

The
CADILLAC

The Cadillac winged shield logo, featuring a shield with a central emblem, flanked by wings, and topped with a crest.

Numbers 1 through 24

January 1 through December 15, 1929

A		ISSUE PAGE		B (Cont.)		ISSUE PAGE		C (Cont.)		ISSUE PAGE	
		NO.				NO.				NO.	
Accessories catalog.....	2	4	Preparing for body service.....	15	4	Charleston, W. Va., service station...	8	4			
Accessories display.....	3	3	Rubber door bumpers.....	24	3	Chart of brake lining.....	4	4			
Accessories showcases.....	6	3	Schools for body service.....	23	3	Chart of metering pins.....	23	4			
Advertising campaign on service.....	23	1		15	4	Chart of tools.....	6	2			
Airplane for fast service.....	11	4	Slidefilms on body service.....	15	2	Choke control spring.....	23	2			
Air valve adjustment, carburetor.....	22	2	Sliding side curtains.....	22	2	Cigar lighters, insulation.....	12	2			
Alcohol as anti-freeze.....	19	2	Tools for body service.....	12	3	Claims for body work.....	21	3			
Alcohol testers.....	22	4		8	6		14	4			
Alignment of crankpin plugs.....	2	4	Windbreak for doors.....	9	2	"Clean Service Station" contest.....	13	1			
All-weather phaeton, Fleetwood.....	24	4	Booklets on radio.....	21	3		10	1			
	23	6				Clinic book "Service Management".....	14	2			
Anti-freeze solutions.....	19	2	BRAKES:				6	3			
Anti-knock fuel in Europe.....	16	2				Clinics.....	5	4			
Anti-rattler for phaeton windows.....	24	4	Adjustments.....	18	2		4	1			
Ashby, George.....	7	2		17	2		3	1			
Automatic heat control.....	17	5	Connections to equalize leverage.....	4	2	Clip on battery cable.....	22	3			
AXLE, FRONT:			Design, 353, 340.....	22	3	Clock stem, La Salle.....	22	2			
Caster and camber.....	17	3	Hand brake connections.....	17	2						
Design, 353, 340.....	17	3	Hand brakes rattle.....	16	2	CLUTCH:					
"Axle-hop".....	20	2	Lead tips on long shoes.....	9	2	Cap screws for bearing.....	2	3			
AXLE, REAR				4	2	Crating for shipment.....	8	7			
Alignment gauge.....	15	3	Lining clearance adjustments.....	22	3	Design, 353, 340.....	17	6			
Design, 353, 340.....	17	8	Lining in rolls.....	18	2	Driven discs larger.....	17	6			
Differential carrier, 63B.....	21	4	Lining, 303.....	4	4	Driven discs thicker.....	8	2			
Propeller shaft, 303.....	10	4	Lubricating front trunnion.....	5	2	Driving plates improved.....	8	2			
Removing propeller shaft.....	8	7	Multibestos lining.....	3	2	Free travel.....	4	4			
Three-quarter floating.....	17	8	Riveting machine for lining.....	4	4	Flushing not recommended.....	6	4			
			Staking screw in trunnion.....	19	3	Grease for release bearing.....	4	4			
B			Stop light and hand brake.....	3	2	Pedal adjustment.....	17	6			
Badges for testers.....	9	2	Tool for cutting lining.....	24	2		2	3			
	7	1	Tool for installing springs.....	5	2	Reasons for replacement.....	3	2			
Balanced parts stock.....	6	1	Tool for installing springs.....	10	3	Scraper for splines.....	2	2			
Ball bearings in steering knuckles.....	17	3	Bulbs, 32-21c.p.....	11	4	Slipping, remedies for.....	2	3			
Ball bearings in wheels.....	17	8	Bulletins, Contract Maintenance.....	1	2	Testing.....	4	4			
Ball bearings in wheels, adjusting.....	19	4	Bushing, torque ball member.....	10	3	Cold and condenser location.....	19	3			
Ball joint packing.....	24	3	"Business getter," the telephone.....	12	1	Cold weather, preparation for.....	19	1			
Battery cable clip.....	22	3				Cold weather starting.....	4	2			
Battery carrier.....	6	4	C				2	2			
Battery charger.....	21	1	Campaign on service advertising.....	23	1	Color markings for oversizes.....	14	2			
Battery hydrometer.....	22	4	Camsides, installing.....	16	4	Complaint reports, owners'.....	6	2			
Battery service in cold weather.....	1	1	Cap screws for clutch bearing.....	2	3	Complaints due to seat adjustment.....	14	4			

C (Cont.)		E (Cont.)		G (Cont.)	
ISSUE PAGE	NO.	ISSUE PAGE	NO.	ISSUE PAGE	NO.
Contest, "Service Sales".....	24 1	Starting motor, 353, 340.....	17 5	Gauge, testing.....	9 2
Contest, "Tourist Treatment".....	21 2	Tag for battery record.....	21 1	"Popping back".....	20 4
Contract Maintenance Bulletins.....	18 1	Emergency service by airplane.....	11 4	Tank, removing dents.....	4 4
Contract Maintenance revisions.....	15 2				
Contract, Standard Service.....	8 5	ENGINE:		Gauge for axle alignment.....	15 3
Conventions.....	23 5	Camslides, installing.....	16 4	Gauge for tires.....	23 7
	12 2	Compression of metric cylinder heads.....	5 5	Gear for convertible coupe window.....	5 3
	10 4	Crankcase, 314.....	24 2	Glycerine anti-freeze.....	19 2
	8 3	Crankcase ventilating pipes.....	23 7	"Good Steering" film.....	11 1
	15 3	Crankpin oil plugs.....	6 3		20 2
COOLING SYSTEM:		Cylinder block gaskets.....	12 3	Graphite for steering gear.....	17 3
Anti-freeze solutions.....	19 2	Cylinder block hold-down nuts.....	5 2		1 3
Fan belt tension.....	11 4	Cylinder block nut wrenches.....	7 3	Grease for clutch release bearing.....	4 4
Fan, lubrication of.....	17 5	Cylinder blocks, regrinding.....	16 2	Grease leaks from transmission to axle.....	24 4
Fans, credit on.....	3 3	Design, 353, 340.....	17 4	Grease retainers for wheels.....	5 3
Flushing.....	7 4	Fan hub oil hole.....	2 2	Greenleaf Motor service department.....	11 3
Radiator cores, La Salle.....	8 7	Gaskets for exhaust manifolds.....	4 2	Grunting shock absorbers.....	20 2
Springtime service.....	7 4	Ignition conduit washer.....	24 2	Guide blocks, transmission.....	18 3
Cowl, plugging fenderwell holes.....	11 4	Moving pictures on.....	7 3		
Crankcase, 314.....	24 2	Oil filter installation.....	2 2	H	
Crankcase ventilating pipes.....	23 7	Piston pin oversizes.....	13 2	Hand brake and stop light.....	24 2
Crankpin oil plugs.....	6 3	Pistons and rings, 353, 340.....	17 4	Hand brake connections.....	4 2
Credit on fans.....	18 2	Pistons included with blocks.....	23 4	Hand brake lining, 303.....	5 2
Credit repair on worn blocks.....	16 2	Reground cylinder blocks.....	16 2	Hand spark control.....	17 5
Crescent wrench.....	10 2	Springtime service.....	7 4	Hangers for radio on Fleetwood.....	24 4
Customer contact playlet.....	8 8	Starting in cold weather.....	4 2	Heat control valve.....	17 5
Cylinder block gasket.....	12 3	Unmasked valves.....	17 4	Heater, hot water.....	19 4
Cylinder block hold-down nuts.....	5 2	Valve seat reamer.....	23 8	Heater, hot water, installing.....	20 3
Cylinder block nut wrenches.....	10 4	Equipment clinic.....	7 4	Heater, Kelch re-circulating.....	19 4
Cylinder blocks, regrinding.....	16 2	Equipment R. G. N.'s.....	8 7	Hinge mirror.....	5 4
		Ethylene glycol anti-freeze.....	19 2		2 4
		Europe, anti-knock fuel.....	16 2	Horn switch, removal of.....	3 2
		Europe, service stations in.....	20 2	Hub caps for wire wheels.....	23 7
			8 2	Hydrometers.....	22 4
D		European service school.....	16 4		
Dealers' stock lists.....	6 1	Exchange price on cylinder heads.....	1 2	I	
Dealers' tool quotas.....	2 1	EXHAUST SYSTEM:		Ignition coil and condenser.....	19 3
"Delivery Promise" contest.....	16 1	Automatic heat control.....	17 5	Ignition conduit washer.....	24 2
Delivery report card.....	24 3	Manifold gaskets.....	4 2	Ignition system, 353, 340.....	17 4
	16 2			Intake header studs.....	12 2
Dents in gasoline tank.....	4 4	Fan belt tension.....	11 4	Intake manifolds.....	20 4
Differential carrier, 63B.....	21 4	Fan hub gasket.....	3 3	Inter-organization invoice form.....	12 2
Direct-mail advertising campaign.....	23 1	Fan hub oil hole.....	2 2	Inventory period.....	23 5
Disbrow-Nachman service car.....	10 3	Fan hubs, credit on.....	18 2	I-sis body polish.....	1 4
Disc wheel, new type.....	6 2	Fan hubs, returning.....	5 3		
Display cases for accessories.....	6 3	Fender racks.....	8 5	J	
Distributor advance governor spring.....	1 3	Fenderwell holes in cowl.....	11 4	Jacox steering gear tool.....	20 2
Distributor eye bolt.....	6 3	Fenderwell strap tightener.....	14 2		14 3
Distributor, 353, 340.....	17 4	Films, see "Slidefilms".....	4 2	Jaeger service stations.....	24 3
Dolly for transmission.....	22 4	Filter installation.....	2 2	Jamaica service car.....	10 3
Door bumpers.....	24 3	Fisher Body Service Corporation.....	9 1	Johnstown equipment clinic.....	7 4
Door catch levers.....	20 4	Fisher Body Service films.....	15 2		
Door handle position.....	24 4	Fisher Body Service schools.....	23 3	K	
Doors, windbreak for.....	9 2	Fisher Body Service tools.....	12 3	Kelch heater registers.....	21 2
Double windshield.....	9 3	Fisher Body tool order pads.....	8 6	Kelch re-circulating heater.....	19 4
Drilling holes for heater.....	20 3	Fleetwood all-weather phaeton.....	24 4	Keys, radio and trunk.....	20 4
Driving lights.....	13 2	Fleetwood sedans, riding qualities.....	23 6		
		Flood hinge, carburetor.....	13 4	L	
E		Flushing cooling system.....	7 4	Lanina, A. J.....	19 4
ELECTRICAL:		Folder with map for tourist.....	15 1	Lapping steering gears.....	14 3
Battery cable clip.....	22 3	Follow-up by telephone.....	12 1		13 4
Battery charger.....	21 1	Follow-up form.....	22 3	Lead tips for brake shoes.....	9 2
Battery service in winter.....	1 1	Framed "Policy" posters.....	14 2		4 2
Charging rate.....	23 4			Letter for service card.....	3 3
	5 2	G		Letter on cold weather service.....	19 1
Cigar lighters, insulation.....	12 2	Gaskets for cylinder block.....	12 3	Letter on policy period.....	9 3
Coil and condenser location.....	19 3	Gaskets for exhaust manifold.....	4 2	License plate brackets, front.....	6 3
Condenser connections.....	9 3	Gaskets for fan hub.....	3 2	License plate brackets, 353 rear.....	20 4
Condensers and resistances for radio.....	21 3	GASOLINE SYSTEM:			
Contact point gap, 353, 340.....	19 3	Carburetor adjustments.....	22 2	LIGHTING:	
	17 4		20 4	32-21 c.p. bulbs.....	11 4
Distributor eye bolt.....	6 3	Carburetor float hinge.....	13 4	Loop in oil gauge pipe.....	21 4
Distributor, governor spring.....	1 3	Carburetor spray nozzle.....	20 4	Lorraine driving lights.....	13 2
Distributor, 353, 340.....	17 4	Carburetor thermostat.....	17 5	Lowering all-weather phaeton top.....	23 6
Metric spark plugs.....	6 4	Carburetor throttle pump adjustment.....	12 2		
	4 4	Choke control spring.....	23 2	LUBRICATION:	
Nipple for coil.....	24 4			Camslides.....	16 4
Plug in socket for trouble lamp.....	1 3			Clutch pedal shaft.....	7 4
Spark control, manual.....	17 5			Clutch release bearing.....	4 4
	21 1			Cold weather.....	19 2
Specific gravity of battery.....	5 2			Fan hub oil hole.....	2 2
	1 1			Fan, 353, 340.....	17 5
				Front brake trunnion.....	3 2
					20 2
				Graphite for steering gear.....	17 3
					1 3

[illegible]

S (Cont.)			T (Cont.)			T (Cont.)		
	NO.	ISSUE PAGE		NO.	ISSUE PAGE		NO.	ISSUE PAGE
Nitroloy sector.....	17	3	Connecting rod tray.....	8	7	Trunks, metal covered.....	11	2
Pyroxylin steering wheel.....	17	3	Crank for turning engine.....	18	3	Trunnion, front brake, lubrication.....	3	2
Slidefilm "Good Steering".....	11	1	Cylinder block nut wrenches.....	10	4	Trunnion, front brake, staking screw.....	3	2
Steering gear, 353, 340.....	17	3		7	3	T-series parts list.....	1	3
Steering modulator.....	22	4	Dealers' quota lists.....	2	1	Tulsa service department.....	11	3
	17	3	Fenderwell strap tightener.....	14	2			
Thrust washers.....	9	4	Flushing cooling system.....	7	4	U		
	1	2	Hub cap wrench.....	17	8	Universal joint packing.....	24	3
Stock lists, parts.....	17	8	Owners' tool kit.....	10	2	Unmasked valves.....	17	4
	6	1	Puller for propeller shaft.....	8	7			
Stock shipment of parts.....	5	4	Puller for water pump packing.....	7	3	V		
Stop light and hand brake.....	24	2	Scraper for clutch splines.....	2	2	Valve seat reamer.....	23	8
Stowing side curtains.....	22	2	Special order tools.....	2	1	Valves, unmasked.....	17	4
Studs in intake header.....	12	2		20	2	Ventilating pipes, return of.....	23	7
Surplus stock lists.....	1	4	Steering gear lapping tool.....	14	3			
				13	4	W		
T			Tire gauge.....	23	7	Wall chart of tools.....	6	2
Tag for battery record.....	21	2	Transmission stands.....	22	4	Washer for ignition conduit.....	24	2
Tank for testing gasoline gauge.....	9	2		11	3	Washer for steering sector shaft.....	9	4
Telephone book listing.....	12	4	Wheel bearing wrench.....	17	8	Washington, D. C., service car.....	24	4
Telephone, use of.....	12	1	Valve seat reamer.....	23	8	Water pump packing puller.....	7	3
Tension of fan belt.....	11	4	Torque ball member bushing.....	10	3	Weaver motor service station.....	8	4
	3	3	Touring service folder.....	15	1			
Testers, badges for.....	9	2	Tourist service card.....	3	3	WHEELS:		
	7	1	Tourist service in Europe.....	8	2	Adjusting ball bearings.....	19	4
Throttle pump adjustment.....	11	2	"Tourist treatment" contest.....	18	1	Ball bearings, 353.....	17	8
Thrust washers for steering gear.....	1	2		15	2	Disc, new type.....	6	2
"Timesaver" lapping compound.....	14	3	Training men for service work.....	8	2	Grease retainers.....	5	3
	13	4				Tightening wire wheels.....	8	8
Timing ignition, 353, 340.....	17	5	TRANSMISSION:			Tire gauge.....	23	7
Tire covers, metal.....	11	2	Angle of cones and drums.....	18	3	Wire wheel hub caps.....	23	7
Tire gauge.....	23	7	Ball joint packing.....	24	3	Windbreak for doors.....	9	2
Tires, La Salle.....	5	3	"Burnishing-in".....	18	3	Windshields, tonneau.....	9	3
Tonneau windshield.....	9	3	Design, 353, 340.....	18	3	Winter battery service.....	1	1
Tool chart.....	6	2		17	6	Winter, preparation for.....	19	1
Tool Manual.....	2	1	Dolly for transmission.....	22	4	Wire wheel hub caps.....	23	7
			Grease leaks to axle.....	24	2	Wire wheel parts list.....	1	3
TOOLS:			Guide blocks.....	18	3	Wrenches for cylinder block nuts.....	10	4
Anti-freeze testers.....	22	4	Retaining ring for intermediate gear				7	3
Axle alignment gauge.....	15	3	bushing.....	17	6	X		
Battery hydrometer.....	22	4	Shim for intermediate gear.....	1	2	"X" series parts list.....	19	2
Body service tools.....	12	3	Slidefilm on Syncro-mesh.....	14	1			
	8	6	Synchronizing mechanism.....	18	3	Y		
Body tool order pads.....	23	8	Testing lubricant.....	5	4	"Your name please" playlet.....	8	8
Brake lining cutter.....	5	2	Tray for connecting rods.....	8	7			
Brake lining riveting machine.....	19	3	Trunk keys.....	20	4	Z		
			Trunk, unpacking.....	20	4	Zero testers.....	22	4

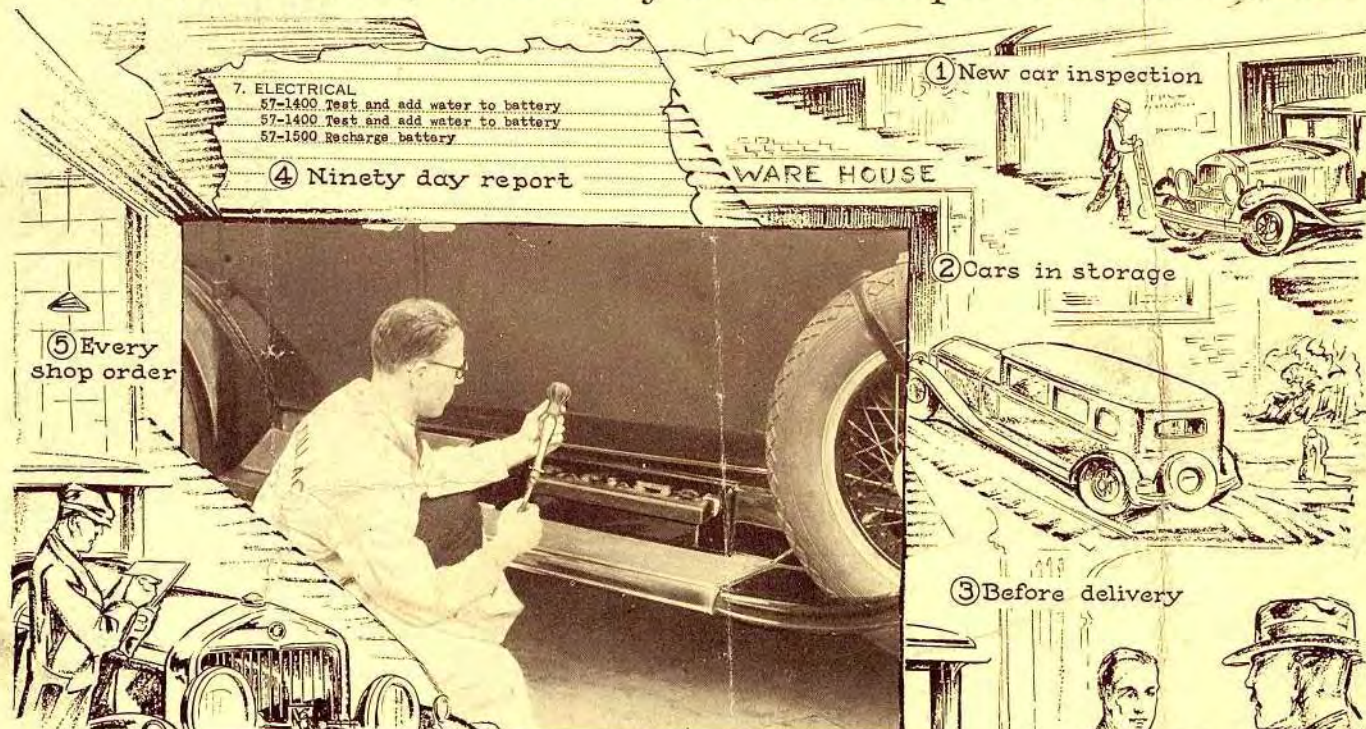
The CADILLAC LA SALLE SERVICE · MAN

Volume III

January 1, 1929

Number 1

Preventive Battery Service Of Utmost Importance In Winter



Preventive service on batteries resolves itself into attention on the five occasions shown above. 1. Test the battery when the new car is first received and report the specific gravity on the New Car Inspection Report. 2. If the car is stored the battery should be removed and given proper care during the storage period. 3. Be sure the battery is fully charged before a new car is delivered to the purchaser. 4. Every attention given to the battery during the 90-day period should be included in the 90-Day Report. 5. Check the specific gravity of the battery on every car that comes into the station and write it on the back of the repair order.

DURING severe winter weather there are just two kinds of automobiles: those that start easily, and those that do not. In cold weather, the battery often carries the entire reputation of the car as far as the owner is concerned.

Cold weather driving conditions do impose a heavy load on the storage battery, and for this reason some service men take it for granted that there will be a number of battery complaints each winter. These complaints can be largely avoided, however, by the application of thor-

ough preventive service on batteries.

New Car Batteries

The best time to combat possible battery trouble is at the very beginning. Start by checking the battery on every new car as soon as it is received and reporting the specific gravity on the New Car Inspection Report. Specific gravity should be tested and recorded by the individual cells, positive, center and negative.

Another thing to watch is cars going to storage. When a car is placed in storage, the battery should always be removed and turned over to the battery department for care and attention. Most battery com-

plaints have their origin in the storage of cars without provision for proper attention to the battery. If the car is not stored the battery (Cont'd, page 4)

A SATISFIED OWNER NEVER COMPLAINS

Number 1
Page 2

The CADILLAC LA SALLE SERVICE · MAN

JANUARY 1, 1929
DETROIT, MICH.

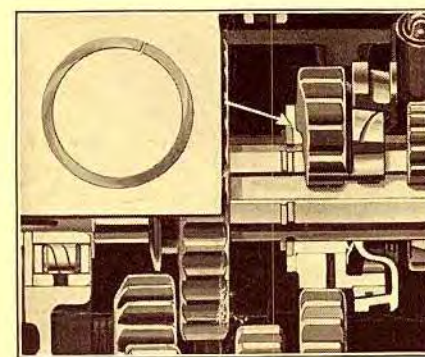
NUMBER 1
VOLUME III

Published on the first and fifteenth of each month in the interest of Cadillac Service

Exchange Price Cancelled

EFFECTIVE January 1, the exchange price of \$10.00 for high compression cylinder heads for Cadillac 341-A and LaSalle 303 cars will be discontinued. Hereafter no credit will be allowed on standard cylinder heads which are replaced by high compression heads.

Shim For Gear Bushing



A .010-inch shim, part number 871728, is now available for use between the snap ring and the intermediate gear bushing in the transmission. This shim can be used with any one of the four snap rings to give a finer adjustment of the clearance between the cone on the intermediate gear and its drum.

Shock Absorbers

WHEN returning single-acting shock absorbers which have been replaced on LaSalle cars in accordance with our letter of December 14, to distributors, it is important that the Returned Goods Notice show the engine number, owner's name, mileage, parts order reference and all of the other items which ordinarily appear on an R.G.N. If the car on which the replacement was made had not yet been delivered, this should be specifically stated. The parts should also be properly tagged.

WANTED—A single cylinder Cadillac carburetor or mixing chamber complete. Any distributor or dealer having one of these available will please write the factory Parts Division.

The Cadillac-LaSalle Service Man

Different Thicknesses Of Thrust Washers Needed In Aligning Steering Worm and Sector

A thrust washer is used on Cadillac and LaSalle steering gears between the sector and the steering gear housing. These washers have previously been made to a standard thickness and have been used interchangeably.

But to secure perfect alignment of the sector and worm in every case, it is necessary to use a washer of the exact thickness required. This is now being done, and beginning with steering gear unit 3-26780 on Cadillac cars and 4-6676 on LaSalle cars, the thrust washer and the sector are matched so as to secure the proper alignment of the sector and worm.

Thrust washers are no longer interchangeable; each washer should be used only with the sector with which it is supplied. Worms and sectors shipped from the factory Parts Division will hereafter include a thrust washer as part of the assembly. The part numbers of these assemblies for cars with left-hand steering are 43343 for Cadillac 341-B and 43342 for LaSalle 328. Thrust washers for replacement will be carried in stock in eight different sizes so that they can be selected to give the proper alignment of worm and sector. These

washers are to be used on all 341-A and B, 303 and 328 steering gears.

Washer .178 in. thick.....	258688
Washer .180 in. thick.....	258682
Washer .182 in. thick.....	258683
Washer .184 in. thick.....	258684
Washer .186 in. thick.....	258277
Washer .188 in. thick.....	258685
Washer .190 in. thick.....	258686
Washer .192 in. thick.....	258687

Bulletins Contain Contract Maintenance Corrections

ALL CHANGES to be made in Contract Maintenance books, with the exception of part number changes, are authorized by means of Contract Maintenance Bulletins. Part number changes should be made on operations which are listed on Price List Changes issued by the Parts Division.

In some cases, service managers have not given the proper attention to following through and making the changes in accordance with these bulletins. It is quite important that these changes be made promptly by all distributors and dealers in order to maintain uniform prices.

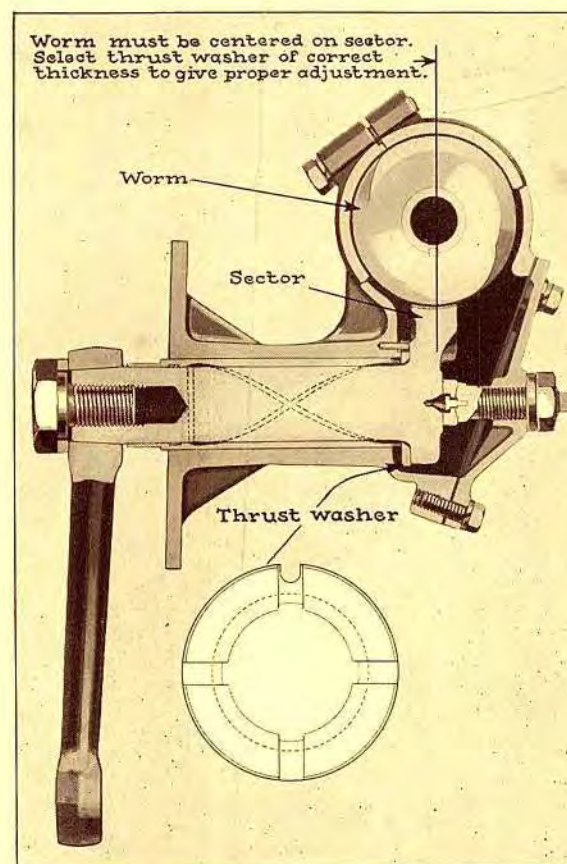
The practice in effect at the factory is to note the bulletin number in small figures opposite each change. In this way, the bulletin can be referred to immediately should occasion arise. It is suggested that each service manager use a binder or letter file and keep these bulletins in numerical order. Each one can then be accounted for and referred to if necessary.

Two copies of each bulletin are mailed to distributors and one to each dealer. If additional copies are required, we shall be glad to arrange to mail these when requested.

R. G. N. Numbers On Bills Of Lading

IN ORDER that the Parts Division may check in shipments of returned material and report any shortages to the transportation companies, it is very important that the R.G.N. numbers be shown on the bills of lading.

The Service Manual states that this information should always be given on the bills of lading, but a number of parts managers are overlooking this important point.



Thrust washers are supplied in various thicknesses to permit centering the worm and sector

A SATISFIED OWNER NEVER COMPLAINS

Approximate Test Of Distributor Advance Governor Can Be Made With Spring Scale

CORRECT ignition timing is essential to satisfactory engine operation. Ignition timing depends first on correct setting of the timer contact points with the timing marks on the flywheel, and second on the characteristics of the automatic advance governor in the distributor housing.

The characteristics of the automatic advance governor are checked at the factory by means of special equipment on which the advance governor is revolved at the same speeds as in the engine. This is the only way an accurate test can be made.

The equipment is too costly to make it practical to attempt this method of testing in a distributor's or dealer's service station. It is possible, however, to get an approximate check on the automatic spark advance by testing the tension of the spring in the automatic advance governor by the following method:

Remove the shaft assembly from the distributor and clamp it in a vise. Be sure to use soft jaws on the vise.

Tie a small flexible wire (such as picture wire) through the hole in the drum that encloses the spring. Wrap this wire around the drum and fasten the loose end to the spring scale used for testing contact point springs (tool number 100242). This set-up is shown in the illustration.

Pull on the scale until the advance pin is drawn to the bottom of the slot in the advance plate. The reading on the scale should then be approximately 4½ pounds. If the reading is higher or lower, the spring tension should be adjusted by loosening the screw and turning the drum to a new position.

This method is only an approximate test. It does not prove conclusively that the governor characteristics are normal throughout the entire speed range. In case of doubt, the only way is to replace the shaft and governor assembly with one which is known to be standard.

This method of testing the governor spring can be used on the distributors of 314 and 341-A and B Cadillac and 303 and 328 LaSalle cars.

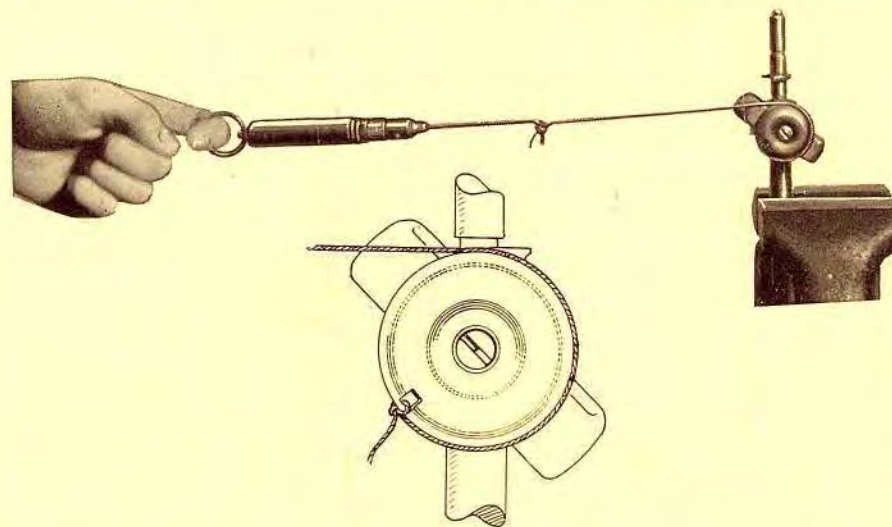
Revised T-Series Parts List Is Being Sent Out

A REPRINT of the T-Series Parts Price List, covering 341-A and B Cadillac and 303 and 328 LaSalle cars, is now ready for distribution. This new book includes all of the additions and changes in listings, part numbers and prices.

One copy of the book is being sent no charge to each distributor and dealer. Additional copies will be supplied at the regular price of \$5.00 net with binder, and \$2.50 net less binder.

There have been price changes on a number of the AC parts which we list, which become effective January 1. The parts are also put on the special discount list. Our new prices on this material are now the same as the United Motors Service prices.

Parts Price Lists covering Cadillac-LaSalle wire wheel parts are also being sent to Cadillac LaSalle distributors and dealers. These lists prepared by the Wire Wheel Corporation of America, enable the parts man to identify the wheel parts more



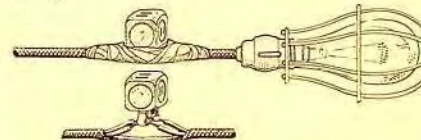
To check the tension of the advance governor spring, fasten the wire to the drum as indicated above. The reading on the spring scale should be approximately 4½ pounds

A SATISFIED OWNER NEVER COMPLAINS



THE prize winning contribution to this issue is a trouble lamp attachment. It was submitted by Mr. R. A. Willson, a mechanic at the Chicago Branch. He assures us that it has proved practical and very convenient.

It is often necessary to use both a trouble lamp and a drill or other electrical appliance on a car at the same time. The old method is to use two separate cords or to take the guard off the lamp and use a two-way plug.



A convenient plug-in socket can be attached to the trouble lamp cord as shown

The "shortcut" method suggested by Mr. Willson is to attach a plug-in socket to the trouble lamp cord about 12 inches from the lamp. The illustration shows how to attach it. The wires are soldered to the socket and securely taped.

Send in your suggestion now. You have a better chance to win the prize before competition gets too keen.

Steering Gear Lubricant Should Not Be Thinned

IN PREVIOUS years thinning of the steering gear lubricant with kerosene has been recommended to prevent hard steering in winter weather before the engine has become warm.

This is no longer recommended, as it does not produce the desired results. The thin lubricant breaks down under the high pressures produced in the steering gear and it then squeezes out from between the worm and sector, with the possibility of "grunting" and hard steering.

The steering gear should be lubricated the year round with A-200 lubricant, to which 5% Acheson No. 38 graphite may be added. Do not add sulphur, recommended in the October 15 SERVICE MAN, as graphite is much more satisfactory.

easily. The factory Parts Division has a number on hand, so additional copies will be furnished on request.

This does not mean that all wire wheel parts must be ordered from the Wire Wheel Corp. The factory will continue to list and stock the wire wheel parts that have been carried previously.

Preventive Service For Storage Batteries

(Continued from page 1)

should be checked before the car is delivered to the purchaser. The battery of a car kept on the showroom floor should be given as careful attention as the battery of a car in storage. No car should be delivered to an owner with a battery that is not fully charged, and that means a gravity of 1.275 or higher.

Batteries in Service

When these precautions are observed, every battery will start in service in good condition. Preventive service is still necessary, however, as the battery must be kept fully charged, or nearly so, if it is to perform satisfactorily.

Ordinarily, the generator will keep the battery charge up, but there is only one way to make sure, and that is to test the battery at regular intervals. For this reason, every service station should make it a practice to check the specific gravity of the battery on every car that comes into the service station. This should be made part of the regular routine, along with checking the level of oil in the engine or the water in the radiator. To make sure that this is being done, the workman should be required to write the specific gravity on the back of the repair order. This also gives a record with which to compare future tests.

It is especially important that the battery be given proper attention during the 90-day period. As a check on this, mark on the 90-Day Report for each car every attention that was

given to the battery during this period, whether it was adding water, testing or re-charging.

Specific Gravity and Re-charging

The following information is given for those service men who do not thoroughly understand how to interpret specific gravity.

If the specific gravity is 1.250 or above, the battery may be safely assumed to be in satisfactory condition.

If the gravity is below 1.225, the battery should in every case be removed and charged.

If the gravity is between 1.225 and 1.250, look up the specific gravity as recorded at the last regular inspection. If the gravity then recorded was below 1.250, the battery should be removed and charged. If it was above 1.250, the low gravity now is probably a temporary condition, and the generator can be depended upon to bring it up, provided, of course, that the charging rate is normal.

Testers should sell car owners on battery re-charging when the specific gravity continues to be low. Customers should be made to realize that this is a precautionary measure which is to their own best interests.

An owner will not object to paying for re-charging, but he will object to buying a new battery to replace one that was ruined by neglect.

Of course, if re-charging should be required within the 90-day period, the owner cannot be charged for it.

Surplus Stock Lists To Be Sent In On February First

SURPLUS parts stock lists are due at the factory on February 1 of each year. The majority of distributors take inventory of their parts stock as of December 31. Immediately upon completion of this inventory work, a list of surplus stock should be made out on form No. 2442 and mailed to the factory on February 1.

Dealers should send a list of their surplus stock to distributors and these lists should be checked by the distributors who should accept as many of the parts as possible into their stock, and include the remaining parts on the distributor's surplus parts stock list.

These surplus parts stock lists should list the parts in numerical order according to part number. Parts having a value of 5c or less should not be included on these surplus lists, as their value does not warrant the expense of handling.

The surplus stock lists must be received by the factory not later than February 28.

I-Sis Body Polish Also Comes In Gallon Containers

THE Accessories Division now has I-Sis Body Polish available in gallon containers for use in service departments. The list price when purchased this way is \$6.00 per gallon, which is a decided saving over the price of \$8.00 per gallon when purchased in pint bottles.



ABOVE is shown one of the conferences that are held regularly at the Factory and attended by Production executives, the Engineering staff and executives of the Service Department. Service problems are discussed at these meetings especially from engineering and production viewpoints. Mr. Dreystadt is standing at the table. Seated at the table are Mr. Widman, Works Manager, at Mr. Dreystadt's right, and Mr. Seaholm, Chief Engineer, and Mr. Ellis, Superintendent of Manufacturing, at Mr. Dreystadt's left.

A SATISFIED OWNER NEVER COMPLAINS

PRINTED IN U.S.A.

The CADILLAC LA SALLE SERVICE MAN

Volume III

January 15, 1929

Number 2

New Tool Manual Includes All Of The Latest Tools

GOOD WORK and proper tools go hand in hand. Having the right tools available means that the job can be done quickly, easily and satisfactorily.

In Cadillac and LaSalle service work, special tools are necessary for a great many operations, and an efficient service station must have these special tools on hand when the operations which require them are to be done.

Cadillac service men should be familiar with the special tools that are available for the work which they do. Service Managers should also make sure their tool room contains all of the tools for which they will have regular use.

All of the information on Cadillac-LaSalle special tools is contained in the Tool Manual. A complete new edition of this book has just been printed and one copy is now being sent, no charge, to each distributor

and dealer. Additional copies can be secured from the Parts Division at 50 cents each, net.

Latest Tools Included

The new manual is right up-to-date. In it are

CADILLAC AND LA SALLE TOOL MANUAL

DEALER'S QUOTA

OF CADILLAC AND LA SALLE SPECIAL TOOLS

These are new lists of tools, graded according to the value a general repair shop can give them.

Tool No.	Code	Price	Quantity
A	For use on 1928	\$125.00	1
B	For use on 1929	\$125.00	1
C	For use on 1930	\$125.00	1
D	For use on 1931	\$125.00	1

Tool No.	Code	Type	Price	Quantity
1	A	For use on 1928	\$125.00	1
2	B	For use on 1929	\$125.00	1
3	C	For use on 1930	\$125.00	1
4	D	For use on 1931	\$125.00	1
5	E	For use on 1932	\$125.00	1
6	F	For use on 1933	\$125.00	1
7	G	For use on 1934	\$125.00	1
8	H	For use on 1935	\$125.00	1
9	I	For use on 1936	\$125.00	1
10	J	For use on 1937	\$125.00	1
11	K	For use on 1938	\$125.00	1
12	L	For use on 1939	\$125.00	1
13	M	For use on 1940	\$125.00	1
14	N	For use on 1941	\$125.00	1
15	O	For use on 1942	\$125.00	1
16	P	For use on 1943	\$125.00	1
17	Q	For use on 1944	\$125.00	1
18	R	For use on 1945	\$125.00	1
19	S	For use on 1946	\$125.00	1
20	T	For use on 1947	\$125.00	1
21	U	For use on 1948	\$125.00	1
22	V	For use on 1949	\$125.00	1
23	W	For use on 1950	\$125.00	1
24	X	For use on 1951	\$125.00	1
25	Y	For use on 1952	\$125.00	1
26	Z	For use on 1953	\$125.00	1
27	AA	For use on 1954	\$125.00	1
28	AB	For use on 1955	\$125.00	1
29	AC	For use on 1956	\$125.00	1
30	AD	For use on 1957	\$125.00	1
31	AE	For use on 1958	\$125.00	1
32	AF	For use on 1959	\$125.00	1
33	AG	For use on 1960	\$125.00	1
34	AH	For use on 1961	\$125.00	1
35	AI	For use on 1962	\$125.00	1
36	AJ	For use on 1963	\$125.00	1
37	AK	For use on 1964	\$125.00	1
38	AL	For use on 1965	\$125.00	1
39	AM	For use on 1966	\$125.00	1
40	AN	For use on 1967	\$125.00	1
41	AO	For use on 1968	\$125.00	1
42	AP	For use on 1969	\$125.00	1
43	AQ	For use on 1970	\$125.00	1
44	AR	For use on 1971	\$125.00	1
45	AS	For use on 1972	\$125.00	1
46	AT	For use on 1973	\$125.00	1
47	AU	For use on 1974	\$125.00	1
48	AV	For use on 1975	\$125.00	1
49	AW	For use on 1976	\$125.00	1
50	AX	For use on 1977	\$125.00	1
51	AY	For use on 1978	\$125.00	1
52	AZ	For use on 1979	\$125.00	1
53	BA	For use on 1980	\$125.00	1
54	BB	For use on 1981	\$125.00	1
55	BC	For use on 1982	\$125.00	1
56	BD	For use on 1983	\$125.00	1
57	BE	For use on 1984	\$125.00	1
58	BF	For use on 1985	\$125.00	1
59	BG	For use on 1986	\$125.00	1
60	BH	For use on 1987	\$125.00	1
61	BI	For use on 1988	\$125.00	1
62	BJ	For use on 1989	\$125.00	1
63	BK	For use on 1990	\$125.00	1
64	BL	For use on 1991	\$125.00	1
65	BM	For use on 1992	\$125.00	1
66	BN	For use on 1993	\$125.00	1
67	BO	For use on 1994	\$125.00	1
68	BP	For use on 1995	\$125.00	1
69	BQ	For use on 1996	\$125.00	1
70	BR	For use on 1997	\$125.00	1
71	BS	For use on 1998	\$125.00	1
72	BT	For use on 1999	\$125.00	1
73	BU	For use on 2000	\$125.00	1
74	BV	For use on 2001	\$125.00	1
75	BW	For use on 2002	\$125.00	1
76	BX	For use on 2003	\$125.00	1
77	BY	For use on 2004	\$125.00	1
78	BZ	For use on 2005	\$125.00	1
79	CA	For use on 2006	\$125.00	1
80	CB	For use on 2007	\$125.00	1
81	CC	For use on 2008	\$125.00	1
82	CD	For use on 2009	\$125.00	1
83	CE	For use on 2010	\$125.00	1
84	CF	For use on 2011	\$125.00	1
85	CG	For use on 2012	\$125.00	1
86	CH	For use on 2013	\$125.00	1
87	CI	For use on 2014	\$125.00	1
88	CJ	For use on 2015	\$125.00	1
89	CK	For use on 2016	\$125.00	1
90	CL	For use on 2017	\$125.00	1
91	CM	For use on 2018	\$125.00	1
92	CN	For use on 2019	\$125.00	1
93	CO	For use on 2020	\$125.00	1
94	CP	For use on 2021	\$125.00	1
95	CQ	For use on 2022	\$125.00	1
96	CR	For use on 2023	\$125.00	1
97	CS	For use on 2024	\$125.00	1
98	CT	For use on 2025	\$125.00	1
99	CU	For use on 2026	\$125.00	1
100	CV	For use on 2027	\$125.00	1
101	CW	For use on 2028	\$125.00	1
102	CX	For use on 2029	\$125.00	1
103	CY	For use on 2030	\$125.00	1
104	CZ	For use on 2031	\$125.00	1
105	DA	For use on 2032	\$125.00	1
106	DB	For use on 2033	\$125.00	1
107	DC	For use on 2034	\$125.00	1
108	DD	For use on 2035	\$125.00	1
109	DE	For use on 2036	\$125.00	1
110	DF	For use on 2037	\$125.00	1
111	DG	For use on 2038	\$125.00	1
112	DH	For use on 2039	\$125.00	1
113	DI	For use on 2040	\$125.00	1
114	DJ	For use on 2041	\$125.00	1
115	DK	For use on 2042	\$125.00	1
116	DL	For use on 2043	\$125.00	1
117	DM	For use on 2044	\$125.00	1
118	DN	For use on 2045	\$125.00	1
119	DO	For use on 2046	\$125.00	1
120	DP	For use on 2047	\$125.00	1
121	DQ	For use on 2048	\$125.00	1
122	DR	For use on 2049	\$125.00	1
123	DS	For use on 2050	\$125.00	1
124	DT	For use on 2051	\$125.00	1
125	DU	For use on 2052	\$125.00	1
126	DV	For use on 2053	\$125.00	1
127	DW	For use on 2054	\$125.00	1
128	DX	For use on 2055	\$125.00	1
129	DY	For use on 2056	\$125.00	1
130	DZ	For use on 2057	\$125.00	1
131	EA	For use on 2058	\$125.00	1
132	EB	For use on 2059	\$125.00	1
133	EC	For use on 2060	\$125.00	1
134	ED	For use on 2061	\$125.00	1
135	EE	For use on 2062	\$125.00	1
136	EF	For use on 2063	\$125.00	1
137	EG	For use on 2064	\$125.00	1
138	EH	For use on 2065	\$125.00	1
139	EI	For use on 2066	\$125.00	1
140	EJ	For use on 2067	\$125.00	1
141	EK	For use on 2068	\$125.00	1
142	EL	For use on 2069	\$125.00	1
143	EM	For use on 2070	\$125.00	1
144	EN	For use on 2071	\$125.00	1
145	EO	For use on 2072	\$125.00	1
146	EP	For use on 2073	\$125.00	1
147	EQ	For use on 2074	\$125.00	1
148	ER	For use on 2075	\$125.00	1
149	ES	For use on 2076	\$125.00	1
150	ET	For use on 2077	\$125.00	1
151	EU	For use on 2078	\$125.00	1
152	EV	For use on 2079	\$125.00	1
153	EW	For use on 2080	\$125.00	1
154	EX	For use on 2081	\$125.00	1
155	EY	For use on 2082	\$125.00	1
156	EZ	For use on 2083	\$125.00	1
157	FA	For use on 2084	\$125.00	1
158	FB	For use on 2085	\$125.00	1
159	FC	For use on 2086	\$125.00	1
160	FD	For use on 2087	\$125.00	1
161	FE	For use on 2088	\$125.00	1
162	FF	For use on 2089	\$125.00	1
163	FG	For use on 2090	\$125.00	1
164	FH	For use on 2091	\$125.00	1
165	FI	For use on 2092	\$125.00	1
166	FJ	For use on 2093	\$125.00	1
167	FK	For use on 2094	\$125.00	1
168	FL	For use on 2095	\$125.00	1
169	FM	For use on 2096	\$125.00	1
170	FN	For use on 2097	\$125.00	1
171	FO	For use on 2098	\$125.00	1
172	FP	For use on 2099	\$125.00	1
173	FQ	For use on 2100	\$125.00	1
174	FR	For use on 2101	\$125.00	1
175	FS	For use on 2102	\$125.00	1
176	FT	For use on 2103	\$125.00	1
177	FU	For use on 2104	\$125.00	1
178	FV	For use on 2105	\$125.00	1
179	FW	For use on 2106	\$125.00	1
180	FX	For use on 2107	\$125.00	1
181	FY	For use on 2108	\$125.00	1
182	FZ	For use on 2109	\$125.00	1
183	GA	For use on 2110	\$125.00	1
184	GB	For use on 2111	\$125.00	1
185	GC	For use on 2112	\$125.00	1
186	GD	For use on 2113	\$125.00	1
187	GE	For use on 2114	\$125.00	1
188	GF	For use on 2115	\$125.00	1
189	GG	For use on 2116	\$125.00	1
190	GH	For use on 2117	\$125.00	1
191	GI	For use on 2118	\$125.00	1
192	GJ	For use on 2119	\$125.00	1
193	GK	For use on 2120	\$125.00	1
194	GL	For use on 2121	\$125.00	1
195	GM	For use on 2122	\$125.00	1
196	GN	For use on 2123	\$125.00	1
197	GO	For use on 2124	\$125.00	1
198	GP	For use on 2125	\$125.00	1
199	GQ	For use on 2126	\$125.00	1
200	GR	For use on 2127	\$125.00	1
201	GS	For use on 2128	\$125.00	1
202	GT	For use on 2129	\$125.00	1
203	GU	For use on 2130	\$125.00	1
204	GV	For use on 2131	\$125.00	1
205	GW	For use on 2132	\$125.00	1
206	GX	For use on 2133	\$125.00	1
207	GY	For use on 2134	\$125.00	1
208	GZ	For use on 2135	\$125.00	1
209	HA	For use on 2136	\$125.00	1
210	HB	For use on 2137	\$125.00	1
211	HC	For use on 2138	\$125.00	1
212	HD	For use on 2139	\$125.00	1
213	HE	For use on 2140	\$125.00	1
214	HF	For use on 2141	\$125.00	1
215	HG	For use on 2142	\$125.00	1
216	HH	For use on 2143	\$125.00	1
217	HI	For use on 2144	\$125.00	1
218	HJ	For use on 2145	\$125.00	1
219	HK	For use on 2146	\$125.00	1
220	HL	For use on 2147	\$125.00	1
221	HM	For use on 2148	\$125.00	1
222	HN	For use on 2149	\$125.00	1
223	HO	For use on 2150	\$125.00	1
224	HP	For use on 2151	\$125.00	1
225	HQ	For use on 2152	\$125.00	1
226	HR	For use on 2153	\$125.00	1
227	HS	For use on 2154	\$125.00	1
228	HT	For use on 2155	\$125.00	1
229	HU	For use on 2156	\$125.00	1
230	HV	For use on 2157	\$125.00	1
231	HW	For use on 2158	\$125.00	1
232	HX	For use on 2159	\$125.00	1
233	HY	For use on 2160	\$125.00	1
234	HZ	For use on 2161	\$125.00	1
235	IA	For use on 2162	\$125.00	1
236	IB	For use on 2163	\$125.00	1
237	IC	For use on 2164	\$125.00	1
238	ID	For use on 2165	\$125.00	1
239	IE	For use on 2166	\$125.00	1
240	IF	For use on 2167	\$125.00	1
241	IG	For use on 2168	\$125.00	1
2				

Cap Screws Will Allow Increased Travel For Clutch Release Yoke; Clutch Adjustment Should Include Inspection Of Pedal Trunnion

EVERY Cadillac-LaSalle service man knows that, as the clutch facing wears, the clutch pedal rod must be readjusted from time to time to maintain clearance between the release levers or fingers and the release bearing. As each adjustment is made the bearing collar and yoke are moved farther toward the transmission.

On Cadillac 341-B and LaSalle 328 cars the yoke will eventually rest on the studs by which the clutch connection bearing is fastened to the transmission and the clutch will slip.

Cap Screws for Bearing

In order to permit the bearing and yoke to come farther back, cap screws with special thin heads and special thin lock washers are now used in place of the studs and nuts. This gives the yoke from $\frac{1}{4}$ inch to $\frac{3}{8}$ inch increased travel, permitting considerably more wear on the facings before refacing is necessary.

This change went into effect beginning with transmission unit 3-31617 on Cadillac cars and 4-12532 on LaSalle cars.

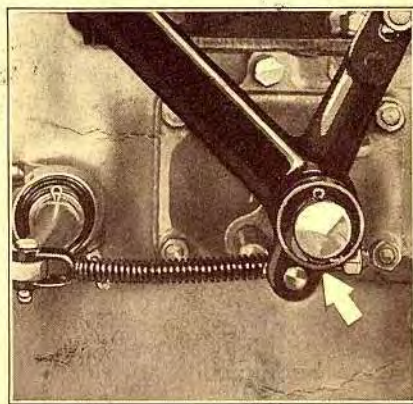
The cap screws are interchangeable with the studs and can be installed upon removing the studs. The screws should be dipped in white lead before installing, to prevent leakage of lubricant from the transmission.

An initial supply of the cap screws (part number 871838) and the thin lock washers (110730) is being

shipped by the Parts Division to each distributor. Distributors' and dealers' stock of the studs (877172) and the nuts (59736) can be diverted for use on other units using these parts.

Pedal Adjustment

When the point of interference between the yoke and studs on the earlier cars is reached, it is useless to adjust the nut on the clutch pedal rod. Unscrewing this nut simply backs it away from the trunnion and, while the pedal may have the required one inch free travel, it does not mean anything because the yoke is as far back as it can go.



When checking the clutch pedal adjustment, make sure that the adjusting nut is tight against the trunnion

For this reason, whenever the clutch pedal is adjusted on a Cadillac 341-B or LaSalle 328 car before the above unit numbers, care should be

taken to make sure that there is no lost motion between the trunnion and the adjusting nut. If the adjusting nut stands away from the trunnion, the yoke is sure to rest against the studs within a short mileage and thus cause the clutch to slip.

Service in the Field

In order to handle this situation properly the following definite practices should be adopted:

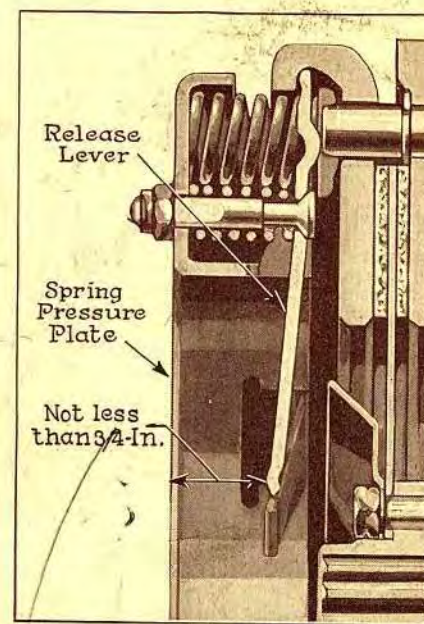
1. *Every 1000 miles.* To avoid inconvenience to the car owner, it is important that slipping of the clutch be anticipated before it actually happens. This means that the clutch pedal adjustment must be checked at every 1000-mile inspection, this check to include inspection of the adjusting nut and trunnion.

This is especially important at the end of the first 1000 miles because the initial surface of the facing wears more rapidly than after it has been worked in by use.

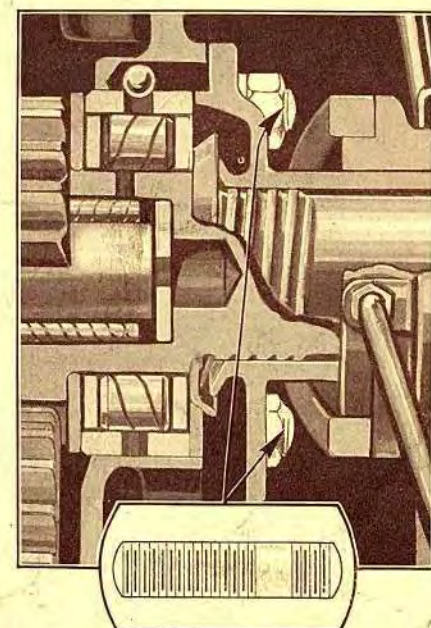
2. *When the clutch pedal adjusting nut stands away from the trunnion.* The transmission should be removed and the studs should be replaced with the cap screws and special thin lock washers.

In some cases it may be advisable while the transmission is off to replace the driven discs and facings. This depends on how much the facings are worn. It is not necessary to

(Continued on page 4)



The clutch driven discs should not be replaced if the distance from the rear face of the pressure plate to the nearest point on the release levers is $\frac{3}{4}$ -inch or more



The studs and nuts for the clutch connection bearing shown at the left have been superseded by the cap screws shown at the right. When used with the special thin lock washers, the cap screws allow approximately $\frac{1}{4}$ -inch additional travel for the clutch release yoke

A SATISFIED OWNER NEVER COMPLAINS

A New Catalogue Describes and Illustrates The Complete Line of Cadillac-Approved Accessories

ANOTHER new development has been made in the program of properly merchandising accessories by the publication of an Accessories Catalogue. This catalogue has just been printed and a copy has been sent to each distributor and dealer. Additional copies will be furnished, no charge, on request.

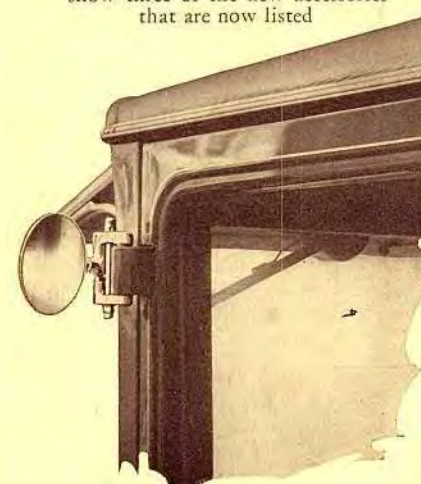


Copies of the new Accessories Catalogue are being distributed no charge

This catalogue describes in detail all of the accessories that can be secured from the Cadillac Motor Car Company. These accessories have been carefully selected; they have all been thoroughly tested, and they are recommended as the best that can be secured. Every Cadillac distributor and dealer should sell them.

Among the things listed are trunks, Cadillac-Kelch heaters, spotlights,

These illustrations are taken from the new Accessories Catalogue and show three of the new accessories that are now listed



Protectahood, seat covers, robes, tire covers and cleaning supplies, all of which have been featured at one time or another in the SERVICE MAN.

There are also several new accessories listed, including a hot-water car heater, new monogram plates in gold and silver, and a new exterior rear vision mirror. Furthermore, the catalogue is made up in a loose-leaf form to permit including additional sheets when new accessories are approved and adopted.

The catalogue contains large, clear illustrations of all accessories, together with descriptions, part numbers and list prices. Part numbers have been assigned to all accessories to simplify ordering and guard against errors.

As a further help in ordering, a special accessories order form has been made up. One pad of these orders, form 4149, has been sent to each distributor. Additional forms can be secured, no charge, from the Parts Division.

Clutch Adjustments

(Continued from page 3)

disassemble the clutch to determine this. Simply place a scale across the rear face of the pressure plate and measure from this scale to the nearest point on the release levers. If this distance is $\frac{3}{4}$ inch or more, the facing is not worn enough to warrant replacement.

3. *If the clutch has already started to slip.* In this case remove the transmission and replace the studs with cap screws and thin lock washers.

Make the same test as described



Exact Alignment Important In Installing Crankpin Plug

WHEN installing crankpin plugs in the crankshaft, particular attention must be given to the alignment of the holes for the retaining screw. The hole in the plug should be properly lined up with the hole in the crankshaft before the screw is inserted.

The screw cannot be used to align the hole in the plug with the hole in the crankshaft. If the holes are not in line when the screw is installed, the screw will probably tighten in the plug without entering the hole in the crankshaft. This will either strip the threads in the plug or will force the end of the plug away from the shaft and spring it out of shape or break it.

before to determine whether the facings are worn enough to require replacement of the driven discs.

Also examine the release levers in this case to see whether the heat generated by the slipping of the clutch has been sufficient to burn them. If they are burned, replace the clutch pressure plate assembly.

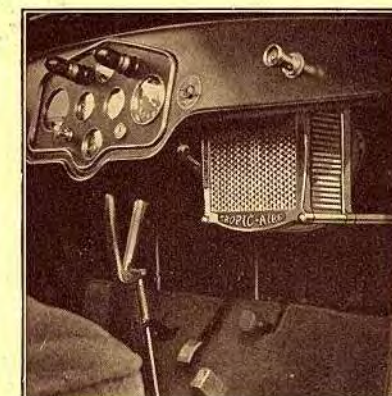
It is especially important, if the clutch has started to slip, to see that the release bearing is repacked in fiber grease as the heat will probably have burned out the original grease. Make sure, also, that the grease cup and the tube connecting it to the bearing are functioning properly.

4. *Whenever a transmission is removed for any purpose.* In this case, always replace the studs with the cap screws and special lock washers.

Wanted

WANTED—59 Cadillac Roadster body with rear fenders and top. State exact condition and price in letter. Dew Motor Company, St. Petersburg, Florida.

The new accessories are: Left, the new exterior rear view mirror; center, a group of the new monograms; below, the Tropic-Aire hot water heater



A SATISFIED OWNER NEVER COMPLAINS

PRINTED IN U.S.A.

The CADILLAC LA SALLE SERVICE · MAN

Volume III

February 1, 1929

Number 3

Service Management IS THEME of Clinics

ANOTHER important advance in service training has been made in the presentation of the 1929 Service Clinics. These clinics will include an entirely new and thoroughly practical course in "Service Management."

The problems that demand the service manager's best thought and ability are now largely problems of administration and organization. While proper testing and repair methods are still essential, they are really only details of what is becoming more and more an administrative job.

Accordingly, the course of study for these clinics will cover every important phase of service station management. The principal topics to be discussed are service station layout and equipment, personnel, the customer, accounting, factory contact, and parts management.

Each clinic will be divided into two distinct sessions. The first session, which will last for three days, will cover the subject of Service

(Continued on page 3)

ATTEND CLINICS AT

Cleveland.....Feb. 4	*San Francisco....Mar. 11
*Kansas City.....Feb. 4	Chicago.....Mar. 11
Denver.....Feb. 4	Winston-Salem...Mar. 18
Philadelphia.....Feb. 11	Los Angeles.....Mar. 18
*Minneapolis.....Feb. 11	Birmingham...Mar. 25
Portland, Ore....Feb. 18	Memphis.....Mar. 25
*Boston.....Feb. 25	Jacksonville....Apr. 1
*New York.....Mar. 4	Dallas.....Apr. 1
Cincinnati.....Mar. 4	Oklahoma City..Apr. 8
*Detroit.....Apr. 8	

IMPORTANT!

*Note change in dates of these clinics since mailing of original schedule. These changes have been made to avoid conflict with shows and sales clinics

A SATISFIED OWNER NEVER COMPLAINS

Number 3
Page 2

The CADILLAC LA SALLE SERVICE · MAN

FEBRUARY 1, 1929
DETROIT, MICH.

NUMBER 3
VOLUME III

Published on the first and fifteenth of each month in the interest of Cadillac Service

New Rate for Policy Work

ALL policy work performed on cars sold by other distributors is to be billed hereafter on Inter-Organization Invoices at \$1.25 per hour instead of \$1.00 per hour.

This rate will also apply to labor allowances for any campaign changes that may be authorized in the future. Labor allowances for campaign changes already authorized must be billed at the original amount.

Reasons for Replacement Of Two-Plate Clutches

WHEN returning two-plate clutches to the factory for either credit or repair, the *exact* reason for returning them should be given on both the Returned Goods Notice and the Returned Parts Tag.

This reason might be improper clutch pedal adjustment, or interference of the yoke with the studs in the clutch connection bearing cap. It is not enough to simply report "clutch slips."

It is also important that the engine number and car mileage be given for every car on which a two-plate type clutch is replaced and returned to the factory. This applies to clutches returned for repairs as well as those returned for credit.

Position Wanted

AMAN with 12 years' experience in Cadillac service work, at present employed in distributor's Sales Department, would like to secure position as Service Manager or Assistant. He was formerly Head Tester and Assistant Service Manager for a western distributor. Address Box C, CADILLAC-LASALLE SERVICE MAN.

Service Manager

with 17 years' service experience, most of which has been on Cadillac cars. He is now Service Manager for a dealer in a southern town, 70,000 population, but would like to secure a position with a larger organization. Address Box D, CADILLAC-LASALLE SERVICE MAN.

The Cadillac-LaSalle Service Man

Fan Hub Assembly Gaskets Packed Under False Bottom

SOME parts managers have written in that they have received fan hub assemblies in which the gasket was missing. When these assemblies are shipped, the gaskets are packed in the box under a false bottom, and care should be observed in unpacking them to make sure that the gaskets are not destroyed.

Lubrication of Front Brake Trunnion Now Recommended

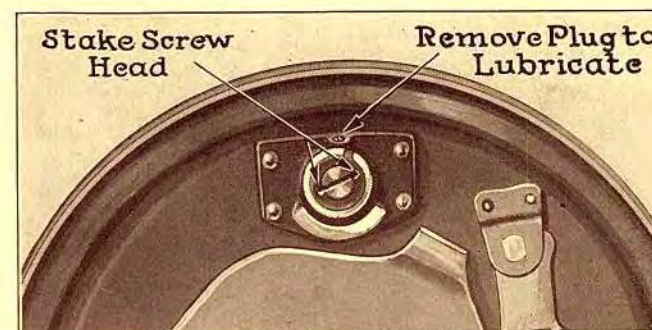
WHEN the front brake trunnions on Cadillac 341-B and LaSalle 328 cars are assembled, they are packed with lubricant and this lubricant stays on the bearing surfaces for a long period of time. On this account, lubrication of the trunnions was not originally included in the lubrication schedule.

It has since been found advisable, however, to add lubricant to the trunnions at regular intervals. It is accordingly recommended that the front brake trunnions be lubricated in the service stations every 4000 miles at the same time that the wheels are removed for re-packing the wheel bearings.

To lubricate the trunnions after the wheels are off, simply remove the brake shoe retracting spring and raise the upper shoe out of the way. Remove the plug on the upper side of the bearing and lubricate with G-11 or A-200. Be very careful not to apply too much lubricant.

Whenever the front wheels are off for lubrication or for any other work, the large flat-headed screw in the end of the trunnion should be inspected. These screws should be staked on the washer at both ends of the slot in the manner shown below. This staking prevents the screw from turning.

If any screws are found that are staked only in one place, they should be re-tightened and staked at both ends of the slot. A center punch is used to stake the screws.



Lubricant should be added to the front brake trunnions every 4000 miles. While the wheels are off, the flat-headed screw in the end of the trunnion should be inspected to see that it is properly staked as shown

SHOP SHORTCUTS

THIS month's shortcut is a method of removing and installing the horn switch button on the steering wheel. It was submitted by Mr. Ward L. Griffin, a mechanic with the Thompson Cadillac Company, Spokane, Washington.

The usual method of removing the horn switch is to drop the side pan and remove the lighting switch so that the switch tube and lever can be turned and pulled up far enough to expose the retaining screw for the switch button.



To remove the horn button, loosen the clamp screw and turn the stationary tube counter-clockwise until the lighting switch tube can be pushed up enough to give access to the retaining screw

Mr. Griffin states that from one-half to three-quarters of the time ordinarily required to do this can be saved by his method. Instead of removing the side pan and switch, he simply loosens the clamp screw on the lower end of the steering gear housing. He can then turn the stationary tube counter-clockwise until the lighting switch lever and tube are released, when the tube can be pushed up far enough to give access to the horn switch retaining screw.

If care is taken not to pull out the horn wire any farther than necessary, it can be easily put back into place. To re-assemble, place the lighting switch lever in the "off" position and push the tube down into place. Then turn the stationary tube back to its proper position and tighten the clamp screw to lock it in place.

A SATISFIED OWNER NEVER COMPLAINS

Service Management Is Theme of Clinics

(Continued from page 1)

Management. The remaining two days will constitute a separate session on the subject of Parts Management. Service managers will attend both sessions of the clinics. In addition, parts managers should arrange to attend the session on Parts Management.

The material will be presented by lecture and discussions. Charts will be thrown on the screen to bring out important points and illustrate subjects requiring it. The clinics will be conducted by Messrs. Clyde Coons, P. A. Noble and Wm. Mogee, whose work with previous clinics is familiar to all Cadillac-LaSalle Service men.

This course presents an opportunity for practical benefit that cannot be secured in any other way. This material cannot be found in any book, and it is not taught in any school.

These clinics are planned to be of greatest benefit to service managers, and every service manager, employed either by a distributor, dealer or branch, should make every effort to attend one of them. Assistant service managers should also attend, as the course will be of a great deal of value to them. This includes any service executives that share the management of the service department, even though they may not have the title of "Assistant Service Manager." Distributors' wholesale representatives should also be sure to attend.

The schedule on the first page shows the dates and locations of the clinics. Each clinic starts on a Monday morning and lasts through Friday. The session on Parts Management will in each case be presented on Thursday and Friday.

The men can attend the clinic that will be most convenient for them providing the factory is notified of the number who will attend at least one week before the clinic starts. Schedules and enrollment blanks for this purpose have already been sent to each distributor. Dealers should arrange to make their reservations through their distributors.

Touring Owners Must Have A Service Card Or Letter

SEVERAL cases have recently been reported to the factory of customers who have purchased Cadillac or LaSalle cars within the past few months and who have been told nothing about the Service Policy.

Some of these owners have gone on trips to the South or West immediately after taking delivery of their cars. They have gone without having a definite understanding of what service they are entitled to receive and without any means of identifying themselves at authorized service stations.

Under the above circumstances, the customer is not likely to receive all of the service to which he is entitled, for the service station will have no means of knowing what policy work he should receive.

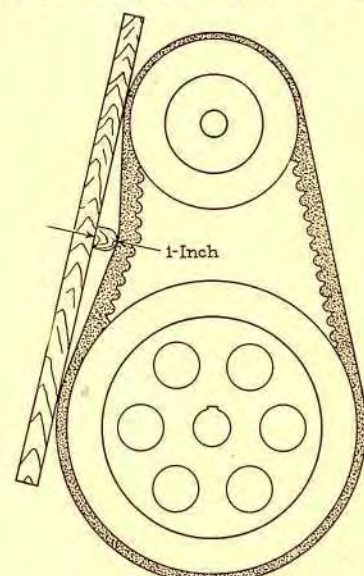
Service managers should check up on their delivery practices and make sure that the policy is properly explained to every new car purchaser. Many owners take trips during the winter as well as during the summer, and these owners should be given proper letters of introduction if they leave before their Service Card arrives.

Body Style On Reports

SPACES are provided on both the New Car and 90-Day Reports for filling in the body style of the car, yet there are a number of service stations that leave this space blank.

The body style is a very important item in tabulating the majority of these reports, and it should be filled in on every report.

Fan Belt Tension



It has been found advisable to lessen the tension on the fan belt. Hereafter all fan belts should be set as shown above, instead of the $\frac{3}{8}$ -inch setting given in the Apr. 1 SERVICE MAN.

For Sale

SEVEN-passenger touring car body for type 61 Cadillac. In good condition. Complete with top and side curtains.

Four-passenger Victoria body for V-63 Cadillac. In A-1 condition.

Communicate direct with Brennen Motor Corporation, 14 N. Columbus Avenue, Mount Vernon, N. Y.



Above are two views of the Cadillac-LaSalle accessory display which was held at the Astor Hotel during the week of the New York show. Representatives of forty-one distributors visited this display during show week. The interest shown and the amount of stock ordered indicates that more distributors and dealers are realizing the possibilities for profit from accessories.

A SATISFIED OWNER NEVER COMPLAINS

Fender Racks of New Design Provide Maximum Capacity With Convenience and Accessibility

THE PROBLEM of storing fenders or other long or bulky parts can be solved most efficiently by the use of the new fender racks which are now available through the factory Parts Division.

These racks provide the most compact and convenient means of storing fenders. They hold more fenders in less space, permit wider aisles and neater stock room arrangement. They are made of steel and are of strong and rigid construction.

The racks come in units 60 inches wide. Two of the units used together are shown in the illustration. Each unit has space to hold 14 front fenders and 14 rear fenders. This capacity is based on the largest size fenders with fender-wells. In spite of this large capacity, the size of each unit is only 9 feet 9 inches high, 4 feet 7 inches deep and 5 feet wide.

Furthermore, when arranged in the racks, the fenders are easily accessible and can be removed without danger of scratching or denting them. The rear fenders are arranged on shelves at the top of the bin. The part numbers can be marked on the wrapping where they can be easily

seen and any fender on the shelves can be located at once.

The front fenders are placed in the rack in an upright position, and held in place by straps that are fastened to the side pieces by movable pegs. Slow moving fenders should be kept in the back of the rack, of course, and fast moving stock near the front.

In order to know just what front fenders are in stock and where they are located, a plate is fastened to the front of each rack on which are kept cards showing the part numbers and location of all the fenders in each section.

The racks are also fully adjustable and when the short front fenders used on V-63 cars are stored in them, additional shelves with L-partitions can be inserted above the fenders and other long material can be stored on these shelves.

By installing extra shelves in these racks, they become adaptable for storing other large parts such as axle shafts, universal joints, brake rods, torque tubes. Location numbers and letters can be marked on these racks the same as on the steel bins. Further information on using these racks for storing large parts will appear in a later issue. (See next column)

Graphite for Steering Gear Must Be Acheson No. 38

IN AN article on steering gear lubrication appearing on Page 3 of the January 1 SERVICE MAN, it was recommended that 5% Acheson Number 38 graphite be added to the A-200 lubricant.

If graphite is added to the steering gear lubricant, it is very important that only Acheson Number 38 be used. This particular product is a very fine powdered graphite, and no other powdered graphite on the market is similar to it.

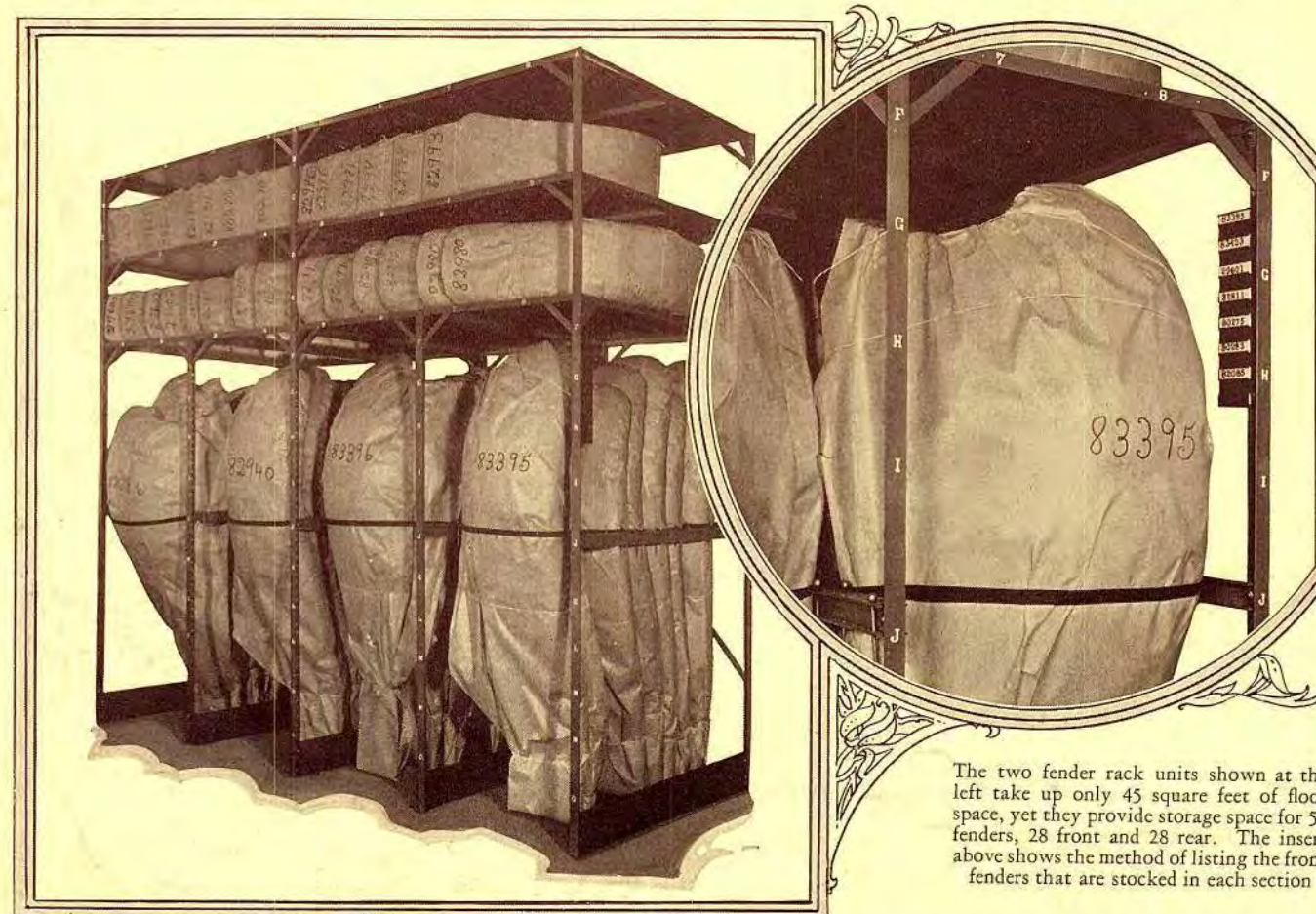
Every distributor or dealer who keeps fenders in stock should have one or more of these units. Fenders are high-priced and fast moving stock and should be handled with care. The cost of refinishing fenders that have been scratched or damaged by careless handling would pay for one of these racks within a comparatively short time.

The racks are made by the Lyon Metal Products Company. The Lyon list prices are as follows:

Each first 60-in. unit, \$111.00.

Each additional 60-in. unit, \$92.00.

Net prices can be obtained by application to the local jobber or direct to the factory Parts Division.



The two fender rack units shown at the left take up only 45 square feet of floor space, yet they provide storage space for 56 fenders, 28 front and 28 rear. The insert above shows the method of listing the front fenders that are stocked in each section.

A SATISFIED OWNER NEVER COMPLAINS

The CADILLAC LA SALLE SERVICE MAN

Volume III

February 15, 1929

Number 4

Parts Managers Are Urged To Attend Sessions Of Clinics

BY THE TIME this issue of the SERVICE MAN is in the hands of its readers, six of the clinics on "Service Management" will have been held.

Every man who has attended these clinics has taken away with him a larger conception of service and what it means to manage a Service Department. As one man put it: "There's a lot more to my job than I ever dreamed. I have a lot to learn, but I am going to lick it."

The amount of good that the clinics are doing for Service Managers must not be allowed to overshadow the attention which is paid to Parts Managers. The two days devoted to the subject of Parts Management are just as important for

Attend These Clinics

	Clinic Starts	Parts Management Sessions
BOSTON	Feb. 25	Feb. 28
NEW YORK	Mar. 4	Mar. 7, 8
CINCINNATI	Mar. 4	Mar. 7, 8
SAN FRANCISCO	Mar. 11	Mar. 14, 15
CHICAGO	Mar. 11	Mar. 14, 15
*WINSTON-SALEM	Mar. 11	Mar. 14, 15
LOS ANGELES	Mar. 18	Mar. 21, 22
BIRMINGHAM	Mar. 25	Mar. 28, 29
MEMPHIS	Mar. 25	Mar. 28, 29
JACKSONVILLE	Apr. 1	Apr. 4, 5
DALLAS	Apr. 1	Apr. 4, 5
OKLAHOMA CITY	Apr. 8	Apr. 11, 12
DETROIT	Apr. 8	Apr. 11, 12

Enroll Right Away!

*Note change in Date

Parts Managers as the rest of the clinic is for Service Managers.

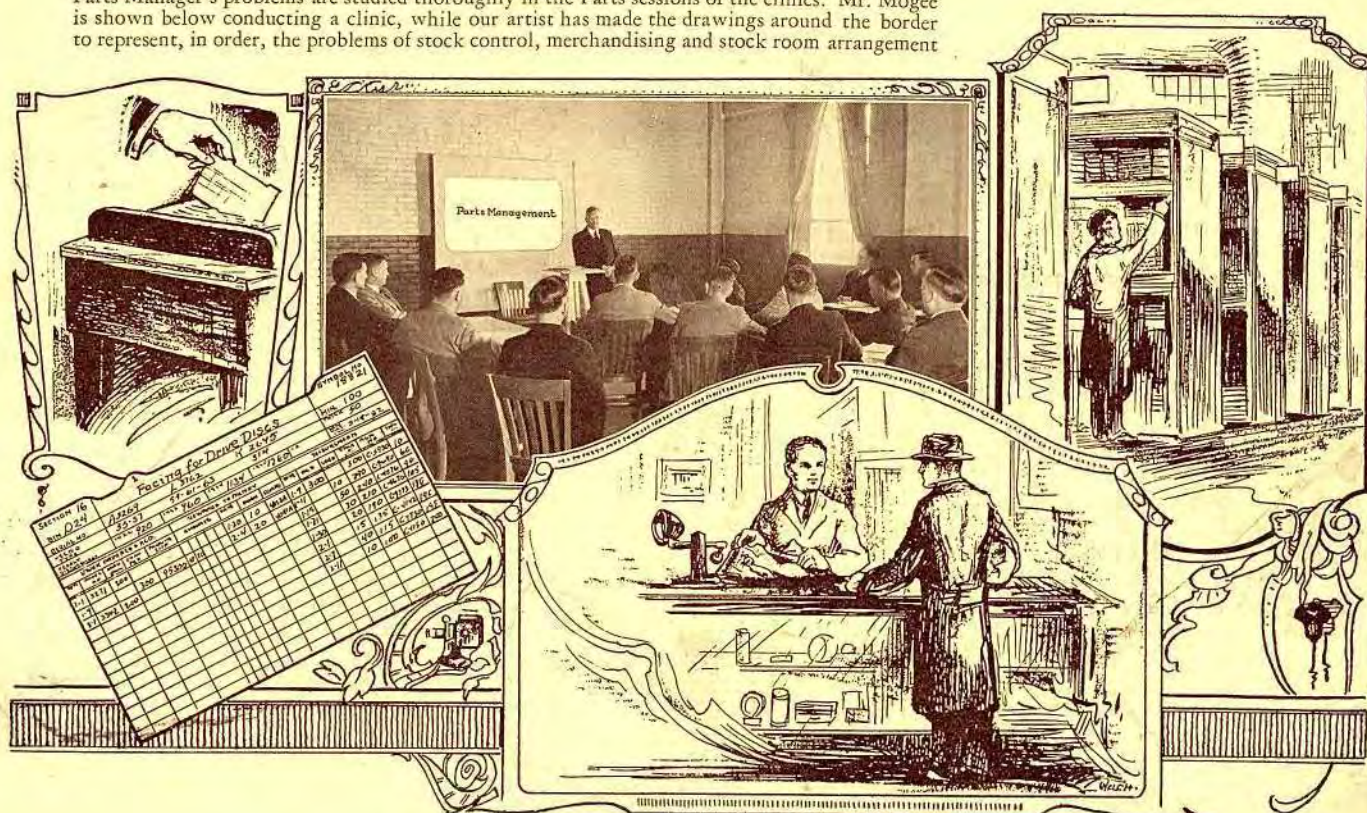
Of course, if only one man from a dealer's organization is able to attend the clinic, this man should be the Service Manager, but wherever it is at all possible, the Parts Manager should be present on Thursday and Friday.

One of the biggest problems facing Parts men is how to sell more parts and accessories. The clinic points the way to larger profits through increased volume by better merchandising methods.

All of the different outlets through which parts and accessories can be sold are discussed, together with ways and means for increasing sales through each outlet. Stock room appearance and location, personnel,

(over)

Parts Manager's problems are studied thoroughly in the Parts sessions of the clinics. Mr. Mogee is shown below conducting a clinic, while our artist has made the drawings around the border to represent, in order, the problems of stock control, merchandising and stock room arrangement



A SATISFIED OWNER NEVER COMPLAINS

Number 4
Page 2

The CADILLAC LA SALLE SERVICE MAN

FEBRUARY 15, 1929
DETROIT, MICH.

NUMBER 4
VOLUME III

Published on the first and fifteenth of each month in the interest of Cadillac Service

proper contact with the independent, and close co-operation with the shop are all considered in their relation to merchandising.

Next to merchandising, the parts man's hardest job is to control his stock efficiently. The accumulation of unsalable and obsolete stock is a nightmare to many Parts Managers. One of the best things done by the clinic is in showing how to keep a "balanced stock"—a stock that will secure every sale it is possible to make and yet do this without an excessive inventory.

Parts Managers are finding out more and more that the physical features of the stock room—equipment, location and arrangement—are vital factors in determining parts sales. What constitutes the ideal location is presented in detail and the latest developments in bin equipment are described.

These are just a part of the problems that are discussed. Other details—parts lists, ordering, returning and crediting of parts, accounting features—are given their share of attention.

Every parts man who attends these two days of the clinic should be able within a short time to save his employer more than enough to pay his expenses.

Exhaust Manifold Gaskets Should Have Bound Edges

FOR several months exhaust manifold to cylinder gaskets, part numbers 876419 and 876420, have been bound around both the inner and outer edges so that the asbestos packing is completely covered. This greatly lessens the possibility of gaskets blowing out.

There are some distributors and dealers that still have old type gaskets in stock. All exhaust gaskets with the above numbers should be inspected and any that are not bound around the outer edges should either be returned for credit on an R.G.N. or held for service representative's credit authorization.

If the cylinder block hold-down nuts are loose, the gaskets are more likely to blow. When installing new gaskets, therefore, it is a good plan to make sure that these hold-down nuts are tight.

The Cadillac-LaSalle Service Man

Hand Brake Lever Applies Rear Foot Brake Shoes With New Arrangement of Brake Connections

THE hand brakes and the foot brakes on both the Cadillac 341-B and LaSalle 328 cars have heretofore been separate and independent brake systems. Beginning with chassis unit 3-31425 on Cadillac cars and 4-13271 on LaSalle cars the hand brakes are inter-connected with the foot brakes so that the rear foot brakes are applied by the hand brake lever. By means of this arrangement a more effective parking brake is obtained.

Installation on Earlier Cars

The new brake hook-up can be installed on the earlier 341-B and 328 cars.

The principal parts to make this change are the hand brake lever pull rod assembly, the foot pedal pull rod assembly and the rocker shaft with the auxiliary lever. The parts necessary to make the change will be assembled in sets and can be ordered from the Factory Parts Division under the following part numbers:

Cadillac LaSalle
Left-hand drive.....43446 43444
Right-hand drive.....43447 43445

Brake Adjustments

The chart on the opposite page gives complete instructions for the adjustment of the brake connections.

One thing to be noted in particular is the new dimensions for the position of the cam levers. These supersede the dimensions given in the Shop Manual and should be used whether or not a car has the new hook-up.

The adjustments for lining clearance on the foot brakes remain the same, but there has been a change in the method of adjusting the hand brake centralizing cam.

To make this adjustment, loosen the locking nut and turn the cam in one direction until the shoe just drags at one end. Then turn the cam in the opposite direction until the shoe just drags at the other end. Finally turn the cam back half-way between the two extreme positions and tighten the locking nut.

Lead Tips On Long Shoes

Another recent change in the brakes is the addition of a lead tip on the end of the long shoe in each of the foot brakes. These lead tips pick up particles of grit or metal and thus help to prevent possible scoring of the drums.

This change went into effect beginning with front axle unit 3-31441 and rear axle unit 3-31525 on Cadillac cars and the front axle unit 4-13424 and rear axle 4-13409 on LaSalle cars.

FOR SALE—Series 314 7-Passenger Sedan body in good condition, Duco in A-1 shape. Price, crated F. O. B. Norwich, Conn., \$125. Inquire of A. C. Swan Company, Norwich.

WANTED—Cylinder water jacket assembly for 1910 model 4-cylinder Cadillac, part number 20473. Reply to Factory Parts Division, stating condition and price asked.

Another Cold Weather Suggestion

WE know of one Service Manager who carefully read our notice on Cold Weather Starting, for he sent in the following suggestion, a thought which probably came to a number of our readers:

"May we suggest that in addition to your suggestions for cold weather starting as mentioned in January 15th, SERVICE MAN, we find that improper spark plug setting oftentimes causes hard starting, and is an adjustment that is frequently overlooked."

With this new arrangement, the hand brake lever ordinarily applies only the rear foot brakes. The hand brake shoes are not applied by the hand brake lever until the lever has been moved 7 or 8 notches.

The connection between the hand brake system and the foot brake system is made by means of the special linkage shown on the opposite page. This linkage consists of an auxiliary lever on the foot brake rocker shaft under the cross member and a slotted link at the rear end of the hand brake lever pull rod.

The front yoke on the foot pedal pull rod is also slotted to permit application of the hand brake lever without moving the foot pedal. This makes it necessary to reinstate the stop screw formerly used on the lower end of the foot pedal for adjusting the pedal position.

In operation the driver will notice no difference in the application of the hand brake lever nor in the application of the foot pedal when the hand brake lever is released. When the hand brake lever is applied, however, the foot pedal will have a few inches of lost motion. This lost motion must not be mistaken for loose adjustment.

A SATISFIED OWNER NEVER COMPLAINS

Brake Lining Chart

MODEL OF CAR	FOOT BRAKES, FRONT			FOOT BRAKES, REAR			HAND BRAKES		
	SIZE	PART NO.	PRICE	SIZE	PART NO.	PRICE	SIZE	PART NO.	PRICE
341-B Short Shoe.....	2¼ x 7½	880125	\$0.45	2¼ x 7½	880125	\$0.45	2¼ x 10⅜	880134	\$0.60
341-B Without Lead Tip.....	2¼ x 16¾	880124	.95	2¼ x 16¾	880124	.95	.....	.....	.....
341-B With Lead Tip.....	2¼ x 15⅜	880845	.90	2¼ x 15⅜	880845	.90	.....	.....	.....
328 Short Shoe.....	2 x 6⅜	870696	.35	2 x 6⅜	870696	.35	2 x 9½	870694	.50
328 Without Lead Tip.....	2 x 15¾	870703	.80	2 x 15¾	870703	.80	.....	.....	.....
328 With Lead Tip.....	2 x 13⅜	871822	.70	2 x 13⅜	871822	.70	.....	.....	.....
341-A *	2¼ x 41¾	46367	2.30	2½ x 49½	46369	3.00	2 x 40¾	878146	2.05
341-A **	2¼ x 45¾	46360	2.55	2¼ x 49½	46370	2.75	2 x 40¾	878146	2.05
303 †.....	2 x 36⅞	46364	1.85	2 x 44¼	46366	2.20	2 x 40⅞	156934	2.05
303 †.....	2 x 41½	46365	2.10	2 x 44¼	46366	2.20	2 x 40⅞	156934	2.05
314.....	2¼ x 45¾	46360	2.55	2½ x 53½	46363	3.25	2 x 43⅞	57626	2.20
63-B.....	2¼ x 45¾	46360	2.55	2½ x 53½	46363	3.25	2½ x 46¾	46373	2.85
63-A.....	2¼ x 44⅞	46359	2.50	2½ x 53½	46363	3.25	2½ x 47¾	54613	2.90

*Before front axle unit 3-6001 for front brakes and before rear axle unit 3-12529 for rear brakes.

**After front axle unit 3-6000 for front brakes and after rear axle unit 3-12528 for rear brakes.

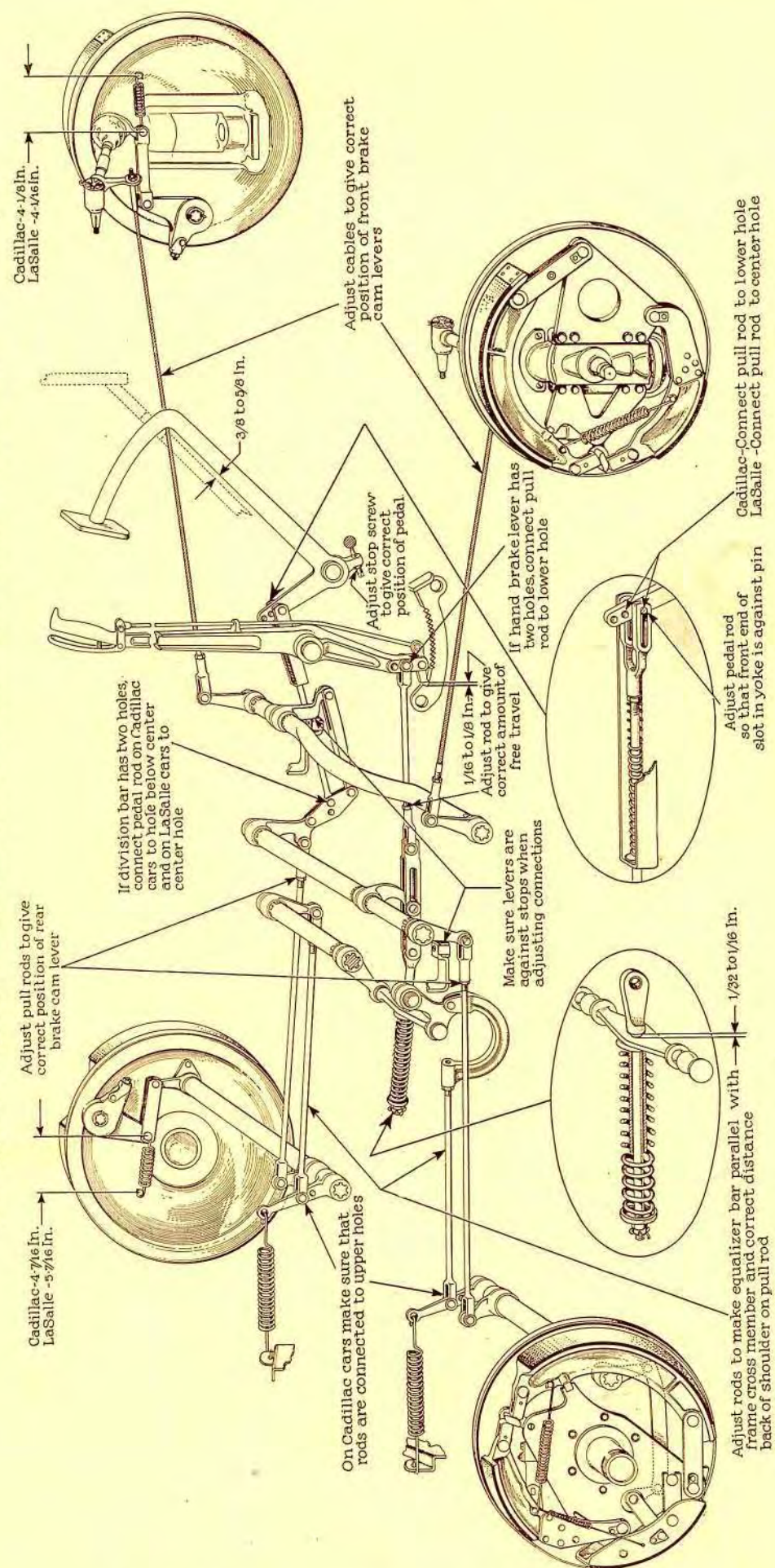
†Before front axle unit 2-16609.

‡After front axle unit 2-16608.

The sizes given above allow for cutting the lining to the proper length for fitting to band brakes according to the method given in the SERVICE MAN for January 1, 1928.

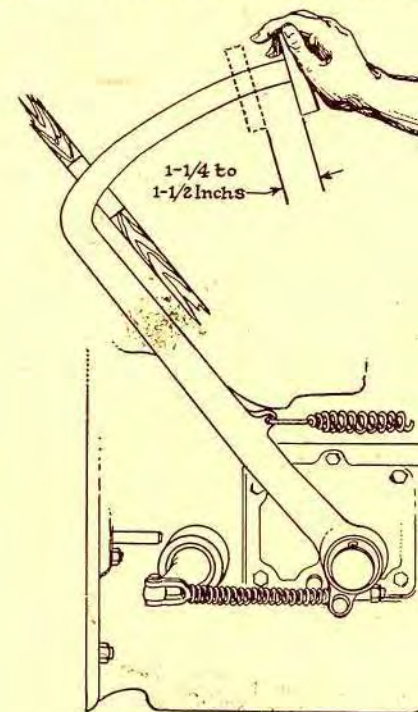
Chart Of Adjustments Of Brake Connections

New type hook-up, after chassis unit 3-31425 on Cadillac and 4-13271 on LaSalle cars



A SATISFIED OWNER NEVER COMPLAINS

Three Points On The Clutch Pedal



1. Test for free travel EVERY 1000 MILES.

This is especially important for the first 3000 miles, but it should be made a regular practice at EVERY 1000-mile inspection.

2. Test BY HAND—not by foot.

With the two-plate clutch, your foot is not sensitive enough to detect the difference between the tension of the pedal pull-back spring and the pressure of the clutch springs. In case of doubt disconnect the pedal spring.

3. Give the pedal the CORRECT AMOUNT of free travel.

1 1/4 to 1 1/2 inches is recommended for the first 3000 miles—after that 1 to 1 1/4 inches is enough. Measure it with a scale—do not guess.

NOTE: On Cadillac 341-B and LaSalle 328 cars be sure after making the adjustment that there is no play between the trunnion and the adjusting nut. (See January 15 "Service Man".)

Multibestos Busduty Is Standard Brake Lining For All Models; Supplied Only In 100 Ft. Rolls

BEGINNING February 15, Multibestos Busduty brake lining, which is standard equipment on Cadillac 341-B and LaSalle 328 cars, will be supplied as the standard brake lining for both current model and past model cars. This lining will be supplied only in 100-foot rolls. It is available for immediate shipment under the following part numbers and list prices per foot:

2" lining—46381.....	\$.58
2 1/4" lining—46382.....	.63
2 1/2" lining—46386.....	.71

Raybestos will still be supplied when specified. It comes in 100-foot rolls. The part numbers and prices are:

2" lining—46383.....	\$.72
2 1/4" lining—46384.....	.79
2 1/2" lining—46385.....	.88

Amco B lining has now been entirely discontinued. Distributors and dealers should use up on cars

with band brakes any Amco B lining they have in stock, either in rolls or in cut lengths, as the factory cannot accept it for credit.

As stated above, brake lining will be supplied only in 100-foot rolls. Cut lengths of lining have been eliminated from factory stock and will not be supplied on Parts Orders. The Parts List Change Notice dated February 15 cancels the listings of all cut lengths of lining.

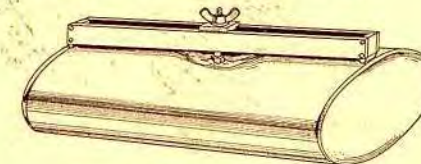
A new brake lining chart which shows the length, part number and price of each piece is being supplied for insertion in the Parts List. The same information is tabulated in the chart that accompanies this issue.

The prices in the chart are based on the Multibestos prices quoted above. New pages that will show the revised prices on brake operations are being prepared for the Contract Maintenance books.

SHOP SHORTCUTS

THIS week's prize goes to Mr. Chris Staugaard of the Cadillac LaSalle Branch at Detroit, for submitting an ingenious arrangement for removing dents in gasoline tanks without danger of explosions.

The device consists of two bars fastened together to form a channel in which a bolt can slide. This bolt is soldered to the depression in the tank and by turning a wing nut down against the bars, the dent can be drawn up flush. The tank must, of course, be refinished afterwards.



Dents can be easily removed from the gasoline tank by the use of this tool. The bolt head is soldered to the dent and the wing nut turned down until the dent is removed.

Wheel Bearing Grease Must Be Used For Clutch Bearing

IN THE past, the clutch release bearing has been lubricated with fiber grease. Recent developments, however, have indicated that wheel bearing grease, G-2 1/2 specifications, is a more satisfactory lubricant.

Wheel bearing grease is now being used for this bearing at the factory. Authorized service stations should begin the use of this lubricant at once for the clutch release bearings of both current and previous model cars.

It is also recommended that the grease connection to the bearing be inspected on any cars from which the transmission has been removed. The fiber grease should be cleaned out and the grease cup and connection filled with fresh wheel bearing grease.

Metric Spark Plugs

BEGINNING with engine unit 3-32889 on Cadillac 341-B and 4-14348 on LaSalle 328 cars, the spark plugs have an 18 millimeter metric thread. These spark plugs, type G-10, can be secured from United Motors Service under part number 841632 for the plug and 840277 for the gasket.

New cylinder heads must, of course, be used with the new plugs. The new LaSalle heads are 43411 and 43412. The new Cadillac heads are 43409 and 43410. New cylinder head gaskets, 880890, must be used with the new Cadillac heads.

A SATISFIED OWNER NEVER COMPLAINS

PRINTED IN U.S.A.

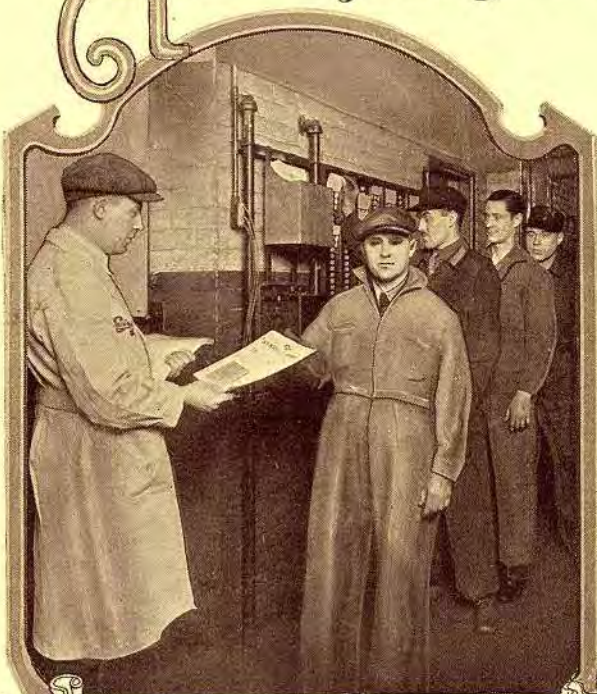
The CADILLAC LA SALLE SERVICE · MAN

Volume III

March 1, 1929

Number 5

Are You Getting The Most Out Of The Service Man?



Every Service Man Should get a copy

EVERY Cadillac-LaSalle service man needs to keep fully informed on all of the latest service developments. The necessary information is published regularly in the SERVICE MAN, but it must be used properly if it is to accomplish its purpose. The following suggestions show how you can get the most from every issue:

First, see that the copies are properly distributed. Packages containing the SERVICE MAN are addressed to the Service Manager in each organization, and he should arrange to have copies given out to every service and parts man. If any Service Manager is not now getting enough copies to supply all of his men, he should order more.

Then every man should take his copy and read it through carefully. The articles that apply to his particular work should be studied until they are firmly fixed in mind.

Informal shop meetings for discussion of the SERVICE MAN are recommended. Discussions invariably result in a better understanding of the subjects by everyone who takes part.

Written examinations stimulate a thorough study of the magazine. Many distributors and dealers hold

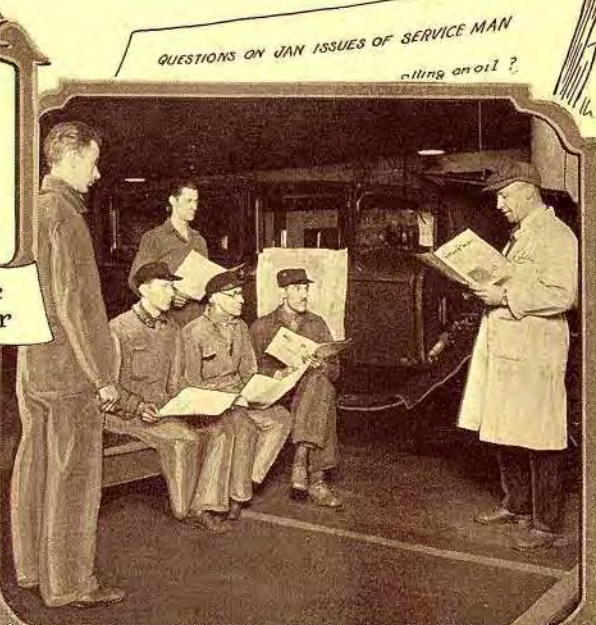
(over)



Put every issue in your binder



Study each copy thoroughly



Discuss the topics in your shop meetings

A SATISFIED OWNER NEVER COMPLAINS

Number 5
Page 2

The CADILLAC LA SALLE SERVICE · MAN

MARCH 1, 1929
DETROIT, MICH.

NUMBER 5
VOLUME III

Published on the first and fifteenth of each month in the interest of Cadillac Service

Using The Service Man

(Continued from page 1)

examinations regularly and a number of them give prizes to the men having the best papers.

To assist in holding examinations, sets of questions are prepared covering both issues of each month and sent out about the twenty-fifth of the month. These sets of questions have been made up for the past year and have been sent out when requested. They are now being sent to all distributors and to a number of dealers. Other dealers who wish to secure them should write to the factory for them.

Finally, after each copy has been studied, it should be filed in a binder, and the binder should be kept up-to-date. This binder will prove to be a valuable reference book of service subjects, all of which can be easily found by means of the index.

The regular SERVICE MAN binder is the best one to use for keeping copies. No new binder will be made up for Volume III. Service men can secure another binder like last year's if they wish to keep this year's copies separately. Binders can be secured from the Parts Division for 50 cents net.

Valve Adjustment Follows Tightening Hold-Down Nuts

THE cylinder block hold-down nuts should be tightened on every car at the end of the first 1000 miles. This operation is necessary because the gaskets compress a certain amount during the initial period of use.

This tightening of the hold-down nuts must be followed in every case by re-adjustment of the valve stem clearances. This is important—otherwise the valves may "ride" and burn.

For Sale

FOR SALE—314 Cadillac 5-Passenger Sedan Body. Windshield and front pillar slightly damaged. Finish (Larchmont Blue), upholstery (53 T 128) and cushions are all in good condition. Price \$150.00 net. Inquire the Wilbur Dunn Cadillac Company, Jackson, Michigan.

The Cadillac-LaSalle Service Man

Charging Rate Adjusted By Battery Readings

IN CONNECTION with the article in the January 1 issue of the SERVICE MAN on care of the storage battery, it is well to review the importance of the generator charging rate.

It is obvious that if the battery is continually losing gravity and finally requires recharging, the generator charging rate should be increased, but never above a maximum of 18 amperes.

On the other hand, if successive readings indicate maximum gravity, or if excessive evaporation makes it difficult to take readings at all, the charging rate is too high and should be lowered slightly.

If the action of the battery is watched in this manner, the proper charging rate for any type of driving conditions can be easily determined.

Size Of LaSalle Hand Brake Lining Incorrect In Chart

THE LINING for the LaSalle 303 hand brake, part number 156934, was listed as 2 inches wide in the brake chart which was enclosed with the last issue of the SERVICE MAN as well as in the chart which was sent out for insertion in the Parts List. The correct width for this one lining is 1½ inches. Change all of the charts in your possession accordingly.

The Parts Division will not supply lining 1½ inches wide in rolls, as the amount used is very small. This one lining will therefore be supplied in cut lengths under the part number and price given in the charts.

Tool For Cutting Lining

To facilitate the cutting of linings supplied in rolls, the factory has arranged to supply a cutting tool which can be ordered from the Parts Division. The tool number is 109242-T and the price \$11.50 net.

Reward Offered For Return Of Stolen LaSalle Landau

THE Becker Auto Company of Grand Rapids, Michigan, offer a reward of \$100 for the return of LaSalle Collapsible Landau Cabriolet, engine number 404136. This car when stolen had 1929 Michigan license, orange numbers on black background, 647-216. The color of the body was Thibetan Gray, with khaki collapsible back and Bedford Cord upholstery. The car was equipped with six black wire wheels, fender wells, and trunk rack, also had a Tropic Air heater.

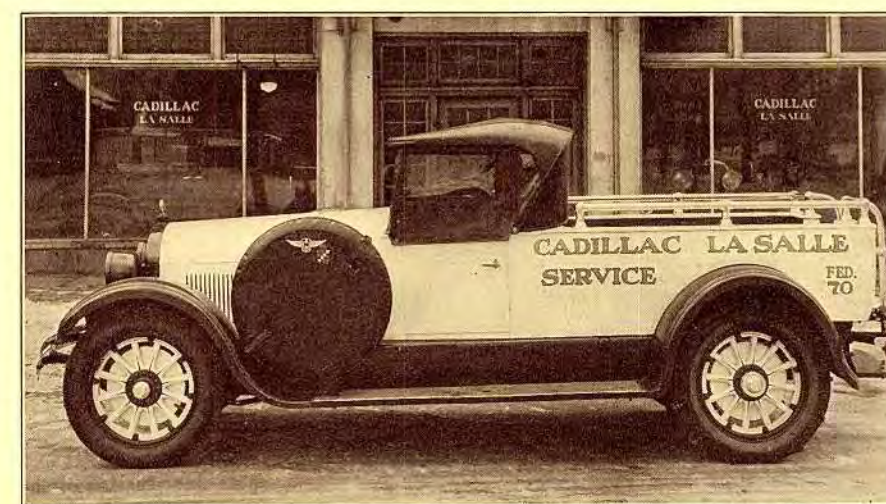
This car was supposedly purchased by a party giving his name as Rene M. S. Devitis, a Frenchman naturalized in Canada, about 45 years old, 5 ft. 7; dark complexion, wore glasses, and spoke with a very decided French accent. He made payment with a fraudulent check and a string of worthless notes. There is a warrant for his arrest already issued.

Gears for Convertible Coupe Window Control Hardened

BEGINNING about November 1, an improvement was made in the window regulator gear and pinion for Cadillac and LaSalle Convertible Coupes. Both the large gear and the integral pinion, which operate the regulator arm, have been hardened to prevent any possibility of broken teeth.

Distributors should check their stock of Convertible Coupe window regulators. These can be easily identified as the Convertible is the only model that uses a two-arm regulator.

Regulator assemblies with hardened gears are marked with a daub of red paint. Assemblies with soft gears should be returned to the Fisher Body Service Corporation for credit.



The Cadillac Sales & Service Company of Saginaw, Michigan, sent in this picture of their good-looking service car. A car like this is obviously good service advertising

A SATISFIED OWNER NEVER COMPLAINS

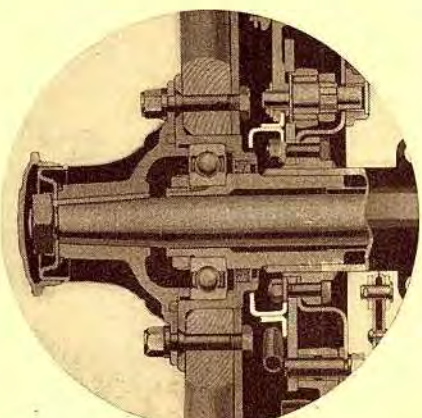
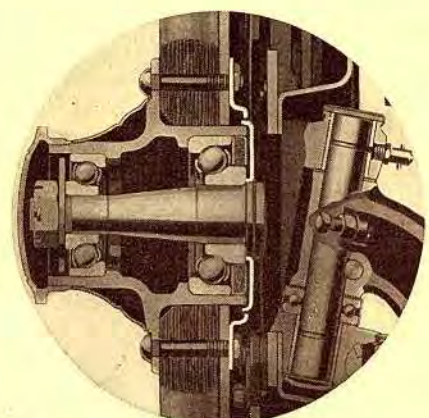
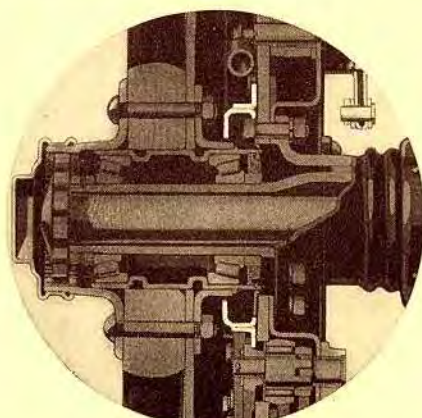
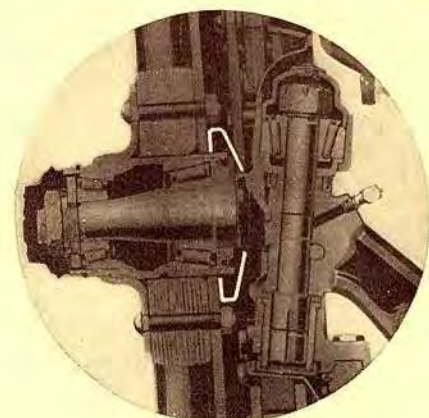
Grease Retainers Added To Both Front and Rear Wheels

BEGINNING approximately with chassis unit 3-30800 and rear axle unit 3-31101 on Cadillac cars and front axle unit 4-12725 and rear axle unit 4-12667 on LaSalle cars, auxiliary grease retainers are installed in the front and rear wheels of Cadillac 341-B and LaSalle 328 cars.

The purpose of the retainers is to catch any lubricant that may seep out of the wheel bearings and prevent its getting on the brakes. The retainers should be cleaned out whenever the wheels are removed.

The construction of the grease retainers is clearly shown in the illustrations. The retainers on the rear axles of both cars are channel-shaped rings which are mounted on the brake supports concentric with the axle tubes.

The retainer in the Cadillac front wheel is also a channel-shaped ring, but it is mounted on the brake drum. The retainer in the LaSalle front wheel is made in two parts. The inner part is a channel-shaped ring mounted on the steering knuckle, while the outer part is a saucer-shaped ring mounted on the brake drum.



Sectional views of the new grease retainers. Top left, Cadillac front wheel. Top right, Cadillac rear wheel. Lower left, LaSalle front wheel. Lower right, LaSalle rear wheel.

New LaSalle Tire Covers Smaller Speedometer Pinion

THE United States Tire Company, who furnish the standard tire equipment for LaSalle cars, are now supplying a new tire with a narrower tread. These tires are now being used in production. New tires can be easily identified as they have a four-groove tread, whereas the old tires had a six-groove tread.

Although the nominal size of these tires is 6.50-19, the same as the others, the rolling radius is a little larger. This necessarily changes the speedometer reading, and in order to secure a correct reading, a speedometer drive pinion with one less tooth must be used.

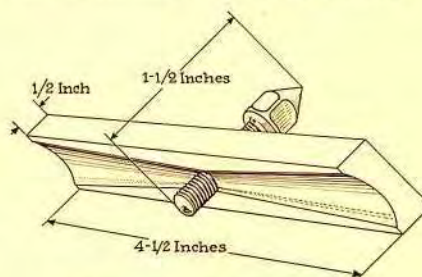
Accordingly, the correct speedometer pinions for LaSalle 328 cars are now as follows:

Axle Ratio	Number of Teeth	Part Number
4.54	20	848122
4.91	22	848124
4.07	18	848177

The part numbers of these new pinions should be marked in the chart of speedometer gears given in the November 15 SERVICE MAN. In any case of doubt as to which pinion to use, measure the rolling radius and refer to this chart.



A MANIFOLD jack submitted by Ed. L. Painter of the Fritz Motor Company, Wichita Falls, Texas, is prize winner this time. This jack is for use on models prior to the 314.



This simple tool is a big help in installing intake manifold gaskets on cars prior to 314.

The tool is made from a piece of cold rolled steel $4\frac{1}{4} \times 1 \times \frac{1}{2}$ ". A $\frac{1}{4}$ " hole is drilled as shown and tapped for a $\frac{5}{16} \times 1\frac{1}{2}$ " S. A. E. cap screw. The body of the tool is hollow ground from the center to fit over the exhaust manifold, and the cap screw head is ground to a point to aid in turning against the intake manifold.

In using this tool, place it between the intake and exhaust manifold with the point of the screw against the intake manifold. When the screw is turned, the intake manifold can be held in sufficiently to install a new gasket without difficulty.

Give Complete Information When Returning Fans

A NUMBER of distributors are returning fan assemblies direct to the Automotive Fan and Bearing Company, at Jackson, Michigan, for repair or for replacement.

This practice is entirely satisfactory. However, the parts that are returned must be properly tagged with all of the necessary information, the same as if they were being returned to the Factory.

Prompt return of these assemblies is also important. They should be sent just as soon as they are replaced.

Quarterly Reports Now Due

DEALERS' quarterly service reports should be made out and sent in to the Factory before April first. It is now time for distributors' wholesale representatives to get together with their dealers and get these reports made out. Report blank forms can be secured from the Parts Division.

Ten More Clinics—Ten Valuable Opportunities for Service Managers and Parts Managers

	Service Management	Parts Management		Service Management	Parts Management
SAN FRANCISCO	Mar. 11	Mar. 14	MEMPHIS	Mar. 25	Mar. 28
CHICAGO	Mar. 11	Mar. 14	JACKSONVILLE	Apr. 1	Apr. 4
WINSTON-SALEM	Mar. 11	Mar. 14	DALLAS	Apr. 1	Apr. 4
LOS ANGELES	Mar. 18	Mar. 21	OKLAHOMA CITY	Apr. 8	Apr. 11
BIRMINGHAM	Mar. 25	Mar. 28	DETROIT	Apr. 8	Apr. 11

"We Are Glad We Went"

"WE of the Towell Organization who attended the Clinic last week, conducted by Mr. Coons, in Cleveland, wish to express our appreciation of the many values contained in this work and of the good that we believe we have attained through it."

"WE wish to offer our congratulations. The 1929 Service Clinic, in our opinion, is the best thing that Cadillac has ever done for our Service Organizations."

"WE believe the information obtained at this Clinic is very valuable to all Service Managers and their assistants, and we regret very much that more of our dealers did not take advantage of the opportunity to send a man to attend this Clinic."

Sign up now!

Test Transmission Lubricant By Filling To Overflowing

SOME service men have been testing the level of lubricant in the transmission by removing the plug and simply sticking their finger or a small stick in the filler hole.

This method cannot be depended upon, as there may be lubricant around the filler hole even if the level is low. The only certain way to test the level is to add lubricant until it flows from the filler hole. This operation should be performed every 2000 miles as indicated on the lubrication chart.

Every Owner Is A Prospect For This Rear View Mirror

THE NEW exterior rear view mirror listed on page 19 of the new Accessories Catalogue is an item that deserves particular attention from parts counter men and wide-awake testers.

This mirror, when installed on the front door hinge, gives an excellent rear vision. It can be installed on either the right or left hand side. The mounting of the mirror is such that it can be instantly adjusted from the driver's seat without leaving car.

A mirror of this type is a great convenience, particularly in heavy traffic as it commands a full view of the road to the rear.

A demonstration will quickly convince an owner of its value and it should prove to be a fast moving accessory and a real money maker.

Service Manager

with 10 years' experience on Cadillac and LaSalle cars now available for new position as former employer (distributor in town of 30,000) has given up the business. Address Box E. CADILLAC-LASALLE SERVICE MAN.

Mechanic

with 19 years' experience, employed for last 5 years with Cadillac dealer in far west, wishes to secure position in Illinois, Missouri, Kansas or Oklahoma. Address Box F. CADILLAC-LASALLE SERVICE MAN.



This mirror, with its universal mounting on the door hinge, gives an unobstructed view of the road to the rear.

Packer's Tickets On Stock Orders Being Sent By Mail

THE PACKER's tickets for distributors' semi-monthly stock orders are now being sent out from the Parts Division by mail instead of being enclosed with the shipment. This plan will be of considerable advantage to the distributor's Parts Department.

Stock shipments are usually sent out in several boxes and frequently they are sent in different consignments, and at different times. Although the packer's ticket was formerly enclosed in the first package sent out, this package did not always arrive first.

When a shipment came in, it was usually necessary to open a number of boxes before the packer's ticket was found. The stock room was then cluttered up with the open boxes until the shipment could be checked, the locations entered and the parts put away.

Now that the packer's tickets are being mailed, they are sure to arrive well ahead of the shipment. Parts Managers can accordingly have the location numbers entered on them before the shipment arrives. When the material does start to come in, it can be opened one box at a time, and the contents of each box checked and put away before the next box is opened.

This makes the receiving of stock shipments an orderly routine proposition instead of a semi-monthly period of confusion, dreaded by everyone in the stock room.

Shock Absorber Parts

THE PARTS DIVISION will be unable to furnish two-way shock absorbers for early LaSalle 303 cars which were originally equipped with stabilators. The demand for them is so small that it does not warrant the expense of making up the special fittings which would be required for the installation.

The Parts Division requests the immediate return of any surplus stock of clamps for shock absorbers, part numbers 871692 and 871693. These particular clamps are used only when installing double acting shock absorbers on the first 700 LaSalle 328 cars. There will accordingly be little call for these parts and distributors should check their stock carefully and return any surplus.

FOR SALE—V-63 Standard Five-Passenger Sedan Body, upholstered in mohair, and in first class condition. Communicate direct with the Carmichael Motor Company, Clarksburg, W. Va.

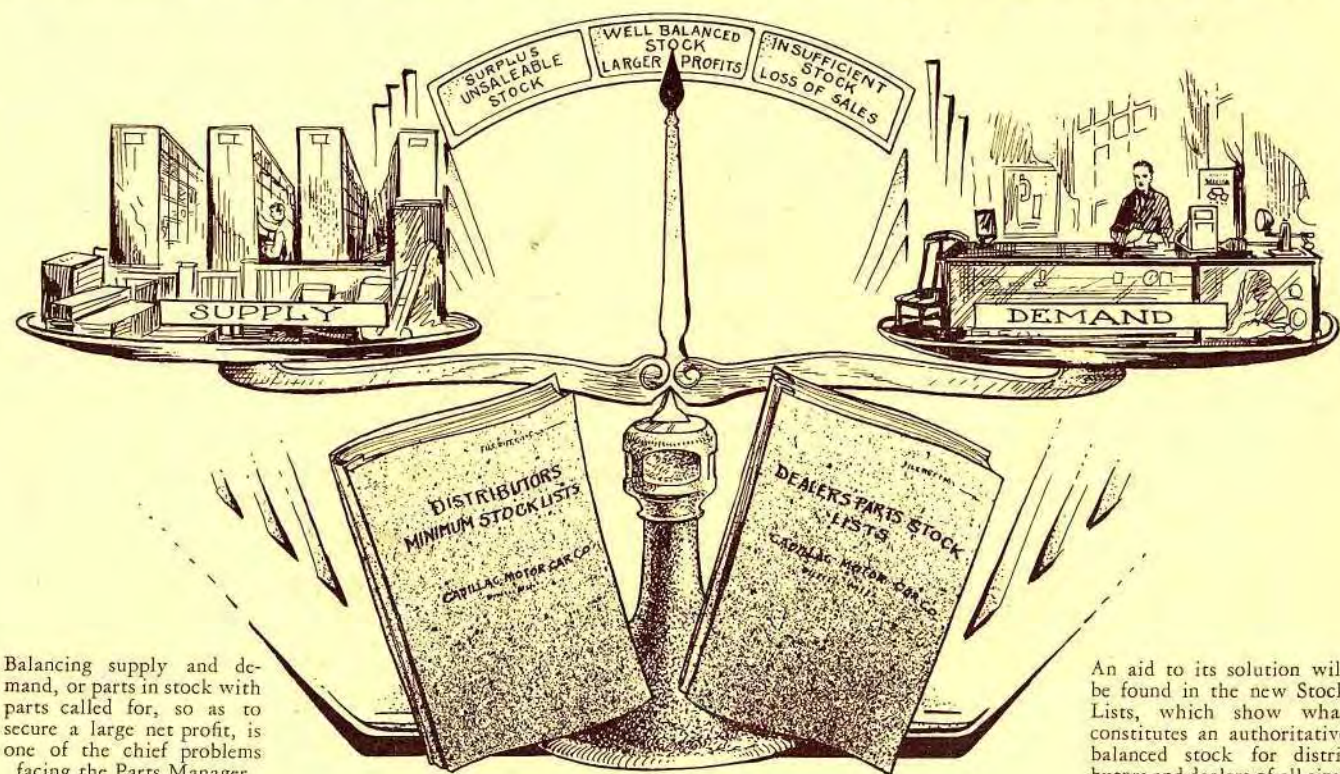
The CADILLAC LA SALLE SERVICE · MAN

Volume III

March 15, 1929

Number 6

Balance Your Stock With The Aid Of These Stock Lists



Balancing supply and demand, or parts in stock with parts called for, so as to secure a large net profit, is one of the chief problems facing the Parts Manager

An aid to its solution will be found in the new Stock Lists, which show what constitutes an authoritative balanced stock for distributors and dealers of all sizes

A WELL-BALANCED parts stock is the most certain means of assuring a satisfactory net profit from the Parts Department. But while every Parts Manager can easily see the importance of having a well-balanced stock, it is not so easy to see what constitutes a well-balanced stock for each individual Parts Department.

This problem has been simplified, however, for the factory Parts Division has just compiled a series of stock lists which will enable any Parts Manager to know just what will constitute a balanced stock for his organization.

These lists include three groups for distributors and six groups for dealers, the groups being based upon the number of cars sold annually. The recommendations are thoroughly authoritative, as they have been made

up after an extensive investigation of actual demand, including the dealer who handles only a few cars each year, as well as the largest distributor.

Each list indicates the items which should be stocked by the distributors and dealers within the group to which the list applies. The quantities specified are not, however, the exact quantities which should be kept in stock; they are the minimum recommended to lay the foundation for a balanced stock. The quantity to be kept in stock depends entirely on the demand. For distributors it should be large enough to cover a 30 to 90 day requirement, as shown by the disbursements on the stock record cards.

Two things have been taken into account in preparing these lists: First, to help in making every possible sale by having the part on hand when it

is wanted. Second, to help to reduce to a minimum any possible losses from the accumulation of surplus or obsolete parts.

With these objectives, a selection has been made which represents the combined experience of the entire parts organization, and which is therefore a better selection, with more possibilities for profit and less for loss, than could possibly be made by any individual Parts Manager.

The dealer's stock lists do not include any items that could be classified as emergency material; it is all fast-moving stock. Dealers can feel safe in carrying all of the material on their respective lists without fear of the parts remaining unsold in their bins.

The complete series of lists has now been sent to each distributor. Dealers should make arrangements to secure copies from their distributors. (Over)

Number 6
Page 2

The CADILLAC LA SALLE SERVICE · MAN

MARCH 15, 1929
DETROIT, MICH.

NUMBER 6
VOLUME III

Published on the first and fifteenth of each month in the interest of Cadillac Service

New Parts Stock Lists

(Continued from page 1)

After a dealer's stock has been brought up to conform to the stock list for his group, it should be maintained by systematic reordering. The simplest plan is to send in a weekly order made up from disbursements for the previous week.

Wanted And For Sale

FOR SALE—314 Roadster Body; paint and upholstery in good condition; top, fair; price, \$200. Also, one 314 frame; good condition. Apply—Romain-Manford Cadillac Company, Inc., New Orleans, La.

FOR SALE—One 341-A seven-passenger Sedan Body, condition as follows: Paint, glasses and top damaged by fire from a building. Car itself did not catch fire. For particulars, write Sellers Motor Company, Inc., Jackson, Mississippi.

WANTED—Roadster Body in good condition to fit a Cadillac 314 chassis with 132 inch wheelbase. Send communications direct to E. V. Lohrman & Co., Bethlehem, Pa.

Tool Chart Now Revised To Include The Latest Tools

A new tool chart, revised to include all of the tools in the new Tool Manual, has been prepared, and is now in stock at the factory Parts Division. The price of the complete chart is 75 cents net, the same as for the first one.

Those shops in which the first tool chart has been used will realize the value of this new chart and will be glad to secure one to replace their old chart. For those who have not been using a tool chart, the following explanation is given:

The chart comes in two sections, each 24 x 30 inches. On the chart are listed practically all of the special tools that have been developed for use on Cadillac and LaSalle cars. The name and number of each tool are shown, as well as the models on which it is used and an illustration to help in identifying each tool.

The proper way to use the chart is to have it framed behind glass or celluloid and placed on the wall of the shop or tool room just outside of the tool room counter or window.

The mechanics can then identify the tool they want and call for it by number. As the tools are arranged according to the groupings used in the Shop Manual, a man can refer to the chart before he starts an operation to see if there is a special tool for the work. And the entire shop force can become well acquainted with the special tools by studying the chart in their spare time.

Steering Gear

The steering gear adjustments should be carefully checked on each car at the end of the first 1,000 miles. It is impossible to make these adjustments permanently at the factory. An adjustment which would be satisfactory after the parts have "worked in" would give hard steering at first

New Type Disc Wheel

A change was recently made in the construction of the disc wheels that are supplied for Cadillac 341 A and B cars. New and old type wheels can be distinguished by the manufacturer's number which is stamped on the face of the hub flange.

The number of the new type wheel is 18415, while the number of the old type wheel is 17077. Although the wheels are interchangeable, be sure to get the late type when securing new wheels.

Owner's Complaint Reports

The owner's complaint reports which are sent in to the factory are to be made the basis of a thorough study of owner's complaints.

Service Managers can help to make this study more valuable by being careful to make their reports as complete as possible. All information should be given on the forms themselves and no references made to other correspondence.

CADILLAC AND LA SALLE SPECIAL TOOLS—Sheet 1

No.	Name	Type	Illustration	No.	Name	Type	Illustration	No.	Name	Type	Illustration	No.	Name	Type	Illustration
Front Axle				Brakes				Cooling System				Engine			
72407-T	Puller for camshaft and spindle bearings.	51-55, 61		109426-T	Brake adjusting wrenches.	303		51200-T	Puller for generator bearings.	51-57, 61-62		194-B	Dial indicator.	All cars	
81923-T	Spindle belt starter and puncher.	51-61		109427-T	Brake adjusting wrenches.	303		109218-T	Crankshaft prying lever.	All cars		65320-T	Main bearing indicator holder.	All cars	
92251-T	Wrench for spindle bearing dust cap.	63-314, 341		109428-T	Brake adjusting wrenches.	303		109219-T	Crankshaft prying lever.	All cars		109414-T	Indicator holder for crankpin bearing.	303, 320, 341	
99731-T	Hub cap wrench.	51-63, 314, 341		109429-T	Brake adjusting wrenches.	303		109415-T	Indicator holder for crankpin bearing.	303, 320, 341		57236-T	Connecting rod prying bar.	51-63, 314	
102789-T	Wheel alignment gauge.	All cars		109430-T	Brake adjusting wrenches.	303		109416-T	Indicator holder for crankpin bearing.	303, 320, 341		109417-T	Connecting rod prying bar.	303, 320, 341	
109405-T	Hub cap wrench.	303, 320		109431-T	Brake adjusting wrenches.	303		109418-T	Indicator holder for crankpin bearing.	303, 320, 341		72813-T	Forked connecting rod wrench.	51-63, 314	
109412-T	Screw driver for steering connecting rod ends.	All cars		109432-T	Brake adjusting wrenches.	303		109419-T	Indicator holder for crankpin bearing.	303, 320, 341		72075-T	Straight connecting rod wrench.	51-63, 314	

Every service man can soon become familiar with all of the latest special tools, if the new tool chart is framed on the outside of the tool room wall

A SATISFIED OWNER NEVER COMPLAINS

A SATISFIED OWNER NEVER COMPLAINS

Clinics Near Close Only These Six Remain

	Service Manage- ment	Parts Manage- ment
Birmingham	March 25	March 28
Memphis	March 25	March 28
Jacksonville	April 1	April 4
Dallas	April 1	April 4
Oklahoma City	April 8	April 11
Detroit	April 8	April 11

If you plan on attending
Act Now!

Display Cases Will Help To Increase Accessory Sales

A GOOD accessory display is one of the best means of selling more accessories. Owners will buy accessories that attract them. Careful attention to display is one of the main considerations in accessory merchandising.

To assist distributors and dealers with this problem, the Accessories Division has arranged to supply the two display cases illustrated on this page.

The large showcase, which is 6 feet long, is especially well adapted for use in the new car salesroom. It is very attractively designed and it will fit in harmoniously with the most pretentious showroom. The front, top and sides are made of heavy, polished plate glass, mounted on a hand carved walnut base. The sliding glass doors at the rear are fitted with locks. The adjustable glass shelves can be arranged to accommodate an endless variety of accessory arrangements.

The smaller display case is intended primarily for use in the Service or

Crankpin Plugs Of Smaller Diameter Are Now In Use

SMALLER crankpin oil plugs are now being used in the engines of both Cadillac 341-B and LaSalle 328 cars. The new plugs went into effect with engine unit 3-31961 on Cadillac cars and 4-13775 on LaSalle cars.

The new plugs are .047 inch smaller in diameter than the old plugs. The outside diameter of the new plugs, part number 871718, is 1.701 to 1.702 inches while the outside diameter of the old plugs, 878857-8, is 1.748 to 1.749.

The new and old plugs can also be identified by the position of the hole for the retaining screw. The screw hole in the new plug is in line with the inlet end of the oil hole, while in the old plug it is about $\frac{1}{16}$ inch to one side of the inlet hole.

Both new and old type plugs will be carried in stock by the Parts Division, the new type for use with crankshaft 43408 used on cars after the unit numbers given above, and the old type for use with crankshaft 43223 used previous to those unit numbers. Only the new crankshaft (43408) will be stocked at the factory in the future, as this crankshaft with oil plugs can be used in place of the previous shaft.

Parts Department, along with the counter display. This case is both durable and good-looking, being made of steel which is given a mahogany finish. It is also equipped with a lock, and with a shelf not shown in the illustration.

The large case will be furnished at a net price of \$159—F. O. B. Detroit. The smaller case carries a list price of \$64—subject to a special discount.

New License Plate Brackets



A license plate properly mounted on the new front brackets with which LaSalle cars are now equipped. The brackets are adjustable both in width and in height so as to accommodate plates of various sizes.

Larger Eye Bolt Used For Distributor Control Rod

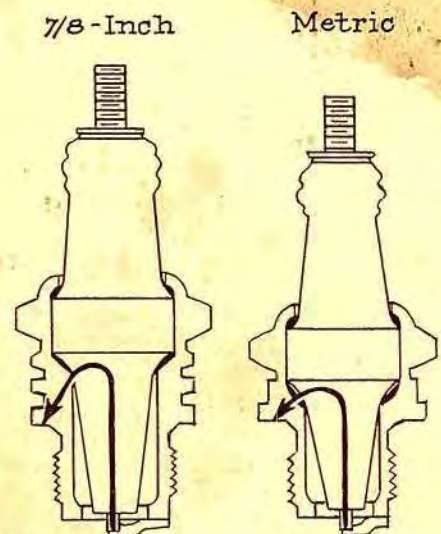
BEGINNING with engine unit 3-25551 on Cadillac cars, and 4-5293 on LaSalle cars, the eye-bolt on the distributor housing for the manual control rod is made larger to give additional strength, thus requiring a change in the threads both on the eye-bolt and in the housing.

The first type eye-bolt, 875612, with 10x32 threads is used with the housing 17528-D on both Cadillac cars and LaSalle cars prior to the above unit numbers. The second type eye-bolt, 880618, for Cadillac cars and 871555 for LaSalle cars has $\frac{1}{4}$ x20 threads. This eye-bolt must be used with the new housing, 829381.

Due to the difference in the threads, the old eye-bolt cannot be used with the new housing. Neither can the new eye-bolts be used with the old housing.

Rapid Cooling Properties Of Metric Spark Plugs Adapt them for Use in High Compression Engines

AS PREVIOUSLY announced, 18 millimeter-metric spark plugs, A.C. Type G-10, are now used on Cadillac and LaSalle cars in place of the $\frac{7}{8}$ -inch S.A.E. standard plug. This change was made because the metric plug, being smaller in diameter, is more efficiently cooled and is thus enabled to stand higher engine speeds and higher compression without overheating and possible pre-ignition.



The metric spark plug cools more rapidly than the $\frac{7}{8}$ -inch plug, because a smaller area is exposed to the heat, while the seat through which the heat is transferred to the cooling water remains practically the same.

The temperature of the combustible gases in an engine increases toward the end of the compression stroke, the increase in temperature depending upon the compression pressure. This rise in temperature is considerable in a high compression engine, and it necessitates the use of a spark plug that cools more readily than plugs which are satisfactory with low compression.

A spark plug, being exposed to the burning gases at its lower end, absorbs an amount of heat proportional to the surface exposed to the heat. In order to prevent overheating and pre-ignition, part of the heat thus absorbed must be conducted through the shell of the plug to the cylinder head, but enough heat should be retained to always keep the plug at a temperature high enough to prevent fouling.

The two factors controlling the heat of the plug are (1) the area of the surface exposed to the combustion and (2) the area and conductivity of the surface through which the transfer of heat to the cylinder head

must be made. Practically all of the heat conducted away from the plug must pass through the seat as the threaded portion of the plug conducts only a small amount.

Now it is a geometrical law that the area of a circle decreases as the square of the diameter whereas the circumference decreases directly in proportion to the diameter. Therefore, by decreasing the diameter of the spark plug, the area exposed to the flame is decreased more in proportion than the area of the ring which forms the seat. In the metric plug the flow of the heat through the seat is nearly as great as with the $\frac{7}{8}$ plug, but the heat acquired from the gases is considerably less. This is why the metric plug is more efficient for high compression engines.

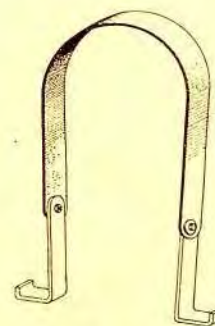
As stated above, very little heat flows through the threaded part of the plug. This explains why using a metric plug in a $\frac{7}{8}$ -inch spark plug hole by means of an adapter does not give the same results as using the metric plug in a hole tapped to receive it. The extra resistance to the flow of heat through the threads of the adapter bushing offsets the gain due to the reduced area exposed to the heat.

Wrench For Metric Plugs

The new spark plugs require a smaller wrench, so a Crescent adjustable wrench is now supplied in the tool kit in place of the wrench formerly supplied. However, the tool kits of some of the first cars shipped with metric spark plugs did not contain this wrench. Those in charge of deliveries should check the tool equipment carefully and make sure that there is a Crescent wrench in the kit of every car that has metric spark plugs.



THE SHORTCUT prize was won this time by Joseph A. Janisch, of the Jonas Cadillac Company, Milwaukee, Wisconsin. His shortcut is a handy carrier for lifting the battery from LaSalle cars without danger of damaging the battery box or spilling the solution.



This convenient battery lifter is made from a shock absorber strap and some band iron.

The carrier is very simple and can be easily made from material that is usually found around the shop. The handle is made from a piece of shock absorber rebound strap about 12 inches long. A hook made from $\frac{1}{8}$ inch band iron is bolted to each end of the strap with a $\frac{3}{16}$ x $\frac{3}{4}$ inch stove bolt. The hooks should be $\frac{3}{4}$ inch wide and $4\frac{1}{8}$ inches long, and should be bent to shape as shown in the illustration.

We want more shortcuts.
Get your ideas in right away.

Gap for Metric Plugs

The proper setting of the metric spark plugs is the same gap as that recommended for the $\frac{7}{8}$ -inch plug, .025 to .028 inch.

Clutches Not To Be Flushed

THE PLATE type clutch on Cadillac and LaSalle cars must not be flushed with kerosene or turpentine, nor should the facings on the discs be cleaned with these liquids when removed from the car.

This practice was mentioned in the February 1, 1928, issue of the Service Man as being permissible when oil on the facings causes clutch chatter. Recent developments, however, show that it is not advisable. The kerosene or turpentine soaks into the facing and reduces the coefficient of friction almost 50%.

Service stations should cease at once the use of turpentine, kerosene, or any other cleaning fluid on the clutch facing.

ARE you checking the clutch pedal adjustment as recommended in the February 15 issue? This is important!



Good display will help sell accessories. The large showcase will make an effective appeal in the salesroom; the small case is especially recommended for the Service Department.

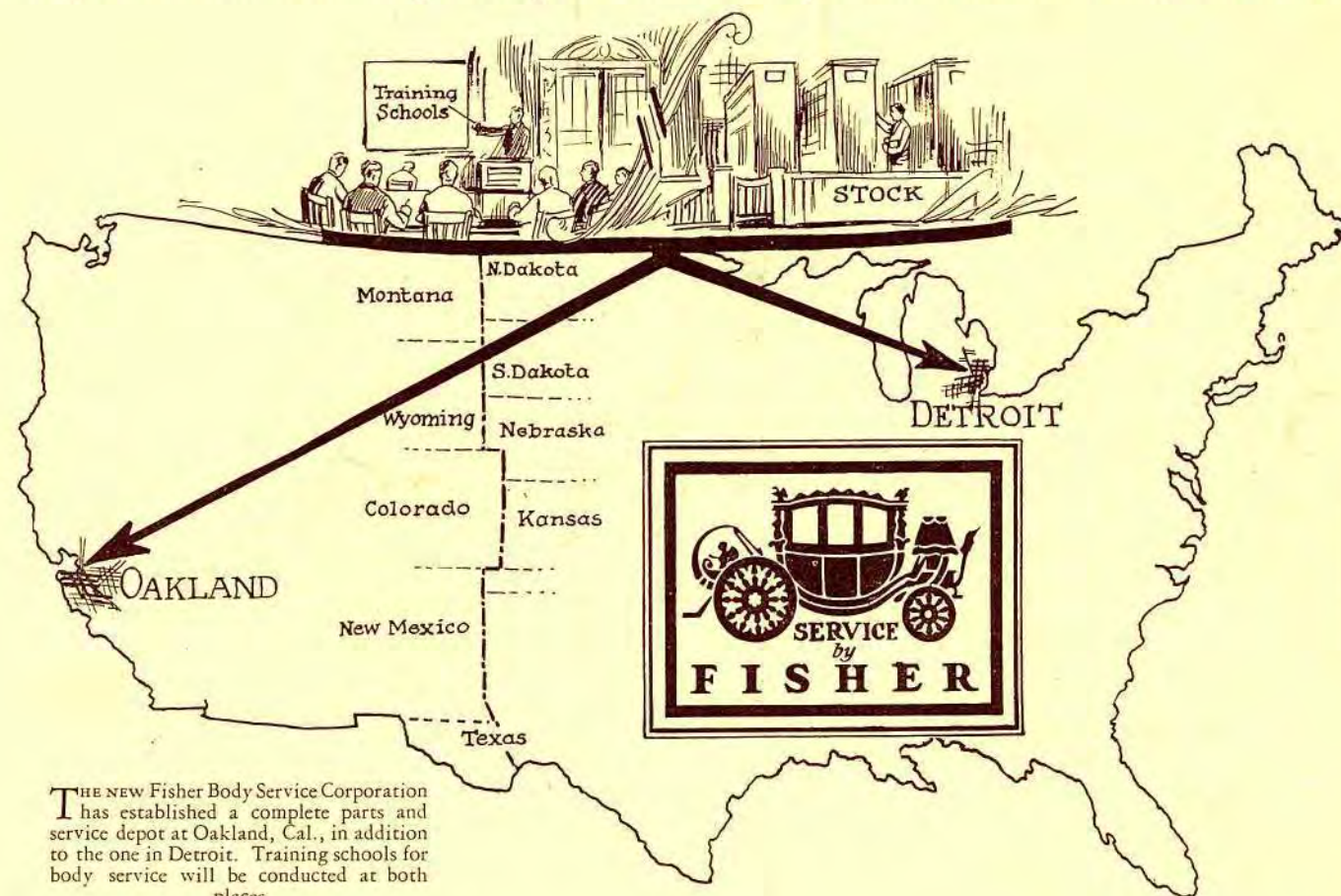
The CADILLAC LA SALLE SERVICE · MAN

Volume III

May 1, 1929

Number 9

New Fisher Set-Up Helps Dealers Render Better Body Service



THE NEW Fisher Body Service Corporation has established a complete parts and service depot at Oakland, Cal., in addition to the one in Detroit. Training schools for body service will be conducted at both places.

THE FISHER BODY Service Corporation has just been organized as a separate General Motors Division to be devoted exclusively to service on Fisher bodies. The purpose of this new unit is to provide a nationwide system of body service to all owners of General Motors cars.

This does *not* mean an organization of independent retail service stations, serving the car owner direct, such as are maintained by electrical and other accessory manufacturers. The Fisher Body Service Corporation will function exclusively through the establishments of distributors and dealers selling General Motors cars. Thus, every General Motors dealer's service station is the authorized Fisher service station for the car he sells.

Profits in Body Work

In the past, body service has been something of an orphan child. Not wanted by the car dealer, it has been left to the independent body shop, where the car

owner has had to endure in many cases high prices and poor workmanship, to say nothing of the possible influence of unfavorable rumors started by competitors.

Comparatively few Service Managers have seen in body service the potential source of business and profit which it is rapidly becoming; although some far-sighted ones have already organized their testers to sell more body service and their shops to produce it, with gratifying results. The object of the new Fisher program is to help every car dealer, regardless of where he is located or how many cars he sells, to take advantage of this opportunity.

The plan of the new Fisher Service organization centers about parts, service information, tools and training.

New Parts Depots

First, there is now a more efficient arrangement for the distribution of Fisher Body parts. In addition to the supply depot in Detroit, (Continued on page 3)

Number 9
Page 2

The CADILLAC LA SALLE SERVICE · MAN

MAY 1, 1929
DETROIT, MICH.

NUMBER 9
VOLUME III

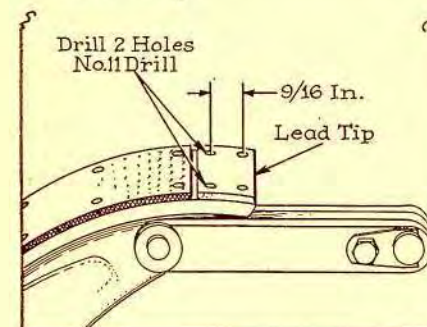
Published on the first and fifteenth of each month in the interest of Cadillac Service

Install New Lead Tips When Relining All Brake Shoes

AS EXPLAINED in the February 15 SERVICE MAN, the purpose of the lead tips now used on the long brake shoes is to pick up particles of grit or metal and thus help to prevent possible scoring of the drums.

In order for the tips to function properly, their outer surface must be even with the frictional surface of the brake lining. New tips must therefore be installed whenever the linings are replaced. Regular lining rivets are used to install the tips.

When brake shoes which were not originally equipped with the lead tips require re-lining, these tips can then be installed. To do so, it is merely necessary to drill two additional holes in each shoe as indicated in the drawing.



When brake shoes, which originally were not equipped with lead tips are being relined, the tips can be installed by simply drilling the two holes shown above.

Badges Useful For 'Parts Men As Well As For Testers

THE NEW badges which were announced in the April 1 SERVICE MAN were described as "tester's badges." This does not mean that these badges should be worn only by testers; for they are adaptable to any men who meet the customers. All Service and Parts salesmen should be furnished with badges.

Those who have not yet ordered their supply of badges should keep this in mind and should order enough to take care of their Parts counter men as well as their testers. Badges can now be shipped immediately upon receipt of order.

The Cadillac-LaSalle Service Man

Ten Per Cent Graphite Is Better For Steering Gear

IN THE JANUARY 1 SERVICE MAN 5% Acheson graphite was recommended for use in the steering gear lubricant. Since that time, we have found that 10% gives even better results.

In warm weather the lubricant becomes thinner, and unless graphite is used, it squeezes out under the high pressure between the teeth of the worm and sector and permits practically metal to metal contact. This is especially true if the lubricant has been thinned for winter use.

Sell every owner on replacement of the steering gear lubricant as a seasonable operation at this time of year, using A-200 with 10% graphite to refill. This operation should include flushing the housing with kerosene and blowing it out with air afterward before adding the new lubricant.

It is very important that the graphite be mixed thoroughly with the lubricant before it is put into the grease gun. This can be done satisfactorily with a wooden paddle in an open container.

As announced in the April 1 SERVICE MAN, Acheson No. 38 graphite can now be ordered from the Parts Division.

Windbreak For Bottom Of Doors Will Prevent Drafts

ALL closed model Cadillac and La Salle cars are now equipped with a windbreak at the bottom of each door to insure an absolutely air-tight fit. This improvement has now been in production for about two months; it can also be installed on earlier 341B and 328 cars if the owners complain of drafts coming in at the bottom of the doors.

This windbreak can be secured from the Fisher Body Service Corporation. In ordering specify "windbreak, lower, bottom of doors, for job number, body number". It is important to specify the job and body numbers so that Fisher can supply the hose covered with material which will match the upholstery.

The installation is easy. Remove the lower edge of the trim panel from the door, tack the windbreak on so that the hose is below the lower edge of the trim panel and replace the panel. The panel is put on with hidden tacks fastened in a metal strip, and it can be reinstalled in the old position without spoiling the trim.



SHOP SHORTCUTS
MR. C. E. WILBY, Service Manager of the Mabbett Motor Company, Rochester, New York, has sent this description of the method and equipment that they use to check gasoline tank gauges.

It is first necessary to secure a gasoline tank from an early model Cadillac. The gasoline gauge in this tank should be checked or calibrated so that it is known to be accurate. The tank itself should be mounted on a low creeper.

A hose about one-half inch in diameter and six or eight feet long should be securely fastened to the feed outlet by an air-tight, leak-proof connection, and a tire valve stem with the insides removed should be soldered to the top of the tank. A funnel completes the equipment.



This portable tank and funnel (foreground) simplifies the job of testing gasoline gauges and draining gasoline tanks for repair work on gauges.

To check the gauge on a car, jack the car up far enough to permit the measuring tank to be rolled in under the drain plug on the car. Use the funnel in the filler neck of the measuring tank and drain the gasoline into the measuring tank, a gallon at a time, checking the gauge on the car at each interval.

By the time the tank is emptied, the accuracy of the gauge will have been checked at all points, and any repairs or replacements necessary on the gauge can be made while the tank remains empty.

To return the gasoline to the tank on the car, make sure that the filler cap on the measuring tank is tight, put the hose into the filler neck of the car and apply the air hose to the connections as shown in the illustration. The air pressure will quickly force all of the gasoline into the car.

Fisher Helps Dealers With Body Service

(Cont'd from page 1)

a completely equipped parts and service depot has been established in Oakland, California, to better serve distributors and dealers in the far west. The Oakland supply depot will serve the states of California, Oregon, Washington, Idaho, Montana, Wyoming, Colorado, Utah, Nevada, Arizona, New Mexico and the extreme western part of Texas.

Both of these supply depots are completely equipped with parts for bodies manufactured in the last three years. Blueprints are also available to permit the manufacture of parts for the bodies of older cars. Service on body parts in the far west will hereafter be much quicker, provided of course, the parts are ordered according to the instructions and listings in the Fisher parts catalog.

Bulletins and Tools

Distributors and dealers are already familiar with the Fisher Body Service Bulletins. These bulletins contain important information on all phases of body service work. Twelve of the bulletins have already been issued and these bulletins will be issued at intervals in the future.

Tools and equipment for body work are also to be supplied at small cost. The tools which are now available were described in the last issue of the SERVICE MAN. These four sets of tools, the emergency kit, the wood-working tools, the metal bumping tools and the trimmer's tools all together cost but \$76.50.

Body Service Schools

A new feature of great importance is the establishment of body service schools at both Oakland and Detroit. These schools will present a six-weeks' course which completely covers all important phases of body work.

The course of instruction will include a study of body design and

construction, starting with the selection of materials and down through the various manufacturing processes to the finished product. Competent service work requires a fundamental knowledge of body construction.

All phases of service work are given thorough attention. Metal work, wood work, trim work, roofing and refinishing are all covered. Body alignment, mending leaks, curing squeaks and rattles and similar problems are worked out and practical methods are given. Body lubrication and preventive service are specially stressed.

The methods of instruction are also important. Part of the time must be spent in lectures and discussions, but a great deal of time is spent in the shop and riding cars, diagnosing troubles and repairing them. A man who has attended the school will know how to do things because he has *already done them*.

Every Cadillac distributor and dealer will be permitted to send at least one man to one of these schools. Write at once to the Fisher Body Service Corporation either at Oakland or Detroit, according to your location, and secure full particulars regarding these schools.

Body Work Will Increase

Cadillac distributors and dealers should prepare now to take care of the body work on the cars that they sell. All have the building facilities, as body work can be handled in the same shop. Tools and equipment can be secured at small cost. Capable body men can be developed from the men who do mechanical work with a little study and experience. The Fisher Service Bulletins and service schools will help in this.

Fisher has already published national advertising in which the new Service Corporation is announced

New Condenser Has Flexible Connection To Distributor

THE CONDENSER used until recently on Cadillac and LaSalle cars was connected to the primary terminal on the distributor housing by means of a strap connector. One end of the strap connector was fastened to the condenser by a locking nut.

Beginning with engine unit 3-29773 on Cadillac cars and 4-11206 on La Salle cars a new type condenser with a flexible wire connector is used. The stud has been removed and the wire connection is permanently fastened to the condenser unit. This change was made because with the old type it is possible to damage the condenser by turning the locking nut too tightly on the stud.

The part number of the new condenser is 823835. On 341-B and 328 cars it supersedes both the old condenser, part number 16398-D, and the old strap connector 35624-D.

When installing the new type condenser, attention must be given to the clip on the connector while tightening the terminal nut. If the clip is allowed to turn with the nut it is apt to come in contact with the housing and short-circuit the condenser.

While the new condenser is interchangeable with the condenser on 303 and 341-A cars, it should not be installed on distributor units using the Electrolock, as this would necessitate unsoldering the locking plate and removing the nut from the stud to which the Electrolock cable is attached. Both the new and the old type condenser will therefore be carried in stock by the Parts Division.

and its purpose explained. Owners of General Motors cars are being urged to take their cars to their respective dealers for all body service work, and Cadillac-La Salle service stations must be prepared to satisfy these customers.

Policy Period Can Be Extended In Certain Cases

CADILLAC DISTRIBUTOR OR DEALER

May 2, 1929

Claude Nolan, Inc.,
Jacksonville, Fla.

Gentlemen: Mr. F. T. Lundgren.

This will introduce to you Mr. Joseph Brown to whom we delivered La Salle car, engine number 400,000, on February 8, 1929.

Mr. Brown expects to be en route to your vicinity when the 3,000-mile or 90-day policy adjustment period on his car expires, and it may be impossible for him to reach an authorized service station for the inspection and final adjustments to which he is entitled before the expiration of this period.

You are hereby authorized on presentation of the owner's Service Card to extend the policy period to include this inspection and whatever final adjustments are necessary, provided the mileage does not exceed 3600 and the date is not later than May 18.

This letter will be surrendered to you by Mr. Brown and is to be attached by you to the Inter-Organization Invoice covering this work.

Very truly yours,
CADILLAC DISTRIBUTOR OR DEALER

Service Manager.

* Fill in mileage and date to suit circumstances.

Sample Of Cadillac Service For Owner Of Another Car

A SHORT time ago an owner of an S..... sedan was touring through North Carolina, and he was having considerable difficulty with his car. The Carolina Cadillac Company proved to be his Good Samaritan, for they repaired his car and put it in good running condition.

The owner was so well pleased with the competent way in which his car was repaired and with the considerate treatment which he, as the owner of another car, received from a Cadillac service station, that he was thoroughly sold on Cadillac service and planned on purchasing a Cadillac upon his return.

Good service *does* sell automobiles. Remember also that only Cadillac owners really know about Cadillac service. It is a good idea to give owners of other cars a "sample" of our service whenever the opportunity presents itself. This will be more effective than any amount of selling talk.

Select Proper Size Washer For Each Worm and Sector

THE PRACTICE of including with each worm and sector a thrust washer selected to give proper alignment of the worm and sector, as announced in the January 1 SERVICE MAN, has been discontinued and worms and sectors now being shipped without this thrust washer. Instead, a washer of the proper thickness must be selected when the worm and sector are installed.

This makes it possible to align the worm and sector with absolute accuracy. The former practice of sending a selected washer with the worm and sector compensated for variations in the sector, but did not compensate for variations in the steering gear housing.

To determine when the sector and worm are properly aligned, it is necessary to test the tooth bearing with red lead. This is best done on the bench.

The red lead should be used as nearly dry as possible and should be brushed sparingly on the sector after wiping all oil from the worm and sector. When the worm and sector are correctly aligned, the bearing will be in the center of the teeth.

For a short time, the Parts Division will send a set of washers with each shipment of worms and sectors. This will be discontinued as soon as Parts Managers have had a chance to order necessary stock of these washers.

OWNERS occasionally start on long trips just before their third 1000-mile inspection is due, and in some cases their proposed destination is so far that it will not be reached until after the 90-day or 3000-mile period has expired.

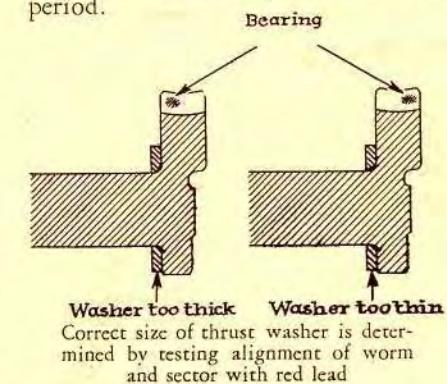
This makes an embarrassing situation when the owner drives into the service station at his destination—the Service Manager has no authority to render the no-charge service which the owner really deserves.

Such a situation can be avoided if the selling distributor or dealer will give a letter similar to the one above to any owner who goes on a tour shortly before the close of his 3000-mile or 90-day period. He can then secure the final adjustments on his car, even though he does not reach the authorized service station until after the regular time limit.

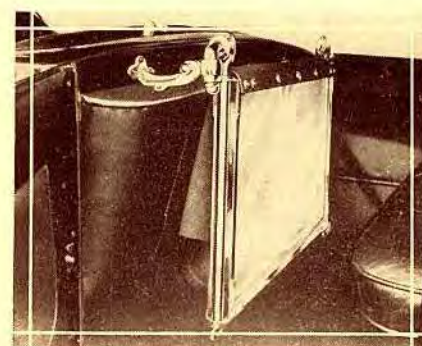
If the owner definitely knows his destination in advance, the letter

should be addressed to the particular distributor or dealer in that city. If the destination is uncertain, the letter can, at the discretion of the Service Manager, be addressed to "Any Authorized Cadillac-LaSalle Service Station."

In no case should the mileage shown in the letter be more than 4000 or the date later than one month after the normal expiration of the period.



Tonneau windshields and wings provide both distinctive appearance and protection from wind and dust



Both of these windshields can be folded out of the way when not wanted. Write the factory Accessories Division for complete specifications and prices

Additional comfort for rumble seat riders is provided by these windshields. Roadster and coupe owners will be wanting them



The CADILLAC LA SALLE SERVICE · MAN

Volume III

May 15, 1929

Number 10

ANNOUNCING A MONTHLY PRIZE CONTEST

for Ideas on Service Problems

A QUESTION involving a service problem is to be announced each month, and a prize will be presented to the service man who sends in the best letter discussing the question. The question for this month is:

"When is a Service Station Clean and What is the Best Way to Keep it Clean?"



A Cadillac pen and pencil set, together with a Certificate of Award signed by President L. P. Fisher, is the prize which will be awarded for the best letter

THIS CONTEST is open to every man in the Cadillac service organization—service managers, testers, foremen, clerks or men in the shop.

The examination papers submitted at the recent clinics have revealed that there is a wealth of good ideas among Cadillac service men—it merely takes something to draw them out. That is what this contest is aimed to do. You have the ideas—we are sure of it—now try putting them on paper.

The letter containing the answer can be one or two pages long, but it should preferably not contain over 250 words. Letters on this first contest must be received by

June 20, the winning letter will be published in the July 1 issue.

In passing on letters, judges will consider: Originality of idea.

General knowledge and grasp of the subject. Definite ideas—actual ways to do things.

Practicability: If the idea has been used successfully, give evidence; if it has not been tried, it will be judged on its feasibility.

Cost: The idea or suggestion must not cost more than the results it brings.

Write-up: Spelling, grammar and penmanship will not be counted. This is not a test of education, but of IDEAS. As long as your idea gets itself across to us, we will make it presentable if it wins the prize.

A SATISFIED OWNER NEVER COMPLAINS

Number 10
Page 2

The CADILLAC LA SALLE SERVICE · MAN

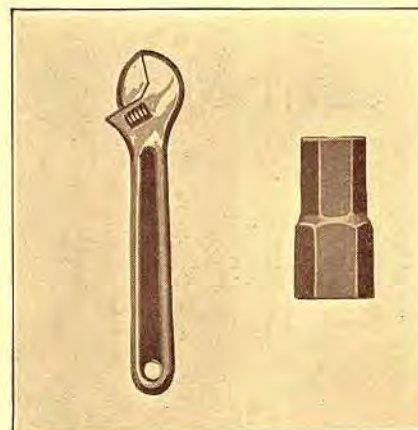
MAY 15, 1929
DETROIT, MICH.

NUMBER 10
VOLUME III

Published on the first and fifteenth of each month in the interest of Cadillac Service

Changes Made In Tool Kit That Is Supplied With Car

THE two new tools illustrated below have recently been added to the owner's tool equipment on both Cadillac and La Salle cars.



Tool kits for both Cadillac and La Salle cars are now supplied with a Crescent adjustable wrench (left) and a wrench for the metric spark plugs

The first tool is a Crescent adjustable wrench. This wrench is supplied in place of the four open-end wrenches which were formerly included in the tool kits.

The other tool is a spark plug wrench. This new wrench is designed to fit the metric spark plugs which are now standard equipment on both cars.

The file, cold chisel and center punch are no longer included in the tool equipment. These three tools have been discontinued as the average owner never has occasion to use them.

Revised New Car Delivery Record and Release forms (3997 for Cadillac and 3997A for La Salle) are now being prepared and will be available for shipment from the Parts Division in about two weeks.

Reward

offered for information leading to the return of 314 5-passenger sedan stolen from the owner's garage in Manson, Iowa, on April 28. The sedan was Cactus Green, new in appearance, engine number 126182, Iowa license 12-3139, the mud pan was off of the engine. Communicate direct with Dr. D. T. Love, Manson, Iowa.

The Cadillac-La Salle Service Man

New Edition Numerical Parts Price List Ready; Many Uses Of This Valuable Book Explained

A NEW REPRINT of the Numerical Parts Price List has just been prepared. The Numerical Lists, of which this is the third edition, contain a complete listing, by part number in numerical order, of all of the parts that are used on Cadillac and La Salle 8-cylinder cars.

Several improvements have been incorporated in this new edition. All of the various models on which each part is used are listed. Only one serial number is given for each part, the serial number from the latest Parts Price List in which the part is listed. By referring to the book indicated, the complete description of a part may be obtained.

Another new feature is a blank column in which the stock room locations for each part may be marked. This book can thus be used as a location index for all parts. All changes and additions which appear in the Price List change notices should be entered in this list as well as in the standard lists.

The information given on each part will then include the part number and name, the list price, the models on which it is used, a serial number from the latest Parts Price List in which the part is listed and the location of the part in your own stock room. The classification of a

part as to crated material or special discount material is also given.

A book which contains all of this information on all Cadillac and La Salle parts obviously has a number of extremely important uses in any Parts Department. However, it is apparent from the number of Numerical Lists that have been sent out in the past, that many Parts Managers do not realize the important uses of this list.

This list can be used as a Master Parts List, for it contains practically all the important information on parts in compact and convenient form.

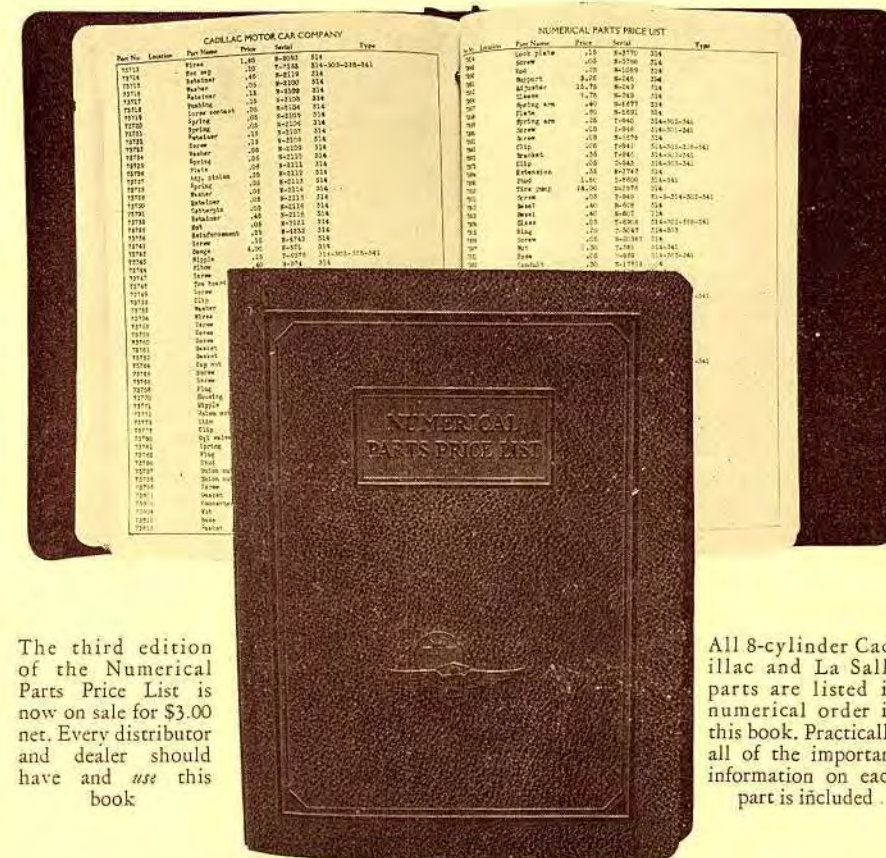
It can be used to ascertain the name and description of a part when only the part number is known, and it is the only Parts List which will furnish this information direct.

It can be used by the Accounting Department for checking prices in preparing statements to customers.

It can be used by Counter Men to find both the price and the location of any part, without the necessity of referring to an inconvenient location card file.

It can be used by the Receiving Department, as a list with the locations will permit immediate transfer of incoming material to the bins.

It can be used (Continued on page 3, col. 1)



The third edition of the Numerical Parts Price List is now on sale for \$3.00 net. Every distributor and dealer should have and use this book

All 8-cylinder Cadillac and La Salle parts are listed in numerical order in this book. Practically all of the important information on each part is included.

A SATISFIED OWNER NEVER COMPLAINS

Bushing For Torque Ball Member Is Oversize Reamed

THE bronze bushing in the ball member at the front end of the torque tube is finish-reamed in production after it is pressed into the ball member. This is necessary because in pressing the bushing into place the inside diameter closes up approximately .002 inch.

In order to avoid the necessity of reaming this bushing in service, the bushings shipped from the Parts Department will hereafter be reamed oversize, so that when installed in the ball member the inside diameter will close up to give the proper fit without further reaming.

A new part number (871923) has been assigned to these bushings and hereafter bushings should be ordered under this part number. These bushings are used on 303, 328, 341A and B cars. All bushings in stock under the old number (871320) should be returned for credit, as they will fit too tight on the universal joint when installed.

Numerical Parts Price List

(Continued from page 2)

in ordering parts also, for the listing of the models on which a part is used will be helpful in determining the proper quantities.

It can also be used in taking inventory, as the record of parts counted can be noted right in a copy of the book. Blank pages for recording the count of material not listed in the Numerical List can be added so that the book will compose a complete inventory record.

Every Parts Manager should check up his own department and find out

New Pages and Price Lists For Accessories Catalogue

REVISED and additional pages for the Accessories Catalogue have been recently prepared and sent out to all distributors and dealers. The new pages should be inserted in their proper place in each catalogue and the old sheets removed and destroyed.

These new pages include the listing of the latest items to be added to the line of Cadillac approved accessories. These new accessories include metal tire covers, windshield wings, golf bag holders, seat covers and tire mirrors.

New accessory price lists, one for distributors and one for dealers, have also been prepared at this time. All of the old price lists should be destroyed, and all orders made out from the latest lists, which are complete in every detail.

Additional copies of the revised catalogue sheets or of the price lists will be furnished upon request to the Accessories Division.

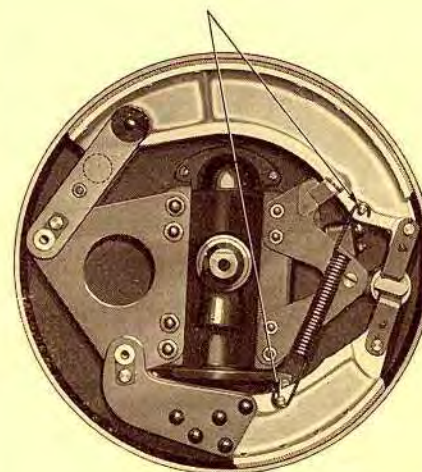
just how many he can use to advantage. Every dealer ought to have at least one copy of this list, and every distributor should have enough copies to take care of the departments mentioned above. One copy is being sent to each distributor. Order additional copies you need from the Parts Division at once. The net price is \$3.00 each.

As soon as the list is received, it should be used to check back the stock record cards to make sure that the prices are all up-to-date and that the classification is correct, and to see that the models on which the part is used are all listed on the cards.



THE PRIZE winning short cut for this issue was submitted by Mr. Jim Lively of the Drennen Motor Car Company, Birmingham, Ala.

This short cut consists of a very handy tool for installing the brake shoe retracting springs on Cadillac 341-B and La Salle 328 cars. The tool is similar to a screw driver except



This simple tool is very handy for installing brake shoe retracting springs

that the blade is rounded to fit over the pin for the spring on the brake shoe. About 1 3/4 inches from the end of the blade there is a flange which prevents the spring from slipping down against the handle.

To use the tool, attach the spring to the pin on the lower shoe. Hook the other end of the spring over the tool. Then place the rounded portion of the tool on the pin of the upper shoe and pry the spring up and over the pin. It never fails to do the job right and it takes only a few seconds.

Surplus Stock Wanted

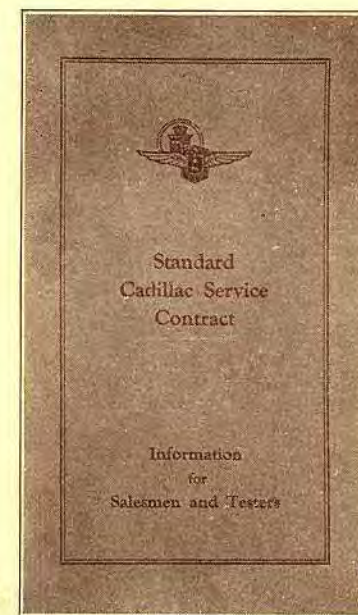
THE Parts Division is in urgent need of connecting rod bearings for type 57 cars, part number 41899. Distributors are requested to return all of their new stock of these bearings to the factory at once. Refer to this announcement on the R.G.N. and be sure to furnish the Parts Order references.

For Sale

FOR SALE—One Type 61 Sedan 5-Passenger Body; top and paint fair, upholstery very good. Price \$50 crated, F. O. B. Norwich, Conn. Inquire direct of the A. C. Swan Co., Norwich.

Standard Cadillac Service Contracts Are Now Being Sold To Owners By Sixteen Distributors

This little booklet contains complete information on the Standard Cadillac Service Contract. Write for it



Since its announcement, in the April 15 SERVICE MAN, sixteen distributors have started to sell the Contract

Three Different Propeller Shafts Used On La Salle 303

PARTS Managers and Shop Foremen should understand the differences between the propeller shafts used on La Salle 303 cars.

There have been three types of propeller shafts used on these cars. The first type shaft, part number 82062, was a solid shaft having six splines on the rear end. This shaft was used up to chassis unit 2-10001.

Between chassis unit 2-10001 and chassis unit 2-25000 (approximately) a 10-spline solid shaft was used. This shaft was at that time assigned part number 82320.

After chassis unit 2-25000 a 10-spline tubular shaft was used. This shaft was released as being interchangeable with the solid shaft, and it was accordingly assigned the same part number, 82320.

The third type shaft, however, is interchangeable with the second type only on cars after chassis unit 2-16143. On cars before this unit number, the flange at the transmission end of the torque tube is riveted to the tube, and these rivets interfere with the larger tubular shaft. It has become necessary therefore, to assign a new part number, 43555, to the 10-spline solid shaft and re-list it for cars between chassis unit 2-10001 and 2-16143.

The 10-spline solid shaft must also be used on any cars before 10000 on which the six-spline pinion shaft has been replaced with a 10-spline pinion shaft.

Special Cylinder Block Nut Wrenches Reduced In Price

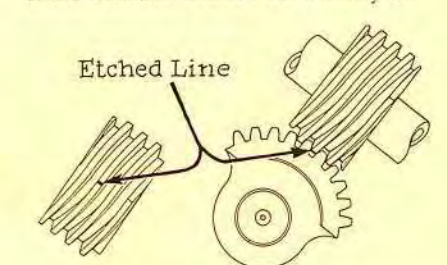
THREE special wrenches for tightening the cylinder block hold-down nuts were announced in the April 1 issue of the SERVICE MAN as special order tools to be sold at a price of \$8.00 for the set.

Because an unusually large number of orders have been received, we are enabled to offer these wrenches at the greatly reduced price of \$5.50.

Corrected Sheets For Shop Manual Are Being Sent Out

CORRECTED sheets for the Cadillac-La Salle Shop Manual have been prepared and one set is being mailed to all holders of Shop Manuals who are on record at the factory. These pages include all of the corrections which have been made necessary by changes during the 8 months that the Shop Manual has been in use.

The pages should be inserted in each Manual according to page number, and the old pages of the same number should be destroyed.



These markings now appear on worms and sectors supplied by the Parts Division. They indicate the proper way to mesh these parts when installing them

Worms and Sectors Marked For Correct Installation

BEGINNING with steering gear worms and sectors shipped from the Parts Division April 25, several improvements have been made in the method of machining and finishing these parts. In order to take advantage of these improvements, it is important that certain precautions be followed when the worms and sectors are installed.

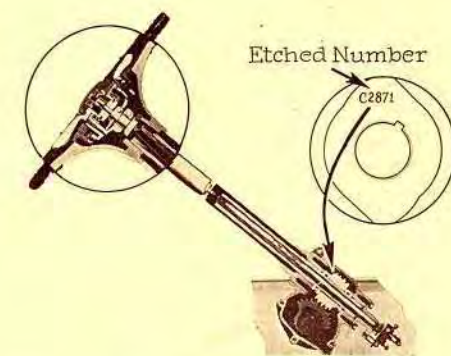
The first matter of importance is to make sure that the sector is accurately centered under the worm. As announced in the May 1 SERVICE MAN, this means that the tooth bearing must be tested with red lead and a thrust washer of the proper thickness selected to give a bearing in the center of the tooth. Parts Managers who have not already ordered a supply of these washers should do so at once.

It is also important, when installing a new worm and sector, to make sure that the same teeth are engaged as when the worm and sector were lapped together at the factory. To insure this, it is necessary to watch two points:

First, when installing the worm, place the end with the number etched on it uppermost or toward the steering wheel.

Second, when installing the sector, turn the worm so that the mark which is etched across one of the threads points toward the sector. Then install the sector with this thread in the center space of the sector.

Some of the worms shipped since April 25 do not have the etched mark referred to in the preceding paragraph. In such cases turn the worm so that the keyway points up and then mesh the center thread on the worm with the center space on the sector.



The CADILLAC LA SALLE SERVICE · MAN

Volume III

June 1, 1929

Number 11

Latest Service Slidefilm Deals With Steering Adjustments

GOOD STEERING" is the title of a new slidefilm which has just been prepared by the factory Service Department. A complete review of all of the important information relating to steering is included in this film.

The information given applies to the Cadillac 341-A and B and the La Salle 303 and 328. The subject is thoroughly covered—design and construction are explained and adjustments and other service operations are given, both for the steering gear itself and for the steering connections.

Many service men do not fully appreciate the importance of things, other than the steering gear itself, which affect steering. Everything that might prevent ideal steering is discussed in this film. The relation of these other factors, such as springs and shock absorbers, is brought out strongly.

EVERY service man should see the new slidefilm "Good Steering."

The slidefilm method of presentation was chosen for this steering information as it is obviously the clearest and most easily understood presentation for a mechanical subject. A brief study of the film will enable any service man to get all of the essential information on steering clearly in mind.

Arrangements should be made by distributors to show this film to their men at the next regular service meeting. Distributors' wholesale representatives should also arrange a trip to show this film to the dealers' service men.

One print will be sent to each distributor and dealer that is now on record at the factory as having access to a projector. Additional prints will be furnished on order. The regular net price is \$2.00 each. A lecture has also been prepared for this film, a copy of which will be sent out with each print.



A SATISFIED OWNER NEVER COMPLAINS

Number 11
Page 2

The CADILLAC LA SALLE SERVICE · MAN

JUNE 1, 1929
DETROIT, MICH.

NUMBER 11
VOLUME III

Published on the first and fifteenth of each month in the interest of Cadillac Service

Provision for Getting Parts To Service Floor Important

SPECIAL provision should be made in every service station for the installation of such small parts as lamp bulbs or hub caps while the customer's car is on the service floor.

For an example, take the case of an owner who has had a hub cap knocked off in a minor collision, and who stops in at the service station the next morning. He will undoubtedly drive on to the service floor and tell the tester that he wants another hub cap put on the wheel. Of course, he wants it right away.

This transaction is actually nothing more than the sale of a hub cap by the Parts Department. When the stock room is on the ground floor and close to the service floor, no problem is involved. It is in larger service stations, where the stock room may be on the second floor or higher, that trouble is experienced. Then the tester cannot be expected to go himself and get the part; yet if the usual channels for filling a requisition are depended upon, the customer may have a long wait before him.

Whether the Parts Department sends a stock clerk down to the service floor with the part or whether the tester sends a messenger up to the stock room is immaterial—but there must be some provision for getting the part down to the waiting car at once. There should be no grounds for the customer to say—and sometimes it is the truth—that he could go and get the part himself and put it on in less time.

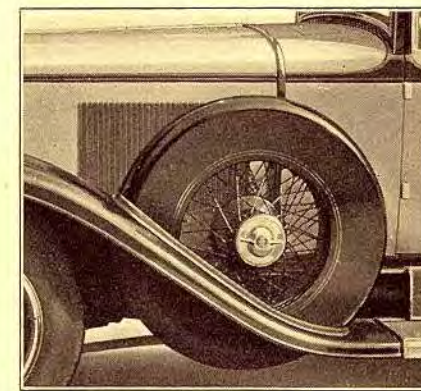


The three-suitcase trunk opens at the side. There is plenty of room in this trunk

Metal Tire Covers and Metal-Covered Trunks Accessories of Combined Beauty and Utility

STRIKING appearance and genuine utility are the features of two of our latest accessories: metal tire covers and metal covered trunks for the folding trunk rack.

The metal tire covers provide the latest thing in protection for spare tires carried in fenderwells. They can be supplied in black or in the same Duco color as the fenders, and they give an attractive and finished look that cannot be duplicated with a fabric cover. They can, furthermore, be easily cleaned at the same time that the car is washed.

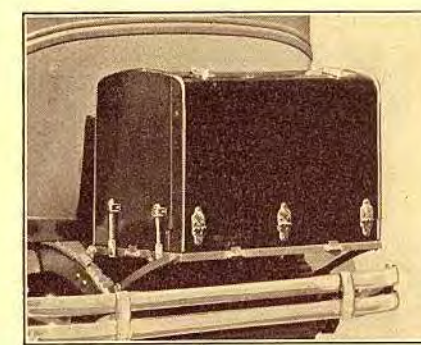


Metal tire covers are the latest thing in smart appearance for cars with fenderwells

Convenience is another valuable feature of these covers. They are held on by three straps which are easily unbuckled when the cover is to be removed. They fit the contour of the fenders exactly, and are provided with a rubber strip so that they will not scratch the fender or rattle.

The list price of the metal tire covers in black is \$40.00 per pair.

The metal trunks are also an accessory of combined beauty and utility. They are furnished in black Duco with chromium plated band and locks. They are solidly constructed of metal over basswood and are



The metal covered trunks present an attractive appearance when closed, and protect baggage thoroughly from dust and rain

waterproof and dust-proof, being fitted with a special groove around the lid to insure these features.

The suitcases furnished with the trunks are equally well-made and of the best quality DuPont fabricoid. Trunks are furnished to hold either two or three suitcases. The trunk for holding two suitcases lists for \$85.00 which includes the suitcases. The trunk for holding three suitcases lists for \$95.00.

Throttle Pump Adjusting Screw Is Normally Closed

THE throttle pump adjusting screw on the carburetor is for the purpose of lessening the effect of the throttle pump, which may be desirable during hot weather when highest gasoline is used. The normal setting of this screw is fully closed, or all the way in.

The screw should be opened only under the conditions mentioned above. Ordinarily it is necessary to unscrew the adjustment only two or three turns. The screw need never be opened more than 7 turns, as this will fully open the by-pass.

The adjustment given in Plate 42, Fig. 6, of the Shop Manual is accordingly incorrect. All service men should make this change in their own Shop Manuals, and this correction will be made when the next revised sheets are made up.

Service Manager

now employed in city of 16,500 population as service manager for another car, prefers to return to Cadillac organization. He has had 14 years automobile experience, mostly on Cadillac, and including the positions of Service Manager, Assistant Service Manager and Tester. Address Box H, care CADILLAC-LA SALLE SERVICE MAN.



The two-suitcase trunk opens at the top. It has an extra space at the right of the suitcases

A SATISFIED OWNER NEVER COMPLAINS

U.S. Bureau of Mines Will Loan Other Pictures

SEVERAL Cadillac distributors and dealers have already made arrangements for a showing of the moving picture "The Power Within," announced in the April 1 issue of the SERVICE MAN. Those who have seen this film will agree that the information on engines is presented in a very clear and interesting manner.

This film was produced by the United States Bureau of Mines with the assistance of the General Motors Corporation. The Bureau has produced a number of moving pictures dealing with the mineral and allied industries. Some of these other films will also be of interest to Service Men. There are, for example:

94. The Story of a Gasoline Motor (3 reels).

99. The Story of Gasoline (3 reels).

100. The Story of a Storage Battery (2 reels).

106. The Story of a Spark Plug (2 reels).

123. The Story of Lubrication (1 reel).

Any of the above films should furnish an interesting feature for a service meeting. Service Managers who would like to secure any one of these should write direct to the United States Bureau of Mines, Pittsburgh Experimental Station, Pittsburgh, Pa. Films are loaned without charge, subject to the following regulations:

1. Requests should reach the Bureau of Mines at least two weeks before the date of showing.

2. Provide a first-class projection machine and competent operator.

3. (a) Pay for transportation both ways and for all telegrams relat-

ing thereto. (b) Pay for all damage and loss other than normal wear and tear.

4. Re-ship films promptly on date specified, charges prepaid.

5. Notify the Bureau of Mines Experiment Station or field office by letter (or if necessary by telegram) that it is proposed to re-ship films as requested. Such notifications should arrive at the bureau not later than the re-shipping date specified.

6. Obtain permission from the bureau if it is desired to retain films subsequent to the re-shipping date specified, otherwise the next borrower will be disappointed.

7. Fill out and return promptly the attendance report card.

8. The Bureau of Mines will send all films free of rental charge.

N. B. A few of the films are printed on inflammable stock. If it is impossible to show these, record this fact when making request for films.

These films are supplied only in the standard film size, 35 mm., and arrangements should be made to secure a standard projecting machine before writing for the films. "The Power Within," which should be ordered from the General Motors Advertising Department, is the only film that is supplied in both the 16 and 35 mm. sizes.

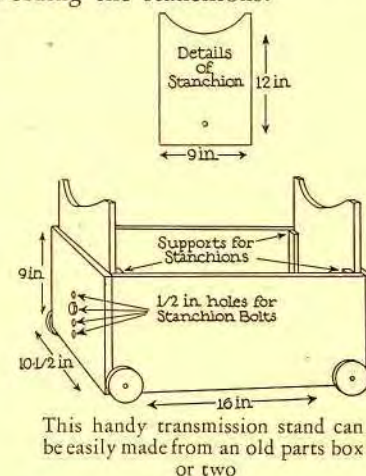
Wanted

FIVE or Seven-passenger Sedan Body for 132-inch series 314 chassis. Must be in good condition. Communicate direct with the Cadillac Company of Columbia, Columbia, South Carolina.



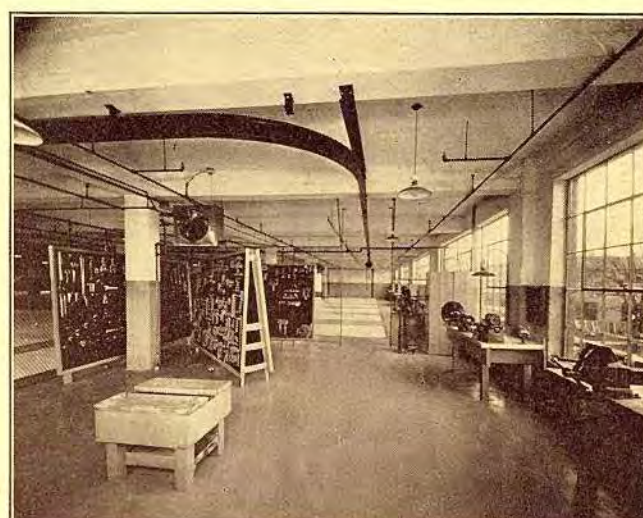
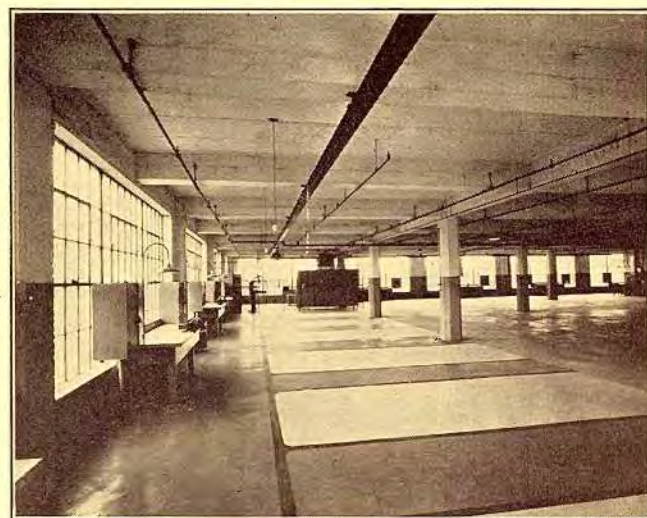
THE prize-winning shortcut for this issue is a stand for holding the transmission while working on the clutch. It was submitted by Joe Simon, a mechanic with the Collins Brothers Company, Portland, Oregon.

The stand can be easily made up, and the only material needed is an old parts box or two, four rollers or casters, and two $\frac{7}{16}$ -inch bolts for holding the stanchions.



To use the stand, hoist the car up, place the stand under the transmission and adjust the stanchions to the proper height to hold the transmission level. When the transmission is on the stand, hoist the car a little higher and the stand can be rolled out of the way.

This stand will prove to be quite a time and labor saver, and it will eliminate a good deal of struggling with heavy transmissions. It will also greatly simplify the problem of keeping the case properly aligned when removing and installing.



Two views of the fine service department in the new building that was opened a short time ago by the Greenlease-Moore Cadillac Company, Tulsa, Okla. The opening of the building was advertised extensively and the public invited to inspect the facilities of the new building. This shop looks capable of turning out a large volume of work in an efficient manner.

A SATISFIED OWNER NEVER COMPLAINS

Plug Holes In Cowl When Fenderwells Are Changed

THERE are occasional instances where a customer desires to change a car from fenderwell equipment to the standard spare wheel or tire carrier at the rear. The removal of the fenderwell brackets on the sides of the car leaves two holes in the cowl, one on each side.

Plugs for plugging these holes can be secured from the Parts Division.

The necessary parts are:

2 plugs.....	871932
2 nuts.....	76617
2 lock washers.....	113114
2 plain washers.....	871933

These plugs can be used to plug the holes in the cowl when fenderwell equipment is changed on any Cadillac 341 or La Salle car.

The plugs are supplied only in chromium finish.

Use of Airplane Speeds Up An Emergency Service Call

SPEAKING of speedy service, the Prather Cadillac Company of Dallas, Texas, deserves credit for doing a good job in the following instance: One of their La Salle owners started on a trip but, after driving out for about four or five hours, telephoned that he was having difficulty with the car.

H. N. Holified, service representative for the Prather Cadillac Company, is also one of the aviators of the locality. Taking another mechanic with him, he flew out to the stranded tourist and had the car repaired. The trip only took about 40 minutes and 20 minutes later the tourist was on his way.

FOR SALE—Series 314 engine complete with clutch and transmission. In perfect condition, having been run less than 13,000 miles. Communicate direct with Johnstown, Pa., Automobile Company.

Some Owners Want Bulbs With Brighter Upper Beams

THE tilting feature of the headlamps on Cadillac and La Salle cars is brought about by the use of double-filament bulbs. In the bulbs furnished as standard equipment (part number 59096) both of the filaments are of 21 candle-power. The use of these lights is legal throughout the entire country.

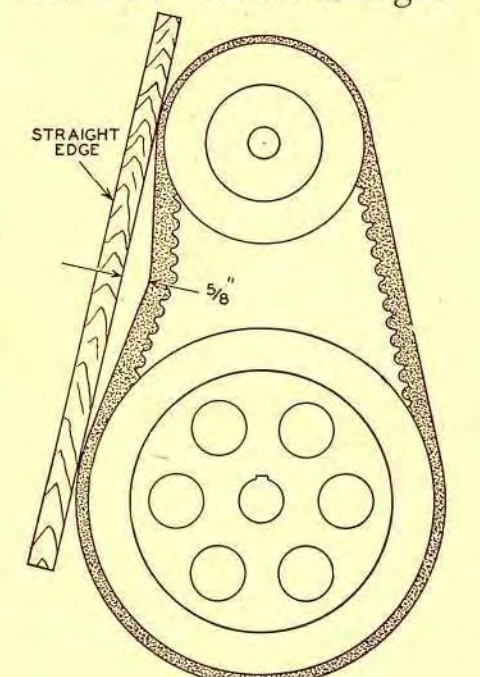
Double filament bulbs (part number 870560) are also available having a 21 candle-power filament for the lower beam and a 32 candle-power filament for the upper beam.

Order these bulbs from the Factory Accessories Division.

These bulbs provide considerably more light in the long range driving beam, yet they have the same safe lower beam for passing and city driving. The use of these bulbs is legal in 36 of the 48 States.

Wide-awake Parts Men should determine whether or not these bulbs can be used in their particular locality and arrange to stock them if it is permissible. Good lights are a necessity to a tourist, so at this season, there will be a good demand for the brighter bulbs if they are called to the owner's attention.

Fan Belt Tension Changed



A change in the fan belt adjustment, increasing the amount of slack from $\frac{5}{8}$ inch to 1 inch, was announced in the February 1 SERVICE MAN. The previous recommendation of $\frac{5}{8}$ inch is once more in force, as the belts slip too much at high speed when adjusted with 1 inch slack.

Send your letter on the "Clean Service Station" contest to the Editor before June 20.

Which of These Posters Is YOURS?



If your Service Policy poster is not already framed and mounted, fix it up at once. As announced in the April 15 SERVICE MAN, we will supply posters framed and ready for hanging at a net price of \$4.75 each. All orders for framed posters must be received by June 20. For your convenience in ordering, we have inserted the coupon below. Clip this Coupon and send to Factory Service Department.

ORDER FOR POSTER

Please enter our order for _____ framed Service Policy Posters at \$4.75 each, net.

Firm Name _____

Street _____

City _____

State _____

Signed _____

A SATISFIED OWNER NEVER COMPLAINS

The CADILLAC LA SALLE SERVICE · MAN

Volume III

July 1, 1929

Number 13

Knoxville Man Is Winner In "Clean Service Station" Contest

MR. J. E. WILLIAMS, Service Manager for the Cadillac-La Salle Company of eastern Tennessee, the dealer in Knoxville, is the deserving winner of our first prize contest, "When is a Service Station Clean, and What is the Best Way to Keep it Clean?"

Mr. Williams' winning letter, which is published complete on an inside page, stood out from among its many excellent competitors and received a majority vote from the judges.

The judges regret that there could only be one prize to award, for many of the other letters submitted are of a calibre to warrant recognition. Quotations from some of the letters which deserve honorable mention appear on page 3.

The contest letters indicate that most service men have a good understanding of the problems involved in keeping a service station clean. Cadillac-La Salle service stations will be the cleanest in the industry if the suggestions submitted in this contest are carried out.

The Next Contest

The subject for next month's prize contest will be:

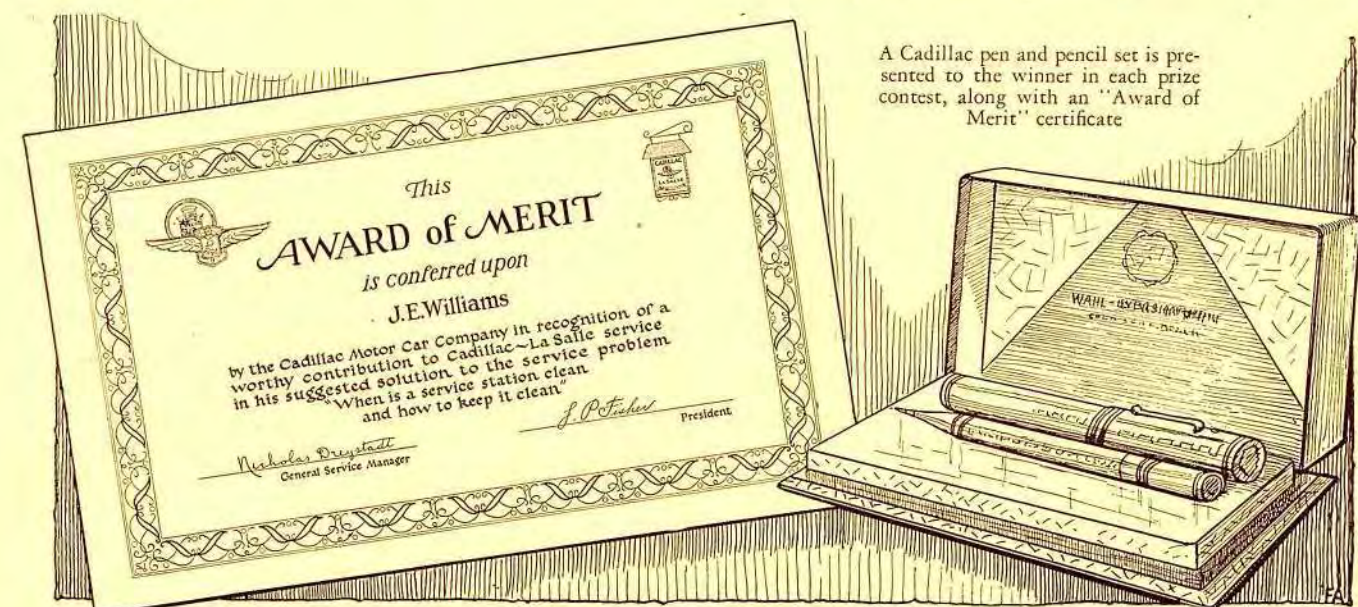
"How to Make and Keep Delivery Promises to Customers"

This is a problem for both the large and the small service station, and every man should have ideas on its solution. *Send these ideas in!*

There was a splendid response to the last contest; those who wrote before should try again, those who did not should get in on this contest for sure. All have an equal chance to get the "Award of Merit" and the pen and pencil set.

Letters for this contest must be received at the factory on or before August 1. The winning letter will be published in the August 15 issue. Send your letter to the SERVICE MAN Editor right away.

As was emphasized when the last contest was announced what is wanted is original, practical ideas—spelling, grammar and penmanship are not important.



A SATISFIED OWNER NEVER COMPLAINS

Number 13
Page 2

The Cadillac-La Salle Service Man

The CADILLAC LA SALLE SERVICE · MAN

JULY 1, 1929
DETROIT, MICH.

NUMBER 13
VOLUME III

Published on the first and fifteenth of each month in the interest of Cadillac Service

Piston Pins Will Now Be Supplied In New Oversizes

PISTON pins have formerly been furnished in the following oversizes: .001, .003 and .005 inch. Standard practice in the industry, however, is to furnish piston pins in oversizes of .002, .004 and .006 inch.

For this reason, the factory Parts Division is arranging to supply piston pins in these standard oversizes to conform to the general practice. Some oversize piston pins are now being supplied in the new oversizes, others will be as soon as the supply of the present oversizes runs out.

On this account, piston pins 37087, used on engines from type 55 to first type La Salle 303, and 876891 used on late type La Salle 303 engines, are now supplied .004 oversize instead of .003 oversize; and piston pin 876892, used on late type La Salle 303 engines, is now supplied .006 oversize instead of .005 oversize. Piston pin 876339, for 314 and early 303 engines, .001 oversize, has been discontinued and 876340, .002 oversize should be used instead.

All other oversize piston pins will be furnished under the same part numbers, but in the larger oversizes, as soon as the stock of the present oversizes runs out.

Lorraine Driving Lights Newest In Accessory Line

LORRAINE driving lights have been added to the factory's line of accessories. Lorraine design and construction are without equal, and these lights have a nation-wide reputation as the finest driving light.

These lights will prove to be a profitable addition to every distributor's and dealer's accessory line. The safety and convenience of a good driving light can be convincingly demonstrated to any owner. No owner who drives on country roads at night can afford to be without one.

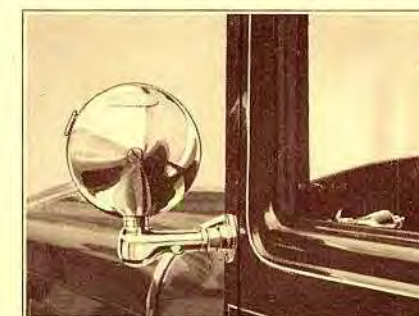
The control of the Lorraine light is right at the fingertips, just below the steering wheel. Lift the handle and the light moves in a vertical circle; turn the handle and the light moves horizontally. The beam can be turned with gun-like accuracy, and can be used to illuminate curves,

signs, or the roadway. It can also be used when backing the car.

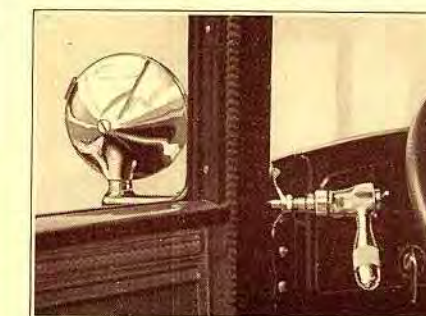
Lorraine driving lights are supplied in two sizes: the Model 35, part number 47165, lists at \$35.00; and the model 25, part number 47166, lists at \$25.00.

Display stands with lights, part

number 47170, are also available. Tools for installing Lorraine lights will be shipped under part number 47167 at \$6.00 a set. Model 35 and Model 25 lights can be furnished for open cars at the same prices under part numbers 47168 and 47169 respectively.



Night driving with convenience and safety is assured on a car equipped with a Lorraine driving light



Instructions for installing these lights accompany the set of tools which are necessary for this work

THE WINNER

ASERVICE STATION is clean when it is pleasing to the critical eye of the Cadillac or La Salle customer in every way. "First impressions are lasting impressions with customers."

The way we find best to keep ours thus is as follows: Sweep the floor thoroughly twice each day.

Have the floorman put fine sawdust on any oil or grease that might get on the floor during the day and sweep it up in the afternoon. The sawdust absorbs the grease and prevents it soaking into the floor.

Hold each mechanic responsible for the cleanliness of his space in the workbench line.

Sweep down the walls and wash the shop windows once every sixty or ninety days.

Have a couple of the floor boys come back one Sunday morning each month and scrub the service floor thoroughly with Wyandotte or Swift's Cleanser (the amount of cleanser used would, of course, depend upon the floor space). This cleanser costs 9½¢ per pound and comes usually in 100 lb. kegs.

Scrub all woodwork of Parts Department and Service Office once every six months with Wyandotte detergent.

At the service meetings promote individual effort on the part of each man of the Service Department by stressing the importance of the appearance of the Service Department to the customer.

See that no advertising posters are tacked up about the walls of the Service Department.

Have each mechanic arrange his personal tools neatly on the bench when in use, and put them away out of sight when through. See that they do not use the running boards of customers' cars as a catchall for tools and greasy parts when working on his car.

Parts Manager has his steel bin equipment wiped off once a week and his floor space swept out once a day. He is instructed not to have the parts window and counter cluttered up with parts and accessories.

Shop men are instructed to change their coveralls and coats regularly, and to use clean service coats or seat covers when driving a car.

We are, in the manner described above, meeting with success in our efforts to maintain a clean Service Station.

J. E. Williams,
Knoxville, Tenn.

A SATISFIED OWNER NEVER COMPLAINS

What Other Service Men Think About Clean Service Stations

IN addition to the prize-winning letter submitted by Mr. Williams, there were a number of other letters deserving of praise and special mention. The following quotations are taken from among these letters. A unique letter was submitted by Mr. M. R. Stehley, of the Uppercu Cadillac Corporation, New York, and it will be published complete in the next issue.

"A service station is clean when a salesman is proud to take a prospective buyer through and show him the ideal conditions under which the men work, and the methods used to keep the car and shop clean."

—Wm. Gray,
Uppercu Cadillac Corporation,
Brooklyn, New York.

"A service station is never clean until everyone connected with the organization is sold on the importance of keeping it clean."

—George Dudley,
G. W. Shroyer Company,
Dayton, Ohio.

"Shop cleanliness starts in the locker room, and if it is insisted upon that the men keep the locker room clean, the chances are ten to one that there will be no trouble in keeping the shop clean."

—E. L. Fuller,
Cadillac Auto Company of Boston,
Boston, Mass.

"A service station will always have a neat and clean appearance when each worker is assigned a duty regarding the cleanliness of the station and is thorough in attending to his particular duty of duties."

—Henry Holtham,
Robertson Motor Car Co.,
Fall River, Mass.

"A service station is clean when an owner can come with his car into the service building either at the entrance or the remotest corner and go out again with the feeling that neither he nor his car is, in any way, dirtier than when he entered."

—H. Clark,
Cornell Motor Car Company,
Staten Island, N. Y.

"If you really want to know if your service station is clean ask the young lady driver who walks through it."

—Jim Stein,
Jerry Duryea, Inc.,
Springfield, Mass.

"If the personnel of the service station is possessed with the idea of cleanliness, all those clumps of dirt, grease, paper, rubbish, dirty windows, outward appearance of building, and frozen countenances of testers and others, who are called upon to meet the customers, will not be hard to look at, for the simple reason that they won't be there."

—F. E. Arnold,
Washington Cadillac Company,
Washington, D. C.

"A service station is clean when there is an appointed place for everything connected with the repairing and servicing of a car. The oil and grease barrels should have a place of their own; the special Cadillac and La Salle tools should be on a board, in the tool room; the shop benches should be in a good convenient place; the mechanics' tool boxes should be kept in order, and there should be waste barrels for keeping oily waste and rags and old parts."

—Joseph A. Avery,
Cadillac-La Salle Inc. of Rutland,
Rutland, Vermont.

"The best way to keep it clean is to be continually after it. The shop that has a weekly clean-up cannot be considered clean during the week. For that reason we have a man assigned to each shop floor whose only duty is to pick up, sweep and mop the floors continuously. He also remains on Saturday afternoons, after hours, and makes the general clean-up."

—Joseph F. McMullen,
Uppercu Cadillac Corp.,
Brooklyn, N. Y.

"A service station is kept clean only when cleanliness is known to be one of the major policies of the firm, and then only by the constant toil and vigilance of every one."

—F. B. Shreve,
Oliver Cadillac Company,
St. Louis, Missouri.

"A man can do more and better work in a clean shop than a dirty one."

—Clifford C. Delfs,
Towell Cadillac Company,
Cleveland, Ohio.

"I am fully convinced that if you have a dark and dirty corner anywhere in your station, clean it up and paint it white—put up a bold front and you will win every time, for dirt just won't stay where white paint makes a corner light."

—H. S. McHenry,
Cadillac Motor Car Co. of Maine,
Portland, Maine.

"Mechanics and testers must at all times wear coats in clean and good condition, bearing the Garage Name, and should also have clean wiping cloths. They should at all times use clean language."

—Christ. Stangaard,
Cadillac Motor Car Company,
Detroit Branch,
Detroit, Michigan.

"Each mechanic's space is painted off, and each is responsible for the removal of any grease or oil that may be spilled; however, pans are provided for this class of work and used wherever possible. A place must be provided for the arrangement of tools and nothing allowed to accumulate or lie around the bench to form an unsightly picture."

—F. L. Lundgren,
Claude Nolan, Inc.,
Jacksonville, Fla.

"It requires no more time or effort to keep clean as you go along than it does to clean up afterwards, and, I believe, not as much. In this way, the mechanic and the car are clean should the owner come to look at his car, and the general appearance of the garage leaves a good impression to any one who enters it."

—John Gruber,
Uppercu Cadillac Corp.,
Bridgeport, Conn.

"One thing that makes a service station look untidy is torn posters on the walls, excessive and unnecessary posters and signs; and above all you must keep the floor, benches and walls free from rags, fender covers or clothes, etc."

—Lee S. Metz,
Cracker Cadillac Company,
Cincinnati, Ohio.

"Watchfulness and work are the two things that will keep a station clean."

—L. B. Sohn,
Southern Motor Car Company,
Memphis, Tenn.

"I wear a fresh laundered white top coat, changing every day, and am proud to say I can send any one of my men down to the office any time and not feel as if I were going to get bawled out about soiled overalls."

—W. S. Leonard,
Nolan-Peeler Motors, Inc.,
Miami, Florida.

Articles on actual methods to be used in keeping the station clean will appear in later issues.

A SATISFIED OWNER NEVER COMPLAINS

New Compound Developed For Lapping Steering Gears

THE slide film "Good steering," which was announced in the June 1 SERVICE MAN refers in one part to the use of a special abrasive called "Timesaver" for lapping worms and sectors which have off-center high spots, without removing the steering gear from the car.

We have been experimenting with this compound and have found it quite useful in overcoming hard steering due to binding at these off-center high spots. In many cases its use avoids the necessity for replacing the worm and sector.

Ordinary abrasives cannot be used for this purpose. Timesaver has special properties in that it loses its abrasive character after being mixed with oil for a short time. It is this characteristic that makes it possible to use it in the steering gear without danger of continued grinding action.

This compound can be secured on order from our Parts Division in one-pound cans, at \$3.00 net per pound. One pound will lap from three to five steering gears. No. 5 Special is the grade to be used for worm and sector gears.

Timesaver can also be used to advantage in lapping oversize half-nuts in Jacox steering gears. For these steering gears two grades are necessary—the No. 5 Special and the No. 80. The No. 5 Special is to be used in fitting the half-nuts to the housing—the No. 80 is for lapping the worm in the half-nuts.

Special instructions for the use of Timesaver compound accompany each can shipped by the Parts Division. These instructions must be carefully followed to save time and obtain satisfactory results.

When used according to these instructions, there is no danger that the compound will cause premature wear or damage to the steering gear. Any Timesaver remaining in the housing will do no harm, but will break down and serve as a polish for the bearing surface.

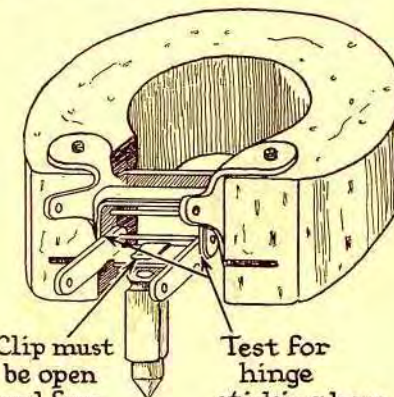
The most important thing to remember in lapping worm and sector gears is that the gears must be lapped only on the off-center high spots, not at the center or throughout the entire range of movement. Lapping at the center defeats the purpose of making the sector high in the center and simply removes metal which should be allowed to wear off.

A lapping tool is necessary when lapping the Jacox steering gears. This tool, number 109008, will be a special order tool and the price, if sufficient orders are received, will be \$10.00 net. Send in your order for this tool right away.

Service On Carburetor Float Hinge Explained

THERE ARE occasional instances of cutting out at high speeds apparently caused by faulty ignition, which in reality are due to the carburetor float hinge sticking.

There are several possible causes for this condition. It most frequently occurs in that part of the hinge to which the needle valve clip (53073) is hooked. This part may bind between the sides of the lower part of the hinge. (See illustration.)



Clip must be open and free

Test for hinge sticking here

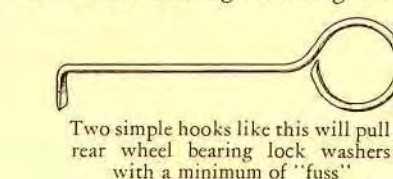
The carburetor float and hinge mechanism removed from the hinge bracket to test for free movement

float. Bending the bracket away from the center of the carburetor raises the float. No force whatever should be applied to the float itself or to the hinge.



OUR prize-winning shortcut time was submitted by Thomas Mulrine, a mechanic with the Bronx branch of the Uppercu Cadillac Corporation.

This shortcut is a simple puller for removing the lock washers for the rear wheel bearing retaining nuts on



Two simple hooks like this will pull rear wheel bearing lock washers with a minimum of "fuss"

all La Salle cars. It will also help with the removal of the felt packing in the wheels.

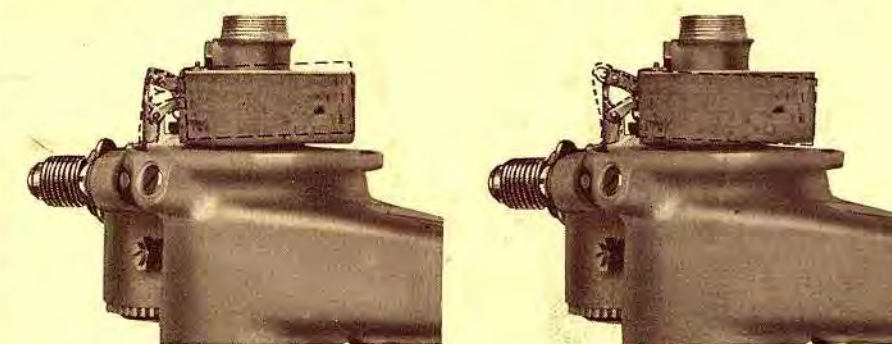
This tool, which consists of two hooks as illustrated, can be made up in a few minutes, while its use will save several minutes of fussing with lock washers on every La Salle rear wheel bearing job.

Service Manager

with Cadillac dealer experience, available for new position, as Service Manager, Shop Foreman, or Tester. Eighteen years' experience in automobile work. Address Box J, Cadillac-La Salle SERVICE MAN.

Wanted

Cadillac V-63 or 314 hearse. Will trade V-63 2-pass. coupe body for hearse body to fit V-63 chassis. Communicate with Lewis E. Springer 52 Genesee Street, Auburn, N. Y.



Bend the hinge bracket in to lower float (left) and out to raise the float (right). In these views the carburetor is upside down, as it would be for working on the bench

A SATISFIED OWNER NEVER COMPLAINS

The CADILLAC LA SALLE SERVICE · MAN

Volume III July 15, 1929 Number 14

New Slidefilm Covers Service On Syncro-Mesh Transmission

ANOTHER mechanical slidefilm, entitled "Servicing the Syncro-Mesh," has been prepared for Cadillac-La Salle service men. This film provides complete information on service operations for the new transmission.

When the Syncro-mesh transmission was first put into production, no major transmission repairs were to be attempted in the service station. Instead, transmissions were to be replaced and returned to the factory for inspection. By following this procedure, the engineers were enabled to learn just how the new transmission was performing in actual service.

By now, however, there is no longer any reason for following this procedure. Hereafter, all necessary repairs to transmissions can and should be made right in the service station. Service operations on the Syncro-mesh transmission are not difficult once they are understood. With the information provided in

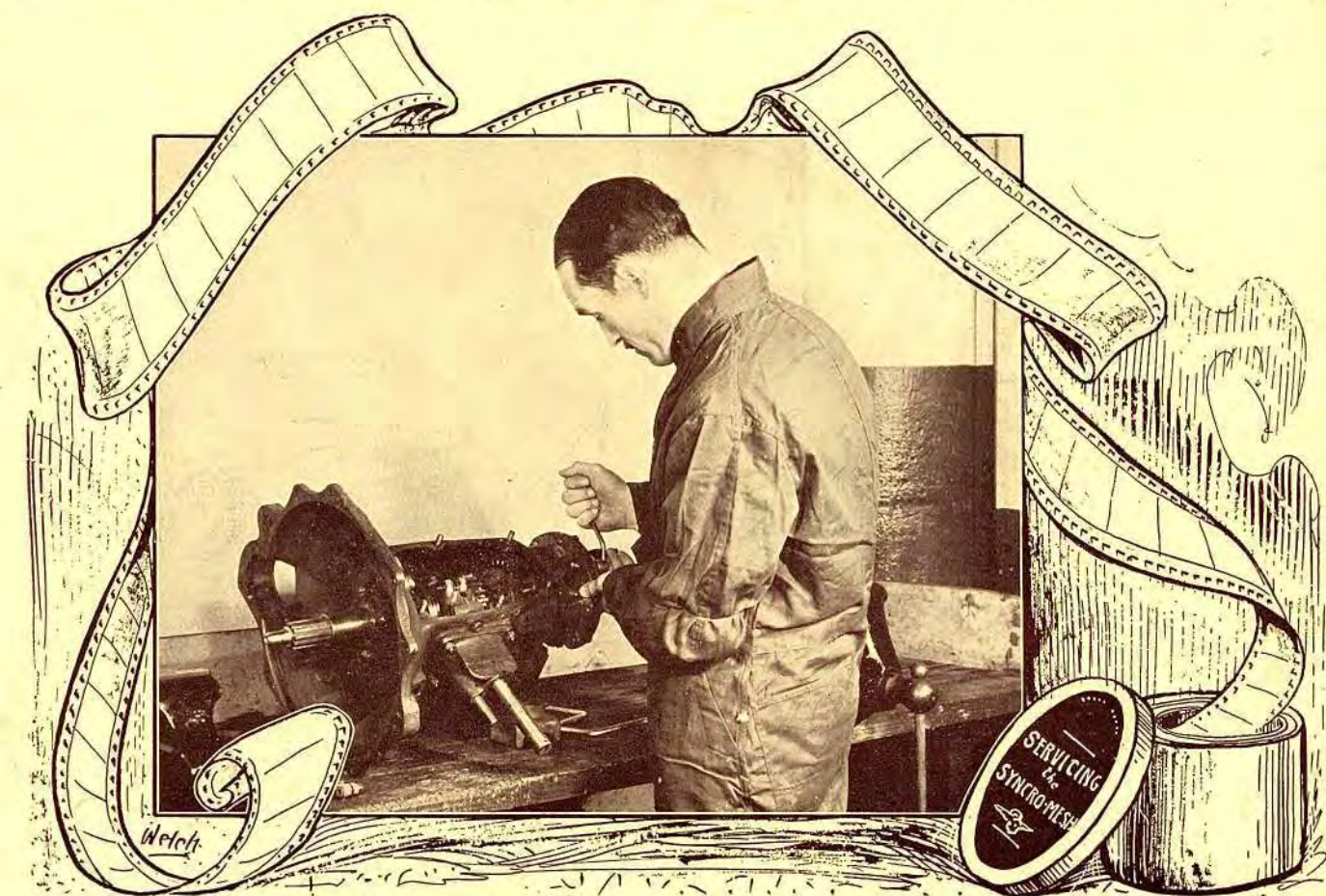
the new film, any capable mechanic who can handle service on the earlier type transmissions will be able to easily service the Syncro-mesh.

One of the first things the film does is to outline the differences and similarities between the old and the new transmissions, so that only the dissimilar operations need to be thoroughly covered.

A large part of the film naturally deals with repairs to the synchronizing mechanism. All possible causes of failure are carefully covered. Removal, disassembly and inspection of all important parts are explained.

Nor is the tester forgotten. A part of the film deals with the possibilities of the operator being at fault, and with the effect of other factors, such as clutch pedal adjustment and seat adjustment.

Distributors' service managers should make arrangements to show this film to their men at the next regular service meeting. Wholesale representatives should also arrange an early trip (Cont'd on page 2, col. 1)



A SATISFIED OWNER NEVER COMPLAINS

Number 14
Page 2

The CADILLAC LA SALLE SERVICE · MAN

JULY 15, 1929 NUMBER 14
DETROIT, MICH. VOLUME III

Published on the first and fifteenth of each month in the interest of Cadillac Service

"Service Management" Book Sent Out To Clinic Men

"SERVICE Management," which contains in printed form the material presented to Service and Parts Managers who attended the Service Clinics this Spring, is now off the press.

This book has been prepared in the form of a hand-book, similar to an engineer's hand-book. It is intended to serve not only as a text book for the review of points brought out at the clinics, but also as a hand-book for Service and Parts Managers for constant reference in their daily work.

Service and Parts Managers who attended the clinics have each received a copy of this book. Other Cadillac-La Salle Service and Parts Managers may secure copies for their personal use from the Parts Division at \$3.00 net.

Several Service Managers have asked if they could secure copies of the films used in presenting the material at the clinics. We can supply prints of these films on order at \$2.00 per print, there being three in the series.

In ordering these films, Service Managers should bear in mind that they do not present a complete story in themselves, but merely supplement the lecturers' notes. With the new hand-book to furnish the notes, they present an excellent opportunity to extend the good work of the clinics. The films should not be ordered with the idea that they can be used in a manner similar to the "picture" slidefilms which have been issued.

New Transmission Slidefilm

(Continued from page 1)

to show this film to their dealers' service men.

One print of this film will be sent to each distributor and dealer that is now on record at the factory as having access to a projector. Additional prints will be furnished on order. The regular net price is \$2.00 each. A lecture has also been prepared for this film, a copy of which will be sent out with each print.

The Cadillac-La Salle Service Man

Framed "Policy" Posters Can Be Secured At Lower Price

THE framed "Service Policy" posters, announced in the April 15 and June 1 issues of the SERVICE MAN, have been made up and are now being sent out.

These framed posters as finally prepared are made up in an attractive dark-finished wood frame, mounted on a sturdy masonite back. No glass is furnished with the frame, but it is grooved so that a glass can be installed.

Sufficient orders have been received so that the frames can be sold for a price substantially less than that originally quoted. The new price is \$3.50. All framed posters that have been sent out have been billed at this figure, and the remainder on hand will be sold at the same price.

Every service station should have its "Service Policy" posters neatly framed and in use. If your poster is not up, now is the time to order one framed and ready for hanging, and to get it up and in use right away.

Standardized Color Markings For All G. M. Oversize Parts

OVERSIZE piston rings for Cadillac and LaSalle engines are designated by color markings for the various oversizes. Color markings for oversize parts are convenient and practical, and such markings are used extensively by the various other General Motors divisions.

For this reason the Standards Section has just evolved a system of standardized color markings for oversize replacement parts, and this system is to be used hereafter by all General Motors divisions.

This new set of markings differs in two instances from the former Cadillac piston ring markings, as shown in the chart below:

The differences in the markings of .005 and .010 oversize rings should not confuse Cadillac service men, as the Red and Green now used do not conflict with any of the General Motors colors that can be used for marking piston rings. No attempt will therefore be made to change the markings on the present stock of rings, but when new rings are ordered, they will be marked with the new standard colors.

A complete color chart of the new standard oversize markings has been made up and copies will be sent to every distributor's Parts Manager.



OUR winning shortcut this time will be of interest to all those who have occasion to install the spare tires on fenderwell jobs; for it is a tool for tightening the straps which hold the tires in the fenderwells. It was submitted by Joseph Prepurisch of the Chicago Branch.

The tool, as illustrated, is very simple, and it can be made up in a short time and at a small cost. A piece of cold rolled steel about 15 inches long by 2 inches wide by 3/4 inch thick is forged to the shape of a button hook. The long end is narrowed to a convenient handle and the outer end is slotted to a depth of 1 1/2 inches in two places about 1/2 inch apart.



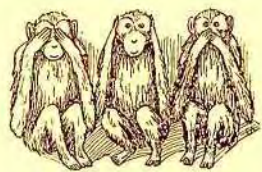
Spare tires will fit snugly in fenderwells if the straps are tightened with this simple tool

By passing the fenderwell strap through the slots and prying, as shown in the picture, the strap can be drawn up very snugly. Use of this tool will give a very good fit and will prevent spare tires from jumping around in the fenderwells when the car is being driven over rough roads at high speed.

COLOR MARKINGS

	G. M. Color Chart	Cadillac Piston Rings
.0001"	oversize Red and White	
.0003"	oversize Red and Blue	
.0005"	oversize Red and Green	
.0007"	oversize Red and Yellow	
.002"- .003"	oversize Red	
.004"	oversize Orange	
.005"	oversize Blue	Red
.006"	oversize Light Blue	
.010"	oversize White	Green
.015"	oversize Yellow	Yellow
.020"	oversize Brown	Brown
.030"	oversize Black	Black

A SATISFIED OWNER NEVER COMPLAINS



A Unique View of the "Clean Service Station" Problem

ONE MAY say a Service Station is CLEAN when your patron may "See No Evil"—"Hear No Evil"—and will "Speak No Evil."

That he may "See No Evil"—the liberal use of white-wash or white paint on the side-walls and ceilings, with a border of brown, green or similar shade extending about five feet from the floor, gives the average Service Station an appearance of cleanliness that pays handsome returns on invested capital.

The Shop floor should be divided into spaces with sufficient room for comfortable and efficient work by the mechanic. Lines of white paint used by the Police Department for marking street crossings, etc., will last a very long time. The regular and even line-up of cars being worked on in these spaces is far more pleasing to the eye than a mass of cars headed in any or all directions. The floor can be given a thorough scrubbing once a week with a cleansing compound and water, with a continuous wiping up of exceptional grease and oil spots.

Steel shop benches are almost as cheap as wood and have many advantages. Painted same color as the wall border mentioned above, the orderly appearance of the shop is increased.

Uniformity of mechanics' overalls—shop coats for foremen, and white coats for testers are all added touches to the picture of cleanliness in your organization.

Office clean—with waste baskets used instead of desk tops for disposal of waste paper, litter, etc., fire-proof cans in the shop for rags—sheet metal boxes for scrap parts—metal stock room bins—are all inexpensive but profit-paying as against the slovenly methods so commonly used in many establishments.

Close inspection of cars before delivery to owner—for soiled upholstery—greasy steering wheels and levers—shop marks on the body and fenders—and subsequent removal, are all items to be borne in mind that your customer may "See No Evil."

The "Personnel" of the Organization should be CLEAN. Polite, courteous and refined conversation with customers and among employees themselves, will create an atmosphere wherein your customer will "Hear No Evil."

Prompt and efficient work, with fair and reasonable charges, together with any or all of the above recommendations will create in the mind of your customer an attitude of friendliness that when thinking of you or your Service—he will "Speak No Evil."

—M. R. STEHLEY
New York City.

HURRY! HURRY! HURRY!

ALL contributions to the contest:

"How to Make and Keep Delivery
Promises to Customers"

must be received at the factory not later than
August first.

Write us your ideas and send them in now. The prize
is waiting for someone!

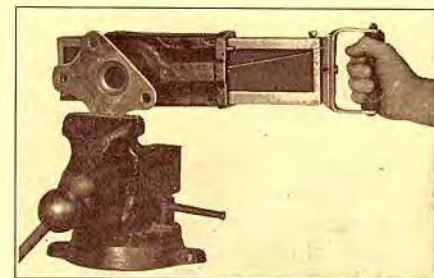
Use of New Lapping Tool For Jacox Steering Gears

AS ANNOUNCED in the last issue of the SERVICE MAN, a new tool for lapping the Jacox steering gear housing for oversize half-nuts has been released.

This tool consists of two tapered blocks fastened together by knurled screws which permit adjustment to the proper size. A handle is attached to one end by which the tool can be worked back and forth within the steering gear housing.

Remember that this lapping tool is not a finishing tool. It is merely used to true up and enlarge the housing until the oversize half-nuts are a fairly tight fit. The half-nuts themselves are then given an application of the lapping compound as the final finish operation.

In using the lapping tool, the steering gear must be completely disassembled and the housing placed in a vise.



Fitting oversize half-nuts in Jacox steering gears can be quickly accomplished by the use of Timesaver compound and this lapping tool

The first operation is to fit the sides of the housing and half-nuts to a fairly tight fit. This is done by applying No. 5 Special Timesaver and oil (mixed 3 ounces of Timesaver to ½ pint medium engine oil) to the sides of the tool and working the tool back and forth, applying pressure first to one side and then to the other.

The next operation is to apply No. 5 Special Timesaver to the top and bottom of the tool and adjust it until tight in the housing. Then operate the tool until the half-nuts can be assembled on the worm in a rather tight hand push fit.

The half-nuts can then be given a final fitting in the housing by lapping with No. 80 Timesaver (mixed 3 ounces to ½ pint of medium oil). In this operation use the half-nuts themselves as a lapping tool.

This tool, number 109008, will be a special order tool and will be made up provided sufficient orders are received to warrant manufacture. The price will range from \$10.00 to \$12.00, depending on the number of orders received by August 15.

Front Seat Adjustment May Cure Owner's Complaint

WHILE the adjustable front seat with which Cadillac and La Salle cars are now equipped is a decided advantage to the car owner; it may, if improperly adjusted, be the indirect cause of complaint. Suppose for instance, that the man of the house does most of the driving and prefers the seat up forward. Some other member of the family may take the car and readjust the seat to his own liking, bringing it further back.

The next time the man drives he may not realize that the seat has been changed, but he will notice quite a difference in the operation of the controls. He will not be able to fully disengage the clutch as easily and the transmission control lever apparently will not come back as far. He may come to the service station to complain about these things.

There have been a number of complaints of noisy gear shifting or of the control lever slipping out of high gear that have been caused simply by the changed position of the adjustable seat. In any case where an owner makes a complaint that has to do with the operation of the controls, the tester should investigate this possibility before anything else is done.

For Sale

FOR SALE—Series 314 2-Passenger Coupe Body. Has not been in wreck and is in very good condition. Price \$200. Write direct to A. P. Mitchell Auto Co., Fort Worth, Texas.

Clean Service Stations Must Have Clean Floors; Contest Letters Include Practical Suggestions

TO MAINTAIN a clean service station, it is generally recognized that keeping the floor clean is the most important factor. This point was emphasized in nearly every letter submitted in the recent "Clean Service Station" contest. Realizing the importance of this matter as most service men do, various ideas and methods submitted are being passed on with hopes that all service station floors may benefit from the application of these recommended practices and that every service organization may soon be able to boast of having a clean floor.

To keep a floor clean you must, first of all, get it clean. A good start is essential. A thorough clean-up and paint-up job at the beginning will make the job easier all the way along.

Cement floors are much easier to keep clean if they are treated with a compound which fills the pores and prevents oil and grease from being absorbed. Several good compounds are available on the open market. Some shops have hardwood floors. These floors can be more easily cleaned if they are stained at regular intervals.

One very good suggestion is to paint the base of the walls and the edges of the floor around the walls and the supporting pillars with white paint. The paint should extend up the wall and out onto the floor about 6 or 8 inches. If this is done, there will be no dark and dirty corners, for everyone instinctively tries to keep a white corner clean.

White parking lines should be painted on the floors of both shop

and service floor. Cars should always be parked within these lines in an orderly manner. Careless or irregular parking will ruin the appearance of the cleanest service station.

Keeping the floor clean requires constant vigilance on the part of everyone connected with the organization. There must, first of all, be a regular cleaning schedule. The actual operation of this schedule depends a great deal upon the size of the station and the men available to do the work, but it must be regular in operation.

Floors should be swept up at least two or three times every day, and they should be thoroughly scrubbed at least twice a month, oftener if necessary. The sweeping can be arranged at the times when there is the least movement of cars through the shop; the scrubbing must be done after hours or on Sunday. In some cases, outside men with special equipment are employed to do the scrubbing and other heavy cleaning.

There are a number of good preparations for scrubbing floors. Oakite, Purolite soap powder and Magnus cleaner were some of the products that were mentioned. In one shop carbide dust from the acetylene welding outfit is mixed with the Oakite; this has been found to be very effective in whitening cement floors.

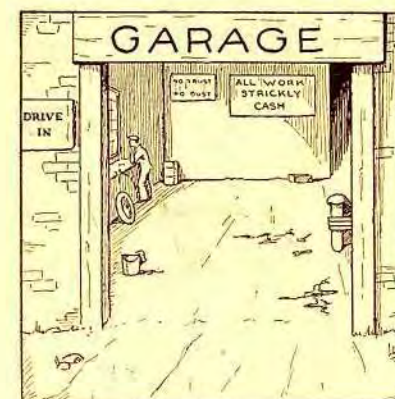
Simply following a schedule of sweeping twice a day and scrubbing twice a month will not, however, keep the floors clean. Keeping floors clean is a job that must be worked on continually.

In the shop, each mechanic should be held strictly accountable for his own working space. In small shops, mechanics will do much of the clean-up work themselves; in larger shops they should get the shop porter to take care of any work that is needed in addition to the routine clean-up. A number of shops have each working stall cleaned whenever a car is taken out, so that it is always clean when another car is put in.

Equipment for keeping the floor clean must be handy. Drip pans, rags, sawdust, and containers for junk parts, etc., should always be where they can be conveniently used.

The most important thing is probably the attitude of the men themselves. If each man is interested in a clean shop and clean floors enough so that he never lets things lie around, he always uses drip pans, and he sees that necessary clean-up work is done, the floors of the service station will be clean.

Do Not Post "Cash" Signs In The Service Station



THE garageman at the left scares away trade by posting "Strictly Cash" signs. The service station at the right gets cash for work by businesslike methods, by quoting the cost of the work in advance, and by assuming that if the work is properly done, the customer will gladly pay cash. Retail transactions are universally on a cash basis, and there is no need for any authorized Cadillac-La Salle service station to put up unsightly signs.

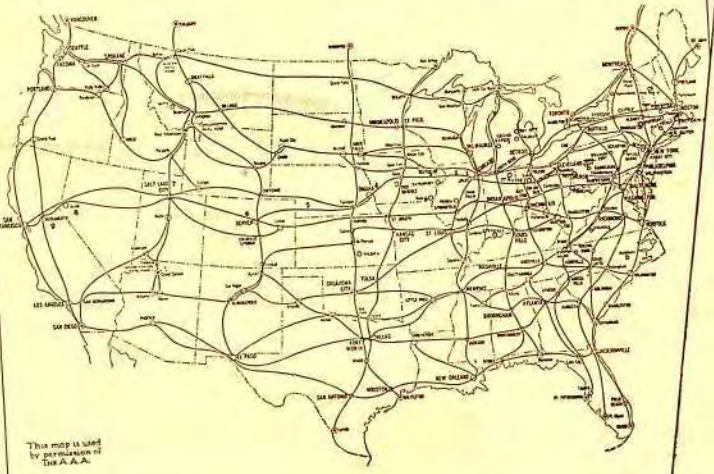
The CADILLAC LA SALLE SERVICE · MAN

Volume III

August 1, 1929

Number 15

New Touring Service Will Help Tourist Owners and Promote Transient Business



This map is used by permission of the AAA.

CADILLAC~LA SALLE Touring Service

CADILLAC AND LA SALLE OWNERS enjoy a unique and distinct service privilege. Through the medium of the Service Card, which is sent to all purchasers of new cars, they receive the same guaranteed service—as provided for in the Standard Cadillac Policy—from any authorized Cadillac-La Salle Service Station in the United States. They are thus free to travel with their cars wherever they will without sacrificing to any degree the benefits assured them when they purchase their cars.

This map and list of authorized Service Stations is simply an added Cadillac-La Salle service feature, aimed to help the owners of Cadillac and La Salle cars to take full advantage of this unusual privilege. A similar map and list will be sent on request to any Cadillac or La Salle owner contemplating a trip which will carry him 100 miles or more from his home service station.



The sign of Authorized Cadillac-La Salle Service

Date: July 20, 1929

Prepared for: J. B. Brown Address: Chicago, Illinois Engine No. 48174

From: Chicago, Illinois Route: San Francisco, California

Via: Omaha, Denver, Salt Lake City Federal Route No. 900

KEY	CITY	NAME	ADDRESS
1	Chicago, Ill.	John G. Milliken	
2	Omaha, Neb.	William A. ...	
3	Denver, Colo.		
4	Salt Lake City, Utah		

DURING the touring season, the Factory Service Department receives many requests from touring owners for information regarding the location of authorized Cadillac-La Salle Service Stations enroute. This is an opportunity not only to secure good will, but to keep the business of these owners within the Cadillac organization.

We are now prepared, therefore, on receipt of such a request, to send to the inquiring owner a map showing the principal transcontinental highways and north and south routes on which we will mark the locations of the authorized Cadillac-La Salle Service Stations along the contemplated route. This map will be accompanied by a list showing the name and street

address of each Service Station thus shown on the map.

To secure the benefit of this service, it is merely necessary for the owner to tell us the names of the cities between which he proposes to travel and the number or name of the highway, or the names of the intermediate cities.

It is impossible, of course, to issue a complete directory of authorized Service Stations which would remain up-to-date. Each map will be in response to an individual request covering a specific route. It will be dated and will carry the notation to the effect that it is subject to changes.

Service Managers and testers are urged to offer this service to owners and to assist in capitalizing on the good will to be obtained.

A SATISFIED OWNER NEVER COMPLAINS

Number 15
Page 2

The Cadillac-La Salle Service Man

The CADILLAC LA SALLE SERVICE · MAN

AUGUST 1, 1929
DETROIT, MICH.

NUMBER 15
VOLUME III

Published on the first and fifteenth of each month in the interest of Cadillac Service

Three New Films On Fisher Body Service Are Released

MORE NEW slidefilms! The Fisher Body Service Corporation has just released three slidefilms. These slidefilms deal with Fisher Body construction and repair methods. The increasing importance of body service behooves every Cadillac-La Salle service man to equip himself with helpful knowledge by studying these new films.

The first of these films, "Factory Facilities and The Field," deals primarily with the newly-organized Fisher Service Corporation. It outlines the activities of the Service Corporation as well as its organization in the field, which includes two parts depots and eight zone offices. Among the things explained are the various sources of information on body service and the proper way of ordering and returning body parts.



Three new slidefilms on body service have just been released by the Fisher Body Service Corporation

The second film is entitled, "Minor Body Repairs." It deals with the correction of such complaints as rattles, squeaks, water leaks and sagging doors.

The third film, "General Body Repairs," gives valuable information on heavier body repair work. The subjects which are considered include roof repairs, windshield adjustments, door repairs, metal welding and repairs to the finish.

A set of these three films has been sent to each Cadillac distributor and dealer that is on record at the factory as having access to a projector. These films make a valuable addition to the film library. Service Managers, show them at the next service meeting. Wholesale representatives, take them out for showing to your dealers.

Any dealer who has access to a projector but is not on our film mailing list can secure these films on request to the Fisher Body Service Corporation.

ANOTHER CONTEST

will be of interest to every Cadillac-La Salle service man. The subject will be:

"How to promote good will in catering to transients and tourists"

THE TOURING SEASON is now in full swing. Every service station is catering to tourists. Every service man, from service manager down to the porter, should know something about the proper way to treat tourists. Put your ideas in writing and send them in. We want them!

Remember, it is original, practical ideas that are wanted—spelling, grammar and penmanship are not important. Letters should only be about two pages long.

All letters must be received at the factory on or before September 1, so send them in right away. The winning letter will be published in the September 15 SERVICE MAN.

Answers to the "Delivery Promise" contest will appear in the next issue.

Deers Roebuk co
Dear sir
i want to no For why you no
send me no pump Handle
i Buy these pump for you And
you send she to me But the handle
For the pump no Got
how cum Pump she no work
without handle no good
Sun she shine Like hell And
Got have water But pump no
pump no Got handle
you give handle quik or throw
dam pump A way
Good bye
John Mawicuty
p.s scuse to me since i rite
i find pump handle in box ok
much Oblige

THE ABOVE letter was at one time a widely-circulated "wheeze," but if you think it is funny you would also laugh at some of the useless letters received at the factory, which answer their own questions. For example, a service manager who knows the Service Policy does not have to write in and ask whether to charge an owner for a new ignition coil at 5,000 miles. If everyone would read over all of his letters a second time before he sends them and make sure that they do not themselves answer the very questions that they ask, time would be saved for the customer, the service manager and the factory.

A SATISFIED OWNER NEVER COMPLAINS



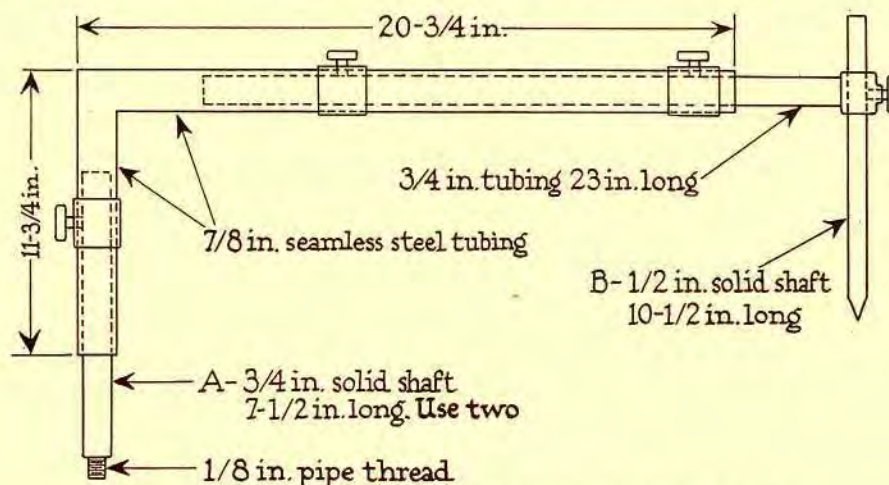
SHOP SHORTCUTS

THE prize-winning shortcut this time was submitted by J. E. Butler, of the Manford Cadillac Company, Houston, Texas.

The shortcut is a tool for checking rear axle alignment. It can be used on either Cadillac or La Salle, and on all models on which the Alemite connection for the front shackle of the rear spring is accessible through the dust shield.

This tool has been in use in the shop at Houston for some time and has been found both practical and accurate. Details of its construction are shown in the illustration. Seamless steel tubing and solid shafts of the dimensions shown and bronze bushings and thumb screws are the only material required.

To use the tool, remove the Alemite fittings from the stationary bolts of the front shackles of the rear springs and screw the shafts "A" into place. Remove both rear hub caps.



A useful gauge for testing rear axle alignment can be made up as shown from seamless steel tubing and shafts.

SALES AND SERVICE CONVENTIONS

SEVEN regional conventions are to be held this year. The programs will contain features on both Sales and Service.

The Service Manager and the Parts Manager of every Distributor and Dealer should attend the convention covering his own territory. Invitations will be broadcast through the Distributor. The convention schedule is as follows:

Detroit . . .	Aug. 19-20	Kansas City . .	Aug. 26-27
Chicago . . .	Aug. 22-23	Boston . . .	Aug. 26-27
New York . . .	Aug. 22-23	Atlanta . . .	Aug. 30-31
	San Francisco, Sept. 4-5		

Save These Dates

Service Manager

with 4 years' experience with Cadillac dealer in city of 67,000 population; fourteen years in automobile service work. Address Box K, Cadillac-La Salle SERVICE MAN.

FOR SALE: Series 314 Custom 5-Passenger Sedan Body in good condition. Reasonable price. Communicate direct with Carolina Cadillac Company, Winston-Salem, N. C.

Slip the frame of the tool over the shaft "A" on one side of the car and adjust the tool so that the pointed shaft "B" touches the center of the rear axle shaft and that the frame of the tool is brought as close as possible to the rear fender without touching it.

Tighten all thumb screws and then slip the frame of the tool off the shaft "A" on the one side and re-install it on shaft "A" on the other side. A difference of no more than 1/16-inch can be easily detected with this tool, which will show up sprung housings, bent axle shafts, or spring trouble.

Regular Replacement of Oil Filter Cartridges Necessary

UNDER normal service, oil filters will require a new filter cartridge every 12,000 miles.

If the filter cartridge is not replaced within this time the filter will soon cease to function, it having absorbed its maximum amount of sediment from the oil. The oil pan and screen should always be cleaned when the filter cartridge is replaced.

The average owner needs to be reminded of the necessity of changing his oil filter cartridge, and considerable selling effort is sometimes necessary to convince him of the importance of the job.

There is another occasion when it is very important to change the filter cartridge. This is in the event that the engine bearings have been burned out. If this occurs, the fine pieces of metal from the damaged bearings will be picked up by the filter and clog it so that the filter no longer functions. The cartridge must then be replaced.

It is, of course, most important that the oil lines be carefully cleaned out after any case of burned out bearings. Otherwise, the bearing metal left in the oiling system will not only clog the new filter but may even be enough to plug the leads to the bearings and cause a recurrence of the bearings burning out.

A new filter cartridge should be sold with every job of replacing bearings that have burned out.

Give Part Numbers of New Parts Installed On R.G.N

THERE are occasional cases where parts are replaced with parts of a different type which carry a different part number. An example of this is when standard rear springs are replaced with extra heavy springs.

In such cases, the replaced parts should be listed in the regular manner on the Credit Request or R. G. N. form.

In addition, a note should be placed in the "Reason for Replacement" column, stating that the parts were replaced by different parts and giving the part numbers of those new parts that were installed.

This information is necessary in order to give the correct parts order reference and to check this reference, as the parts order given as a reference must be an order for the new parts that were installed.

Take a Look Into Your Future—Are You Prepared For Body Service?



Service Managers, you do not need to go to a crystal-gazer to learn that body service is coming to the front. Send your men to the Fisher Body Service Schools now and you will be prepared.

ALL Cadillac-La Salle service stations should prepare to handle body service work, first, because of its increasing importance to the owner and second, because of the profits that will accrue to a well-managed body department. A large number of distributors and dealers already have body departments, and they are, without exception, reaping the advantages of additional profits and increased owner good will.

The public is becoming more and more critical of the bodies on the cars they buy and owners will no longer tolerate minor faults in the bodies of cars they own. The time is not far distant when new car prospects will not consider purchasing a car unless they are confident that they can secure satisfactory body service as well as chassis repairs.

To conduct a successful body de-

partment, three things are required: proper tools, adequate instructions and trained men. All necessary tools are already available in the Fisher tool sets described in the April 15 SERVICE MAN. Instructions are available through the Fisher Body Service Bulletins, which are being sent to each distributor and dealer; through the new Fisher slidefilms, described elsewhere in this issue; and through the Fisher Body Manual.

In order to make the best use of these tools and instructions, however, the workman should be trained in the Fisher Body Service Schools. These schools give thorough and practical instruction on all phases of body work, including the correction of body noises, wood and metal repairs, and paint and trim work. A man who has attended these schools knows how to repair bodies because he has worked on them and he under-

stands body construction thoroughly.

Every Cadillac distributor or dealer is privileged to send one or more men to the Fisher Service Schools. No fee whatever is charged for this instruction; there is only the cost of sending the men. The wise service manager will pick out someone in his own organization to specialize on body work and give him the benefit of the Fisher training program.

The schools are held at Detroit and at Oakland, California, and are in continuous operation. The entire course is completed in two weeks' time, and new classes are started on the first and third Monday of each month.

Write in to the Cadillac factory at once to make arrangements to attend these classes. As the classes are limited in attendance, those who delay writing may not be able to attend classes for several months.

The CADILLAC LA SALLE SERVICE · MAN

Volume III

August 15, 1929

Number 16

"Delivery Promise" Contest Won By El Paso Service Man

MR. S. L. QUISENBERRY, serviceman of the Lone Star Motor Company, distributor in El Paso, Texas, is the winner of our prize contest on "How to make and keep delivery promises to customers."

As in the first contest, a number of very good letters were received, but when the deliberations were completed, the judges found Mr. Quisenberry's letter to be the best. This winning letter is printed in full on an inside page.

The majority of the letters stated or implied that an important part of *keeping* delivery promises is to be very careful about

the way you *make* promises. Testers should keep this in mind. After a promise has been made, it is of course necessary for the shop to keep it.

Many helpful suggestions were included in the letters that were submitted, and these suggestions are given in the quotations which are published elsewhere in this issue.

If you have not yet submitted any letters to these contests, dig up your ideas and send in a contribution. If you have already submitted letters, try again. Many good letters are submitted in each contest and it takes a real good letter to win—your next contribution may be that real good letter.

The WINNER of the FIRST Contest



Service Representative George Otto (at right), presenting the Award of Merit and pen and pencil set to J. E. Williams, winner of the "Clean Service Station" contest. The presentation was made in front of the Knoxville Cadillac Company, with the entire service force in attendance

If you want to win a pen and pencil set, send in a letter for the next contest right away

All answers to the "Tourist GoodWill" contest must be received at the factory by September 5

A SATISFIED OWNER NEVER COMPLAINS

Number 16
Page 2

The CADILLAC LA SALLE SERVICE · MAN

AUGUST 15, 1929
DETROIT, MICH.

NUMBER 16
VOLUME III

Published on the first and fifteenth of each month in the interest of Cadillac Service

Hand Brake Shoes Will Not Rattle If Up Against Stops

THERE have been some cases of rattling of hand brake shoes on 341-B and 328 cars. This condition is usually caused by the shoes not being fully released. The hand brake shoes will not rattle if they are fully released and up against the stops.

The adjustment of the hand brake pull rods should be checked first. These rods must be adjusted so that the brake shoes are permitted to come up against the stops when the lever is in the released position.

If this adjustment is correct and the shoes still rattle, check for binding in the brake shoe mechanism. Binding may occur at either end of the guides or in the connecting link.



Insufficient release or binding of guide pins or connections may cause hand brake shoes to rattle

The entire mechanism should be made to operate freely, so that the shoes will return easily to the stops.

A pull-back spring that is too weak to hold the shoes against the stops might also permit rattling.

Anti-Knock Motor Fuels Not Distributed In Europe

ANTI-KNOCK fuels, used extensively with high compression engines in this country, are not available at all in European countries.

It is advisable to equip Cadillac or LaSalle cars with low compression cylinder heads for European travel. Service Managers should arrange to make this change on any of their cars that are to be used abroad.

The Cadillac-LaSalle Service Man

New Delivery Report Card Will Shorten The Time Required To Get Service Card To Owner

A NEW form of "New Car Delivery Report Card" has been prepared by the factory Service Department, and is being used for the cars now being shipped. This new card requires a new method of handling which should reduce considerably the time required to get the service card into the hands of the owner.

In the past, the old style report card accompanied the car keys from the factory. When the car was received by the distributor, the card was generally removed and was often misplaced or lost. Consequently, the delivery report was delayed, and in many cases was not reported at all until request was made by the factory Service Department.

This condition was probably due to the fact that in many organizations no particular department or person assumed the responsibility.

This new form is designed to correct the cause of past complaints. First, by having the blank card sent to distributors, by mail, when the car leaves the factory. Second, by placing the responsibility directly upon the "Specification Department" where we feel it will receive the proper attention. In organizations where the Specification Department is combined with the Accounting Department, the Accounting Manager will handle the matter.

When the card is received by the distributor, it immediately comes to the attention of the Specification Department. The card is placed in the file with the new car inventory records and remains there until the car is delivered. In the case of a wholesale delivery to either dealer or distributor, the card is removed from the file, addressed and folded

and mailed to the distributor or dealer receiving the car. Not until the car is actually delivered to the purchaser should the card be completed, separated and mailed to the factory.

It is essential that we receive the fullest support of every distributor and dealer in this matter, in order that all new owners may receive an early favorable impression of Cadillac Service by receiving their Service Cards promptly.

Mark "Credit Repair" On R.G.N's. For Worn Blocks

A NUMBER of distributors' parts managers apparently are not yet familiar with the correct method of handling orders for reground cylinder blocks.

Cylinder blocks are being sent in on R.G.N. forms marked "Regrind and Fit with Oversize Pistons." These old blocks are usually shipped by freight, and considerable time must elapse before they are received at the factory. Inquiries regarding shipment of the reground blocks are often received at the factory before the old blocks have been received.

Considerable time will be saved by following the correct procedure, which is to order reground blocks and pistons on a regular parts order, and to return the old blocks on an R.G.N. form marked "Credit Repair."

If this method is followed, distributors can carry in stock a set of reground blocks fitted with pistons, and it will not be necessary to hold up owners' cars while awaiting shipments from the factory.

Form 3518

ENGINE NO. _____

NEW CAR DELIVERY REPORT CARD

TYPE OR PRINT

NAME OF OWNER _____ STATE _____

ADDRESS _____

CITY _____

RETAIL DELIVERY BY _____ STATE _____

CITY _____

SHIPPED TO _____ TRANSFERRED TO _____

DATE OF ACTUAL RETAIL DELIVERY _____

CADILLAC MOTOR CAR CO.

2860 CLARK AVENUE

DETROIT, MICHIGAN

SERVICE DEPARTMENT

FOR SPECIFICATION DEPARTMENT IMPORTANT

INSTRUCTIONS: WHEN RETAIL DELIVERY OF THIS CAR IS ACTUALLY MADE BY DISTRIBUTOR OR DEALER THE ATTACHED CARD MUST BE FILLED OUT AND MAILED THE SAME DAY.

NOTE: IF DELIVERED WHOLESALE, FOLD CARD (THIS SIDE IN) AND MAIL TO DISTRIBUTOR OR DEALER.

A SATISFIED OWNER NEVER COMPLAINS

THE WINNER

IN ORDER to make a delivery promise to a customer, the tester should make a correct diagnosis of the trouble.

After diagnosing the trouble and writing up the order, quoting prices and getting the customer's signature along with his address and phone number, he should know, if he is acquainted with the customer's office hours or habits from previous contacts, about the time the customer wants his car. If the customer is in the habit of leaving his car all day at the Service Station, the tester can promise the car at about the time he leaves his office. This is to give the shop leeway for the rush jobs or the jobs that are promised at noon.

In case of the customer wanting his car as soon as possible, the promise should only be made by the man responsible for fulfilling this promise—this is the Shop Foreman. The Shop Foreman knows the capacity of the shop and the speed of the various mechanics, and he should be the only man to make promises. The tester contacts with the shop foreman, advises him of the work to be done, secures the promise, adds at least 30 minutes for a test and clean up, and tells the customer the time he can get the car.

Now, in order to keep this promise, there must be the closest cooperation between the tester and the shop foreman. All misunderstandings and wrong diagnosis must be ironed out, but not at the expense of the promise. *Keep this promise sacred.*

In case of the shop finding that there is additional work necessary, the tester is to contact with the owner, securing his authority for the work as well as an extension of the time. There will always be times when promises cannot be kept. This is the time for the tester to use his diplomacy and tact and contact with the owner before he comes to the service station. Explain that delay

was unavoidable and offer to do something that will offset the inconvenience, such as calling for owner in another car or whatever the circumstances warrant.

To assist the testers in keeping their promises, there should be a blackboard provided in the Service Department. This should be ruled with spaces for Customer's name, License Number, Time Promised, Location and Tester's O. K. The board should be located where it can be readily seen from the Service Department telephone. The space marked "Location" is for marking where the car is at all times, whether Shop, Grease Rack or some outside shop for sublet repairs. The space "Tester's O. K." is for the tester to initial when he has completed test and the car is ready for delivery.

During the day the tester can glance at the board and see what cars are promised for a certain time and contact with shop to see how work is progressing. He should not forget to add 30 minutes for a test, correcting of faulty work and having invoice ready for customer when he calls for car.

The shop foreman should have a work schedule card so that he can tell at a glance what cars are promised for certain times so he can give testers accurate information of progress of work and what additional work the shop can handle. We find a pasteboard card ruled off in spaces for the hours of the day on which the foreman can write the name or repair order number is suitable for this purpose.

In our opinion the making and keeping of delivery promises to customers is INTELLIGENT DIAGNOSIS, CO-OPERATION AND "AUTO SENSE".

—S. L. Quisenberry,
El Paso, Texas.

MANY other contributors to this contest submitted valuable ideas. The following quotations from various letters include a number of helpful suggestions on making and keeping delivery promises.

"ONE very important factor in 'How to Make and Keep Delivery Promises to Customers' is to avoid the question 'When do you want your car?' Invariably the answer is such as to put the asker on the defensive, and promises are made which are utterly impossible of accomplishment."

M. R. Stehley,
Mt. Vernon, N. Y.

"One half of the job of fixing any car is knowing what the trouble is. If the order is correct, the car is one half completed when it arrives in the shop."

Howard Drebran,
Detroit, Mich.

"The closer Contract Maintenance can be worked to a 100% basis—the easier it is to make and live up to delivery promises. Hourly work is the stumbling block."

D. N. McClinton,
Pittsburgh, Pa.

"A delivery promise must be made that will provide the necessary time to properly repair, test and clean up the car."

H. S. McHenry,
Portland, Me.

"First: Always be sure you have the complete order before making the promise."

"Second: Find out from the Shop Foreman when the work can be handled and get a definite answer."

"Third: Follow the job through the Shop."

Geo. Dudley,
Dayton, Ohio.

"Testers should first of all make a correct diagnosis of the trouble and then get the owner to allow them sufficient time to repair whatever is necessary."

Fred C. Stoad,
Cleveland, Ohio.

"Promises should be made only by the man who is responsible for the completion of the work."

F. D. Williams,
Youngstown, Ohio.

"Quick delivery to shop is essential, so that work may be started at once."

Wm. A. Reppke,
Brooklyn, N. Y.

"Each tester should keep a record of the hour of delivery on each Cadillac or LaSalle that he handles and keep in check with the foreman to see how the work is progressing."

E. J. Vaura,
Chicago, Ill.

"If there is any doubt as to whether the proper part is in stock, the Parts Department should be consulted."

Floyd Julian,
Knoxville, Tenn.

"If you cannot promise your customer his car for the time wanted, make him understand that to make a perfect job you need absolutely so many hours."

Paul Lavigne,
Quebec, Canada.

"If it is impossible to get car out on time, call customer in plenty of time so other arrangements can be made. Don't let customer come for car and have to wait."

Earl E. Grabill,
Columbus, Ohio.

"Delivery promises should be made only by the one responsible for getting the job out, and the hour of promise should be stated on order for the benefit of the mechanic doing the work."

Geo. Woesner,
West Palm Beach, Fla.

"Time should be allowed so the car is surely ready before the owner calls—work as ordered, tested and clean. It is easier to explain before than after."

M. R. Potter,
Syracuse, N. Y.

"Customers that are forever in a hurry should not be given service at the expense of breaking the promise or promises of customers that are more reasonable."

W. B. Shutt,
Brooklyn, N. Y.

"Parts to be sent out for repairs, paint work or plating, must be removed, tagged and sent out without delay. This is specially important in the case of tourists' and doctors' cars. It is a good practice to put the time the car is promised on the claim check which is given to the customer as the exact hour is often forgotten by the owner."

G. B. Andrews,
Detroit, Mich.

A SATISFIED OWNER NEVER COMPLAINS

Export Company's Educational Program Will Help Cadillac-LaSalle Service In Europe

CADILLAC-LA SALLE service men in America will be interested in learning of the progress of Cadillac-La Salle service in Europe, especially as much of the work is being done under the direction of Spencer W. King, who will be remembered as former Cadillac Service Representative and Clinic Instructor.

Mr. King is now connected with the European Operations of the Export Company and recently made a two weeks' visit to the Cadillac factory, securing more information to take back to European service men.

As a step to better Cadillac-La Salle service in Europe, the General Motors Export Company has started an educational program to acquaint their service men with Cadillac design, construction and service operations.

A service school was accordingly held in Berlin early this spring, in which intensive instruction was given to twelve delegates representing the nine "Operations," or Export Company branches in Europe. These operations, located in London, Paris, Berlin, Madrid, Antwerp, Stockholm, Copenhagen, Warsaw and Alexandria, Egypt, control the entire European market for General Motors cars.

The delegates, whose pictures are shown below, are Service Managers, Service Representatives, or Instructors with their respective operations. At the close of the school, they returned to their various headquarters and took up the work of conducting schools for their own service men and of traveling through

their territories to strengthen Cadillac-La Salle service.

These men must, of course, be thoroughly familiar with the language or languages of their territories. Each of the delegates understood two, three or four of the following languages: German, French, Spanish, Italian, Danish, Swedish, Flemish, Polish, Russian, Ukrainian and Arabic, depending on the territory in which he worked. Fortunately for Mr. King, however, they all had at least a working knowledge of English.

The course of instruction included a complete study of all units of the car. A 341-B Cadillac was completely dismantled and reassembled by the students. In presenting the subjects, use was made of all of the slidefilms and manuals prepared for the use of service men in this country.

Lubricate Camslides Before Installing Them In Engines

WHENEVER new camslide assemblies are being installed in an engine, it is important that the rollers be thoroughly lubricated with engine oil before being installed.

This is necessary because the engine usually must run for several seconds before enough oil is thrown up by the crankshaft to properly lubricate the rollers; and the rollers may score in this brief time.

The same caution applies to re-installing camslide assemblies which may have been removed and cleaned for inspection.



These are the men who will supervise Cadillac-LaSalle service throughout Europe. From left to right: Zbigniew Szdimir, Ernest Nielson, Chris Lodge, F. J. Sloan, Svend Sorensen, F. Ahnmark, S. W. King, Heinz Schedelmann, A. Vandenheuvel, P. deMeuter, Joseph Chacinski, A. Jordan and Maurice Villemin.

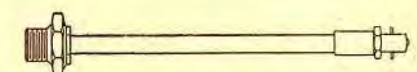
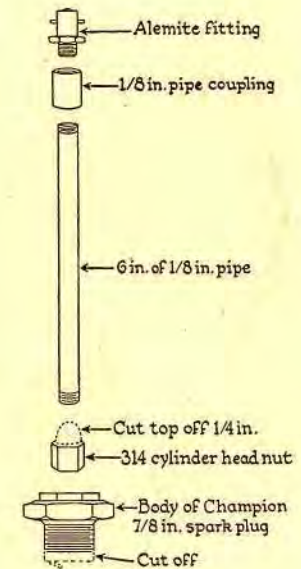
A SATISFIED OWNER NEVER COMPLAINS



THE SHORTCUT this time is an adapter for greasing speedometer cables. It was submitted by Mr. E. L. Boone, a mechanic with the Carolina Cadillac Company, Greensboro, N. C.

The speedometer cable is probably the most neglected part of the car as far as lubrication is concerned, due to the inconvenience of properly lubricating it. Mr. Boone's new adapter is "pie" for this particular operation.

The ingredients for the "pie" are shown in the illustration. They can all be easily secured around the service station and more easily assembled.



An adapter for greasing speedometer cables can be easily assembled as shown above.

To use the adapter, disconnect the speedometer cable at the head and at the transmission end. Fasten the adapter to the transmission end and apply wheel bearing grease with a grease gun until the cable is filled to the upper end. Then remove the tool and allow a small amount of the grease to drain off before fastening the cable.

For Sale

FOR SALE—Standard 5-passenger Sedan body for Series 314, 132-inch chassis. Write direct to Theodore Titus, Jr., Thomasville, Ga.

The CADILLAC LA SALLE SERVICE · MAN

Volume III

September 1, 1929

Number 17

New Cadillac And LaSalle Service Information Is Ready

THE NEW Cadillac and La Salle automobiles which are soon to be announced to the public incorporate a number of changes and improvements which will be of special interest to all service men.

Detailed information on the various mechanical improvements are given on the inside pages of this issue. Every service man should familiarize himself with the new features of construction immediately, so that everyone can do his part in giving complete service satisfaction on the new cars from the very start.

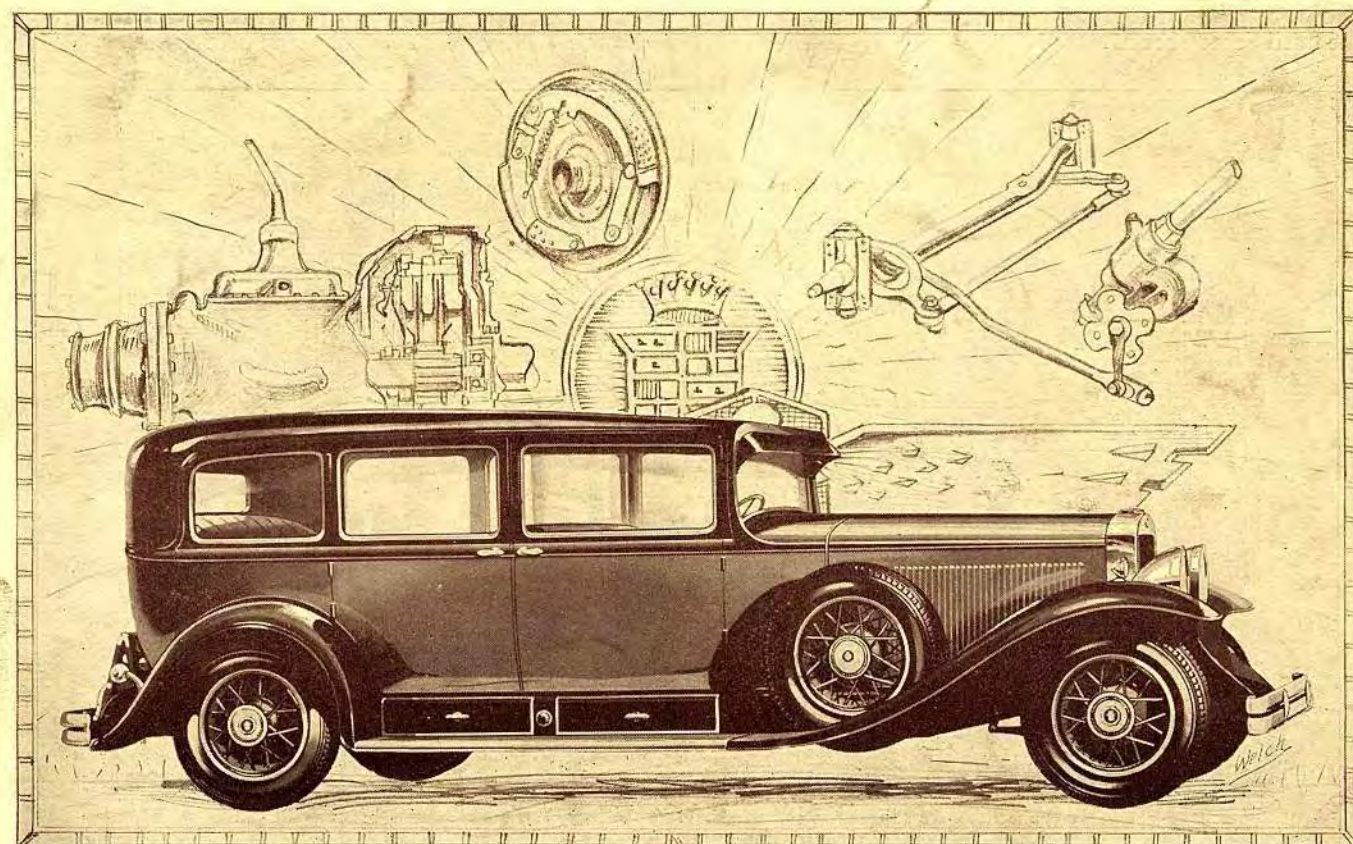
The improvements of greatest interest, both to owners and to service men, are those affecting steering. The steering construction on the new cars combines easy steering with

a freedom from road shocks that has heretofore been unknown.

The engines of both cars have been increased in size. This, together with other important changes, has brought about a considerable increase in both power and smoothness. The clutch and transmission have been made larger and stronger and will greatly outlast the previous units.

Two changes of special interest to service men have been made in the electrical systems. First, a new starting motor with a double reduction drive is used, and second, there is a new and larger distributor which is much easier to service.

New wheel equipment furnished for the new cars includes a new type wire wheel and optional wood wheels (Cont'd on page 2, col. 1)



A SATISFIED OWNER NEVER COMPLAINS

Number 17
Page 2

The CADILLAC LA SALLE SERVICE · MAN

SEPTEMBER 1, 1929
DETROIT, MICH.

NUMBER 17
VOLUME III

Published on the first and fifteenth of each month in the interest of Cadillac Service

New Cadillac And LaSalle Service Information Ready

(Cont'd from page 1)

which are demountable at the hub. The wheels on both cars are mounted on ball bearings.

Changes have also been made in the brakes, spring suspension and gasoline system. These changes are carefully covered either in this issue, in the Preliminary Service Information booklet, or the slidefilm "Service Information—Cadillac 353—La Salle 340".

Service men, study this information and prepare yourself to render excellent service on the new cars. Good service from the very start is each service department's share of the job of putting the new cars over. Let's make sure we do our share.

THIS issue of the SERVICE MAN has been purposely delayed so that it would be mailed just shortly before the public announcement of the new cars.

Because of the late mailing of this issue, the September 15 issue will also be mailed a little late, probably not until September 21.

The Cadillac-LaSalle Service Man

Minor Changes Increase Brake Effectiveness; Adjustments And Service Operations Are Same

THE BRAKES on the new cars have practically the same design, construction, and method of operation. Several changes have been made, however, which result in increased effectiveness.

The most important change is in the hand brake. Separate hand brake shoes are no longer used. The hand brake lever now operates the rear foot brake shoes through the linkage shown in the diagram below, which is the same in principle as the late-type 341-B and 328 hook-up. This change results in a simplified braking system and a more effective hand brake.

The hand brake lever is so designed that it has considerably more

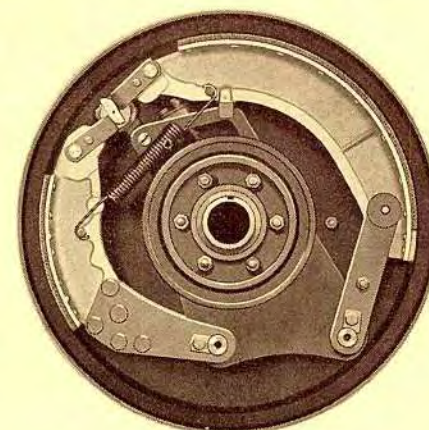
travel than the foot pedal. It is thus possible to apply the rear brakes with the hand lever after the lining has worn down to a point where the foot pedal is no longer effective.

Service operations are performed in practically the same manner as before. The adjustment for lining clearance is made in the same manner, by means of the adjusting nut on the end of the cam lever. One and one-sixth turns is still equivalent to one inch of pedal travel. The cam centralizing adjustment is also made in the same manner as before.

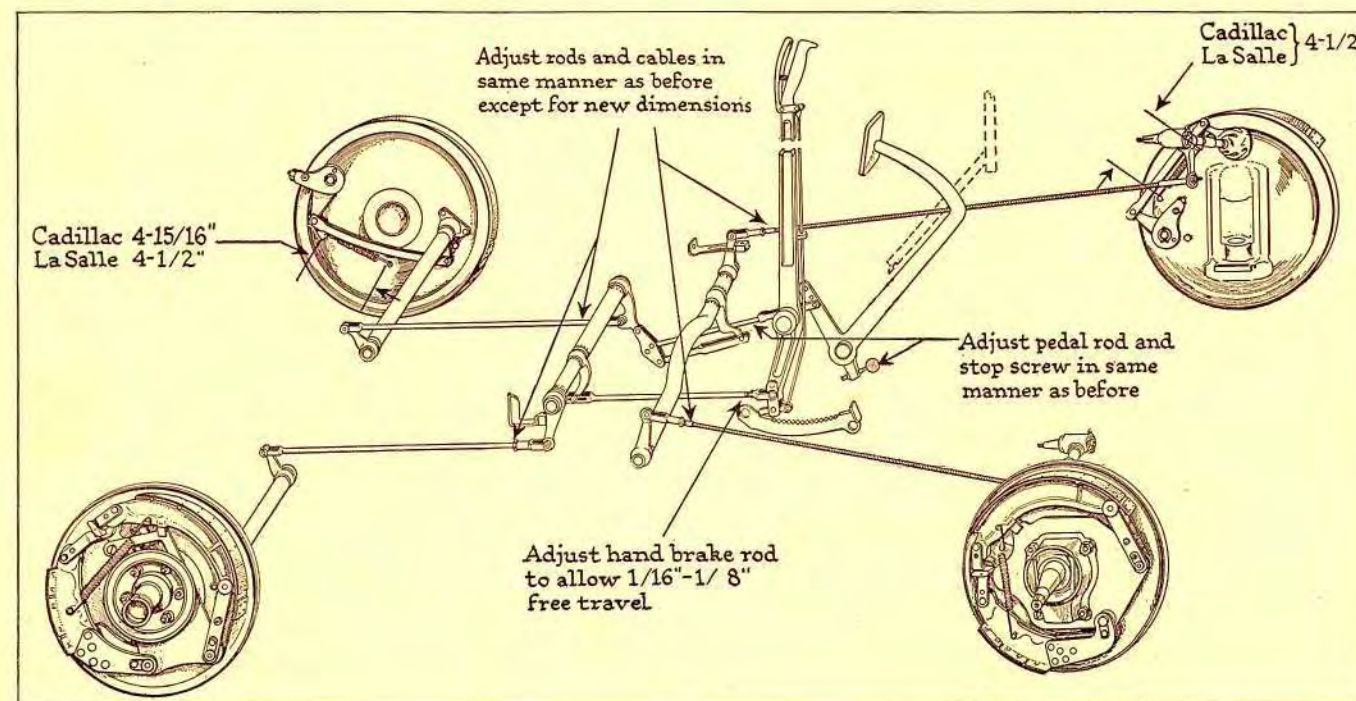
The cam and cam centralizing mechanism are unchanged except that they are located in different positions on the dust shields. The construction of the cam lever has been partly changed, as the cable connection to the adjusting nut has been replaced by a link connected to an eccentric.

The brake drums and foot brake shoes are of the same sizes and general construction as the parts previously used, but they are not interchangeable with these previous parts. The operations for removal and disassembly, and for relining the shoes are the same. The same brake lining is used as was used on 341-B and 328 brakes, and the use of lead tips on the ends of the long shoes is continued.

The brake connections are similar to the late type 341-B and 328 connections. The layout and adjustments are given below.



Separate hand brake shoes are no longer used; the hand brake lever operates the rear foot brake shoes



The brake connections are adjusted as shown above. The dimensions are measured between the ends of the retracting springs, the same as before

A SATISFIED OWNER NEVER COMPLAINS

New Front Axles, Ball Bearing Knuckles, Nitraloy Sector And Steering Modulator All Contribute to Easy, Shock-Free Steering

GOOD STEERING is one of the most important factors in the operation of a motor car, as the steering mechanism is in use continuously while the car is being driven.

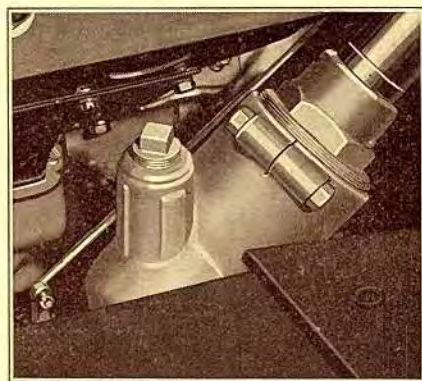
Good steering means two things—easy steering and steering that is free from whip and shimmy. Both of these qualities are secured in the steering systems of the Cadillac 353 and La Salle 340 by means of the following improvements:

Geometry of Axle

First, the "geometry" of the front axles has been changed. The camber of the front wheels has been reduced from $2\frac{1}{2}$ degrees to $1\frac{1}{2}$ degrees. The angle between the steering knuckle bolt and the vertical has been increased to $10\frac{1}{4}$ degrees, so that if the knuckle bolt were extended down it would meet the ground almost exactly at the point of contact with the tire—a condition necessary to easy steering.

The caster angle has been increased to 2 degrees for the Cadillac, while it remains at $1\frac{1}{2}$ degrees for the La Salle. The spring seats on the I-beams of both cars are machined exactly at right angles to the knuckle bolts.

New steering arms are used on both cars. The steering arms are now bolted to the knuckles on La Salle as well as Cadillac. The Cadillac steering knuckle arm is $\frac{3}{4}$ inch longer than formerly, which makes it the same length as the La Salle. The overall steering ratio on both cars is 18 to 1, while the ratio of the steering gear itself is 14 to 1, the same as formerly.

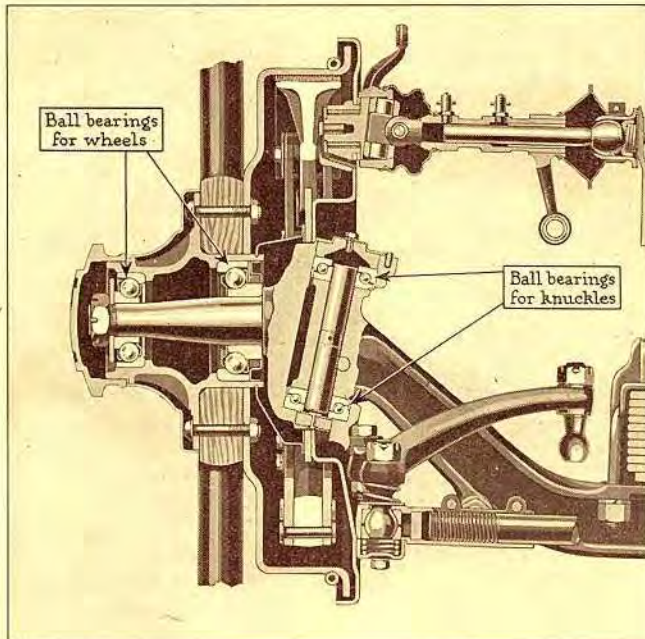


Improvements in the steering gear include a larger housing, longer bushings and a Nitraloy sector

Steering Knuckles

The steering knuckles are entirely new and pivot on ball bearings both top and bottom. The lower ball bearing takes the thrust and the upper one takes the radial load.

These bearings practically eliminate friction at the knuckles and help considerably to secure easier steering. The knuckle bolts and bearings are entirely outside the brake dustshields on Cadillac as well as La Salle. This construction prevents all possi-



The steering knuckles operate entirely in ball bearings. The La Salle wheel and knuckle are shown above, Cadillac construction is similar

bility of grease from the knuckle getting on the brakes. This type of knuckle is easily disassembled.

Steering Gear

Steering has also been made easier by cutting down friction in the steering gear itself. The sector is made from Nitraloy, a new alloy of remarkable hardness and ability to resist wear. Perfect contact between the worm and sector can thus be more easily secured and re-adjustment will be required at less frequent intervals.

Better alignment of the worm and sector is secured by the use of a larger steering gear housing and longer bushings for the worm. The upper bushing now turns in a bearing which floats in the housing rather than turning in the adjusting sleeve, as heretofore. Alignment of the bushing is therefore independent of the threads on the sleeve.

Instead of an Alemite fitting, a large filling plug is used, similar to

that on the transmission. A-200 with 5 per cent Acheson No. 38 graphite is recommended for both the new and for previous steering gears. An overflow hole in the steering column is no longer required, as the new filling plug extends up to the proper level for the lubricant.

All adjustments and service operations on the steering gear and steering connections are performed in the same manner as before. These adjustments are fully explained in the slidefilm "Good Steering."

Steering Modulator

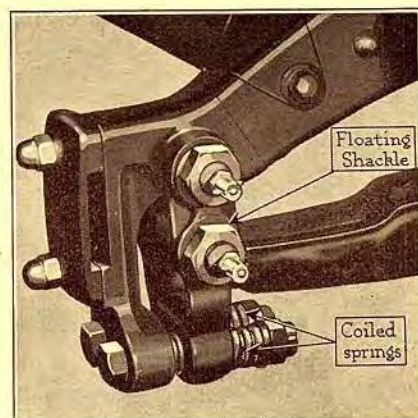
The changes already described will do a great deal to secure steadier steering and freedom from road shocks. In addition, a new device, called a "Steering Modulator", has been designed to prevent shimmy and steering wheel whip.

This device is merely a unique mounting of the front shackle of the left front spring in such a way that the shackle "floats" between the two pairs of stiff coil springs. These springs allow just enough movement of the shackle to absorb road shocks that might otherwise be transmitted to the steering wheel.

Steering Wheel

Another valuable new feature is the new steering wheel used on Cadillac cars.

This new wheel is made of die-cast aluminum reinforced with steel, and is accordingly of such strength that it is unlikely to be broken even in a serious collision. It has an attractive pyroxylin finish.



The front shackle of the left front spring floats between two pairs of stiff coil springs

Engines In The New Cars Are Larger, Smoother And More Powerful; Valves, Ignition, Starter And Heat Control Valve Are Improved

THE ENGINES on the new cars are larger and more powerful. The increase in power has been secured partly by increasing the bores, while the stroke of both engines remains at $4\frac{1}{8}$ inches. The Cadillac 353 engine has a bore of $3\frac{3}{8}$ inches and a piston displacement of 353 cu. in. This car is accordingly designated as "Series 353".

The La Salle 340 engine has a bore of $3\frac{5}{16}$ inches and a total piston displacement of slightly over 340 cu. in. To avoid confusion, the La Salle is referred to as "Series 340", although it has the same bore, stroke and piston displacement as the Cadillac 341. The N. A. C. C. horsepower of

angles as formerly, 30 degrees for the inlet and 45 degrees for the exhaust.

The valves are also "unmasked", that is, the cylinder blocks are recessed between the valves and the cylinder bores. This construction permits more rapid movement of the gases, thus increasing the power output.

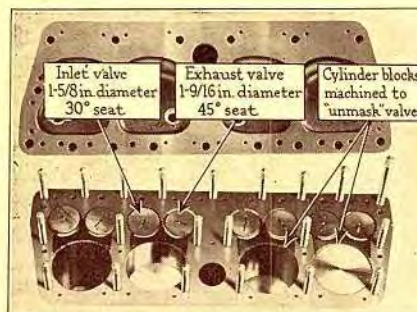
Crankcase, Blocks and Pistons

The crankcase for the new engines is of similar design but not interchangeable with the previous crankcase. The crankshaft assembly is new, as the counterweights are arranged in different positions. The camshaft, timing chains and sprockets are interchangeable with 341-B and 328 parts as well as being interchangeable between Cadillac and La Salle.

The cylinder blocks and the cylinder heads are new. High compression heads, marked "HC", are standard. The compression ratio of these heads is 4.92 for Cadillac and 5.05 for La Salle. Low compression heads are also available on special order.

The pistons, of course, are new, differing both in diameter and in the rings used. There are now four piston rings, three compression rings above the pin and one oil regulating ring below the pin. The piston rings are cut square across the ends instead of diagonally. This type of ring holds compression as well as the diagonally cut ring, and it does away with a slight noise caused by the diagonally cut ring when the gap happens to line up with the breather holes in the cylinder wall.

The connecting rods are the same



The cylinder blocks are machined to "unmask" the valves and allow free flow of the gases

the Cadillac 353 engine is 36.45 and of the La Salle 340 engine, 35.1.

The increased power of the new engines is not due entirely to the greater piston displacements. In addition, the valves are larger, the inlet valve having a clear diameter of $1\frac{5}{8}$ inches, and the exhaust valve a clear diameter of $1\frac{9}{16}$ inches. The valve seats are machined to the same

as those used on 341-B and 328 cars. The piston pins are pressure lubricated and are fitted in the pistons in the same manner as before.

Ignition

A new distributor is used for both cars. It is larger in diameter, and the high tension wires leave the head at the rear, the connections being made inside of a compartment enclosed by a cover held on by three screws. The distributor ends of the sparkplug cables require no terminal fittings. The contacts in the head have sharp prongs which pierce the cable insulation and make contact with the wire inside. Each contact has a cup



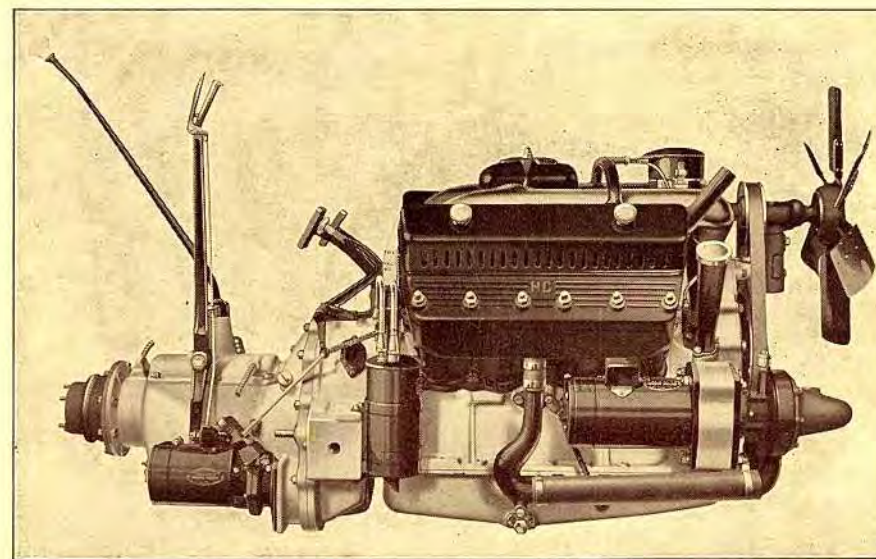
The new pistons are fitted with three compression rings above the pin and one oil regulating ring below

in which the cable end fits, and the distributor cap holds the cable in place.

Service on the timer contact points is also simplified. The stationary contacts are no longer on screws, but are welded to the supports which swivel about the same centers as the contact arms. Adjustment of the gap is now made with a screw driver by simply loosening the locking screws and turning the eccentric as shown in the illustration. The standard gap is .018—.024.

Synchronization of the contact arm for the even numbered cylinders is the same as before except that the adjustable plate which carries the arm swivels about the cam, so that adjustment of this plate does not disturb the gap.

The new distributor head is part of a change in the complete ignition harness. There is now only one conduit, which brings the high tension wires together just ahead of the intake header, from which point they go forward to the distributor. Clips held by the cylinder head nuts keep the wires in line on the cylinder heads. The complete harness can be easily removed by simply unclamping the distributor head and removing



The new covers improve the appearance of the Cadillac engine. Both new engines are of increased size and power

Engines In The New Cars Are Larger, Smoother And More Powerful; Valves, Ignition, Starter And Heat Control Valve Are Improved

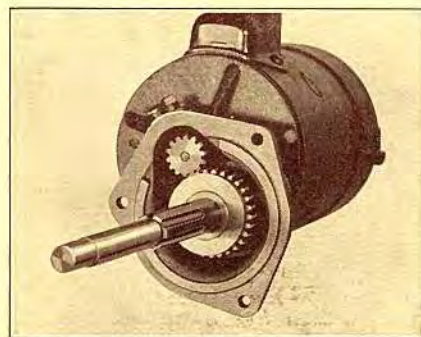
the two cylinder head nuts that hold the conduit in place.

An important improvement in the Cadillac engine from the standpoint of appearance is the use of a metal cover above each cylinder head, enclosing the spark plugs. A cover is also used over the intake header, similar to the 341-B cover.

The ignition coil is now mounted on the radiator tie-rods above the distributor. In this new location it is more accessible and subject to less heat. The distributor is mounted higher on the engine, so that the condenser in the distributor is less affected by heat.

Starting

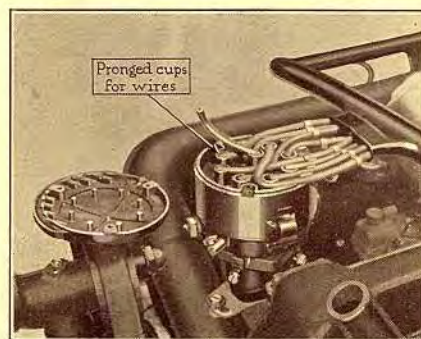
Several improvements have been made which will result in easier starting. First, there is a new starting motor which drives the flywheel through reduction gears which give a driving ratio of approximately 25 to 1, practically double what it has been. This permits the motor, which is a new four-pole unit, to revolve at a higher and more efficient speed, giving more torque with less current. The same batteries are



The double reduction starter develops more torque with less current

used, as the new starting motor gives the same effect as a battery of larger capacity.

Second, the spark control range has been increased from 38 degrees to



The high tension wires must be arranged in the distributor head exactly as shown above

53½ degrees, which allows even greater advance for starting in cold weather. The dial on the instrument board has been divided in the three sections marked—"Starting", "Driving", and "Retard". The starting position is full advance, as a cold engine will start much easier and run better while warming up if the spark is fully advanced. Of course, if the engine is to be cranked by hand the spark must be fully retarded.

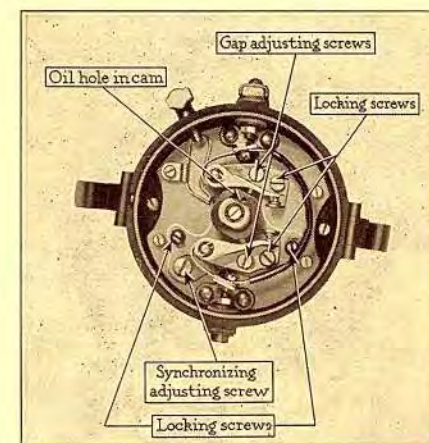
After the engine has become warm, the spark lever should be moved to a position in the "Driving" range. The proper position depends upon the fuel used and the amount of carbon in the engine. The proper setting is then at the point where the engine pings slightly on acceleration. This setting is the same as has been formerly used with high compression heads.

The timing marks on the flywheel are now located 2¼ inches ahead of dead center instead of ⅞ inch as formerly. When timing the spark, the hand control lever should be advanced as far as possible. With the new timing, the spark has practically the same amount of advance in the driving range as the previous timing had at full advance, while the "Starting" position is more advanced than before.

The third improvement to facilitate cold weather starting is a change in the carburetor air valve thermostat. This thermostat has been made thinner, (.050 instead of .080 inches) which gives a slightly richer mixture for cold weather starting and running during the warming-up period.

Heat Control Valve

A new heat control valve is used, one that is entirely automatic in operation. The valve is located at the front of the left-hand exhaust



Both the contact point gap and the angle between the contact arms can be adjusted with a screw driver

manifold, but it is pivoted horizontally rather than vertically, and it is so weighted and balanced that it opens from the pressure of the exhaust gases at a car speed of about 25 miles per hour.

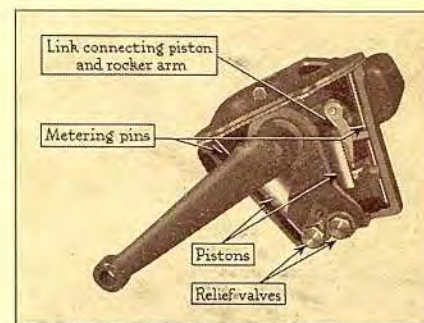
Fan Lubrication

One other important change is the lubrication of the fan. The fan runs on Durex bushings, lubricated with oil under pressure from the crankcase. The oil is led through a pipe from the oil pressure regulator and returns to the crankcase through the hollow fan bracket.

The fan belt tension is adjusted by loosening the clamping screw and raising or lowering the fan support until the proper tension is secured. This tension is the same as previously recommended, one inch slack as measured in from a straight edge.

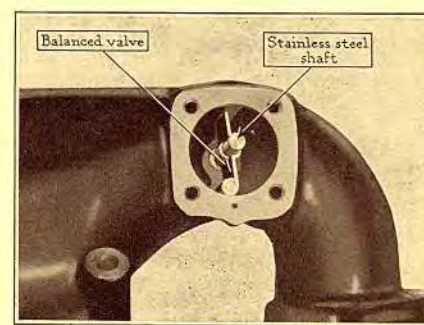
New Shock Absorbers Used On The New Cars

THE MOST important change in the spring suspension is the use of the new "Duodraulic" shock absorbers.



The new shock absorbers operate on the same principle as the others, but the construction differs in several ways

These shock absorbers are the same in principle as the previous two-way type, but they have the following important differences: (Cont'd on page 7)



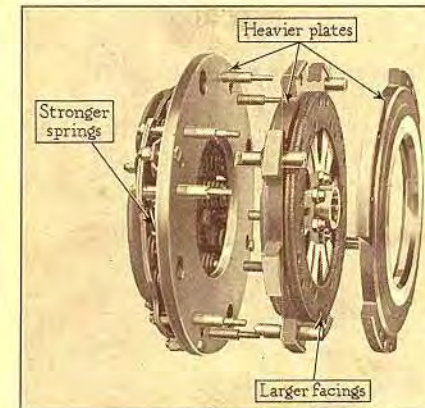
The heat control valve is so weighted and balanced that it opens and closes automatically under the pressure of the exhaust gases

Clutch And Transmission Similar To Previous Units But Stronger; Changes Assure Longer Life; Some Service Operations Are Different

BOTH THE CLUTCH and the transmission on the new cars are of the same type of design, but both units have been re-designed and made larger and heavier in order to accommodate the larger power plants and to secure longer life.

Clutch

The facing area of the clutch has been increased 12 square inches. This



The new clutch is of larger and heavier construction throughout

was accomplished by increasing the outside diameter of the driven discs from 9½ to 10 inches.

The driving plates are larger and heavier, and have a greater capacity

to absorb and radiate heat, so that they are held to lower operating temperatures. The center plate is mounted on the flywheel with the lugs clamping around the outside of the pilot on the flywheel. With this construction, expansion due to heating will not distort the plates.

The spring pressure plate assembly has also been changed. The same number of springs (12) is used, but they are heavier than the springs in the old clutch, and they are arranged in four groups of three each and are actuated by four heavy release fingers, instead of six.

Checking the clutch pedal adjustment every 1,000 miles is as important on the new clutch as on previous two-plate clutches. The specifications for free travel are, 1⅞ to 1¼ inches for the first 3,000 miles, and 1 to 1⅞ inches thereafter.

Transmission

The transmission employs the same Syncro-Mesh principle and the same type of design, but many of the details of construction are different. The case is stronger, the gears are larger, and the synchronizing mechanism is more rugged.

The gears are stronger, being larger in diameter, so that the load is distributed over a larger number of

teeth. They are also made of a new oil-quenched alloy steel, which has greater wear-resisting qualities than the old material.

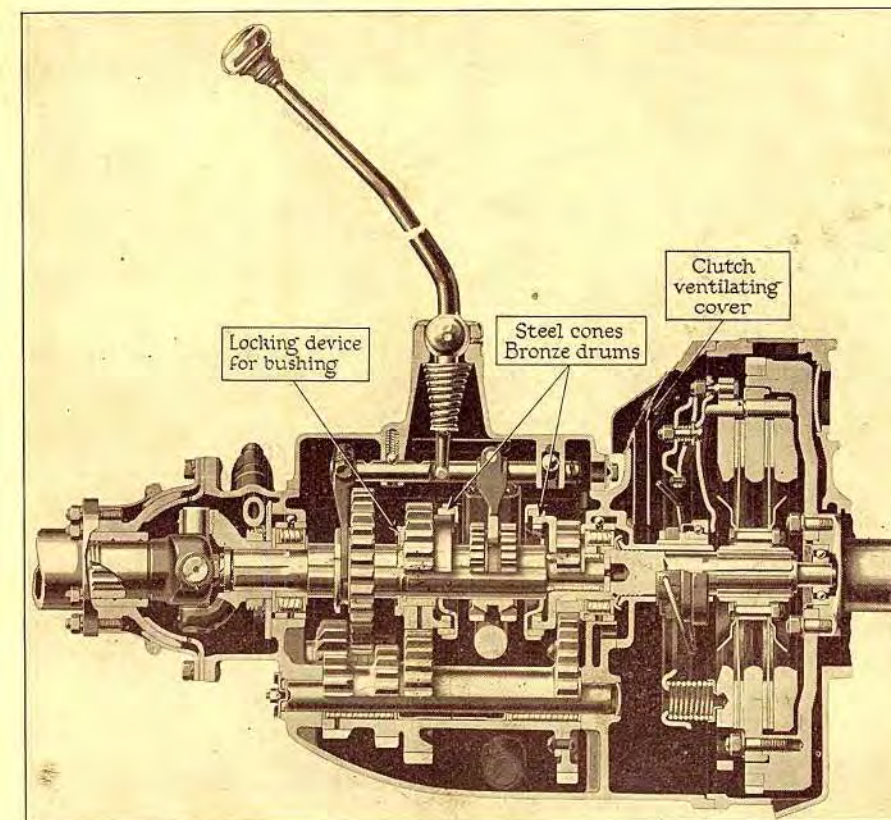
An important change in the synchronizing mechanism is the reversing of the relative positions of the bronze and steel members of the synchronizing clutches. The cones are no longer bronze, but steel, and the drums are lined with bronze rings tapered to the correct angle. Bronze expands from heat more than steel, and with the new construction this expansion tightens rather than loosens the fit between the bronze and the drum.

The intermediate gear bushing is held in place by a new retaining ring which prevents forward movement. The new ring has lugs in the internal diameter which fit the splines on the main shaft, and lugs in the outside diameter which fit splines machined on a pilot at the rear of the bronze bushing.

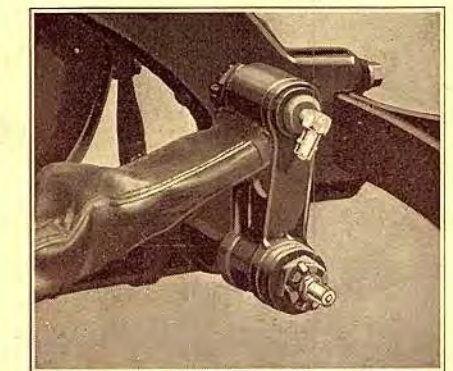
The retaining ring and the intermediate gear and bushing must be assembled on the main shaft with the lugs and splines in line and moved back to the groove in the main shaft. Then, using a screw-driver or similar tool, turn the retaining ring so that the lugs on the ring are staggered with relation to the splines in the bushing and in the main shaft, and snap the locking ring around the outside of the bushing into place.

All other service operations are the same as before and are described in the film, "Servicing the Syncro-Mesh". The yoke travel for the new transmission has been increased to from ⅝ inch to ⅞ inch.

A minor change is the location of the filler plug for A-200 lubricant. This is now on the left-hand side of the case, just below the pedal bracket. The drain plug is also on the left-hand side.



Several detail changes of interest to service men have been made in the new clutch and transmission



A straight type shackle is used at the rear of the LaSalle rear springs (Article on page 7)

New Lubrication Schedule On 12000-mile Basis; Applies To La Salle and Cadillac Cars After 314

LUBRICATION of the new cars differs from the previous cars in only a few minor details. The fan is lubricated by oil under pressure from the engine; the transmission case holds three quarts of lubricant, and changes have been made in the grease gun connections due to changes in the brakes and steering system.

One entirely new lubricating point has been added, an oil hole in the timer-distributor cam. A few drops of light engine oil should be applied to this oil hole every 3,000 miles.

Complete lubrication instructions for the new cars are given in the lubrication chart which is a part of

the tool kit. Extra copies of this chart for service station use can be secured from the factory Parts Division.

New Schedule

Although the new cars are lubricated in practically the same manner as the previous cars, this occasion is being taken to revise the lubrication schedule as to mileage intervals. The new schedule will apply to previous cars back to 303 and 341-A. A universal lubrication record card, which can be used for any of these cars, has been prepared and can now be secured from the Parts Division as Form 104

The schedule has been changed primarily to put re-packing of the wheel bearings at 6,000 miles instead of 4,000 miles as formerly, as this longer interval has been found to be quite adequate. The front brake trunnions and speedometer drive shaft, formerly on the 4000-mile interval, are also put on the 6000-mile basis. Adding lubricant to the transmission, rear axle and steering gear has been changed from 2000 to 3000-mile intervals.

All other items on the schedule remain the same as formerly.

This new arrangement of the schedule has necessitated a change in numbering of the lubrication operations. The new series of operations runs from 1 to 12, so that 12,000 miles or 12 monthly lubrication operations are included in a complete unit of the schedule. Actually, the operations 7 through 12 are merely a repetition of 1 through 6.

New Shock Absorbers

(Cont'd from page 5)

The pistons are linked to the rocker arm through a connection incorporating a spring take-up. This linkage keeps the rocker arm always in contact with the pistons, preventing lost motion and noise.

The metering pins are no longer inserted through a hole in the bottom of the shock absorber, they are at the sides of the pistons and they float on small springs between the cover plate and the bottom of the housing.

The relief valves are in the housing at the bottom of the cylinders rather than in the pistons. These valves prevent excessive pressure, especially in cold weather, by opening a by-pass from the cylinders to a relief chamber in the center of the housing. The relief valves can be changed, if necessary, without removing the cover.

Information regarding the identification marks on metering pins and relief valves is given in the Preliminary Service Information booklet. Parts for these shock absorbers are carried in stock by the factory Parts Division and listed in the Parts Lists.

Other changes in the spring suspension include the steering modulator, which is fully explained in the article on steering; the use of straight shackles at the front of the Cadillac rear springs and at the rear of the La Salle rear springs; and underslung rear springs for the La Salle.

LUBRICATION SCHEDULE		LUBRICATION NO. AND MILEAGE AT WHICH DUE											
CADCILLAC 353, 341A, 341B LASALLE 340, 328, 303		1	2	3	4	5	6	7	8	9	10	11	12
OWNER'S NAME	ADDRESS												
ENGINE NO.	DATE DELIVERED												
DO NOT WAIT FOR SCHEDULE LUBRICATIONS BEFORE ADDING ENGINE OIL. THE OIL LEVEL SHOULD BE CHECKED EVERY 100 TO 150 MILES AND OIL ADDED IF THE INDICATOR BALL IS BELOW "FULL." THIS IS ESPECIALLY IMPORTANT ON CARS DRIVEN AT HIGH SPEEDS.													
LUBRICANT													
ADD LIQUID TO RADIATOR													
ADD ENGINE OIL AS NECESSARY													
STARTER, GENERATOR AND DISTRIBUTOR OIL CUPS													
FAN (303, 328, 341 ONLY)													
BRAKE PINS AND CONNECTIONS													
DOOR HARDWARE													
SPRING LEAVES (WITHOUT SPRING COVERS)													
GREASE GUN CONNECTIONS													
WATER PUMP GREASE CUP													
*ADD WATER TO STORAGE BATTERY													
CHECK TIRE INFLATION													
DRAIN AND REPLACE ENGINE OIL													
CLUTCH RELEASE BEARING													
TRANSMISSION—ADD LUBRICANT													
REAR AXLE—ADD LUBRICANT													
STEERING GEAR—ADD LUBRICANT													
TIMER DISTRIBUTOR CAM (340, 353 ONLY)													
FRONT BRAKE TRUNNIONS (ALL CARS)													
BRAKE CAM BEARINGS (340, 353 ONLY)													
WHEEL BEARINGS													
SPEEDOMETER DRIVE SHAFT													
**REFILL SHOCK ABSORBERS													
**FLUSH COOLING SYSTEM													
**REPLACE OIL FILTER CARTRIDGE AND CLEAN OIL PAN AND SCREEN		EVERY 12,000 MILES											

*IN SUMMER, INSPECT BATTERY EVERY 100 MILES OR AT LEAST EVERY 2 WEEKS.
**RECOMMENDED BUT NOT INCLUDED IN LUBRICATIONS 8 AND 12.
THE FOLLOWING OPERATIONS CANNOT BE PLACED ON A MILEAGE BASIS AND ARE NOT INCLUDED IN THE ABOVE SCHEDULE.
THIN REAR AXLE AND TRANSMISSION LUBRICANT—AS REQUIRED FOR LOW TEMPERATURES.
DRAIN AND REPLACE REAR AXLE AND TRANSMISSION LUBRICANT—AT BEGINNING OF MILD WEATHER IN SPRING.
REMOVE SPRING COVERS ONCE A SEASON AND REPACK WITH PETROLEUM JELLY.
RECORD ON OTHER SIDE

The new lubrication record card which incorporates the 12000-mile schedule can be secured from the Parts Division as form 104

A SATISFIED OWNER NEVER COMPLAINS

It is time to think about

THE NEXT CONTEST

which will be on the subject:

"How to get the most out of Service Meetings"

EVERY SERVICE MAN attends service meetings, so every one can tell his ideas on how to have good meetings. You men who plan meetings, tell us how you plan most successfully; you men who only attend, tell us the sort of a meeting that means the most to you.

Good service meetings make a remarkable difference in any organization. Every service man should have or get some ideas on them. We want those ideas!

All letters for this contest should be received at the factory by October 5, so hurry. The winning letter will appear in the October 15 issue.

Watch for the answer to the "Tourist Goodwill" contest in the next issue!

Three-Quarter Floating Rear Axle Now Used On Cadillac; Construction Similar To LaSalle

THE REAR AXLE on the new Cadillac has been changed from the full floating to the three-quarter floating type. This type of axle has proved to be very satisfactory in actual use on the La Salle, and it has one important advantage over the full-floating type. The axle shafts are bolted directly to the wheels, a construction which does not wear as do the keyways in the wheel hubs of a full floating axle.

The wheel bearings are also changed because of this change in axle construction. Ball bearings are used for the Cadillac rear wheels and for the front wheels as well.

The rear wheel hub construction on both new cars is similar to the La Salle 328. The new axle shafts are interchangeable between Cadillac and La Salle, but they are not interchangeable with 328 shafts, as the tread of the rear wheels on both new cars has been increased to 59½ inches.

The principal changes in the La Salle rear axle are the underslung

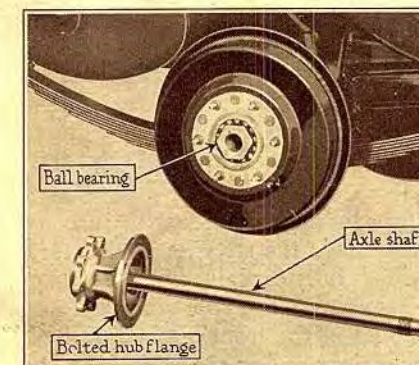
rear springs, the wider tread, and the changes due to the new brakes.

The center construction of both axles is practically unchanged. The propeller shaft, differential, ring gear and pinion, torque tube and strut rods are all of similar construction.

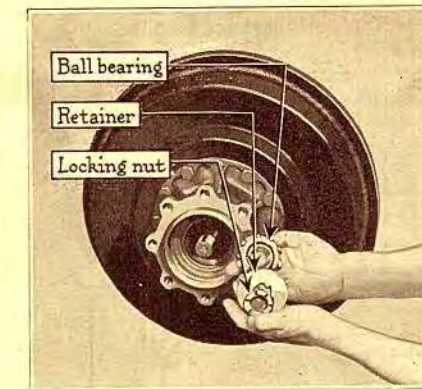
The ring gear and pinion are interchangeable between 340 and 328 and between 353 and 341-B. One change has been made in the differential, the use of two pinions instead of four.

Service operations on the new rear axles are the same as for the La Salle 328 axle. For service on the wheel bearings, two new tools have been developed. Wrench 109610-T is for removing and installing the rear wheel bearing adjusting nuts on both new cars. Wrench 109611-T is a hub cap wrench for service station use.

These are the only new special tools required to service the new cars. They can now be secured from the Parts Division at a net price of \$2.50 for each tool.



The axle shafts of both cars have flanges which bolt to the wheels



Cadillac front wheel bearings. Ball bearings are used in the wheels of both Cadillac and La Salle

Other Valuable Sources Of Service Information Ready

ALTHOUGH the main features of the new cars that are of interest to service men are given in this issue, there are other sources of information which every service man should study. Only in this way can a thorough knowledge of the new cars be obtained.

Preliminary Service Information

There is, first, the Preliminary Service Information booklet, which gives a thorough explanation of each unit of the new cars, and explains the differences and similarities between the new and the previous models. Service operations that differ from previous practice are described in detail in this book.

The information in this book is grouped under the same headings that are used in the Shop Manual. This Preliminary book should, in fact, be used as the Shop Manual for the new cars until the permanent manual is published.

Copies of this book have already been sent to each distributor. Dealers should secure copies from their distributors as soon as they have received some of the new cars. Additional copies will be mailed on request to the Service Department.

New Slidefilm

A slidefilm covering the new cars has also been prepared under the title "Service Information, Cadillac 353, La Salle 340". While the information given in the slidefilm is practically the same as given in the other material, it has the advantage of being completely illustrated. A number of valuable illustrations are used exclusively in the film, and they will give service men an understanding of the construction features that can be duplicated only by months of work in the shop.

One print of this film has recently been sent to each distributor and dealer who is on record as having a projector. Every service man should plan on seeing it the first time it is shown to his organization.

Parts Stock List

Nor has the parts man been forgotten. Minimum stock lists, covering the parts for the new cars that are not interchangeable with previous parts have already been prepared and sent to each distributor.

These parts are now in stock at the factory, and stock orders for parts for the new cars should be sent in at once. Every parts manager can and should have enough parts on hand to properly service the new cars from the very start.

A SATISFIED OWNER NEVER COMPLAINS

The CADILLAC LA SALLE SERVICE · MAN

Volume III

September 15, 1929

Number 18

Service Man From Portland, Maine, Wins "Tourist" Contest

THE WINNER of this month's prize contest on "How to promote good will in catering to transients and tourists" is H. S. McHenry, Service Salesman for the Cadillac Motor Car Co. of Maine, at Portland.

We can just imagine that pen and pencil set dazzling the eyes of all the Cadillac and La Salle owners in Portland when they come in for service.

Mr. McHenry's winning letter is printed in full on this page. A number of quotations from other good letters appear on page two of

this issue. The main theme of most of the letters was that the tourists should always be given preferred attention. Several letters stressed the fact that every authorized service station should be interested in having all Cadillac and La Salle cars at their best at all times.

Although we know that most Cadillac-La Salle service stations are quite capable in this matter of attending to tourist owners, very few service men seem to know how they do it. At least, there were com-

paratively few replies to this contest, less than we ordinarily receive.

There should be a much larger contribution to the next contest. We want letters from everyone. The subject

"How to make the most of Service Meetings"

is one on which every service man should have his own definite ideas. Send these ideas in. Your chances of winning the prize are excellent, providing you get your letter in by October 5.

This Is The Way To Treat Tourists

EVERY experienced Cadillac Service Man will agree that in the tourist's mind, speed in turning out good work is an all-important factor. When the transient enters an authorized Service Station, he believes that the work will be of a quality befitting Cadillac, and as a rule he thinks little of the cost in dollars and cents, but his main thought will be: "There's something wrong with my car, when can you get it fixed?" Everyone should quicken his step a bit when dealing with tourists, for a vacation trip may be ruined by long delays reflecting most unfavorably on Cadillac cars and Cadillac service.

Here is a list of what I consider very important things in trying to promote tourist good will:

1. Meet all customers promptly on the service floor, if possible don't let them wait a minute unattended after entering.
2. If a cash customer is waiting for a few minutes' job, cut the "red tape" where possible and get the mechanic started on the job at once. Nothing is more annoying than time lost at this point. Check up on gas, oil and water before job is completed and give tourist work a preferred place wherever possible.
3. Have system arranged for rapid billing and collecting for work. This routine has proven its worth in our Service Station. Service salesman watches job closely, inspects and takes job order, cards and requisitions to cashier after car is tested. Customer pays bill at once and receives door pass and receipt or itemized bill if desired. Salesman leaves customer with cashier and returns to service floor to have his car cleaned and headed out, staying to collect door pass.
4. Offer road information and maps. Give clear directions on how to find best way out of city or onto his route.

5. Check up on your telephone system and rearrange, if necessary, so that incoming calls won't be asked to wait while several people are spoken to before getting the right ones. Be sure your phone is listed under both Cadillac and La Salle.

6. Keep all rest rooms spick and span, also well lighted and equipped.

7. Be prepared to give advice about hotels, restaurants, stores, etc., also directions for reaching them. Many times it can be arranged to take customers there while testing their car and to deliver it when done. This is especially appreciated by those who plan to stay at a hotel and have more or less luggage.

8. Train and boat time-tables, etc., should be kept at hand and up-to-date. Remember that any kindness you can show a stranger reflects most favorably on Cadillac Service and builds good will.

9. After lubrication jobs tell owner what one you have just done, what is due next and point out that you have changed the speedometer tag reading properly. Offer to fill in his lubrication chart for his own record or start one for him.

10. Make sure all testers are supplied with badges for the name. The stranger likes to know who he left his car with and badges make it easy.

11. Have service truck clean and ready for business with men ready for efficient handling of road service. Have man available for emergency work nights and Sundays. Stations too small for a regular emergency man should have someone who can be easily called when necessary.

—H. S. McHenry,
Portland, Maine

A SATISFIED OWNER NEVER COMPLAINS

Number 18
Page 2

The CADILLAC LA SALLE SERVICE · MAN

SEPTEMBER 15, 1929
DETROIT, MICH.

NUMBER 18
VOLUME III

Published on the first and fifteenth of each month in the interest of Cadillac Service

These Tourists—

"When you have sent a transient owner from your place of business, who is well pleased with the appearance and operation of his car, and who later finds that any repairs made there were consistently permanent, you have created in him a feeling of 'good will.'"

—F. C. Pettebone
Phoenix, Arizona.

"Maps of your state and city are usually in demand, but don't just hand out the map to the owner. Mark the route on it and give him clear instructions as to the best way to leave the city."

—C. B. Andrews
Detroit, Michigan.

"Establish confidence by making it known that you are an authorized service station and your prices are according to the Cadillac Contract Maintenance Book."

—Z. Bryant
Little Rock, Ark.

"If it is impossible to get the tourist's job out without some delay, I make it a point to suggest the best hotel to stop at while in town, also the points of interest they might visit, or anything that will occupy the time while their car is laid up."

—John H. Gruber,
Bridgeport, Conn.

For Sale

THE FACTORY Parts Division has a limited quantity of tire pumps, part number 42905, for use on 303, 328, 341-A and 341-B cars, to be sold at a special list price of \$10.00 each. This price includes all parts necessary to install on transmission.

FOR SALE—La Salle 328 five-passenger sedan body. Body number is 3500, job number 8550. Communicate direct with Mr. Nicholls, Cadillac Motor Car Co., Chicago Branch.

WANTED—Seven-passenger sedan body to fit 314 chassis. Send price and full particulars to Greenleaf Motor Car Co., Kansas City.

The Cadillac-La Salle Service Man

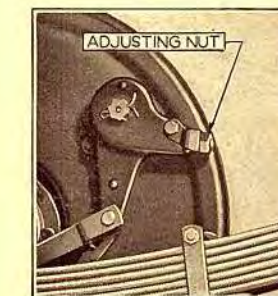
Full Credit Will Not Be Allowed For Damaged Fans

A NUMBER of 341-B and 328 fan assemblies have been recently returned to the factory for credit. The majority of these assemblies have been passed for full credit and re-shipped to the manufacturer for replacement.

In some cases, however, this replacement has not been allowed, due to indications that heavy grease has been used or to the fans having been damaged in removal.

The instructions on fan lubrication have been clear enough so that there is no excuse for the use of grease in these fans. Nor is there any reason for battering fans in disassembling them. The use of puller 111309-T will prevent any damage to the fan assembly.

Hereafter, a charge will be made to cover repairs to fan assemblies in which heavy grease has been used, or in cases where assemblies have been damaged by improper removal.



Turn each adjusting nut down until the wheel cannot be moved by hand, back off adjusting nuts on right brakes 12 flats and on left brakes, 15 flats

Left Brakes Must Have More Clearance Than Right Brakes

IN ADJUSTING the brakes on the new Cadillac 353 and La Salle 340 cars, it has been found advisable to make a slight departure from previous practice.

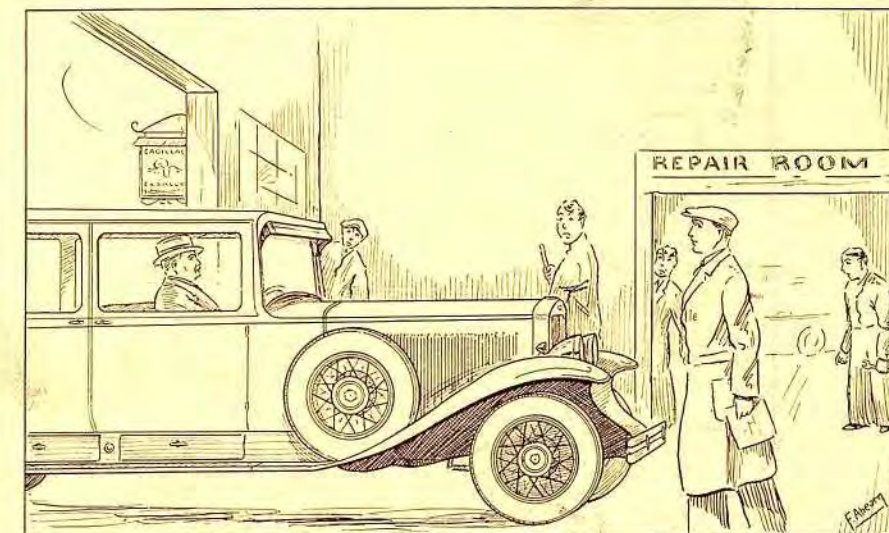
The layout of the brake connections is such that there is a tendency for more pressure to be applied to the brakes on the left-hand side of the car. The use of the steering shock absorber at the left front spring further increases this tendency.

To compensate for this condition and to assure well-balanced brakes, it is recommended that both the left front and the left rear brake be backed off 3 flats or one-half turn of the adjusting nut, after the brakes have been equalized.

In practice, the correct method of adjusting the lining clearance is as follows: Turn down the adjusting nut on each brake just until the wheel cannot be turned by hand; then back off the nut 12 flats (2 complete turns) if it is a right-hand brake, and 15 flats (2 1/2 turns) if it is a left-hand brake.

This is the standard adjustment on cars now going through production, and it should be used on all 353 and 340 cars. The adjustment of 341-B and 328 brakes remains the same as previously recommended.

And Everybody Rubbered—



Service men, you should know all about the new cars before they are brought into your station for service work. If you do not, study up the Preliminary Service Information, the new slidefilm, and the Announcement issue of the Service Man. Don't give your customers the impression that this man is getting—that nobody has even seen one of the new cars before

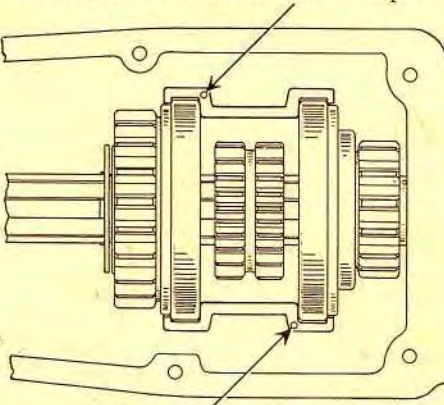
A SATISFIED OWNER NEVER COMPLAINS

Good Service On Syncro-Mesh Transmissions Depends Upon Instructions and Procedure

ONE OF THE most important jobs facing the Cadillac-La Salle service organization is the servicing of Syncro-Mesh transmissions. As it is a new and advanced engineering development, Syncro-Mesh transmission is constantly under the critical eye of owners, prospects and competition.

Because most owners do not understand the operation of this transmission, they will easily become suspicious of the slightest tendency toward imperfect operation. On this account transmissions must be kept in the best possible operating condition.

Service men should be prepared to service the new transmissions. They have the benefit of a year's service experience. They also have the accumulated information which is pre-



Guide blocks should always be installed in 353 and 340 transmissions with the "O" marks in the positions shown in this diagram

sented in the recent slidefilm, "Servicing the Syncro-Mesh." Finally, they have the information on the details of construction of the new transmissions, appearing in the "Preliminary Service Information" booklet and the September 1 SERVICE MAN.

The following additional information on the new transmission is also important. Few minor changes have been made in the synchronizing mechanism which were not described previously. Some of the first Cadillac 353 and La Salle 340 cars built did not have these changes incorporated in the transmission. Transmissions that have the changes can be identified by a figure "6" stamped on the face of the bell housing flange.

One change is in the angle of the synchronizing drums and cones. This angle has been increased from 5° to 6°. Only the 6° cones and drums will be kept in stock by the factory Parts Division.

Another change is in the guide blocks for the drums. These blocks are now milled out .005 inch more at

one end than at the other. The milled end can be identified by a letter "O" stamped on the upper surface as shown in the drawing. Guide blocks are so arranged that a thick and a thin end clamp each drum, with the result that the blocks disengage the drums from the cones at a slight angle, which makes them release more easily.

When installing guide blocks in a transmission it is important to have them with the relieved portion which is done to allow full travel of the yoke, face upward, which will bring the markings in the correct positions. The "O" mark on the right-hand block should be at the front, while the mark on the left-hand block should be at the rear. If one of the blocks should be installed upside-down, both milled ends would operate on the same drum, and the angle effect would be lost.

When re-assembling transmissions after any service work has been performed, plungers should always be filled with A-200 lubricant just before top cover is put on. This will insure sufficient lubricant in dashpots for proper synchronization from the start.

Another effective service "wrinkle" is for use when synchronizing drums on the first 353 and 340 transmissions do not disengage readily, a condition might cause difficulty in getting into gear. This condition can often be corrected by "burnishing in" the drums and cones.

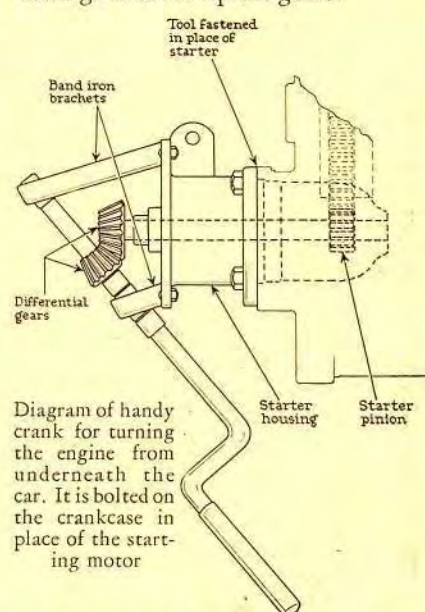
This operation is performed by driving the car at a 30-mile-an-hour speed, shifting to neutral, then moving lever forward just enough to engage drum and cone. Only a slight amount of pressure should be applied to the lever, and only for a few seconds at a time. If slight amount of burnishing does not remedy the condition, the transmission should be replaced.

Burnishing can be employed to correct sticking drums on either high or intermediate gear. It will not, however, remedy gear clashing. It will, in fact make this condition worse. In any cases where ordinary service measures do not correct any unsatisfactory operation of a 340 or 353 transmissions, the complete transmission should be replaced.

The Parts Division is in position to ship complete transmissions into the field to permit prompt replacements. These replacement transmissions will have Cadillac unit assembly numbers, but they are to be used for replacements on La Salle cars as well as Cadillac.

SHOP SHORTCUTS

THE winner of the shortcut prize this time is E. M. Douglas, shop foreman for the Manford Cadillac Company, New Orleans, La. Mr. Douglas submitted a new arrangement of a crank for turning the crankshaft from under the car when installing rods and pistons. This crank, as shown in the illustration, is bolted to the engine in place of the starting motor and turns the flywheel through a set of spiral gears.



Although the tool has a rather complicated appearance, it is really quite easy to make, and it can be assembled from parts which can ordinarily be salvaged from the shop scrap pile.

The following parts must be secured:

- 1 starter housing 37590-D.
- 1 starter pinion 18115-D.
- 2 differential spider gears.
- 2 pieces of 3/4 inch round cold-rolled steel, one about 21 inches long, the other 9 inches long.
- 1 center bearing plate for armature shaft.
- 25 inches of 3/4 x 3/16 band iron for angle brackets, handle to starter housing.
- Miscellaneous bushings, etc.

With this arrangement, any transmission that apparently cannot be made to operate properly can be promptly replaced and returned to the factory. Credit will be allowed both for transmission and for labor. By following this procedure, customers can be quickly taken care of, and the Engineering Department will secure prompt and first-hand information regarding the behavior of transmissions in actual customer use.

New Films Of Considerable Importance Have Been Recently Released; All Distributors and Dealers Should Have Slidefilm Projectors

INCREASING emphasis is being placed upon slidefilms as a means of presenting information for Cadillac-La Salle service men. Slidefilms, being largely made up of pictures, present even the most complex mechanical subjects in a clear and understandable way. They are also especially adaptable to service meetings and to group instruction.

The importance of slidefilms in the Cadillac educational program can best be realized by reviewing the slidefilms which have recently been sent out. Three extremely valuable films have been prepared by the factory Service Department within the last few months. These films are "Good Steering," "Servicing the Syncro-Mesh" and "Service Information, Cadillac 353 and La Salle 340."

Each of these films contains information of vital importance to every service man. No Cadillac-La Salle service station can afford to be without the information they contain. Furthermore, the instructions given in these films are not duplicated in any other service literature.

Obviously, those service stations that do not have a slidefilm projector and that do not receive prints of each new slidefilm for their exclusive use are operating under a tremendous disadvantage as far as service instructions are concerned.

Those dealers who do not now have a projector should carefully reconsider the advisability of securing a machine and a set of films.



The pocket size projector can be used for meetings of not over 15 men. Every traveling representative and every small dealer should have one.

Projector.....	\$31.50 net
Carrying case.....	3.75
Spare bulb.....	2.00
	\$37.25

* * *

The standard size projector can be used for large or small meetings. Every dealer employing more than 12 men in his Service Department should have one of these machines.

Projector.....	\$46.75 net
Carrying case.....	6.38
Spare bulb.....	2.10
	\$55.23



SERVICE SLIDEFILM LIBRARY

Issued	Satisfy the Customer.....	May 15, 1928
Cadillac Service and the Factory Organization.....	Mechanical Details—Cadillac 341-B and La Salle 328 Aug. 15, 1928	
Cadillac Improvements and the Service Man, Part I.....	Successful Parts Service.....	Dec. 1, 1928
Cadillac Improvements and the Service Man, Part II.....	*Service Management.....	Feb. 1, 1929
La Salle Facts for the Service Man, Part I.....	*Accounting.....	Feb. 1, 1929
La Salle Facts for the Service Man, Part II.....	*Parts Management.....	Feb. 1, 1929
Service Operations on Fisher Bodies.....	Good Steering.....	June 1, 1929
Service Information on the 341 Cadillac.....	Servicing the Syncro-Mesh.....	July 15, 1929
How to Service Brakes on 341 Cadillac and La Salle Cars Mar. 1, 1928	Servicing Information—Cadillac 353, La Salle 340.....	Sept. 10, 1929

*Films used in the 1929 clinics. These are not picture films and are for special clinic work only

The CADILLAC LA SALLE SERVICE · MAN

Volume III

October 1, 1929

Number 19

Feature Cold Weather Preparation to All of Your Owners

THE TIME is now close at hand when winter weather will be having its effect upon the operation of many motor cars. There is, however, no real reason for a Cadillac or a La Salle owner dreading cold weather, providing he properly prepares and gives his car needed attention during this season.

Cadillac-La Salle service stations have at this time a double opportunity for securing both customer good will and additional work for the shop by reminding all of their owners of the need for special cold weather preparations.

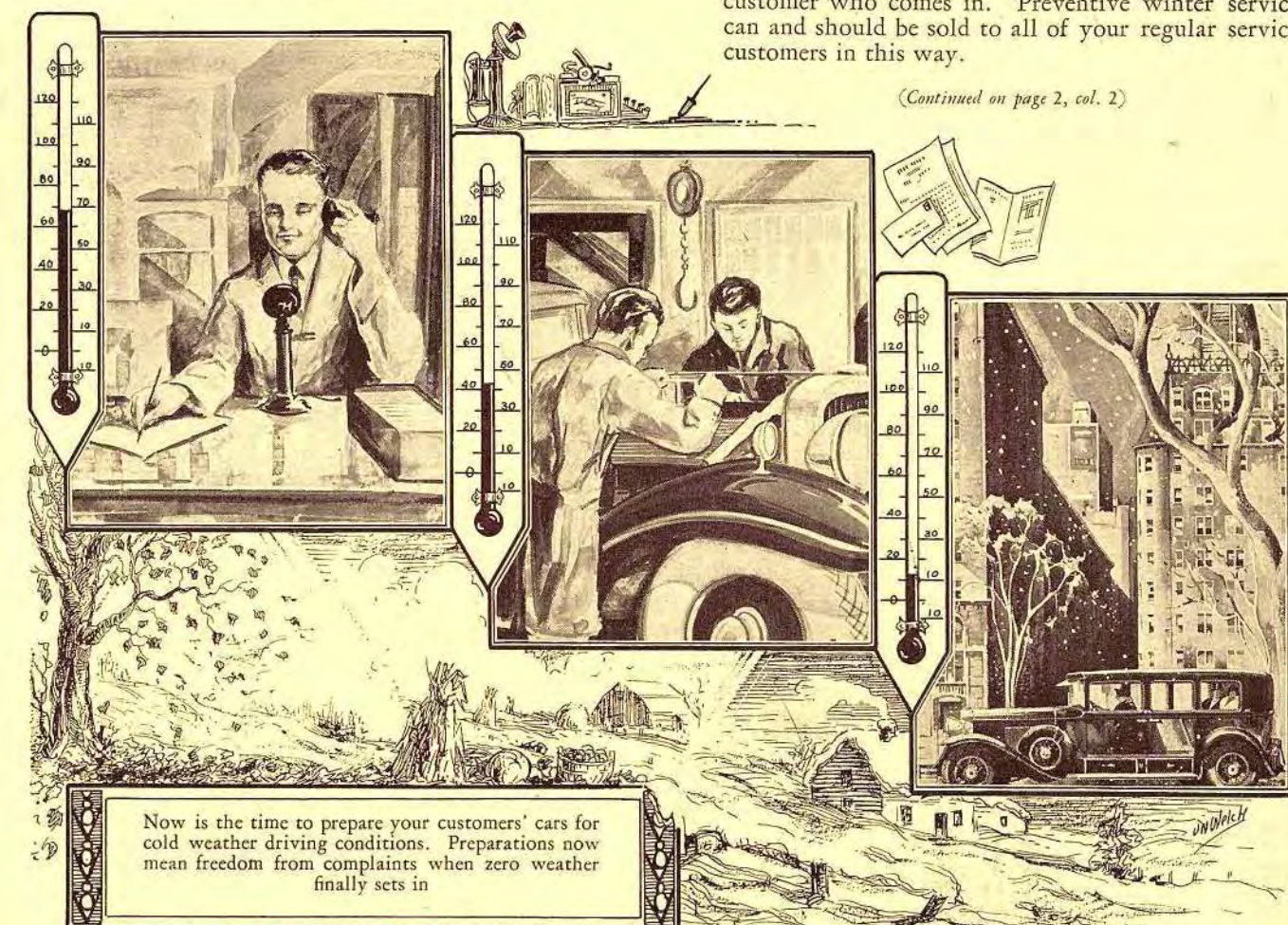
A thorough educational program at this time of year will bring excellent results during cold weather in freedom from complaints on hard starting, weak batteries, frozen radiator and similar woes.

One of the mainstays of this program will be your ever-useful follow-up system. Letters or folders on preparing for cold weather operation should be sent to every name on the books. This forms an especially good opportunity for renewing contact with those owners who do not come in regularly for service. Many of them will come in when this important matter of winter preparations is explained to them.

Several good specimen letters on this subject have appeared in the SERVICE MAN from time to time. The one appearing on page 4 of the October 1, 1928, issue is reprinted in a special insert which accompanies this issue. Make up your letters using this as a guide.

This campaign should also be "pushed" on the service floor. Testers should mention such subjects as anti-freeze and winter grade lubricants to every customer who comes in. Preventive winter service can and should be sold to all of your regular service customers in this way.

(Continued on page 2, col. 2)



A SATISFIED OWNER NEVER COMPLAINS

Number 19
Page 2

The Cadillac-La Salle Service Man

The CADILLAC LA SALLE SERVICE · MAN

OCTOBER 1, 1929
DETROIT, MICH.

NUMBER 19
VOLUME III

Published on the first and fifteenth of each month in the interest of Cadillac Service

Anti-Freeze Solutions

THE BEST known available commercial materials for preparing anti-freezing solutions for automobile radiators are denatured alcohol, distilled glycerine, and ethylene glycol.

Denatured alcohol solutions are, at present, the most generally used. Denatured alcohol is widely distributed, affords protection against freezing, and is not injurious to the cooling system.

There are two principal objections to denatured alcohol. It is lost by evaporation, especially on heavy runs, and unless the solution is tested periodically and sufficient alcohol added to replace this loss, the motor or radiator, or both, are likely to be damaged by freezing. Car finish is damaged by contact with the alcohol solution or vapor. Alcohol accidentally spilled on the finish should be flushed off immediately with a large quantity of water.

Distilled glycerine and ethylene glycol solutions are, in first cost, more expensive than alcohol, but as they are not lost by evaporation, only water need be added to replace evaporation losses. However, when solution is lost mechanically, by leakage, foaming, etc., the addition of fresh anti-freeze solution is necessary. These solutions under ordinary conditions are not injurious to the car finish.

The principal objections to glycerine and ethylene glycol solutions are their tendency to loosen the iron rust and scale which forms in the water passages of the engine, thus rendering difficult the maintaining of tight and leakproof connections. It is absolutely necessary to thoroughly clean and flush the entire cooling system before glycerine or ethylene glycol is used. It is also necessary to tighten or replace the cylinder head gaskets and pump packing. The cylinder head gaskets must be kept tight to prevent the solution from leaking into the crankcase where it might cause gumming and sticking of the moving parts. The pump packing must be kept tight to prevent air from being drawn into the cooling system, in order to avoid foaming and other difficulties which may result when air is present.

The Subject of OUR NEXT CONTEST

"How to use the Follow-up System to best advantage"

THE Follow-up System has become one of the most-important and the most-talked of phases of operating a service station.

Service Managers and testers should be especially interested in this subject, and should be able to tell us many things about it.

Tell us about your experience with the follow-up—how you are using it—what it is accomplishing—and what you expect of it.

Put your ideas down and send them in at once. Replies must be in by November 5, so that the winning letter can be published in the November 15 issue.

Results of the "Service Meeting" contest will be published in the next issue

Preparing for Cold Weather

(Continued from page 1)

It is a good plan to make a list of the things which should be given attention, and to check over these items, mentally at least, when going over every car. The important features of cold weather preparations are:

Flush cooling system, drain and refill with suitable anti-freeze. Change to lubricants of winter grade.

Check generator charging rate and see that battery is fully charged. Adjust spark plugs and timer contact points.

Clean gasoline filter and strainers. Check carburetor adjustment.

Anti-freeze solutions are the same as last year, and are reviewed on this page.

In regard to winter grade lubricants, a new list of approved lubricants, with corrections and additions up to October 1, will be sent out by October 15. This list will include approved engine oils, gear lubricants and chassis greases.

Attention is called to the fact that the new list now indicates the "minimum temperature" at which a gear lubricant can be used without thinning.

Service Managers should select and purchase lubricants which have a sufficiently low "minimum temperature" to permit satisfactory use in their territory. If such lubricants are not available, other lubricants should be selected from the approved list and thinned with kerosene according to the instructions given in the list.

New Parts Lists Combine "T" Book with New Car Parts

THE Parts Lists for Series 340 and 353 cars have been prepared and sent out to all distributors.

The parts listings for the two new cars have been combined with those in the "T" series book forming a new book which is assigned the serial letter "X". The "X" series book applies to all Cadillac and La Salle cars later than series 314.

Several changes have been made in the new book. The page size has been increased slightly, so as to permit the listing of the additional car series on which many of the parts are used. Another change is the omission of the code words, as ordering of parts should be exclusively by part number.

The larger pages of the new book cannot be adopted to the binders formerly used, so that larger binders must also be supplied.

Enough books have been sent to each distributor so that one book can be furnished to each dealer. Dealers who have not already secured their copies should get them from their distributors. The books themselves are furnished no charge, but it is necessary to make a charge of \$2.50 net for the new binder.

Additional copies of this new Parts List may be ordered from the Parts Division. The price is \$5.00 net with binder or \$2.50 net, without binder. A limited number of books are also available with paper covers.

A SATISFIED OWNER NEVER COMPLAINS

This letter will build good will as well as increase service business

CADILLAC DISTRIBUTOR OR DEALER

CADILLAC and LA SALLE
MOTOR CARS

Dear Sir:

Satisfactory operation of your Cadillac car during the approaching winter depends a great deal on its being properly prepared for cold weather. The necessary preparations which our experience leads us to recommend include the following:

- Flushing cooling system and refilling with anti-freeze.
- Changing to suitable grade of engine oil.
- Thinning lubricant in transmission, rear axle and steering gear.
- Testing storage battery and checking generator charging rate.
- Draining and cleaning gasoline filter and sediment chambers.
- Cleaning and adjusting spark plugs and timer contact points.
- Checking carburetor adjustment.
- Inspecting tires and tire chains.
- Inspecting heater connections or connecting heater.

Our flat rate charge for the work listed above, except the last item is \$8.60, which does not include anti-freeze. The charge for connecting the heater depends upon the type used.

Many of our customers depend upon us to look after this entire matter of cold weather service for them. We shall be pleased to do this work for you.

Very truly yours,

CADILLAC DISTRIBUTOR OR DEALER

Mr.

THIS letter as it appears is suitable for owners who have had their cars from 3 months to one year. For other owners it should be changed as indicated below.

IF THE owner's car is still within the warranty period, substitute this paragraph for the one indicated:

"We shall be glad to take care of these matters for you without charge, except for the anti-freeze, lubrication and any heater work. We recommend installing the Cadillac-Kelch heater or the Cadillac-LaSalle hot water heater."

IF THE owner has been driving his car for over a year, the following paragraph substituted for the last paragraph will help to get some work for the shop:

"We would also suggest that any mechanical reconditioning your car may require be done before cold weather sets in. Work performed now will mean more dependable operation at the times you will appreciate it most. We shall be glad to inspect your car without charge to you and to quote you on any work that may be necessary for the best operation of your car."

The Best "Wrinkle" In Service



The best wrinkle in service is the service man's smile. The service job is a serious job and it requires plenty of serious thought and treatment, but don't wear your troubles on your face. Smile to a grouchy customer, smile at a tough job, smile on an "off day," but anyhow, smile!



Ignition Coil and Condenser Have New Location

INSTANCES of cutting out at high speeds have two possible causes: carburetion or ignition.

The carburetor should be checked first, as this is the most likely cause. A sticking float hinge is frequently the cause of the difficulty. This can be tested and corrected according to the instructions given on page 4 of the July 1 SERVICE MAN.

A clogged gasoline line may also be the trouble-maker.

If the fault is not with the carburetor, it is undoubtedly with the ignition condenser or with the coil.

Possibility of failure of these units on Cadillac 353 and La Salle 340 cars has been reduced considerably by

a horizontal mounting of the coil on the tie rods and by recent changes which have located the condenser where it will be less affected by heat than before.

Condenser Mounting

The condenser is now mounted on the outside of the distributor housing, where it is subject to less heat. In cases of condenser trouble on previous cars, a new condenser, part number 1836639, should be installed and mounted on the outside of the distributor.

This mounting can be made on 353 and 340 distributors as shown in the illustration. This same condenser (1836639) can also be mounted on 341B and 328 distributors, fastening it in place with one of the screws which is used on these distributors merely to plug the two extra holes in the housing.

Another change which benefits the condenser was made in the distributor support, which is now 2 inches higher than formerly.

Contact Point Setting

A necessary change has been made in the high limit of the contact point setting. The setting has been changed to limits of .018—.022. Hereafter all 353 and 340 timers should be adjusted within these limits.



In its new location, the ignition condenser is less affected by the heat than formerly

SHOP SHORTCUTS

IN RIVETING brake lining to the shoes of the present type brakes, the last two rivets are difficult to rivet; in fact, most brake riveting machines cannot be used at all for the last two rivets on the end of each shoe where the anchor bracket is fastened.

A tool for taking care of these two rivets has been designed and submitted to the Shortcut Editor by Chris Staggard, of the Detroit Branch.

The tool requires a firm base, such as the heavy plate shown in the illustration. A lighter plate may be used if it is bolted firmly to the bench. A small square base can also be used by clamping it firmly in a vise.

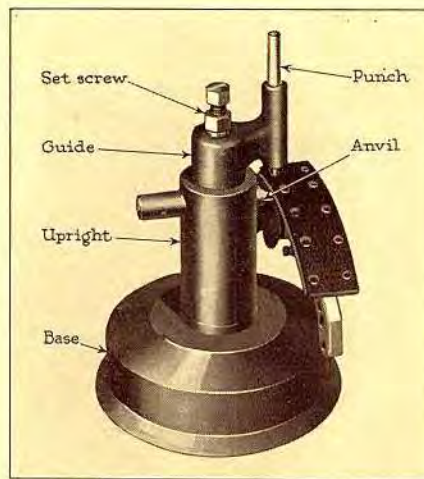
The upright post of the tool is a piece of 2½-inch cold rolled steel tubing, long enough to allow the brake shoes to easily clear the bench.

Inserted in this upright is a piece that can be called the guide. The guide is made of a piece of steel just large enough to slide in the upright tube, and welded at the top to another small piece of tubing which acts as a guide for the rivet punch.

After the guide has been assembled to the base, drill a one-half-inch hole for the rivet set or anvil. This hole should be at a distance below the guide about the same as shown in the picture.

The anvil should be made of tool steel if this can be procured, with the end shaped the same as the end of the anvil on your standard brake riveting machine. The punch should be shaped with a flat head the same diameter as the rivet head.

The guide should be drilled down from the top and tapped for a set screw which will hold the anvil in place.



A handy brake lining riveting machine for those rivets that cannot be easily reached with a standard riveting machine

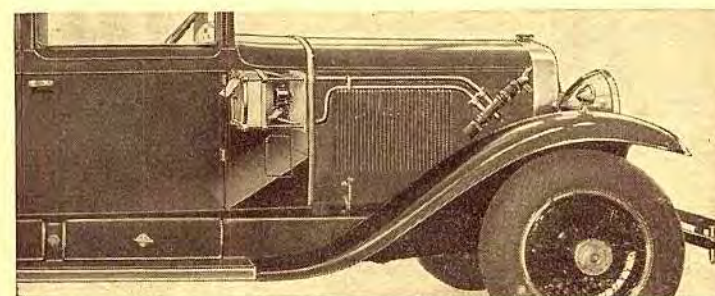
Hot Water and Hot Air Car Heaters Are Available; Heater Sales Should Be Numerous

TWO types of heaters are being supplied this year by the factory Accessories Division—a hot air heater and a hot water heater. You are thus enabled to sell your customers the type of heater they prefer, and still have the assurance that you are selling them a heater that will be entirely satisfactory in operation.

The Cadillac-Kelch heater, for years an approved accessory, has been re-designed and improved. This heater is now of the re-circulating type, in which air is taken from the body of the car and forced by an

blower is controlled by a two-way switch on the instrument panel and can be operated fast or slow as required. When the switch is turned off, no heat will be delivered to the car.

Old style Kelch heaters now in use can be converted to the re-circulating type by the installation of a new blower unit. These units are available under part number 47257 at a list price of \$10.00. To install a blower unit on one of these heaters, remove the old air funnel and lead the pipe to the blower. Also, remove the old hand control and wire, and tie the



The neat and efficient installation of the Cadillac-La Salle hot water heater. This heater has a list price of \$42.50 installed

electric blower through the heating unit and up through the registers into the car.

This new heater has several advantages over the old Kelch heater which took air from behind the fan. The new heater is entirely independent of the fan on the engine or of the opening of the radiator shutters, and it will keep the car properly heated whether the car is going fast or slow. Having the air intake inside the body is another advantage, as there is no possibility of road dust or exhaust fumes from other cars being forced through the heater.

The amount of heat delivered in the car can be regulated at will. The

valve in the wide open position.

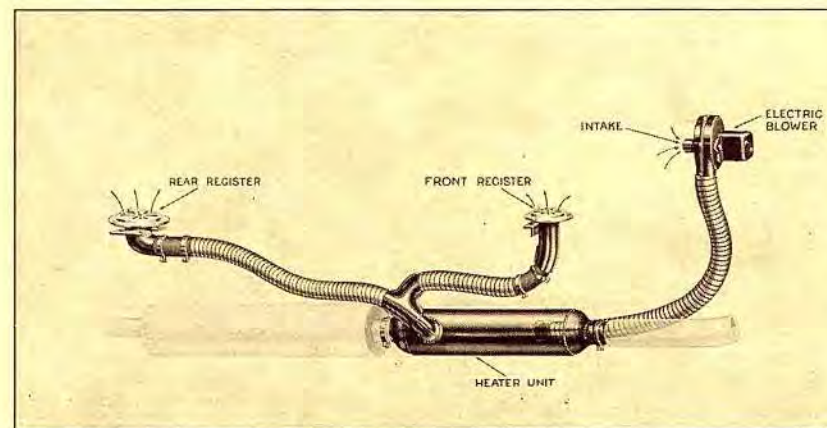
The part numbers of the Kelch heaters are as follows:

- 47025—Series 314
- 47026—303 (before engine unit 2-12000)
- 47027—341A-303 (after engine unit 2-12000)
- 47028—328-341B-340
- 47220—353
- 47043—Front register for all models

Hot Water Heater

The new Cadillac-La Salle hot water heater (47044) has a number of exclusive features which indicate its superiority among heaters of this type.

The heater is connected to and



The new Kelch re-circulating heater is operated by an electric blower. This heater has an installed list price of \$42.50 with only the rear register. The front register increases the price by \$12.50

New Method of Adjusting Ball Bearings In Wheels

NEW recommendations for the adjustment of ball bearings in wheels have just been released by the bearing manufacturers.

The new procedure is to pull the adjusting nut up tightly by hand and then to back it off not less than one full space between cotter pin slots and not more than two full spaces. In other words, the nut should be drawn up tightly by hand and then backed off to the second cotter pin hole and pinned in place.

This new method of adjustment should be used for the front wheel bearings of the Cadillac 353 and of all previous La Salle cars as well as the La Salle 340.

A. J. Laninga

MR. A. J. LANINGA, Service Manager for the Becker Auto Company, of Grand Rapids, Michigan, died Saturday, September 14.

Mr. Laninga was one of the keymen of his organization, having been employed there for 17 years, and his loss will be keenly felt. His successor has not yet been named.

Wanted and For Sale

WANTED—Standard 5-passenger Sedan body for series 314, 132-inch chassis. Send full particulars to Ike Hanley, Inc., Huntington, W. Va.

FOR SALE—V-63 7-passenger Imperial Limousine body in beautiful condition. Price \$150.00 f. o. b. Inquire the Towell Cadillac Company, Columbus, Ohio.

forms a part of the water circulating system of the engine. This connection is made at the cylinder head outlet hose. All heater connections are made of special steel tubes shaped to fit and make a neat installation. Our heaters thus have two advantages over most ordinary heaters that use rubber hose connections and are attached to the thermo-coupling, a construction which Cadillac engineers will not permit.

The hot water is circulated through a radiator located beneath the dash, and a fan behind the radiator circulates clear, steady heat to all parts of the car. The radiator has an unusually high radiating capacity and it supplies an abundance of heat.

This heat can be easily regulated also, for the fan has two speeds and is controlled by a switch on the instrument panel. The heater is also equipped with a chromium-plated deflector which is easily adjustable to deflect the heat in any desired direction.

The CADILLAC LA SALLE SERVICE · MAN

Volume III

October 15, 1929

Number 20

Atlanta Man Wins "Service Meeting" Contest

THE PRIZE-WINNING letter in the contest, "How To Get The Most Out of Service Meetings," was submitted by M. B. Wilkes, Service Manager for the Cadillac Company of Atlanta. A Cadillac pen and pencil set and an Award of Merit are "headin' south" right now.

Mr. Wilkes' letter is published below. Note especially the number of different items that are stressed and check up on your own service meetings with each of these items in mind.

A number of good ideas were submitted by the other contestants and several of these are quoted on an inside page. These suggestions also deserve careful consideration.

How to Get the Most Out of Service Meetings

THE MEETING should be held preferably in the evening at 7:30. This gives the men an opportunity to eat before the meeting and they will not be in a hurry to get away.

It should be held in a place far enough away from the noise of the shop and private enough to be free from interruptions.

All of the Service Department employees including the Parts Department should attend.

Every Service Department should have a "suggestion box," and insist on all of the employees writing down any worth-while suggestions or criticisms, and placing them in the box. These should be assorted out the day before the meeting and the worth-while ones brought up for discussion.

All employees should be given sufficient notice so they will have adequate time to make their plans to attend. All plans for the meeting should be definitely made and the order of the program written down. The meeting should be called to order by the Service Manager at the exact time decided upon.

The program should be carried through in a business-like manner; no time should be wasted on unimportant matters, and the meeting should not last over two hours. Long drawn out programs kill interest more quickly than anything else.

Any new slidefilms that have been released by the Factory Service Department or Fisher Body Service Corporation should be shown. The set of questions on the last two issues of the SERVICE MAN should be asked by the Service Manager and answered by the employees. Any service information from the factory by letter or bulletin should be read and discussed. Any items regarding your own organization and system that are in line for discussion should be brought up. The last twenty minutes should be spent in round table discussion and everyone given an opportunity to express themselves.

In closing the meeting, the Service Manager should thank each one for his interest and attendance.

M. B. Wilkes,
Atlanta, Ga.



A SATISFIED OWNER NEVER COMPLAINS

Number 20
Page 2

The Cadillac-La Salle Service Man

The CADILLAC LA SALLE SERVICE · MAN

OCTOBER 15, 1929
DETROIT, MICH.

NUMBER 20
VOLUME III

Published on the first and fifteenth of each month in the interest of Cadillac Service

In the Editor's mail bag—

Gentlemen:

On the evening of September 24th, we held a meeting, attended by seventy employees of our service department, showing the new 353 and 340 Service film.

We all feel that this film was especially well put up and we all received benefits that would have been very difficult to obtain in any other form, as complete as this. Our employees were very enthusiastic over the meeting and we are making provisions to go ahead and show it to branches and dealers in our organization.

Very truly yours,
The Towell Cadillac Company
G. H. Payne,
Service Manager.

The slidefilm

"Service Information, Cadillac 353, La Salle 340" has now been in the field for some time. Every service man should have seen it and studied it thoroughly. If you have not—get busy! You have the films—Use them!

Export Company Has Service Lists for European Tourists

SERVICE Managers are again reminded of the arrangements which can be made with the General Motors Export Company for securing lists of service stations for Cadillac or La Salle owners who plan on touring through Europe.

This plan was originally explained in the April 15 SERVICE MAN, in which it was stated that inquiry should be made through the factory Service Department, but this is not necessary. The information can be secured more quickly and easily by communicating direct with the New York office of the Export Company, which is located at 1775 Broadway, New York City.

Now Is THE TIME—
to send in your letter for the Contest

"How to use the Follow-Up System to best advantage"

All replies must be in by November 5

That Prize Is Waiting!

Use Graphite In Steering Gears All Winter

THE ONLY approved lubricant for use in Cadillac-La Salle steering gears is A-200 gear lubricant mixed with 5% graphite. Acheson No. 38 graphite has been the only approved product, but another commercial graphite, Dixon No. 066, has also been found to meet our specifications. Hereafter, either of these two products can be used.

Graphite for steering gears can be ordered most conveniently from the factory Parts Division, who will supply either Dixon No. 066 or Acheson No. 38, whichever they happen to have in stock. If the products should be purchased on the open market, care must be exercised to get the correct grade, as no other grades will be satisfactory. The proportion of 5% graphite given here and in previous issues of the SERVICE MAN is by weight, not volume, that is, 1/2 lb. graphite to 10 lbs. lubricant.

This mixture of lubricant and graphite is the correct lubricant for winter as well as for summer. Steering gear lubricant should never be thinned with kerosene. To secure easy steering in cold weather, use a gear lubricant which has a sufficiently low "cold point" to meet the climatic conditions of the territory.

The "cold point" of each gear lubricant is given on the October 15 list of approved lubricants, and every Service Manager will be able to find at least one gear lubricant that he can use in steering gears in his territory without thinning.

Suggestions for Testing Action of Shock Absorbers

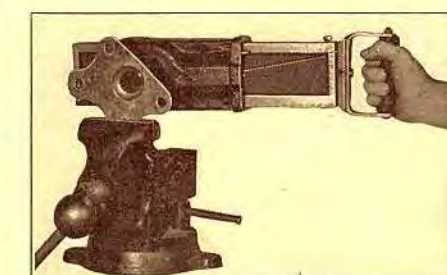
IN CASES of complaint on shock absorber action many forget to check the oil level. The shock absorber should be full to the level of the filler plug in the cover.

In any cases of excessive "axle-hop" the shock absorbers should be checked for sticking intake valves. To do this, disconnect the link and move the arm rapidly from top to bottom and then from bottom to top. If either stroke lacks resistance entirely for its full length, the shock absorber should be replaced.

When making this check, it must be kept in mind that the bumper stroke is normally very much less restricted than the rebound stroke. To check the action correctly one should be familiar with the feeling of a properly operating shock absorber.

Shock absorber links which develop a "grunting" noise have been set up too tight. This noise can be corrected by disconnecting one end of the link and backing it off one turn, providing an even pressure on each ball socket.

Jacox Steering Gear Tool



THE Jacox steering gear lapping tool announced in the July 15 SERVICE MAN will greatly simplify and speed up the job of fitting over-size half-nuts to Jacox steering gears. The number of orders received to date, however, will scarcely justify making up the tools. Service Managers are requested to re-consider the advisability of securing this tool; and, if they want one, to order at once. The tool number is 109008 and the price, \$12.00 net.

A SATISFIED OWNER NEVER COMPLAINS

Suggestions for YOUR Service Meetings

A Service Meeting, to be of any value, must be properly prepared in advance—be conducted in a friendly but business-like manner—and have a programme of interesting and instructive topics for discussion.

M. R. Stehley,
Mt. Vernon, N. Y.

Be sure that everyone has a good comfortable seat where he can see and hear everything.

L. L. Hatter,
San Antonio, Texas

To get the most out of Service Meetings is to attend every one. Have a list ready of the problems you have had and have them discussed one by one, until thoroughly understood by all.

John H. Gruber,
Bridgeport, Conn.

Urge free discussion in every meeting. Go one step better than asking for questions. Try to pick out the important points that nobody asks about and lead the talk around so everything is covered.

H. S. McHenry,
Portland, Me.

Preventive Service

THE ARGUMENT usually given for preventive service is that conditions which might develop into serious trouble involving considerable expense and delay are corrected before they become serious, thus saving time and money.

This argument is the best argument to use in selling preventive service to the customer. There is another reason, however, for preventive service—a reason that every tester and Service Manager should know and appreciate.

This reason involves a bit of psychology. It is a well-known fact to every tester that a customer will not accept the same quality in the repaired product as would have been satisfactory in the original product. An engine noise, for instance, may pass unnoticed for months until the customer happens to single it out for complaint. By doing so he has focused his attention on it to the extent that he is not satisfied simply to have the noise reduced to what it was originally—he insists on an even higher standard than before, which it is impossible to give him.

The point of this to the tester is that if a condition can be corrected or relieved before the customer complains, less is required to satisfy the customer than in case the condition is allowed to go until the customer makes the complaint. In other words, the customer's complaint and your effort to correct it make the customer supercritical.

Keep the customer's car in reasonably good condition without waiting for him to complain and he will be less likely to make unreasonable demands.

Delivery Report Cards

THE Delivery Report Cards for all Cadillac and La Salle cars are sent to the distributor the day after the car is shipped from the factory.

These cards are sent by first class mail, right in the package of mail which is sent daily to each distributor. If whoever opens this mail at the distributor's place of business takes care to see that the cards are sent at once to the proper party, complaints of lost or mislaid report cards will practically cease.

Wanted

WANTED—V-63, 5-passenger Sedan Body in good condition. Send full particulars to H. H. Martin, Bankers Trust Company, 501 Fifth Avenue, New York City.

Rear View Mirror Mounting



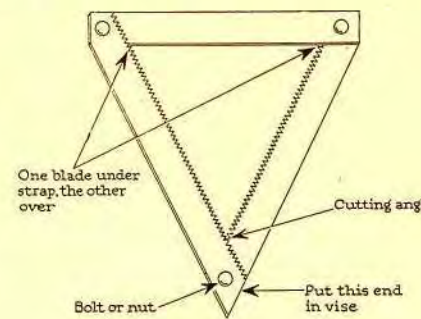
THE mounting of the rear view mirror on Cadillac and La Salle cars is such that considerable range of adjustment is allowed. In addition to the ordinary adjustment by means of the slots in the bracket, it is also possible to alter the position of the mirror by installing it upside down, as the bracket is fastened to the back of the glass approximately 1/2 inch off center.



A HANDY little device for removing the insulation from the end of electrical wires, wins the shortcut prize this time. This shortcut was submitted by J. Tinaglia, a Parts man with the Chicago branch.

The tool is as effective as it is simple. It is made from a hack saw blade, a short piece of band iron and three rivets or nuts and bolts. Break the hack saw blade into two equal parts and bolt or rivet the two pieces to the piece of strap iron in the manner shown in the drawing. Grind down the rough edges.

To use tool, clamp the lower end in a vise. Place the wire in the cutting angle at the proper distance from the end of the wire, twist the wire at least a full turn in order to cut the insulation all the way around, and remove the insulation by pulling the wire through the tool.



This simple device is very effective for removing the insulation from the ends of wires

Check Rear Face of Dash When Drilling for Heater

WHEN installing hot water heaters on Cadillac and La Salle cars, four holes must be drilled through the dash. The correct location of these holes is indicated on 353 and 340 cars by four punch marks on the front face of the dash.

Before drilling these holes, however, one precaution should be taken. The gasoline pipe on these cars is brought up the rear face of the dash on the right hand side, where it crossed over and leads to the vacuum tank. As the path of this pipe is not laid out with precision, on some cars the pipe may come dangerously close to where one of the upper holes is to be drilled.

While there is slight possibility of this occurring, it should be checked on every car before drilling for a heater. If the pipe should be in the way, it can be bent slightly and thus moved out of the way. Do not bend the pipe sharply as this may cause a fracture.

"Popping Back" Result of Carburetor or Manifolds

SOME CADILLAC 353 and La Salle 340 cars have been reported for an excessive amount of "popping back."

The most frequent cause for this is lean carburetor adjustment. The method now recommended for adjusting the carburetor is to turn the adjusting screw clockwise until the engine slows down from a rich mixture. Then turn the screw the other way, counting the number of notches until the engine starts to slow down from the lean mixture. Then turn the screw back exactly half the number of notches between the two extreme positions.

This method when properly followed is more accurate than the method generally used of testing by touching the counterweight on the air valve. The accuracy depends altogether on being able to detect the instant at which the engine starts to slow down from a rich or lean mixture.

Carburetor Spray Nozzle

A second possible cause is the carburetor spray nozzle. In order for the air stream around the tip of the spray nozzle to have the proper characteristics, the spray nozzle must be perfectly square across the tip end and must not be rounded. A spray nozzle which has the edge of the tip rounded will produce a lean mixture with resulting back-firing.

In any case of "popping back" that cannot be corrected by proper adjustment of the carburetor, inspect the spray nozzle and replace it if the tip is rounded.

Intake Manifolds

A third possible cause for back-firing on the first 353 and 340 cars is in the intake manifolds. Before engine units 5-2716 and 6-4668, the intake manifolds on some cars have small pockets or depressions in the elbows at the ends of the manifolds. These pockets sometimes affect the gas mixture, producing back-firing on the pick-up, especially when the engine is cold.

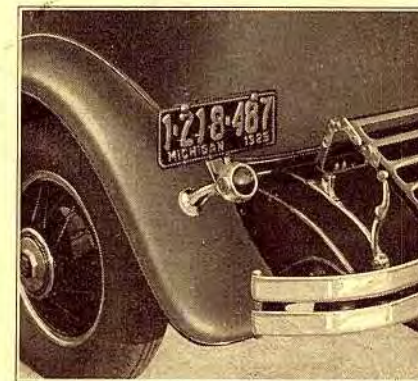
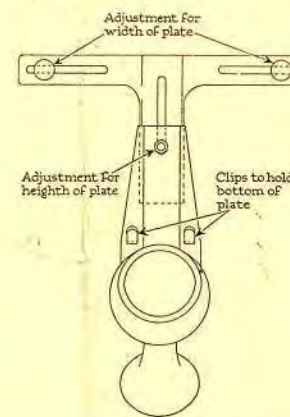
If "popping back" is not corrected by carburetor adjustment or replacing the spray nozzle, the next thing to be done is to inspect the intake manifolds. If the pockets are present, they will be found on the bottom of the gas passage about one or one and a half inches in from the flanges at the point where the machined surface ends. The pockets can be felt more easily than they can be seen.

Intake manifolds with these pockets should be replaced. All intake manifolds (Part Number 873161) in

Adjustment of Rear License Bracket on Cadillac 353

MANY PEOPLE think that license plates may be placed anywhere on the front and rear ends of the car and attached in any sort of fashion. This is not true. Many States are quite particular about where the license plates shall be and how they shall be attached.

The provisions made for carrying license plates on Cadillac and La Salle cars satisfy the legal requirements of every State, provided the plates are properly installed. If the directions given below are followed, there will be no cause for complaint from any Secretary of State.



TO MOUNT a license plate on a 353 Cadillac rear bracket, simply slip the plate into the two clips which hold it at the bottom and adjust the clamp in back to line up with the holes in the top of the plate. If the clips at the bottom are a little loose, they can be bent in enough to prevent rattling.

Parts Division stock have been inspected for this condition and any new manifolds shipped for replacement may be depended upon to be correct.

Valves

"Popping back" not due to any of the foregoing causes may be due to valves not seating properly. Grinding the valves may be necessary in such cases.

Record of Trunk and Radio Key Numbers Is Important

THE KEYS used in the locks of the trunks that are standard equipment on Cadillac 353 and La Salle 340 Town Sedans number from H-251 to H-500 inclusive. The keys for the new radio sets number from BB-501 to BB-750 inclusive.

On the first cars shipped from the factory, no record was kept of the key numbers on either the trunks or the radio sets; but these numbers now appear on the copy of the shipping orders mailed to distributors. Distributors should accordingly arrange to show these key numbers on their unit number record cards. They can also secure the key numbers of the trunks or radio sets of any of the first cars which have not yet been delivered. The key numbers of any radio sets which are installed by the distributor or dealers should also appear on the unit number record card.

The above is very important because the key number must always be specified when ordering duplicate keys from the factory. If the key number does not appear on the new car shipping order or the unit number record card, it will be necessary to remove the lock in order to read the number, which is stamped only on the back barrel.

Unlocking Trunks

Owners of Town Sedans should be instructed as to the proper method of unlocking trunks. The locks should be unlocked before the clamps are released. If the clamps are released first, the resulting strain on the lock may cause sticking, and make the key hard to turn.

Short Safety Catch Levers Will Not Touch Upholstery

ON SOME of the first Cadillac 353 Sedans, the left-hand edge of the front seat back may interfere with the safety catch on the left front door. When this occurs there is a tendency for the safety catch lever to rub into the upholstery.

This condition has been corrected on later cars by reducing the width of the front seat approximately 1/2 inch on each side. On cars already in service, it is recommended that a shorter safety catch lever be installed.

These short lever assemblies can be secured on order from the Fisher Body Service Corporation under Part No. 4170087. They will be sent out at regular charge and credited upon the return of the replaced levers.

The lever assembly includes the plate which is screwed into the door so that the changeover can be easily made. Only one new lever is required for each car.

The CADILLAC LA SALLE SERVICE · MAN

Volume III November 1, 1929 Number 21

Portable Charger Solves Battery Problem For Cars In Storage

THE PERIOD intervening between shipment of a new car from the factory and its delivery to the customer has always been a problem from the standpoint of battery service.

At one extreme, the car may be delivered to the customer at the factory with no lapse of time during which the battery can dissipate its charge. At the other extreme, a car may be several weeks in transit, several months in storage, and perhaps a final period of weeks or months on the salesroom floor.

It is a fact that most battery complaints have their origin in the storage of cars without provision for proper attention to the battery. A customer who takes delivery of a new car with a partially-charged battery is almost certain to get into trouble.

If it is winter, he will soon discharge the battery to the point where it will not crank the engine and there will then be the expense of a service call, a "loaner," and recharging of the customer's battery.

At other times of the year, the evil results may not be apparent at once, but eventually the lack of care during the storage period will shorten the life of the battery. In either case, sooner or later a complaint will be received which must be adjusted at the expense of the customer's goodwill and the distributor's or dealer's pocketbook.

The practice of removing a battery from a car placed in storage and re-installing it just before the car is delivered is an effective one but expensive, and it fails to provide for cars on display, which must be ready to run on a minute's notice.

The Electric Storage Battery Co., of Philadelphia, working in conjunction with the Cadillac Branch in that city, has evolved an effective and economical solution of this problem. A portable charger of the type used for radio batteries is the answer.

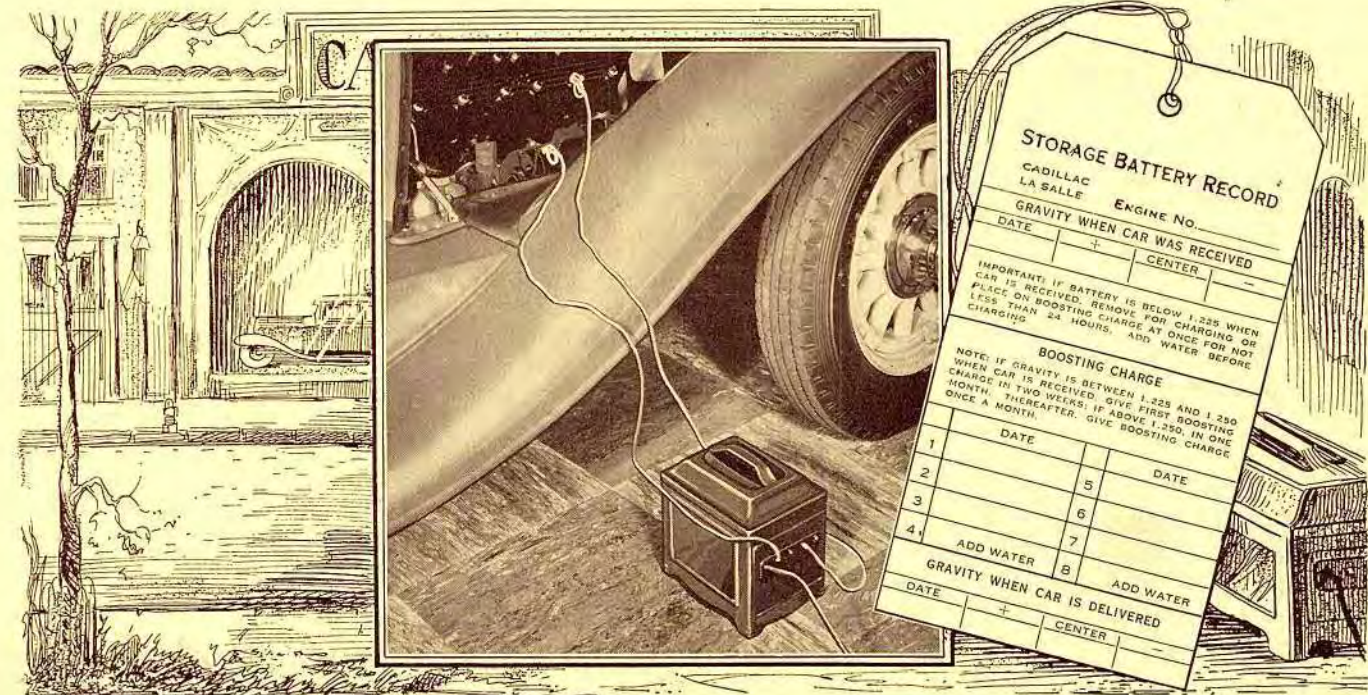
Portable Charger

A five-ampere, single-bulb Tungar charging outfit will satisfactorily bring up a battery, if not too far discharged, in eight to twelve hours. This means that if cars in storage are given "a boost" in this manner once a month, one of these outfits will take care of sixty cars in storage or thirty cars on display.

It is not even necessary to have access to the battery in order to use this method. This charger can be connected at the generator by simply raising the hood.

In order to assist Cadillac distributors, and dealers to secure the proper equipment to make use of this arrangement, our Accessory Division has in stock and can ship on order Tungar charging outfits complete with leads of the proper length. The tool number is 109250-T and the price is \$18.00 net, f. o. b. Detroit.

(Continued on page 2, col. 1)



A SATISFIED OWNER NEVER COMPLAINS

The CADILLAC LA SALLE SERVICE · MAN

NOVEMBER 1, 1929
DETROIT, MICH. NUMBER 21
VOLUME III

Published on the first and fifteenth of each month in the interest of Cadillac Service

Battery Charging Outfit

(Continued from page 1)

To place the outfit in use, it is simply necessary to plug in at the nearest outlet, ground the positive lead of the charging outfit on the engine, and connect the negative lead of the charger to the battery lead at the generator cut-out. The leads are long enough for the charger to be placed out of the way under the car.

In most cases, the man who takes care of the stationary battery charging equipment can also look after the portable outfit, changing it from one car to another night and morning.

Two cars in storage can be charged in twenty-four hours—one during the night and the other during the day. It is not desirable to have a charging outfit connected to a car on display during the daytime and such cars should be charged during the night.

Tag For Record

Some systematic procedure is necessary in using a portable charging outfit to determine what cars to charge and when to charge them. For this purpose a tag has been prepared. This tag should be kept under the cowl where it is out of sight. It can best be fastened to the wires that run up from the cigar lighter. A supply of 100 tags will be furnished with each charger.

The use of this tag should be started when the car is first received and should show the gravity of the battery and the date. Keeping this record does not involve any extra work, as it is necessary to take the gravity at this time in order to report it on the New Car Inspection Report.

The battery man will then simply go from one car to another in storage or on display, inspect the tag and put the battery on charge, if one month has elapsed.

For instance, if the tag shows that the battery tested below 1.250 two weeks or more ago, it should be put on charge. If the battery tested above 1.250 when the car was received, it need not be put on charge until four weeks have elapsed.

If the battery tests below 1.225 when the car is checked, the battery should either be removed and charged on the bench or should be given a boosting charge with the portable charger for at least twenty-four hours.

"How to Increase Service Sales"

Is the Subject of
OUR NEXT CONTEST

This is a problem of importance to every worker in the service station, so think it over.

New ideas for getting and keeping service customers are very much in demand. Old and tried ideas are also wanted—they may be the solution to someone's problem.

Get all of the ideas together and send them in!

This prize contest closes on December 5th, so start thinking about it now. Results will be published in the December 15th issue.

Water should be added as necessary before starting the charge.

The date of each "booster" charge should be noted on the tag and just before the car is delivered, the gravity should be checked and recorded in the space provided. One of these chargers should be available in the department where new cars are prepared for delivery, so that if the battery is below 1.275 it can be given a boosting charge the night before the customer takes delivery.

We recommend that the tag be removed just before the car is delivered and filed in the Service Department for future reference.

If the car is in storage less than four months, it will not be necessary to add water during the interval. If the car is in storage more than four months, water should be added every fourth time a charge is given.

In the course of a winter, the saving in labor resulting from the fact that fewer batteries have to be removed will more than pay for the cost of the outfit. Maintenance expense for the charging outfit is small—current cost is negligible and bulbs are guaranteed to give 1500 hours service. Replacement bulbs are \$8.00 list each.

Order blanks listing this equipment are being mailed to every distributor and dealer. Each distributor and dealer will find use for at least one outfit. Larger distributors should put their outfits in service at once, so as to determine their requirements for additional outfits during the winter when more cars will be stored.

The portable charging outfits supplied by the Accessory Division are intended for use with alternating current, which is practically universal. An outfit for use with direct current can, however, be procured at reasonable price from the Ward-Leonard Electric Company, Mt. Vernon, N. Y.

New Edition Of Numerical Parts Price List Is Ready

THE fourth edition of the Numerical Parts Price List has just been released. This latest numerical list includes a listing of parts for all Cadillac and La Salle 8-cylinder cars, including the new Cadillac 353 and La Salle 340.

This new book is made in a style similar to the third edition, which was announced last spring, and includes the same information on each part. This information includes part number and name, list price, the models on which the part is used, a serial number from the latest Parts Price List in which the part is listed and space to write the location of the part in your own stock room.

As this book is the same size as the previous one, the same binders are to be used. One copy of the new list, without the binder, has been sent to each distributor at the regular charge of \$2.50 net.

Additional copies of this Parts List can be secured without binders at the above price, or complete with binders at a net price of \$3.00.

Kelch Heater Registers

AN ARTICLE in the October 1st SERVICE MAN stated that one front register (47043) was available for all Kelch re-circulating heaters. A special front register, part number 47087, must be used for all front compartment installations on Cadillac 353 cars, however, as the outlet pipe on the 353 heater unit is slightly different in size. For the Fleetwood installation of the Kelch heater, a special rear register, part number 47158, is now available. This new register has been designed to allow moving the register to a position further forward where it will be more comfortable for the occupants and more easily installed.

A SATISFIED OWNER NEVER COMPLAINS

Radio Sets Can Be Easily Installed On New Cars; Books On Installing And Servicing Now Ready

A NEW TYPE of aerial lead wire has been developed and is now being built into all cars. This new wire has a flexible metallic covering which is grounded to the set.

When installing radio in cars originally equipped with the first-type ordinary cotton-covered lead wire, this wire must be replaced with the new type. Replacement should also be made on any cars in which radio has been previously installed, if noise due to ignition interference is objectionable.

A small supply of this wire, part number 873705, has been sent to each distributor to whom radio sets have been shipped. Additional supplies should be ordered as required. Distributors who have not yet ordered radio sets should remember to order a supply of this wire at the time their first radio sets are ordered.

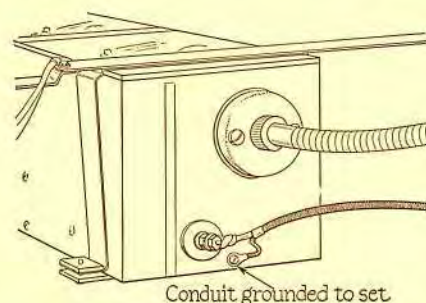
This wire will be shipped at regular charge but credit will be allowed on receipt of a Credit Request, giving the engine number and the other necessary information. Directions for installing the wire are given on page 12 of the radio installation booklet.

Instruction Books

Two new booklets giving instructions on the radio have just been printed. The booklet for the service station gives complete instructions for

installing sets and batteries in the car, and includes an extensive section on testing and repairing. The other booklet gives operating instructions for the car owner.

One copy of both books is included with each set that is sent out from the factory. The owner's book alone is included with those sets that are installed at the factory. Every owner who has a radio in his car should have a copy of this book. This includes those owners whose radios were installed before the books were available.



The metallic covering around the new aerial lead wire is grounded to the set in this manner

Sample copies of both books have been sent to each distributor. Additional copies for distributors' and dealers' use can be secured on request to the Accessory Division.

Copies of the radio booklets have been sent to each distributor. Extra copies can be secured from the Parts Division



A SATISFIED OWNER NEVER COMPLAINS

Claims For Body Work Must Give Definite Information

DISTRIBUTORS sending in credit requests to invoice (form 4218) covering warranty work on Fisher Bodies, must take particular care to describe the exact source of the difficulty and the actual corrective work that was necessary.

For example, a claim which states simply "removal of noises from roof" is so indefinite as to mean nothing. Such a condition might be caused by improper gluing, loose nails or screws, interference of metal, metal rubbing on wood, or a number of other things.

Whatever condition caused the trouble must be definitely explained, so that the Fisher production departments will be able to guard against a recurrence of the same thing.

The credit request form to be used in presenting these claims is provided with blank spaces for describing the conditions which necessitated the repairs, as well as for the flat rate operations necessary to correct the condition. Credit will not be allowed unless this information is given *definitely and completely*.

Service Managers should also be careful not to submit claims for service work which should properly be classed as maintenance and charged to the owner. Only work which is clearly warranty work can be credited.

The Cadillac-La Salle radio has an excellent quality of tone, comparable to the best of sets for home use and superior to other sets available for automobiles. Automobile radio sets are, however, subject to limitations and interference which do not trouble house sets.

The electrical system of the car, for example, will create interference that will greatly affect the operation of the radio set unless means are taken to prevent it. This is overcome in the Cadillac-La Salle radio by the use of special resistance units on the spark plugs and the coil, and the use of condensers on the generator and starter.

Radio reception in a car is also limited in that only a certain length of aerial can be placed in the top of a car, nor can an aerial in a car be grounded to the earth as is always done with a stationary aerial.

Furthermore, a moving car is constantly changing its distance and direction from the broadcasting station, with a corresponding change in the strength of the signals. The car may move into or out of "pockets" or "dead spots." Reception may also be affected by the shielding effect of steel buildings or bridges or by the interference of high tension lines or substations.

PARTS MERCHANDISING MEETINGS

For Distributors' and Dealers' Managers, Service Managers and Parts Managers on

"Increased Parts Profits for 1930"

Among the subjects discussed will be:

1. Importance of balanced stock.
2. Proper selling effort.
3. Proper selling atmosphere.
4. Proper business management.

Stress will be laid upon the actual ways and means of keeping the parts inventory in most salable condition. A new and effective inventory plan, analyzing parts stocks as to surplus and obsolete material and providing for their disposition, will be of particular interest.

One-Day Meetings

The meetings will last only one day; they will be held in each of the following cities on the date indicated:

Detroit.....Nov. 18	Dallas.....Nov. 22	Los Angeles.....Dec. 2	Charlotte, N. C.....Dec. 11
Kansas City.....Nov. 18	Denver.....Nov. 25	San Francisco.....Dec. 6	Jacksonville.....Dec. 13
Chicago.....Nov. 20	Pittsburgh.....Nov. 25	New York.....Dec. 6	Atlanta.....Dec. 16
Oklahoma City.....Nov. 20	Utica.....Nov. 27	Philadelphia.....Dec. 9	Minneapolis.....Dec. 16
Cleveland.....Nov. 22	Boston.....Dec. 4	Seattle, Wash.....Dec. 10	Cincinnati.....Dec. 18

ATTEND THE MEETING IN YOUR ZONE!

Oil Gauge Pipes Should Be Re-installed With A Loop

THE OIL gauge pipes on Cadillac 353 and La Salle 340 cars are now installed with a loop near the tee fitting on the engine. This change went into effect on Cadillac cars beginning with engine number 504443 and on La Salle cars beginning with engine number 606835.

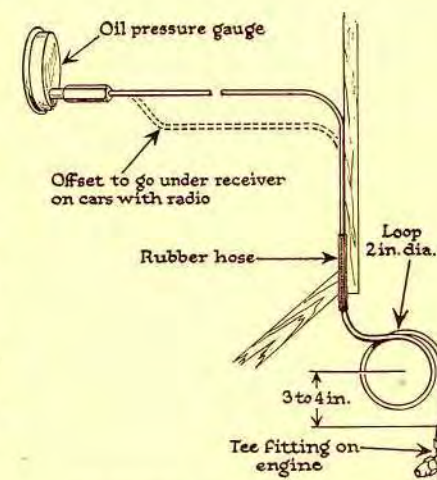
The oil gauge pipes on all earlier cars should also have the loop. It is not necessary to replace the pipe, as the pipe as originally installed is long enough to permit the necessary loop to be made.

Disconnect the pipe from the oil gauge and from the "tee" fitting on the crankcase and remove the pipe from the car. It may be necessary to loosen the upper toe board to take out the pipe.

Straighten the lower end of the pipe for approximately 12 inches from the end and from a loop 2 inches in diameter with its center 3 or 4 inches from the end of the pipe, as shown in the illustration. In order to insure a good job, this should be done on a mandrel 1 3/4 or 2 inches in diameter.

Re-install the pipe, bending it as necessary under the cowl and moving the clips to new positions on the pipe.

It is also important to protect the pipe from being chafed by the dash or the toe-board. A piece of rubber tubing is used at this point on cars



Oil pressure gauge pipes on 353 and 340 cars must have this loop between the dash and the engine

now being shipped, and should be installed on cars in service when the loop is made in the pipe.

Simply take a piece of windshield cleaner tubing (46427) about four inches long, cut a slit the full length and slip it over the pipe at the junction of the board and the dash, as shown in the illustration. The tubing should be assembled on the pipe with the slit toward the left hand side of the car.

Tubing of the proper length can be secured from the Parts Division under part number 873780. All tubing installed on oil pipes will be credited, if listed under the above part number.

Chipping 63-B Differential Permits Use Of 314 Gear

THE factory Parts Division has been supplying the series 314 ring gear and pinion, part number 42511, for use in 63-B rear axles, as it is a larger gear, with a greater number of teeth to take the load. The use of this part, however, requires a few minor alterations in the 63-B differential carrier.

When installing one of these new ring gears, the ring gear must be mounted on the differential and the entire assembly then fitted into the carrier.

In order to make the assembly fit, it will be necessary to chip out part of the differential carrier to allow proper clearance for the ring gear. The amount to be chipped out can be determined by trial.

It is also necessary to use the latest type rear axle cover, which has a slightly greater depression in it. The part number of this cover is 27726.

A Calumet Blue Sedan

THE Cadillac Providence Company is anxious to secure information regarding the whereabouts of 314 Cadillac 5-Passenger Sedan, engine number 146061, a Calumet Blue Sedan. The purchasers of this car left Providence while owing a considerable sum on the car. If this car comes to any Cadillac Service Station, inform the Cadillac Providence Company, Providence, Rhode Island.

A SATISFIED OWNER NEVER COMPLAINS

The CADILLAC LA SALLE SERVICE · MAN

Volume III

November 15, 1929

Number 22

Cleveland Man Wins Contest On Owner Follow-Up System

THE WINNER of the prize contest on "How to use the follow-up system to best advantage" is Mr. I. A. Roth of the Towell Cadillac Company, Cleveland, Ohio. His prize-winning letter is printed in full below.

A number of excellent ideas were submitted by the various contestants, yet there was no letter which included *all* of the *vital* facts concerning the owner follow-up system. These vital facts are re-

THE OWNER FOLLOW-UP SYSTEM

- Provides for following up every owner to make sure that his car continues to give satisfactory service.
- Secures a continuous volume of pay work for the shop by getting customers to come in regularly.
- Brings to light any owner dissatisfaction, and thus permits its correction.
- Maintains a satisfactory relationship between owner and dealer, enabling the dealer to make the repeat sale.
- Leads to additional sales of both new and used cars.
- Requires an accurate and up-to-date record of all cars, showing what was done on them and when they were in last.
- Requires a contact man with a knowledge of automobiles, sales ability, courtesy, diplomacy and sincerity.
- Contact should be made with every owner who has not come in within the last thirty days.
- Contact should ordinarily be made by telephone—if this does not bring the owner in, by letter and by personal call.
- Contact should be made after complaint adjustments or overhaul jobs, to make sure that the customer is satisfied.

printed in the center of this page. The points enumerated have been taken from the thirty-odd letters that were contributed. Study them carefully, for they are the important points concerning the follow-up system. Check your owner follow-up and see that it operates in these ways.

It is now time to think about the next contest. "How to increase service sales" is a subject that should bring forth many good ideas. Write your letter and get it in by December 5.

THE WINNER

We have found the one-man method of contact, by telephone, to be the most efficient and productive in handling the follow-up calls.

The success of the system depends largely on the qualifications of the man selected for the position. He should possess sales ability, together with a working and fundamental knowledge of automobile mechanics. He should be courteous and diplomatic in his approach and be able to impress the owners with our sincere interest in the satisfactory operation of their cars.

In this manner it is not difficult to secure the customers' confidence, and with the added assurance of personal attention, succeed in bringing them in for service.

If a customer has a complaint to offer, note the particulars; then persuade him to come in and have the matter adjusted. Steps should be taken to investigate the cause of the complaint and measures adopted to prevent a recurrence. Aggravated cases should be brought to the attention of the Service Manager.

Those testers who write jobs for customers who come in on account of complaints should call the owners to find out if everything is satisfactory within a few days after the car has been released. This applies also to overhaul jobs.

The regular Service follow-up card which we are using provides space on the reverse side on which to keep a record of calls, indicating the Date, Nature of Complaint, and Disposition and Adjustment.

The Contact Man goes through these files regularly and calls owners who have not been in for service during the preceding thirty days. If after two telephone calls satisfactory results are not obtained, personal contact is made, thereby presenting an opportunity to express and explain in detail the advantages of regular monthly inspection and 1000-mile lubrication.

The follow-up method keeps our files accurate and up-to-date, disposing of records that are useless, in such instances where owners have moved out of the city, traded in their cars, or otherwise disposed of them.

In connection with the follow-up on new car deliveries, it is our practice to call personally on all owners about ten days before the expiration date of policy covering free mechanical adjustments, and to remind the customer to bring the car in for final inspection and adjustment. At that time an expression of satisfaction is requested and complaints, if any, are taken up immediately with the proper authority and adjusted. The benefits of this sort of contact are far-reaching and prove to the owner our interest in his car extends beyond the date of sale.

Another feature of the system, according to our experience, is the way to possible car sale prospects.

We feel the follow-up system aids in perfecting our service organization, fostering goodwill, and increasing our business possibilities.

—Ignatius A. Roth

A SATISFIED OWNER NEVER COMPLAINS

Number 22
Page 2

The CADILLAC LA SALLE SERVICE · MAN

NOVEMBER 15, 1929
DETROIT, MICH.

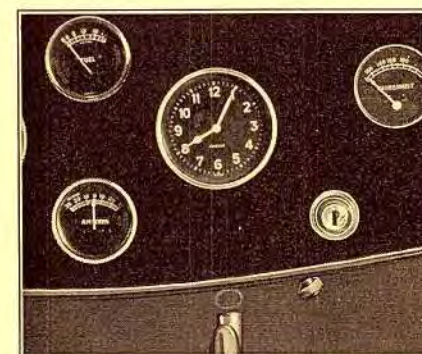
NUMBER 22
VOLUME III

Published on the first and fifteenth of each month in the interest of Cadillac Service

Stem Of La Salle Clock Has Been Moved to New Location

THE STEMS of the clocks on the La Salle 340 instrument boards have formerly projected straight down. The knurled knob of the clock stem has thus projected down to within a very short distance of the top of the hand brake lever.

While the hand brake lever can be operated without interference from the knob of the stem, the knob will interfere if the lever is grasped with the thumb over the top of the handle.



The new winding stem for La Salle 340 clocks is located further to the right so that it will not interfere with operation of the hand-brake lever

On this account, the clock stem has been lengthened and moved around so that it projects down from the clock at a 30° angle which brings it approximately two inches to the right of the brake lever.

This change can be made on any La Salle 340 car on which the owner complains of interference. It is necessary to install a new clock with the longer stem, part number 873563, using a new clamp, 873562. It is also necessary to notch the lower bead of the instrument panel to permit the stem to extend down unobstructed.

The clock stems on some Cadillac 353 and La Salle 340 cars sometimes make a vibrating noise when the car is under a hard pull. This condition in most cases can be overcome by installing a small spring (part no. 873805) in the counterbored hole in the knurled winding knob.

To install the spring, simply remove the knob from the clock stem

Air Valve Adjustment To Be Made With Engine Hot

THE CARBURETOR air valve thermostat on the Cadillac 353 and La Salle 340 cars is thinner (.050 instead of .080 inches) than that used originally on 341 and 328 cars. This thermostat is, however, the same as the thermostat used on Cadillac cars prior to series 314, and is carried in stock under the same part number, 42007.

It should be understood that the thinner a piece of thermostatic metal is, the greater will be the movement of the free end for any given change in temperature. It is therefore more important with the .050 thermostat to wait until the engine is thoroughly warm before adjusting the air valve screw. If this adjustment is made after the engine has partly cooled off, the mixture will be too lean when the engine is hot. The engine must be thoroughly warmed up when the carburetor is being adjusted.

If the mixture cannot be made sufficiently lean without backing the adjusting screw all the way out, it is probably an indication that the engine is not thoroughly warm. In such a case, simply run the engine until you are sure it is hot and then readjust the carburetor. This adjustment should be made out of doors.

If a satisfactory adjustment cannot be secured within the range of travel of the adjusting screw, while the engine is hot, let the engine cool to room temperature and check the adjustment of the thermostat on the choke lever shaft. The air valve should stand open $\frac{1}{16}$ to $\frac{3}{32}$ inch when the choke lever is held against the stop, rather than at $\frac{1}{32}$ to $\frac{1}{16}$ inch as is standard for the .080 thermostat. This adjustment must be made at room temperature.

When this adjustment is correct, warm up the engine again and adjust the air valve screw. If a satisfactory adjustment still cannot be secured either on account of the screw bottoming or being all the way out, the thermostat is probably improperly shaped and should be replaced.

The .050 inch thermostat, part number 42007, can and should be used when replacement is necessary on all models except series 314. The .080 inch thermostat, part number 42659, should still be used for 314 carburetors.

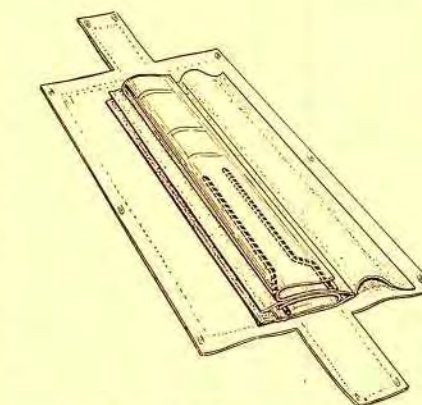
by removing the small set screw in the upper end. Then place the spring in the inside of the knob and re-install the knob on the stem.

Proper Method Must Be Used For Stowing Side Curtains

THERE HAVE been a number of cases where difficulty has been experienced in stowing side curtains on the new Fleetwood open cars. This difficulty can be entirely eliminated if the curtains are folded in the right manner.

The curtains are packed in a special container or bag which is fitted with woolen separators to prevent rubbing and chafing. This bag is stored in a compartment in back of the rear seat on touring cars and in back of the front seat on phaetons and roadsters.

This compartment on touring cars is reached by unclipping the back of the rear seat at the top and swinging it forward. It may be necessary to lift up the seat cushion in order to swing the seat back cushion far enough to remove the curtains.



When stowing side curtains, fold them so that the door rods are staggered as shown above

The door curtains require special attention. Fold the door rod down parallel with the base of the curtain and fold the top of the curtain down to the base.

Place the curtains in the bag with the rods all toward one end, but staggered with relation to the edges of the bag; that is, with the first rod toward the inside edge, the next one toward the outside edge, etc. In this position the rods take up the least amount of room.

Make sure the curtains are dry and clean before stowing them. Also make sure there is a woolen separator between each curtain and the next one. When all the curtains are carefully folded in place, fold over the flaps of the bag and clasp them in place.

The curtain compartment on the phaetons now being shipped has been increased in size, providing ample carrying space for the curtains.

A SATISFIED OWNER NEVER COMPLAINS

The CADILLAC LA SALLE SERVICE · MAN

Volume III

December 1, 1929

Number 23

Advertising Campaign on Service Is Available at Low Cost

ONE OF THE answers to the current contest on "How to increase service sales" is *Advertising*. But while most Service Managers will agree that advertising can be employed to advantage in securing business, few are doing very much about it.

It is admittedly a difficult task to plan an advertising campaign for a service station and to carry it through effectively. Few service organizations contain men who have the experience and ability to do this work; while the cost of having a campaign made up outside is usually prohibitive. On this account, the factory Advertising Department has arranged a campaign which can be used by any authorized service station.

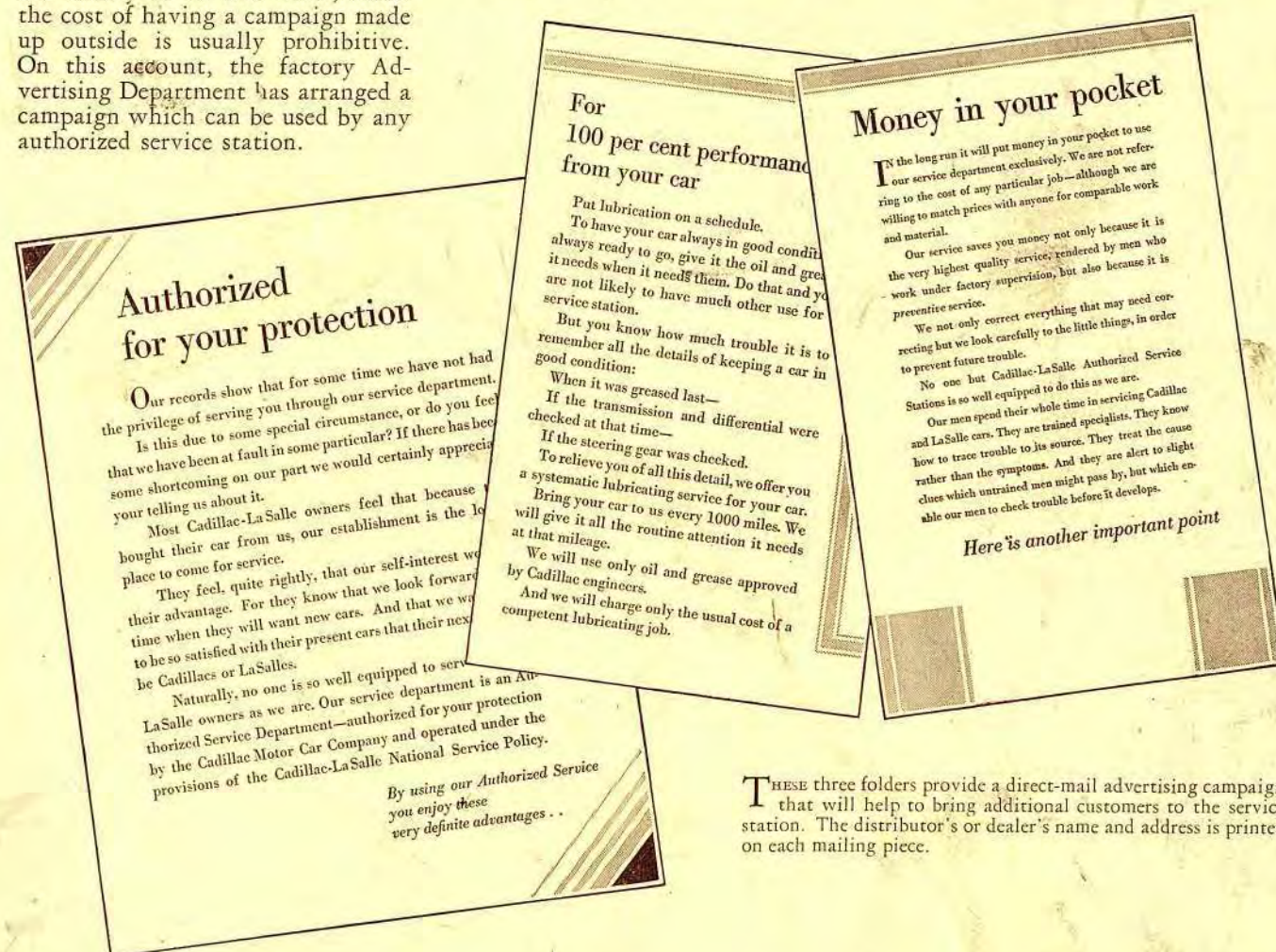
The best way to advertise service is by direct mail folders. Every wide-awake service station has, in its follow-up record, a list of Cadillac-La Salle owners in its territory. These are all *live* prospects, and those who do not come in regularly should receive your advertising literature. Printed literature sent to these prospects will often bring in business that might not otherwise be secured.

The direct mail campaign which is now available consists of three well-prepared mailing pieces. The first

stresses the value of dealing with an authorized service station, and carefully enumerates the various advantages to the owner; the second deals with the advantages of regular, systematic lubrication on the 1000 mile schedule; while the third explains why the owner is money ahead in the long run by dealing with an authorized service station.

Each of these folders has a definite message which is of real interest to your prospective customers, while all

(Continued on page 2)



A SATISFIED OWNER NEVER COMPLAINS

Number 23
Page 2

The CADILLAC LA SALLE SERVICE · MAN

DECEMBER 1, 1929
DETROIT, MICH.

NUMBER 23
VOLUME III

Published on the first and fifteenth of each month in the interest of Cadillac Service

Advertising Campaign (Continued from page 1)

of them stress the importance of authorized service as ultimately the most economical, convenient and thorough. The folders all present a strong appeal for good service, and they are all written for one purpose—to get the owner to come in to *your* service station.

In using this campaign, send the folders out to those prospects who do not come in regularly, or to those who have not been in the service station for 60 days or more. There is obviously no reason for sending these folders to regular customers.

The folders are to be sent out locally in the distributors' or dealers' envelopes, so that they really come to the prospect as an advertisement from the distributor or dealer. The folders should be sent out 3 or 4 days apart, the whole campaign being mailed within two weeks' time.

The entire set of three mailings will be furnished at a net price of 12 cents per set. Specimen copies will be furnished on request. Order them direct from the factory Advertising Department. The above price includes imprinting each folder with the name and address of the distributor or dealer.

Winter Lubricants Are Used In Cars Now Being Shipped

ALL new cars delivered to owners in localities where the weather is cold should be suitably prepared for winter driving. Winter grade lubricant for transmission and rear axle is one of the things to be given careful attention.

Cars now being shipped have winter lubricant in the transmission and rear axle. The use of this lubricant in Cadillac 353 transmissions was started at chassis unit 5-2780, and in Cadillac axles at chassis unit 5-5271. Winter lubricants were started in La Salle 340 transmissions with chassis unit 6-4500, and in rear axles with chassis unit 6-9060.

New cars having chassis unit numbers below those mentioned, should be supplied with winter grade lubricants before they are delivered to the purchasers.

The Cadillac-La Salle Service Man

ANOTHER CONTEST

Think this over—

"Why and how to get the customer to sign the repair order."

—Then send in your letter.

Replies to this contest should first give the reasons why the customer should sign the order, and then explain just how to get him to sign. Actual methods, drawn from your owner experiences, will give you the ideas you want.

This is a problem that is confronting testers and service salesmen every day—tell us how you are meeting it.

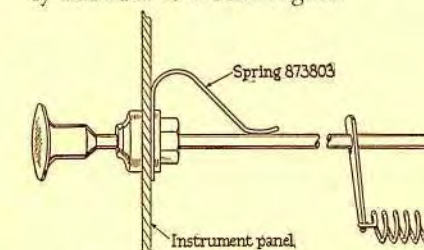
The letters for this contest must be in by January 5, but don't put it off—send your letter in now!

New Spring Released To Hold Choke Control Open And Shorten Warming-Up Period

THE CARBURETOR enriching button on Cadillac and La Salle cars has been fitted with a spring which returns it to normal position as soon as the operator releases his hold on the button.

This type of control was started on Cadillac cars before they were equipped with the crankcase ventilating system. On these earlier cars a spring-controlled choke was of considerable value in minimizing crankcase dilution, by preventing an excess of raw gasoline reaching the cylinders.

But on cars equipped with the crankcase ventilating system, dilution that might be caused by leaving the choke out too long is not as serious a factor—in fact, some dilution is desirable to facilitate cold weather starting. There are decided advantages in being able to leave the choke part way out during the warming-up period. The engine will warm up more rapidly, there will be less "popping-back" and it will not be necessary to race the engine to keep it going, a practice which is especially harmful to a cold engine.



This new spring (873803) prevents the choke control from returning to position immediately. Whenever it is installed, the tension on the coiled pull-back spring should be decreased.

A change has accordingly been made in the choke control on cars now being shipped. The change consists of a spring which is installed over the choke rod between the instrument panel and the retaining nut washer. The end of this spring presses against the choke rod with sufficient force to prevent its returning immediately to position.

This new spring, part number 873803, can also be installed on cars already in service, and it is recommended that the installation be made whenever there is complaint of an excessive amount of "popping back." The illustration shows how to make this installation. When installing the new spring, the coiled pull-back spring should be left on, but the bracket to which it is attached should be moved several inches closer to the dash to weaken the tension of the spring.

On cars with this new arrangement of the choke control, special pains must be taken to educate the owners on the importance of keeping the choke button pushed in as far as possible without "popping back."

Parts Managers

RETURN all replaced 341-B and 328 clutch and transmission assemblies to the factory as soon as possible. If there are any replaced clutches or transmissions in your stock room, send them in. The "float" of these units is getting too large and it must be reduced.

A SATISFIED OWNER NEVER COMPLAINS

Eight New Body Service Schools Are To Be Established By Fisher; Every Distributor And Dealer Can Send Body Men To Near-by School

THE FISHER Body Service Corporation has just completed arrangements for the establishment of eight new schools for body service work. After the first of the year, body service schools will be held in each of the ten cities shown on the map.

These new schools are the outgrowth of the two Fisher schools in Detroit and Emeryville, which have been in operation now for over six months, and have in this time

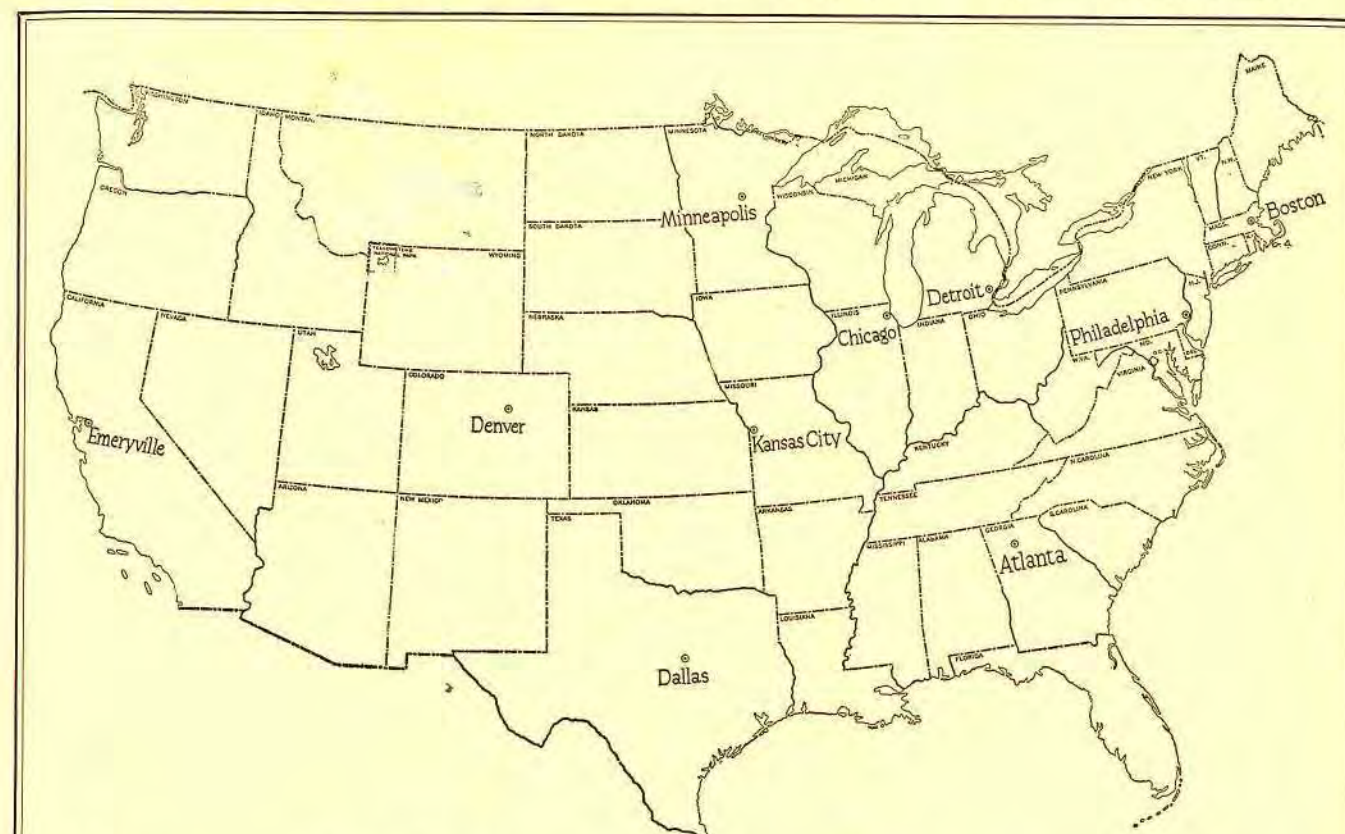
proved to be a complete success.

A large number of Cadillac-La Salle distributors and dealers have sent men to these first two schools, and these men have invariably returned with an understanding of body work that has paid good dividends to the men themselves as well as to their employers.

The establishment of these new schools will make it possible for

every distributor and dealer to send men to a school that will be reasonably close by. There will be in many cases a considerable saving of time and expense, which will make it possible for many more men to attend. Thus, distributors and dealers will be able to secure most of the body service on Cadillac and La Salle cars, and to handle it with a very satisfactory profit.

(Continued on page 8 column 3)



Atlanta
Asheville
Birmingham
Columbia
Greenville
Jacksonville
Memphis
Nashville
Raleigh
Winston-Salem

Boston
Albany
Hartford
New Haven
Norwich
Ogdenburg
Portland, Me.
Providence
Springfield
Taunton

Boston—Continued
White River Jct.
Worcester

Chicago
Davenport
Evansville
Indianapolis
Louisville
Milwaukee
Peoria
Waterloo

Dallas
Houston
Jackson
Little Rock
New Orleans
Oklahoma City
San Antonio
Shreveport

Denver
Albuquerque
Butte
El Paso

Detroit
Bay City
Buffalo
Charleston W. Va.
Cincinnati
Cleveland
Columbus
Dayton
Erie
Fort Wayne
Grand Rapids
Huntington
Lexington
Lima
Rochester
Saginaw

Detroit—Continued
Toledo
Wheeling
Youngstown

Emeryville
Los Angeles
Phoenix
Portland, Ore.
Reno
Salt Lake City
San Francisco
Seattle
Spokane

Kansas City
Des Moines
Keokuk
Omaha
St. Louis
Wichita

Minneapolis

Philadelphia
Baltimore
Brooklyn
Harrisburg
Jersey City
Johnstown
Newark
New York
Norfolk
Pittsburgh
Richmond
Roanoke
Syracuse
Utica
Washington
Wilkes-Barre
Williamsport
Wilmington

Make reservations for the Atlanta school with F. D. Akers, 494 Spring St., Atlanta; for the Boston and Philadelphia schools with T. W. Holloway, 1132 General Motors Bldg., New York; for the Chicago school with A. J. Turk, Cadillac Motor Car Co., Chicago; for the Dallas school with P. A. Noble, 4226 Prescott St., Dallas; for the Denver school with A. A. Weidman, 2951 W. 39th St., Denver; for the Detroit and Minneapolis schools with F. J. Messing, Cadillac factory; for the Emeryville school with K. S. Hardy, 464 Russ Bldg., San Francisco; for the Kansas City school with R. F. Lanham, 705 Security Bldg., Kansas City.

A SATISFIED OWNER NEVER COMPLAINS

Shock Absorber Metering Pins can be Changed to Secure More Spring Control On Rough Roads

THE SHOCK absorbers used on Cadillac 353 and La Salle 340 cars are so designed that they will give satisfactory performance under widely varying road conditions and loads. It is for this reason that the same metering pin and valve combinations can be used for all Cadillac body styles and the same combination for all La Salle body styles.

There may be some instances, however, when the owner feels that the shock absorbers do not provide sufficient control of the springs for his particular type of driving. To satisfy such owners it is possible to install metering pins which will give more control. Two special metering pin combinations are given in the accompanying chart.

To change metering pins, it is necessary to remove the top covers from the shock absorbers. Rear shock absorbers must be removed from the car to do this. When reinstalling the top cover, have the shock absorber filled with oil, use a new gasket, part number 39030-D, and make sure that an oil-tight joint is secured.

Do not attempt to operate shock absorbers with the metering pins removed. The results obtained in this way will be far from satisfactory and damage may be done to the shock absorbers.

Fleetwood Sedans

In the production of Fleetwood Sedans, special care is exercised to make a car that has riding qualities of surpassing smoothness. And, as the majority of these cars are purchased for use in town, they are designed to provide the maximum of riding comfort on paved streets.

In consequence, when one of these cars is driven over rough roads at a high rate of speed, the action of the car springs and of the seat cushions is apt to be too lively, with the result that the occupants of the rear seat may be tossed uncomfortably.

This condition can be corrected, although the corrective measures will reduce the cushion effect of the car on smooth pavement. The remedy is to dampen the action of the cushion springs with curled hair. Ten or twelve ounces of curled hair should be distributed as evenly as possible either inside or between the spring coils of each seat back cushion.

If the seat cushion also has a tendency to toss, curled hair should be used in this cushion as well, the amount being determined by trial.

It is a good plan to change the shock absorber pins at the same time that the curled hair is installed in the cushions. On 353 Fleetwoods, use number 29 bumper pins and number 17 rebound pins in the rear shock absorbers as listed under A in the chart. On 341-B Fleetwoods, use CX bumper pins with 7X rebound pins in the rear shock absorbers, and CX bumper pins with 6X rebound pins in the front shock absorbers.

Pistons Will Be Included With Orders For New Blocks

ALL cylinder blocks shipped out by the factory Parts Division hereafter will be fitted with pistons and rings. Listings in the Parts List of cylinder blocks only have accordingly been discontinued. This practice is obviously a convenience to all concerned and it is also in line with the practice followed by most other car manufacturers.

If it is desired to make use of any of the original pistons that may be in condition for further service, the pistons furnished with the new blocks should be placed in stock. If a surplus stock of pistons should accumulate as a result, this should be brought to the attention of the factory Parts Division.

Shock Absorber Metering Pins

	Cadillac			La Salle		
	Std.	A*	B*	Std.	A*	B*
Front Bumper.....	19	19	19	29	29	19
Front Rebound.....	18	18	18	31	31	18
Rear Bumper.....	14	29	19	14	29	19
Rear Rebound.....	17	17	18	30	17	18

*Combination A gives slightly more control than standard.

B gives slightly more control than A.

Metering Pin	Part Number	Metering Pin	Part No.
14.....	39314 D	19.....	39319 D
17.....	39317 D	29.....	39129 D
18.....	39318 D	30.....	39130 D
		31.....	39131 D

Charging Rate Changed To Range Of 15 To 20 Amperes

THE CLOSE range of 18 to 20 amperes for the charging rate, while suitable for test room or laboratory work with positive temperature and load control, and with accurate instruments, has been found impractical for checking the charging rate on the car. Therefore a wider range, 15 to 20 amperes, has been adopted.

Furthermore, a study of recent new car inspection reports indicates that there is some misunderstanding as to the correct way to read the charging rate.

In checking up the charging rate, the readings should be taken while the generator is cold with all the car lights turned "off" and the engine running at the speed which gives the highest charging rate, corresponding to 25 to 30 M. P. H. in high gear.

Under these conditions, the maximum charging rate as registered by the car ammeter should be not less than 15 amperes nor more than 20 amperes. However, in winter weather, if the generator is extremely cold, the maximum charging rate may be even higher than 20 amperes for a few minutes.

The charging rate when the generator is "hot" should not be considered in making this check because of the fact that it is difficult to standardize the conditions under which the "hot" readings bear a fixed relation to the cold readings.

The thermostat is only one of the factors which reduce the charging rate when the generator is hot. Even without the thermostat, the rate would be lower hot than cold, due to normal losses in the generator.

Furthermore, the length of time the engine must run before the thermostat opens and the hot charging rate becomes stabilized is extremely variable.

It is not enough to run the engine until the heat indicator on the instrument board shows that the engine is warmed up. Twenty to thirty minutes running is usually necessary to open the thermostat and 1½ to 2 hours is frequently required before the generator is warm enough to reduce the charging rate to its lowest point.

It is therefore not practical for a tester to make a dependable check on the "hot" charging rate. The check must be made cold and the hot reading will take care of itself.

To summarize—check the charging rate cold, get the maximum reading and do not report on New Car Inspection Reports unless the reading is below 15 amperes or above 20 amperes.

A SATISFIED OWNER NEVER COMPLAINS

Standard Service Contract Proves Successful Over First Period; Contract For Second Period Of Operation Made Available

THE STANDARD Cadillac Service Contract, which was first announced in the April 15 issue of the SERVICE MAN, has been in highly successful use for over seven months.

In this time thirty-three distributors have ordered out contracts and over 475 contracts have been sold to purchasers of new cars. In this time also, eighteen of the cars for which contracts were purchased have traveled over 12,000 miles and have thus completed their contracts.

The Service Contract has accordingly been put to the test of actual usage, and this experience has proven conclusively that it is an advanced method of merchandising service. The contracts that have been completed have kept the owners pleased with their cars, and have made a very satisfactory profit for the service station.

When the contract was first announced, there were a number of skeptics. Many wondered whether or not the contract would prove profitable to the service station. We now have the conclusive answer. The sale of these contracts is profitable providing the contract is properly handled. And, at the same time, the owner has secured complete and satisfactory service for his car over the entire period. He has expressed his satisfaction by buying a contract for the Second Period.

Another question was whether or not the owner would abuse the privileges of the contract and bring his car to the service station at unreasonably frequent intervals. However, the average number of calls made by those owners who have completed their contracts is fifteen, as compared with an average of eighteen calls per year for cars not operated on contract.

Maintenance Work for Tourists

The entire service organization has, on the whole, co-operated very well in rendering contract service to tourists. There have, however, been a few testers in various organizations who have not understood just what was included in the work to which the holder of a contract was entitled. Some of these testers have been willing to render only lubrication work on contract.

Every tester should be familiar with what constitutes contract work. All maintenance work is included, except the following: Gasoline, anti-freeze, tires or tire repairs, washing, storage, or work necessitated by accident, abuse or neglect. In cases where the necessary work amounts to more than \$15.00, however, the distributor who sold the contract should be consulted before going ahead with the work.

Furthermore, contract work should be performed only on presentation of a contract identification card, as illustrated on this page. This card should not be confused with the service card, which merely entitles the holder to policy service. Most of the cars that are operating on contract have a contract "sticker" on the ammeter. When cars bearing this sticker come in, ask the driver for his contract identification card.

Second Period Contract

Now that a number of cars have successfully completed the first 12,000 mile period of contract operation, a contract has been drawn up to cover the "Second Period," which will be the second 12,000 miles, counted from the mileage record which is part of the contract, or the second twelve months, counted from the date of the contract, whichever expires first.

The Second Period contract includes the same work and is subject to the same conditions as the first period. Refinishing work which is done no-charge on a policy basis during the first 12,000 miles, is not included in the contract. The prices for the second period are naturally higher than those for the first period, but they have been worked out to be just to both the owner and the service station. The price for a Cadillac car will be \$190.00, and for a La Salle car, \$160.00.

The contract identification card for the second period is reproduced on this page. This card is blue in color and has "Second Period" imprinted on it in shaded letters so that it should not be confused with the first period card or with a service card.

The contract itself is of the same design as the first period contract, but it can be immediately identified by the sub-title "Second Period" printed in red below the title on top of the contract and on the outside fold.

Further information in regard to the contract, either first or second period, will be gladly furnished by the factory Service Department.

Parts Division Will Close For Inventory December 26

THE factory Parts Division will be closed for its annual inventory from December 26 to January 2.

No parts orders will be filled or shipped during this period except emergency orders for parts which distributors are not expected to carry in stock. Shipment of freight orders reaching the factory later than December 20, or express and parcel post orders received after December 21, must be held up until after January 2.



SERVICE contract cards entitle the holder to no-charge maintenance work as explained in the article on this page. These cards should not be confused with the Service Card, which entitles the holder to Policy work only. The card for the first period is shown at the left; the card for the second period, which is blue in color, is shown at the right.

A SATISFIED OWNER NEVER COMPLAINS

Lowering And Raising Fleetwood All-Weather Phaeton Top

Lowering



Lower all windows, including the one in back of the driving compartment. Fasten the top boot in place on the two lower snap fasteners at the rear of the body.



Unfasten the top material all along the sides and at the rear quarters. Remove the knurled knobs above the windshield and fold the top deck material back as far as possible.



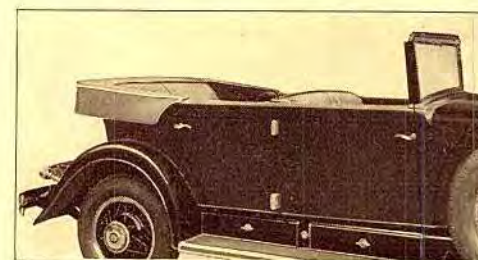
Loosen the clamps above the windshield on the inside and fold the foremost top bows back. Loosen the clamps that hold the top frame to the center post. Then fold the bows completely down. It may be necessary to "break" the bows in the rear quarter to do this. (See opposite illustration.)



See that the top deck material is kept back clear of the bows and that the roof side padding is pulled out away from the bows.



Bring the top deck material up around the back and make a few folds of it on top of the bows. Fasten straps around front and rear roof rails on each side.



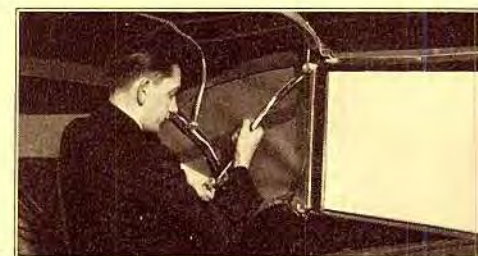
Pull the top boot up in place and secure it with the snap fasteners. Unclamp the center posts on each side of the body and swing them down out of sight in the tonneau.

Raising



Swing the center posts up and clamp them in position securely. Unsnap the top boot at the top and sides and pull it back, leaving it lay on the trunk rack, held in place by the two bottom fasteners.

Lift the top material off the bows and let it lie back in the boot. Raise the top frame up and over, straightening it into position as much as possible.



Straighten out the bows in the rear quarter. This must be done on both sides from within the car.

The top frame will then extend far enough forward so that it can be clamped to the center posts and to the inside of the windshield.



Bring the top deck up over the frame and fasten it with the thumbscrews over the windshield.



Fasten all of the clasps at the sides and rear quarters. Do not forget to take off the boot and stow it under the rear seat.

A SATISFIED OWNER NEVER COMPLAINS

New Returned Goods Notice Must Be Used

SEVERAL months ago a new Returned Goods Notice, form number 4205, was put into use, and instructions were given to scrap any supply of the old form, number 2227. There are some distributors, however, who still send in the old form.

These old forms must no longer be used. All material that is returned to the factory must hereafter be listed on form 4205. This means also that the use of the new Stock Return Orders should be discontinued in favor of the R. G. N.

In listing material on R. G. N. forms, parts taken from cars, new stock and accessories should be listed on separate sheets. Also, list parts for credit and parts for repair on separate sheets, as following this procedure will greatly speed up handling at the factory.

Parts Managers should keep in mind that the Returned Goods Notice forms are for use only in returning material direct to the Cadillac factory, and that they should *never* be used when shipping material to other manufacturers.

Prompt Return Of Replaced Ventilating Pipes Is Urged

INSTRUCTIONS have been issued to replace any right-hand crankcase ventilating pipes (part no. 85004) that have the lower end bevelled on the wrong side so that the opening faces the front instead of the rear. The replacement was announced as applying to Cadillac cars between engine numbers 501444 and 503226 and to La Salle cars between engine numbers 603255 and 605432.

Some service managers have mistaken this to mean that *all* right-hand ventilating pipes on cars between the above engine numbers are to be replaced, regardless of whether the pipe is correctly bevelled or not. The unit numbers were given to indicate the cars that should be inspected for this condition. Replacement should not be made unless the pipe is actually cut so that the opening faces toward the front instead of the rear.

Replaced pipes should be returned at once so they can be reworked and shipped out again for replacement. Any distributor who has received more new pipes than he needs to replace pipes that are incorrectly bevelled should return the surplus at once.

Tire Gauge In Air Hose Is Best For Service Stations

THE QUICKEST and most convenient method of properly inflating tires is by using a gauge in the pressure line. A gauge of this type illustrated below is now being distributed by the factory Accessories Division.

This gauge is installed in the air hose 6 or 8 inches from the end, and in such a way that the pressure scale can be easily read while the tire is being inflated. The gauge includes a valve to regulate the flow of air, so that tires can be easily inflated to the exact pressure in a moment's time.

The gauge is sturdy and durable and, unless abused, will remain accurate throughout its entire life. Its convenience will be readily appreciated in every Cadillac-La Salle service station. Orders should be sent in now. The part number is 1097501 and the net price only \$14.00.



THIS new gauge makes tire inflation quick and accurate. It will be very handy in any service station.

Simple Lubrication Will Remedy Squeaking Springs

SQUEAKS that sometimes develop in the car springs can usually be quieted without disassembling the entire spring. The number 2 leaf is the one that is most likely to be causing the noise, because the ends of this leaf receive the least protection from the spring covers. Accordingly, the first thing to do is to spread the spring leaves and lubricate the number 2 leaf with a mixture of engine oil and graphite or with some good penetrating oil.

Another good way to remedy squeaking springs is to spray them. Simply unlatch and lay back the spring cover and lubricate the spring with a penetrating lubricant. This method can be used to advantage by those distributors and dealers having spray outfits for using penetrating lubricant. It obviously effects a considerable saving of both time and labor.

First Wire Wheel Hub Caps Need Rounded-Head Screw

THE large hub caps used with the wire wheels on early Cadillac 353 and La Salle 340 cars, were intended to be locked from unscrewing by pressure of the inside of the hub cap against the screws which hold the wheel itself on the hub. This is effective provided the heads of the screws are properly rounded to permit good contact with the hub cap.

On some of the first 353 and 340 cars, however, the screws that hold the wheels on the hubs were made with the heads perfectly flat. The screws now used have the head rounded slightly (one inch radius) as originally intended.

Whenever the hub caps of an early car are removed for any reason, check the screws on all four wheels and, if any are of the old type, replace them with the new, rounded head type. The part number of the screws is 872648; all stock in the factory Parts Division is now of the late type.

Another possible cause of these hub caps loosening up may be that the threaded part of the hub cap bottoms against the hub before the hub cap itself touches the screw heads. In such cases, either replace the hub cap or take enough metal off the threaded part so that the inside of the hub cap presses firmly against the screw heads.

The foregoing applies only to hub caps on the first cars. On cars now being shipped, the hub caps are a tighter fit on the threads and will hold without pulling the cap up against the screw heads.

Hard Riding May Be Caused By Tight Spring Shackles

IT seems to have become the practice of many service men to assume that all cases of hard riding are due to the shock absorbers, forgetting that tight spring shackles will produce the same result.

In checking over new cars, with a tendency to hard riding, the spring shackle bolts should be tested and readjusted, if necessary, before blaming the shock absorbers.

Wanted And For Sale

WANTED: V-63 engine in good condition. Send full particulars to Guy Kull, Cadillac-La Salle dealer at Monroe, Michigan.

FOR SALE: V-63 phaeton body, top and windshield in good condition. Price right, F. O. B. Easton. Some chassis parts also available. Write direct to Easton Cadillac Company, Easton, Maryland.

OUR PARTS MERCHANDISING MEETINGS

Have Proved Their Worth!

Read these comments:

"No matter how well a dealer or a distributor has organized this (Parts) department of his business, he will surely profit by the application of some new suggestions revealed in these meetings. We predict an overwhelming field acceptance and wish for you abundant and continued success."

A. C. Berthold
dealer in
Aurora, Illinois.

"Parts meeting today great success stop Representatives from our entire organization and all branches present stop Very much delighted with program for nineteen thirty."

Telegram from
R. L. Montgomery
Towell Cadillac Co.
Cleveland, Ohio.

"ALTHOUGH we are only a small dealer, we consider our time well spent in attending said meeting and know that it will save and make us some money. Some one gave a lot of time and thought to the subject and we want you to know that we appreciate it."

John C. Killian
dealer in
DeKalb, Illinois.

Those who still have the opportunity should attend these meetings and learn more about—

1. Importance of balanced stock.
2. Proper selling effort.
3. Proper selling atmosphere.
4. Proper business management.

The following one-day meetings are yet to be held:

Jacksonville.....Dec. 13 Atlanta.....Dec. 16 Minneapolis.....Dec. 16 Cincinnati.....Dec. 18

New Valve Seat Reamer Set On Special Tool List

A NEW valve seat reamer set has just been added to the list of Cadillac-La Salle special tools. This one reamer set will supersede the old valve seat reamers, 109207-T and 109403-T, as it has several important advantages over the old tools.

The set includes two 45° reamers for exhaust valves, one 30° reamer for intake valves, and one 70° and one 20° narrowing reamer. There are four turning sleeves, one expansion pilot, one sharpening pilot, and a wrench for operating. The tools are all fitted in a neat steel case.

A most important feature of this equipment is the use of an expanding pilot that insures accurate centering of the cutters. The different size reamers are each mounted on individual sleeves, machined to an exact fit on the expanding pilot. The 70° and 20° cutters are for narrowing the seat to the proper width, which is $\frac{1}{16}$ for inlet and $\frac{3}{16}$ for exhaust valve seats.

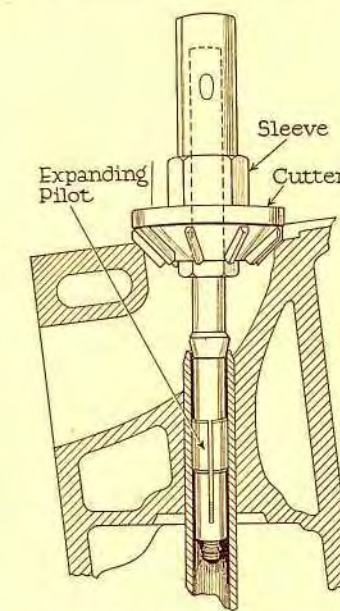
After using these reamers it is necessary to lap the valves only a very slight amount. The reamers are easily operated by following the complete instructions which are included in each set.

The valve seat reamer set is listed as tool number 109249-T with a net price of \$30.00. Orders should be sent to the Parts Division.

Body Tool Order Pads

THE Fisher Body Service Corporation has printed up a quantity of order pads for body repair tool equipment. These order pads list all of the sets of tools that are sold by Fisher.

One of these order pads has been sent to each distributor, for use in ordering tools for himself or for his dealers. The use of this form will simplify both the making out and the filling of orders for body repair tools.



ACCURACY plus rapid operation are features of the new valve reaming outfit, tool 109249-T.

New Fisher Schools

(Continued from page 3)

Distributors and dealers must support these schools from the very start. The first classes will be started on Monday, January 6, 1930, and will last for two weeks. Succeeding classes will start on the first and third Monday of each month.

The course of instruction to be offered in the new schools is exactly the same as the course now being offered at Detroit and at Emeryville. There will be competent instructors and actual shop practice on body construction, covering squeaks and rattles, metal work, trim work and other phases of body work.

Reservations must be made in advance for all classes. The table shown on page 3 lists the locations of the ten schools together with the names of those distributors who should send men to each school. Make arrangements for reservations with the men named in the chart.

It is urged that reservations for the early classes be made at once. Cadillac-La Salle has its quotas of men for these schools and the quota must be kept full. Arrange your program so that every man in your body department, as well as your dealers' body departments, can take advantage of this unusual opportunity. Pick out capable men to send and make arrangements *now* for their reservations.

The CADILLAC LA SALLE SERVICE MAN

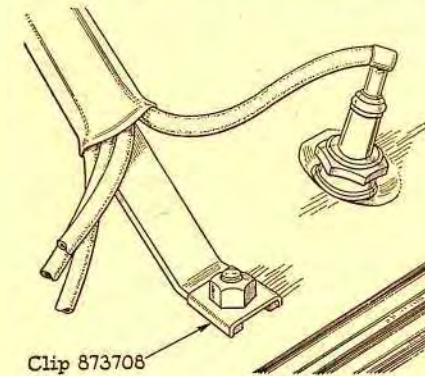
DECEMBER 15, 1929
DETROIT, MICH.

NUMBER 24
VOLUME III

Published on the first and fifteenth of each month in the interest of Cadillac Service

Clip Prevents Spreading Of Ignition Conduit Base

A MINOR improvement recently made in Cadillac 353 and La Salle 340 engines is the use of a new clip, part number 873708, under the hold-down nuts for the ignition conduit support. This clip is bent over on the ends in such a manner that it keeps the forked ends of the conduit



Clip 873708
If the stud is not long enough to show one full thread above the nut when the clip is installed, a longer stud, 873788, should be used.

support from spreading when the nuts are turned down tightly.

The use of this clip was started on Cadillac cars with chassis unit 5-5548 and on La Salle cars with chassis unit 6-7966. These clips can also be installed on cars previous to these unit numbers if trouble is experienced with spreading.

On some cars the cylinder head studs to which the conduit base is fastened will be a little too short to permit installing the clips. It will then be necessary to replace the studs with stud 873788, which is of sufficient length to permit easy installation.

Clips and studs will be sent out at regular charge and credited after installation upon receipt of a Credit Request listing the parts installed.

Complete 341-A Chassis

That is in good condition is for sale; or will purchase Sedan body (preferably Town Sedan for it). Address communications to Wilbur Dunn Cadillac Company, 135 West Cortland St., Jackson, Mich.

Method Of Stopping Grease From Seeping To Rear Axle

IN CASES where lubricant is found to leak out of the transmission through the universal joint and down through the torque tube to the rear axle, the following possible causes should be investigated in the order given:

1. The first thing to do is to make sure that the proper kind (A-200) of transmission lubricant is used, and that the lubricant comes up to the level of the filling plug and no higher.

2. Then make sure that the transmission breather hole is open. This breather comes out of the transmission case just above the hand brake lever shaft. (See SERVICE MAN of May 15, 1928.)

3. If both of these items are correct, it will be necessary to disassemble the universal joint and inspect the bushing in the ball member. This bushing must be installed with the end marked "Top Front" toward the front and with the marking uppermost.

4. It is also important to check the oil grooves in the bushing. These grooves should be 1/8-in. wide and 1/16-in. deep to properly carry the oil back.

5. Excessive wear on the bushing will also prevent proper oil return.

6. On Cadillac 353 and La Salle 340 cars, the return hole between the universal joint housing and the transmission case proper should be inspected. On the first transmissions this is a cored hole, while on the later ones the hole is drilled. Either type of hole will perform its function properly, providing it is open.

Interchangeability Of 314 Crankcase Fully Explained

THERE has been some question among Parts Managers regarding the different types of crankcases supplied for 314 cars, which are accordingly explained below.

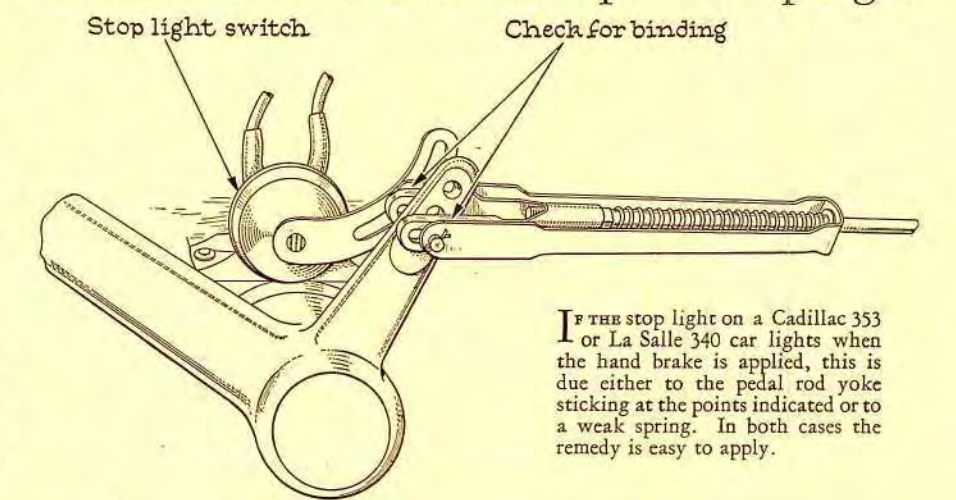
Three different types of crankcases were used in production on 314 cars. With the first type crankcase, the oil suction and header pipes to the oil pump were merely clamped in place against the inside of the crankcase; while with the second type, these oil pipes were fitted with threaded elbows so that they could be securely screwed into place. The third type crankcase (after 41000 cars) was entirely redesigned to accommodate the chain-driven water pump and generator.

In service, however, only two different types of crankcases are necessary. By using the threaded type of oil pipes and oil pump casing, the second type crankcase is interchangeable with the first type. To obviate the necessity of ordering these pipes and the casing separately, they are in all cases furnished with the crankcase.

When ordered for cars before 13000, the oil header pipe has a nozzle for lubricating the front end chains, and the entire assembly with crankcase is listed in the parts list as 42401. When ordered for cars between 13000 and 41000, a plain header pipe is furnished, as on these cars the chains are lubricated by a pipe from the chain adjusting mechanism. This crankcase assembly is listed as 42591.

The only difference, therefore, between 314 crankcases listed before and after 13,000 cars is in the oil header pipe. The crankcases themselves are interchangeable, providing the proper oil header pipe, as explained above, is used.

Hand Brake Lever Does Not Operate Stop Light



If the stop light on a Cadillac 353 or La Salle 340 car lights when the hand brake is applied, this is due either to the pedal rod yoke sticking at the points indicated or to a weak spring. In both cases the remedy is easy to apply.

The CADILLAC LA SALLE SERVICE MAN

Volume III

December 15, 1929

Number 24

The Answer to the Contest "How to Increase Service Sales"

ATLANTA scores again! Mr. L. F. Marsh, assistant Service Manager with the Cadillac Company of Atlanta, is the winner of this month's contest on "How to increase service sales." Mr. Marsh's prize-winning letter is printed in full below. It contains a number of excellent suggestions, deserving of careful consideration by all Service Managers.

Honorable mention is accorded to the following, although space does

not permit printing extracts from their letters: Frank Walthall, Dunlap-Huckabee Auto Company, Macon, Georgia; Wayne Mathews, Don Lee Inc., Los Angeles, Cal.; Oscar Haeblerle, Jonas Cadillac Company, Milwaukee, Wisconsin; and A. L. Allan, Uppercu Cadillac Corporation, Brooklyn, New York.

The most probable reason why Atlanta has been able to win two of the prizes is that their men have

stirred up enough enthusiasm to work on these contests. The winner of the next contest will also be a man who has given it some careful thought and sent in his conclusions.

"Why and how to get the customer to sign the repair order" is a subject that touches every tester's experience. Think it over, organize your experience and send in your answer. Answers should be in by January 10, so hurry!

How To Increase Service Sales

FIRST, take an inventory of your organization and facilities. Be sure your organization is composed of the right personnel to sell and produce satisfactory service and that your equipment and facilities are sufficient to properly handle an increase in sales. Sales improperly made or work unsatisfactorily done will not result in profit, nor gain regular customers.

Solicit the sales of all the service your owners require, even if you do not do all the work in your own shop. It will maintain a valuable contact with the owners, help to build up a volume of such work that will warrant you to equip for it, and reduce the opportunities of your competitors to encroach on your regular service operations.

Feature preventive service. Examine each job taken in carefully and suggest all the preventive work apparent. This will increase your sales and lessen your complaints materially. Have regular campaigns to bring to the owner's attention, by letter or otherwise, the necessity for certain preventive service such as: putting anti-freeze in the cooling system, changing lubricants for seasonable requirements, tuning motor for easy starting in cold weather, etc.

Adjust all service complaints promptly. Do not treat them with indifference and afford the owner an opportunity to criticize your service, unjustly, to other owners. Remember that one knocker can tear down as much as a dozen boosters can build up. If it is necessary to make a concession to adjust a complaint, you can often sell the owner some other work needed which will counterbalance the loss on that transaction to some extent, and will tend to weaken his resistance to continue as your regular customer.

Always quote flat rate prices on service operations. Have an understanding about the price before the work is started and avoid a misunderstanding after the work is finished, thus you will have overcome a huge obstacle toward retaining

the owner's good will and future patronage.

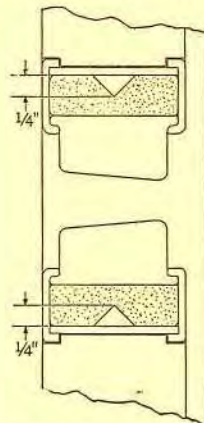
Start the new owner off right. Sell him the lubrication schedule first and impress upon him that the provisions of our Service Policy will not apply unless he follows the lubrication schedule. Endeavor to satisfy him and to convince him that you are interested in him and in the satisfactory performance of his car, and will render properly any service he may require.

The best source for an increase in sales is from the owners who are not already your service customers, or do not come in regularly. Have a follow-up system and keep it working properly. Phone your owners at least once a month if their cars have not been in your service station during that time. Always emphasize your interest in them and enumerate the advantages you can offer them through the Cadillac-La Salle Service Policy, your contact with the factory, special tools and equipment and specialized mechanics, and point out that no one else in your city can offer them these advantages.

Have the Sales Department give you the names of those owners who, it is obvious, will not purchase new cars soon, and make an effort to sell them overhaul jobs. Do not press the sales of overhaul jobs too strongly, however, unless the need is apparent to the owner. It will increase his expense of operation and may prejudice him against the car, or the cost of your service.

Cars do not require as much maintenance work as formerly, therefore, any effort to increase service sales must be directed toward increasing the volume of inexpensive service operations. This can best be accomplished by endeavoring to retain all of your present customers, selling them all of their service requirements, and making a constant effort to gain the patronage of all the other owners in your territory.

—L. F. Marsh
Atlanta, Ga.

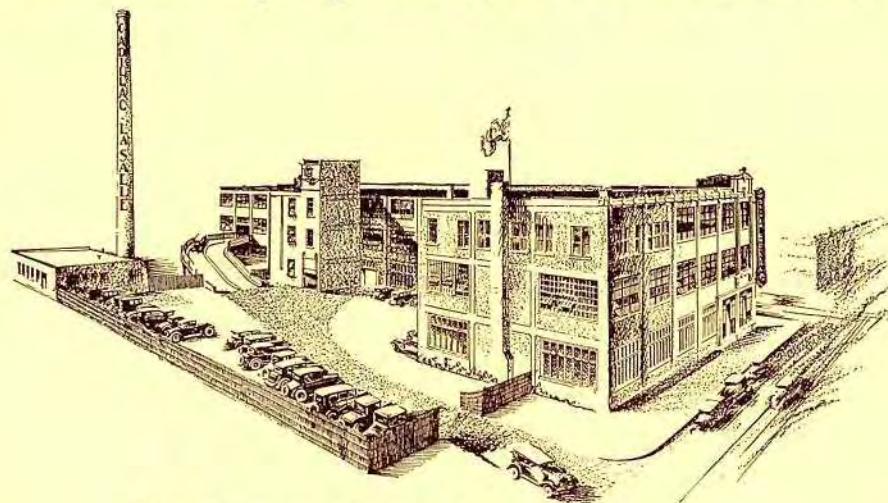
Stiffness Of Door Bumpers
On Body Easily Remedied

WHEN the doors on new Cadillac or La Salle cars must be slammed with considerable force in order to close them, this may be due to tightness of the door dovetail bumpers on the body. This can be remedied by cutting a notch in the back of both rubber pads in the bumper. Remove both rubbers and cut a 45 degree "V", 1/4 inch deep, in each and then reinstall the rubbers in their proper position. The above view shows the bumper with the plate removed.

Official Service Stations
Of Jaeger Watch Company

EACH mailing of the last issue of the SERVICE MAN included a copy of a list of Jaeger Watch Company authorized service stations. These stations will take care of any repairs to instrument board clocks, and are also authorized to handle claims in regard to warrantee service on Jaeger clocks within the 90-day period.

New Building Opened By St. Louis Distributor



THE Oliver Cadillac Company of St. Louis, Mo., recently opened a splendid new sales and service building. The above illustration was taken from a booklet which they issued at the time. It shows the rear view of the building, its spacious parking court and the double ramp which leads directly to the service department. The main service entrance for customer's use is on the other side of the building.

A SATISFIED OWNER NEVER COMPLAINS

Correct Address Essential
On Delivery Report Cards

JUDGING from some of the Delivery Report Cards that are received at the factory, there are some who do not realize that a mailing address must be both complete and accurate if the mail is to reach its destination.

Delivery report cards have been received which give the name of the owner and the city, but no street address; other cards give the name of an estate and the state, omitting the city or nearest post office. And in addition, there are often cards which have the wrong number or even the wrong street.

Service cards are returned daily to the factory, undelivered because of mistakes like the above. Consequently, a number of Cadillac and La Salle purchasers are not getting their service cards promptly and the good name of Cadillac service suffers.

This condition will immediately cease to exist if all of those responsible for sending in delivery report cards will realize that this is more than a formality, and will accordingly make sure that they have the purchaser's address complete and correct before the card is sent in.

For Sale

341-A Five-passenger Sedan body, black finish, driven about 2500 miles. Communicate direct with H. L. Binig Motor Co., Springfield, Ohio.

Flushing Tool Has Proved
Its Worth In Actual Usage

ANNOUNCEMENT was made some time ago in the SERVICE MAN of a new tool for flushing the cooling system. This tool, illustrated below, consists of a special clamp by means of which water and compressed air are forced through the cooling system by the reverse flow method, quickly and thoroughly cleaning the entire system.

Since that announcement, a number of distributors and dealers have purchased this tool and they all agree that it does an excellent job, and that



THE ENTIRE cooling system can be easily flushed by the reverse flow method, using tool 109248-T and making the connections as shown.

it has increased considerably their flushing jobs and the profits on them.

The use of this tool enables any workman to do a thorough job of cleaning the cooling system in a very short time. No special skill is required to operate it, and the only things that are needed in addition to the tool are water, compressed air and hose. Directions for operation accompany the tool.

These tools are available for immediate shipment from the Parts Division. The tool number is 109248-T and the net price is \$15.40.

Cork Packing Is Now Used
In Transmission Ball Joint

A CORK packing, part number 873543, is now used in the transmission ball joint of Cadillac 353 and La Salle 340 cars, instead of the hemp packing (877018) which was formerly used. The cork packing is more effective in preventing the lubricant from seeping out and it should be used in place of the old packing in cases of leakage or dripping.

Only the cork packing is now kept in Parts Division stock. It is supplied for use in 328 and 341-B universal joints as well as 340 and 353. Hemp packing should no longer be used for any of these models.

Two Refinements In All-Weather Phaetons

FLEETWOOD All-Weather Phaetons now being shipped embody two refinements of interest to body service men.

The first of these improvements was made to assure a completely water-tight joint between the bottom of the center post and the body. It consists of a bracket fitted with a strip of sponge rubber, fastened to the bottom of the center post. When the center post is up, the sponge



THE RAIN bracket at the bottom of the center post and the anti-rattler for the door glass are two new features of the Fleetwood All-Weather Phaeton.

rubber is compressed with sufficient tension to form a leak-proof joint.

These brackets can be installed in a short time on any All-Weather Phaeton which shows a tendency to leak at this point. They can be secured

from the Fisher Body Service Corporation under Fleetwood part number F-13870.

The other improvement is the use of anti-rattle brackets for the four door windows. These brackets, as shown in the illustration, consist of a rubber stop which can be adjusted against the window glass with varying tension by means of the knurled knob. The tension must be backed off slightly while lowering or raising the window glass; but the glass can be held snugly in any position by tightening the knob.

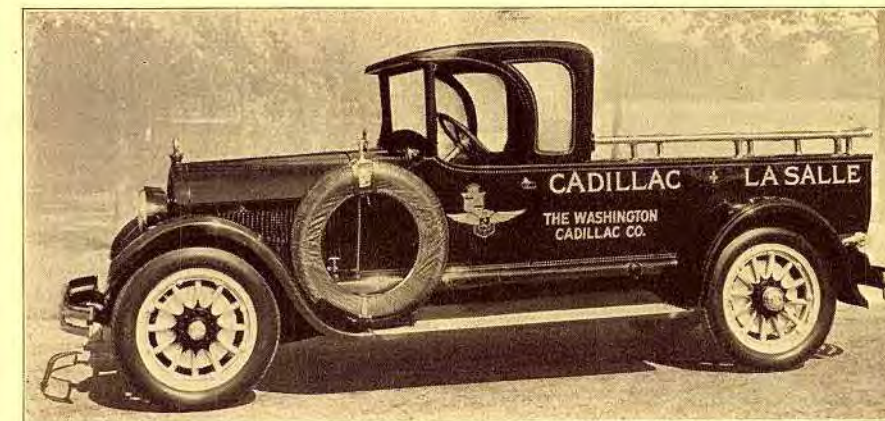
This equipment can also be installed on earlier All-Weather Phaetons, if desired. To make the installation it is necessary to remove the trim and drill and mortise the door belt bar. This work will be clear to all experienced body men. The part numbers are F-13955 for the front door anti-rattler and F-13974 for the rear.

Valance Over Gasoline Tank

THERE is a possibility on some Cadillac 353 cars of the rear spring clips clicking against the edge of the valance that covers the gasoline tank. This might occur in cases of extreme spring action, as will be encountered on rough roads.

This condition can be remedied in a moment's time by simply inserting a pry bar between the unfinished side of the valance and the frame, and bending the valance outward just enough so that the spring clip will clear it at all times. Only a very slight amount of bending will be necessary to secure this result.

Service Car Body Built In Distributor's Shop



THE neat and trim appearance of this service car is enough to justify this picture, but that is only half the story. This car body was designed, built and painted entirely in the Washington Cadillac Company's service station. The total cost, body and chassis, was only \$889.00. This demonstrates another advantage in having a complete body department.

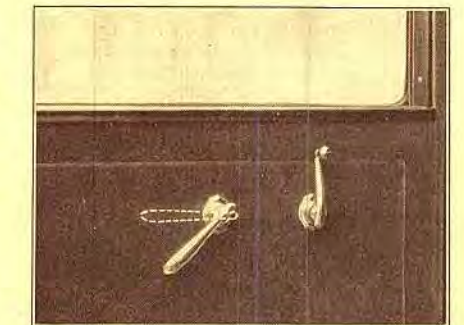
A SATISFIED OWNER NEVER COMPLAINS

Radio Hangers On Fleetwood

DIFFERENT hangers for the radio are required on Fleetwood cars with damaskeen finished hoods because the cowl on these cars is constructed and braced differently.

The proper hangers will be supplied by the Accessory Division under part number 1085049 for the right hand and number 1085050 for the left hand hanger. Distributors and dealers intending to install radios in these types of cars should be sure to specify these hangers when ordering.

New Door Handle Position



THE remote control handle for the left front door of Cadillac 353 sedans has formerly been installed at an approximate angle of 45°, as shown above. This position makes it possible for the driver to catch the cuff of his coat sleeve on the handle when making a sharp turn to the left. On this account the handles are now being assembled at the factory in a horizontal position, as indicated by the dotted line. This change can also be made in service where desired by simply loosening the flat hexagonal nut back of the handle and re-setting the handle in the proper position on the serrated shaft.

Rubber Nipple Used On Coil
Of All Radio-Equipped Cars

AS stated in the November 1 SERVICE MAN, radio-equipped cars must have special resistance units installed on the ignition coil and on the spark plugs. When this resistance unit is installed on the coil, the rubber nipple which is used on the coil connection cannot be reinstalled and it is necessary to use a larger rubber nipple which will protect both the resistance unit and the connection itself.

This new rubber nipple, part number 873661, is now included in the equipment of all radio sets sent out from the factory and is included as part of all radio installations made at the factory. These nipples are also carried in stock separately by the Parts Division, and a small supply should be secured for installation on radio-equipped cars now in service.