The Cadillac Serviceman

VOLUME XXXI No. 9 SEPTEMBER, 1957

TWO TYPES OF PISTONS USED IN 1957 PRODUCTION

At the beginning of 1957 production, high and low compression pistons with scuff bands and slightly oval shaped (cam ground) heads were used. The scuff bands may be identified by grooves located on the top and second lands of the first design piston, as shown in Fig. 1.

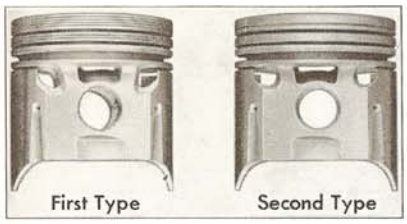

FIG. 1.

The scuff bands were for the purpose of improving heat transfer at high speeds. It was recently determined, however, that the scuff bands are not necessary, and second design pistons without scuff bands and with a round head contour, as shown in Fig. 1, are being used. Part Numbers remain the same.

If a loud, cold clicking noise under a light load is detected, check by removing the spark plug wire from the affected cylinder. If the noise stops, install the second design piston, now available from the factory Parts Warehouse, in the affected cylinder.

All pistons in engines beginning with the following engine numbers are of the new design: high compression engines in cars with Air Conditioning after Engine No. 091632, without Air Conditioning, Engine No. 091594, low compression engines in all cars after Engine No. 105277, and in all Eldorado Broughams after Engine No. 094206.

The first and second design pistons are fully interchangeable. It is advisable to use the old stock first for replacement.

REAR WHEEL BEARING "O" RING SEAL IMPROVED

To insure a controlled amount of swelling, which will lessen the possibility of rear wheel bearing seal leaks, the material specifications of the "O" ring seal have been changed. The Part Number, 1466050, remains the same.

Prior to usage, the new "O" rings can be identified by traces of a light blue dye on the outer surface of the seal. All old seals on 1957 series 60S, 62, 70, and 75 axle shaft bearings and axle shaft assemblies in dealers' stock should be replaced with the new seals before being installed in cars. Field stock of the black rubber seals (no blue dye) should be scrapped with the approval of the District Parts and Service Manager. Whenever removing the axle shaft for any reason in the field, the "O" ring should always be replaced.

To become better acquainted with the situation, Servicemen should review the article "Cause of Oil Leaks at the Rear Wheel Bearing" on Page 62 of the August "Serviceman."

REAR RADIO SPEAKER VIBRATION CORRECTION

On some 1957 cars, the rear radio speaker may vibrate while the radio is being operated. This condition can be caused during the process of closing the deck lid.

If the deck lid is closed excessively hard, a sharp rise of air pressure will be built up inside the trunk. This build up of air pressure may tear the speaker cone away from the frame on some speakers. Also, there is a possibility of the speaker spider being pulled away from the cone. In either case, a vibration would result.

When this condition occurs, it will be necessary to replace the rear radio speaker. In recent production cars, these speakers employ an improved gluing operation to guard against this possibility.

FAST IDLE CHANGES IN ROCHESTER CARBURETOR

To help eliminate possible stalling after morning starts on 1957 cars equipped with Rochester carburetors, the recommended fast idle setting has been changed from 1500 RPM to 1700 RPM, regardless of the required choke setting.

The fast idle setting for the Carter carburetor is also 1700 RPM, with the choke notch setting on the index mark as specified on Page 5, Section C of the Carter AFB Carburetor Service Information Book.

Choke Setting

On all first type 1957 Rochester carburetors, and on those second type carburetors containing code letters A, B, or C on the brass identification tag, the choke setting should be two notches rich in the summer and on the index mark during the winter. On second type Rochester carburetors identified by the letter D, the choke setting should be on the index mark all year around. All fast idle settings should be at 1700 RPM.

The reason for this revised calibration is the new choke coil, Number 14, which is being used in all second type code D Rochester carburetors. This model is found on Air Conditioned cars after Engine Number 123341, and on non-Air Conditioned cars after Engine Number 126849. On earlier cars, a Number 20 choke coil was used. The identifying number is stamped on the leaf section of the coil, as illustrated in Fig. 2.

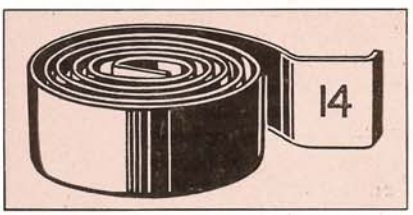

FIG. 2.

NEW LEVELING VALVE LINK NUTS USED ON BROUGHAM

A NEW nylon self-locking nut, Part No. 454750, is being used with the air suspension leveling valve link on all Eldorado Broughams as of Engine No. 109861. This nut, which has a nylon insert, eliminates any possible tendency to loosen during normal road travel as was reported on some earlier type nuts.

There are nine air suspension leveling valve link nuts on each Eldorado Brougham. On all Broughams prior to Engine No. 109861, six of the old nuts, Part No. 120367, should be replaced by the new nylon nuts.

The following replacement procedure will not affect the standing height of the Brougham. The adjusting links should not be disconnected when performing this operation:

1. Make certain that ignition is "OFF" and raise car on hoist. Be sure both front doors remain closed until car is lowered.
2. Remove lower nut and lockwasher from front leveling valve adjusting link at lower suspension arm, and install a new nylon self-locking nut, Part No. 454750.
3. Remove adjusting link retaining nut and lockwasher at front leveling valve control arm and install the new nylon self-locking nut.
4. Repeat steps 2 and 3 at each of the rear leveling valve adjusting links, replacing the existing retaining nuts with the new nylon self-locking nuts.
5. Lower car.

Only the existing flat washer should be used with the self-locking nut. Discard the original nut and lockwasher.

LONGER WIPER BLADES USED ON ELDORADO BROUGHAM

BEGINNING at Engine No. 105021, all Eldorado Brougham cars will have 15" windshield wiper blades instead of the standard 12⅞" blades. This new blade, Part No. 1470418, will provide a larger wiping pattern area. The location of the windshield wiper transmission on other series cars does not permit use of the longer blade. When wiper blade replacement is required on Eldorado Broughams built before Engine No. 105021, both blades should be replaced with the new 15" blade.

RECENT TRAINING INSTRUCTOR APPOINTMENTS

THE factory Training Center Section is happy to announce the above recent additions to their staff of Cadillac Training Center Instructors.

These men are competent and well qualified by their training and experience for their new positions.

LATEST 1957 HYDRA-MATIC REVISIONS

THERE have been some recent changes in the 1957 Cadillac Hydra-Matic transmission. While in most cases these alterations have been made to facilitate production, all the related parts are interchangeable, and present type parts in stock should be used first. These changes and effective transmission serial numbers are listed below:

1. The mainshaft pilot bushing, formerly a part of the transmission output shaft, Part No. 8617588, has been eliminated as of the following transmission unit numbers: C-103066 and CA-4735. New output shafts not containing this bushing may be used interchangeably in any earlier 1957 transmission.
2. The rear pump locating screw, Part No. 271212, has been eliminated in late production from all models. This part has been cancelled for service; and does not have to be used in reassembling any 1956 or 1957 model Hydra-Matic transmission.
3. New front and rear sprag assemblies incorporating a larger cage window for individual springs are being used. The newly designed sprag assemblies, front sprag, Part No. 8618363, effective with transmission unit number C-94635, and rear sprag, Part No. 8618372, effective with transmission unit numbers C-101805 and CB-1203, will supersede the corresponding earlier design after field stock has been used.
4. The reverse drive flange washer, Part No. 8616069, which is located on the rear unit internal gear and rear pump body, has been replaced by washer, Part No. 8618398. The new washer is of a fiber construction and is interchangeable with the previous design.
5. A new accumulator piston, Part No. 8618521, changed slightly to eliminate the hole for T.V. pressure to the center area of the piston, has replaced the original piston, Part No. 8616836. A segment of the new piston has been removed from the small diameter end to allow T.V. pressure to apply against the entire piston area. This change took place at transmission unit numbers C-105225, CA-4735, and CB-1250 and does not affect transmission operation.
6. The spacer plate, channel plate to valve body, Part No. 8618188, has been superseded by Part No. 8618189, effective with transmission unit numbers C-125449 and CA-5035. This change has been incorporated in order to obtain a smaller 2-3 orifice size for 2-3 shift improvement.

BROUGHAM NORMAL STANDING HEIGHT CAN BE VARIED

In some regions of the country, Eldorado Brougham owners may request an adjustment of the standing height of their cars to suit the particular type of roads that they travel. If absolutely necessary, the standing height may be raised or lowered a maximum of one inch without affecting the quality of the ride.

The required adjustment is made at the three leveling valve assembly adjusting links as described below:

Front Standing Height

To raise the front standing height on the Brougham ½" or 1", turn the adjusting nuts counter-clockwise, looking up at the bottom of the adjusting link rod from the floor. For an initial setting, turn the nuts approximately 25 flatsfor ½", or 50 flats for 1". Then measure the distance from the top of the left lower suspension arm to the center of the outer lower rivet on the front of the frame as illustrated in the Eldorado Brougham Service Information Book, Fig. 4-22, Page 4-24. The corresponding measurements for the revised standing heights are given in the chart, Fig. 3. Tighten the adjusting nuts securely when the desired setting is obtained.

To lower the front standing height, turn the adjusting nuts clockwise until the correct measurement, as outlined in the chart is obtained.

Rear Standing Height

When raising the rear standing height on the Brougham ½" or 1", turn the adjusting nuts counter-clockwise, looking up at the bottom of the adjusting link from the floor. For an initial setting, turn the nuts 43 flats for ½", or 86 flats for 1". Then measure the distance on both sides of the car at the top of the rear axle housing as shown on Fig. 4-23, Page 4-25 of the Eldorado Brougham Service Information Book. Refer to the chart, Fig. 3, for the revised standing height measurements.

To lower the rear standing height, turn the adjusting nuts clockwise unil the measurement selected from the chart is obtained, and tighten the nuts securely.

Whenever the standing height of the car has been altered in this manner, front wheel alignment must be readjusted to bring camber, caster and toe-in within the recommended settings.

ELDORADO BROUGHAM STANDING HEIGHT ADJUSTMENT

	Higher		Normal	Lower	
	1"	½"		1"	½"
Front	3 15/16"	3 13/16"	3 5/8"	3 5/16"	3 7/16"
Rear	5 13/16"	5 5/16"	4 13/16"	3 13/16"	4 5/16"

FIG. 3.

RADIATOR AIR DEFLECTOR TO FRONT BUMPER SEAL

There have been occasional reports from the field of the radiator air deflector to front bumper seal hanging down below the bumper on some 1957 cars.

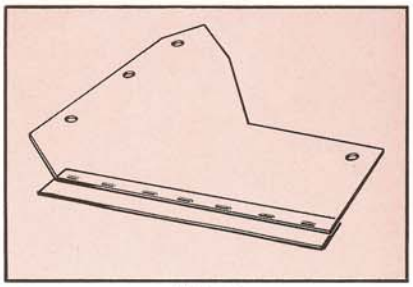

FIG. 4.

Servicemen can correct this condition by stapling a 1½" x 12 9/16" piece of acromat to the deflector seal as shown in Fig. 4. Thus, by lengthening the seal, it can be tucked up further into the bumper, preventing any possibility of its slipping down and becoming exposed.

The purpose of the radiator air deflector to bumper seal is to keep the engine cooler by assuring a better directional flow of air through the radiator. There are two of these seals, one located on either side of the outside radiator lower deflector.

RETURN LABELS FOR WARRANTY MATERIAL

Labels for the identification of packages, containing warranty material being returned to the factory for inspection, are now available from the factory Parts Warehouse and can be ordered in pads of 50 under Part No. 1098740. Use of these labels, Fig. 5, will assure direct routing of the packages to the Return Material Inspection Department at the factory.

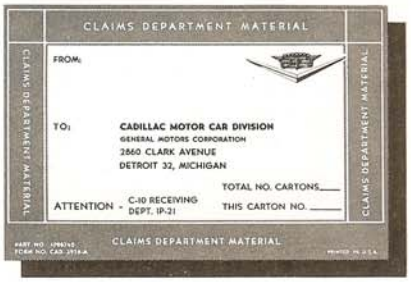

FIG. 5.

Each package should have two labels, and, if the shipment consists of more than one package, indicate this in the proper space on the labels.

NEW APPOINTMENTS TO SERVICE FIELD FORCE

With the formation of two new Cadillac Zones in New York and Pittsburgh, several field force changes have been required. Mr. R. M. Phillips, General Service Manager, announced the following appointments effective September 1:

Mr. R. W. Parsell has been appointed as New York Zone Service Manager. Mr. D. C. Borgsdorf and Mr. R. S. Rea will serve with him in the capacity of Service Representatives.

Mr. D. G. Adams has been selected for the position of Pittsburgh Zone Service Manager. Assisting Mr. Adams as Service Representatives will be Mr. J. R. Sandstrom and Mr. C. R. Furnival.

Mr. Parsell, Mr. Adams and Mr. Sandstrom are former District Parts and Service Managers at New York, Erie and Pittsburgh, respectively. Mr. Borgsdorf, Mr. Rea and Mr. Furnival have served as Training Center Instructors at Tarrytown, Detroit and Cleveland, respectively.

Mr. C. C. Wagner has been appointed as Service Representative in the Syracuse District. Mr. Wagner was Training Instructor at the Cincinnati Training Center.

CADILLAC DEALER AND DISTRIBUTOR ACTIVITIES

SERVICE MANAGERS GRADUATE

PHILADELPHIA PA.

Service Managers Graduate

Mr. J. D. Kice, Service Engineer, is shown congratulating Mr. William C. Judson and Mr. T. Richard Small at the factory upon their graduation from the Service Management Training Program of the General Motors Institute in Flint, Michigan.

Mr. Judson is Service Manager for Van Brunt Motors, Horseheads, New York, and Mr. Small is Service Manager for Standard Auto Company, Louisville, Kentucky.

Philadelphia, Pennsylvania

The Delaware Valley Parts and Service Managers Club recently held a meeting at the Training Center in Moorestown, New Jersey with 41 members in attendance.

Mr. J. C. Wittenberg, factory Parts and Accessories Manager, was the featured speaker. Mr. N. W. Metzger, District Parts and Service Manager, and Mr. F. W. Milo, Training Center Instructor, also gave interesting talks.

Mobile, Alabama

Members of the Memphis Service Managers Club met at the Battle House Hotel in Mobile recently. Guest speakers from the factory were Mr. J. C. Wittenberg, Parts and Accessories Manager, and Mr. J. T. Nekervis, Service Claims Manager.

Club activities were covered by Mr. L. E. Smith, Club President, Mr. G. L. Krause, District Parts and Service Manager, and Mr. L. B. Moore, Training Center Instructor, led product discussions.

MR. J. W. RICE RETIRES AFTER 25 YEARS SERVICE

THE retirement of Mr. J. W. Rice from his position as District Parts and Service Manager brings 25 years of loyal and devoted automotive service to a close.

J. W. RICE

Mr. Rice has been associated with Cadillac Service since 1932 when he joined the Service Department as a District Parts and Service Manager and served in the Chicago and New York Districts. In 1941, Mr. Rice was assigned to the Philadelphia District where he remained until August 1956, when he went to the Boston District where he stayed until his retirement.

Cadillac is fortunate in having enjoyed the services of a man of Mr. Rice's capabilities for these many years.

Mr. R. L. Foulke, who has an extensive Cadillac background, will succeed Mr. Rice as District Parts and Service Manager of the Boston District, effective September 1st. Mr. Foulke more recently has been the District Parts and Service Manager of the Hartford District.

Thought of the Month

The only ideas that will work for you are the ones you put to work.

—Mutual Points

AROUND THE HORN

NO.7 CHART

Don't miss this month's Round Table Chart Presentation, "Around the Horn." The topic of discussion will be the latest information about carburetor and brake conditions, vibrations and weather sealing.

* * *

Is courtesy something that can be turned on and off like a water faucet? For the answer to this and many more customer relationship questions, attend this month's Film Supplement, "A More Likeable Guy."

EVERYONE'S LOOKING FOR . . .

SEPTEMBER, 1957 . . . FILM NO.7

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