

PONTIAC



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H.M. REAR INTAKE PIPE CHANGED

NEW REAR INTAKE PIPE KIT REDUCES H.M. NOISE IN REVERSE

If an owner complains of a scraping noise heard when operating in reverse, there is a possibility that the noise originates in the Strato-Flight transmission. The noise generally is most pronounced when backing up in close quarters (garage, alley) or in a noise-free area. This is not harmful in any way to the transmission nor does it indicate damage within the transmission. It is the result of gear rotation in the rear pump under conditions when the rear pump is not supplying oil. The noise can be reduced, and may be completely eliminated, in some cases by installing a new rear pump intake pipe containing a check valve (Fig. 1). (The new Rear Pump Intake Pipe Kit is serviced under Part No. 8616978.) The check valve stops main line oil from exhausting through the rear pump when it is operated in reverse, thereby keeping oil pressure on the pump gears. The suggested straight time for installation of rear pump intake pipe is .8 hour.

PROCEDURE FOR INSTALLING SPECIAL REAR PUMP INTAKE PIPE ASSEMBLY

1. Drain fluid, remove pan, and discard gasket.
2. Remove following parts from the transmission.
 - a. Rear pump intake pipe.
 - b. "O" ring seal
 - c. Oil Screen
3. Discard the pipe and the "O" ring seal.

NOTE: If the front pump intake pipe "O" ring seal is disturbed during oil screen removal it should be replaced.

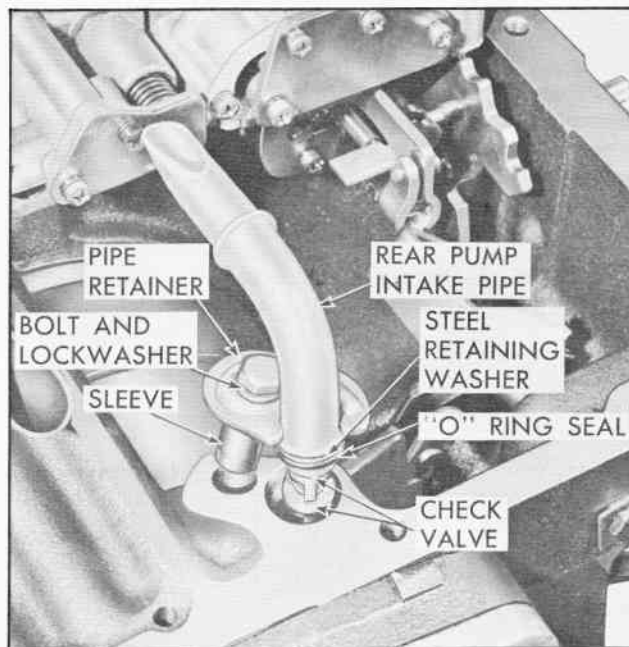


Fig. 1 Rear Pump Intake Pipe and Check Valve

4. Install bolt 1/2" into counterbored end of the sleeve. Then using bolt as driver install sleeve into canted hole adjacent to the rear pump intake hole, until the sleeve is flush with or up to 1/16" below the machined face of the case. NOTE: Canted hole is the one in which the reverse stationary cone lock key is located.
5. Remove the bolt from the sleeve.
6. Assemble the rear pump intake pipe and valve as follows:

- a. Install steel retaining washer on pump end of pipe.
 - b. Install new "O" ring seal next to retaining washer on pipe.
 - c. Install check valve into pump end of pipe.
7. Install pipe assembly into case.
 8. Install pipe retainer with the raised edge out and the open end of the retainer toward the rear of the transmission. Secure retainer with bolt and lock washer, torquing the bolt to 5-6 lbs. ft. **CAUTION:** Excessive tightening will pull sleeve out of hole.
 9. Install oil screen.
 10. Install oil pan using new gasket.
 11. Refill transmission with Hydra-Matic fluid.

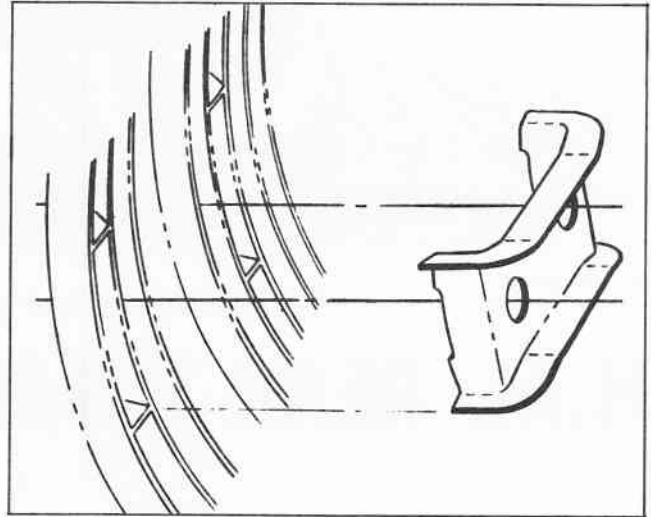


Fig. 3 View in Direction of Arrow "A", Fig. 2

INSTALLATION INSTRUCTIONS FOR 1957 FRONT LICENSE PLATE BRACKET

Installation of 1957 front license plate mounting packages is diagramed in Figures 2 and 3. No preliminary preparation is needed to install the license plate bracket because the bracket bolts and clamp fit between the grille recesses. Fig. 3 shows positioning of the clamp.

Bracket packages for past models are listed in the Pontiac Parts Catalogue under group number 7.798.

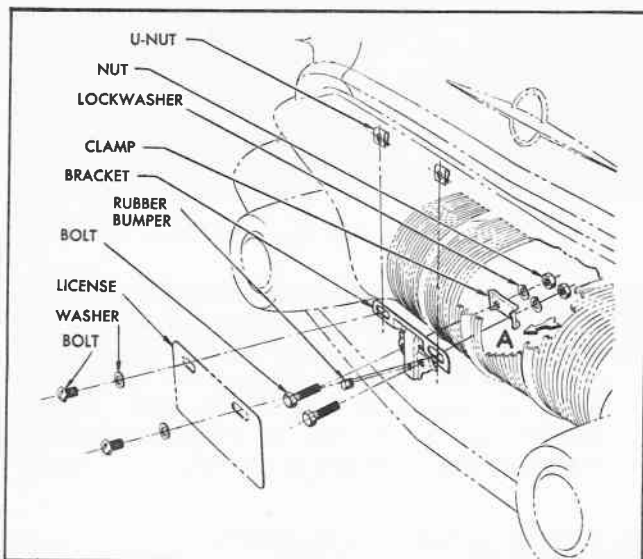


Fig. 2 Installation of 1957 Front License Plate Bracket

STRATO-FLIGHT OUTPUT SHAFT

In case of repeated failure of the speedometer driven gear on cars equipped with Strato-Flight Hydra-Matic, inspect the speedometer drive gear teeth on the output shaft. Inspection can be made through the speedometer gear hole using a mirror and a flash light. Compare the speedometer drive gear teeth on the output shaft with those on a known good shaft. If they appear sharper, (finer) than those on the known good shaft, the output shaft must be replaced. The shafts with the sharper teeth are used in transmissions built for a different manufacturer.

If there is any doubt as to whether the output shaft has the correct speedometer gear teeth, remove the propeller shaft to expose the end of the output shaft. The Pontiac output shaft has a plain end while the one with the wrong teeth has a concentric groove cut in the end.

CORRECTLY INSTALL GASKET ON BENDIX POWER BRAKE HYDRAULIC RESERVOIR

When assembling the hydraulic reservoir cover on Bendix power brake units make sure the vent passage is not covered or sealed. This passage, located in a boss next to one of the cover screw holes, vents the area between the plunger vacuum seal and the plunger hydraulic seal.

Gaskets used on some other makes of cars have an extra tab which seals this passage. If such a gasket is used on a Pontiac unit, it must be installed with the extra tab on the opposite side of the reservoir. Otherwise the vent will be ineffective and a leak at the plunger vacuum seal could cause hydraulic fluid to be drawn into the vacuum cylinder.

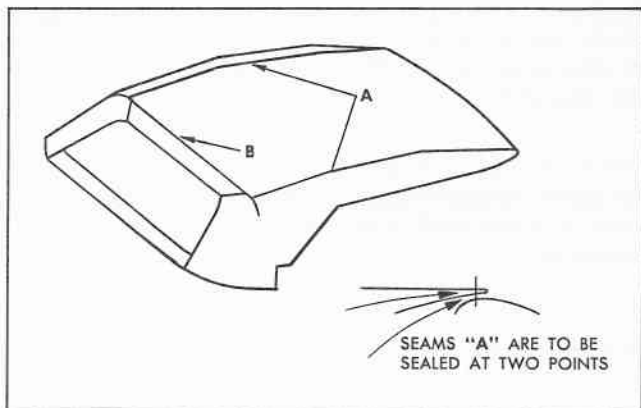


Fig. 4 Sealing Locations On Convertible Top

SEAL ALL REPLACEMENT CONVERTIBLE TOPS

In order to prevent leakage at the seams of service replacement convertible tops, it is imperative that two sealing operations be performed. Three-M Super Weatherstrip Adhesive may be used to seal seams "A" and "B" (Fig. 4) in the following manner:

1. To gain access to the seams at "A", raise the top approximately half-way. Open the seam from the underside of the top and apply 3-M Super Weatherstrip Adhesive along the entire length of the seam with a plews oiler. Note that a double bead of sealer is required to seal the seam (Fig. 4). Apply the sealer so that it will flow around the stitches and provide a proper seal. These seams must be sealed prior to installation of the top.
2. The seal at "B" can be sealed from outside by removing the wire-on binding from the rear bow and applying 3-M Super Weatherstrip Adhesive along the edge of the tucked area. This operation can be performed immediately prior to installation of the wire-on binding.

Whenever water leaks are encountered at seams "A" and "B" on any Pontiac convertible top, it is recommended that they be sealed in the above manner.

THREE SOURCES FOR H.M. REAR BEARING OIL SEALS

Three sources of rear bearing oil seals, Part No. 8612229 are utilized for servicing 1951 - 1955 Hydra-Matic transmissions. These seals differ in construction and appearance as shown in Fig. 5, but they are completely interchangeable. Be sure to lubricate rubber portions of seal with Lithium Soap Grease when it is installed.

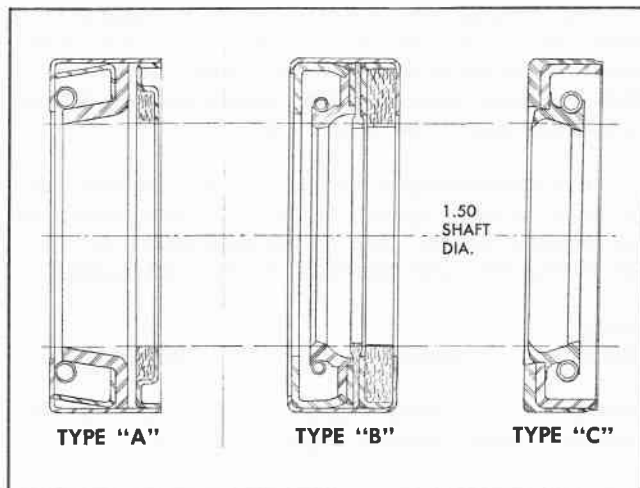


Fig. 5 Three Types of H.M. Rear Bearing Oil Seals

STRATO-FLIGHT NEUTRAL CLUTCH DRIVE PLATES—1957

The late type 1956 neutral clutch drive plates have also been released for 1957. These are the plates which have two concentric circles of lining material, one of Krafelt paper and the other of cork. The solid Krafelt plates originally released for 1956 were used on some of the early production transmissions. The only difference in performance will be a slightly smoother neutral to drive shift with the plates having the combination facings.

NEW FLAT RATE FOR DRAINING AND REFILLING FUEL TANK

A maximum suggested Flat Rate time allowance of .4 hours has been established for draining and refilling the fuel tank. This allowance is applicable only to Operation 8-1 (Fuel Tank - Replace). This maximum time allowance should be used for draining a full tank and the time should be graduated down accordingly when less than a full tank is drained. A maximum suggested time allowance of .2 hours for draining one-half of the fuel tank also has been established for Operation 8-5 (Fuel Gauge, Tank Unit-Replace). Both of these maximum allowances will be listed as combinations under their respective major operation.

DOOR TRIM PAD CHROME FOIL IS REPLACEABLE

Some dealers have been replacing the entire door or quarter panel trim when only the chrome foil section is damaged. This foil trim can be replaced on any panel and is more economical than replacing the entire trim panel.

The chrome foil trim, part number 4257677, is serviced by the yard and is 54 inches wide. When installing chrome foil trim it is only necessary to fold the edge over the trim foundation and cement to the back side of the trim panel.

The dimensions of all the trim foil sections used on 1956 models appear below. The trim should be cut slightly larger than these dimensions to allow for folding over and cementing to the trim foundation.

| Body Style | Location | Dimensions |
|------------|--------------------|------------------|
| 2837SD | Front Door Upper | 27-1/2" x 7-1/2" |
| 2837SD | Rear Quarter Upper | 35" x 8" |
| 2839SD | Front Door Upper | 20-1/2" x 6-1/2" |
| 2839SD | Rear Door | 35" x 8-1/2" |
| 2764 | Front Door Upper | 27-1/2" x 6-1/2" |
| 2764 | Rear Quarter Upper | 36" x 6-1/2" |

The use of this trim material will effect a considerable savings to the owner.

Warranty replacements must be handled accordingly.

FUEL PUMP ECCENTRIC BUSHING NOW USED

Beginning with 1957 model production a fuel pump eccentric bushing has been used in production. This bushing is positioned over the eccentric on the cam-

shaft with the flanged end toward the camshaft. Fig. 6 shows the bushing correctly installed. A clearance of approximately .010" exists between the bushing and eccentric.

The eccentric bushing has been released for service use under package number 523024. This package consists of a camshaft eccentric bushing and a camshaft eccentric.

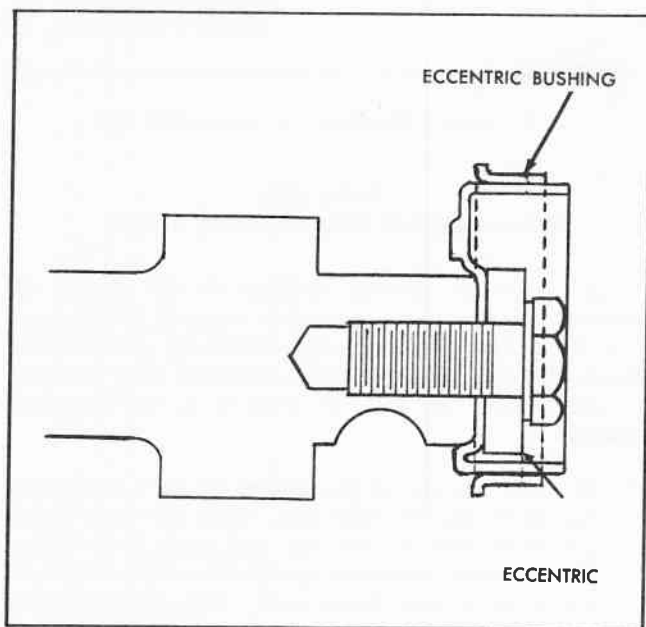


Fig. 6 1957 Fuel Pump Eccentric and Bushing

SERVICE MANAGER—IMPORTANT

This News contains important service information on Pontiac cars. Each subject should be cross-referenced in the space provided at the end of each section in the Shop Manual or its Supplement. **Be sure and cover every point with your entire organization.**

Each service man should sign in the space below after he has read and understands the information in this issue.

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