

# PONTIAC



## Service Craftsman News

No. 11 S-278

December, 1955

# 4-BARREL CARBURETOR CHANGES

### ROCHESTER 4-JET AND CARTER 4-BARREL CARBURETORS MODIFIED

To improve cold engine operation and eliminate engine stalling after a cold start, the following changes have been made in the 1956 Rochester 4GC 4-Jet Carburetor and the 1956 Carter WCFB 4-Barrel Carburetor. The Carter parts covered are master warehouse items only, the Rochester parts are zone warehouse items.

#### ROCHESTER 4-JET

The Rochester 4-Jet change consists of a new choke piston. A comparison of this new piston and the earlier type shows that the new piston has only two lands and one hole as compared to three lands and two holes found on the first type. Fig. 1 gives a comparison of the two pistons.

The new piston is released for service under part number 7009710. When installing the new piston set the choke to one notch rich as was covered in the "November News."

The choke piston can easily be installed with the carburetor on the car by disconnecting the choke linkage, removing choke valve, choke cover and baffle plate. Use care that choke valve screws do not drop down into carburetor. The suggested time allowance for the operation is .4 hrs.

All Rochester 4-Jet Carburetors using the new piston will be identified by the letter "F" embossed on the carburetor identification tag.

#### CARTER 4-BARREL

The Carter 4-Barrel change consists of a new vacuumer piston spring and a new choke piston. The new choke piston is the same piston that was used on the 1955 Carter 2268S carburetor and is available for service under part number 7008360. The vacuumer spring can be identified by its red coloring and is

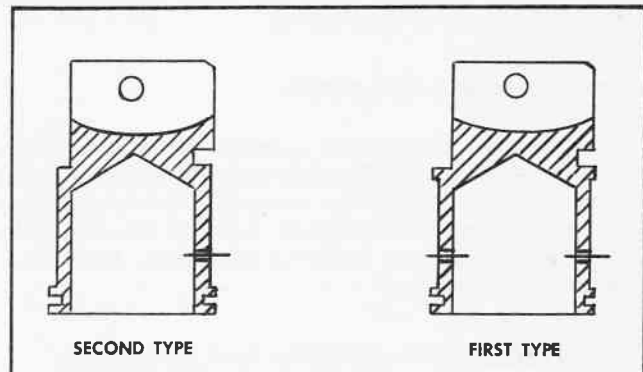


Fig. 1 Comparison of First and Second Type Rochester 4-Jet Choke Pistons

available for service under part number 7009746. All Carter carburetors built with an identification tag of M-5 or later (A-6, B-6, etc.) will contain the new type parts.

In all cases of attempted correction of poor cold engine operation or cold stalling on Carter 4-Barrel carburetors built prior to units with tag number M-5 both the choke piston and the vacuumer spring must be installed. One part alone will not correct the condition. In addition to the above changes the choke

Copies of the Delco "Auto Radio Dealers Manual" are now being distributed to all dealers. This manual discusses the various minor services which constitute 75% of the radio complaints encountered in the dealership. Handling of these as outlined in the manual will result in a minimum of lost time in the dealership and less inconvenience for the owner.

setting on all 1956 Carter 4-Barrel carburetors has been changed from center index to one notch rich.

The easiest method of completing the installation is to remove the air horn casting with the carburetor on the car. Install new spring in the carburetor bowl then with air horn on bench install new choke piston. The suggested flat rate time for this operation is 1.0 hour and includes time for a float level, metering rod, and fast idle cam clearance adjustment.

## 1956 SERVICE BRIEFS

### STRATO-FLIGHT OIL LEVEL CHECK

When checking oil level on the Strato-Flight Hydra-Matic transmission always have car located on a fairly level surface. Checking oil on an uneven surface can raise or lower oil level on the dipstick and give an erroneous reading.

### POWER STEERING LUBRICATION

In answer to questions received on the lubrication recommendations for the 1956 power steering gear, the gear is lubricated by the hydraulic fluid in the gear itself. No other lubrication is required. Use the same type fluid in the gear as recommended for the Hydra-Matic Transmission.

### USE CAUTION WHEN UNDERCOATING HOOD AREA

Inspection of parts involved in a recent product investigation revealed that a hood latch failure was caused by application of undercoating material to the hood latch mechanism. When undercoating the hood, the hood hinges and the latch mechanism should be carefully protected.

### CORRECTION OF STATION WAGON REAR END LOWER PANEL INTERFERENCE

In some cases the rear end lower panel (under tail gate) touches the rear bumper support bar on station wagons. Contact at this point contributes to carrying of road noises into the body. If the condition is found, it can be corrected by bending the edge of the panel away from the bumper bar.

### NEW ENGINE WATER DISTRIBUTING TUBE

The engine water distributing tube is now being made of stainless steel instead of brass.

### AIR CONDITIONING GENERATOR CHANGED

The 1102047 generator used on air conditioning equipped cars has been replaced by the 1102052 generator. These generators have the same specifications.

## 1955 AND 1956 AIR CONDITIONING MAINTENANCE PROCEDURE

With the increase in popularity of air conditioning and the anticipated new sales because of our competitive price position, it is important that Pontiac protect the fine reputation that we have established in making a dependable and low cost maintenance air conditioning system.

To assure the maximum efficiency and satisfactory operation that is built into this accessory, the following suggested service covering a recommended testing procedure should be sold periodically to owners as maintenance.

Suggested straight time allowance of 2.0 hours is recommended for performing this service. If it is necessary to correct leaks, add oil or Freon or, make extensive repairs, additional time allowances should be made.

1. Clean out front of condenser to remove all obstructions, such as leaves, bugs, dirt, etc. Be sure that the space between the condenser and radiator is also free of this material.
2. Remove air filter. Clean filter in water using a detergent, and blow dry with air. Coat both sides of filter with Filterkote "S" Part No. 984920.
3. Check to ensure that the evaporator drain is open and flush evaporator clean with water.
4. A. 1955 model - check and adjust the air valve control cable and the air recirculation valve control cable.  
B. 1956 model - check and adjust the air valve control cable and the thermostat control cable.
5. Check compressor for sufficient oil.
6. Inspect compressor drive belt for excessive wear or looseness. If necessary adjust belt tension to 53-57 lb. ft. If a new belt is required torque the new belt to 60 lb. ft.
7. Check to see that the air distributor hoses are connected.
8. Check electrical circuit for proper operation of master switch and relay, compressor clutch and blower motor.
9. Adjust engine idle RPM in Neutral with air conditioning "OFF".
10. Perform operational test. Adjust as outlined in the air conditioning shop manual.



Fig. 2 Rocker Arm Stud Remover J-6392

### ROCKER ARM STUD REMOVER NOW AVAILABLE FOR SERVICE

To aid in removing rocker arm studs when replacement is needed tool J-6392, Rocker Arm Stud Remover (Fig. 2), has been made available through Kent-Moore Organization. The tool is applicable to 1955 and 1956 models and is especially valuable for removing broken rocker arm studs which defy ordinary methods of removal. Following are complete instructions for the use of this tool:

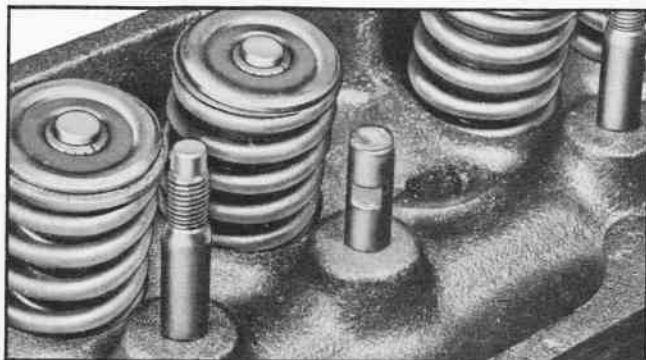


Fig. 3 Stud Filed for Removal

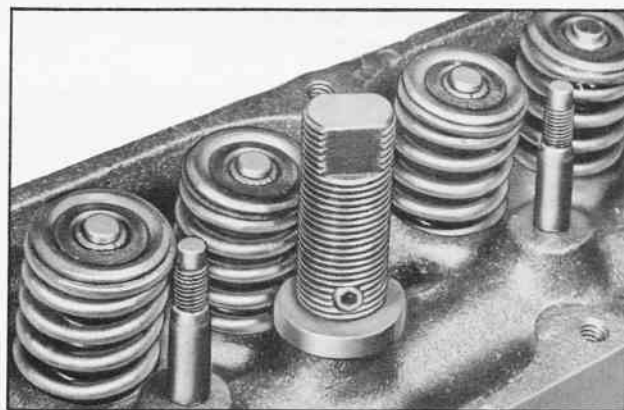


Fig. 4 J-6392-1 Installed Over Stud

1. Remove cylinder head (head must be removed to allow gauging on installation of new stud and also makes stud removal easier).
2. File two slots on opposite sides of stud as shown in Fig. 3. Slots should be high enough to allow the engagement of allen screws in J-6392-1 when it is installed on stud over washer J-6392-3.
3. Install J-6392-3 washer over stud.
4. Install J-6392-1 over stud aligning allen screws with slots and tighten screws securely with 5/32" allen wrench. (See Fig. 4).
5. Install spacer J-6392-2 over J-6392-1 so that it bears on washer J-6392-3. Then install 7/8"-14 standard nut. (See Fig. 5).
6. Turn nut until stud is completely free of cylinder head.
7. Install new stud using procedure in 1955 Pontiac Shop Manual.
8. Replace cylinder head.

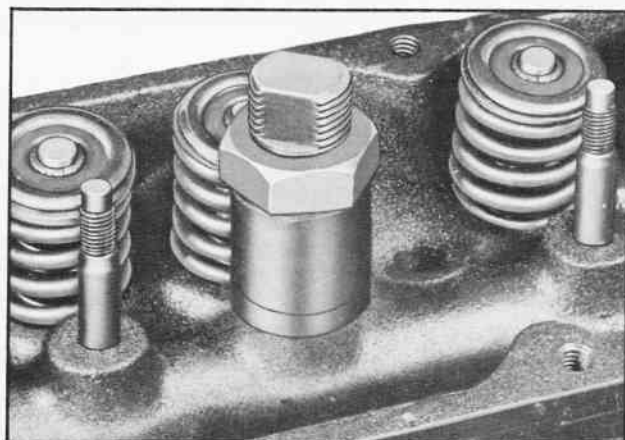


Fig. 5 J-6392 Installed for Stud Removal

### ADDITIONAL INFORMATION ON NEW GLOSS FINISH

News Flash 55-29 dated October 17, 1955 announced the new type gloss finish to be used on Custom 2 and 4-door Catalina models built at the Pontiac Plant only. Following is service information on this new type finish identified by DuPont as 882-886 lines. This information has been published by the E.I. DuPont Company.

#### IDENTIFICATION

Pontiac Color Symbol	Stock No.	Code No.	Name
S	2284	882-59891	Sandalwood Tan Metallic
T	2283	886-59892	Sun Beige

#### CAUTION:

"DUCO" LACQUER CANNOT BE USED FOR TOUCH UP AND/OR REPAIRS OF CARS FINISHED WITH 882 OR 886 LINES OF LACQUER OR SERIOUS FAILURES WILL RESULT. 882 OR 886 LINES OF LACQUER CANNOT BE USED FOR TOUCH-UP AND/OR REPAIR OF CARS FINISHED IN "DUCO" LACQUER OR SERIOUS FAILURES WILL RESULT.

#### REFINISHING INSTRUCTIONS

1. Before any sanding is done, wipe surface with a clean cloth soaked with T-3812 DULUX Enamel Reducer to remove all traces of wax, polish, and grease. Wipe dry with a clean, dry cloth.
2. Cut down the edges of broken spots with coarse sandpaper. If large areas are to be stripped, use "Klean Strip," "Stripeeze," etc. Feather edges with 400 paper. Sand any rusty metal or new panels with a metal conditioner such as "Metal-prep," "Deoxidine," etc. Wash with water and dry thoroughly.
3. Spray bare and feathered areas with 233-82381 Primer-Surfacer #90 reduced 2 parts 233-82381 Primer-Surfacer #90 with 1 part 3745 Undercoat Thinner. Apply two or more medium coats rather than heavy wet coats. Permit each coat to flash (become dull) before applying succeeding coats. Allow final coat to dry at least thirty minutes before sanding. Best results will be obtained by sanding with 360 paper and water. If dry sanding is preferred, use 400 paper. If any imperfections still show, knife out with PX Putty and allow to dry one to two hours. Sand same as Primer-Surfacer. Seal sanded PX Putty with one medium coat 233-82381 Primer-Surfacer #90, reduced as above and dry 30 minutes before sanding to smoothness.

4. In spot repair, rub around patches with DUCO Rubbing Compound to remove overspray and scratches in old finish. Wipe clean with cloth dampened with T-3812 DULUX Enamel Reducer.
5. Dust off surface to be finished and tack wipe.
6. Spray three or four wet double coats of 882 Line or 886 Line Lacquers reduced 1 part of 882 line or 886 line lacquers with 1 1/2 parts 3619 Topcoat Thinner. Allow each coat to flash before applying succeeding coats. In spot repair extend each color coat a little beyond previous coat so as to blend into surrounding finish. Spray 3635 Mist Coat Thinner to improve leveling and gloss.
7. Allow to air dry at least four hours, preferably overnight; or force dry with infrared or oven to heat the finished area at least 10 minutes at 180 Deg. F. Then process the area by hand rubbing with DUCO Rubbing Compound No. 2 or by Machine Rubbing with DUCO Lacquer Machine Polishing Compound No. 14. In spot repair be careful not to compound too far out--stay within the area of the fresh color coat. Polish the entire area with DuPont No. 7 Polish or dry buff with "Amcor" Disc No. 5 or lamb's wool bonnet.

NOTE: 882 Line or 886 Line Lacquer may lose original brilliance due to shrinkage caused by loss of solvent after buffing. This shrinkage is reduced by increasing the dry or force dry time before buffing. Re-buffing after shrinkage is complete (2 weeks or longer) will permanently restore brilliance. Allow at least 2 months for lacquer to harden before applying wax or silicone polish.

#### CORRECTION TO NOVEMBER SERVICE CRAFTSMAN NEWS

On page 158 of the November Service Craftsman News it was stated that wheel discs were standard equipment on all deluxe station wagons. This is incorrect. Wheel discs are standard only on the Safari Station Wagon. Please correct your "News" accordingly.

#### REAR SPRING AND BUSHING ASSEMBLY

The chart shown in Fig. 6, can be used as a guide in checking model application of production and service rear spring and bushing assemblies on 1955 and 1956 models.

It will be noted that only the left hand production spring is serviced. The left hand spring has the higher load rating and is used on both sides for service. Refer to the Master Parts Catalog for complete parts information.

Body Style	1955 Production Color**	Service Part Number*	1956 Production Color**	Service Part Number*
<b>27 Models</b>				
Two-Door Catalina	RH Dark Green LH Yellow	519874	Dark Green Yellow	522593
Four-Door Catalina	RH LH		Yellow Light Green	522594
Sedans, Except Taxi & Police Cars	RH Yellow LH Light Green	519875	Yellow Light Green	522594
Taxi, Police, Safari Station Wagon, Special Order Export Catalina & Sedan	RH Aluminum LH Bright Red	519876	Aluminum Bright Red	522595
Special & Deluxe Station Wagon & Heavy Duty Chassis	RH Brown LH White	521836	Brown White	521836
<b>28 Models</b>				
Two-Door Catalina	RH Amber LH Light Blue	519879	Amber Light Blue	522617
Four-Door Catalina	RH LH		Amber Light Blue	522617
Convertible & Four-Door Sedan	RH Light Blue LH Purple	519880	Light Blue Purple	522618
Heavy Duty Chassis	RH Coral LH Maroon	521835	Coral Maroon	522619

\* Refer to Master Parts Catalog for Parts Information

\*\* Paint daub located on rear eye of spring - if covered with chassis black paint, wipe with gasoline soaked rag to uncover.

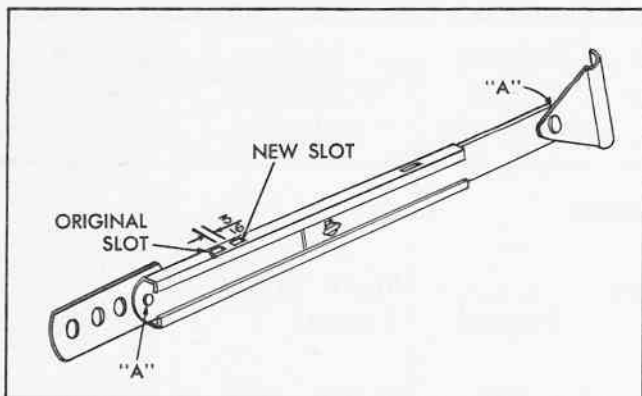


Fig. 7 Right Lift Gate Support - 1955 Safari Shown

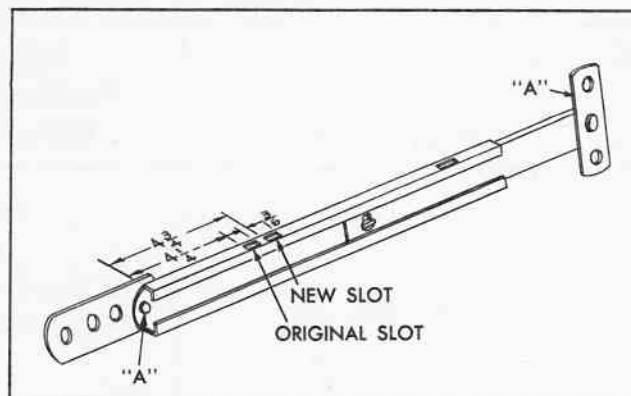


Fig. 8 Location of Slots on First and Second Type Lift Gate Support

### CORRECTION OF RATTLES IN LIFT GATE SUPPORTS AND/OR HINGES IN OPEN HORIZONTAL POSITION 1955 AND 1956 MODELS

If rattles in the lift gate supports and/or hinges are encountered when a station wagon is driven with the lift gate in the open (horizontal) position, the supports may be reworked on all models, and/or the lift gate hinges replaced with revised hinges on all models except Safari, to eliminate excessive movement of the lift gate as follows:

#### 1955 STYLES

1. On all models except the Safari replace present lift gate hinge assemblies with revised lift gate hinge assemblies having shoulder bushings and spring supports. (Part No. 4649346-7)
2. Remove right lift gate support on all models.
3. At a distance  $3/16$ " above the original slot in the support used for locking the lift gate in the open (horizontal) position, make an additional slot of the same size. See Fig. 7. The use of this new slot in the right lift gate support when locking the lift gate in the horizontal position will eliminate any looseness between the inner and outer channels of the supports. Slot can be made as follows:
  - a. At required location on outer channel, drill pilot hole and file support to obtain required slot size.
  - b. Clean off metal particles which result from drilling and filing operations.
  - c. Re-lubricate channel as required.
4. Peen the support rivets "A" to remove excess play between the support channels and their attaching brackets.
5. Reinstall right lift gate support.

6. Remove left lift gate support, peen around the support rivets and reinstall support.
7. Notify owner to use the new locking slot when driving the car with the lift gate in the open (horizontal) position.
8. The lift gate is not designed to be set in the full open position when car is being driven.

#### 1956 STYLES

1. Check the lift gate hinges on all models except the Safari to determine whether they are the latest type. The latest type hinge has the shoulder bushing and spring supports which contact the male hinge arm to restrict side movement of the arm.
2. If lift gate hinges are not latest type, replace them with revised lift gate hinge assemblies having shoulder bushings and spring supports (Part No. 4649346-7).
3. Check the right lift gate support on all models to determine whether it is the latest type. The latest type support has the horizontal position locking slot located  $4-3/4$ " from the lift gate end of the channel. On the first type support the horizontal position locking slot is located  $4-1/4$ " from lift gate end of channel. See Fig. 8.
4. If lift gate support is not the latest type, rework supports as described previously for 1955 styles in steps 2 through 8.

### STATION WAGON DRIP MOULDING PAINT REPAIR

Several reports have been received regarding paint failure at the joint between the roof drip moulding and the upper rear quarter panel on station wagon models. Following is a suggested repair procedure for this condition:

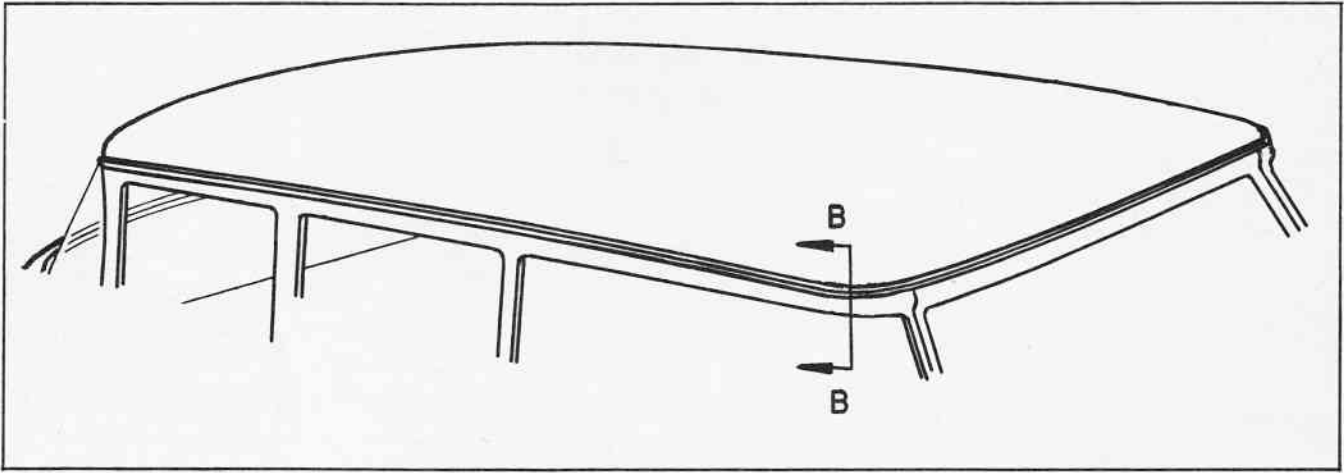


Fig. 9 Station Wagon Drip Moulding Area

1. Remove paint and rust thoroughly to bright metal finish.
2. Apply thin coat of neoprene weatherstrip cement at point "A" (Fig. 9).
3. Dry to hard surface (approximately 3 hours).
4. Repaint and refinish.
5. Check joint at point "C" (Fig. 10) and reseal if necessary.

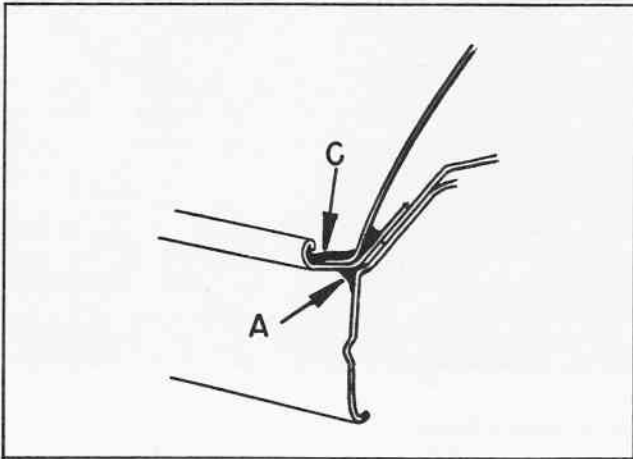


Fig. 10 Cross-Section at "B"-"B" Figure 9

### WINTER SEASON BRINGS GREATER NEED FOR CAR OF BRIGHT METAL

Many areas of the country are now using highway ice melting materials that are detrimental to stainless steel and chrome plated parts. Because of this it is extremely important that all new cars be washed immediately upon their delivery to the dealership to prevent corrosive damage to the chrome.

Owners should be advised that frequent washing will aid in keeping bright metal free from damaging materials. The use of Pontiac Chrome Protector Kit, part number 988718, will offer protection for chrome plated parts.

### CORRECTIONS TO OCTOBER SERVICE CRAFTSMAN NEWS

On page 153 of the October News under the heading "UNDERHOOD LAMP" it is stated that the underhood lamp is so wired that it will operate only when the headlamp switch is on. This is incorrect. The underhood lamp operates at any time the hood is raised regardless of headlamp switch position.

Page 116 of the October News states that a new rear clutch drum and annular piston are used in the D-56 Hydra-Matic to accommodate the increased number of clutch plates. Actually only a new rear clutch annular piston is used, the rear drum is the same as that used in 1955.

Please correct your "Craftsman News" accordingly.

### HYDRA-MATIC OPERATING INSTRUCTIONS REVISED

The following paragraph has been inserted in the second printing of the 1956 Owner's Guide under "Operation in Drive Range" on both the Strato-Flight and the Dual Range Hydra-Matic.

"The right hand arrow position in DR range is also recommended when starting out with a hot engine after parking or idling for an extended period during extremely hot weather. Under these conditions the transmission assists in eliminating vapor in the fuel system. After a short distance of operation the control lever can be placed in the left hand arrow position if desired."

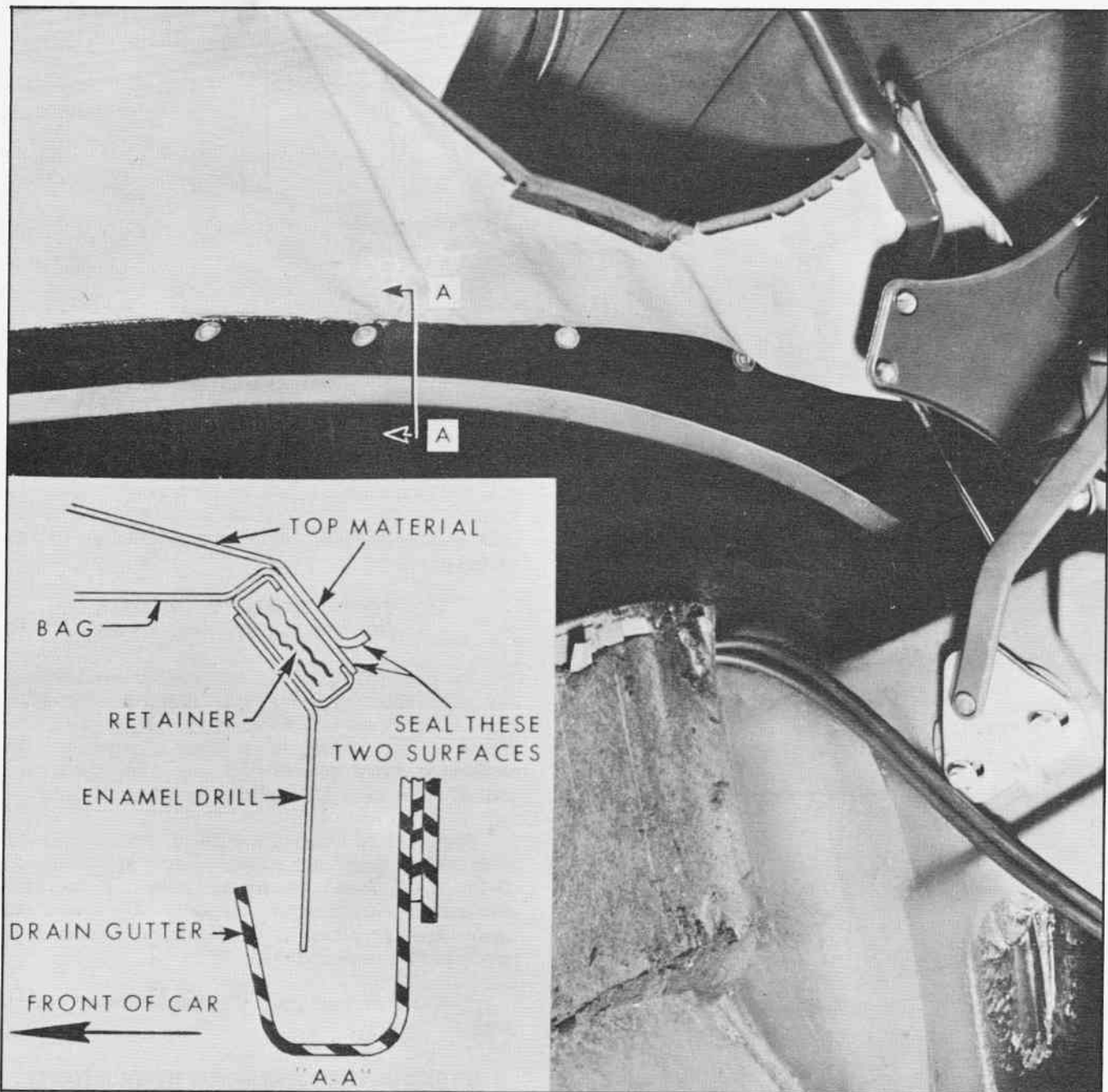


Fig. 11 Convertible Top Water Wicking Repair

### CORRECTION OF WATER WICKING AND STAINING 1955 CONVERTIBLE TOPS

If water wicking is encountered at the folding-top compartment bag or at the inner surface of the folding top material along the back and/or rear quarter belt lines, the edges of the bag and top material should be sealed along the rear trim stick.

If waterleaks are encountered because of water bypassing the folding top compartment drain gutter, a piece of enamel drill should be cemented to the trim

stick retainer to deflect the water into the drain gutter.

Following is the corrective procedure:

1. Remove rear seat cushion and back, and remove folding top compartment side trim assemblies (arm rests).
2. Detach folding top compartment bag from rear seat back panel to gain access to trim stick retainer attaching screws.



3. Remove trim stick retainer attaching screws and raise bottom section of top from body.
  4. If there is wicking of top material or bag, seal trimmed edges of material with an approved convertible top sealer as shown in Fig. 11. The inside surface of the top material should be waterproofed along entire length of trimmed edge. Be sure that edges of stay pad along retainer are thoroughly sealed.
- NOTE: If there is tape on trim sticks and there is wicking of material, tape should be trimmed so that edge of material is accessible. It is not necessary to re-apply this tape after above sealing operation is performed.
5. a. If water overshoots gutter below bottom edge of folding top, cement cotton side of a piece of enamel drill to inside (metal) surface of retainers with an approved weatherstrip cement. The top edge of enamel drill should not extend above top edge of retainers and should be of sufficient width to extend into gutter for entire length of gutter. (See step "c" and see Fig. 11.)
    - b. Punch holes in enamel drill at screw locations and install trim stick retainer attaching screws securely.
    - c. Trim enamel drill along bottom edge so that drill will extend about half-way into gutter and does not obstruct drain holes at forward ends of the gutter.
  6. Reinstall previously removed parts.

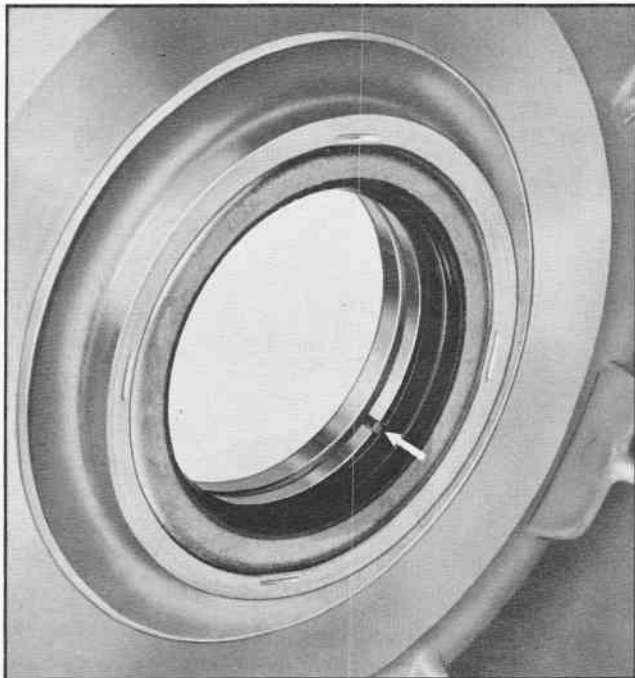


Fig. 12 Over Staked Flywheel Housing Bushing

### STRATO-FLIGHT FLYWHEEL HOUSING BUSHING MAY BE OVERSTAKED

Some cases have been found where the Flywheel Housing Bushing on the Strato-Flight Transmission has been overstaked causing grooves as shown in Fig. 12. The grooves run between the four normal staking marks and the circular lubrication channel.

These grooves may be the cause of torus drain back or front seal leak. If disassembly for one of the above conditions or any other condition is necessary, the Flywheel Housing Bushing should be inspected for these grooves. In all cases where the grooves are present the Flywheel Housing Assembly should be replaced.

This condition has been corrected in production.

### CORRECTION OF DASH PANEL THUMP ON STRATO-FLIGHT EQUIPPED CARS

Investigation of a reported thump on the dash panel of Strato-Flight equipped models shows that the condition is caused by interference between the transmission oil level dip stick tube and the tooling tab of the dash panel at the weld joint of the dash panel and floor pan. The correction of the condition is to bend the tooling tab away from the dip stick tube.

The thump condition occurs only when there is movement of the engine such as when starting or during rapid acceleration and a visual inspection with the engine not running may show what appears to be adequate clearance, however, in all instances bend tab away from tube.

This condition is being corrected in production.

### REPLACE OIL COOLER WHEN HYDRA-MATIC OIL CONTAMINATION IS ENCOUNTERED

Analysis of product information reports on 1956 Hydra-Matic transmission malfunctions shows that many of these malfunctions are either caused by or indicated by metal particles or other foreign material present in the transmission oil.

In the event that oil contamination is observed when the transmission is open for inspection or adjustments, it should be a standard practice to install a new transmission oil cooler. The internal construction of the oil cooler is such that it cannot be flushed or cleaned out in any manner. Excessive loading of the cooler can prevent its functioning properly and also can be a source of further oil contamination. This applies to both the Strato-Flight Hydra-Matic and the Dual Range Hydra-Matic equipped with an oil cooler for heavy duty service.

In addition to replacing the oil cooler, whenever the above conditions are encountered, the transmission itself and all cooler oil pipes etc, should be thoroughly cleaned before reinstalling. If the oil screen cannot be cleaned satisfactorily, it should also be replaced.

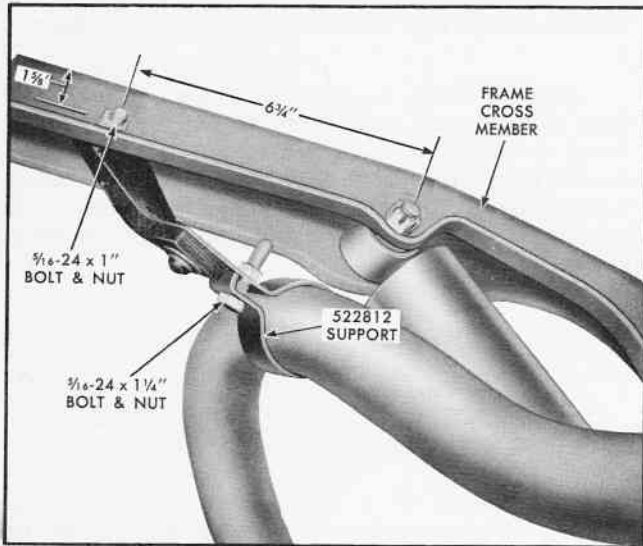


Fig. 13 Left Hand Front Tail Pipe Support Installed

### NEW LEFT HAND TAIL PIPE SUPPORT NOW AVAILABLE FOR SERVICE

Due to the Product Information Reports received on tail pipe rattle on dual exhaust equipped cars a front tail pipe support assembly is now in production and is available for service under part number 522812 as a master warehouse item.

The tail pipe support should be installed, as shown in Fig. 13, on any cars which have an objectionable rattle. It is necessary to drill one hole as located in Fig. 13 using an 11/32" drill.

The suggested time allowance for this operation is .5 hours.

### SERVICE PROCEDURE FOR FRONT SPRAG FAILURE CORRECTION AND NEUTRAL CLUTCH REBUILD

#### FRONT SPRAG

In the event of a front sprag failure it is recommended that in all cases the following parts should be replaced:

Front Pump	Front Sprag Inner Race
Front Sprag Assembly	Front Unit Driven Torus Member Assembly

Inspect all other adjacent parts such as overrun clutch plate, washer, etc., and replace where needed.

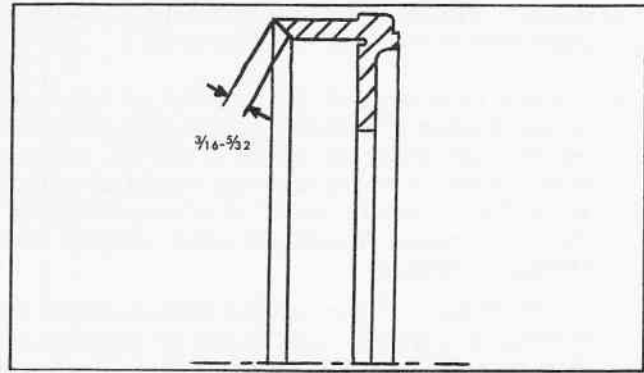


Fig. 14 Neutral Clutch Drum Chamfer

#### NEUTRAL CLUTCH

In the event the neutral clutch is disassembled for any reason it is recommended that the following be done:

On transmissions below serial number P-15234 neutral clutch drum must be checked as follows:

The drum must have a 5/32" - 3/16" width chamfer measured across chamfered surface on the inside leading edge (Fig. 14). If chamfer is less than 5/32", the drum should be replaced.

Undamaged neutral clutch drive plates can be re-used and durability increased by slotting. Cut four radial, equally spaced, sharp-edged grooves on each side of the cork facings on the Neutral clutch drive plates. These grooves must be 1/8" to 5/32" wide and

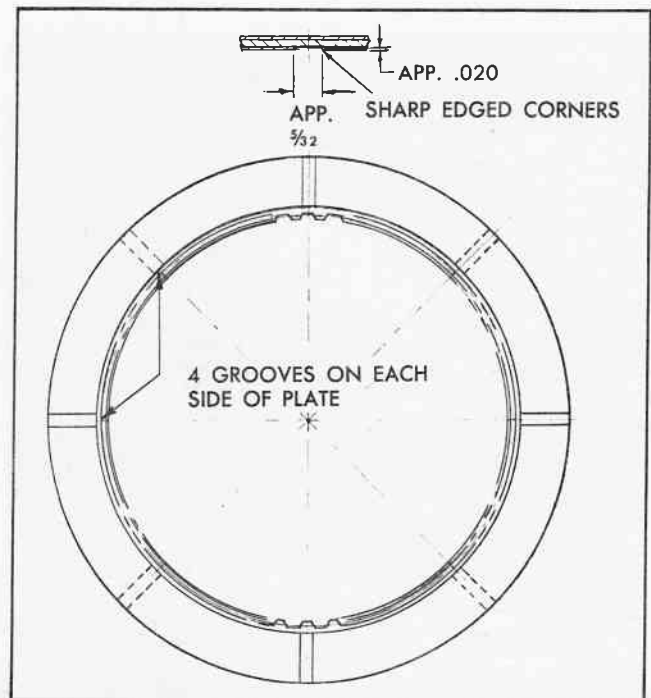


Fig. 15 Location of Grooves in Neutral Clutch Drive Plates

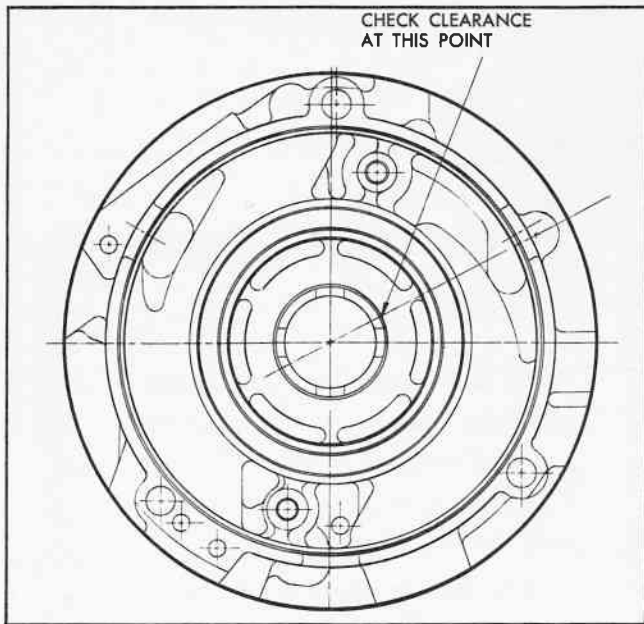


Fig. 16 Point of Clearance Check - Front Pump Bushing and Torus Shaft

have a depth of approximately .020. Note that grooves on one face are spaced between grooves on other face (Fig. 15). Use a square-cornered (mill) file to perform this modification. Any new plates in stock if not slotted must be slotted before use.

Inspect all adjacent parts on an individual basis and replace where needed.

#### FRONT PUMP

Anytime the front pump is removed for any reason the clearance between the front pump bushing and the front unit driven torus shaft should be checked using the following procedure:

The clearance between front unit driven torus shaft and front pump bushing must not exceed .003" using a 1/2" feeler gauge at point shown in Fig. 16. The measurement must be taken at the point shown since this is the point of greatest thrust. If a .004"

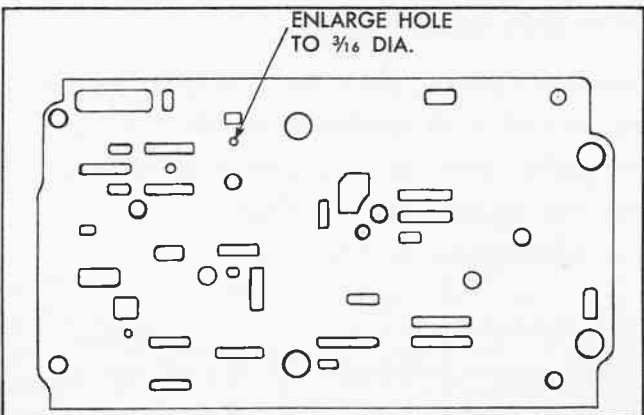


Fig. 17 Spacer Plate Modification

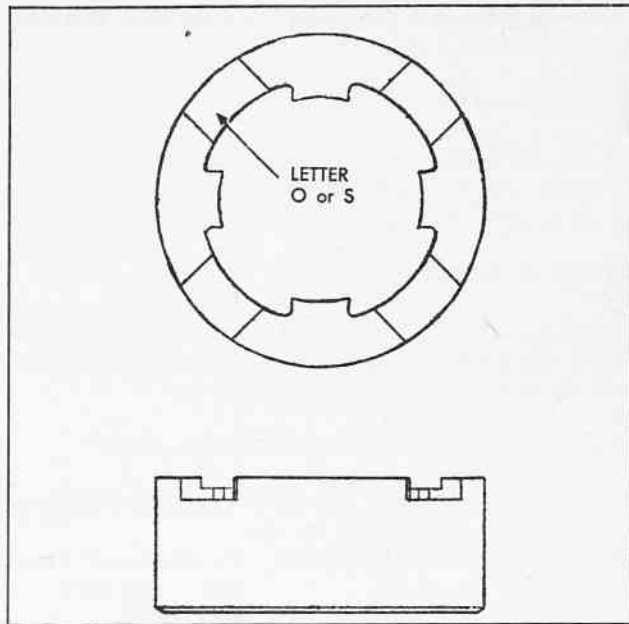


Fig. 18 Front Sprag Inner Race Identification

gauge can be inserted between the front unit driven torus shaft and the front pump bushing, the front pump and front unit driven torus member should be replaced.

If the inner race is not of the late type, which can be identified by an "O" or "S" in the recess of the tang end, it should be replaced (see Fig. 18).

All front pump assemblies replaced for any reason should be carefully packed and returned to Pontiac

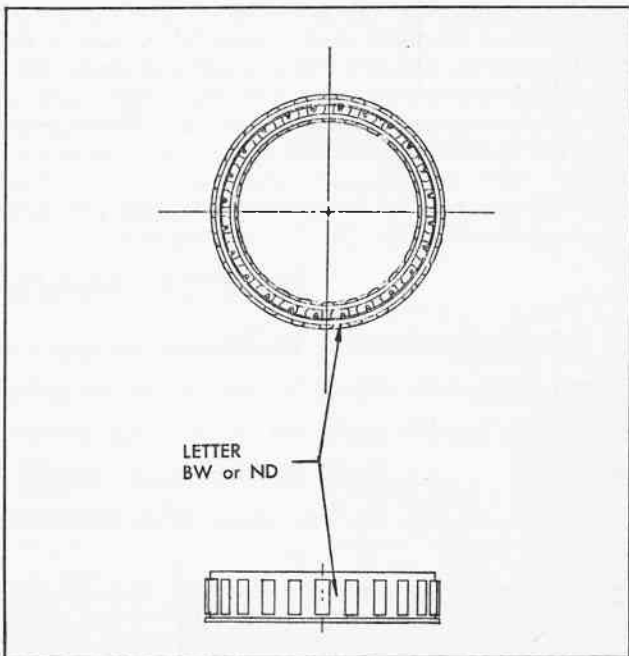


Fig. 19 Front Sprag Identification

Motor Division, Pontiac, Michigan, Attention: Warranty Material Inspector.

**CONTROL VALVE**

Anytime the control valve assembly is removed from the transmission the neutral clutch feed passage in the spacer plate should be drilled to 3/16" (Fig. 17).

**REPORT INFORMATION**

In all cases of front sprag failure call the zone office and advise the parts needed to complete repairs and also the following information:

- Front Sprag Inner Race - Identification letter. See Fig. 18.
- Front Sprag - Extent damaged and identification letter. See Fig. 19.
- Front Unit Driven Torus Shaft - Condition of finish (OK, scored, or scratched).
- Front Pump Bushing - Condition and clearance between shaft and bushing. See Fig. 16.

**NEW WINDSHIELD WASHER CHECK VALVE RELEASED**

A number of cases of inoperative 1956 windshield washers have been found to be caused by a defective windshield washer check valve assembly, part number 522531. This is the white plastic valve located on top of the windshield washer jar.

In order to avoid malfunctions of this unit, a new windshield washer check valve, part number 522805, has been released. The new check valve can easily be identified from the early type as it is made of red or blue plastic. The new valve should be installed during the predelivery inspection on cars which have not been delivered or at the time of the 2,000 mile inspection. Dealers should also inspect all cars coming in for other service and change to the second type valve if this type is found on the car. The new parts are available through G.M.P.D. warehouses.



# Season's Greetings

*We are nearing the end of the greatest year in Pontiac history . . . and you, as Pontiac Service Craftsmen, have played a vital part in this success.*

*The future holds even bigger things for Pontiac dealers and their employes. The service you give Pontiac owners will determine in large degree the measure of that success. We know we can count on you to fulfill your important responsibility.*

*To each of you, we extend our sincere wishes for a happy holiday season . . .*

H. J. HALES  
General Service Manager

## 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.
