

PONTIAC

Service Craftsman News



No. 4 S-293

April, 1957

CLEARANCE BETWEEN MUFFLER, 'PROP' SHAFT SHOULD BE CHECKED ON DUAL EXHAUST CARS

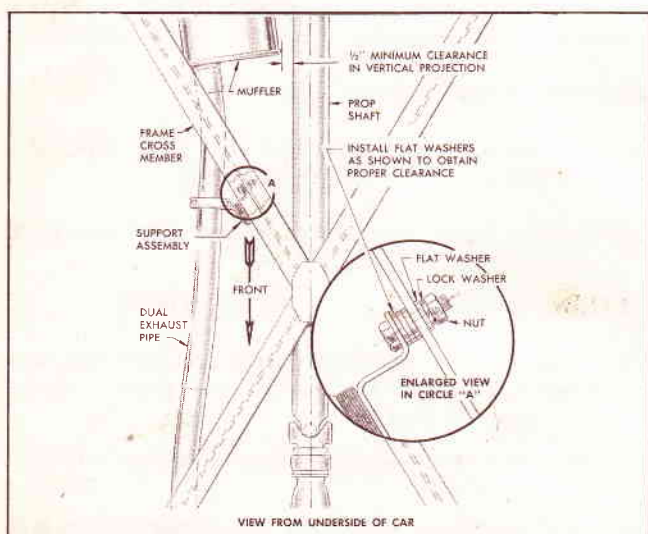


Fig. 1 Clearance Between Muffler and Propeller Shaft

PROPELLER SHAFT, U-JOINTS SERVICED ONLY AS BALANCED ASSEMBLIES

In the future, 1957 Pontiac propeller shafts will be serviced only as balanced assemblies containing the propeller shaft and front and rear universal joint assemblies. This will assure the customer of a unit free from any objectionable vibration or high speed distortion.

When ordering a propeller shaft for service, use the designation "Propeller Shaft and Universal Joint Assembly", together with the appropriate part number. Part numbers with model application appear below.

523819	27 Series	Synchro-Mech Equipped Cars
523820	28 Series	Synchro-Mesh Equipped Cars
523822	27 Series	Hydra-Matic Equipped Cars
523823	28 Series	Hydra-Matic Equipped Cars

IMPROPER ALIGNMENT MAY CAUSE NOISE, DAMAGE

All 1957 cars equipped with dual exhausts should be examined when in your dealership for service of any nature to determine clearance between the left muffler and propeller shaft. This clearance must be a minimum of 1/2 inch in a vertical projection measured at the front of the muffler (See Fig. 1).

Cars found without this 1/2 inch clearance should be corrected immediately by loosening and re-positioning the exhaust pipe and muffler supports to give the necessary clearance.

Less than 1/2 inch clearance may permit the muffler to contact the shaft when the car is being operated at fast initial acceleration or under severe conditions such as heavy loads, rough road rebound, sharp turning, etc. Such a condition may result in damage to the propeller shaft or cause a noise that is difficult to trace.

Shims may be used under the front muffler support if clearance cannot be maintained by realignment of pipes. When proper clearance has been obtained, check for interference between the frame and exhaust system.

This condition has been corrected in production by installing mufflers with a flat depression at the extreme front edge to give additional clearance. The suggested time allowance for this operation will be a straight time of .5 hr.

New Mailing Procedure For Service Craftsman News

The Service Craftsman News is now being mailed directly from Pontiac to you instead of from GM Training Centers. This mailing procedure is another step in our constant efforts to provide you with the latest service information in the shortest possible time.

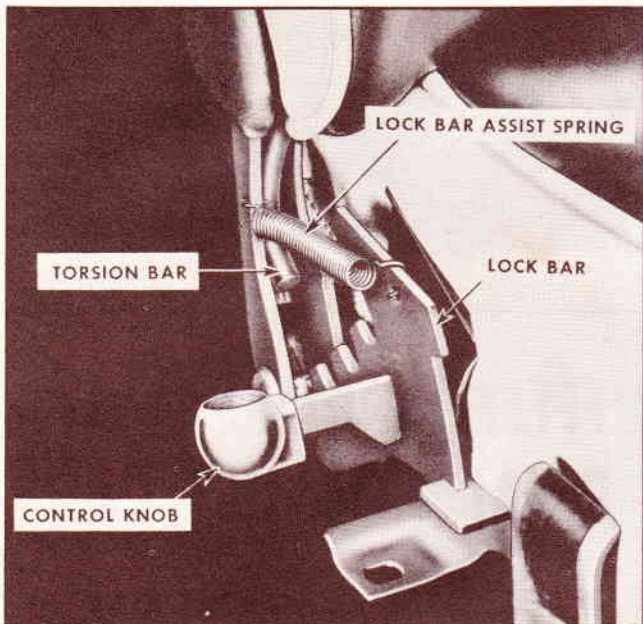


Fig. 2 Reclining Seat Back - Side View

RECLINING SEAT BACK SERVICE

DESCRIPTION

The new front seat reclining back on the passenger side is designed to provide three reclining positions to a maximum of 22-1/2 degrees rearward tilt from the normal position. A knob located at the rear of the right seat side panel controls the reclining seat back. In addition to the reclining feature, the seat back is equipped with a swing-up type head rest which can be moved to head rest position by depressing a lock catch at the outer head rest support.

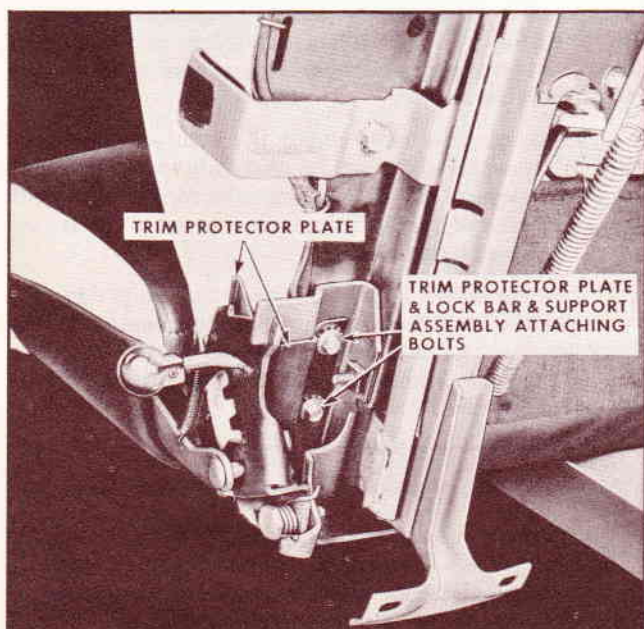


Fig. 3 Lock Bar and Support Assembly - Bottom View

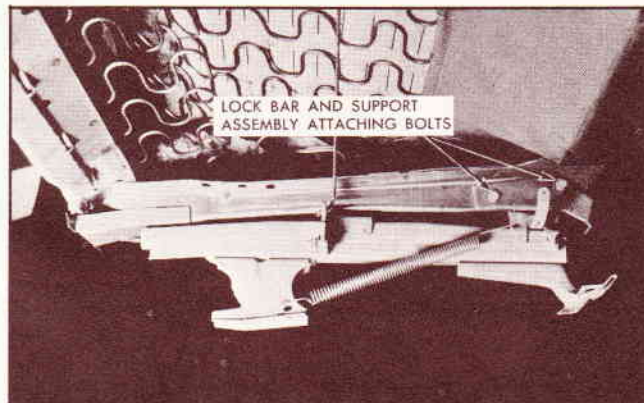


Fig. 4 Lock Bar and Support Assembly - Side View

SEAT ASSEMBLY—REMOVAL AND INSTALLATION

The front seat assembly is removed and installed in the same manner as the standard seat assembly equipped with manually operated seat adjusters.

RECLINING BACK ASSEMBLY—REMOVAL

1. Remove seat assembly including seat adjusters and place on a protected surface.
2. Remove right seat side panel and right seat back outer panel.
3. Remove lock bar assist spring, Fig. 2.
4. Remove trim protector plate and lock bar and support assembly secured by four (4) bolts, shown in Figures 3 and 4.
5. Remove cap nut securing inner hinge pin to hinge pin support.
6. With reclining seat back assembly in normal position, disengage seat back outer hinge arm torsion bar shown in Fig. 2.
7. With seat back outer hinge arm disengaged from torsion bar, carefully hold seat back outward to disengage from hinge pin, then remove seat back assembly from body.

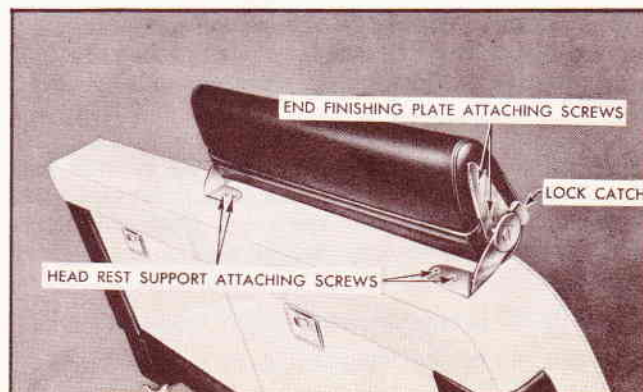


Fig. 5 Reclining Seat Back Head Rest Removal

- To install reclining seat back assembly, reverse removal procedure.

HEAD REST AND SUPPORTS—REMOVAL

- Raise head rest to the rest position, as shown in Fig. 5.
- Remove screws securing head rest supports to seat back assembly, Fig. 5 and remove assembly from seat back.
- To remove head rest inner support assembly or head rest outer support and lock assembly, remove head rest end finishing plate attaching screws, Fig. 5 and remove assembly from head rest.
- To install head rest supports and head rest assembly, reverse removal procedure.

INNER AND/OR OUTER SUPPORT—DISASSEMBLY AND ASSEMBLY

- Remove front seat back head rest assembly (including supports) from reclining seat back.
- At end of head rest from which support is being removed, remove head rest end finishing plate attaching screws, Fig. 5 and remove support assembly from head rest.
- Remove cotter pin and the nut which secures component parts of outer support and lock assembly and/or inner support assembly (See Figs. 6 and 7). Disassemble the entire assembly.
- To assemble reclining seat back head rest outer support and lock assembly and/or inner support assembly, reverse removal procedure. Assemble component parts in order shown on Figs. 6 or 7.

NOTE: (a) On outer support and lock assembly, tighten nut securely and install cotter pin.

- (b) On inner support assembly, tighten nut sufficiently to properly seat spring washer (approximately one turn of nut from point where spring starts to compress) and install pin.

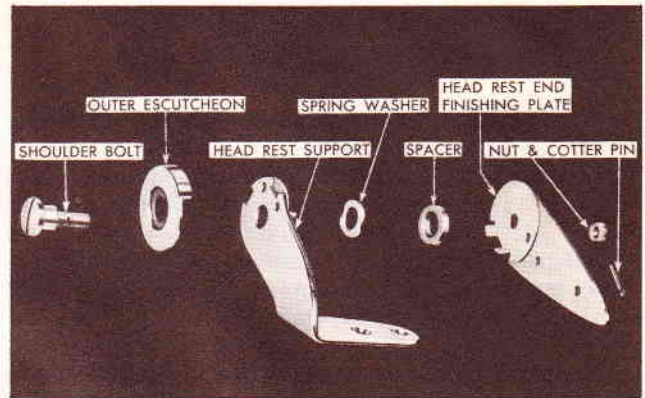


Fig. 7 Head Rest Inner Support Assembly

IMPORTANT: Cotter pin should be installed so that ends of pin do not extend more than 1/16" beyond sides of nut. This is to allow clearance for installing nut end of support assembly into head rest assembly.

IDENTIFY MORaine, BENDIX POWER BRAKE UNITS BY THESE ADDITIONAL METHODS

The following paragraphs show additional identification information beyond description of Power brake units given on page 5-13 (Bendix) and page 5-29 (Moraine) in the 1957 Shop Manual.

The Bendix Power Brake Unit is painted black and uses a die-cast hydraulic cylinder and a pressed steel filler cap. The valve operating rod boot is made of thin dipped rubber.

The Moraine Power Brake Unit vacuum cylinder is zinc chromate plated and the hydraulic cylinder is cast iron. The reservoir filler cap is cast iron. The vacuum cylinder push rod and boot is made of thick moulded rubber.

ORIGINAL CRANKSHAFT DOWEL PINS AGAIN BEING USED IN PRODUCTION

The February 1957 Service Craftsman News contains a story about the use of hollow dowel pins at main bearing caps. These dowel pins were only used on a limited number of engines due to the possibility of oil leaks at the rear main bearing. Therefore, they have been discontinued, and production is now installing the original solid dowel pins.

Should an oil leak be noted in the flywheel area, examine the engine to see if the dowel pins used at the rear main bearings are hollow. If the pins are hollow, Permatex No. 2 should be used to seal the opening after cleaning the surface thoroughly to obtain a bond. Engines between production numbers 141500 and 143147 may be involved.

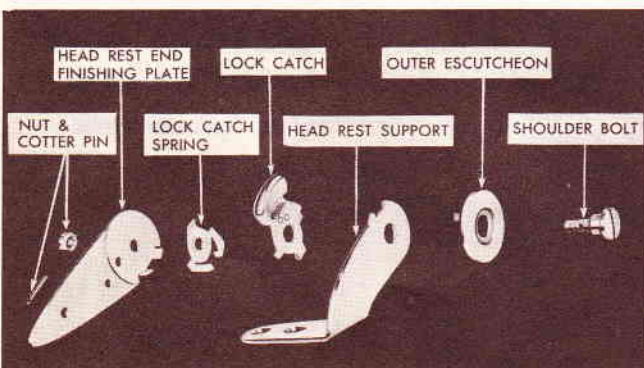


Fig. 6 Head Rest Outer Support and Lock Assembly

MAIN BEARING NOISE DIAGNOSIS— POWER STEERING EQUIPPED CARS

Product Information Reports indicate some difficulty is being experienced in diagnosing a main bearing noise that develops after the engine has been warmed up with cars equipped with Power Steering and/or Air Conditioning. Such a noise can often be traced to the front main bearing. We repeat an article published on this subject in the June, 1955 Service Craftsman News, Page 74.

"In some cases on power steering equipped cars, where front main bearing clearances are near the allowable maximum, the front main bearing may be noisy at idle. This noise is only noticeable if the engine is thoroughly warmed up and when the power steering pump belt tension is adjusted to the high limit.

"Diagnosis can be made by lowering the belt tension below the specified lb. ft. reading, using tool J-5574 (specifications: new belt, 58-65 lb. ft.; belt that has been in service, 51-53 lb. ft.). The belt should not be left loose. A loose belt will cause slippage on the pump pulley and steering wheel "kick" in extreme turn positions.

"If belt adjustment at the minimum specified does not eliminate the bearing noise, decrease the clearance between the crankshaft and main bearing shells on the front main. Use the plastigage method and select undersize bearing shells to give .001" to .002" shaft to bearing clearance."

This information supplements specifications in the Shop Manual on Page 6-46. Specifications for front main bearing clearance should read .0005"-.0025".

NEW PAINT COLORS RELEASED

Below are the colors, symbols and duPont stock numbers of the 1957 paint colors. Cascade Blue, Mayfair Yellow and Iris are the new "Spring" colors and replace Sapphire Blue, Starlight Yellow, and Sage Blue in production. The release of Bonneville Red was announced in the March Service Craftsman News. All colors will, of course, be available for service. Be sure to use the stock numbers when ordering these paints from duPont.

Color	Pontiac Color Code	duPont Stock No.
Raven Black	A	44
Chevron Blue Metallic	B	2452-H
Nassau Green	C	2443
Sapphire Blue	D	1986
Chateau Gray Metallic	E	2449-H
Fontaine Blue Metallic	F	2459-L
Tartan Red	G	2448-H
Charcoal Gray Metallic	H	2453-L
Lucerne Blue	J	2444
Sheffield Gray	K	2445
Braeburn Green Metallic	L	2450-H
Starlight Yellow	M	2451
Cordova Red Metallic	N	2456-LH
Kenya Ivory	P	2458-L
Silver Gray Metallic	Q	2455-L
Carib Coral	R	2447-H
Limefire Green Metallic	S	2454-L
Seacrest Green	T	2457-L
Sage Blue Metallic	U	2446
Cascade Blue	V	2657
Mayfair Yellow	W	2658-H
Iris	X	2659
Bonneville Red	Z	2649-LH

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.
