Studebaker

SERVICE BULLETIN

MAY NO. 251 STUDEBAKER 1951

MODIFICATION OF WATER PUMP - H MODELS

Please record this reprint of Passenger Car Service Letter No. 849 on the Service Bulletin Reference page of the Cooling System section of the 1951 Passenger Car Shop Manual. The letter may be destroyed.

A slight modification has been made in the water pump assembly used on the 1951 Commander V-8 engine to eliminate the possibility of noisy water pump operation. This modification became effective in production with V-8 Engine No. V-27454.

If noisy water pump operation occurs, it will generally be encountered at car speeds between 18 to 30 miles per hour. The diagnosis is simple. It is only necessary to loosen or remove the fan belt and operate the engine at a speed corresponding to 18 to 30 miles per hour. If the noise is eliminated, the condition of suspected water pump noise is confirmed.

Under such circumstances, it will be necessary to replace the water pump assembly. All water pumps supplied through Parts Depots will be of the modified type.

FAN BLADE ASSEMBLY - CHAMPION-TYPE ENGINES, 1950 AND BEFORE

Please record this article on page 78 of 1950 Shop Manual, and on page 46 of 1947 Shop Manual.

In order to avoid possibility of interference between the tips of the fan blades and the radiator overflow pipe on 1950 and earlier Champion models when installing a radiator, inspect for clearance and, if necessary, bend the 3/8" overflow pipe to give the most clearance at the tip of the fan.

In this issue

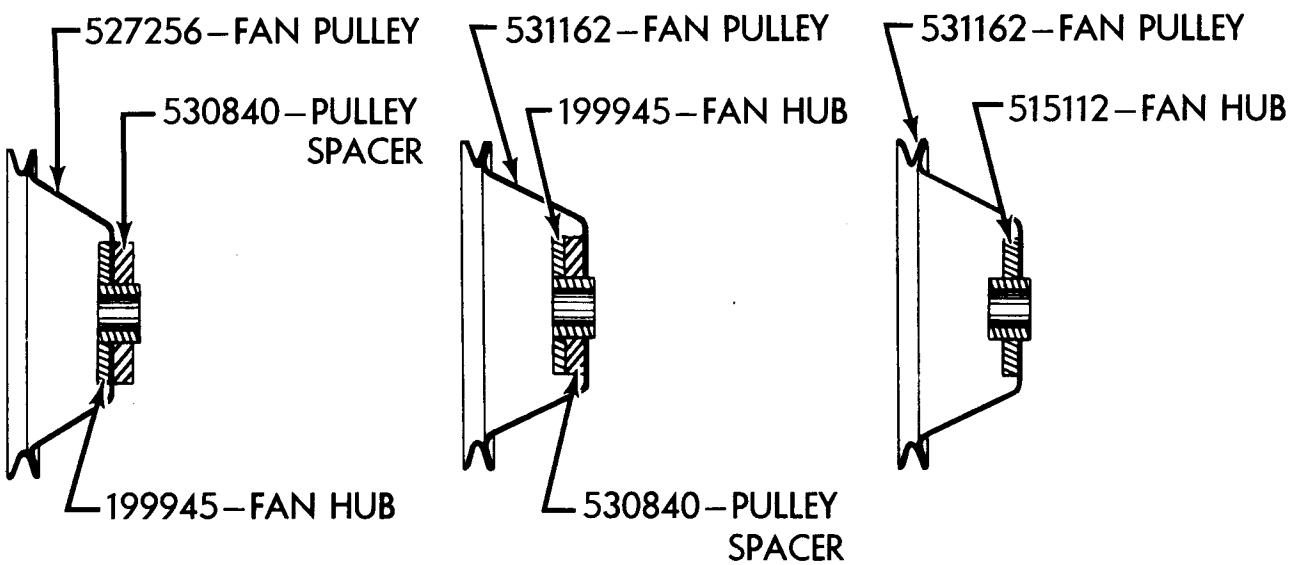
Following are the fans for replacement in models specified. Note that 6G and 7G Champion models *must* use Part No. 519115 fan to obtain proper clearance with the radiator overflow pipe.

For Models	Use Fan, Part No.
G, 2G, 3G, 4G, 5G, 8G, 9G	530430
6G, 7G	519115

FAN BLADE SPACER DISCONTINUED - H MODELS

Please record this article on the Service Bulletin reference page at the end of the Cooling System section of your 1951 Shop Manual.

Effective with 1951 Commander (H) V-8 Engine No. V-30,007, the fan blade spacer, Part No.



530840 (see Fig. 1), has been discontinued in production, resulting in the use of a new fan pulley (Part No. 531162) and a new hub (Part No. 515112) as shown in Fig. 3.

When servicing these parts on cars with engine numbers before V-30,007, the parts shown in Fig. 1 should be used and installed in the sequence shown.

When servicing cars with engine numbers of V-30,007 and after, it is necessary to use Part No. 531162 Fan Pulley and Part No. 515112 Fan Hub in the sequence shown in Fig. 3.

If it is necessary to use the Part No. 531162 Fan Pulley (latest type) on a car with engine number before V-30,007, use the original fan hub, Part No. 199945, and it will be necessary to install Part No. 530840 Pulley Spacer in the location shown in Fig. 2.

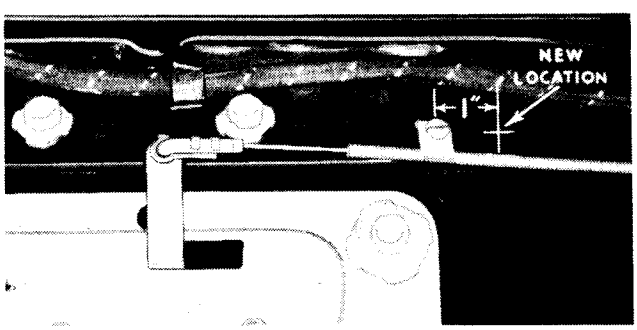
WATER PUMP CONSIDERATION With Part No. 531169 Water Pump only the new type pulley (Fig. 3) can be used. With Part No. 527242 Water Pump either type pulley can be used as described above and shown in Fig. 1 and 2.

TRANSMISSION OIL PAN 1951 PASSENGER CARS WITH AUTOMATIC DRIVE

Please record this article on page 50 of your Automatic Transmission Preliminary Shop Manual.

Effective with Automatic Transmission Serial Nos. 45792 (H models) and 20171 (10G models), the transmission oil pans have a reinforced flange, using 1/8" longer oil pan screws.

When installing the reinforced pan on transmissions with serial numbers lower than those given above, use the kit, Part No. 529975, which includes 14 of the Part No. 31-0510 longer oil pan screws.



HOOD CONTROL CLIP LOCATION - 1951 PASSENGER CARS

Please record this article on the Service Bulletin Reference page at the end of the Body section of your 1951 Shop Manual.

In a few cases the hood lock control cable on 1951 passenger cars became kinked because of a too-sharp curve near the hood latch. In production, the screw hole for the cable clip on the radiator upper air deflector has been moved 1" outward from the center line of the car.

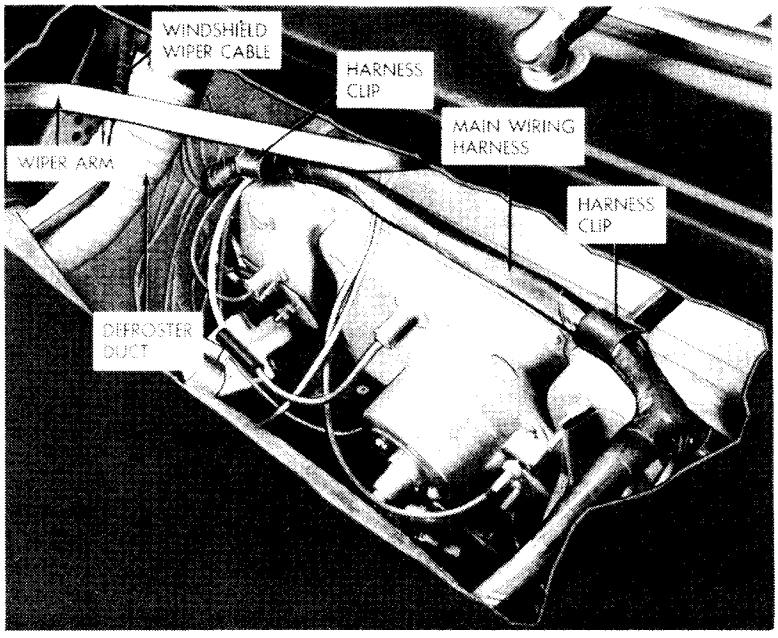
When this condition is encountered on cars produced prior to this change, drill a 3/32" diameter hole and relocate the control cable clip as shown in the illustration.

WIRING HARNESS LOCATION 1951 PASSENGER CARS WITH ELECTRIC WINDSHIELD WIPERS

Please record this article on the Service Bulletin Reference page at the end of the Electrical section of your 1951 Shop Manual.

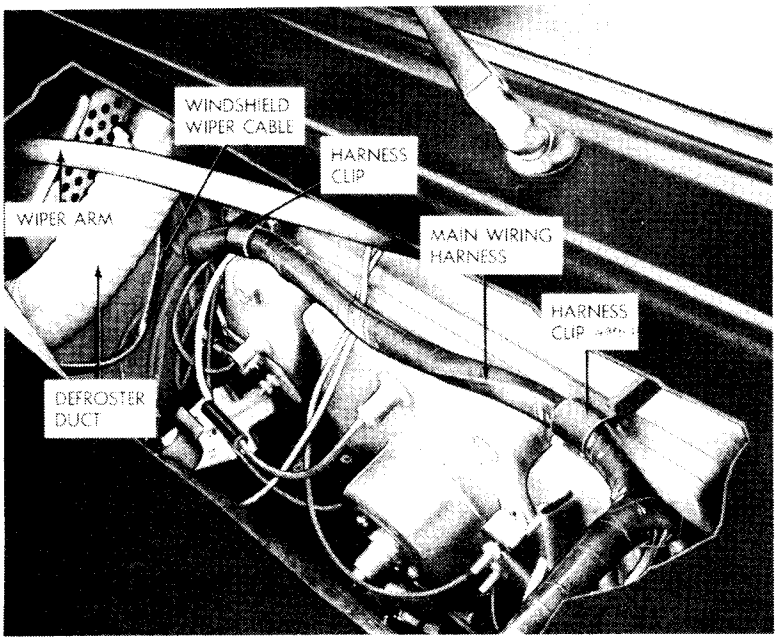
It is possible on cars equipped with electric windshield wipers that the wiper arm on the driver's side of the car may interfere with the main wiring harness or the wiper motor cable. This will occur if, as a result of work or other disturbance of these wires, they are left too high up as shown in Fig. 1.

Whenever these wires must be moved to provide working clearance under the cowl, it is important that they be repositioned as follows:



(ABOVE) FIG. 1 - IMPROPER POSITIONING OF MAIN WIRING HARNESS AND WINDSHIELD WIPER CABLE

(BELOW) FIG. 2 - CORRECT POSITIONING OF CABLES TO ELIMINATE INTERFERENCE



Main wiring harness must be snug in the two harness clips provided on the instrument cluster housing. Furthermore, the portion of the harness that lies between the clips must be pulled down so that it rests against the top of the speedometer housing. (See Fig. 2.)

Windshield wiper cable must lead out from the main harness underneath the left defroster duct. It must not be allowed to lie across the top of this duct. (See Fig. 2.)

Service men should check the location of the wiring harnesses whenever doing work between the firewall and instrument panel and should also check these harnesses on cars equipped with electric wipers that have had radios, Climatizers, etc., previously installed.

USED '48 LAND CRUISER BODY WANTED BY DEALER

A. C. Ray Motors, 115 W. 8th Street, Paris, Kentucky would like to purchase a used 1948 (15A) Land Cruiser body. Any dealer having such a body for sale should communicate directly with A. C. Ray Motors at the above address.

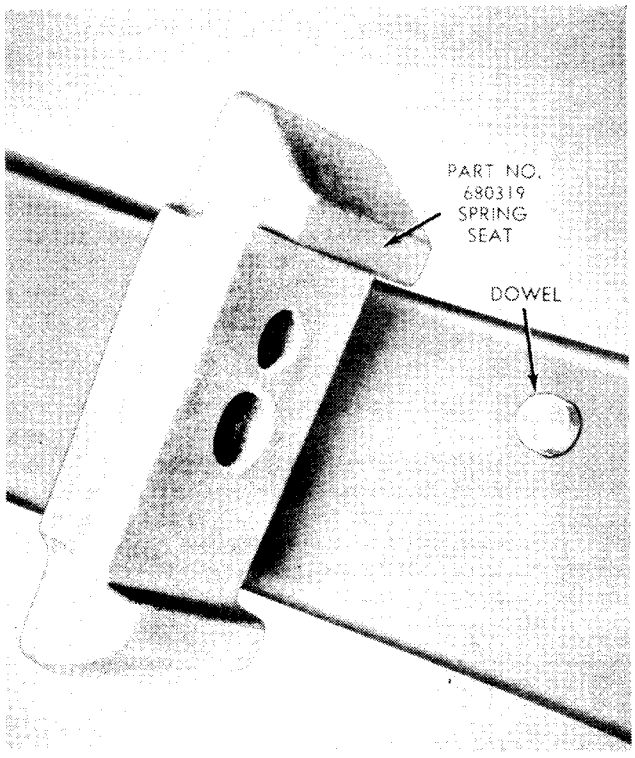
SERVICE AIR CLEANERS REGULARLY AND OFTEN!

TRUCK SERVICE Information

BRAKE AND REAR AXLE CHANGES - 2R14, 2R15, 2R16A, 2R17A

Please record this article on pages 30 and 177 of your 2R Series Trucks Shop Manual.

We are now using in production a different type of rear axle housing for banjo-type rear axles. The new housing is square in design.



Because of this change, it is necessary to change the spring seat, which is no longer welded to the housing but is located on the axle by means of a dowel pin (see illustration).

In addition, changes have been made in the front and rear brake assemblies. These are the brakes described beginning on page 253, Supplement III for 2R Series Trucks Shop Manual.

The following serial numbers indicate when these changes took effect in production:

Part No.	Part Name
Spring Seat and Clip Plate	
680319	Spring Seat (banjo-type housing)
680320	Clip Plate (banjo-type housing)

Part No.	Part Name	Ratio	Type Brakes	Starting Serial
Rear Axle				
680404X2	Rr. Axle Assy.	5.83-1		2R14-381
680404X2	Rr. Axle Assy.	5.83-1		2R15-12374
680399X1	Rr. Axle Assy.	5.83-1	Std. Brake	2R16A-31530
680399X1	Rr. Axle Assy.	5.83-1	H.D. Brake	2R16A-31120
680405X2	Rr. Axle Assy.	6.2-1	Std. Brake	2R16A-31386
680399X2	Rr. Axle Assy.	6.66-1	Std. Brake	2R16A-31158
680399X2	Rr. Axle Assy.	6.66-1	H.D. Brake	2R16A-30550
680405X1	Rr. Axle Assy.	6.8-1	Std. Brake	2R16A-30895
680408	Rr. Axle Assy.	2-speed	Std. Brake	2R16A-31558
680408	Rr. Axle Assy.	2-speed	H.D. Brake	2R16A-30452
680405X1	Rr. Axle Assy.	6.8	Std. Brake	2R17A-19816
680408	Rr. Axle Assy.	2-speed	Std. Brake	2R17A-19815
680405X2	Rr. Axle Assy.	6.2	Std. Brake	2R17A-19945

Because of the difference in location of the holes in the bolt circle for mounting the backing plate assemblies, Hi-Tork brakes cannot be used in conjunction with the new type rear axle. Conversely, the new type brakes cannot be used with the old type rear axle.

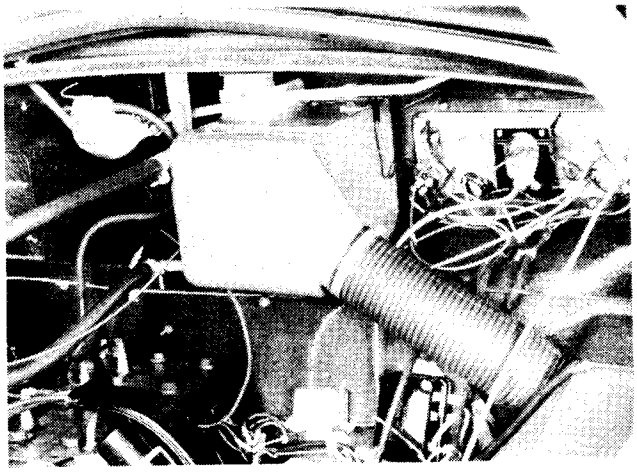
It is essential that you supply the serial number of the truck when ordering any of the above listed parts, i.e., rear axle assemblies, spring seat and clip plates, and brake parts.

2R SERIES TRUCK CLIMATIZER

Please record this article on page 58 of your 2R Series Trucks Shop Manual.

All 2R Series Trucks with factory-installed Climatizers before the following serial numbers were equipped with Climatizers containing a 3"-thick core and the water inlet and outlet projected from the side of the heater housing: 2R5-63030, 2R6-1234, 2R10-27953, 2R11-1288, 2R14-293, 2R15-12081, 2R16-29666, and 2R17-18836.

Factory-installed Climatizers in trucks produced *on and after* the above serial numbers also contain a 3"-thick core and the water inlet also projects from the side of the heater housing but the water outlet projects through the front cover (see illustration on next page).



2R SERIES TRUCK CLIMATIZER WITH WATER OUTLET IN FRONT COVER INSTEAD OF INSIDE OF HOUSING

To service Climatizers before above serials, order Part No. 680717 2-1/2"-thick core and 2-680721 wood spacers. To service Climatizers after above serials, order Part No. 680722 2-1/2"-thick core and 2-680721 wood spacers.

TOOLS FOR TRUCK REAR AXLE SERVICE

Enclosed with this issue of the Service Bulletin is a copy of the Kent-Moore Special Tool Catalog Insert Supplements 2 and 3 describing the following special tools and their model applications:

J-3212 Hub Cap Wrench for 2R10, 2R11, 2R15, 2R16A, 2R17A, M15, and M16 trucks

J-3299 Pinion Bearing Assembly Remover and Replacer for 2R10 and 2R11 trucks

An order blank is attached to the bottom of the sheet and orders should be placed on this blank and sent directly to Kent-Moore Organization, Inc., General Motors Building, Detroit 2, Michigan. NOTE.--Export dealers may order from The Studebaker Corporation, Export Div.

AMMCO SERVICE TOOLS

Mailed with this issue of the Service Bulletin is a copy of the Ammco Service Tools folder describing a brake shoe grinder, brake drum micrometer, tension indicator, ridge reamer, cylinder surfacing hones, connecting rod aligner, and cylinder hone.

Orders for Ammco shop equipment should be placed with your jobber. An order blank for this purpose is provided in the folder.

CARBURETOR TOOL KIT COMPONENTS

Please record this article on the Service Bulletin reference page at the end of the Gasoline System section of your 1951 Shop Manual.

Following is a list of all the individual tools that should be included in the J-3261 Carburetor tool kits for the service of carburetors on all Studebaker models of passenger cars and trucks:

Part No.	Part Name
J-507	Loading Cylinder (3/4")
J-508	Nozzle Puller with Handle
J-509	Metering Rod Gage
J-510	Metering Rod Gage (Pr.)
J-816-1	Screw Driver Bit (3/16")
J-816-2	Screw Driver Bit (1/2")
J-816-5	Handle for Screw Driver Bits
J-816-6	Screw Driver Bit (11/32")
J-818-2	Float Level Gage
J-818-3	Float and Unloader Gage
J-818-6	Float Level Gage (1/2")
J-818-9	Float Level Gage
J-1137	Fast Idle and Unloader Bending Iron
J-1265	Metering Rod Gage
J-1306	Ball Retainer Ring Removing Tool
J-1331	Metering Rod Gage
J-1407	Pump Spring Loader Unit
J-1503-3-A	Handle for Jet Wrench Socket
J-1561	Metering Jet Wrench
J-1633	Antipercolator Gage
J-3189	Adjusting Tool
*J-4498	Inlet Ball Clip Remover and Replacer (marked T-25360)
KMO-267-A-1	Leatherette Kit
KMO-269-S-4	Main Jet Remover
KMO-269-S-5	Vacuum Piston Wrench
KMO-269-S-7	Float Level Gage
KMO-269-S-10	Choke Setting Socket Wrench
KMO-478	Unloader Adjusting Tool
KMO-480-A	Wire Gage (.045" and .053")
KMO-696	Main Vent Tube Tool
KMO-733	Float Level Gage (5/64" and 7/64")

*Included in EG-13-51 Essential Tools Group for 1951.

Dealers should order any replacement or additional requirements of the above tools direct from Kent-Moore Organization, Detroit, Michigan.

how well do you REMEMBER?

The questions below have one correct answer. Mark the answer you believe to be correct, then check your results with the reference given.

1. The water temperature indicator on 1951 19G Champion and H Commander models is

   (a)_____gas type.

   (b)_____electric type. (Page 4, Cooling System, 1951 Shop Manual.

2. On each piston of all Studebaker engines, 1936 to 1951 inclusive, there are

   (a)_____four piston rings.

   (b)_____three piston rings.

   (c)_____five piston rings. (Pages 1 and 25, Engine Section, 1951 Shop Manual)

3. Car pulling to right or left on brake application is usually caused by

   (a)_____improper pedal adjustment.

   (b)_____grease or fluid soaked lining.

   (c)_____air in the system. (Page 13, Brake Section, 1951 Shop Manual)

4. The recommended valve tappet clearance on all 1941-1950 models inclusive is

   (a)_____.016" "hot".

   (b)_____.014" to .006" "hot".

   (c)_____.016" "cold". (Engine Specifications - 1941-45-46-47-48-49-50 Shop Manual)

5. If the 1947 - 1951, inclusive, overdrive transmission will not change from overdrive to conventional gear with the accelerator past the wide open position, first check for current at the black wire terminal on the overdrive solenoid with the ignition switch on and the distributor points open. If current is found, replace the

   (a)_____governor.

   (b)_____kick-down switch.

   (c)_____solenoid. (Page 20, Transmission Section, 1951 Shop Manual)

6. On Studebaker engines the compression among all cylinders should not vary more than

   (a)_____five pounds.

   (b)_____ten pounds.

   (c)_____fifteen pounds. (Page 58, Engine Section, 1951 Shop Manual)

7. Dirty or discolored generator commutators should be polished with

   (a)_____emery cloth.

   (b)_____sand paper.

   (c)_____small file. (Page 5, Electrical Section, 1951 Shop Manual)

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