

# SERVICE BULLETIN

MAY

NO. 222



1949

**WELCOME VISITOR**



**LET US HELP**  
*to make your trip more pleasant*



**Let's Continue to Build the Best  
Reputation in America for  
Nation-Wide Studebaker Service**

## SUMMER TOURING SEASON GOOD TIME TO EXPAND CUSTOMER GOOD WILL

You've seen the colorful and impressive Welcome Visitor poster. You've examined the attractive customer mailing piece, "Along With Your Road Maps", with its timely suggestions for pre-trip car service.

Plan now to get the most out of the nationwide Welcome Visitor campaign. Take advantage of this opportunity to build further service sales and customer good will during the vacation season just ahead - which is expected to set a new record for motor touring.

Display the posters prominently where tourists can't miss seeing them. Order an adequate supply of folders to mail to each of your Studebaker owners and service customers -- they'll appreciate the friendly advice and the assurance of courteous service at whatever Studebaker dealership they might visit.

Be sure your employees understand the importance of courtesy and assistance to visitors. Be sure you have an adequate stock of service parts and supplies. Be sure your shop equipment is in top condition. And, equally important, be sure your customer reception areas and wash rooms are sparkling clean at all times.

## FUEL-VACUUM PUMPS CAN BE REPAIRED - DO NOT EXCHANGE GOOD UNITS

*Please record this article on page 131 of your 1947 Shop Manual and on page 126 of your 2R Series Trucks Shop Manual.*

Reports from the field indicate dealer service departments are not taking advantage of an opportunity to increase their labor sales by servicing fuel-vacuum pumps on 7G, 8G Champion and 15A, 16A Commander models and 2R Series trucks so equipped. Also, many dealers are returning for claims consideration pumps which are not defective, but require only the replacement of parts to put them in good running order.

Below are listed the complete sets of components for the several repair kits available through your Studebaker parts depot. These kits should be kept in your parts stock and every service order for fuel-vacuum pump service should be carefully diagnosed for the possibility of reconditioning before an entire new pump is ordered as a replacement.

Installation of a repair kit will reduce your customer's cost. This, of course will be appreciated and, at the same time, it will afford more in-the-shop labor than will the installation of a complete new pump. In the latter case most of the revenue goes to the pump manufacturer.

There are five repair kits available which will cover the repair of any part of the fuel-vacuum pump without necessitating breaking a

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large kit to repair one section of the pump only. With one or more of the kits listed below any pump which is not completely destroyed can be restored to good service condition.

**PART NO. 524390 FUEL AND VACUUM PUMP REPAIR KIT**

Qty.	Part No.	Part Name
1	AC-5590544	Diaphragm and Rod, Fuel
1	AC-854003	Gasket, Bowl
1	AC-1289450	Gasket, Mounting
2	AC-855003	Valve, Fuel
2	AC-855136	Gasket, Dome and Valve Seat
2	AC-856270	Spring, Fuel Valve
1	AC-5590382	Diaphragm and Rod, Vacuum
1	AC-1523801	Gasket, Cover Plate
1	AC-1521476	Gasket, Cover Plate Screw
2	AC-1523106	Valve and Cage, Vacuum
2	AC-1521953	Gasket, Vacuum Valve
1	AC-1523124	Spring, Fuel Diaphragm
1	AC-5590533	Spring, Vacuum Diaphragm
1	AC-854009	Screw, Fuel
1	AC-1521906	Link, Rocker Arm Fuel
1	AC-1521907	Link, Right, Rocker Arm Vacuum
1	AC-1521908	Link, Left, Rocker Arm Vacuum
1	AC-1521909	Spacer, Link
2	AC-1523033	Spring, Rocker Arm
1	AC-1522023	Pin, Rocker Arm
1	AC-1521288	Washer, Rocker Arm Pin
1	AC-1523221	Bushing, Rocker Arm Pin

**PART NO. 524391 FUEL DIAPHRAGM KIT consists of:**

Qty.	Part No.	Part Name
1	AC-5590544	Diaphragm and Pull Rod
1	AC-854003	Gasket, Bowl
1	AC-1289450	Gasket, Mounting
2	AC-855003	Valve, Fuel
2	AC-855136	Gasket, Dome and Valve Seat
2	AC-856270	Spring, Fuel Valve

**PART NO. 524393 BOWL KIT consists of:**

Qty.	Part No.	Part Name
1	AC-1522092	Bowl
1	AC-854003	Gasket, Bowl

**PART NO.524392 VACUUM DIAPHRAGM KIT consists of:**

Qty.	Part No.	Part Name
1	AC-5590382	Diaphragm and Pull Rod
1	AC-1523801	Gasket, Cover Plate
1	AC-1521476	Gasket, Cover Plate Screw
2	AC-1523106	Valve and Cage, Vacuum
2	AC-1521906	Gasket, Valve and Cage

**PART NO. 524395 BAIL AND SCREW KIT consists of:**

Qty.	Part No.	Part Name
1	AC-1522090	Bail and Screw, Assembly
1	AC-855763	Nut, Bail Screw
1	AC-854005	Seat, Bowl

**CLUTCH AND BRAKE PEDAL SPLASH SHIELD INSTALLATION ON 6G, 7G, 14A, AND 15A MODELS**

Please record this article on pages 28 and 40 of your 1947 Shop Manual.

The following installation instructions describe the method of installing the 8G Champion and 16A Commander types of clutch and brake pedal splash shields on 6G or 7G Champion and 14A or 15A Commander models.

These shields protect the clutch and brake pedal linkages from slush and thus eliminate "frozen" clutch or brake pedal action from this cause. The shields also prevent the possible entry of water into the driver compartment through the pedal arm openings in the floor board.

**Parts Requirements**

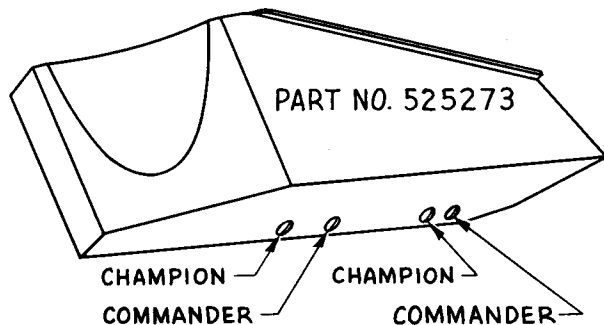
The following parts, which may be purchased from your nearest Studebaker parts depot, are required to install the clutch and brake pedal splash shield:

**PARTS FOR SPLASH SHIELD INSTALLATION - 6G,7G; 14A,15A**

Part No.	No. Req'd. Per		Body Style	Part Name
	6G-7G	14A-15A		
525273	1	1	All	Frame clutch pedal shield
290051	1	1	All	Pedal splash shield assembly
522780	1	-	All	Frame brake pedal splash shield
651-#14-8	3	-	All	Brake pedal shield screws
524952	-	1	All	Frame brake pedal splash shield, upper
524953	-	1	All	Frame brake pedal splash shield, lower
13X424	-	2	W-F-C-Q	Brake pedal shield, lower, screws
20X83	-	2	W-F-C-Q	Brake pedal shield, lower, nuts
41X517	-	2	W-F-C-Q	Brake pedal shield, lower, plain washer
380-06	-	2	W-F-C-Q	Brake pedal shield, lower, lock washer

6G, 7G Champion Installation

1. Clean the dirt from under the left front fender and from around the brake and clutch pedals and linkage.
2. Remove the old clutch pedal splash shield (similar to the one shown in Fig. 2). Retain the fastening parts for installation of the new shield. Discard the old shield.
3. Use a socket wrench connected to the driver with a universal and remove the two frame to crossmember screws on the outside of the frame side rail. Place the clutch pedal splash shield, Part No. 525273, in position (see Fig. 1), align the front hole of each pair in the shield with the two outer frame side rail screw holes, and fasten the shield to the frame by reinstalling the two screws.
4. Place the pedal splash shield assembly Part No. 290051, in position so that the holes in the shield are aligned with the screw holes of the old shield which was removed in Step No. 2, above, and, using the original attaching parts, fasten the shield securely in place. See Fig. 2.
5. Hold the brake pedal splash shield, Part No. 522780, in position at the right angle made by the front face of the crossmember and the frame side rail, and center punch the frame members at the location of the three holes in the shield. Drill a 7/32" diameter hole in the frame at each of these three points. See Fig. 3. Secure the splash shield in position with the three self-tapping metal screws, Part No. 651-#14-8.



DRAWING OF PART NO. 525273

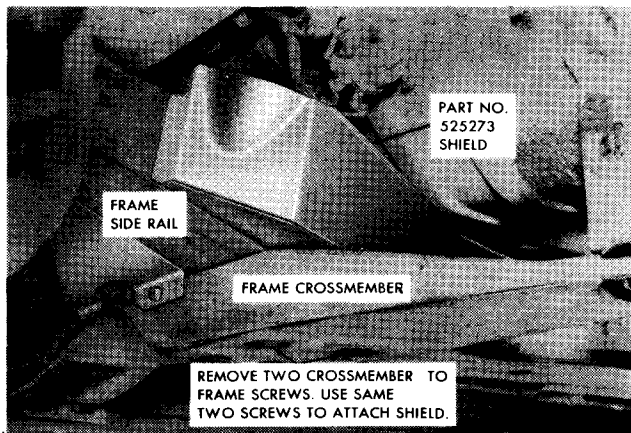


FIG. 1

14A, 15A Commander Installation

1. Clean the dirt from under the left front fender and from around the brake and clutch pedals and linkage.
2. Remove the old clutch pedal splash shield (similar to the one shown in Fig. 2). Retain the fastening parts for installation of the new shield. Discard the old shield.
3. Remove the clutch operating shaft bearing attaching screws (see Fig. 4).

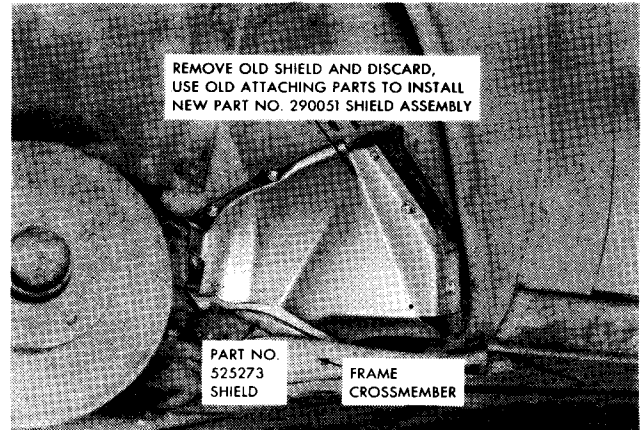


FIG. 2

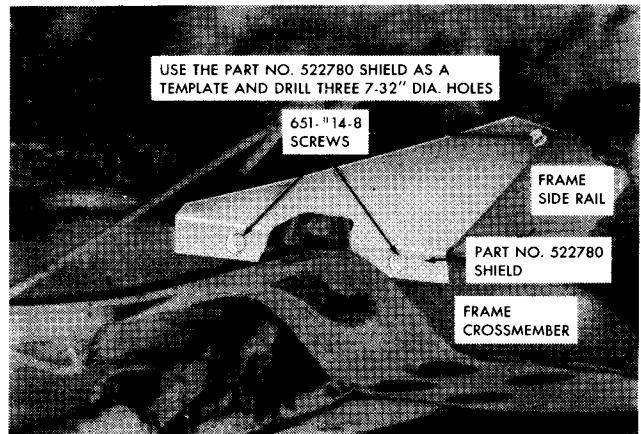


FIG. 3

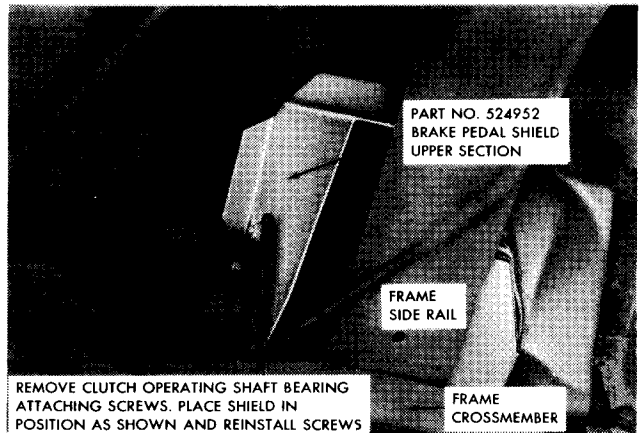
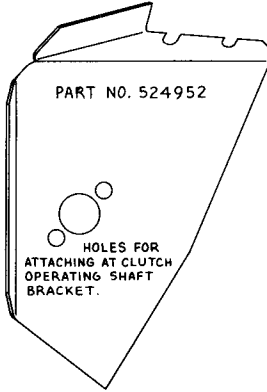


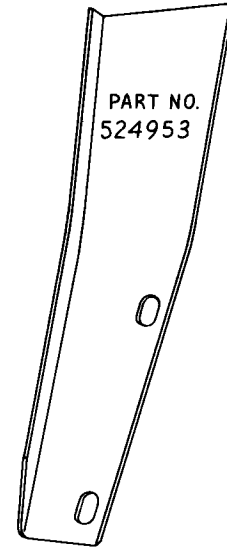
FIG. 4

Place the brake pedal splash shield, upper section, Part No. 524952, in position as shown in Fig. 4 and reinstall screws.



DRAWING OF PART NO. 524952

4. **W-F-C-Q Bodies:** Slide brake pedal splash shield lower section, Part No. 524953, into position from the rear of the frame crossmember (see Fig. 5). Then move the lower lip inward (toward center of car) so that the holes just show at the edge of the side rail flange. Mark the bottom of the flange at these two points and measure in 1/2" from edge of flange and center punch the side rail flange at the location of the two fastening holes in the shield. Drill a 13/32" hole at each of these points. Place shield in position again so that the lip rests on the top of the side rail flange, align holes, and fasten securely with the 3/8"x1" screws, plain washers, lock washers and nuts.



DRAWING OF PART NO. 524953

ON 14A, 15A, W, F, C, Q MODELS USE SHIELD PART NO. 524953 AS A TEMPLATE AND DRILL TWO 13-32" DIA. HOLES. USE TWO EACH OF PART NO. 1.0616 SCREWS, PART NO. 361-06 PLAIN WASHERS, PART NO. 380-06 NUTS

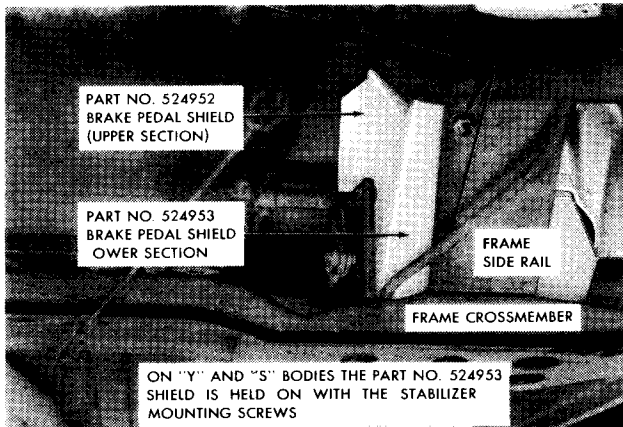


FIG. 5

On some 14A or 15A W-F-C-Q chassis the frame may already be drilled at these points. In such cases, of course, it is necessary only to slide in the splash shield lower section and attach.

**Convertible (S) and Land Cruiser (Y) Bodies:** Remove the two inner stabilizer bar mounting screws and slide the brake pedal splash shield lower section, Part No. 524953, into position from the rear of the frame crossmember with the lip of the lower section resting on top of the frame side member flange. Secure in place by reinstalling the two inner stabilizer bar mounting screws. See Fig. 5.

5. Use a socket wrench connected to the driver with a universal and remove the two frame to crossmember screws on the outside of the frame side rail. Place the clutch pedal

shield, Part No. 525273, in position (see Fig. 1), align the rear hole of each pair in the shield with the two outer frame side rail screw holes, and fasten shield to frame by reinstalling the two screws.

6. Place pedal splash shield assembly, Part No. 290051, in position so that the holes in the shield are aligned with the screw holes of the old shield which was removed in Step No. 2, above, and, using the original attaching parts, fasten the shield securely in place. See Fig. 2.

### CARTER CARBURETOR MODEL WE 715S (8G)

Please record this article on page 131 of your 1947 Shop Manual.

We are enclosing with this issue of the Service Bulletin a manual insert sheet supplied by the Carter Carburetor Corporation.

This sheet gives complete specifications of the Model WE 715S Carter carburetor used on the 8G Champion models. Starting serial numbers are also given, as are condensed tune up data, carburetor service information, and a complete breakdown of the parts of this model carburetor. Prices given are those in effect at the time the manual sheet was printed and are subject to change without notice.

We suggest this sheet be placed between pages 116 and 117 of your Shop Manual or that a note referring to the sheet in this issue of the Service Bulletin be placed at the top of page 116 of the 1947 Shop Manual.

## CAMSHAFT BEARING SETS

Please record this article on page 91 of your 1947 Shop Manual and on page 107 of your 2R Series Trucks Shop Manual.

Camshaft bearings will now be sold from parts depots in complete sets rather than individually as in the past. One set is required for a camshaft bearing replacement in one engine.

Following are the parts numbers and model application of the camshaft bearing sets for models produced from 1938 to the present:

Part No.	Part Name	Models
526223	Camshaft Bearing Set	7A-16A incl; M16; 2R16, 2R17, 2R16A, 2R17A
526224	Camshaft Bearing Set	G-8G incl; M5, M15, M15A; 2R5, 2R10, 2R15
526225	Camshaft Bearing Set	4C-8C inclusive

# T TRUCK SERVICE Information

## STEERING GEAR ASSEMBLY HIGH SPOT - 2R SERIES

Please record this article on page 198 of your 2R Series Trucks Shop Manual.

Under certain conditions the possibility exists that the steering gear assembly cannot be placed on the high spot when the front wheels are in a straight ahead position.

This condition can be corrected to a point where it will not be objectionable by installing plain washers between the frame side rail and steering gear assembly. If desirable, a portion of the washer can be cut out to give the washer a C shape. The washers can then be installed by loosening the cap screws and inserting the washers between the frame side rail and steering gear assembly.

Judgment must be exercised in the number of washers to be used. It is important that the

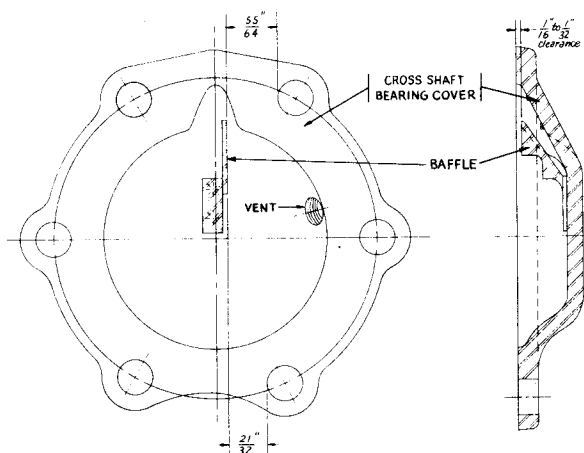
cap screws and nuts have a full thread. In most cases it will be necessary to reposition the steering wheel after installing the shims.

## LUBRICANT LEAKAGE AT TWO-SPEED REAR AXLE VENT - 2R SERIES

Please record this article on page 177 of your 2R Series Trucks Shop Manual.

If lubricant leaks from the two-speed rear axle vent, it is possible that the baffle in the cover is not in correct relationship to the vent.

To check for this condition, remove the cover and measure in toward the center of the cover  $55/64$ " from the inner edge of the screw hole above the vent as shown in the accompanying drawing. Scribe a mark at that point on the face of the cover. Then measure  $21/32$ " from the inner edge of the cover screw hole at the bottom on the same side of center (see drawing) and scribe a mark at this point. Line a six inch scale across these scribed marks. The edge of the baffle (side toward vent) should be in line with the edge of the scale. If it is not, bend it carefully to either side until it is aligned with the scale.



Then measure the amount of clearance between the face of the cover and the wiping edge of the baffle as shown in the cross section drawing. There should be from  $1/32$ " to  $1/16$ " clearance and this edge of the baffle should be parallel with the surfaces of the cover. If it is not, bend the baffle up or down until the proper clearance is obtained.

It is important whenever the cover is removed for any reason that the position and clearance of the baffle in the cover be correct so that the proper relationship of the baffle to the return hole is maintained. This permits lubricant to be correctly channeled to the return hole and not to accumulate on the vent side of the baffle.

## WARNER T9A TRANSMISSION IDENTIFICATION - 2R16A

Please record this article on page 221 of your 2R Series Trucks Shop Manual.

Because of the similarity in appearance of the Warner T9 transmission used in the M Series and 2R Series trucks to that of the Warner T9A transmission now used in 2R16A models, a metal tag bearing the letter "A" is fastened to the right front transmission cover screw of the T9A transmission to provide ready identification.

## CHROMALOY BULLETIN BOARD PRICE ADVANCED APRIL 15

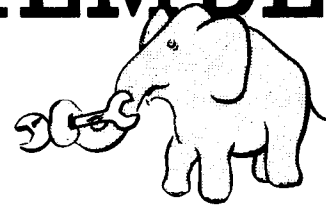
We have been advised by Van Houten-Rankin Incorporated, 1020 Dime Building, Detroit 26, Michigan, that the price of their Chromaloy shop bulletin board, described in Service Bulletin No. 216, p. 6, has been increased from \$12.50 to \$16.50, effective April 15, 1949.

Orders should be placed directly with Van Houten-Rankin for these boards.

NOTE.--Export dealers may order from The Studebaker Export Corporation.



# how well do you REMEMBER?



Below are some questions with multiple choice answers which you may check as a self-quiz. This is the type of question which will appear on the 1949 Master Mechanic Award Program examination. For convenience in checking your accuracy after you have selected an answer to each question, a reference to the location of the correct answer is given.

1. To correct the accelerating pump travel on 1941-47 model Champion carburetor

replace the pump

bend the throttle connector rod

turn the adjusting screw

Reference: 1947 Shop Manual, p. 121

2. The maximum permissible radial run-out of tire, wheel, hub and drum assemblies on the 1947 6G Champion model is

.125"

.065"

.093"

Reference: Service Bulletin No. 197, p. 4

3. The first step in correcting excessive brake pedal free travel is to adjust the eccentric of the forward or primary shoes.

True

False

Reference: 1947 Shop Manual, p. 20

4. The recommended lubricant for the 1947 14A Commander steering gear box is

SAE 250 All Gear Lubricant having a channel point of -5°

Heavy engine oil

SAE 90 gear oil

Reference: Service Bulletin No. 193, p. 8

PRICES CONTAINED HEREIN SUBJECT TO CHANGE WITHOUT NOTICE