

Studebaker

# SERVICE BULLETIN

MARCH

NO. 237



1950

## SEVEN PANELS, SEVEN STEPS MAKE DOOR REPAIRS EASY ON ALL 1939 THROUGH 1950 PASSENGER CARS

Please record this article on page 18 of your 1947 Shop Manual.

On any 1939 through 1950 Studebaker passenger car, when the outer sheet metal of doors is badly bumped, gashed, or otherwise damaged "beyond repair", you can save your customers the cost of a new door installation when the door frame is unharmed by replacing the outer panel as described in the Parts and Accessories Flash No. 175 issued recently.

Only seven steps are required to remove the damaged outer panel and install a new one, as follows:

1. Remove outer door handle and door cylinder lock. Remove door from car and place on bench with outside panel up. Cut with "Airgun" and panel cutter, metal splitter, or cold chisel.
2. Finish cutting job by sawing at flanges using ordinary hack saw, thus separating damaged door panel from upper door frame.
3. Cut through edge of outer panel flange using power sander. Lift off damaged panel. Remove flanging strip left on underside of door edge with chisel. File burr from edge.
4. If necessary, straighten flanges and inner framework. Place the door in the door opening to make sure it is true. New door panel is now ready to be inserted.
5. Insert repair panel under moulding so it extends enough on either side for flanging. Clamp in place using C-clamps. Mark off outline of framework on new panel, with cutout for hinges, leaving 1/2" all around (excepting hinges) for flanges. Trim away excess metal to 1/2" allowance line. Insert six countersunk metal drive screws through both panels.
6. Flange door along side and bottom using dolly block and hammer. (Note.--Dolly block is held flat on top of new panel at edge of flange to give a clean, flat job without bucking.) Tack weld flange on back of door and remove C-clamps.
7. Apply solder over screw heads and along edge of moulding. Insert scratch awl from back of door and mark centers for

## In this issue

	PAGE
CHROME HEADLAMP RIMS NOW USED ON 9G, 17A MODELS . . . . .	2
DAMAGED REAR AXLE ASSEMBLIES DO NOT MERIT FULL CLAIM CREDIT. . . . .	3
DRAIN AND CLEAN ASSEMBLIES BEFORE RETURNING TO FACTORY . . . . .	3
HUB COVER RETAINING SPRING G-9G: 10A-17A; 6C-8C . . . . .	2
IDENTIFICATION OF 2R SERIES TRUCKS CLIMATIZER CORES . . . . .	5
MODIFYING INSTRUMENT BRACKET TO ACCOMMODATE NEW SPEEDOMETER - 2R SERIES . . . . .	4
NEW PAWL STOP FOR LUGGAGE COMPARTMENT. LID HANDLE - 9G, 17A . . . . .	3
PHILCO AUTO RADIO SERVICE STATION LIST . . . . .	6
PROPELLER SHAFT - 2R15, 2R16A, 2R17A . . . . .	3
REAR SPRING CLIP PLATE PERMITS INCREASED U-BOLT TORQUE SPECIFICATIONS - 2R15, 2R16A, 2R17A . . . . .	5
SEVEN PANELS, SEVEN STEPS MAKE DOOR REPAIRS EASY ON ALL 1939 THROUGH 1950 PASSENGER CARS . . . . .	1
TWO-PIECE PROPELLER SHAFT 2R10 OVERDRIVE . . . . .	4
3-UP METAL PARTS CLEANER GREAT HELP IN THE SHOP . . . . .	6

handle hole and cylinder lock hole. Drill with 1/8" drill from outside of panel to make certain hole is properly located. Drill with proper sized drills. The door is now ready for painting. Replace door handle and door cylinder lock.

Parts required for performing the outer door panel replacement work on various models are as follows:

Part No.	Description
292000	Outer Replacement panel for Left and Right Front or Rear Doors on 1939-40 Champion 2-door and 4-door models
292001	Outer Replacement Panel for Left and Right Front or Rear Doors on 1939 through 1942 Commander and President 4-door models, 1941 through 1946 Champion 2-door models
292002	Outer Replacement Panel for Left and

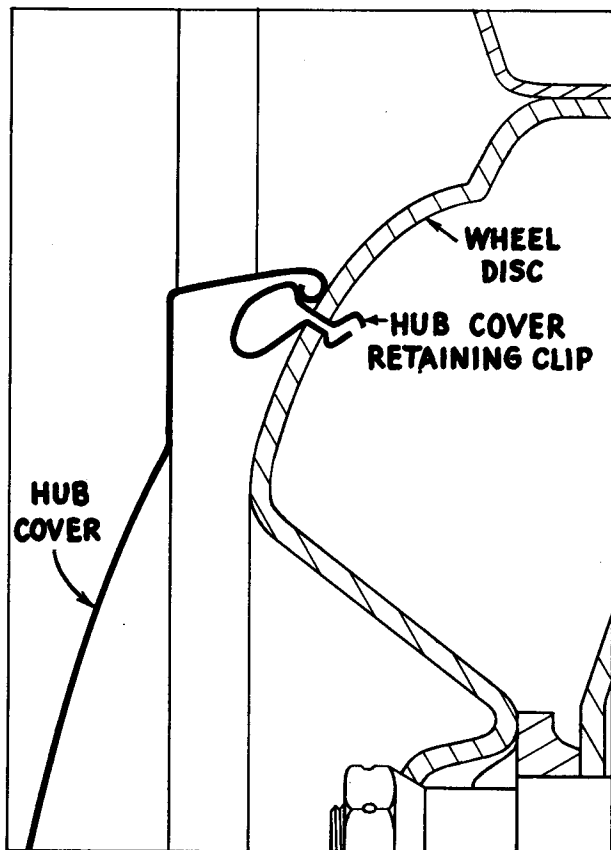
Part No.	Description
	Right Doors on 1939 through 1942 Commander and President 2-door models, 1941 through 1946 Champion 2-door models
292004	Outer Replacement Panel for Right Front Doors on 1947 through 1950 Champion and Commander 2-door and 4-door models
292005	Outer Replacement Panel for Left Front Doors on 1947 through 1950 Champion and Commander 2-door and 4-door models
292006	Outer Replacement Panel for Right Rear Doors on 1947 through 1950 Champion and Commander 4-door models
292007	Outer Replacement Panel for Left Rear Doors on 1947 through 1950 Champion and Commander 4-door models

**HUB COVER RETAINING SPRING  
G-9G; 10A-17A; 6C-8C**

Please record this article on page 182 of your 1947 Shop Manual.

To reduce the possibility of hub cover loss, a new retainer clip, Part No. 526646, entered production with Champion 9G Serial No. G-542601 and Commander Serial No. 4428475.

Part No. 526646 clip replaces the clip Part No. 518977 formerly used; the new clip can also



be used in prior model Champion, Commander, and President cars. To install the clip, punch out the rivet and remove the old clip. Insert the new type clip in place as shown. It is not necessary to remove the wheel from the car nor to rivet the new clip to the wheel, since it is held in place by its own spring tension. It is recommended that clips be replaced in sets on each wheel.

**CHROME HEADLAMP RIMS NOW  
USED ON 9G, 17A MODELS**

Effective with Champion 9G Serial No. G-547936 and Commander 17A Serial No. 4227984, the headlamp rims are chrome-plated instead of painted. It is possible to install the new type rims on cars of earlier production for any of your customers who so desire it, but no credit will be allowed for the painted rims which are so replaced.

**PAINT FORMULAS - NEW  
COLORS FOR 9G, 17A**

Please record this article on page 18 of your 1947 Shop Manual.

Below are given the formulas for the new colors added to the assortment available for 1950 Champion and Commander models:

**COOK'S #8409 SURF GRAY BAKING ENAMEL - SYMBOL W-VR**

Routile non-chalking	97.86%	(by weight)
titanium dioxide		
Synthetic Iron Oxide Yellow	1.62	
Lamp Black	.52	
	<u>100.00%</u>	

**JONES-DABNEY #8405 OLD IVORY BAKING ENAMEL-W-VP**

Pigment Composition	Vehicle Composition
Titanium Dioxide, Zinc Yellow, Ferrite Yellow, Lamp Black	Alkyd Resin, Melamine
	Total Non-Volatile 44%

**JONES-DABNEY'S #8401 SHENANDOAH GREEN BAKING ENAMEL - SYMBOL W-VO**

Pigment Composition	Vehicle Composition
Titanium Dioxide, Zinc Yellow, Ferrite Yellow, Lamp Black, Organic Green	Alkyd Resin, Melamine
	Total Non-Volatile : 44%

**DUPONT'S #8417 AERO BLUE BAKING ENAMEL - SYMBOL W-VT**

246-0953 White	28.5 oz.
246-025 Black	2.1 oz.
246-059 Blue	1.3 oz.
Special Tinting Enamel	0.1 oz.
	<u>32.0 oz.</u>

## DRAIN AND CLEAN ASSEMBLIES BEFORE RETURNING TO FACTORY

Assemblies such as transmissions, differentials, and engine assemblies, must be drained and cleaned before they are returned to the factory or claims credit may be refused.

Dirty or undrained units received by the claims division result in damage to other parts

in handling. Failure on the part of the dealer to drain units would justify refusal of credit. In addition, the shipper of such uncleaned units risks refusal on the part of the carriers to ship or damage to other merchandise in the truck or freight car.

We ask your cooperation in seeing that only clean assemblies are sent back to the factory.

## NEW PAWL STOP FOR LUGGAGE COMPARTMENT LID HANDLE - 9G, 17A

To apply a service correction for a luggage compartment which can be opened without the key when in the locked position, it is necessary only to replace the original pawl stop, Part No. 291025, with a new pawl stop, Part No. 292077. The new stop entered production approximately February 15, 1950, and will be the only such stop carried in parts depot stocks.

To replace the old stop with the new stop, remove the deck lid handle and lock assembly from the lid, remove the two screws that hold the stop in place, and remove the old stop. Install the new stop, which is completely interchangeable with the old, and reassemble the handle and lock assembly. The same mounting screws are used. Adjust the lid lock and striker as necessary to assure firm locking and proper opening of the lid.

## TRUCK SERVICE ITEMS

### DAMAGED REAR AXLE ASSEMBLIES DO NOT MERIT FULL CLAIM CREDIT

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

Rear axle assemblies from 2R10, 2R15, 2R16A, and 2R17A trucks sent to the Claims Division for credit consideration have been arriving with the differential housings damaged beyond use. In most cases, this is caused by burning off the rivet heads with an acetylene torch when removing the brake backing plates.

In the future, in cases where full claims credit would normally be allowed for returned rear axle assembly, the cost of differential housings damaged as described above will be deducted from the claim.

Mechanics should be reminded that brake backing plates can be easily removed without damage to the housing as follows:

1. Center punch the head of the rivet.
2. Drill a small guide hole, preferably

3/16" about 1/2" deep and follow with a 7/16" drill.

3. Cut off the head of the rivet with a chisel.
4. Drive out the rest of the rivet with a drift punch.
5. Ream holes in backing plate and axle to assure a snug fit of the special bolts.

Special bolts, nuts, and washers for installing the backing plates are available from your nearest parts depot as follows:

Part No.	Part Name	Quantity	Model
679054	Bolt	8	2R10
22X186	Nut	8	2R10
84X9	Washer	8	2R10
676215	Bolt	12	2R15, 2R16A, 2R17A
22X186	Nut	12	2R15, 2R16A, 2R17A
84X9	Washer	12	2R15, 2R16A, 2R17A

### PROPELLER SHAFT - 2R15, 2R16A, 2R17A

Please record this article on page 146 of your 2R Series Trucks Shop Manual.

The diameter of the front propeller shaft splines has been increased from 1.248" to 1.373" as a precaution against possible twisting or shearing of the splined end of the front propeller shaft on model 2R15, 2R16A, and 2R17A trucks.

The diameter of the shaft in the support bearing area has not changed thus making it possible to install the new type front shafts (listed below) on trucks produced before the serial numbers shown. The rear shaft, in such an installation, need not be changed. To make the installation of the new shaft in a prior production 2R15, 2R16, 2R16A, 2R17, or 2R17A it will be necessary to install the following parts in addition to the propeller shaft listed for the various wheel bases:

Part No.	Part Name
679781	Spline Yoke
679794	Felt Washer
679795	Washer Retainer
182550	Cap

Changes in propeller shafts for trucks were made effective in production as follows:

Part No. 679770X3, Front Propeller Shaft Assembly:

- 2R15-21 R15-10961
- 2R15-31 R15-10912

Part No. 679770X4, Front Propeller Shaft Assembly: single speed axle.

- 2R16A-31 R16A-24869 with Heavy Duty Transmission (T97)
- 2R16A-55 R16A-24870 with Heavy Duty Transmission (T97)
- 2R17A-31 R17A-14023 (T97) 2-speed

Part No. 679770X1, Front Propeller Shaft Assembly:

- 2R16A-31 R16A-24869 (T9A) Transmission
- 2R16A-55 R16A-24870 (T9A) Transmission

Part No. 679770X4, Front Propeller Shaft:

- 2R17A-55 R17A-13956 2-speed
- R17A-13986 Single Speed
- 2R17A-31 R17A-13970 2-speed

Part No. 679771X2, Intermediate propeller shafts:

- 2R16A-71 R16A-24879
- 2R16A-95 R16A-24879
- 2R17A-71 R17A-14024
- 2R17A-95 R17A-14027

### TWO-PIECE PROPELLER SHAFT 2R10 OVERDRIVE

*Please record this article on page 146 of your 2R Series Trucks Shop Manual.*

Effective with truck Serial No. R10-20524, a two-piece propeller shaft is now being used in all 2R10 model trucks equipped with an overdrive transmission. Use of the two-piece shaft with overdrive transmission is expected to eliminate the so-called "pipe organ" noise occasionally heard on this model when equipped with single propeller shaft.

The rear shaft and support bearing assembly parts used on other 2R10 model trucks are used in this installation with a new front propeller shaft assembly, Part No. 677168X6.

Certain individual trucks with lower serial numbers than the effective number given above are equipped with the two-piece shaft prior to shipment from the factory. These trucks are:

R10-20221	R10-20271	R10-20307	R10-20356
20223	20274	20311	20363
20229	20275	20335	20378
20241	20279	20338	20437
30250	20285	20353	20453
20263	20290	20354	

### MODIFYING INSTRUMENT BRACKET TO ACCOMMODATE NEW SPEEDOMETER - 2R SERIES

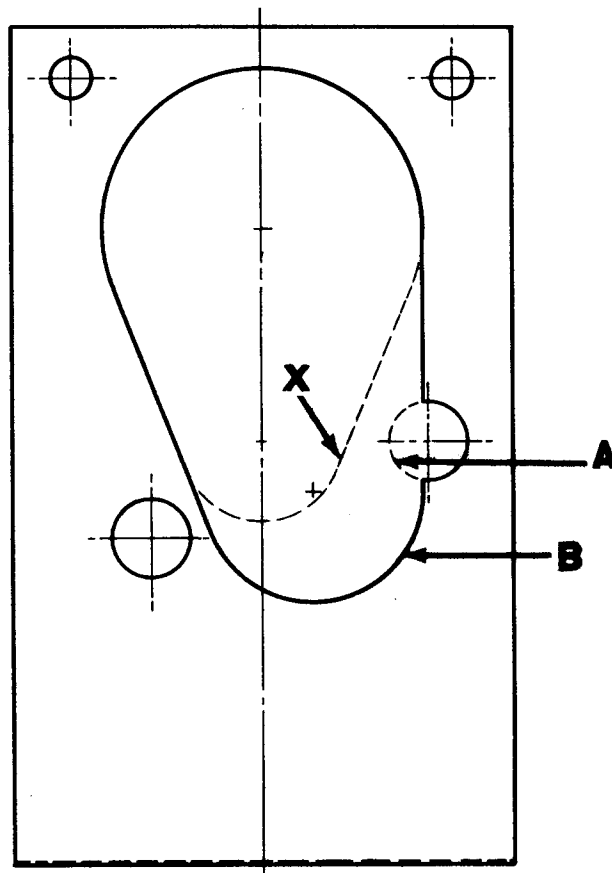
*Please record this article on page 221 of your 2R Series Trucks Shop Manual.*

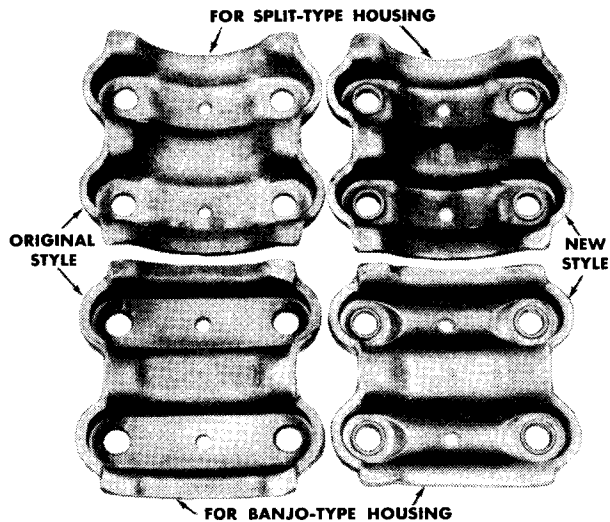
When installing the present type speedometer assembly (with an oiler on the rear) in trucks equipped with Part No. 652463 original bracket, it will be necessary to enlarge the hole in the bracket from the dotted line X to the solid line B as shown in the accompanying illustration.

The illustration is full scale, so that a template can be traced from it and placed on the bracket. The dotted lines indicate the size of the holes in the original Part No. 652463 bracket.

If, for some reason, the new type bracket, Part No. 653082, is used to hold the original speedometer in place, it will be necessary to file out the half-hole shown by the dotted line at A.

Only the new speedometer assembly (with the oiler) will be available for service.





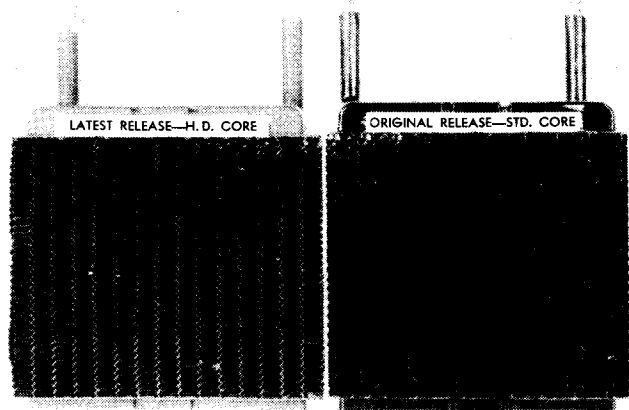
### REAR SPRING CLIP PLATE PERMITS INCREASED U-BOLT TORQUE SPECIFICATIONS - 2R15, 2R16A, 2R17A

Please record this article on page 183 of your 2R Series Trucks Shop Manual.

A design revision has been made in Part Nos. 675998 and 676030 rear spring clip plates which permits the spring U-bolt nuts to be tightened to 180-190 ft. lbs. instead of 80-90 ft. lbs. as formerly specified.

Part No. 675998 plate is used on round axle housings on 2R15 and 2R16A and the Part No. 676030 is used on the 2R16A and 2R17A two-speed rear axles and the 2R17A standard axle (also used on special order for 2R16A).

In the photograph above, the new design plates are on the right and the former type are shown on the left. Plates will not be identifiable when installed, but the differences as shown are apparent before the plates are installed. There is no change in part numbers. The new design plates entered production with the following serial numbers: R15-10925, R16A-24929, and R17A-14073.



### IDENTIFICATION OF 2R SERIES TRUCKS CLIMATIZER CORES

This article is a reprint of Truck Service Letter No. 91, which may now be discarded from your files.

Please record it on page 37 of your 2R Series Trucks Shop Manual.

The accompanying illustration shows the appearance differences between the standard and heavy duty 2R Series Trucks Climatizer cores. The core on the left, heavy duty type (described in Service Bulletin 228, p. 3), has fins arranged in rows of flat accordion folds while the standard core shown on the right uses the common honeycomb arrangement.

To obtain maximum heating efficiency from the heavy duty Climatizer core in localities where extreme weather conditions are encountered, we recommend the use of a 177° thermostat, Part No. 199310 for 2R5, 2R10, and 2R15, and Part No. 197031 for 2R16A and 2R17A. Before installing the thermostat, check its operation for opening at approximately 177° F. in hot water. With this thermostat, of course, permanent type anti-freeze must be used.

If the truck is at least a year old, inspect the inside of the heater hoses for possible obstruction and replace if necessary.

### 2R SERIES TRUCKS USE TWO-WIRE CIRCUIT GASOLINE GAGE SYSTEM

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

The gasoline gage system of all 2R Series trucks thus far produced is of the two-wire type as described on page 238 of the 2R Series Trucks Shop Manual Supplement.

All parts shown in 2R Series Trucks Parts Catalogs are for this type of system and should be ordered for replacement purposes.

Since a one-wire system may be used in future production, we suggest that you make a note beside the heading "Gasoline Gage" on page 113 of your 2R Series Trucks Shop Manual referring to page 238 of the Supplement for information regarding the two-wire system gasoline gage.



### 3-UP METAL PARTS CLEANER GREAT HELP IN THE SHOP

Your attention is called to the recent Parts and Accessories department flash No. 171 describing the Ramco 3-Up metal parts cleaner.

In addition to the money-saving deals offered for initial orders such as the Portatank unit plus prepaid freight, Ramco 3-Up has several points which should be considered when

you are ready to purchase a new supply of cleaner.

3-Up is *non-toxic* and non-inflammable. It requires no heating, no agitation, no power whatsoever. It forms a "top layer" seal or "skin" which virtually eliminates evaporation losses while in use.

It is packed in many convenient sizes of containers, some of which include a handy perforated basket. Possibly most important of all, 3-Up is handled directly through your Studebaker parts depot, permitting you cost savings due to our mass purchasing volume. When necessary, Ramco can ship immediately from any one of its 48 U. S. warehouses.

### PHILCO AUTO RADIO SERVICE STATION LIST

Enclosed with this issue of the Service Bulletin is a copy of the 1950 issue of the Philco Auto Radio Official Directory of Authorized Philco Distributors and Service Stations.

For information regarding warranty service and relations between Studebaker dealers and Philco auto radio service stations, please see Service Bulletin No. 214.

