Studebaker

SERVICE BULLETIN

NOVEMBER NO. 211 STUDEBAKER 1948

HOW TO APPLY THE PARKING BRAKE

Please record on p.28 of 1947 Shop Manual.

It has come to our attention that many owners are not familiar with the procedure for applying the parking brake on passenger cars as recommended on p.12 of the 1948 Owner's Guides.

These owners fail to "set" the brake shoes with the brake pedal before pulling back the parking brake handle, and thereby lose the full pressure against the shoes afforded by the hydraulic system. When the brake pedal is not depressed and held until the parking brake handle is pulled back, it is quite possible that the handle will not be pulled back far enough to provide positive parking brake action.

Dealers are urged to make it a part of the delivery procedure to instruct every owner in the correct application of the parking brake by an actual demonstration. Also, point out the paragraph on p. 12 of the Owner's Guide which reads as follows: "The parking brake lever operates independently of the hydraulic brake system, applying brake pressure to the rear wheels only. *To set the parking brake, depress brake pedal and pull back parking brake handle.*"

KEEP TOP CROSS BRACES ADJUSTED — 15A CONVERTIBLE

Please record on p. 18L of 1947 Shop Manual.

Top cross braces between the top cover and bows of 14A and 15A Commander Convertibles are used to hold vibration to a minimum when the top is in the raised position. Unless the braces are kept taut, their purpose will be defeated.

Owners and dealers alike should check the braces frequently to see that they are properly adjusted. If the braces are loose or give evidence of sagging, unsnap the sleeve and pull it up on each brace to expose the turnbuckle. Tighten the turnbuckles until the braces are taut. Avoid overtightening since this will make it difficult to fasten the top properly at the windshield. Slip the sleeves down over the turnbuckles and close the snap fasteners.

FRONT WHEEL SHAKE AT LOW SPEED

Below is reprinted Passenger Car Service Letter No. 784, September 16, 1948, which may now be discarded from your files. Please record on page 111 of your 1947 Shop Manual.

In this issue

Beginning with Serial No. 4340289 all Commander models were equipped in production with a plain bushing, Part No. 525175, in the left steering knuckle in place of the upper needle bearing, Part No. 196859.

Installation of this bushing increases friction in the steering knuckle bearing and thereby reduces rotational disturbance at the steering wheel sometimes caused by rough surface road conditions. Use of the bushing is recommended on cars in service when this condition is encountered at relatively low speeds. It will have little effect on vibration and shake at high speeds resulting from excessive runout or improper balancing of wheels or tires.

To assure satisfactory results, it is considered important that prior to, or concurrent with, the bushing installation, the items in the following check list be carefully observed.

1. Center steering gear on high spot of cam. Adjust high spot if required. (See pages 103-104 in the Shop Manual.)
2. With wheels in straight-ahead position and gear centered on high spot, align front wheels. (See page 108 in the Shop Manual and also Bulletin No. 203).
3. Inspect all steering connections for looseness and wear. Correct if required. Be sure to inspect steering bell cranks for vertical clearance and adjust to

minimum clearance if required. (See page 108 in the Shop Manual.)
4. Adjust front wheel bearings if required.
5. Install a summer grade (SAE 250) steering gear lubricant, such as Kendall #400, Swan-Finch EP No. 250, Cities Service Trojan Steering Gear 0.
6. Check front end alignment.

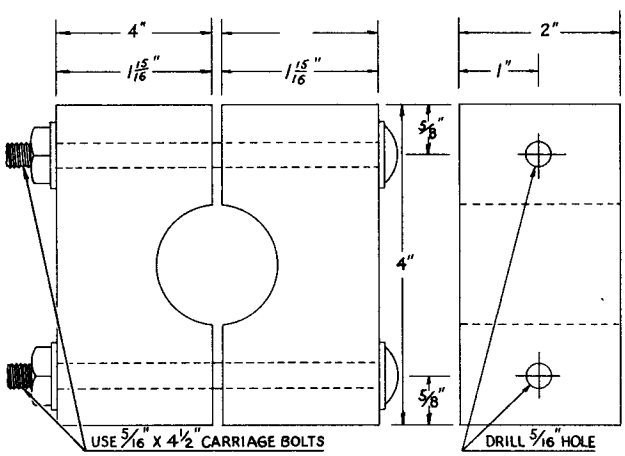
After the above work has been completed satisfactorily there should be no chuckle in the steering gear when the car is driven in a straight-ahead position. It may be possible to detect a slight chuckle in turns under rough road conditions due to the normal increase in clearance which results when the cam lever pins leave the high spot of the cam.

When it is known that the greater portion of driving of a particular car is over roads which tend to accentuate complaints of excessive steering freedom, it may be desirable to install the plain bushings in the upper location of both steering knuckles. The use of two bushings, however, definitely increases the steering effort, particularly when parking the car or in low speed turns. Therefore, two bushings should not be used unless the road conditions require it, and then only if the customer is willing to accept the resulting increased steering effort.

INSTALLING OIL FILLER PIPE IN COMMANDER STRIPPED ENGINES - PASSENGER CARS AND TRUCKS

To avoid possible damage in shipment to the oil pan filler tube of Commander-type stripped engine assemblies, the filler tube will be shipped with the stripped engine but will be uninstalled.

Dealers should make up the set of blocks described and illustrated below to facilitate installation of the tube.



The blocks are made from two pieces of hardwood, each 2" thick, 1-5/16" wide, and 4" long. Each block contains a semicircle of 1-1/2" diameter cut into one of its 4" sides. The blocks are held together in use by two 5/16" x 4-1/2" carriage bolts, washers, and nuts as shown in the drawing.

When installing an oil pan filler tube in a Commander-type engine, wrap a piece of emery cloth around the tube below the bend, then draw up the blocks snug against the emery cloth. The blocks will then serve as a hammering surface to drive the oil pan filler tube into the engine without any necessity for hammering or driving on the pipe itself and possibly damaging it. There is a flange inside the hole in the engine block at the depth to which the filler pipe should be driven.

TRUCK SERVICE Information

REAR AXLE CODING - 2R SERIES TRUCKS

Below is reprinted Truck Service Letter No. 86, September 16, 1948, which may now be discarded from your files.

The code identification of the various rear axle assemblies for the 2R Series Trucks given below should be consulted before placing orders for replacement axles to ensure that the correct type axle is ordered.

MODEL	CODE	CODE LOCATION	RATIO	MFR.
2R5	W 11	On tag under Cover Plate Cap Screw	4.82	Spicer
2R10	51524NX11	L.R. Side of Axle Tube	5.57	Timken
2R10	51524NX11	L.R. Side of Axle Tube	4.85	Timken
2R15	53625NX1	L.R. Side of Axle Tube Gear Ratio on R.R. Side of Axle Tube	6.66	Timken
	53625NX1	L.R. Side of Axle Tube Gear Ratio on R.R. Side of Axle Tube	5.83	

MODEL	CODE	CODE LOCATION	RATIO	MFR.
2R16	53521NX6	L.R. Side of Axle Tube Gear Ratio on R.R. Side of Axle Tube	6.66	Timken
	53521NX6	L.R. Side of Axle Tube Gear Ratio on R.R. Side of Axle Tube	5.66	Timken
2R17	E102NX1	R.R. Side of Axle Tube Gear Ratio on R. Side of Differential Carrier	6.80 for single speed	
	E302NX1	R.R. Side of Axle Tube Gear Ratio on Top of Differential Carrier	6.13 8.10 for 2-speed	

Example:

A 2R15 truck will show the code marking 53625NX1 on the left rear side of the axle tube. Part No. 53625 is the manufacturer's part number. The NX1 indicates that it is an assembly purchased without backing plates, and the 5.83 on the right rear side of the axle tube is the gear ratio.

On the 2R16 truck showing the code markings of 53521NX6 on the left rear side of the axle tube, Part No. 53521 is the manufacturer's part number; NX indicates that it is an assembly purchased without backing plates and the figure 6 after the NX indicates that there have been five non-interchangeable engineering changes made by the vendor. The 6667 on the right rear side of the axle tube is the gear ratio of 6.66 to one.

PROPELLER SHAFT SUPPORT BEARING KIT - M15A AND M16 TRUCKS

Please record this article on goldenrod page titled "Propeller Shaft and Universal Joint" of M Series Shop Manual.

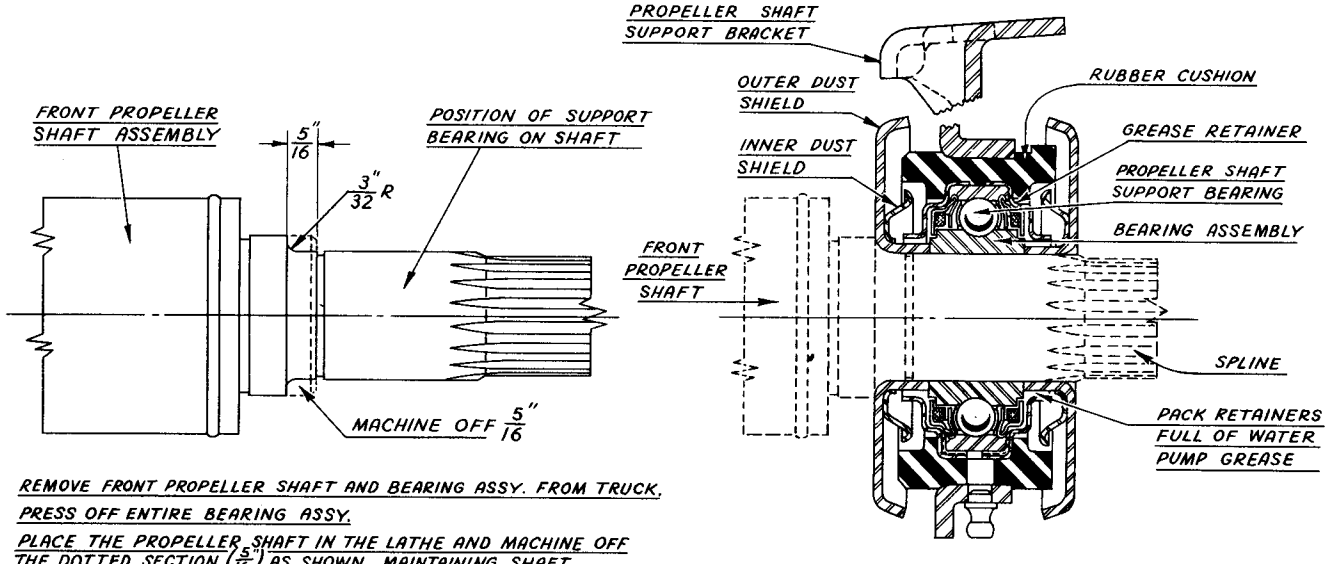
To assure longer life and trouble free service of propeller shaft support bearing assemblies on M15A and M16 trucks (so equipped) which operate under abnormal conditions, a kit has been released for service containing improved support bearing assembly parts such as are now used on the 1949 model trucks.

The kit, Part No. 678889, contains the following parts and can be ordered through your regular parts depot:

Qty.	Part No.	Part Name
1	678652	Propeller Shaft Support
2	678233	Propeller Shaft Support Cushion-Upper
2	678234	Propeller Shaft Support Cushion-Lower
2	678235	Propeller Shaft Support Cushion Spacer
4	41X357	Propeller Shaft Support Cushion Plain Washer
2	8-0832-G	Propeller Shaft Support Screw
1	93X13	Propeller Shaft Support Screw Lock Wire
1	664443	Propeller Shaft Support Bearing
1	678651	Propeller Shaft Support Bearing Cushion
2	677881	Propeller Shaft Support Bearing Grease Retainer
1	677882	Propeller Shaft Support Bearing Grease Fitting
2	677878	Propeller Shaft Support Bearing Dust Guard Assembly

Installation

To install the new parts it will be necessary to place the propeller shaft in a lathe and machine 5/16" from the large section of the shaft where the old style front dust shield was installed. Be sure to maintain the shaft diameter size of 1.3779 to 1.3784. The new dust shield will be pressed on to this section. See the accompanying sketch.



REMOVE FRONT PROPELLER SHAFT AND BEARING ASSY. FROM TRUCK. PRESS OFF ENTIRE BEARING ASSY.

PLACE THE PROPELLER SHAFT IN THE LATHE AND MACHINE OFF THE DOTTED SECTION (5/16) AS SHOWN, MAINTAINING SHAFT DIAMETER AT THIS POINT.

Clean the grease retainers and pack full with water pump grease. If water pump grease is not available, use wheel bearing lubricant or a high melting point grease.

Install the grease retainers on the center bearing making sure the retainer grease passages are aligned. Install the bearing and retainer assembly in the rubber cushion being sure that the grease passages are in line with the slot and hole in the rubber cushion.

Apply liquid soap to the outside surface of the rubber cushion and to the inside surface of the support bracket. *Do not use engine or mineral oil.* Insert rubber cushion and bearing assembly as shown in the sketch on p. 3. Push through until approximately 3/8" of the rubber cushion extends beyond the support bracket edge.

Place the propeller shaft in an arbor press and install the front dust shield. To install the bearing and support assembly, place a 1-1/8" diameter tube on the inner race of the bearing and press bearing into place on the propeller shaft. Install the rear dust shield on the propeller shaft. Then install the propeller shaft and center bearing support assembly on the vehicle and drive the truck as soon as possible while soap is still wet to assure proper alignment of the propeller shaft support bearing assembly.

1940 CHAMPION TOP PANEL WANTED

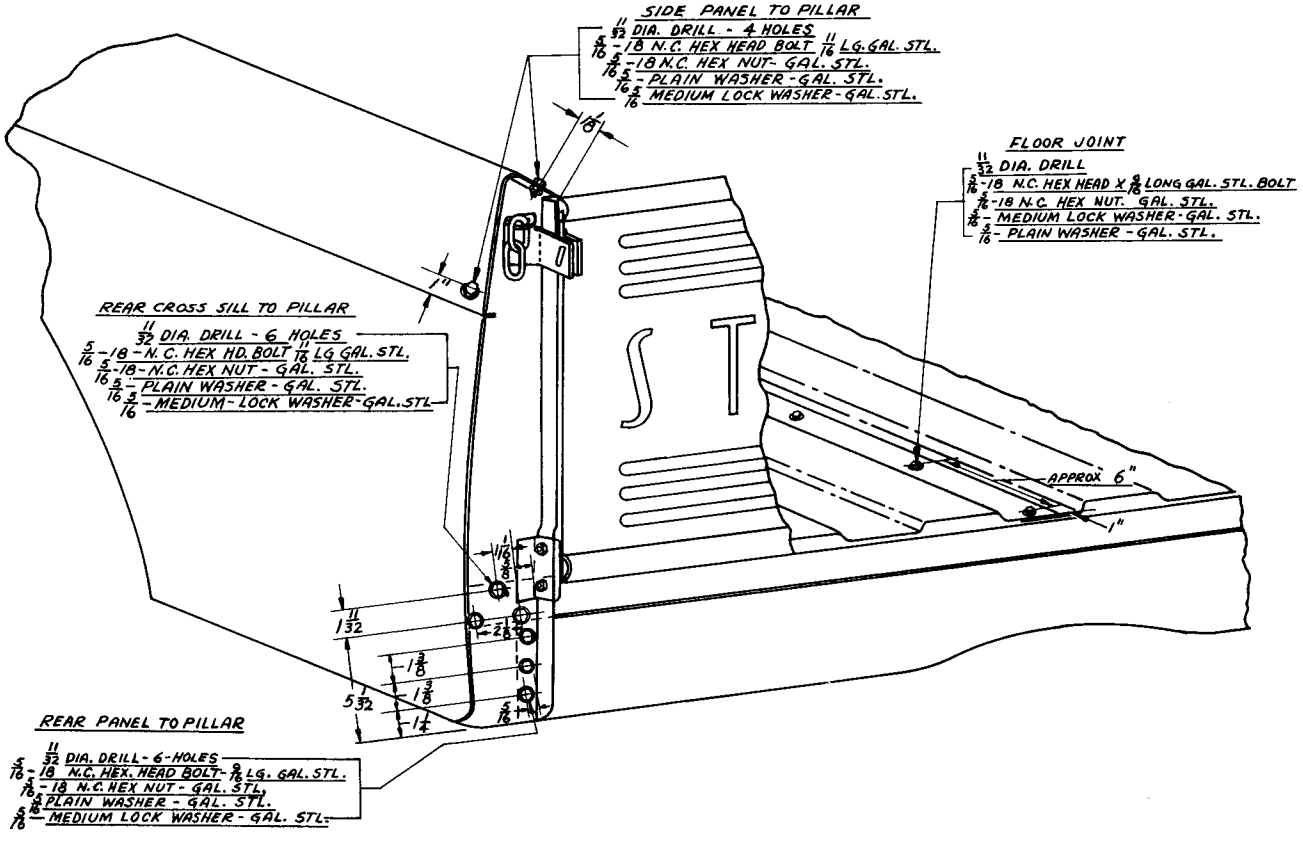
Mr. John R. Maurseth, Dacotah Motors, 112 Third Avenue, S. W., Aberdeen, South Dakota, would like to hear from any dealer who has for sale a roof or top panel (Part No. 606631) for a 1940 Champion (2G) 4-door sedan.

PICK-UP BOXES-2R5, 2R10, 2R15

Below is a reprint of Truck Service Letter No. 85, September 14, 1948, which may now be discarded from your files.

Beginning with Truck Serial Nos. R5-004653, R10-001543, and R15-002062, a change in the welding procedure on the pick-up box entered production. Additional spot welds and acetylene gas welds were placed on the tail gate section to eliminate the possibility of joint separation.

Should difficulty be experienced with joint separation of pick-up boxes on trucks with serial numbers prior to those given above, the pick-up box can be strengthened by the installation of bolts, washers, and nuts in the locations shown on the drawing below. Included in the drawing are the exact measurements for locating the holes, correct drill size to use, and the bolts, washers, and nuts required.



FLOOR PAN TRANSMISSION CLEARANCE COVER SEAL -- 2R SERIES TRUCKS WITH FOUR-SPEED TRANSMISSION

For 2R Series trucks equipped with 4-speed transmissions, a seal is now available for the shift lever tower and hand brake lever opening in the floor pan to prevent air or dust from entering the cab.

This seal is made of material similar to sponge rubber and is installed by cementing it to the transmission floor pan cover so that it fits tightly around the shift lever tower and hand brake lever. The seal is available through your nearest parts depot. Order Part No.652871.

Effective with truck Serial Nos. R5-006577, R10-001565, R15-002063, R16-005531, and R17-001943, the shift tower hole in the floor mat was made smaller and the mat reinforced at this point as well as around the brake lever to accomplish the same purpose. The seal described above also entered production with these serial numbers.

KENT-MOORE CONTINUING TOOL AND EQUIPMENT CATALOG

Kent-Moore will publish, from time to time, punched insert pages for their loose-leaf service tool and equipment catalogue.

Kent-Moore representatives are personally visiting Studebaker dealers and presenting them with the binder for the insert sheets which will be mailed with Studebaker Service Bulletins. Dealers who have not yet received their binders are requested to write Kent-Moore Organization, General Motors Bldg., Detroit 2, Michigan, for one. It will be mailed at once.

Each tool insert sheet is headed "New Service Tool for Studebaker" and in a white circle is given the following information for filing: Tool Manual Insert No., Section (such as "Transmission," "Steering," etc.), and date of publication. The contents of the sheet will cover generally, the following: illustration of tool, tool name, model applications, descriptions and use of tool, and the shipping weight. At the bottom of each insert sheet is a detachable price list-order blank with complete ordering information.

The equipment inserts are headed "Service Equipment Bulletin" and in the white circle are shown the Bulletin No., Section (such as "General Equipment," "Lubrication Equipment," etc.), and the date of publication. The rest of the equipment bulletin make up follows that of the tool inserts.

These insert sheets should be carefully filed in the binder supplied you by Kent-Moore. As further insert sheets are published, they will be mailed to you in the Studebaker Service Bulletin and a note will be printed in the Bulletin so that you will know that such an insert was mailed if, for any reason, your copy of the Kent-Moore insert sheet should fail to reach your desk.

KENT-MOORE SERVICE TOOL INSERTS NO.1, 2, 3, AND 4

We are mailing with this issue of the Service Bulletin, Kent-Moore Service Tool Manual Inserts Nos. ST-1 through ST-4, which describe KMO 630 Transmission Snap Ring Pliers; J2679 Remote Control Starter Switch; J2200 Steering Arm Ball Bolt Puller; and J1621 Steering Idler Lever Bushing Service Set, which carries the same price ($45.80) as it did in 1940.

KENT-MOORE SHOP LIGHTS

Service Equipment Insert No.1

Mailed with this issue of the Service Bulletin is a copy of the Kent-Moore Service Equipment Bulletin No. 1 which describes their three new portable shop lights. This sheet should be filed in the Kent-Moore Tool and Equipment binder.

One light is a floor type shop light for general purpose use. This light is suspended from an arm and sits on a large tripod base, requiring no hooks or clamps.

The second type of shop light described is the undercoating light, which uses a floodlight type of reflector and is particularly suitable for lighting the whole underside of a car while it is on the lift.

The third portable light is a smaller utility light on a heavy circular pedestal base suitable for work in car interiors.