Studebaker

SERVICE BULLETIN

NOVEMBER NO. 269 STUDEBAKER 1952

RECOMMENDATIONS COVERING TYPE OF CRANKCASE ENGINE OIL TO BE USED IN ALL STUDEBAKER VEHICLES

Please record this article on the Service Bulletin reference page at the end of the Lubrication section of your 1951 Passenger Car Shop Manual and also on p.135 of your 2R Series Trucks Shop Manual. This is a reprint of the main portion of Passenger Car Service Letter No. 888.

The Automotive and Petroleum Industries have together developed a revision in the identification of the various *TYPES* of engine crankcase oils. Where the former designations of "Heavy Duty," "Premium," and "Regular" were based on quality or character of the lubricants, the new method classifies them as to the type of vehicle service to which they are best suited. The nomenclature being adopted for this purpose will be "FOR SERVICE MS" (Severe Service), "FOR SERVICE MM" (Moderate Service), and "FOR SERVICE ML" (Light Service).

Within a reasonably short time, these designations will replace the previous designations of "Heavy Duty," "Premium," and "Regular." Some oil companies are already identifying their containers with these revised *TYPE* classifications. It appears desirable, therefore, to review briefly the subject of engine crankcase oils in the light of the revised *TYPE* classifications.

"For Service MS"

This designation normally represents severe service conditions of operation. The definition "severe service" includes (1) start and stop, short run type of operation so often encountered in urban areas and (2) high temperature, heavy load or sustained high speed operation.

Start and stop, short run type of operation tends to promote condensation, contamination of the oil through dilution with products of combustion and unburned fuel, corrosive wear of metal parts, and formation of emulsion type crankcase sludge. The severity of this type of severe service increases materially in cold weather or winter operation.

High temperature, heavy load or high speed operation tends to promote oxidation of the crankcase oil, varnish deposits, and lower film strength of the crankcase oil with the possibility of resultant scuffing of metal parts.

Engine crankcase oils bearing the "FOR SERVICE MS" symbol will, in general, possess the corrosion resistance and viscosity characteristics to afford maximum protection against the above severe service conditions.

"For Service MM"

This designation represents moderate operating conditions where the engine temperature differences, due to start and stop driving, are not as great as those prevailing in some parts of the country during cold weather or winter operation and where relatively high speeds are encountered only intermittently. It does not, however, include *extensive* start and stop type of operation or prolonged idling which some vehicles are, of necessity, subjected to.

In this issue

Crankcase engine oils bearing the "FOR SERVICE MM" symbol will, in general, possess the characteristics of the "FOR SERVICE MS" engine oils but to a lesser degree in accordance with the less severe type of service for which they are intended.

"For Service ML"

This designation represents the least severe type of service and includes moderate speed driving most of the time with no severe low or high engine temperature operation.

Engine crankcase oils bearing the "FOR SERVICE ML" designation based on these requirements may be rather unstable in high temperature viscosity characteristics with little or no corrosion resistance properties.

Recommendation

Effective immediately, therefore, we recommend for use in Studebaker vehicles engine crankcase oils which bear the designation "FOR SERVICE MS." Engine crankcase oils bearing the designation "FOR SERVICE MM" may be used as an alternate where it is certain the type of service to which the vehicle is subjected falls within the definition outlined under "FOR SERVICE MM." We specifically recommend *against* the use of engine crankcase oils which are designated "FOR SERVICE ML."

It may be a matter of some months before all refiners label engine oils with the new revised classifications. During that period, such refiners will still be labeling their crankcase engine oils with the old *type* classifications. In those cases we recommend that only engine oils which are labeled either "Heavy Duty" or "Premium - Heavy Duty" be used in our vehicles.

Viscosities

There is no change in our recommendation as to *viscosity* of engine crankcase oils to be used in our vehicles. "Engine oil viscosity" is a term which indicates, broadly, the "body" or "weight" of the oil to be used in the engine as opposed to the *TYPE*. Our prevailing recommendations as to engine oil *viscosity* are listed below:

LOWEST TEMPERATURES ANTICIPATED	CRANKCASE OIL VISCOSITY RECOMMENDATION
32° Above Zero (Fahrenheit)	S.A.E. 30
10° Above Zero (Fahrenheit)	S.A.E. 20-20W
10° Below Zero (Fahrenheit)	S.A.E. 10W
Under 10° Below Zero (Fahrenheit)	S.A.E. 5W*

* The engine should not be operated at sustained high speeds when using S.A.E. 5W engine oil.

Please review this article with all members of your organization to be certain they have a full and complete understanding of our crankcase engine oil recommendations. Also, be certain that these recommendations are reviewed with new vehicle purchasers and with your service customers as the occasion arises.

BRAKE PEDAL ARM RUBBING TOEBOARD 1950-52 MODELS WITH AUTOMATIC DRIVE

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

On some 1950-52 model passenger cars with Studebaker Automatic Drive the pedal arms become slightly misaligned from the factory production setting. This causes the arm to rub against one side of the hole in the toeboard and floor mat and in turn causes the pedal to drag.

To relieve the rubbing condition that causes this type of drag in pedal action in 1950-52 cars with Automatic Drive, proceed as follows:

1. Remove the brake pedal return spring.
2. Remove pin at clevis from brake pedal-to-master cylinder rod. This allows pedal to move the full travel to the toeboard.
3. Align left pedal arm parallel with the right pedal arm. Be sure that the clamp bolt securely tightens the left pedal arm to the shaft.
4. Align pedal pad to pedal arms.
5. Loosen toeboard retainer screws and position the brake pedal grommets in toeboard so that they are centered with the full travel of the brake pedal.
6. Replace clevis pin in brake pedal-to-master cylinder rod..
7. Adjust brake pedal free travel as specified in the respective Shop Manuals.

BEAT THE BATTERY BOGEY

SERVICE INSTALLATION OF DOOR WINDOW GUIDE SUPPORT - ALL 2R SERIES TRUCKS

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

Occasionally the truck cab door window guide support may fail in service. Attempts to repair the support by welding usually results in damage to the paint of the door panel.

To provide a more satisfactory method of repair, a door window guide support has been released for service. This support may be obtained by writing to the General Service Department, Truck Service Division at South Bend, Indiana. Be sure to include the serial number of the truck on which the service support is to be installed.

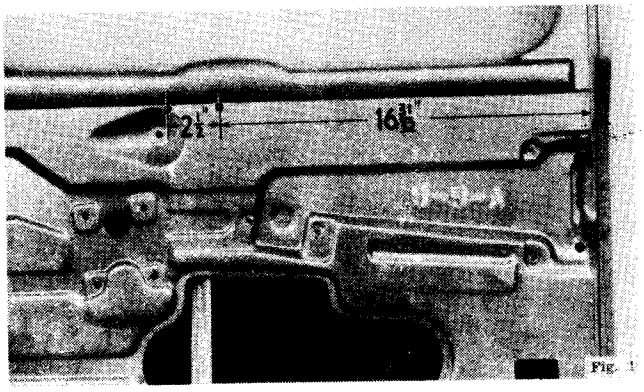

Fig. 1

Instructions for installing the door window guide support are as follows:

1. Remove the door trim and glass as outlined on pages 31 and 32 of the 2R Series Trucks Shop Manual.

2. Locate and center punch the hole location as shown in Fig. 1. Start hole with 1/8" drill, following with 3/8" drill.

3. Remove screws and Tinnerman speed nuts from service support. Install service support on window guide as shown in Fig. 2. Place the

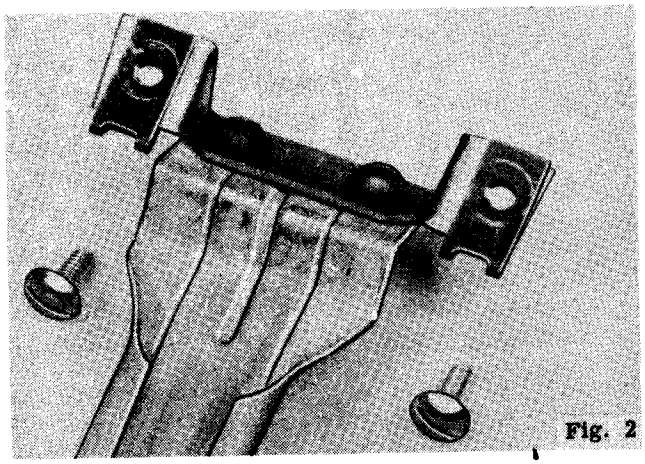
Fig. 2

REAR SPRING ASSEMBLIES 2R16A AND 2R17A TRUCKS

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

Rear spring assemblies of 2R16A and 2R17A trucks now have a slightly greater carrying capacity. When making this change in design the number of leaves per spring assembly was reduced. The small differences in carrying capacity between the former type spring assemblies and the new type make it possible to replace rear spring assemblies on an individual basis; i.e., a new type assembly can be installed on the right rear side of the truck and the old type left rear assembly need not be changed.

The new standard rear springs entered production effective with Truck Serial Nos. R16A-38770 and R17A-31034. The heavy duty rear springs entered production effective with Truck Serial No. R16A-39498 and R17A-31959. Extra heavy duty rear springs entered production with Truck Serial No. R16A-40433.

The part numbers and application of the new type rear spring assemblies are:

PART	PART NO.	NO. LEAVES	MODEL 2R16A	MODEL 2R17A	SPRING CLIP TO BE USED R16A SINGLE SPEED AXLE	SPRING CLIP TO BE USED R16A-R17A TWO SPEED AXLE
*Assy.	681190	20 ■	Standard		677545X1	677545X2
Main	681189	10	Standard			
Aux.	681188	10 ■	Standard			
*Assy.	681193	23 ■	Heavy Duty	Standard	677545X3	677545X4
Main	681192	13	Heavy Duty	Standard		
Aux.	681191	10 ■	Heavy Duty	Standard		
*Assy.	681196	25 ■●	Extra Heavy Duty	Heavy Duty	(Not available)	677545X9
Main	681195	15 ●	Extra Heavy Duty	Heavy Duty	(With split)	
Aux.	681194	10 ■	Extra Heavy Duty	Heavy Duty	(Type axle)	

*Assembly consisting of main and auxiliary spring. ■ Includes spacer leaf. ● Includes rebound leaf.

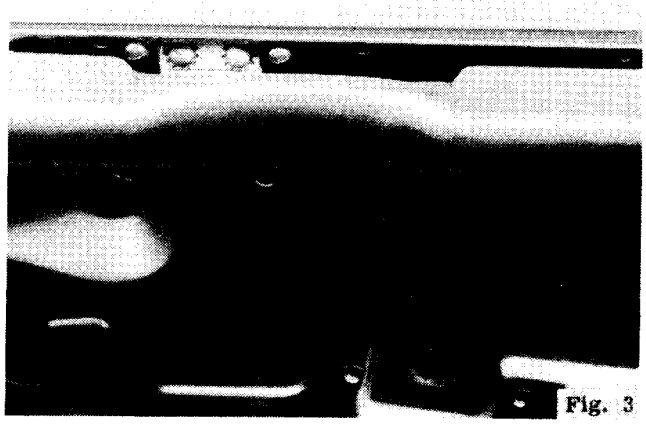

Fig. 3

window guide and support in door with the support resting on the outside of door flange. Install the two bottom screws in door window guide. With window guide and support properly aligned, mark support hole location on door flange, and center punch. Remove window guide screws and remove window guide and support from door.

4. To drill the two 9/32" holes for the window guide support fastening screws, it may be necessary to bend the flange toward the door outer panel to prevent the drill from running off center punch mark. After drilling holes pull flange back to original position.

5. Install Tinnerman speed nuts on support. Install window guide and support in regular position in door. If part of the original support is still in place it will be necessary to cut or break off the pieces in order to get service support properly installed in the cutout section of the flange. Fig. 3 shows support correctly installed.

6. Reassemble all parts and adjust according to instructions on pages 32 and 33 of the 2R Series Trucks Shop Manual.

The production door window guide support is now being made of heavier gage stock. Sharp edges which might induce fatigue failure have been eliminated.

CYLINDER DEGLAZING TOOL

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

We have tested the Circle-Y Cylinder De-Glazing tool and found that it satisfactorily deglazes cylinders as advertised by the manufacturer. For the information of dealers who may want a cylinder deglazer of this sort, we have placed the Circle-Y tool on our list of approved tools.

Orders for the tool should be placed directly with the Circle-Y Tool Company, P. O. Box No. 1850, Milwaukee 1, Wisconsin.

NOTE.--*Export dealers may order from The Studebaker Corporation, Export Division.*

FENDER COVERS SELL SERVICE, PROTECT CARS

Fender (or seat) covers are used by careful servicemen mainly to protect the finish of the fender on cars or trucks against scratches, oils and greases, or damage from liquids that act as solvents on lacquer or synthetic enamels.

Many dealers do not realize, however, that the very act of placing a clean cover over the fender (or seat) has merchandising as well as protective value. If the cover itself is clean, attractive, and adequate in size, customers who see it will gain at once an impression that the dealership is careful in the handling of cars and trucks in the service department.

It therefore becomes worth the while to choose covers carefully and to protect them against abuse. Keep covers on the fender (don't let them slip to the floor in a crumpled heap) and when they are not in use, fold them carefully and store them away from damage. If acid, grease, or other materials fall on the cover, wipe them off before putting the covers away. Use only *clean* covers on fenders and seats.

Some fender and seat covers are especially made to guard against slipping. One such is the Vacuum Grip cover, made by the Vacuum Grip Cover Co., Inc., of 54 Washburn St., Bridgeport 5, Connecticut.

PRINTED IN THE UNITED STATES OF AMERICA 115215M