

Studebaker

# SERVICE BULLETIN

NOVEMBER

NO. 234



1949

## ENGINE CYLINDER BLOCK FOR 9G, 2R5, 2R10, 2R15

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

An engine cylinder block, Part No. 524824, is now available for use in either 9G Champion or 2R5, 2R10, and 2R15 truck models. The oil filler pipe holes have been plugged so that the proper filler pipe location can be selected depending upon whether the cylinder block is to be used in a passenger car or truck. The oil filler pipe is not included with the cylinder block.

If the cylinder block is to be used on a 9G Champion model, order Filler Pipe, Part No. 525922, and install in the front oil filler pipe hole. If it is to be used in a 2R5, 2R10, or 2R15 truck model, order Filler Pipe, Part No. 195978, and install in the rear filler pipe hole.

## INSTALL CLIMATIZER HOSES CAREFULLY - 9G, 17A

We have had reports that the Climatizer hose was installed in such a manner that the hose rested on the exhaust manifold. This situation, of course, could lead to coolant loss and possible damage to the engine.

We urge your service personnel to follow the Climatizer installation instructions carefully so that the hoses will be installed exactly as specified.

Your service men should inspect early production Climatizer-equipped cars to be sure there are no improperly positioned hoses.

## ALIGNMENT OF RADIO MOUNTING BOLT HOLES - 9G, 17A

We have found several cases in early 1950 model cars wherein the radio attaching holes in the bottom flange of the instrument panel were misaligned and causes difficulty in installing the radio mounting bolts used at this point. Should this condition be experienced, use the center section of the trim strip (removed for radio installation) as a guide or template to

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determine approximately how much misalignment is present, then with a file elongate the corresponding hole in the bottom flange of the instrument panel until correct alignment can be obtained.

A few cases have been reported wherein radio installers have damaged sets by attempting to remove manual tuning (right hand) knob prior to installing the radio in the car. No knobs or other components need be removed from radios for installation. The radio is installed as it comes in the package, that is, as a complete assembly with tuning knobs, dial, and dial bezel already in place. It is necessary only to follow instructions to attach antenna and power leads and secure radio in place with the mounting bolts, being careful to obtain proper alignment of the mounting bolt holes, as described above.

## ELIMINATION OF CLUTCH OPERATING SHAFT RATTLE — 6G-9G, 14A-17A

Please record this article on page 40 of your 1947 Shop Manual.

This article is a reprint of Passenger Car Service Letter No. 811, which may now be discarded from your files.

A rattle in the clutch operating shaft can be eliminated in the 6G-9G models inclusive and 14A-17A models inclusive by the use of two Neoprene washers, Part No. 527281. Two of these washers, used as directed below and described in the accompanying illustration, will prevent noise in the clutch operating shaft parts, in cars produced prior to Serial Nos. G485212 (9G) and 4404905 (17A).

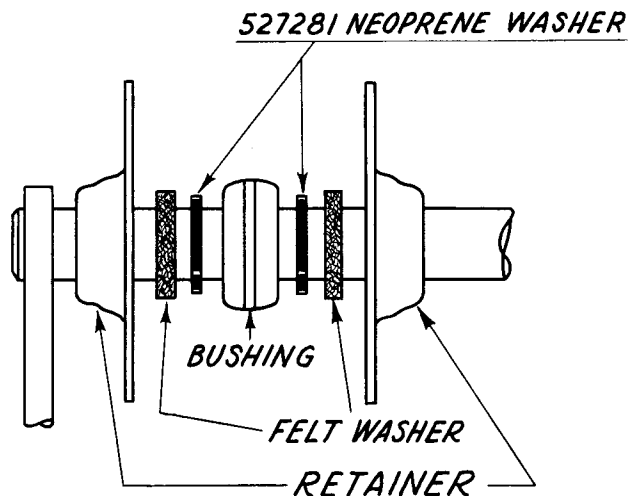
### Installation Procedure

1. Remove operating shaft and bushing and retainer assembly and disassemble.
2. Inspect shaft. If it shows signs of wear, replace shaft.
3. Disassemble the bushing and retainer assembly, replace any worn parts, and reassemble, using two of the new Neoprene washers, Part No. 527281. The parts should be assembled in the following order:

- (a) Metal retainer
- (b) Felt washer
- (c) Neoprene washer
- (d) Bushing
- (e) Neoprene washer
- (f) Felt washer
- (g) Metal retainer

4. Thoroughly lubricate the assembly with SAE 30 engine oil and reassemble with the shaft in the car.

Use of the Neoprene washers will enter pro-



duction on Engine No. 559437 (9G) and Engine No. H388622 (17A). The parts are available from your Studebaker Parts Depots.

## INSTALLATION OF FLOOR MATS AND CARPETS — 9G, 17A

Careful installation of floor mats and carpets before the new car is delivered to the customer is important not only for purposes of appearance, but is also important to assure proper air flow to both front and rear compartments from the Climatizer either in summer or winter.

The drawings at the right show the location of installation screws for installing floor mats and carpets in the various body styles of 9G Champion and 17A Commander models.

The inner scuff plate screws are removed, mat or carpet laid, and the scuff plate screws reinstalled to fasten the floor covering at those points. Additional screws (provided in an envelope placed in the package compartment) are to be installed at the points designated by the large letter X on the drawings.

**EXPORT CARS:** The carpet installation screws for assembled cars, both boxed and unboxed, are in a bag in the package compartment.

The carpet screws for unassembled cars are in Bag 95 (short screws) and Bag 96 (long screws) in the Deck Lid Box.

The drawings at the right are of a L.H.C. car and the locations of the carpet installation screws on R.H.C. cars are reversed.

## RADIO INTERFERENCE — 17A, 17AY

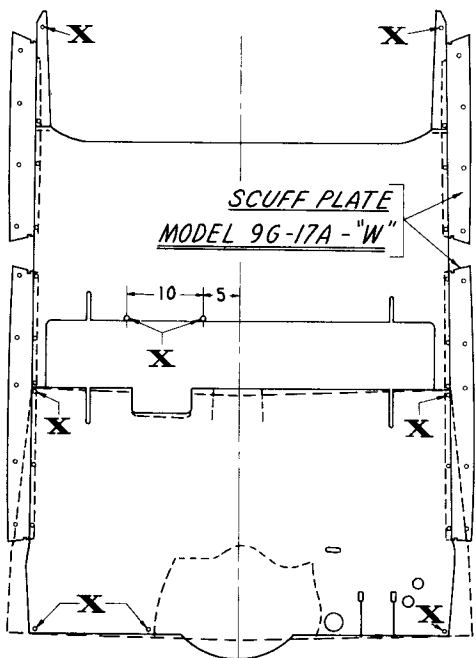
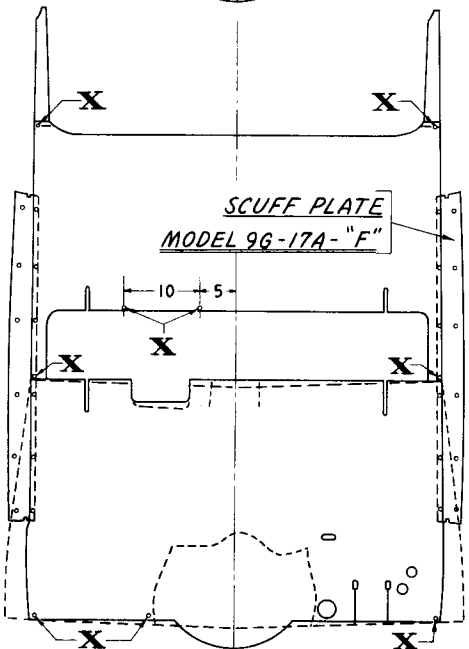
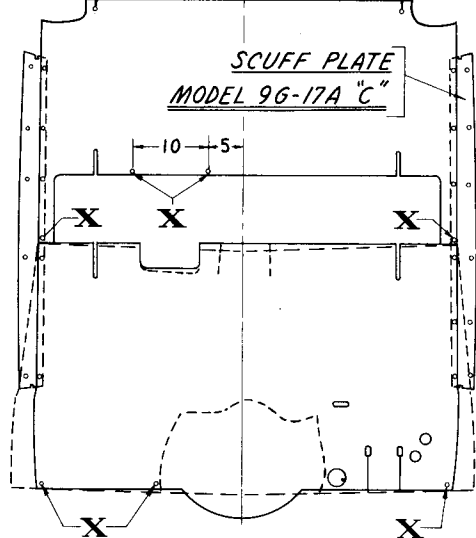
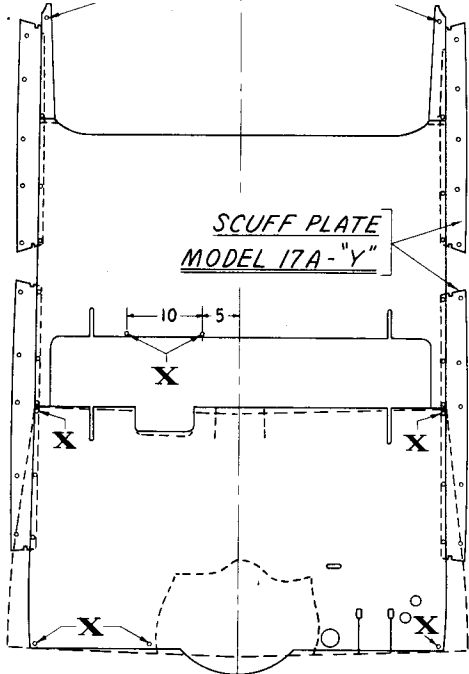
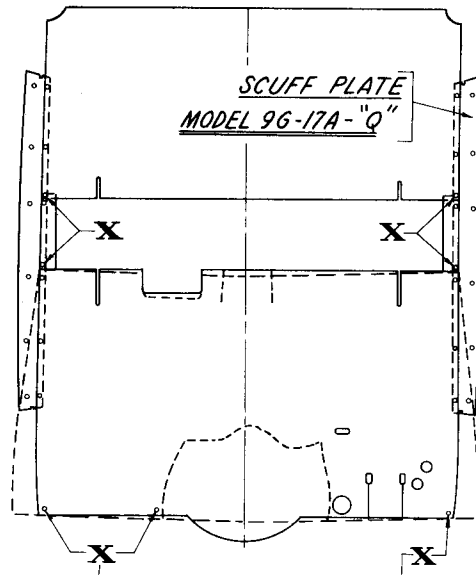
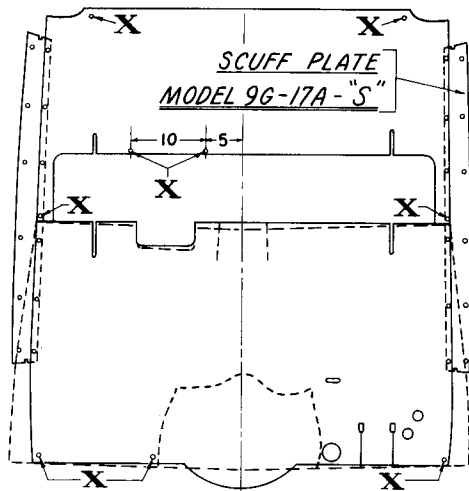
This article is a reprint of Passenger Car Service Letter No. 813, which may now be discarded from your files.

An objectionable interference to good radio reception has been noticed in 1950 Commanders and Land Cruisers. This has been traced to the car's electrical system.

To eliminate this interference a condenser is being installed in production at the current and voltage regulator, effective with Serial No. 4409560. Cars so equipped can be identified by the condenser attached to the battery terminal of the regulator.

In addition, certain internal revisions have been made in the radio set. These revised sets

(continued on page 4)



can be identified by a five-pointed star stamped on the container and on the serial ticket of the set.

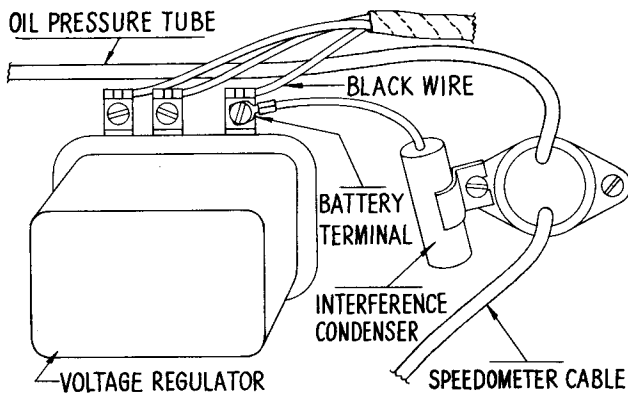
On cars and radio sets produced prior to these changes, equally good radio reception can be obtained by installing the condenser on the battery terminal voltage regulator, and, in addition, by installing a condenser on the ignition switch. Radios with or without the internal revisions will perform satisfactorily with the two condensers.

It is considered desirable to install these two condensers in all 17A Commanders and Land Cruisers built previously without them. This will eliminate the interference if the car is now equipped with a radio and will preclude its occurrence in those cars in which radios may subsequently be installed. Please determine the number of 17A Commanders and Land Cruisers you have delivered and have in stock. Then place an order with your nearest Parts Depot for TWO, Part No. 527425, Condensers per car. The condensers will be supplied without charge.

When received, arrange to install two condensers in every 17A Commander or Land Cruiser, delivered or in stock, as follows:

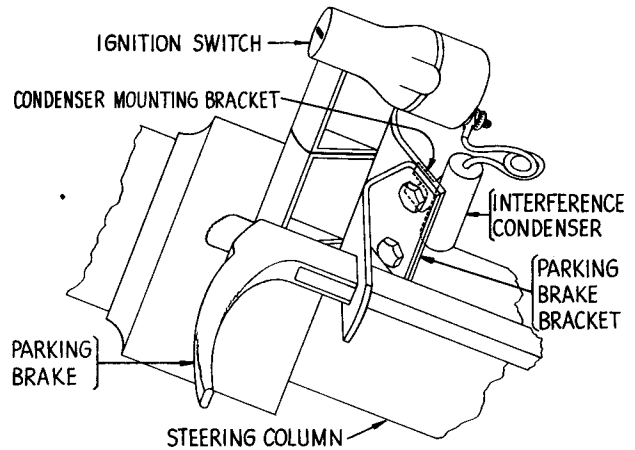
**SUPPRESSION AT VOLTAGE REGULATOR**

One condenser is fastened to the battery (BAT) terminal of the current and voltage regulator and the condenser bracket is grounded to the engine side of the dash at the innermost mounting screw of the grommet containing the speedometer cable and the oil pressure gage tube, as shown below.



**SUPPRESSION AT IGNITION SWITCH**

One condenser is fastened to the accessory terminal of the ignition switch and the condenser bracket is grounded to the right hand parking brake handle support bracket mounting screw, as shown at the top of next column.



**WINDOW REGULATORS - 9G, 17A**

**FRONT WINDOWS OF TWO-DOOR MODELS AND REAR DOOR WINDOWS OF LAND CRUISERS**

The window regulators used with ventilator-type door windows will, in some cases, permit the window to be lowered below the moulding. These windows may rattle when in the fully lowered position. To correct such cases, the trim panels and the regulator mounting screws should be removed and the mounting holes filed upward until the regulator can be mounted high enough to position the top edge of the window glass approximately 3/8" above the moulding when in the fully lowered position. See the accompanying illustration for location of the window regulator mounting screws.



## JACK SHAFT UPPER SUPPORT BRACKET - 9G, 17A

The jack shaft, when in place in the luggage compartment, fits into a support bracket which is spot welded to the body, permitting the jack shaft to act as a support for the spare tire. On some early production cars, it has been found that the spot weld was weak and the support bracket torn loose, thereby reducing support of the spare tire and resulting in noise in the luggage compartment.

Should any cars be found with a loose jack support bracket, a correction can be made by either arc welding the bracket to the body or by drilling and bolting the bracket to the body. Care must be used to prevent damage to the rear deck finish.

## CHANGING STEERING WHEEL ELEVATION - 9G, 17A

*This article is a reprint of Passenger Car Service Letter No. 812, which may now be discarded from your files.*

Beginning with 1950 Champion Serial No. G-474946 and 1950 Commander Serial No. 4403432, the steering wheel has been lowered 13/16". This has been accomplished by the use of a spacer, Part No. 291489, between the instrument board and the steering post jacket bracket on the Champion and by the use of a new bracket, Part No. 291590, on the Commander and Land Cruiser.

The steering wheel position of cars built prior to the above serial numbers may be lowered by the procedure hereinafter described. Should the top of the steering wheel obscure the vision of purchasers who are short in stature, it is important that you make arrangements immediately to install the spacer if the car is a Champion and the new bracket if the car is a Commander.

### CHAMPION

1. Remove the cap screw and the bolt and nut attaching the steering post jacket bracket to the instrument board and discard bolt and cap screw.
2. Loosen the bolts attaching the steering gear housing to frame.
3. Insert the spacer, Part No. 291489, between the instrument board and the steering post jacket bracket.
4. Install bolt and nut and cap screw in bracket and the instrument board. Tighten securely - a 5/16-18X2" bolt and 5/16-18X1-1/8" cap screw must be used.
5. Tighten the bolts attaching the steering gear housing to frame securely.

To raise the steering wheel on Champion cars produced after the above serial number, remove the spacer. When spacer is removed, a 5/16-18X1-1/2" bolt and a 5/16-18X5/8" cap screw must be used in place of the original bolt and cap screw.

### COMMANDER AND LAND CRUISER

1. Remove speedometer to permit access to bolts in upper steering post bracket.
2. Remove four screws in lower half of bracket and remove lower half of bracket.
3. Remove bolts from steering gear housing to frame and drop steering gear.
4. Remove bolts from instrument board to upper steering post jacket bracket and remove bracket. Discard bracket.
5. Install new upper bracket, Part No. 291590. Install dash to bracket bolts.
6. Install lower half of bracket.
7. Install speedometer.
8. Install steering gear housing to frame bolts - tighten securely.

To raise the steering wheel on Commanders and Land Cruisers produced after above serial number, replace upper bracket half with bracket, Part No. 291060.

The spacer, Part No. 291489, and the brackets, Part No. 291590 or Part No. 291060 may be purchased through parts depots.

## NOISE IN FRONT SUSPENSION - 17A

A noise may be encountered in the front suspension of some 1950 Commander models, described as a "clunking" sound, which is traceable to the upper control arm. If such a noise is encountered, test for its location by loosening the front shock absorber on the side of noise origin and road test the car. If the "clunk" disappears during this test, eliminate it permanently by proceeding as follows:

1. Tighten self-threading bushing in the rear end of the upper control arm inner shaft 1/6 turn. Road test car to see if noise has been eliminated.
2. If not eliminated, remove the upper control arm from the car, disassemble the upper control arm inner shaft by removing the self-threading bushing and, with spreader (Tool No. J 3957), spread the inner yoke to a total of .090". Assemble the upper control arm and reinstall on car.

NOTE.--As shown in Operation A-31A of the Preliminary 1950 Service Operation Step and Time Guide, the upper control arm can be disassembled at the inner shaft without complete disassembly of the front suspension.

**STEERING IDLER ARM BRACKET - 9G**

On some of the first 1950 Champion models, interference was found between the steering idler arm and the frame. The top hole in the idler arm bracket was punched oversize approximately 1/8" to allow clearance with the frame. One-quarter inch clearance is ideal, whereas 1/2" or more results in rapid change in toe-in. In production, the dust cover on the tie rods has been reduced 1/4" in diameter to allow additional clearance, this dust cover being the first part to cause interference.

Should this type of interference be present on any cars brought to you, it can be eliminated by securing as nearly as possible 1/4" clearance between the idler arm and the frame by use of the oversize top hole in the idler arm bracket, but being careful not to get as much as 1/2" or more clearance.

**STEERING GEAR TO FRAME SPACER - 9G**

In preparing 1950 9G Champion models for delivery, the alignment at the instrument panel of the steering gear and column should be checked carefully for evidence of bind on the gear as the steering wheel is turned in both directions.

If bind is present, spacers should be used as necessary between the steering gear housing and the frame to secure proper alignment at the instrument panel. The following spacers are available at your nearest parts depot:

Part No.	Part Name
41X336	Steering gear to frame spacer - 1/32" thick
41X519	Steering gear to frame spacer - 1/16" thick
369-07	Steering gear to frame spacer - 1/8" thick

**TIE ROD AND REACH ROD CLAMP POSITIONING - 9G, 17A**

Whenever service of the front end involves loosening of the steering tie rod or reach rod clamps, it is important they be properly positioned when retightened so as to prevent possibility of interference with other parts of the chassis. Correct positions of the clamps are as follows:

**9G CHAMPION** The clamps on the left reach rod should be positioned so that the bolts are at the bottom and are horizontal. The right reach rod inner bolt should be on the top side and have the same angle as the frame above the rod. The outer bolt should be at the bottom and horizontal.

**17A COMMANDER** All inner tie rod clamp bolts should be at the bottom of the rod and horizontal with the head of the bolt toward the engine pan. The two outer clamp bolts may have any position.

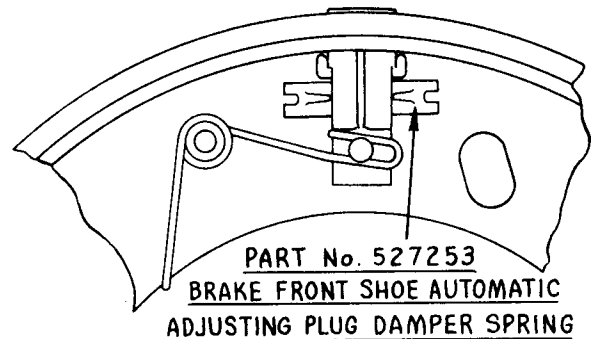
**ELIMINATION OF BRAKE SQUEAK SELF-ADJUSTING PLUG - 6G-9G; 14A-17A; 2R5**

Please record this article on page 28 of your 1947 Shop Manual and on page 30 of your 2R Series Trucks Shop Manual.

This article is a reprint of Passenger Car Service Letter No. 814 which may now be discarded from your files.

A brake squeak that can be traced to the self-adjusting plug of the forward brake shoe on 6G, 7G, 8G and 9G Champion models and 14A, 15A, 16A and 17A Commander models and 2R5 series truck models, can be eliminated by the use of a Damper Spring, Part No. 527253. The spring is inserted between the self-adjusting plug and the web of the brake shoe at all four wheels. This change was incorporated in production on all passenger cars and 2R5 trucks beginning approximately October 1, 1949.

Installation of these springs should be made as shown in the accompanying sketch and by the following procedure:



1. Remove the wheel, hub and drum assembly.
2. Slide the spring, Part No. 527253, between the flat side of the self-adjusting plug and the web of the brake shoe, with the concave face of the spring toward the web of the shoe.
3. Center the spring and make sure the tabs on the spring on either side of the self-adjusting plug are raised to hold the spring in position.
4. Push self-adjusting plug down until it is flush with or slightly below the surface of the brake lining.
5. Install the wheel, hub and drum assembly.
6. Make brake application and adjust brakes as required.

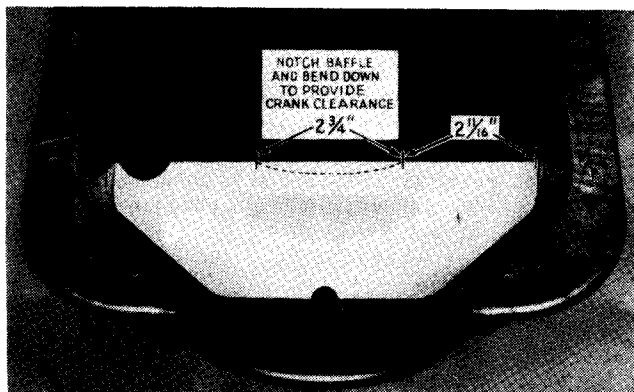
Part No. 527253 Damper Springs required for use in service may be secured through your Parts Depot.

## INTERFERENCE BETWEEN OIL PAN BAFFLE AND CRANKSHAFT - 9G, 2R5, 2R10, 2R15

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

Engine noise in a few cases has resulted from interference between the oil pan baffle and the cheek of the No. 5 crank on the crankshaft. In production, a notch and a depression have been placed in the baffle in the oil pan to provide clearance for the crank cheek at this location.

Should any interference of this kind be noticed in Champion-type engines brought to your service department, it will be necessary to remove the oil pan, notch the baffle and bend it downward at the point of interference as shown in the accompanying illustration.



## FRONT FENDER REAR REINFORCEMENT BOLTS - LAND CRUISER ONLY

A special pad reinforcing bracket is welded to the front fender aprons on the Land Cruiser models only. This bracket is located about two-thirds of the way back from the front of the fender and is bolted to the top of the frame side rail on each side. Due to misalignment of sheet metal on some early production Land Cruisers, difficulty was experienced in placing the attaching screws in the holes and it is possible that a few may have been shipped without the screws in the bracket.

If these screws were omitted, the hood and fenders may have a tendency to flutter. You should inspect all Land Cruisers for this omission and install screws as necessary. In addition, this bracket should be shimmed up from the frame with 1/16" and 1/8" shims as required. These shims are available from your nearest parts depot. Order Part No. 291623 (1/16") and Part No. 291624 (1/8") Front Fender Apron to Frame Brace Shim.

## GREASE LEAK AT CLUTCH RELEASE SHAFT RETAINER - 6G-9G; 14A-17A

Please record this article on page 40 of your 1947 Shop Manual.

If it is found that grease gets in clutch parts through the clutch release shaft bushing and retainer on 6G through 9G Champion and 14A through 17A Commander models, the condition can be corrected by installing new retainer and seal assemblies. Seals and retainers are available through your nearest parts depot as follows:

Part No. 527277 Clutch Release Shaft Grease Seal for 6G through 9G Champion models and Part No. 527280 Clutch Release Shaft Grease Seal for 14A through 17A Commander models. The old type retainer cannot be fitted with the new type seal. Both the above new parts must be used.

Effective with Champion Serial No. G485212 and Commander Serial No. 4404905, release shaft retainer assemblies incorporating the grease seal entered production. For service use, only the new type retainer assemblies will be available through parts depots as follows:

Part No. 527275 Clutch Release Shaft Retainer Assembly for 6G through 9G and Part No. 527278 Clutch Release Shaft Retainer Assembly for 14A through 17A.

## 1950 PAINT SERVICE PACKAGES NOW READY

The Parts and Accessories division has prepared a kit of sixteen 1950 passenger car colors especially formulated by Studebaker laboratories to match the high quality of pigments and color shades of the 9G Champion and 17A Commander models. This package gives you a minimum requirement for your retouching needs - don't be without it!

The Paint Service Package contains 1 quart each of the following colors: Aqua Green, Bahama Mist, Bermuda Green, Black Cherry, Comanche Red, Concord Blue, Copper Mist No. 2, Falcon Grey, Fiesta Tan, Grove Green, Highland Mist, Midnight Blue, Plaza Grey, Steel Mist, Tulip Cream, and Black.

Order Part No. S-695, Paint Service Package, from your nearest parts depot. The special introductory price to Studebaker dealers is \$27.75, a reduction from the regular dealer net price of \$29.35.

### GASOLINE PIPE TO FUEL PUMP CONNECTOR - 17A

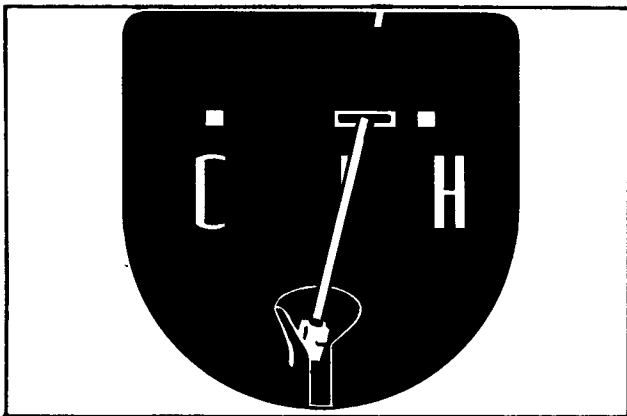
On the first few 17A Commander models, the flexible connector between the gasoline pipe and the fuel pump interfered with the fender side apron. This was caused by the gasoline pipe's being located upward too far, allowing the flexible connector to bend outward and contact the apron.

Should one of these first few cars come into your service department, eliminate the interference and straighten the flexible connector by bending the gasoline pipe downward and backward.

### HEAT INDICATOR MARKING REVISED - 9G, 17A

Effective with production of 9G Champion Serial No. G498915 and 17A Commander Serial No. 4410219, the marking on the face of the instrument panel heat indicator was revised to include a white outline block in the normal driving temperature range as shown in the illustration below.

Part numbers of the heat indicator dial, Part No. 526719 for 9G and Part No. 526739 for 17A, will remain unchanged and only the latest type of heat indicator dial will be carried by parts depots.



### REAR FENDER REINFORCEMENT - 9G, 17A

To eliminate a condition of wrinkle on rear fenders at each bolt hole, install reinforcement strips between the body and fender as follows: five (5) Part No. 291824 strips and one (1) Part No. 291826 strip for left rear fenders, and seven (7) Part No. 291824 strips for right rear fenders.

These fender reinforcing strips are available through your nearest parts depot.

### SHOCK ABSORBER SETTING CHANGED TO IMPROVE RIDE - 17A

On 17A Commander models effective with Serial No. 4405687, the factory setting of the shock absorbers has been changed to improve the riding characteristics and eliminate possibility of any pitching motion.

Should such a riding condition be noticed on 17A Commanders produced before Serial No. 4405687, it can be eliminated by *tightening the rear shock absorber adjusting screw 1/16" to the right (clockwise) and loosening the front shock absorber screw 1/16" to the left (counterclockwise).*

### FRONT STABILIZER LINK INTERFERENCE - 17A

On some 17A Commander models it is possible that there is interference between the front stabilizer and the front frame crossmember, causing a snapping noise in the front end of the car.

This interference can be eliminated by first determining the location of the interference and then peening the crossmember flange upward and over at this point to provide sufficient clearance. Frames are now being notched in production to prevent interference at this point.