TECHNICAL SERVICE BULLETIN

DODGE 1962 **LANCER** **DART** **POLARA 500** **CUSTOM EIGHT EIGHTY**

SERVICE DEPARTMENT **DODGE DIVISION** CHRYSLER MOTORS CORPORATION

September 19, 1962

NO. D-104

ELECTRICAL

New

Distributor Cap

and

Rotor Assemblies

MODELS: Dodge and Dart equipped with 170 and 225 cu. in. Displacement Engine

P-3734-C

New distributor caps and rotors are now available which incorporate changes that substantially improve the wet weather starting and performance characteristics of the 1960, 1961 and 1962 six cylinder engine. The new cap has wider inserts, a revision of the height of the towers and the width of the blade of the new rotor has been decreased.

If you encounter conditions of condensation ground-out, hard starting and/or ignition system drown-out during wet weather, it is recommended that the normal tune-up services be performed. Then, install a MoPar Distributor Cap, Rotor and Cable Package, Part No. 2448273.

NOTE: The coil secondary cable assembly included in the package is equipped with the new neoprene nipples which fit tighter on the cable insulation and have longer skirts that provide better sealing on the distributor cap and coil towers. It is important that this cable assembly is installed with the new cap and rotor to insure that the owner receives complete benefit of the Distributor Cap, Rotor and Cable Package.

Policy: Information Only

Part Number listed is Stock Class Code "P".

R. H. Kline

R. H. Kline
Director of Service
DODGE DIVISION

OF INTEREST TO:	
DEALER	
MANAGER	
SERVICE MGR.	
PARTS MGR.	
TECHNICIANS	

84-915-7075

TECHNICAL SERVICE BULLETIN

DODGE

LANCER
DART 1962
POLARA 500

CUSTOM EIGHT EIGHTY

SERVICE DEPARTMENT **DODGE DIVISION** CHRYSLER MOTORS CORPORATION

October 19, 1962

No. D-110

ELECTRICAL

Spark Plugs

MODELS: 1960, 1961, & 1962 Dodge - Lancer

P-4259-C

This bulletin supplements the information in Service Bulletin Nos. D-34 dated January 24, 1962 and D-34A dated May 2, 1962.

A new spark plug, MoPar P/N 2098381 (Champion N14Y) has been released for service. This spark plug has a heat range that is compatible with most of the operating conditions to which cars are normally subjected and is less likely to carbon and/or oil foul during cold weather operation.

Should you encounter repeated conditions of carbon and/or oil fouled spark plugs on a "G" - "RG" Slant Six Engine, and it is known that the carburetor and automatic choke are operating properly, replace with Champion N14Y - P/N 2098 381 available from your usual source of MoPar Parts.

IMPORTANT:

A spark plug gasket must be used with Champion Spark Plug in addition to the aluminum tubes on all 1960, 1961, 1962 170 and 225 cu. in. engines. The thread design on these plugs makes the use of gaskets necessary to prevent interference with the mating threads in the head. On the 1963 170 and 225 cu. in. engines, the head is counterbored for thread relief and the gasket should not be used.

The part number listed in this bulletin is Stock Code Class "P".

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TECHNICAL SERVICE BULLETIN

DODGE LANCER DART POLARA 500 CUSTOM EIGHT EIGHTY 1962

SERVICE DEPARTMENT **DODGE DIVISION** CHRYSLER MOTORS CORPORATION

December 5, 1962

No. D-112

ELECTRICAL

SEALING STARTER MOTOR TO PREVENT ICING AND CORROSION

MODELS: 1962 Dodge Dart, Polara and Lancer

P-4996-C

If you experience a condition of the starting motor failing to operate at below freezing temperatures, but operates normally at temperatures above freezing, the condition may be caused by moisture freezing or frosting inside the starting motor.

However, before removing and servicing the starting motor, it is recommended that the battery and starting circuit be tested for condition, resistance and possible loose connections. This includes: the battery, battery cables, starter neutral switch, starter relay, ignition-starter switch and all connections. If it is determined by test that these components and connections are satisfactory, the failure to operate condition may be caused by icing of road moisture entering the starting motor, or water vapors entering the starting motor through the transmission bell housing, resulting in a poor ground in the solenoid stack assembly. Both production and service modifications have been developed to prevent these conditions.

The production modifications occurred in two stages:

1. A bead of sealer was placed around the joints of the brush cover plate, the field frame and the gear housing in the area of the solenoid. However, it was still possible for vapors to enter the starting motor through the transmission bell housing and form condensation.

2. The final production modification consists of a vapor blocking seal installed between the solenoid coil and the brush holder cover plate, washer seals on the terminal studs, an alodined gear housing painted black, a ground screw through the gear housing at the solenoid, cadmium plating of the metal parts of the solenoid stack assembly and the bead of sealer described above. These corrective modifications are not only adequate for preventing the icing condition, but they also materially reduce the possibility of starting motor corrosion.

The service correction may be accomplished using Starter Terminal Relay Stud Package, part Number 2421837, consisting of the following parts:

(Over)

OF INTEREST TO:	
DEALER	
MANAGER	
SERVICE MGR.	
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TECHNICIANS	

84-915-7075

1 - Vapor Blocking Seal
1 - Battery Terminal Washer Seal - 5/8 Inch O.D.
1 - Solenoid Terminal Washer Seal - 1/2 Inch O.D.
1 - Solenoid Terminal Stud
1 - 8-32 x 1/2 Inch Hex Head Ground Screw
1 - 1/2 Ounce Tube Starter Brush Plate Sealer

It may be determined if a starting motor has been modified or to what extent it has been modified by these indications:

1. A starting motor that has not been modified at all has no sealing bead and is painted black.
2. A starting motor that has been production modified by the use of sealer only, the gear housing is not "alodined" (gold colored) and is painted black, and has no ground screw.
3. A starting motor that has the complete production modification has an "alodined" gear housing painted black, a ground screw and will have a slash of yellow paint on the engine side of the aluminum casting that surrounds the solenoid coil.
4. Starting motors that have been modified with the service package will have the bead of sealer, a ground screw and will be painted black.

Service Correction Procedure:

When an inoperative starting motor condition is encountered, the entire electrical starting circuit should be tested according to the procedures outlined in the 1962 Service Manuals. If the condition is traced to the starting motor and temperature conditions present a possibility of icing, or loss of solenoid coil ground, the following procedures should be performed.

1. Disconnect the negative battery cable and remove the starting motor from the car.
2. Following the disassembly procedures outlined in the 1962 Service Manuals, remove the end head, field frame assembly, brush plate and the solenoid winding.
3. Disassemble the brush plate from the solenoid assembly.
   (a) Unsolder the solenoid winding from the starter brush terminal.
   (b) On early production models, the connection to the solenoid terminal was welded. Hold the double solenoid wires with pliers immediately adjacent to the terminal stud and break the wires from the stud. Later production models have a soldered connection. On these models unsolder the double solenoid wires from the stud.
4. Clean all corrosion from the solenoid assembly including washers, sleeve, solenoid housing interior and coil retainer. These metal parts are part of the solenoid hold-in coil ground circuit and must be clean.
5. Clean the contacts on the brush plate and the solenoid contact assembly with crocus cloth. The contact disc can be turned over by removing the lock ring.

6. Remove the nut and steel washer from the battery terminal stud. Install the (larger) 5/8 inch O.D. washer seal on the battery terminal stud and place the steel washer on top of it. Reinstall the nut. See Figure 2.

7. Thoroughly clean the outside area of the brush plate to remove all oil, dirt, paint, etc.

8. Straighten the solenoid lead wires and install the vapor blocking seal over the wires by inserting the double wires into the larger hole and the single wire in the smaller hole. Refer to Figure 1. Place the ends of the double solenoid lead wires into the new terminal stud. Crimp in position and solder with resin core solder.

9. Install the solenoid contact and rod assembly and re-form the double wires to enable proper entry of the terminal stud into the brush holder with the double wires curved around the contact The double wires must not touch the contact after assembly is completed.

10. Assemble the brush plate to the solenoid assembly.

    CAUTION: Use care in installing the vapor blocking seal over the tab on the brush plate to prevent tearing the seal.

    Install the (smaller) 1/2 inch O.D. washer seal on the solenoid terminal stud and then install the steel washer and nut over it.

11. Drill a hole in the gear housing with a No. 26 drill (.147 inch diameter) 9/32 inch plus or minus 1/64 inch from the edge of the solenoid assembly well in the gear housing in the center of the rib as shown in Figure 3. This hole is to be used for the ground screw.

12. If the motor has been removed from a six cylinder engine, make certain there are two drain holes provided in the gear housing. If necessary, drill a second 5/32 inch hole through the gear housing so that the hole will be located at the 6 o'clock position when the motor is installed. Refer to Figure 4.

13. Bend the four tangs "up" on the solenoid coil retainer to 5/32 to 3/16 inch above the surface of the retainer. Refer to Figure 5.

14. Completely reassemble the motor and perform the free running test. (11 volts, 85-90 amperes, 1950 rpm). Lubricate the pinion shaft and shift mechanism with 10 W. oil.

15. Clean off all paint, oil, dirt and moisture from the joint between the brush holder plate to field frame and the gear housing mating joint. Then flow the starter brush plate sealer around the four sides of the joint. Additional sealer is available from MoPar in five (5) ounce tubes, P/N 2421838.

IMPORTANT: Sealer must be flowed continuously to avoid gaps. After the bead has been flowed on, use a brush or small paddle moistened in mineral spirits to press the adhesive into the joint. Do not get adhesive on the battery or solenoid terminals. Refer to Figure 6.

16. Use a Multi-Purpose Grease to seal the shift fork pin openings.

17. Apply the starter brush plate sealer under the shoulder of the 8-32 x 1/2 inch ground screw and install the screw into the hole which was drilled with the No. 26 drill. Tighten the screw to 25-35 inch pounds torque. This screw provides a more positive ground for the hold-in coil. Refer to Figure 7.

18. Install the starting motor on the engine, using the correct cylinder block to starter seal.

19. A drain opening must be provided on the small cover plate which is installed on the bottom of the transmission bell housing on early production 1962 318 cubic inch engines. Later production engines are provided with a drain opening at this location. The drain opening should be formed as follows:

    (a) Loosen the two screws in the small cover plate and insert a screw driver blade between the cover and housing at the center of the plate.

    (b) While holding the screw driver blade in the position between the cover and housing, retighten the two screws.

    (c) Using a suitable drift and hammer, form a drain slot around the screw driver blade using the screw driver blade as a die. Refer to Figure 8.

    (d) Remove the screw driver blade and tighten the screws.

Time allowance: Operation No. 8-875 - Sealing Starter - 1.3 hours.

Part numbers listed in this bulletin are Stock Class Code "P".

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P-4996-C

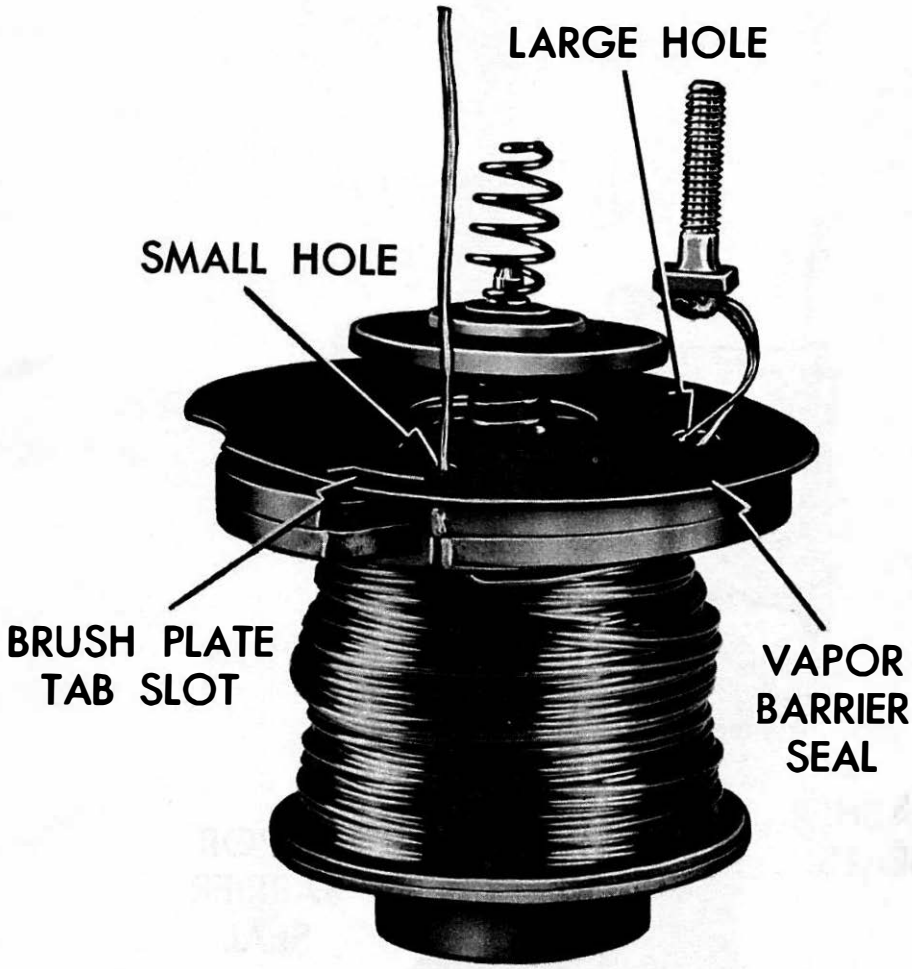
LARGE HOLE
SMALL HOLE
BRUSH PLATE
TAB SLOT
VAPOR
BARRIER
SEAL

FIG. 1

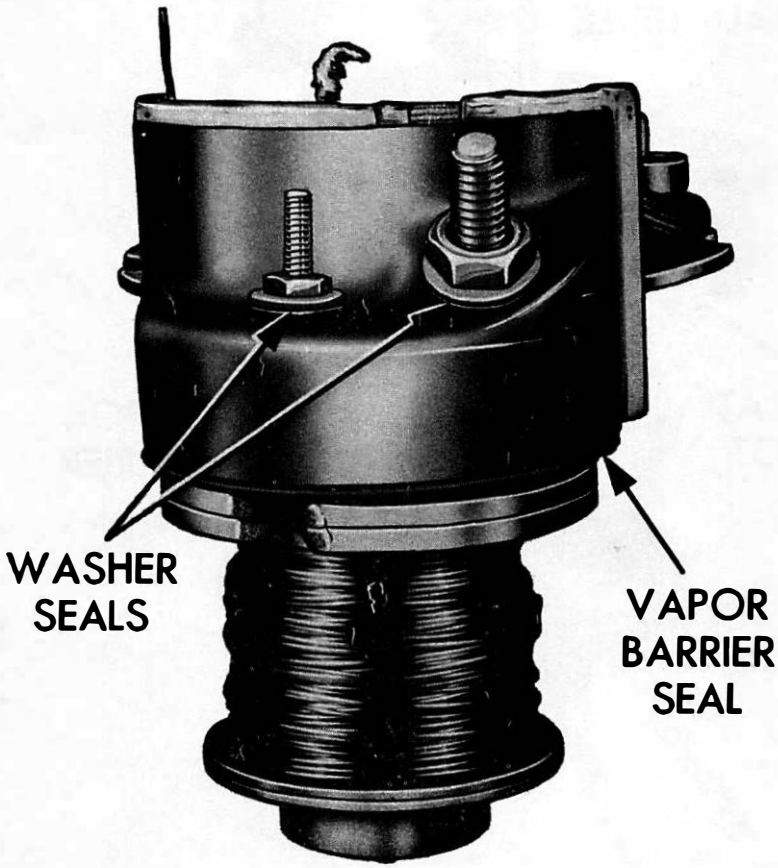

FIG. 2

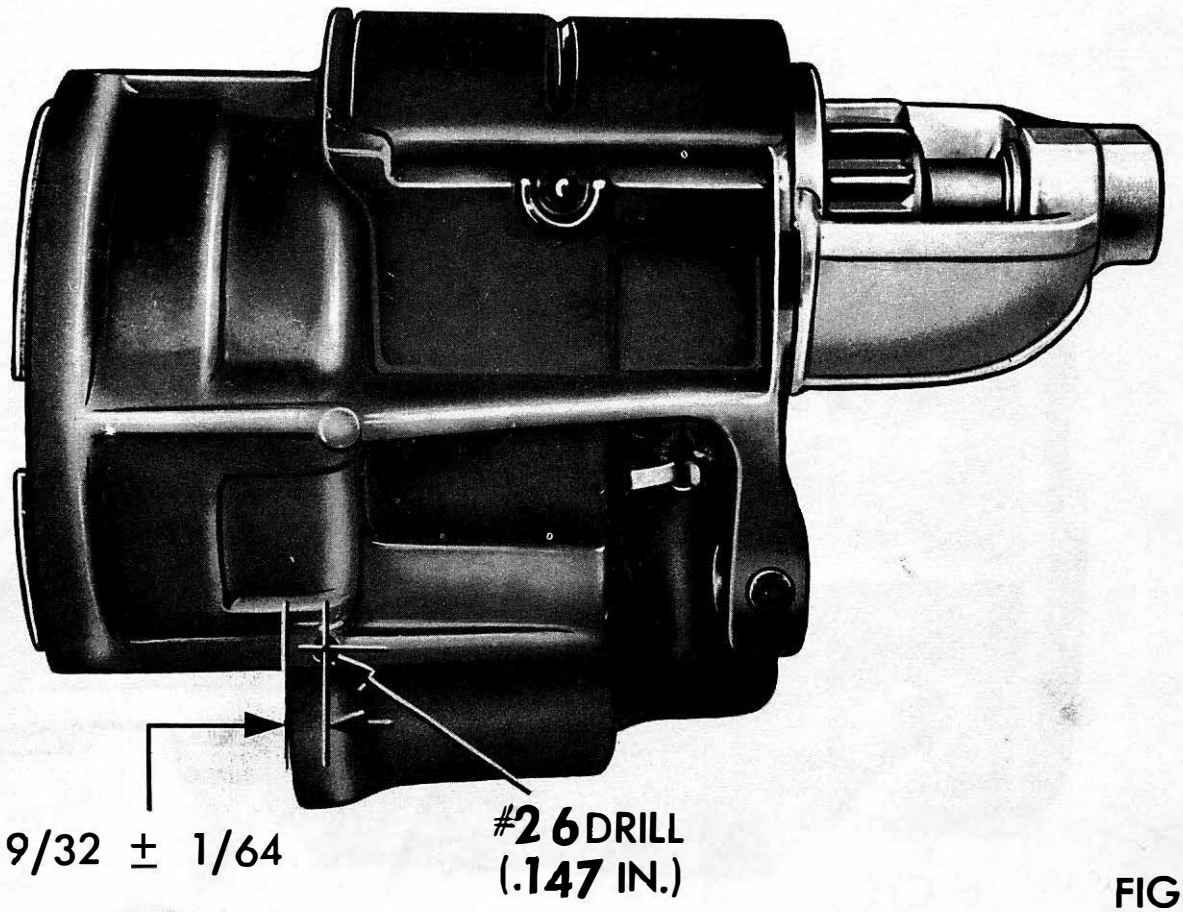

FIG. 3

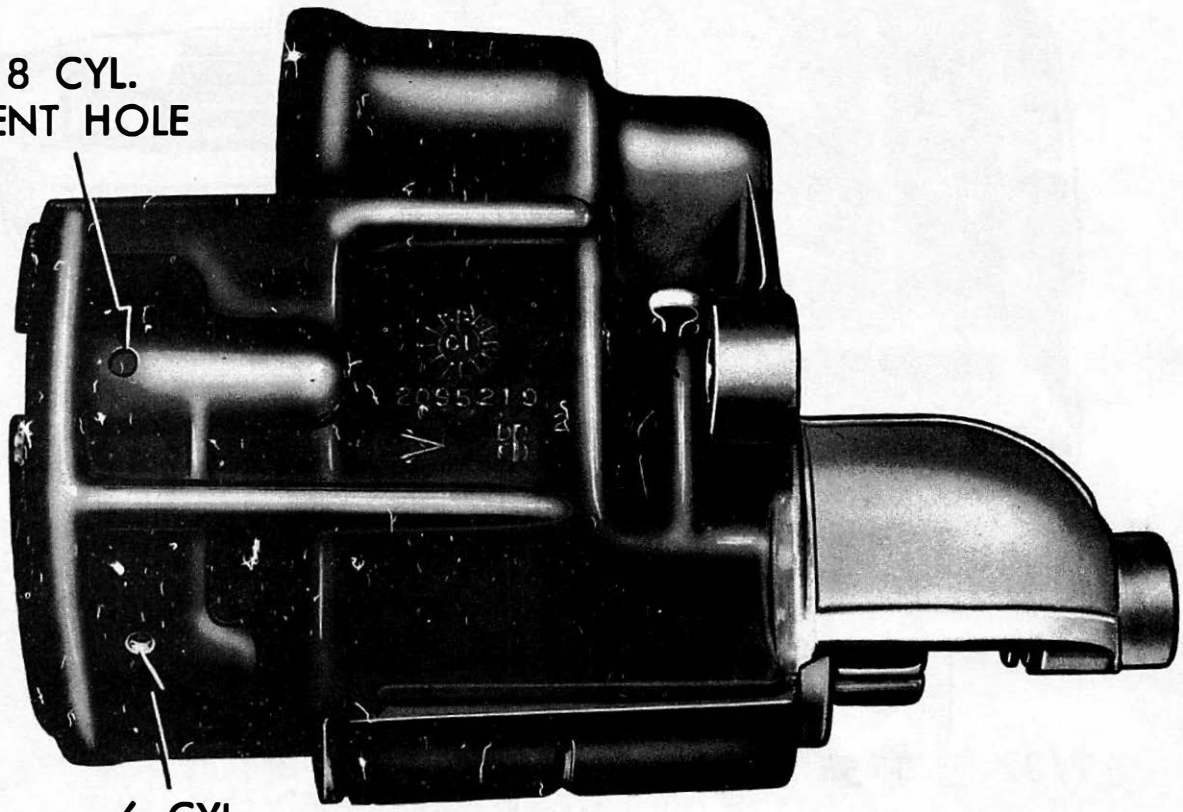

FIG. 4

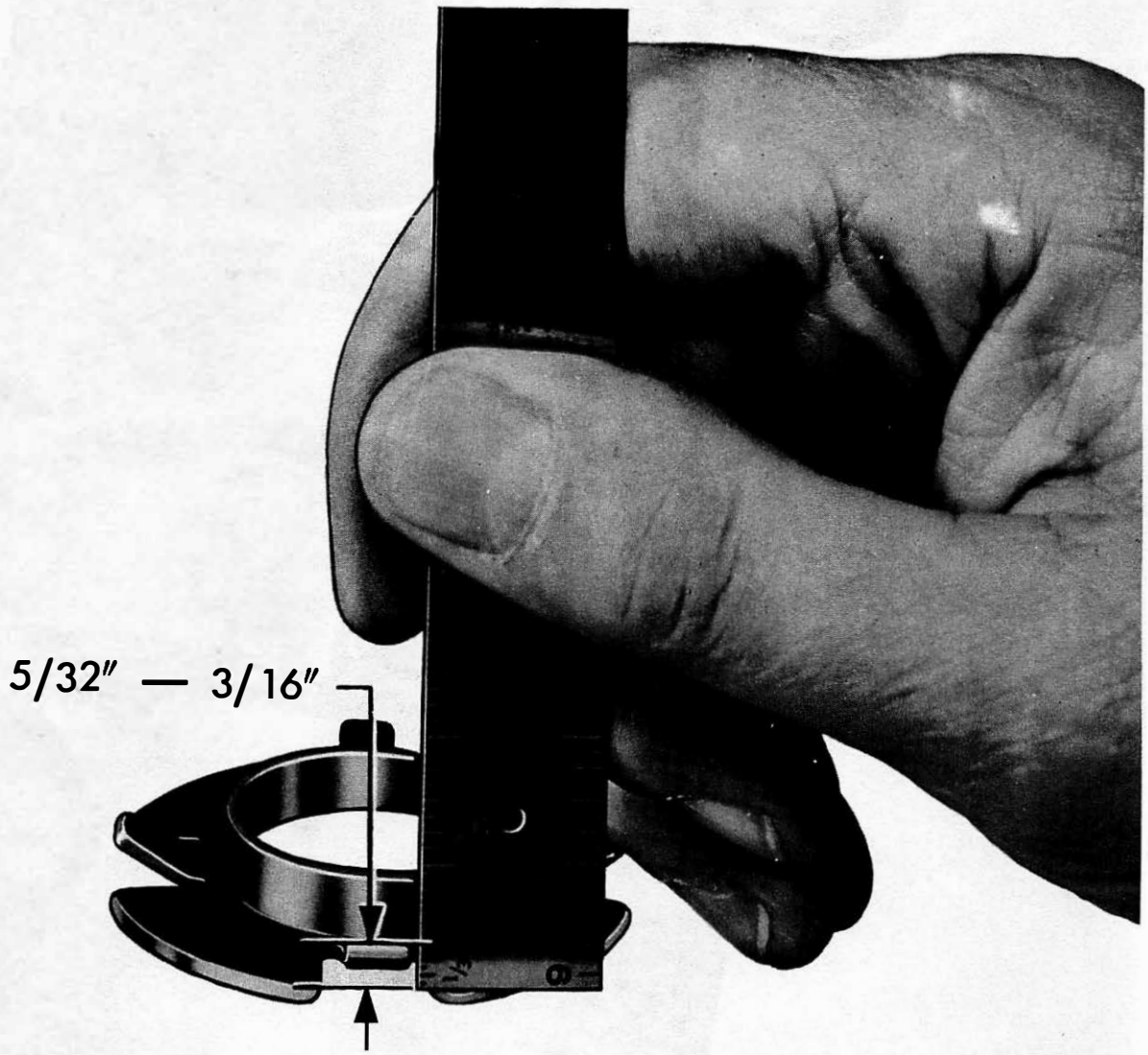

FIG. 5

FIG. 6

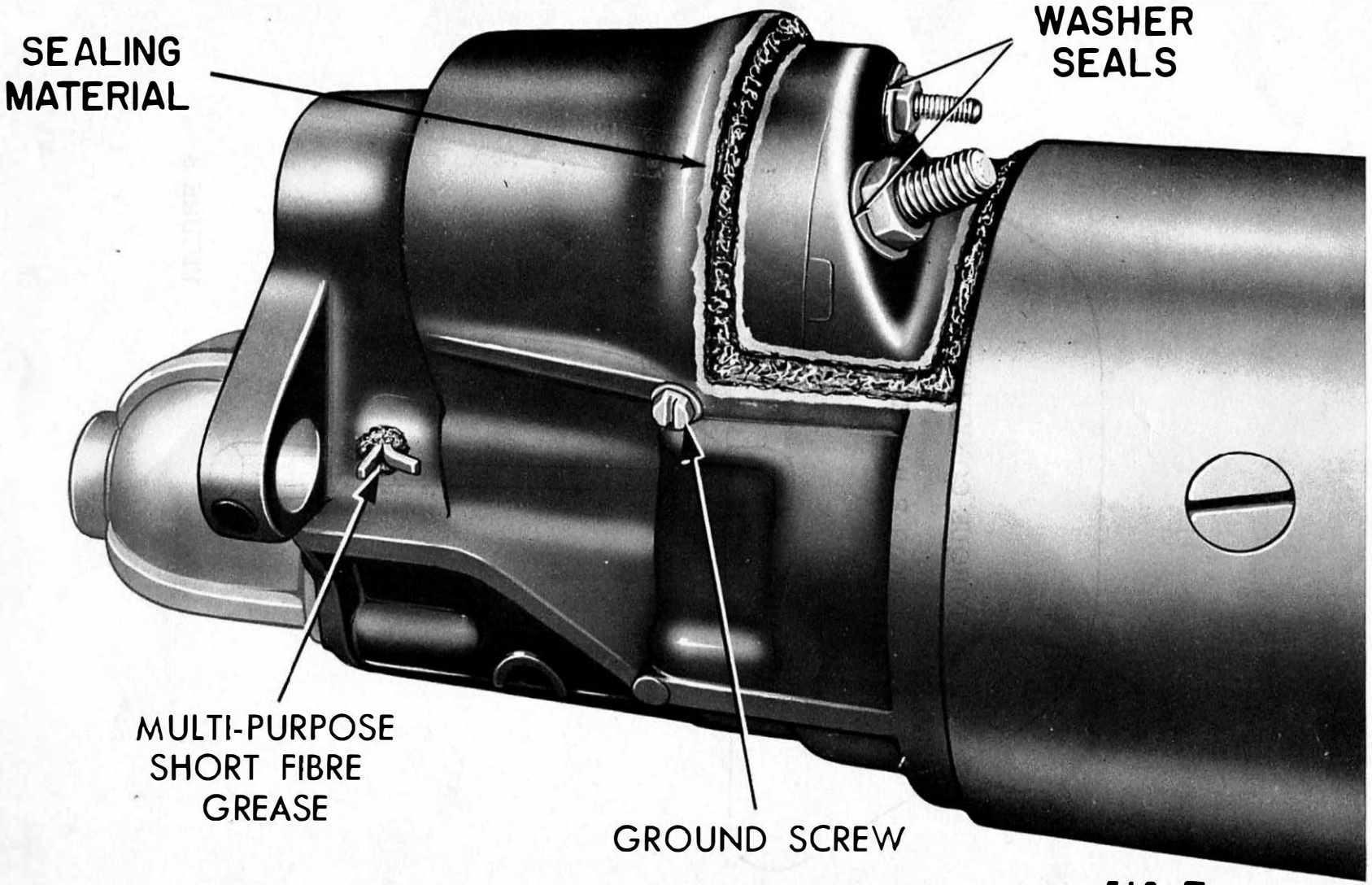
SEALING MATERIAL
WASHER SEALS
MULTI-PURPOSE SHORT FIBRE GREASE
GROUND SCREW

FIG. 7

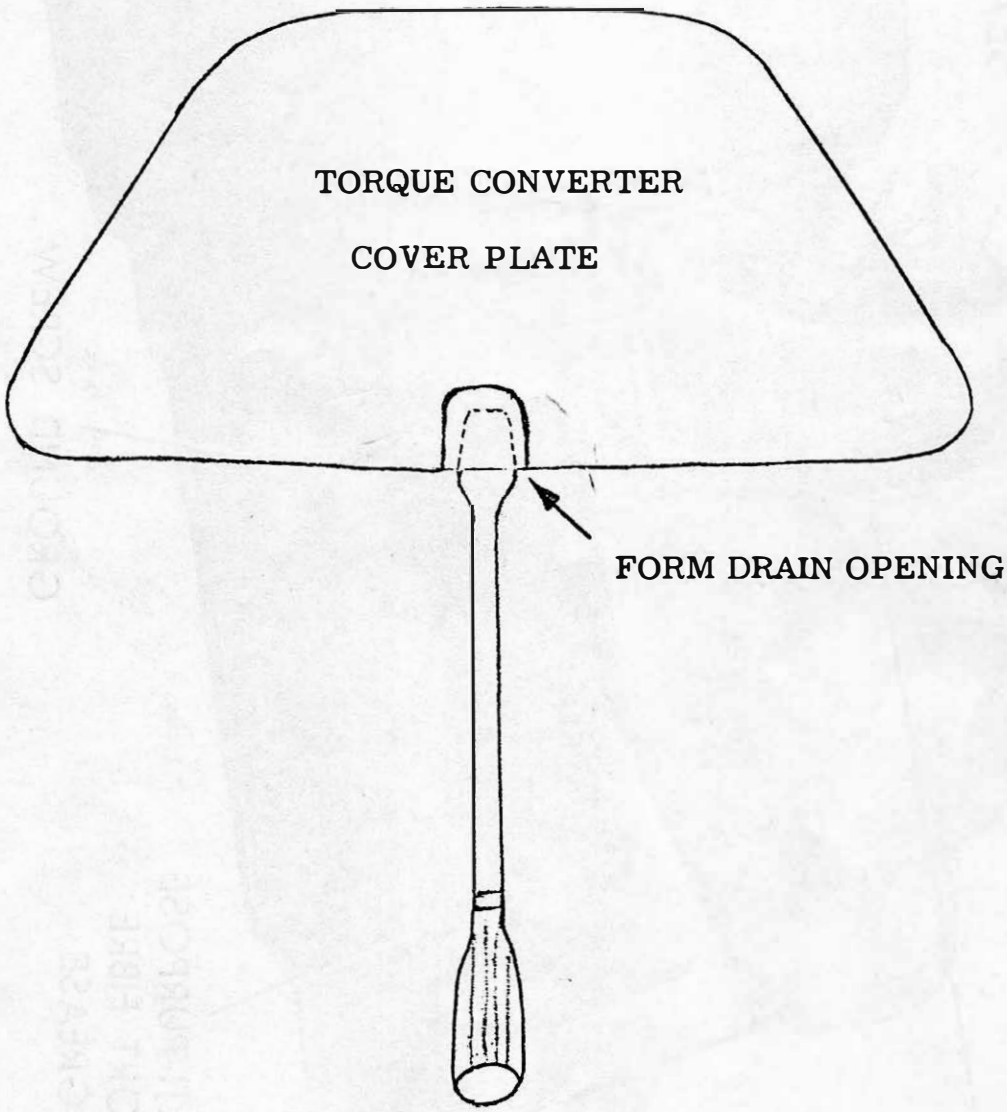

FIGURE 8