

Fig. 16—Wiper Motor—Exploded View

- c. Install field puller tool J-7844 as shown in Fig. 18 and remove field.
- d. Code the tow field leads that connect to the case assembly (See Step 7 above) and cut them off in a location convenient for splicing.

### Inspection

Check all parts for condition and replace as required. All parts can be replaced individually.

### Assembly

#### Gear Box

1. Reverse steps 2 through 6 in the disassembly procedure.
2. Operate wiper to park position. (Fig. 19).
3. Install crank arm in park position.

**CAUTION: Clamp crank arm in vise when tightening up crank arm retaining nut.**

#### Motor

1. Install replacement field as follows:
  - a. Scribe reference line on new field in approxi-

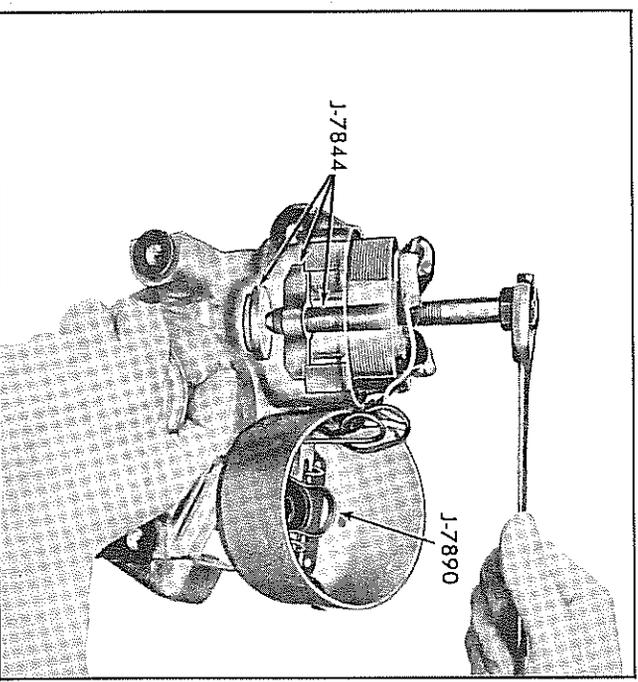


Fig. 18—Removing Field Coil With Tool J-7844

mately the same location as the one scribed on the original field.

- b. Install the bolts in housing and position field assembly over housing and tie bolts so that the reference lines match and the tie bolts line up with the two grooves in the field lamina.
- c. Push field into housing until it bottoms on the machined ridge.
- d. Connect up leads as required (Fig. 17).
2. Reassemble rubber disc, steel thrust plate and felt washer in case assembly bearing in the order indicated.
3. When replacing the armature BE SURE to remove thrust ball from original armature and re-use it in the new armature. Always check armature end-play after replacing the armature.
4. Install armature in case assembly and remove brush retainer clip installed in step 5 under disassembly.
5. Maintaining the armature in its assembled position in the case, start the armature worm through the gear housing bearing.
6. Align case assembly the bolt holes with those in the housing and start folding the excess lead lengths in the open areas between the field and housing.
7. Push the case assembly and armature on the field lamina until the case butts against the housing. **CAUTION: It may be necessary to turn the gear or armature slightly in order to get the armature worm to mesh properly with the gear teeth.**
8. Install tie bolts.
9. Operate wiper motor and tap the case assembly lightly with a mallet to realign the bearings.
10. Reassemble gear box as required.

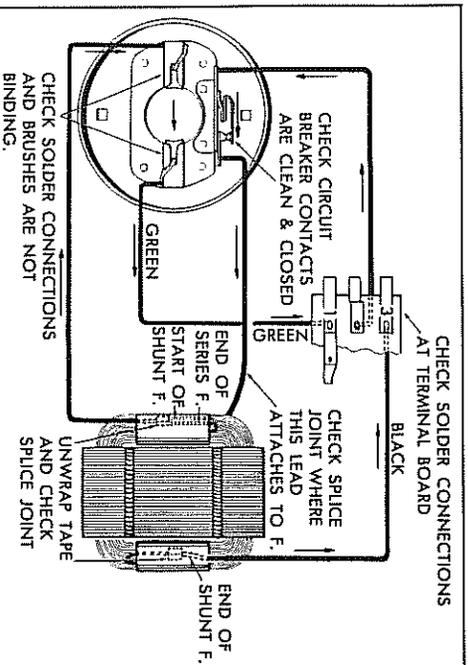


Fig. 17—Shunt Field Circuit