- 5. On vehicles with positive earth, clip the negative lead of a moving coil type voltmeter, calibrated 0-20 volts, to one generator terminal and the positive lead to a good earthing point on the yoke.
  - On vehicles with negative earth, make the voltmeter connections in reverse order.
- 6. Gradually increase the engine speed, when the voltmeter reading should rise rapidly and without fluctuation. Do not allow the voltmeter reading to reach 20 volts, and do not race the engine in an attempt to increase the voltage. It is sufficient to run the generator up to a speed of 1,000 r.p.m. If the voltage does not rise rapidly and without fluctuation the unit must be dismanded for internal examination.

Excessive sparking at the commutator in the above test indicates a defective armature which should be renewed.

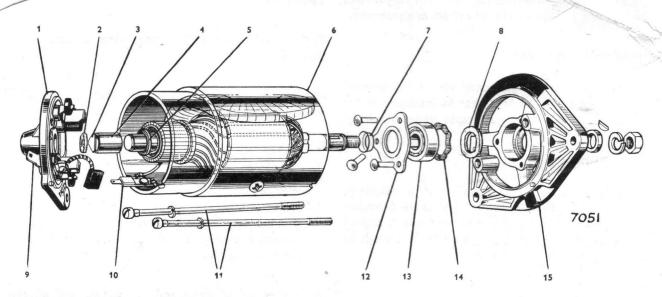
If a radio suppression capacitor is fitted between the output terminal and earth, disconnect this capacitor and re-test the generator before dismantling. If a reading is now given on the voltmeter, the capacitor is defective and must be renewed.

If the generator is in good order, remove the link from between the torminals and restore the original connections.

## **SERVICING**

To dismantle (See Fig. 3)

- 1 Take off the driving pulley and Woodruff key.
- 2. Unscrew and withdraw the two through bolts (11).
- 3. Withdraw the commutator-end bracket (1) from the yoke (6).
- Lift the driving-end bracket and armature assembly from the yoke. Take care not to lose the fibre thrust washer (5) from the commutator-end of the shaft.
- The driving-end bracket, which on removal from the yoke has withdrawn with it the armature and armature shall-bearing, need not be separated from the shaft unions the bearing is suspected and requires examination, or the armature is to be renewed; in this event the armature should be removed from the end bracket by means of a hand press.



- 1. COMMUTATOR-END BRACKET
- 2. FELT RING
- 3. FELT RING RETAINER
- 4. BRONZE BUSH
- 5. FIBRE WASHER

- 6. YOKE
- 7. RETAINING CUP
- 8. FELT RING
- 9. TERMINAL 'D'
- 10. TERMINAL 'F'

- 11. THROUGH BOLTS
- 12. BEARING RETAINER
- 13. DRIVE-END BEARING
- 14. CORRUGATED WASHER
- 15. DRIVE-END BRACKET

Fig. 3. Exploded view of generator