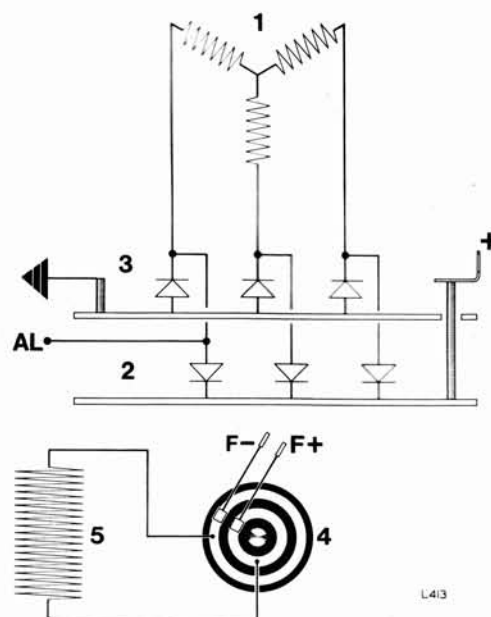


Alternator

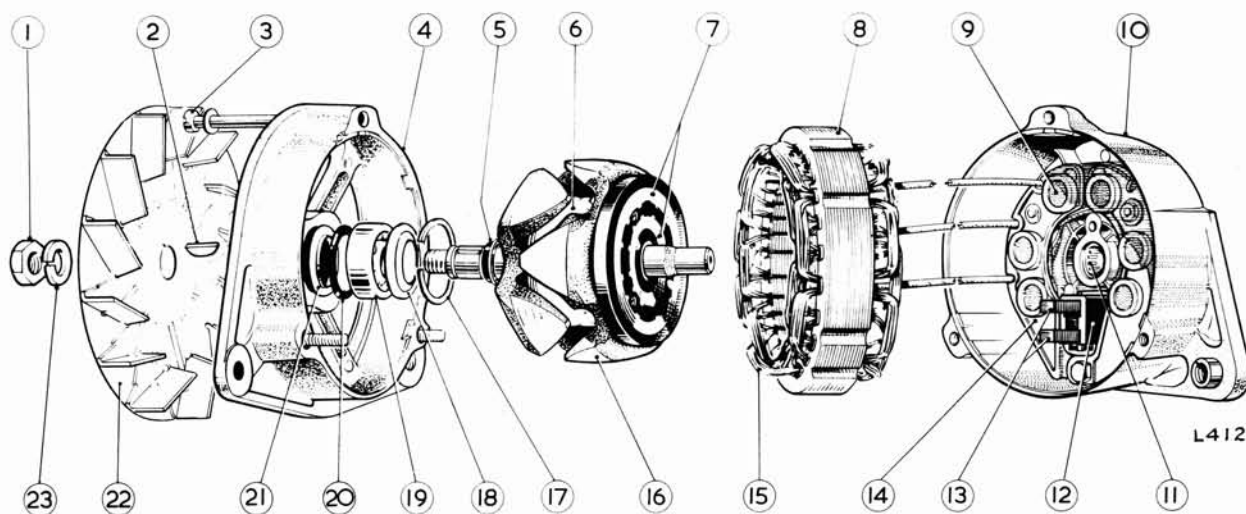
The mechanical features of the alternator are a rotor supported by a ball bearing at the drive-end and a needle-roller bearing at the slip-ring end. No periodic lubrication is required. The field winding carried on the rotor is energized via a pair of brushes and slip-rings. Cooling air is drawn through the unit by a fan mounted at the drive end.

Electrically an alternating current produced in the three-phase, star-connected, stator windings is rectified by six diodes—three on the live side and three on the earth side—to supply direct current to the vehicle electrical circuits and battery.

The field winding circuit is controlled by the alternator control system. A tapping taken from the mid-point of one pair of diodes is connected to terminal 'AL' and provides the low voltage facility required by the alternator control system.



- 1. Stator windings
- 2. Live side output diodes
- 3. Earth side output diodes
- 4. Brushes and slip-rings
- 5. Field winding



- 1. Nut
- 2. Key
- 3. Through-bolt
- 4. Drive end bracket
- 5. Jump ring shroud (early units)
- 6. Field winding
- 7. Slip-rings
- 8. Lamination pack
- 9. Diode
- 10. Slip-ring end bracket
- 11. Needle-roller bearing
- 12. Brushbox
- 13. Brushes
- 14. Heatsink
- 15. Stator winding
- 16. Rotor
- 17. Circlip
- 18. Retaining plate
- 19. Ball bearing
- 20. Rubber 'O' ring
- 21. Retaining washer
- 22. Fan
- 23. Washer

