

STARTER MOTOR (Continued)

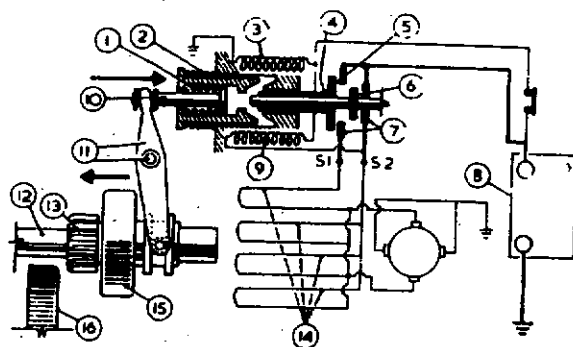


Fig. 54 – Explanation of two-stage switching

The solenoid is energised in the conventional manner to move the pinion towards the gear ring on the engine flywheel.

- | | | | |
|--|--------------------------|------------------------------|---|
| 1 Engagement spring | 5 First switch contacts | 9 Solenoid operating winding | 13 Pinion |
| 2 Return spring | 6 Second switch contacts | 10 Punger | 14 Field system:
Four field coils
in parallel |
| 3 Solenoid hold-on winding | 7 Fixed contacts | 11 Operating lever and pivot | 15 Roller clutch |
| 4 Switch operating spindles (concentric) | 8 Battery | 12 Armature shaft | 16 Gear ring |

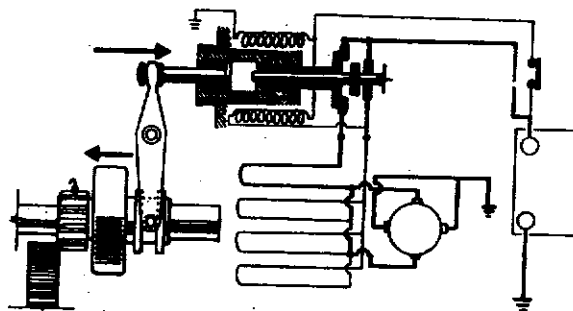


Fig. 55

If tooth-to-tooth abutment occurs, the first set of solenoid contacts close and energise one field coil only, thus giving low power indexing to move the pinion teeth into a meshing position.

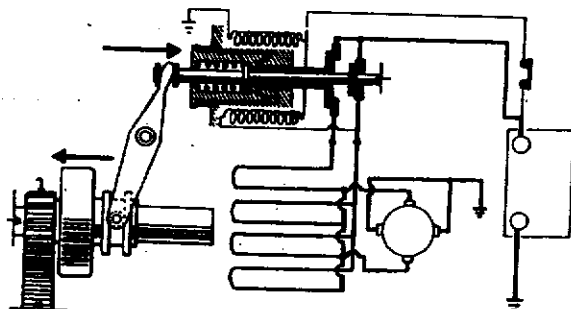


Fig. 56

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