BOSCH

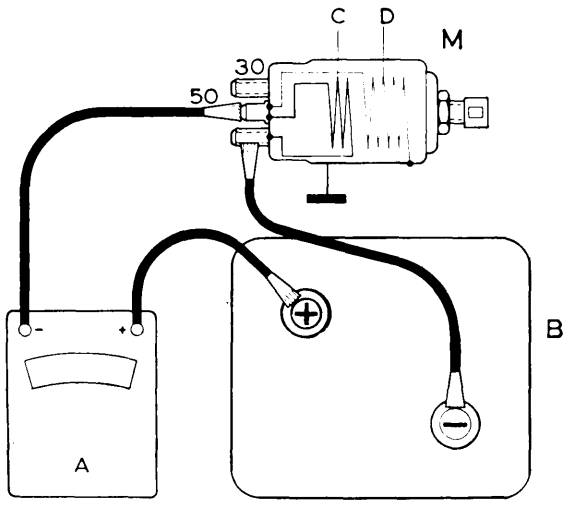
DESCRIPTION

Bosch Starter (Solenoid) switch is used on pre-engaged screw-push starter motors. Mounted on starter, solenoid activates a soft iron plunger (armature) which is connected to the overrunning clutch shift lever, in starter motor. Two coils are used in the solenoid. A "pull-in" coil to engage starter and a "hold-in" coil to hold cranking starter into flywheel. After cutting in starter motor current, the pull-in coil is short circuited, and only hold-in coil remains energized. When starter motor is switched off, current to solenoid stops and armature returns to outer position.

TESTING

SOLENOID REMOVED FROM STARTER

With armature disconnected from overrunning clutch shift lever, armature must move freely in and out of solenoid. If corroded, clean thoroughly before proceeding with tests.

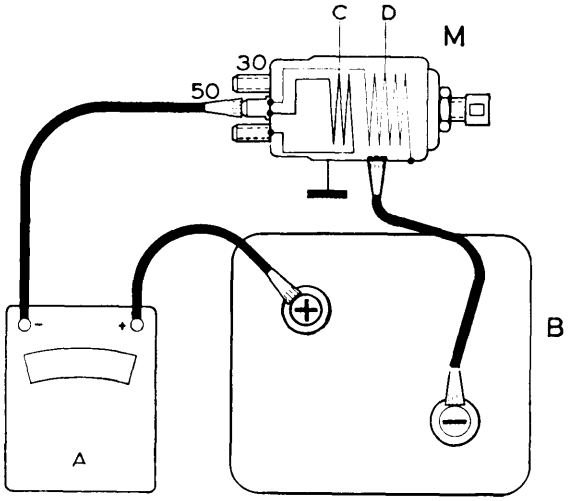


1E4029

A – AMMETER
B – BATTERY
C – PULL-IN COIL
D – HOLD-IN COIL
M – SOLENOID

Fig. 1 Jumper Connections for Pull-In Test

Pull-In Coil – Connect jumper wires between a 12 volt battery and the solenoid as shown in Figure 1. *NOTE – A quick touch of the jumper to terminal 50 is all that is necessary.* The armature should pull-in suddenly and return when electrical connection is broken.



A – AMMETER
B – BATTERY
C – PULL-IN COIL
D – HOLD-IN COIL
M – SOLENOID

1E4030

Fig. 2 Jumper Connections for Hold-In Test

Hold-In Coil – Connect jumper wires between a 12 volt battery and solenoid as shown in Figure 2, at the same time, press the armature into the solenoid by hand. The armature should remain held-in. Disconnect jumper to terminal 50 and armature should immediately return to its outer position.

Do not attempt to repair solenoid. If it fails either test, replace it with a new one.