

# Starter Controls

## DELCO-REMY STARTER CONTROLS

### DESCRIPTION

Solenoid switch consists basically of two windings mounted around a hollow cylinder containing a movable core or plunger, a shift lever is connected to plunger. Push rod and contact disc are assembled in line with plunger. When windings are energized, plunger movement by means of shift lever moves motor drive into mesh with ring gear and contact disc is pushed into firm contact with solenoid battery (B or BAT) and motor (M or MOT) terminals. With motor windings connected directly to battery, cranking takes place. Two windings in solenoid are hold-in winding and pull-in winding. Drive end housing of starter is extended to enclose entire shift lever mechanism for protection from dirt, splash, and icing. Solenoid is flange mounted on drive end housing and is sealed to housing with sealing compound. Shift lever return spring is compression type and is located inside solenoid case.

solenoid switch terminal and solenoid motor (M or MOT) terminal. **CAUTION** — Do not leave pull-in winding energized more than 15 seconds. Current draw will decrease as winding temperature increases.

### SPECIFICATIONS

Solenoid Number <sup>①</sup>	Pull-In Winding Amperes <sup>②</sup>	Hold-In Winding Amperes <sup>③</sup>
1114336 to 1114382	13-15.5	14.4-16.5

- ① — Except No.'s 1114363, 1114368, 1114371, & 1114373.
- ② — At 5 volts.
- ③ — At 10 volts.

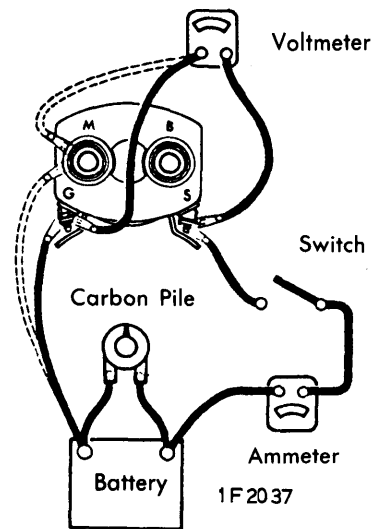
### TESTING & CHECKING

#### SOLENOID WINDING

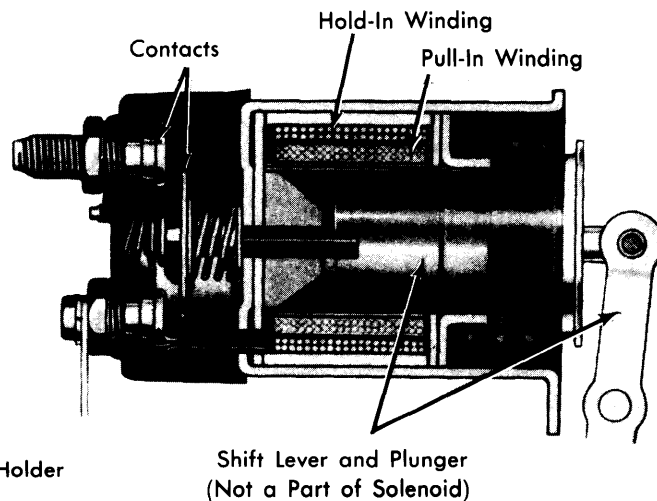
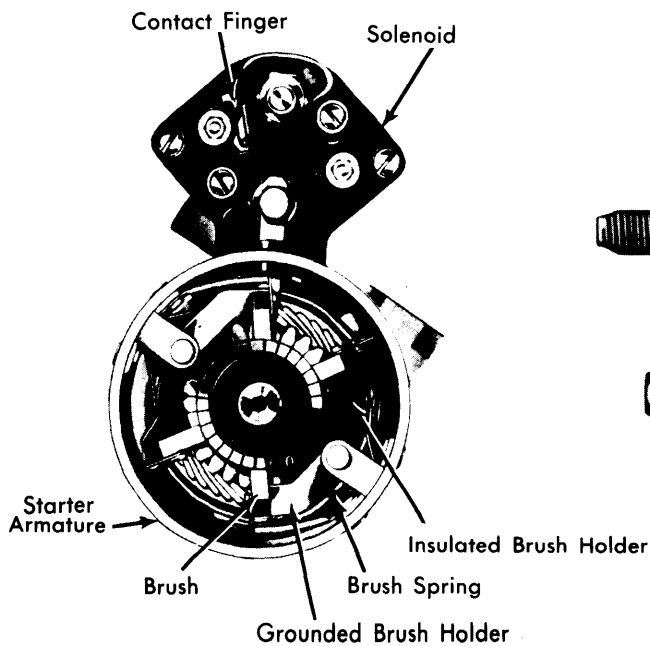
With all leads disconnected from solenoid, check pull-in winding or hold-in winding as follows:

**Hold-In Winding** — Make test connections as shown in illustration. Use carbon pile to decrease battery voltage to value required in specifications. Compare ammeter reading with specifications. If reading is higher than shown in specifications, winding is shorted or grounded. If reading is lower than that specified, excessive resistance is indicated.

**Pull-In Winding** — Check in similar manner as Hold-In Winding test, except connect ammeter and voltmeter between



SOLENOID WINDING TEST



SOLENOID CROSS SECTION

1GM01