PRESTOLITE SOLENOID

DESCRIPTION

Combined starting switch and pinion shift solenoid unit mounted on starter. Solenoid has a series (pull-in) winding and a shunt (hold-in) winding. Both windings are energized to engage the starter pinion with the flywheel and to close the main starting switch contacts. Series winding is short circuited when switch contacts close but shunt winding remains energized to hold contacts closed.

TESTING & CHECKING

SOLENOID WINDING CHECK

Check both windings in parallel (pull-in) and hold-in winding alone. This check can be made with solenoid either on or off starter. Check as follows:

Pull-In Windings (Both Windings in Parallel) – If solenoid installed on starter, disconnect field lead connector from solenoid terminal, ground solenoid terminal to solenoid case. Connect 6 volt battery, (to keep starter from energizing) variable resistor, and ammeter in series to solenoid "S" terminal, connect other battery terminal to solenoid base. Adjust resistance until voltmeter reads exactly 6 volts. Ammeter will indicate current draw of both windings. *See Specifications below.*

Hold-In Winding – After checking both windings, remove jumper wire between solenoid terminal and solenoid case. Adjust resistance until voltmeter reads exactly 6 volts. Ammeter will indicate current draw of hold-in winding. *See Specifications below.*

PINION CLEARANCE

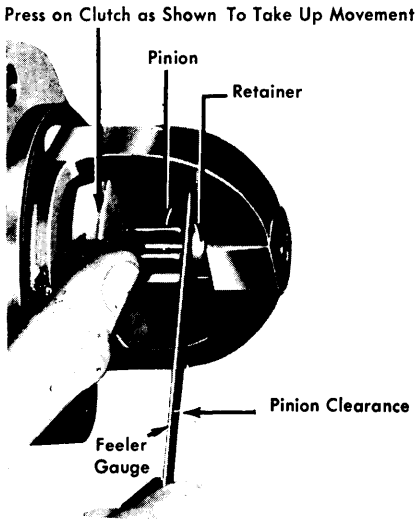
To check pinion engaged position, connect 6 volt test battery between solenoid "S" terminal and ground to starter frame (connect jumper lead from solenoid motor to ground on starter frame as a precaution to prevent motor operation). Battery will operate solenoid pinion shift and move pinion to engaged position. Push pinion back toward commutator end to eliminate endplay, then check clearance between end of pinion and retainer on armature shaft. If not within specifications, wear in shift linkage or at shift lever contact buttons indicated. No adjustment provided.

SPECIFICATIONS

Both Windings – 29.9-34.5 amperes at 6 volts.

Hold-in Winding – 10.0-11.5 amperes at 6 volts.

Pinion Clearance – .025-.235 between pinion and pinion stop with pinion in engaged position.



PINION CLEARANCE CHECK