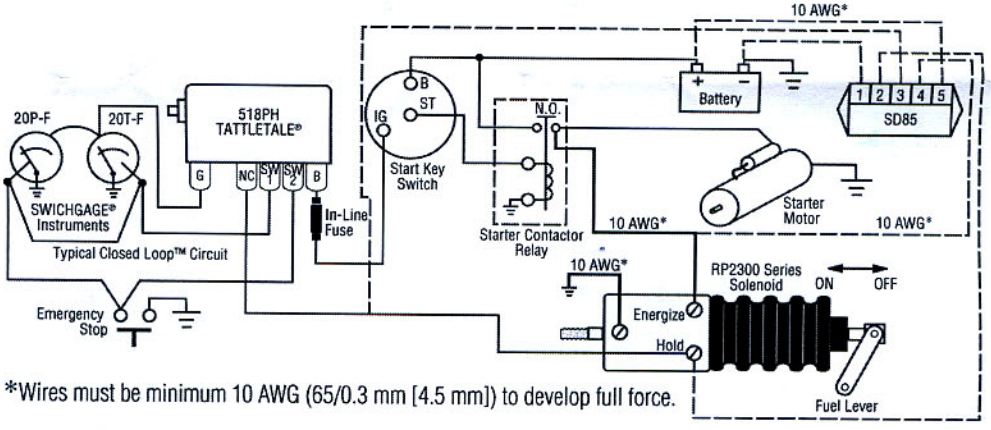
Typical Wiring Diagrams

NOTE: In either application if the starter hangs, on starters with integral solenoids, the energize coil remains energized.

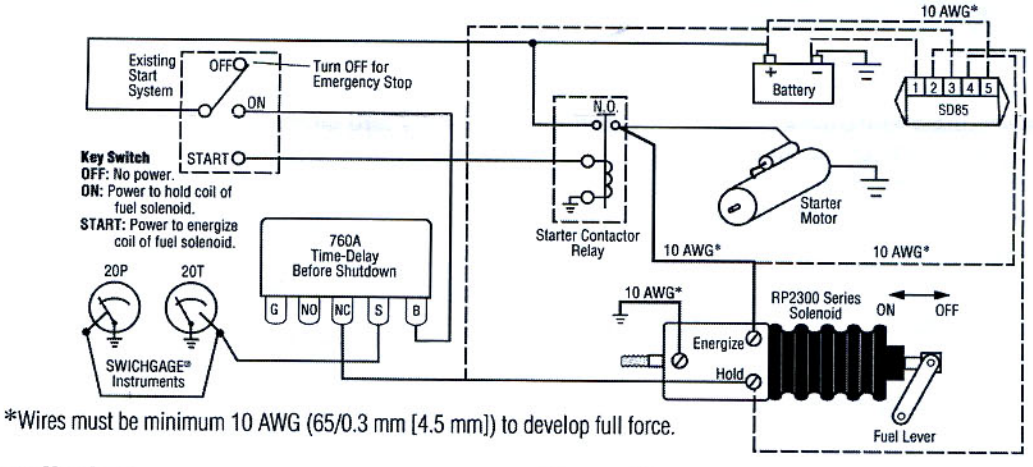
CAUTION: On certain starter solenoids/ contactor relays, current can feed back through the energize terminal from the hold coil and provide a parallel path to ground through the device connected to the energize terminal.

Typical time-delayed shutdown using a 518PH magnetic switch (SD85 is optional)



*Wires must be minimum 10 AWG (65/0.3 mm [4.5 mm]) to develop full force.

Typical time-delayed shutdown using a 760A magnetic switch (SD85 is optional)



*Wires must be minimum 10 AWG (65/0.3 mm [4.5 mm]) to develop full force.

Mechanical Installation

1. Bolt the solenoid securely to the mounting bracket.
2. Connect linkage and check for binding. Plunger should move freely throughout the complete stroke and be allowed to "bottom" at the internal stop of the solenoid.

DO NOT MOUNT WITH BOOT DOWN. DO NOT APPLY ANY GREASE OR LUBRICATION TO PARTS.

IMPORTANT: If the plunger does not seat, it will release prematurely when shifted to the "holding" mode of operation. Readjust linkage to lengthen the plunger stroke. Adjust the yoke in increments of 1/2 turn until plunger will remain in hold position.

Electrical Installation

1. Refer to the diagrams above for typical electric wiring.
2. Use minimum 10 AWG [65/0.3 mm (4.5 mm)] wire size, as noted in the wiring diagrams. A smaller wire will reduce the current available and thus the pulling force. Wire length must be kept to a minimum.

Operation

The solenoid coil is connected to the existing engine starter system or an equivalent circuit. A SD85 is recommended. At starting, both the Energize and Hold-in coils are energized. In the run mode, the Hold-in coil is continuously energized while the Energize coil has to be disconnected, reducing the heating effect and power consumption and avoiding damage to the device.

NOTE: Coils that burn out due to improper electrical hookup, misadjustment or improper operation are not covered by Murphy factory warranty.

CAUTION: The solenoid housing is hot to the touch. A temperature rise to 185°F (85°C) is permissible.

NOTE: A cool down period of 15 minutes minimum should be allowed between energized pull in cycles.