A jumper connection between Terminals 4 and 5 is required. See RESULT - Negative Ground, Case Isolated Functionally Tested 200 to 10000 Hz -40° to 180°F (-40 to 80°C)

ADJUSTMENTS

MODEL 5G @ 20 - 500 Hz
See SECTION 8 Diagram 1 or 2

A soldered wire jumper between posts E4 and E6 is required. The unit is factory set for manual reset. To reinitiate engine crank

SWSW674

A jumper connection between Terminals 4 and 5 is required. By removing the series resistor the unit is factory set for auto reset. To reinitiate engine crank

SWSW675 & SSW676

A jumper connection between Terminals 4 and 5 is required. To wire the SSW675 or SSW676, refer to SECTION 8

SSW674

A jumper connection between Terminals 4 and 5 is required. See SECTION 8 Diagram 1. To wire the SSW674, refer to SECTION 8 Diagram 2.

The range of adjustment of the overspeed set point is from 200 to 10,000 Hz. For settings below 2,500 Hz, solder a jumper wire between posts E3 & E4 located below the adjustments and to the right.

To incorporate 12 volt and 32 volt power systems:

12V System
A jumper connection between Terminals 4 and 5 is required. See SECTION 8 Diagram 1.

32V System
A soldered wire jumper between posts E4 and E5 is required.

NOTE
Posts E4, E5, and E6 are accessible through the top cover adjustment hole. See SECTION 8 Diagram 1.

When wiring the speed switch into the engine protection control system, proper wire size must be used. The speed switch relay contacts are rated for a maximum current of 5 amps. All other connections have less than 1 amp current flow each.

Connecting the Magnetic Speed Sensor:

The magnetic speed sensor connection MUST BE TWISTED AND/OR SHIELDED for their entire length. The speed sensor cable shield must only be connected to Terminal 2 on the SSW675 and SSW676, or Terminal 8 on the SSW674. The shield should be insulated to assure that no other part of it comes into contact with engine ground, otherwise stray signals may be introduced into the speed switch.

When the engine is stopped, adjust the gap between the magnetic speed sensor and the ring gear teeth. The gap should not be smaller than 0.020 in. (0.45 mm). Usually, backing out the speed sensor 3/4 turn after touching the ring gear tooth will result in a satisfactory gap. The magnetic speed sensor voltage should be at least 1 VPMs while cranking. During operation, 5 to 10 VPMs is recommended.

Adjustment (SSW674)

A. Raise the engine speed to the desired overspeed alarm point.
B. Turn the speed adjustment counterclockwise until the relay energizes and the red overspeed LED lights.
C. Lower the engine speed to the normal operating speed.

The SSW674 is shipped from the factory configured so that the internal relay latch is engaged when the set speed is reached. Power must be removed from the unit to reset the relay.

NOTE
If an automatic reset (nonlatching) relay is desired, cut the jumper wire between the two posts located below the adjustments and to the left. With the jumper between E1 & E2 removed, the SSW674 relay will reset when the engine speed falls below set speed.

It is recommended that each speed switch setting be checked periodically when maintenance is being performed on the engine. The overspeed set point can be tested by pressing the TEST button.

Remove the tachometer connections. If the overspeed section of the SSW675 and SSW676 include TEST and RESET relays are wired correctly, the unit is de fault. Using a standard tachometer, stop the engine and adjust the tachometer zero point if necessary. Readjust the engine speed to the normal operating speed with the governor speed control.

The overspeed section of the SSW675 and SSW676 include TEST and RESET relays are wired correctly, the unit is de fault. Using a standard tachometer, stop the engine and adjust the tachometer zero point if necessary. Readjust the engine speed to the normal operating speed with the governor speed control.

Procedure

Remove the tachometer connections. Apply DC power and an input speed signal to the speed switch. Measure the speed input frequency and the speed input is proportional to frequency. An increase in frequency should cause a voltage increase.

Troubleshooting

If the voltage is not proportional to frequency, check the wiring to the relay. If the speed sensor is operating, and the relay are wired correctly, the unit is de fault.