

# Swichgage<sup>®</sup> Kits for Engines WD100 Series

The WD100 Series Swichgage kits provide engine monitoring that shuts down farm, construction or other engine-powered equipment when dangerous pressures or temperatures occur. The control center for each of these kits is the compact and adjustable Universal Mounting Panel. This panel holds two Swichgages and a Tattletale<sup>®</sup> magnetic switch as well as a shut-down device where appropriate.

# Specifications

Murphy Swichgage products are two-instruments-in-one: (1) an accurate indicating gage with (2) a built-in, adjustable limit switch.
518PH Tattletale magnetic switch is designed to shut down engines by operating as a circuit breaker to interrupt the ignition circuit to a distributor or to close a solenoid fuel valve on diesels.

- Temperature capillary tubes are 6 ft. (1.8 m) standard but can be ordered in any length.
- Standard Swichgage ranges\*:
- Pressure: 0-100 psi (0-689 kPa) [0-6.89 bar] Temperature: 100° to 250°F (37° to 121°C) \*Other ranges available on request.

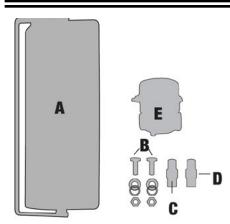


#### WD100 Series Kits

Depending upon the kit selected, the following components are supplied:

- A. Universal Mounting Panel which consists of:
  - 20P oil pressure Swichgage instrument
  - 20T temperature Swichgage instrument with 6 ft. (1.8 m) capillary, or 20TH temperature Swichgage instrument for WD175 kit
  - 518PH Tattletale magnetic switch
- B. Bracket mounting bolts, washers and nuts
- C. CKV2336 fuel reverse flow/check valve
- D. PRV50 fuel pressure relief valve
- E. SV Series fuel shut-off solenoid valve (1/4 NPT X 1/4 NPT) Specify 12-VDC or 24-VDC

# Kit Combinations



These kits are available for virtually any engine application, any engine type or can be custom ordered to meet a specific use.

#### Kit WD100 includes: A and B

Suitable for use on distributor ignition engines or on diesels having a shutdown solenoid in the fuel pump

Approximate Shipping Weight: 4.75 lbs. (2.2 kg)

**Approximate Shipping Dimensions:** 9-3/4 x 9-1/4 x 5-3/4 in. (248 x 235 x 146 mm)

Kit WD150 includes: A, B, C and E Suitable for most liquid cooled diesel engines

Approximate Shipping Weight: 6.15 lbs. (2.8 kg)

**Approximate Shipping Dimensions:** 9-3/4 x 9-1/4 x 5-3/4 in. (248 x 235 x 146 mm)

#### Kit WD175 includes: A, B, C and E

Suitable for air-cooled diesel engines; 10 mm 1.5 adaptor and special head temperature bulb. Includes SV Series fuel valve

Approximate Shipping Weight: 6.15 lbs. (2.8 kg)

**Approximate Shipping Dimensions:** 9-3/4 x 9-1/4 x 5-3/4 in. (248 x 235 x 146)

**Kit WD185 includes: A, B, C, D and E** Suitable for engines with geardriven transfer pump. (SV Series is not required on engines with built-in shutdown in the injector pump.)

**Approximate Shipping Weight:** 6.20 lbs. (2.8 kg)

**Approximate Shipping Dimensions:** 9-3/4 x 9-1/4 x 5-3/4 in. (248 x 235 x 146 mm)

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# Typical Wiring to Diesel Engine

#### **Special Notes:**

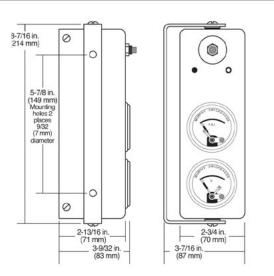
• Murphy Pressure Relief Valve (model PRV50) is factory set to start opening at 25 psi (172 kPa) [1.72 bar]. This is done to protect the fuel filter canister from bursting due to high pressure.

• Install the Murphy Check Relief Valve (model CKV2336) as close as possible to the injection pump. When the CKV2336 is installed properly, it should prevent the injection pump from siphoning fuel which halts operation after the SV valve closes.

 Install the SV Series fuel valve as close as possible to the injection pump inlet port.

• All fittings must be air tight.

## Dimensions



### How to Order

DIESEL ENGINE On some fuel 518PH Ъ systems it may Fuse Glass PRV50 be necessary to njecto install check 21 SV ÷ valve here. alve Ø Injection Pump CKV2336 20P -Fuel-In í Fuel Return Line Fuel ump

Fuel Tank

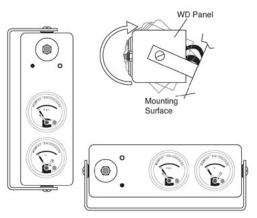
\* Always provide proper circuit protection with fuses or circuit breakers.

# **Rotating/Tilting Panel**

This panel may mount in many different positions (Swichgage instruments can be rotated and the panel tilted) that allows for instrument visibility without a difficult installation or interference with other engine equipment.

Battery

WD PANEL



To determine the kit that will suit your application, refer to descriptions. When you have selected a kit, the model number and voltage must be specified when ordering.

Order oil line assembly separately.