#### **ELECTRONIC SWITCHES**

12V Part No.

24V Part No.

Single Level Speed Switch

R4901

NA

Speed switch will trip at preset rpm to control engine function or other control circuitry. Relay outputs can also be used to switch external circuit on or off at trip point.

When ordering, specify sensor or ignition input, latched or auto -reset relay,

and the desired switch point.

12V Part No.

24V Part No.

Adjustable Single Level Speed Switch

R4901A

R4901A-24VDC

R4901A is field adjustable and designed to be used as an over rev alarm or road speed alarm. When setting is exceeded, a warning device or shutdown is activated. This unit accepts signals from ISSPRO magnetic pickup or signal generator. Set point is adjustable from 100 to 5,000 hertz. R4901A is available in unlatched (auto-reset) version only. When the set point is exceeded, the relay will remain tripped until the signal falls below the set point, when it will reset. Use R4901 factory preset to your specifications for latched applications. R4901A is not compatible with ignition inputs.

12V Part No.

24V Part No.

Dual Level Speed Switch

R4902

R4902-24VDC

R4902 is like R4901A except it has two switch points, one upper and one lower. When ordering, specify the two switch points, sensor or ignition input, latched or auto reset relay.

12V Part No.

24V Part No.

Single Level Temperature Switch

R6327

R6327-24VDC

R6327 is designed to activate a warning when a predetermined exhaust temperature is reached. When ordering, specify type J or K thermocouple and temperature at which you want the device to switch.

12V Part No.

24V Part No.

Dual Level Temperature Switch

R6326

R6326-24VDC

R6326 Gives a two step warning when predetermined exhaust temperatures are reached. When the first switch point is reached, an initial warning signal is activated. When the second temperature switch point is reached, additional warnings or systems are activated. Alarm points must be specified for factory setting.

#### TURBO TEMPERATURE MONITORS

| Application    | Voltage   | Shutdown Temp | Part No.     |
|----------------|-----------|---------------|--------------|
| Diesel Engines | 12 VDC NG | 300° F        | R4130        |
| Diesel Engines | 24 VDC NG | 300° F        | R4130-24 VDC |

This monitor can help eliminate early turbocharger failure in diesel applications. When engine ignition turned off, the R4130 idles until a safe exhaust temperature is reached, then automatically shuts down the engine. By shutting down in a cool condition, deposits are reduced and turbo life is increased. Standard shutdown is 300° F. For installation, the existing pyrometer system can be used or order lead wire R660 and a type K thermocouple.



| TEMPERATURE SWITCHES (For 6-24V Systems • 1 Amp Switch Capacity | TEMPERATUR | SWITCHES | (For 6-24V Sustems | 1 Amp Switch Capacity |
|---|------------|----------|--------------------|-----------------------|
|---|------------|----------|--------------------|-----------------------|

| A-1-10-40- 17-1510-0110 |                | AND THE RESERVE OF THE PARTY OF | 2 Company of the Comp |  |
|-------------------------|----------------|--|--|--|
| Thread                  | Switch Setting | Terminals  | Part No.   |  |
| 1/4" NPTF               | 200° F         | 1 STUD   | R363D  |  |
| -■ 1/4"NPTF             | 200° F         | Two Blades   | R363D-03   |  |
| - ■ 3/8" NPTF           | 200° F         | 1 STUD   | R363E  |  |
| —■ 1/2" NPTF            | 200° F         | 1 STUD   | R363F  |  |
| ■ 1/2" NPTF             | 212°F          | 1 STUD   | R363B  |  |
| 1/2" NPTF               | 225° F         | 1 STUD   | R363G  |  |
| —■ 1/4" NPTF            | 225° F         | 1 STUD   | R363AM   |  |
| -■ 1/4" NPTF            | 250° F         | 1 STUD   | R363A  |  |
| - <b>■</b> 1/2" NPTF    | 250° F         | 1 STUD   | R363W  |  |

### PRESSURE SWITCHES (All have 1/8" NPTFThread)

| I KESSOI           | CL SWITCH      | All Have 76 INF               | Tr Tilleau)  |          |   |
|--------------------|----------------|-------------------------------|--------------|----------|---|
| Туре               | Switch Setting | Terminals                     | Capacity     | Part No. | 1 |
| - ■ N/0, HD        | 4 PSI          | Two <sup>1</sup> /4" Blades   | 6A • 6-24VDC | R4006-4  |   |
| - ■ N/C, HD        | 4 PSI          | Two <sup>1</sup> /4" Blades   | 6A • 6-24VDC | R4007-4  |   |
| <b>■</b> N/C & N/O | 4 PSI          | Three <sup>1</sup> /4" Blades | 6A • 6-24VDC | R4012-4  |   |
| - <b>■</b> N/0     | 4 PSI          | 1 Stud                        | 6A • 6-24VDC | R7504    |   |
| ■ N/C              | 6 PSI          | 1 Stud                        | 3A • 6-24VDC | R364L    |   |
| ■ N/C, HD          | 8 PSI          | Two <sup>1</sup> /4" Blades   | 6A • 6-24VDC | R4009-8  |   |
| - <b>■</b> N/C     | 8 PSI          | 1 Stud                        | 6A • 6-24VDC | R7508    |   |
| ••■ N/C            | 15 PSI         | 1 Stud                        | 3A • 6-24VDC | R364K    |   |
| ■ N/O, HD          | 15 PSI         | Two <sup>1</sup> /4" Blades   | 6A • 6-24VDC | R4008-15 |   |
| – ■ N/C, HD        | 15 PSI         | Two <sup>1</sup> /4" Blades   | 6A • 6-24VDC | R4009-15 |   |
| N/0, HD            | 60PSI          | Two <sup>1</sup> /4" Blades   | 6A • 6-24VDC | R4010-60 |   |
| - <b>■</b> N/C, HD | 60 PSI         | Two <sup>1</sup> /4" Blades   | 6A • 6-24VDC | R4011-60 |   |
|                    |                |                               |              |          |   |

| Voltage   | Relay Current   | Kit Contents   | Kit Part No.   |
|---|---|--|--|
| 12 VDC  | 20 Amp (Normally Open)<br>10 Amp (Normally Closed)  | Probe, Warning Light, Buzzer   | R4290  |
| Low Coolar  | nt Alarm Module Only for R4290  |  | R4291  |
| 24 VDC  | 20 Amp (Normally Open)<br>10 Amp (Normally Closed)  | Probe, Warning Light, Buzzer   | R4290-24VD   |
| 1   | nt Alarm Module Only for R4290-2  | אואר   | R4291-24VD   |
| Plastic radi<br>Solid state<br>plating pro                            | ators require two probes. Contac<br>low water alarm uses AC to detect l<br>blems. High current relay 20A (NO)         | t factory for isolated coolant level<br>ow coolant conditions. This elimina  | probe.<br>ates potential                               |
| Plastic radi<br>Solid state<br>plating pro<br>alarm circu             | ators require two probes. Contac<br>low water alarm uses AC to detect I<br>blems. High current relay 20A (NO)<br>its. | t factory for isolated coolant level<br>ow coolant conditions. This elimina<br>, 10A (NC) relay will handle most sh<br>WATER L | probe.<br>ates potential                               |
| Plastic radi<br>Solid state<br>plating pro<br>alarm circu             | ators require two probes. Contac<br>low water alarm uses AC to detect l<br>blems. High current relay 20A (NO)         | t factory for isolated coolant level<br>ow coolant conditions. This elimina<br>, 10A (NC) relay will handle most sh<br>WATER L | probe.<br>ates potential<br>autdown or                 |
| Plastic radi<br>Solid state<br>plating pro<br>alarm circu<br>Sensor • | ators require two probes. Contac<br>low water alarm uses AC to detect I<br>blems. High current relay 20A (NO)<br>its. | t factory for isolated coolant level<br>ow coolant conditions. This elimina<br>, 10A (NC) relay will handle most sh<br>WATER L | probe.<br>etes potential<br>outdown or<br>LEVEL PROBE  |
| Plastic radi Solid state plating pro alarm circu Sensor •             | ators require two probes. Contact low water alarm uses AC to detect I blems. High current relay 20A (NO) its.         | t factory for isolated coolant level<br>ow coolant conditions. This elimina<br>, 10A (NC) relay will handle most sh<br>WATER L | probe.  ates potential autdown or  LEVEL PROBE  R1220L |

R4020 Engine Shutdown Protection Kit

R4020

For use in mobile applications(trucking, automotive). Solid state engine protection module with 20A(NO) or 10A(NC) contacts to handle heavy switch loads. The kit includes a 12 VDC R4022 shutdown module (15 second delay for engine starting and 30 second delay before the shudown after alarm), low coolant probe, low oil pressure switch (7-9 PSI), high engine temperature switch (225°F), warning light and buzzer.

Contact ISSPRO, INC. for isolated coolant level probe.

For 24 volt order, R4020-24VDC.

R4021 Engine Shutdown Protection Kit

R4021

For use in stationary engines.

Solid state engine protection module with 20A(NO) or 10A(NC) contacts to handle heavy switch loads.

The kit includes a 12 VDC R4023 shutdown module (30 second delay to allow engine starting, then immediate shutdown with alarm), low coolant probe, low oil pressure switch(7-9 PSI), high engine temperature switch (225°F), warning light and buzzer. Specifications are the same as R4020 shutdown kit but for use in stationary engine applications (immediate shutdown after alarm). For 24 volt order R4021-24VDC.

R4022 Engine Shutdown Protection Control Module only. (for R4020 kit)

R4022

For 24 Volt Application

R4022-24V

R4023 Engine Shutdown/Protection Control Module for use in stationary engine applications (generator, pump).

R4023

For 24 Volt Application

R4023-24V

### Specialty & Accessories

### GAUGE MOUNTING ACCESSORIES

| N4   | L:   | D    | 1    |
|------|------|------|------|
| Moun | tine | огас | Kets |

| Black    | Chrome | No. of Gauges | Gauge Diameter      |  |
|----------|--------|---------------|---------------------|--|
| R7610    | R7611  | 1             | 2 1/16"             |  |
| R7620    | R7621  | 2             | 2 <sup>1</sup> /16" |  |
| —■ R7630 | R7631  | 3             | 2 <sup>1</sup> /16" |  |
| ₹7608    | N/A    | 1             | 3"                  |  |
| ■ R7680  | R7681  | 1             | 3 3/8"              |  |

#### Mounting Cups



|   | HEAVY DUTY FU       | LL SWEEF  | VOLTMETER: | s & Ammeters    |
|---|---------------------|-----------|------------|-----------------|
| 10 H 12   | Туре                | Scale     | Part No.   |                 |
| VOLTS VOLTS   | Voltmeter Voltmeter | 7-18 VDC  | R8802      |                 |
| 25/11/25 25/11/25 75 75=  | Ammeter/Shunt       | 100-0-100 | R8808      |                 |
| ISSPAID TOO SO AMPREES  | Ammeter/Shunt       | 150-0-150 | R8810      |                 |
| 50 50 100 [ISSTPO]  | Ammeter/Shunt       | 200-0-200 | R8812      | Shunt (Typical) |
| EACH STATE OF THE | Ammeter/Shunt       | 300-0-300 | R8814      |                 |
| 300 a.C. AMPERE   | 300                 |           |            |                 |

| RELAYS, BUZZERS & WARN | ING LIGHTS |
|------------------------|------------|
| Part No.               |            |
|                        |            |

Description

12 VDC NG NC Relay 20 Amp with Connector

12 VDC NG Buzzer

12-24 VDC NG Buzzer with Steady Tone

12-24 VDC NG Buzzer with Pulse Tone

12-24 VDC NG • 103 dBA Buzzer

12 VDC NG Buzzer and Light

24 VDC NG Buzzer and Light

Red Warning Light for <sup>3</sup>/4\* Diameter Cut Out

Red Warning Light Marked "LOW WTR" for 3/4" Diameter Cutout

R7066 ---

R7074

R7085 =--

R7051

77054



| Description   | Voltage   | Bezel     | Part No.    | ISSPRO                                |
|---|-----------|-----------|-------------|---------------------------------------|
| 2 ½16" Diameter Hourmeter with Snap On Clamp                | 4-40 VDC  | Black     | R8861 🗐     | 6 6 6 6 6 6 Ave                       |
| 2 ½16" Diameter Hourmeter with Snap On Clamp                | 10-80 VDC | Black     | R8861HV     |                                       |
| 2 ½16° Diameter Hourmeter with Snap On Clamp                | 4-40 VDC  | Stainless | R8862 🔳     | 0 0 0 0                               |
| 2 ½16° Diameter Hourmeter with Snap On Clamp                | 10-80 VDC | Stainless | R8862HV     |                                       |
| 3 Screw SAE Mount Hourmeter                                 | 4-40 VDC  | Black     | R8863 🔳 = = | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 |
| 3 Screw SAE Mount Hourmeter                                 | 10-80 VDC | Black     | R8863HV     |                                       |
| Rectangular Mini Meter with 1.39" X 1.25" Viewing Area      | 10-80 VDC | Black     | R8864HV     | 0000                                  |
| 2 <sup>1</sup> /16" Digital Hourmeter with Clamp Mount      | 9-60 VDC  | Black     | R8865* -    | HOUS                                  |
| Rectangular Digital MiniMeter with 1.07 X .89" Viewing Area | 12-48 VDC | Black     | R8866*      | HOURS                                 |
|   |           |           |             | 100000                                |

\*Solid State Memory Retains Reading when Voltage is Removed.

### VOLTAGE REDUCERS

| Application             | Part No. |
|-------------------------|----------|
| FOR 24-12 VDC NG GAUGES | R7934    |

FOR 32-12 VDC NG GAUGES

R7936

For use on R8600, R8700, R9000, and R9700 Series Gauges Only.