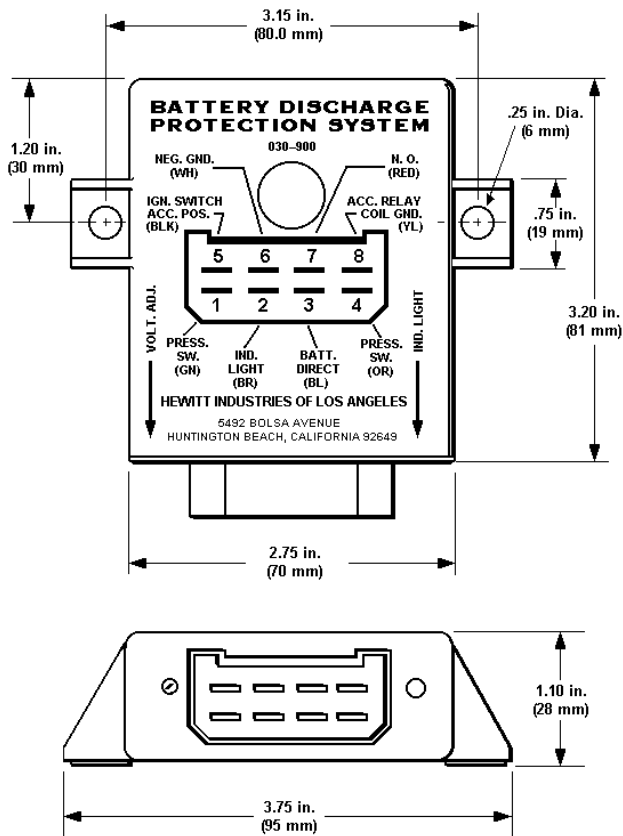


# Installation Instructions

Battery Discharge Protection Module P/N 900030

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## MODULE PIN IDENTIFICATION

- Pin 3: Battery direct (+)
- Pin 5: Switched ON signal from Webasto switch device
- Pin 8: Output signal to Webasto control unit (ON signal)
- Pin 6: Ground (-)

This system limits battery discharge from the Webasto heater unit to a preset level of 11.5 volts to ensure adequate minimum voltage for engine starting requirements.

The Battery Protection System is installed in-line between the ON/OFF device and the control unit of the heater.

## SPECIFICATIONS

### POWER INPUT

- Voltage: 12/24 VDC Models
- Current: 250 Milliamps max. plus load.

### SIGNAL OUTPUT

- 10 Amp. Non-Inductive
- 5 Amp. Inductive

### PROTECTION

- Transients
- RF signals
- Reverse polarity
- Fuse 10 Amp.
- Temperature compensated
- Voltage stable

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# Installation Instructions

Battery Discharge Protection Module P/N 900030

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## FUNCTION

When the heater is switched on, the system is initiated and continuously monitors battery voltage. If the battery voltage reaches the preset level (suggested 11.5 volts) and remains low for 8 seconds, the audio alarm is activated indicating impending heater switch off due to low voltage. After 20 seconds the heater will be switched off, and the audio alarm stops. The ON signal is "locked out" until the system is reset by cycling the Webasto switch off and then back on.

The module is adjustable by tenths of a volt to any voltage level. On the plug end of the module is an adjusting screw and a LED to indicate switching points. Turning the screw clockwise will increase voltage cut-out level and counter clockwise to decrease cut-out level.

## SELF-TEST

Each time the heater is switched ON, the system self-tests, indicated by the audio alarm for three seconds. The circuitry includes a momentary low voltage trigger for this purpose.

## INSTALLATION

Mount battery discharge protection module near the Webasto heater switch or timer behind dashboard in a protected area. Do not expose to weather conditions or other sources of contamination.

See following wiring diagrams for proper connection to the electrical circuitry of the heater.

## WIRING DIAGRAMS

Wiring diagrams apply to common switch or timer configurations as used with current Thermo 90 / 90 S and DBW 2010.73 model heaters manufactured after 9/96.

For wiring configurations different from those shown, please contact Webasto Product North America, Inc. directly for instructions.

# Installation Instructions

Battery Discharge Protection Module P/N 900030

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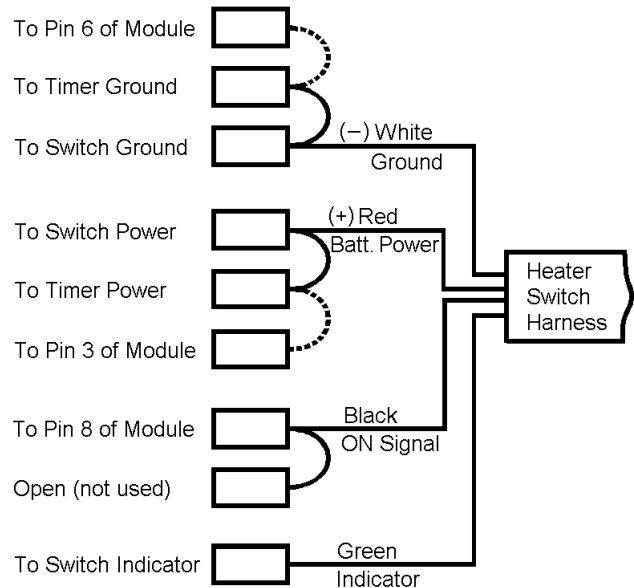
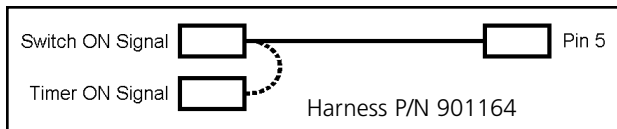
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## WIRING DIAGRAMS

### Diagram 1: General Terminal and Connection Identification

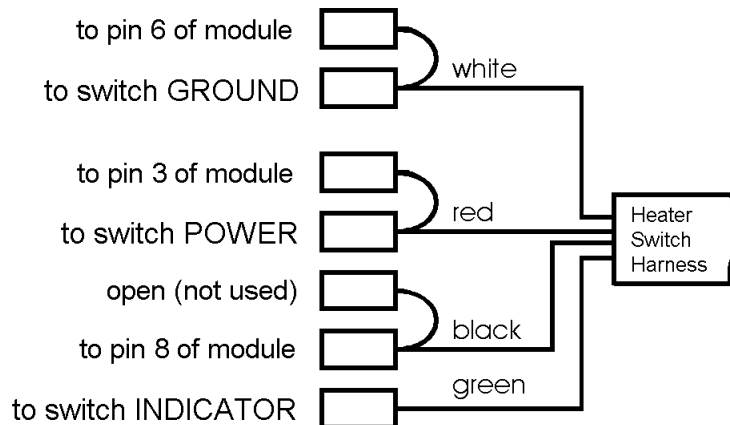
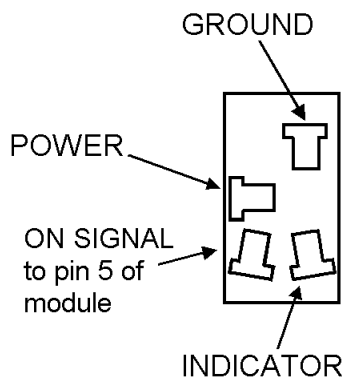
Additional jumpers and terminals will be required in applications where both a timer and switch are utilized.

Adapter harness to connect switch or timer ON signal terminal to pin 5 of battery discharge protection module shown below.



### Diagram 2: Switch Connections

Use supplied adapter harness to connect pin 5 of module to 'On signal' terminal of switch.



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# Installation Instructions

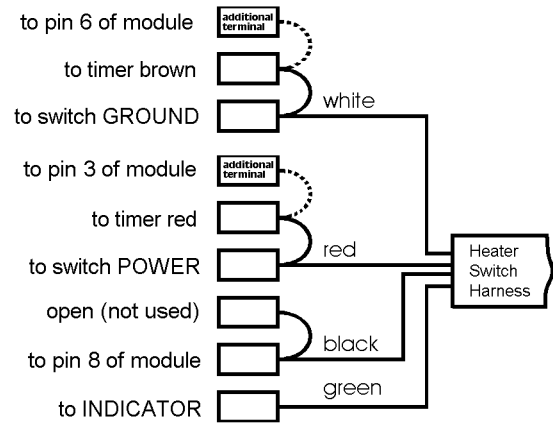
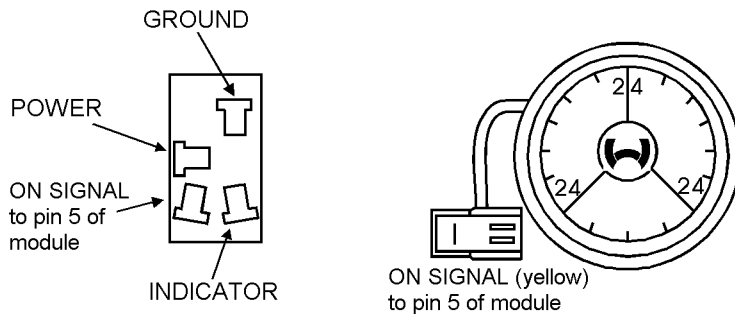
Battery Discharge Protection Module P/N 900030



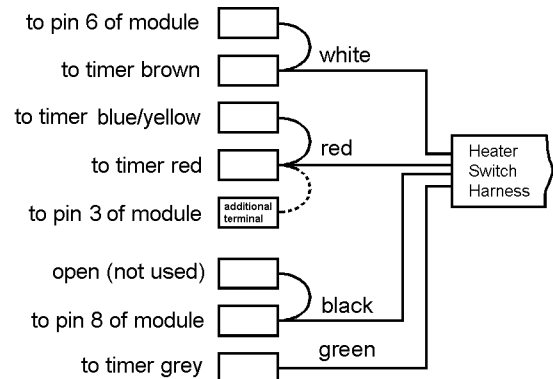
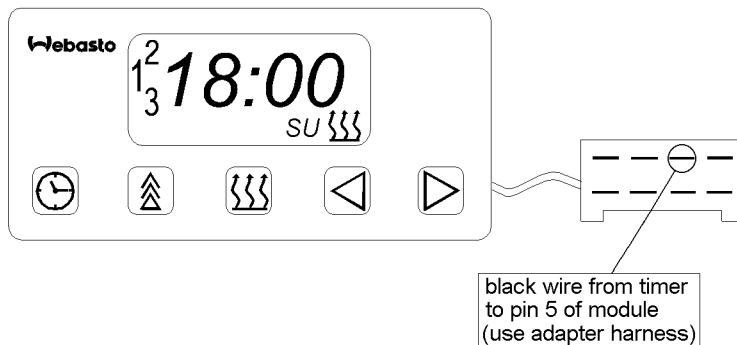
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## Diagram 3: Switch and 72 Hour Timer Connections

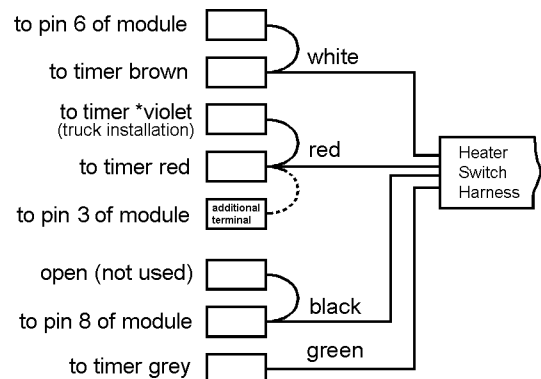
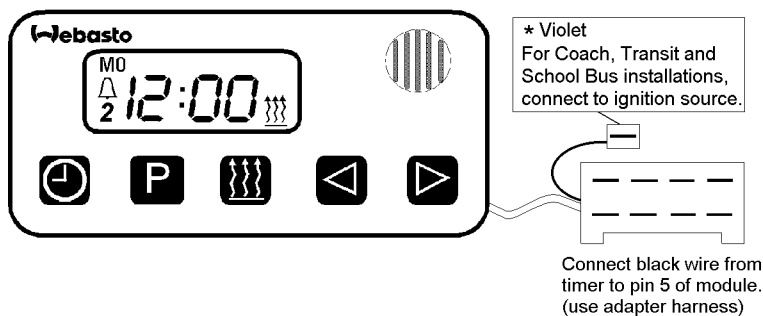
Use supplied adapter harness to connect pin 5 of module to 'On signal' terminal of switch and timer.



## Diagram 4: 7-Day Digital Timer Model 1529 Connections



## Diagram 5: 7-Day Digital Comfort Timer Model 1531 Connections



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1-800-667-8900 Canada