PORTABLE ENGINE TEST SETS & TRIMMERS

H394 Series TEMPCAL®[1] Tester

Multi-Range Thermocouple and Thermal Switch Tester

Precision Testing for

- **Thermal Switches**
- **Chromel®-Alumel®[2] Thermocouples**
- **Continuous-Wire Fire Detection Systems**

H394R
NSN 4920-01-468-9406

H394-115
NSN 4920-01-464-9810

Howell's TEMPCAL® Tester provides a portable, lightweight means for conducting repeatable, accurate testing of thermal switches, thermocouples and continuous-wire fire detection systems. Connected to the H394, TEMPCAL® Heater Probes can test heat sensitive detectors either in their normal operating location or on the bench. Testing thermal sensors in place dramatically reduces test time and associated cost.

Providing rapid heat rise and stabilization, this system enables an 800 °F thermal switch to be heated to test temperature in approximately five minutes. The five minute period is sufficient to heat the thermal switch and verify its operation. Once the probe is heated, additional switches can be checked rapidly.

Heater Probes

Specifications	
Indicator Range	-40 to 1850 °F -40 to 1010 °C
Indicator Accuracy	±1 °C in Normal Operating Conditions of 50° to 95 °F
Dimensions	14″ H x 9.7″ D x 12″ W
Weight	25 lbs
Power Requirements	20A Maximum

1 TEMPCAL® is a registered trademark of Howell Instruments, Inc.
2 Chromel® and Alumel® are registered trademarks of Hoskins Manufacturing Company

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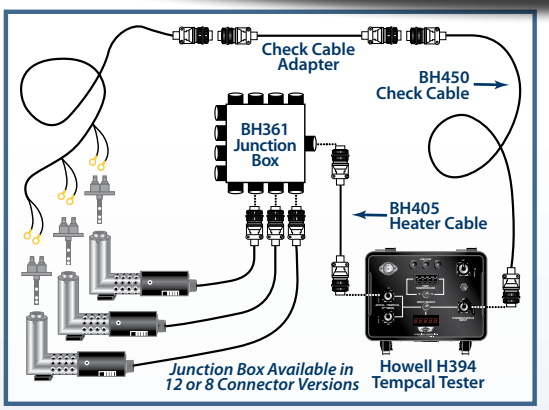
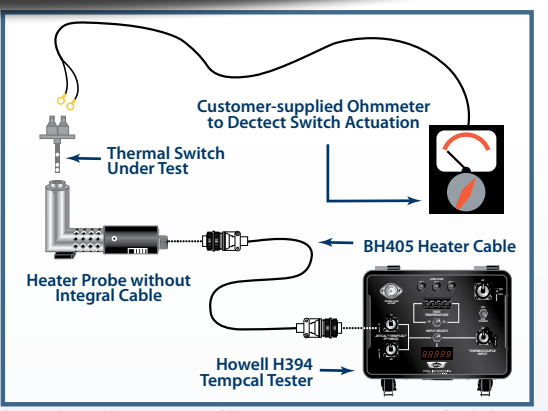
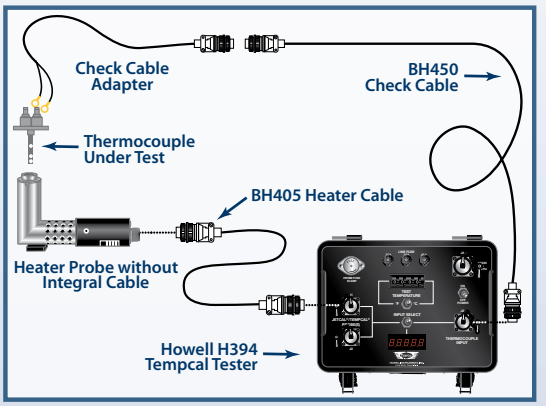


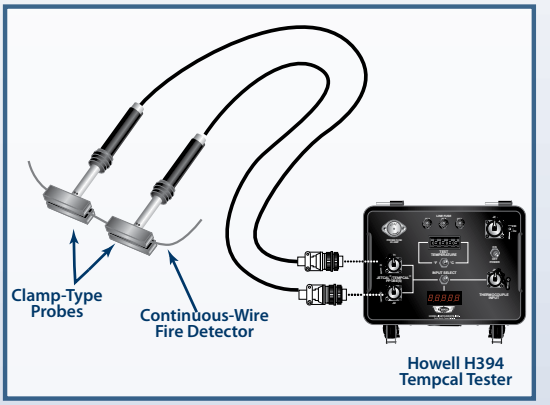
Harnesses containing up to 12 thermocouples can be tested by using the BH361 Series junction box. The H394 monitors the average probe temperature and the average thermocouple temperature.



Thermal switches are tested by using a customer-supplied ohmmeter to detect switch actuation at the proper test temperature. BH405 heater cables are required for probes without integral cables.



Thermocouples are tested by using the two-position selector switch to compare the heater probe temperature with the output of the thermocouple under test.



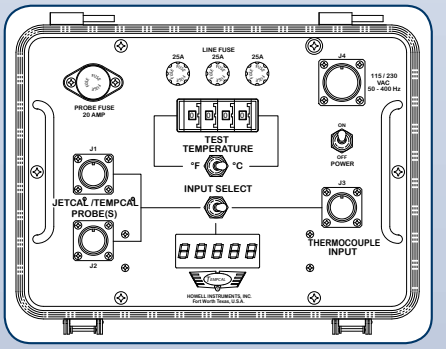
Clamp-type Probes (1 or 2 probes) are used to test continuous-wire fire detection systems such as those manufactured by Walter Kidde and Meggitt. These systems are checked by comparing the operation of the normal indicating device (indicator, lamp, alarm, etc.) with the heater probe temperature display on the H394.

Application Table

Note:
If the TEMPCAL® Probe being used does not have an integral cable, the BH405 Heater Cable is required.

* For Meggitt (Systron Donner) Fire Detection Systems.

	H394R-1 TEMPCAL® Tester	BH31294-115 Power Cable	BH31294-230 Power Cable	BH405 Heater Cable	BH450 Check Cable	BH27906-120 Heater Probe	BH1278 Heater Probe	BH27978 Heater Probe	BH7413-40 Heater Cable	BH7424 Temp Adapter	C12714 Accessory Case
H394R	1	1	1	1							
H394-115	1	1		1							
H394-230	1		1	1							
H394-1	1	1		1			1				
H394A-1	1		1	1			1				
H394-2	1	1		1				1			1
H394-3	1	1			1				1	1	
H394SD-115*	1	1				2					
H394SD-230*	1		1			2					



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