

SPEEDHEAT® Monitor Box Testing Procedure

1. INFORMATION

- 1.1 THE MONITOR BOX (MB) HAS RED, BLACK AND GREEN/YELLOW WIRES CONNECTED WITH ALIGATOR CLIPS ON ENDS.
- 1.2 MB RUNS ON BATTERIES AND IS SAFE TO TOUCH ANYWHERE.
- 1.3 THE WIRES IN SWITCH BOX BELONG TO 2 SEPARATE HEATERS.

HEATER 1 YELLOW & WHITE WIRES ARE TAPED TOGETHER WITH A LABEL READING **US 0575/12/120**.

HEATER 2 YELLOW AND WHITE WIRES ARE TAPED TOGETHER WITH A LABEL READING **US 0445/12/120**.

- 1.4 THERE ARE TWO **PAIR** OF GREEN GROUND WIRES (4 IN ALL) THAT HAVE NOT BEEN IDENTIFIED AS BELONGING TO PARTICULAR HEATERS.

2. IDENTIFICATION AND TESTING

- 2.1 IDENTIFY WHICH PAIRS OF GREEN GROUND WIRES GO TOGETHER USING THE MB.
 - 2.1.1 SEPARATE GREEN WIRES FROM EACH OTHER, SO THERE ARE 4 INDIVIDUAL GREEN WIRES COMING FROM THE SWITCH BOX.
 - 2.1.2 CONNECT RED FROM MB TO ANY GREEN IN SWITCH BOX.
 - 2.1.3 CONNECT BLACK FROM MB TO ANOTHER GREEN IN SWITCH BOX. IF MB ALARM SILENT, THEY ARE A PAIR. IF MB CONTINUES TO SOUND ALARM, TRY EACH OF THE OTHER GREENS UNTIL MB ALARM SILENT. WHEN A PAIR IS IDENTIFIED, TAPE THEM TOGETHER AND TAPE THE OTHER PAIR TOGETHER AS WELL.
- 2.2 IDENTIFY WHICH PAIR OF GREEN GROUND WIRES IS MATCHED TO **HEATER 1** YELLOW & WHITE WIRES.
 - 2.2.1 CONNECT RED FROM MB TO YELLOW OF **HEATER 1** IN SWITCH BOX.
 - 2.2.2 CONNECT BLACK FROM MB TO WHITE OF **HEATER 1** IN SWITCH BOX. THE MB ALARM SHOULD BE SILENT. IF MB

ALARM IS NOT SILENT, DO NOT PRECEDE WITH THE REST OF **HEATER 1** TEST AS **HEATER 1** IS DAMAGED.

- 2.2.3 CONNECT YELLOW/GREEN FROM MB TO ONE PAIR OF GREEN GROUND WIRES. IF MB ALARM IS SILENT, A MATCHING SET OF WIRES HAS BEEN IDENTIFIED AND THE HEATER IS NOT DAMAGED. TAPE THE PAIR OF GREEN WIRES TO THE YELLOW & WHITE OF **HEATER 1**.
 - 2.2.4 IF THE MB ALARM IS NOT SILENT, CONNECT THE NEXT PAIR OF GREEN GROUND WIRES TO THE YELLOW/GREEN FROM MB. IF MB ALARM IS SILENT, A MATCHING SET OF WIRES HAS BEEN IDENTIFIED AND THE HEATER IS NOT DAMAGED. TAPE THE PAIR OF GREEN WIRES TO THE YELLOW & WHITE OF **HEATER 1**.
 - 2.2.5 IF THE MB ALARM IS NOT SILENT, A MATCHING SET HAS NOT BEEN IDENTIFIED AND **HEATER 1** IS DAMAGED.
- 2.3 IDENTIFY WHICH PAIR OF GREEN GROUND WIRES IS MATCHED TO **HEATER 2** YELLOW & WHITE WIRES.
- 2.3.1 CONNECT RED FROM MB TO YELLOW OF **HEATER 2** IN SWITCH BOX.
 - 2.3.2 CONNECT BLACK FROM MB TO WHITE OF **HEATER 2** IN SWITCH BOX. THE MB ALARM SHOULD BE SILENT. IF MB ALARM IS NOT SILENT, DO NOT PRECEDE WITH THE REST OF **HEATER 2** TEST AS **HEATER 2** IS DAMAGED.
 - 2.3.3 CONNECT YELLOW/GREEN FROM MB TO ONE PAIR OF GREEN GROUND WIRES. IF MB ALARM IS SILENT, A MATCHING SET OF WIRES HAS BEEN IDENTIFIED AND THE HEATER IS NOT DAMAGED. TAPE THE PAIR OF GREEN WIRES TO THE YELLOW & WHITE OF **HEATER 2**.
 - 2.2.4 IF THE MB ALARM IS NOT SILENT, CONNECT THE NEXT PAIR OF GREEN GROUND WIRES TO THE YELLOW/GREEN FROM MB. IF MB ALARM IS SILENT, A MATCHING SET OF WIRES HAS BEEN IDENTIFIED AND THE HEATER IS NOT DAMAGED. TAPE THE PAIR OF GREEN WIRES TO THE YELLOW & WHITE OF **HEATER 2**.
 - 2.2.5 IF THE MB ALARM IS NOT SILENT, A MATCHING SET HAS NOT BEEN IDENTIFIED AND **HEATER 2** IS DAMAGED.