

Universal Hi/Lo Seat Heaters



WIRE SEAT HEATER INSTALLATION INSTRUCTIONS

1-Seat Coverage2-Temperature SettingWire Heating Elements



Part# STND-Hi/Lo-xxx

Document: LIT-MAN-UNV-3 10/5/2018

Limited Warranty This Product is warranted to be free from defects in manufacturing and workmanship and is guaranteed to work for three years or 36,000 miles, or whichever occurs first. This Limited Warranty covers the repair or replacement of the seat heater components only and does not cover any costs related to or damage resulting from the installation of the seat heater. Seat heaters must only be used in the seat applications for which they were designed, tested and approved by Check Corporation, and failure to properly install the designated seat heated product, or improper installation or misuse of any component, will void this Limited Warranty.

MANUFACTURER'S LIMITED REPAIR/REPLACEMENT WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR DUTIES OR WARRANTIES ARISING FROM A COURSE OF DEALING, USAGE OF TRADE OR COMMON LAW. IN NO EVENT SHALL MANUFACTURER BE LIABLE FOR PROXIMATE, INCIDENTAL, CONSEQUENTIAL OR OTHER DAMAGES, INCLUDING BUT NOT LIMITED TO DAMAGES FOR LOSS OF PROFITS OR PRODUCTION OR INJURY TO PERSON OR PROPERTY. THE CONSUMER OF THIS PRODUCT SHOULD CONTACT ITS INSTALLATION DEALER FOR ANY WARRANTY CLAIM AND RETURN WARRANTY CARD TO VALIDATE WARRANTY.

Installer shall indemnify and hold Check Corporation harmless from any and all installations contrary to automobile OEM, automobile dealership, and Check Corporation issued instructions.

Safety:

PLEASE READ BEFORE INSTALLING HEATING ELEMENT ASSEMBLIES!

[wear gloves]

[wear safety glasses]



- IF ANY OF THE FOLLOWING SAFETY CONDITIONS CANNOT BE MET, DO NOT ATTEMPT PRODUCT INSTALLATION
- Circulation and or sensory compromised persons **SHALL NOT** use this system/product at any time. There is a High Risk of Thermal Burns.
- Never reinstall a heating element. Once the element has been removed it cannot be reapplied to the foam bun. There is a risk of a thermal event
- Check Corporation wire heating element assemblies are specific to each seat and are not to be cut. They are designed to fit specific vehicle seats according to the model and production year of the vehicle. For a full list of vehicles that your kit is compatible with, please call customer service at 877-607-8941.
- Some front passenger seats are outfitted with occupant detection sensors which are not compatible with any after-market seat heater. Consult with Check Corporation to determine the appropriate heating element assembly for each specific vehicle.
- Heating elements should NEVER be installed onto foam where an occupant detection sensor is visible on the top surface of the foam, even if the heating element would not touch the sensor. Heating elements are to be placed onto foam bun only. The heating elements may adversely affect or cause the sensors or airbag system to not function correctly, thereby causing severe injury or death.
- The kit has a cushion and back heating element and both must be used.
- Release paper must be completely removed. Failing to completely remove paper is a fire hazard and nullifies and voids warranty.



- Do not modify this product.
- Do not connect this product to factory seat heater parts
- Remove paper adhesive liner from the cushion and back heating elements before
 installing them onto the foam bun. This is mandatory as the heating pattern is
 maintained by the adhesion of the heating elements to the foam bun of the seat. If the
 heating elements are not secured they could develop hot spots.
- The Heating elements must NOT be folded into seat listing channels except where cutouts were designed into the element. Do not fold the heating elements against themselves.



CLOTH UPHOLSTERY

If your upholstery is thin, and does not have at least 1/4" of foam sewn onto the backside of the upholstery, it is required that you apply a minimum of 1/4" thick layer of foam to the entire insert area between the heating element and the upholstery. This will eliminate read-through and make sure the temperature is at an appropriate level.

NOTICE

- The heating elements must be connected to switched or keyed ignition power only, to prevent battery drain when vehicle is off.
- Check and determine that the heating elements will fit under the seat trim covers in the desired areas. The listing channels or the Velcro hold-downs should line up with the cutouts in the heating elements. This is not important if the heating elements do not cross over a listing channel or Velcro hold-down. See Figure 1
- BONDED SEATS (UPHOLSTERY GLUED TO FOAM BUN)
 Never remove the cover of a bonded seat. The cover of a bonded seat cannot be installed again once it has been removed. If installation of a heating element assembly is to be attempted in this kind of seat, cut an opening in the foam bun large enough for the element to fit ½" underneath the cover. A professional should only attempt this, as mistakes often result in the replacement of the seat foam and cover.

1-SEAT HI/Lo SEAT HEATER KIT INSTALLATION MANUAL

for Leather and Cloth Seating

Product Specifications

- 12v automotive system (11 15 volts)
- Maximum power requirements vary by kit and range between

48W (3.5A @ 13.8V) and 63W (4.6A @ 13.8V)

- Temperature range measured at seat surface during normal operation
- **The temperature will cycle up and down on its own at high setting:

High Setting100 - 110°F (37.8 – 43.3°C)

**The temperature will reach at low setting: Low Setting 102°F (39°C)

- Heating elements meet FMVSS 302 flammability requirements
- New thin element design to reduce read through on thin upholstery on cloth and leather
- ** Performance varies with seat materials used and the density and amount of sewn foam between the heating elements and the surface of the seat.

The skills you need:

You need to be confident in your ability to:

- remove an automotive seat and reinstall to specification
- remove the upholstery and reinstall the upholstery
- remove and reinstall other trim such as the center console or parts of the instrument panel
- create a hole in the trim for placement of the switch
- work with advanced airbag and occupant detection systems if equipped

Automotive electrical experience or a basic understanding of electrical systems and the ability to disassemble and reassemble automotive seating is recommended.

Recommended tools:

- multi-meter (ohm's, volts, continuity)
- Terminal crimpers
- Wire strippers
- Screw driver
- Wrenches
- Electrical tape
- Marker or pencil
- Drill
- Wire cutters

- Torque, socket and Allen wrenches
- Hog ring pliers
- Utility knife
- Needle nose pliers
- Ratchet
- Deep socket
- 1" Uni-bit (step bit) or 13/16" Drill bit

This product features:

Temperatures Seats

2 temp 1 Seat



Round Rocker Switch

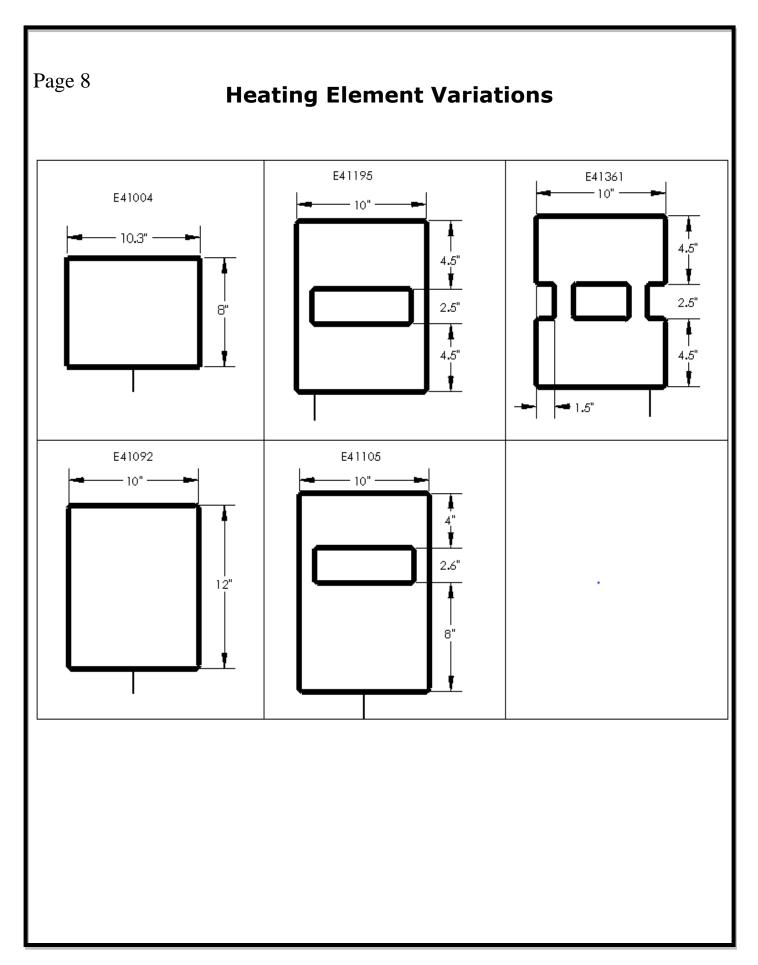
Hi/Lo Wire Seat Heater Kit

Checklists:

Product Contents Part Number	Heating Element(s)	Hardware
STND-HI/LO-201	E41092, E41092	STND-HI/LO-PACK
STND-HI/LO-202	E41092, E41004	STND-HI/LO-PACK
STND-HI/LO-210	E41004, E41105	STND-HI/LO-PACK
STND-HI/LO-211	E41105, E41105	STND-HI/LO-PACK
STND-HI/LO-212	E41092, E41105	STND-HI/LO-PACK
STND-HI/LO-220	E41195, E41195	STND-HI/LO-PACK
STND-HI/LO-225	E41105, E41195	STND-HI/LO-PACK
STND-HI/LO-227	E41092, E41195	STND-HI/LO-PACK
STND-HI/LO-228	E41004, E41195	STND-HI/LO-PACK
STND-HI/LO-229	E41004, E41361	STND-HI/LO-PACK
STND-HI/LO-230	E41361, E41361	STND-HI/LO-PACK
STND-HI/LO-231	E41092, E41361	STND-HI/LO-PACK
STND-HI/LO-232	E41105, E41361	STND-HI/LO-PACK
STND-HI/LO-2XP	E41004, E41004	STND-HI/LO-PACK

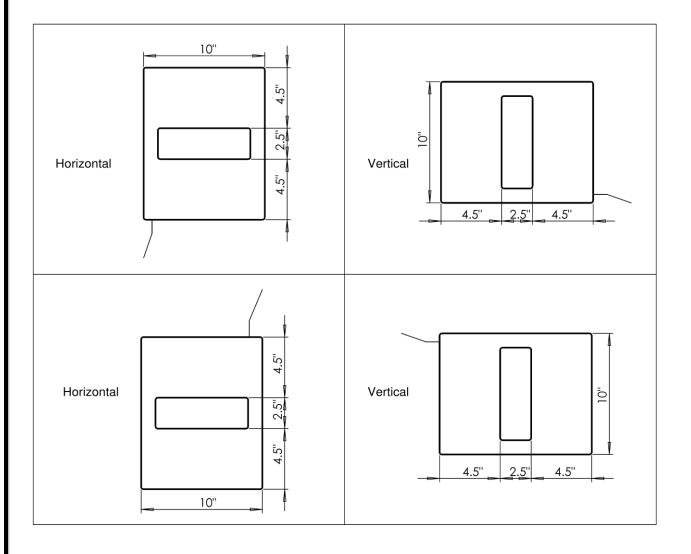
STND-HI/LO-PACK Component Hardware Contents	Part Number	Quantity
Power Harness (12')	PH-12FT	1
Switch Harness	SWH-STD-4	1
Installation Extras (See contents below)	HPACK-HI/LO-STND	1
SERVICE MANUAL	LIT-MAN-UNV-3 (This document)	1

HPACK-HI/LO-STND Parts List	Part Number	Quantity
4" TY-RAP	CT-AP4	4
Crimp Cap 20-16 AWG, Insulated	FACC-04	2
7.5 AMP ATO Fuse	FUSE02-075	1
Female Faston .25" Insulated	3-520141-2	1
Female faston .125" Insulated	B-887	1
TAP SCREW	TSHW-85	1
HI-LO Round Switch	SW-DPDT-08	1
ATO Fuse Tap .25" Blade	FACC-01	1
Ring Terminal 5/16" Insulated	B-225-56	1
Ring Terminal #10 Insulated	B-239-10	1
Mini Fuse Tap .125" Blade	FACC-03	1
ATO Fuse Holder (In-Line)	FACC-02	1



E41195 Installation Features

• The E41195 heating element is made to accommodate several different seat styling layouts. It can be installed so that the cut-out is aligned horizontally or vertically. When installing this element vertically, you may find it helpful to create a slit in the foam bun to conceal the element's wiring harnes.



Installation

- 1. **Pre-wire all components** on your workbench and test with a multi-meter for continuity. Do NOT use a battery charger as a power source. Use a 12V D.C. power source. If there are any problems, see the troubleshooting page. **THE KIT HAS A CUSHION AND BACK HEATING ELEMENT. BOTH MUST BE USED.**
- 2. **Locate vehicle fuse panel** and determine routing of power harness. **Each** seat heater needs a separate 7.5A inline fuse (included) with a switched ignition 12V power source.
- 3. **Install the ground** wire ring terminal, from the power harness, to the fuse box ground screw. Clean terminals and grounding point of paint, grease, and dirt to ensure a good electrical connection. **NEVER DRILL THROUGH THE FLOOR.**
- 4. **Disconnect and isolate** the negative (ground) battery cable.
- 5. **Discharge latent electricity** pump the brakes a few times, and wait five minutes for the system to discharge. It is important to do this before disconnecting any airbag connectors.
- 6. **Remove Seat(s) from vehicle.** Care should be taken, as the sharp edges of the seat frame will scratch the interior trim. Use duct tape or padding to cover sharp areas before removing seat.
- 7. Remove the seat covers and verify that the heating elements fit. HEATING ELEMENT ASSEMBLIES SHOULD <u>NEVER</u> BE INSTALLED ONTO FOAM WHERE AN OCCUPANT DETECTION SENSOR IS VISIBLE ON THE <u>TOP</u> SURFACE OF THE FOAM. EVEN IF THE HEATING ELEMENT WOULD NOT TOUCH THE SENSOR.
- 8. **Determine a location for mounting the switch.** Cut a hole according to the dimensions shown in the wiring diagram. Connect switch harness to the back of the switch.
- 9. **Locate area for heating elements** by tracing element outline onto foam bun. Be sure that the cushion element is placed on the cushion bun, and that the back element is placed on the back bun.
- 10. **Remove the adhesive release paper.** This paper must be removed, as IT WILL BURN.

- 11. Attach the heating elements to the foam bun (not the seat cover) by pushing down on the pads causing the adhesive to stick completely to the foam bun. NOTE: Element may be hard to handle if you tear the release paper off all at once. Paper can be peeled away in increments as you apply the element to the foam bun. Apply cushion element rear to front and back element bottom to top. RELEASE PAPER MUST BE COMPLETELY REMOVED. FAILING TO COMPLETELY REMOVE PAPER IS A FIRE HAZARD AND NULLIFIES AND VOIDS WARRANTY.
- 12. **Re-install seat trim covers.** Do not install hog rings through the heating element. **THE SEAT LISTING WIRES SHOULD NOT LIE DIRECTLY ON TOP OF THE HEATING ELEMENTS.**
- 13. Install the seat into the vehicle
- 14. Reconnect airbag connectors
- 15. Reconnect the ground of the battery
- 16. **Mate all remaining connectors** (as shown in the wiring diagram). SECURE THE WIRE WITH THE TIES PROVIDED. CHECK THAT THE RECLINING OF THE SEATS, OR THE MOVEMENT OF THE SEAT FRAME DOES NOT PULL, FRAY, OR CUT THE WIRES
- 17. **TEST SEAT FUNCTIONS**; RECLINE, FORWARD, REVERSE, UP, DOWN, ETC. ENSURING THAT NO STRAIN IS PLACED ON ANY OF THE SYSTEM'S WIRES. Ensure all of the anchor bolts are tight to the manufacturer's specification.

Using the Seat Heater for the First Time (before you deliver to your customer)

OPERATION OF THE HEATED SEATS:

After turning the system on high setting, **you must sit in the seat** and should be able to feel heat within 1-5 minutes depending on the thickness of the trim cover material over the element.

The thicker the trim cover, the longer it takes to feel the heat.

Troubleshooting of the electrical system

If the system does not heat up, check the following:

To test the unit you must sit in it for at least a 5-minute period in which the heat has time to reach the seat surface.

- Check the fuse utilized during the installation.
- Ensure that all connections are properly mated and that the 12V DC and ground wires are properly installed. (See seat heater wiring diagram)
- A break in the heating element circuit. To check for this, pull on the wires at all connectors to verify they are properly seated in the connector. Don't forget the connector on the back element. Also check for continuity at the heating elements. Use a multi-meter set to ohms.
- A low voltage condition on the power harness input from the fuse box. To verify the voltage input, use a multi-meter set to volts, across red AND black wires at the power harness connector.

If the heating elements, switch, and seat harness test OK, then a power problem exists, check the following:

• Using a multi-meter or a test light, start at the power connection and trace back through all of the connectors and the switch to determine where the power loss is occurring. Repair as necessary.

If the fuse continues to fail, check the following:

- Each pair of heating elements that are installed in the vehicle must have their own fuse.
- A poor ground connection. Check connections or try another grounding point. Another possible cause is the fuse used for power is computer controlled (try another fuse location).

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Installation Instructions

Using fuse-taps

If you are using fuse taps, it is important to draw from the correct side of the fuse

When connecting the red wire on the power harness connect it to the cold side of the fuse.



Red = Cold Side



<u>Using Optional Add-A-Fuse Accessory (Purchased Separately)</u>

This adaptor is rated to handle up to 10 amps on the accessory fuse.

Prong indicated in photo below must go to the DC +12V hot side of the fuse receptacle. In the example photo, the 7.5 amp fuse runs the seat heater accessory; the 10 amp fuse is the original amperage fuse from the fuse box. The 7.5 amp fuse is in line with the red wire for connection to the DC +12V seat heater wire.

Photo: Add-A-Fuse with fuses

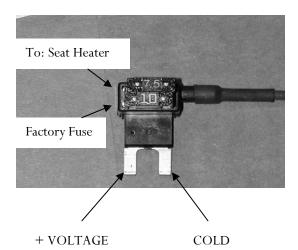
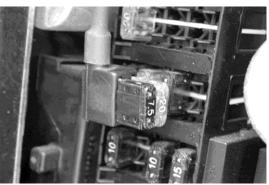


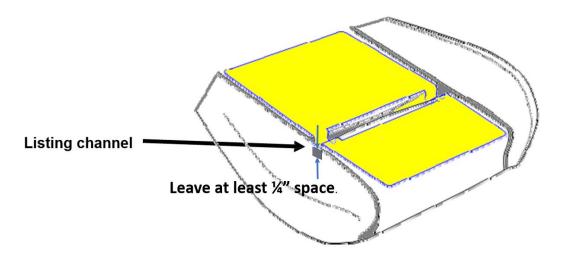
Photo: Add-A-Fuse installed in fuse box

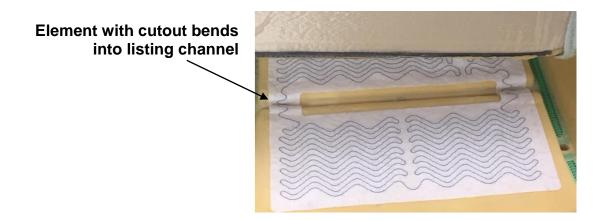


HI/LO Wire Seat Heater Kit

Figure 1

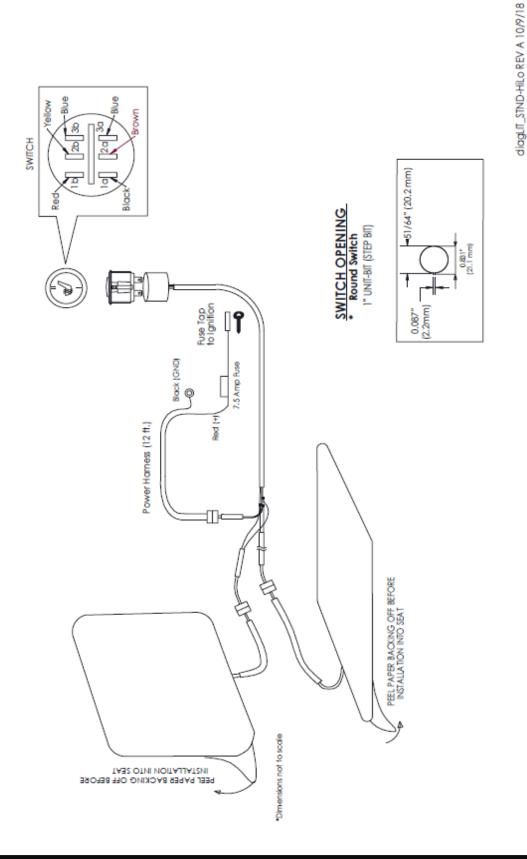
- If your heating element has a cutout hole, it has been made this way to fit with the listing channels in your seat.
- The edge of the element should bend down into and back out of the listing channel as shown below. This is the only area of the heating element that should be bent to fit the seat.
- The listing channels or the Velcro hold-downs should line up with the cutouts in the heating elements. Seat heater adheres 100% to the foam bun following the surface into the listing gaps. Opening in heater is aligned with gap. Between the element and the foam in the channel, there must be at least ¼" space. If the channel is not deep enough, remove some foam and make the gap.





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STND HI/LO SEAT HEATER KIT WIRING DIAGRAM



HI/LO Wire Seat Heater Kit

Thrown for a loop? Have a great idea? Questions?

We're listening and we're here to help.

Call us @ (877) 607-8941

24/7 Direct / International

+1 (248) 687-2722

Office Hours

8:30 AM to 5:00 PM Eastern

5:30 AM to 2:00 PM Pacific

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