



INSTRUCTIONS

-J03507

REV. 10-11-2004

Kit Number 53040-05

HEATED SEAT LED KIT

General

The Heated Seat LED Kit indicates the ON/OFF status and heat settings for a Heated Seat for Touring Models kit (Part No. 52127-05 or 52130-05) and can be installed on the following Harley-Davidson® model motorcycles:

1997 and later FLHT/I/C/CI/CUI
1997 and later FLHR/I/CI
1998 and later FLTR/I
2004 and later FLHRS/I

These kits fit the above models except those fitted with large handlebars.

The Heated Seat LED Kit requires an additional Auxiliary Accessory Housing Kit to complete installation:

Kit No.	Description
70248-02	LH black
70213-02A	LH chrome
70256-02	RH black
70255-02A	RH chrome

See Service Parts illustration for a list of kit contents.

⚠ WARNING

The rider's safety depends upon the correct installation of this kit. If the procedure is not within your capabilities or you do not have the correct tools, have a Harley-Davidson dealer perform the installation. Improper installation of this kit could result in death or serious injury. (00308a)

NOTE

This instruction sheet references Service Manual instructions. A Service Manual for the year and model motorcycle is available from any Harley-Davidson dealer.

CAUTION

It is possible to overload your motorcycle's charging system by adding too many electrical accessories. If your combined electrical accessories operating at any one time consume more electrical current than your vehicle's charging system can produce, the electrical consumption can discharge the battery and cause vehicle electrical system damage. See a Harley-Davidson dealer for advice about the amount of current consumed by additional electrical accessories, or for necessary wiring changes. (00211b)

⚠ WARNING

When installing any electrical accessory, be certain not to exceed the maximum amperage rating of the fuse or circuit breaker protecting the affected circuit being modified. Exceeding the maximum amperage can lead to electrical failures, which could result in death or serious injury. (00310a)

The Heated Seat LED Kit requires a maximum of 30 milliamps additional current from the electrical system.

Installation

Prepare the Motorcycle

1. Follow the Service Manual instructions for the model to remove the seat.

⚠ WARNING

To prevent accidental vehicle start-up, which could cause death or serious injury, disconnect negative (-) battery cable before proceeding. (00048a)

2. Disconnect the negative (-) battery cable from the battery.
3. Follow the instructions in the Service Manual to remove the fuel tank.

Install Auxiliary Accessory Housing and LED

1. See Figure 1. Follow the instructions in the auxiliary accessory housing kit to install the lower housing clamp (1).

NOTE

The following procedure installs the LED harness into the housing. Instructions for installing additional auxiliary switches will be found in the instruction sheet for the auxiliary housing.

2. See Figure 3. Orient the radiant heat lines of the bezel to indicate rising heat, over the opening of the housing cover.
3. Hold the bezel in place and turn the housing cover over to position the LED lens on the harness assembly aligning the LED lens mounting holes with the holes in the bezel.

NOTE

See Figure 2. Orient the circuit board LED lens with the two soldered wires toward the "pillion" end of the seat cutout in the bezel.

4. Using the two small thread cutting screws, securely sandwich the cover between the bezel and the LED lens. Tighten to 3-4 **in-lbs** (0.34-0.45 Nm).

NOTE

To avoid damage to the bezel or the LED lens, do not over tighten the screws.

5. See Figure 1. Route the pin terminal ends of the wire harness alongside the switch support bracket (if present) (2) and then through the lower plug hole in the back of the lower housing clamp. Carefully pull the harness until it is completely through the opening.
6. See Figure 3. Using a T-25 TORX driver, install the cover with the 2 button head screws. Tighten to 35-45 **in-lbs** (4-5 Nm).

Route the LED Conduit

1. Route the LED wire harness down along the handlebars following the existing switch housing wire harness.

For FLHR and FLTR: Replace handlebar wiring clip(s) with clip(s) from kit.

For FLHT: Replace existing switch wiring cable ties with cable ties from kit to tie LED harness to existing wiring and handlebar.

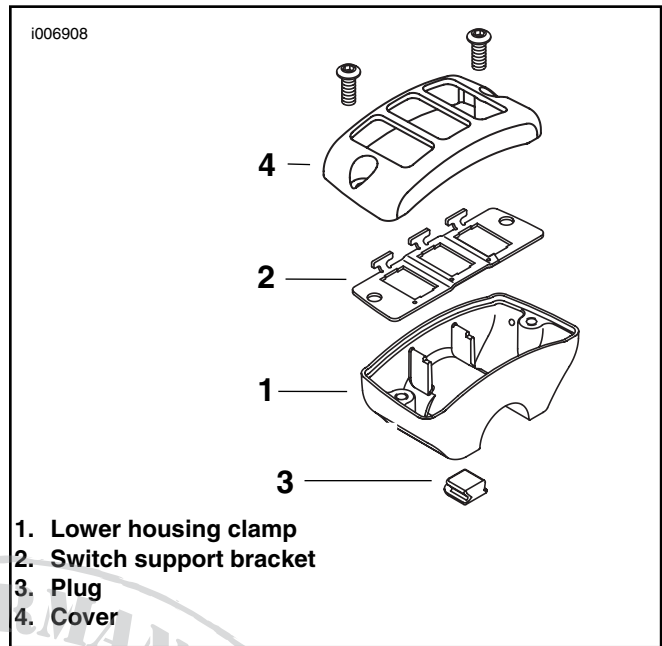


Figure 1. Auxiliary Accessory Housing

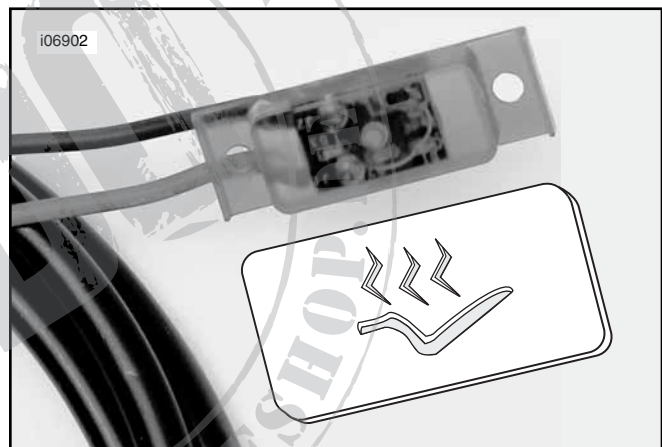


Figure 2. LED Lens to Bezel Orientation (LED harness assembly)

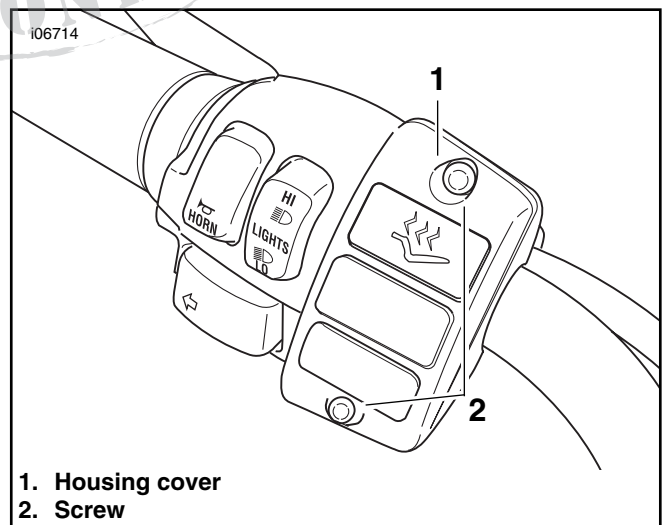


Figure 3. Housing Cover

CAUTION

Keep the main-harness wires, and all wiring, away from heat sources. Wires contacting heat sources could result in short circuits and equipment damage.

2. For left or right hand accessory switch housings, continue to follow the existing switch wire harness through or around the triple trees.

For FLHR: Follow Service Manual instructions to remove or partially disassemble the nacelle and remove the handlebar cover to follow the switch wire harness.

For FLHT: Follow Service manual instructions to remove the inner fairing cap (toggle switch cover) and the rubber grommets for the switch wiring. If necessary remove the fairing to guide the LED harness back to the right side of the backbone.

For FLTR: Follow Service Manual instructions to remove the speedometer bezel and remove the bezel along with speedometer and tachometer.

NOTE

A fish tape or the terminal pins of the LED harness taped to a length of mechanics wire can be used to route the LED wire harness through the nacelle or fairing.

3. Leave a loop in the LED harness for turning slack and turn the harness back down the right side of the frame backbone.
4. **For all models:** See Figure 4. Being careful not to bend pins, thread terminal pins and LED harness (2) inside the P-clamp (1) holding the main wire harness. Leave a loop in front of the P-clamp for turning slack.
5. Continue routing LED harness along the main wire harness until the pin terminals and LED harness extend beyond the fuel tank tunnel and under the seat.
6. Cable tie (3) the LED harness to the main wire harness and use the remaining cable ties to secure LED harness to prevent chafing or heat damage.

NOTE

Verify that the front forks can rotate full left lock and full right lock without pinching the wiring or restricting fork movement.

7. If removed, follow Service Manual instructions to replace any switch housing, fairing, grommets or instrument bezel.

Install the Pin Terminals in the Connector Half

1. See Figure 5. Push the pin terminal of the brown wire into the B cavity in the connector half until the pin clicks into place.
2. Push the pin terminal of the red wire into the A cavity in the connector half until the pin clicks into place.
3. Snap the connector locking tab tight over the wires.

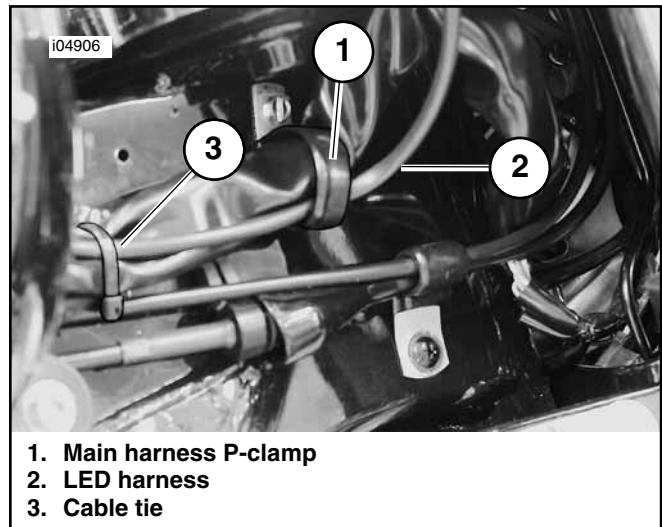


Figure 4. Harness Routing



Figure 5. B (brown wire) and A (red wire) Cavities

Mate the Connectors

1. Follow the instructions in the Heated Seat for Touring Models (Part No. 52127-05 or 52130-05) instruction sheet to locate the LED connector wired to the underside of the heated seat. Carefully cut the cable tie securing the LED harness to the bottom of the seat and extend the harness.
2. Push the 2 LED connector halves (pin and socket) together until the latch clicks.
3. Verify that the heated seat power connector is seated in the P & A accessory connector [4] on the main wiring harness of the motorcycle (located in front of the battery).

NOTE

If more than one accessory is mated to the accessory power connector [4], the heated seat connector will be seated in one branch of a dual accessory Y adapter harness (Part No. 70264-94A), .

4. Guide the wiring into the space beneath the seat so that the wiring will not be crimped or otherwise damaged.

Return the Motorcycle to Service

1. Follow the Service Manual instructions to install the fuel tank.
2. Connect the negative (-) battery cable to the battery.
3. Follow the Heated Seat for Touring Models instruction sheet to install the seat, and if necessary, the kit grab strap.

WARNING

After installing seat, pull upward on front of seat to be sure it is in locked position. While riding, a loose seat can shift causing loss of control, which could result in death or serious injury. (00070a)

Test the LED

Follow the instructions in the Heated Seat for Touring Models instruction sheet to turn the accessory toggle switch OFF and ON, to turn the heated seat ON and cycle the heated seat through its heat settings.

The LED will illuminate when the heated seat is turned ON and will vary brightness to indicate HIGH, MEDIUM and LOW.

Troubleshoot an LED that Does Not Illuminate

1. Flip accessory toggle switch OFF and ON. Press the seat button ON.
2. Remove seat and verify that the heated seat power connector is seated in the P & A accessory connector [4].
3. See Figure 6. Verify that the brown wire is in the B cavity and the red wire is in the A cavity of the connector



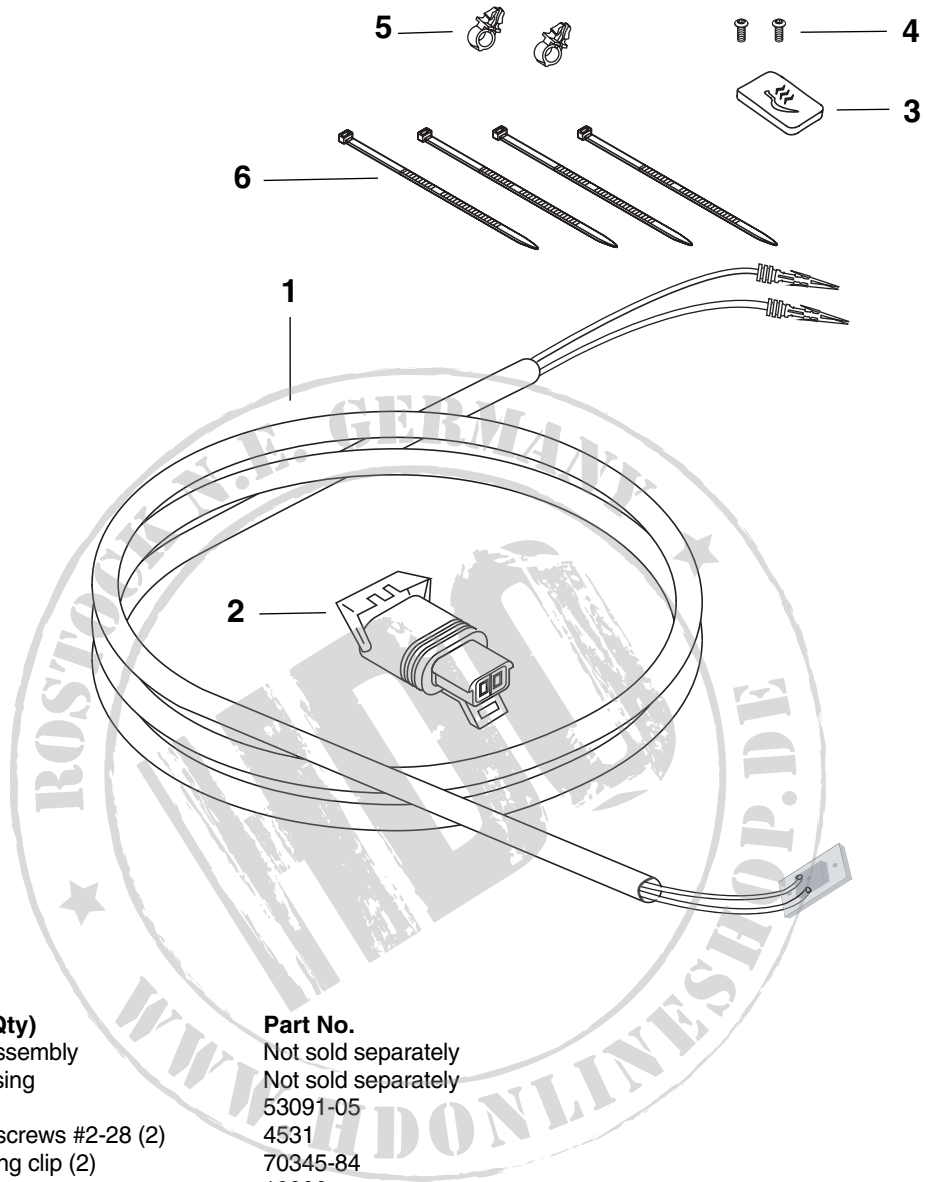
Service Parts

Part No. 53040-05

Date 10/04

Heated Seat LED Kit

i06712



Item	Description (Qty)	Part No.
1	LED harness assembly	Not sold separately
2	Connector housing	Not sold separately
3	LED bezel	53091-05
4	Thread cutting screws #2-28 (2)	4531
5	Harness retaining clip (2)	70345-84
6	Cable tie (4)	10006