



## INSTALLATION INSTRUCTIONS

TRAILER HITCH RECEPTACLE and  
WIRING HARNESS

For all 1997-2013 FLH Touring and  
1997-up Softail Heritage models w/KW hitch  
Mfg. p/n 720585  
(See pkg. label for Dist. p/n)

### ATTENTION INSTALLER (if other than owner):

Please forward this instruction sheet and the warranty card to the purchaser of this product. These instructions also contain valuable information necessary to the end user.

### INTRODUCTION:

These instructions describe the procedure for properly installing KHROME WERKS® Trailer Hitch Receptacle and wiring harness on 1997-2013 FLH Touring and 1997-up Softail Heritage models equipped with a Khrome Werks Trailer Hitch. Review instructions carefully before beginning, as they contain important information. Please retain for future reference.

Particularly important information is distinguished in these instructions by the following notations:

**NOTE:** A NOTE provides key information to make procedures easier or clearer.

**CAUTION:** A CAUTION indicates special procedures that must be followed to avoid damage to the motorcycle or accessories.

**WARNING:** A WARNING indicates special procedures that must be followed to avoid injury or death to a motorcycle operator or person inspecting or repairing the motorcycle.

### All Models:

**CAUTION:** This kit is not intended for use with trailers that have automotive combination tail, stop and turn signal lights (four wire system). The use of a 5-4 turn signal converter is required. See KW part number 720590.

**CAUTION:** Do not use with more than two tail/stop lights and two turn signals). A separate fused circuit utilizing a trailer isolation relay device must be installed if more lights are used to avoid overloading the main fused lighting circuit.

### TOOLS REQUIRED:

1 – #40 Torx key wrench or socket      1 – #2 Phillips screwdriver  
1 – 3/8" combination wrench          1 – wire stripper  
1 – 7/16" combination wrench          1 – side cutter  
1 – 5/32" flat blade screw driver  
Supplies: Silicone sealer

### PROCEDURE:

1. Wiring harness may be routed to the 5 pin female connector down either side of the rear fender. The right side allows for the natural flow of the harness from the connector. Remove right side saddle bag.

**Proceed to step 6 if kit is installed at the same time as KW hitch.**

2. Remove 1/4" hex screw (7/16 wrench or socket) (Ref 1) that secures the right upper front saddlebag support bracket and seat strap if equipped.

3. Remove the 1/4" Phillips head screw at the rear of the seat. Remove seat.

4. Remove the 5/16" Torx screw (T40 Torx) (Ref 2) from the rear of the right side chrome strut cover.

5. Remove strut cover.

**WARNING:** Disconnect battery cable (negative cable first) to prevent short circuits before performing following procedures.

6. Disconnect the factory plug leading to the rear lighting under the seat.

**NOTE:** H-D Trikes only: Disconnect the plugs between the main wiring harness and the 5-4 convertor leading to the trike's rear lighting.

Connect the two (2) KW plugs, installed as part of the supplied harness, between the factory plugs to the rear lighting. Route the wiring harness on top of the rear fender's front mounting bolt and in between the fender and the black frame strut (Ref 3). Start routing the harness downward just in front of the rear fender's rear mounting bolt (Ref 4) (if routed behind the rear bolt the chrome cover may pinch the wires). Tie wrap the wiring harness to the right hitch tube just below the hitch's upper mounting ear (Ref 5). Continue routing the harness along the inside of the hitch tube behind the tube gusset. Tie wrap the harness around the horizontal run of the tube thru the provided slot(s) in the gusset(s) depending on which hitch model is installed (6).

7. Install the 5 pin receptacle (Ref 7) and bracket (Ref 8) to the bottom of the hitch safety chain bracket with the supplied screws (Ref 9) and nuts (Ref 10). Do not tighten.

8. Cut the wires and housing to the right length after determining satisfactory routing to the receptacle. Remove the receptacle and bracket from the hitch. Loosen the external set screw and disassemble the male plug inside the receptacle (note the index of the plug to the receptacle housing). Install the wire harness thru the receptacle housing.

**CAUTION:** Make sure the receptacle's internal plastic sleeve remains in place to insure that the connected wires do not directly contact the metal housing.

Strip the wire insulation (short as possible) and connect to the plug. Red wire is stop light, Blue is taillight, Black is ground, Purple is left turn signal, Brown is right signal. If your trailer is already wired with a 5 pin plug make sure it is compatible with the supplied receptacle connector; if so, wire to match. If not, we have provided a suggested connection diagram to insure that the wiring is correct (Ref 11). Both connectors need to be wired the same. Index and insert the plug into the receptacle housing and install the set screw. Seal the back of the plug with silicone. Reinstall the assembled receptacle and bracket to the hitch.

9. Repeat the procedure to wire the trailer plug (Ref 12). Insure that the trailer's wiring harness is long enough to allow the tightest turn possible.

10. Reconnect the battery and test lights. Reinstall the chrome strut cover and front saddlebag mounting bracket. Install saddlebags and adjust and tighten front mounting bracket. Install seat.

### Hooking up your trailer:

10. Lubricate ball and connect trailer, close and secure coupler lever with safety pin or lock. Connect safety chains and test lights. Torque of all mounting hardware after first usage.

**KHROME WERKS®**

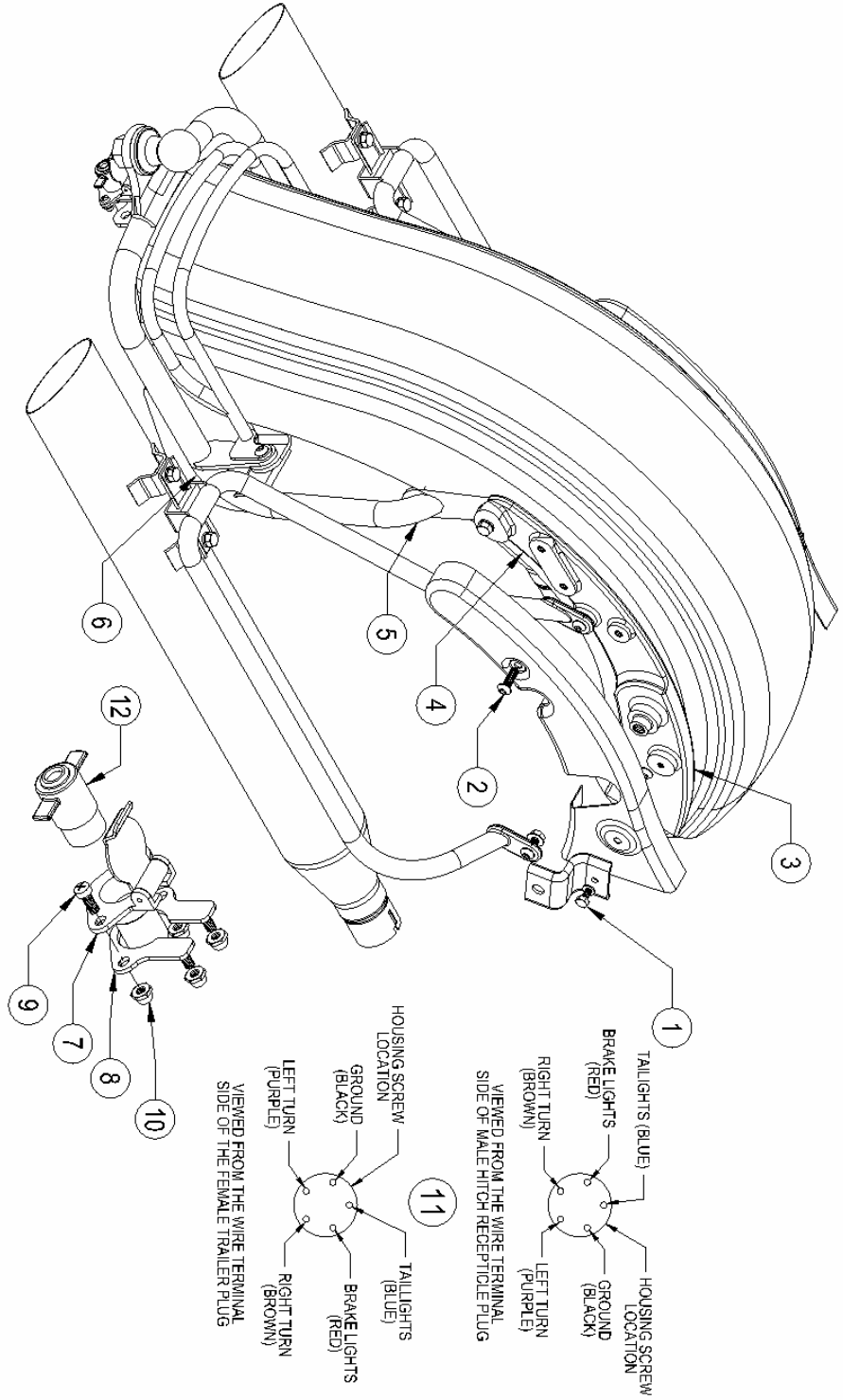
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BILL OF MATERIALS		
Mfg. P/N	Description	Qty
680793A	Connector Plate with studs	1
708132	5-pin trailer male/female connector	1
424124	Screw, 10-32 x 1/2" Phillips	2
420102	Nut, 10-32 kep	4
720586	Wiring harness plug-n-play	1