

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 on 2014 Harley-Davidson® FLHTCU, FLHX/S, FLHTK, and FLHR models. 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.

NOTE: The Khrome Werks trailer hitch requires about an hour for an experienced mechanic to install (not including wiring). Our hitch does not interfere with the use of any Harley-Davidson® Genuine Accessory. Installation of the Bumper Hitch and the Receiver Hitch is the same.

TOOLS REQUIRED:

1 - T45 Torx key wrench 2 - 1/2" comb.wrench

1 - T40 Torx key wrench 1 - 9/16" comb. wrench

1 – 3/4" comb. Wrench

1 – 7/16" comb.wrench

1 – 3/8" comb. Wrench

1 – #2 Phillips screw driver

And/or 3/8" sockets, drivers and torque wrench

Save all hardware except two (2) large, thick fender mounting washers PN 59788-01 and two (2) 5/16" x 1½" Torx screws.

PROCEDURE:

- 1. Remove saddle bags and side covers.
- 2. Remove seat strap and brackets (3/8" wrench or socket).
- 3. Remove the $\frac{1}{4}$ " Phillips head screw at the rear of the seat. Remove seat.
- 4a. **FLHX Models:** Disconnect antenna cable, wiring and rear suspension air filler from the left casting. Remove antenna.
- 4b. All Models except FLHX: Remove the rear suspension air filler from the left casting.
- 5. Remove the four (4) 5/16" hex bolts and washers (1/2" wrench or socket) that secure the mufflers to saddlebag supports.

INSTALLATION INSTRUCTIONS

BUMPER TRAILER HITCH RECEIVER TRAILER HITCH For 2014 FLHTCU, FLHX/S, FLHTK, FLHR models Mfg. p/n 720535, 720540, 720545, 720550 (See pkg. label for Dist. p/n)

- 6a. **Models without rails and saddlebag guards:** Remove left and right black lower saddlebag supports. Save all hardware except the two (2) 5/16" x 1¼" Torx screw that connect the saddlebag crossover support to the saddlebag supports.
- 6b. **Models with rails and saddlebag guards:** Remove left and right black lower saddlebag supports and chrome guard. Save all hardware except the two (2) 5/16" x 11/4" Torx screws that connect the saddlebag crossover support to the saddlebag supports.
- 7a. **Models equipped with a Tour-Pak:** Unplug Tour Pak electrical connectors. Remove the four (4) Torx screws securing the Tour-Pak supports. Pivot the Tour-Pak assembly forward and remove. **NOTE:** Use 2 people for this step.
- 7b. **Models without Tour Paks:** Remove left and right plastic strut inserts.
- 8. Remove the two (2) 5/16"-18 x 1¼" Torx screws that secure the left and right saddlebag support castings. Remove castings.
- 9. **All Models:** Loosen the front two (2) 5/16" Torx screws (T40) that secure the fender to the frame struts. Remove the two (2) rear 5/16" Torx screws (T40) that secure the fender to the frame struts. Lower the fender to expose the $\frac{1}{2}$ " nuts and threaded bosses in the rear fender holes.
- 10. Remove the two (2) 1/2" nuts, washers from each side of the fender (3/4" wrench or socket). Discard the two (2) thick washers. Save the threaded bosses from the inside of the fender.
- 11. **Models with two rail OEM rear bumpers:** Loosen the ¼"-20 nut and washer inside of the fender that secures the two rail bumper (7/16" wrench or socket).
- 12. **All Models:** Install the hitch weldment. The upper ears of the hitch weldment attach outside of the fender and are secured with the OEM ½" nuts and the threaded bosses.

CAUTION: Make sure that the fender is clean and the back sides of the hitch mounting ears are clean and burr-free so the fender does not get scratched.

NOTE: Tape the fender around the rear fender bolt holes to protect the paint finish.

<u>CAUTION:</u> The threaded bosses must be properly indexed in the fender.

Do not fully tighten the $\frac{1}{2}$ " nuts at this time. The lower hitch ears mount to the rear facing side of the saddlebag crossover support bracket and in front of the bumper mounting ears (if equipped). Temporarily install 5/16" Torx screws and nuts through the hitch lower hitch ears and saddlebag crossover support. Final torque the $\frac{1}{2}$ " fender nuts (3/4" wrench or socket) and $\frac{1}{2}$ " bumper nut (7/16" wrench or socket) at this time (if equipped).

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13. Carefully rotate the fender/hitch assembly in place, install two (2) OEM 5/16"-18 x $1\frac{1}{4}$ " Torx head cap screws. Torque all four (4) fender mount screws.

WARNING: Check inside the fender to see if the rear screw is at least flush with the head of the t-bolt, but no more then one thread protruding inside the fender to maintain tire clearance.

14. **WIRING:** Tie wrap slots are provided in the hitch gusset(s) depending on which model is installed. If using Khrome Werks electrical connection kits follow the provided instructions.

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

- 15. Install the rear suspension air filler to the left saddlebag and install the left and right saddlebag support castings using the OEM hardware.
- 16. Install the black saddlebag/muffler supports and saddlebag guards (if equipped). Install the supplied 5/16"-18 x 1¼" hex head screws and 5/16" flat washers with the OEM flange nuts to connect the lower hitch ears and saddlebag crossover brace to the saddlebag/muffler supports. Use the OEM fasteners to connect the saddlebag/muffler supports to the saddlebag support castings.
- 17. Install seat and seat strap.
- 18. Reinstall saddlebags.
- 19. **Bumper Hitch models:** Install 1 7/8" ball to hitch plate with the provided bolt and washer. Torque to 260 ft-lb (dry). Hitch height is approximately 13".
- 20. **Receiver Hitch models:** Install the 1 7/8" ball to the receiver tongue with the provided bolt and washer. Torque to 260 ft-lb (dry). Note: the receiver tongue may be mounted in the high or low position dependant on the model bike and hitch. (models without OEM bumpers and/or fasciae use the high position). Hitch height is approximately 13". Mud flap mounting holes are drilled in the rear gusset.

WARNING: Insure that the bolt that fastens the ball to the hitch plate or tongue does not bottom out before achieving maximum clamp load.

21. Receiver Hitch models: Install the retaining pin and safety clip.

WARNING: Before riding motorcycle, check all wires and air lines to be sure they are routed properly so they will not get caught up in brake, belts, wheels, trailer, tongue or other moving parts of motorcycle. Take care so wires and air lines are not touching any hot surfaces. Secure wires and air lines by using tie-wraps.

Hooking up your trailer:

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

WARNING: Do not operate motorcycle/trailer with faulty turn signals, stop or tail lamps. Inspect all connections and routing of wires if lamps do not function properly.

USE AND CARE: Wash your accessories with the same care you use when washing your motorcycle. Use mild soap and water. DO NOT use abrasive chemicals or cleaners, or high pressure washers.

Optional Chrome Trailer Hitch Electrical Connectors:

6 pin Molex Plug-n-play isolator and a four 4 wire harness with a flat connector. Available under p/n 720750.

6 pin Molex Plug-n-play isolator and a 5 wire harness with a five-pin male female connector. Available under p/n 720751.

6 pin Molex Plug-n-play isolator/convertor and a 5-4 wire harness with a flat connector. Available under p/n 720752.

BILL OF MATERIALS

P/N	DESCRIPTION	720535	720540	720545	720550
420285	Washer, 5/16" flat	2	2	2	2
420473	Screw, 5/16"-18 x	2	2	2	2
	1 ¼" hex cap				
7081043	Ball w/bolt &	1	1	1	1
	washer				
410440	1/2" hitch pin and			1	1
	clip				
720536	Bumper hitch Low	1			
720546	Receiver hitch,			1	
	low				
720551	Receiver hitch,				1
	high				
720541	Bumper hitch		1		
	High				
720572	Hitch tongue			1	1

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ADDITIONAL WARNINGS

For all-around best handling of motorcycle, tongue weight should be 10% of the gross weight of the trailer, but maximum tongue weight cannot exceed 30 lbs.

NOTE: Gross weight includes weight of trailer and all its contents, not to exceed 300 lbs.

REMEMBER:

- A. Tow only those trailers equipped with a 1 7/8" coupler to match the 1 7/8" ball supplied with the hitch. We recommend only trailers from reputable suppliers, designed for motorcycle towing, and with a proven history of good handling. Towing a trailer with poor handling can result in severe injury or death from an accident.
- B. When connecting to trailer, always make sure ball is tight on hitch, and that coupler is tight on ball. When connecting to trailers equipped with hand wheel couplers, hand-tighten only. Do not tighten with a wrench. Periodically, check these areas for tightness.
- C. Always use approved safety chains, and have them securely attached. Cross the safety chains under the tongue of the trailer so that the tongue will not drop to the road if it becomes separated from the hitch. Always leave just enough slack so that you can turn with your rig. And, never allow safety chains to drag on the ground.
- D. Trailer tire pressure should be inflated to maximum allowable pressure, unless otherwise recommended by the trailer manufacturer. Rear motorcycle tire pressure should be inflated to maximum allowable pressure (refer to tire side wall marking) and checked periodically.

- E. Towing a trailer requires a certain amount of experience. Before setting out on an extended ride, get to know your rig. Check the trailer hitch, coupler, safety chains, electrical connector, lights and tires. After loading the trailer, weigh the trailer and then the tongue, separately, to see if the weights are proper. If not, you may be able to get them right by simply shifting the items around in the trailer. When pulling a trailer with a motorcycle, extra distance must be allowed for stopping, and a slower speed when cornering must be used. The motorcycle and trailer combination is now longer, so allow more passing distance. Reduce speed when traveling downhill (may have to downshift). Use extra caution and don't exceed your riding capabilities. During the trip, check occasionally to be sure that the load is secure, and that the lights are still working.
- F. The coupler is susceptible to physical damage when trailer is parked. Prop tongue off ground when trailer is not in use. Carefully inspect coupler for damage or missing parts before each hook-up.
- G. If trailer sways or bounces while towing, SLOW DOWN BY REDUCING SPEED GRADUALLY and STOP TOWING immediately. Unless cause can be determined, i.e., shifted load, low tire pressure etc., which can be corrected, do not resume towing.
- H. If motorcycle is involved in an accident or spill, with or without trailer attached, hitch must be inspected for physical damage before towing.
- Periodically, inspect hitch to insure it is not bent or cracked and check tightness of all hardware relating to trailer hitch assembly and trailer.

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