

HD0073

TRAILER HITCH FOR 2009-2013 HARLEY-DAVIDSON FLH & FLT MODELS

INSTALLATION INSTRUCTIONS

A note about installing a Trailer Hitch and Your Factory Warranty

There has been and continues to be "harassment" from dealers telling you, the customer and owner, that installing a trailer hitch will "void" your warranty. **THIS IS NOT TRUE!** In 1975 the federal government passed a set of laws called the **Magnuson-Moss Warranty Act** (please look it up on the internet, and then tell your dealer to do the same). In short, it states that your warranty cannot be voided or canceled for using a non-OEM part or accessory (like a trailer hitch). **IF** the manufacturer of the vehicle can prove that the use of this non OEM part or accessory caused the failure of a part or parts of the vehicle then that part or parts would not be covered under your warranty **but your warranty CANNOT be VOIDED or CANCELLED.**

1. Remove the saddlebags, driver's backrest (if so equipped), and seat. If equipped with driver's backrest, remove the backrest-mounting bracket from the rear fender (photo 1A). Be sure to note or mark the bolt locations used as some models have multiple mounting locations. Remove the left and right forward saddlebag mount that the twist lock pins go into and seat strap brackets (photo1B) and seat strap brackets (photo1C). Unplug the tail light wire connector located near the front of the rear fender.
2. Remove the chrome fender support covers (photo1D) as follows. Remove the T-40 Torx bolts from the fender support covers (photo1E). On the left side you will also need to remove the Torx bolt, which secures the rear shock air fill valve. Remove the covers.
3. Remove the rear fenders chrome inner support bracket (photo1F) as follows. Remove the two T-40 Torx bolts (photo1G) which secure inner fender bracket to the black saddlebag support brackets. On most models there will also be a 7/16" nut inside the rear fender. Remove this nut as well, then remove the chrome inner fender support bracket and set aside as it will **NOT** be reused (photo1F). On models equipped with a fender bumper as shown, remove the bumper also.
4. Remove the rear fender assembly as follows. There are two T-40 Torx bolts on each side of the frame (see photo1H behind the chrome covers removed earlier), these bolts will be removed, the fender lowered down to the tire then rotated down and slid out the rear of the motorcycle. **FIRST**, place masking or duct tape on the sides of the fender to prevent scratches during removal and installation later. Now - remove the four bolts and remove the rear fender as described. Set the fender upside down on a towel or blanket.
5. Layout and familiarize yourself with the trailer hitch components. If your model is equipped with a fender bumper proceed as follows, if not proceed to the next step. Locate the three 1/4" flat washers supplied. Reinstall the wire-retaining clip onto the 1/4" stud on the inside of the fender then two of the washers. Place the bumper back in place on the fender. Place the remaining washer onto the stud then the lock nut removed earlier. Make the nut snug yet loose enough to be able to slide the bumper up and down in its slot.
6. Remove the two rear fender support bolts, washers and nuts (see photo 2A) from the fender. Be sure you have the edges of the fender protected with tape in the area of the support bolt holes as shown. To install the main hitch frame the two struts or arms of the hitch with the new fender support bolts welded in will have to be flexed inward or towards each other to clear the fender. Carefully position the main hitch frame at an angle into the fender as shown in photo

(2) with the bolt of one arm going into the hole on the fender (photo2B), then carefully flexing the other arm in to clear the fender and guiding it into the hole on the fender (photo 2C). Pivot the hitch frame on the fender support bolts down into place against the inside of the fender.

7. If equipped with a bumper proceed as follows, if not proceed to the next step. Temporarily place two of the supplied 5/16" bolts thru the holes of the fender bumper and mating holes on the hitch frame. Push the rear of the bumper down so that its upper chrome rail is parallel with the bottom of the fender (there should be a gap of 1/4"-1/2" between the bumper and the fender light). While holding the bumper in position as described and using a 7/16" open-end wrench, tighten the nut inside the fender securely. Be sure the tail light wires are not pinched between the hitch and fender, and that they are in the remaining plastic retainer clip.
8. Reinstall the two fender support washers and nuts (2A) removed earlier onto the bolts of the hitch frame and tighten securely (DO NOT over tighten 8-10 ft.lbs). Place some additional tape as needed on the sharp edges of the tabs on the saddlebag support brackets and fender as shown in (3D) so as not to scratch the fender during installation.
9. Carefully place the fender back into place, rotating it around the tire, and allow it to rest on the tire. With someone helping you lift the fender into place. NOTE: Check to be sure being the small black air line to the shock absorbers and wiring plug are above the fender. Also be sure that the black tabs from the lower part of the hitch are to the rear of the saddlebag support brackets. Now loosely reinstall the two rear fender mounting Torx bolts (1H). Remove the two bolts temporarily installed thru the hitch and bumper (if so equipped) earlier. Rotate the front of the fender up into position again, (make sure the airline and electrical connectors are above the fender and its mounting bolts) and loosely install the forward fender mounting Torx bolts.
10. Remove the two T-40 Torx rear saddlebag support-mounting bolts (photo 1J). Locate the supplied left and right support struts (photo 3A) and two each of the supplied 5/16" x 1 1/2" bolts, 5/16" lock washers, washers, and spacers. The struts (marked left and right) should be installed with the lower bent tab facing inward towards the rear wheel and the arc at the top facing upward. Place the lock washers and washers onto the bolts. Starting on the left side, place the bolt with washers thru the air shock filler valve bracket, then the strut as shown, then one of the supplied spacers on the backside of the strut. Screw this assembly loosely into the hole as shown (photo 3B). Do the same on the right strut.
11. Place two of the remaining 5/16" washers onto the two remaining 5/16" x 1 1/2" bolts. Rotate or swing the bottom of the struts back and align its lower hole with that of the bottom of the hitch, saddlebag support tabs, and bumper if so equipped. Place the bolts with washers from the rear forward thru all the components (photo 3C). Place the remaining washers onto the bolts and then the supplied Ny-lock nuts.
12. Check that the hitch is centered on the rear tire. If it is tighten all bolts securely as follows., the four fender mounting bolts, the two upper and two lower strut mounting bolts. Replace the chrome fender support covers (photo 1D) installing the rear bolts first. Then the forward bolts with seat strap brackets (photo 1C) and saddlebag mounting brackets (photo1B). Tighten the rear bolts securely. If it is not centered proceed as follows. Use a screwdriver or hammer handle between the hitch and tire, move the hitch towards and then past center in the direction you need it to go about 1/2"., then have another person tighten the bolts as described above. Next put the saddlebags in place and install the rear twist lock pin. Align the front brackets with the front twist lock pins then tighten the bracket/seat strap mounting bolts. Remove the saddlebags again.

13. Locate the chrome tongue (Chrome ball sold separately) and the supplied hitch pin with clip. Note there are multiple holes in the tongue. Slide the tongue up into the receiver and align the hole of the receiver with that of the tongue which allows the least clearance between the fender or bumper and tongue. Place the pin thru the aligned holes, then with the retaining clip to the rear (away from the tire) snap the wire clip in place. The bolt located at the rear of the receiver tube can be tightened to prevent the tongue from rattling.
14. Wiring: (not supplied with hitch) Refer to the instructions supplied with wiring sub harness, isolator and 5 to 4 wire convertor.

NOTE: We offer a sub harness (plug and play), which provides a plug in connection from motorcycle to the isolator, 5-to-4 wire convertor and trailer plug.

NOTE: If your trailer uses more than two (2) incandescent tail light bulbs the use of a trailer wiring isolator is strongly advised as this additional load is too much for the motorcycle wiring to support and may cause damage to the electrical system. Trailer wiring isolators are available thru RIVCO Products (or at some auto parts stores). If you are installing both you must first install the 5 to 4 wire converter then the isolator then attach to the trailer plug.

NOTE: If your trailer has only four (4) wires you will need to use a 5 to 4 wire converter. These are available thru RIVCO Products (or at most auto parts stores).

15. See that all wires and the shock absorber air hose are in place and secure. Install the backrest-mounting bracket (if so equipped), seat, and any other items removed earlier.

TRAILER TOWING GUIDELINES AND SAFETY

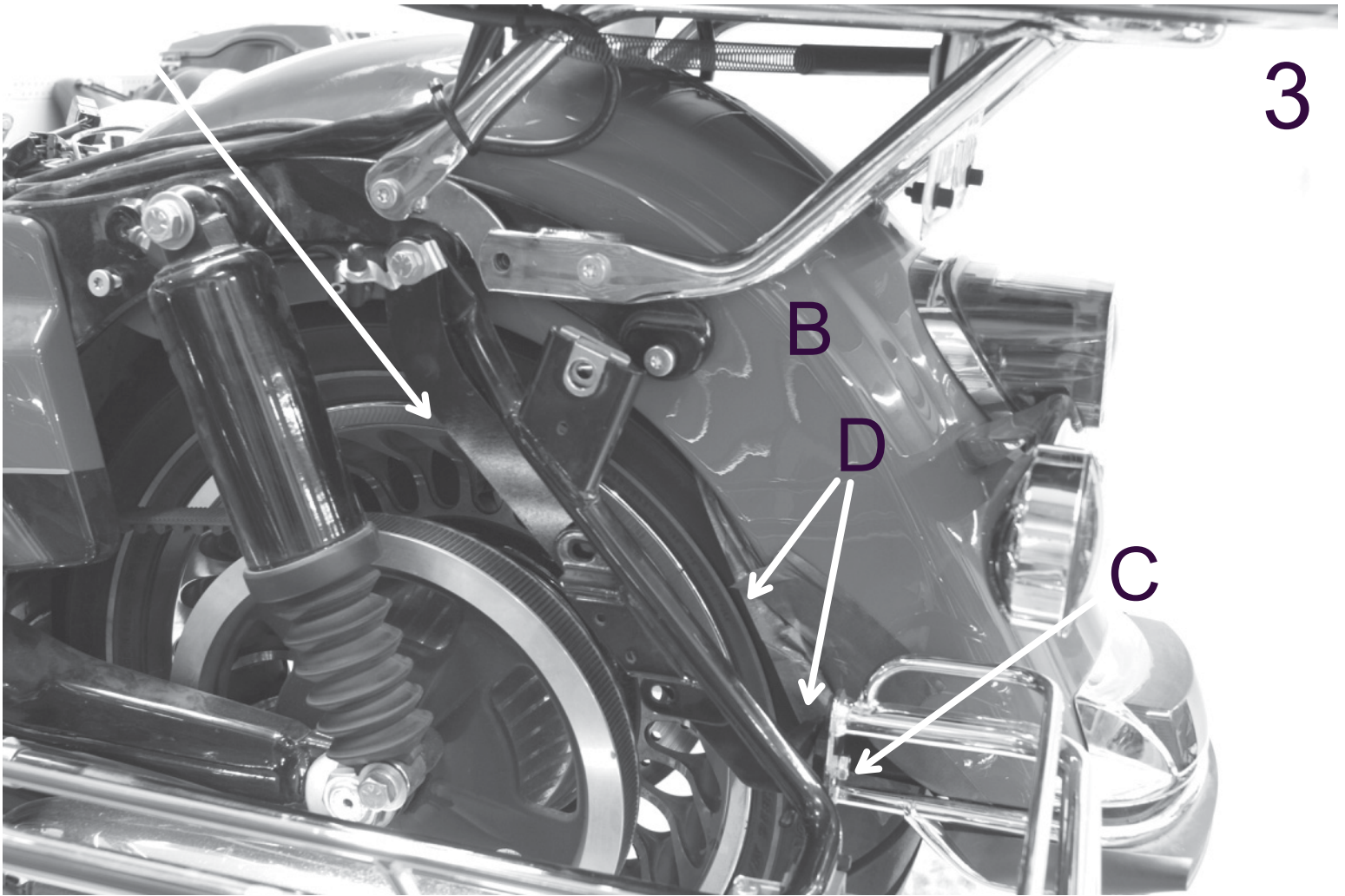
Remember that this is only a guide, and should be supplemented with your own common sense for safe operation.

WARNING: TOWING A TRAILER BEHIND A MOTORCYCLE IS DONE SO AT YOUR OWN RISK AND INCREASES THE LIKELIHOOD OF INJURY OR DEATH TO BOTH OPERATOR AND PASSENGER DUE TO INCREASED RISK AND EXPOSURE. FAILURE TO OBSERVE THE FOLLOWING WILL FURTHER INCREASE THE RISK OF INJURY OR DEATH TO OPERATOR AND PASSENGER.

- (A) ALL HIGHWAY SAFETY WARNINGS, RULES AND LAWS,
- (B) MAINTENANCE AND OPERATION INSTRUCTIONS ASSOCIATED WITH THIS HITCH OR YOUR TRAILER,
- (C) POSTED SPEED AND ROAD CONDITION WARNINGS,
- (D) SAFE RIDING PRACTICES AND PROCEDURES

We are aware of no current state or federal guidelines for pulling a trailer with a Motorcycle. We suggest when pulling and loading a trailer that you do not exceed the Manufacturers Gross Vehicle Weight and tongue weight limits. When pulling a trailer with a motorcycle, allow for extra stopping distance. When cornering, use slower speeds and a wider angle of attack. Use extra caution at all times, particularly if the road surface is wet or slippery. Splitting lanes with a trailer is HIGHLY discouraged and is ILLEGAL in many states.

IMPORTANT- As a safety precaution, please check the following before every trip:
Perform a visual inspection of hitch and mounting bolts, be sure safety chains properly attached, check trailer light functions, check to be sure the hitch pin is on & clipped, and check air pressure in trailer tires.



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