

## HD0074

# TRAILER HITCH FOR HARLEY-DAVIDSON 2014 FLH & FLT MODELS INSTALLATION INSTRUCTIONS

1. Remove the saddlebags, driver's backrest (if so equipped) and seat. Loosen the two seat strap mounting plate bolts (photo1H) 4-5 turns. If equipped with driver's backrest, remove the two 7/16" nuts that attach the back rest mounting bracket to 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 clips that the twist lock pins go into (photo1B) by flexing the outer edge out with a screwdriver and sliding the clip down. Unplug the tail light wire connector located near the front of the rear fender.
2. If equipped with a Tour-Pak unplug all wires at the front of the tour Pak from the main wire harness. Remove the four T-40 Torx bolts (photo1C) and remove the Tour-Pak.
3. Remove the rear fenders inner support bracket (photo2A) located on the inside of the bottom of the fender as follows. Remove the two T-40 Torx bolts with 1/2" nuts, these will be the shorter ones closest to the fender (photo1D not visible in this view) which secure inner fender bracket to the chrome saddlebag mounting brackets. On most models there will also be a 7/16"nut inside the rear fender. Remove this nut, the wire clip (if so equipped) then remove the chrome inner fender support bracket and set aside as it will **NOT** be reused. Replace the wire clip and 7/16" nut and tighten.
4. Loosen the two T-40Torx bolts with 9/16" nuts (photo1E) 2-3 full turns. Remove the two T-40 Torx bolts (photo1F). Remove the two T-40 Torx forward fender mounting bolts (photo 1B). These will be in behind where you removed the saddlebag-mounting clip earlier.
5. Remove the rear fender assembly as follows. It will be helpful to have another set of hands when removing and replacing the fender to prevent any paint damage. There are two remaining T-40 Torx bolts (photo1G) holding the fender up in place. These bolts will be removed, the fender lowered down then slid out the rear while holding the chrome saddlebag support/mounting brackets apart. **FIRST**, place masking or duct tape on the sides of the fender behind the chrome supports to prevent scratches during removal and installation later. Now remove the remaining two bolts (photo1G) and remove the rear fender as described. Set the fender upside down on a towel or blanket.
6. Layout and familiarize yourself with the trailer hitch components. Remove the two rear fender support bolts, washers and nuts (see photo 2B) that are at the rear of the fender, from the fender. Install the main hitch frame into the fender as shown (photo 2). Carefully position the main hitch frame at an angle into the fender as shown in photo (3) with the bolt of one arm going into the hole on the fender (photo3A), then carefully flexing the other arm in to clear the fender and guiding it into the hole on the fender (photo B). Pivot the hitch frame on the fender support bolts down into place against the inside of the fender.
7. Reinstall the two fender support washers and nuts (2A) removed earlier onto the bolts of the hitch frame and tighten (8-10 ft. lbs). **DO NOT** over tighten as you can break off the support bolt - it gets its strength when the remaining bolt is threaded into its center.

8. Again, with someone helping you, carefully place the fender back into place the same as you removed it earlier. **NOTE: The hitch's lower mounting tabs should be to the rear of the chrome saddlebag supports. Lift the fender into place, being sure the small black airline to the shock absorbers and wiring plug are above the front edge of the fender.** Now loosely reinstall the two rear fender mounting Torx bolts (1G). Rotate the front of the fender up into position again, (again making sure the airline and electrical connectors are above the fender and its mounting bolts) and loosely reinstall the forward fender mounting Torx bolts (photo 1B).
9. If equipped with a Tour-Pak reinstall it loosely using the two-rear Torx bolts only (photo 4C).
10. Install the supplied left and right support struts shown (photo 4D) as follows. The struts are (marked left and right) and must be installed with the lower bent tab facing inward towards the rear wheel.
11. If the motorcycle also has optional saddlebag guard rails you will first need to modify the struts as follows, if not proceed to the next step.. Remove or straighten the slight bend in the struts that is about half way down on both struts. Next - drill out the lower hole (end with the bent tab) to 11/32" then proceed to install as follows: Using the two supplied 5/16" x 2" bolts, 5/16" lock washers, flat washers and spacers - place the lock washers and washers onto the bolts. Starting on the left side, place the bolt with washers thru the upper hole of the left strut, then one of the supplied spacers on the back side of the strut. Screw this assembly loosely into the hole as shown (photo 4A). Do the same on the right strut.
12. If equipped with optional saddlebag guardrails, remove the larger 3/8" bolts and nuts located at photo (1E), attach the lower end of the modified struts into these holes, and loosely replace the bolts and nuts.
13. If not equipped with saddlebag guard rails proceed as follows: Place the two of the remaining 5/16" flat 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 and saddlebag supports. Place the bolts with washers from the rear forward thru all the components (hitch frame, saddlebag support and strut) (photo 4B). Thread the locking flange nuts removed earlier from the original bolts onto the new bolts.
14. Loosely reinstall the two Torx bolts (photo 1F). Check that the hitch is centered on the rear tire. If it is tighten all bolts securely on both sides, (1B,1D,1E,1F,1G, 4A, 4B, 4C, 1H). And one more time - recheck all bolts removed for tightness. 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.
15. Reconnect the tail light wiring connector and all Tour-Pak wires if so equipped. Reinstall and tighten the two 7/16" nuts that attach the back rest mounting bracket to the rear fender (photo 1A). Reinstall the saddlebag mounting clips (photo1B)
16. 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.

17. Wiring: (not supplied with hitch) Refer to the instructions supplied with wiring sub-harness, isolator, 4 to 5 wire signal decoder box and plug.

**NOTE:** 2014 models use a Can-Bus Style electronic wiring system. You **MUST** use a trailer wiring isolator to prevent damage to the motorcycles wiring and proper operation of the trailers lighting. Also 2014 models put out a 4 wire tail/brake/turn/stop signal which has combined take and turn signal functions. If you have a trailer with a 5 wire system which has separate wires for turn and brake lights you **MUST** also use a 4 to 5 signal decoder box.

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

18. See that all wires and the shock absorber air hose are in place and secure. Install seat, seat strap and any other items removed earlier. Reinstall the saddlebags.

### **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.**

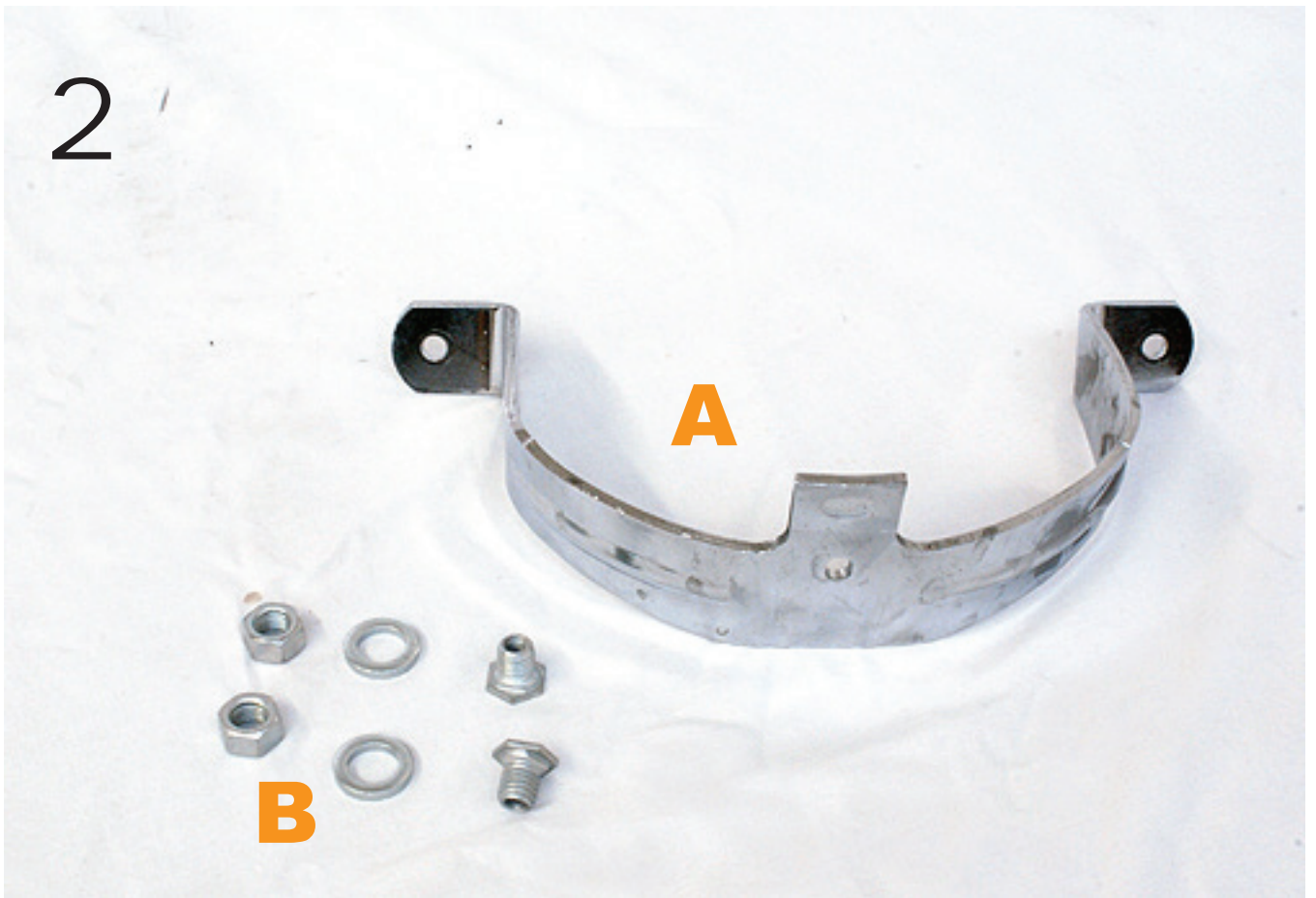
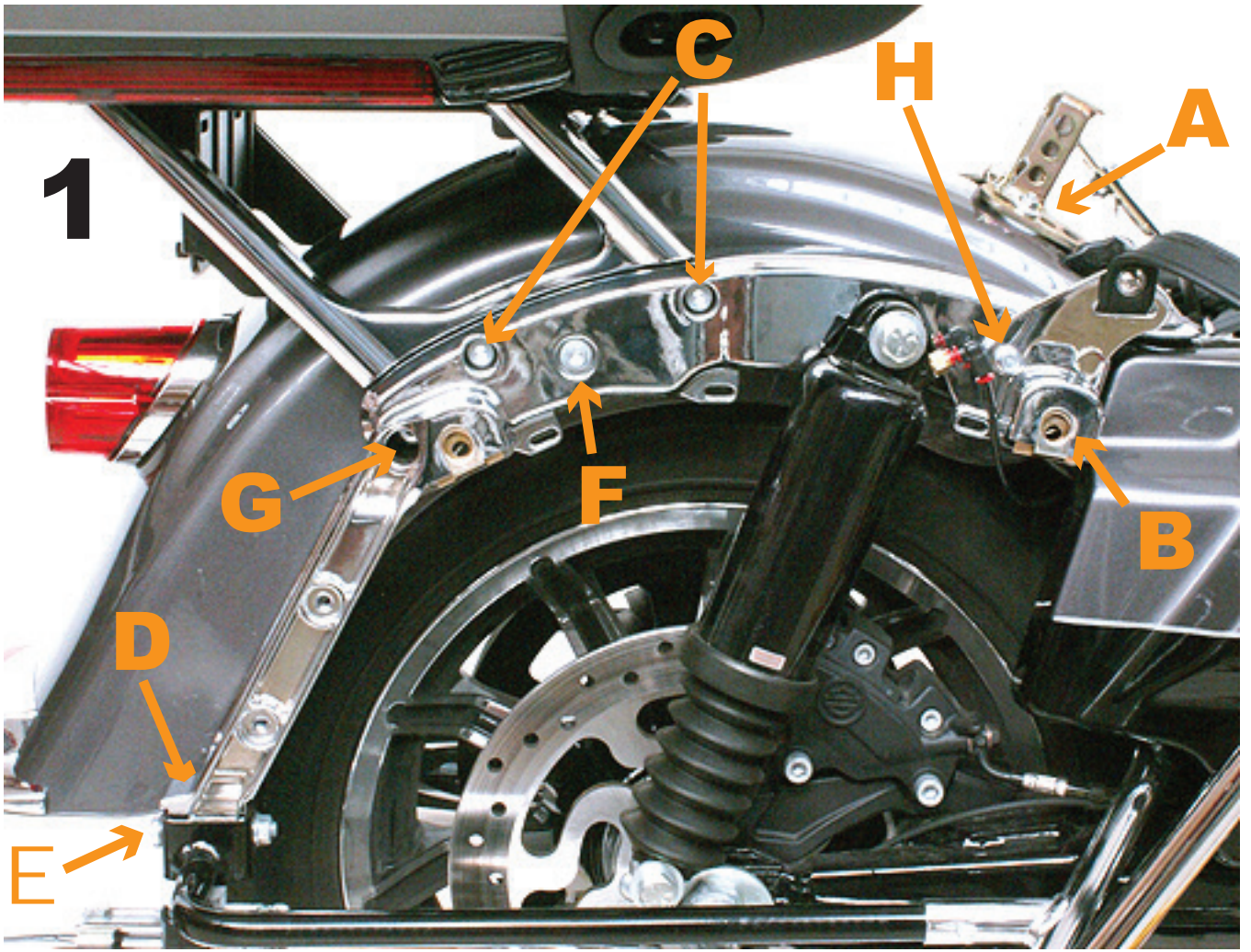
- (A) ALL HIGHWAY SAFETY WARNINGS, RULES AND LAWS,
- (B) MAINTENANCE AND OPERATION INSTRUCTIONS ASSOCIATED WITH THIS HITCH OR YOUR TRAILER,
- (C) POSTED SPEED AND ROAD CONDITION WARNINGS,
- (D) SAFE RIDING PRACTICES AND PROCEDURES

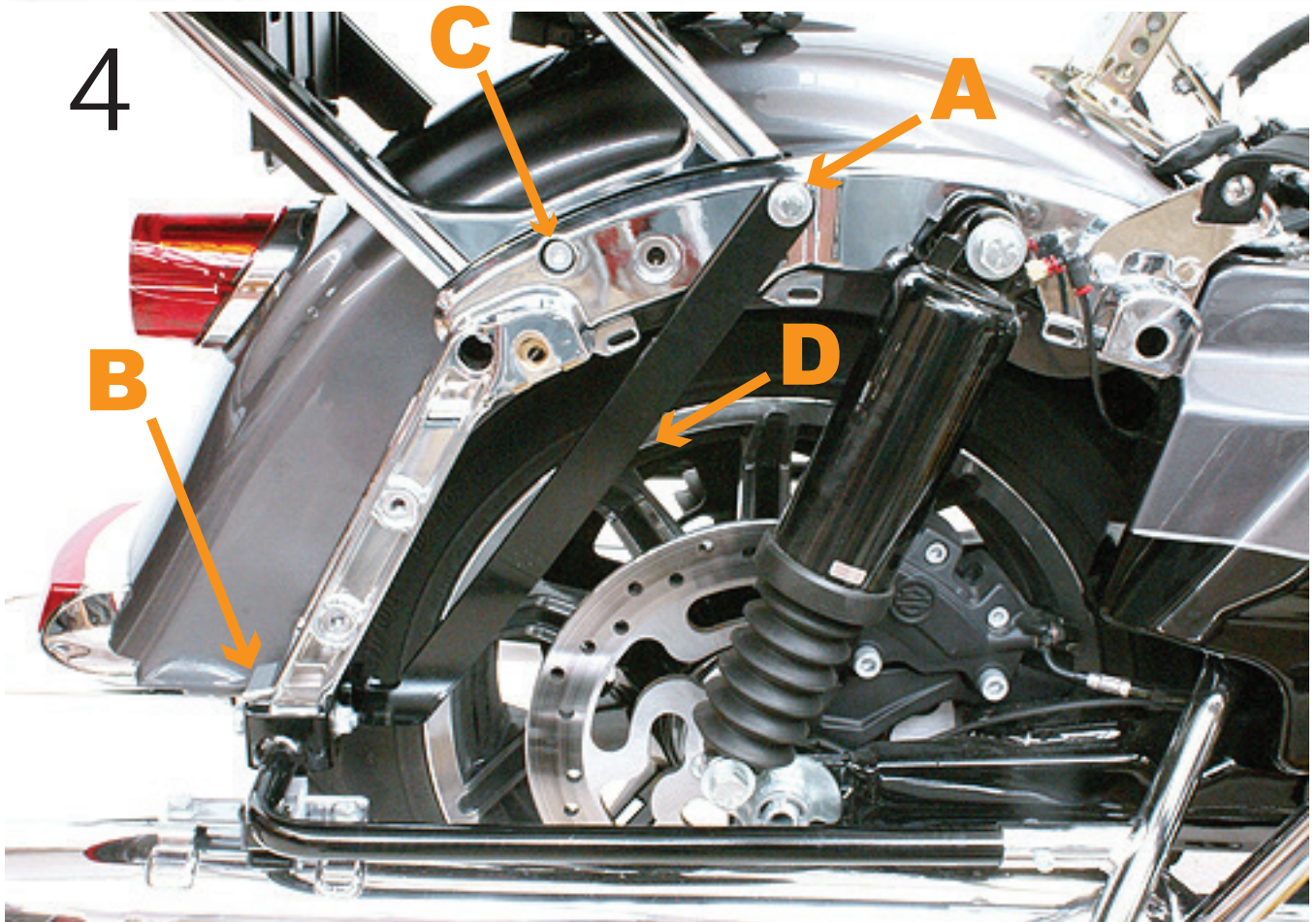
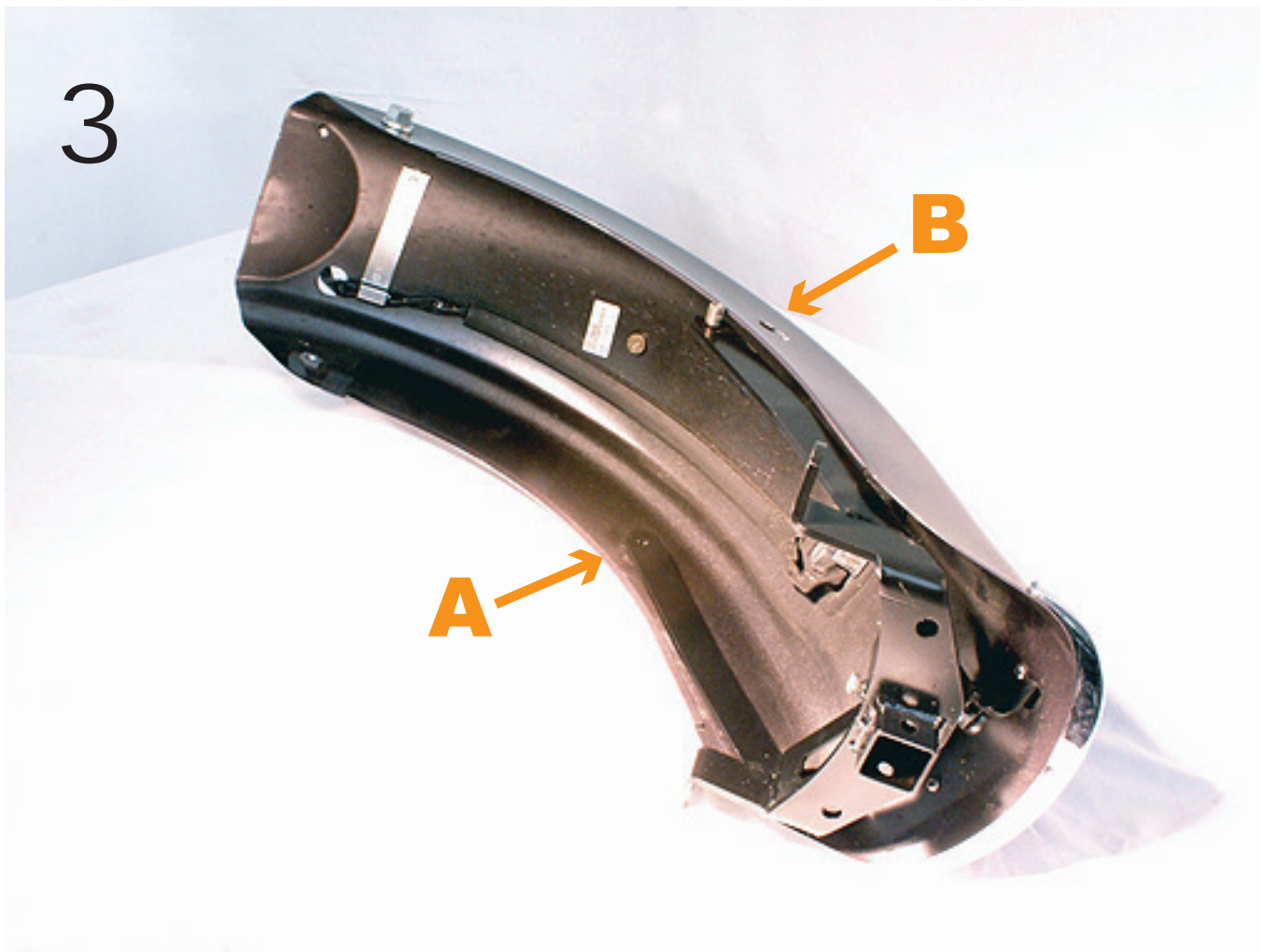
We are aware of no current state or federal guidelines for pulling a trailer with a Motorcycle. We suggest when pulling and loading a trailer that you do not exceed the Manufacturers Gross Vehicle Weight and tongue weight limits.

When pulling a trailer with a motorcycle, extra distance must be allowed for stopping. 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 CHECK THE FOLLOWING BEFORE EVERY TRIP:**

- \*Visual Inspection of Hitch and Mounting Bolts. \*Safety Chains are Attached Properly
  - \*Trailer Lights Function Properly. \*Hitch Pin on & Clipped. \*Check Air Pressure In Trailer tires.
- Thank you for purchasing a RIVCO Product!





When it comes to quality motorcycle towing products & accessories, Rivco is the brand you can depend on.