

# **2018 GOLD WING TRAILER HITCH INSTALLATION INSTRUCTION GW007**

**Will installing a trailer hitch void my motorcycle warranty?** No, in 1975 the federal government passed a set of laws called the Magnuson-Moss Warranty Act. This act states your vehicle warranty cannot be voided or canceled for using any non-original equipment manufacturer (O.E.M.) part or accessory (like our trailer hitch) unless the manufacturer of the vehicle can prove the use of this non-O.E.M. part or accessory caused a failure of any part or parts on the vehicle. We encourage you to research the Magnuson-Moss act then share your findings with your dealer if they tell you installing our trailer hitch or any other accessories will void your warranty.

Read through these instructions completely before attempting installation, lay out all pieces including the hardware to make yourself familiar with all the parts.

1. Place the motorcycle on its center stand. Referring to photo (1A) remove the two 5 mm hex screws from the rear fender. Remove the rear fender by pulling outward on the bottom then lifting it upwards. Unplug the wire connector on the backside of the fender and set the fender aside
2. Open the saddlebags. Remove the side covers as follows. There are three plastic pins on each side cover that press into three mating rubber grommets at locations photo (2A). Pull outwards on the covers firmly and slowly at each corner until the pin releases from the grommet.
3. Remove the small gray plastic covers just above the passenger floor boards. Each cover is held on by two plastic rivets photo (2B), one 5mm hex screw photo (2C) and one 10mm hex bolt photo (2D). Using a small blade screwdriver push the center pin of the rivets inward then remove the entire rivet.
4. Remove the seat by removing the two 6mm hex screws at location photo (2E). Unplug the seats wire connector photo (2F). Lift the front of the seat upward then slide it towards the rear and lift it off the frame.
5. Remove the rear tip over bar plastic covers photo (3B) (shown removed and upside down) by removing the plastic rivet photo (3A) from the bottom side of the cover then pulling it outward. Remove the 6mm screws photo (3C) that secures the exhaust heat shields. Slide the covers forward (3D) and remove them. Remove the two 12mm bolts photo (4A) and remove the tip over bars.
6. Remove the mufflers as follows. Loosen the 12mm muffler clamp bolts photo (4C) 3-4 turns. Remove the 12mm muffler hangar bolts and nuts located at the rear of the mufflers just below the saddlebags (4D). Slide the muffler to the rear and off while wiggling them side to side.

7. Remove the two 12mm bolts and nuts (5A&B) that connect the end of the main frame to the sub frame. When removing the nuts use care not to drop them into the space below. A pencil type magnet will help with this. To remove the bolts easier lift up on the bottom of the trunk.
8. Referring to photo (7C) unplug the white and the brown wire connectors. Reroute them beneath the two plugs photo (7D) as shown then reconnect them.
9. Referring to photo (6) install the two strut arms as follows. Starting on the right side hold the arm as shown photo (6A ) vertically with the curved end up and facing forward, slide it up between the inner fender and saddlebag photo (6B &C). You will be able to see a small gap between the two. Slide it up until the curved end is above the main frame and sub frame. Route the wire loom photo (7A) to the outside, between the black sub frame and the strut arm as you bring the curved end of the strut up and over the silver main frame. Rotate or angle the lower end of the strut to the rear until it is almost touching the rear of the saddlebag. Install one of the supplied longer 8 x 50 mm bolts thru the strut, frame and sub frame then start the nut removed from the original bolt photo (again using a pencil type magnet will help to get the nut started and prevent dropping it into the bodywork).
10. Install the left strut arm to this point in the same manner. On the right side route the larger wire loom between the strut and sub frame as shown and the two smaller wires rerouted earlier photo (7C) under the strut.
11. Locate the tip over bars removed earlier in step 4. The nuts that are welded to the bars need to be removed. Do this by cutting or grinding off the welds photo (8A). Smooth the surface with your grinder or a file then apply some touch up paint to the bare metal.
12. Starting on the right side and referring to photo (9) install the right trailing arm (item #4) using the thin spacer (item#7), 8x45mm flange bolt which is the medium length fully threaded 8mm bolt (item#8) and an 8mm flange nut (item#11). Referring to photo insert the 8x45mm bolt into the sub frame. Thread the bolt in fully and tighten it securely (18-22 ft. lbs.). Next install the thin spacer (item #7) over the nut that is welded to the backside of the sub frame). Place the trailing arm up into place and place its rear hole onto the backside of the sub frame sliding it over the protruding threads of the bolt. Install the hex nut loosely.
13. Replace the right tip over bar placing its rear tab with bolt hole between the trailing arm and the main frame. In this hole use one of the supplied 8x40mm bolts (item#10) and 8mm flange nuts. In the forward hole use one of the original 8x25mm bolts. Do not tighten these bolts at this time.
14. Install the left trailing arm (item#3) in the same manner referring to photo (10) threading the 8x50mm (item#8, longest fully threaded) bolt thru the sub frame then tightened securely followed by the remaining thicker spacer (item#6) on the backside of the sub frame, the trailing arm and a flange nut. Replace the tip over bar as done earlier on the right side placing its rear tab between the silver main frame and the trailing arm then using a 8x40mm bolt (item#10) and flange nut. Use the original 8x25mm bolt at the front of the tip over bar. Do not tighten these bolts at this time.

15. Referring to the diagram and photo(11) install the Hitch frame receiver (item 1) using the four supplied 3/8"x1 1/4" bolts, 3/8" locking nuts and eight 3/8" flat washers. Place a washer onto each bolt. Lift the receiver up into place. The strut arms should be outward of the receiver and the trailing arms outward of the struts as shown. Insert the bolts from the center outward as shown thru all three pieces followed by another washer and a locking nut.
16. Tighten all the 8mm bolts and nuts securely to 18-22 ft. lbs. and as follows. Tighten the upper strut bolts and nuts (item8). Tighten the forward tip over bar bolts. Next tighten the forward trailing arm bolts and nuts (items 10&11). Tighten the remaining trailing arm bolts **first** (items 8&9) **and then** tighten their nuts. It is important that you have used the correct bolts at the forward locations of the trailing arms as too long of bolts may cause damage to the swing arm of the rear suspension. To check this refer to photo (9& 10), you should see that the bolt shanks only protrude past the flange nuts one or two threads. If it is significantly more recheck that you have the correct bolt at that location. Tighten the hitch frame bolts and nuts (item 12 & 14) securely (30-32 ft. lbs.).
17. At this time install the wiring you plan to use for your trailer according to their instructions.
18. Replace the mufflers tightening the hangar bolts and nuts first then the clamp bolts .Replace the muffler heat shields, the heat shield should hook on at the front then slide towards the rear until the screw hole aligns (photo 3C). Replace the tip over bar cover and plastic rivets (photo3A&B). Replace the gray plastic covers just above the passenger floorboards and their plastic rivets (photo 2B).
19. Replace the seat by first hooking the plastic tabs near the center of the seat onto the frame then sliding it to the rear and finally aligning the pins and tab at the front of the seat and pushing down until the bolt holes at the front of the seat align with those on the frame then install the bolts and tighten. Reconnect the seats wire plug. Replace the side covers. Replace the rear fender.
20. Install the tongue (item 5) into the receiver using the supplied pin with clip (item 15). Snug the anti rattle bolt (item16). Making this bolt snug will also help your trailer track straighter behind the motorcycle.

## **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 AT YOUR OWN RISK AND CAN INCREASE 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!

**RIVCO Products, Inc.**

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