

# HORIZON INSTALLATION INSTRUCTIONS

HZ300-SR (REBEL 3)  
HZ400-SR (REBEL 4) and HZ700-SR (REBEL)

***IMPORTANT:  
PLEASE GIVE CUSTOMER ENCLOSED INFORMATION!***



Thank you for your HeliBars® purchase.

HeliBars are designed to increase your long distance comfort and improve the handling of your motorcycle, and we feel confident you will enjoy them. The Horizon handlebar is the most technologically advanced handlebar system to ever grace a motorcycle. Many safety features have been included in the design. It is of the utmost importance the bars are installed by a mechanic with good mechanical skills following the installation instructions provided.

### **HeliBars INSTALLATION**

**DANGER: IMPROPER INSTALLATION COULD RESULT IN SERIOUS INJURY OR DEATH. HAVE A QUALIFIED MECHANIC INSTALL YOUR HeliBars.**

**BRAKE FLUID CAN BE CORROSIVE TO PLASTIC & PAINT. PLEASE USE CAUTION WHEN WORKING WITH YOUR HYDRAULIC SYSTEMS. ENSURING ALL WORK AREAS ARE PROTECTED.**

**AFTER INSTALLATION, MOVE BARS LOCK TO LOCK AND CHECK CLEARANCE OF: 1.CABLES 2. HYDRAULIC LINES 3.WIRES 4.FAIRING 5.FUEL TANK. TORQUE ALL HARDWARE TO MANUFACTURER'S SPECIFICATIONS.**

**IF YOU HAVE INSTALLATION QUESTIONS, PLEASE CALL 1-800-859-4642.**



## **WARRANTY / RETURN POLICY**

**We make every effort to build a quality product so you can fully enjoy your riding experience. Thank you for your order.**

**HeliBars® may be returned for defects in materials and workmanship within one year from the date of shipment to the original purchaser, in which event the purchaser may receive a replacement set of HeliBars.**

**If within thirty (30) days of the shipping date you are not satisfied for any reason, you can return the HeliBars. Return policy is valid for original purchaser only. If HeliBars are purchased from a vendor other than Heli Modified, Inc., customer must contact vendor where purchased regarding returns. Refund will be extended to original purchaser only. There are no other warranties which extend beyond this.**

**Conditions of this 30 day return policy:**

- 1. Bars must not be used as a tie down point. (See attached ‘Trailer Instructions’).**
- 2. Bars cannot be damaged, dented, or altered in any way.**
- 3. Bars cannot be overtorqued.**
- 4. Refund will be for product purchase price only, and credited to original purchaser only.**
- 5. Product must be returned with all original equipment, documents and in original packaging. There must be no physical damage caused by the customer or by carrier.**
- 6. A Return Authorization Number must be obtained from us before you return the product.**

**We reserve the right to charge a re-stocking fee of up to 25% if the above criteria are not met.**

**THERE ARE NO FURTHER EXPRESS OR IMPLIED WARRANTIES INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. By accepting this product, the consumer agrees to arbitrate and litigate any controversy in the State of Maine, and under the laws of the State of Maine.**

**HELI MODIFIED INC. ASSUMES NO LIABILITY FOR ANY INJURY OR LOSS OF PROPERTY WHICH RESULT FROM IMPROPER INSTALLATION OR USE OF ANY HELI BARS. ALL HELI MODIFIED, INC. PRODUCTS SHOULD BE INSTALLED BY A QUALIFIED MECHANIC. IMPROPER INSTALLATION MAY CAUSE DEATH OR INJURY.**

**Ride Safe and Enjoy!**





## Horizon 300/400/700 Rebel Install in same fashion **Installation Instructions**

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Follow the manufacturer's recommendation for handlebar removal/installation. Parts of the headlight housing need to be removed on some models to gain access to the handlebar mounting clamps. This will also allow easier access to throttle cables and brake hydraulic line for proper placement with the Horizon installation.

On 2007 and earlier models a flexible stainless steel front hydraulic brake line is required. We recommend HD part # 45510-04 which fits Road Kings and Road Glides. On Softails and Dynas use HD part # 46011-01. These lines work best and allow full adjustability of the Horizon handlebars.

On 2008 and later touring models the stock brake lines can be used and replacement is not necessary. Stock 1" handlebar risers are required to install Horizon handlebars. Proceed to step #2

It is recommended that the fuel tank and front fender be covered with a protective layer.

1.) Drain the front brake hydraulic system and remove the stock brake line. Install the required SS brake line to the calipers and attach to the bottom triple clamp. Leave the upper line loose for now. Remove the stock controls and handlebars. 2008 and later Touring models do NOT require brake line replacement.

2.) Install the partially assembled Horizon bar in the top triple clamp bar clamps as per the stock handlebars. The Horizon is delivered with the mounting (knurled) bar and risers torqued to spec. A good starting point is to have the risers pointing at about 45 degrees toward the rider. Tighten the handlebar fork clamps enough to keep the bars from falling.

### **Road Glides**

3.) Remove fairing (front cover.)

4.) Find the left and right control housing wire looms, cut cable ties and pull back to provide more slack. Re-attach with cable ties as original. Remove instruments by removing the two outer screws and remove ignition knob.

- 5.) Remove rear fork cover (ignition) On 2007 and earlier models, drain the front brake system and remove the stock front brake lines.
- 6.) Remove all controls and the stock handlebars. Important: On 2008 and later models the front brake hydraulic line banjo fitting at the master cylinder must be rotated forward slightly. See photo #1: Loosen the banjo bolt just enough so the line can be rotated forward, retighten. Some adjustment may be necessary after Horizon Bars are installed. On 2008 and newer models, locate the throttle-by wire Molex connector and disconnect. Remove the connector pins using the Molex tool and withdraw from the stock handlebar. Note the location of the wires by color. See photo #2 and #3.
- 7.) Install the left and right handlebars into the upper pivot bores. The left handlebar has the Horizon logo and the right side has the HeliBar logo, which should be readable from the saddle. First remove the safety caps and screws from the bar upper pivot shaft, slide down into the bores of upper pivot 1 and fully seat. Replace safety covers and screws and tighten. It may be necessary to lightly tighten pivot one pinch bolts (see photo #4) to keep handlebars from rotating down. Adjustments can be made after installation is complete.
- 8.) Install controls onto the Horizon handlebars. There are notches in the bottoms of the handlebar that allows the control housing wire loom to pass. Use caution not to pinch the wires / sheathing when the controls are clamped. On '08 and later throttle-by wire models, the throttle wire will exit from the handlebar slot and will be bundled with the other lines on the right side of the bike.
- 9.) On the right side, position the throttles cables and the front brake upper hydraulic line as shown in photo #5. Rotate the banjo fitting at the master cylinder to the rough angle as shown in photo #6. Use small cable ties to hold wire loom to the brake line. The front brake hydraulic line and wire loom should be positioned high

enough to keep them from contacting the tank mounted speedometer when the bars are turned to the right steering stop.

On 2008 and newer models, additional slack is needed for the brake line to reach the front brake master cylinder. On the right side of the steering head, carefully cut the cable tie that holds the ABS brake lines to the mounting bracket. Move the brake lines so that the lower brake line now sets in the upper bracket groove. See photo #7. Install a new cable tie.

Tighten right control housing and master cylinder. Leave a small gap between the master cylinder and the upper handlebar clamp. Notice that the wiring harness for the 2008 and newer Throttle-by-wire is installed into the right handlebar and is exiting from the bar lower slot. Cover any bare wires with shrink tube and reconnect Molex connector to the throttle-by-wire harness. Plug back into it's connector.

10.) On left side position clutch cable so that it rests behind the left side handlebar riser. This provides the smoothest path although other placements are possible. When re-attaching the clutch controls onto the Horizon bars if slack is necessary, temporarily remove the p-clip that holds the line to the left fork tube and reposition it to the rear of the fork tube to gain additional slack. Then re-attach.

On Screaming Eagle Models with hydraulic actuated clutch, position the master cylinder on the left handlebar so that it matches the clearance between the front brake master cylinder and the pivot 2 housing. See photo #8 right side and photo #9 left side.



On Road Glides Reposition the clutch cable so it runs up along the left fork tube and through the small square cut out in the forks black plastic cover (left side.)

11.) Adjust bars. Before headlight housing covers are assembled (if equipped), rotate bars back and forth to find the best position. Tighten fork handlebar clamps to factory specs. Rotate bars up and down to desired angle. Upper pivot shaft pinch bolts (1 on left and 1 on right) are located on the bottom of the risers top mounting clamps. Torque to 14ft. lbs (photo #4).

12.) Rotate handle bars forward and back to desired angle. Match left and right bar angles by noticing the moving and stationary parts of the upper clamps so each side looks the same. Tighten to 14 ft. lbs. Rebel bars are independent without upper cross bar. Please refer to Page 11 for details.

Clutch and front brake levers can be adjusted up and down. Torque the two pinch bolts (per side) - located on the bottom of upper pivot #2 where the handlebar shaft is attached - to 14 ft.lbs.

It is a good idea to leave the fork handlebar cover off the headlight housing (some models) in case more adjusting is necessary. Remember to plug in and remount the headlight before a test ride. Do not road test until all pivoting clamp pinch bolts are double checked for tightness. All pivoting pinch bolts are 14 ft. lbs on the Standard Horizon – Rebel Riser Pinch Bolts (10mm bolts) 28 ft. lbs. Use a 6mm hex drive for pinch bolt torquing.

**DANGER: There are a total of eight pinch bolts that MUST be torqued to 14 ft. lbs.**

**!! CAUTION!! BARS MUST BE TORQUED TO SPECIFIED VALUES. THEY MUST NOT BE OVERTORQUED. OVERTIGHTENED HARDWARE CAN LOSE INTEGRITY.**

**HELI MODIFIED, INC. ASSUMES NO LIABILITY FOR ANY INJURY OR LOSS OF PROPERTY WHICH MAY RESULT FROM IMPROPER USE OF PRODUCT.**

**All text & photos © Heli Modified Inc. 2015**





Photo # 2



Photo # 4



Photo # 1



Photo # 3





Photo # 6



Photo # 8



Photo # 5



Photo # 7







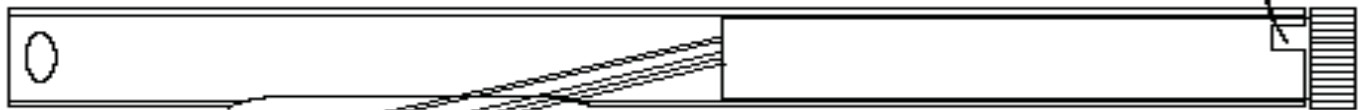
Photo # 9



## Horizon™ right bar electronic throttle installation

- 1) Un-plug throttle by wire connector from the wiring harness.
- 2) Remove connector from throttle harness with a Molex pin extractor tool. Note the location of wires by colors.
- 3) Withdraw harness from stock handlebars.
- 4) Place throttle leads through end of the bar with the three notches and out the opening in the bottom of the right Horizon bar. Make sure the single heated grip wire lead is also placed through opening if the machine does not have heated grips installed.

5) Align the 3 notches and press throttle in place



heated grip wire

- 6) Push the wire leads back into the handlebar tube such that they roll to the other end of the tube as shown. Make sure the green connector is inside the tube.

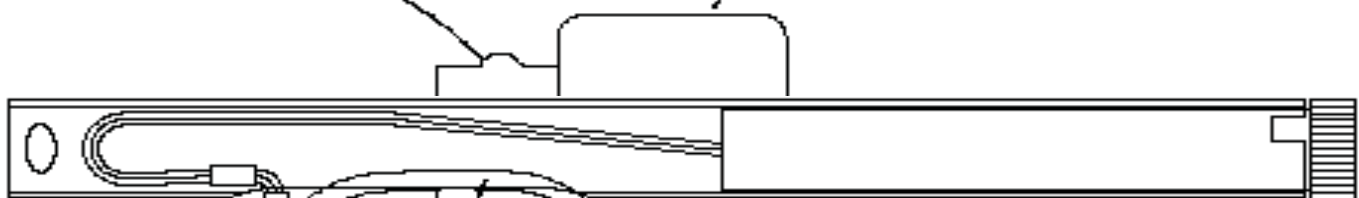
green connector



- 7) Install right bar into Horizon system.
- 8) Mount throttle control housing and front brake. Use caution not to pinch control housing wire loom. Make sure wire loom is up inside slot.

front brake

throttle control housing



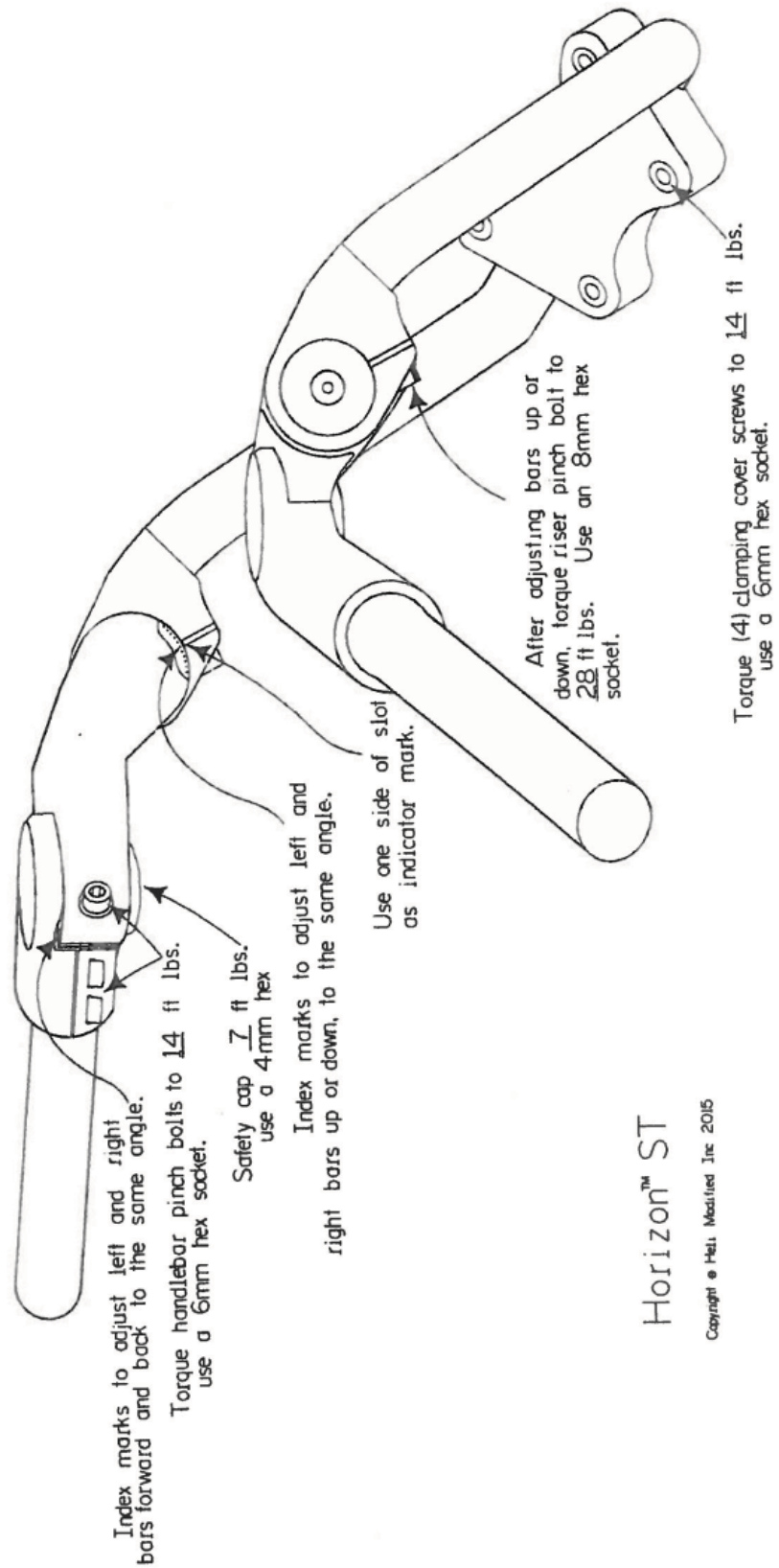
control housing wire loom

- 9) Cable tie all wire looms together.

- 10) Re-install Molex connector placing each wire in the correct slot. Plug back into bikes wiring harness.



# Horizon Rebel Model's Only HZ300SR, HZ400SR, HZ700SR



Horizon™ ST

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## Trailing with HeliBars®

HeliBars clip ons and handlebars must not be used as the primary holding points for tie downs while trailering. *As with your stock bars* applying extreme force to the ends of the bars can bend the bars or rotate them on their mounts.

Use a wheel chock and pull the machine down and forward using soft ties or similar, attached to the lower triple clamp.

Bars should only be used as secondary attachment points to steady the motorcycle from lateral sway.

Failure to follow these guidelines can cause damage to the bars and the motorcycle, and may also void our warranty.

