

INSTALLATION INSTRUCTIONS

Horizon ES

HZ10011

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



Thank you for your purchase of our HeliBars®. They are designed to increase your long distance comfort and improve the handling of your sport motorcycle, and we feel confident you will enjoy them.

Your HeliBars are designed to fit your motorcycle with little to no modifications needed to your stock cables and hydraulic lines. In order to achieve this fit, we do not simply increase the height at the fork tube/triple clamp area. If we were to mirror the angle of your stock handlebars, the HeliBars would not fit and clear your stock equipment, and lock to lock steering clearance would be impossible.

If you hold up the HeliBars and compare it to your stock handlebar, the difference may not be readily evident. One test we can suggest is to take your stock handlebar, and the corresponding HeliBars, and set them both on a flat surface. You can see the angle difference. Then install the left HeliBars, following the instructions. Walk around the front of your bike and look through the windshield. You should see a noticeable difference between your stock handlebar and the HeliBars. Finish the installation, and try them out. We think you'll like them!

HeliBars INSTALLATION

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

IF WE HAVE NOT INCLUDED SPECIFIC INSTRUCTIONS FOR YOUR MOTORCYCLE, THEN THE INSTALLATION IS SIMPLY A REVERSAL OF THE DISASSEMBLY PROCESS. **NOTE THE LOCATION OF LINES AND CABLES. BE SURE TO CLEAN THE FORK TUBES BEFORE INSTALLATION!!

!! CAUTION !! MAKE SURE THE HeliBars ARE FULLY SEATED. TIGHTEN BAR END DAMPER WEIGHTS FIRMLY. 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.

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



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® ES
Harley® Electra Glide® Standard, Classic, Ultra Classic
and
Street Glide®

WARNING:
IMPROPER INSTALLATION COULD RESULT IN SERIOUS INJURY OR DEATH.
HAVE A QUALIFIED MECHANIC INSTALL YOUR HORIZON BARS.

The Horizon-ES handlebars are delivered with all the rotating components installed at the factory. This simplifies installation; however, none of the rotating components are torqued to spec. Once, the bars and all controls are installed and adjusted to the customers' preference the rotating components will need to be torqued to spec.

Follow the manufacturer's recommendation for handlebar removal/installation using the factory service manual.

For 2007 and earlier Electra Glides a flexible SS front hydraulic brake line is required. We recommend HD part # 45510-04 which fits Road Kings and Road Glides. These lines work best and allows full adjustability of the Horizon handlebars. Some minor rotational adjustment of the upper banjo fitting is required to get a proper fit at the front brake master cylinder.

For 2008 and later models the factory brake lines are retained and do not require replacement.

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

- 1.) Remove fairing (front cover.)
- 2.) Remove ignition knob.
- 3.) Remove rear fork cover (ignition) On 2007 and earlier models, drain the front brake system and remove the stock front brake lines.
- 4.) Remove all controls and the stock handlebars. See **Photo #1. IMPORTANT:** On 2008 models and newer the front brake hydraulic line banjo fitting at the master cylinder must be rotated forward slightly. See **Photo B:** Loosen the banjo bolt just enough so the line can be rotated forward, re-tighten. Some adjustment may be necessary after Horizon Bars are installed. On 2008 and newer models, locate the throttle-by wire Molex

connector, 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**.

5.) If the Stock clutch cable is to be used, it must be removed from the stock location in the fairing and reposition to come up behind the frame down tubes and up to the left bar riser. See **Photo# 4**. Harley sells longer clutch cables if the stock appearance is desirable. A 4" over should work fine for most adjustment ranges.

6.) Install the Horizon-ES bars in the factory fork clamps and tighten just enough to keep bars in place. See **Photo #5** for reference. On 2007 and earlier models, the throttle cables need to be repositioned. Remove cables from the throttle housing. Use caution to not lose the two brass cable bosses. Carefully pull the cables through the fairing. Feed the cables behind the fairing sheet metal frame and back through the fairing in the stock hole. Re-install back into the throttle housing. Install new front brake line.

7.) Install the throttle and right control housing onto the right bar. The right bar has the small radial groove facing the rider with the controls wire slot facing down. Remove the inner socket head cap screw from the upper handlebar clamp, carefully insert bar until the screw captures the handle bars groove. See **Photo #6**. Lightly tighten. Carefully install the front brake master cylinder. Use caution to not damage the front brake micro switch plunger that operates the rear brake light.

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 its connector.

8.) Install left bar and all controls. Use caution and install the cap screw into the left handlebar radial groove just as with the right bar. Make sure the control housing wire loom is placed up into the bar tube slot. Do not pinch the wires with the clutch lever clamp.

9.) With all controls in place and all the rotating joints lightly tightened, adjust bars to the desired position. Go to full left and right steering stops and make sure there is adequate clearance around the fuel tank console.

10.) Install the two black plastic caps into the inside ends of the left and right handlebar tubes.



After all adjustments are made, torque the following:

1. Handlebar mounting clamps (on the top triple clamp) to 16 ft lbs. See photo #1
2. See photo A Torque 10mm screw to 30 ft. lbs. a 8mm hex drive is required.
3. See photo A Torque 8mm screw to 12 ft lbs. a 6mm hex drive is required.
4. See photo A Torque the two handle bar pinch bolts (M8) to 12 ft lbs. Install 4 chrome covers supplied in these screws.

Double check all hardware for proper tightness including all controls.

5. Reinstall all fairing components.

!! 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.

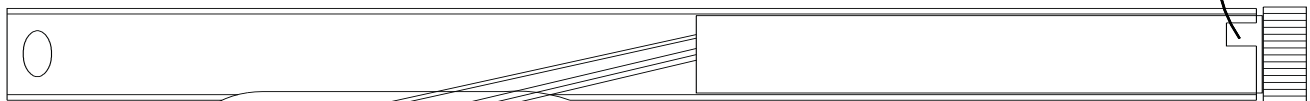
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Horizon™ right bar electronic throttle installation

- 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.

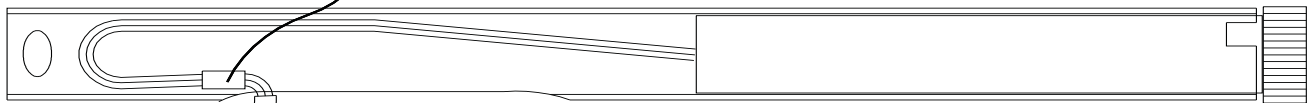
5) Align the 3 notches and press throttle in place



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.

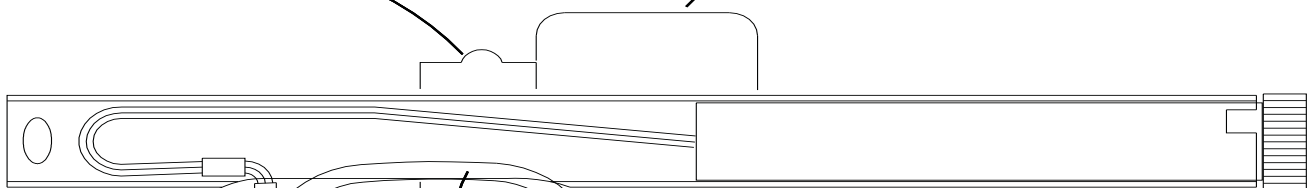
green connector



- 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.





Photo # 2



Photo # 4



Photo # 1

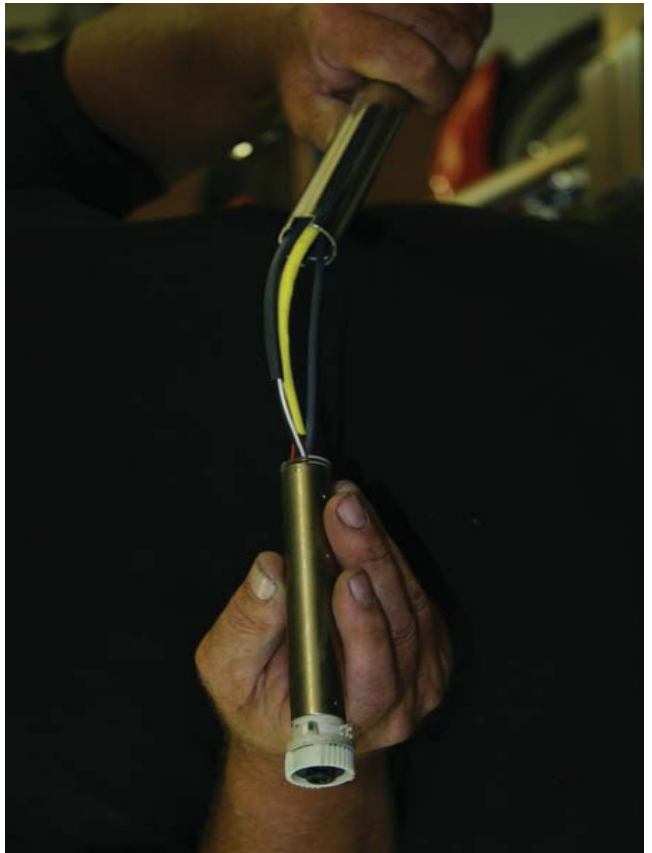


Photo # 3





Photo # 6



Photo # A



Photo # 5



Photo # 7





Photo # B



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.

