

HORIZON INSTALLATION INSTRUCTIONS

Horizon[®] HeliBars[®] for Harley-Davidson
Late Model Road King 2014+
HZ10156

***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 over torqued.
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!





Installation Instructions - HZ10156

There are no modifications required for the brake/clutch hydraulic lines and wire harness on late model Road Kings with the new controls. Parts of the headlight housing need to be disassembled 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 earlier models.

On earlier model Road Kings a longer flexible SS front hydraulic brake line may be required, as well as a longer clutch cable. Please review your stock lines to ensure they are flexible.

This installation was performed on a late model Road King with hydraulic clutch and with Heritage style bars. No modifications required to lines or cables. On earlier Road King models with clutch cable and/or other bar styles may require re-routing or replacement of some lines and/or cables.

1. Cover front fender and fuel tank with large shop rags, etc., Remove windscreen if fitted.
 - a. Remove head light and handlebar mount cover.
 - b. Remove screw at the bottom of the headlight rim (**See Photo #1**)
 - c. Remove ring by pulling the bottom forward. (**See Photo #2**)
 - d. Remove the eight (8) rubber mount screws. (**See Photo #3**)
 - e. Pull out headlight, press both sides to unlock connector and separate. (**See Photo #4**) Remove lower connector. Set light aside with hardware.
 - f. Remove center moulding by removing nut with an 8mm socket. (**See Photo #5 & #6**)
 - g. Remove front handlebar cover screw, washer and nut. (**See Photo #7 & #8**) Carefully, hold washer and nut with one hand while loosening screws.
 - h. Gently remove ignition cover with a utility knife. Loosen and remove two screws. Remove cover. (**See Photo #9**)

2. Adjust hydraulic line banjo fitting angles and remove handlebars.
 - a. Locate fly-by-wire throttle wire loom which exits the bottom center of the handlebars. (**See Photo #10**) Follow the wire loom down inside the headlight and carefully cut the cable tie. (**See Photo #11**) This will release additional slack.
 - b. Turn the handlebars all the way to the right. On the left side of the steering head disconnect the fly-by-wire wire loom connector by pressing the release button as shown (**See Photo #12**). Pull the fly-by-wire wire loom out of the headlight. (**See Photo #13**)

- c. **Important alteration:** Loosen the banjo bolt (12mm box wrench) just enough to rotate the front brake hydraulic line up to a new angle slightly less than horizontal. Retighten banjo bolt. No fluid will be lost and no air will enter the system. (See **Photo #14**) This is necessary for the new bar clearance and slack.
 - d. Adjust the clutch hydraulic line banjo fitting just like the brake line so it's now just slightly less than horizontal. Both lines can be adjusted after bars are installed. (See **Photo #15**)
 - e. Remove the cable ties from the left and right wire looms. Carefully get a wire cutter behind the ties and twist them out and off the wire looms. (See **Photo #16**)
 - f. Loosen and remove the clutch master cylinder cap and screws. Place the master cylinder carefully on the fuel tank. (See **Photos #17 & #18**)
 - g. Remove left side control housing screws and front cover. (See **Photos #19 & #20**)
 - h. With a small long reach screw driver (spade), gently pry up the release mechanism to release the top and front and back halves of the left control housing. (See **Photo #21**)
 - i. Carefully continue to spread and wiggle left control housing off bar. Rest housing on fuel tank next to clutch master cylinder. (See **Photo #22 & #23**)
 - j. Insert a long shank flat screwdriver under the left grip and pour some isopropyl alcohol into the gap beside the screw driver. Work the screw driver deeper as you twist grip to spread the alcohol and twist the grip off. (See **Photos #24 & #25**)
 - k. Loosen and remove screws and cap from front brake master cylinder. (See **Photo #26**) Place master cylinder on covered fuel tank, see red arrow (**Photo #27**)
 - l. Loosen the two screws holding the throttle control housing halves together and remove the front and rear halves and set aside. (See **Photo #28**) Lift up on the clip to release clamp and set throttle housing on fuel tank. See red arrow in (**Photo #29**)
 - m. On Models with heated grips remove end cap and disconnect plug. Remove throttle grip from bar. (See **Photo #30**)
3. Remove the four (4) screws holding the handlebar clamp in place, steady the bar so it doesn't rotate down and damage tank. Use a 1/4 hex driver. Remove handlebar from bike and use caution to carefully remove fly-by-wire wire loom and connectors. (See **Photos #31, #32, & #33**)
- a. Remove throttle fly-by-wire from stock bar. With a flat screw driver placed between the metal tube and the plastic end, twist and separate the unit. (See **Photo #34**)
 - b. Carefully, withdraw throttle assembly while feeding the wire loom into the bottom of the stock bar. (See **Photo #35**)
 - c. Do not pull hard if the connectors get jammed, push back in and start pulling again. Use some rubbing alcohol to lubricate line to ease removal. (See **Photo #36**)
4. To install Horizon bars more slack is required from the hydraulic lines and the wire looms.
- a. Carefully cut the two (2) cable ties holding the clutch and the front brake hydraulic lines to the lower handlebar clamp. Both have to be removed. (See **Photo #37**)
 - b. Carefully cut cable tie holding right side throttle housing wire loom to the clutch hydraulic line inside the headlight. (See **Photo #38**) If right side control housing wire loom is wrapped around a



hydraulic line, unplug, re-run and plug back in without hydraulic line interference.

5. Install Horizon bars

- a. Hold Horizon bars (as shown in **Photo #39**) adjust left or right until knurling is evenly spaced in the clamp. Start all four (4) screws but only tighten the forward two (2) screws at this time. (**See Photo #40**)
- b. Adjust bars so they look similar to the rearward angle shown in (**Photo #41**). Snug down the rear two screws for now. (**See Photo #42**).
- c. Locate the left bar tube. It has two smooth ends and an elongated hole which will face straight down when mounted. Remove inner handlebar clamp pinch bolt. See red arrow in (**Photo #43**)
- d. Install end of left bar that has the radial groove into the clamp until the end is flush and the pinch bolt drops in and is easily threaded into pivot. (**See Photo #44**) Adjust elongated slot so it's faced down and slightly forward. Torque handlebar pinch bolts to 14 ft lbs. (**Photo #45**)
- e. Spread some grip glue or super glue inside grip and on bar tube and slide grip on all the way until it's flush. (**See Photo #46**)
- f. Grab the left control housing, position the wire loom so it's directly over tab, (**See Photo #47**, red arrow.) Carefully wiggle the housing over the left bar tube and make sure the wire loom is inside the slot in the bottom of the bar. (**See Photo #48**) Put the rear half back in place, make sure housing halves are seated in the groove at the end of the grip and carefully tighten them, then back off 1/2 turn. (**See Photo #49**)
- g. Re-install clutch master cylinder, clamp and screws. Adjust lever angle and tighten screws. Go back and tighten left control housing screws. (**See Photo #50**)
- h. Grab the right handlebar tube. Start the throttle wire loom into the handlebar and out the slot until the fly-by-wire unit is fully in place and the plastic keys are in their grooves. (**See Photo #51**)
- i. Insert the right bar into the right mounting clamp (inner screws removed) until end is flush. Make sure wire loom exits the elongated opening and that groove is facing straight down and slightly forward. (**See Photo #52**) Install inner screw and torque both to **14 ft lbs**.
- j. Install throttle grip and right control housing. Make sure inner groove of grip is captured by rear half of housing and clamp the two halves together. Notice location of wire loom and make sure it enters the open groove in the bottom of the bar tube under the throttle wire loom. (**See Photo #53**) Installer's finger is pushing wire looms into bar opening.
- k. Install front cover, adjust in or out so throttle grip has just a bit of play when pushed in and out. (**See Photo #54**) Make sure no wires are going to be pinched.
- l. Make sure both wire looms are pushed up inside right tube then mount front brake master cylinder. (**See Photo #55 & #56**) Adjust brake lever up and down then tighten clamp. Check throttle housing screws are tight, throttle moves freely and easily returns to stop. Re-adjust throttle components if necessary, tighten. Carefully replace the fly-by-wire into the headlight along side the right control housing wire loom.

6. Adjust bars forward and back for reach.

- a. Rotate handlebars carefully all the way to the right steering stop. Make sure there is adequate clearance between the handlebar riser tube and the speedometer nacelle. (**See Photo #57**) Torque the mounting screws (starting with the forward two) to **18 ft lbs**. Refer back to (**Photo #40**)



- b. Adjust grips forward or back closer to the rider by loosening the pivot one pinch bolt (red arrows in **Photo #58**). Left side shown. Torque screw to **18 ft. lbs.** after adjustment. Perform forward or back adjustment on the right side now. There are small round index mark on the top pivot one. There is one stationary mark indicator on the lower half. This will help to mirror both left and right adjustments. (**See Photo #59**)
- c. To raise or lower the ends of the grip loosen pivot one pinch bolt (red arrow). (**See Photo #60**) When desired angle is reached, torque with an 8mm hex to **28-32 ft. lbs.** Using the index marks and the machined slot (blue arrows) mirror both left and right.
7. Install rubber covers provided into the open ends of the bars with finger pressure and a rubber/plastic mallet. (See Photo #61)
 8. Place cable ties as shown to hold wire looms to bar. (**Photo #62**, upper right side. **Photo #63**, lower right side. **Photo #64**, lower left side. **Photo #65**, upper light side.)
 9. Re-attach fly-by-wire connectors on the left side of the steering head. Refer back to the disassembly photos.
 10. Re-install top handlebar cover, two (2) screws, and ignition plastic cover. Install center trim as per disassembly.
 11. Make headlight electric connections (2 plugs) and using the eight (8) small screws, carefully start all before tightening. Once screws bottom out rotate additional one complete turn. Any tighter will damage rubber mounts.
 12. Re-install headlight finish rim and screw. Install fairing and double check all handlebar pinch bolt torque settings before riding.

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.

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Photo # 2

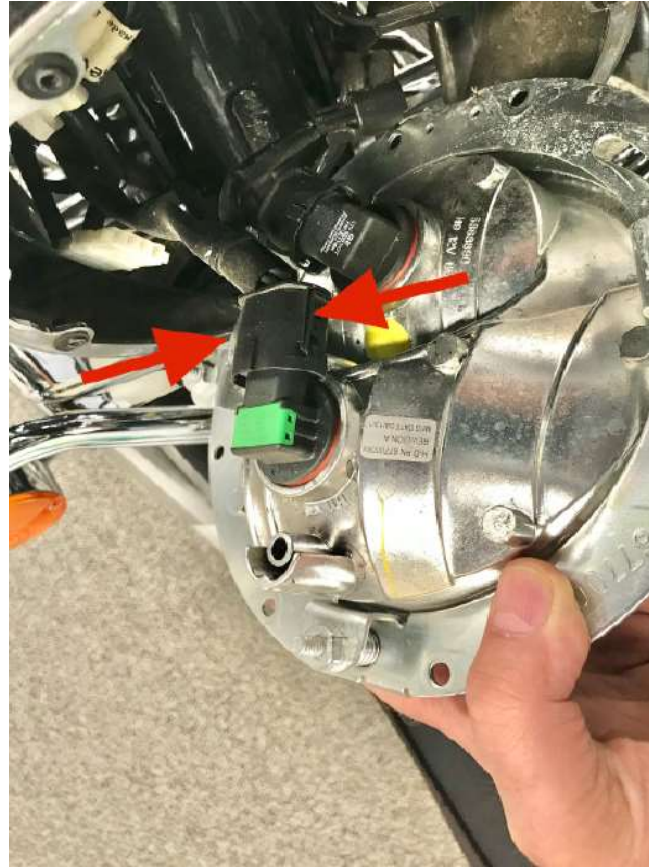


Photo # 4



Photo # 1



Photo # 3





Photo # 6



Photo # 8



Photo # 5

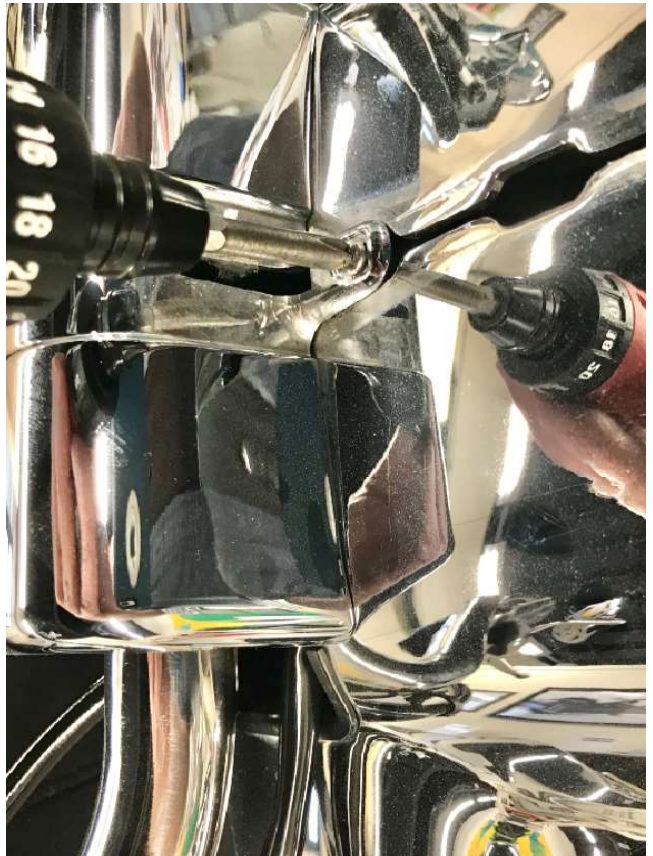


Photo # 7





Photo # 10

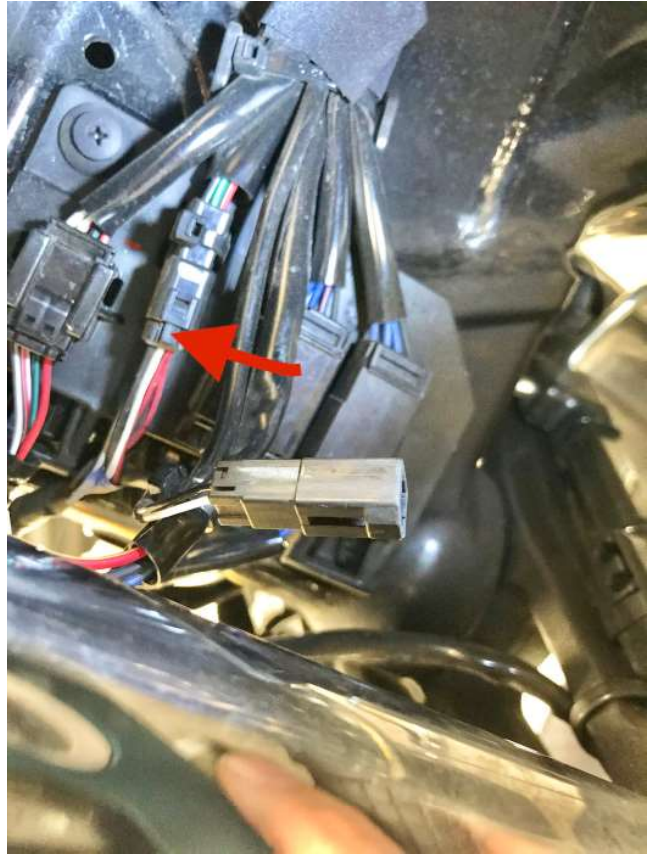


Photo # 12



Photo # 9

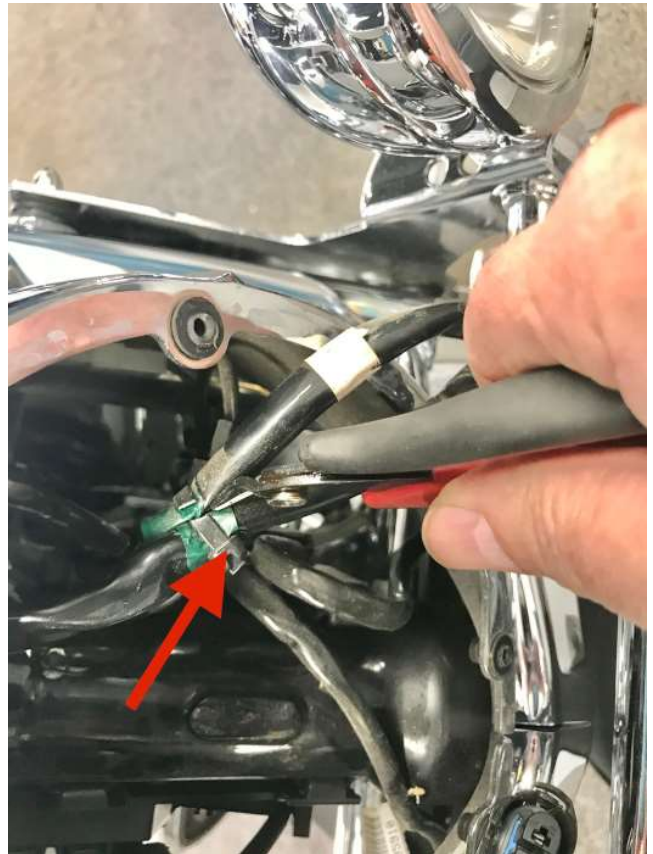


Photo # 11





Photo # 14

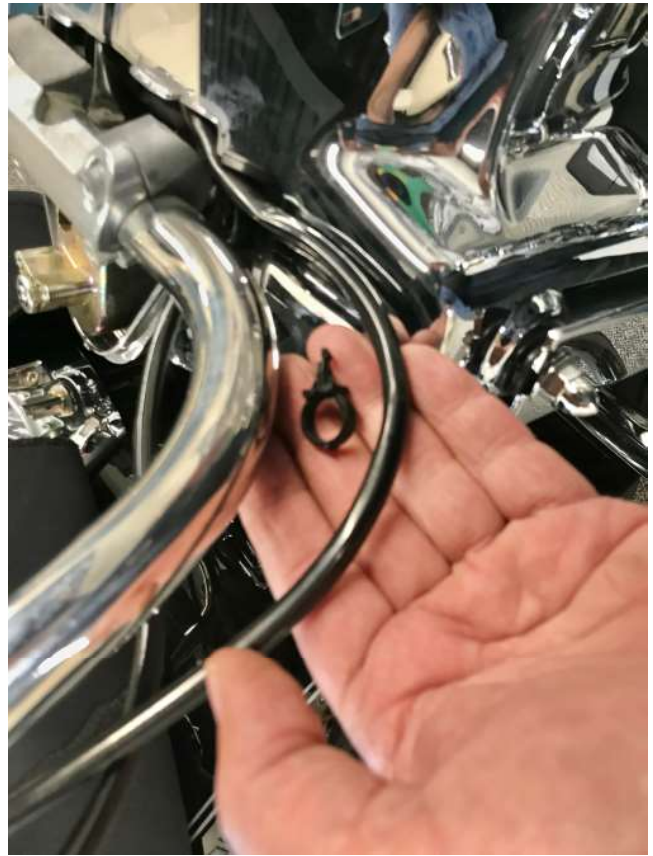


Photo # 16



Photo # 13



Photo # 15





Photo # 18



Photo # 20



Photo # 17



Photo # 19





Photo # 22



Photo # 24



Photo # 21



Photo # 23





Photo # 26



Photo # 28



Photo # 25



Photo # 27





Photo # 30



Photo # 32



Photo # 29



Photo # 31



Photo # 34

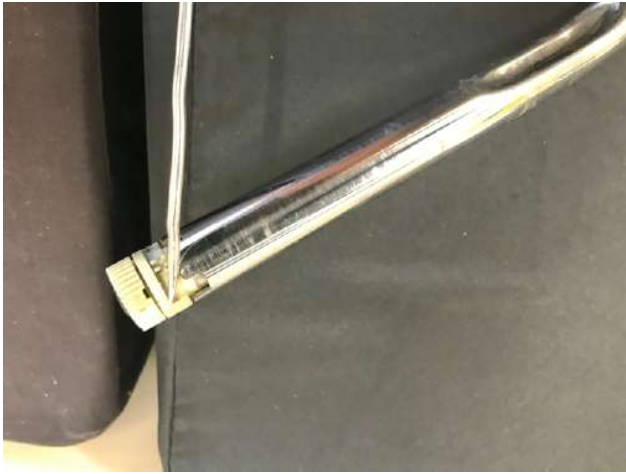


Photo # 36



Photo # 33



Photo # 35

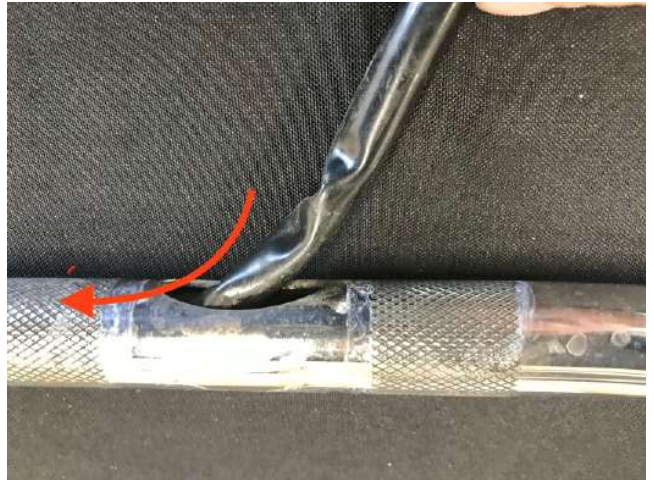




Photo # 38

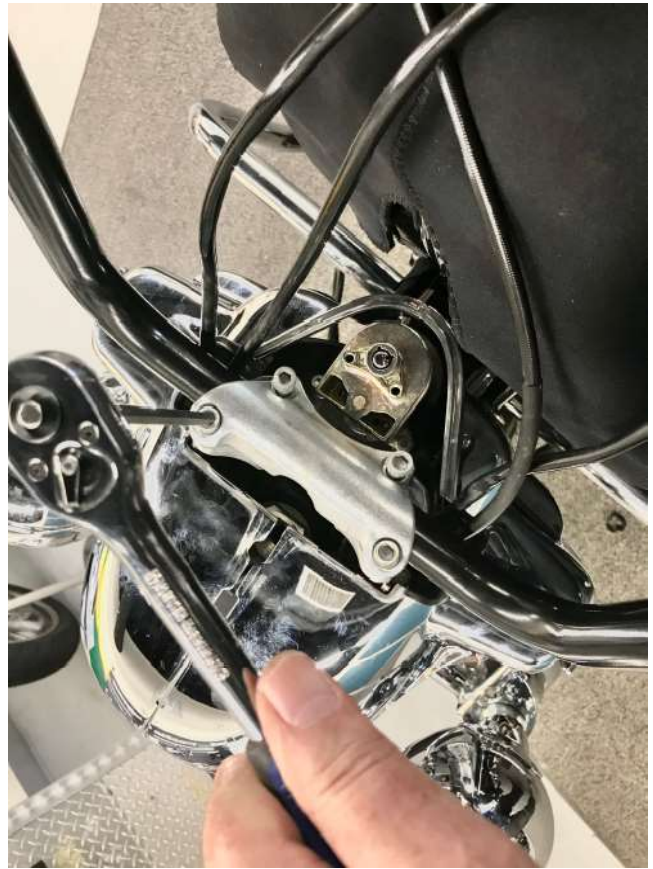


Photo # 40



Photo # 37



Photo # 39





Photo # 42



Photo # 44



Photo # 41



Photo # 43





Photo # 46

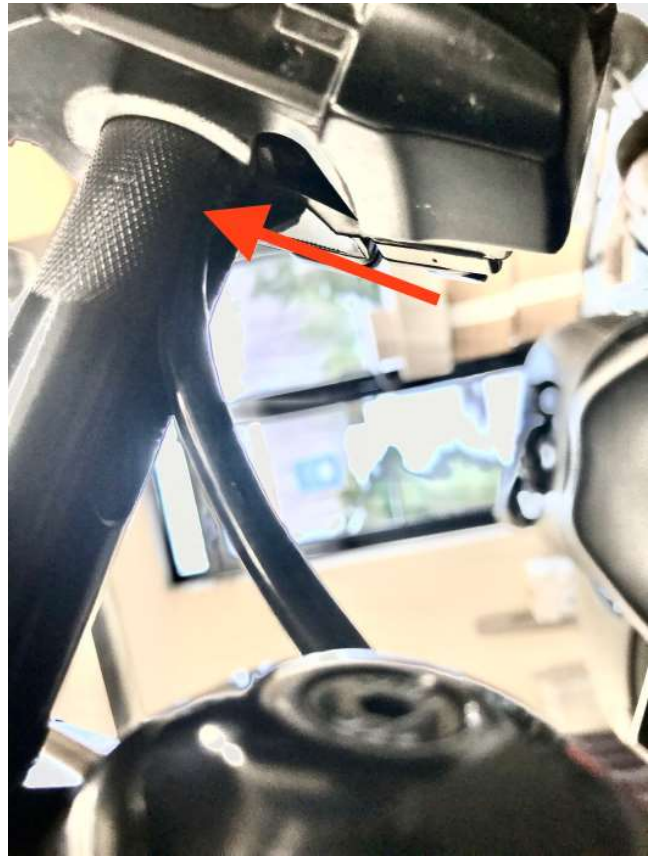


Photo # 48



Photo # 45



Photo # 47



Photo # 50



Photo # 52



Photo # 49



Photo # 51





Photo # 54



Photo # 56



Photo # 53



Photo # 55





Photo # 58



Photo # 60



Photo # 57



Photo # 59





Photo # 62



Photo # 64



Photo # 61



Photo # 63





Photo # 65



IMPORTANT INFORMATION ABOUT POWDER COATED HELIBARS

HeliBars® are finished with a polyester powder coating. The polyester is recommended for outdoor use because of its excellent UV resistant quality; if we were to use an epoxy it would tend to fade and chalk pretty quickly when exposed to sunlight and UV rays.

Care must be taken during installation because the finish can be scratched by the sharp surfaces of the controls and master cylinder clamps. When mounting the master cylinders to bars, do not let them move around the bars with the caps loose. Mount them in the proper position and hand tighten the screws until final adjustments are made; in this way you will lessen the possibility of scratching.

NOTE: Powder coat finish is not indestructible, there are chemicals which may react negatively when applied to finish. Brake fluid may cause deterioration of the finish. We do not recommend the use of acetone or similar chemicals for cleaning purposes. We would recommend the use of an over-the-counter adhesive remover (such as Goo Gone) for the removal of any extraneous material. Please read labels directions for any cleaning/polishing product before use. If you have any questions regarding the use of any over-counter-products with the HeliBars, please call us before applying them to the powder coated finish.

If care is taken during installation, your HeliBars will continue to look as good as when they were new. They will look great for years to come with a bit of wax and careful cleaning. Thank you for your purchase, ride safe and enjoy!

Sincerely,

Harry Eddy, President



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.

