INSTALLATION INSTRUCTIONS

Horizon® ST Installation Instructions
2008+ Concours14 ABS & Non-ABS
With Standard Line Extension Kit

P/N: HST04157-SV & HST04157-BA

IMPORTANT:
PLEASE GIVE CUSTOMER ENCLOSED INFORMATION!

Patent No: US 8,230,758 B1

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 Heli-Bars.

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 'Trailering 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 ST Installation Instructions
2008+ Concours14 ABS & Non-ABS

Part # HST04157-SV & HST04157-BA With Standard Line Extension Kit

Height: +2.5 up to 4.5 inches ~ Set Back: Up to 6 inches ~ Width: 27" to 28.5"

Installation of this handlebar system utilizes a handlebar clamping adapter which attaches to the forks top triple clamp and replaces both left and right handlebars. Improved range of adjustments over our previous design. Riders reach can now be reduced by over one additional inch. More comfortable with more ergonomic choices.

Several alterations need to be performed before the stock left and right factory handlebars and all controls are dis-assembled.

Both the front brake and hydraulic clutch lines will receive hydraulic line extensions and the throttle cables will be moved from the front of the top triple clamp to the rear.

1.) Cover fuel tank and sides of fairing with protective covers and shop rags. (**Photo #1**)

2.) Remove the left and right bar end damper weights. Use a 6mm hex. (**Photo #2**)

CAUTION:
BRAKE FLUID IS CAUSTIC AND WILL DAMAGE PAINT AND PLASTIC SURFACES. PROTECT ALL OF THESE SURFACES WHEN WORKING WITH BRAKE FLUID.

3.) Follow the clutch hydraulic line down and loosen and remove the screw holding the bracket to the top triple clamp. (**See Photo #3**) Use a 5mm hex. This will create more room to remove the cable tie below.

4.) Follow the left control housing wire loom down and find the large cable tie and remove: it can be opened up but it's difficult, easier to carefully cut. (**See Photo #4**) This must be removed to allow additional slack required by the Horizon bar. (**Photo #5**) shows a red arrow. If you push the cable tie tab in the direction of the red arrow and pull the other end out (purple arrow) the cable tie will come apart. This is a very tight area to work! (**Photo #6**) is a close-up of the cable tie.

5.) Re-attach clutch hydraulic line mounting bracket and tighten screw. (**See Photo #3**)

6.) Follow throttle side control housing wire loom down to the lower triple clamp. (**See Photo #7, red arrow**) Place a long nose spade (flat) screw driver in the slot (red arrow) and twist the screw driver to loosen and open the plastic clamp. Remove the heated throttle grip wire loom (**See Photo #8, red arrow**) and close clamp back together. It should click when together.

7.) Loosen and remove screw and clip from the bottom of the left control housing. (**See Photo #9 & #10**) The clip holds the left heated grip wire lead in place. Remove the clip holding the clutch hydraulic line and left heated grip wire lead. (**See Photo #11**)

8.) Remove the top screw from the left side control housing and carefully separate the two halves and remove from bar. (**See Photo #12**) Let the left control rest on the fuel tank. (**See Photo #13**)

9.) Temporarily tape the left heated grip lead to the clutch lever. This will make it easier to get to the hydraulic fitting at the bottom of the clutch master cylinder. (**See Photo #14**)

10.) Install left side hydraulic line extension. This must be completed before stock bars are removed!

a. Lay out all the hydraulic line components provided (**See Photo #15**)

b. Remove the rubber caps from the banjo bleeders and lightly tighten them with an 8mm and 12mm wrench. (**See Photo #16**)

c. Place a paper towel, folded several times, under the clutch master cylinder. **DO NOT** remove the reservoir cover! Loosen and remove the hydraulic line, banjo bolt and two washers. (**See photo #17**) The stock banjo bolt will be reused but not the washers. A little bit of hydraulic fluid will escape and that's expected, but it will stop and only drip several more times.

d. Locate one of the bleeder banjo bolts provided and 2 copper washers. Install them onto the end of the stock brake line as shown in (**Photo #18**) with a copper washer on both sides of the fitting as indicated by the red arrows.

e. Thread one of the line extensions over the banjo bolt as shown. (**Photo #19**) Use a 12mm and 14mm wrench to snug fittings together. Make sure the top banjo fitting is angling out to the left and banjo fitting hold is pointing up and down. (**See Photo #20**)

f. Attach top banjo fitting to the bottom of the clutch master cylinder. Be sure to put copper washers on both sides of the fitting and torque to **12 ft-lb**. (**See Photo #21**) for position of the extension. Tighten lower fittings with a 12mm and 14mm wrench firmly.

11.) Remove left side handlebar.

a. Remove screws, cap and clutch master cylinder from handlebar using a 5mm hex. (**See Photo #22**)

b. Carefully remove left heated grip using a long, narrow spade (flat) screwdriver pushed between the grip and the bar tube. Drip some rubbing alcohol in the crack and work the screw driver deeper. Move the screw driver around to several different positions around the grip . When enough alcohol is disbursed under the grip, a twist will allow it to be slid off. (**See Photos #23 & #24**)

c. Remove plastic caps (covering mounting screws) at the base of the stock handlebars. (**See Photo #25**)

12.) Install right side hydraulic line extension as per the left side.

a. Remove mounting screw and throttle heated grip lead cover. (**See Photo #27**)

b. Loosen and remove top throttle housing cover. (**See Photos #28 & #29**)

c. Remove clip holding heated grip wire loom to front brake hydraulic line. (**See Photo #30**)

d. Loosen the two screws at the bottom of the right control housing. (**See Photo #31**) If the two halves are loose enough housing should move freely.

e. Temporarily tape right control housing wire loom to stock handlebar to make it easier to access hydraulic line. (**See Photo #32**)

f. Install the right hydraulic line extension, per the left, but with the top banjo fitting. (**See Photo #33**)

g. Loosen and remove right front brake master cylinder from handlebar. (**See Photo #34**)
h. Loosen and remove the 3 screws holding the right bar in place. (**See Photo #35**
i.) Withdraw right bar from throttle housing. (**See Photo #36**)

13.) Reposition throttle cables behind top triple clamp.
a. Using an 8mm and 10mm wrench, bottom out the adjuster on the rear push cable. (**See Photo #37**)
b. Remove the rear (push) cable from the throttle sleeve followed by the front (pull) cable. (**See Photo #38**)
c. Loosen top right triple clamp pinch bolt (**blue arrow - See Photo #39**) and withdraw throttle cables from wire stay (red arrow). Retighten pinch bolt to **18 ft. lbs**. using a 6mm hex.
d. Push down on throttle assembly in front of top triple clamp while pulling up on the throttle cables behind the top triple clamp. (**See Photo #40**) Throttle cables now come up behind top triple clamp.
e. Put both cables back on the throttle sleeve. (**See Photo #41**)
f. Reinstall cover and two mounting screws but only thread screws several turns. (**See Photo #42**) Readjust push cable adjuster. Rest throttle assembly on covered fuel tank.

14.) Install handlebar mounting adapter with provided hardware.
a. Clean the area where the stock bars mounted with a clean shop rag.
b. Install the bar mounting adapter as shown in (**Photo #43**) using four (4) of the screws supplied, thread all hardware with a 6mm hex. Torque all screws to **18 ft. lbs.**
c. Put the handlebars riser into the mount with the upper bends almost horizontal. Center knurls left or right and install cover. (**See Photo #44**) Start all four (4) screws by hand. (**See Photo #45**)
d. Snug the two forward screws first followed by the rear two. (**See Photo #46**) Tighten enough to keep bar from moving. Final torque will be set after all components are assembled.

15.) Install left handlebar assembly to upper pivot.
a. Find left bar tube, slide left control housing into place and align dowel pin into the dowel hole and tighten screw shown. Notice the radial groove on the mounting end of the bar, red arrow. (**See Photo #47**)
b. Pour some rubbing alcohol inside the left heated grip, slide grip over the bar tube and wiggle into position as shown in (**Photo #48**).
c. Install screw and clip to hold heated grip wire loom in place. (**See Photo #49**)
d. Remove screw from the inside of the left mounting clamp, insert left tube till it's flush with end of clamp and reinstall screw. (**See Photo #50**) Adjust up or down to position at the left control housing switches then torque the two mounting pinch bolts to **14 ft.lbs** . (**See Photo #51**)
e. Install clutch master cylinder to left bar. Adjust clutch lever up or down then tighten clutch master cylinder mounting screws starting with the upper screw first. Install left bar end damper weight and tighten. (**See Photo #52**)

16.) Assemble right handlebar.
a. Slide right handlebar tube into throttle housing and right control housing. (**See Photo #53**) Align dowel pins into dowel holes and tighten mounting screws. (**See Photos #54 & #55**)
b. Remove front brake master cylinder to the right bar. Adjust levers up or down then tighten mount as per the hydraulic clutch master cylinder. Remove right bar end damper weight and tighten.
c. Reinstall cover over throttle wire loom, reinstall mounting screws and tighten. (**See Photo #56**)

17.) Bleed the clutch master cylinder:
a. Get a 3" - 4" piece of 1/4" plastic tubing and place it over the bleeder nipple at the clutch master cylinder. (**See Photo #57**)
b. With an eye dropper, fill the tubing up to the blue arrow with clean DOT4 brake fluid. Pull in the clutch

lever all the way, open bleeder (red arrow) with an 8mm wrench until the fluid flows down, tighten the bleeder and release lever. Now finish bleeding fitting in (**Photo #58**) until clutch action returns to normal.

c. Remove reservoir cover and add DOT4 fluid as needed. Carefully remove short brake line and replace the rubber caps on master cylinder bleeder and hydraulic line extension bleeder. Use CAUTION when tightening bleeders.

18.) Cable tie left hydraulic line extension. (**See Photo #59**) Place the left side large control housing wire loom between the handlebars and the clutch hydraulic line crimped fitting to protect the finish. Place a cable tie provided and tighten as shown. Cut off excess.

19.) Bleed the front brake master cylinder using the same technique as the clutch. Use the 1/4" plastic line with DOT4 fluid inside using an eye dropper. When finished cable tie right side as per (**Photo #60**).

20.) Place the long cable tie provided around the two throttle cables and the right side fork tube making sure to engage it with the metal stay that now holds the right control housing wire loom.. (**See Photo #61 & #62**) - this will keep the cable tie from sliding down. Do not over-tighten, and cut off excess.

21.) Install the two inner caps provided. (**See Photo #63**)

22.) Adjust bars to personal preference.

a. If the reach is good torque the four (4) bar clamp screws to **18 ft-lbs.** starting with the forward two. This refers to the bar mounting adapter on top of the forks. Refer back to (**Photo #46**).

b. Forward or back adjustment to the wrist. (**See Photo #64**) The red arrow shows the stationary indicator and the blue arrow shows the adjustable index marks. Make adjustments to left and right sides and you can mirror angles using the index marks. Loosen pinch bolt on the left bar using a 6mm hex as shown by red arrow in (**Photo #65**). Blue arrows show the adjustment range. After adjustments are made, torque pinch bolts **16 to 18 ft-lbs**. Repeat on right side.

c. To raise or lower outer ends of grips, loosen the 10mm pivot one pinch bolt with an 8mm hex as shown in (**Photo #66**) on the left side, red arrow. The upper blue arrow shows the index marks and the lower blue arrow is pointing to the slit that is used as the stationary indicator mark to mirror both sides. After adjustments are made torque the pinch bolts, **28 to 32 ft-lbs** with an 8mm hex. Repeat on the right side and re-torque when finished.

CAUTION: After all adjustments are completed, confirm that there is proper clearance for the brake lever mechanism that actuates the micro switch (See Photo #67)

The left arrow shows the hydraulic brake line and the right points to the inner most part of the front brake lever. Pull in the brake lever and confirm there is no contact of the lever mechanism and the hydraulic line.

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

For questions regarding installation 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.

Photo # 2

Photo # 4

Photo # 1

Photo # 3

Photo # 6

Photo # 8

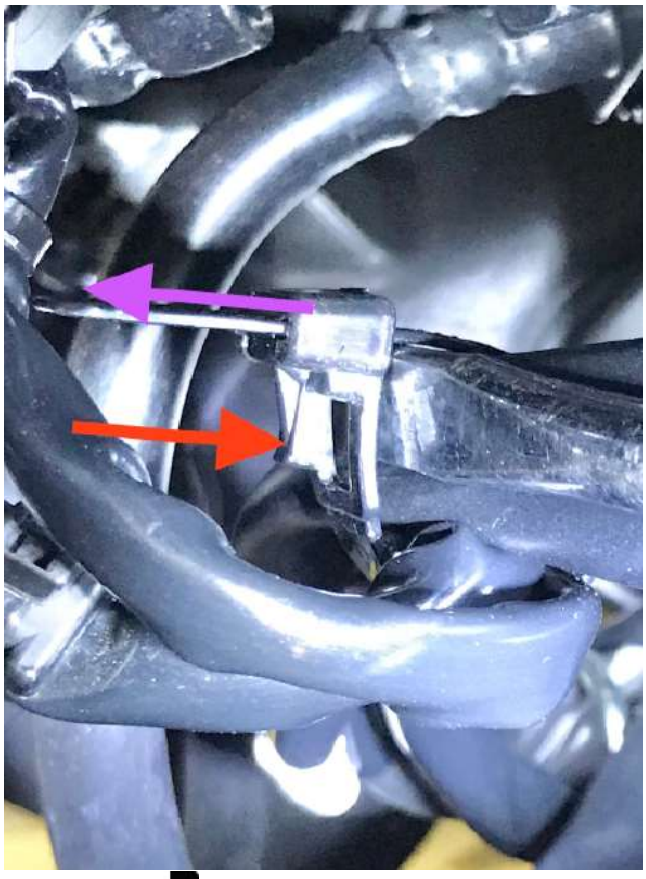


Photo # 5

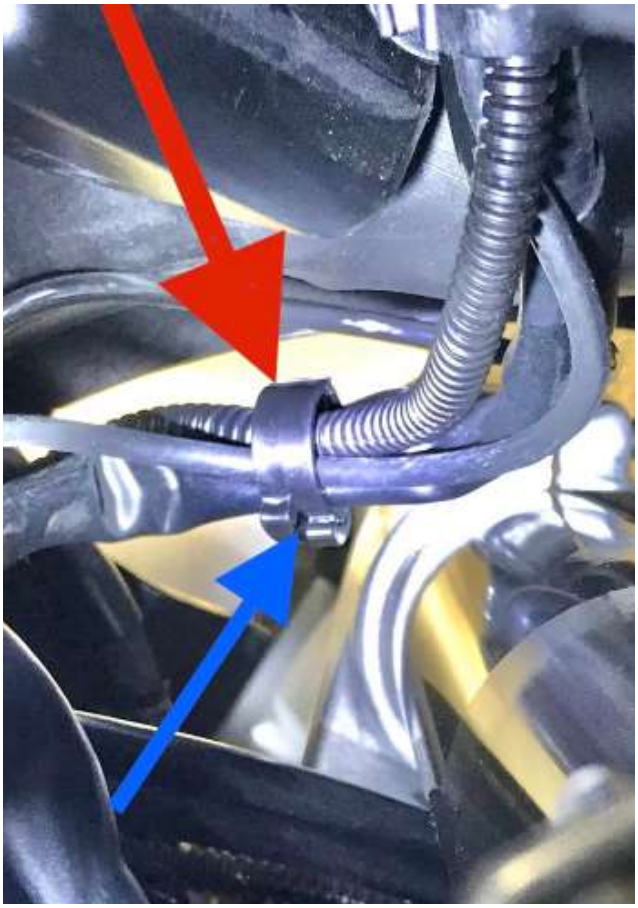


Photo # 7

Photo # 10

Photo # 12

Photo # 9

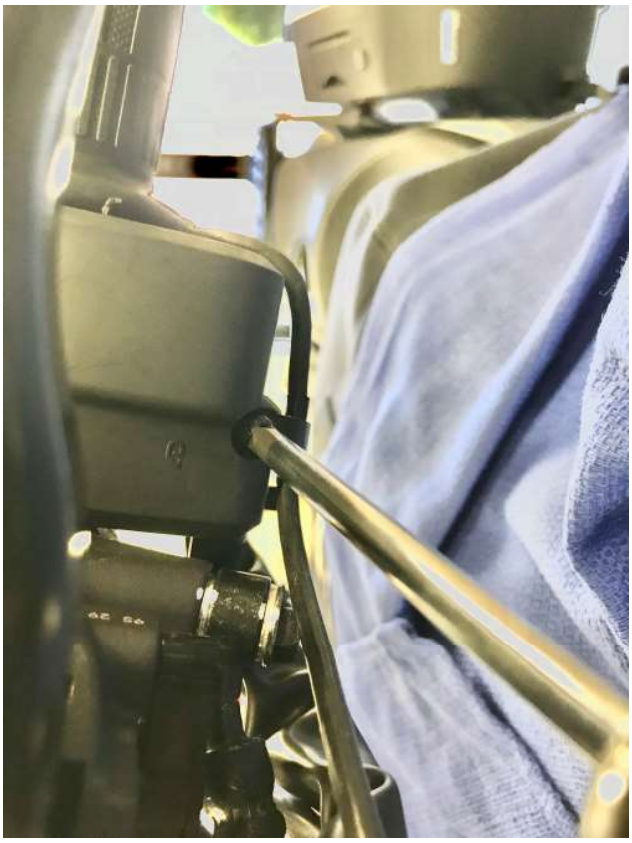


Photo # 11

Photo # 14

Photo # 16

Photo # 13

Photo # 15

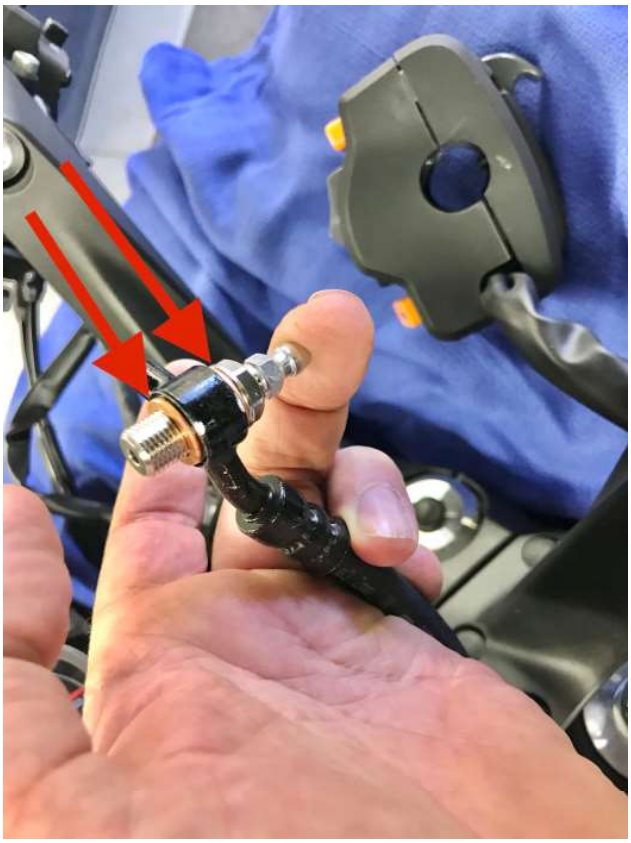


Photo # 18

Photo # 20

Photo # 17

Photo # 19

Photo # 22

Photo # 24

Photo # 21

Photo # 23

Photo # 26

Photo # 28

Photo # 25

Photo # 28

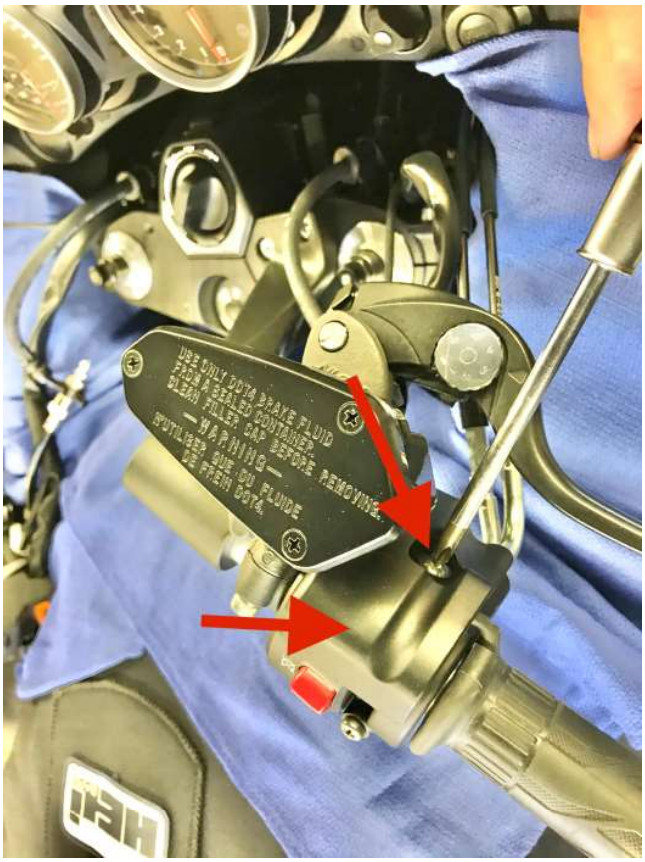


Photo # 30

Photo # 32

Photo # 29

Photo # 31

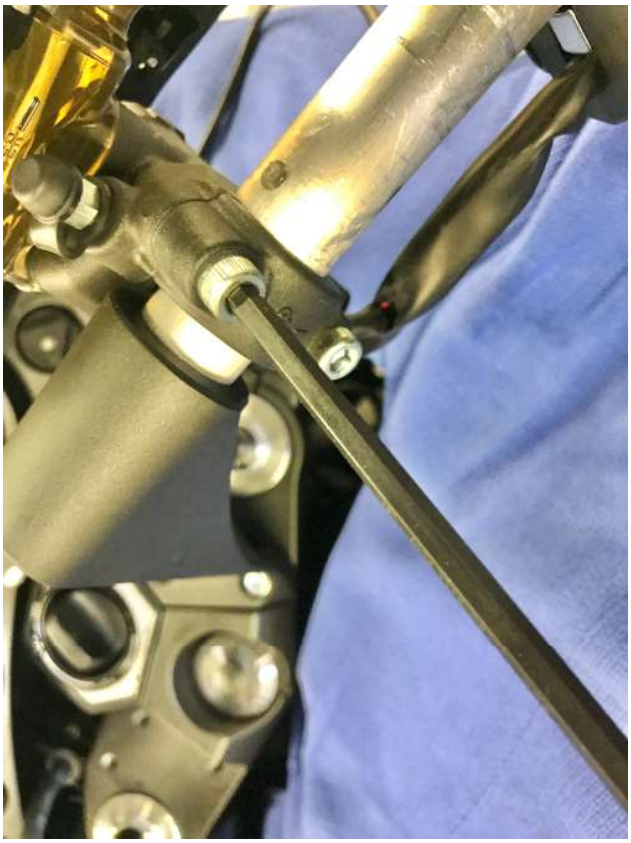


Photo # 34

Photo # 36

Photo # 33

Photo # 35

Photo # 38

Photo # 40

Photo # 37

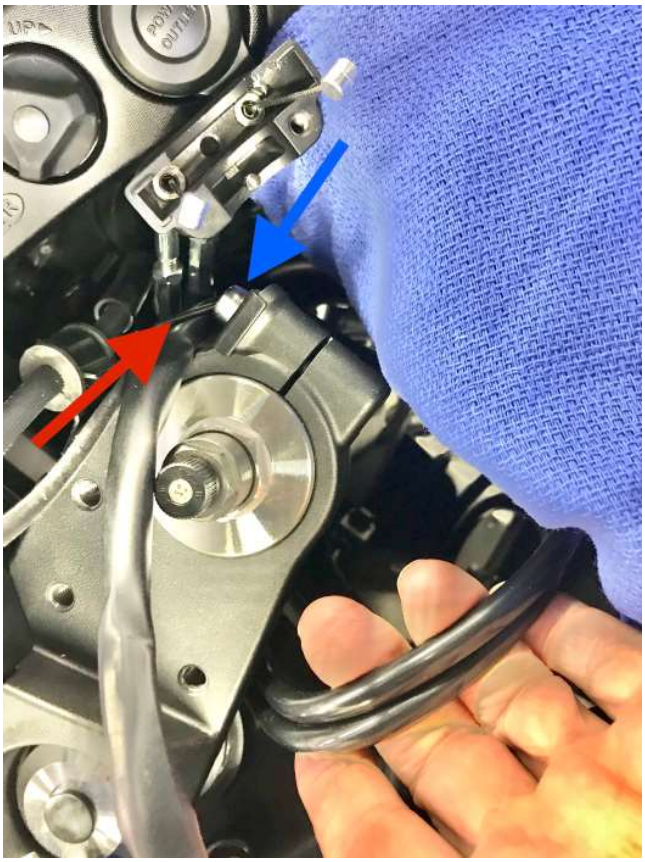


Photo # 39

Photo # 42

Photo # 44

Photo # 41

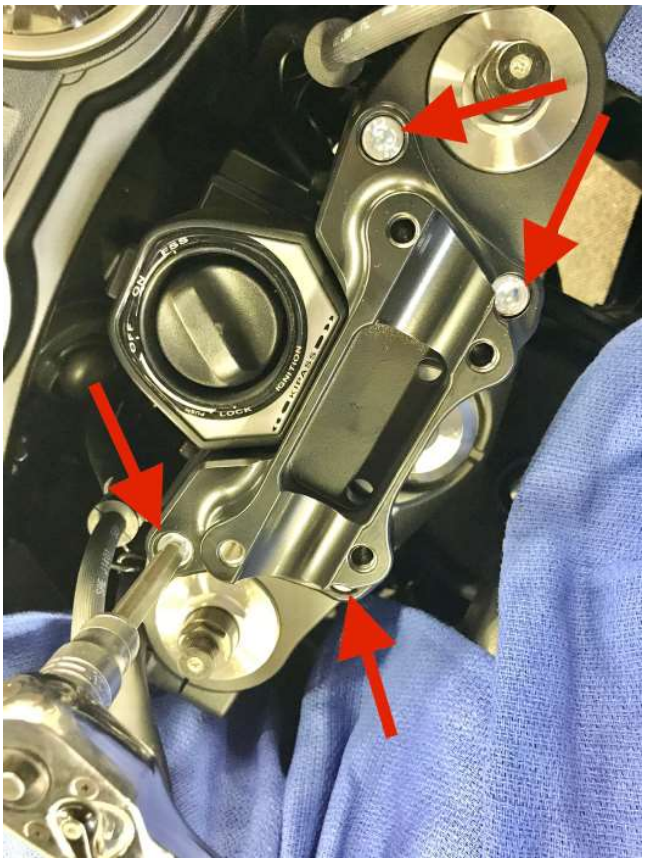


Photo # 43

Photo # 46

Photo # 48

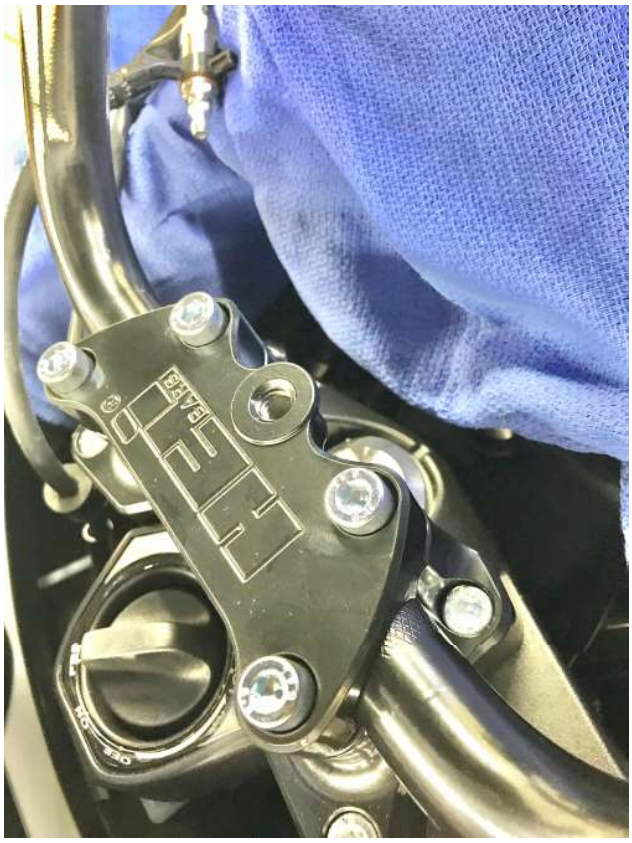


Photo # 45

Photo # 47

Photo # 50

Photo # 52

Photo # 49

Photo # 51

Photo # 54

Photo # 56

Photo # 53

Photo # 55

Photo # 58

Photo # 60

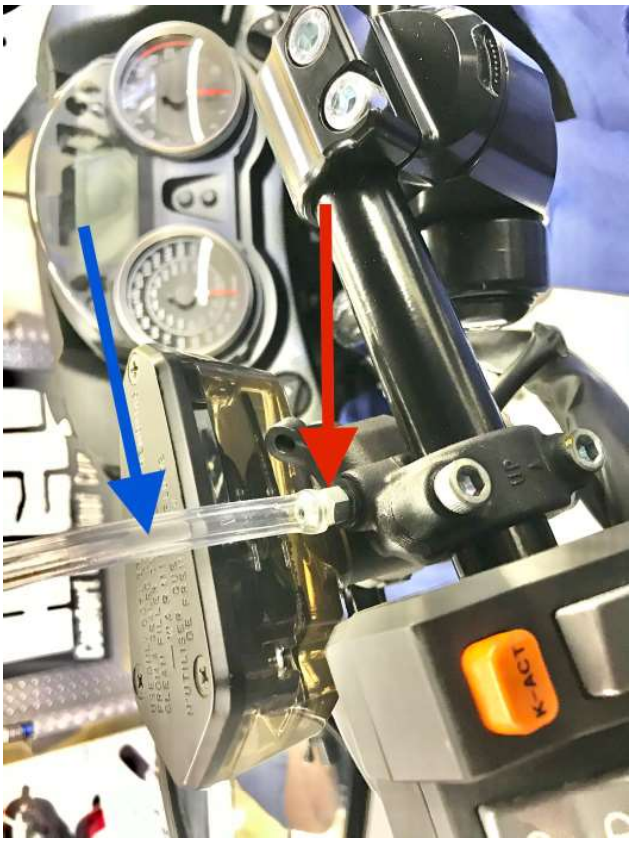


Photo # 57

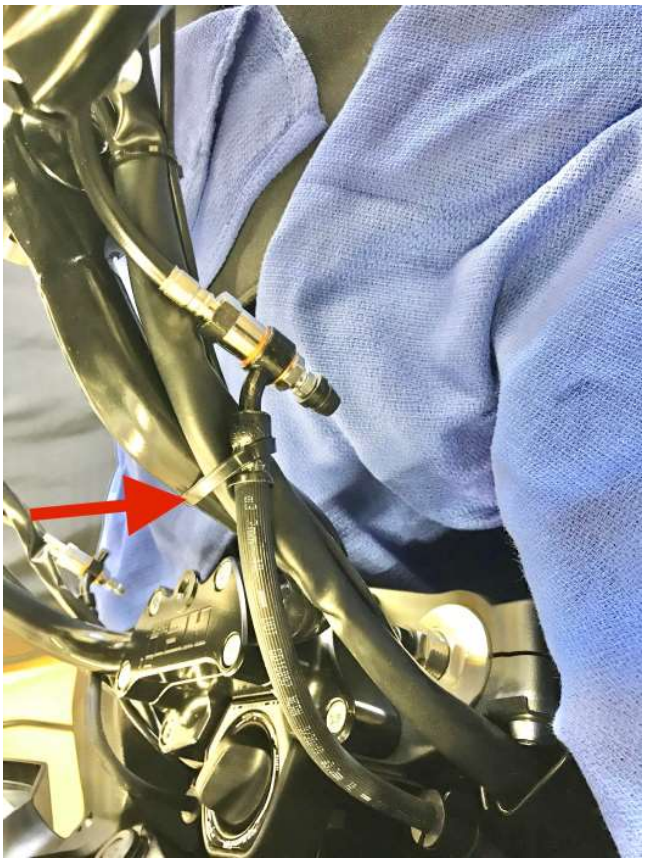


Photo # 59

Photo # 62

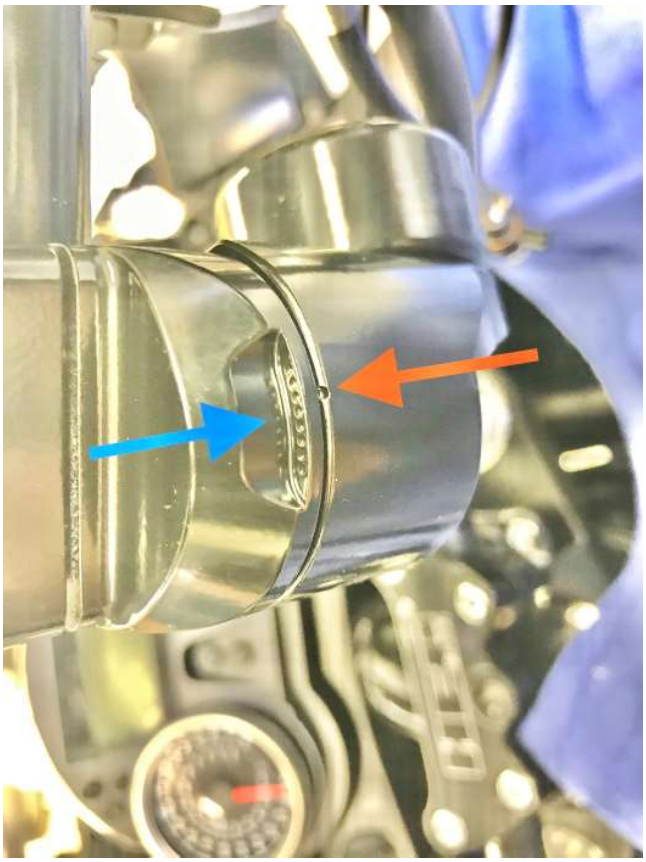


Photo # 64

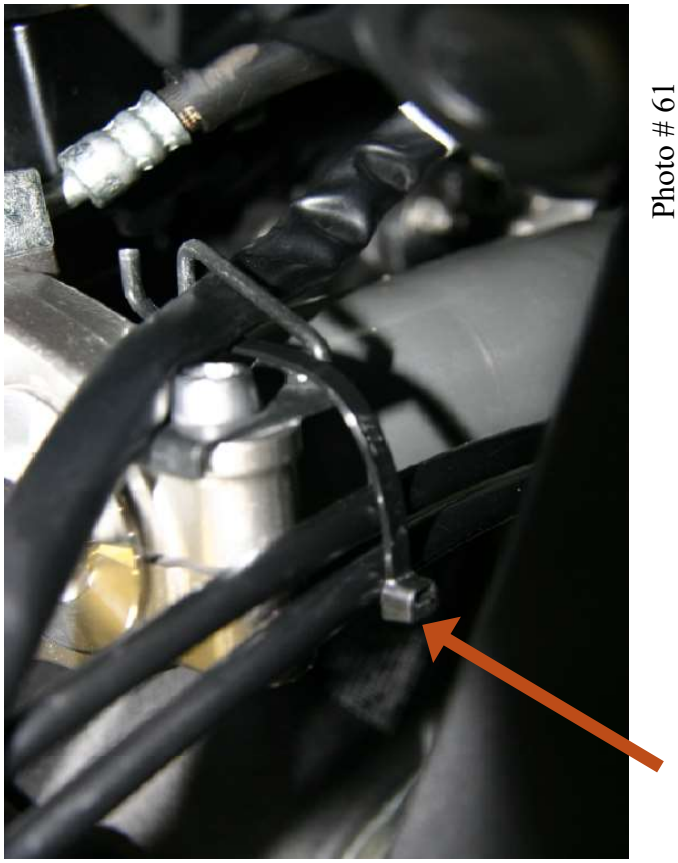


Photo # 61

Photo # 63

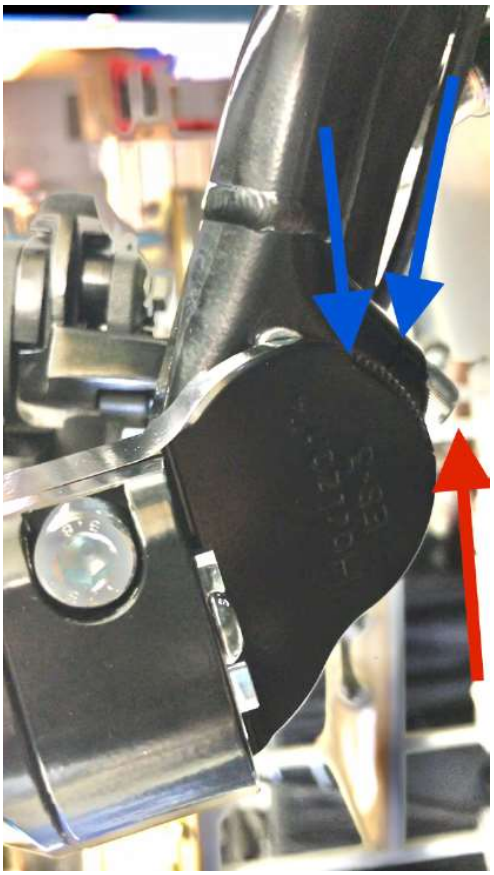


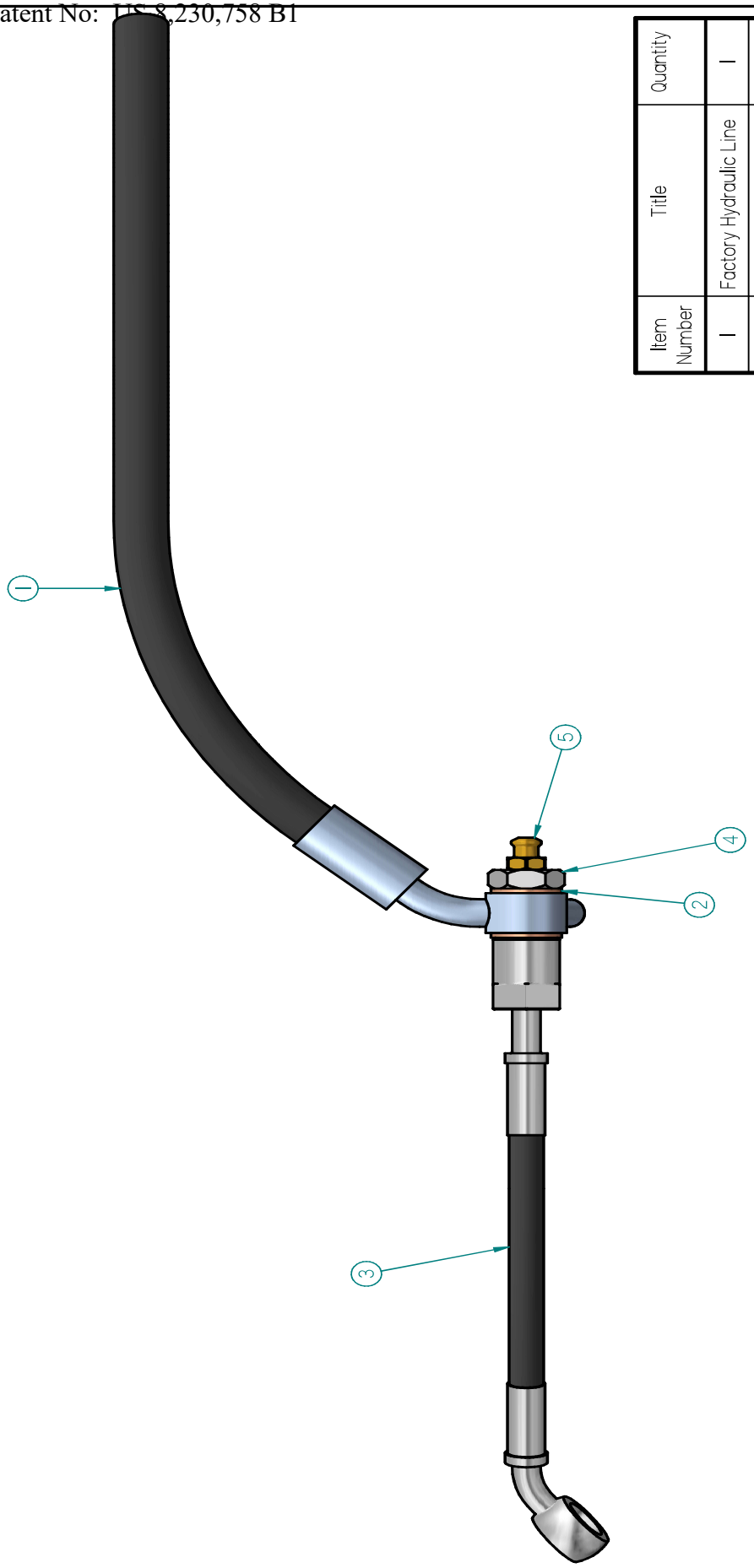
Photo # 66

Photo # 65

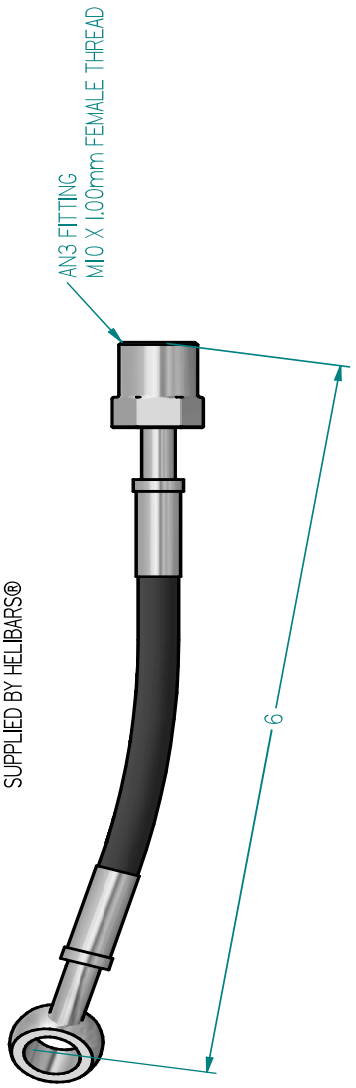
Photo # 67

Item Number	Title	Quantity
1	Factory Hydraulic Line	1
2	Crush Washer	2
3	Hydraulic Line Extension	1
4	Banjo Bolt	1
5	Bleeder Valve	1

TITLE: HYDRAULIC LINE EXTENSION (AN3)
SIZE: B | DWG NO: TBD | REV: A
DRAWN BY: Tom
DATE: 06/30/11



HYDRAULIC LINE EXTENSION
SUPPLIED BY HELIBARS®



Patent No: US 8,230,758 B1

IMPORTANT INFORMATION ABOUT POWDER COATED HELIBARS

HeliBars® are finished with a polyester powder coating. The polyester is recommended for outdoor use because of it's 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

~ PO Box 638 ~ 20 Industrial Way ~ Cornish, ME 04020
Toll Free: 800-859-4642 ~ Int'l: 207-625-4642 ~ Fax: 207-625-3024 ~ www.HeliBars.com

Trailering 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.