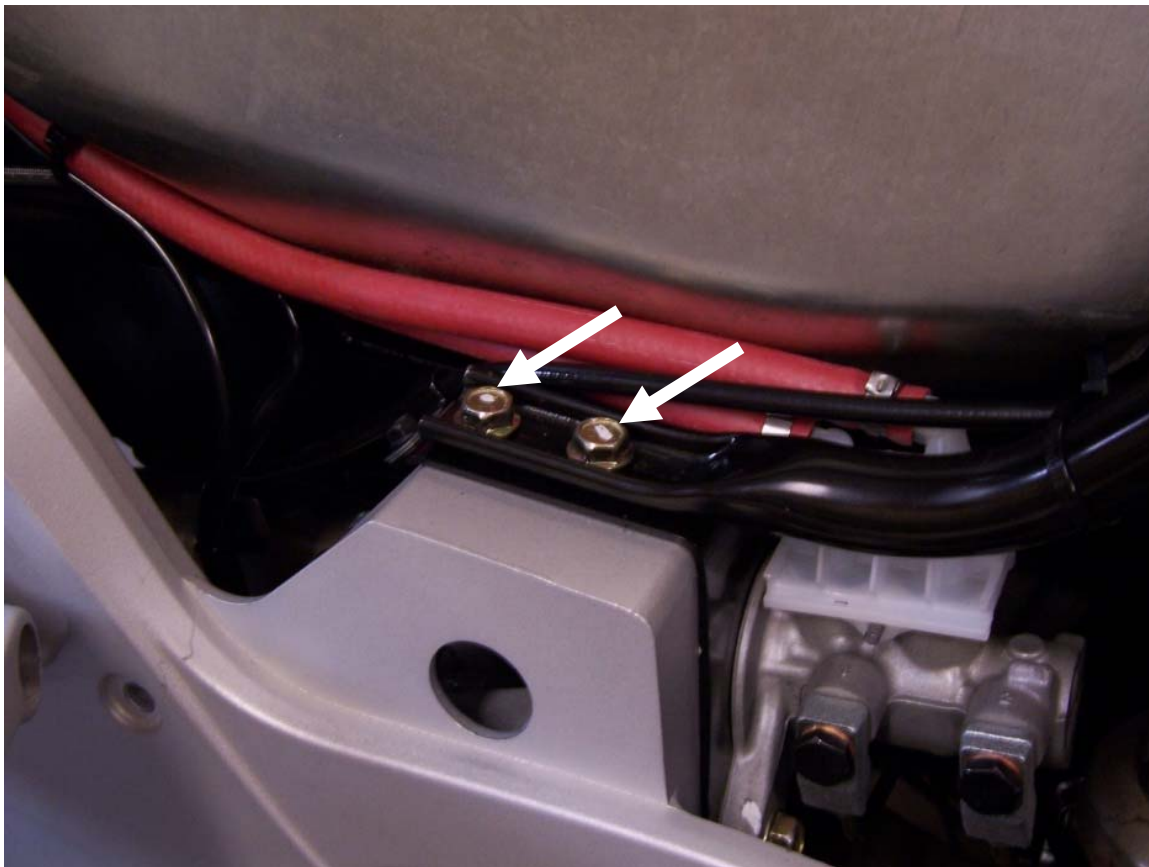


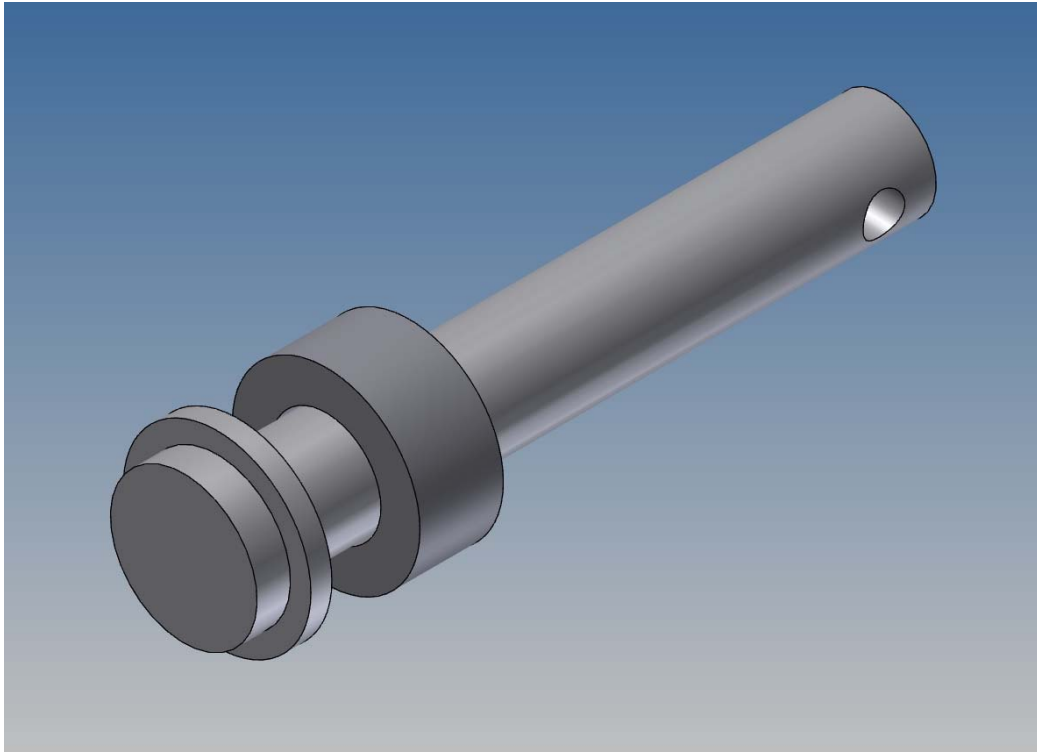
INSTALLATION INSTRUCTIONS FOR ISCI SPYDER HANDBRAKE SPY-HB-RT_RevD

Great care has gone into providing complete and thorough installation instructions. Use the torque values listed on the Assembly Drawing when tightening all fasteners. Use the supplied Loctite on all fasteners that do not have any mechanical locking device. See terms and conditions located at the end of this document.

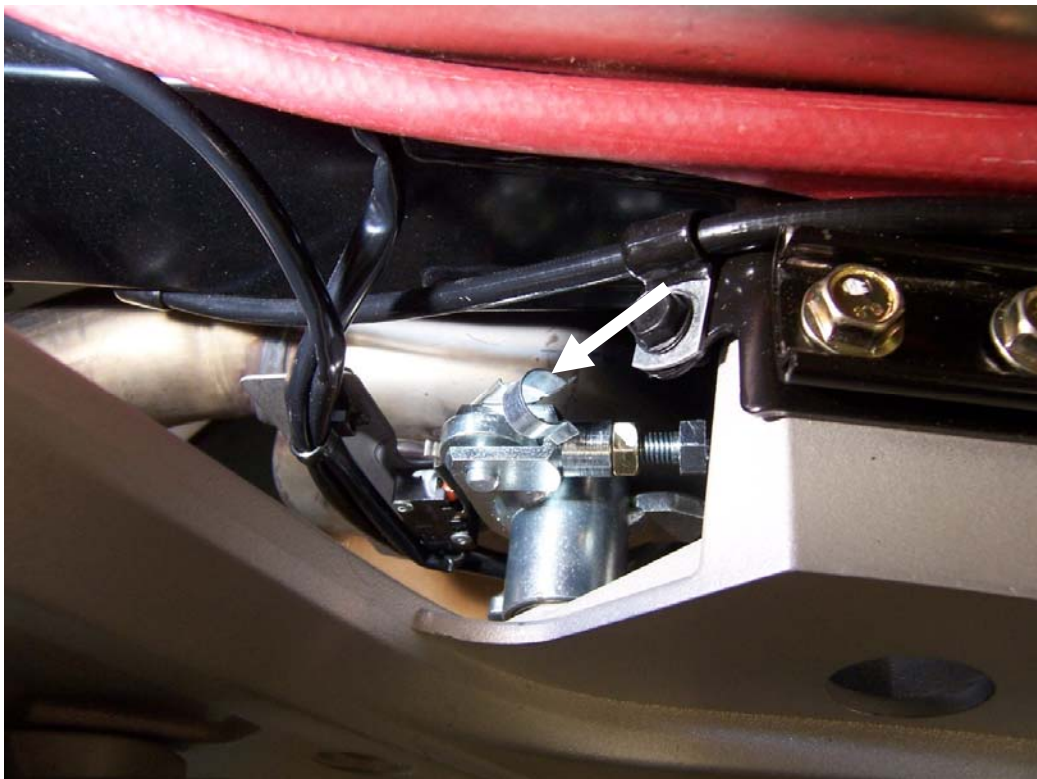
1. Ensure that all parts and the proper quantities of parts that are listed in the Parts List on the Assembly Drawing are in the package. Some of these items are pre-assembled.
2. Refer to Spyder Shop Manual and remove all side body panels, Middle, Upper and Lower from the right side and the Central Panel.
3. Remove two Lateral Support Screws from the top of the Driver's Footrest Support.



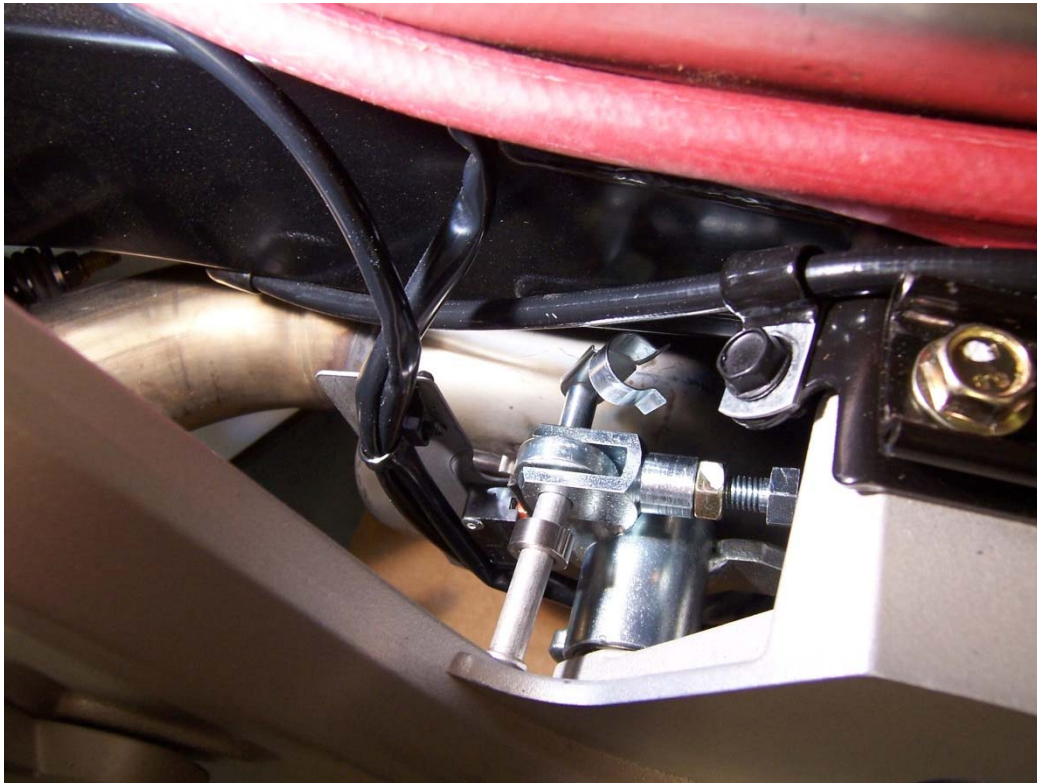
4. Assemble $\frac{1}{4}$ " bushing and washer onto the clevis pin as shown below.



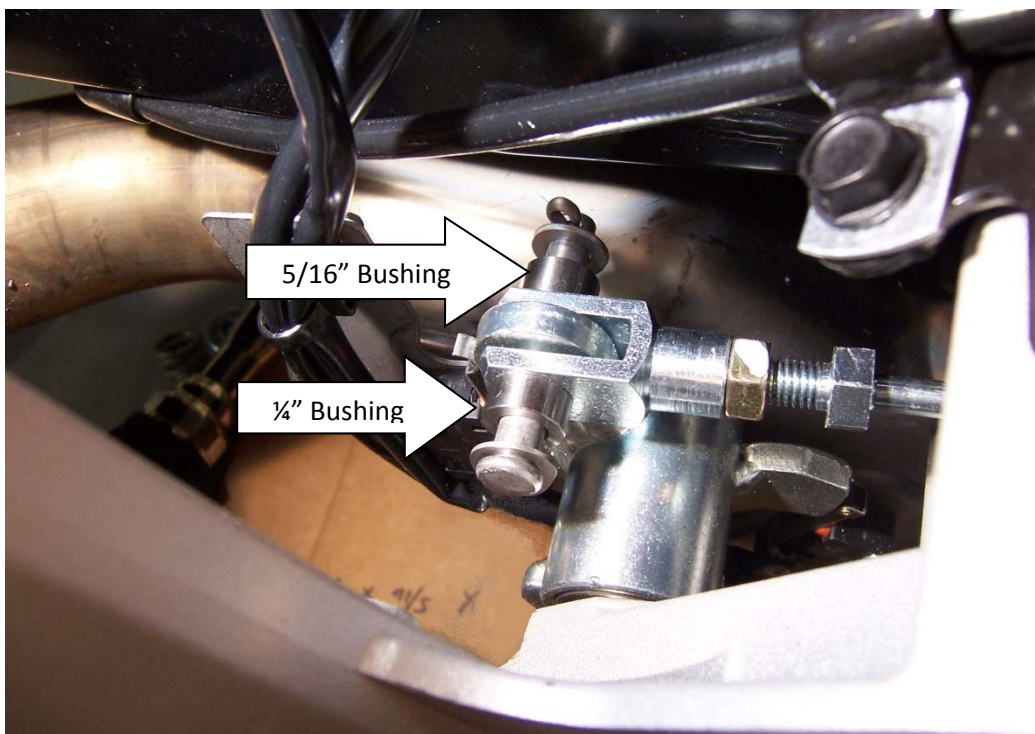
5. Unhook the Hook Lock from the Clevis on the Master Cylinder Rod. DO NOT REMOVE THE PIN FROM THE CLEVIS AT THIS TIME!!



6. Use the Clevis Pin Assembly from Step #4 to start pushing the OEM Clevis Pin out.



7. Install 5/16" bushing and washer then insert Rue Ring Cotter into Clevis Pin. Locate the bushings against the OEM clevis and position the Clevis Pin so that there is 1/4" spacing between the washers and the bushings. Note that this picture shows a regular Cotter pin installed and not the Rue Ring Cotter.

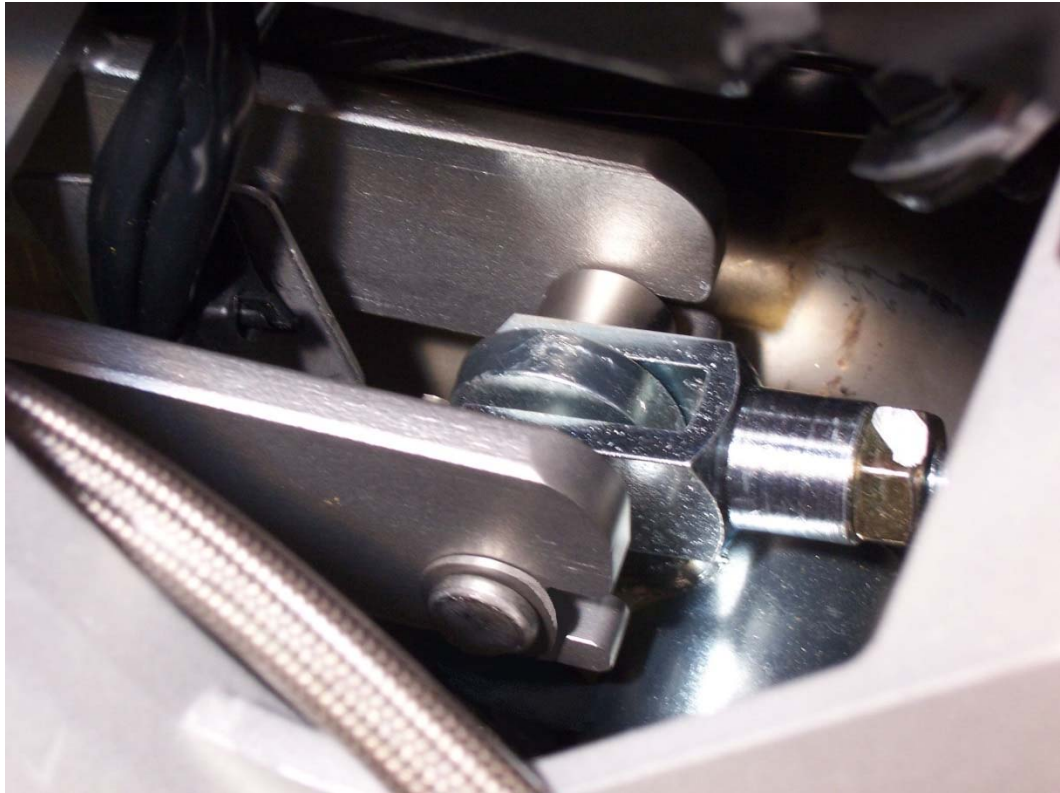
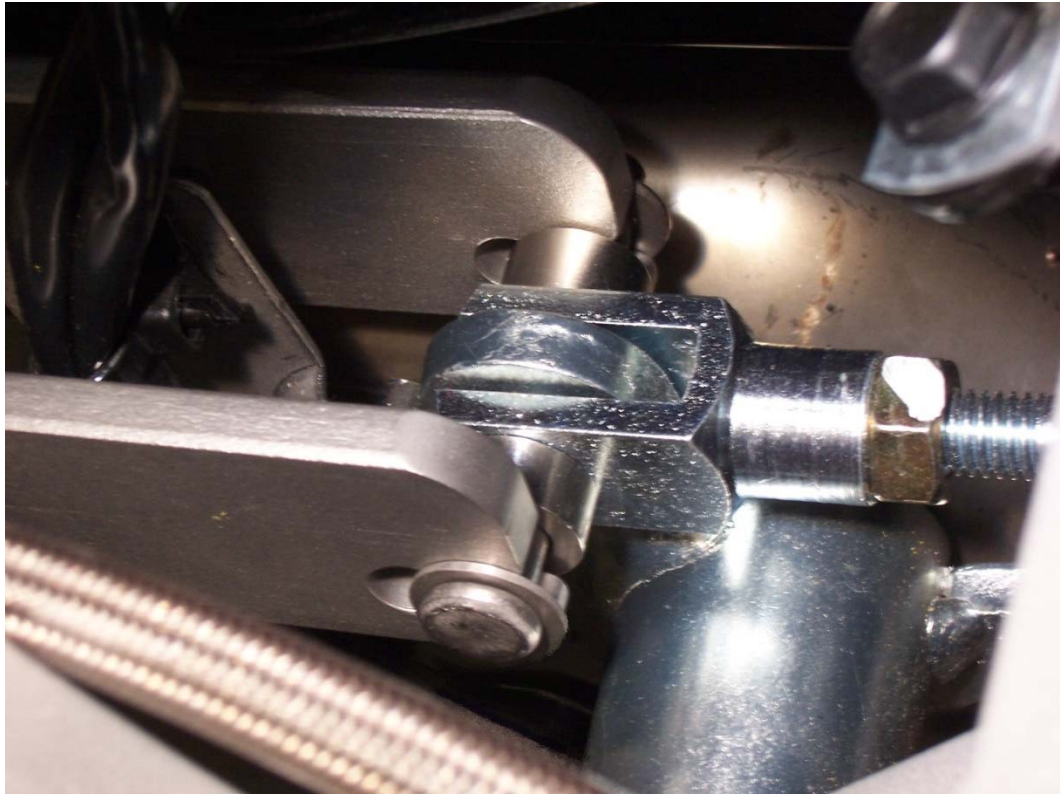


8. Remove the muffler. DO NOT reinstall muffler until everything is installed and system has been bled!!



9. Bolt brake line to the Slave Cylinder with the Banjo Bolt and 2 Crush Washers. Bring bracket and slave assembly underneath the Spyder so that the holes in the bracket line up with the holes in the top of the Driver's Footrest Support and the new clevis straddles the OEM clevis as shown below. **If you have a 2011 or 2012 model refer to page 13 for additional instructions.**

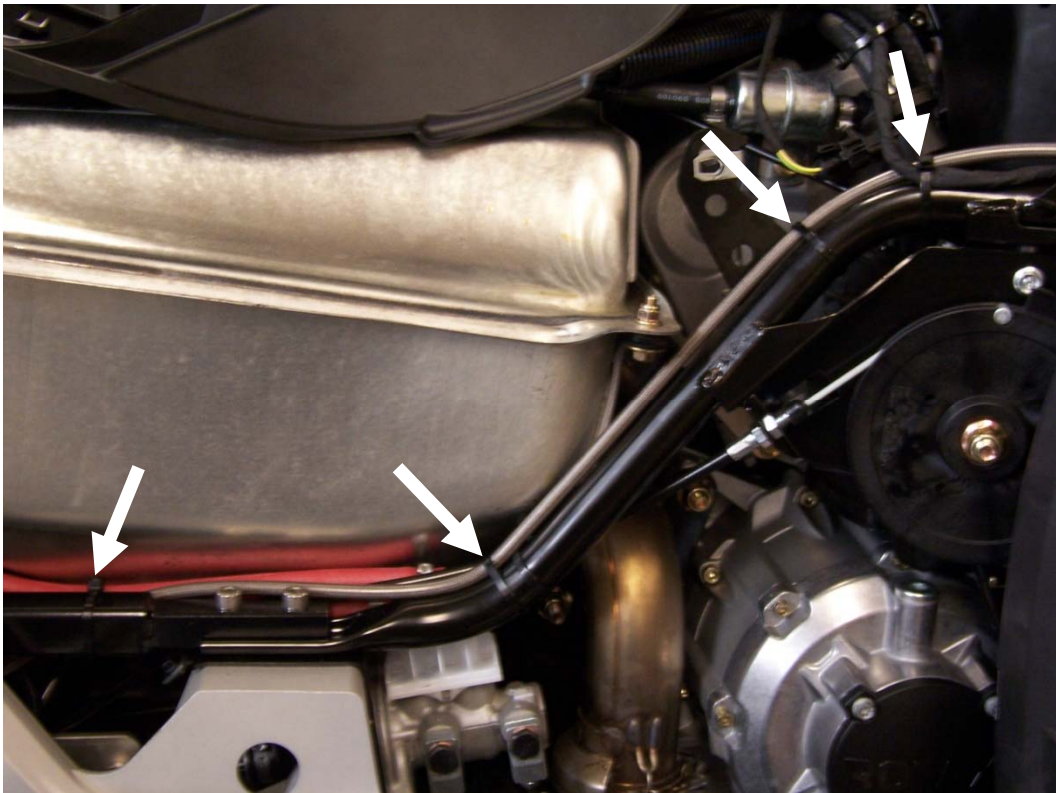


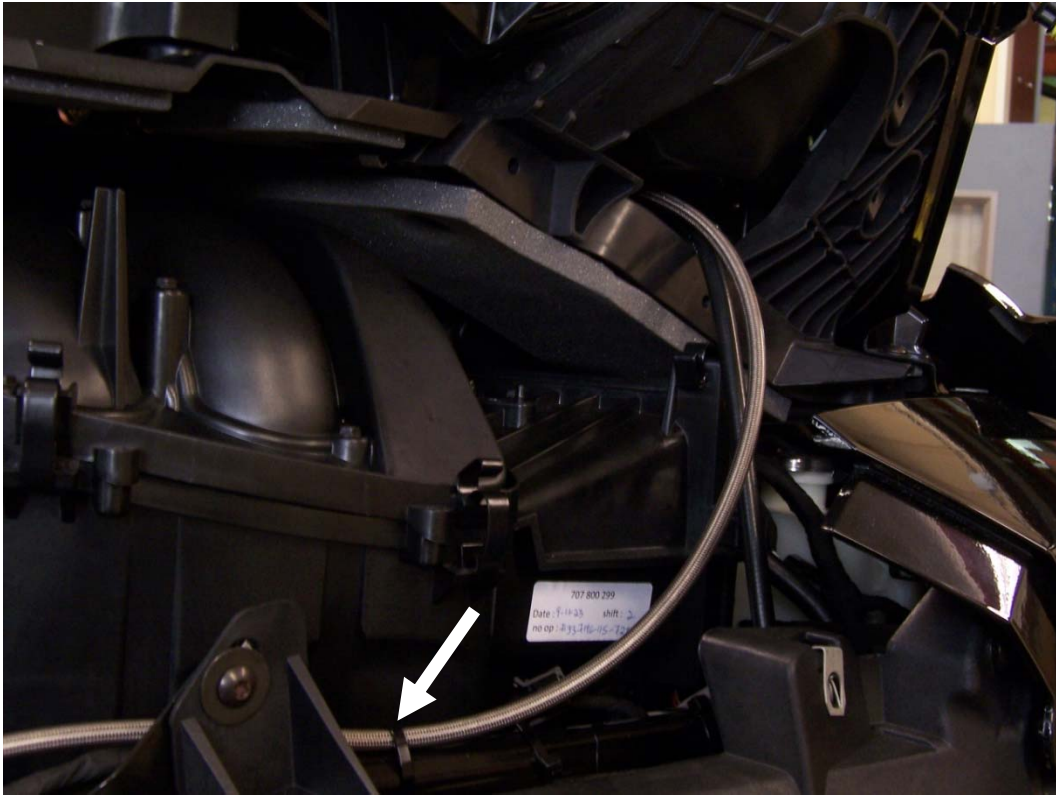


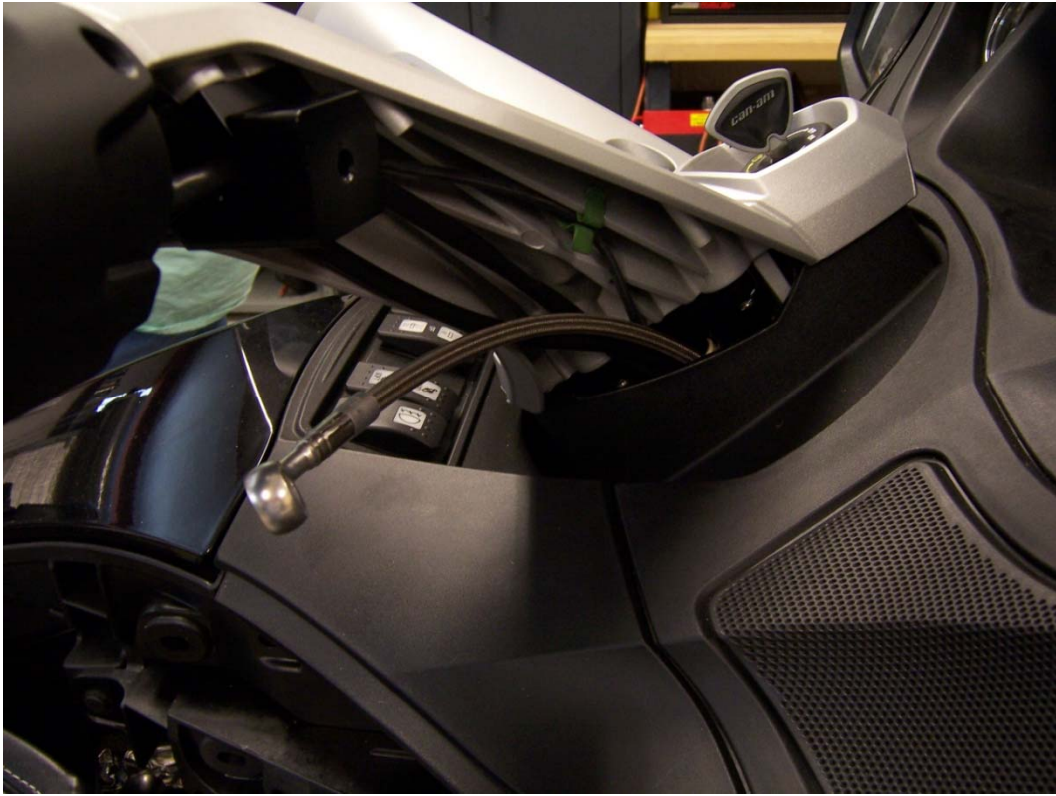
10. Install two M8x40mm Hex Head Bolts through the bracket and into the top of the Driver's Footrest Support.
11. Install bracket to space brake reservoir hoses away from bracket and secure with a ty-wrap.



12. Route Braided Brake Line from Slave Cylinder to the Handle Bar as shown in the following pictures. Remove right hand lower Handle Bar Cover.



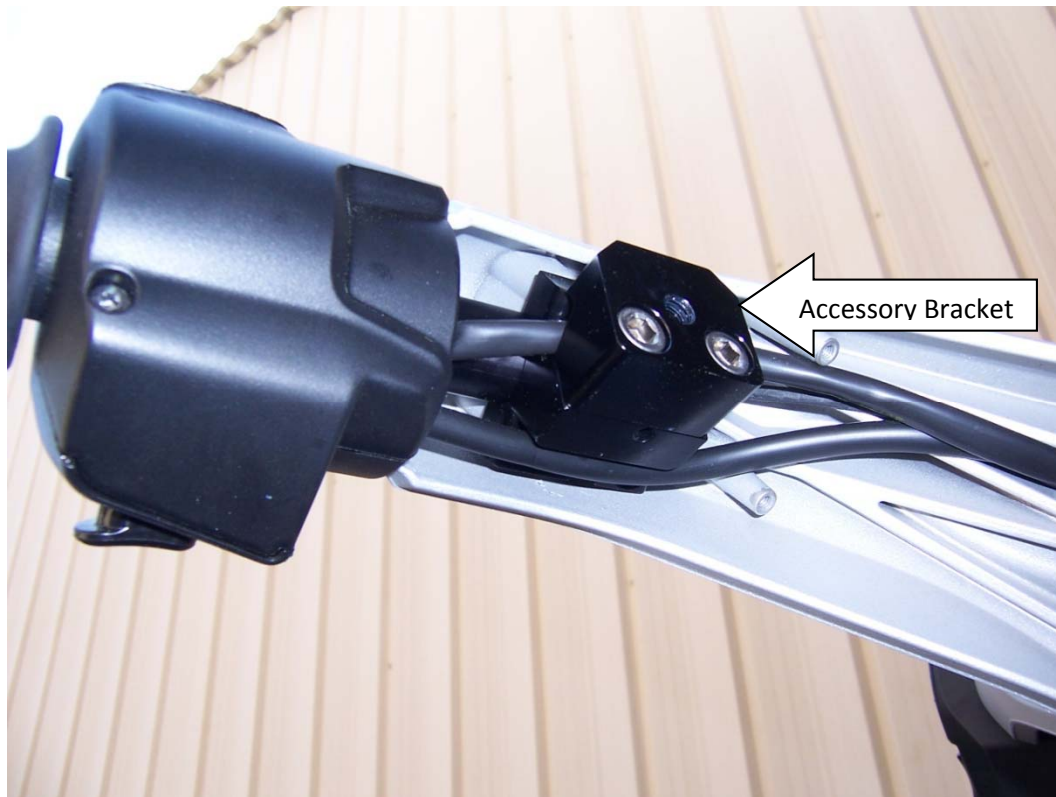




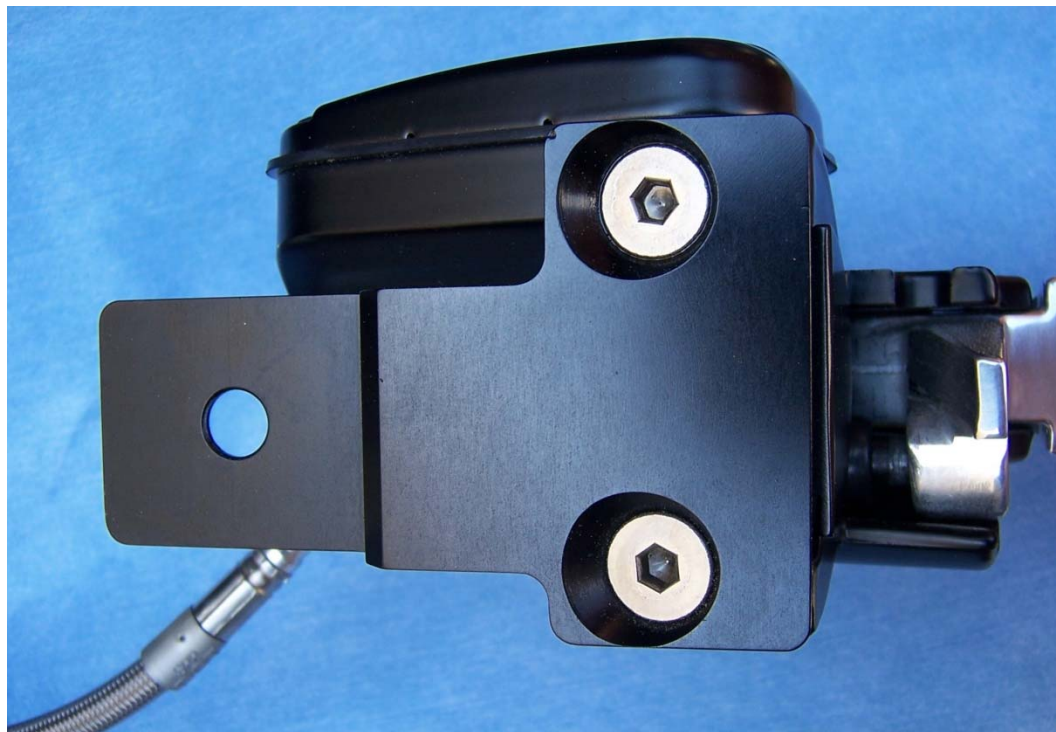
13. Remove 4 screws holding the throttle clamp and replace with the one as shown below. Notice the placement of the wire bundles on either side of the mounting boss. Place the the 2 3/16" x 1/2" dowels as shown.

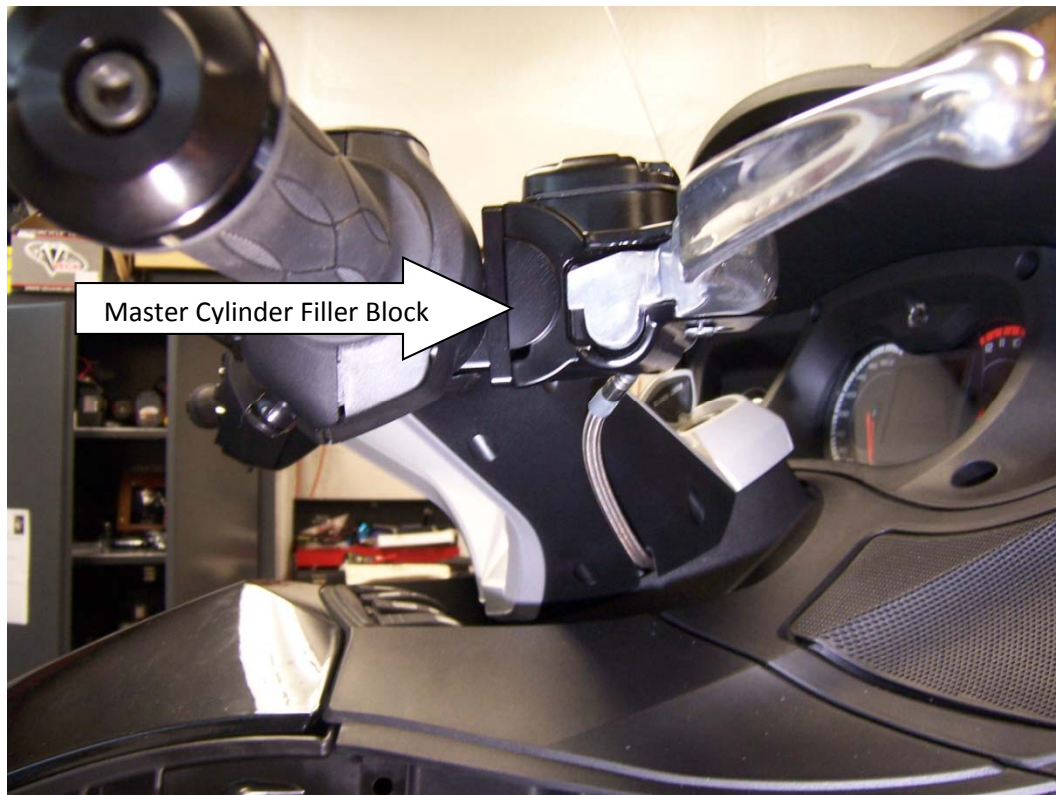


14. At this time the Lower Handlebar Cover would be installed and then the Accessory Bracket. The following picture shows the Accessory Bracket mounted without the cover in place. Be sure not to pinch the wire bundle when installing.



15. Attach Master Cylinder Bracket to the Master Cylinder using 2 ¼"-20 x 5/8" Flathead Screws as shown below with Master Cylinder Filler Block in between.





16. Attach Master Cylinder Bracket to Accessory Bracket using 5/16"-18 x 3/4" Flathead Screw.



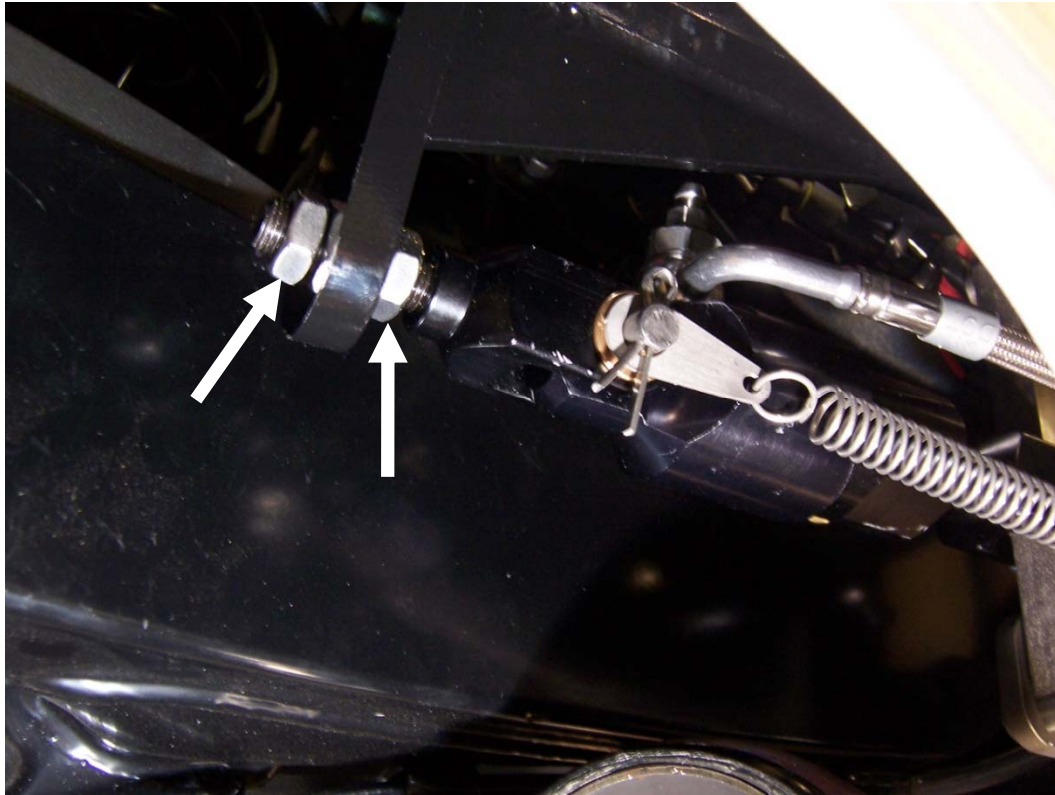
17. With Handlebar Cover installed.



18. Attach brake line to the master cylinder using the supplied black banjo bolt and two crush washers. Fill master cylinder with DOT 4 brake fluid and bleed till there is no air coming out of the bleeder valve. Connecting a clear tube to the bleeder will help from making a mess and you can easily see when there is no more air coming from the slave cylinder. **See pages 14 and 15 of these instructions for more information about the bleeder valve.**
19. Use ty-wraps to secure brake line along the Lateral Support Tube and on the Slave Cylinder Mounting Bracket.

20. Loosen the two Jam Nuts at the rear of the slave cylinder so that the brake pedal is in its upmost position. Tighten the front jam nut against the mounting bracket until the brake pedal starts to move down and then back off that jam nut ½ turn. Check to make sure that the brake lights are not on. If they are on continue backing off the front jam nut ½ turn at a time until the brake lights are no longer on. At this time tighten the rear jam nut securely.

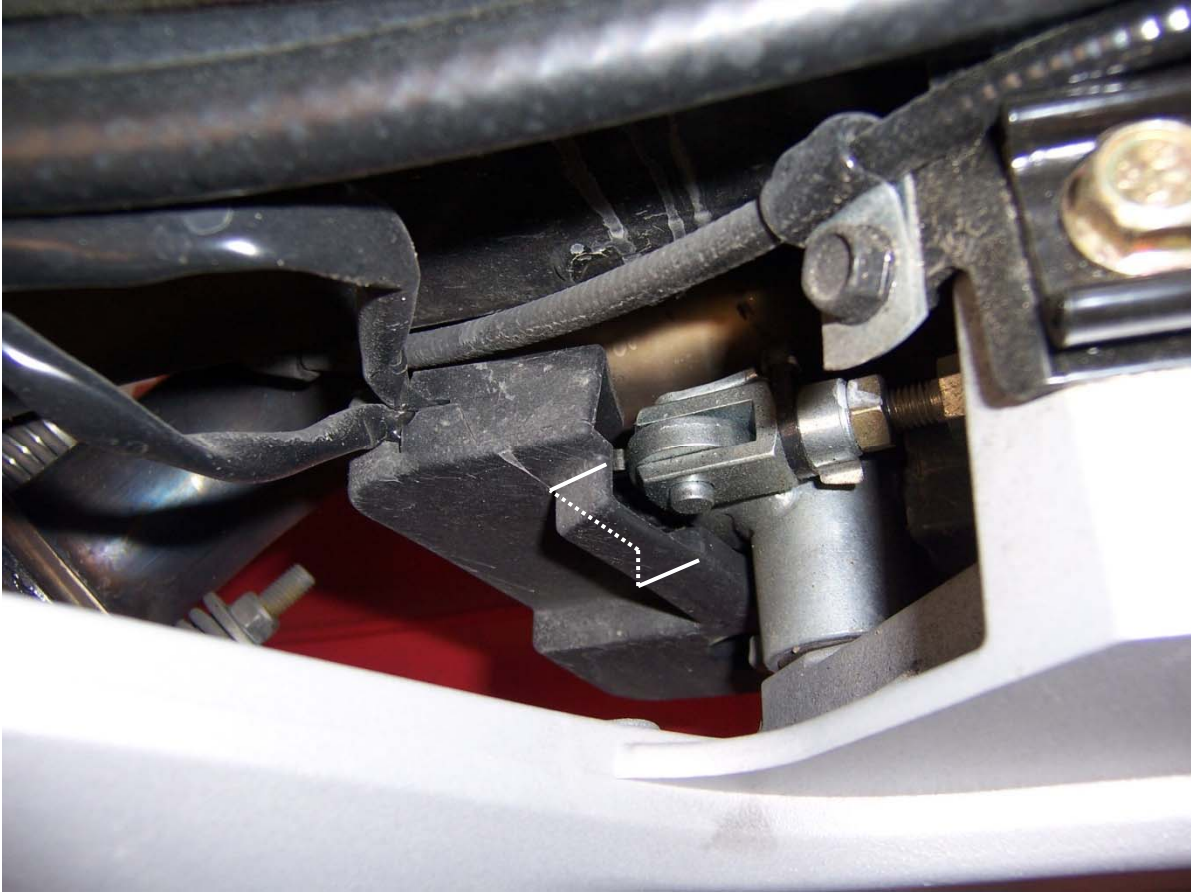
NOTE: The following picture shows an older version of the handbrake. Yours will not have the spring and spring washer.



21. Reinstall all body panels that were removed and the installation is complete.
22. Perform a visual inspection of the slave cylinder every 3000-5000 miles by wiping the cylinder rod clean and checking that the vent is not caked up with road grime.
- 23. It is recommended that the brake system's fluid be changed and the system flushed to remove moisture and contamination build up every year or every 25,000 miles, which ever comes first. Also do this if the Spyder isnt ridden very often.**

If for some reason you are having trouble with any part of this installation please do not hesitate to give us a call at 334-277-2224. Ask for Jeff Kranzusch or Robert Kawzinski.

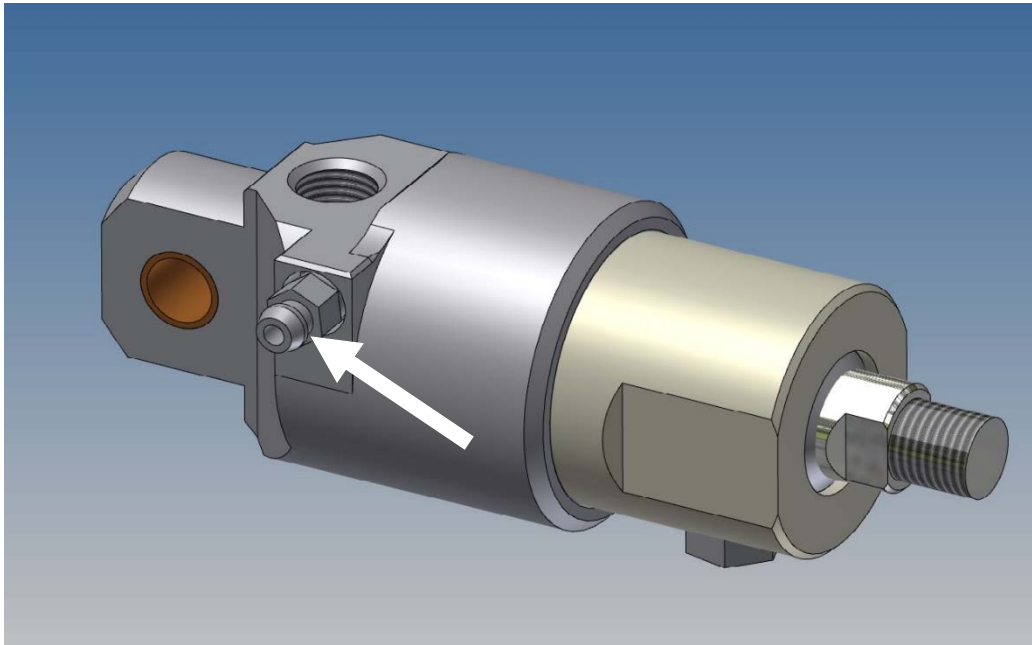
On the 2011 models a rubber cover has been added around the micro switches. Using an Xacto knife or other sharp knife cut this cover along the white lines in the picture below to give the clearance needed for installation.



ATTENTION!!

All of our slave cylinders now feature a Made in the USA Speed Bleeder® bleeder screw installed into the Cylinder End Cap for easier bleeding of the Handbrake System. The unique and patented Speed Bleeder® has a built in check valve to allow for easier and less messy bleeding of the system!!





Once you are at the point of filling and then bleeding the system all you have to do is open the Speed Bleeder® $\frac{1}{4}$ to $\frac{1}{2}$ of a turn and leave it open with the clear tubing supplied on the nipple of the Speed Bleeder® while pumping the Master Cylinder Lever. Opening and closing of the bleeder screw repeatedly is no longer necessary due to the built in check valve of the Speed Bleeder®. You will need to keep an eye on the brake reservoir so you don't empty it of brake fluid. Once all the air is removed and you have bubble free fluid coming out of the Slave Cylinder, tighten the Speed Bleeder® to close it. **DO NOT OVER TIGHTEN!!!** If it leaks after closing tighten it a little more **BUT NO MORE THAN 1/8 TURN!!** If you tighten any more than this you might break it off. Be sure to top off the master cylinder with fluid after the bleeding process is finished.

www.speedbleeder.com

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REVISION HISTORY

REV	DESCRIPTION	DATE	APPROVED
A	Released for Production	03/09/10	
B	Released for Production	05/10/10	
C	Released for Production	03/23/12	
D	Released for Production	02/11/14	

PARTS LIST

ITEM	QTY	REV	PART NUMBER	DESCRIPTION	DIMENSIONS
1	1	B	SPY043_RevB	RT Brake Actuating Clevis	
2	1	B	349171044_RevB	RS/RT Slave Cylinder Bracket	
3	1	A	349171045	RS/RT Master Cylinder Mount	
4	1	F	7-8 Slave_RevF	Slave Cylinder	3/4" X 1" X 1-3/4"
5	2	F	SPY406_RevF	Slave Cylinder Clevis	1/2" X 1" X 5-1/16"
6	1	F	349171505_RevF	Brake Actuating Lever	7/8" OD X 1/2" lg
7	1	B	349171514_RevB	Bronze Flange Bushing	1/16" X 1" X 3-15/16"
8	1	C	349171515_RevC	Hose Bracket	9/16" OD X 1/4" lg
9	1	A	519	1/4" Spacer	9/16" OD X 5/16" lg
10	2	A	520	5/16" Spacer	9/16" OD X 3/8" lg
11	1	A	521	3/8" Spacer	5/8" OD X 5/16"
12	4	B	SPY805_RevB	Bronze Flanged Bushing	3/8" X 24 X 2"
13	1	A	SPY1027	Adjusting Screw	3/8" OD X 5/16" ID X 1/2" lg
14	1		6391K153	Bronze Bushing	1/2" Dia X 1/2" lg
15	1		90298A707	Shoulder Bolt	40mm lg
16	2		91280A542	M8 Hex Head Grade 8.8	1/4-20
17	2		91847A029	Jam Nut	3/8-24
18	2		91847A431	Jam Nut	1-5/32" Usable Length
19	2		92390A217	5/16" Clevis Pin	1-25/32" Usable Length
20	2		92390A222	5/16" Clevis Pin	5/16" lg
21	1		92949A262	10-32 BHCS	5/8" lg
22	1		92979A245	5/16"-18 Hex Flange Cap Screw	1/4-20
23	2		95907A480	Spring Anchor	5/16" ID X 9/16" OD X 1/16" thk
24	3		98017A690	5/16" Washer	THIS ITEM NOT SHOWN
25	1		709400578	RH Lower Handlebar Cover	20mm lg
26	2		41750-06B	Barjo Bolt, M10 X 1	THIS ITEM NOT SHOWN
27	1		44551-08A	Master Cylinder Assembly	10mm ID X 15mm OD X 1.5mm thk
28	4		FK003D010A	Crush Washer	50" OD X 1-1/2" lg X .075 wire
29	1		FK003DJS-1	Braided Brake Line	RUE-10-S
30	1		LE 075E 02S	Extension Spring	Speed Bleeder
31	4		RUE-10-S	Rue Ring Cotter	
32	1		SB1428	Speed Bleeder	

MASTER CYLINDER END OF BRAKE LINE
-BRAKE LINE SHOWN SHORTENED FOR CLARITY -

MASTER CYLINDER END OF BRAKE LINE
-BRAKE LINE SHOWN SHORTENED FOR CLARITY -

MASTER CYLINDER END OF BRAKE LINE
-BRAKE LINE SHOWN SHORTENED FOR CLARITY -

SECTION A-A

REAR VIEW

Industrial Specialty Co. Inc. Proprietary Property

This drawing is the proprietary property of Industrial Specialty Company Inc. and must not be used except in connection with our work, not in any manner disclosed to any third party without Industrial Specialty Company Inc.'s prior written consent, all rights of design and invention are reserved.

Scale: NTS Drawing Unit: IN. (mm)

Tolerances

Unless Noted Otherwise

Inches .xx .xx .xx

Fract. ±.003 ±.01 ±.02

Metric ±.13 ±.25 ±.5

Angle ±0°-30°

Date 5/7/2010

Drawn By R.L.K.

Part # SPY-HB-RT_RevD

Description RT Handbrake Assembly

Used in Assembly #

Material

Finish

Company ISCI

Project Spyder

Dimensions

Model File # \\SCISRV01\Inventor\34917-1\SPY-HB-RT_RevD.ipt

Model File # \\SCISRV01\Inventor\34917-1\SPY-HB-RT_RevD.ipt

Model File # \\SCISRV01\Inventor\34917-1\SPY-HB-RT_RevD.ipt

Revision

Industrial Specialty Co. Inc.

Precision Machining / Engineered Products / Anodizing

50 Forest Hills Dr. - P.O. Box 3262 - Montgomery, AL 36109

PH (334) 277-2224 FX (334) 277-5646

D

SECTION A-A

Please read these terms and conditions very carefully.

The terms and conditions of product sales and service projects are limited to those contained herein. Any additional or different terms or conditions in any form delivered by you ("Customer") are hereby deemed to be material alterations and notice of objection to them and rejection of them is hereby given.

By accepting delivery of the products or by engaging Industrial Specialty Company, Inc. ("ISCI") on the invoice, statement of work or other ISCI documentation ("Seller") to provide product to perform or procure any services, Customer agrees to be bound by and accepts these terms and conditions. ISCI ("Seller") makes no claims of reduced risk of injury or inherent agreement on the performance as the product relates to safety. ISCI cannot guarantee optimal performance of product if not installed by ISCI, nor if proper installation instructions provided by ISCI are not adhered to.

Under no circumstances and notwithstanding the failure of essential purpose of any remedy set forth herein, will Seller, it's affiliates or it's or their suppliers, subcontractors or agents be liable for: (A) Any incidental, indirect, special, punitive or consequential damages including but not limited to, loss of profits, business, revenues or savings, even if Seller has been advised of the possibilities of such damages, or if such damages are otherwise foreseeable, in each case, whether a claim for any such liability is premised upon breach of contract, warranty, negligence, strict liability or other theory of liability; (B) Any claims, demands or actions against Customer by any third party; (C) Any loss or claim arising out of or in connection with Customer's implementation of any conclusions or recommendations by Seller or it's affiliates based on, resulting from, arising out of or otherwise related to the products or services; or (D) any inclusive in relation to the liability of ISCI (Seller).