



Factory Five Racing, Inc.

<i>Part Number:</i> <u>15207</u>	<i>Revision:</i> <u>A</u>	<i>Effective Date:</i> <u>07/21/10</u>	<i>By:</i> <u>J. Ingerslev</u>
<i>Document Type (indicate):</i>			
<input type="radio"/> Bill of Material	<input checked="" type="radio"/> Drawing (may be attached)	<input type="radio"/> Specification	
<input checked="" type="radio"/> Assembly Instructions	<input type="radio"/> Operating Procedure	<input type="radio"/> Other	



Emergency Brake handle

Installation and adjustment instructions

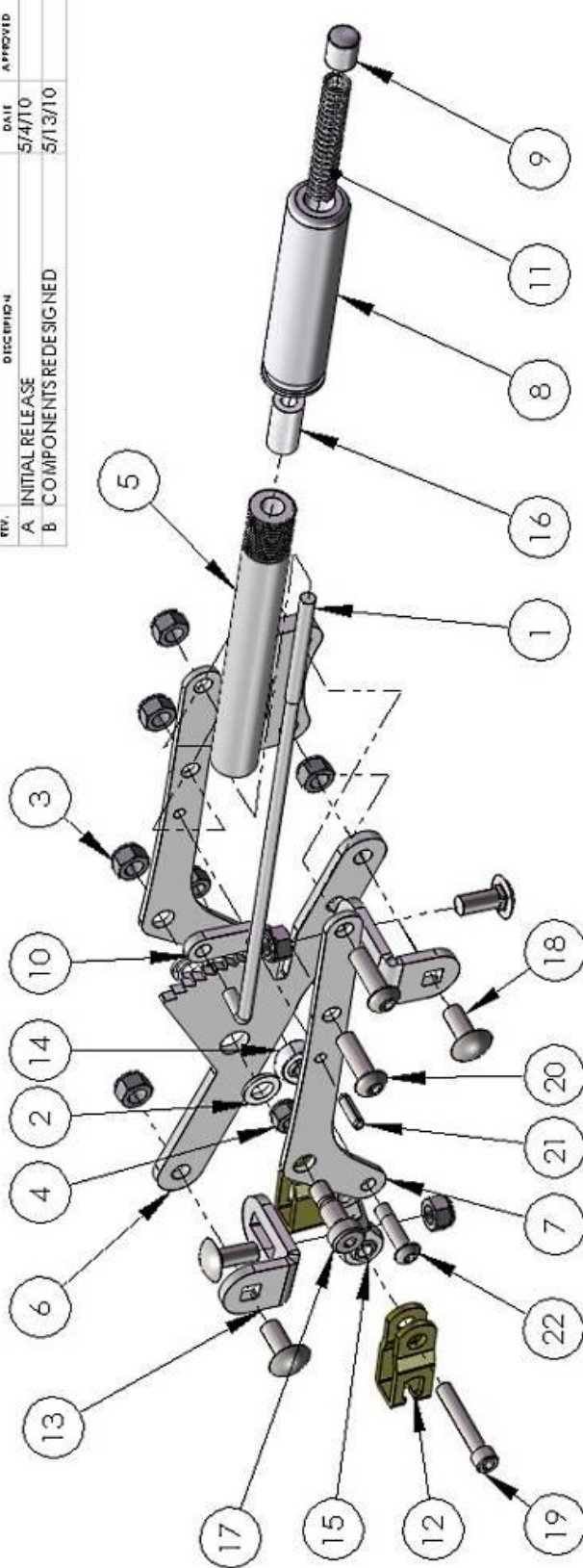
These instructions have been written using a Mk3/4 E-brake handle mount. The Coupe cables are routed the same but the handle mount brackets would both be flipped down so that it sits on the floor flat.

Hot Rod specific Instructions start on pg 21

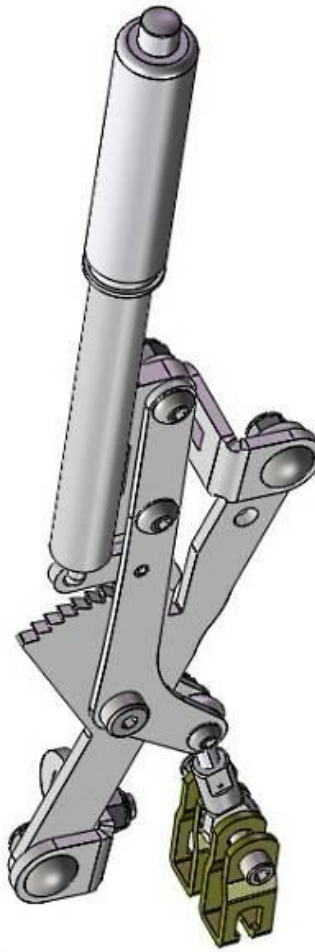
E-brake Handle

-  $5/32$ " , $3/16$ " hex keys, $7/16$ " , $1/2$ " wrenches, channel lock pliers
-  E-brake handle assembly, brake line components

REV.	REVISED DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	5/4/10	
B	COMPONENTS REDESIGNED	5/13/10	



ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	10801	ANCHOR BOLT, 1/4-20 x 10", 4.25" THREAD LENGTH	1
2	15185	NYLON BUSHING	2
3	NIL-3125C	NYLON INSERT LOCK NUT, SIZE 18 UNC	2
4	10802	NYLON INSERT LOCK NUT	2
5	15176	LOWER HANDLE ASSEMBLY	1
6	15167	FIXED GEAR	1
7	15168	HANDLE TO RATCHET MOUNT	2
8	15173	FRANKIE BUSHING	2
9	15174	E-BRAKE BUSHING	1
10	15175	1/4" MALE ROD END	1
11	15181	E-BRAKE CABLE LEVIS	2
12	15191	ROCKY BRACKET	2
13	15177	1/4" MALE ROD END	1
14	15180	1/4" FEMALE ROD END	1
15	Nylon Spacer	0.50" OD x 0.25" ID x 1" NYLON SPACER	1
16	SHSSCREW	0.375x0.5-N	1
17	RHSSNBOLT	0.3125-	1
18	HX-SHCS	0.25x20x1.5x1.1-N	4
19	SBHCSCREW	0.25x20x1.5x1.1-N	2
20	SBHCSCREW	0.3125x18x1.1-HX-N	2
21	SPS	0.1875x0.625	1
22	SBHCSCREW	0.25x20x1.1-HX-N	1

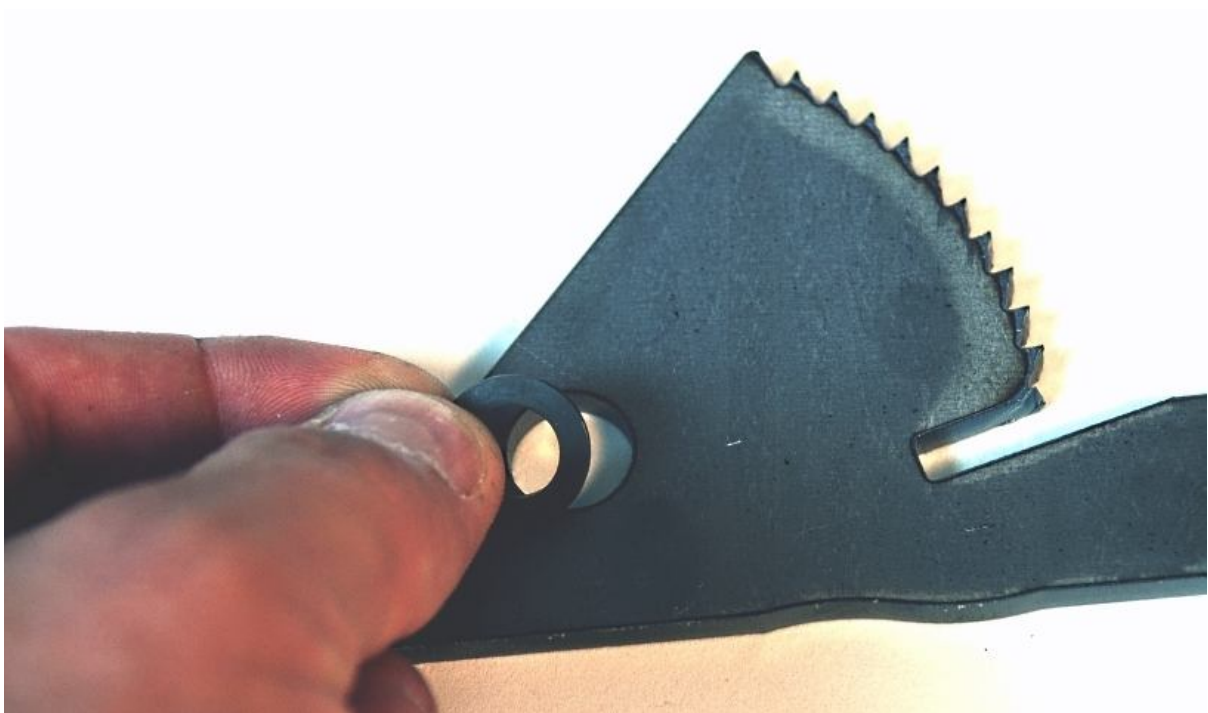


UNLESS OTHERWISE SPECIFIED:	NAME	DATE	DATE	DATE
DIMENSIONS ARE IN INCHES	JL	4/26/10		
TOLERANCES:	COMMENTS:			
TWO PLACE DECIMAL ±0.01	812:1 LEVERAGE RATIO			
THREE PLACE DECIMAL ±0.005				
FOUR PLACE DECIMAL ±0.001				
MATERIAL				
FINISH				
USED ON				
APPLICATION				
ROADSTER				
COUPE				
HOT ROD				
PROPRIETARY AND CONFIDENTIAL				
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FACTORY FIVE RACING, Inc.				
E-BRAKE HANDLE				
SIZE	DWG. NO.	REV		
A	15183	B		
SCALE: 1:2.5	WEIGHT:	SHEET 1 OF 2		
PRINTED	7/20/2010			

Unpack the emergency brake handle components.



Push a nylon bushing into one side of the fixed gear.



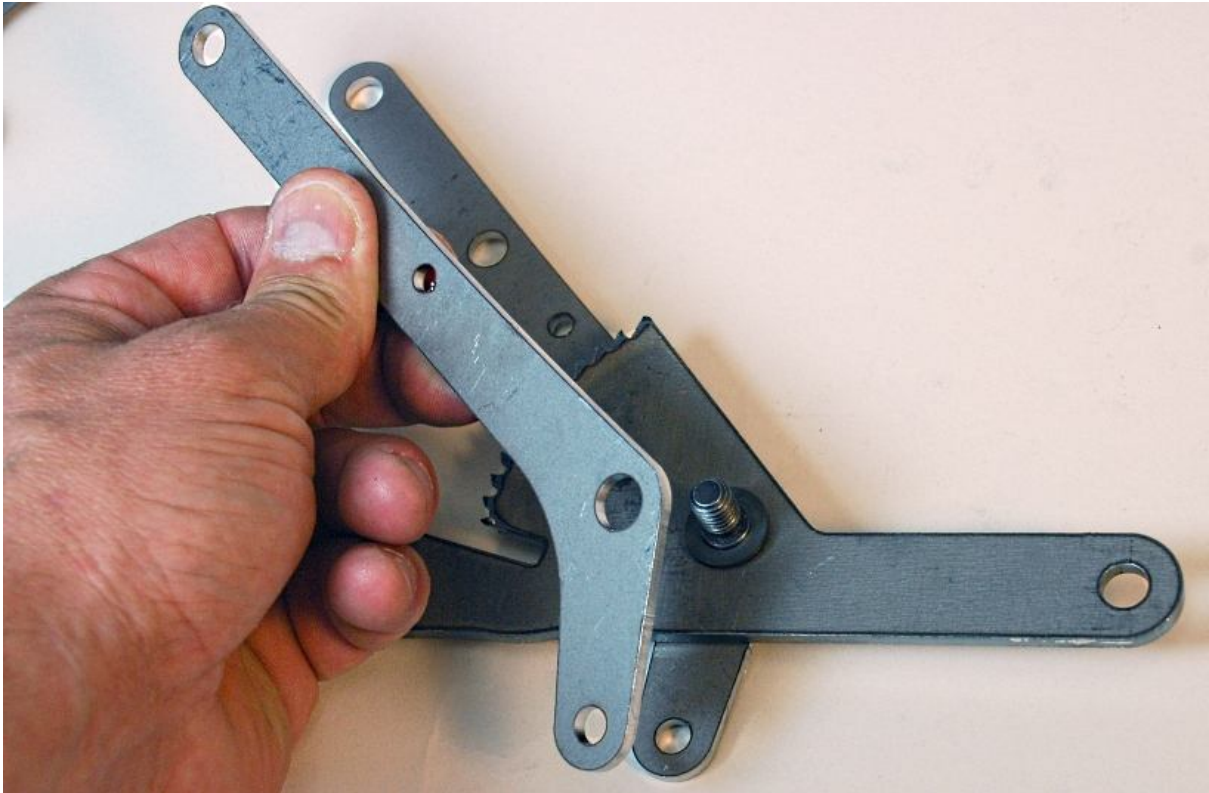
Push the other bushing into the other side of the fixed gear.



From the right side of one of the Handle to ratchet mounts, insert the shoulder bolt through the ratchet mount and then the fixed gear.



Put the other ratchet to handle mount on shoulder bolt from the other side of the fixed gear.



Using a $\frac{3}{16}$ " hex key and $\frac{1}{2}$ " wrench, tighten the shoulder bolt lock nut so that the ratchet to handle mount plates are against the bushings but they can still move up and down. Make sure the ratchet to handle mount plate next to the locknut does not get caught on the edge of the shoulder bolt.



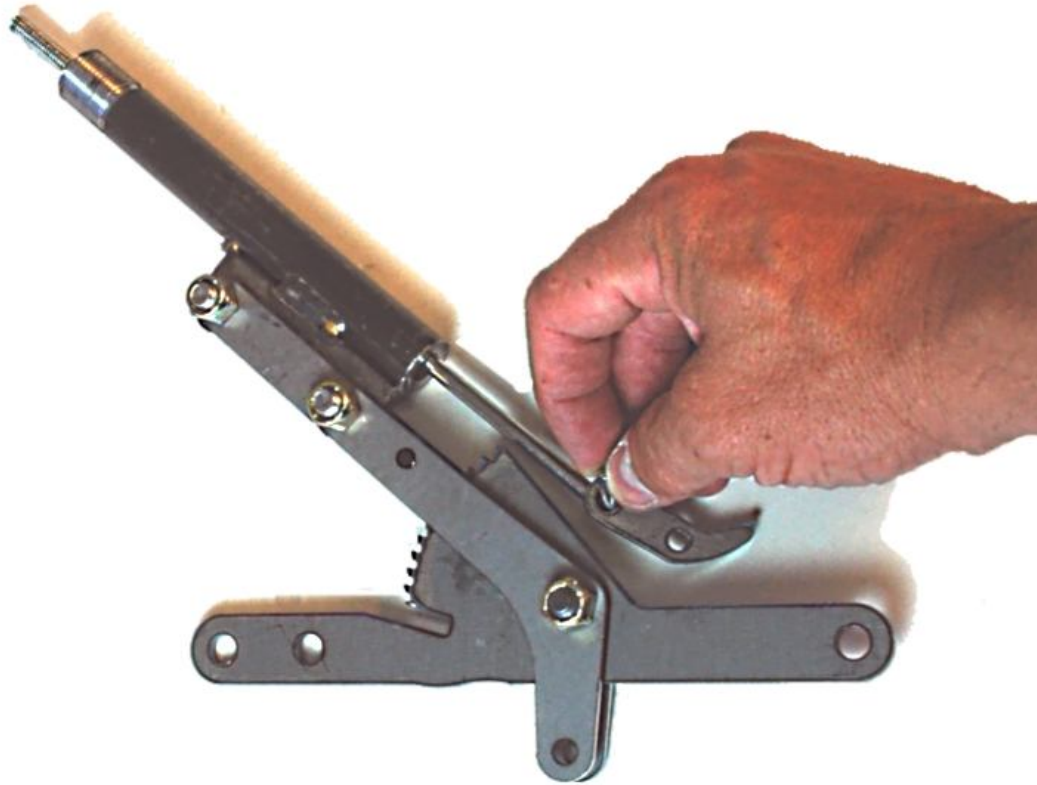
Slide the lower handle between the ratchet to handle mount plates and bolt the three pieces together using the two $\frac{5}{16}$ "x 1" button head screws.



Put the ratchet tooth on the long anchor bolt as shown in the picture below.



Rotate the fixed gear out of the way and pass the anchor bolt up through the lower handle.



Rotate the ratchet tooth between the handle to ratchet mount plates and align the mount holes.



Push the included spring pin through the ratchet mount plates and the ratchet tooth using a pair of channel lock pliers.



Slide the 1" nylon spacer onto the end of the anchor bolt.



👉 There are two nylon spacers included. They provide preload on the spring so there is more force holding the ratchet tooth to the fixed gear and making the release button harder to push. Try using the 1" long spacer first. After the handle is assembled, try the handle and if desired the other 1/2" spacer can be added.

Screw the upper handle onto the lower handle.



Insert the spring into the upper handle over the anchor bolt.



Screw the button onto the end of the anchor bolt.



Screw the male and female rod ends together.



Use a wrench to spread the ears of the ratchet to handle mounts so that the rod end can just slide between them.



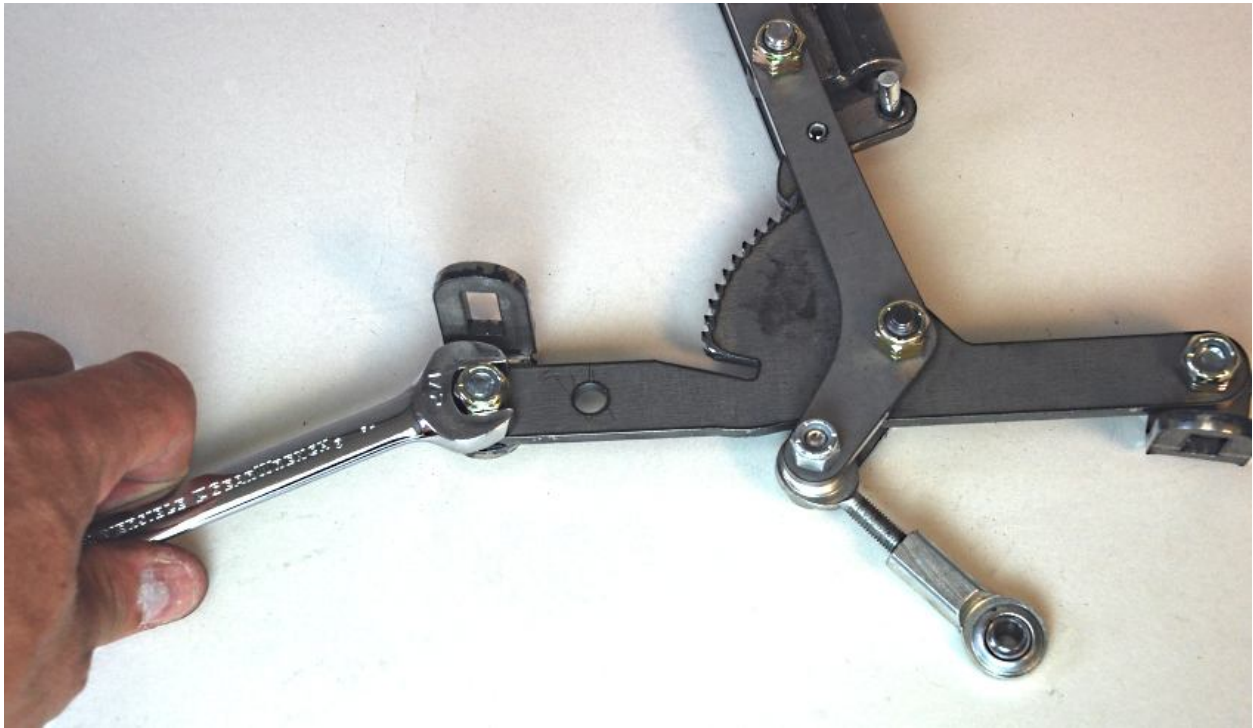
Slide the male rod end between the ratchet to handle mount plates and attach it using the 1/4" flange head bolt and locknut.



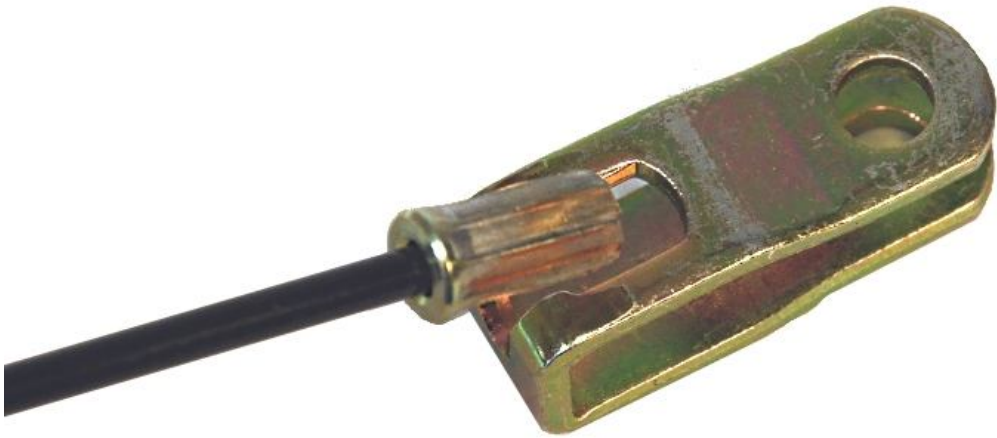
Insert a 5/16" carriage bolt into one of the bent mount brackets so the square shoulder is in the square hole.



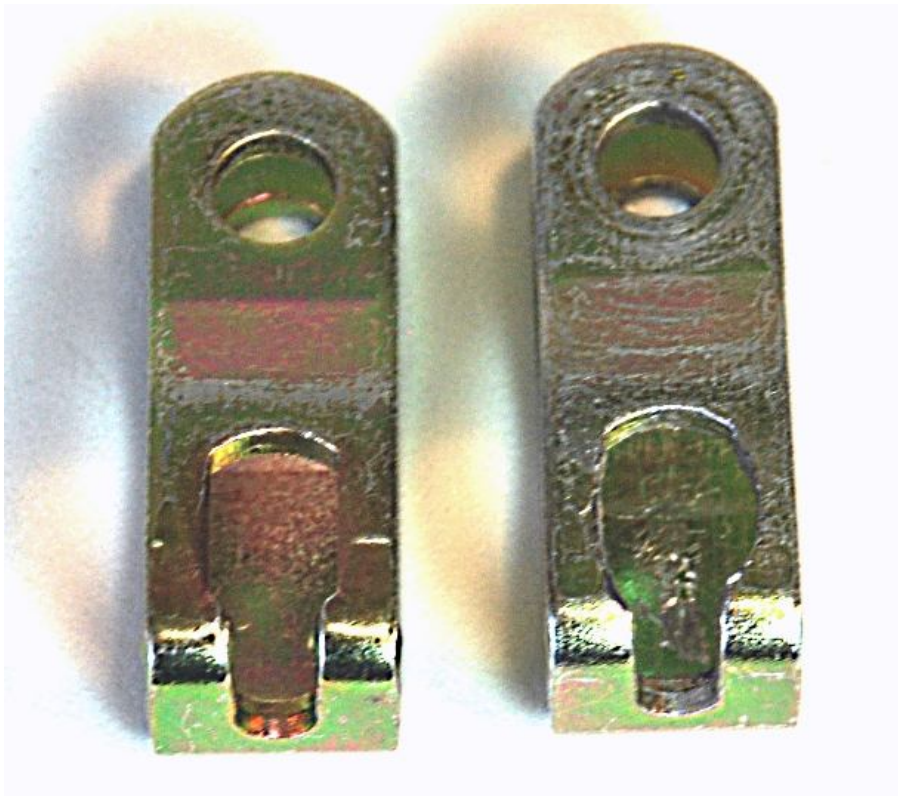
Attach the mount brackets to the fixed gear using a ½” wrench. Leave the locknut slightly loose so positioning can be done on the frame later.

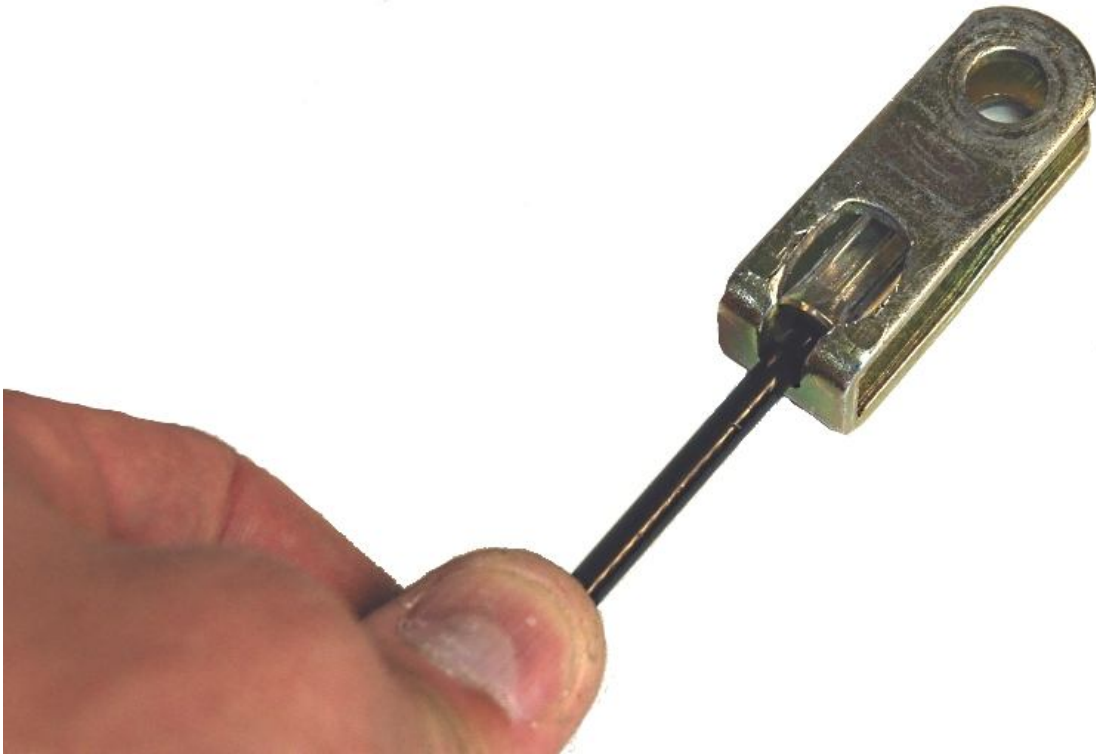


Check the fit of the emergency brake cable end in the brake cable clevis.



If necessary, use a drill bit and drill or a dremel tool to open up the slot slightly.



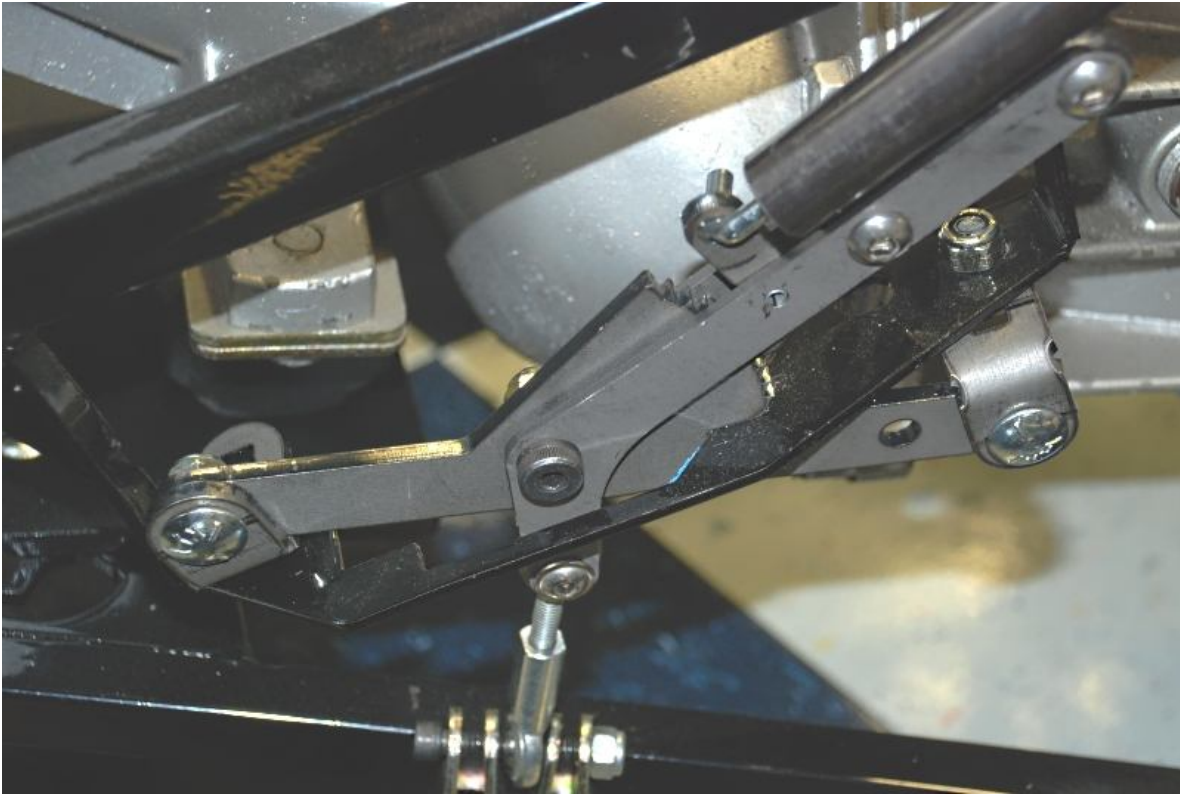


Facing the cable slots towards each other, attach one of the cable clevises to each side of the female rod end using the 1/4" x 1.50" socket head bolt and locknut. Just start the nut for now, do not tighten it.



Attach the handle to the frame using the $\frac{5}{16}$ " carriage bolts. Leave the locknuts loose enough so that the mount bracket can still slide on the frame mount. The front mount bracket goes under the frame bracket while the rear goes on top. The fixed gear straddles the frame mount.

- 👉 This picture is shown without aluminum for easier viewing.
- 👉 For the Coupe, the handle mount brackets would both be flipped down so that it sits on the floor flat.



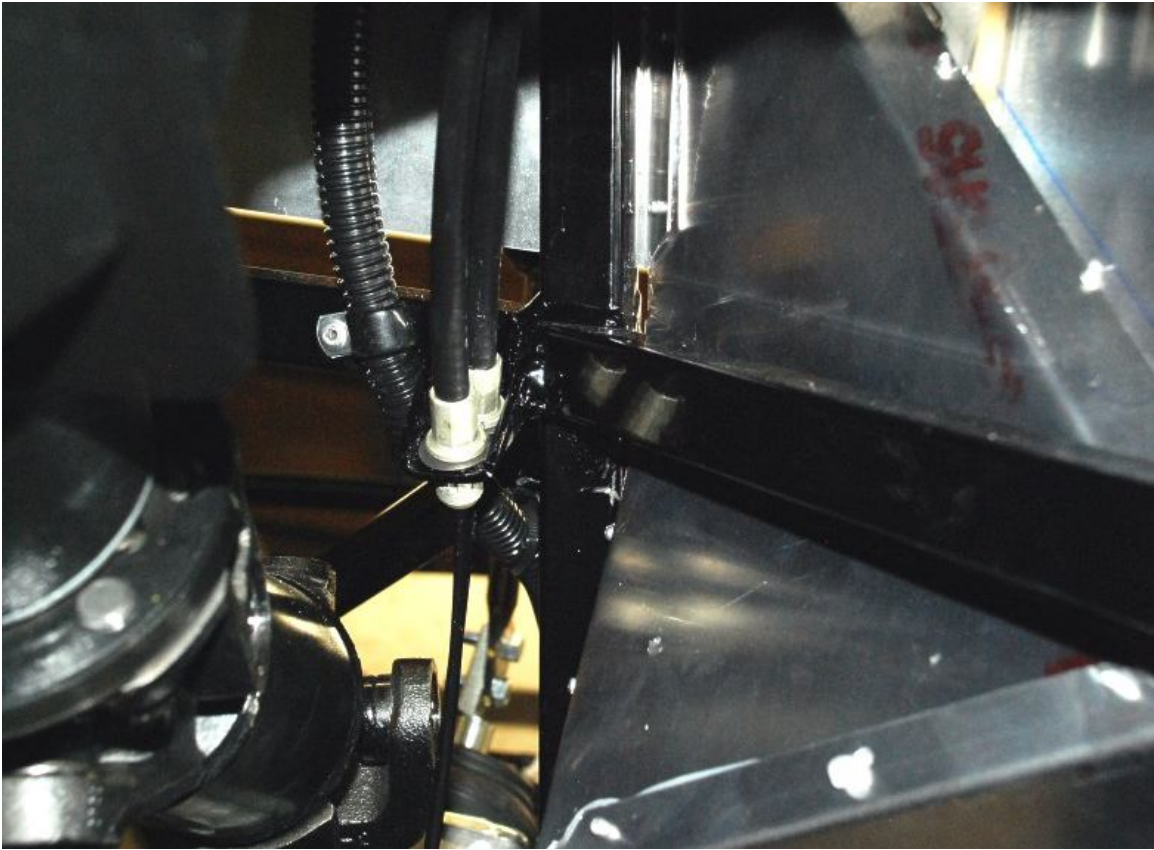
Tighten the mount bracket to fixed gear carriage bolts.



Cables

- 👉 Your E-brake cables should be from the same car as your rear brakes.
- 👉 87-92 Mustang cables or the FFR cables mount to the bracket up near the 2"x 3" tube. 93-04 Mustang cables mount to the bracket near the handle.

For 87-92 and FFR cables route them through the upper bracket in the transmission tunnel until the sheath end clicks in place.

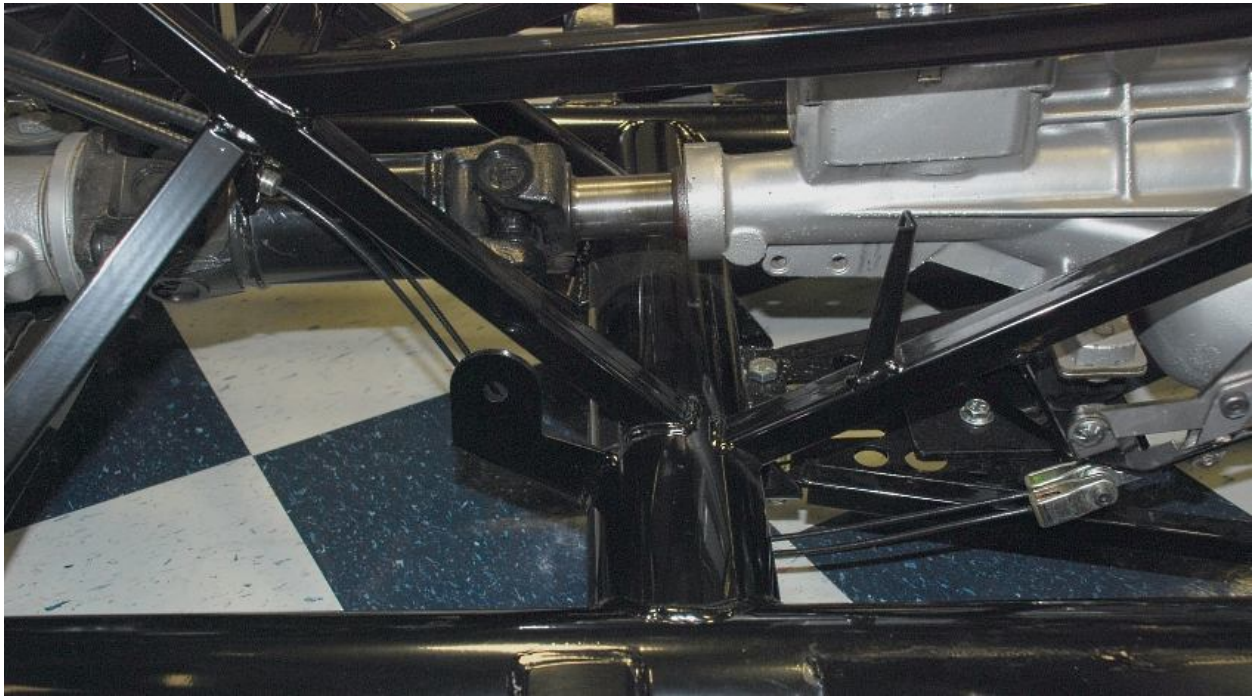


Route the cables back to the calipers and attach. Make sure your routing is out of the way of any moving parts and the cable has slack to move with the axle.



The following pictures are shown without aluminum for easier viewing.

For 87-92 and FFR cables route the inner cable down under the chassis 4" crossmember.



Handle and Cable Adjustment

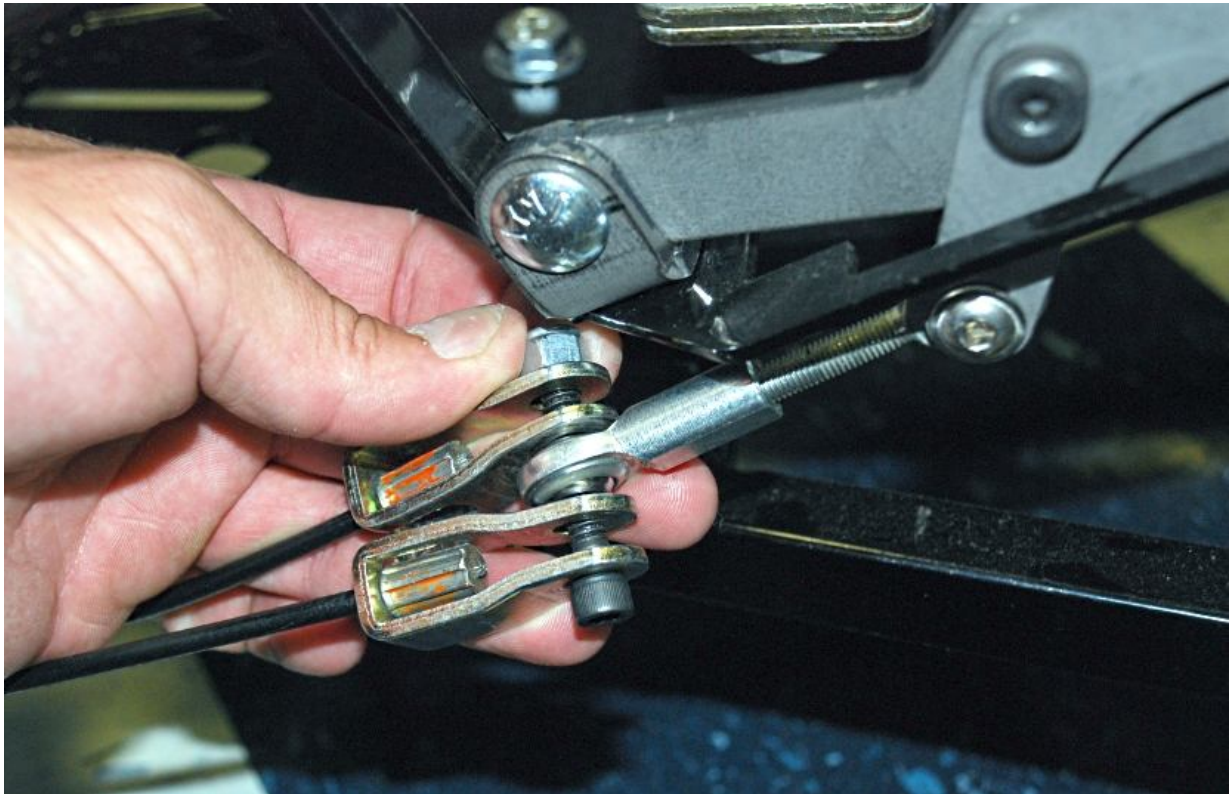
Remove the cable clevises from the rod end and attach them to the cable ends.



Adjust the rod end so that the 1/4" bolt goes through the rod end and both clevises and the cable is tight.



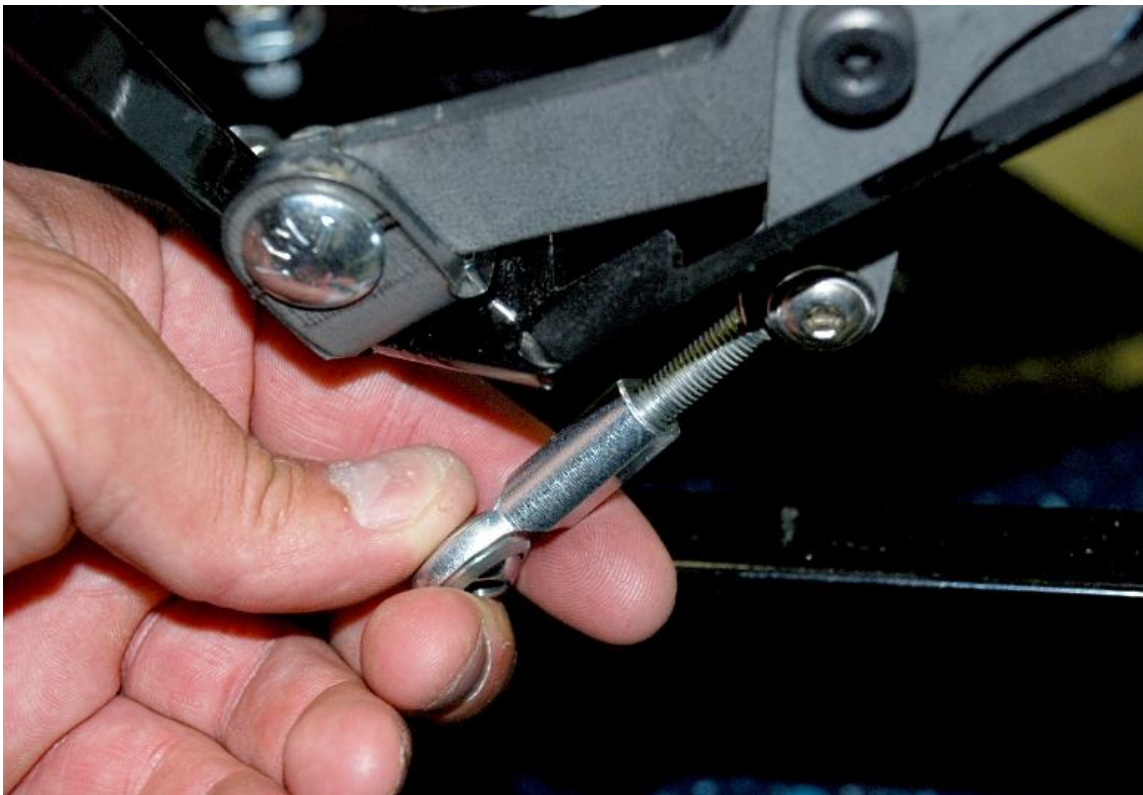
Put the locknut back on the 1/4" bolt hand tight.



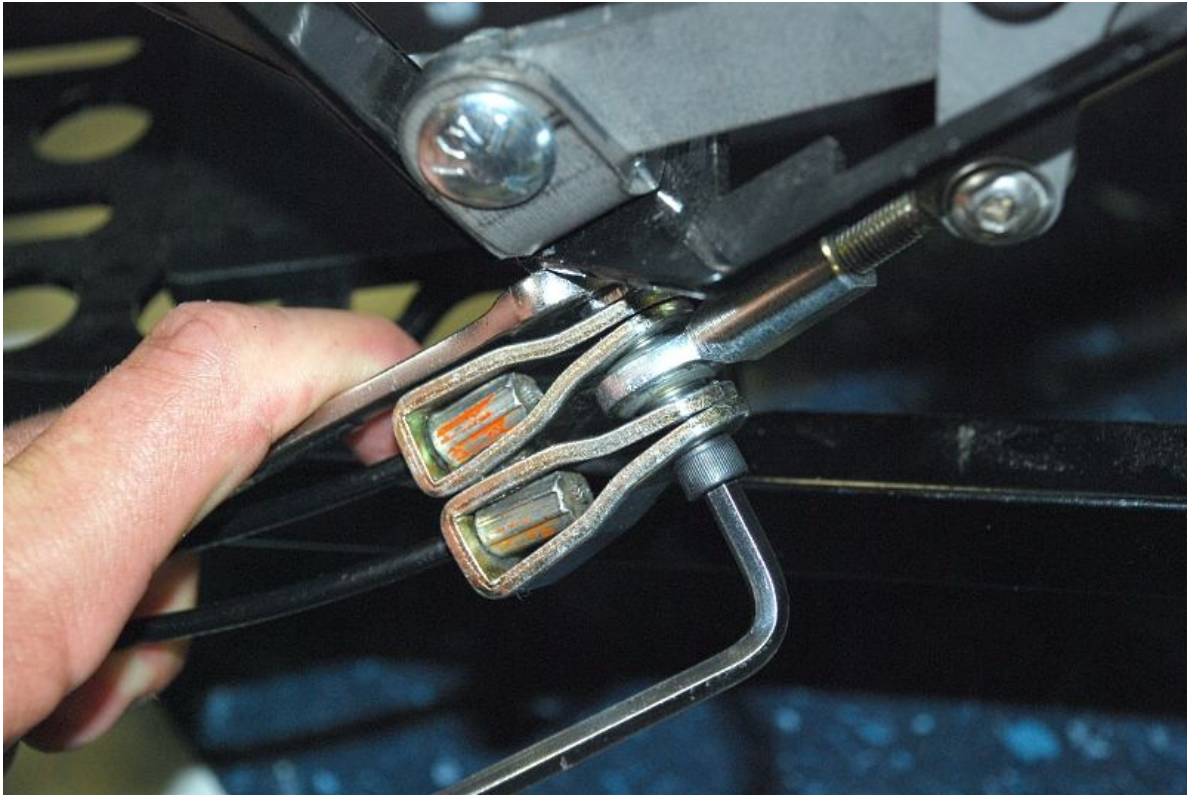
Slowly pull up on the handle to set the brake pads and remove any slack from the brake cables.



Release the brake and if necessary remove the ¼" clevis bolt and readjust the rod end so that the cable is tight.

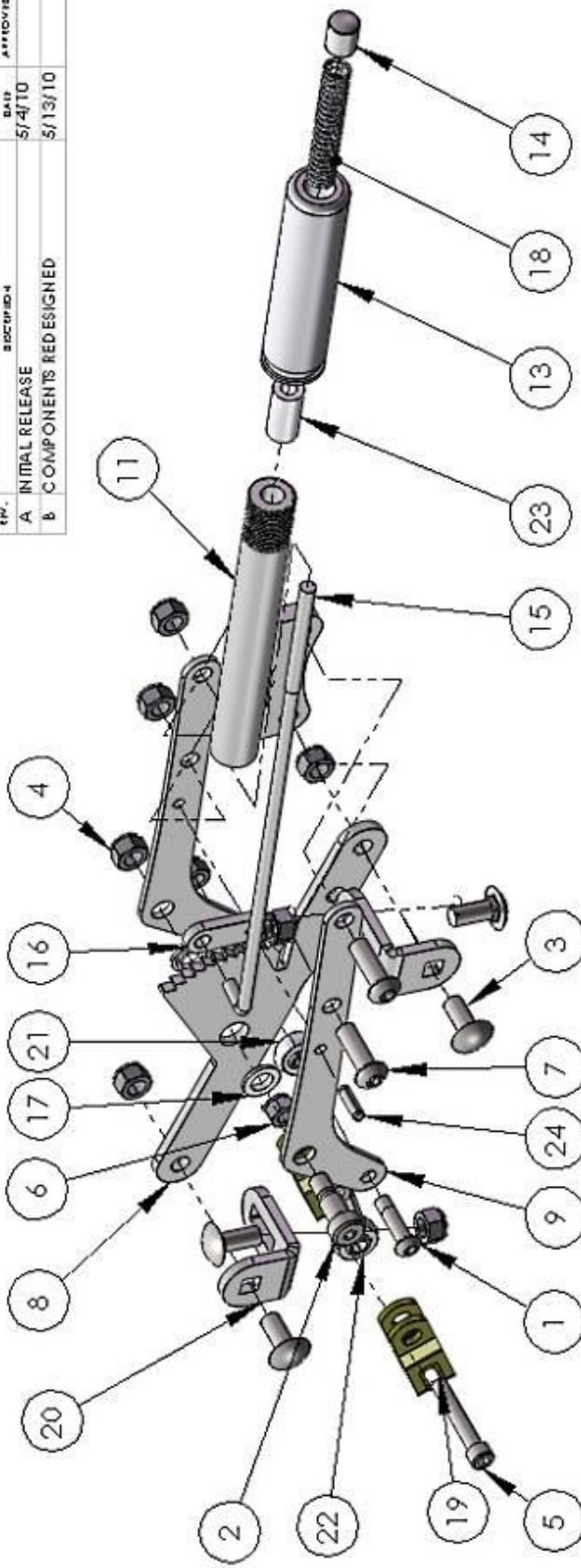


Reinstall the clevises and ¼" bolt then tighten the bolt so that the clevis ends are closed, this will prevent the cable ends from coming out.



Hot Rod Specific Instructions

REV.	DESCRIPTION	DATE	APPROVE
A	INITIAL RELEASE	5/4/10	
B	COMPONENTS REDESIGNED	5/13/10	



ITEM NO.	PART NUMBER	DESCRIPTION	Def ault QTY.
1	10801	ANCHOR BOLT 1/4-20 x 10" 4-25"	1
2	15185	THREAD LENGTH NYLON BUSHING	1
3	NLMS-125C	NYLON INSERT LOCKNUT 5/16-18 UNC	2
4	10802	NYLON INSERT LOCKNUT	2
5	15176	LOWER HANDLE ASSEMBLY	1
6	15169	FIXED WEAR	2
7	15168	HANDLE TO RATCHET MOUNT	2
8	15172	HANDLE GRIP	1
9	15174	RATCHET BUTTON	1
10	15163	RATCHET TOOTH	1
11	15191	2.625" O.D. x 0.60" I.D. COMPRESSION SPRING	2
12	15170	E-BRAKE CABLE CLEVIS	2
13	15177	1/4" MOUNT BRACKET	2
14	15177 - 1	1/4" MALE ROD END	2
15	15180 - 1	1/4" FEMALE ROD END	2
16	16200	5/16-18 x 1.5" U-BOLT	1
17	SHSSCREW0.375x0.5-N	U.S. 0.375" x 0.5" NYLON SPACER	1
18	RHSNBOLT 0.3125-		4
19	18x0.75x0.75-N		1
20	SBHCSCREW0.3125-18x1-HX-N		2
21	SFS0.1875x0.625		2
22	SBHCSCREW0.25-20x1-HX-N		1

Factory Five Racing, Inc.

DATE: 4/26/10

NAME: JI

DRAWN: JI

COMMENTS: 8.12:1 LEVERAGE RATIO

UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN INCHES
 TOLERANCES:
 TWO PLACE DECIMAL ±0.01
 THREE PLACE DECIMAL ±0.005
 FOUR PLACE DECIMAL ±0.001

SCALE: 1:2.5 WEIGHT: SHEET 1 OF 3

REV: **B**

DWG. NO.: **A 15183**

TITLE: E-BRAKE HANDLE

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Attach the handle to the frame using the 5/16" carriage bolts. Leave the locknuts loose enough so that the mount bracket can still slide on the floor.

