## Installation Instructions for PDL3 Shifter and Brake Pedal kit for FC1 Forward Controls

It is highly recommended that you use a thread lock compound such as Loctite on all threads to keep them from vibrating loose.

Please read these instructions **entirely before** starting.

Parts will be referred to by the names & numbers shown here. If you are missing anything please email refinedcycle@gmail.com.



## Components list for the PDL3 Shifter and Brake Pedal kit

1-SLV4

2-not used

3-SLV1

4-5/8x1/2 Bronze Sleeve

5-1/2" Zinc washer

6-3/8" Nylon washer (x2)

7-1/4" Zinc washer

8-5/64x1 Cotter pin

9-5/16x7/8 Clevis pin

10-M6-1.0x25 Bolt

11-3/8-16x2 Button Head Bolt

12-1/2-20x2.25 Bolt

13-M6-1.0 Acorn nut

14-5/16-24 nut (x2)

15-3/8-16 nut

16-Toe peg (x2)

17-Shifter Linkage

18-Shifter Pedal

19-M6-1.0 Spherical Rod End

20-Brake Pedal



**NOTE:** If you are using a 3/8" mounted foot peg, rather than the more typical 1/2" mounted foot peg, part numbers 1 and 12 will be omitted and the parts shown here will replace them for the shifter side.



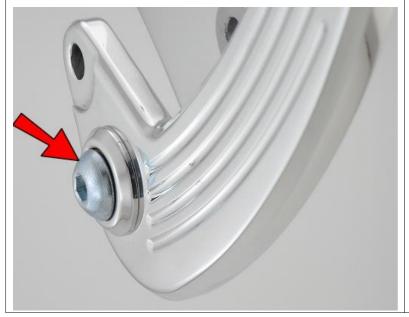
## **Brake side:**

Attach the Toe Pegs to the threaded top hole of the Shifter and Brake Pedals and secure with a 5/16" Nut.



Apply some axle grease or similar, to the SLV1 and 5/8x1/2 Bronze Sleeve and insert them into the Brake Pedal, one inside the other.

Note: You will be replacing the M10 bolt that connected the stock brake pedal with a 3/8" bolt, so the threaded 10mm hole in the FC1-R can be drilled out a little or you can just cross thread the 3/8" bolt through.



Place the 3/8-16x2 Button Head Bolt into the Brake Pedal.



Connect the Brake Pedal to the FC1-R and secure with a 3/8" Nut.



Insert a 5/16x7/8 Clevis Pin into the Brake Pedal, then place a 3/8" Nylon washer onto the Clevis Pin.



Place the Brake Linkage Extension onto the Clevis Pin, then place another 3/8" Nylon washer onto the Clevis Pin, then a 1/4" Zinc washer and secure with a 5/64x1 Cotter Pin.

Next install the foot peg. The angle of the Brake Pedal will be determined by the angle of your foot peg clevis since it will rest against it. Tighten in the position desired.







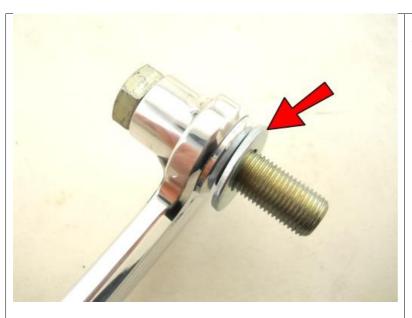
**NOTE:** The threaded 8mm hole at the front of the FC1-L will not be used and can be left open or covered with an M8x1.25 bolt of your choice.

**NOTE:** If you are using a 3/8" mounted foot peg, the shifter will mount much like the brake side, with the alternate hardware arranged as shown here, NOT as shown below with a 1/2" bolt. (Make sure the smaller, steel sleeve is inside the bronze sleeve.)

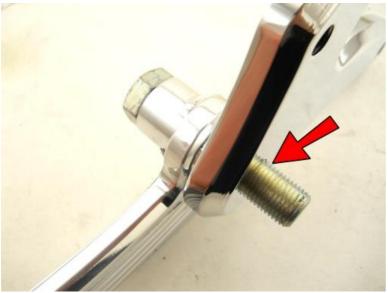
Apply some axle grease or similar, to the SLV4, then insert it into the new Shifter Pedal.



Insert a 1/2-20x2.25 Bolt into the back of the Shifter Pedal.



Place a 1/2" Washer onto the Bolt on the front side of the Shifter Pedal.



Insert the Shifter Pedal assembly into the 1/2" hole in the FC1-L.



Thread a foot peg onto the 1/2-20x2.25 Bolt and tighten in the desired position.



Remove the stock shifter linkage from the ball joint at the shifter arm under the chrome crankcase cover by rotating the linkage clockwise (it is a left hand thread).



Remove the nuts from both ends of the stock linkage and thread them all the way onto the new Shifter Linkage. (Make sure to put the left hand threaded nut onto the correct end.)



Connect the M6-1.0 Spherical Rod End to the right hand threaded end of the Shifter Linkage.

Thread the Shifter Linkage left hand threaded end into the ball joint that you just removed the stock linkage from. (Behind the crankcase cover).



Connect the Rod End to the back side of the Shifter Pedal with an M6-1.0x25 Bolt.



Secure with an M6-1.0 Acorn nut.

Make fine adjustments to the pedal angle by rotating the linkage and then tighten the nut against the Rod End. Make sure enough of the rod is threaded into both ends to allow a secure connection.

If the Shifter Pedal height is not in the desired position you may need to remove the chrome crankcase cover to adjust its angle by removing the shifter arm from the spline and rotating it one or two teeth to get the desired angle for the shifter pedal.

It is recommended that at this point you double check that ALL connections are tight and take the bike for a test ride and make any other adjustments necessary for the optimal position of your shifter and brake pedals.

Enjoy the ride!