

## Installation instructions for PDL4 Brake and Shifter Pedal kit for FC7 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.

This picture shows the components of the PDL4 kit for FC7 Forward Controls. Parts will be referred to by the names & numbers shown here. If you are missing anything please email [sales@refinedcycle.com](mailto:sales@refinedcycle.com).



- 13- SLV1
- 16- Toe Peg (x2)
- 19- Brake Pedal
- 20- Shifter Pedal
- 21- M6-1.0x25 bolt
- 22- 3/8-16x2.25" Button Head Cap Screw
- 23- not used
- 24 - 5/8 OD x 1/2 ID Bronze sleeve (x2)
- 25- 1/4" Zinc Washer
- 26- 5/16" Zinc Washer (x3)
- 27- M6-1.0 Acorn Nut
- 28- 5/16" Nut (x2)
- 29- 3/8" Nut (x3)
- 30- Spherical Rod End

**Note:** If you are installing this PDL4 kit at the same time as the FC7 kit, please disregard some of the steps for removing components of the FC7 kit that you have not yet installed.

Start with the shifter side because you will reuse some parts previously used there.

Remove the 3/8" Nut, the 1/2" Washers, the shifter pedal, the SLV1 and the 3/8-16x2" Socket Head Cap Screw shown in picture A.



**Picture A**

Loosen the nut that secures the Shifter Linkage to the shifter pedal indicated in picture B.



**Picture B**

Twist the pedal to unthread the ball joint from the shifter linkage.

Thread the Spherical Rod End (part#30) onto the shifter linkage. Make sure not to loosen the other end while you do this.

Apply grease to the outside surface of both SLV1's (part# 13) and the inside and outside of both the 5/8x1/2 Bronze Sleeves (part# 24).

Place a SLV1 into a 5/8x1/2 Bronze Sleeve and insert them into the new Brake Pedal (part# 19) and new Shifter Pedal (Part #20) as shown in picture C.



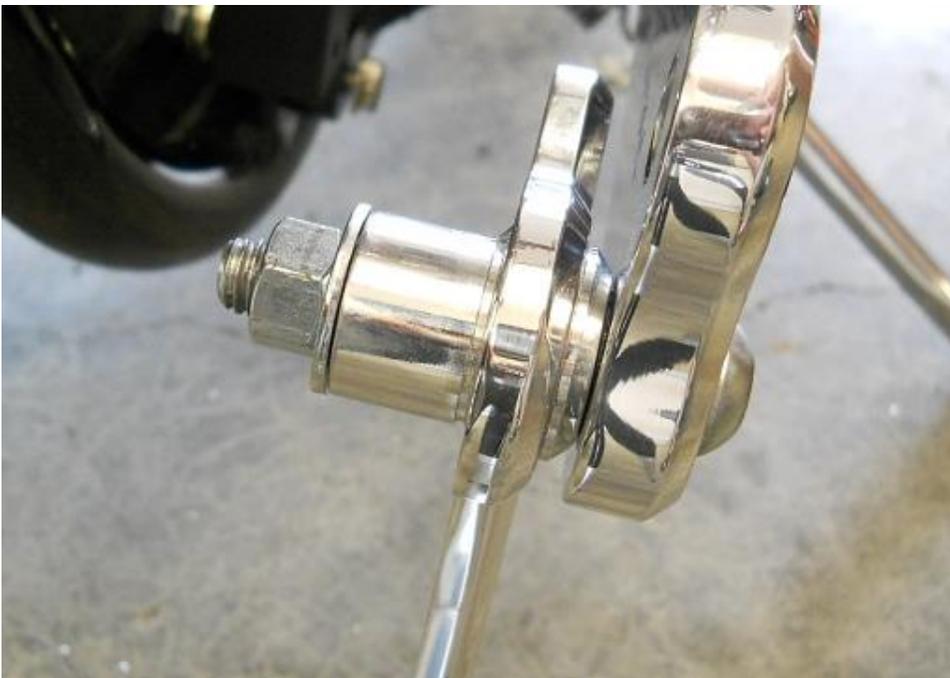
**Picture C**

Attach a Toe Peg (Part #16) to the threaded top hole of the Shifter and Brake Pedals and secure with a 5/16" Nut (Part #28) as shown in picture D.



**Picture D**

Attach the Shifter Pedal to the back of the FC7-L using the 3/8" Nut, 5/16" Washer and 3/8-16x2" Socket Head Cap Screw previously removed from the old shifter pedal as shown in picture E.



**Picture E**

Connect the shifter linkage to the back of the Shifter pedal using an M6-1.0x25 socket head bolt (part# 21) and secure with an M6-1.0 acorn nut (part #27) as shown in picture E2.



**Picture E2**

If the Shifter Pedal position needs adjustment, remove shifter arm from its spline by first removing the bolt that holds it on and then slide it off of the spline. See picture F.

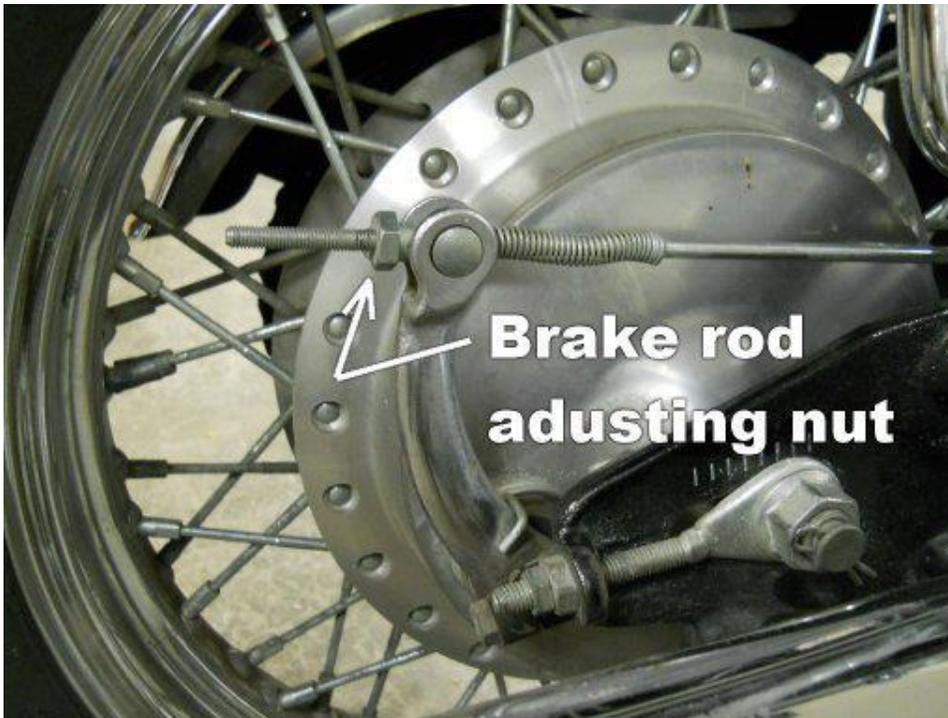


**Picture F**

Hold the Shifter Pedal in the position you want, and slide the shifter arm back onto the spline and secure with the bolt previously removed from the shifter arm. After testing, the position of the pedal can be adjusted by rotating the shifter arm or by threading the Shifter Linkage in or out. After adjustment is finished, make sure to tighten the nuts on both ends of the Shifter Linkage to secure it.

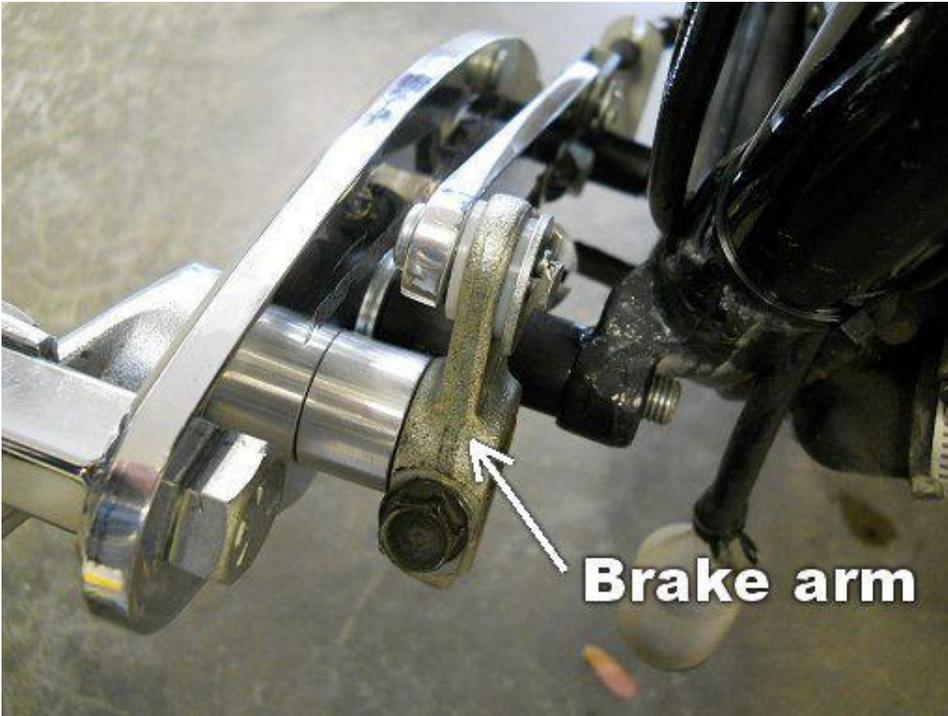
### **Brake side...**

Loosen the brake rod adjusting nut to allow slack in the brake line. See picture G.



**Picture G**

Remove the brake arm bolt. Pull the brake pedal out of the brake arm and aluminum spacer to remove the brake pedal. See picture H.



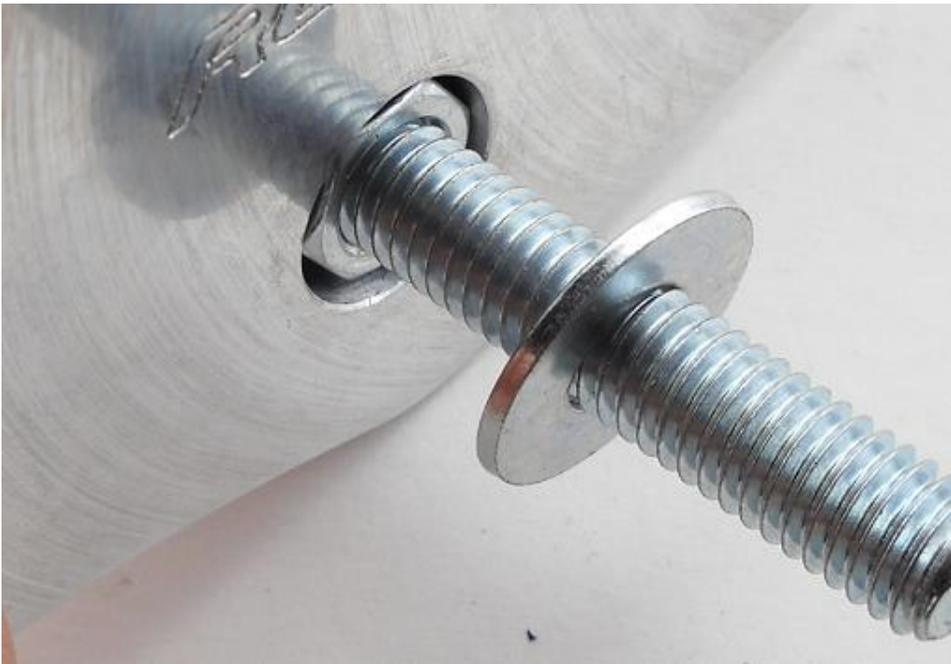
Picture H

Insert a 3/8-16x2.25" Button Head Cap Screw (Part #22) into a 5/16" Zinc Washer and thread a 3/8" Nut all the way on and tighten as shown in picture I. Note: The only function this 3/8" nut serves, is to help center the 3/8-16x2.25" Button Head Cap Screw in the Brake Pedal mounting hole of the FC7-R as shown in picture J.



Picture I

Place the 3/8-16x2.25" Button Head Cap Screw into the front side of the FC7-R and slide a 5/16" Zinc Washer on at the back, as shown in picture J.



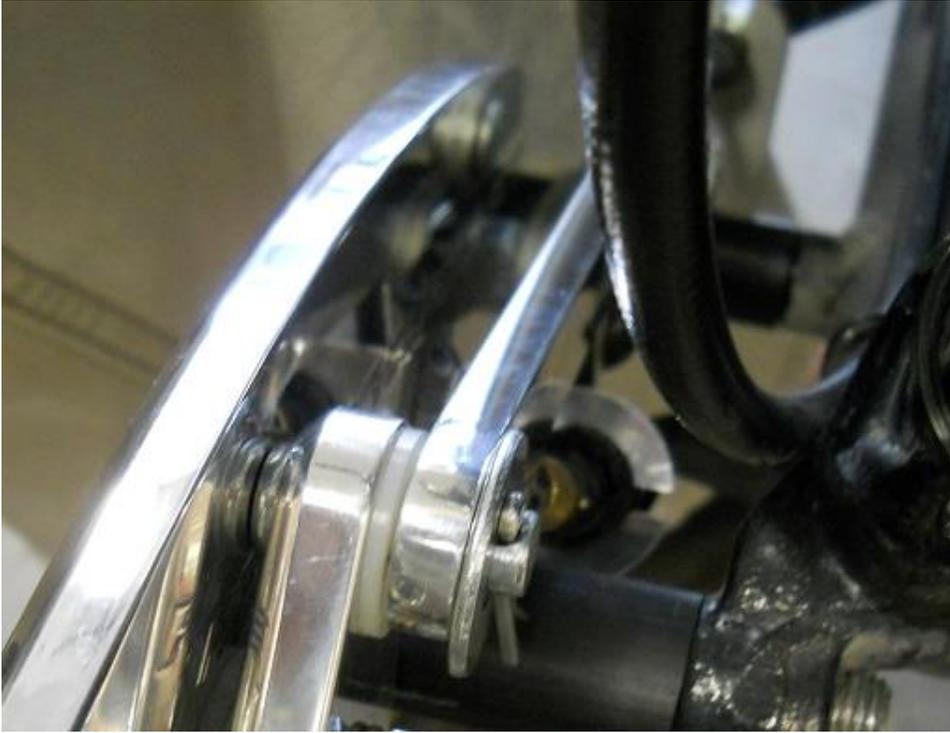
**Picture J**

Insert a 5/16" x 7/8" Clevis Pin into the Brake Pedal and place a 3/8" Nylon Washer onto the Clevis Pin. Slide the Brake Pedal assembly onto the 3/8-16x2.25" Button Head Cap Screw (shown above) and secure with another 5/16" Zinc Washer and 3/8" Nut as shown in picture K.



**Picture K**

Now connect the Brake Linkage to the 5/16" x 7/8" Clevis Pin and secure with a 1/4" Zinc Washer (part# 25) and Cotter Pin as shown in picture L.



**Picture L**

The Brake Pedal should rest against the foot peg bolt head.

Now adjust the brakes by tightening the brake rod adjusting nut. See picture A of the FC7 Forward Control Instructions.

You want enough tension to allow a small, comfortable amount of movement to actuate the brake, but do not over tighten, as this will keep the brakes from releasing fully.

Once the brakes are adjusted correctly, the brake light switch may need to be adjusted. Do this by tightening the adjustment nut shown in picture M.



**Picture M**

Hold the brake light switch in one hand to keep it from turning, while using a wrench to turn the nut. If the spring tension is too tight, your brake light will be on all of the time. If it is too loose, it will not come on when the brake is applied.

To test, turn your key on and observe your brake light while pressing and releasing the brake pedal a few times. If the brake light works as desired, no adjustment is necessary. If it stays on all the time, turn the adjustment wheel to loosen the spring tension on the brake light switch and retry. If it does not come on at all, tighten the tension on the brake light switch. With a little trial and error you will find the right position.

That's it!

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!