

Installation Instructions for FC1 Forward Controls (94-03 Honda Magna)

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.

Below is a picture of the components that you should have in your kit. Parts will be referred to by the names & numbers shown here. If you are missing anything please email sales@refinedcycle.com.



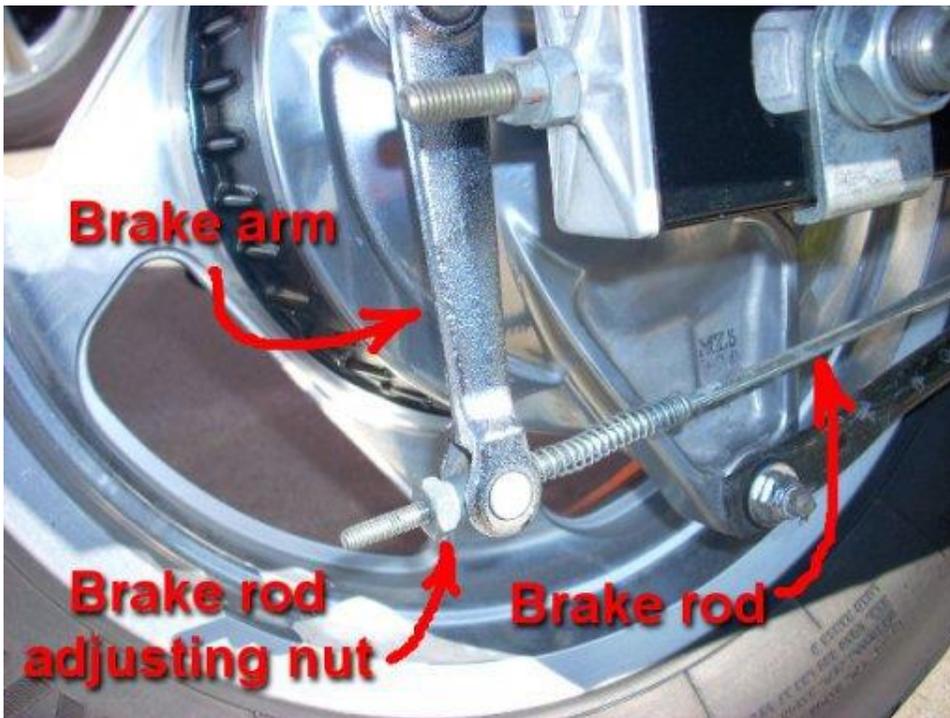
FC1 Components

- 1 - FC1-R
- 2 - FC1-L
- 3 - Brake linkage extension
- 4 - Long spacer (qty. 2)
- 5 - M10-1.5x130 bolt (qty. 2)
- 6 - Shifter linkage extension
- 7 - M8-1.25x25 bolt (Note: This bolt has been changed to a socket head bolt)
- 8 - M8-1.25 lock nut
- 9 - Short spacer
- 10 - M10-1.5 nut

Note: Some of these pictures show the old design FC1, but all the bolt holes and installation are exactly the same.

ALSO Note: If you purchase the PDL3 Pedal Upgrade kit, see the separate installation instructions for that.

Start at the right rear of the motorcycle and loosen the tension on the brake arm by loosening the brake rod adjusting nut all the way to the end of the threaded brake rod. To make this easier you can hold the brake arm forward while turning the brake rod adjusting nut counterclockwise. See Picture A.



Picture A

Move around to the right side to begin removing the stock brake control assembly. Below the exhaust remove the two bolts that hold the control assembly to the frame. This will allow easier access to the fasteners that hold the brake lever and linkage on. See Picture B.



Picture B

Remove the cotter pin and washer from the clevis pin that holds your linkage rod to your brake lever and keep for later use. If the cotter pin is damaged during removal it will need to be replaced.

Remove the brake lever by removing the nut, then the bolt, that holds it on. You will now be able to remove the mount by carefully sliding it forward and rotating it up and around the exhaust.

Re-install the brake lever onto the threaded hole of the FC1-R (part #1) and leave it finger tight for adjustment later.

Loosely tension a jack under the motor to help keep the holes lined up while you remove the 2 motor mount bolts that will hold the FC1-R in place as shown in picture C.



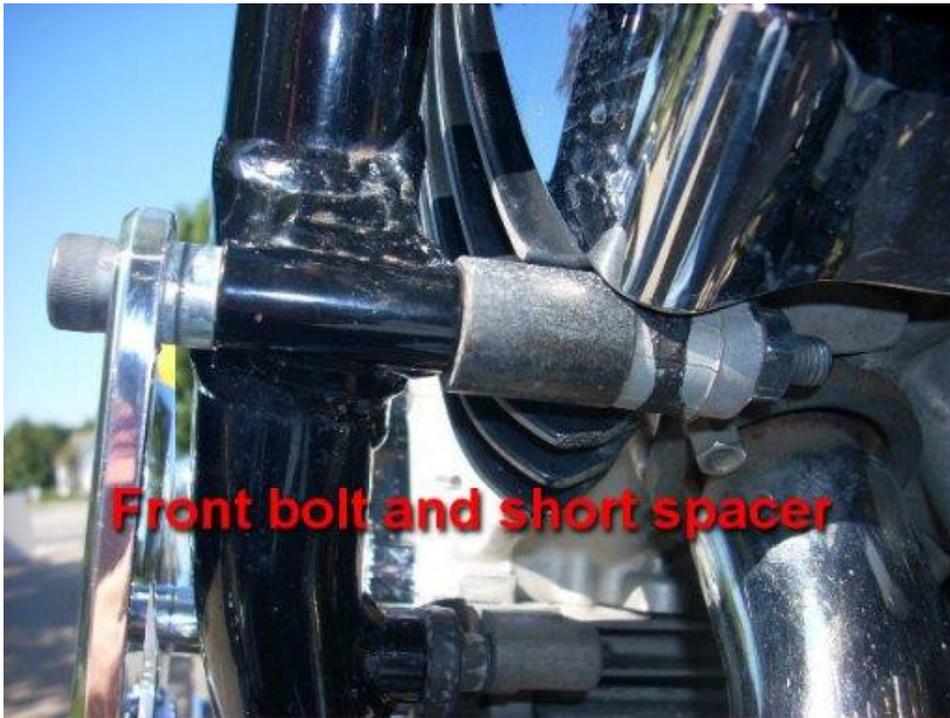
Picture C

The stock bolt that you remove from the front will now be used as the rear. The M10-1.5x130 bolt (part# 5) and M10-1.5 nut (part #10) will now be used on the front. Loosely thread in the rear bolt using the long spacer (part# 4) as shown in picture D.



Picture D

Do the same in the front using the short spacer (part# 9) and keep the stock spacer that was on the front bolt between the frame and the motor in the same place as it was, shown in picture E then tighten these 2 bolts.



Picture E

Attach brake linkage extension (part# 3) to brake linkage rod by inserting one end between the holes where the clevis pin was. Make sure to orient the brake linkage extension so that it angles out as it goes toward the front so that it will line up with the brake lever. Use the M8-1.25x25 bolt (part# 7) and the M8-1.25 lock nut (part #8) to secure as shown in picture F. Holding the linkage away from the engine case, tighten this bolt so that the line of the linkage and linkage extension is a straight line and does not rub your engine case.



Picture F

The brake lever stop is a small bolt at the top of the brake lever that hits your foot peg. Adjust it all the way in to allow your brake pedal to come up as much as possible. To attach the other end of your brake linkage extension, hold the brake lever up as you pull the linkage toward the brake lever to line up the holes. The linkage extension goes on the outside of the brake lever. Insert the clevis pin that you removed earlier and replace the washer and cotter pin on the backside of the brake lever as shown in picture G.



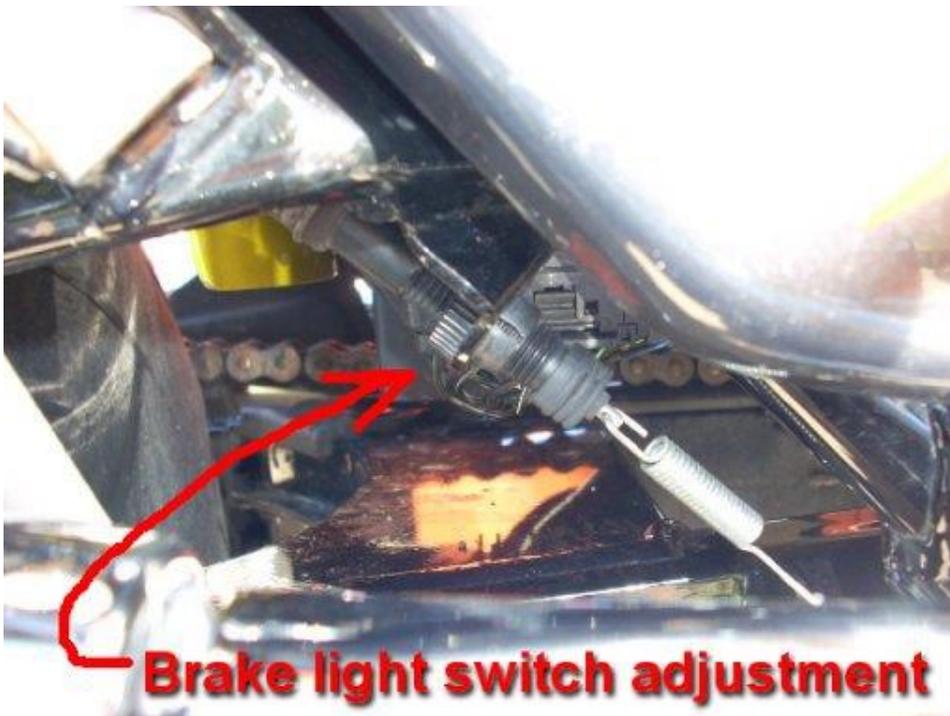
Picture G

Adjust your foot peg angle to the desired position and tighten. Adjust your brake lever to the desired position by turning the stop bolt in or out to the desired position. Tighten all bolts that were previously finger tight.

Go to the rear of the bike where you started and retighten the brake rod adjusting nut back to previous position. You will need to fine tune this position to adjust for the new installation. 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 shown in picture H may need to be adjusted. If the spring tension is too tight, your brake light will be on all the time. If it is too loose, it will not come on when the brake is applied. To test this, turn your key on and observe your brake light while pressing the brake pedal with your foot. Test a few times by pressing and releasing and 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.

This completes the brake side installation. Now move to the other side.



Picture H

In the same way as before, remove the shifter control mount by removing the 2 bolts under the exhaust. Remove the shifter pedal by removing the nut and allen bolt that holds it on and put it in a clean place for reuse.

You may now remove the stock control mount in the same way as before. After the stock mount is out of the way, loosen the 6mm nut that locks the ball joint onto the threaded shifter linkage rod. Now remove the shifter pedal from the threaded rod by rotating the entire shifter pedal with the ball joint. This is a little awkward because you must rotate the pedal around so that it will clear the engine and exhaust as you are turning. Do not allow the shifter linkage rod to turn as you are removing the shifter pedal or you will have to remove the chrome cover at the other end to rethread it in. You may want to use a pair of vice grips to hold that rod from turning as you remove the shifter pedal.

Once the shifter pedal is removed, thread the shifter linkage extension (part# 6) onto the end of the shifter linkage rod. Install the 6mm nut onto the end to use to tighten the shifter pedal.

Install your foot peg on the FC1-L (part# 2) and bolt on as previously instructed for the right side using the supplied nuts, bolts and spacers.

Reattach the shifter pedal onto the extension in the same manner you removed it and connect to the inside of the FC1-L by threading the allen head bolt onto the threaded hole on the FC1-L and reinstall the nut onto this bolt.

If the shifter pedal is in a comfortable position for both down and up shifting, make sure all connections are tightened and you are done. If the pedal is too low or too high, you may make slight adjustments by removing the pedal and turning the ball joint farther onto or farther off of the threaded rod to allow it to rotate up or down as necessary. You may also make slight adjustment by rotating some of the linkage extension out of the coupler nut. The shifter pedal should not be so low that it hit's the FC1-L when downshifting.

That's it!

It is recommended that at this point you take the bike for a test ride and make any fine adjustments necessary for the optimal position of your shifter and brake pedals.

