

Items Supplied >

- 1 – Fi2000 Fuel Injection Module
- 9 – Zip Ties 4"
- 2 – Zip Tie 8"
- 1 – Velcro Patch

Application(s) >

HARLEY SOFTAIL CLOSED LOOP
2018-2023
All models: 107 / 114 Cubic Inch
FXDRS/ FXFB/ FXFBS/ FXBB/ FXBR/ FLDE/
FLFB/ FLFBS/ FLHC/ FLHCS/ FLSB/ FLSL

Instruction Manual >

92-1632CL

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Read all instructions carefully and completely before installing your new Fi2000 module. It is recommended that a qualified mechanic or technician install this product.

1. Remove the seat and rear fuel tank mounting bolt. Loosen front mounting bolt and prop the rear of the fuel tank up approximately 4 inches with a small block.
2. Remove right side cover over ABS control module and battery. Place Fi2000 (Fi) control module between ABS control module if equipped and battery, Figure 1. If no ABS module is present place in front of battery, Figure 2.
3. Route injector connectors between the front and right side of the shock and right upper frame tube. Pull connectors through area between shock bolt and frame. Continue harness forward along right side of frame backbone and oil lines, Figure 3.
4. Locate front and rear engine fuel injector connectors. Press tab on stock female connectors and pull connectors off, be sure to note which one is front and rear, see Figure 4. Depress the clip on the connector and pull the connector free and move it out of the way. **Note:** A pair of needle nose pliers and a long flat blade screwdriver helps with this job. Attach the pair of Fi2000 module's injector plugs labeled "FRONT" to the front injector, make sure it seats all the way on injector with a "click." Take the original female HD connector and insert the corresponding male Fi2000 connector into it. Be sure the connectors fully seat into each other see Figure 4.
5. Repeat installing Fi2000 connectors on rear HD fuel injector being sure the female connector seats on injector and mating connectors are properly mated and seated, see Figure 4.
6. Use (4) small 4" zipties to secure Fi2000 harness to oil lines along right side of upper frame and near stock injector harness underneath tank, see Figure 5. Lower fuel tank back down and reinstall rear tank bolt. Secure to factory torque. Tighten front tank bolt securely also.
7. Route front oxygen sensor harness (the longest supplied harness with one pair of black connectors) down along right side of battery along existing cables and lower right frame tube. Continue routing along lower right frame tube and between clutch cable and existing wire harnesses, Figure 6. Route Fi2000 oxygen sensor connectors to front oxygen sensor on front exhaust headpipe near front master cylinder.
8. Disconnect front oxygen sensor connector by depressing tab on female connector and sliding forward toward front tire. Mate the corresponding male and female stock connectors and Fi2000 connectors. Be sure connectors fully seat when pressed together. Leave a little excess harness slack in Fi harness in O₂ sensor area. Ziptie Fi harness to existing harnesses along lower right frame tube starting from front to rear. Secure in (5) places along entire length traced back to battery area. See Figure 6/7 for ziptie locations.
9. Locate rear O₂ sensor adjacent to battery, Figure 8 for non-ABS bikes, Figure 9 for ABS bikes. Depress clip on O₂ sensor connector and remove. Mate corresponding Fi2000 and stock HD connectors together. Be sure connectors fully seat together.

Continued to next page!

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10. Install Fi2000 ground wire on negative battery post. Ziptie remaining extra harness to main harness and rear O₂ sensor connectors adjacent to battery area, use (2) 8 inch Zipties see Figure 8/9, until all F.I. connections have been verified.
11. Remove the door from the Fi2000 box to expose the LED's. The pot settings on the Fi2000 must be set to match the proper intake and exhaust configuration - Refer to Figure 6 and the **Advanced Tuning** section to determine the proper configuration. Once the proper pot setting have been chosen set the pot dials using a small flat blade screwdriver. Verify the wire connections by (1) turning the ignition on, prior to starting, and see if all three LED's are on steady. If you have no light, your ground connection (BLACK wire) has not made proper contact or the injector connections are not complete. (2) After achieving a steady light from all three LED's, start the motorcycle, wait 15 seconds and let it idle, the green light should now be the only LED on. If all three LED's are still on after start up, verify you have attached the injector connectors correctly. Reattach the door when finished. **Note:** Make sure the ignition is turned off before changing any connection.
12. Once proper Fi2000 operation has been verified, remove the plastic backing from the supplied Velcro strip and apply to the back of the Fi housing. Remove the opposite side plastic backing on Velcro and leave Velcro pieces connected on rear of housing. Tuck the Powrpro housing down between battery and ABS module, see Figure 8 or on non-ABS models adjacent to starter and battery, see Figure 9. Be sure no wires are pinched or bound. Press housing on to desired installation location and be sure Velcro keeps it in place.
13. Reinstall right side cover, be sure bolts are secure. Install seat and attachment screws. Verify all fasteners have been tightened and all zipties have been properly trimmed.

TROUBLE SHOOTING: If you have any problems refer to Step 11 in the main body of the instructions.

ADVANCED TUNING

Your Fi2000 fuel injection module has been tested and preset for best function and rideability on a motorcycle with aftermarket aircleaner and aftermarket performance slip-on mufflers. If your motorcycle has a different intake and exhaust configuration please read below for the appropriate pot setting, and change the pot dials to these settings. Remove the door to expose the pots shown on Page 3. The Fi2000 does have 3 important adjustments that allow you to tune the module for optimum performance, especially if you have performed other changes to your motorcycle. These adjustments also allow you to resolve drivability issues if our stock settings are not exactly right for your bike. Make sure your motorcycle is up to normal operating temperature (15 minutes of riding should be sufficient) before making any adjustments.

GREEN LED POT (left pot) – With the Closed Loop function of this module you do not need to adjust this setting, leave it at 1.0. Without a closed loop system this adjustment would affect idle and cruise fuel. If you had cruising issues, this is where you would try a different setting. Generally, surging and uneven running while cruising is a lean fuel condition, so adding a small increase in fuel by turning this adjustment clockwise with a small flat blade screwdriver a 1/2 of a position would help. The bike would need to be Test-driven to feel an improvement and only the setting would need to be increased until the surge went away. Also, backfiring or popping on trailing throttle is generally a lean symptom (or an exhaust gasket leak). The same small increases as above would be tried just until the backfiring would disappear.

YELLOW LED POT (middle pot) - this adjustment affects acceleration and power fuel. If you have a hesitation or bogging on acceleration, this is where you would try a different setting. Aftermarket air cleaner assemblies generally lean out fuel mixtures, so try small clockwise increases as above until a smooth acceleration returns.

RED LED POT (right pot) - this adjustment is the top end or power fuel adjustment. Just like the main jet in a carburetor, it starts to control fuel as you demand maximum power from your bike and takes over completely above 4000 R.P.M. As performance gains are added to your motorcycle, such as big bore kits, camshafts, flowed cylinder heads, etc., each component will increase the fuel demand of the system. With the red pot turned to its maximum (10) position, the Fi2000 will cope with nearly 100 R.W. horsepower. You can generally, if you are using quality performance engine upgrades, in a sensible combination equate the numbers evenly from 2 up to 10 based on horsepower gains.

TUNING NOTES

Typically full exhaust headpipe systems require one additional increase, however we recommend starting with the settings below, and then adjusting the yellow and red pots, should the engine exhibit lean characteristics.

On high performance motors, slip-on mufflers do not flow well enough and create fuel setting problems and detonation. The installation of a complete exhaust system is recommended.

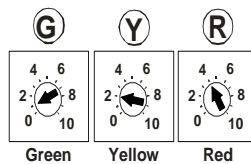
TROUBLE SHOOTING

If you have any problems refer to Step 11 in the main body of the instructions.

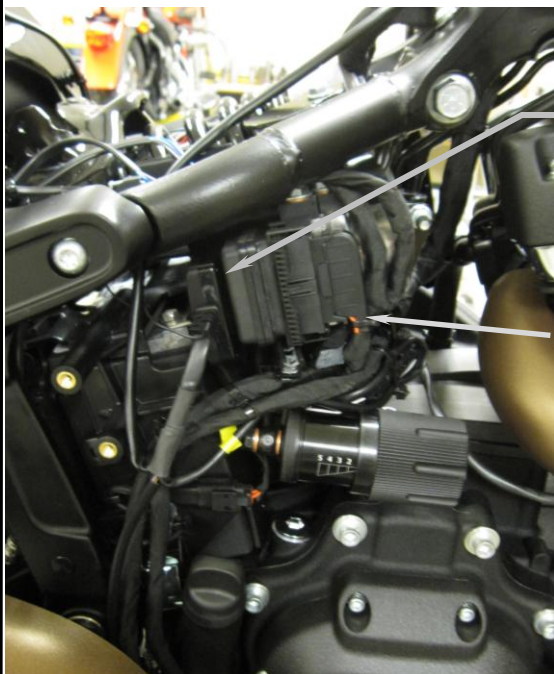
Aftermarket Air Cleaner w/ Slip-on Mufflers

Default Pot Settings:

1.0 2.0 4.0



AS SUPPLIED

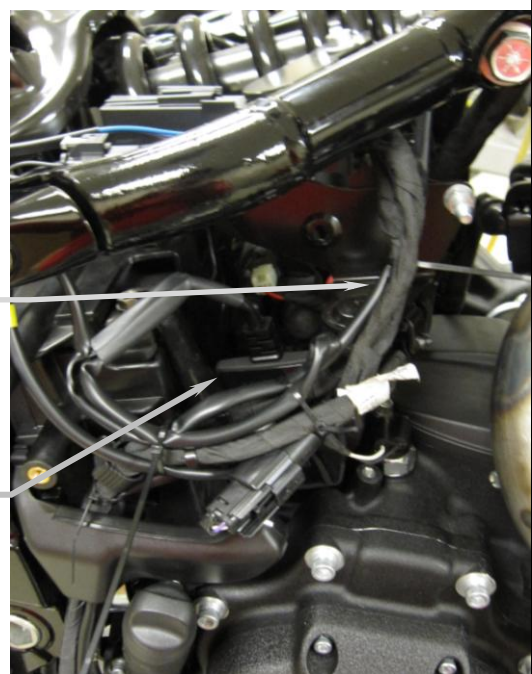


FI MOUNTING LOCATION ON ABS MODELS

HARNESS ROUTING TO INJECTORS UP TOWARDS FRONT OF SHOCK

FI MOUNTING LOCATION ON NON-ABS MODELS

ABS EQUIPPED MODELS
FIGURE 1



NON ABS EQUIPPED MODELS
FIGURE 2

INJECTOR HARNESS
ROUTING ALONG OIL
LINES

INJECTOR HARNESS
ROUTING AROUND
FRONT OF SHOCK /
BETWEEN RIGHT
FRAME TUBE

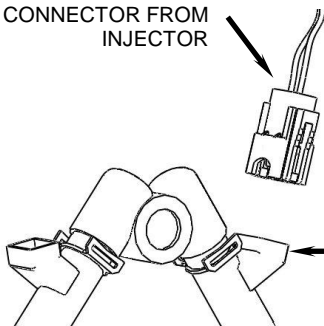


ROUTE HARNESS TO
FUEL INJECTOR
CONNECTOR AREA HERE

INJECTOR
CONNECTORS
BETWEEN
CYLINDERS

FIGURE 3

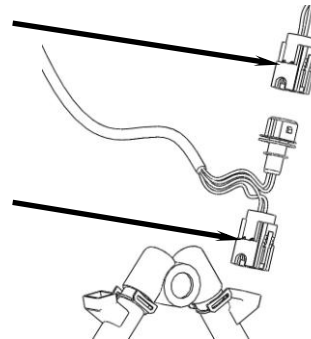
DISCONNECT H.D.
CONNECTOR FROM
INJECTOR



FUEL INJECTORS

H.D. CONNECTOR TO
POWRPRO CONNECTOR

POWRPRO
CONNECTOR TO
INJECTOR



FRONT OF
MOTORCYCLE

FIGURE 4

(REAR INJECTOR CONNECTORS NOT SHOWN)
(ACTUAL INJECTORS MAY VARY FROM PICTURE)

ZIPTIE
LOCATION FOR FUEL
INJECTOR
HARNESS,
TRIM
EXCESS



ZIPTIE
HARNESS TO
OIL LINE HERE

FRONT
INJECTOR
CONNECTORS

REAR
INJECTOR
CONNECTORS

FIGURE 5



ROUTE FRONT O₂ HARNESS ALONG EXISTING WIRE HARNESS; ZIPTIE HARNESS TO EXISTING HARNESS WITH 4" ZIPTIES

FIGURE 6

ROUTE FRONT O₂ HARNESS ALONG FRAME TUBE AND ABOVE CLUTCH CABLE, SECURE TO EXISTING HARNESS WITH ZIPTIE

LOWER LEFT MOTORCYCLE FRAME TUBE



FIGURE 7



ABS EQUIPPED MODELS

FIGURE 8

STOCK REAR O₂ CONNECTORS SECURED WITH TWO 8" ZIPTIES. TRIM ZIPTIES ONCE SECURE

STOCK REAR O₂ CONNECTORS MATED WITH POWERPRO CONNECTORS



NON ABS EQUIPPED MODELS

FIGURE 9

STOCK REAR O₂ CONNECTORS SECURED WITH TWO 8" ZIPTIES. TRIM ZIPTIES ONCE SECURE

STOCK REAR O₂ CONNECTORS MATED WITH POWERPRO CONNECTORS

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