

**MSD Motorcycle Trigger Pickup,
Kawasaki, PN 15-06-4020
Suzuki GSXR 86-88, PN 15-10-4025
Suzuki GS, PN 15-10-4027**

IMPORTANT: Read These Instructions Before Attempting The Installation!

CAUTION: This pickup assembly is for use with an MSD Motorcycle Ignition **only**.
Do Not connect directly to coils or failure of the pickup will result.

Parts Included In This Kit

1 - Trigger Pickup

WARNING: During installation, disconnect the battery cables. When disconnecting the battery, always remove the Negative cable first and install it last.

Note: The FDP Motorcycle Trigger Pickup assembly will eliminate all timing advance functions unless used with a mechanical advance mechanism.

INSTALLATION

Before installing the FDP Motorcycle Trigger Pickup, the stock trigger assembly must be removed. Refer to your motorcycle's Service Manual for the proper procedure for removing these components.

1. Remove the points/trigger cover located on the side of the engine.
2. Remove the bolt and hex washer that holds the mechanical advance assembly (points only) to the engine.
3. Remove the three screws which hold the points/trigger plate to the engine case. Disconnect the wires from the points/trigger where they attach to the OEM harness. Remove the entire points/trigger plate assembly from the engine.
4. Remove the mechanical advance assembly from the engine.
5. Remove the points/rotor cam from the mechanical advance assembly. With everything apart, it is a good idea to place a light coat of oil on the mechanical advance assembly shaft.

Note: The mechanical advance assembly is not required when using the FDP MC-4 Ignition.

6. While holding the assembly with the 1-4 position pointing up, slide the MSD rotor over the shaft. Rotate the rotor so the magnet in the rotor is located on the left side of the 1-4 position. Spread the advance weights, and push the rotor inward so that it engages to the weights. Verify that the rotor rotates freely and the advance weights operate correctly.
7. Install the advance rotor assembly on the engine. Confirm that the pin on the mechanical advance assembly engages to the pin hole on the crankshaft. Install the hex washer and bolt and torque to the manufacturers recommended specification.
8. Using the three screws removed in step 3, install the MSD Trigger Pickup Plate assembly and tighten.
9. Route the trigger pickup wires to the location where they will be attached to the MSD Motorcycle Ignition. The original grommet may be used if cut from the factory harness.

WIRING

Clean, well crimped or soldered connections ensure reliable operation of the ignition system. Before making any connections, inspect all wires and their routing. Figure 1 shows the proper connections for the MSD Trigger Pickup Assembly.

Trigger Pickups	4 Pin Connector
White/Blue	+ 12V to Trigger Pickups
Black	Ground to Trigger Pickups
White (Coil 1)	This wire is used to connect to breaker points or trigger pickups (Dyna* or MSD), electronic ignition amplifier output of the ECU for coil 1. (*Single Magnet Rotor Only.)
Green (Coil 2)	This wire is used to connect to breaker points or trigger pickups (Dyna* or MSD), electronic ignition amplifier output of the ECU for coil 2. (*Single Magnet Rotor Only.)

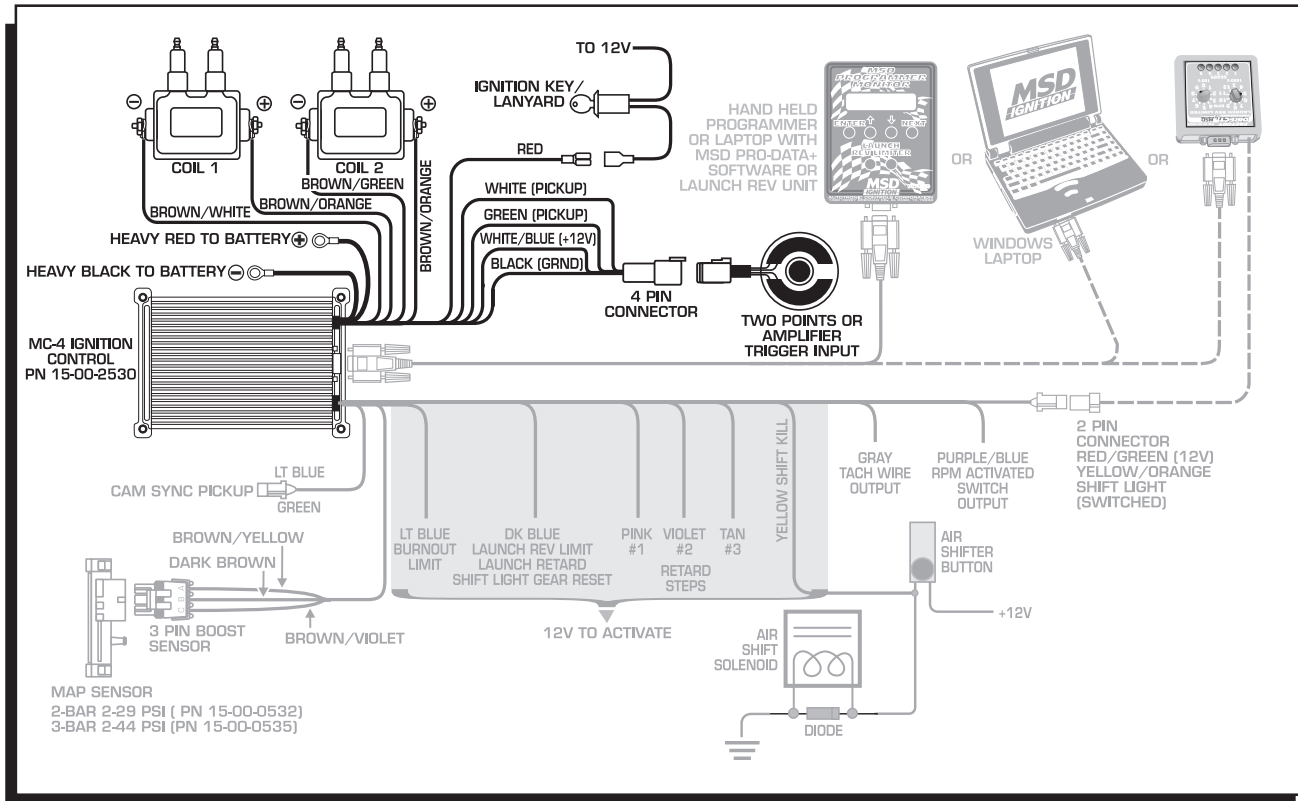


Figure 1 Wiring the MSD Trigger Pickup.

SETTING THE TIMING

The pickup on the left fires cylinders 1 and 4. The right side pickup triggers cylinders 2 and 3. The entire pickup plate assembly can be adjusted +/- 10° or each pickup can be adjusted +/- 3°. Moving the the plate/pickup counterclockwise advances the timing and clockwise retards the timing. All timing adjustments should be made using the advance timing marks which are approximately 1/2 " to the right of the "F" marks on the mechanical advance assembly.

- 1. To time the engine statically (engine not running), remove the spark plugs then connect the plug wires and position the plugs against ground.
- 2. Turn the ignition switch On. Rotate the rotor to the full advanced position (clockwise) and hold. While holding the rotor, place a wrench on the mechanical advance assembly hex washer and slowly rotate it until the LED on the Ignition illuminates. If the engine is timed correctly, the right hand advance mark for cylinder 1-4 should align with the fixed mark on the engine case.
- 3. If the timing mark does not align, loosen the trigger pickup plate retaining screws and rotate the plate/pickup counterclockwise (advance) or clockwise (retard) as required. Retighten and then repeat Step 2.
- 4. After the the timing for the first two cylinders is verified, rotate the rotor 180° to the other pickup and repeat step 2 with the timing marks for cylinders 2 and 3. If the second pickup needs adjustment, loosen the screws holding the pickup and move it counterclockwise or clockwise as needed. Once adjusted, retighten the screws and recheck timing.
- 5. When the timing is confirmed, make sure all of the pickup and plate retaining screws are tight then install the timing cover.

Note: Engine timing can also be checked using a common timing light. Set the timing using the original timing advance marks and check the timing at or above 2500 rpm so full advance is present.

Notes

TECH NOTES

Service

In case of malfunction, this component will be repaired free of charge according to the terms of the warranty. When returning components for service, Proof of Purchase must be supplied for warranty verification. After the warranty period has expired, repair service is charged based on a minimum and maximum charge.

Send the unit prepaid with proof of purchase to the attention of: **Customer Service Department, Factory Direct Performance, 1355 Pullman Dr., El Paso Texas 79936.**

When returning the unit for repair, leave all wires at the length in which you have them installed. Be sure to include a detailed account of any problems experienced, and what components and accessories are installed on the vehicle.

The repaired unit will be returned as soon as possible after receipt, COD/Cashiers Check for any charges. For more information, call the FDP Customer Service Line **(915) 858-3365**. FDP technicians are available from 8:00 a.m. to 5:00 p.m. Monday - Friday (Mountain Time).

Limited Warranty

Factory Direct Performance warrants this product to be free from defects in material and workmanship under its intended normal use* and if properly installed, for a period of one year from the date of original purchase. If found to be defective as mentioned above, it will be repaired or replaced at the option of Factory Direct Performance. Any item that is covered under this warranty will be returned free of charge through standard shipping methods. If faster service is required the customer has the option of paying for this service.

This shall constitute the sole remedy of the purchaser and the sole liability of Factory Direct Performance. To the extent permitted by law, the foregoing is exclusive and in lieu of all other warranties or representations whether expressed or implied, including any implied warranty of merchantability or fitness. In no event shall Factory Direct Performance or its suppliers be liable for special or consequential damages.

*Intended normal use means that this item is being used as was originally intended and for the original application as sold by Factory Direct Performance. Any modifications to this item or if it is used on an application other than what Factory Direct Performance markets the product, the warranty will be void. It is the sole responsibility of the customer to determine that this item will work for the application they are intending. Factory Direct Performance will accept no liability for custom applications.