

MSD **IGNITION** **INSTALLATION INSTRUCTIONS**

MSD SB6 Programmable Ignition for the Kawasaki ZX-14 PN 4219

Parts Included:

1 - Ignition

1 - Wiring Harness

1 - Parts Bag

1 - CD ROM

WARNING: When installing the SB6, disconnect the battery cables. When disconnecting, always remove the negative cable first and re-install it last.

Note: It is recommended to have the Service Manual available to verify correct panel removal and wiring since models can vary by year. It is recommended to contact the MSD Technical Help Desk when programming, 888-258-3835. The software is also available on the website at www.msdpowersports.com.

These instructions detail the installation and wiring process of the ignition. Details in programming the SB6 Ignition are provided on the supplied CD in the Help menu or with the Programming Instructions.

DISASSEMBLY

1. Remove dash screws A, B and C on left and right side of the bike then remove dash cover assembly (Figure 1).
2. Remove panel's screws D and E on left and right side of bike. Gently remove the side covers (Figure 1).

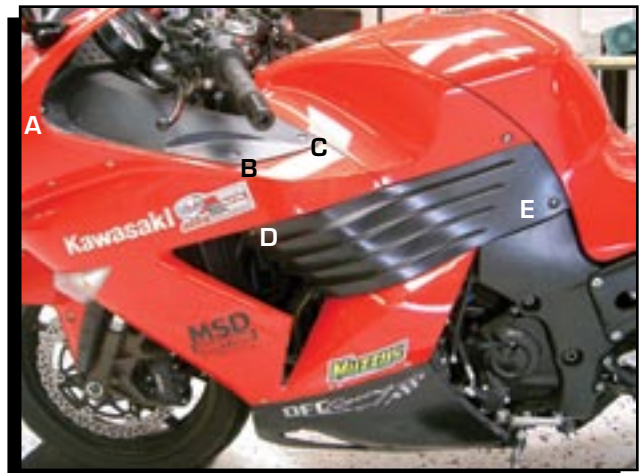


Figure 1 Removing the Dash Screws and Cover.

3. Use care to remove the tank cover. Carefully lift the front tabs on both sides and slide the cover forward. Once the tabs have cleared, lift the cover off (Figure 2).

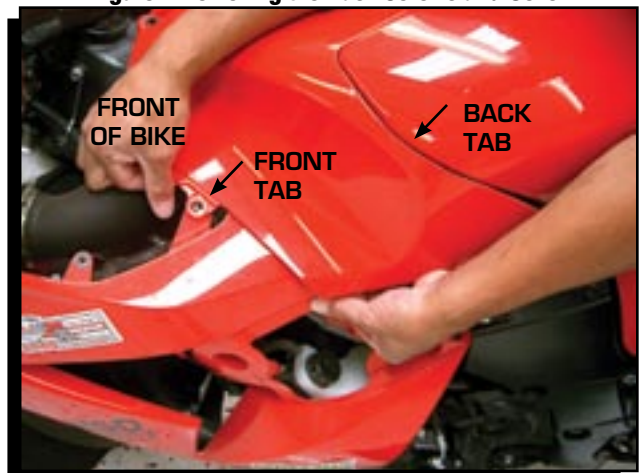


Figure 2 Removing the Tank Cover.

4. Remove the plastic rivet located on the bottom cover behind the front wheel (Figure 3). This will loosen the left and right side panels. Then remove the two plastic rivets under the headlight to remove the panels (Figure 4).



Figure 3 Bottom Cover.



Figure 4 Removing the Headlight Panels.

5. Lift the panel tab over the boss to release panel (Figure 5).

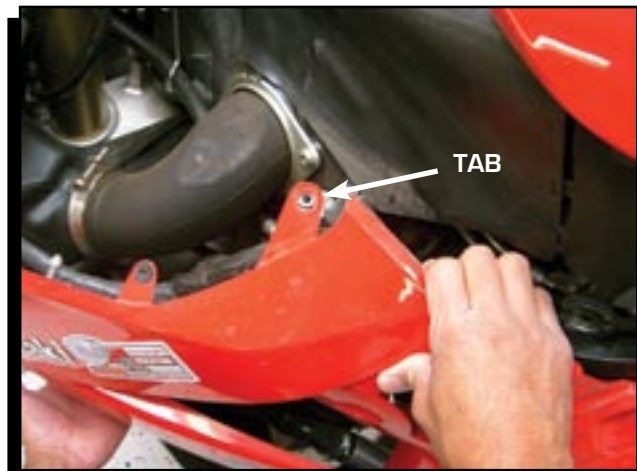


Figure 5 Panel Removal.

6. Before removing the side panels, disconnect the turn signal connector (Figure 6). Slide the panels down to remove.

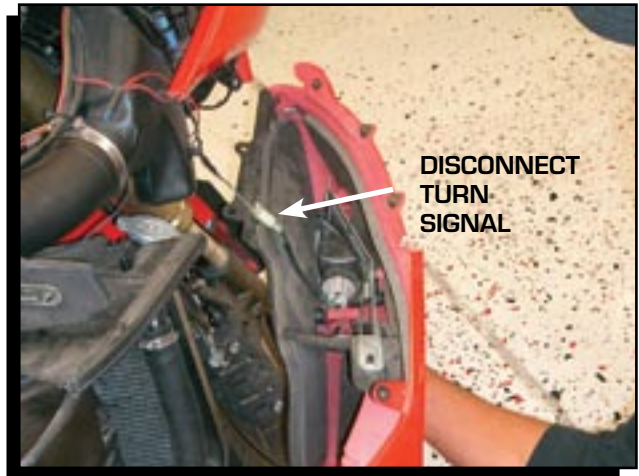


Figure 6 Disconnecting the Turn Signal.

7. The front of the gas tank needs to be propped up to access wiring. Remove the four 10mm bolts (Figure 7). Note that the tank does not have to be removed. It can be propped up to gain access to the harness.

With the panels removed and the tank propped up, the installation can begin. Page 4 shows all of the wiring of the MSD SB6. The unit can be mounted with Velcro or secured under the seat.

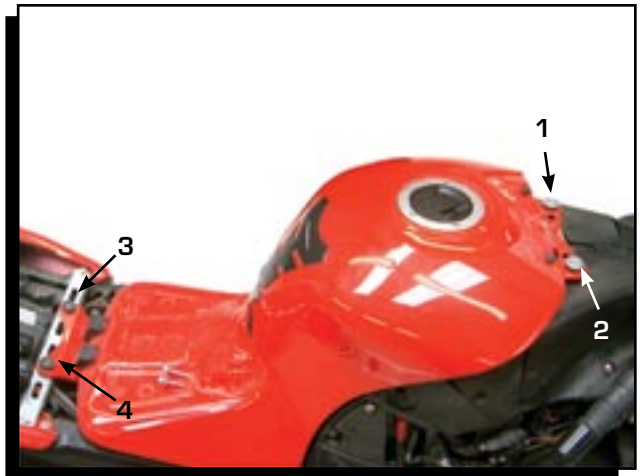


Figure 7 Prop the Gas Tank Up.

PIN LOCATION		WIRING			
Black	11	Connect to Ground.			
Red/Black	16	Connect to the factory speed Sensor Yellow wire.			
Gray	22	Gear Position Sensor wire. Splice into the factory Red/Green wire.			
Crank Sensor Connectors, 2-pin					
Red	1	Crankshaft Sensor positive.			
Black	14	Crankshaft Sensor negative.			
Input		Coil Connectors, 6-Pin		Output	
Green	2	Coil 1 input.	Black/Orange	25	Coil 1 Trigger.
White	7	Coil 2 input.	Black/White	26	Coil 2 Trigger.
Yellow	4	Coil 3 input.	Black/Yellow	13	Coil 3 Trigger.
Violet	20	Coil 4 input.	Black/Red	9	Coil 4 Trigger.
Red	8	12 volts.	Red	8	12 volts.
Accessories					
Blue	17	2-Step. Activates the MSD launch rpm setting when grounded. Connects to the clutch switch Black wire.			
Brown	15	Step Retard. When connected to 12 volts, the timing will retard.			
Orange	3	Shift Light. Provides 12 volts to activate a shift light.			
Yellow/Black	18	Shift Kill. When connected to ground the ignition output is disabled.			
Red	5	0-5 Volt Sensor Input. Connect to any sensor that outputs a 0-5 volt signal.			

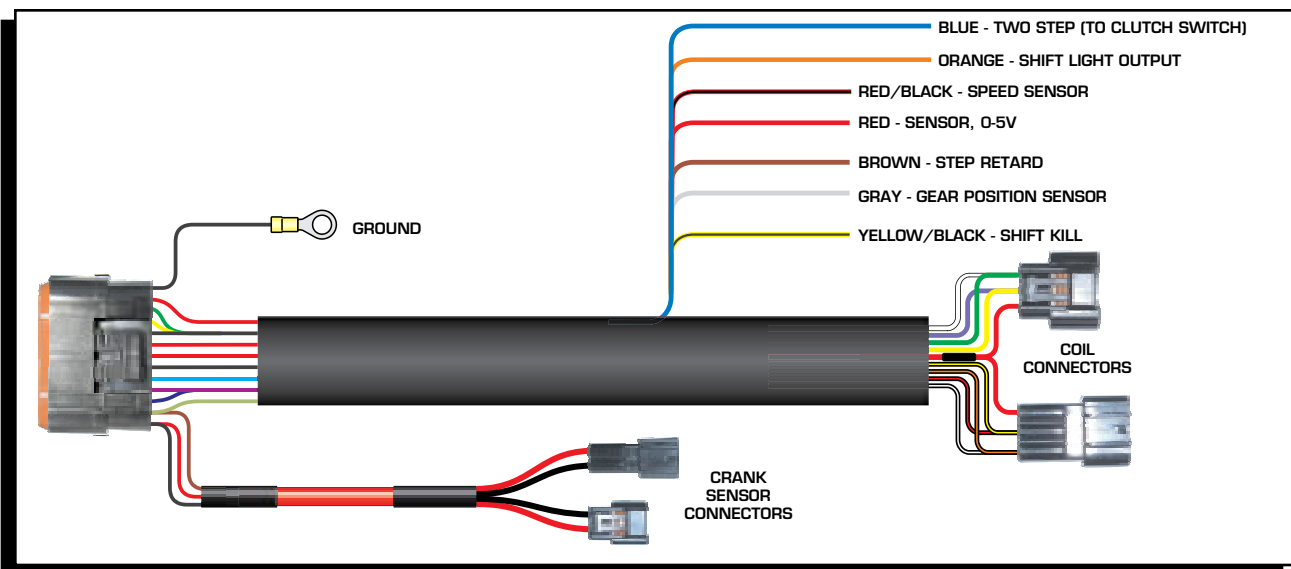
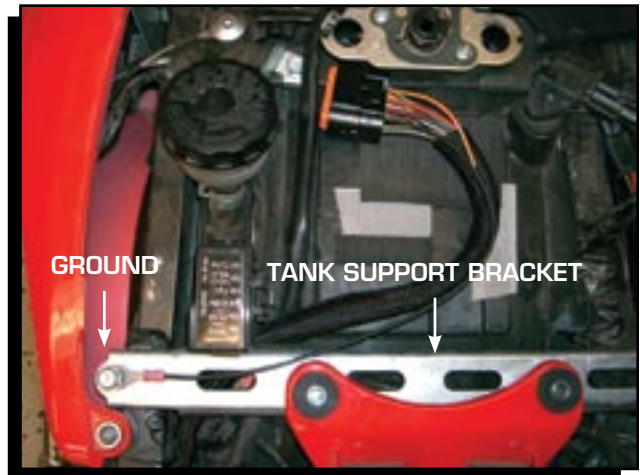


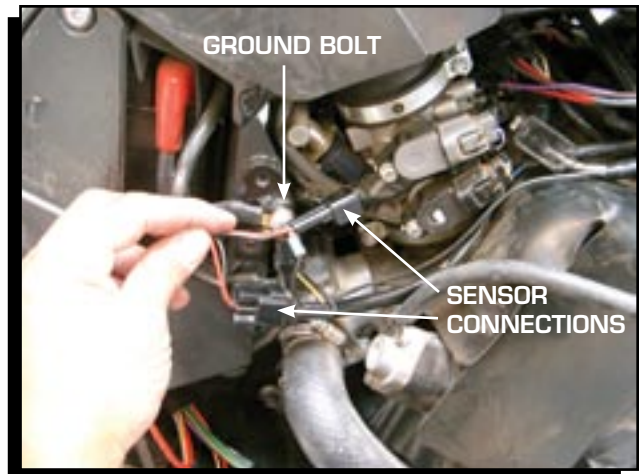
Figure 8 Wiring of the SB6 for the Kawasaki ZX-14.

INSTALLATION

1. The MSD unit can be secured with a strap or Velcro® under the seat for easy access. Route the harness below the tank support bracket. Connect the ground eyelet to the bracket (Figure 9).

**Figure 9 Grounding.**

2. Locate the OEM Crank connectors on the right side of the bike, behind the throttle bodies (parallel to the ground bolt). Connect the MSD harness inline (Figure 10).

**Figure 10 Crank Position Connection.**

3. Locate the OEM 6-pin connectors on the left side of the bike. Remove the bracket bolt to access the connectors. Plug the MSD harness inline to the connectors (Figure 11 and 12). Reinstall the coil connector bolt.



Figure 11 Coil Connector Location.



Figure 12 Coil Connections.

4. Locate the Gray 4-pin connector on the left side of the bike. Using the supplied splice connector, splice the Gray MSD wire into the Red/Green wire of the factory Gear Position Sensor (Figure 13).

See how to properly use the Wire Taps in Figure 15.

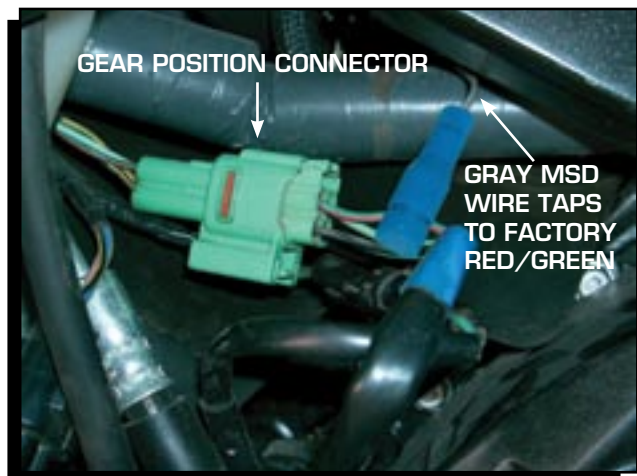


Figure 13 Splicing into the Gear Position Sensor.

5. Locate the 3-pin Black connector of the Speed Sensor on the left side of the bike. Splice the Red/Black wire of the MSD to Yellow factory wire (Figure 14).

This completes the wiring and installation of the SB6. To start the engine, it is recommended to position the rotary switch to position 0.

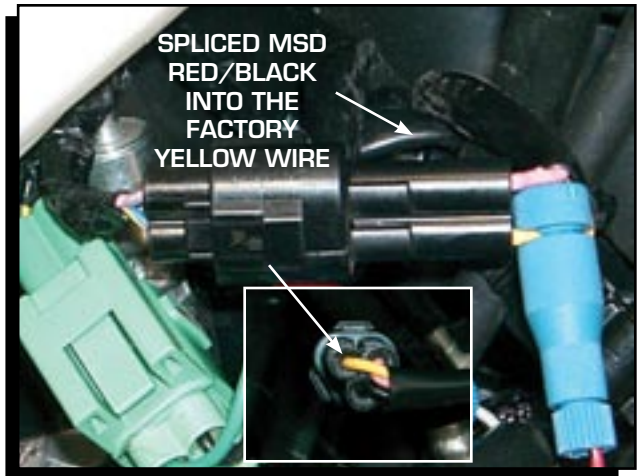


Figure 14 Splicing into the Speed Sensor Wiring.

WIRE TAP INSTALLATION

1. Insert male end cup into wire to be spliced.
3. Hand tighten barrel into male end cup.
3. Strip wire approximately 3/8" (10mm).
4. Insert wire into male end exposing only bare wire.
5. Hand tighten male end to barrel.

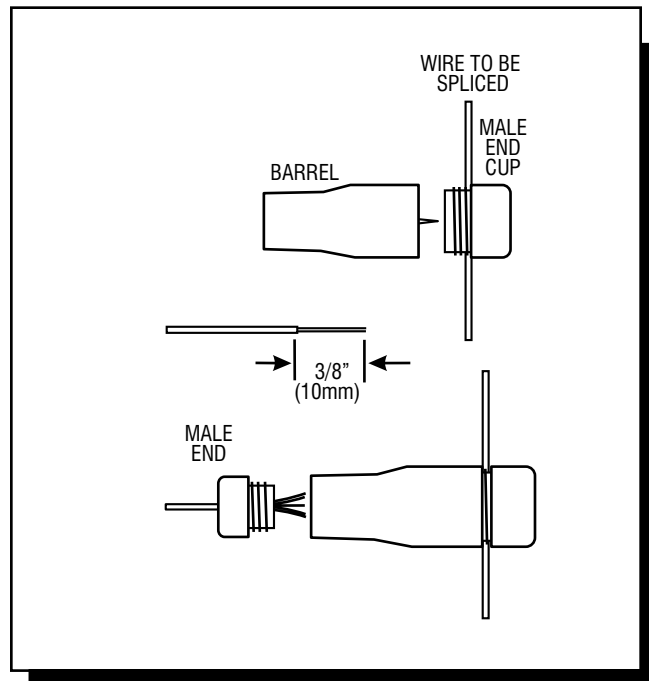


Figure 15 Wire Tap.

TECH NOTES
