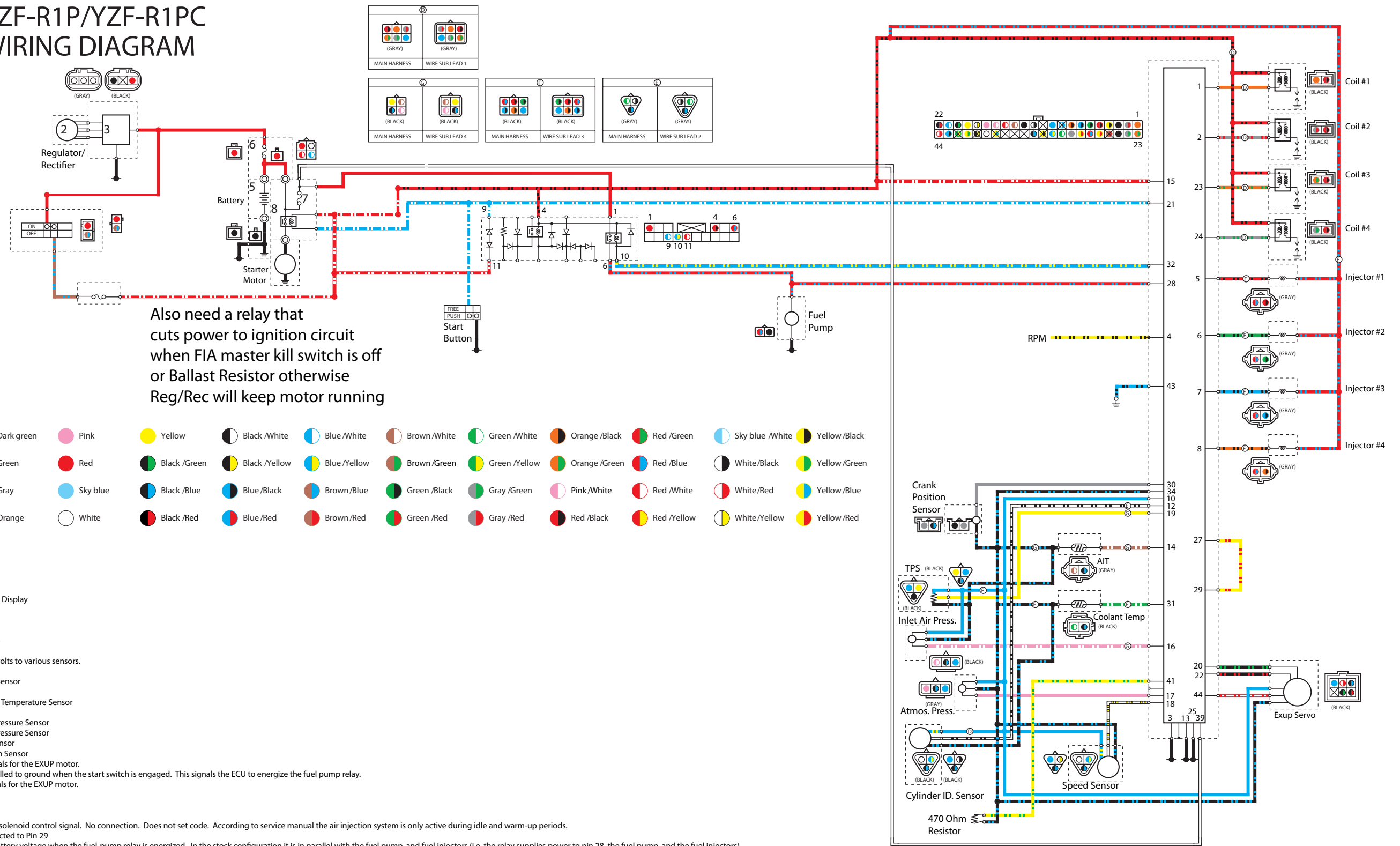


# MODIFIED BASIC 5PW YZF-R1P/YZF-R1PC WIRING DIAGRAM



## COLOR CODE

● Black	● Dark green	● Pink	● Yellow	● Black /White	● Blue /White	● Brown /White	● Green /White	● Orange /Black	● Red /Green	● Sky blue /White	● Yellow /Black
● Blue	● Green	● Red	● Black /Green	● Black /Yellow	● Blue /Yellow	● Brown /Green	● Green /Yellow	● Orange /Green	● Red /Blue	● White /Black	● Yellow /Green
● Brown	● Gray	● Sky blue	● Black /Blue	● Blue /Black	● Brown /Blue	● Green /Black	● Gray /Green	● Pink /White	● Red /White	● White /Red	● Yellow /Blue
● Chocolate	● Orange	● White	● Black /Red	● Blue /Red	● Brown /Red	● Green /Red	● Gray /Red	● Red /Black	● Red /Yellow	● White /Yellow	● Yellow /Red

## ECU Pins

- 1)(Orange) – Coil #1
- 2)(Grey/Red) – Coil #2
- 3)(Black) - Gnd
- 4)(Yellow/Black) – RPM - Multi Display
- 5)(Red/Black) – Injector #1
- 6)(Green/Black) – Injector #2
- 7)(Blue/Black) – Injector #3
- 8)(Orange/Black) – Injector #4
- 9)(White/Blue) N/C
- 10)(Blue) This pin provides 5 volts to various sensors.
- 11) N/C
- 12)(White/Black) Cylinder ID Sensor
- 13)(Black) - Gnd
- 14)(Brown/White) – Air Intake Temperature Sensor
- 15)(Red/White) - +12v
- 16)(Pink/White) – Intake Air Pressure Sensor
- 17)(Pink) – Atmospheric Air Pressure Sensor
- 18)(White/Yellow) – Speed Sensor
- 19) (Yellow) – Throttle Position Sensor
- 20 (Black/Green) Control signals for the EXUP motor.
- 21) (Blue/White) This pin is pulled to ground when the start switch is engaged. This signals the ECU to energize the fuel pump relay.
- 22)(Black/Red) – Control signals for the EXUP motor.
- 23)(Orange/Green) – Coil #3
- 24)(Grey/Green) – Coil #4
- 25)(Black) - Gnd
- 26)(Brown/Red) Air injection solenoid control signal. No connection. Does not set code. According to service manual the air injection system is only active during idle and warm-up periods.
- 27)(Yellow/Red) Stock Connected to Pin 29
- 28) (Red/Blue) This pin has battery voltage when the fuel-pump relay is energized. In the stock configuration it is in parallel with the fuel pump, and fuel injectors (i.e. the relay supplies power to pin 28, the fuel pump, and the fuel injectors). Also, pin 28 is used to trigger various functions while in diagnostic mode. In stock configuration this is accomplished by turning off the fuel pump relay via the run/stop switch. The ignition switch will perform the same function in the modified harness.
- 29) (Yellow/Red) Stock this pin is connected to ECU pin 27. When connected to ground the “CO” mode can be selected in addition to the “DIAG” mode when the units are powered up with both dash buttons depressed (must wait approx. eight seconds).
- 30)(Grey) – Crankshaft Position Sensor
- 31)(Green/White) – Coolant Temperature Sensor
- 32)(Blue/Yellow) This pin is the control signal that energizes the fuel pump cut-off relay. It does so by providing a ground to one side of the fuel pump relay coil.
- 33) (Yellow/Black) Pin 33 controls the headlight relay. No connection.
- 34)(Black/Blue) – Sensor Gnd
- 35)N/C
- 36)N/C
- 37)N/C
- 38)(Yellow/Blue) – Multi-Display - Comms
- 39) (White) Always on battery voltage to ECU. ECU functions properly without. No connection.
- 40)(Black/Yellow) Clutch switch position. No connection.
- 41)(Yellow/Green) Lean angle cut-off switch position signal. In stock configuration this pin is connected to the lean angle cut-off switch. Connected to resistor if cut-off switch is eliminated. 470 Ohm 1/4W Resistor to Black/Blue (Pin 34)
- 42)(Green/Yellow) Fan motor relay control. No connection.
- 43)(Blue/Black) Pin 43 is connected to ground. Signals ECU that side stand is in up position.
- 44)(White/Red) EXUP position signal. If left unconnected code 18 will be set.

## Starting Circuit Cut-Off Relay

The starting circuit cut-off relay is a module that incorporates the starting cut-off relay along with the fuel system relay and a diode/zener diode protection circuit. In the modified harness the starting cut-off relay and the circuitry associated with it is not used. The diode/zener diode protection circuit remains connected across the starting solenoid coil as in the stock configuration. See ECU pin 21 for further discussion. The fuel pump relay is also used. In the stock configuration the fuel pump relay controls power to ECU pin 28, the fuel pump, and the fuel injectors. In modified form the relay control power only to ECU pin 28 and, if desired, the fuel pump. The fuel injectors are wired directly to the ignition switch.

## Multi-Function Display (Dash)

Select multi-function display connections are maintained so that the display unit can be used to check for engine codes and used for diagnostic purposes. Battery power, ground, and the two signal leads from ECU pins 4 and 38 are required. If it is desired to use the display as a dash some additional changes will be necessary. Assuming the low-oil level sensor is not connected the oil light will flash. The flashing can be stopped by connecting the Black/Red oil level sensor lead to a 470 Ω one-quarter watt resistor that is connected to ground. This is shown in the wiring diagram. The exact same approach can be used to stop the fuel-level light from flashing also. In this case the Green/White lead is connected to ground via a 470 Ω one-quarter watt resistor. This is also shown in the wiring diagram. The neutral switch can be used in conjunction with the dash as shown or connected to a separate dashboard light.