Error codes Yamaha R1. Explanation and diagnosis.

To enter the diagnostic mode and check the existing error codes in memory, do the following:

1. Turn off the ignition, the engine stop button to put in the ON position.
2. Disconnect the fuel pump connector.
3. Simultaneously press SELECT + RESET on the dashboard and not let go.
4. Turn the ignition switch (button still hold) and wait for about 8 seconds until the dashboard inscription "dIAG".
5. Release the button, SELECT button to select "dIAG" (in case the inscription on the dashboard there was another).
6. Once displayed on the screen dIAG press both buttons on the dashboard (SELECT + RESET) at ~ 2 seconds.
7. Once the dashboard displays the diagnostic mode (d01) button to turn off the stop of the engine.
8. To move through the list from d01 to d64 need using the SELECT (up in the list) or RESET (down the list).

In the range list from d01 to d59 performed a self-test system components.
The inclusion of some components is made with the engine brake.

List of self (opposite numbers menu list Decoder + nominal value):
D: 01 = throttle position sensor
completely closed, figures from 12 to 21
fully opened, figures from 96 to 106

D: 02 = barometric pressure as a percentage;
D: 03 = the absolute pressure in the intake circuit;
D: 05 = air temperature in the intake circuit;
D: 06 = engine coolant temperature;
D: 07 = sensor reading speed;
D: 08 = position sensor fall
normal position index of 0.4 - 1.4
inverted position, figure 3.7 - 4.4

D: 09 = board voltage
D: 13 = position sensor throttle 2
completely closed, figure 9 to 23
fully opened, the rate of from 94 to 108

D: 14 = position sensor throttle 1
completely closed, the indicator 12 to 22
fully opened, the rate of from 97 to 107

D: 15 = position sensor throttle 2
completely closed, the indicator 10 to 24
fully opened, the rate of from 95 to 109

D: 20 = encoder side steps;
D: 21 = position sensor check point (neutral)

D: 60 = EEPROM, list of system errors (00 = no error, error code = 01-04 in the cylinders, if more than one memory errors, they are displayed alternately)

D: 61 = list of errors on the ignition module sensors (00 = no errors in memory, 11-70 = error codes for the components if more than one memory errors, they are displayed alternately)

D: 62 = number of errors in a memory unit (00 = no error, XX - number of errors, erase mistakes made by including the "stop-motion")
D: 63 = subclass error code (only for error 24 if more than one value in memory, the value is displayed alternately)

List of self-diagnostics on the unit (ignition system components / electrical):
D: 30 = diagnosis of the ignition coil 1 cylinder;
D: 31 = diagnosis of the ignition coil cylinder 2;
D: 32 = diagnosis of the ignition coil 3 of the cylinder;
D: 33 = diagnosis of the ignition coil 4 cylinder;
D: 34 = intake valve diagnostics system;
D: 36 = primary diagnosis of the injector nozzle 1
D: 37 = primary diagnosis injector nozzle 2
D: 38 = diagnosis of primary injector nozzle 3
D: 39 = primary diagnosis injector nozzle 4
D: 40 = secondary diagnosis of the injector nozzle 1
D: 41 = diagnostics secondary injector nozzle 2
D: 42 = diagnosis of secondary injector nozzle 3
D: 43 = diagnostics secondary injector nozzle 4
D: 47 = diagnosis sensor steering damper;
D: 48 = diagnosis sensor valve intake system;
D: 50 = fuel pump relay diagnostics;
D: 51 = Diagnosis cooling fan motor relay;
D: 52 = relay diagnostics lamp head light;

Explanation of error codes (for line D: 60 and D: 61):

Number error - transcript

11 - Error cylinder position sensor;
12 - crankshaft position sensor error;
13 - Error in the inlet pressure sensor (the sensor is within the desired range) - self-diagnosed string D: 03;
14 - Error in the inlet pressure sensor (sensor disconnected or faulty) - self-diagnosed string D: 03;
15 - error position sensor throttle - self diagnosed line D: 01 + D: 13;
19 - error on the incoming signal from the ECU (short circuit or disconnected sensor side footboard) - - self diagnosed line D: 20;
20 - the error of sensor readings of atmospheric and absolute pressure in the inlet, not permissible values - self-diagnosed string D: 03, D: 02;
21 - Error reading sensor coolant temperature - self diagnosed string D: 06;
22 - Error in the inlet temperature sensor, - self-diagnosed string D: 05;
23 - error sensor readings of atmospheric pressure - self-diagnosed string D: 02;
24 - error of the oxygen sensor (O2 sensor, lambda probe);
30 - Error drop sensor (triggered or faulty sensor), - self-diagnosed string D: 08;
33 - faulty ignition coil cylinder 1 - self-diagnosed string D: 30;
34 - faulty ignition coil cylinder 2 - self-diagnosed string D: 31;
35 - faulty ignition coil 3 cylinder - self diagnosed string D: 32;
36 - faulty ignition coil 4 cylinder - self diagnosed string D: 33;
39 - Primary circuit fault injector - self diagnosed string D: 36,37,38,39;
40 - fault circuit secondary injector - self diagnosed string D: 40,41,42,43;
41 - fault or short circuit in the wiring of the sensor falls, self-diagnosed string D: 08;
42 - no signal or a faulty speed sensor - self diagnosed string D: 07 (speed sensor), D: 21 (Sensor CAT (neutral));

43 - error voltage at the fuel pump circuit, - self-diagnosed string D: 50;

44 - error values / data system diagnostics / ignition - self diagnosed string D: 60
- 00 indicates normal readings EEP-ROM;
- 01 represents a violation of the cylinder charge mode 01
- 02 represents a violation of the cylinder charge mode 02
- 03 represents a violation of the cylinder charge mode 03
- 04 represents a violation of the cylinder charge mode 04

46 - Error pokazateey voltage on the ignition module;

50 - Error memory module plugs;

59 - disconnection or short circuit in the throttle position sensor - self diagnosed string D: 14,15;

60 - System Error YCC-T;

66 - failure trailer steering damper - diagnosed line self D: 47;

70 - Error organizations idling (as a symptom: the engine begins to stall at idle after 20 minutes of work);

Er-1 - no incoming signal from the ignition module;
Er-2 - no outgoing signal from the ignition module;
Er-3 - it is impossible to consider the testimony from the ignition module;
Er-4 - communication error with the dashboard;

Login process in diagnostic mode:

1. Switch off ignition. Disable button Start / Stop Engine (red on the right panel).

2. Press both buttons on and keep them tidy.

3. Turn the ignition, hold the button after the ignition is about 8 seconds.

4. Wait inscriptions DIAG.

5. Release and press both buttons together on the tidy again for 2 sec., And release.

6. A [d01]. This is the first diagnostic indicator shows the position of the throttle.

7. Press the Select (top) to get to the line number [d60]. This cell shows the number of currently existing bugs.

8. View room facing opposite d61. This error number MEMORY "brains." If several errors, they are displayed alternately.

All cells diagnostics above 60 - is the line diagnosis of each component
separately. Learn more - see below.

To clear the error from the system memory come on line d62 and includes buttons stop the engine on the right panel.

details:

When you enter the diagnostic mode, the display shows the cell [d01].

Press Select (top) need to go to the index [d60] (self-test in real time) and [d61] (memory error) and see the number next. The number next to the room and there is an error, please make note of the "brain".

And all the other numbers from [d01] and to [d60] - this performance of different sensors (eg [d01] is a position of the throttle percentage at the moment, to twist and understand everything).

Indicators (by testing the inclusion of sensors stop the engine):

d01 = throttle position (twist the throttle)
d02 = atmospheric pressure (absolute percentage)
d03 = vacuum at the inlet (the sensor in the air cleaner housing, in percent)
d05 = air temperature at the inlet (the sensor in the air filter housing, nominal percentage as I understand it)
d06 = coolant temperature at the moment
d07 = speed sensor (figure)
d08 = drop sensor (tilt)
d09 = voltage at the gasoline pump (tested by including a stop of the engine)
d20 = SEITENSTAENDER (on / off) - testing only works when off neutral
d21 = neutral sensor (on / off)
d30 = 1 coil per cylinder (when the stop button the engine is made by testing the coil 5 pulses, accompanied by a distinctive sound, with concurrently. lamp blinking Check Engine)
d31 = 2 cylinder coil (when the stop button the engine is made by testing the coil 5 pulses, accompanied by a distinctive sound, with concurrently. lamp blinking Check Engine)
d32 = 3 coil cylinder (when the stop button the engine is made by testing the coil 5 pulses, accompanied by a distinctive sound, with concurrently. lamp blinking Check Engine)
d33 = 4 cylinder coil (when the stop button the engine is made by testing the coil 5 pulses, accompanied by a distinctive sound, with concurrently. lamp blinking Check Engine)
d36 = 1 cylinder injector (when the stop button the engine is made by testing the nozzle 5 pulses, accompanied by a distinctive sound, with concurrently. lamp blinking Check Engine)
d37 = 2 cylinder injector (when the stop button the engine is made by testing the nozzle 5 pulses, accompanied by a distinctive sound, with concurrently. lamp
blinking Check Engine)

d38 = 3 cylinder injector (when the stop button the engine is made by testing
the nozzle 5 pulses, accompanied by a distinctive sound, with concurrently. lamp
blinking Check Engine)

d39 = 4 cylinder injector (when the stop button the engine is made by testing
the nozzle 5 pulses, accompanied by a distinctive sound, with concurrently. lamp
blinking Check Engine)

d48 = AI valve. (when the buttons stop valve engine is tested, 5 pulses,
accompanied by a distinctive sound, with concurrently. lamp blinking Check
Engine)

d50 = power relay injector and ignition system (tested in the same stop-button
engine)

d51 = relay switching the cooling fan (tested in the same stop-button engine)

d52 = relay head light (PAR) (tested in the same stop-button engine)

d53 = testing of servo motor EXUP (tested just stop engine button, shows the
value in the corners)

d56 = secondary servo valves (tested just stop engine button, shows the value in
the corners)

d60 = error of the switch (the codes are displayed alternately, a list of the
error codes of the switch below)

d61 = recorded in the memory of the error code

d62 = erase the stored fault codes

d70 = displays the code of a running program (0-255)

Explanation of the indicator line d60 (self-diagnosis found irregularities in
the sensors):

11 = no signal detection sensor cylinder
12 = no signal from the crankshaft position sensor
13 = error signal from the vacuum sensor (in the case of the air filter)
14 = the wrong signal to the absolute pressure sensor
15 = sensor error polodzheiya throttle
16 = fixed bug jamming throttle position sensor
17 = fixed bug EXUP servo position sensor
18 = Error jamming EXUP servo
19 = short circuit to the engine control unit by pressing the start button
20 = when the stop button the engine encountered an error voltage (big
difference indicators) at an absolute pressure sensor and vacuum
21 = Motor temperature sensor fault
22 = failure temperature sensor in the inlet
23 = fault (short circuit) absolute pressure sensor
30 = recorded incidence is detected (the bike fell)
33 = short-circuit on the control wire of the ignition coil cylinder 1
34 = short-circuit on the control wire of the ignition coil cylinder 2
35 = short-circuit on the control wire of the ignition coil cylinder 3
36 = short-circuit on the control wire of the ignition coil cylinder 4
41 = fault or short circuit on the sensor fall
42 = no or erroneous signal from the speed sensor
43 = error of measurement board voltage (short circuit in the wiring)
44 = failure ECU
46 = no voltage on the unit injector
47 = Error secondary servo valves (short circuit is detected or sensor failure)
48 = jamming or short circuit in the secondary servo valves throttle
50 = Error ECU, can not be read error
Er1 = no signal from the engine control unit
Er2 = no response from the engine control unit
Er3 = error signal from the engine control unit
Er4 = unknown signal from the engine control unit