

2002-2009 Road Star Warrior – ECU Pin-Out Voltages

Pin No.

1. 12v Into ECU from Ignition Coil Primary for Cylinder 1 (rear)
2. 12v Into ECU from Ignition Coil Primary for Cylinder 2 (front)
3. 12v Out from ECU to Frame Ground (see also 25)
4. 12v Into ECU from Decompression Solenoid coil
5. 12v Into ECU from Fuel Injector for Cylinder 1 (rear)
6. 12v Into ECU from Fuel Injector for Cylinder 2 (front)
7. 12v Into ECU from Ignition Switch at Key-On
8. 12v Into ECU from Starter Relay coil (see also 39)
9. Blank
10. 5v Out from ECU to Seven (7) Sensors as follows: (Throttle Position)
(Intake Air Pressure Cylinder 1) (Intake Air Pressure Cylinder 2)
(Air Pressure) (Cylinder Identification) (Lean Angle) (Speed)
11. Blank
12. 5v Into ECU from Cylinder Identification Sensor
13. 12v Out from ECU to Battery Negative Post
14. 5v Into ECU from Air Temperature Sensor
15. 5v Into ECU from Intake Air Pressure Sensor for Cylinder 2 (front)
16. 5v Into ECU from Intake Air Pressure Sensor for Cylinder 1 (rear)
17. 5v Into ECU from Air Pressure Sensor
18. 5v Into ECU from Speed Sensor
19. 5v Into ECU from Throttle Position Sensor
20. Blank
21. 12v Into ECU from Linear Control Valve (Open Valve 1?)
22. 12v Into ECU from Linear Control Valve (Close Valve 1?)
23. 12v Into ECU from Starter Push Button
24. 12v Into ECU from Start Circuit Relay and Clutch Switch
25. 12v Out from ECU to Frame Ground (see also 3)
26. 12v Into ECU from Starter Relay and Start Circuit Relay
27. 12v? ECU to ECU Diagnostic / Adjustment Loop (see also 29)
28. 12v Into ECU from Fuel Injection System Relay
29. 12v? ECU to ECU Diagnostic / Adjustment Loop (to 27 or to Ground)
30. 5v Into ECU from Crank Position Sensor
31. 5v Out from ECU to Oil Temperature Sensor
32. 12v Into ECU from Fuel Injection Relay coil
33. 12v Into ECU from Headlight Relay coil
34. 5v Out from ECU Digital Ground to Frame
35. Blank
36. 5v Out from ECU to Engine Temperature Sensor
37. 12v Into ECU from Battery Positive Post via ECU Fuse
38. 12v? Out? from ECU to Tachometer Display
39. 12v Into ECU from Starter Relay coil (see also 8)
40. Blank
41. 1v ~ 4v Into ECU from Lean Angle Sensor
42. 5v Into ECU from Decompression Solenoid
43. 12v Into ECU from Linear Control Valve (Open Valve 2?)
44. 12v Into ECU from Linear Control Valve (Close Valve 2?)

CO-1 = Coefficient 1?
CO-2 = Coefficient 2?

See Service Manual Pages:
1-23 Starting Coefficient
1-24 After Start Coefficient
1-25 Warm Up Coefficient
1-26 Acceleration Coefficient

Verify Voltages at Pin 27; 29; 38
Verify Flow Direction at Pin 38
Verify LCV Pins 21; 22; 43; 44