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| Document Number | | RG_SPEC_0037 | |
| Title | | Generation I ZX-14 Adaptor Board | |
| Revision | Date | Prepared By | Change History |
| 1.0 | 5/6/2013 | Hannah Westbrook | Initial release. |
| 1.1 | 11/14/2014 | Hannah Westbrook | Updated description section |

Introduction

The RaceGrade adaptor is used to interface a Suzuki Generation I Kawasaki (2009-2011) factory harness with a MoTeC M130 ECU. The adaptor box plugs directly in the factory harness replacing the factory ECU.

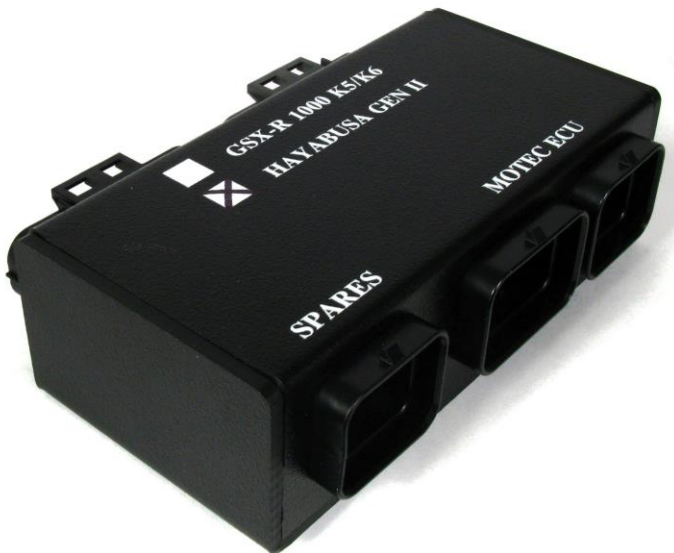


Figure 1: Adaptor Box

Specifications:

- Weight: 7.072 ounces
- Dimensions: 4.70 L x 1.972 W x 1.14 H in (119.4 x 50.1 x 29.0 mm)
- Key and Thumb switch power voltage supply through 30A fuse and 30A Relay
- Spares power supplied through 15A fuse
- 1 kΩ pull-up resistor to 5V on pin 4(Gear)

Connection:

- ZX-14 GEN I Stock wiring harness
- MoTeC ECU
M130 Adaptor Loom
M H 130PNP 401A
- Spares
M PNP 26P Kit
26 Pin Header with alternate Keyway

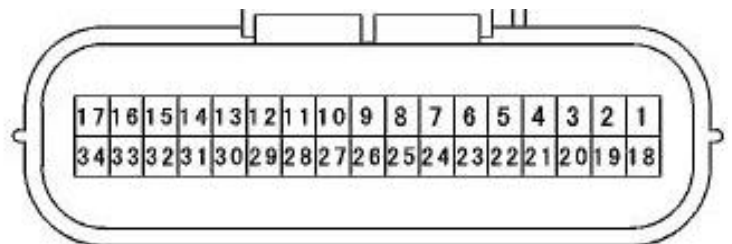
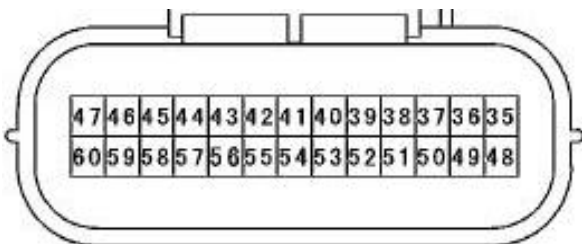


Figure 2: Kawasaki ZX-14 Connector Pin out
Connector Mating View (wire entry view on harness)

MoTeC Spares Connector

Not all of the M130 ECU channels are used on the Generation I Kawasaki ZX-14 harness. A spares connector is included with all other ECU resources for expansion. See MoTeC M130 manual for I/O Specifications.

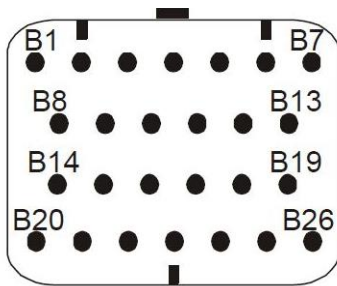


Figure 3: Spares Connector Pin out Connector Mating View (wire entry view on harness)

| PIN NO. | SPARES CONNECTOR |
|---------|------------------|
| 1 | 5V |
| 2 | 5V |
| 3 | OUT_HB2 |
| 4 | ECU 6.3V |
| 5 | OUT_HB3 |
| 6 | 0V |
| 7 | 0V |
| 8 | AV #6 |
| 9 | AV #5 |
| 10 | 12V |
| 11 | GROUND |
| 12 | OUT_LS2 |
| 13 | OUT_HB1 |
| 14 | INJ #5 |
| 15 | U_DIG7 |
| 16 | 12V |
| 17 | GROUND |
| 18 | INJ #6 |
| 19 | INJ #7 |
| 20 | AT #3 |
| 21 | AV #4 |
| 22 | AT #4 |
| 23 | INJ #8 |
| 24 | -- |
| 25 | OUT_LS1 |
| 26 | UDIG 5 |

Note: The following factory controls are not available in the Adaptor Box kit:

- Subthrottle Throttle valve actuator (STVA) and Secondary throttle position sensor (STP)
- Idle Stepper control (ISC)
- EVAP system