

Document Number		RG_SPEC_0038	
Title		Generation II ZX-14 Adaptor Board	
Revision	Date	Prepared By	Change History
1.0	11/14/2014	Hannah Westbrook	Initial release.

Introduction

The RaceGrade adaptor is used to interface a Kawasaki Generation II ZX-14 (2012-2014) factory harness with a MoTeC M130 ECU. The adaptor box plugs directly in to the factory harness replacing the factory ECU.

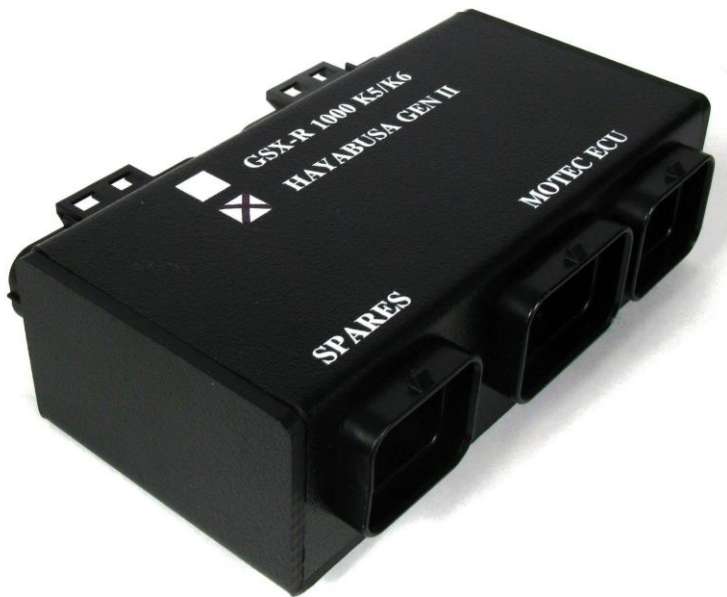


Figure 1: Adaptor Box

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 Gear (pin 7)

Connection:

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

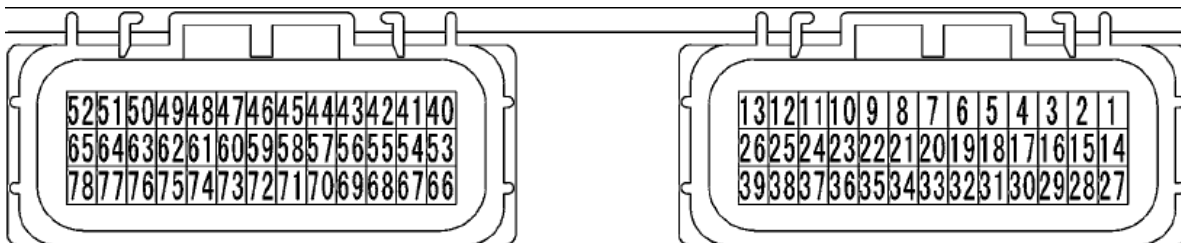


Figure 2: Generation II ZX-14 Adaptor Box Connector Pin out
Connector Mating View (wire entry view on harness)

Generation II ZX-14 pin-out

PIN NO.	ZX-14 Parameter
1	N/A
2	N/A
3	FRONT WHEEL SPEED(1400E)
4	FRONT WHEEL SPEED(1400F)
5	N/A
6	N/A
7	GEAR
8	0V REF
9	5V
10	N/A
11	MAP #2
12	N/A
13	0V
14	N/A
15	N/A
16	N/A
17	STARTER BUTTON
18	N/A
19	N/A
20	GROUND
21	REF
22	MAP #1
23	COOLANT TEMPERATURE
24	N/A
25	TPS
26	N/A
27	CAN HI
28	CAN LO
29	N/A
30	N/A
31	REAR WHEEL SPEED (1400F)
32	N/A
33	N/A
34	REAR WHEEL SPEED (1400E)
35	N/A
36	N/A
37	INTAKE AIR TEMPERATURE
38	TIP OVER SENSOR
39	N/A

PIN NO.	ZX-14 Parameter
40	GROUND
41	12V
42	N/A
43	N/A
44	N/A
45	N/A
46	N/A
47	INJ #1
48	INJ #2
49	INJ #3
50	INJ#4
51	IGN #4
52	IGN#2
53	IGNITION SWITCH
54	12V
55	N/A
56	N/A
57	N/A
58	12V
59	N/A
60	N/A
61	N/A
62	N/A
63	N/A
64	N/A
65	IGN#1
66	N/A
67	N/A
68	N/A
69	N/A
70	FAN
71	FUEL PUMP
72	N/A
73	GROUND
74	GROUND
75	N/A
76	N/A
77	N/A
78	IGN #3

MoTeC Spares Connector

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

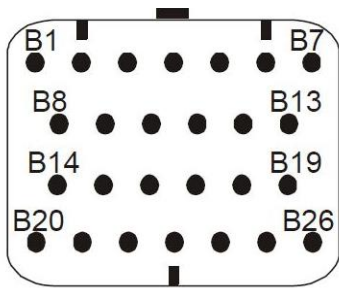


Figure 3: Spares Connector Pin out
Connector Mating View (wire entry view on harness)

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 speed control (ISC)
- Immobilizer (IMB)

PIN NO.	SPARES CONNECTOR
1	5V
2	5V
3	OUT_HB2
4	6.3 V
5	OUT_HB6
6	0V
7	0V
8	AV #6
9	AV #5
10	12V
11	GROUND
12	OUT_LS2
13	OUT_HB1
14	U_DIG2
15	OUT_LS1
16	12V
17	GROUND
18	UDIG4
19	UDIG5
20	AT #3
21	AV #8
22	AT #4
23	INJ#5
24	INJ#6
25	INJ#7
26	INJ#8