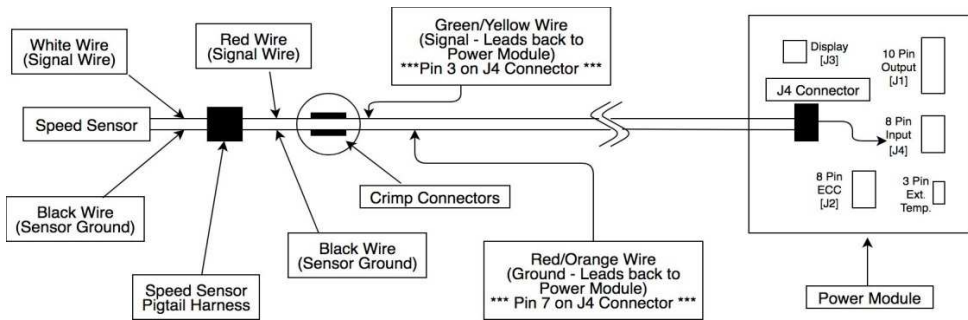
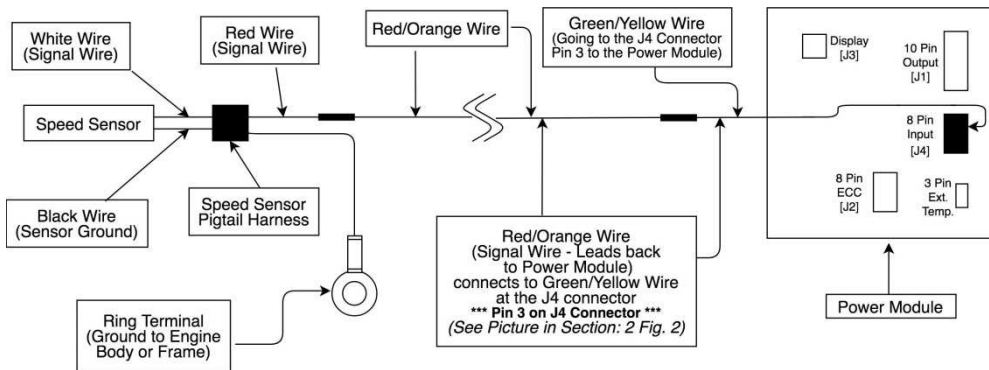


WIRING DIAGRAM FOR ANALOG TO ANALOG CONVERSION



WIRING DIAGRAM FOR DIGITAL TO ANALOG CONVERSION



Please call or email RigMaster Technical Support for any questions. Thank you.

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Technical Service Bulletin

RMI-TSB-001-20180101

Analog Speed Sensor Upgrade Kits For Cat/Perkins RIGMASTER APU's

The update is intended to improve the engine starting and running operations on ALL Cat/Perkins units by replacing the older style analog speed sensor or digital speed sensor that was provided or installed on our APU's.

RP7-106K

Analog Kit for Cat/Perkins APU's

RP7-106K – Analog Kit for Cat/Perkins APU's

Part No.	Description	Quantity
KL7-106	Mechanical/Analog Speed Sensor (RPM Sensor)	1
KL7-106-01	Analog Speed Sensor Connector w/pigtail	1
RTR10-010	Speed Sensor Bracket	1
BOLT-016	M8-1.25 x 16mm DIN 933 Class 8.8 Yellow Zinc Cap Screw	2
RP15-142	16-14 GA PARALLEL CONNECTORS BLUE INSULATED VINYL	2
RP15-230	Ring Terminal, 12-10 AWG, 5/16" Stud, Nylon Insulated w/ Extra Sleeve	1
LW-003	5/16" 18-8 Stainless Steel Medium Split Lock Washer	2



INSTALLATION NOTES

When installing any speed sensor kit please make sure that you follow the appropriate installation section for the unit and repair you are working on.

SECTION 1: OLD ANALOG TO NEW ANALOG SPEED SENSOR INSTALLATION (RP7-106K)

Installing RP7-106K: Analog Kit for Cat/Perkins APU's w/Analog Speed Sensor

This is a direct replacement to the **OLD** speed sensor style. Unplug the **OLD** speed sensor, and then remove the speed sensor and bracket off the engine before proceeding with this install. (Fig. 1a & Fig 1b)

1. After removing the **OLD** speed sensor, cut off the **OLD** harness connector. Attach the **NEW** harness connector as follows.
 - **Black wire** on Connector to **Red/Orange wire** on Harness
 - **Red wire** on Connector to **Green/Yellow** wire on Harness
2. Mount the **NEW** speed sensor bracket to the engine block, screw in the **NEW** speed sensor and plug in connector. Adjust sensor to **0.50mm (0.020 inches)** from the flywheel. (See Fig 2)

Fig. 1a – RMP-110 to RMP-10-4

Fig. 1b – MTS-14-6 to MTS-T4-6

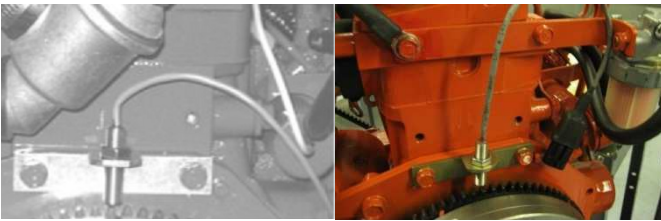


Fig. 2 – Finished install



NOTE: This install is for replacing the ORIGINAL Analog Speed sensor once it has failed.

For installing this on a unit running the DIGITAL Speed Sensor please see **SECTION 2.**

SECTION 2: DIGITAL SPEED SENSOR TO NEW ANALOG SPEED SENSOR INTALLATION (RP7-106K)

This is a replacement from the **DIGITAL** speed sensor to **ANALOG** speed sensor. Please note which unit you are doing the conversion to, as the kits are unit specific.

Installing RP7-106K: Analog Kit for Cat/Perkins APU's w/Digital Speed Sensor

1. To install the **NEW** Analog speed sensor follow the install on the previous section. When you are wiring the speed sensor, follow the below procedure.
 - a. **Black wire** to ground (use the provided **RING** terminal and ground to one of the bolts at the speed sensor bracket)
 - b. **Red wire** connect to the **Red/Orange** wire off the **Alternator** (cut **Red/Orange** wire from the Alternator connector and connect with **Red wire** on **NEW** speed sensor harness connector)
2. On the inside of the truck under the bunk you will need to wire the **NEW** speed sensor to the **Power Module**. Follow this procedure. (See Fig. 3)
 - a. **REMOVE DIGITAL** speed sensor from **MAIN** wiring harness. Connect the **White wire to White wire** and **Black wire to Black wire** on the **J1 connector** either with crimp connectors or electrical tape.
 - b. Connect the **Red/Orange** wire (now the signal input wire) to the **Green/Yellow** wire **DIRECTLY** into the **POWER MODULE**.

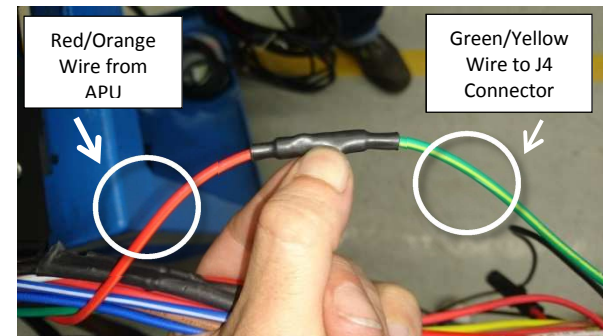


Fig.3 – Signal Wire connection under bunk