**CAUTION**

Exceeding the specified amount of torque may permanently damage this sensor. Read installation instructions before installing the sensor.

This digital speed sensor is used to monitor the speed of an Eaton Heavy Duty Series piston motor.

1. Make sure the hydraulic power is turned off and the motor can not rotate before proceeding.
2. Screw the digital speed sensor CW into the motor’s end cover until the end just touches the shaft.
3. Unscrew the sensor CCW 60° ± 10° to provide running clearance.

   **Note:** The angle between each of the flat wrenching surfaces on the nut is 60°. These flats can be used to estimate the backoff distance of CCW rotation.

4. Continue to unscrew the sensor CCW until the flats on the sensor are parallel with the motor shaft (see drawing below).
5. Maintain the sensor position and tighten the seal nut to a torque of 13.6 ± 1.4 Nm [120 ± 12 lb-in].
6. If sensor flats are not parallel with motor shaft; loosen seal nut, realign sensor and retorque to value specified in step 5.

**Important Note:** More torque than the specified amount may permanently damage the sensor.

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**Installation Information**

Eaton® Heavy Duty Series Piston Motors

109823-000 Speed Sensor

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**Enlarged Detail**

60° Visual Reference
Motor Shaft Centerline
Seal Nut

**Enlarged Detail**

Flats Parallel ± 5° is OK
Motor Shaft Centerline

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**3 Pin Connector**

RED TO PIN A
GREEN TO PIN B
BLACK TO PIN C

PACKARD ELECTRIC WEATHER PACK SERIES
12010717 CONNECTOR (BLACK WITH INDEX CODE 101)
(MATES WITH 12015793, CONNECTOR AND 12089188, SLEEVE TERMINAL FEMALE)
12015323 SEAL (3 SEALS)
12089040 PIN (3 PINS)