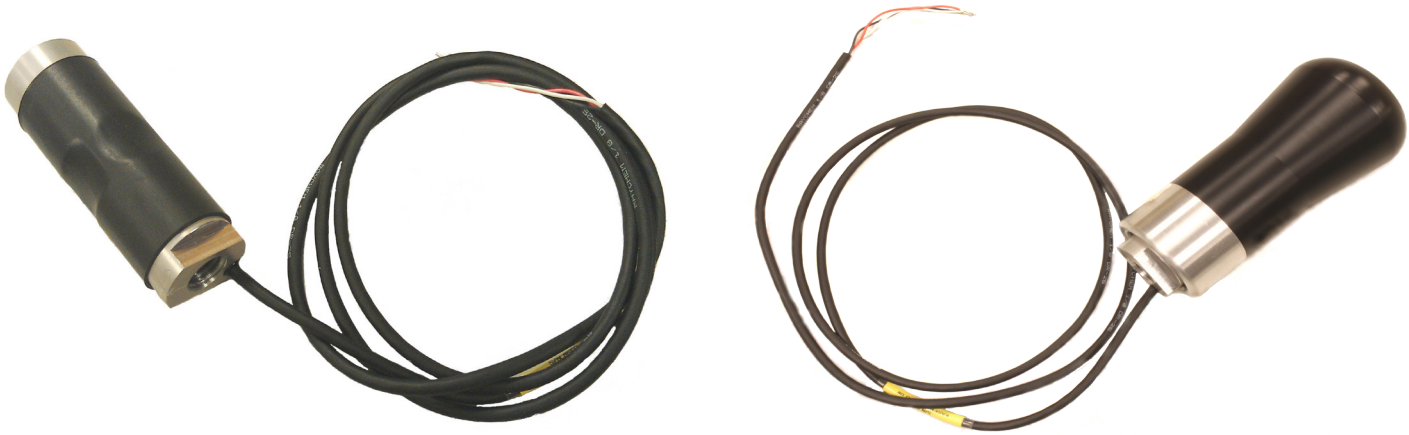
LINGENFELTER

PERFORMANCE ENGINEERING

Installation Instructions for the Lingenfelter Load Cell Shift Knob and Load Cell Shift Adapter



PN's: L350170000 (Shift Knob)
L350180000 (Shift Adapter)

Lingenfelter Performance Engineering
1557 Winchester Road
Decatur, IN 46733
(260) 724-2552
(260) 724-8761 fax
www.lingenfelter.com

Release date 15-September-2012

Revision - 1.1

Parts List

#	Description	Part number
1	LPE LOAD CELL SHIFT KNOB	L350170000
OR		
1	LPE LOAD CELL SHIFT ADAPTER	L350180000

Tools & Materials Required

- 16mm open-end wrench
- Wire stripper/crimp tool

Optional Items

#	Description	Part number
1	LNC-TC1 LAUNCH & TORQUE CUT CONTROLLER	L460135297
1	3 PIN PLUG SPLASH PROOF, MINI, MOLEX	522660311
1	3 PIN RECEPTACLE SPLASH PROOF, MINI, MOLEX	522130311

LPE load cell shift adapter (L350180000)

LPE load cell shift knob (L350170000)

Features / Specifications:

- Designed for sequential or “H” pattern gearboxes
- ±500N / ±112lbf range
- Built-in amplifier
- Nylon outer cover
- M12 x 1.75 thread size/pitch (in and out for adapter version)
- ±0.5% accuracy
- 2.5V ±2.0V (bi-directional operation)

Load Cell Shifter Operation:

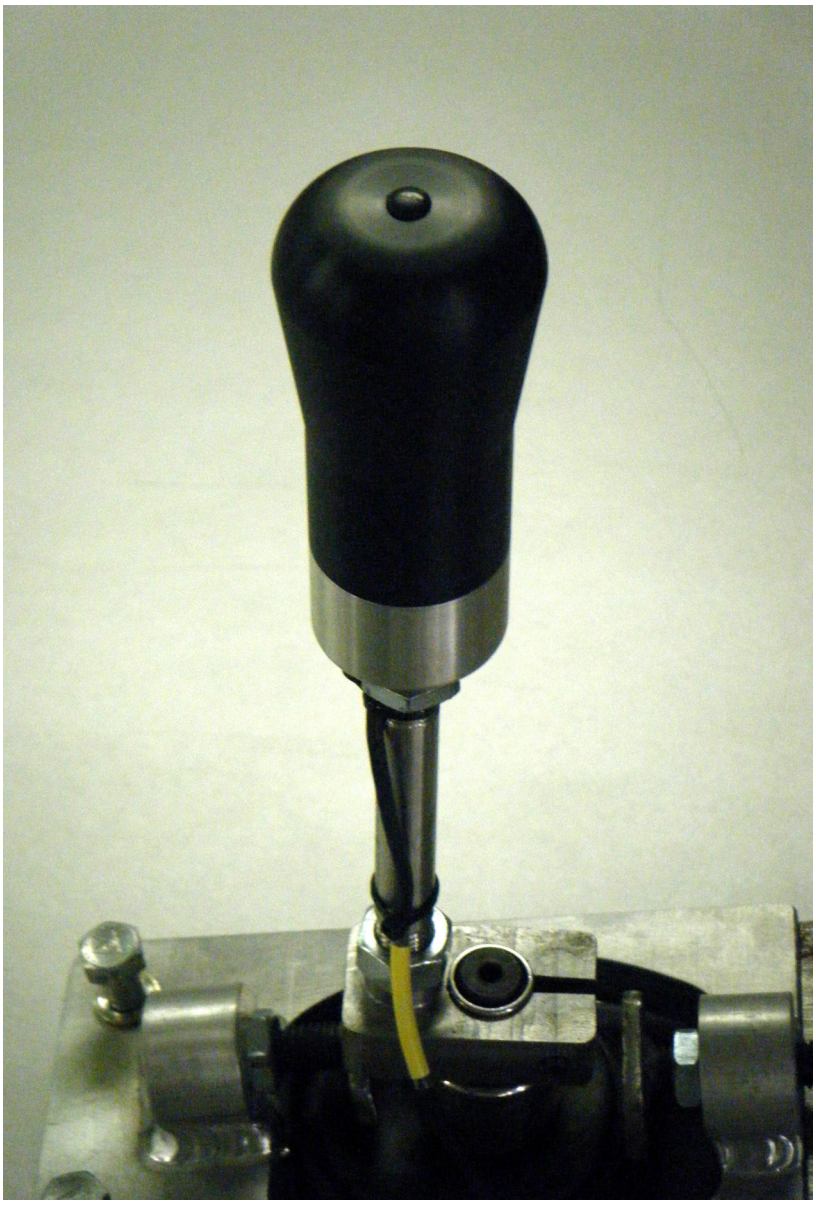
The Lingenfelter Performance Engineering (LPE) load cell shift knob and load cell shift adapter both have bi-directional strain gauges installed inside of the devices that provides a signal that is caused by a change in length of a resistor that is attached to the load cell. The change in length of the resistor element in the load cell causes a change in output voltage across the load cell. At zero strain the voltage across the load cell should be 2.5 V. When load (strain) is applied to the shifter, the voltage will then become 2.5V +/- 2.0V. The maximum and minimum voltage across the load cell is therefore 4.5V and 0.5V in tension and compression, respectively. Both LPE load cell shifter products have a built-in amplifier, alleviating the need for an external amplifier.

Load Cell Shifter Installation:

Before the LPE load cell shift knob or load cell shift adapter can be wired up, the shift knob or shift adapter must be screwed onto the shift lever. A 16mm open end wrench can be used to screw the shift knob or shift adapter onto the shift lever. The LPE load cell shift knob and load cell shift adapter are both designed to recieve their +5 volt reference (red wire) and ground reference (black wire) signals from the same device that recieves the load cell’s signal, such as the LPE LNC-TC1 Launch and torque cut controller (L460135297), or directly from an aftermarket Engine Control Module (ECM). The 0-5 volt load signal (white wire) should be connected to the device that is providing the torque cut, which could be a torque cut controller (such as the LPE LNC-TC1), an aftermarket EFI unit, or a transmission controller. If it is necessary to lengthen the wires, use 26-24 AWG twisted wires. You may have to adapt some of your other shifter components to the correct thread size and pitch.

For additional product installation information and technical support, contact LPE or your LPE products distributor. You can also find technical support and usage discussions regarding this product and many other LPE products in our Internet forums:

http://www.lingenfelter.com/LPEforumfiles



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