

Installation PROCEDURES

SUBJECT

EXHAUST BRAKE INTERFACE WITH ALLISON 4th GENERATION CONTROL

Allison has released a new version of controls for all of their electronic transmissions; therefore Pacbrake has released a new interface kit: C13074 for 4th generation controls. This transmission can be programmed to communicate the exhaust brake requests over the Data-link (Can-Bus) by either Allison or the engine manufacturer eliminating the need to install this interface kit.

interface kit# C13074. This is required in order to provide automatic downshifting and the torque converter unlock feature.

Automatic downshifting, when the Pacbrake is applied a 12 volt positive signal is sent into the Allison TCM, in the case of 4th generation controls this is Pin #2 wire #102. When the conditions are correct (foot off the accelerator) the Allison TCM will downshift the transmission into a lower gear increasing engine RPM to enhance braking.

Torque converter un-lock feature, when slowing the vehicle to a stop the Pacbrake will disengage below 25 MPH, this is to protect the torque converter clutch. Allison requires a relay be installed between the Allison TCM and the exhaust brake solenoid. This relay is wired normally closed, in the case of 4th generation controls when it receives ground signal from PIN #4 wire #104 to terminal 85 of the relay it will open the relay turning off the exhaust brake.

Pacbrake has developed specific wiring schematics for the most combinations of engine and transmission configurations, visit us at www.pacbrake.com for the most current Pacbrake wiring schematics.

Below is a generic interface schematic provided by Allison Transmission:

