

## APTB 18/16

# SUBJECT: Importance of Programming Coded Injectors November 30, 2016

Anytime coded injectors are installed into an engine, it is extremely important to program the injector codes into the ECU (electronic control unit). There are many different terms used by manufacturer's to reference injector codes. Below is a list of some of the terms that are used:

- Trim Code
- Trim File
- IQA Code
- IMA Code

An injector code is generated after the injector passes testing in production. When programmed into the ECU, this code gives the ECU the information required to adjust fuel quantity and timing based in the injector's unique performance characteristics. When the injectors are coded properly, the engine functions as though all injectors perform identically.

When injectors are not coded into the ECU, there are a range of performance concerns that may occur:

- Hard Starting
- Rough Running
- Excessive Smoke
- Poor Fuel Economy

In extreme cases, engine damage is also possible. For these reasons, along with the importance of maintaining emissions compliance, programming coded injectors into the ECU per manufacturer's recommendations is extremely important.

Refer to the following bulletins for more information on programming injector codes:

[APTB 03/16 R1](#) – Alliant Power John Deere® Common Rail Injector Trim Code Programming

[APTB 12/16](#) – Alliant Power Isuzu® Common Rail Injector Trim Code Programming for GM® Applications

[APTB 13/16](#) – Alliant Power Isuzu Common Rail Injector Trim Code Programming for Isuzu and GM Applications

