International® A26 (2017)

Overview: *Vehicle Setup*

TABLE OF CONTENTS

General Overview: Vehicle Setup

The Vehicle Setup feature consists of a list of all original equipment manufacturer, and customer programmable parameters, within the engine control module (ECM). This document will address the unique vehicle setup functionality for the A26.

Description and Operation

> NOTE: Refer to the vehicle operation and maintenance manual, as well as the A26 engine operation and maintenance manual, for additional information on operation and indications.

The vehicle setup feature reports and updates all stored vehicle setup information.

Programmable Parameters

The following programmable parameters are available with the vehicle setup feature.

Parameters indicated as customer programmable can be adjusted differently than the production assembly plant setting to meet the customer's needs. If the parameter is indicated as non-customer programmable, the parameter setting is preset from the factory and can't be changed without dealer authorization.

Parameter Value	Description	Possible Values	Cust Pgrm?	Recommended Settings
Transmission Type (82002)	This parameter indicates the type of transmission equipped on the vehicle.	**0:** Manual **1:** AMT with Clutch Pedal **2:** AMT without Clutch Pedal **3:** Torque Converter Automatic	YES	Program Support
Two Speed Axle Enable (80001)	This parameter should be enabled if the vehicle is equipped with a 2-speed axle.	**0:** Disable **1:** Enable	YES	Varies with Vehicle Application
Two Speed Axle Input Selection (99222)	This parameter specifies the correct source to signal 2-speed axle engagement. • **If set to (0)** – The 2-speed axle status is broadcast, on the datalink, from the body controller to the ECM. • **If set to (1)** – The 2-speed axle status is provided on a hardwired circuit to the ECM.	**0:** Enable with CAN input 1: Enable with hardwired input	YES	Varies with Vehicle Application
Tire Revs Per Mile (80011)	This value is provided by the tire manufacturer and is used in the vehicle speed calculation	300 to 676 (rev/mile)	YES	Varies with Vehicle Application
Vehicle Speed Signal Mode (89003)	This parameter specifies the correct signal for vehicle speed. ▪ **If set to (0)** – For manual transmissions and transfer cases, the VSS is hardwired from the transmission output shaft or transfer case. PP 39050 should be set to 1. ▪ **If set to (1) -** The VSS signal comes from the ABS module over the J1939 Public CAN.	**0:** Hardwire Sensor **1:** Public J1939/CAN Vehicle Speed **3**: Public J1939/CAN OSS	NO	Program Support

Parameter Value	Description	Possible Values	Cust Pgrm?	Recommended Settings
	▪ **If set to (3)** – For automatic transmissions, the VSS signal comes from the J1939 transmission output shaft signal. PP 39050 should be set to 1. **Note 1:** If operating in "Split Shaft" Power Take-Off (PTO) mode, the engine looks for a SAE J1939 message from an Anti-Lock Braking System (ABS) source address module. PP 89003 should be set to 1 and PP 39050 should be set to 0.			
Transmission Tail Shaft Gear Teeth (80071)	This parameter indicates the number of teeth on the transmission output OR transfer case shaft.	5 to 255	YES	Varies with Vehicle Application
Rear Axle Ratio Low (80022)	This is the application specific final drive gear ratio. **Note 1:** This is a "low speed" gear ratio if equipped with a 2-speed axle. **Note 2:** If equipped with a single speed axle, then parameter (8002) and (8003) must be programmed to the same value.	1 to 20.00	YES	Varies with Vehicle Application
Rear Axle Ratio High (80031)	This is the application specific final drive gear ratio. **Note 1:** This is a "high speed" gear ratio if equipped with a 2-speed axle. **Note 2:** If equipped with a single speed axle, then parameter (8002) and (8003) must be programmed to the same value.	1 to 20.00	YES	Varies with Vehicle Application
GDP Top Gear Minus 1 Gear Ratio (77292)	This parameter is used by the gear down protection feature. It is the gear ratio which the "Gear Down Protection (GDP) Vehicle Speed Limit (Top Gear Minus 1)" will be active. For example, on a 10-speed transmission this is the gear ratio of 9th gear.	0 to 75	YES	Varies with Vehicle Application
GDP Top Gear Minus 2 Gear Ratio (77302)	This parameter is used by the gear down protection feature. It is the gear ratio which the "GDP Vehicle Speed Limit (Top Gear Minus 2)" will be active. For example, on a 10-speed transmission this is the gear ratio of 8th gear.	0 to 75	YES	Varies with Vehicle Application
Transmission Top Gear Ratio (80042)	The gear ratio of the highest gear in the transmission.	0.6 to 20	YES	Varies with Vehicle Application
High Idle Engine Speed (82032)	The engine speed at high idle engine speed.	1,450 to 3000 rpm	YES	Varies with Vehicle Application
Rated Horsepower (82052)	The maximum HP at the "RPM: Rated Engine Speed" (82042) parameter value.	24 to 890 HP	NO	Program Support
Cold Ambient Protection Enable (94001)	This parameter enables or disables the cold ambient protection (CAP) feature. ▪ **If set to (0)** – CAP will not be able to increase the engine speed. ▪ **If set to (1)** – CAP will increase the engine speed as required to warm-up the engine. Refer to the A26 Diesel Engines Operation and Maintenance Manual for more information about CAP.	**0**: Disable **1**: Enable	YES	Engineering
Engine Running Output Control Mode (73002)	This parameter is set to 1.	**0**: Disable **1**: Enable	NO	Program Support

Definitions/Acronyms

The following terms are referenced in this document:

Acronym	Definition
ABS	Anti-lock Braking System
AESC	Auxiliary Engine Speed Control
CAN	Controller Area Network
CAP	Cold Ambient Protection
ECM	Engine Control Module
GDP	Gear Down Protection
HP	Horsepower
OSS	Output Shaft Speed
PPM	Pulses Per Mile
PTO	Power Take-Off
RPM	Revolutions Per Minute
VSL	Vehicle Speed Limiter
VSS	Vehicle Speed Sensor