Coder 5.05-0 Release Notes

DATE:

June 17, 2011

BACKGROUND:

Version 5.05-0 is a new release of the Coder / Operating System

COMPATABILITY:

This version of the GAP Programmer is only for Engine platform controls: ECM3, MCU (MCU, ARAPAHOE), PCMHD.

To use this version of GAP/Coder, you must use SOS 4.00 or higher.

To use this version of GAP/Coder, you must use Control Assistant 4.00 or higher.

To use this version of GAP/Coder, you must use Toolkit 3.6 or higher.

NEW FEATURES:

I_FUNCTION block: The I_FUNCTION block allows user configuration of an interrupt service routine through a C_FUNCTION block

Configurable Saturation field in SYNC_INJ and PER_INJ blocks

Shortened synchronization time for Pattern 21 to (1 - CrankTeeth/4)

Removed arbitrary 4ms limit on SI and PI peak-time inputs for patterns which can go faster

ISSUES:

The following Product Issue Database ("PID") issues and requests were addressed in 5.05-0:

Issue #	Description	Solution
15629	EFI_CORE patterns with more than 360 teeth value error	The error was because of the imprecision of integer math. The solution was to perform the calculation in floating point and then convert it to integer.
15733	Problem with AI_UEGO sensors on the new model year 2007 PCMHD (pn#8237-1448)	Added model year 2007 case to logic
15695 15697	Gap Block Help Issues (EFI_P_CORE help)	Modified 5.05 Block Help

UNSUPPORTED BLOCKS:

The following blocks are available in the Template and GAP Editor, but are not supported for customer use in the 5.05-0 release version of the Coder (compiler):

- CAL_ID
- I_TO_NAN
- PC104_ATL
- TEMP_HIST
- Tunable inputs for the <u>SYNC_INJ</u> block (CYL, MIN_ADV, MAX_ADV) are only available to Woodward developers in this version

PART NUMBERS:

Version 5.05-0

Gap/Coder Part Number: 9927-1931

Master Kit: 9927-1333, 8928-1088, 1796-1068

Template Changes in 5.05

NEW BLOCKS

The following blocks were added new to this template:

<u>Block Name</u>	<u>Description</u>
I_FUNCTION	This block calls a <u>C_FUNCTION</u> block to act as a user configurable Interrupt Service Routine. The rate of the Interrupt is configurable through the input/outputs passed.

ACTIVATED BLOCKS

The following formerly restricted blocks are now available

• None

DELETED BLOCKS

The following blocks were deleted going from the 5.04 template to the 5.05 template:

• None

MODIFIED BLOCKS

The following blocks' input and/or output fields were modified going from the 5.04 template to the 5.05 template

<u>Block Name</u>	<u>Description of Template Changes</u>
PER_INJ	Made SAT (Saturation) field accept a variable input (name, tunable, constant
SYNC_INJ	or extern).