



Countries: CANADA, UNITED STATES, MEXICO Document ID: IK1201360
 Availability: ISIS, NotSIR Revision: 5
 Major System: ENGINES Created: 2/14/2017
 Current Language: English Last Modified: 9/6/2018
 Other Languages: NONE Author: Marcelo Sahagun
 Viewed: 6183

[Less Info](#)

Hide Details Coding Information

Copy Link	Copy Relative Link	Bookmark View My Bookmarks	Add to Favorites	Print	Provide Feedback	Helpful 26	Not Helpful 0
-----------	--------------------	---	------------------	-------	------------------	---------------	------------------

Title: Cylinder Performance Analyzer (CPA) Resource Center

Applies To: ALL Engine and Chassis Models

CHANGE LOG

Please refer to the change log text box below for recent changes to this article

09/06/2018- Corrected HPFP test module chart
 *12/xx/2017- Add NEW software version blurb
 06/07/2017- Minor edits
 06/02/2017- Updated Software Version

IF THERE IS ANY OTHER INFORMATION YOU WOULD LIKE TO HAVE ADDED TO THIS RESOURCE ARTICLE PLEASE WRITE IT IN THE Feedback SECTION

DESCRIPTION

This document will serve as a resource center for all areas related to the Cylinder Performance Analyzer (CPA).

The CPA tool is an easy to use high speed data acquisition module capable of detecting detailed signals. Navistar utilizes this tool to accurately diagnose:

1. Engine Performance Concerns
2. Chassis Performance Concerns

VERSION RELEASE TIMELINE

Most up to date version: **9.0.1.0**, Released: **12/18/2017**

The table below outlines the major release dates for CPA Modules:

Version	Change Description	Release Date
8.8.21.1	Software Improvements	5/23/2017
8.8.8.0	BEAM improvements	1/22/2017
8.1.1.1	Snapshot Viewer Launch	3/12/2016
7.8.8.67	13L Full Load Blow By Launch	1/28/2016
7.1.8.88	Base Engine Analysis Module (BEAM) Launch	12/14/2015
6.0.10.1	Big Bore High Pressure Fuel Pump (HPFP) Test Launch	03/18/2015
5.0.10.5	MED Duty HPOP Test Update: Under Valve Cover Repair Strategy	12/08/2014
3.0.0.16	MED Duty High Pressure Oil Pump (HPOP) Test Launch	01/15/2014
2.0.0.148	Warranty Authorization Code (WAC) for 2 injectors in Injector Misfire Detection	09/25/2013
1.0.0.329	MED Duty Injector Misfire Detection Launch	03/20/2012

NEW VERSION 9.0.1.0:

- NEW CPA Software Version Available: This version involves a software driver update so it requires removal of current version and re-install

- Depending on internet bandwidth this may take between 30min-1hr to remove and install. Schedule accordingly because EZ-Tech will NOT be active to use
- Any issues with download> Open an EZ-Tech Case File

Various Improvements implemented in NEW CPA Software Version 9.0.1.0. Improvements such as:

1. User Interface Home Screen> Select Platform Category> Select Desired Test> Press Launch Test
2. Software Functionality
3. WAC Criteria Improvements
4. Message changes BEAM/ HPOP
5. Software Logic Improvements SSV/ BEAM/ HPOP/ IMD
6. Software Driver Update



CPA SOFTWARE

Verify CPA software is up to date. Software version can be identified in two ways:

1. Launching the CPA software from computer and viewing the home screen (Picture below)

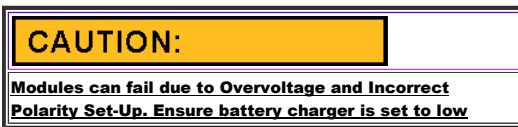


2. Launching the CPA Software Finder. Click link> Unzip> Launch exe: [CPA Software Version Finder](#)

If Software version is NOT current:


1. Installation/Upgrading Instructions and 1st Time Registration: [IK2700062](#)
2. OnCommand EZ-Tech Download Center: [IK2700090](#)
3. EZ-Tech Download Center: [IK2700065](#)



SPECIAL CPA TOOL(S)



Any individual harness required to perform a specific CPA test will be under the **CPA Test Module(s)** section below. Every individual CPA Module has a related sub-article with the necessary tool(s) with part numbers to complete a test.

Primary Data Acquisition Modules:

Tool Description	Tool Number	Comments
 0000056510	OE-11178	1st Gen CPA Module
	12-999-01-01	2nd Gen CPA Module

		
	12-999-05-01	Pressure Plus Module

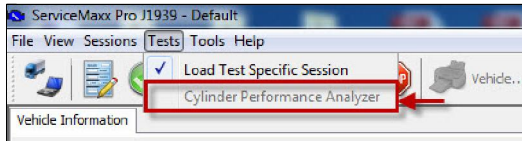
[Tools Catalog](#)

OPENING CPA SOFTWARE

The CPA software can be accessed in two ways:

1. Launch CPA software through ServiceMaxx or Navistar Engine Diagnostic (NED) (Navistar recommended)
 - Open ServiceMaxx or NED> Enter Log In Information> **TESTS**> Select **Cylinder Performance Analyzer**

Note: This process will auto-populate truck information

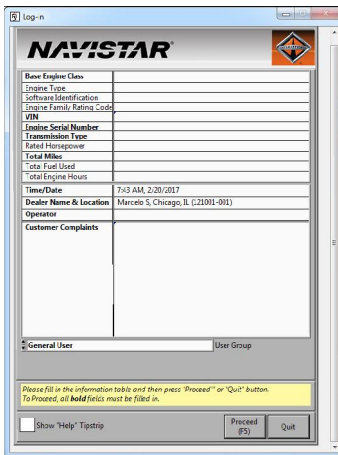


2. Launch CPA software as standalone



- Locate CPA software: Icon on desktop (Picture Above) or under **All Programs** list> Double click on icon> Accurately fill in **ALL** fields in **BOLD**

Note: If information is NOT accurate, Navistar Warranty could potentially be denied



CPA TEST MODULE(S)

CPA Module	Engine Applications	Related iKnow Article	Notes
Injector Misfire Detection	<ul style="list-style-type: none"> • EPA 2004-2006 DT 466/570 • EPA 2007-2009 MF DT/9/10 • EPA 2010-2013 MF DT/9/10 • EPA 2014-2017 N9/ N10 	DT/9/10: IK1201363	

16 High pressure Oil Pump (HPOP) Module	<ul style="list-style-type: none"> EPA 2007-2009 MF DT/9/10 EPA 2010-2013 MF DT/9/10 EPA 2014-2017 N9/ N10 	IK1200991	
13L High Pressure Fuel Pump (HPFP) Module	<ul style="list-style-type: none"> EPA 2010-2012 MF 13L EPA 2013-2016 N13 	IK1201252	
Base Engine Analysis Module (BEAM)	<ul style="list-style-type: none"> EPA 2007-2016 MF7 EPA 2007-2009 MF DT/9/10 EPA 2010-2013 MF DT/9/10 EPA 2014-2017 N9/ N10 EPA 2010-2012 MF13 EPA 2013-2016 N13 	BEAM Overview: IK1201369 BEAM Details: IK1201325 MF7: IK1201222	
13L Full Load Blow-by	<ul style="list-style-type: none"> 2013-2014 N13:ESN 126HM2Y4300000 to 4315712 2015 N13: ESN 124KM2Y4400000 to 4401769 	IK1201329	
Snapshot Viewer (SSV)	<ul style="list-style-type: none"> EPA 2010-2012 MF 13L EPA 2010-2017 MF DT/9/10/N9/N10 	IK1201387	
Vibration Analyzer	<ul style="list-style-type: none"> All Chassis Models 	N/A	
Recorder	<ul style="list-style-type: none"> All Chassis Models All Engine Models 	N/A	

WARRANTY INFORMATION

CPA Test Module	WAC can be issued for components listed	Navistar Engine Model	Example WAC	Related Articles
Injector Misfire Detection	<ul style="list-style-type: none"> 1 or 2 Fuel Injectors 	2004-2017 MF DT/9/10/ N9/ N10	XXXX	
16 High Pressure Oil Pump (HPOP) Module	<ul style="list-style-type: none"> High Pressure Oil Pump (HPOP) 6 Fuel Injectors w/ 6 Oil Inlet Adapters (Puck) Injection Control Pressure (ICP) Sensor <p>Note: WAC containing a combination of above components may be issued</p>	2007-2017 MF DT/9/10/ N9/ N10	XXXX_XX	ICP Sensor Policy: WPL1200001
13L High Pressure Fuel Pump (HPFP) Module	<ul style="list-style-type: none"> High Pressure Fuel Pump (HPFP) 	2010-2012 MF13 2013-2016 N13	XXXX	
Base Engine Analysis Module (BEAM)	<ul style="list-style-type: none"> 1 or 2 or 6 Power Cylinders 	2007-2016 MF7 2010-2017 MF DT/9/10/N9/N10 2010-2016 MF13	XXXX_XX_X	Power Cylinder Replacement: IK1201
13L Full Load Blow-by	<ul style="list-style-type: none"> Anti-Polishing Ring (APR) Kit 	2010-2016 MF 11/13L/ N13	XXXX_XX	BB APR Kit: IK1201 BB APR Kit: IK1201
Snapshot Viewer	<ul style="list-style-type: none"> Diesel Oxidation Catalyst (DOC) 	2010-2012 MF11/13L	XXXX_XX	

- All Component Replacement Requirements are temporarily covered under policy letter: [WPL2800126](#)
- Reference the Warranty Resource Center for the most recent iApproval/ Warranty Authorization Code (WAC) requirements letter
- Refer to the [Warranty Coding Manual](#) for Group and Noun Codes.

STANDARD REPAIR TIME(S)

Description	SRT Link
12 - CYLINDER PERFORMANCE ANALYZER (CPA) TOOL, DIAGNOSIS	CPA Diagnostics

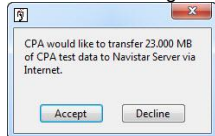
CPA DATA FILE ARCHIVE

CPA software allows files to transfer from EZ-Tech computer to Navistar network. There are two ways this can be accomplished:

Note: For proper function CPA software must be at version 7.8.8.88 or later

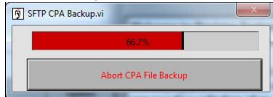
1. Software Prompt:

At initial software launch the following message is displayed



If select **Decline**: Home screen is displayed

If select **Accept**: Archiving will proceed

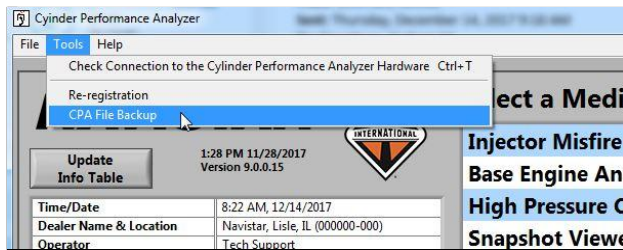


2. Manual Prompt:

Note: Ez-Tech must be online for proper function

Note: Issues may arise due to administrative firewall protection

1. From CPA Home screen > Under Tools > Select CPA File Backup



2. Click Folder Icon > Ensure **C:\Engine Cylinder Performance Analyzer** is selected > Click **Current Folder**

3. Select Desired data files > Click **Add** or **Remove** as needed

4. Once file selecting is complete > Click **Upload selected and previously saved Data to Navistar**

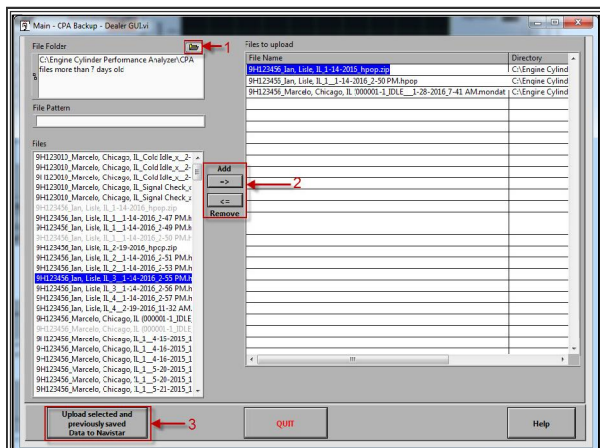


Figure 1: CPA File Backup Module

1. Folder Icon
2. ADD/ REMOVE data files
3. UPLOAD Files to Navistar Button

Data Archive Issue- "File Archiving Failed" message troubleshooting (For IT personnel):


CPA software will prompt to upload files to SFTP server (Port 22) but dealer firewall is not allowing server to communicate with computer.

Please ensure computer is able to open ports 49000 and up so a proper hand shake can be done with Navistar server. Some antivirus and security applications installed on the dealer network might be responsible as well for this communication problem.

Any additional support: Open an **EZ-Tech Support Case file**

OTHER RESOURCES

[Master Service Information Site](#)

 Hide Details	Feedback Information
Viewed: 6182 Helpful: 26 Not Helpful: 0	
No Feedback Found	

Copyright © 2018 Navistar, Inc.