



Countries:	CANADA, UNITED STATES, MEXICO, PUERTO RICO	Document ID:	IK1201452
Availability:		Revision:	1
Major System:	ENGINES	Created:	11/11/2020
Current Language:	English	Last Modified:	11/24/2020
Other Languages:	NONE	Author:	Mark Ehlers
Viewed:	40		

[Less Info](#)

Hide Details

Coding Information

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

Title: CPA RCT (relative compression test) for PSI V8 8.8L engines

Applies To: PSI propane and PSI gasoline V8 engines

CHANGE LOG

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

09/23/2015 - Initial Article Release

DESCRIPTION

This article shows how to perform a simple RCT (relative compression test) using only 2 channels of the CPA box

SYMPTOM(s)

Perform this test whenever you need to quickly determine if all cylinders have about the same cranking compression.

Note: Compression tests are most accurate when the engine is at operating temperature. If you have a fault code that identifies the suspect cylinder then it may be faster to do a conventional compression test on just this cylinder (versus a CPA RCT)

Symptoms may include:

High Blow-By

Low Compression

Hard Start

Engine noise or knock

Suspected bent rod

Oil Carry-Over at Road Draft

Low Power

Oil Consumption

Misfire & misfire faults

Engine runs rough

SPECIAL TOOL(s) / SOFTWARE

Tool Description	Quantity	Tool Number	Comments
EZ-Tech	one		Navistar Engine Diagnostics and CPA software must be installed
RP1210 Communication Device	one		Nexiq
CPA Module	one	OE-11178/ 12-999-01-01	
CPA extension harnesses	two	12-999-01-05	
CPA to Banana jack leads	one	12-999-01-06	
PSI ignition coil breakout tee	one	08-332-01	
CPA Pressure Plus Module	one	12-999-05-01	

[Tools Resource Center](#)

DIAGNOSTIC STEP(s)

1. Ensure vehicle batteries are fully charged, then DISCONNECT the battery charger
2. Open **Cylinder Performance Analyzer** on the EZ-Tech- Open directly from the software icon or launch NEDs & then simulate a MaxxForce7 & then launch Cylinder Performance Analyzer
3. Complete the info for a V8 engine
4. Select Medium Duty > BEAM > RCT+
5. Open this [PDF](#) and connect CPA to the vehicle as shown

When testing is complete remove all test equipment

1. Reinstall the fuse that was removed to prevent engine from starting
 2. Key on & wait for wait-to-start lamp to go out
 3. Start the engine (sometimes extended cranking is needed)
 4. Key off & key on & clear faults that were set using HERO or PSI diagnostic software
-

REPAIR STEP(s)

REMOVAL PROCEDURE:

WARRANTY INFORMATION

NA

OTHER RESOURCES[Master Service Information Site](#) Hide Details

Feedback Information

Viewed: 39

Helpful: 0

Not Helpful: 0

No Feedback Found

Copyright © 2020 Navistar, Inc.