



Subject Area:	anual Correction $\square$ rvice Information $\square$	Issue #	C14008
		Level:	В
		Issue Date:	5/29/2014
		Expiration Date:	11/29/2014
<b>Model Category:</b> IC ⊠ Electric ⊡ Narrow Ai	sle 🗌		
Model (s) DP100N	T, DP120NT, DP150NT		

#### Subject:

Serial Numbers

Adjust factory settings prior to pre-delivery inspection.

#### Cause:

Factory engine RPM setting and the system hydraulic relief pressure may not be optimum for proper operation. When the hydraulic system is deadheaded the engine may stall at idle.

T15E00012 and up, T24C00012 and up

#### Parts Required: None

#### Tools Required:

Perkins EST Software, Laptop, Engine Communication Adapter, 12mm and 14mm wrenches, 4mm and 5mm hex wrenches, hydraulic pressure gauge up to 4000psi, butane torch, and the tools required to install gauge.

#### Warranty Info:

File a "PSB" claim in iWarranty using PSB code: C14008.

#### Solution:

Increase the engine idle RPM from 800 to 950 and lower the hydraulic system relief pressure from 2900psi to 2700psi at Wide Open Throttle (WOT). Please follow the two procedures to make adjustments.





\*Refer to Service Manual and Operation and Maintenance Manual (OMM) for safety guidelines prior to working on equipment.

\*Make all repairs with the lift truck parked on a level, hard surface. Block the lift truck so it does not roll while working on or under the lift truck.

\*Ensure enforcement of company policy for proper lockout/tag out procedure.

\*Do not operate this truck unless you have read and understood the instructions in the OMM. Improper truck operation is dangerous and could result in injury or death.

\* Please follow all safety guidelines when using an open flame near flammables. Remove any hydraulic fluid on top or near test port area. Ensure a fire extinguisher is within arm's reach.





### Solution:

Procedure 1: Adjust Engine Idle RPM Setting.

1. Connect the communications adapter and laptop to the truck.









2. Open the Perkins EST Software.



3. When the Warranty window appears click NO.







4. On the Toolbar click on Configurations.

Se EST 2013A v10 - ECM Summary			
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Available ECM(s)	Description	Value	
- ED- 1204E Industrial #1 (ML82413U001375X)	1204E Industrial #1 (ML82413U001375X)		
	-Equipment ID	NOT PROGRAMMED	
1	-Engine Serial Number	ML82413U001375X	
	-ECM Part Number	3453388-04	
	-ECM Serial Number	20137551QV	
	- Software Group Part Number	3966343-00	
	- Software Group Release Date	FEB12	
	- Software Group Description	CCR-a5e2	
4.	Calibration Identification Number	3966343-00	
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	1204E Industrial #1 (ML82413U001		
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5. On the configuration dashboard, click to expand "Speed Control".







6. Find the Low Idle Speed Value of 800 and Double Click the value.

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-B ECM Identification Parameters	ECM Identification Parameters			
- Selected Engine Rating	E 😽 Selected Engine Rating			
	Speed Control	6		
-3 Engine Configuration Parameters	Low Idle Speed	800 rpm		
- Belayed Engine Shutdown	🗉 🕌 Engine Configuration Parameters			
	🗉 😽 Engine Idle Shutdown			
	🗉 🕌 Delayed Engine Shutdown			
- H PTO and Throttle Lock Parameters	General Information			
Wiscellaneous	🗉 🕌 Aftertreatment Configuration			
-3 Fan Control	B  B PTO and Throttle Lock Parameters			
- 😽 Fan Temperatures	🖽 🕌 Miscellaneous			
- 😽 Reversing Fan Control	🗉 👑 Fan Control			
-3 Maintenance Parameters	🗄 💥 Fan Temperatures			
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J1939 Continuous Fault Handling	🗉 🥁 Maintenance Parameters			
	🗉 👹 Configurable Inputs			
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- J Security Access Farameters	🗉 🕁 System Settings			
	🗄 🕌 Passwords			
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🗆 😸 Speed C	ontrol			
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🗉 😹 Engine Configuration Parameters				
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7. Input **950** in the New Value Box and click OK.

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-3 ECM Identification Parameters	ECM Identification Para	meters		
- Selected Engine Rating	E Selected Engine Rating			
- Speed Control	Speed Control			
-B Engine Configuration Parameters	Low Idle Speed		800 rpm	
- 诺 Engine Idle Shutdown - 😽 Delayed Engine Shutdown		and the second se	? <b>**</b>	
General Information	Change Parameter Value			
- Aftertreatment Configuration				
Hierdeautient Conngulation	Parameter Name:	Low Idle Speed		
- Miscellaneous				
- Fan Control				
- Kan Temperatures	Current Value:	800 rpm		
- Keversing Fan Control				
-3 Maintenance Parameters		a sal		
-3 Configurable Inputs	New Value:	950		
- 👑 J1939 Continuous Fault Handling	7			
-B System Settings	· · · · · · · · · · · · · · · · · · ·			
- Basswords				
☐ Security Access Parameters				
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			Current Value:	800 rpm
			-	
			New Value:	950
			New Value.	3301
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		1204E Industrial #1 (ML82413U001	375X)	





8. EST will ask you to confirm your new programing...click Yes.

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	🗉 😽 Selected Engine Rating		
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	🗉 😸 Delayed Engine Shutdown		
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9. The dashboard will now reflect the new RPM value of 950.

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∃ -■ 1204E Industrial #1 (ML82413U001375X)	Description	Value	TT	
-B ECM Identification Parameters	E K ECM Identification Parameters			
- Selected Engine Rating	Selected Engine Rating			
- Speed Control	E 🖌 Speed Control			
- 😽 Engine Configuration Parameters - 🥳 Engine Idle Shutdown	Low Idle Speed	950 rpm		
- Belayed Engine Shutdown	Engine Configuration Parameters			
General Information	Engine Idle Shutdown			
	E G Delayed Engine Shutdown			
- PTO and Throttle Lock Parameters	E 🖌 General Information			
- Miscellaneous	E 😽 Aftertreatment Configuration			
- 😽 Fan Control	E G PTO and Throttle Lock Parameters			
–👑 Fan Temperatures	🗉 😽 Miscellaneous			
-3 Reversing Fan Control	🗉 👑 Fan Control			
- 💥 Maintenance Parameters	🗉 😸 Fan Temperatures			
- 💥 Configurable Inputs	Keversing Fan Control			
- 3 J1939 Continuous Fault Handling	Maintenance Parameters			
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	1204E Industrial #1 (MI 824131001	375X)		





### Solution:

Procedure 2: Adjust hydraulic main relief pressure to 2700psi.

1. Use a 14mm wrench to remove the hydraulic control valve access cover (6 bolts).









2. Locate the test port on the hydraulic control valve. Apply heat to test port plug to melt/loosen the thread locking compound (at least 400°F).

\***Note:** Please follow all safety guidelines when using an open flame near flammables. Ensure a <u>fire extinguisher</u> is within arm's reach.\*









3. Use the 5mm hex key to remove test port plug and install 4000psi hydraulic pressure guage.



4. Locate the main relief pressure vavle.









5. Using the 12mm wrench, loosen the lock nut.







6. Use the 4mm hex key to adjust the main relief pressure.



7. Set the main relief pressure to 2700psi. Check the pressure at 100% throttle (WOT) at full back tilt.







8. Tighten the lock nut, remove pressure gauge, reinstall test port plug and the access cover.

#### **Questions?**

If you have any questions regarding this PSB, please contact Lift Central at (877) 228-3675.