

Type of Engine	[CORE] [RUNNING] [UN-DETERMINED] [SOLD]	SKU#	24529506
Stock#	78IH118	Warranty	180 DAYS P&L
Model:	INTERNATIONAL	Assy#	
Desc	DT 466A	Serial#	466TM2U0440624
		Horsepower	
Notes:	NEED TO RUN ON GROUND AND TESTED		

	Engine Inspection Checklist		BEN B RAN ON GROUND			
1. Pre-Running Check List- Engine not running					Inspected	Notes
		Check Oil and anti-freeze-add as needed				
		Check Flywheel and Bell housing				
		Check Engine Mounts				
		Check Valve cover for leaks			SILICONE ALL OVER	
		Check Head gasket for leaks				
		Check Front cover for leaks				
		Check Turbo-fins move freely-play in & out			GOOD	
		Check Exhaust Manifold for cracks-missing/broken bolts			GOOD	
		Check over Fan blades(cut belts)				
		Check for Jakes			NONE	
	Notes					

Radiator needs to be in working order-If not see NOTE1						
Install a Manual oil pressure gauge in place of the oil sending unit. NOTE2						

2. Running Check List-Engine needs to be running					Inspected	Notes
		Hook up Electronic Device and record				
	Q&A	ECM Miles _____ HP _____ HRS _____				
	Q&A	Odometer _____				
	Q&A	Oil Pressure _____				
	Q&A	SCFM(BLOWBY) _____				
		Exhaust Temps @ operating temperature				
	Q&A	1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____				
		Dept. Leader or Qualified Technician listens to engine				
		(2)Signatures _____				
		Inspect for new or fresh oil leaks				
		Check Surge tank for bubbles. NOTE3				
		Monitor exhaust for excessive smoke				
	Q&A	Did the engine run? { Y/N}				
		How did it run? IT RAN WIDE OPEN... BAD FUEL PUMP, WILL NEED TO BE REBUILT BEFORE IT RUNS AGAIN				
		Check Jake Brake function				
	Q&A	Engine Comments ENGINE IS MISSING GASKETS AND LOOSE THINGS HERE AND THERE				
		VALVE COVER GASKETS, INTAKE GASKET AND PUMP GASKETS				

			STEEL TO RUN	
		Determine what type of pallet to place engine on-wood or steel	LATER PUT ON WOOD PALLET	

IMPORTANT: IF ENGINE DID NOT RUN IN CHASSIS VERIFY IT TURNS OVER

3. Internal Engine Checks			Inspected	Notes
		Engine needs to be power washed prior to Inspection	JE	
		Remove any block insulators at this time	JE	
		Drain Engine oil	X	
		Remove all accesories-removal done by engine/bearing techs	X	
		Starter <u>X</u> Alternator <u>X</u> A/C <u>X</u> Accessory Brackets <u>X</u> Fan clutch <u>X</u>	X	
		Remove all Flywheels except Mercedes,DD13, DD15	X	
		Clean up engine to make it look showroom worthy	X	
		Verify ESN on block (see WIKI for ESN location)	X	
		Remove Engine Valve Cover & Inspect	X	GOOD
		1. Appearance of oil in Top end	X	CLEAN
		2. Valve Springs-visual and tap with rubber mallet	X	FELT AND LOOKED GOOD
	Q&A	3. Camshaft & Cam Followers-look for galling,flaking and scratches	-----	
		4. Inspect Jake Brakes-look for missing/broken pcs		
Jake Part #		NONE		If no Part # attach non-public picture of Jakes to part record
		Check Turbo-fins move freely-play in & out	X	GOOD
		Make sure oil is drained.		
	Notes	TURNING INTO A RUNNING CORE		
4. Engine Bearing Inspection			Inspected	Notes
		Open Part to Inventory work order		
		Jobs created for work done-ex. Rod & Main Bearings/ Camshaft	D	
		Place engine in Rotator and turn 90 degrees.	I	
		Place a jack stand in appropriate place to ensure safety	D	
		Remove oil pan and inspect oil remnants for debris or metal shavings	N	
		Wash oil pan and inspect for damage-cracks/dent		
		Inspect cylinder walls & piston coolers-NOTE4	T	
		Inspect Camshaft & Cam Followers-looking for galling,flaking and scratches		
		Remove main bearing caps 6,7	C	
		Remove rod bearings caps 5,6.	H	
Don't assume:inspect		Main Bearing P# _____	E	
Don't assume:inspect		Rod Bearing P# _____		
	Q&A	Inspect lower main bearing and upper rod bearing for wear	C	
	Q&A	Replaced? { Y/N }		
		(2) Signatures_____	K	
		Inspect crankshaft NOTE5		
		If bearings need replaced remove mains 4-7-Inspect Crank		

		Replace using assembly lube and torque to spec with new bearings		
		Remove 1-3 and Repeat NOTE6		
		Remove/Replace rod bearing caps in pairs (1/6,2/5,3/4)		
		Install bearings with Lubriplate and torque to spec		
		Install oil pump and Clean oil pan w/ gaskets		
		Rotate Engine 360 degrees-NOTE7		

5. Engine Work Orders- for sellable engines			Inspected	Notes
		Jobs created for work done-ex. Rod & Main Bearings/ Camshaft	X	
		Document Notes-State what you are doing to the engine	X	
		Internal job Notes-State what you did to the engine and why	X	
		Complaint, Cause, Correction-filled out	X	
		Add New and used replaced parts to work order	-----	
		Before closing work order	X	
		(2) Signatures BENJAMIN BENTS		
		If engine is sold pictures need to taken now.	CP	

6. Updating Part Inventory			Inspected	Notes
		Update engine description		
		Make sure all flex fields match recorded information		
		Update engine Grading and Price if necessary-NOTE8		
		Update engine Q &A including Serial # and Model#		
		Update SCFM-Google Docs		
		Attach paperwork to Part Record		
		Attach Pocket IQ PDF.		

7. Engine Pre- Wash			Initials and Notes	
		Do not paint engines we have inspected and need bearings, but chosen to not replace at this time and any engine we have not inspected yet.		
		Use flashlight to inspect for damaged or loose parts-Cracks, missing bolts		
		Tape, or cap all openings and ports, electrical plugs, ECM plugs, intake manifold,exhaust manifold, exposed fittings. Etc.		
		Remove tag and power wash engine		
		If engine does not require paint go strait to post paint instructions.		
		If engine is sold use air blower and blow water and excess debris off of engine		

8. Engine Pre- Paint				
		Make sure engine is dry		
		Put on PPE (Mask, gloves and eye protection)		
		Find and mask off all manufacture tags, ID plates and part numbers		

		If engine has just come from getting bearings checked or replaced, clean oil pan and oil pan bolt area w/ brake clean	
		Prime if necessary	
		Paint entire engine primary color, do not paint exhaust manifold, or valve covers if they will be painted a different color	
		Look over engine carefully and then paint exhaust manifold and turbo "Cast Iron Grey"	
		Paint Valve covers if needed	
8. Engine Post Paint			
		Print new adhesive, plastic tags and get VHI decal ready	
		Delete old pictures of engine while still in the truck, pictures of info tags can be preserved if good.	
		Check engine for cracks and major oil leaks	
		Apply adhesive tags and VHI logo sticker to front on engine	
		Zip tie plastic tag to top front of engine w/ barcode facing out	
		Remove tape from identification labels	
		Bring engine to picture area and take pics of Front, LH, RH and back side of engine- IN THAT ORDER!	
		Double check I-track to make sure pics are centered and clear. Re-take as needed	
		If engine needs to be put on AQ pallet, be sure to band engine to pallet w/ 2 bands	
		Put engine away and update location in i-track if not sold, if sold let shipping know	
		Bring completed paperwork to Deman Lead	