

GENERAL SPECIFICATIONS

Power Solutions, Inc.

GM Powertrain Industrial Engines

Engine	1.6L	3.0L	4.3L	5.0L/5.7L	8.1L/8.1L Turbo
Type	1.6-2V	3.0L L4	4.3L V-6	5.7L V-8 GEN-1E	8.1L V-8
Displacement cc (c.i.d.)	1600 (98)	2966 (181)	4294 (262)	5735 (350)	8127 (496)
Compression Ratio	9.5:1	10.5:1	9.4:1	9.4:1	9.1:1
Valve Configuration	Overhead Cam	Push Rod Actuated Overhead Valve	Push Rod Actuated Overhead Valve	Push Rod Actuated Overhead Valve	Push Rod Actuated Overhead Valve
Valve Lifters	Hydraulic	Flat Follower	Hydraulic Roller	Hydraulic Roller	Hydraulic Roller
Bore x Stroke mm (inches)	79.0x81.5 (3.11x3.21)	101.60x91.44 (4.00x3.60)	101.60x88.39 (4.00x3.48)	101.60x88.39 (4.00x3.48)	107.95x111 (4.25x4.37)
Main Bearing Caps	2 Bolt	2 Bolt	2 Bolt	2 Bolt	4 Bolt
Balance Method	External	External	Internal Balance Shaft	External	External
Intake Manifold	Mixer	Mixer	Mixer	Mixer	Mixer
Firing Order	1-3-4-2	1-3-4-2	1-6-5-4-3-2	1-8-4-3-6-5-7-2	1-8-7-2-6-5-4-3
Oil Capacity With Oil Filter	3.4 qts. (3.2L) 3.7 qts. (3.5L)	4 qts. (3.8L) 5 qts. (4.7L)	4.5 qts. (4.3L) 5 qts. (4.7L)	4.5 qts. (4.3L) 5 qts. (4.7L)	8 qts. (7.6L) 9 qts. (8.5L)
Oil Filter		PF-25 or Equivalent	PF-47/PF-52 or Equivalent	PF-1218 or Equivalent	PF-454 or Equivalent
Minimum Oil Pressure (Hot)	21 psi @ idle	6 psi @ 1000 rpm 18 psi @ 2000 rpm	6 psi @ 1000 rpm 18 psi @ 2000 rpm	6 psi @ 1000 rpm 18 psi @ 2000 rpm	5 psi @ 1000 rpm 15 psi @ 2000 rpm
Coolant Capacity (Engine)	3.5 qts.	4 qts. (3.78L)	7.75 qts. (7.3L)	8.1 qts. (7.8L)	14.5 qts. (13.7L)
Coolant Capacity (W/PSI Rad)	10 qts	12 qts. (11.4L)	17 qts. (16L)	17.5 qts. (16.6L)	28 qts (26.5L)
Fuel Type	NG, LPG	LPG, NG	LPG, NG	LPG, NG	LPG, NG
Engine Rotation (Flywheel End)	CCW	CCW	CCW	CCW	CCW
Ignition System	Distributor-less Electronic (ECU)	High Voltage Switch (HVS)	High Voltage Switch (HVS)	High Voltage Switch (HVS)	Distributor-less Electronic (ECU)
Ignition Timing	ECM Controlled Not Adjustable	ECM Controlled Not Adjustable	ECM Controlled Not Adjustable	ECM Controlled Not Adjustable	ECM Controlled Not Adjustable
Spark Plugs	AC Delco 93206675	AC Delco R42LTS or R44LTS	AC Delco R42LTS or R44LTS	AC Delco R42LTS or R44LTS	AC Delco R42LTS or R44LTS
Spark Plug Gap	0.035"	0.035"	0.035"	0.035"	0.035"
Valve Clearance (Lash) Intake Exhaust	No Adjustment OHC Engine	½ to 1 Turn Down From 0 Lash	Net Lash No Adjustment	1 Turn Down From 0 Lash	Net Lash No Adjustment
Manufactured	Toluca, Mexico	Toluca, Mexico	Tonawanda, NY	Toluca, Mexico	Tonawanda, NY
Revised 12/2011					

CERTIFIED STATIONARY ENGINE MAINTENANCE REQUIREMENTS

Perform the following maintenance on the engine at the hours indicated and at equivalent hour intervals thereafter.

	Interval Hours									
	Daily	1000	1500	2000	2500	3000	3500	4000	4500	5000
General Maintenance Section										
Visual check for fluid leaks	X									
Check engine oil level	X									
Check coolant level	X									
Change engine oil and filter	Every 150 hours or 120 days of operation									
Check LPG system for leaks	Prior to any service or maintenance activity									
Inspect accessory drive belts for cracks, breaks, splits or glazing		X		X		X		X		X
Inspect electrical system wiring for cuts, abrasions or corrosion				X				X		
Inspect all vacuum lines and fittings for cracks, breaks or hardening				X				X		
Engine Coolant Section										
Clean debris from radiator core	Every 100 hours or 60 days of operation									
Change coolant		X		X		X		X		X
Inspect coolant hoses for cracks, swelling or deterioration		X		X		X		X		X
Base Engine – Prime Engines										
Compression Test			X			X			X	
Replace/Rebuild Cylinder Heads					X					X
Base Engine – Turbo Charged Emergency Engines										
Replace/Rebuild Cylinder Heads		X		X						
Replace Turbo Charger										
Engine Ignition System										
Replace spark plugs		X		X		X		X		X
Clean secondary ignition coil tower		X	X	X		X		X		X
Check spark plug wires for cuts abrasions or hardening		X								
Replace distributor cap and rotor				X				X		
Replace spark plug wires				X				X		
Fuel System Maintenance										
Inspect air cleaner	Every 200 hours, or every 100 hours in dusty environment									
Replace filter element	Annually, or as required in dusty environments									
Replace fuel filter		X		X		X		X		X
Inspect Shut-off Valve for leaks and closing				X				X		
Leak check fuel lines				X				X		
Check air induction for leaks		X		X		X		X		X
Check manifold for vacuum leaks		X		X		X		X		X
Drain Vaporizer oil build up	Every 2500 hrs									
Engine Exhaust System										
Inspect exhaust manifold for leaks				X				X		
Inspect exhaust piping for leaks				X				X		
Check HEGO sensor(s) connector and wires for burns, cuts or damage				X				X		
Inspect catalyst for mechanical damage				X				X		