

# Specifications

TYPE	254 cu/in. 4 Cyl.	380 cu/in. 6 Cyl.	363 cu/in 6 Cyl. Turbo. and 6 Cyl. Turbo/Int.
MODEL	4 CYCLE, OVERHEAD VALVE, DIRECT INJECTION		
MODEL (LEHMAN)	2722E SP90	2725E SP135	2728E SP185 2728E SP225/SP275
COMPRESSION PRESSURE MIN	300lbs per sq. in inl at 215 rpm $\pm$ 80 PSI between Cyl		
FIRING ORDER	1-2-4-3	1-5-3-6-2-4	1-5-3-6-2-4
CRANKSHAFT ROTATION	C.C.W facing flywheel		
GOVERNED SPEED (Max) NO LOAD	2850	2850	2800
UNDER LOAD	2600	2600	2500
IDLING SPEED			
EXHAUST SIZE	3.5" ID		3" SE
EXHAUST BACK PRESSURE (Max)	1 1/2 lb/sc		
COLD START	Auto Excess fuel device		
VALVES	Free turn		
VALVE CLEARANCE (hot/cold)	Inlet & Exhaust 0.015"		3"
PISTONS	Aluminium alloy		
COMBUSTION CHAMBER	Machined in piston crown		
PISTON RINGS	2 Compression; 1 Oil control 3 compression + 1 oil control		
CAMSHAFT	Cast iron alloy; Gear driven		
CRANKSHAFT	Steel forging		
MAIN BEARINGS	5	7	7
LUBE SYSTEM:			
MIN OIL PRESSURE	41 PSI at 1600 RPM & 47 at 2000 RPM		
OIL TEMPERATURE (range)	165 - 230°F		
LUBRICANT			
Above 90°F ambient	SAE 30		
20 to 90°F ambient	SAE 20W/20		
Below 30°F ambient	SAE 10W		
OIL COOLER	Shell and tube type heat exchanger		
TIMING	22° BTDC No. 1 piston	22° BTDC No. 1 piston	24° BTDC No. 1 piston*
INJECTORS	4 hole type		
PRESSURE	SP275 - Test Pressure 265/275 Bar - others 208/218 bar		
FUEL LIFT PUMP	Diaphragm with hand priming lever Piston type		
OPERATING TEMP.	82° - 94°C		
MAXIMUM TEMP.	99°C		
CIRCULATION	159 liters/min; 180 liters/min		
SUGGESTED BATTERY	120 AMP/HR		
LOCK TORQUE	37.5 ft/lbs., 1240 amp. draw Max		
RUNNING TORQUE	15 ft/lbs 690 amp Draw Max		
HEAT EXCHANGER	Shell and tube type, 2 pass		
RAW WATER PUMP	Bronze, single impeller type, gear driven		
MANIFOLD, EXHAUST	Gray iron, fresh water, cooled		
MANIFOLD, INTAKE	Integral with exhaust		
AIR FILTER ELEMENT	Polyurethane, 40 pore, replaceable Wire Mesh		
ENGINE MOUNTINGS	Rubber compound, adjustable		
FUEL LINE	3/8" Recommended. Reduce to 5/16" at engine		
TACHOMETER ADAPTOR	Turns C.C.W. at 1/2 engine speed. Adapts to 7/8" - 18 ferrule		
FAN BELT TENSION	1/2 free movement		

\*May be adjusted in certain conditions to 20° BTDC No. 1 Piston