

Systems Data

Reference Number: EM1898


 July 13, 2020
 For Help Desk Phone Numbers

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AIR INTAKE SYSTEM

THE INSTALLED SYSTEM MUST COMPLY WITH THE SYSTEM LIMITS BELOW FOR ALL EMISSIONS CERTIFIED ENGINES TO ASSURE REGULATORY COMPLIANCE.

MAXIMUM ALLOWABLE INTAKE RESTRICTION WITH CLEAN ELEMENT	15	IN-H2O
MAXIMUM ALLOWABLE INTAKE RESTRICTION WITH DIRTY ELEMENT	25	IN-H2O
MAXIMUM PRESSURE DROP FROM COMPRESSOR OUTLET TO MANIFOLD INLET (OR MIXER INLET FOR EGR)	4.4	IN-HG
CHARGE AIR FLOW AT RATED SPEED	337.7	LB/MIN
TURBO COMPRESSOR OUTLET TEMPERATURE AT RATED SPEED	451	DEG F
MAXIMUM ALLOWABLE STATIC WEIGHT ON AIR INLET	59.5	LB
MAXIMUM ALLOWABLE STATIC WEIGHT ON AIR INLET (AIR SHUT OFF INCLUDED)	17.6	LB
MAXIMUM ALLOWABLE STATIC BENDING MOMENT ON AIR INLET	9.6	LB-FT
MAXIMUM ALLOWABLE STATIC WEIGHT ON TURBO OUTLET CONNECTION	0	LB
MAXIMUM ALLOWABLE STATIC BENDING MOMENT ON TURBO OUTLET CONNECTION	0	LB-FT

COOLING SYSTEM

ENGINE ONLY COOLANT CAPACITY	41.4	GAL
MAXIMUM ALLOWABLE JACKET WATER OUTLET TEMPERATURE	210	DEG F
REGULATOR LOCATION FOR JW (HT) CIRCUIT	OUTLET	
MAXIMUM UNINTERRUPTED FILL RATE	5.0	G/MIN

ENGINE SPEC SYSTEM

CYLINDER ARRANGEMENT	VEE	
NUMBER OF CYLINDERS	12	
CYLINDER BORE DIAMETER	6.7	IN
PISTON STROKE	7.5	IN
TOTAL CYLINDER DISPLACEMENT	3161	CU IN
STANDARD CRANKSHAFT ROTATION FROM FLYWHEEL END	CCW	
STANDARD CYLINDER FIRING ORDER	1-12-9-4-5- 8-11-2-3- 10-7-6	
NUMBER 1 CYLINDER LOCATION	RIGHT FRONT	
STROKES/COMBUSTION CYCLE	4	

EXHAUST SYSTEM

THE INSTALLED SYSTEM MUST COMPLY WITH THE SYSTEM LIMITS BELOW FOR ALL EMISSIONS CERTIFIED ENGINES TO ASSURE REGULATORY COMPLIANCE.

MAXIMUM ALLOWABLE SYSTEM BACK PRESSURE	27	IN-H2O
MANIFOLD TYPE	DRY	
MAXIMUM ALLOWABLE STATIC WEIGHT ON EXHAUST CONNECTION	63.9	LB
MAXIMUM ALLOWABLE STATIC BENDING MOMENT ON EXHAUST CONNECTION	31.7	LB-FT

FUEL SYSTEM		
MAXIMUM FUEL FLOW FROM TRANSFER PUMP TO ENGINE	332.9	G/HR
MAXIMUM ALLOWABLE FUEL SUPPLY LINE RESTRICTION	8.9	IN-HG
MAXIMUM ALLOWABLE FUEL TEMPERATURE AT TRANSFER PUMP INLET	151	DEG F
MAXIMUM FUEL FLOW TO RETURN LINE FROM ENGINE	322.3	G/HR
MAXIMUM ALLOWABLE FUEL RETURN LINE RESTRICTION	8.0	IN-HG
NORMAL FUEL PRESSURE IN A CLEAN SYSTEM	60.2	PSI
FUEL SYSTEM TYPE	EUI	
MAXIMUM TRANSFER PUMP PRIMING LIFT WITHOUT PRIMING PUMP	12.1	FT
MAXIMUM HEAT REJECTION TO FUEL	540	BTU/MIN
LUBE SYSTEM		
CRANKCASE VENTILATION TYPE	TO ATM	
MOUNTING SYSTEM		
CENTER OF GRAVITY LOCATION - X DIMENSION - FROM REAR FACE OF BLOCK - (REFERENCE TM7077)	37.4	IN
CENTER OF GRAVITY LOCATION - Y DIMENSION - FROM CENTERLINE OF CRANKSHAFT - (REFERENCE TM7077)	9.8	IN
CENTER OF GRAVITY LOCATION - Z DIMENSION - FROM CENTERLINE OF CRANKSHAFT - (REFERENCE TM7077)	0.0	IN
MASS MOMENT OF INERTIA - X AXIS	8851	LB IN SEC2
MASS MOMENT OF INERTIA - Y AXIS	61955	LB IN SEC2
MASS MOMENT OF INERTIA - Z AXIS	61955	LB IN SEC2
STARTING SYSTEM		
MINIMUM CRANKING SPEED REQUIRED FOR START	120	RPM