Systems Data

CATERPILLAR®

Print

Systems Data Reference Number: EM4305

June 24, 2020 For Help Desk Phone Numbers <u>Click Here</u>

AIR INTAKE SYSTEM		
THE INSTALLED SYSTEM MUST COMPLY WITH THE SYSTEM LIMITS BELOW FOR ALL E TO ASSURE REGULATORY COMPLIANCE.	MISSIONS CERTIF	TED ENGINES
MAXIMUM ALLOWABLE INTAKE RESTRICTION WITH CLEAN ELEMENT	5	IN-H20
MAXIMUM ALLOWABLE INTAKE RESTRICTION WITH DIRTY ELEMENT	15	IN-H20
MAXIMUM TURBO INLET AIR TEMPERATURE	140	DEG F
MAXIMUM AIR FILTER INLET AIR TEMPERATURE	140	DEG F
COOLING SYSTEM		
ENGINE ONLY COOLANT CAPACITY	92.4	GAL
MAXIMUM ALLOWABLE JACKET WATER OUTLET TEMPERATURE	210	DEG F
MAXIMUM UNINTERRUPTED FILL RATE	5.0	G/MIN
REGULATOR START TO OPEN TEMPERATURE - JW	192	DEG F
REGULATOR FULLY OPEN TEMP - JW	208	DEG F
CHARGE AIR TEMPERATURE CONTROL TYPE	SCAC	
MAXIMUM COOLANT WATER PRESSURE - ENGINE INLET	28.4	PSI
SCAC THERMOSTAT START TO OPEN TEMPERATURE	120	DEG F
SCAC THERMOSTAT FULL OPEN TEMPERATURE	138	DEG F
MINIMUM STARTING JACKET WATER TEMPERATURE	140	DEG F
AIR-TO-CORE TEMPERATURE RISE (RELATIVE TO INLET AIR TEMP)	6.7	Delta deg F
FAN AIRFLOW AT ADDITIONAL RESTRICTION A	67133.2447	CU FT/MIN
FAN AIRFLOW AT ADDITIONAL RESTRICTION B	64060.8658	CU FT/MIN
FAN AIRFLOW AT ADDITIONAL RESTRICTION C	0	CU FT/MIN
FAN ADDITIONAL RESTRICTION A	0	IN-H20
FAN ADDITIONAL RESTRICTION B	0.50	IN-H20
FAN ADDITIONAL RESTRICTION C	0.75	IN-H20
ENGINE SPEC SYSTEM		
CYLINDER ARRANGEMENT	VEE	
NUMBER OF CYLINDERS	20	
CYLINDER BORE DIAMETER	6.7	IN
PISTON STROKE	8.5	IN
TOTAL CYLINDER DISPLACEMENT	5956	CU IN
STANDARD CRANKSHAFT ROTATION FROM FLYWHEEL END	CCW	
STANDARD CYLINDER FIRING ORDER	1-2-11-12- 3-4-15-16- 7-8-19-20- 9-10-17-18- 5-6-13-14	
NUMBER 1 CYLINDER LOCATION	RIGHT FRONT	
STROKES/COMBUSTION CYCLE	4	
MAXIMUM ALLOWED CRANKCASE PRESSURE	0.1	PSI

THE INSTALLED SYSTEM MUST COMPLY WITH THE SYSTEM LIMITS BELOW FOR AL TO ASSURE REGULATORY COMPLIANCE.		
MAXIMUM ALLOWABLE SYSTEM BACK PRESSURE	20	IN-H20
MANIFOLD TYPE	DRY	
FUEL SYSTEM		
FUEL SYSTEM TYPE	CAT LOW PRESSURE	
LUBE SYSTEM		
LUBE SYSTEM OIL COOLER TYPE	SHELL & TUBE	
CRANKCASE VENTILATION TYPE	OCV	
MOUNTING SYSTEM		
CENTER OF GRAVITY LOCATION - X DIMENSION - FROM REAR FACE BLOCK - (REFERENCE TM7077)	OF 60.6	IN
CENTER OF GRAVITY LOCATION - Y DIMENSION - FROM CENTERLIN OF CRANKSHAFT - (REFERENCE TM7077)	IE 13.7	IN
CENTER OF GRAVITY LOCATION - Z DIMENSION - FROM CENTERLIN OF CRANKSHAFT - (REFERENCE TM7077)	NE 0.3	IN
DRY WEIGHT - ENGINE ONLY (REFERENCE VALUE)	23739	LB
LENGTH - ENGINE ONLY (REFERENCE VALUE)	166	IN
HEIGHT - ENGINE ONLY (REFERENCE VALUE)	96	IN
WIDTH - ENGINE ONLY (REFERENCE VALUE)	93	IN