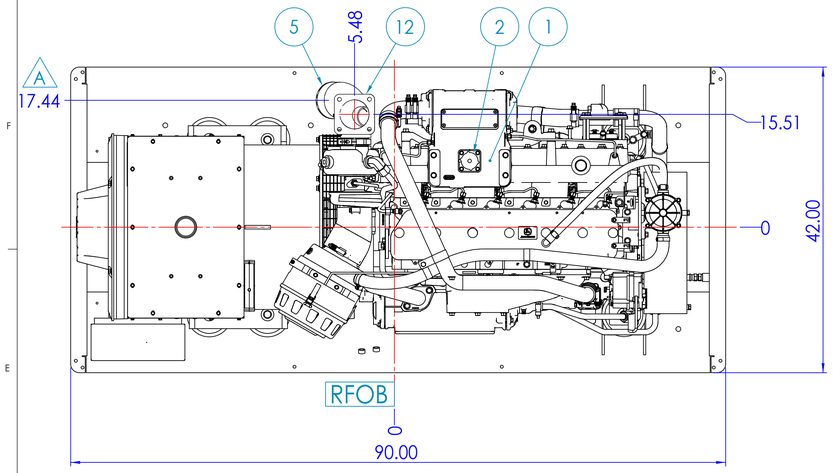
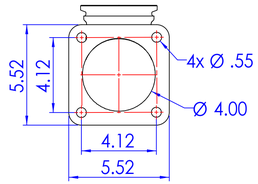
EST. WEIGHT AND C.G.				
MODEL	WEIGHT	C.G.		
	LBS.	X	Y	Z
M150A13.11L (150kW/60Hz)	3500	-.19	-.31	2.26
M150A13.51L (125kW/50Hz)	3645	.90	-.30	2.17

NOTE: WEIGHTS INCLUDE OIL, NO COOLANT.

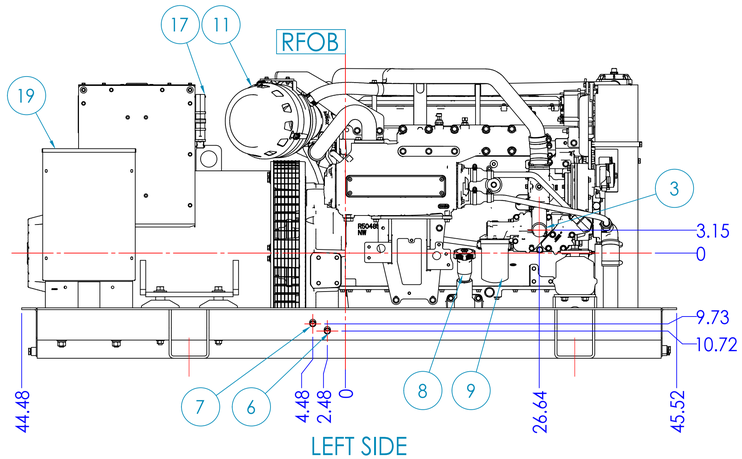
ITEM	DESCRIPTION
1	EXPANSION TANK
2	COOLANT FILL
3	SEAWATER INLET - Ø 2.0 H.B.
4	SEAWATER OUTLET (DRY EXHAUST) - Ø 2.0 H.B.
5	OPTIONAL WET EXHAUST ELBOW - Ø 6.0 H.B.
6	FUEL SUPPLY - 3/8 NPT
7	FUEL RETURN - 3/8 NPT
8	CRANKCASE OIL FILL/DIPSTICK
9	CRANKCASE OIL FILTER
10	ENGINE OIL DRAIN - 1/2 NPT
11	AIR INLET FILTER
12	OPTIONAL DRY EXHAUST ELBOW - SEE DETAIL
13	CLOSED CRANKCASE VENTILATION SYSTEM
14	ELECTRIC STARTER
15	PRIMARY FUEL FILTER
16	FINAL FUEL FILTER
17	ENGINE CONTROL UNIT
18	PMG
19	D.C. JUNCTION BOX
20	BASE PAN DRAIN - 1/2 NPT



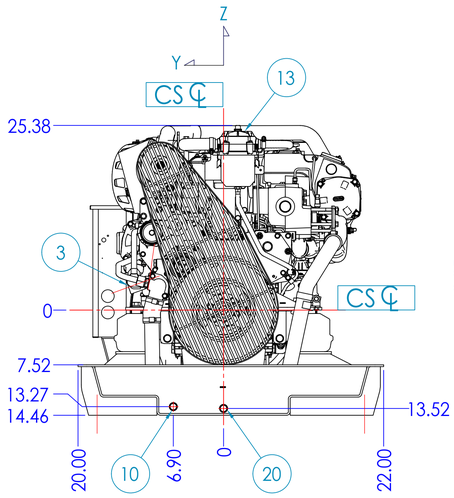
PLAN



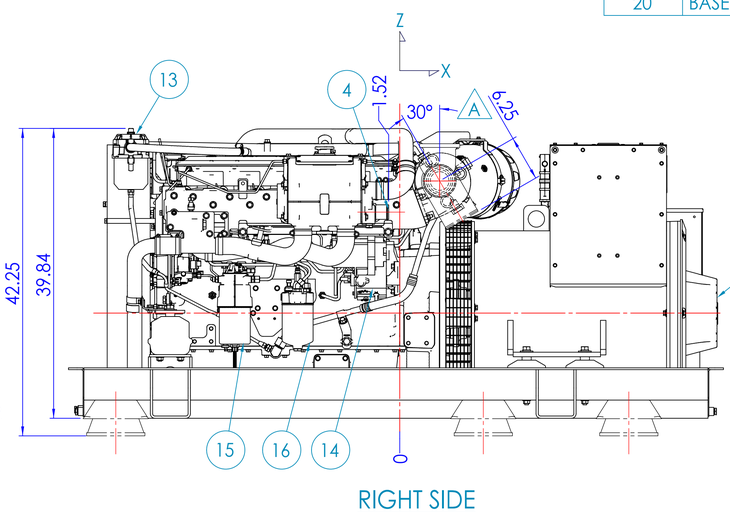
OPTIONAL DRY EXHAUST ELBOW
SCALE 1:4



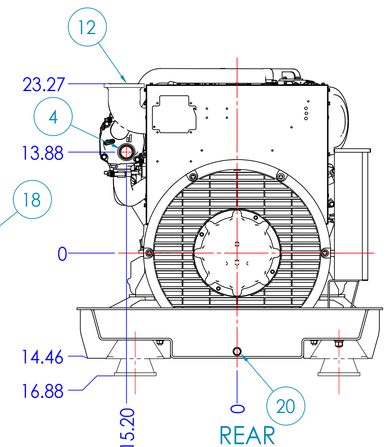
LEFT SIDE



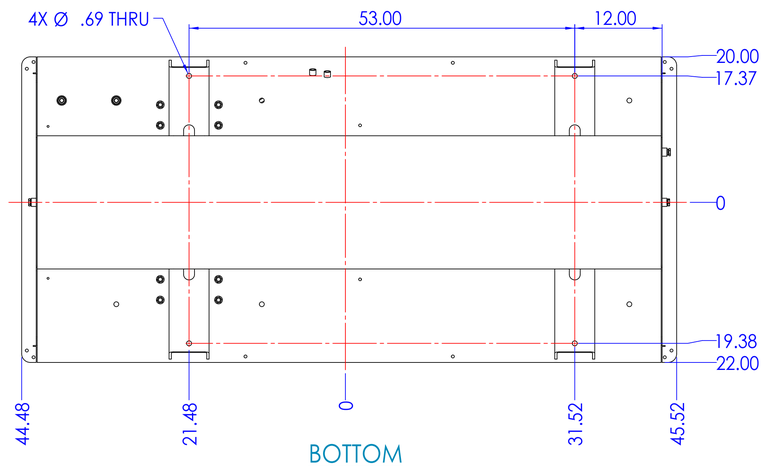
FRONT



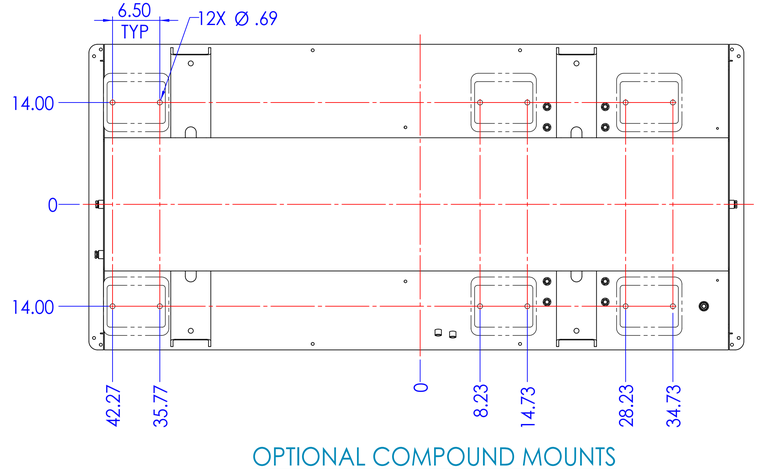
RIGHT SIDE



REAR



BOTTOM



OPTIONAL COMPOUND MOUNTS

REV.	DESCRIPTION	DATE	BY	CHECKED
A	CHANGED WET EXHAUST ELBOW ANGLE AND LENGTH, UPDATED BELT GUARD. ECN 6234	10/2/2019	MG	LTP

REVISIONS

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES:
ANGULAR: MACH± 0.5° BEND ± 1.0°
X ± 0.1
XX ± 0.03
XXX ± 0.005
INTERPRET GEOMETRIC TOLERANCING PER: ASME Y14.5M

	NAME	DATE
DRAWN	MG	06/22/17
CHECKED	TAH	06/28/17
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

THIRD ANGLE PROJECTION

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MATERIAL
FINISH
DO NOT SCALE

NORTHERN LIGHTS
4420 14th AVE. N.W.
Seattle, WA 98107
(206) 789-3880
www. northern-lights.com

TITLE:
INSTALLATION DIMENSIONS
M150A13L HEAT EXCHANGER COOLED

SIZE	PART NO.	DWG. NO.	REV
D		D-5020	A

SCALE: 1:10 | WEIGHT: LBS. | SHEET 1 OF 1

REV A
D-5020
D