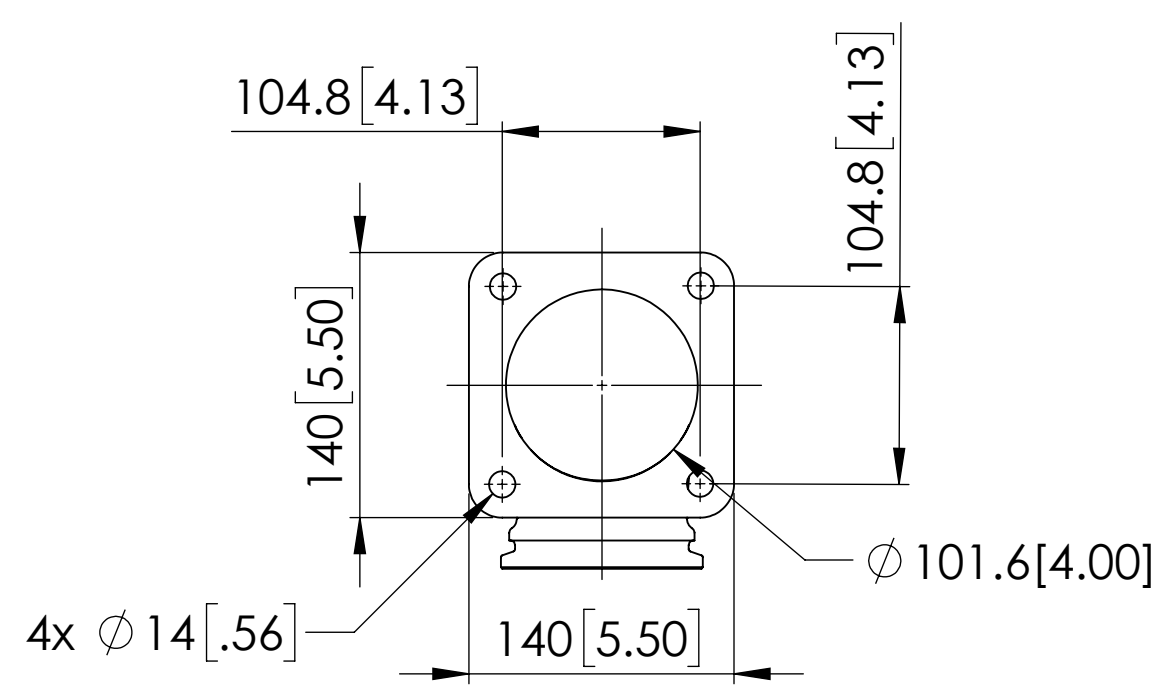
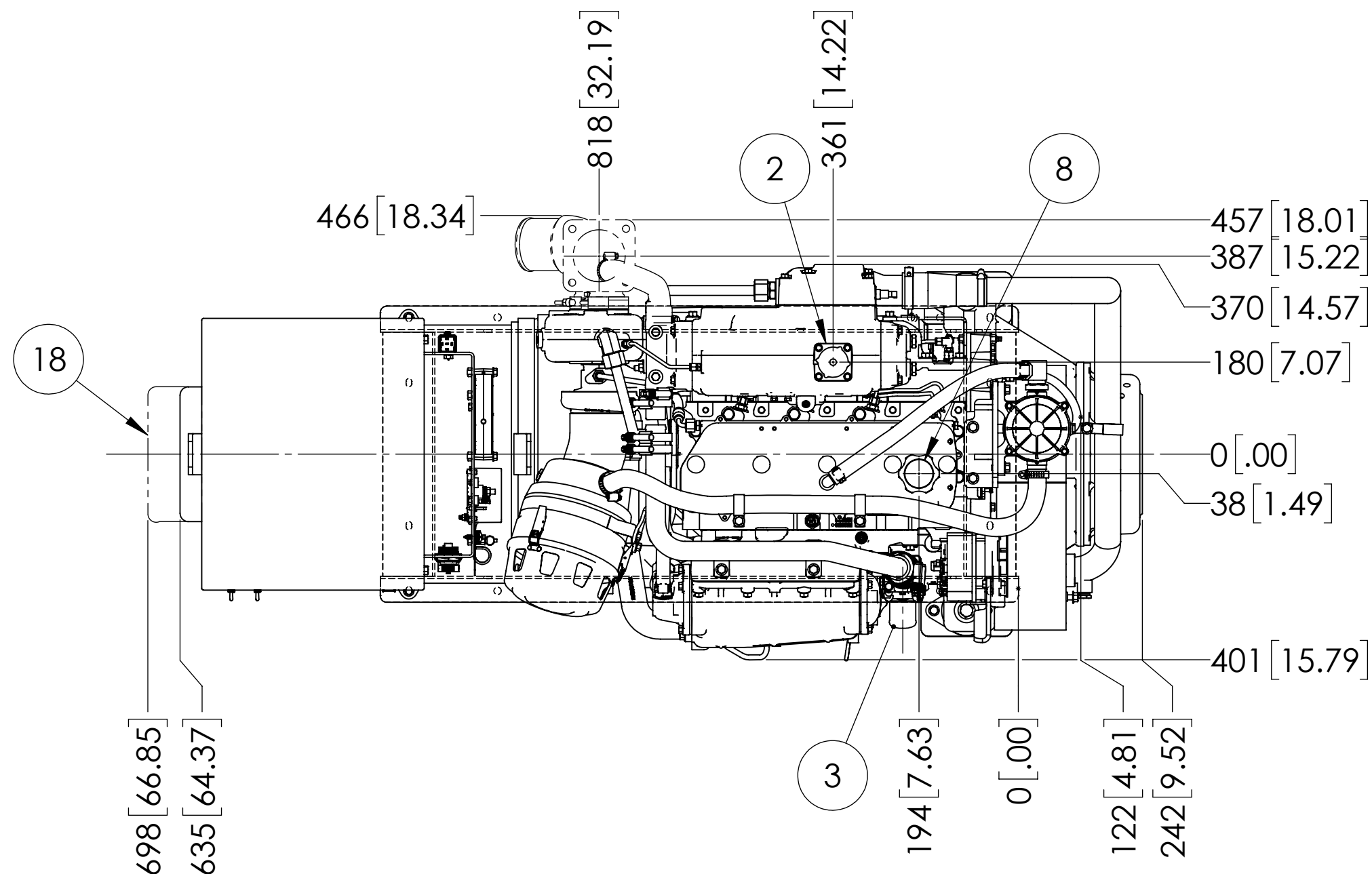
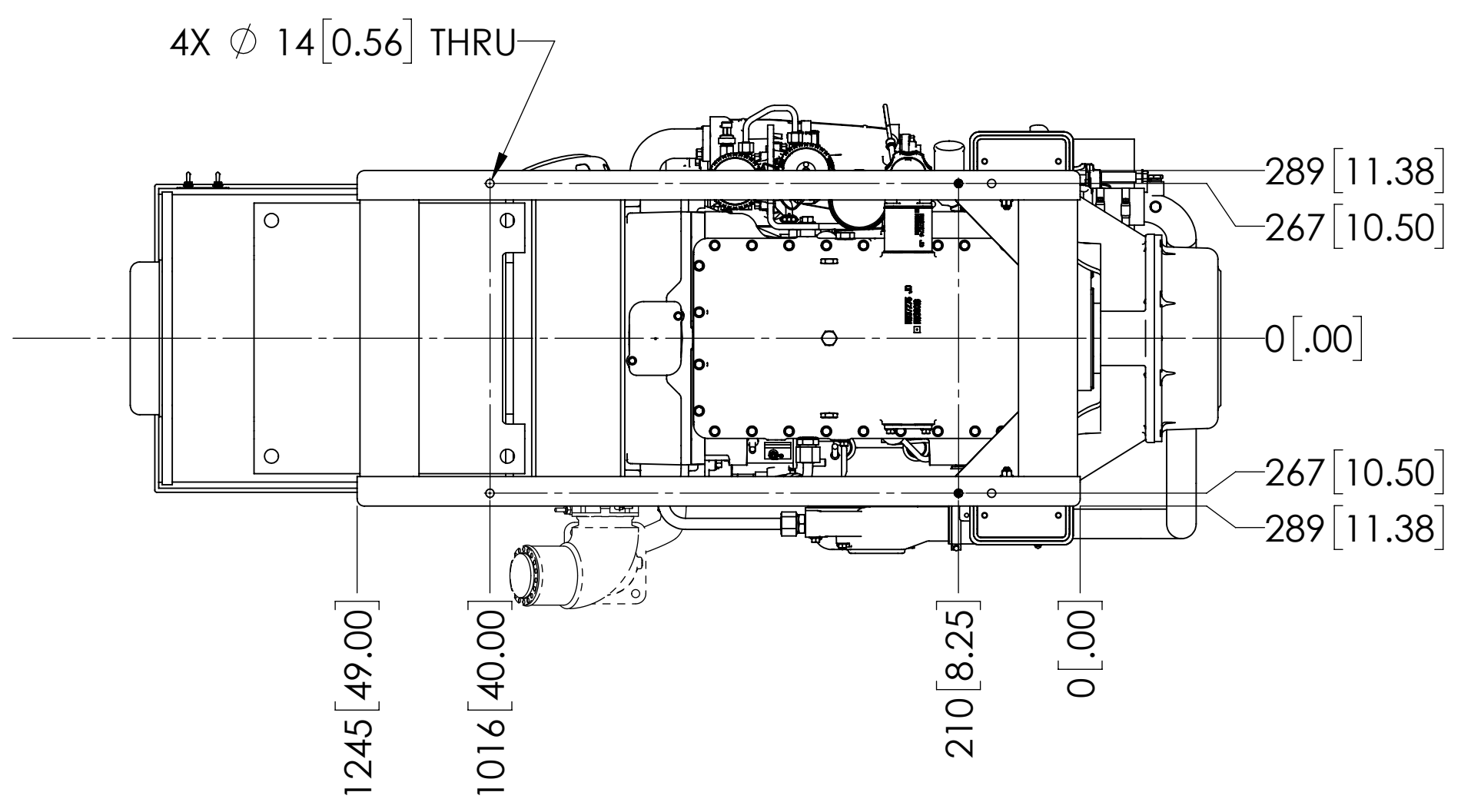
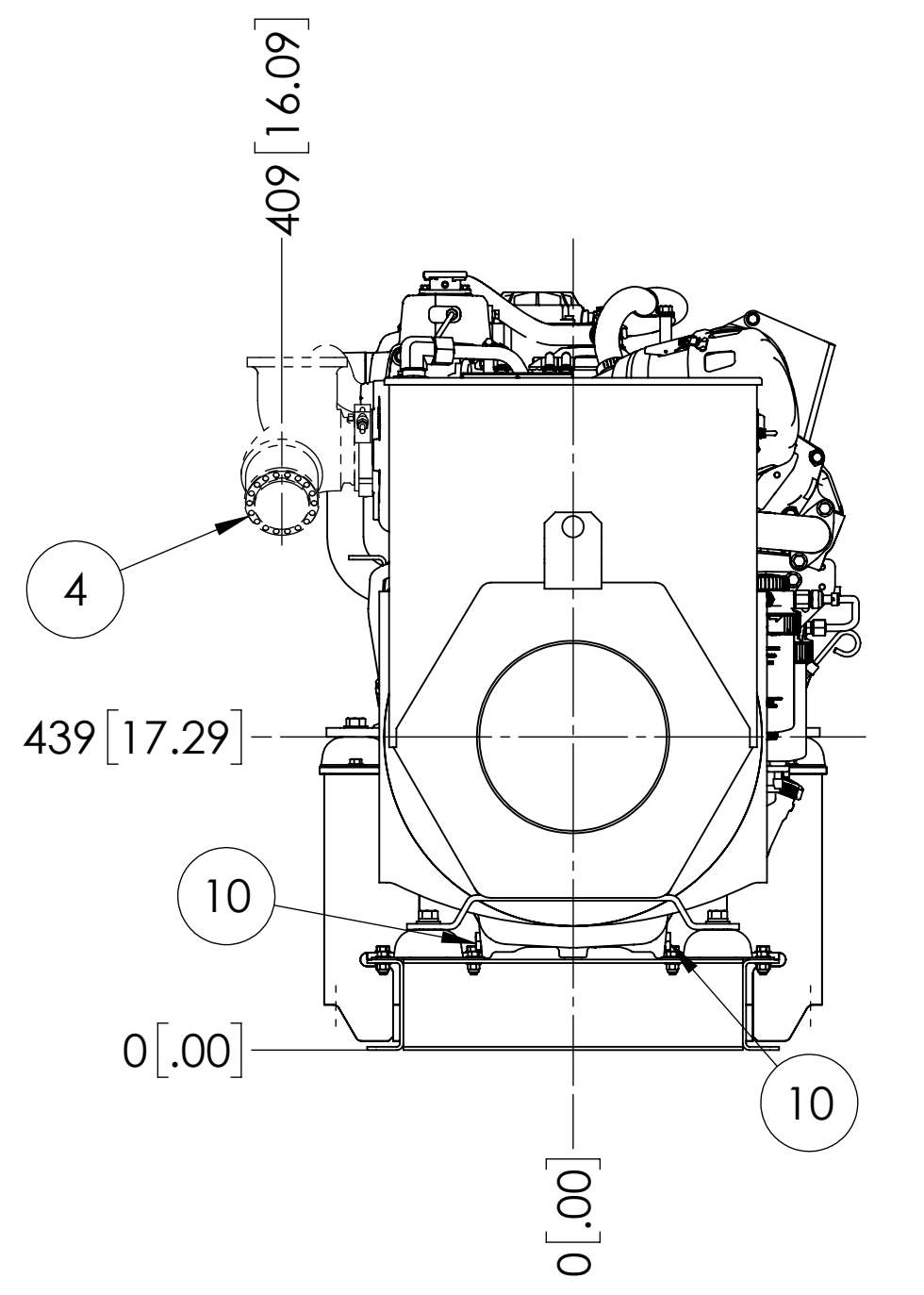
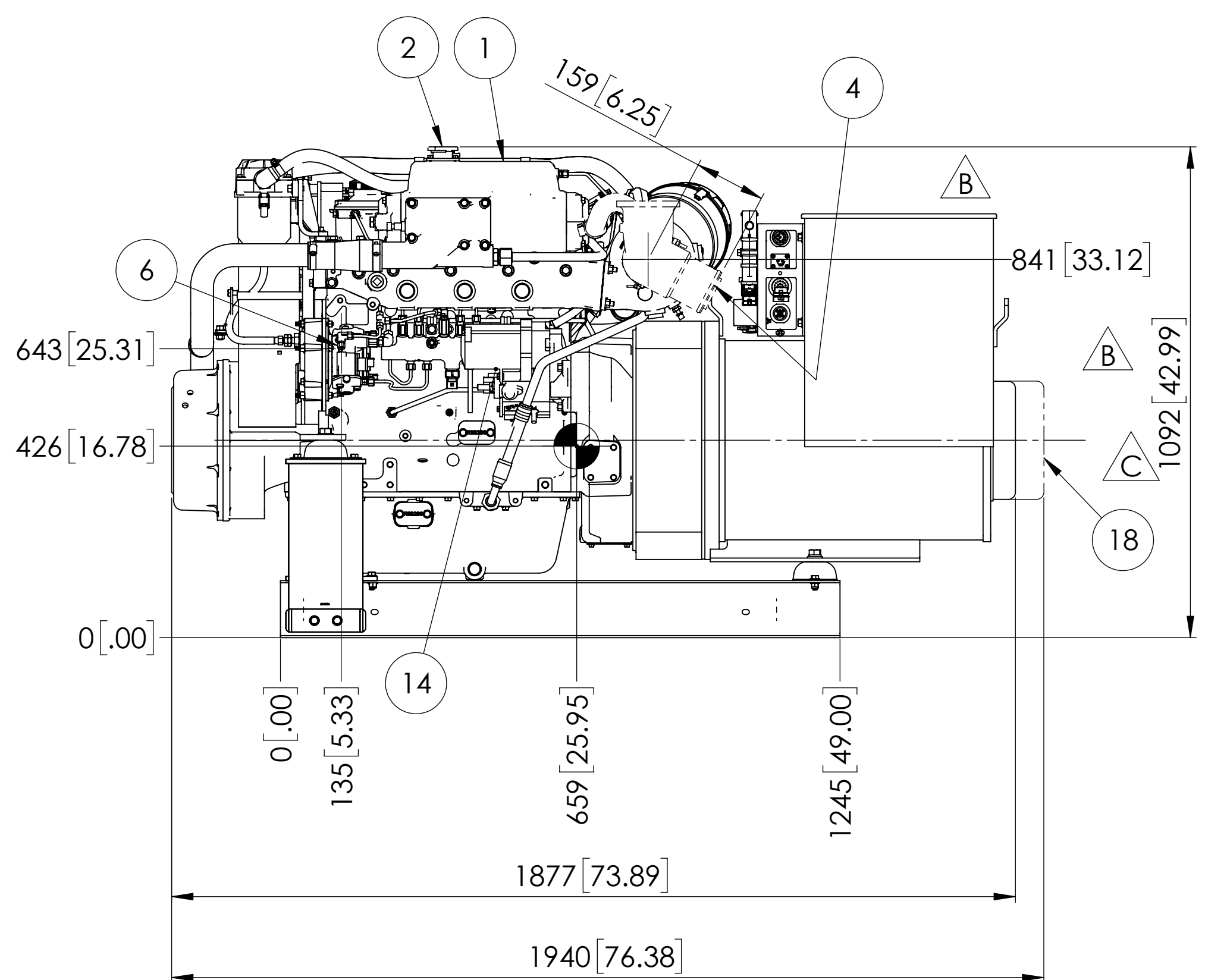
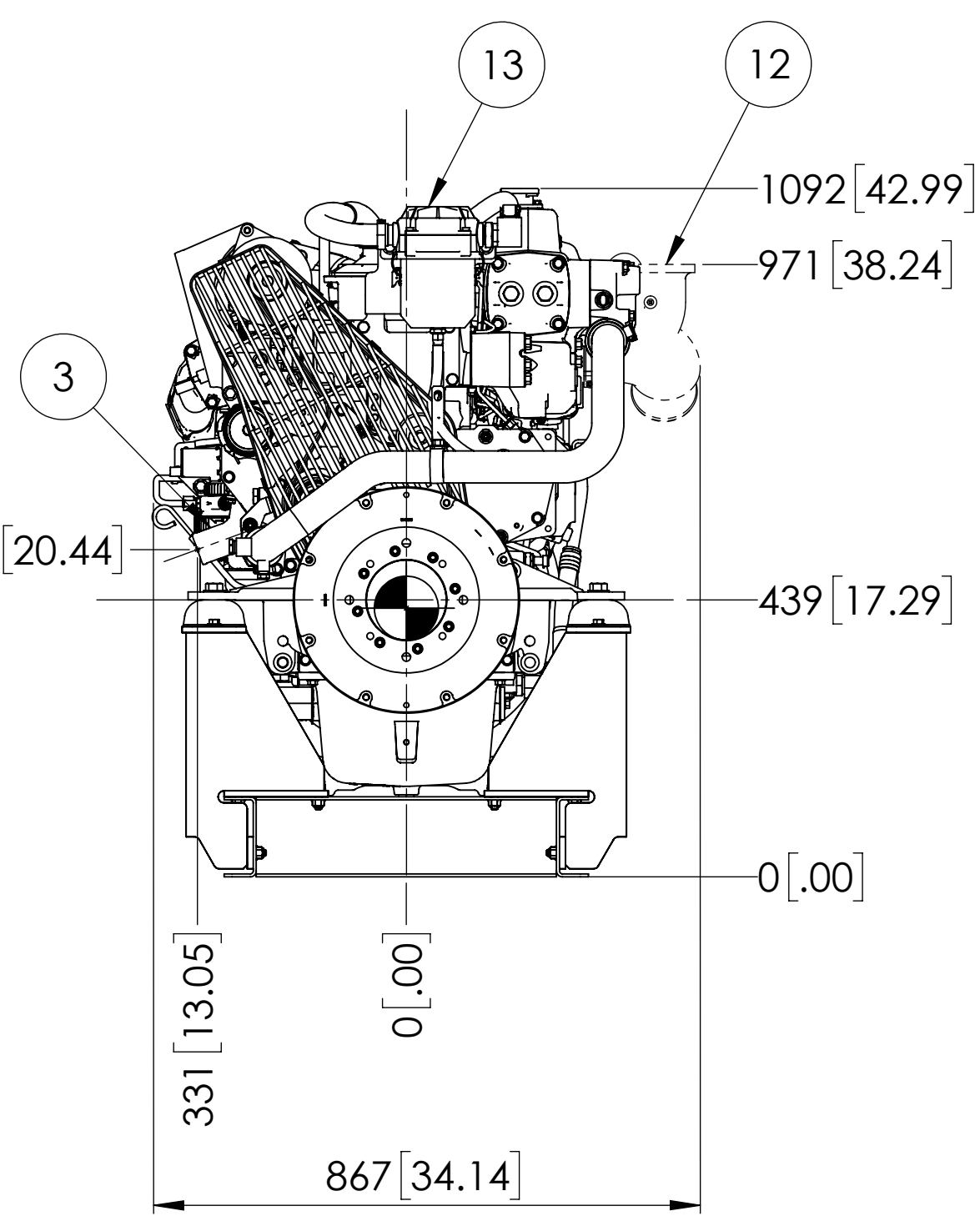
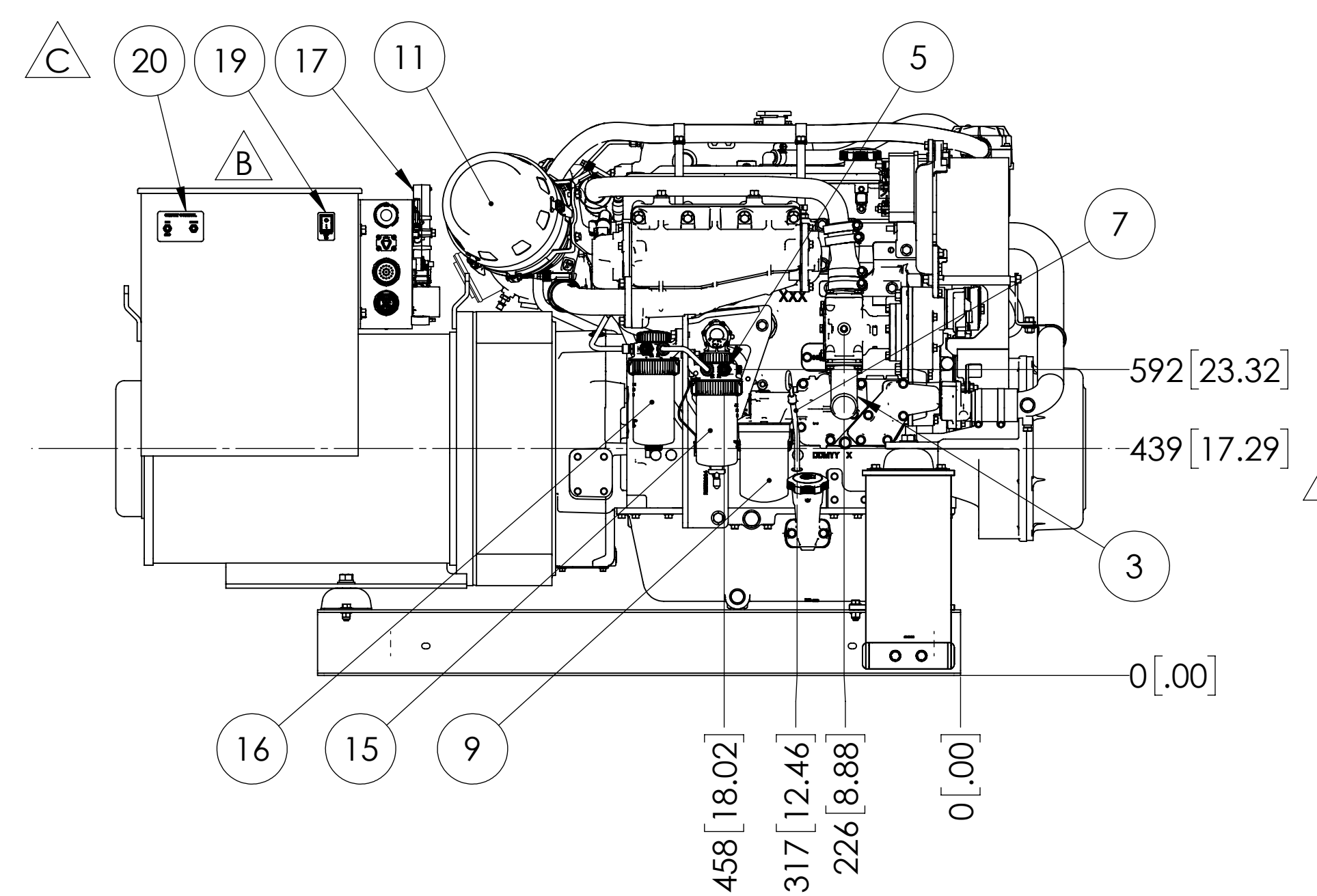


MODELS	APPROX. WT. lbs [kg]
M99C13.1S 99kW 1800 RPM 60Hz 3 ϕ	2790 [1266]

ITEM	DESCRIPTION
1	EXPANSION TANK
2	COOLANT FILL
3	SEAWATER INLET - ϕ 2.0 H.B.
4	OPTIONAL WET EXHAUST ELBOW - ϕ 4.0 H.B.
5	FUEL SUPPLY - ϕ 3/8 H.B.
6	FUEL RETURN - ϕ 1/4 H.B.
7	CRANKCASE OIL DIPSTICK
8	CRANKCASE OIL FILLER
9	CRANKCASE OIL FILTER
10	ENGINE OIL DRAIN - M18x1.5
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	OPTIONAL PMG
19	EMERGENCY STOP SWITCH
20	GENSET CONTROL TOGGLE SWITCHES



OPTIONAL DRY EXHAUST ELBOW FLANGE DETAIL



NOTE:
1. FOR M99C13 W/O OPTIONAL PTO, SEE DRAWING D-4776.

THE DIMENSIONS ON THIS DRAWING ARE SUBJECT TO CHANGE. PLEASE CONTACT NLI TO BE SURE YOU HAVE THE MOST CURRENT REVISION.

REV.	DESCRIPTION	DATE	BY	CHECKED
C	MOVED ENGINE TO ECU HARNESS KIT. ADDED E-STOP AND GENSET CONTROL SWITCHES. ECN 7313	4/29/2021	MG	DV
B	ADDED ENGINE TO ECU HARNESS KIT. CHANGED DIM.: NOW 1101 WAS 1092. CHANGED WEIGHT: NOW 2790 LB WAS 2780 LB. ECN 6803.	6/12/2020	MG	LTP
A	UPDATED TO SHOW NEW BASE FRAME. ECN 3768.	2/11/2016	MG	TAH

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS TOLERANCES: ANGULAR: MACH: 0.5° BEND \pm 1.0° X, \pm 3 X.X \pm 2		NAME: MG	DATE: 08/06/13	NORTHERN LIGHTS 4420 14th AVE. N.W. Seattle, WA 98107 (206) 789-3880 www.northern-lights.com
INTERPRET GEOMETRIC TOLERANCING PER ASME Y14.5M		CHECKED: TAH	DATE: 09/03/14	
MATERIAL: FINISH		G.A.		TITLE: INSTALLATION DIMENSIONS M99C13.1S H.E. WITH OPTIONAL PTO
DO NOT SCALE		COMMENTS:		
THIRD ANGLE PROJECTION		SCALE: 1:10		SIZE: D
PROPERTY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF NORTHERN LIGHTS. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF NORTHERN LIGHTS IS PROHIBITED.		WEIGHT:		REV: C
REVISIONS		SHEET 1 OF 1		DWG. NO. D-4777