

HARDIN
MARINE

11 Industry Dr. Palm Coast, FL 32137
386-445-2500 / FAX 386-445-1122

PART NO.
620-3813X

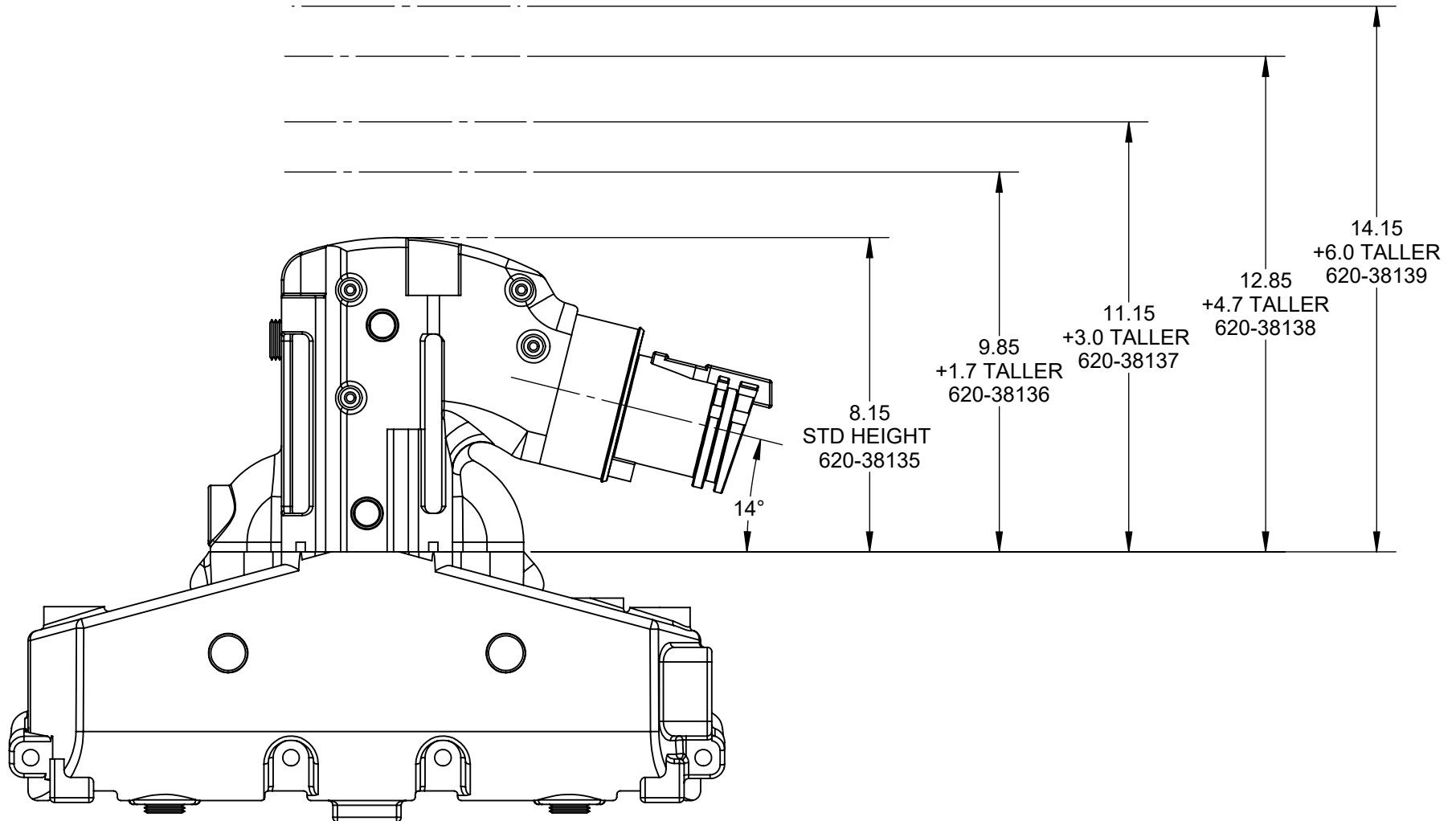
FOR MERCURY 2005 + WITH 14 DEGREE RISER

TITLE:

MERCURY SBC DRY JOINT RISER HEIGHTS

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MERCURY OFFERED 5 DIFFERENT RISER EXIT HEIGHTS. MEASURE FROM THE BOTTOM OF THE RISER TO THE TOP OF THE RISER. THE DIMENSIONS BELOW SHOW WHICH KIT PART NUMBER TO ORDER. WE OFFER EACH KIT WITH OR WITHOUT SALT WATER ZINC COAT AND WITH OR WITHOUT CLOSED COOLING.



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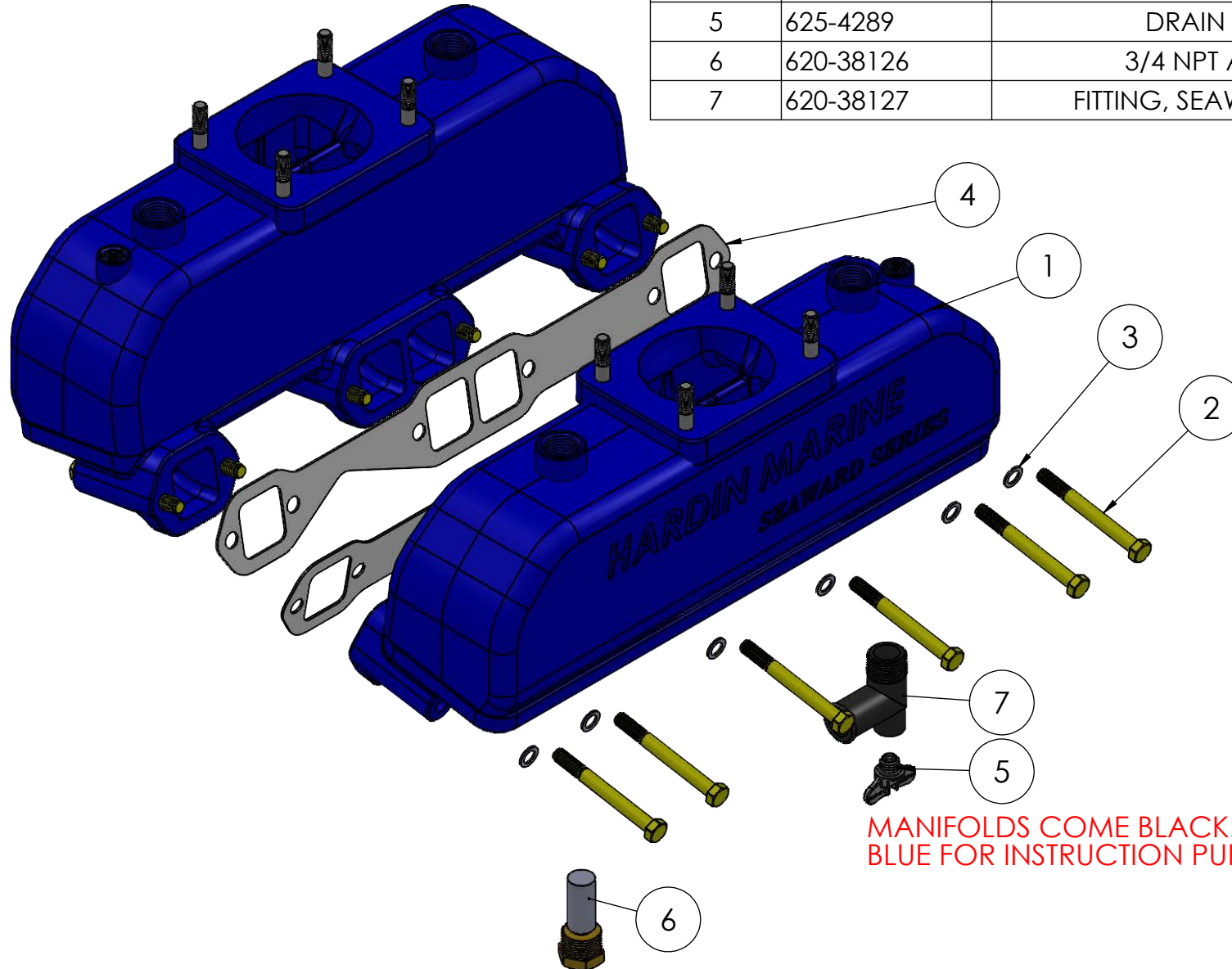
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PART NO.
620-38025
620-38101

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	620-38025	SEAWARD SBC MANIFOLD	2
2	90037C350HH5	BOLT, 3/8-16	12
3	90037AN-STSS	WASHER, 3/8 AN	12
4	300-1404	SBC EXHAUST GASKET	2
5	625-4289	DRAIN PLUG	2
6	620-38126	3/4 NPT ANODE	2
7	620-38127	FITTING, SEAWARD INLET	2

TITLE:
SEAWARD SBC MANIFOLD -620-38025 & 620-38101

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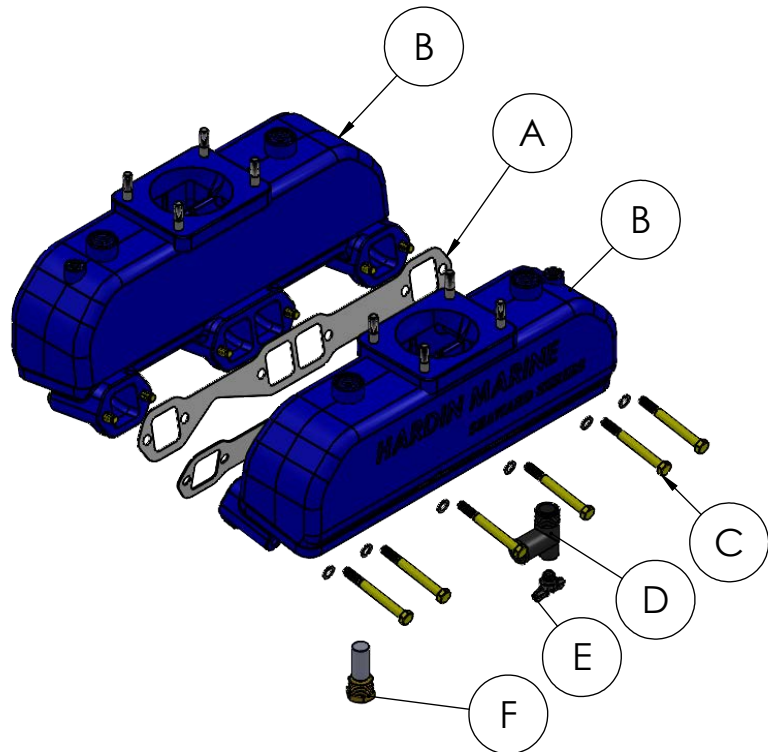
MANIFOLDS COME BLACK. SHOWN IN BLUE FOR INSTRUCTION PURPOSES.

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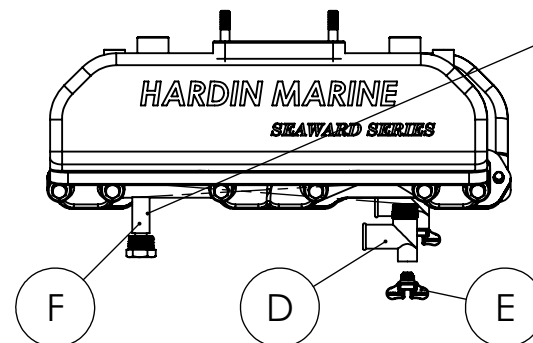
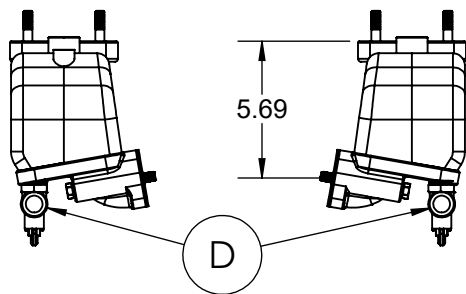
PART NO.
620-38025
620-38101

TITLE: SEAWARD SBC MANIFOLD INSTALL
- 620-38025 & 620-38101

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MANIFOLDS COME BLACK. SHOWN IN BLUE FOR INSTRUCTION PURPOSES.



WARNING** ANODES ARE A SERVICEABLE PART AND SHOULD BE INSPECTED ROUTINELY DEPENDING ON THE NATURE OF THE BOATING ENVIRONMENT.

INSTALLATION INSTRUCTIONS:

- 1) MAKE SURE CYLINDER HEAD EXHAUST MOUNTING SURFACE IS FREE OF KNICKS AND ANY OLD GASKET MATERIAL IS REMOVED. SEALANT IS NOT REQUIRED ON THE NEW SUPPLIED GASKETS. FIG. A.
- 2) THE PORT AND STARBOARD MANIFOLDS ARE THE SAME PART AND CAN BE USED ON EITHER SIDE OF THE ENGINE. FIG. B.
- 3) INSTALL MANIFOLDS WITH THE SUPPLIED 3/8 BOLTS AND WASHERS. APPLY ANTI-SIEZE TO 3/8 MOUNTING BOLTS, FIG.C . USING A 9/16 SOCKET, TORQUE TO 30 FT. LBS..
- 4) SIDE VIEW BELOW AND ISOMETRIC VIEW TO THE LEFT SHOWS PORT SIDE TYPICAL WATER INLET POSITION. INSTALL 1" HOSE BARB FITTING INTO BOTTOM, REAR PORT OF THE MANIFOLD, FIG. D. NO ADDITIONAL SEALANT IS NEEDED. CAREFULL NOT TO CROSS THREAD THE FITTING. DO NOT OVER TIGHTEN. DO NOT USE THIS FITTING FOR 2005 + MERCURY ENGINES WITH SINGLE AND 3 POINT DRAIN SYSTEMS.
- 5) USING 1-1/16 SOCKET, INSTALL DRAIN PLUG, FIG. E, INTO THE BOTTOM OF THE WATER INLET BUNG.
- 6) INSTALL 3/4 ANODE PLUG, FIG. F, INTO THE OPPOSITE WATER INLET BUNG. NO ADDITIONAL SEALANT IS NEEDED.
- 7) ATTACH 1" WATER INLET HOSE FROM THERMOSTAT HOUSING TO FIG. E FITTINGS (MAKE SURE IT IS A CONSTANT FLOW WATER SUPPLY).
- 8) GO TO 620-38046 TAILPIPE INSTRUCTIONS TO COMPLETE INSTALLATION.

CAUTION** HARDIN MARINE MANIFOLD SYSTEMS ARE DESIGNED FOR USE ON ENGINES WITH FULL TIME CONSTANT WATER CIRCULATION AT ALL TIMES. NOTE** AFTER APPROXIMATELY 2-5 HOURS USE OR NUMEROUS ENGINE HEAT CYCLES ALL HARDWARE MUST BE RETORQUED AND OR TIGHTENED.

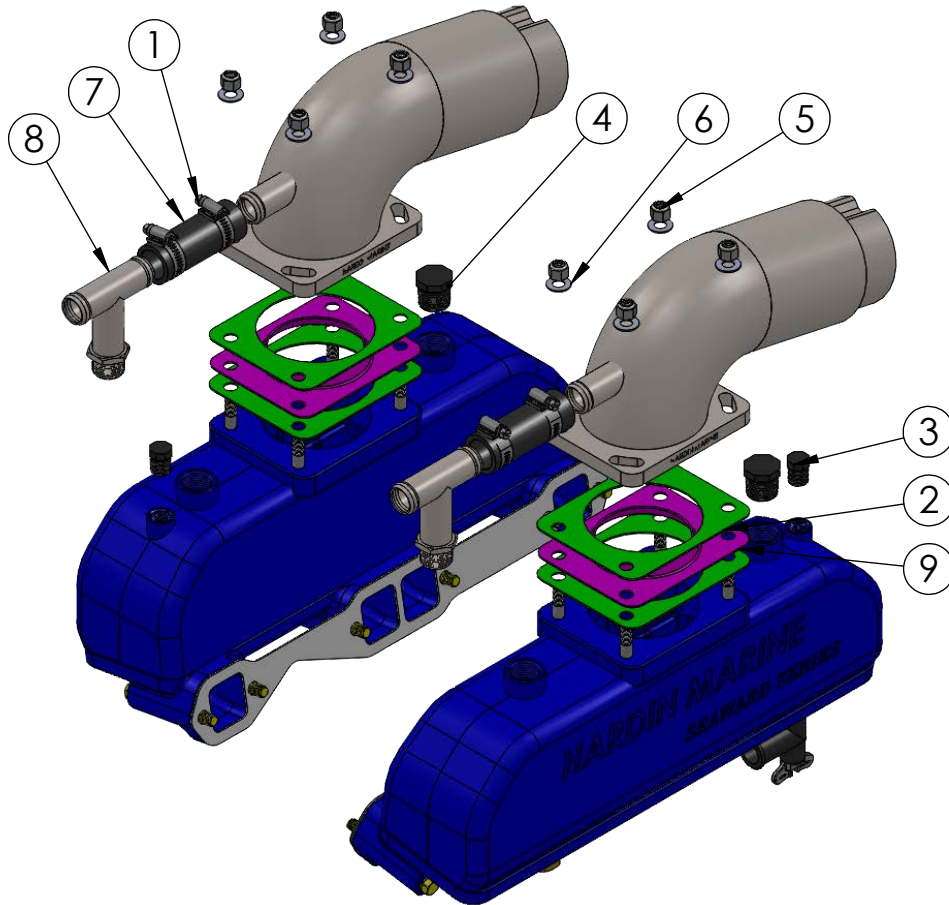
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11 Industry Dr. Palm Coast, FL 32137
386-445-2500 / FAX 386-445-1122

PART NO.
620-38140

TITLE: SEAWARD SBC DRY JOINT RISER
INSTALL KIT - FRESH WATER

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ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	100-720-6316	HOSE CLAMP	4
2	620-38006	RISER GASKET	4
3	625-2084	PLUG, PIPE 3/8NPT	2
4	625-2086	PLUG, PIPE - 3/4 NPT	2
5	90037CN-FNSS	NUT, 3/8-16	8
6	90037SA-STSS	WASHER, 3/8 SAE	8
7	420-906515	HOSE, JUMP	2
8	620-38130	TEE, WATER INLET - CLOSED COOLING	2
9	620-38089	TURBULATOR, SEAWARD	2

INSTALLATION NOTES:

- 1) FOR MERCURY 2005 + WITH 14 DEGREE RISER WITH CLOSED COOLING.
- 2) APPLY LIQUID THREAD SEALANT TO THE SUPPLIED 1" TEE FITTING, 3/8 & 3/4 NPT PIPE PLUGS.
- 3) USING 1-1/16 WRENCH, INSTALL #8 TEE FITTINGS INTO FRONT OF THE MANIFOLDS.
- 4) USING 1-1/8 WRENCH, INSTALL #4 3/4NPT PIPE PLUGS INTO THE REAR OF THE MANIFOLDS.
- 5) USING 13/16 WRENCH, INSTALL #3 3/8 NPT PIPE PLUGS.
- 6) APPLY ANTI-SIEZE TO THE 8 STUDS.
- 7) SLIDE GASKET, TURBULATOR AND ANOTHER GASKET OVER STUDS. DO NOT USE SEALANT ON THE GASKETS.
- 8) INSTALL RISERS.
- 9) INSTALL 620-38131 SHIFT BRACKET AND 620-38132 ECU BRACKET, NOT SHOWN. USE THE INSTRUCTIONS THAT CAME WITH THOSE KITS.
- 10) INSTALL #6 WASHERS AND #5 NUTS. USING 9/16 SOCKET, TORQUE TO 30 FT. LBS..
- 11) INSTALL #7 JUMPER HOSE AND #1 HOSE CLAMPS.
- 12) SEE THE FRESH WATER INSTRUCTIONS FOR PLUMBING INSTRUCTIONS.

CAUTION HARDIN MARINE MANIFOLD SYSTEMS ARE DESIGNED FOR USE ON ENGINES WITH FULL TIME CONSTANT WATER CIRCULATION AT ALL TIMES. NOTE** AFTER APPROXIMATELY 2-5 HOURS USE OR NUMEROUS ENGINE HEAT CYCLES ALL HARDWARE MUST BE RETORQUED AND OR TIGHTENED.**

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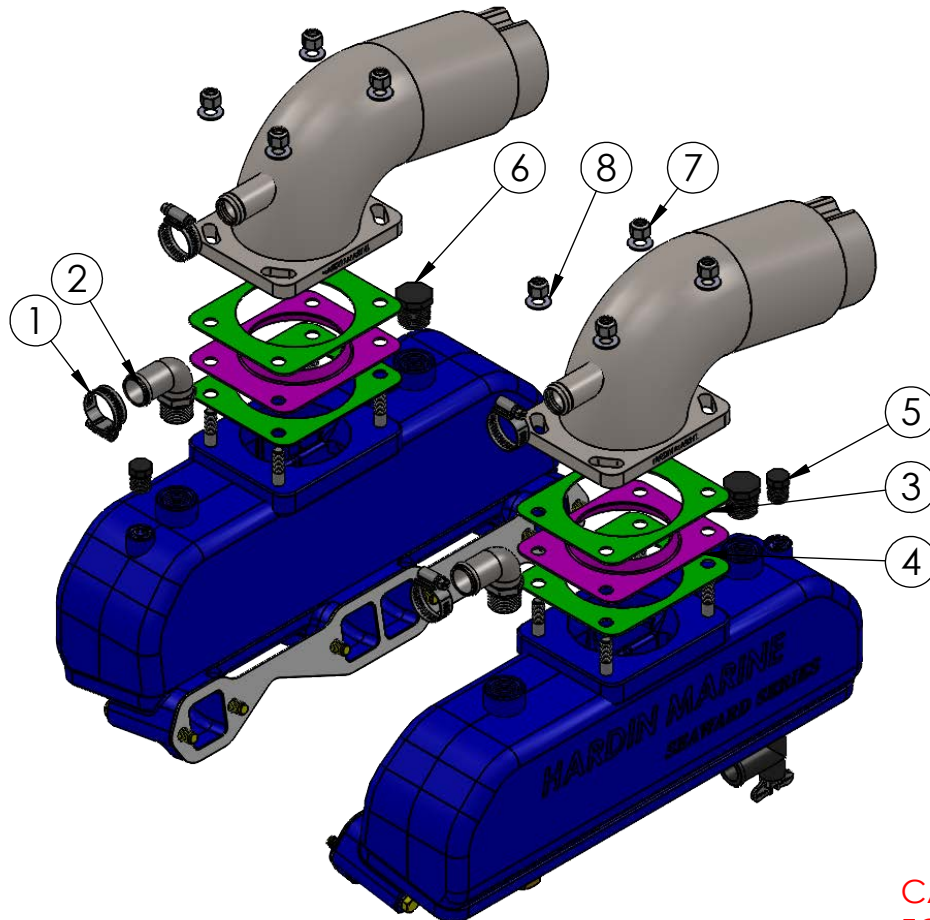
11 Industry Dr. Palm Coast, FL 32137
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PART NO.

620-38141

TITLE: SEAWARD SBC DRY JOINT RISER
INSTALL KIT - CLOSED COOLING

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ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	100-720-6316	HOSE CLAMP	4
2	540-222120	FITTING, 3/4NPT x 1' BARB 90 DEG	2
3	620-38006	RISER GASKET	4
4	620-38089	TURBULATOR, SEAWARD	2
5	625-2084	PLUG, PIPE 3/8NPT	2
6	625-2086	PLUG, PIPE - 3/4 NPT	2
7	90037CN-FNSS	NUT, 3/8-16	8
8	90037SA-STSS	WASHER, 3/8 SAE	8

INSTALLATION NOTES:

- 1) FOR MERCURY 2005 + WITH 14 DEGREE RISER WITH CLOSED COOLING.
- 2) APPLY LIQUID THREAD SEALANT TO THE SUPPLIED 1" TEE FITTING, 3/8 & 3/4 NPT PIPE PLUGS.
- 3) USING 1-1/16 WRENCH, INSTALL #2 BARB FITTINGS INTO FRONT OF THE MANIFOLDS.
- 4) USING 1-1/8 WRENCH, INSTALL #6 3/4NPT PIPE PLUGS INTO THE REAR OF THE MANIFOLDS.
- 5) USING 13/16 WRENCH, INSTALL #5 3/8 NPT PIPE PLUGS.
- 6) APPLY ANTI-SIEZE TO THE 8 STUDS.
- 7) SLIDE GASKET, TURBULATOR AND ANOTHER GASKET OVER STUDS. DO NOT USE SEALANT ON THE GASKETS.
- 8) INSTALL RISERS.
- 9) INSTALL 620-38131 SHIFT BRACKET AND 620-38132 ECU BRACKET, NOT SHOWN. USE THE INSTRUCTIONS THAT CAME WITH THOSE KITS.
- 10) INSTALL #8 WASHERS AND #7 NUTS. USING 9/16 SOCKET, TORQUE TO 30 FT. LBS..
- 11) SEE THE CLOSED COOLING INSTRUCTIONS FOR PLUMBING INSTRUCTIONS.

CAUTION HARDIN MARINE MANIFOLD SYSTEMS ARE DESIGNED FOR USE ON ENGINES WITH FULL TIME CONSTANT WATER CIRCULATION AT ALL TIMES. NOTE** AFTER APPROXIMATELY 2-5 HOURS USE OR NUMEROUS ENGINE HEAT CYCLES ALL HARDWARE MUST BE RETORQUED AND OR TIGHTENED.**

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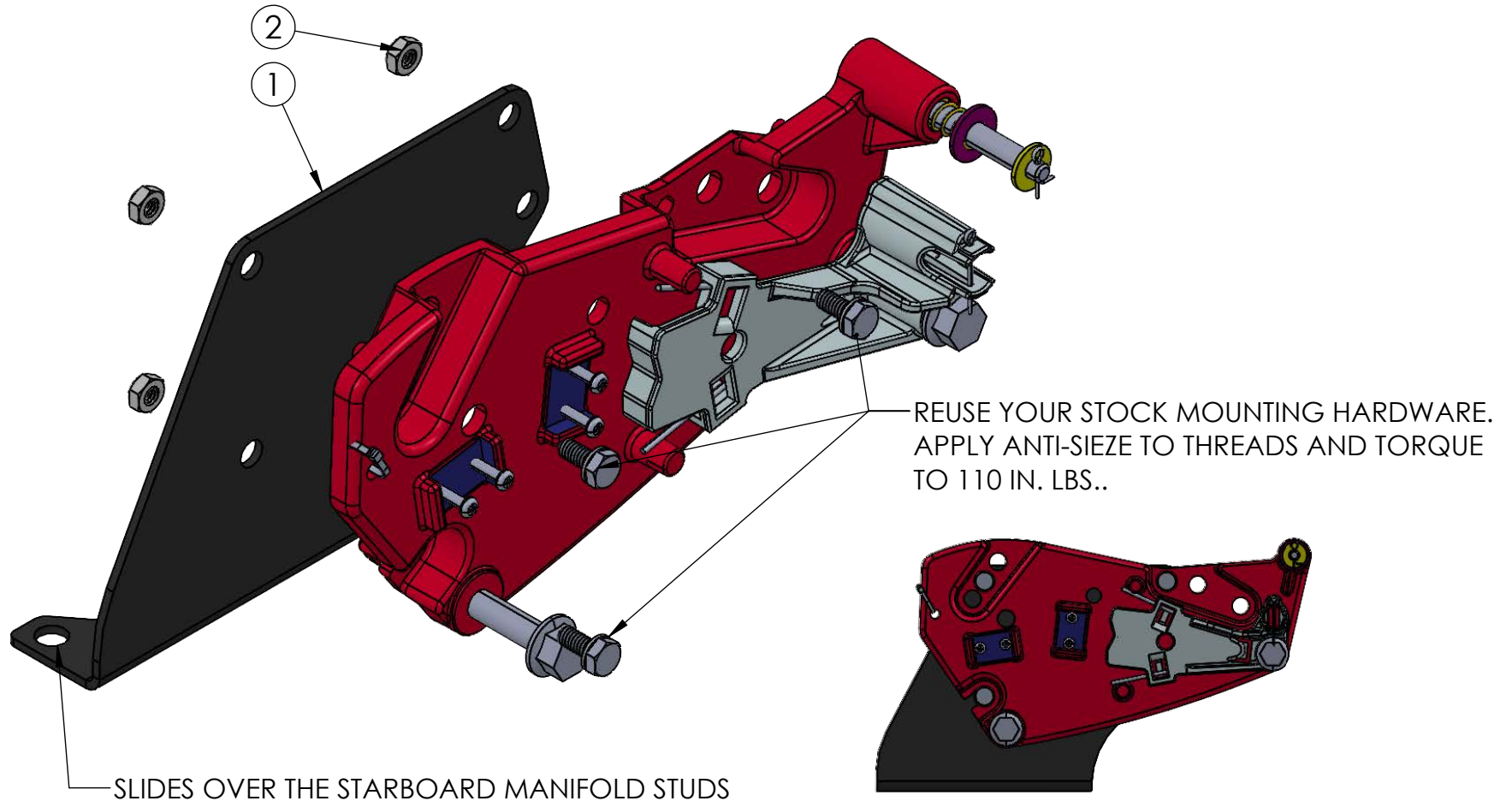
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PART NO.
620-38131i

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	620-38131	BRACKET,SHIFT - SEAWARD SBC DRY JOINT	1
2	90025CN-HNSS	NUT, 1/4-20 HALF LOCKING	3

TITLE:
SEAWARD SBC DRY JOINT SHIFT BRACKET

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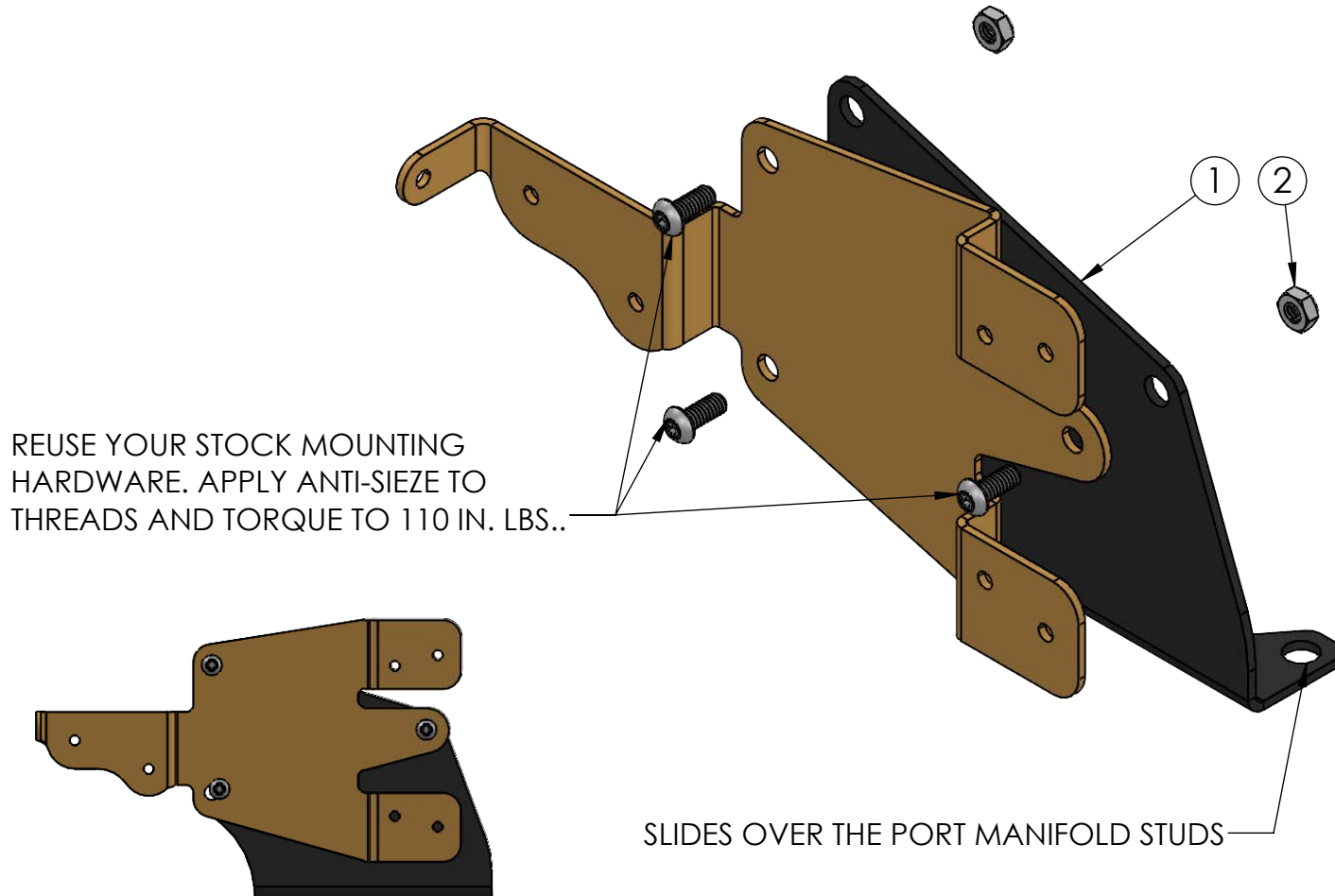
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PART NO.
620-38132i

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	620-38132	BRACKET,ECU - SEAWARD SBC DRY JOINT	1
2	90025CN-HNSS	NUT, 1/4-20 HALF LOCKING	3

TITLE:
SEAWARD SBC DRY JOINT ECU BRACKET

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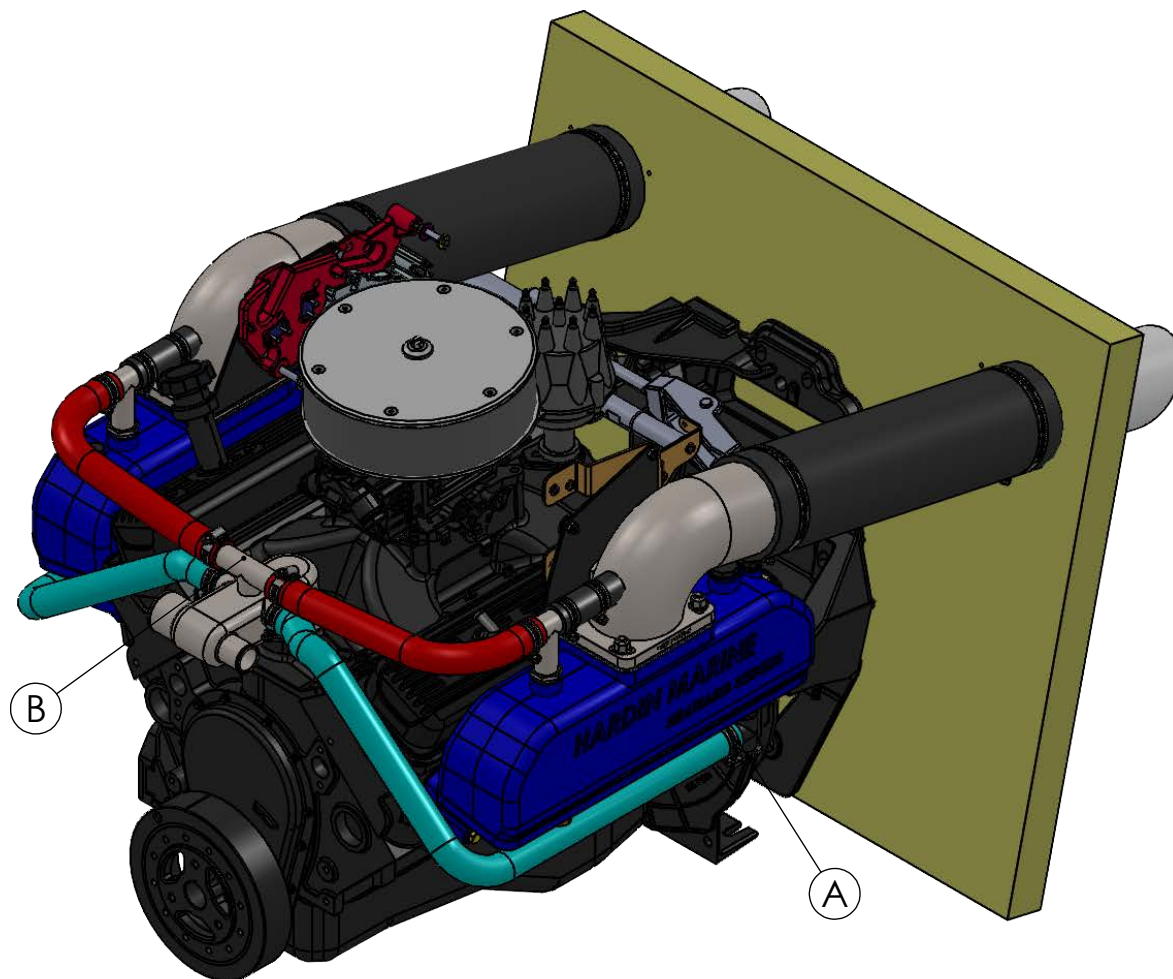
PART NO.
620-3813X

TITLE: SEAWARD SBC DRY JOINT EXHAUST
SYSTEM - FRESH WATER PLUMBING

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NOTES AND INSTALLATION INSTRUCTIONS:

- 1) FOR MERCURY 2005 + WITH 14 DEGREE RISER.
- 2) PLUMBING SHOWN FOR ALFA/BRAVO SINGLE, 3 POINT AND 7 POINT DRAIN SYSTEMS.
- 3) YOUR STOCK HOSES CAN BE REUSED. SOME MIGHT NEED TO BE LENGTHENED OR SHORTENED DEPENDING ON THE APPLICATION.
- 4) SOME MERCURY SYSTEMS HAVE 2 LINES THAT FEED WATER INTO THE BOTTOM OF THE MANIFOLD, FIG. A. IF THAT IS YOUR SYSTEM YOU NEED TO REUSE YOUR MERCURY FITTINGS.
- 5) SOME MODELS THE TEE THAT THE RED LINES CONNECT TO IS NOT ON TOP OF THE THERMOSTAT HOUSING, FIG. B.
- 6) SEAWARD MANIFOLDS AND RISERS REQUIRE CONSTANT FLOW OF COOLING WATER.



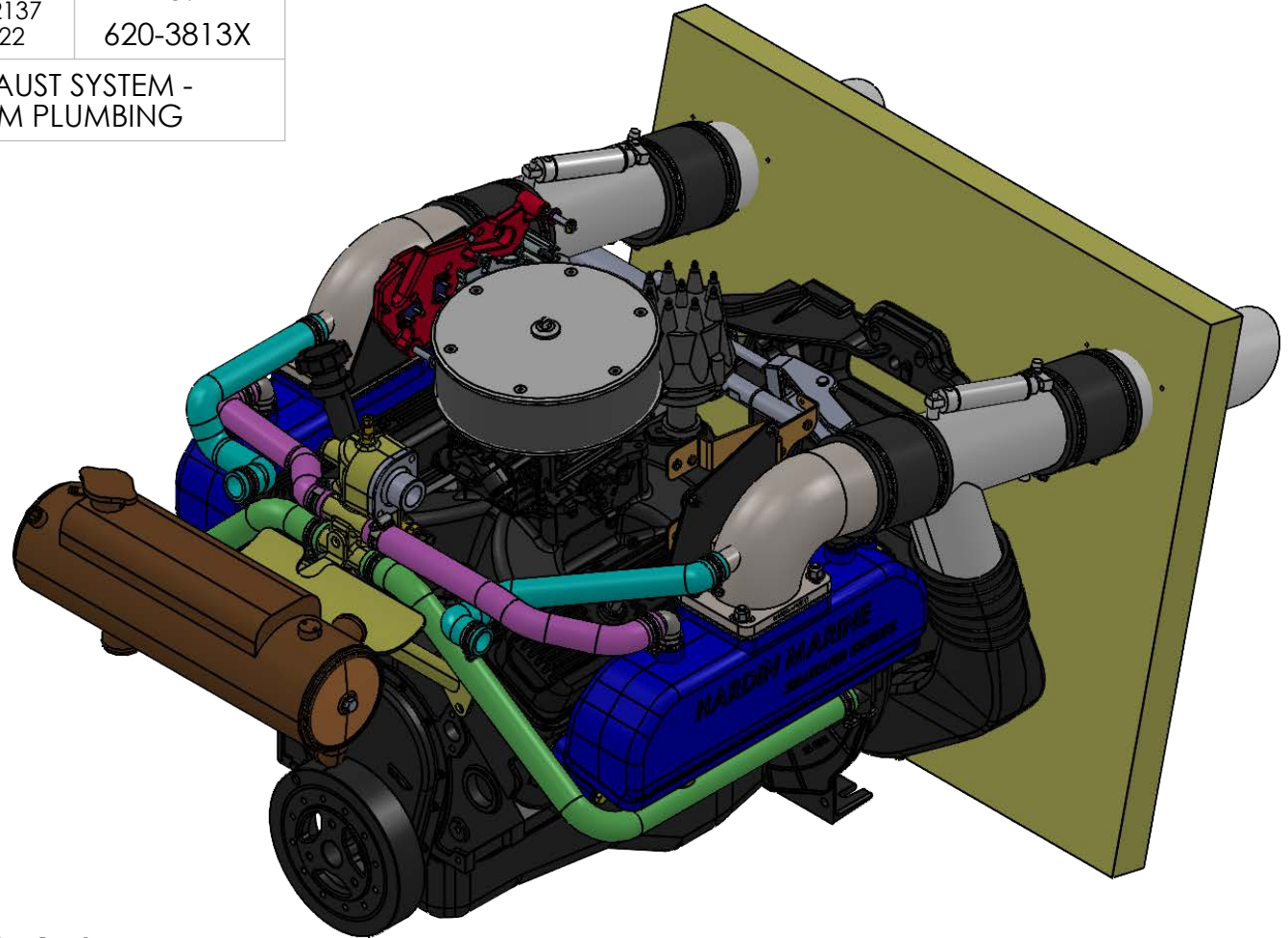
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PART NO.
620-3813X

TITLE: SEAWARD SBC DRY JOINT EXHAUST SYSTEM -
CLOSED COOLING FULL SYSTEM PLUMBING

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NOTES AND INSTALLATION INSTRUCTIONS:

- 1) FOR MERCURY 2005 + WITH 14 DEGREE RISER AND CLOSED COOLING FULL SYSTEM.
- 2) YOUR STOCK HOSES CAN BE REUSED. SOME MIGHT NEED TO BE LENGTHENED OR SHORTENED DEPENDING ON THE APPLICATION.
- 3) FOR PICTURE PURPOSES, HEAT EXCHANGER NOT SHOWN IN STOCK POSITION.
- 4) COOLANT COMES OUT OF THE BOTTOM OF THE THERMOSTAT HOUSING AND GOES INTO THE BOTTOM OF THE MANIFOLDS. HOSES SHOWN IN LIGHT GREEN.
- 5) COOLANT COMES OUT OF THE MANIFOLDS AND RETURNS BACK TO THE THERMOSTAT HOUSING. HOSES SHOWN IN VIOLET.
- 6) FRESH WATER EXITS THE HEAT EXCHANGER AND GOES INTO THE RISERS. HOSES SHOWN AS TEAL.
- 7) SEAWARD MANIFOLDS AND RISES REQUIRE CONSTANT FLOW OF COOLING.

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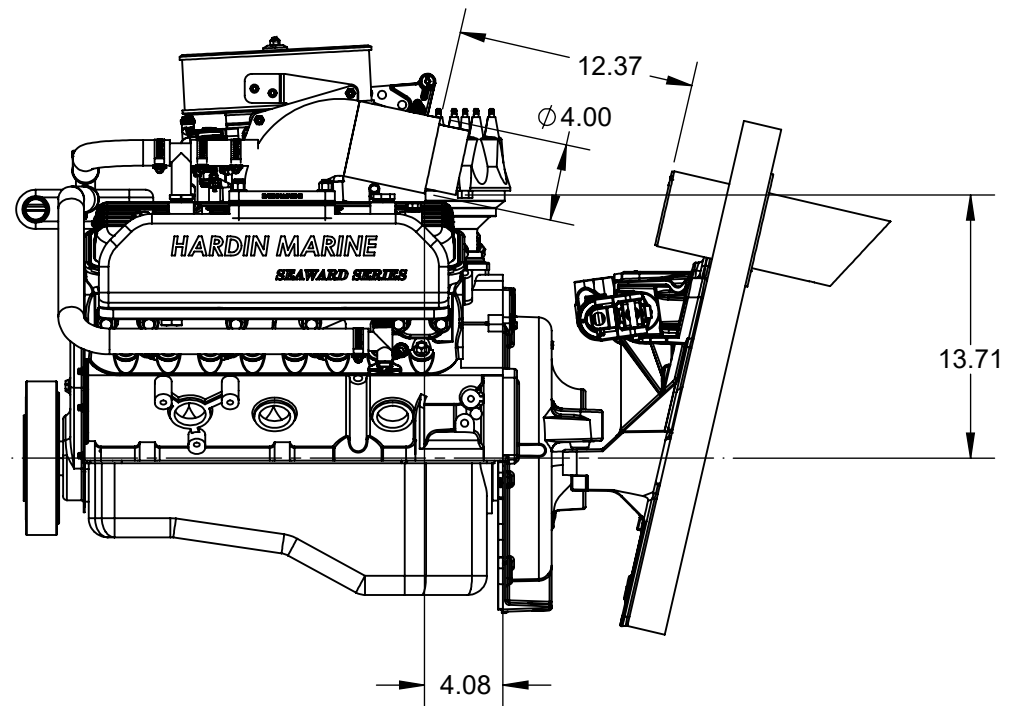
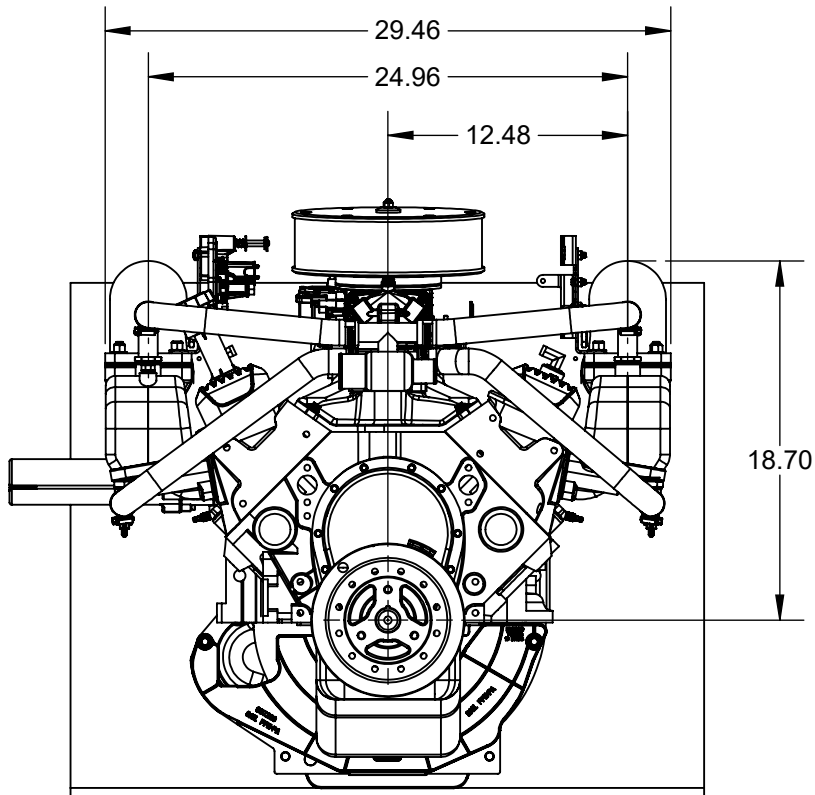
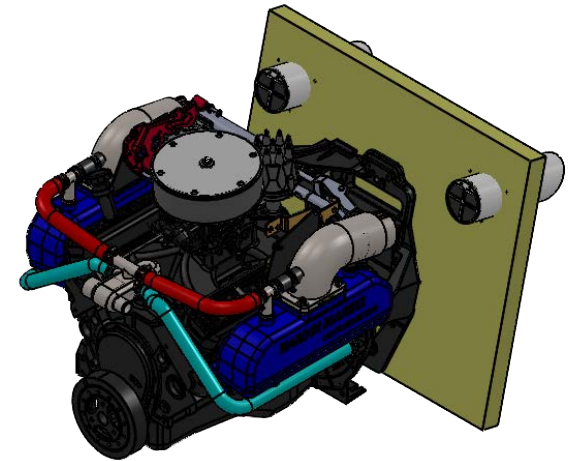
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PART NO.
620-38135

TITLE: SEAWARD SBC DRY JOINT EXHAUST
SYSTEM w/ STD HEIGHT RISER

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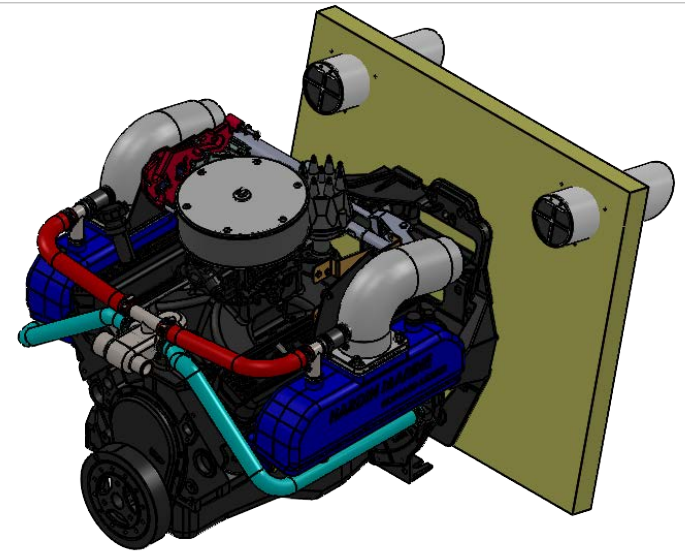
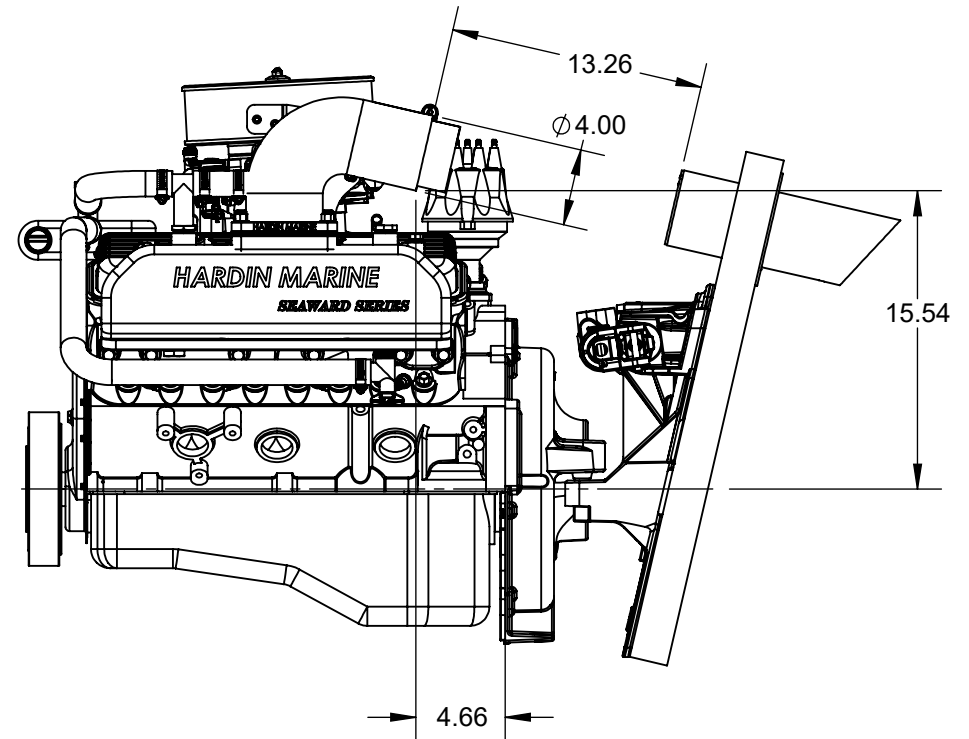
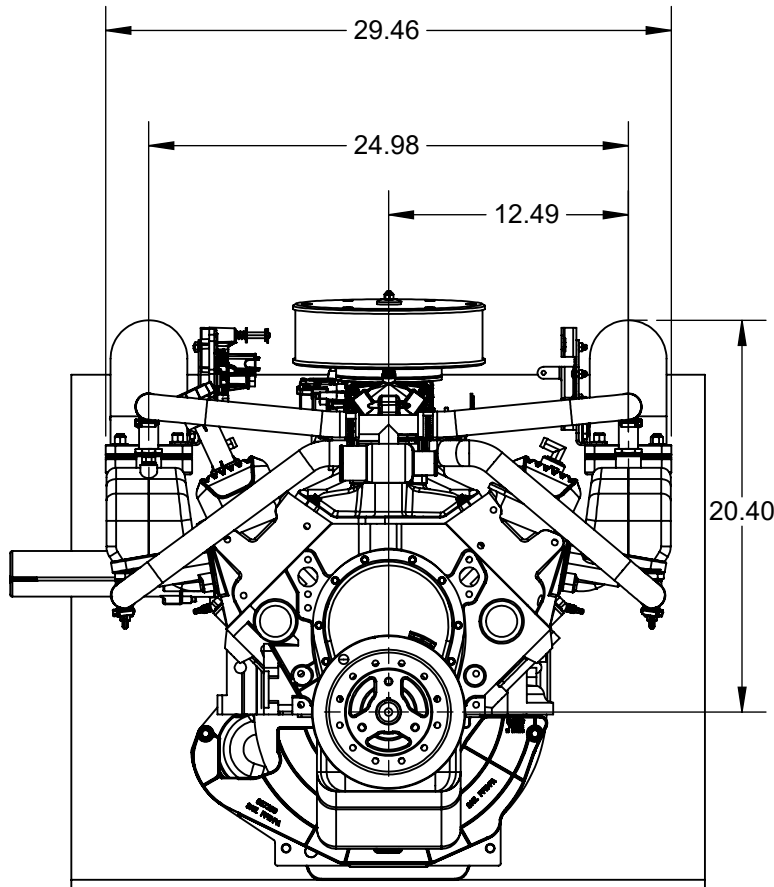
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PART NO.
620-38136

TITLE: SEAWARD SBC DRY JOINT EXHAUST
SYSTEM w/ +1.7 HEIGHT RISER

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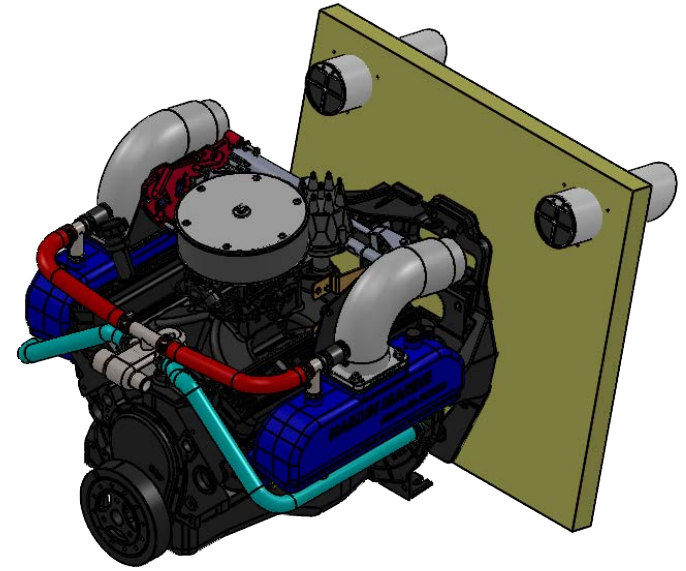
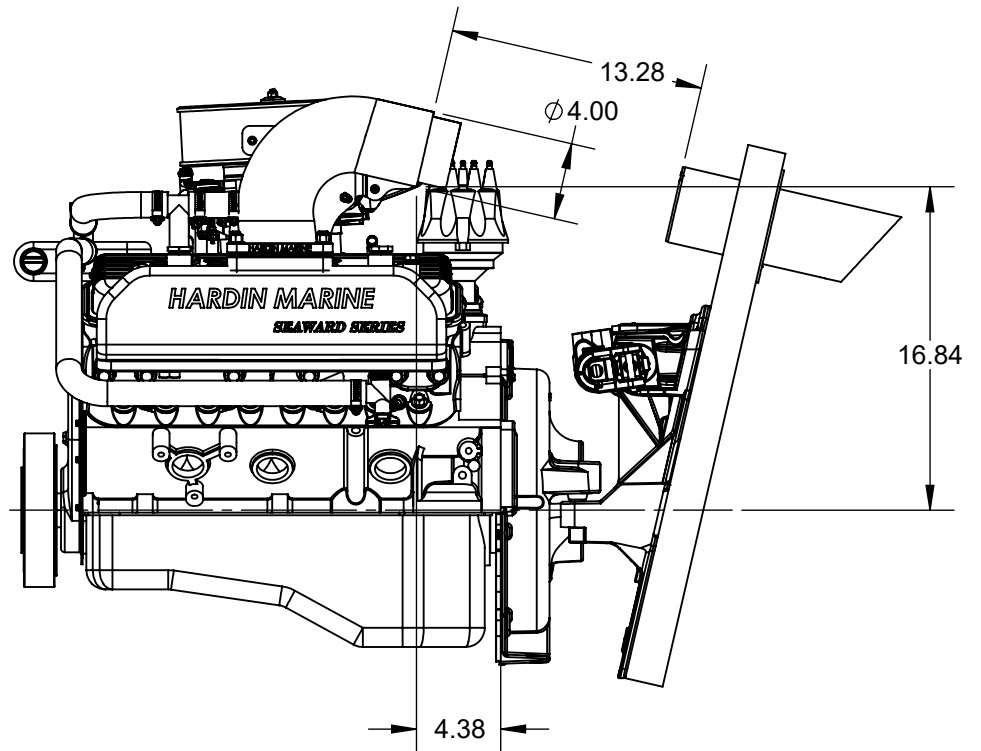
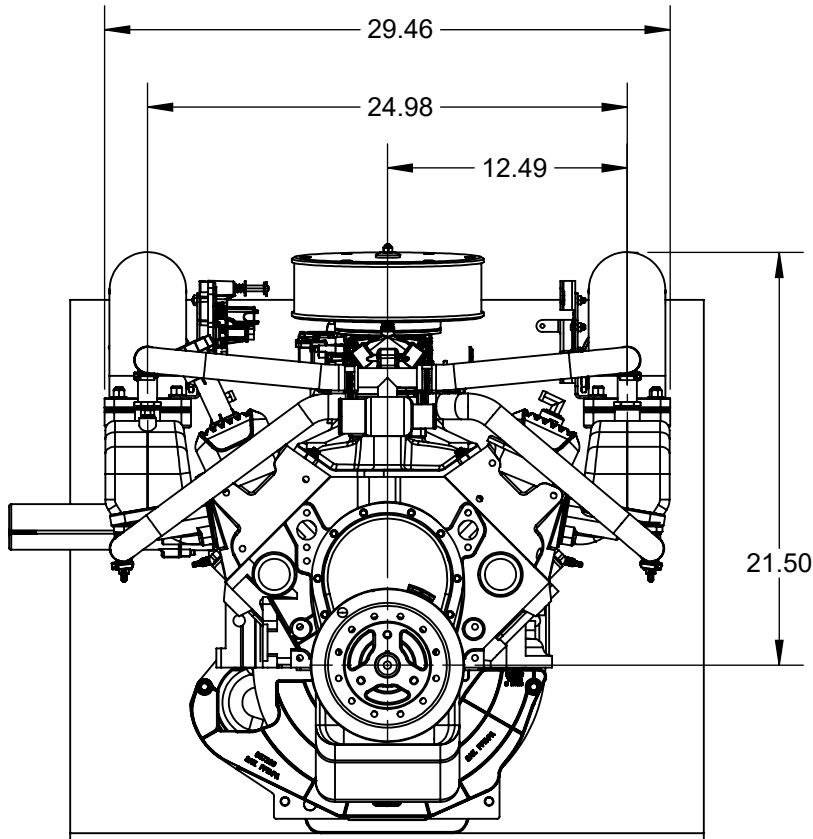
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PART NO.
620-38137

TITLE: SEAWARD SBC DRY JOINT EXHAUST
SYSTEM w/ +3.0 HEIGHT RISER

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FOR MERCURY 2005 + WITH 14 DEGREE RISER



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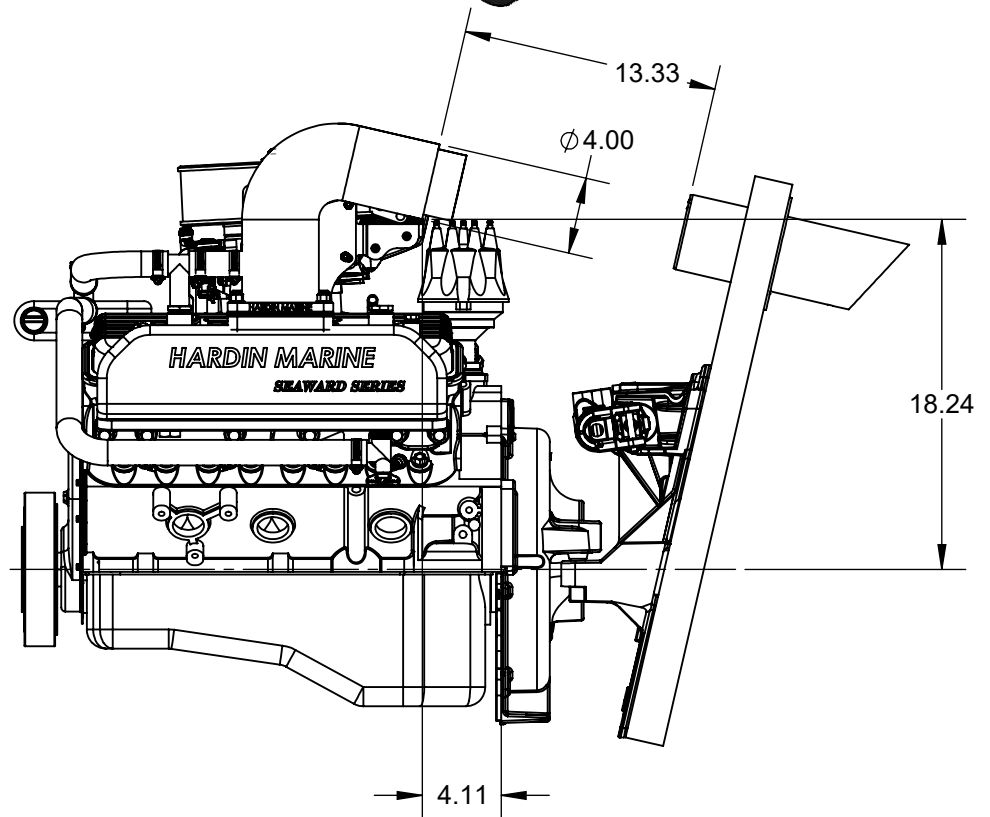
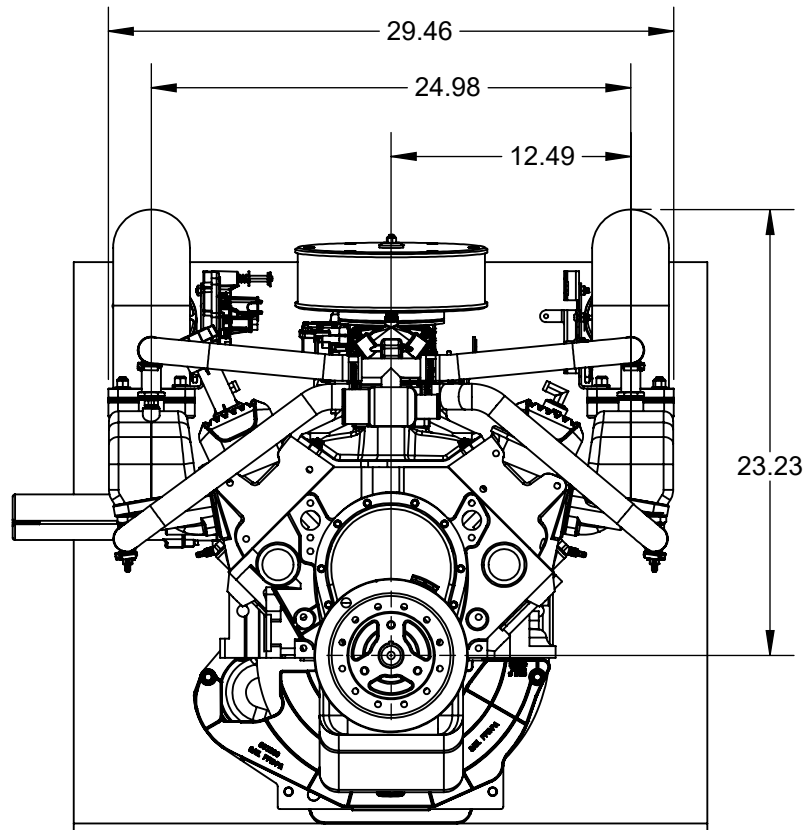
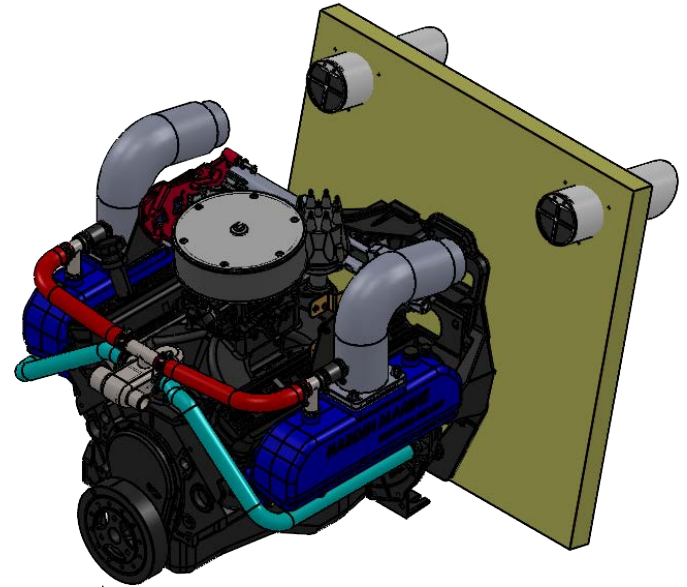
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PART NO.
620-38138

TITLE: SEAWARD SBC DRY JOINT EXHAUST
SYSTEM w/ +4.7 HEIGHT RISER

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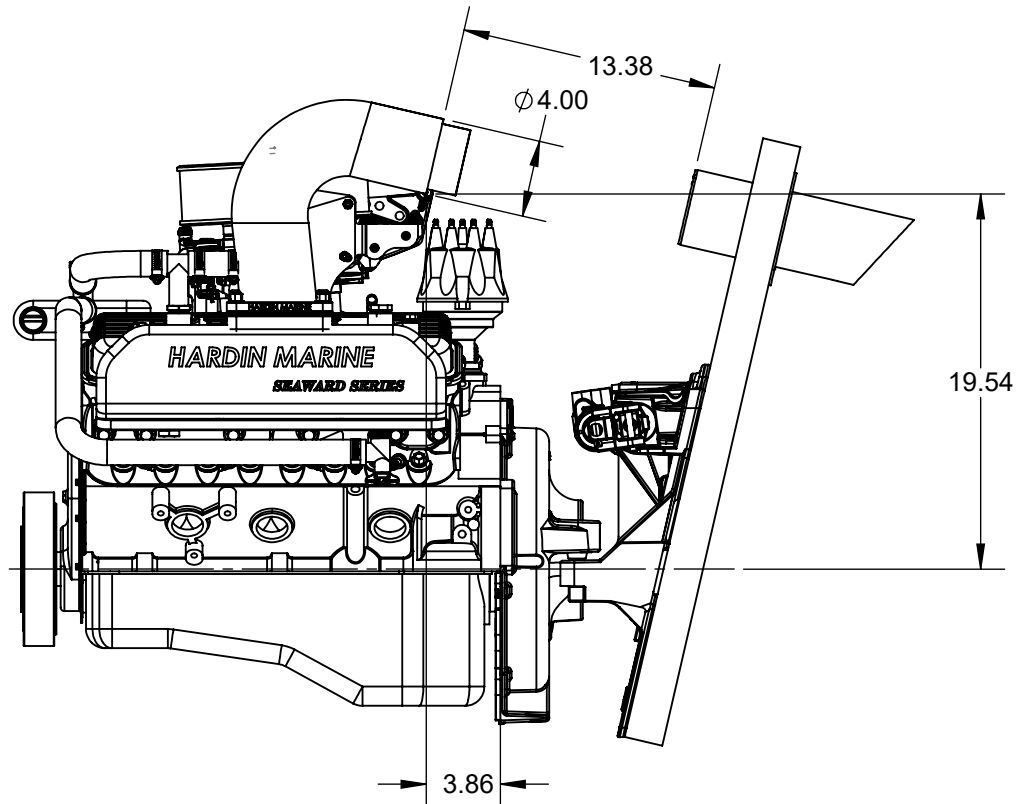
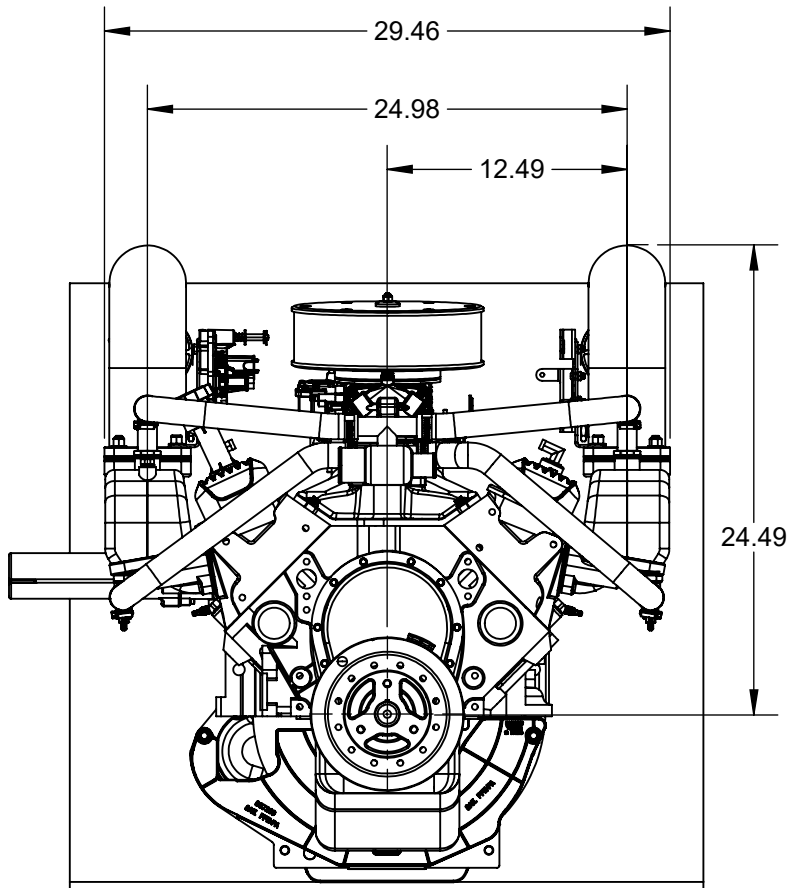
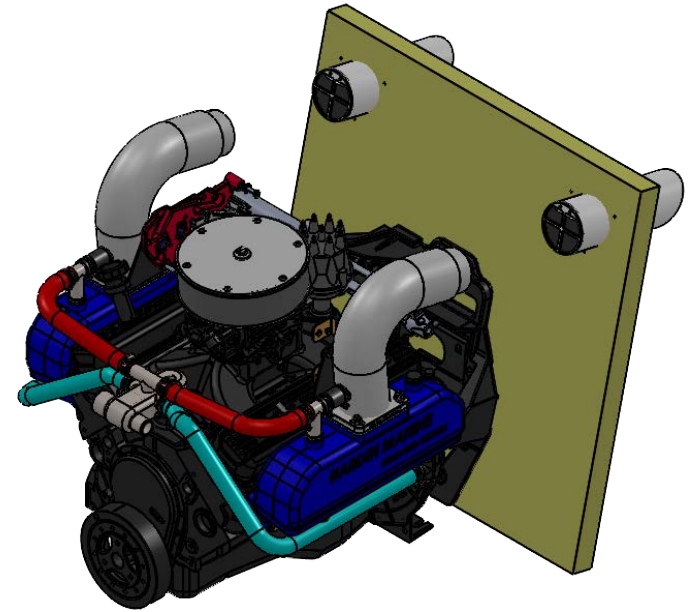
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TITLE: SEAWARD SBC DRY JOINT EXHAUST
SYSTEM w/ +6.0 HEIGHT RISER

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