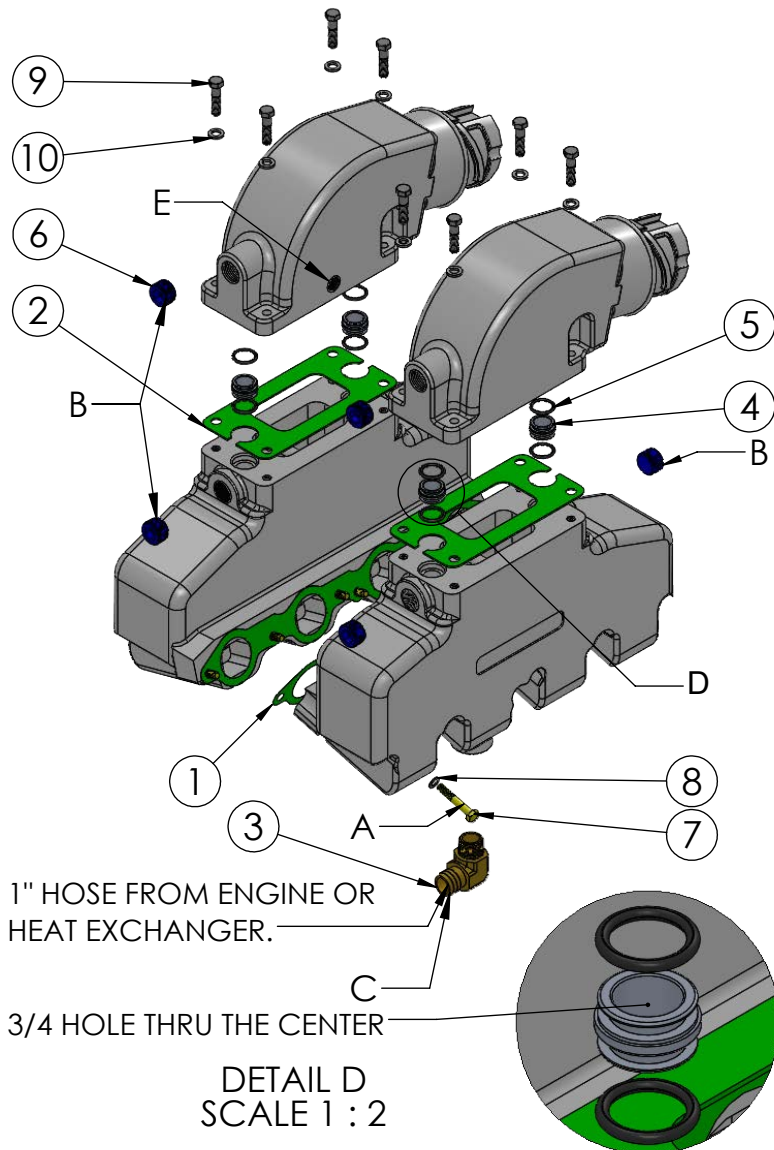


HARDIN MARINE 11 Industry Dr. Palm Coast, FL 32137  
386-445-2500 / FAX 386-445-1122

PART NO.  
620-32950

TITLE: LS MANIFOLD AND RISER INSTALLATION  
FOR FRESH WATER COOLING

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ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	302-C5818-030	GASKET, LS EXHAUST	2
2	620-32494	GASKET, RISER	2
3	540-222120B	FITTING, 3/4NPTx1.00 BARB	2
4	620-32943	TUBE, SEALING - FRESH WATER	4
5	625-1211	O-RING	8
6	625-2035	PIPE PLUG, 3/4 NPT	6
7	900M08C050HH8	BOLT, 8MM	12
8	90031AN-STSS	WASHER, 5/16 AN	12
9	90037C150HHS	BOLT, 3/8-16x1-1/2	8
10	90037SL-STSS	WASHER, LOCKING - 3/8	8

INSTALLATION INSTRUCTIONS FOR FRESH WATER COOLING :

- 1) INSTALL MANIFOLDS ON THE ENGINE USING #7 900M08C050HH8 BOLTS AND #8 90031AN-STSS WASHERS, FIG A. APPLY ANTI-SIEZE TO THE THREADS. TORQUE FIRST PASS TO 11 FT. LBS.. THE FINAL PASS IS 18 FT. LBS.. THE MANIFOLD IS THE SAME FOR BOTH SIDES.
- 2) INSTALL #6 625-2035 3/4 NPT PIPE PLUG INTO THE RISERS, REAR AND FRONT OF THE MANIFOLDS, FIG. B.
- 3) INSTALL #3 540-22120B FITTING INTO THE BOTTOM OF MANIFOLDS FIG. C. MAKE SURE TO USE TEFLON SEALANT TO ON THREADS.
- 4) INSTALL #5 625-1211 O-RINGS ON BOTH OF THE GROOVES IN #4 620-32943 TUBES, DETAIL D. 620-32943 TUBES HAVE A  $\phi$ 3/4 HOLE THRU THEM.
- 5) INSTALL TUBES INTO MANIFOLDS. SLIDE #2 620-32494 GASKET ON THE MANIFOLDS.
- 6) 1 OF THE RISERS WILL BE THREADED FOR O-2 SENSOR, FIG. E. ON THE STARBOARD SIDE IT WILL BE INBOARD. ON THE PORT SIDE IT WILL BE OUTBOARD. IF YOU ARE NOT USING O-2 SENSOR YOU WILL NEED TO PURCHASE 620-50031 PLUG SEPARATELY.
- 7) INSTALL RISERS TO THE MANIFOLDS WITH #9 90037C150HHS BOLTS AND #10 90037SL-STSS LOCKING WASHERS. APPLY ANTI-SIEZE TO THE THREADS. TORQUE TO 30 FT. LBS..
- 8) PLUMB WATER FROM THE ENGINE TO THE 1" HOSE BARB IN THE BOTTOM OF THE MANIFOLD. FIG, C.

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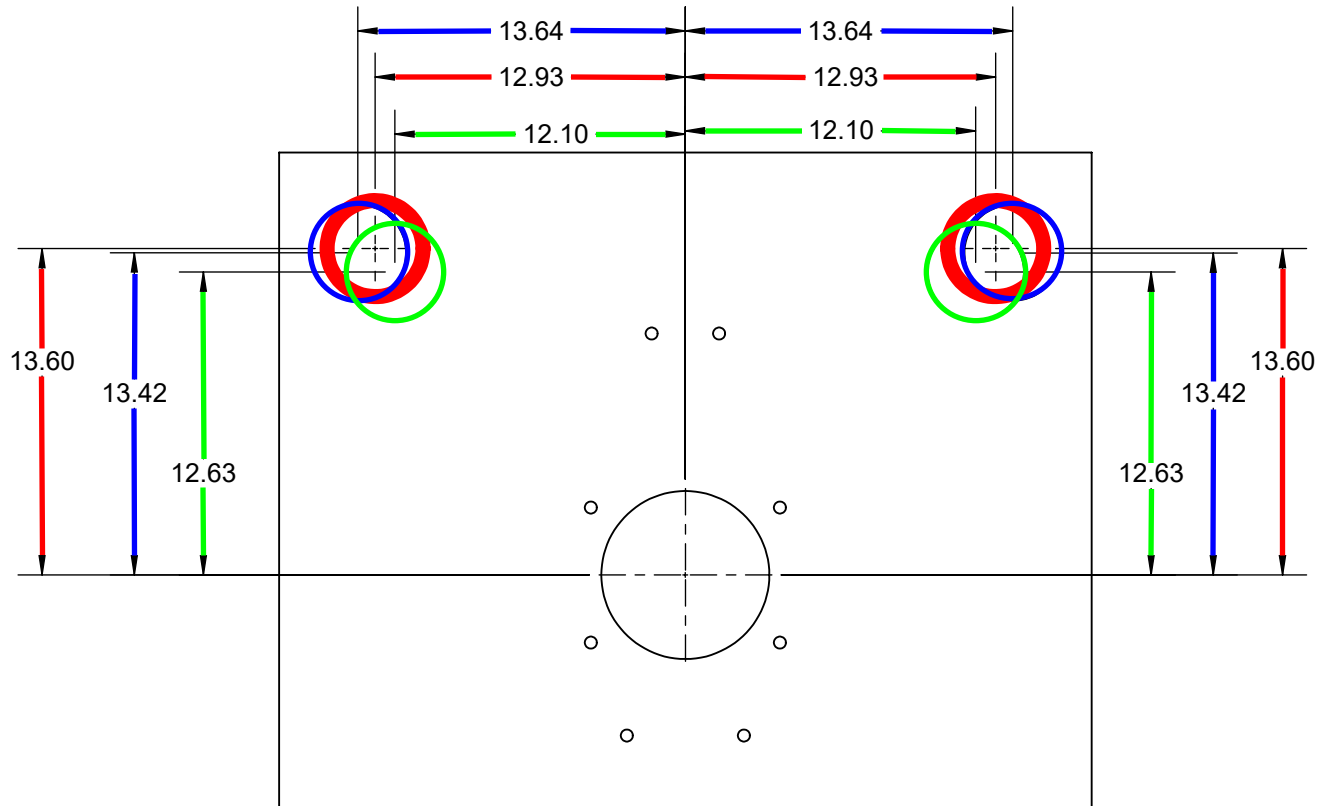
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386-445-2500 / FAX 386-445-1122

PART NO.  
620-32950 &  
620-32951

TITLE:

LS MANIFOLD & RISER TIP LOCATION.

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RED CIRCLE IS LS ALUMINUM MANIFOLD EXIT.

BLUE CIRCLE IS BBC/BRAVO EXIT.

GREEN CIRCLE IS SBC/ALPHA EXIT.

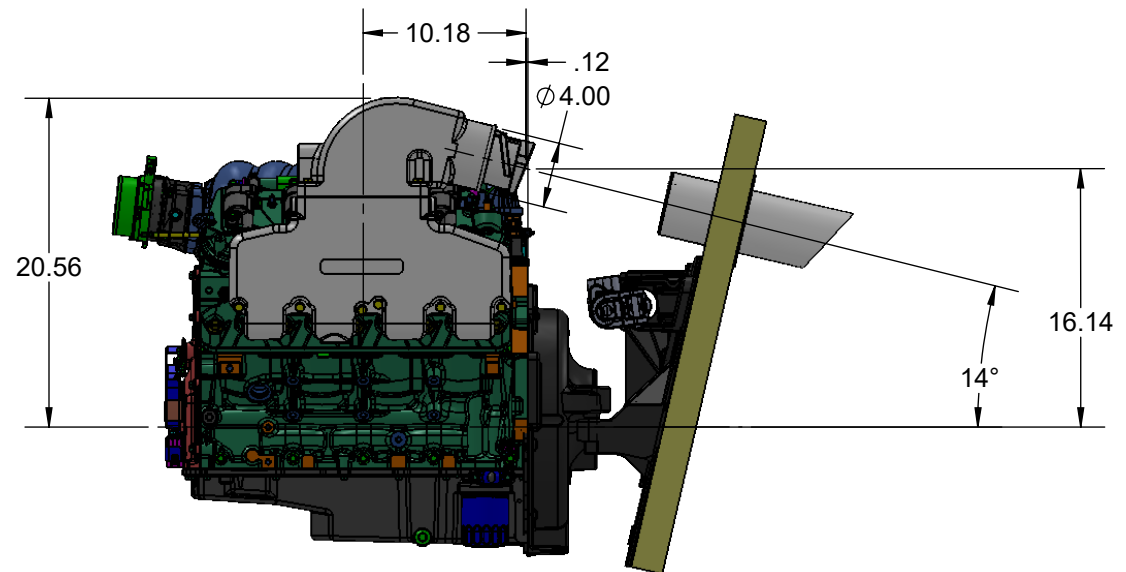
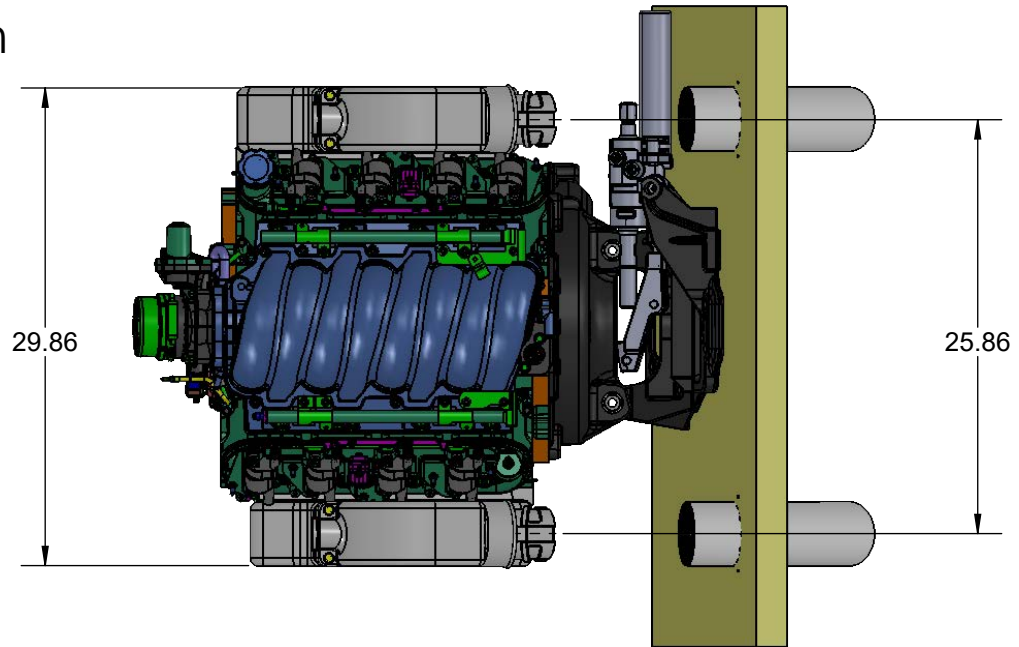
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PART NO.  
620-32950  
& 620-32951

TITLE:

LS MANIFOLD AND RISER

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