

HARDIN  
MARINE

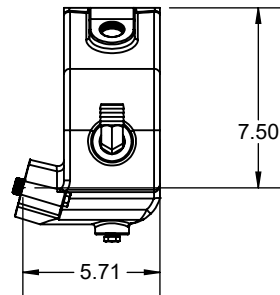
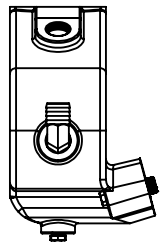
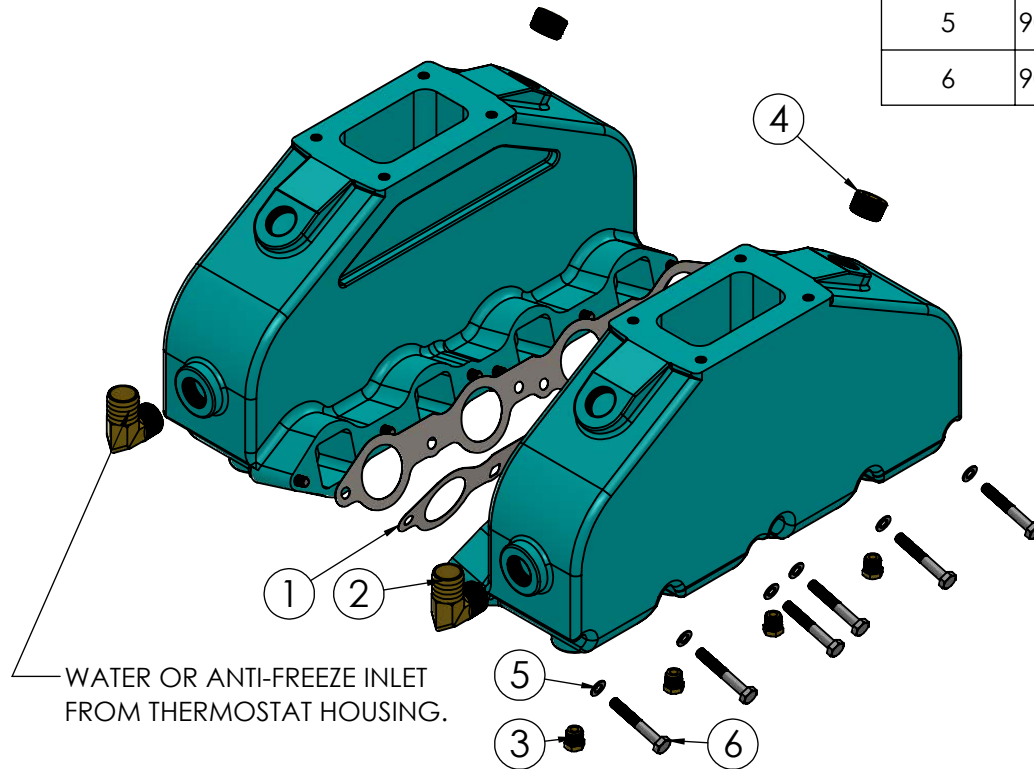
11 Industry Dr. Palm Coast, FL 32137  
386-445-2500 / FAX 386-445-1122

PART NO.  
620-32950

TITLE:

## LS MANIFOLD INSTALLATION

www.hardin-marine.com



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	302-C5818-030	GASKET, LS EXHAUST	2
2	540-110120B	FITTING, 3/4NPT x 1.00 BARB	2
3	625-2002	PLUG, 1/4NPT PIPE	8
4	625-2025	PIPE PLUG, 3/4 NPT	4
5	90031AN-STSS	WASHER, 5/16 AN	12
6	900M08C055HH5	BOLT, 8MM x 55	12

### INSTALLATION INSTRUCTIONS:

- 1) INSTALL LIQUID THREAD SEALANT TO THE SUPPLIED HOSE BARB FITTINGS AND PIPE PLUGS.
- 2) INSTALL ANTI-SIEZE TO #8 BOLTS.
- 3) POSITION #1 GASKETS BETWEEN THE HEAD AND MANIFOLD. DO NOT USE ANY SEALANT ON THE GASKETS.
- 4) INSTALL MANIFOLD USING #6 WASHERS AND #5 BOLTS. USING 13MM SOCKET. START WITH THE MIDDLE BOLTS AND TORQUE IN CIRCULAR MOTION. FIRST PASS AT 11 FT. LBS.. SECOND PASS AT 18 FT. LBS..
- 5) USING A 9/16 SOCKET, INSTALL #3 PIPE PLUGS IN THE BOTTOM OF THE EXHAUST PORTS.
- 6) USING 9/16 ALLEN HEX SOCKET INSTALL #4 PIPE PLUGS INTO THE BACK OF EACH MANIFOLD.
- 7) USING 15/16 WRENCH TO INSTALL #2 FITTINGS INTO THE FRONT OF THE MANIFOLDS.
- 8) CONNECT HOSES FROM THERMOSTAT HOUSING TO THE #2 FITTINGS. THESE MANIFOLDS REQUIRE CONSTANT WATER OR ANIT-FREESE COOLANT AT ALL TIMES.

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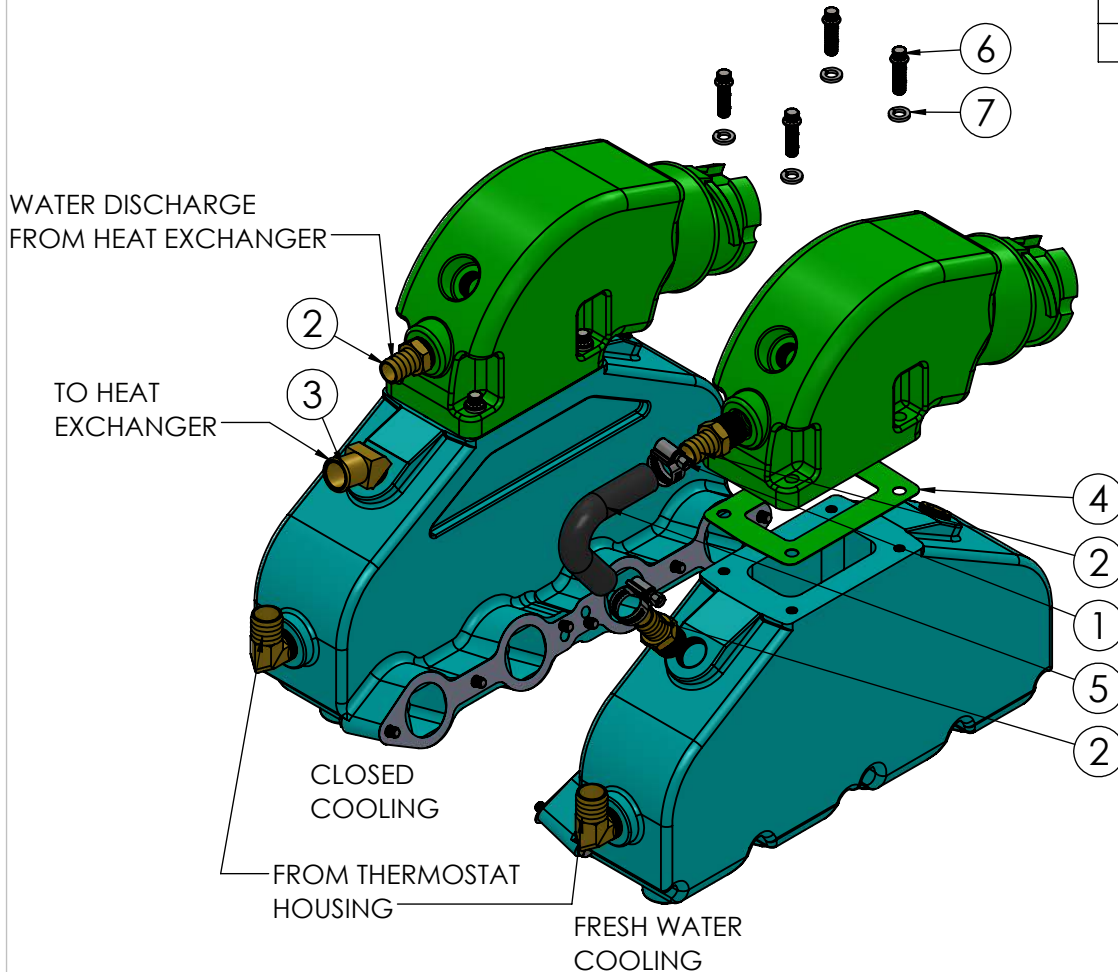
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PART NO.  
620-32950

TITLE:

## LS RISER INSTALLATION

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ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	100-720-6312	HOSE CLAMP	2
2	540-222109B	FITTING, 3/4 NPT TO 3/4 BARB	4
3	540-223020B	FITTING, 3/4 NPT x 1.00 BARB	2
4	620-24132	GASKET, LS RISER	2
5	620-32950JH	HOSE, JUMP	2
6	90037C125HBS	BOLT, 3/8-16x1-1/4	8
7	90037SL-STZN	WASHER, LOCKING - 3/8 ZINC	8

### INSTALLATION INSRUCTIONS:

- 1) APPLY LIQUID THREAD SEALANT TO THE SUPPLIED HOSE BARB FITTINGS AND PIPE PLUGS.
- 2) INSTALL RISER GASKETS. DO NOT USE SEALANT ON THE GASKETS.
- 3) INSTALL RISERS USING #6 BOLTS AND #7 WASHERS. USE ANTI-SIEZE ON THE THREADS. USING 3/8 12 CROWSFOOT TORQUE TO 30 FT. LBS..

### PLUMBING INSTRUCTIONS:

- 1) PORT SIDE PICTURE IS HOW YOU PLUMB THE RISERS IF YOU NOT USING A HEAT EXCHANGER WITH COOLANT. USE THE #5 HOSE TO CONNECT WATER OUT OF THE MANIFOLD TO WATER IN ON THE RISER.
- 2) STARBOARD SIDE PICTURE IS HOW YOU PLUMB FOR FULL HEAT EXCHANGER KITS. YOU EXIT OUT OF THE TOP OF THE MANIFOLD WITH #3 FITTING AND CONNECT TO THE HEAT EXCHANGER. THE WATER DISCHARGE FROM THE HEAT EXCHANGER IS CONNECTED TO THE RISER.

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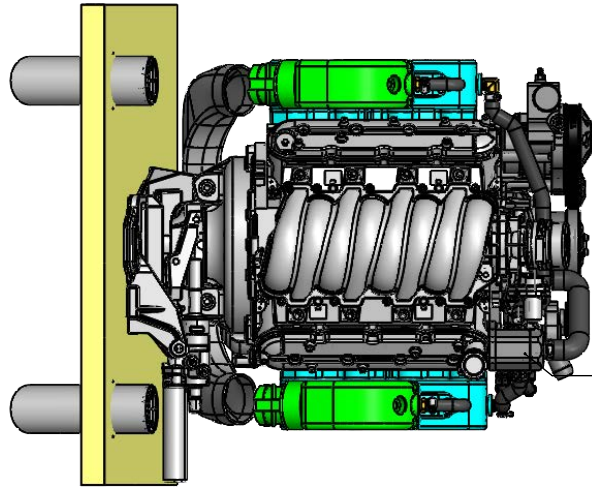
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PART NO.

625-7653

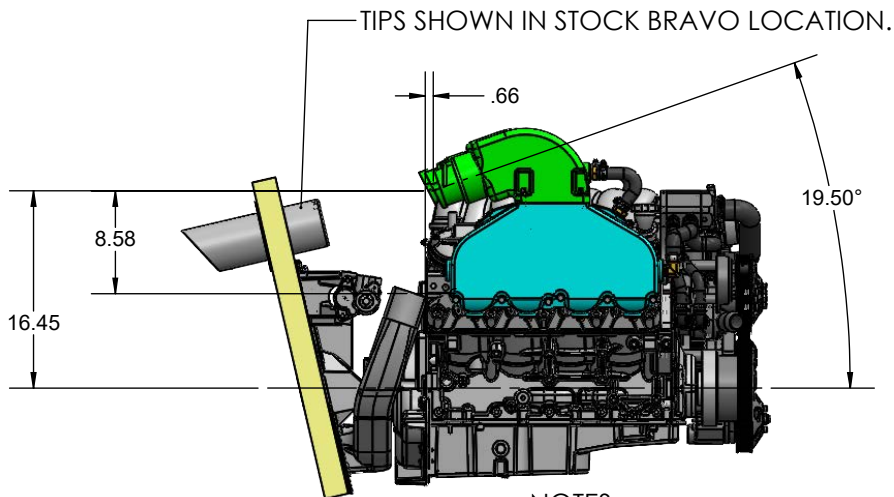
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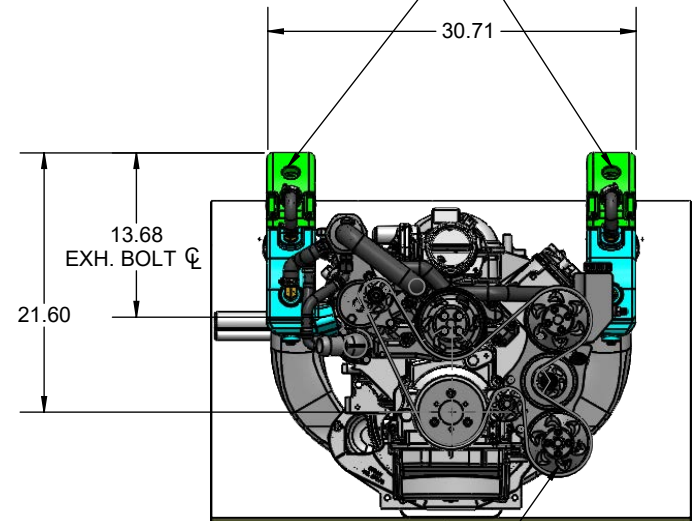


625-4530 THEMATIC  
COOLING SYSTEM

EACH RISER HAS O2 PROVISIONS



TIPS SHOWN IN STOCK BRAVO LOCATION.



625-8312 DRIVE KIT

NOTES:

WILL NOT WORK WITH 625-4574 HEAT  
EXHANGER KIT. 625-4545 HEAT EXHANGER  
WILL NEED TO BE MOUNTED OFF THE ENGINE.

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