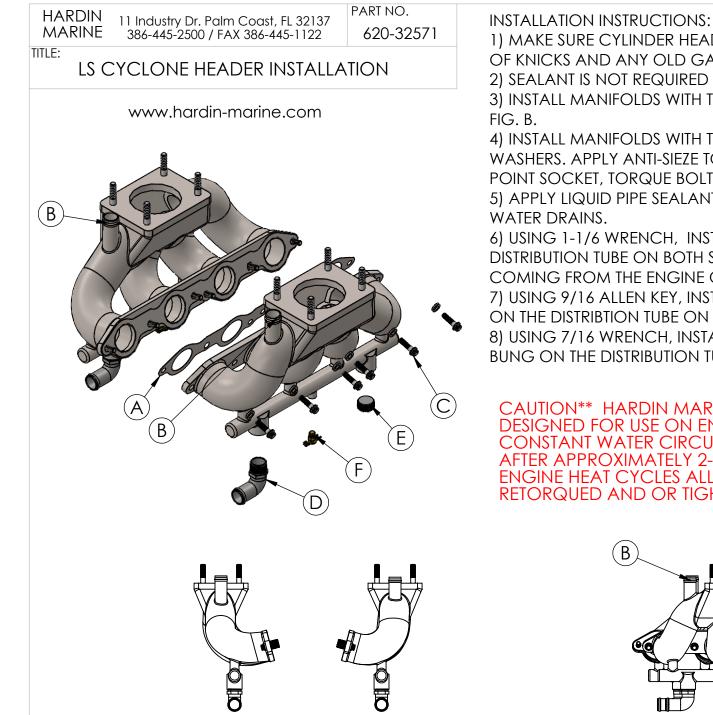


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1) MAKE SURE CYLINDER HEAD EXHAUST MOUNTING SURFACE IS FREE OF KNICKS AND ANY OLD GASKET MATERIAL.

2) SEALANT IS NOT REQUIRED ON THE NEW SUPPLIED GASKETS, FIG. A3) INSTALL MANIFOLDS WITH THE WATER OUTLET BUNGS FOWARD,FIG. B.

4) INSTALL MANIFOLDS WITH THE SUPPLIED ARP 8MM BOLTS AND WASHERS. APPLY ANTI-SIEZE TO THE BOLTS, FIG. C. USING 10MM 12 POINT SOCKET, TORQUE BOLTS TO 24 FT. LBS..

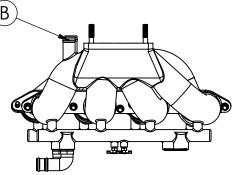
5) APPLY LIQUID PIPE SEALANT TO THE PIPE PLUGS, FITTINGS AND WATER DRAINS.

6) USING 1-1/6 WRENCH, INSTALL FITTING INTO THE FRONT OF THE DISTRIBUTION TUBE ON BOTH SIDE, FIG. D. ATTACH 1" WATER HOSE COMING FROM THE ENGINE OR HEAT EXCHANGER.

7) USING 9/16 ALLEN KEY, INSTALL 3/4 PIPE PLUG INTO THE END BUNG ON THE DISTRIBTION TUBE ON BOTH SIDE. FIG. E.

8) USING 7/16 WRENCH, INSTALL DRAIN PLUG INTO THE CENTER BUNG ON THE DISTRIBUTION TUBE ON BOTH SIDES, FIG F.

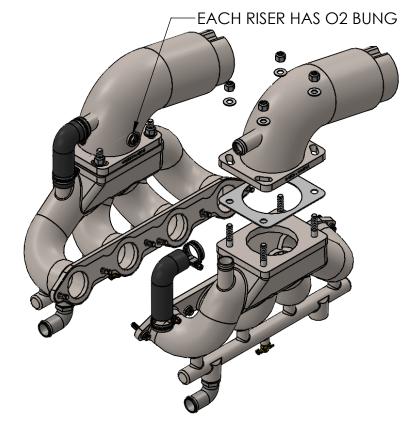
CAUTION** HARDIN MARINE HEADER SYSTEMS ARE DESIGNED FOR USE ON ENGINES WITH FULL TIME CONSTANT WATER CIRCULATION AT ALL TIMES. NOTE** AFTER APPROXIMATELY 2-5 HOURS USE OR NUMEROUS ENGINE HEAT CYCLES ALL HARDWARE MUST BE RETORQUED AND OR TIGHTENED.



HARDIN	11 Industry Dr. Palm Coast, FL 32137	PART NO.
MARINE	386-445-2500 / FAX 386-445-1122	620-32572

LS CYCLONE RISER INSTALL KIT

www.hardin-marine.com



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	100-720-6316	HOSE CLAMP	4
2	620-38006	RISER GASKET	2
3	620-38029	HOSE, RISER - PORT	2
4	90037CN-FNSS	NUT, 3/8-16	8
5	90037SA-STSS	WASHER, 3/8 SAE	8
	ITEM NO. 1 2 3 4 5	1 100-720-6316 2 620-38006 3 620-38029 4 90037CN-FNSS	1 100-720-6316 HOSE CLAMP 2 620-38006 RISER GASKET 3 620-38029 HOSE, RISER - PORT 4 90037CN-FNSS NUT, 3/8-16

INSTALLATION INSTRUCTIONS:

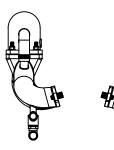
1) APPLY ANTI-SIEZE TO THE 8 STUDS, FIG.A.

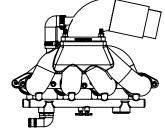
2) SLIDE GASKETS OVER THE STUDS, FIG. B. DO NOT USE ANY SEALANT ON THE GASKETS.

3) INSTALL RISERS USING THE 3/8 WASHERS AND NUTS, FIG.C. USING 9/16 SOCKET TORQUE TO 30 FT. LBS..

4) INSTALL JUMPER HOSE AND HOSE CLAMPS, AS SHOWN IN FIG. D, FOR FRESH WATER COOLING. FOR CLOSED COOLING SEE THE INSTRUCTIONS THAT COME WITH COMPLETE KIT.

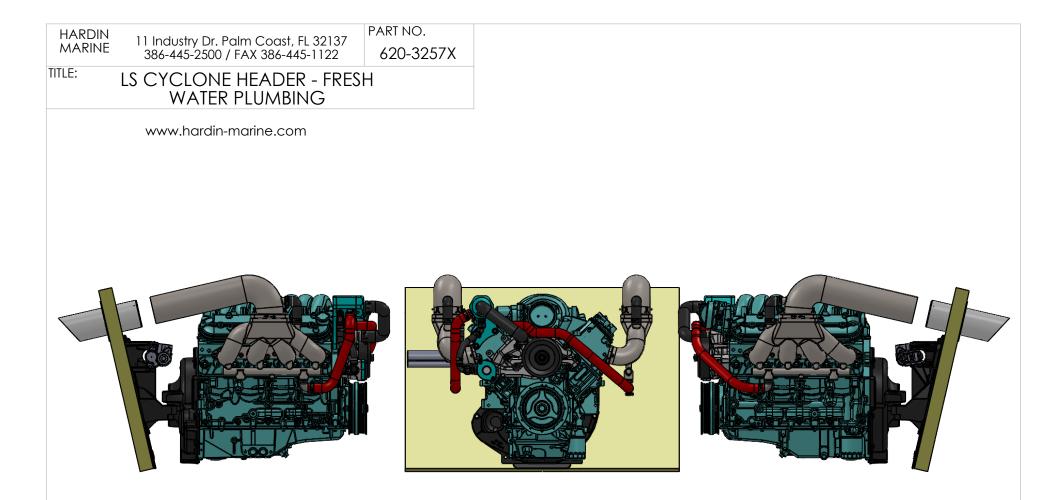
CAUTION** HARDIN MARINE HEADER SYSTEMS ARE DESIGNED FOR USE ON ENGINES WITH FULL TIME CONSTANT WATER CIRCULATION AT ALL TIMES. NOTE** AFTER APPROXIMATELY 2-5 HOURS USE OR NUMEROUS ENGINE HEAT CYCLES ALL HARDWARE MUST BE RETORQUED AND OR TIGHTENED.





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TITLE:



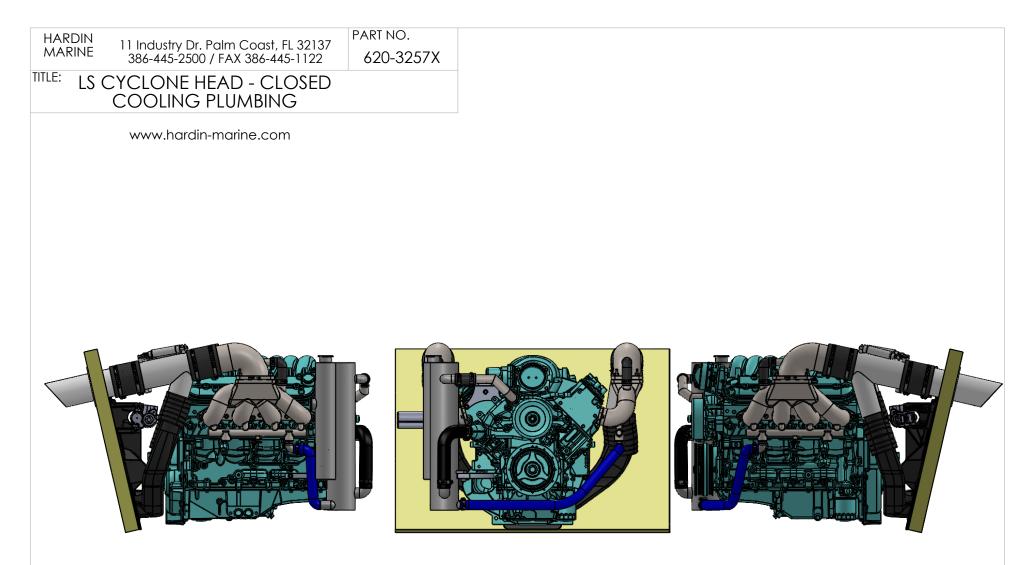
FRESH WATER PLUMBING

1) SHOW WITH 625-4530 LS THERMOSTATIC COOLING SYSTEM.

2) THE FRESH WATER DISCHARGE FROM THE THERMOSTATIC HEAD IS PLUMBED TO THE BOTTOM OF THE HEADER DISTRIBUTION TUBE, SHOWN BY THE RED HOSE.

3) WATER FLOWS VERTICALLY THROUGH THE EXHAUST MANIFOLD AND IS DISCHARGED THROUGHT A JUMP CONNECTION HOSE TO THE EXHAUST RISER FOR COOLING.

4) WATER EXITS INTERNALLY AT THE END OF THE RISER AND FLOWS THROUGH THE TIP OR OUTDRIVE.



CLOSED COOLING HALF SYSTEM PLUMBING

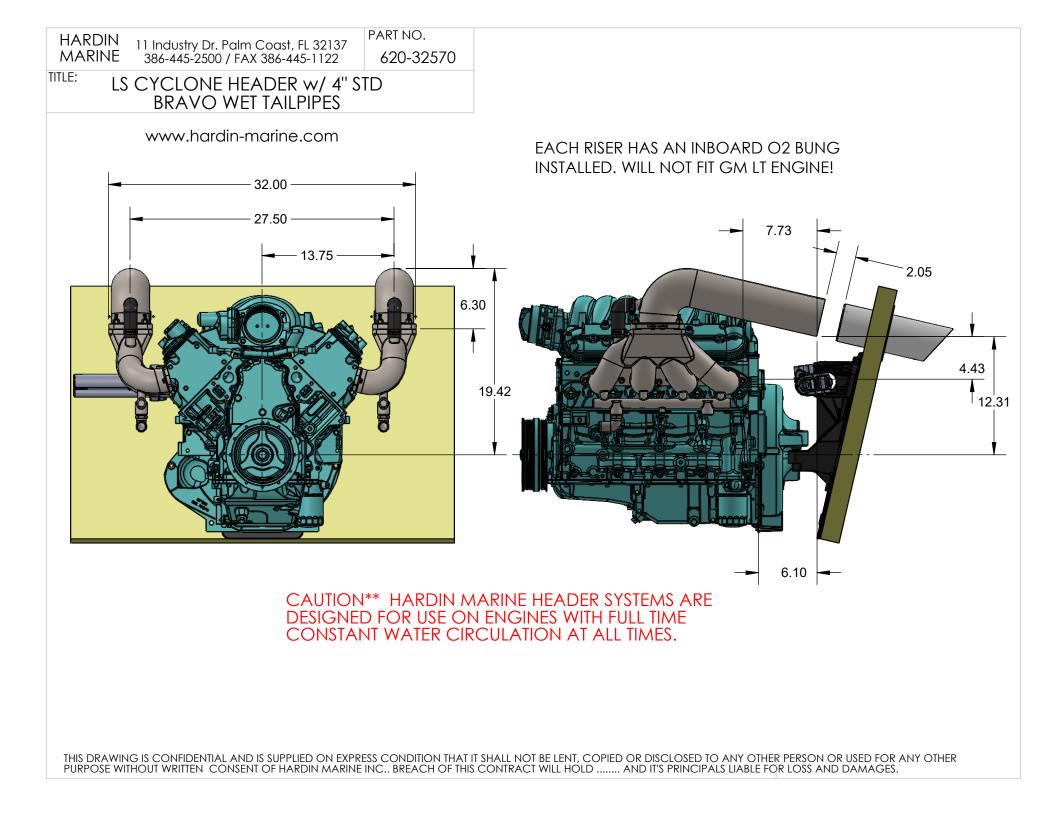
1) SHOW WITH 625-4574 LS VERTICAL HEAT EXCHANGER KIT.

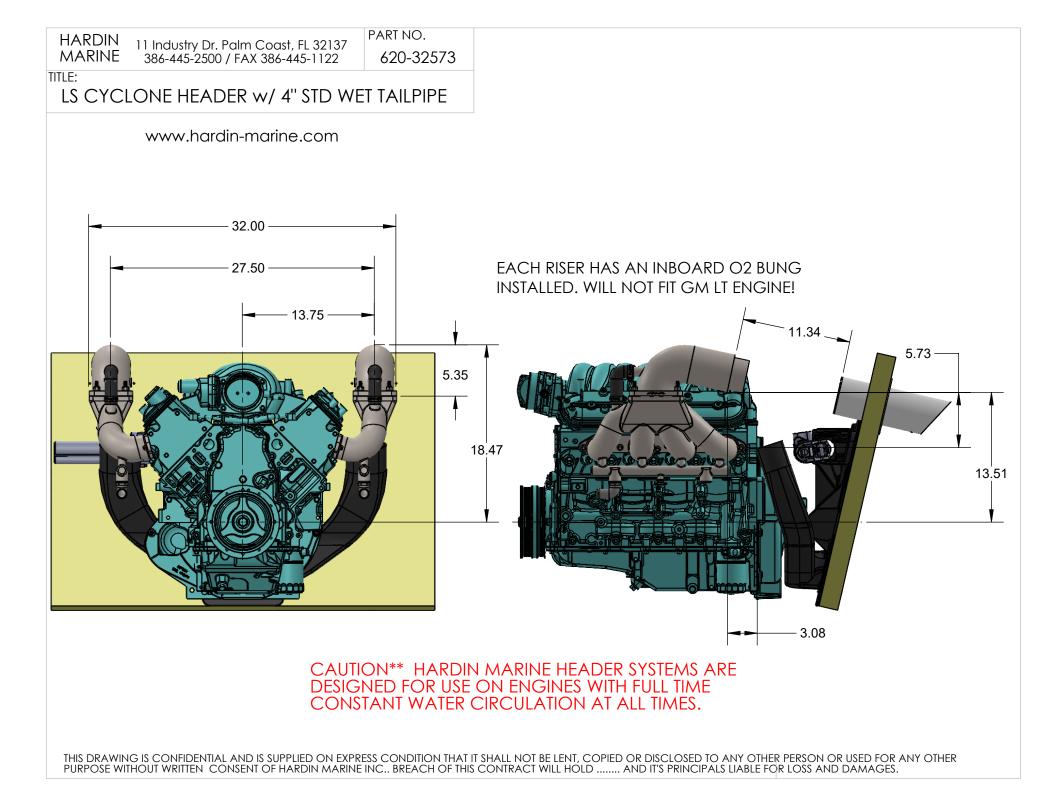
2) THE FRESH WATER DISCHARGE FROM THE HEAT EXCHANGER IS PLUMBED TO THE BOTTOM OF THE HEADER DISTRIBUTION TUBE, SHOWN BY THE BLUE HOSE.

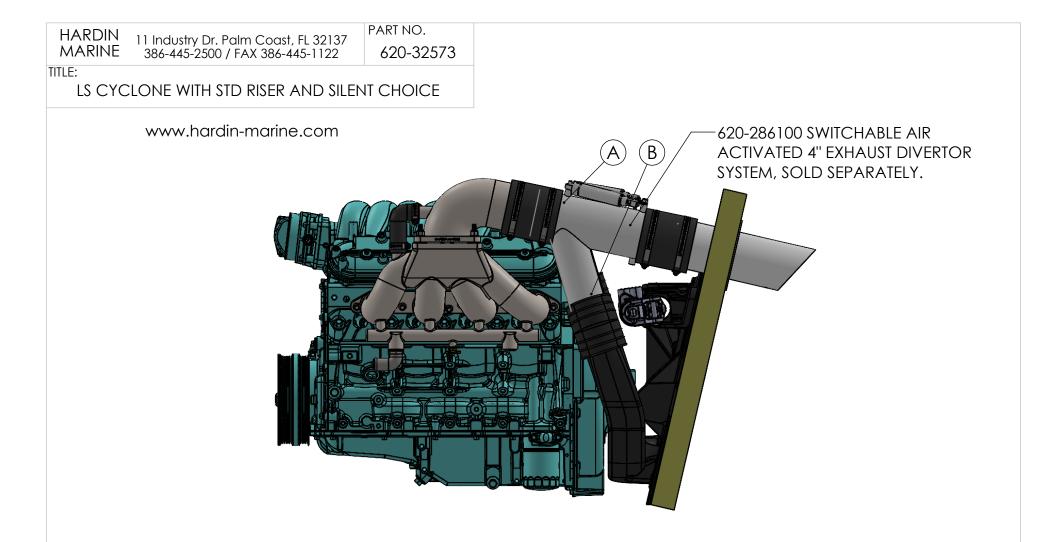
3) WATER FLOWS VERTICALLY THROUGH THE EXHAUST MANIFOLD AND IS DISCHARGED THROUGHT A JUMP CONNECTION HOSE TO THE EXHAUST RISER FOR COOLING.

4) WATER EXITS INTERNALLY AT THE END OF THE RISER AND FLOWS THROUGH THE TIP OR OUTDRIVE.

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INSTALLATION INSTRUCTIONS:

1) YOU WILL NEED TO CUT BACK THE FRONT OF 620-286100, FIG. A AND THE LOWER EXTENSIONS FIG. B TO MAKE THIS KIT. 2) YOUR ORIGINAL UPPER AND LOWER EXHAUST BELLOWS CAN BE REUSED.

3) YOU WILL NEED TO PURCHASE 16" OF 100-200-4004 EXHAUST HOSE AND (4)100-720-6372 HOSE CLAMPS TO COMPLETE THE INSTALLATION.

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