



# **2023 OWNERS Product Technical Specifications**

**PERFORMANCE TO MOVE YOU**



# Warranty

## LEVITATOR AIRBOAT 3 YEAR / 200 HOUR TRANSFERABLE LIMITED WARRANTY

Levittor Marine Engine Co., through its Levittor Division ("Levittor"), warrants its new products to be free from defects in material and workmanship under normal use and service conditions. This warranty is extended only to the first registered owner or registered user, as well as all subsequent users who comply with Levittor's warranty transfer policy and receive Levittor's approval of warranty transfer. The obligation of Levittor under this warranty shall be limited to the repair or replacement with new or reconditioned components, at Levittor's option, of any product, or parts thereof, which have failed during the warranty coverage period specified below and are demonstrated upon examination to have failed due to defective material and/or workmanship.

### WARRANTY COVERAGE; TRANSFER; WARRANTY PERIOD

This warranty is extended to the first registered owner or registered user purchasing the engine at retail, as well as all subsequent users who, in accordance with Levittor's warranty transfer policy and warranty transfer approval, must notify Levittor within 30 days of any subsequent sale of the product at which time Levittor will review for an approval of the transfer of any remaining portion of warranty coverage. To obtain a Levittor Warranty Transfer Application, contact your local Levittor dealer or Levittor's Warranty Services Department at (803) 345-1337. Certification of an inspection of the product by an authorized technician and payment of a warranty transfer fee are required to be submitted with the Application.

All components, other than those itemized below and those components that are warranted by Levittor's suppliers, are warranted, solely for non-commercial use, for a period of 3 years or 200 hours of use, whichever first occurs, from the earlier of (1) the date of sale to the first registered owner or registered user, or (2) from the date the engine is first placed into service for demonstration or any other purpose prior to the sale of the engine to the first owner purchasing the engine at retail. Commercial use is defined as, but not limited to, use of the product by ski schools, for promotional use, for athletes' boats, for rentals, etc. In the case of commercial use of the product, the term of this warranty shall be for a period of 3 years or 200 hours of use, whichever occurs first, from the earlier of (1) the date in which the engine is first registered, or (2) within 30 days from the date the boat was manufactured.

Components not covered under this warranty:

- (1) Water pump impellers are not covered by this warranty.
- (2) Seals, gaskets, O-rings, and other materials affected by time are not covered by this warranty if their effectiveness is reduced by an extended storage period prior to sale or use of the product.
- (3) Items such as, but not limited to, lubricants, spark plugs and other items which are frequently replaced as part of routine maintenance.

### NO OTHER WARRANTY GIVEN

The obligations set forth in the preceding paragraphs are Levittor's sole obligation and the owner's exclusive remedy. Levittor makes no other express warranty. Any implied warranty of merchantability or fitness for a particular purpose that may be applicable to this product is limited in duration to the duration of this warranty. Some States do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

No distributor, dealer, agent or employee of Levittor is authorized to grant any other or further warranty or incur any additional warranty obligation on Levittor's behalf in connection with the sale of its products. Any qualification or restriction contained herein which is prohibited by any law of mandatory application shall be deemed to be deleted from this warranty; however, such deletion shall have no effect on the remaining provisions hereof, all of which shall remain in full force and effect.

### REMEDIES

The obligation of Levittor set forth in the first paragraph of this warranty shall be the exclusive remedy for any breach of warranty hereunder, and any owner or user's sole remedy in the event of breach of the warranty is repair or replacement of the product or any warranted part thereof as set forth in this warranty. With this sole exception, Levittor shall not be liable for any direct or indirect, incidental or consequential damages, including without limitation, any damages for property damage, loss of use or loss of profits, loss of income, inconvenience, trailing, towing, haul out, launch and/or any other in and out of water expenses, storage charges, dockage charges, expenses to deliver or pick up the product being warranted to and from the dealer, telephone expenses, lodging expenses, travel expenses, mechanic travel time and mileage, damage caused by any occurrence of an insurable nature, rental of substitute equipment of any type, removal and replacement and/or modification of any boat parts to facilitate repairs, moving of furniture, carpets, cleaning, painting, carpenter work, or re-delivery charges. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Any owner or user hereby waives for himself/herself/itself and his/her/its successor and assigns (a) any and all claims for punitive damages, and (b) all claims of negligence or strict liability or both. In no event will Levittor's liability exceed the purchase price of the product(s) which is actually paid to Levittor.

### OBTAINING PERFORMANCE UNDER WARRANTY

Levittor's warranty registration form should be prepared by your selling dealer, executed by you and the dealer, and mailed by you to Levittor within 30 days after the date of your purchase of the product. Upon receipt of the warranty registration form, Levittor will issue to you a personalized owner's registration card which will be mailed directly to you. If the owner's registration card is not received within 8 weeks after the date of purchase, please write to Levittor at the address set forth below.

At the time that a claim for warranty service is made, the owner's registration card should be presented to the person or entity providing warranty service. Authorized Levittor dealers or distributors are entitled to be reimbursed by Levittor for some or all of the expense of warranty repairs; thus, service under the terms of this warranty will be performed by an authorized Levittor dealer or distributor without charge for established flat rate labor or replacement parts, other than items not covered by the warranty, such as, but not limited to, water pump impellers, seals, gaskets, O-rings and other materials affected by time if their effectiveness is reduced by an extended storage period prior to sale or use of the product, and lubricants, spark plugs and other items which are frequently replaced as part of routine maintenance. Charges for additional non-warranty work and/or additional dealer charges for labor relative to warranty work in excess of flat rate must be paid for by the owner.

Prior authorization in writing must be obtained from Levittor for any warranty repairs over \$50.00 and in all cases where the owner fails to establish the purchase and warranty expiration dates with the owner's registration card sent upon receipt of the warranty registration form by Levittor. While failure to present the owner's registration card will not prevent you from obtaining coverage hereunder, this warranty shall not be effective and, therefore, cannot be honored until the product purchase date can be confirmed by Levittor. If the card is lost, communicate with Levittor at the address listed below, and, for a processing fee of \$10.00, a new owner's registration card will be issued to you.

Any questions concerning service, parts or this warranty should be directed to your selling dealer. If your dealer is unable to assist or if you relocate, if you are traveling or if you need a referral to your nearest dealer, contact: Levittor Marine Engine Co., 1737 Highway 76, Little Mountain, SC 29075 (803) 345-1337.

### FAILURES EXCLUDED FROM WARRANTY

This warranty will not apply to any failure which results from accidents, sinking, fire, neglect, abuse or abnormal service or use, such as racing, towing or operation in water of insufficient depth, or to any failure resulting from improper installation, improper adjustments, repairs or improper delivery service, or to any failure resulting from the use of parts, fuels, oils or lubricants not suitable for use with the product and/or materials or parts not approved by Levittor. This warranty does not apply to any engine or drive which has been modified, or altered, or repaired in such a manner as, in the opinion of Levittor, to affect its stability, reliability or performance. Further, this warranty will not apply to product failure resulting from (1) use of non-recommended lubricants or fuels, (2) failure to follow maintenance or lubrication schedules, (3) failure caused or contributed to by improper or contaminated fuel, (4) failure caused by water intrusion, salt corrosion to external components, or improper installation or misapplication of the engine or drive, (5) the owner's or operator's failure to exercise due or normal care and precaution, (6) failure of components and/or assemblies that are warranted by Levittor suppliers, and (7) damage resulting from the owner's or operator's failure to timely replace failed water pump impellers, seals, gaskets and O-rings.

### OWNER'S RESPONSIBILITY

Performance under this warranty shall be conditioned upon the first registered owner's or registered user's compliance with the following requirements:

- (1) Owner or user shall verify that the pre-delivery service has been performed, all requested information recorded and that the selling dealer has signed the warranty registration.
- (2) Owner or user shall promptly mail the warranty registration to Levittor after accepting delivery.
- (3) Owner or user shall follow the instructions in the owner's manual regarding operation, break-in, lubrication and fuel.
- (4) Owner or user shall follow or comply with the maintenance schedule, operation limits, and lay up instruction, as outlined in the owner's manual. Levittor original equipment genuine marine engine parts should be used whenever service or repairs are performed.

### CHOICE OF LAW

This limited warranty shall be governed by, and construed and interpreted in accordance with, the local laws of the State of Ohio (without application of its conflicts of laws principles), except only to the extent replaced or precluded by other law of mandatory application.

### GENERAL

This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.

The Levittor Federal/California Emissions Warranty and Federal/California Emissions Control Warranty Statement are separate documents included in the owner's manual. Any questions concerning the Emissions Warranty can be obtained by calling Levittor at (803) 345-0050.

Levittor's policy is one of continued improvement of its products, and Levittor hereby reserves the right to improve and change the design and production of any of its products without assuming any obligation to modify products previously manufactured and/or sold.

# LEVITATOR WARRANTY REGISTRATION

ENGINE MODEL NUMBER: \_\_\_\_\_ SERIAL NUMBER: \_\_\_\_\_

SELLING DEALER / BUILDER: \_\_\_\_\_

DEALER EMAIL ADDRESS: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY STATE ZIP: \_\_\_\_\_ PHONE: \_\_\_\_\_

DEALER SIGNATURE: \_\_\_\_\_

CUSTOMER: \_\_\_\_\_

CUSTOMER EMAIL ADDRESS: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY STATE ZIP: \_\_\_\_\_

PHONE: \_\_\_\_\_

After reading the above warranty statement and entries, the provisions of which I understand and accept, I now affix my signature below, as purchaser, in proof of receipt of this base engine and acceptance of the above warranty provisions:

CUSTOMER SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

**IMPORTANT:** MAKE COPIES OF THIS COMPLETED FORM. ONE COPY FOR THE OWNER, ONE COPY FOR THE DEALER AND ONE COPY TO THE DISTRIBUTOR.

MAIL TO: PLEASURECRAFT MARINE ENGINE CO., 1737 HIGHWAY 76, LITTLE MOUNTAIN, SC 29075

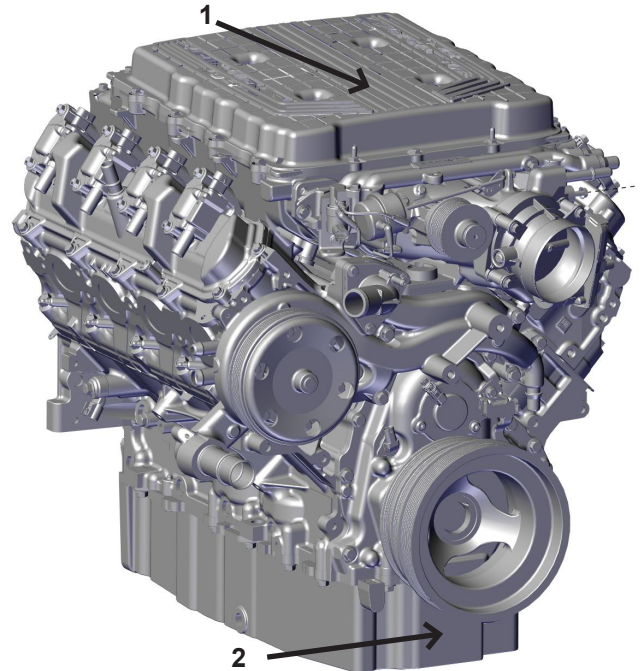
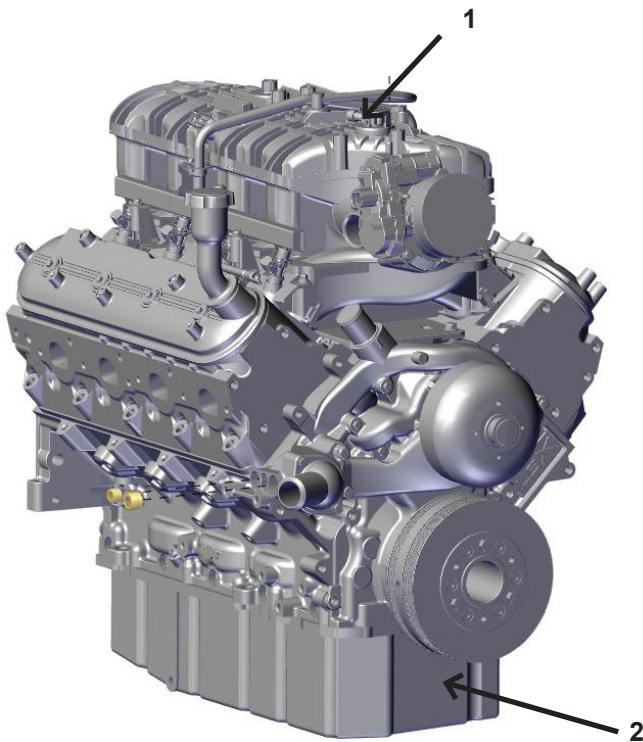
## Engine Serial Number and Specification Decal Locations



1. Engine Specification Decal



2. Engine Identification Decal



### ENGINE RPM CHART

Model	Minimum Full Load	Preferred	Maximum
6.0L HO	5400	5500	5600
6.2L DI SC	5100	5200	5300
7.4L	5200	5400	5600

#### IMPORTANT

Your new Levitator engine incorporates an RPM "MAX GOVERNOR" in order to prevent the engine from over-revving. Operation above the Maximum RPM is not recommended. If your engine is operating above the maximum RPM listed, a higher pitched propeller would be required to lower the engine maximum RPM to the Preferred RPM.



#### CAUTION

Prolonged WOT operation will shorten the life of your engine and could cause premature engine failure. Problems caused by prolonged WOT operation are considered abuse and are not covered under the Levitator Warranty.



## ENGINE FLUID CAPACITIES

Model	6.0L / 6.2L SC MODELS	6.2L DI SC / 7.4L MODELS
Crankcase Oil Capacity <b>W / NEW FILTER</b>	Start with 4 Quarts (4.5 Liters) <sup>1</sup>	Start with 6 Quarts (5.7 Liters) <sup>1</sup>
Fresh Water Cooling System Capacity	Fill Until Completely Purged	Fill Until Completely Purged

Engine	Oil Requirements All Temperatures
6.0L HO / 7.4L 6.2L DI SC	Dexos 1 / Gen 2 5W-30 0W-40

<sup>1</sup> - Capacities are dependent on installation angle. Oil capacities are approximate. **Always use the dipstick to determine the exact quantity of oil required.**

**WARRANTY NOTICE:** Levitator Engines reserves the right to refuse warranty on part(s) and/or engine(s) damaged by using improper fuels and engine oils.

### Oil Change Intervals (Common)

Crankcase oil and oil filter change - Recommended intervals:

- Initial oil change - 1st 60 days or 25 hours of operation, whichever occurs first
- Regular oil changes - Every 50 hours of operation or 120 days, whichever occurs first
- Heavy Duty High RPM / High Load Use - Every 30 hours of operation or 120 days, whichever occurs first

**NOTE:** Never over-fill the engine with oil. Engines over-filled with oil can cause engine damage.

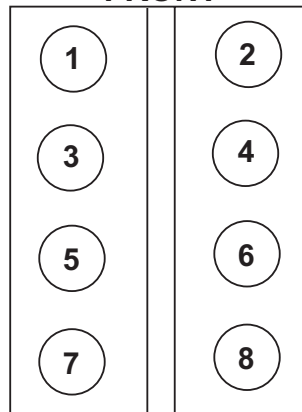
# Specifications

## ENGINE SPECIFICATIONS

MODEL	6.0LHO	7.4L	6.2L DI Supercharged
Displacement	6.0L (366 CID)	7.4L (454 CID)	6.2L SC (376 CID)
Bore	4.0007 in. (101.618 mm)	4.19 in. (106.3 mm)	4.0649 in. (103.25 mm)
Stroke	3.622 in. (92.0 mm)	4.13 in. (104.8 mm)	3.622 in. (92.0 mm)
Compression Ratio	9.67:1	10.1:1	9.1:1
Compression	130 - 215 psi	130 - 215 psi	130 - 215 psi
WOT Operating RPM Preferred WOT RPM	5400 - 5600 <b>5500</b>	5400 - 5600 <b>5500</b>	5100 - 5300 <b>5200</b>
Cruising RPM (Max)	4480	4480	4240
Idle RPM	650 (Not Adjustable)	650 (Not Adjustable)	650 (Not Adjustable)
Oil Pressure @ 2000 RPM	25 - 80 psi (172 - 552 kPa)	25 - 80 psi (172 - 552 kPa)	25 - 80 psi (172 - 552 kPa)
Minimum Oil Pressure	5 psi (35 kPa) - Idle 24 psi (165 kPa) - 4000 RPM	5 psi (35 kPa) - Idle 24 psi (165 kPa) - 4000 RPM	5 psi (35 kPa) - Idle 24 psi (165 kPa) - 4000 RPM
FCC Fuel Pressure (wide open throttle)	57 - 62 psi (393 - 427 kPa)	57 - 62 psi (393 - 427 kPa)	57 - 62 psi (393 - 427 kPa)
Spark Plug P/N Spark Plug Gap	R030011 0.040 in.	R030015 0.040 in.	R030014 0.040 in.
Firing Order	1-8-7-2-6-5-4-3	1-8-7-2-6-5-4-3	1-8-7-2-6-5-4-3
Thermostat	195°F (61.7°C)	195°F (61.7°C)	195°F (61.7°C)
Engine Over- Temperature	220°F (104.8° C)	220°F (104.8° C)	220°F (104.8° C)
Electrical System	12 Volt Negative (-) Ground	12 Volt Negative (-) Ground	12 Volt Negative (-) Ground
Alternator Rating	150 Amps	150 Amps	150 Amps
Battery Rating	650 CCA (Minimum) 120 Ah	650 CCA (Minimum) 120 Ah	650 CCA (Minimum) 120 Ah

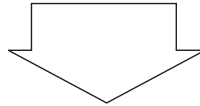
**NOTE: FOR NEW BOAT PROPPING, IT IS RECOMMENDED THAT OEMS PROP TO THE MAXIMUM RPM LISTED.**

## LH ROTATION FRONT



## NO DISTRIBUTOR

## FLYWHEEL END OF ENGINE ALL V-8 MODELS



**FIRING ORDER:**  
**1-8-7-2-6-5-4-3**

## TUNE-UP SPECIFICATIONS

Model	6.0L HO	7.4L	6.2L DI SC
Spark Plug Type	R030011	R030014	R030012
Spark Plug Gap	0.040 in. (1.02 mm)	0.040 in. (1.02 mm)	0.040 in. (1.02 mm)
Ignition Timing	Fixed, Not Adjustable	Fixed, Not Adjustable	Fixed, Not Adjustable
Firing Order	1-8-7-2-6-5-4-3 (LH Rotation)	1-8-7-2-6-5-4-3 (LH Rotation)	1-8-7-2-6-5-4-3 (LH Rotation)

**IMPORTANT: FUEL PRESSURE VALIDATION MUST BE MADE WITH THE ENGINE UNDER LOAD.**

## ACCESSORY DRIVE BELT

Levittor engines use a serpentine belt to drive the engine water circulation pump, sea-water pump and the alternator.



### WARNING

Engine must be shut OFF and the ignition key removed before inspecting the drive belt(s). The drive belt(s) should be checked periodically for condition and tension. If the belt(s) shows signs of cracking, glazing or deterioration, replace with new belt(s).

## DRIVE BELT INSPECTION

Inspect the drive belt for excessive wear, shredding or missing sections.

Inspect the drive belt for contamination from excessive dirt, oil, coolant or other substances that may effect the drive belt operation.

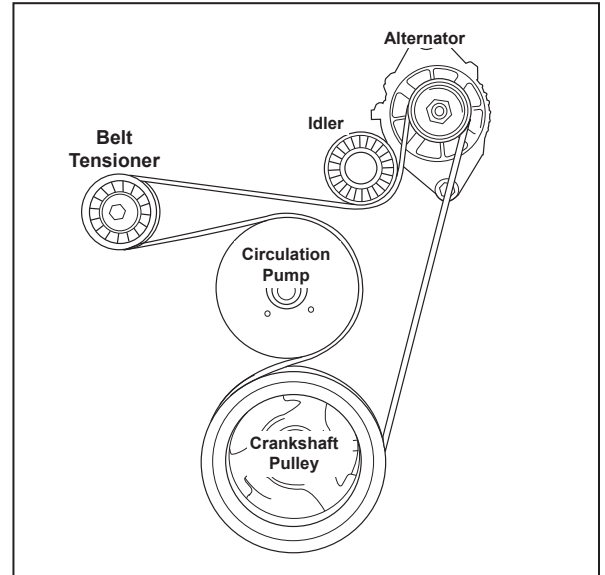
If a problem is found, replace the belt after inspecting the following items:

- All pulleys and tensioners for signs of misalignment
- All pulleys and tensioners for signs of rust or other damage
- Bent pulleys or tight bearings in the engine water circulation pump, sea-water pump and alternator

## DRIVE BELT REPLACEMENT

### 6.0L / 7.4L HO SERPENTINE BELT #: R066041

1. Note the routing of the belt before removing.
2. Using a 15 mm box wrench or socket, turn the belt tensioner to relieve the tension on the belt. Slide the belt off of the pulleys. **Release the tensioner slowly to prevent the tensioner from snapping against its stop, and possibly causing damage to the tensioner.**
3. Slide the belt onto the pulleys using the same routing as noted prior to removal.
4. Compress the belt tensioner, and slide the belt over the tensioner pulley. Release the tension slowly to tension the belt.

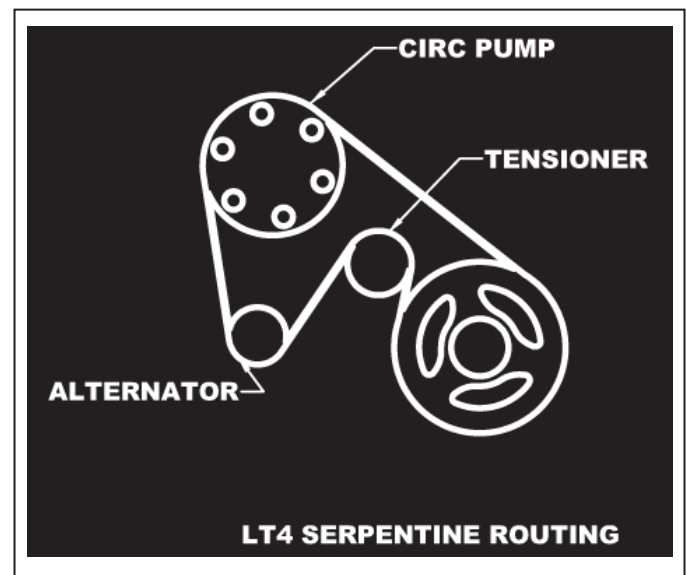


6.0L / 7.4L Accessory Drive Belt Configuration

## DRIVE BELT REPLACEMENT

### 6.2L DI SC SERPENTINE BELT #: R066044

1. Note the routing of the belt before removing.
2. Using a 15 mm box wrench or socket, turn the belt tensioner to relieve the tension on the belt. Slide the belt off of the pulleys. **Release the tensioner slowly to prevent the tensioner from snapping against its stop, and possibly causing damage to the tensioner.**
3. Slide the belt onto the pulleys using the same routing as noted prior to removal.
4. Compress the belt tensioner, and slide the belt over the tensioner pulley. Release the tension slowly to tension the belt.

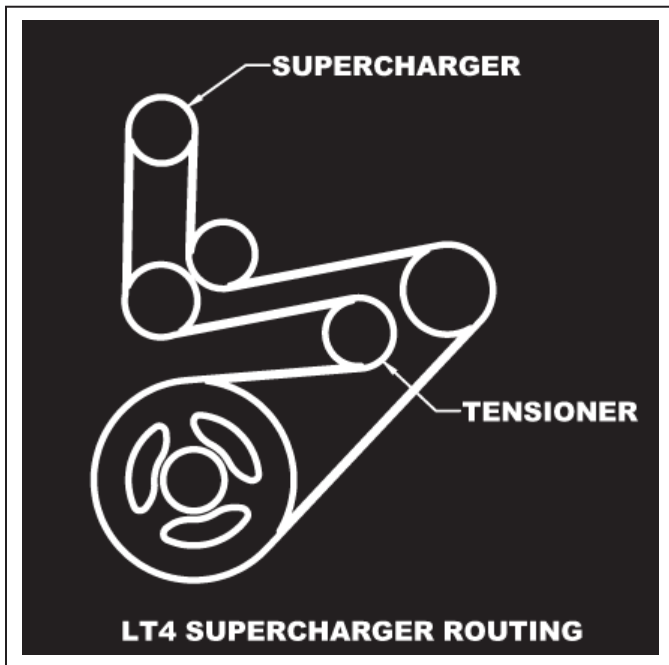


6.2L DI SC Accessory Drive Belt Configuration

### SUPERCHARGER BELT REPLACEMENT

#### 6.2L DI SC SERPENTINE BELT #: R066043

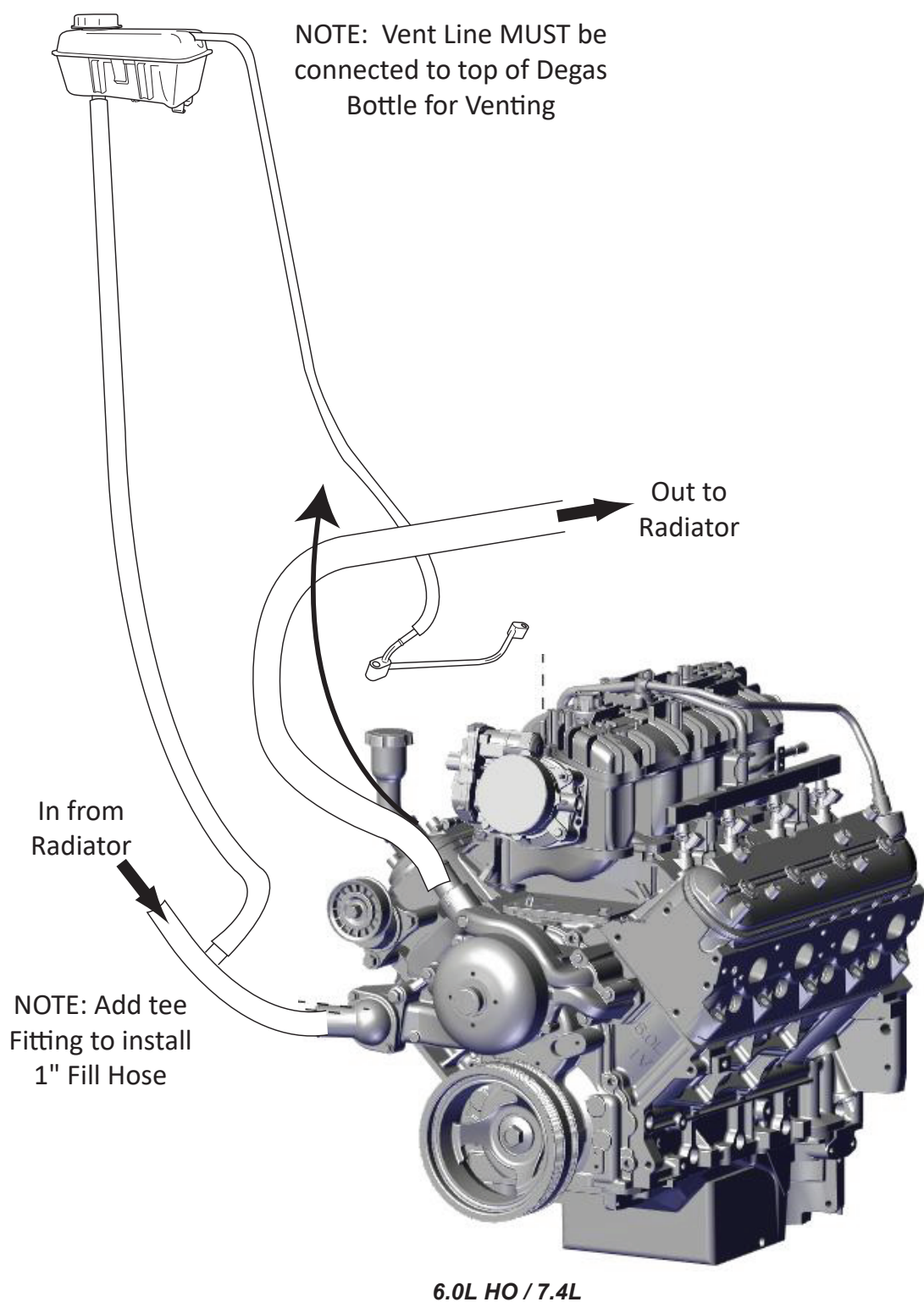
1. Note the routing of the belt before removing.
2. Using a 1/2" drive ratchet, turn the belt tensioner to relieve the tension on the belt. Slide the belt off of the pulleys. ***Release the tensioner slowly to prevent the tensioner from snapping against its stop, and possibly causing damage to the tensioner.***
3. Slide the belt onto the pulleys using the same routing as noted prior to removal.
4. Compress the belt tensioner, and slide the belt over the tensioner pulley. Release the tension slowly to tension the belt.



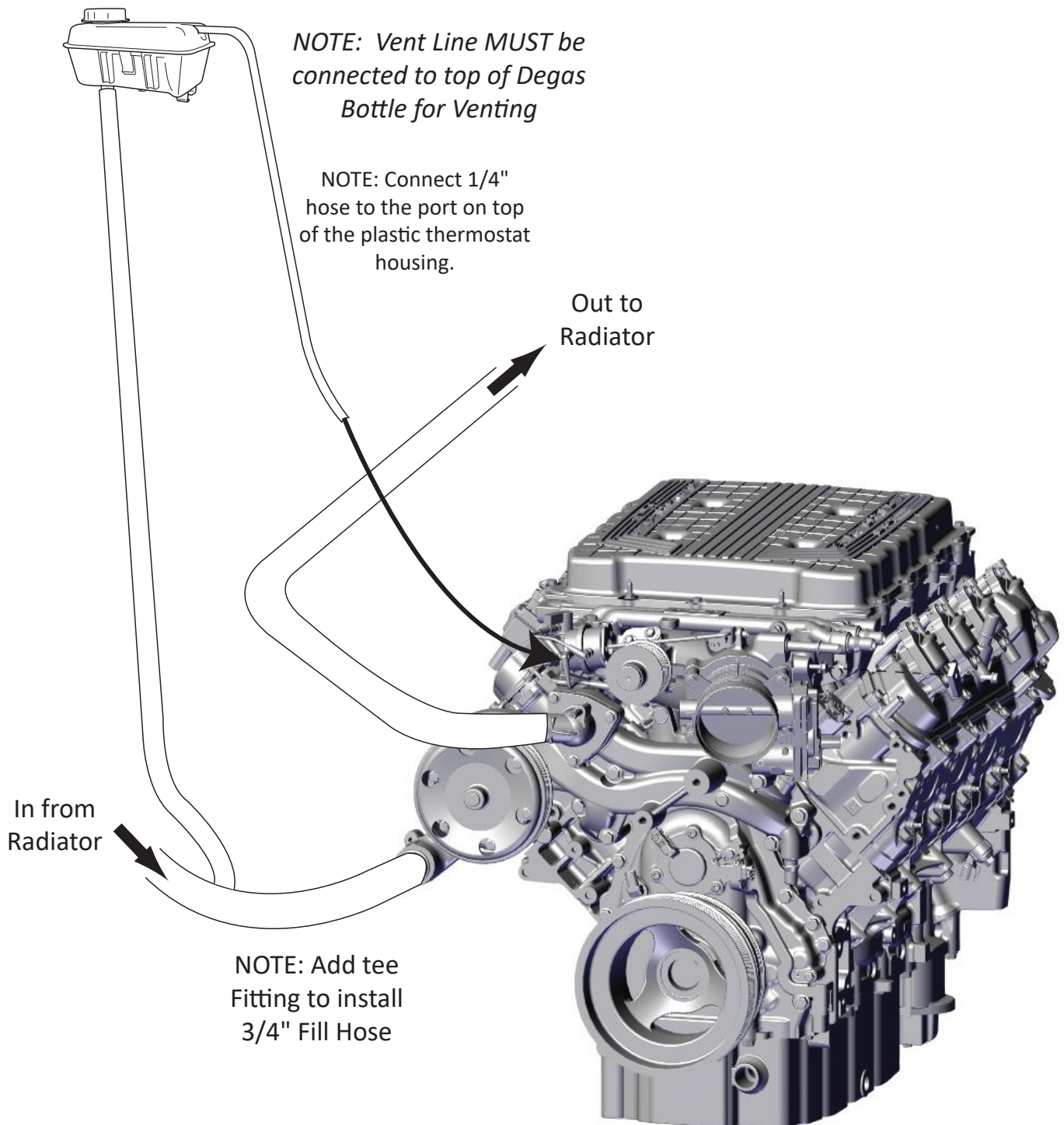
6.2L DI SC Supercharger Belt Configuration



# Levigator 6.0L HO / 7.4L Water Flow Guidelines

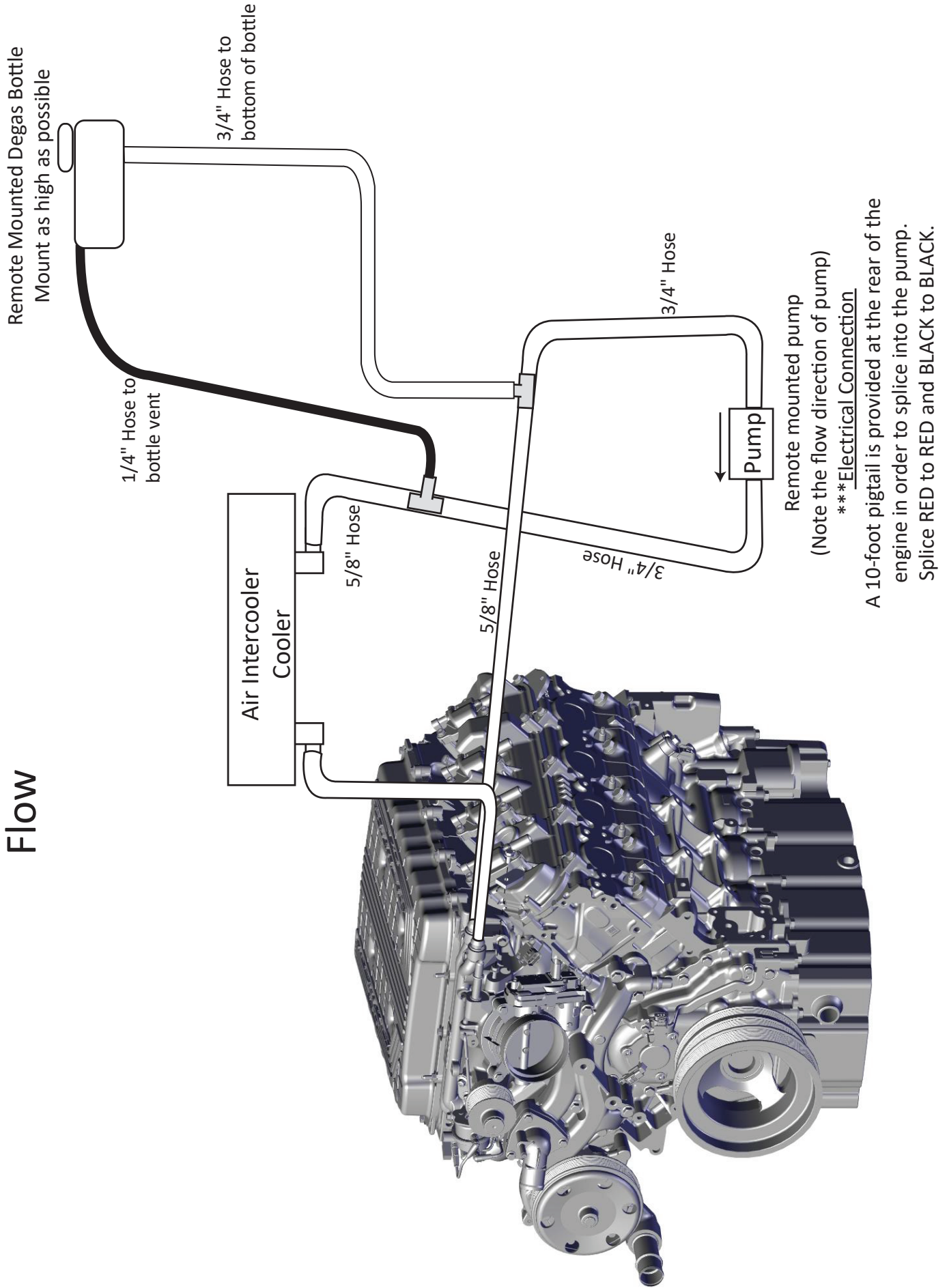


## 6.2L DI SC Levitator Cooling System Water Flow



6.2L DI SC Cooling System

## 6.2L DI SC Airboat Intercooler System Water Flow

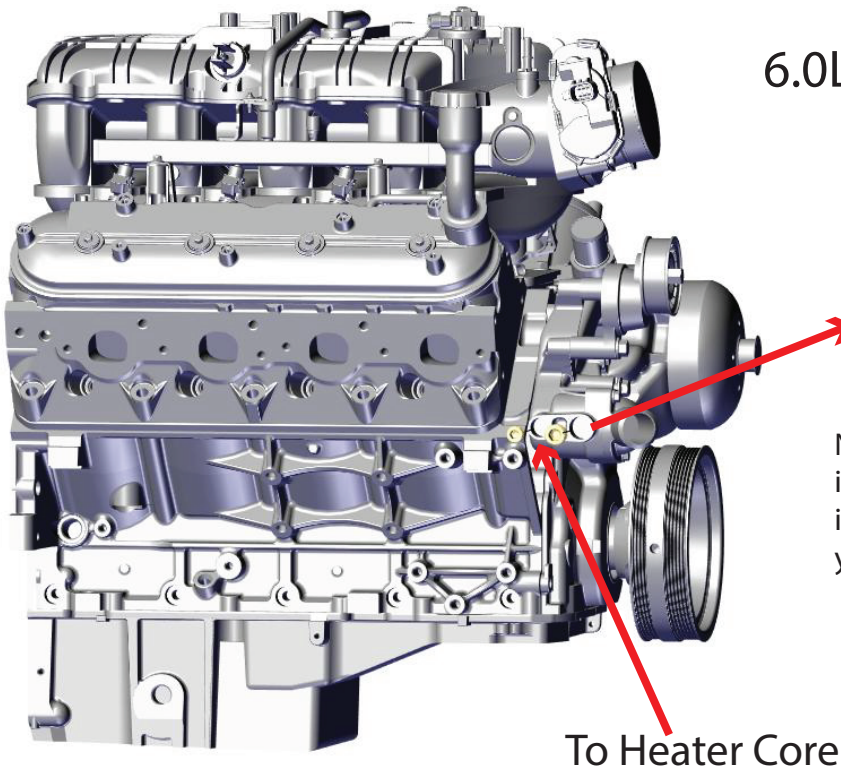


6.2L DI SC Intercooler Cooling System



# Heater Core Connections for Levitator Engines

## 6.0L HO / 7.4L LSX

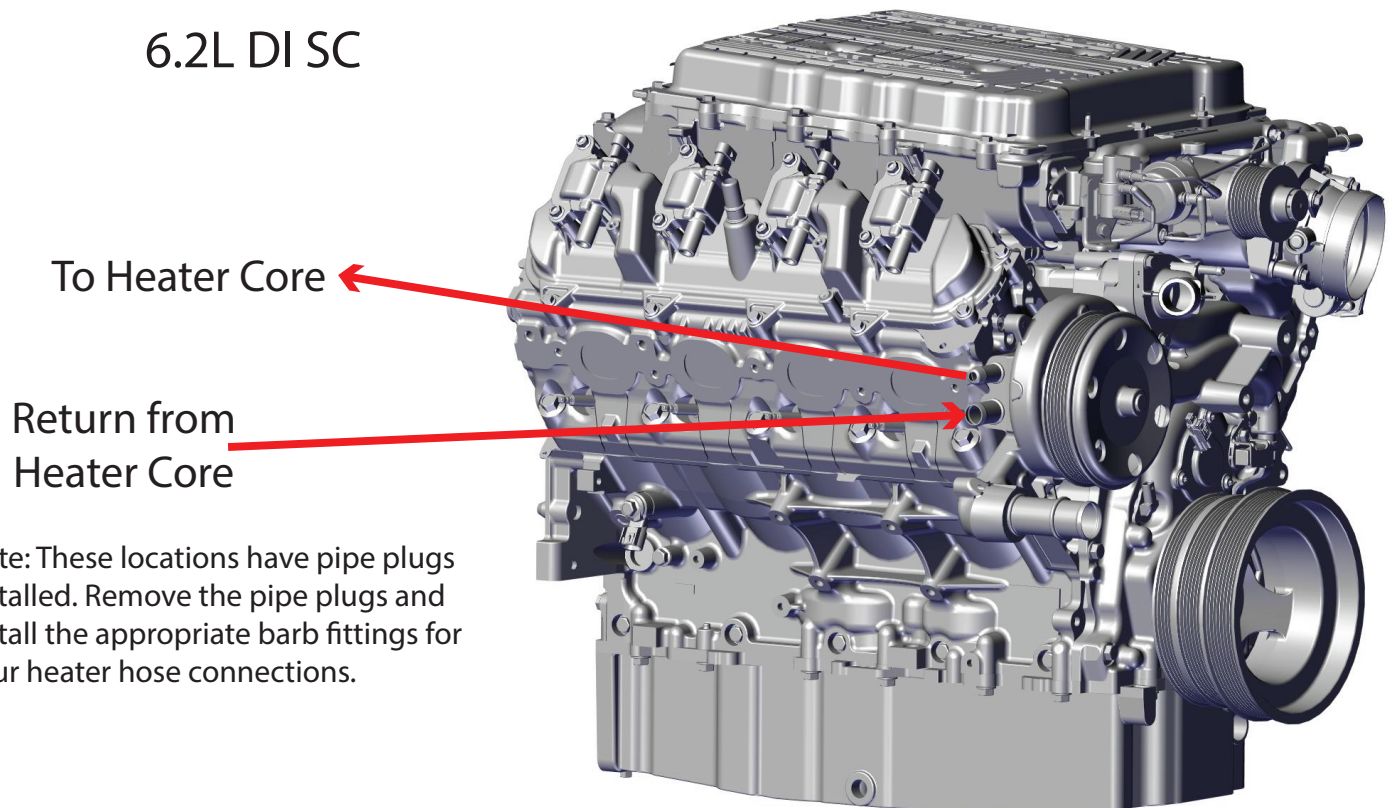


From Heater Core

Note: These locations have pipe plugs installed. Remove the pipe plugs and install the appropriate barb fittings for your heater hose connections.

To Heater Core

## 6.2L DI SC



To Heater Core

Return from  
Heater Core

Note: These locations have pipe plugs installed. Remove the pipe plugs and install the appropriate barb fittings for your heater hose connections.