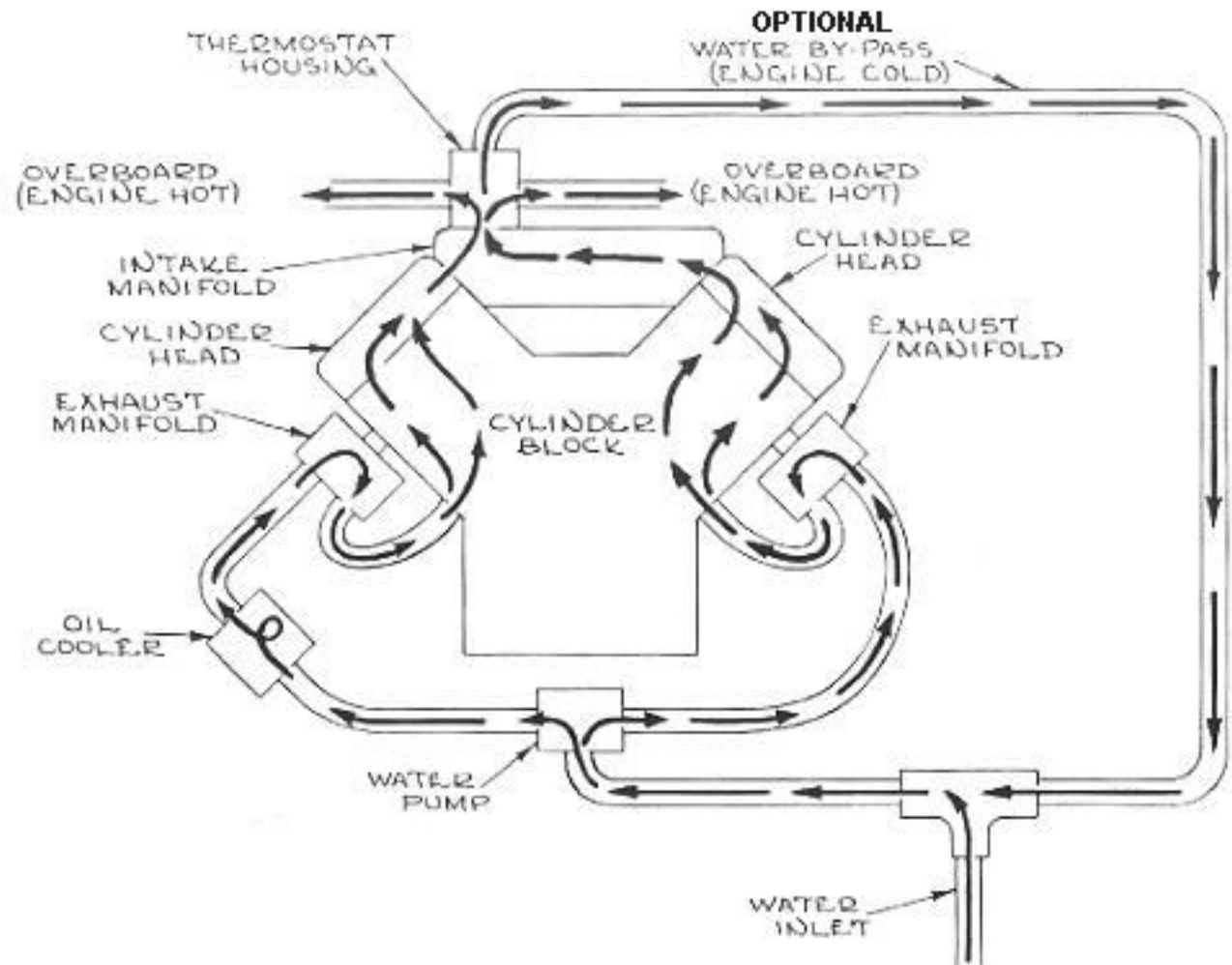


COOLING SYSTEM



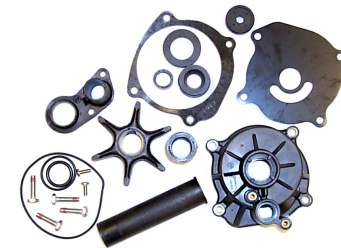
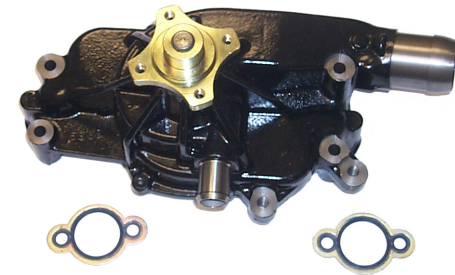
Cooling System

Circulation of cooling system



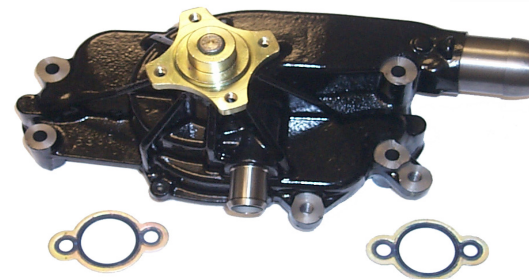
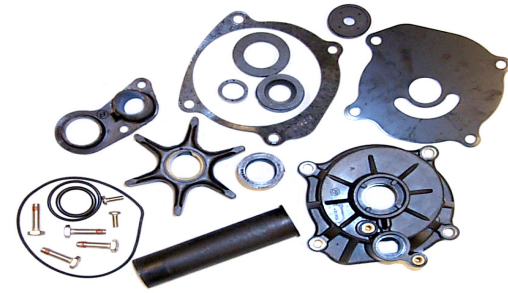
Cooling System

- The purpose of the cooling system is to remove excess heat from the engine and other components for optimum operating efficiency and longevity
- Cooling systems are composed of two primary types:
 - Open Cooling Systems
 - Closed Cooling Systems



Water Pumps

- The water pump is the heart of all cooling systems
- There are three basic pump types:
 - Lower unit mounted pickup pump (Outboard and I/O applications)
 - Engine mounted/engine driven pickup pump (I/O & Inboard applications)
 - Engine Circulating pump (I/O & Inboard applications)



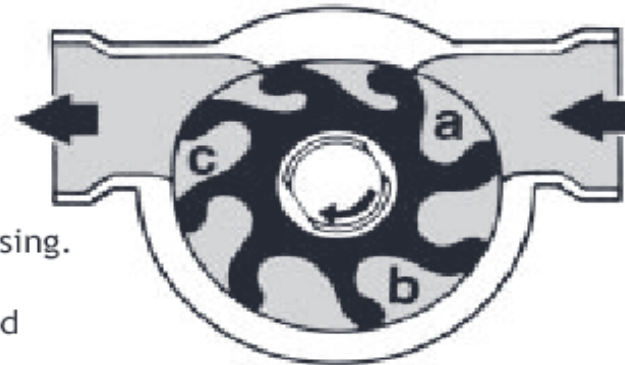
Cooling System

COMMON PUMPING PRINCIPLES

FLEXIBLE IMPELLER

HOW IT WORKS:

- a.) As the flexible impeller blades leave the cam, the cavities between them increase in size and create a vacuum which draws in the liquid.
- b.) Once the blades clear the inlet port, the liquid is captured in the cavity between the blades and the housing.
- c.) As the blades contact the cam and bend, the cavity between them is reduced in size and the liquid is forced out the discharge.



FEATURES:

Self-priming: primes quickly from a dry or wet start / will lift up to 15 feet when wet

Low Shear: smooth gentle pumping action for liquids of low to high viscosity

Batching: smooth repeatable flow of low to high viscosity liquids



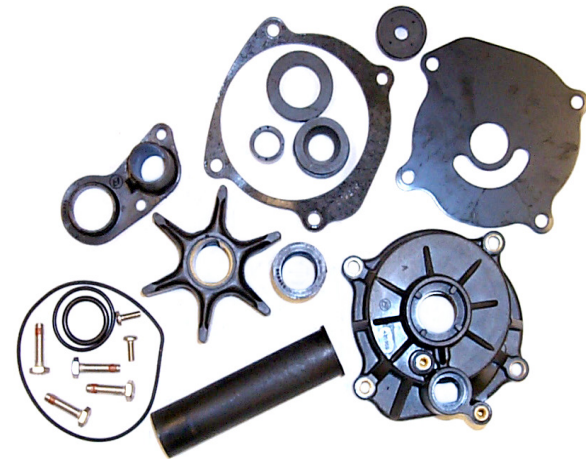
Impellers

- Molded using high quality buna-N or neoprene rubber compounds which have been field tested to ensure exceptional performance
- Meets or exceeds OEM performance
- Most extensive lineup of products in the marketplace
- Available in a variety of convenient kits



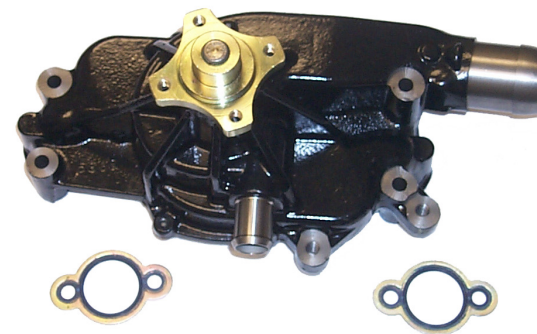
Water pump kits

- Quality materials specifically formulated to provide maximum performance
- High grade marine stainless steel wear plates and cups ensure excellent corrosion and wear resistance
- Meets all OEM dimensional specifications



Circulating Pumps

- All housings from our dedicated tooling
- Designed for bi-directional pumps
- Housings are powder coated for maximum corrosion protection
- All brass impeller is bi-directional
- Heavy-duty ceramic seal used for long-life
- Backing plate is stainless steel
- Hub height and hub are checked for correct run-out and height
- Only water pump completely vacuum tested in the industry



Thermostats

- All kits feature high-grade stainless and brass bi-metal thermostats for superior corrosion resistance
- Correct operating ranges for optimum performance and efficiency
- Kits include all necessary components to complete the job

