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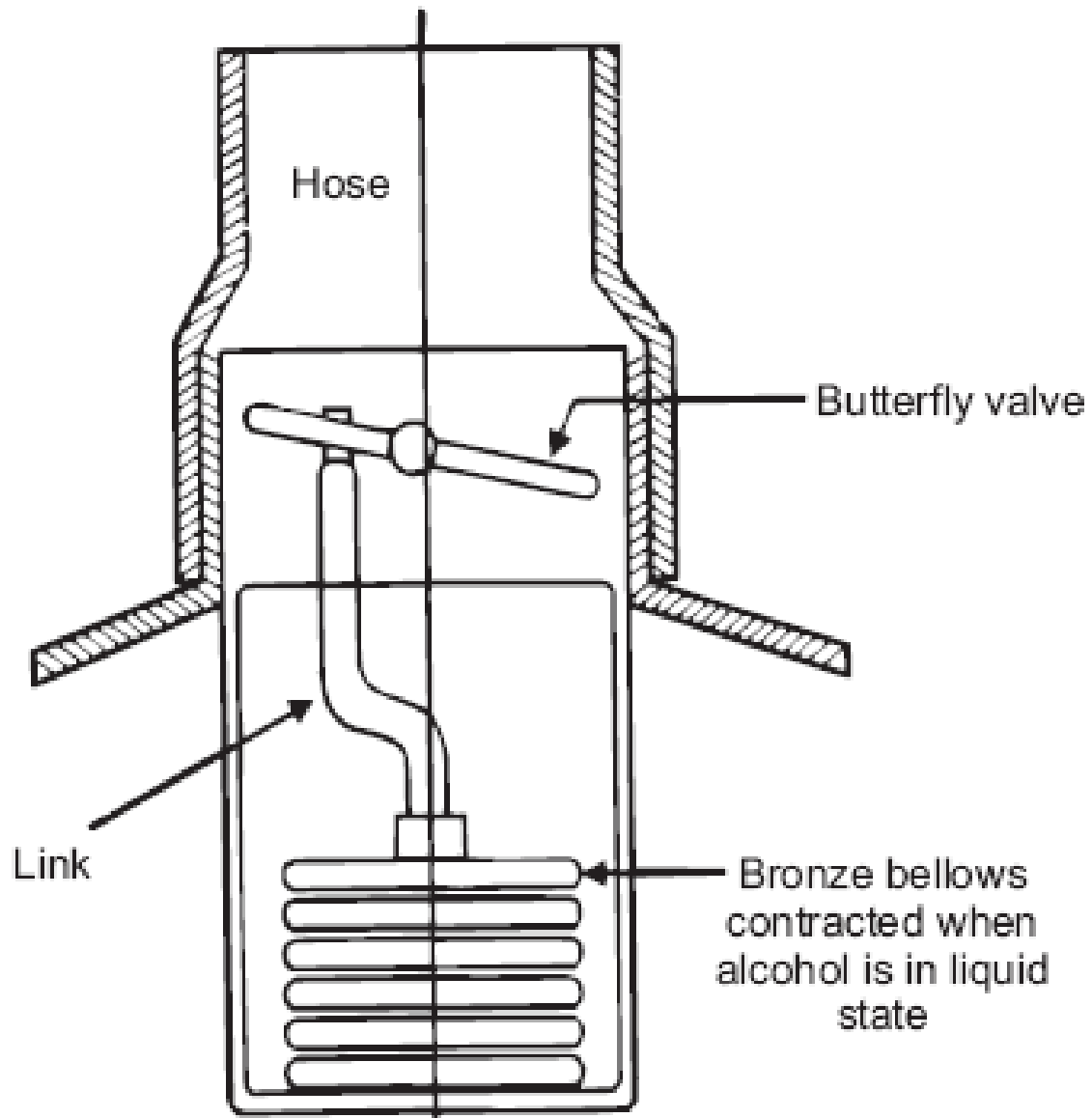
Thermostat Valve



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Thermostat Valve





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How it works?

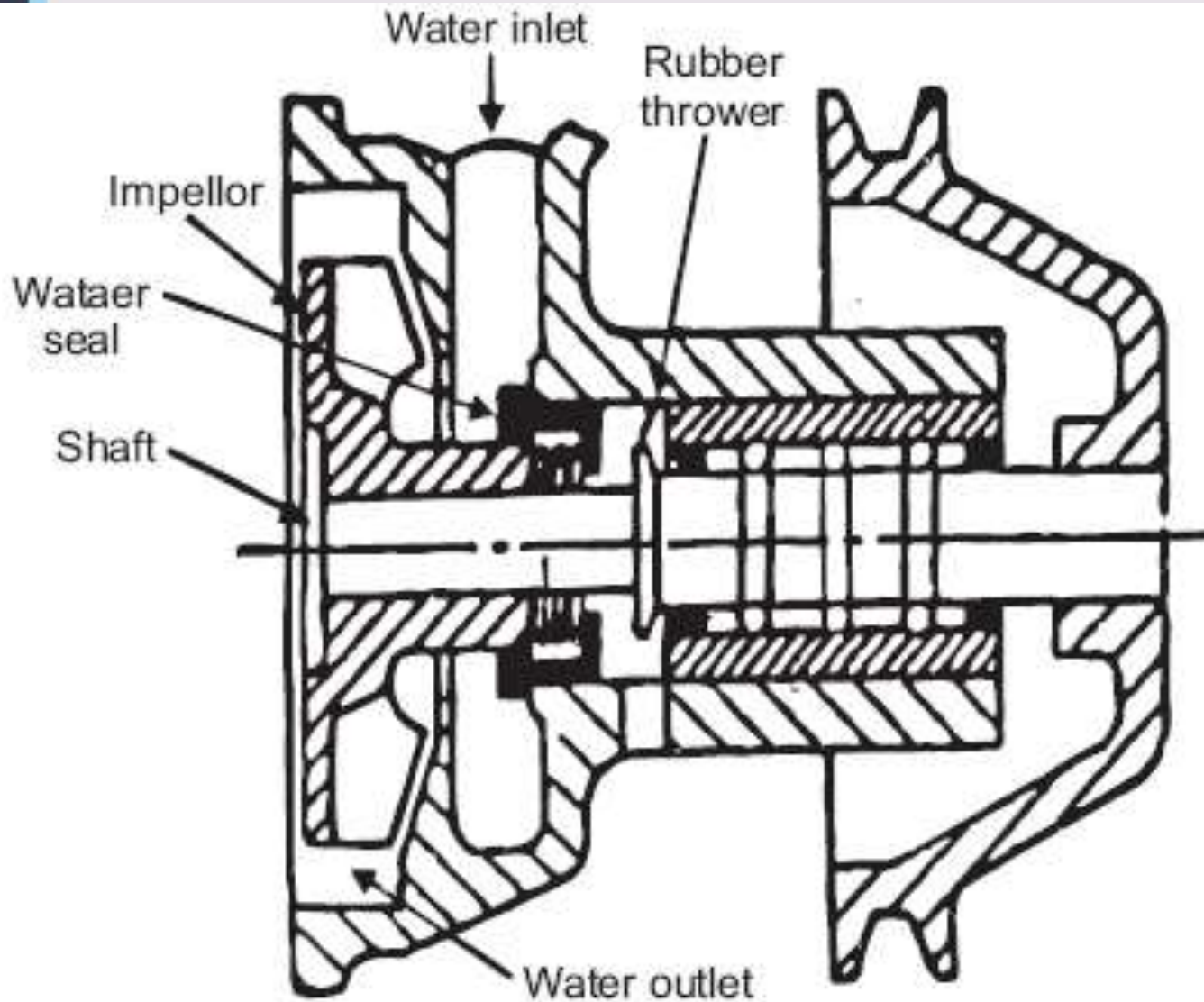
It is a valve which prevents flow of water from the engine to radiator, so that engine readily reaches to its maximum efficient operating temperature.

After attaining maximum efficient operating temperature, it automatically begins functioning. Generally, it prevents the water below 70°C.



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Water Pump





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How the pump works?

It is used to pump the circulating water. Impeller type pump will be mounted at the front end.

Pump consists of an impeller mounted on a shaft and enclosed in the pump casing.

The pump casing has inlet and outlet openings.

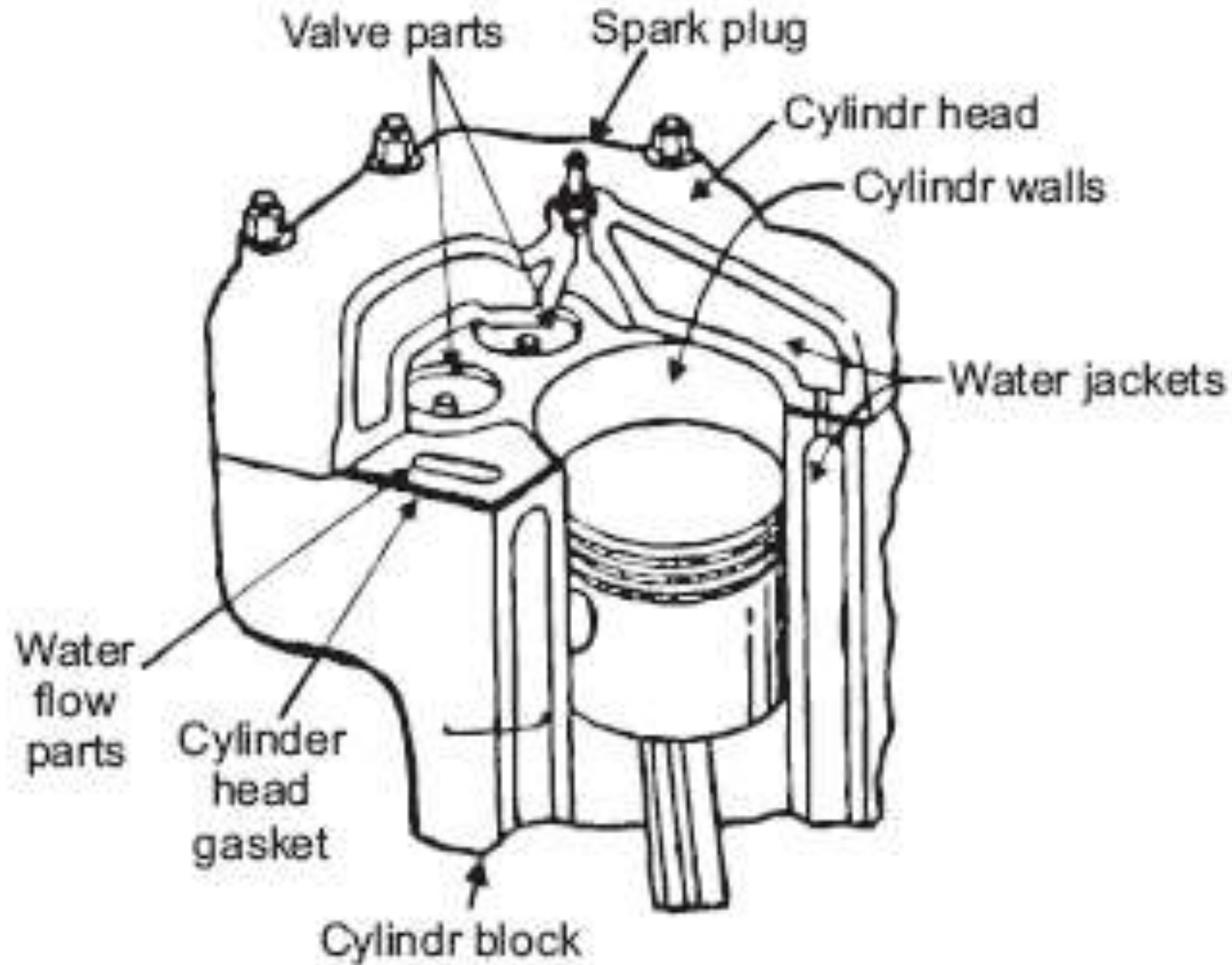
The pump is driven by means of engine output shaft only through belts.

When it is driven water will be pumped.



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Water Jackets





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Function of water jackets

Cooling water jackets are provided around the cylinder, cylinder head, valve seats and any hot parts which are to be cooled.

Heat generated in the engine cylinder, conducted through the cylinder walls to the jackets.

The water flowing through the jackets absorbs this heat and gets hot. This hot water will then be cooled in the radiator



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Antifreeze Mixture

The ideal antifreeze solutions should have the following properties :

- (a) It should dissolve in water easily.
- (b) It should not evaporate.
- (c) It should not deposit any foreign matter in cooling system.
- (d) It should not have any harmful effect on any part of cooling system.
- (e) It should be cheap and easily available.
- (f) It should not corrode the system.



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Antifreeze solutions used

- (a) Methyl, ethyl and isopropyl alcohols.
- (b) A solution of alcohol and water.
- (c) Ethylene Glycol.
- (d) A solution of water and Ethylene Glycol.
- (e) Glycerin along with water, etc.