WATER PUMP **TERMINOLOGY**

Below is more information on some of the additional terminology used in the description of water pump specifications, technology and operation:

PRESSURE

Pressure is force per unit area, usually listed in bar, and is often included in pump performance curves. Pressure and head are directly related when referring to water pump performance. The pressure exerted (in bar) at the base of a column of water is 0.433 × HEAD (in metres). If you attach a pressure gauge at the base of a 30m pipe filled with clear water, you would measure 2.94 bar. Notice how the diameter of the pipe doesn't affect the pressure value. The maximum pressure (at zero discharge) of any water pump can be determined by multiplying the maximum head by 0.433.

IMPELLER

An impeller is a rotating disk containing vanes coupled to the engine's crankshaft. All centrifugal pumps contain an impeller. The impeller vanes sling liquid outward through centrifugal force, causing a pressure change. This pressure change results in liquid flowing through the pump.

VOLUTE

The volute is the stationary housing enclosing the impeller. The volute collects and directs the flow of liquid from the impeller and increases the pressure of the high velocity water flowing from the vanes of the impeller.

MECHANICAL SEAL

This is a spring-loaded seal consisting of several parts that seals the rotating impeller in the water pump case, preventing water from leaking into and damaging the engine. Mechanical seals are subject to wear when pumping water containing abrasives and will quickly overheat if the pump is run without filling the pump chamber with water before starting the engine. Honda trash pumps contain silicone carbide mechanical seals, designed to withstand abrasive conditions.

HONDA FEATURES **AND TECHNOLOGIES**

Honda water pumps have many innovative features and technologies. The following icons have been carefully considered to support you in choosing the right water pump for your needs. Look for these symbols on the following model pages.

OHV 4-STROKE ENGINE
Powerful and efficient with trusted reliability. Easy starting in all conditions with automatic decompression to reduce the pull force required.

UNIQUE 360° OPERATION
Allows the pump to operate or be stored at any incline without damage.

LIGHTWEIGHT AND PORTABLE
Super-compact and lightweight with integral carry handle for easy transporting and storage.

CHEMICAL PUMP
Suitable for pumping chemical products such as agricultural fertiliser or industrial chemicals.

OIL ALERT™
Prevents engine damage by automatically shutting the unit down if the oil drops below a safe operating level.

CAST IRON VOLUTE AND IMPELLER
Superior durability for long life performance, even when pumping abrasive silts.

CONICAL IMPELLER
Superb pumping and priming performance with reduced wear and clogging.

REMOVABLE INSPECTION COVER
Quick and simple access for making inspections and clearing debris for reduced down-time.

ANTI-VIBRATION SYSTEM
Straight engine rubber mounts to reduce mechanical stress on the entire unit.

ENHANCED ANTI-VIBRATION SYSTEM
45° inclined rubber engine mounts for superior vibration damping at high engine rpm.

HIGH-EFFICIENCY IMPELLER
Unique Honda design results in optimal flow and efficiency.

WATER QUALITY EXAMPLES AND SUITABLE WATER PUMPS

	WX 10	WX 15	WH 15	WH 20	WB 20	WB 30	WT 20	WT 30	WT 40	WMP 20
Clean water	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Muddy water	✔	✔			✔	✔	✔	✔	✔	
Solids up to 3mm	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Solids up to 6mm	✔	✔			✔	✔	✔	✔	✔	
Solids up to 24mm							✔	✔	✔	
Solids up to 28mm								✔	✔	
Solids up to 31mm									✔	
Chemicals										✔