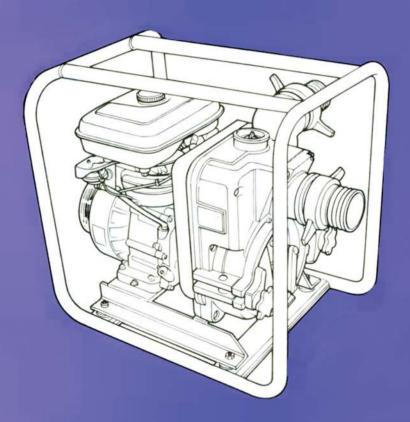
# HONDA

WATER PUMP

# WT20/30



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## OWNER'S MANUAL

## FOR SAFE OPERATION

#### WARNING

- To prevent fire hazards and to provide adequate ventilation, keep the pump at least 3 ft away from buildings and other equipment during operation.
- Do not place flammable materials, such as gasoline, matches etc., close to the pump while it is running.
- Refuel in a well ventilated area with the engine stopped. Gasoline is flammable and explosive under certain conditions.
- Do not smoke or allow flames or sparks where the pump is refueled or where gasoline is stored.
- Do not overfill the tank. There should be no fuel in the filler neck. Make sure that the filler cap is closed securely.
- If any fuel is spilled, make sure the area is dry before starting the engine.
- Do not operate the pump on grades steeper than 20° in any direction.
- Exhaust gas contains poisonous carbon monoxide. Avoid inhaling exhaust gases. Never run the engine in a closed garage or confined area.

#### CAUTION:

- Never attempt to operate the pump without priming water.
- Drain the water in the pump after use in freezing area.
- Hold the pump securely to prevent tipping over or dragging, when using on a bank or shore.
- · Sea water may cause corrosion in the pump.









# PRE-OPERATION CHECKS

**CAUTION:** Gasoline substitutes, such as gasohol etc., are not recommended, they may be harmful to the fuel system components.

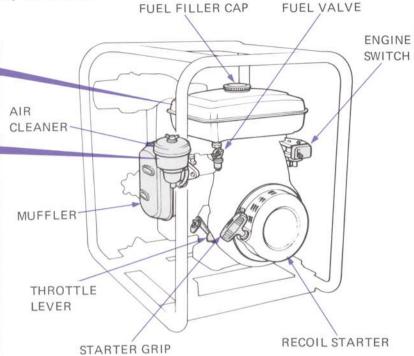
### Fill fuel tank:

WT20: 3.5ℓ (0.93 US gal) WT30: 6.0ℓ (1.58 US gal)

★ Use low-lead or unleaded gasoline.



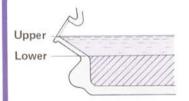
Check oil level. Clean and refill the case if dirty.



### = IMPORTANT ==

Loosen the filler cap and fill the pump with priming water.

SPARK PLUG

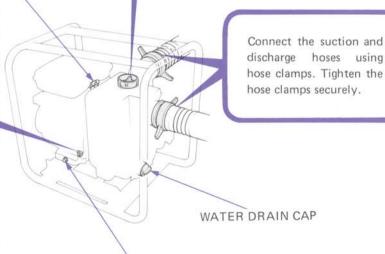


Fill crankcase with SE or SF rated SAE 10W-40 engine oil:

WT20: 0.7½ (1.5 US pt) WT30: 1.2½ (2.54 US pt)

### NOTE:

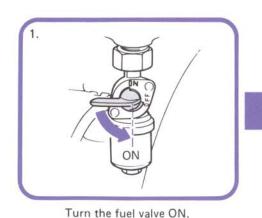
 Fill or check oil with engine on level ground; oil should come to the upper level.

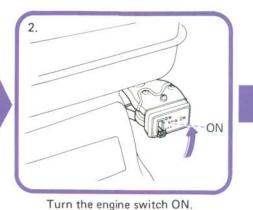


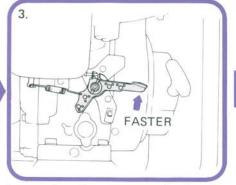
ENGINE OIL DRAIN PLUG

# STARTING THE ENGINE









4. CLOSE

Loosen the wing nut, move the throttle lever up slightly and re-tighten the wing

nut.

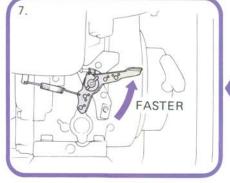
Close choke lever.

NOTE: Do not use CHOKE if the engine is warm or in warm weather.

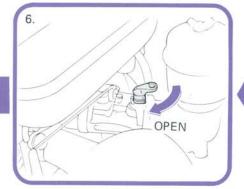
## EXTENDED STORAGE

- ★ Flush the pump out by pumping clean water through it before shutting down. After flushing, drain the water.
- ★ Drain gasoline from the fuel tank and carburetor. Change engine oil.
- ★ Pull the starter rope until resistance is felt, leaving the engine on its compression stroke.
- \* Store on a level surface in a dry, dust-free area.

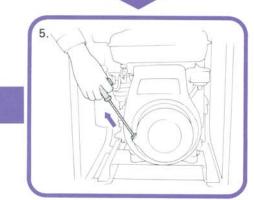




Loosen the throttle wing nut, set the throttle lever for the desired engine speed and retighten the wing nut.



As the engine warms up, gradually open the choke.



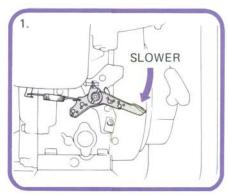
Pull the recoil starter briskly.

NOTE: Allow it to return slowly.

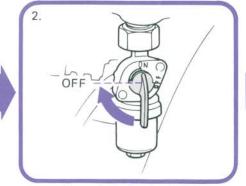
# STOPPING

### NOTE:

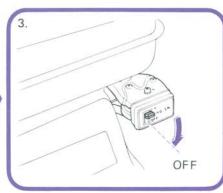
- If the pump is to be stored for a few days, run the engine with the fuel valve OFF until it stops; this removes fuel from the carburetor.
- To stop the engine in an emergency, turn the engine switch OFF.



Loosen the wing nut and fully lower the throttle lever.



Turn the fuel valve OFF.

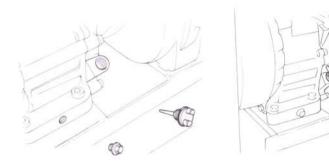


Turn the engine switch OFF.

## PERIODIC MAINTENANCE

## AFTER FIRST 20 HOURS

CHANGE ENGINE OIL



\* Use a screwdriver shaft to loosen or tighten oil filler cap.

## **EVERY 50 HOURS**





- \* Wash the case, grid (WT20 only) and element in high flash point cleaning solvent. After drying, fill with engine oil up to the specified level.
- \* Clean more frequently if pump is operated in a dusty area.

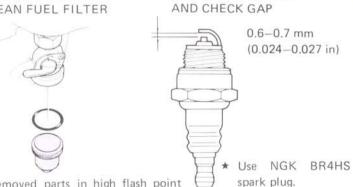
CLEAN SPARK PLUG

## ELEMENT

\* Never use gasoline or low flash point solvents for cleaning the air cleaner element. A fire or explosion could result.

## **EVERY 100 HOURS**





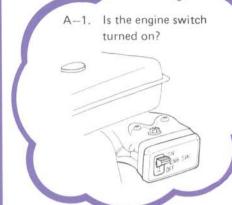
\* Wash removed parts in high flash point solvent, dry them thoroughly and install securely. Turn the fuel valve ON and check for leaks.

## CHECK FUEL HOSE

\* Check fuel hose for cracks or leaks every 300 hours. Replace, if necessary.

# TROUBLESHOOTING

A. When the engine will not start:



B. When the pump cannot pump the water:

A-2. Is there enough fuel?



A-4. Is there a spark at the spark plug?



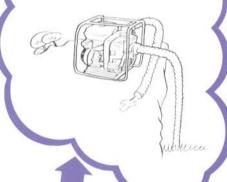
Pull the starter while touching the spark plug against the engine. If a spark in visible, reinstall the spark plug and try to start the engine. If there is no spark, clean or replace the spark plug. A-5. Take the pump to your dealer.

A-3. Is the fuel valve turned on?

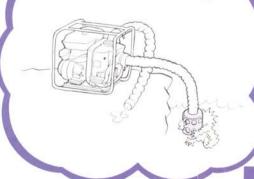


HONDA

B-5. Is the suction head too high?



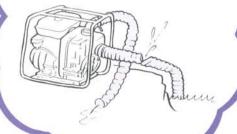
B-2. Is the strainer clogged?



Are the hose clamps tightened? Are the packing damaged?



B-4. Are the hoses damaged?



## **SPECIFICATIONS**

Model	WT20	WT30
Length x Width x Height	675 x 480 x 605 mm	690 x 485 x 655 mm
	(26.6 x 18.9 x 23.8 in)	(27.2 x 19.1 x 25.8 in)
Dry weight	55 kg (121 lbs)	62 kg (137 lbs)
Engine type	4 cycle, side valve, 1 cylinder, forced air cooled	
Displacement	197 cc (12.0 cu in)	272 cc (16.6 cu in)
Ignition system	Flywheel magneto	Flywheel magneto
Suction port diameter	50 mm (2 in)	80 mm (3 in)
Discharge port diameter	50 mm (2 in)	80 mm (3 in)
Total head	26 m (90 ft)	30 m (100 ft)
Suction head	7 m (23 ft)	7 m (23 ft)
Capacity	650l (170 US gal)	1,230 (320 US gal)

# MECHANICAL SEAL REPLACEMENT

- 1. Loosen the clamp handle knobs, pivot the clamp handles out as shown, then pull the pump cover out of the pump housing.
- 2. Pull the pump casing back, rotate it counterclockwise about 30°, and remove it from the housing.
- 3. Remove the impeller by turning it counterclockwise and remove the shims. Note the number of shims.
- Replace the mechanical seal.
   Install the removed parts in the reverse order of removal.

