



ENGINE PUMP

INSTRUCTION MANUAL

SPARE PARTS LIST

TSURUMI MANUFACTURING CO.,LTD.

1. INTRODUCTION

Thank you for your recent purchase of this TSURUMI Engine pumps.

This model machine is designed for your convenience.

They feature safety, high-quality, compact and handy design.

Before using the them forever please read this "Instruction Manual" carefully to insure that your use of this pump will be long and trouble free.

2. PREPARING & CAUTIONARY POINTS

PREPARING THE PUMP FOR STARTING

1.FUEL

(1) Selecting Fuel

2-cycle Use mixture fuel.

4-cycle Use fresh, clean automotive gasoline (kerosene).

(2) Filling Fuel

Fill fuel into the fuel tank.

NOTE:Do not fill the tank while the engine is running.

2.PRIMING WATER

(1) Putting Priming Water

Put priming water to flow out into the pump casing.

3.Operation of Suction and Delivery hose.

(1) Install and tighten the suction hose securely.

(2) Install and tighen the delivery hose securely.

NOTE:Strainer should be installed at the end of the suction pipe.

All the suction pipe joints or connection side through a hose joint.

3. HOW TO OPERATE & CAUTIONARY POINTS

START THE PUMP

1.Turn the fuel cock lever to "OPEN".

2.Turn the speed regulator to "START".

3. Operation of choke lever.

(1) When the engine is cold : In cold weather, start with the choke lever fully-closed.

(2) When the engine is warm : Start with the choke lever fully-opened.

4.Starting

(1) Pull the recoil starter rope quickly and forcibly.

Repeat until the engine start.

OPERATE THE PUMP

1. Idle the engine for 3 to 5 minutes to warm it up.
2. Push the speed regulator handle to the upper zone, when ready to warm up engine.
When the proper r.p.m. for service loads is attained, secure the speed regulator handle by tightening the knob.

STOPPING THE PUMP

1. For short periods
Push the speed regulator handle all the way down let the engine run at low r.p.m. for while, then push the stop switch.
2. For long periods
Close the fuel cock,(do not push the stop switch), allowing the engine to idle until the fuel in the carburetor has been used up,(about 2 to 3 minutes) engine will stop after fuel is exhausted.
3. For cold weather periods
Drain all water from the pump.

4. AFTER USE

PUMP MAINTENANCE

1. Daily inspection
 - (1) Tighten any loose nuts and bolts.
 - (2) Make sure there are no fuel or oil leaks.
2. After every 100~150 hours of operation.
 - (1) Remove the casing cover and clean by washing with water.
 - (2) Change the engine lubricating oil.
Do this while the engine is still warm.
 - (3) Remove the air cleaner cap and remove the cleaner sponge.
Rinse the sponge well in gasoline. Squeeze it to remove the gasoline and dry, then dip it in new lubricating oil, squeeze it tight and remount.
 - (4) Detach and clean the spark plug. The gap should be adjusted to 0.6~0.7mm if necessary.
 - (5) Tighten all outside nuts, bolts, and screw.

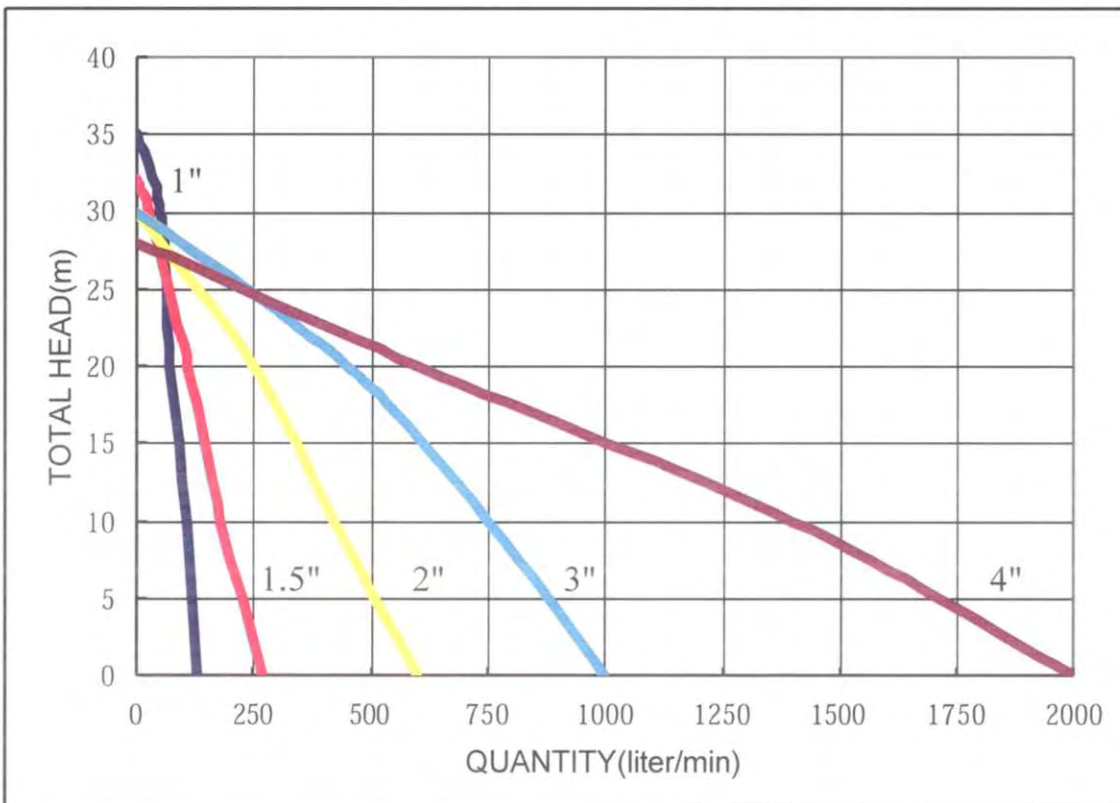
PROPER STORAGE

1. Drain all water from the pump.
2. Drain all fuel from the engine, fuel filter, fuel lines and tank.
3. Store the pump in a dry place free of air-borne sand or dust.
4. Always keep the pump covered.

5. TROUBLE SHOOTING

Pump does not lift at all	REMEDY
①Lack of water in pump	Add priming water.
②Pump speed too low	Raise engine speed
③Clogged strainer	Clean
④Cracked suction pipe	Replace
⑤Air leak from suction joint	Re-tighten
⑥Excessive suction head	Correct setting
⑦Accumulation of mud and priming sand pump Insufficient water circulation	Clean the pump and remove the debris.

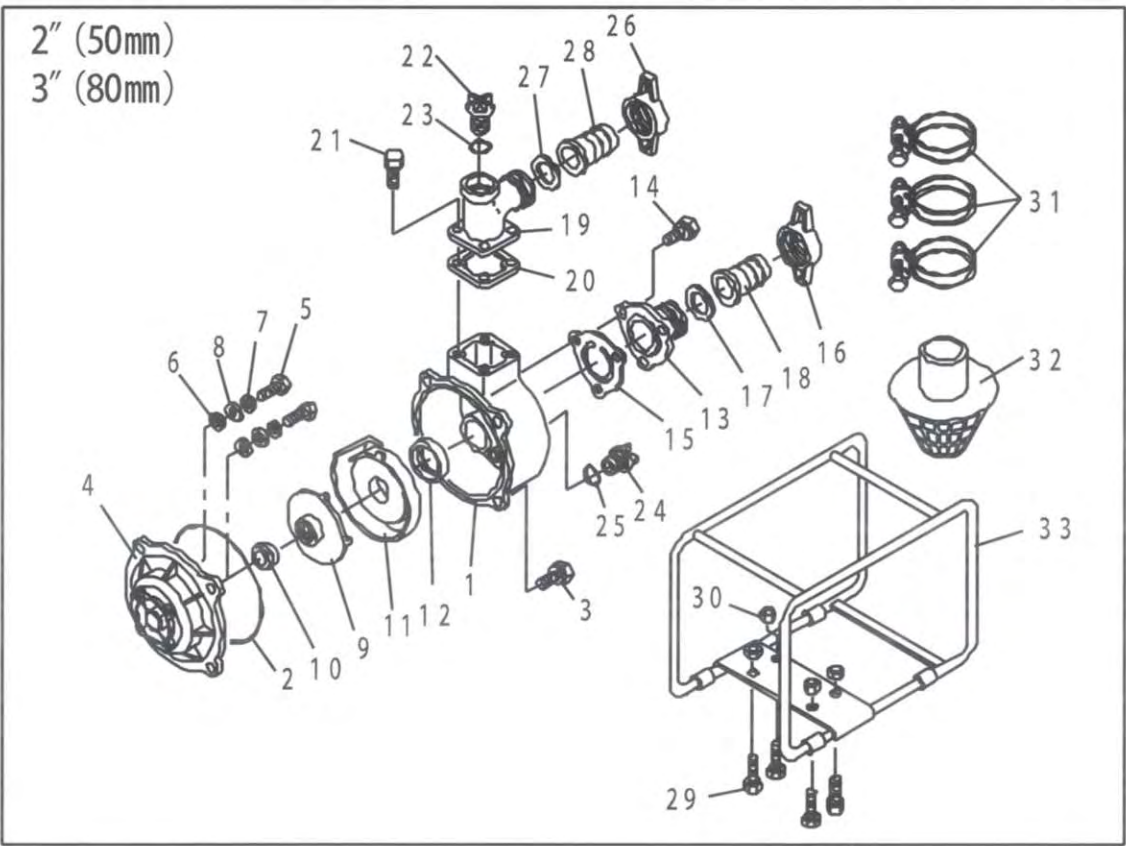
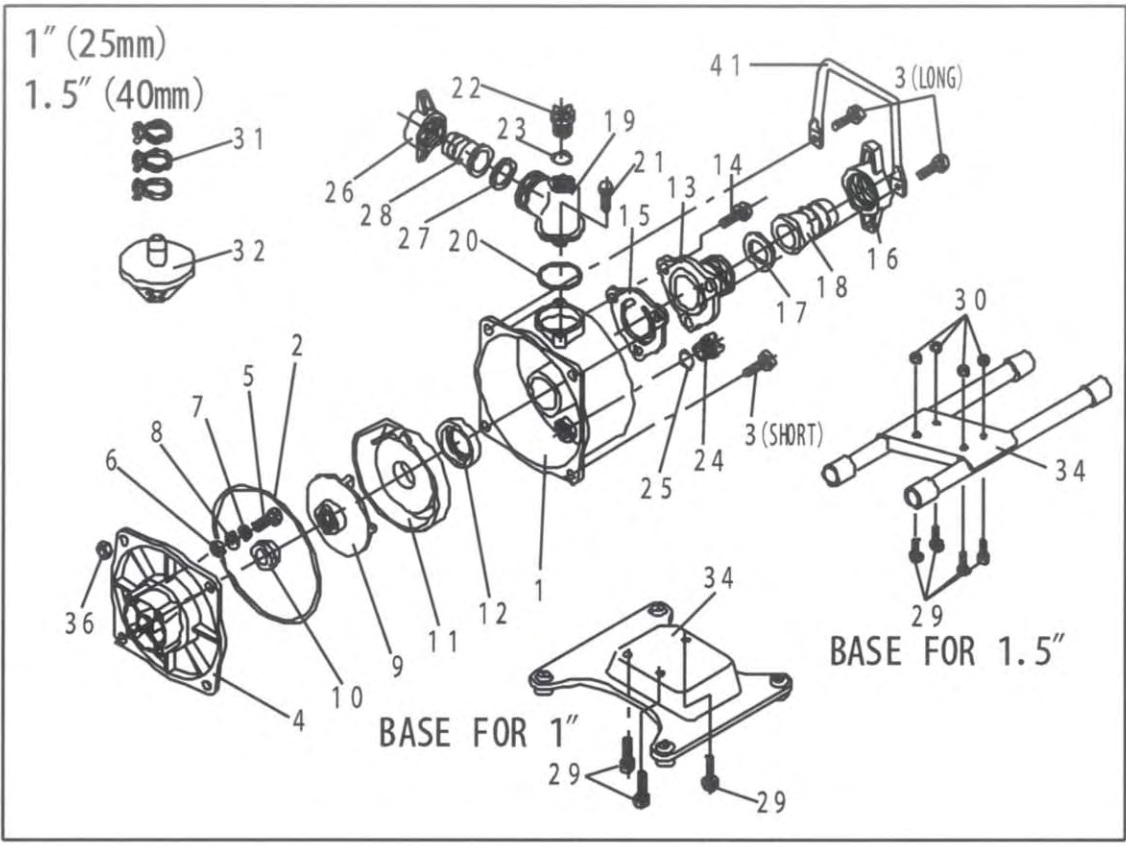
6. PERFORMANCE CURVE & SPECIFICATIONS

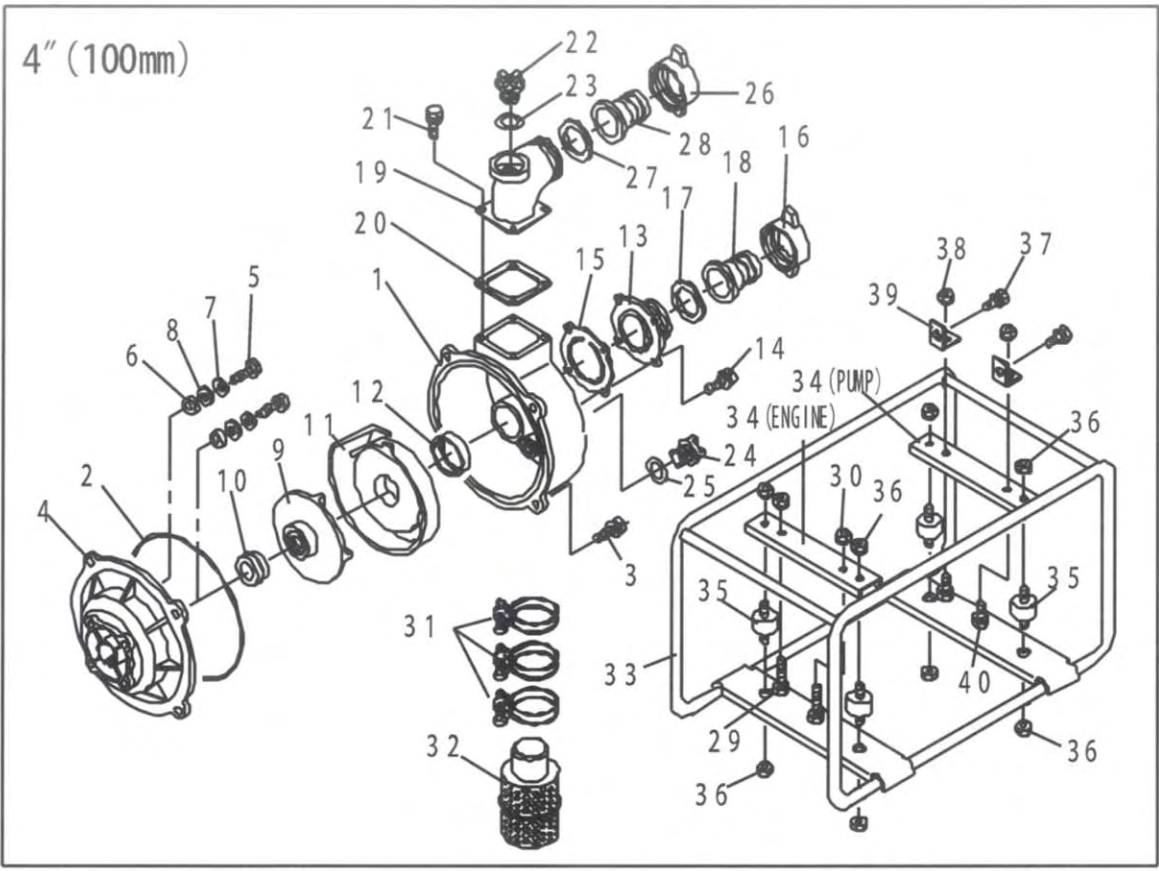


Suc. & Dis. Dia (mm)	Engine Model & Max. Output (kW)HP/min ⁻¹	Max. Capacity (liter)usg/min	Total Head (m)ft	Suc. Head (m)ft
25 × 25	ROBIN EC04D (1.47)2.0/7000	(130) 34	(35)115	(8.0)26
40 × 40	ROBIN EY08D (1.47)2.0/4500	(220) 58	(33)108	
50 × 50	ROBIN EY15-3D (2.6)3.5/4000	(520~600) 137~158	(32)105	
	ROBIN EY15DK (2.4)3.3/4000			
	ROBIN DY23-2D (3.3)4.5/3600			
	HONDA GX120 (2.9)4.0/3600			
	YANMAR L48 (3.5)4.3/3600			
80 × 80	ROBIN EY20-3D (3.7)5.0/4000	(1000) 263	(32)105	
	ROBIN EY20DK (3.2)4.3/4000			
	ROBIN DY23-2D (3.3)4.5/3600			
	HONDA GX160 (4.0)5.5/3600			
	YANMAR L48 (3.5)4.3/3600			
100 × 100	ROBIN EY28D (5.5)7.5/4000	(1800) 474	(28)92	
	ROBIN DY27 (5.5)7.5/4000			
	HONDA GX240 (5.9)8.0/3600			

※ Specifications subject to change without notice.

7. SPARE PARTS LIST





※ The above parts list is based on TSURUMI standard water pump.

REF. No,	PARTS NAME
1	CASING
2	CASING PACKING
3	BOLT W/S.W.
4	CASING COVER
5	BOLT
6	SEAL PACKING
7	SPRING WASHER
8	PLANE WASHER
9	IMPELLER
10	MECHANICAL SEAL
11	INNER CASING
12	INNER CASING PACKING
13	VALVE CASE
14	BOLT W/S.W.
15	CHECK VALVE
16	HOSE JOINT
17	COUPLING PACKING
18	HOSE COUPLING
19	BEND
20	BEND PACKING

REF. No,	PARTS NAME
21	BOLT W/S.W.
22	PLUG
23	PLUG PACKING
24	PLUG
25	PLUG PACKING
26	HOSE JOINT
27	COUPLING PACKING
28	HOSE COUPLING
29	BOLT W/S.W.
30	FLANGE NUT
31	HOSE BAND
32	STRAINER
33	FRAME
34	BASE ASSY
35	ANTI VIBRATION RUBBER
36	NUT W/S.W.
37	BOLT
38	FLANGE NUT
39	METAL
40	BOLT