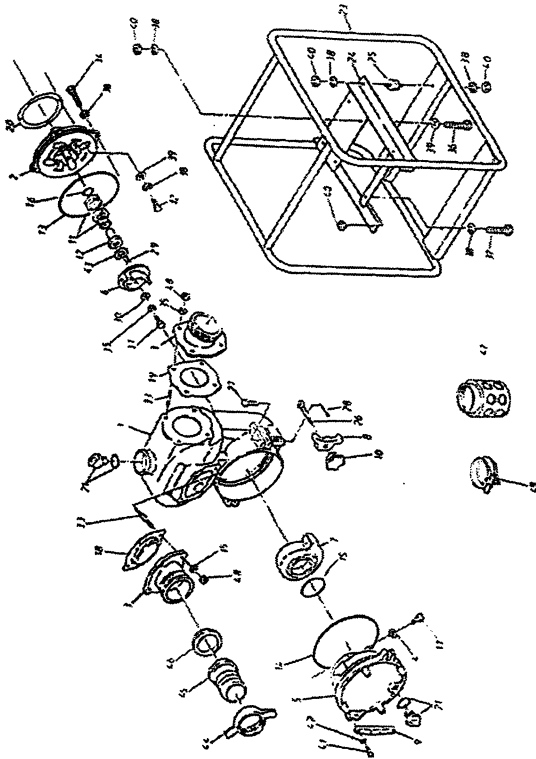


MITSUBISHI ENGINE PUMP

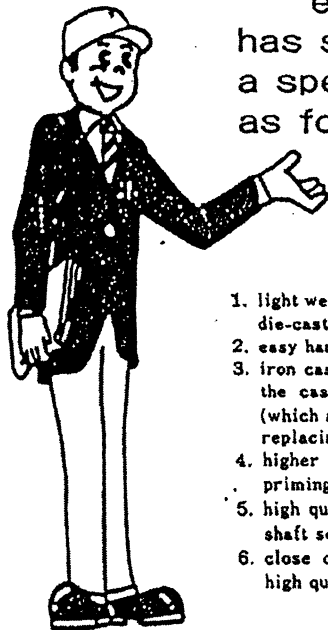
MPT100



MITSUBISHI
HEAVY INDUSTRIES, LTD.
NAGOYA MACHINERY WORKS

We appreciate very much your kind application of engine pump, that has been designed and developed under our long experience and original engineering technology in the pump industry.

Please read carefully the contents of this manual for better and durable performance to be attained by the engine pump.



engine pump
has such
a special feature
as follows:

1. light weight, rust-proof aluminum die-casting housing.
2. easy handling portable type.
3. iron cast volute casing is set in the casing, and interchangeable (which assures the longer life by replacing the volute casing alone)
4. higher suction lift and short priming time.
5. high quality mechanical seal for shaft sealing.
6. close coupled with non misfire high quality engine.

BEFORE STARTING

A) Installation

When installing a centrifugal pump, always remember that the closer the pump is placed to the source of supply, the better will be its performance. To ensure maximum capacity, select a site that will permit the use of shortest and most direct suction piping, and smallest possible vertical lift.

Set pump on a foundation as firm and level as possible (as inclined installation over than 15 degrees may sometimes cause engine burning, and the higher the suction lift is, the more pumping capacity will be reduced).

B) Lubrication

Fill the engine crank-case through lubricating oil hole with mobil oil (No. SAE-30 in summer, SAE-20 in winter season) to the level marked on indicator.

C) Fuel

Use non-leaded gasoline for automobiles.

D) Suction Piping

Make certain that the packing is placed in the seat of hose coupling, and all the suction piping line is perfectly free from leak of air.

Also, make it certain that the suction piping line is laid gradually descending from the pump to the source of supply to avoid possible air reservoir through the line, and must be ended with required strainer.

E) Do not try to connect seriously.

F) Please arrange to set a check valve at the delivery end, when so required to apply for shut-and-open application by a cock set at the delivery piping.

OPERATION

A) Remove the flooding cap at the top of the delivery, and set it again tightly after filling up the casing with prime water. (Open the gate valve on the delivery line, if so fitted.)

- B) Open the fuel cock, and close the engine choke, when the engine is cooled down, or not worked for a long time. (Open the engine choke gradually, when engine starts.)
- C) It will start to pump in a while as soon as the engine runs at the rated speed (which is attained when the engine speed control lever is set to the end of opposite position).
- D) engine pump is self-priming type, and no more priming is required as long as the casing is filled with water.

FINISHING

- A) Press down the stop button until the engine stops. (Slow down the engine speed, when driven at high speed, then stop the engine.)
- B) Close the fuel cock without fail.
- C) Drain the pump casing completely under freezing weather. (Drain in the pump may cause damage the pump by freezing.)

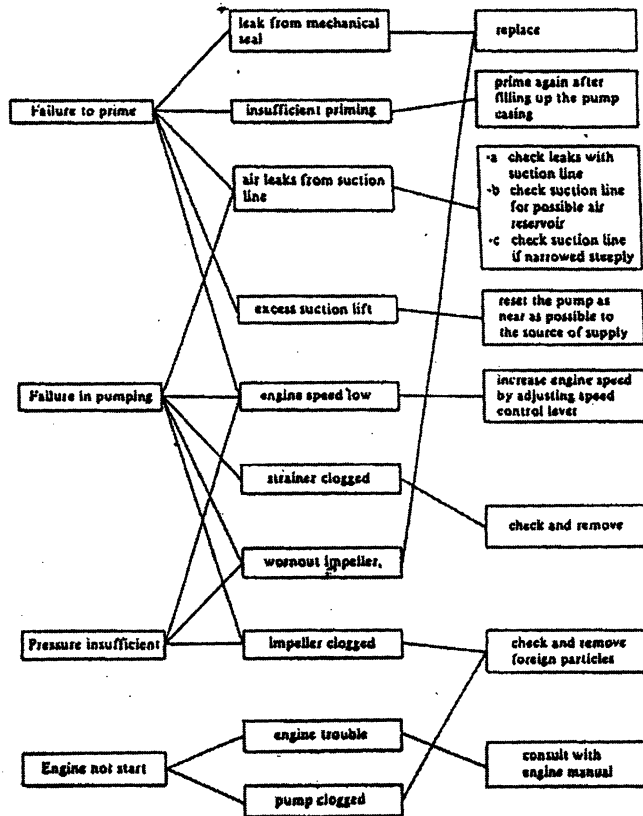
MAINTENANCE

- A) Keep dry the pump inside completely.
- B) Keep the engine well covered from rain and dust.
- C) Handle with care.
- D) Remove fuel for long time storage.
- E) Keep the engine at its compressing stroke (where it gets loaded) for storing long time.

Remarks:

- The engine life is determined mostly by oil checks. Please make it a rule to check the oil before starting engine.
- Please change the oil completely after 20 hours works with new pump set.
- Fill the pump with water whenever drive the engine. (Dry running will damage the mechanical seal.)

USE OF TROUBLE & REMEDY



MPT100G-M01 (MHI STD)

NO.	MHI PARTS NO.	PARTS NAME	QTY
	←	ENGINE	1
1	KY60003AA	CASING	1
2	KY60009AA	CASING COVER	1
3	KY60025AA	DELIVERY /SUCTION COVER	2
4	KY90098AA	SEAL WASHER	2
5	KY60011AA	DRAIN COVER	1
6	KY60018AA	IMPELLER	1
7	KY60020AA	VOLUTE CASING	1
8	KY60016AA	DRAIN COVER PUSH PLATE	2
9	KY60013AA	DRAIN COVER HANDLE	2
10	KY60015AA	DRAIN COVER SET HANDLE	2
11	KY60042AA	MECHANICAL SEAL	1
12	KY60096AA	MECHANICAL SEAL SLEEVE	1
13	KY60038AA	O-RING	1
14	KY60035AA	O-RING	1
15	KY60008AA	O-RING	1
18	KY60039AA	O-RING	1
17	KY90099AA	CAP SCREW	2
18	KY60076AA	CHECK VALVE	1
19	KY60033AA	DELIVERY COVER PACKING	1
20	KY60034AA	CASING COVER PACKING	1
21	KY60037AA	FLOODING/DRAIN CAP	2
21	KY60038AA	O-RING(FLOODING/DRAIN CAP)	2
23	KY60028AA	BASE	1
24	KY60030AA	ENGINE BASE	1
25	KY60031AA	CUSHION RUBBER	4
26	KY60046AA	HINGE BOLT	2

27	KY60047AA	HINGE PIN	2
28	KY60053AA	SPLIT PIN	2
29	KY60083AA	KEY	1
30	KY60081AA	IMPELLER WASHER	1
31	KY60079AA	BOLT	1
32	KY60022AA	CAP SCREW	4
33	KY60080AA	STUD BOLT	8
34	KY60040AA	BOLT	4
35	KY60041AA	SPRING WASHER	13
36	KY60051AA	BOLT	4
37	KY60056AA	BOLT	2
38	KY60049AA	SPRING WASHER	18
39	KY60052AA	WASHER	8
40	KY60048AA	NUT	14
41	KY60066AA	SCREW	4
42	KY60067AA	SPRING WASHER	4
43	KY60044AA	ADJUST LINER	1
43	KY60045AA	ADJUST LINER	1
44	KY60060AA	HOSE COUPLING	2
45	KY60061AA	HOSE JOINT	2
46	KY60063AA	HOSE COUPLING PACKING	2
47	KY60065AA	STRAINER	1
48	KY60087AA	NUT	8
49	KY60086AA	WIRE HOSE BAND	3
62	KY60090AA	HANDLING MANUAL	1
63	KY60094AA	CFB (CARTON)	1