OWNER'S MANUAL

OPERATION & SAFETY

ORIGINAL INSTRUCTIONS

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

TE pump is to transfer the water for various purposes. The pump is self-priming centrifugal type coupled with engine and stand-alone type. You may move it to the place of water supply and install there for usage.

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

TE 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.

SAFETY INSTRUCTION

⚠ WARNING !

TE Water pump is designed to give safe and dependable service if operated according to instructions.
Read and understand the owner's manual before operating the water pump. Failure to do so could result in personal injury or equipment damage.
The muffler becomes very hot during operation and remains hot for a while after stopping the engine. Be careful not to touch the muffler while it is hot. Let the engine cool before storing the water pump indoors. The engine exhaust system will be heated during operation and remain hot immediately after stopping the engine. Be careful not to spill fuel when refueling. Spilled fuel or fuel vapor may ignite. If any fuel is spilled, make sure the area is dry before starting engine.
Never run the engine in an enclosed or confined area. Exhaust contains poisonous carbon monoxide gas; exposure can cause loss of consciousness and may lead to death.
Children and pets must be kept away from the area of operation due to a possibility of burns from hot engine components

Caution and warning labels are attached on the engine for your safety. For details, refer to the enclosed owner's manual of engine.

To ensure safe operation

Always make a before starting inspection before you start the engine. You may prevent an accident or equipment damage.

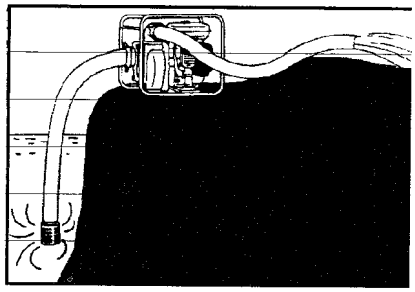
For safety, never pump flammable or crrosive liquids such as gasoline or acid. Also to avoid pump corrosion, never pump sea water, chemical solutions, or caustic liquids such as used oil, wine, or milk.

To prevent fire hazards and to provide adequate ventilation, keep the pump at least 1 meter(3 feet) away from building walls and other equipment during operation. Do not place flammable objects close to the pump.
Know how to stop the pump quickly, and understand the operation of all controls. Never permit anyone to operate the pump without proper instructions.
Gasoline is extremely flammable and is explosive under certain conditions.

- Refuel in a well-ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the refueling area or where gasoline is stored.
- Do not overfill the tank. After refueling, make sure the tank cap i closed properly and securely.

1. BEFORE STARTING

A) INSTALLATION

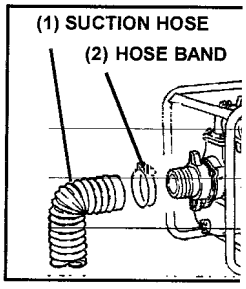


When installing a centrifugal pump, always remember that the closer the pump is placed to the source of supply, the better will be its performance. To ensure maximum capacity, select a site that will permit the use of shortest and most direct suction piping, and smallest possible vertical lift.
Set pump on a foundation as firm and level as possible (as incline installation over than 14 degrees may sometimes cause engine burr ing, and the higher the suction lift is, the more pumping capacity wi be reduced). Due to engine-driven, some level of noise will arise i its operation. For reducing noise level if necessary, you may install in the place surrounded by walls in all directions.The sound powe level of TE pump is shown in attached "Declaration of conformity"

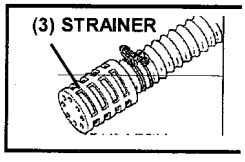
B) CONNECT THE SUCTION HOSE
Use commercially available hose, hose connector, and hose banc The suction hose must be of reinforced, noncollapsible constructior Suction hose length should not be longer than necessary, as pum performance is best when the pump is not far above the water leve Self-priming time is also proportional to hose length.
The strainer that is provided with the pump should be attached to th end of the suction hose with a band, as shown.

⚠ CAUTION !

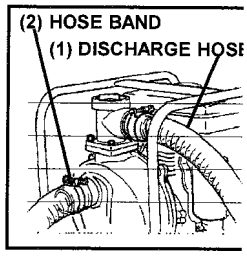
Always install the strainer on the end of the suction hose before pumping.The strainer will excluse debris that can cause clogging or impeller damage.



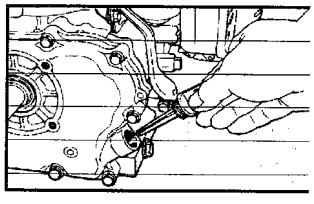
NOTE: Tighten the hose band securely to prevent the hose from disconnecting under high pressure.
(1) SUCTION HOSE
(2) HOSE BAND
(3) STRAINER



C) CONNECT THE DISCHARGE HOSE
Use a commercially available hose, hose connector, and hose band. A short, Large-diameter hose is most efficient. Long or small-diameter hose increases fluid friction and reduces pump output.
NOTE: Tighten the hose band securely to prevent the hose from disconnecting under high pressure.
(1) DISCHARGE HOSE
(2) HOSE BAND



D) 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.
Please change the oil completely after 20 hours works with new pump set



⚠ CAUTION !

Engine oil is a major factor affecting engine performance and service life.

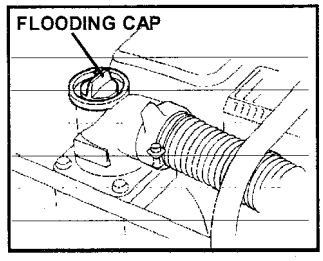
E) FUEL
Use non-leaded gasoline for automobiles to gasoline engine, or diesel fuel to diesel engine.

⚠ CAUTION !

For gasoline engine, never use an oil/gasoline mixture or dirty gasoline. Avoid getting dirt, dust or water in the fuel tank.

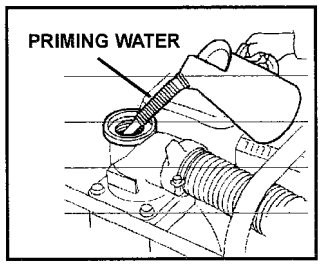
2. OPERATION

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 thedelivery line, if so fitted)



⚠ CAUTION !

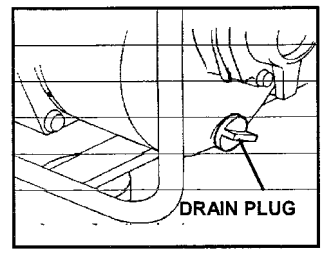
Never attempt to operate the pump without priming water or the pump will overheat. Extended dry operation will destroy the pump seal. If the unit has been operated dry, stop the engine immediately and allow the pump to cool before adding priming water.



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 garadually, 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.
E) In the event of accident or breakdown, do not run the pump further and follow 5. USE OF TROUBLE & REMEDY of this instruction or consult with the agent or the shop from where you bought it.

3. FINISHING

A) Press down the stop button until the engine stopped. (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)



4. TRANSPORTING & STORAGE

⚠ WARNING !

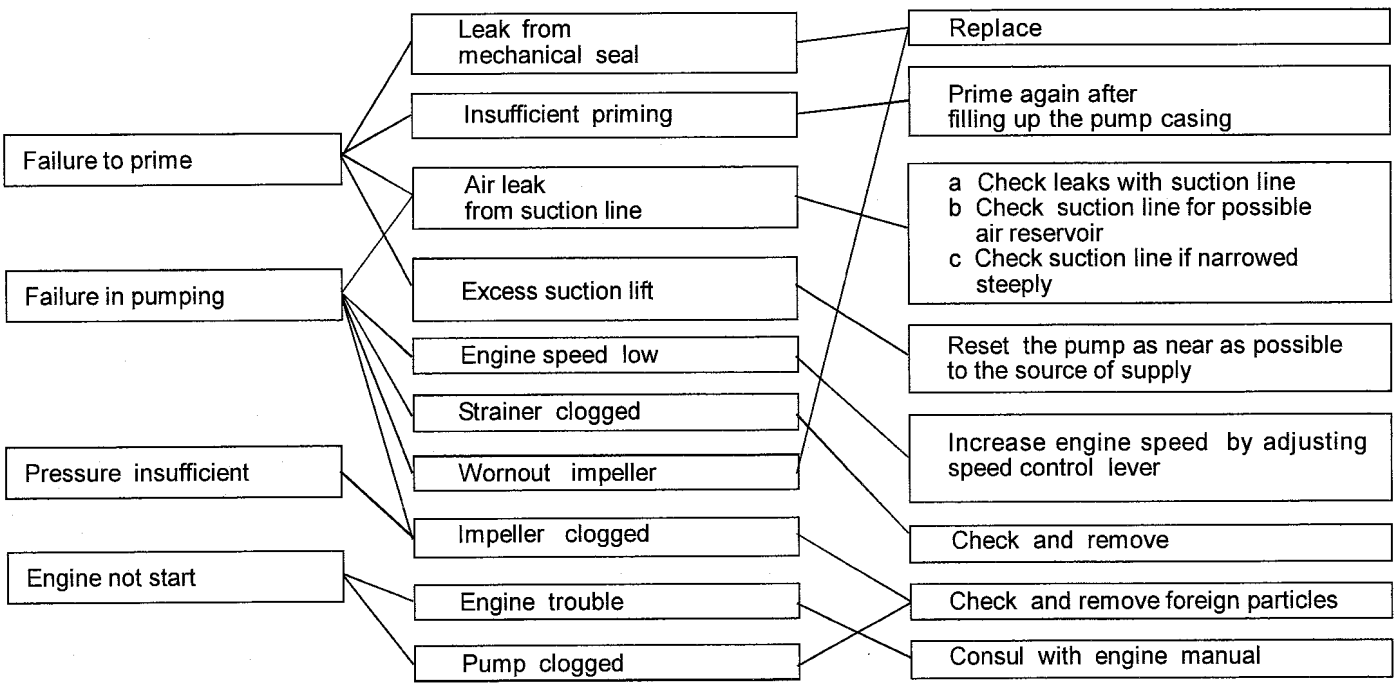
To avoid service burns or fire hazards, let the engine cool before transporting the pump or storing it indoors.
When transporting the pump, turn the fuel valve to the OFF position, and keep the pump level to prevent fuel spillage. Spilled fuel or fuel vapor may ignite.

Before storing the pump for an extended period ;

1. Be sure the storage area is free of excessive humidity and dust.
2. Clean the pump interior.
   Sediment will settle in the pump if it has been used in muddy or sandy water, water containing heavy debris.
   Pump clean water through the pump before shutting down or impeller may be damaged when restarting. After flushing, remove the pump drain plug, drain as much water as possible from the pump housing and reinstall the plug.
3. Drain the fuel.
   With the fuel valve OFF, remove the drain screw from carburetor float bowl and drain the carburetor. Drain the gasoline(or diesel) in the fuel tank into the suitable container.
   Turn the fuel velve ON and drain the gasoline(or diesel) in the fuel tank into the suitable container.
   Reinstall the carburetor drain screw.
4. Change the engine oil.
5. Keep the engine at its compressing stroke (where it gets loaded) for storing long time.

5. USE OF TROUBLE & REMEDY

The tools necessary for initial repair or refit are packed together as a standard accessory.



Use genuine spare parts provided by the agent or the shop.

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PARTS LIST & EXPLODED DRAWING (TEF3-50H)

NO.	PARTS NO.	PARTS NAME	Q'TY	MATERIAL
	GX160	ENGINE		
2	1803-100160	SUCTION COVER	1	ADC
3	1378-350350	CHECK VALVE	1	NBR+SS400
4	018105-0825	BOLT SET WITH SPRING WASHER	4	SS400
5	018105-0825	BOLT SET WITH SPRING WASHER	4	SS400
6	048935-2550	O-RING	1	NBR
7	080311-2320	MECHANICAL SEAL	1	CERAMIC×CARBON
9	1803-060031	IMPELLER	1	AC
10	1803-100130	VOLUTE CASING	1	ADC
11	1378-330620	VOLUTE CASING PACKING	1	NBR
12	1211-390610	CASING COVER PACKING	1	OIL SHEET
13	1378-100020	CASING COVER	1	ADC
14	018105-0825	BOLT SET WITH SPRING WASHER	6	SS400
15	1803-330360	DELIVERY COVER PACKING	1	NBR
16	1814-100091	DELIVERY COVER (3WAY OUTLET)	1	ADC
17	010505-0840	BOLT	4	SS400
18	063121-1100	FLOODING CAP	1	ABS
19	048035-0300	O-RING(FLOODING CAP)	1	NBR
20	063121-1100	DRAIN CAP	1	ABS
21	048035-0300	O-RING(DRAIN CAP)	1	NBR
22	1378-100010B	CASING	1	ADC
23	1803-521221	LINER RING	1	DURACON
24	1378-214012-0004	BASE	1	SS400
25	010505-0840	BOLT	4	SS400
26	018105-0820	BOLT SET WITH SPRING WASHER	1	SS400
27	072332-3040	CUSHION RUBBER	4	NBR+SS400
29	045125-0080	SPRING WASHER	4	SWRH
30	020915-0080	FLANGE NUT	8	SS400
31	074230-1050R	STRAINER	1	PE
32	092031-2013	NYLON NET	1	NYLON
33	1806-998050	CHAIN CAP WITH PACKING(L)	1	AC
34	1806-998070	CHAIN CAP WITH PACKING(S)	2	AC
35	1814-209660ASSY2	BALL CHAIN	1	AC+SS
36	1814-209660ASSY	BALL CHAIN WITH CAP	1	AC+SS
37	074111-9025	HOSE COUPLING SET	2	PE
37-1	074131-0321	HOSE COUPLING PACKING	2	NBR
38	074111-8040	HOSE COUPLING SET	1	PE
38-1	074131-0481	HOSE COUPLING PACKING	1	NBR
39	074111-7050(R)	HOSE COUPLING SET	1	ADC
39-1	074131-0501	HOSE COUPLING PACKING	1	NBR
40	093225-2000	WIRE HOSE BAND	2	SWRM
41	093225-1120	WIRE HOSE BAND	1	SWRM
42	093225-1000	WIRE HOSE BAND	2	SWRM
43	020545-0080	NUT	1	SS400

205S-AD XH03

Pump Specification

MAX.HEAD	75 m
MAX.CAP.	400 L/min.
Installed Power	3.6 kW