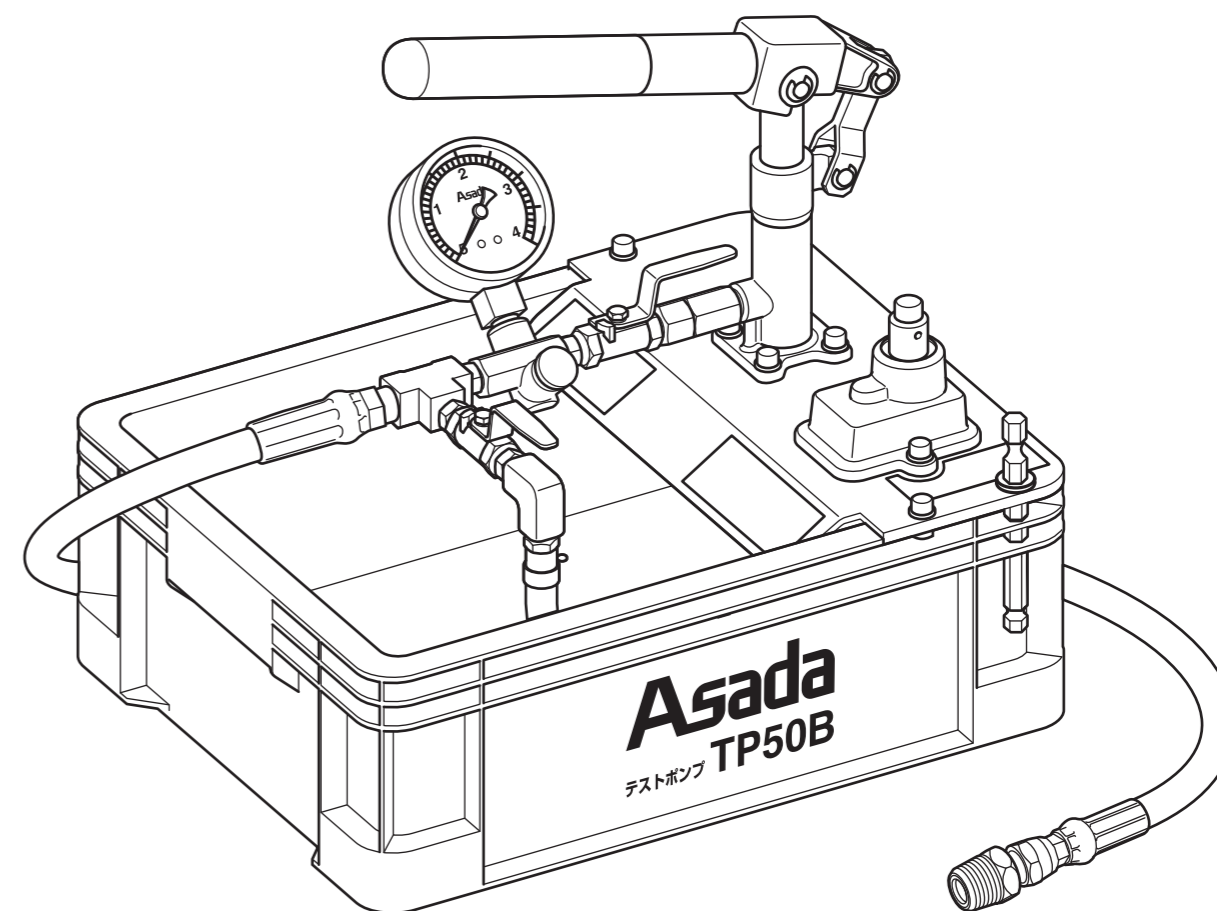


# TEST PUMP TP50B

## INSTRUCTION MANUAL



● **Customer Memo** Please fill in for your record in the future  
The information is helpful for inquiry and ordering parts.

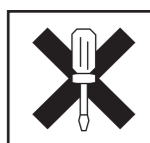
Products Number:  
Date Purchased:  
Store Purchased the Unit:

## For your safe use

Thank you for selecting the TEST PUMP TP50B.

- Please hand over this manual to the person who uses this equipment.
- Please read this manual thoroughly and make sure to understand before use.
- We hope you will make full use of this equipment with an appropriate handling and work safely.
- Please do not use this equipment for any other purposes than specified.  
This is a pump for water pressure testing of plumbing.

### Warning



◆ Please do not ever try to disassemble other than by repair mechanics.

◆ Do not attempt to modify the equipment.

☆It might cause an unexpected accident.

◆ Do not store in a place where temperature rises above 40°C.

◆ Store at a place where children cannot reach or store in a room that can be locked.



### Caution



◆ Do not handle the equipment with wet hands.

☆It may cause an unexpected accident by slipping during the work.

◆ Please carry the tank with both hands when moving the equipment.

☆You might drop the equipment if carried in unsecured manner.

◆ Do not store in a place where the temperature falls down below 0°C.

☆The pump may be frozen and causes cracks to the gaskets and so on.

## Before asking for repairs

- When an abnormal condition is noticed on the TEST PUMP TP50B, check the followings before requesting for repairs:
- If you still find abnormality or doubtful condition upon checking, please contact the store you have purchased or our sales office with intact condition.

Trouble	Possible cause	Solution
Unable to transfer water (manual pump)	·Ball valve A is closed.	·Open all valve A.
	·Ball valve B is open.	·Close ball valve B.
	·Water suction valve is stuck.	·Tap the side of cylinder to release
	·Filter mesh is clogged.	·Clean filter.
	·High pressure hose has particles.	·Remove clogs or replace.
Unable to transfer water (gear pump)	·Nipple with filter is clogged.	·Clean filter.
	·Ball valve B is closed.	·Open ball valve B.
	·Air relief valve is open.	·Close air relief valve.
	·High pressure hose has particles.	·Remove clogs or replace.
	·Filter mesh is clogged.	·Clean filter.
	·Gear pump is wearing out.	·Replace gear pump.
Insufficient water discharging volume (gear pump)	·Inside of Gear Pump is dry.	·Moisten inside of Gear Pump. (Refer to page 4)
	·High pressure hose has particles.	·Remove clogs or replace.
Unable to pressurize (manual pump)	·Air relief valve is open.	·Close air relief valve.
	·Filter is nearly to be clogged.	·Clean filter.
	·Ball valve A is closed.	·Open ball valve A.
Pressure drops after pressurizing	·Ball valve B is open.	·Close ball valve B.
	·Air relief valve is open.	·Close air relief valve.
	·Plumbing to be inspected is open.	·Close the valve of plumbing to be inspected.
	·Ball valve A is open.	·Close ball valve A.
	·Ball valve B is open.	·Close ball valve B.
	·Air relief valve is open.	·Close air relief valve.
	·Water is leaking from air relief valve.	·Replac air relief valve.
·There is water leakage from plumbing to be inspected.	·It is not abnormal.	

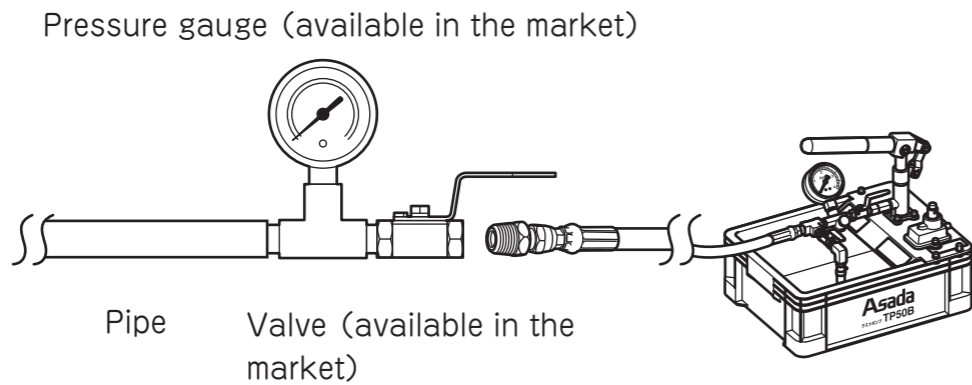
## Caution



◆ To check pressure drop, it is recommended to connect a separate pressure gauge (available in the market) directly to the plumbing pipe to be inspected.

☆ There is a possibility of inaccurate pressure measuring by the temperature change if checked with the pressure gauge on this equipment.

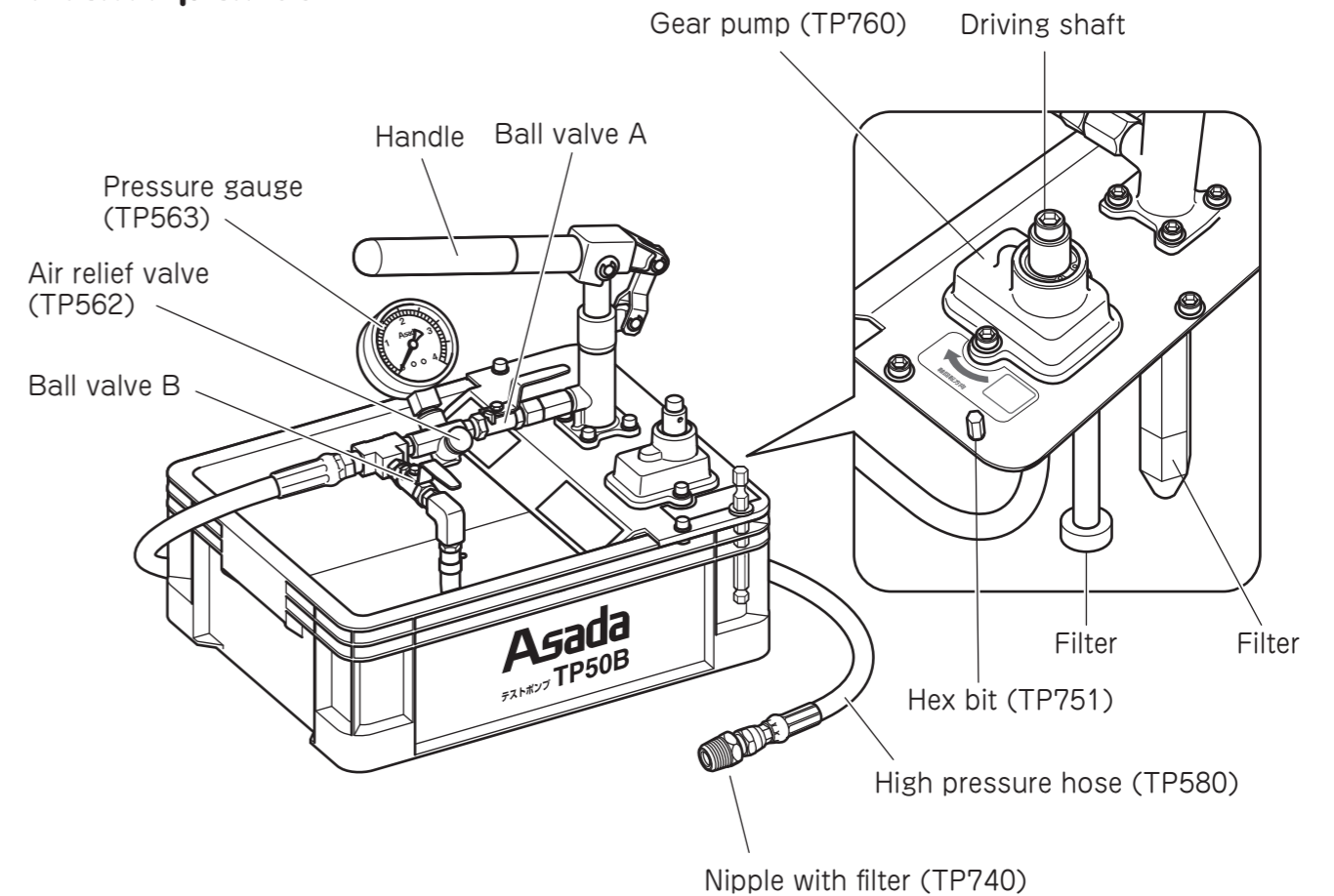
◆ For an accurate test, connect an additional pressure gauge and valve that are available in the market to the plumbing pipe to be inspected as inspected below.



## Completion of the test and storage

- 1) Drain the water (faucet water) in the tank.
- 2) Open the ball valve A and close the ball valve B.
- 3) Drain water in the manual pump by moving the handle up and down for several times.
- 4) Close the ball valve A and open the ball valve B.
- 5) Drain water in the gear pump by running the gear pump for about 10 seconds.
- 6) Store in a place where temperature does not get high and not so humid.

## Main parts



Model name		TEST PUMP TP50B
Code number		TP50BE
Maximum pressure	Manual	4MPa , $\phi$ 75
	Gear pump	0.2MPa
Volume of water	Manual	16mL/stroke
	Gear pump	*3.5L/min
Size (LxWxH)		380x292x296 mm
Weight		5.5kg
Tank volume		10.5L
Standard accessories		Nipple with filter (TP740) Hex bit (TP751) Instruction manual (TP765)

\*Volume of water when Gear pump is rotated by 1100min<sup>-1</sup>

## Preparation before use

- 1) Attach Nipple with filter (TP740) to the plumbing pipe to be inspected.
- 2) Connect the High pressure hose (TP580) of the equipment to the Nipple with filter (TP740).
- 3) Pour clean water (faucet water) into the tank of this equipment.

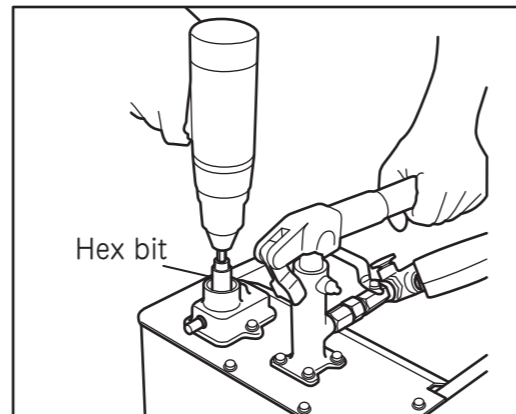
### Caution



- ◆ Pour clean water (faucet water) into the tank of this equipment.
- ◆ When the tank is dirty, pour clean water (faucet water) after the tank has been cleaned.
  - ☆The pump may be damaged if particles get in the pump and also clog filter mesh.
- ◆ Check the High pressure hose (TP580) before using the equipment.
  - ☆If inferior high pressure hose is used, it may explode and causes an unexpected accident.

## How to use (transfer water by gear pump)

- 1) Fully open the ball valve and pump up with Handle.
- 2) Close the ball valve B.
- 3) Attach the hex bit (TP751) included in the standard accessories on the chuck of power drill.
- 4) Insert the hex bit (TP751) which was set to the chuck of power drill to the driving shaft of the gear pump.
- 5) Hold the handle firmly by left hand and pull the trigger of the power drill. Water starts to flow. (Turn to the direction as shown on the drawing)
- 6) Close the ball valve B when the plumbing pipe to be inspected has been fully filled with water or the water supply is stopped by gear pump.
- 7) Follow the procedure in "How to use (Manual pumping) and pressurizing)".



### Caution



- ◆ When the pump is dry, it may not suck water.
- ◆ Do not use Gear Pump for pressurize.

### Caution



- ◆ Gear pump is an expendable item. The life of the gear pump is influenced by the state of use. Please exchange gear pump when it seems that the ability lowered.
  - Gear pump (TP760)**
- ◆ Do not turn gear pump in riverse direction.
  - ☆Riverse turning shortens its lifep.
- ◆ Do not idle gear pump.
  - ☆Idling of gear pump shortens its life.

## How to use (Manual pumping and pressurizing)

- 1) After the water has been transferred, relieve air and pressurize by manual pump.
- 2) Close the ball valve B and open the ball valve A.
- 3) Open the air relief valve.
- 4) Move the handle up and down, and exhaust air in the pump from the air relief valve.
- 5) Close the air relief valve, move the handle up and down, and exhaust air in the pipe to be inspected by supplying water to the pipe to be inspected when air in the pump is exhausted.
- 6) If air in the pipe to be inspected is exhausted, close all valves and faucets etc. of the pipe to be inspected.
- 7) More the handle and down to pressurize.
- 8) Close the ball valve A when pressure reached the test pressure. There is no leakage in the pipe to be inspected if pressure doesn't descend.

### Caution



- ◆ Feed grease to the manual pump periodically.
- ◆ If water cannot be transferred by moving the handle up and down, water suction valve may be stuck. Tap the side of cylinder by hammer and release the valve.