Pneumatic Oil Extractor

Operational Manual

Model No.: TW-2085

Safety Warnings and Precautions

WARNING: When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

- 1. Keep work area clean. Cluttered areas invite injuries.
- **2. Observe work area conditions.** Do not use machines or power tools in damp or wet locations. Don't expose to rain. Keep work area well lighted. Do not use electrically powered tools in the presence of flammable gases or liquids.
- **3. Keep children away.** Children must never be allowed in the work area. Do not let them handle machines, tools or extension cords.
- **4. Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
- **5. Avoid Unintentional Starting**. Be sure the air pressure is in the off position when not in use and before making hose connection.
- **6. Stay alert**. Watch what you are doing, use common sense. Do not operate any tool when you are tired.
- 7. Check for damaged parts. Before using any tool, any part that appears damaged should be carefully checked to determine that it would operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the tool if any control or switch does not operate properly.
- **8. Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool.
- **9. Do not operate tool if under the influence of alcohol or drugs.** Read warning labels if taking prescription medicine to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.

10. Maintenance. For your safety, service and maintenance should be performed regularly by a qualified technician.

Note: Performance of this tool may vary depending on variations in air pressure and compressor capacity.

Product specific safety precautions

This equipment is designed be operated by qualified personnel. It should only be operated after reading and understanding the safety warnings and operating procedures in this instruction manual.

- 1. Do not smoke near this equipment.
- 2. Use in a well ventilated area.
- 3. When leaks are found in the equipment or hoses, immediately turn the air pressure off and repair the leaks.
- 4. Do not exceed the recommended operating air pressure. This could damage equipment. See specification on Page 5.
- 5. Keep a type ABC fire extinguisher nearby in case of fires.

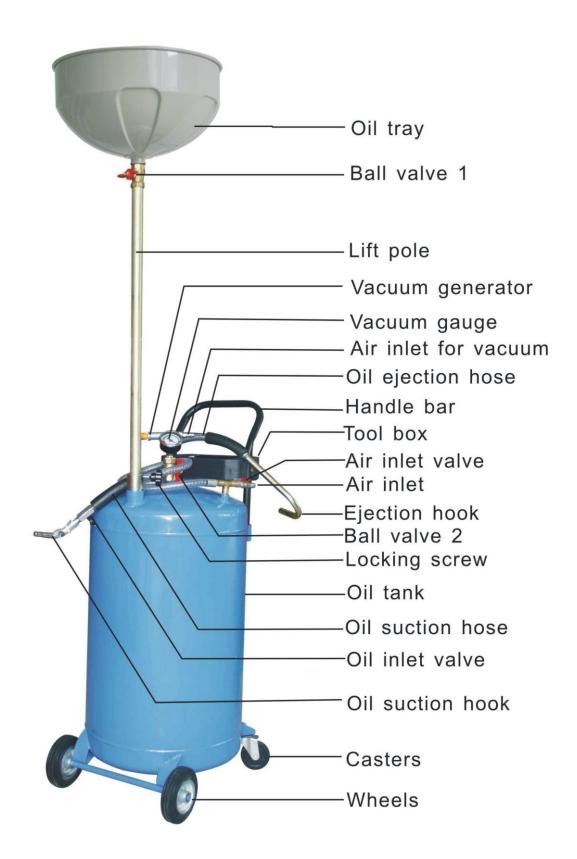


6. Always protect your skin and eyes from contact with oil and solvents.



- 7. Do not start engine during the time of oil extraction. Otherwise it will cause the damage of extraction probes and injuries of people.
- 8. Be careful for the oil extracted out from the vehicle, as temperature of oil is high, always between $40{\sim}60\,^{\circ}$ C
- 9. Used oil should be properly disposed or recycled. Please contact with your local waste liquid/solid authority for information on recycling.

Names of Parts:



Specification:

Functions: Remove and extract waste fluids or oil out from engine and etc. with flexible PV tube and robust CU probe. Power from compressed air

Air Inlet Pressure:	86~114PSI /6~8Kgs/c m²(Extraction)
	14~28 PSI/1~2KGS (Ejection)
Air Consumption:	52 Gallons/min (200L/min.)
Vacuum Degree:	0 ~ -12PSI/0~-0.1Mpa
	(the area between red and green)
Tank Capacity:	21 Gallons/80Liters
Tray Capacity:	12Liters
Working Temperature:	40~60°C (for engine oil)
Waste Liquid:	Engine Oil/Fluid
Net Weight:	24KGS

Package Contents

Please inspect and look for damages from shipping when package is first received. If the unit is damaged in any way, please contact customer service and include pictures if possible.

In the package, you will find:

- a) One Complete Oil Tank/Reservoir (80L/21Gallon),
- b) One Oil Collecting Tray
- c) One Complete Extraction/ Ejection Pipe
- d) Probes 6 pcs with sleeve
- e) User's Manual

Operation Instruction

1) Setup

- 1. Open the carton to take out the oil tray, checking any damage or not. If so, please immediately contact with your distributor.
- 2. unscrew the locking screw(page 4) then lift the lift pole(page 4) to a proper high, fasten the screw(page 4)
- 3. Screw the oil tray(page 4)on with clock-wise direction.

2)Preparation

- 1. Check well connected of all pipes.
- 2. Making sure all ball valves and switches are closed.
- 3. Stop the engine of the vehicle.
- 4. Temperature of oil should between 40~60°C.

3) Vacuum Generation

Operating air pressure: 86~114PSI /6~8KGS

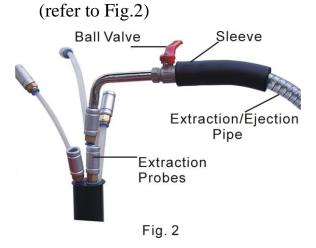
Consumption of air: 52 Gallons/min (200L/min.)

- 1. make all valve are closed except ball valve 2(page 4)
- 2. connect the compressed air with machine air inlet for vacuum(page 4)
- 3. Gradually turn on the air inlet valve (equipped by customer himself) for vacuum generation.
- 4. When Vacuum gauge finger reaching to the MAX area, turn off the air inlet valve. It will take you about 3 minutes for vacuum generation.
- 5. Remove the pipe of air compressor.(If continuously extraction required, just leave the pipe connected with machine)

6. Now it is ready for extraction

4) Extraction

- 1. Close all valves before extraction operation.
- 2. Choose suitable probe (which is the largest diameter one can be inserted into the engine) and tightly connect it to the extraction pipe connector.



- 3. Insert the end of the probe into the engine oil inlet hole of the engine.
- 4. Open the ball valve (see Fig.2),the oil will be extracted into the oil tank from engine.
- 5. After finish extraction, turn off the extraction ball valve (Fig.2)

Notice: Extraction of hot-oil, max. temperature for oil 60°C. Please do not exceed 60°C. Please hold the black sleeve to avoid scald.

5) Oil Collection

- 1. Lift the vehicle up, push the machine under the engine and lift the lift pole to proper high
- 2. unscrew oil drain plug of vehicle and open the ball valve 1(page 4)
- 3. Open the air inlet valve (page 4) for air out.

- 4. Then oil transferring from oil tray to oil tank.
- 5. Screw on the drain plug of vehicle.
- 6. Of course waste oil can be extracted into the oil tank if vacuum existed in the oil tank.

6) Tank Emptying

When the oil retained in tank near full(see back transparent tube), You need to eject oil out into a disposal tank and resolve the waste oil accordingly to the instruction of local government.

- 1. Close all the valves except the valve fixed on the end of machine ejection hose
- 2. Hook the ejection hook (page 4) on the external disposal tank.
- 3. Connect the compressed air with the machine air inlet (page 4)
- 4. Turn on the air inlet valve (page 4) for ejection the oil out. During the process please Hold the ejection hose to avoid oil spray
- 5. After oil drained out completely, remove the air supply hose.
- 6. Turn off all the valves and recover all pipes to its original places.

Safety Device

A safety valve will release pressure when pressure is over 28PSI during ejection.

Trouble Shooting

- A: Vacuum gauge don't work
 - a) Check the air pressure: standard air pressure through "air inlet valve "should between **86~114PSI** /**6~8KGS**; Air consumption is 52

Gallons/min (200L/Min).

- b) Make sure all the valves are on the correct place.
- c) Check vacuum operator-to-tank seal.

B: There is a figure showed on the vacuum gauge but the machine don't working and extracting

- a) Check extraction hose-to-probe seal.
- b) Temperature of waste oil is too low or not?(ordinary temperature of oil should between $40\sim60^{\circ}$ C.
- c) Extract grease oil or other oil with high density, which is, avoided.
- d) Make sure the ball valve of extraction pipe is open.
- e) Make sure that extraction pipe is not blocked and probe doesn't touch the bottom of tank.

Ordinary Maintenance

- a) Check leakage of the machine regularly.
- b) Pipe to pipe connection should be tightly closed together.
- c) It's necessary to release the waste oil as soon as possible in case of the corroding of tank.
- d) If you work for suction oil for a long time (ordinary one year), please check the adapter of the probe for leakage.