

# **Pneumatic Oil Extractor**

# HC-2297



**INSTRUCTION & MAINTENANCE MANUAL** 



Read this entire manual carefully and completelybefore installation or operation of the Pneumatic Oil Extractor

### **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. Firework is strictly prohibited during operation, keep away from heat, high voltage, flammable and explosive place
- 3. Use in a well ventilated area.
- 4. When leaks are found in the equipment or hoses, immediately turn the air pressure off and repair the leaks.
- 5. Once leakage is found in the hose or other components during operation, turn off air compressor immediately, conduct a detailed inspection and proceed with troubleshooting.
- 6. Do not exceed the recommended operating air pressure. This could damage equipment. See specification on Page 5.
- 7. Keep a type ABC fire extinguisher nearby in case of fires.



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



- 9. Do not start engine during the time of oil extraction. Otherwise it will cause the damage of extraction probes and injuries of people.
- 10. Be careful for the oil extracted out from the vehicle, as temperature of oil is high, always between  $40\sim60^{\circ}$ C
- 11. Used oil should be properly disposed or recycled. Please contact with your local waste liquid/solid authority for information on recycling.

#### **Product description:**

1.Fast vaccum speed, capable of high negative pressure, multi-purpose equipment.

2.High quality cylinder, higher intensity, high grade of transparency as well as high temperature resistance (able to withstand 80°C & negative pressure without deforming). Transparent cylinder allows oil observation

and measurement.

3. Use compressed air as power source; guarantee the safety in use, Eco friendly and low power consumption

- 4. Vacuum cylinder and oil tank at a same time, increase oil extraction speed
- 5. Different diameter of oil suction probes to meet the need of different type of cars
- 6. Height adjustable Oil tray lift, can be fix to desirable height
- 7. Can be used with other mechanical engine oil, lubricants as well as temporary storage. Brake fluid,

gasoline, diesel and other liquid contains methanol and ketones or flammable is strictly prohibited.

#### **Specification:**

Functions: Remove and extract waste fluids or oil out from engine and etc. with flexible PVC tube and

robust CU probe. Power from compressed air

Air Inlet Pressure:	6~8bar/ 87~116PSI
Ejection pressure:	0.7~1bar/ 10~15PSI
Air Consumption:	150L/Min
Vacuum Degree:	0~-1 bar /-15PSI
Tank Capacity:	80L
Cylinder Capacity:	9L
Oil tray volume:	15L
Working Temperature:	40~60°C
Package:	Cylinder/box, oil tank/box
Carton size:	270*270*525mm/550*430*980mm
Suction probes:	
Φ5*L700mm,(Cu,1 PCS)	Suction speed: 1.9 L/Min.
Φ6*L700mm,(Cu,1 PCS)	Suction speed: 3.2 L/Min.
Φ7*L700mm,(PVC,1PCS)	Suction speed: 4.2 L/Min.
Φ8*L700mm,(PVC,1PCS)	Suction speed: 6.2 L/Min.
Φ5*L1000mm,(PVC,1PCS)	Suction speed: 1.7 L/Min.
Φ6*L700mm,(PVC,1PCS)	Suction speed: 2.2 L/Min.

#### **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

- b) One Complete Measuring Glass/Cylinder
- c) One Oil Collecting Bowl/tray
- d) One Strain
- e) Probes 6 pcs with sleeve
- f) User's Manual

#### **Operation Instruction**

#### 1) Vacuum Generation with Cylinder

- 1. Operating air pressure:  $6 \sim 8 \text{bar} / 87 \sim 116 \text{PSI}$ .
- Make sure all valves are close. (FIG.1)connect air source with air inlet(Part No.32HC-0801), turn on air valve for vacuum extraction, When finger reaching to the MAX area on the vacuum gauge, turn off air inlet valve.

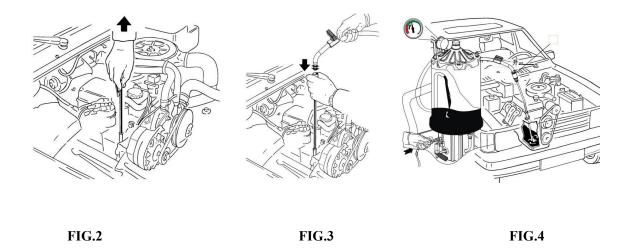




#### Notice: Under a working condition without air source. Please pump with vacuum air before use.

#### 2) Extraction

 Ensure the oil tank is under negative pressure, FIG.2 remove engine oil case., choose suitable probe (which is the largest diameter one can be inserted into the engine) and tightly connect it to the extraction pipe connector. Insert the end of the probe into the engine oil inlet hole, FIG.4 Turn on the ball valve(Part No.32HC-1703) for oil extraction.



#### **NOTICE:**

Do not exceed maximum oil extraction temperature 60°C.

Hold the hose protection sheath during extraction to avoid scald

Place the machine in a flat ground to avoid sliding under working condition

Oil temperature higher than 80 °C will cause seriously damage to the components, in worst case it could lead to machine failure.

3) Oil Ejection

#### Oil ejection from cylinder to oil tank

- When the oil level reached cylinder 'STOP' warning line, please empty the cylinder with oil ejection.
- Turn on ball extraction valve(Part No.32HC-1005), at the same time turn on mini ball valve(Part No.32HC-0803) from the hose to release cylinder pressure and oil drain into the oil tank.
- **3.** Turn off oil extraction valve(Part No.32HC-1005) and hose ball valve(Part No.32HC-1703) after completion of oil ejection.

#### 4) Oil Collection

1.Lift the vehicle to proper height

2. Move the oil extractor below the car engine, oil tray position right under the vehicle oil drain hole.





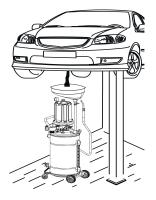


FIG.6

Release plum knob to adjust lifting pole. tighten plum knob to fix its height, open wing valve(Part No.
21HC-2106), release oil drain bolt for oil collection from vehicle.

#### 5) Tank Emptying

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

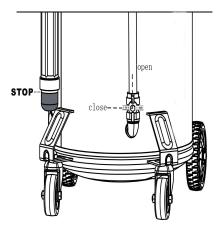
- 1. Turn off all the valves.
- 2. Hold the ejection hook and insert it into the external disposal tank.
- 3. Connect the air compressor with the air inlet(Part No.32HC-0801)

4. Turn on the wing valve(Part No.32HC-0402) gradually, addingtank pressure, turn off air compressor when pressure reach to desired pressure. (The valve will automatically release pressure when the tank pressure reach 1.0 bar/14PSI, turn off the air compressor immediately and quickly drop the tank pressure below 0.7bar/10PSI,otherwise it could lead to serious incident)





As FIG.10 shows, discharge Residual oil from Residual oil cup when it reach STOP sign.





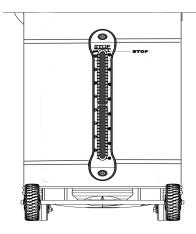
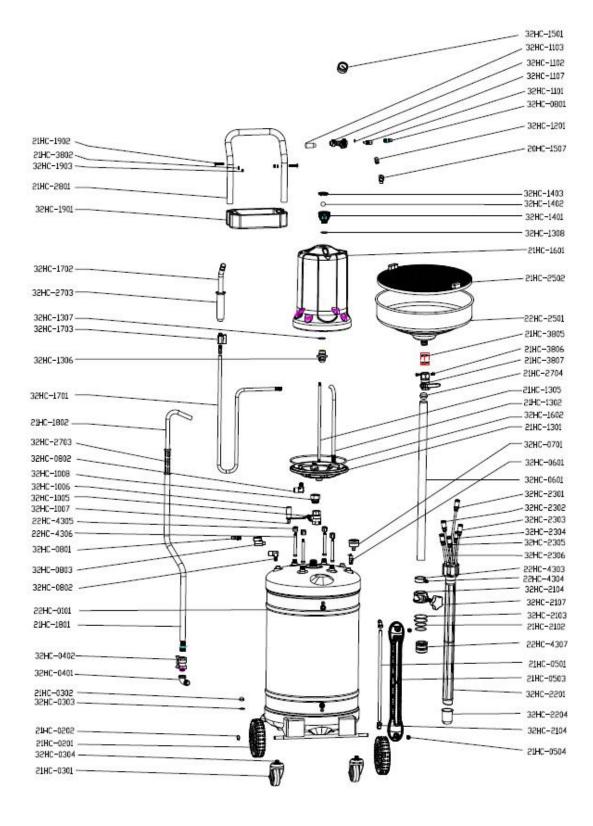


FIG.9



### BOM Part List

No.	name	qty	unit
22HC-0101	tank	1	pcs
21HC-0201	directional wheel	2	pcs
21HC-0202	snap ring	2	pcs
21HC-0301	universal wheel	2	pcs
21HC-0302	nut	2	pcs
21HC-0501	level pipe	0.4	m
21HC-0502	elbow connector	2	pcs
21HC-0503	level pipe protector	1	pcs
21HC-0504	hexagonal screw	2	pcs
21HC-1204	hexagonal screw	1	pcs
21HC-1301	cylinder base	1	pcs
21HC-1302	absorbing oil pipe	1	pcs
21HC-1305	connecting centre rod	1	pcs
21HC-1601	modular cylinder	1	pcs
21HC-1801	oil drain hose	2	m
21HC-1802	oil drain hook	1	pcs
21HC-1902	screw	2	pcs
21HC-2003	screw	2	pcs
21HC-2801	handrail	1	pcs
21HC-2802	protection sheath	1	pcs
32HC-0303	gasket	4	pcs
32HC-0304	thread rod	2	pcs
32HC-0401	cast-iron bend	3	pcs
32HC-0402	butterfly valve	1	pcs
32HC-0601	safe valve	1	pcs
32HC-0701	pressure gauge	1	pcs
32HC-0802	elbow connector	2	pcs
32HC-0803	mini ball valve	1	pcs
32HC-1306	connector	1	pcs
32HC-1307	seal ring	1	pcs
32HC-1308	seal ring	1	pcs
32HC-1401	anti explosion valve	1	pcs
32HC-1402	steel ball	1	pcs
32HC-1403	anti explosion cover	1	pcs
32HC-1404	seal ring	1	pcs
32HC-1602	seal ring	1	pcs
32HC-1701	extraction oil hose	2	m

32HC-1702	oil extraction hook	1	pcs
32HC-1703	mini ball valve	1	pcs
32HC-1704	seal ring	2	pcs
32HC-1901	tool box	1	pcs
32HC-1903	nut	2	pcs
32HC-2201	probe sleeve	1	pcs
32HC-1005	ball valve	1	pcs
32HC-1006	hand lever	1	pcs
32HC-1007	nut	1	pcs
32HC-2202	oil cup	1	pcs
32HC-2301	oil extraction probe	1	pcs
32HC-2302	oil extraction probe	1	pcs
32HC-2303	oil extraction probe	1	pcs
32HC-2304	oil extraction probe	1	pcs
32HC-2305	oil extraction probe	1	pcs
32HC-2306	oil extraction probe	1	pcs
32HC-2703	handle sleeve	2	pcs
20HC-1501	vacuum gauge	1	pcs
20HC-1507	Y-connector	1	pcs
32HC-0801	wind nozzle	2	pcs
32HC-1101	Bolt	1	pcs
32HC-1102	vacuum generator	1	pcs
32HC-1103	silencer	1	pcs
32HC-1107	seal ring	1	pcs
32HC-1201	bead valve	1	set
32HC-1502	connector	1	pcs
32HC-1503	hollow bolt	1	pcs
32HC-1504	seal ring	1	pcs
32HC-1505	rubber gasket		pcs
32HC-1506	metallic gasket	1	pcs
32HC-1008	connector	1	pcs
22HC-4305	measuring cup tie rod nut	4	pcs
22HC-4306	measuring cup support bar	4	pcs
22HC-2501	oil tray	1	pcs
21HC-2502	strainer	1	pcs
21HC-2101	fixing seat	1	pcs
21HC-2102	seal ring	2	pcs
21HC-2105	lift pole	1	pcs
21HC-2704	connector	1	pcs
32HC-2103	seal ring	2	pcs

32HC-2104	brake sleeve	1	pcs
32HC-2107	knob	1	pcs
22HC-4303	locating sleeve	1	pcs
22HC-4304	hex socket set screw	1	pcs
22HC-4307	lift	1	pcs
21HC-3805	seal ring	1	pcs
21HC-3806	screw	1	pcs
21HC-3807	ball valve	1	pcs