



# Pneumatic Oil Extractor

## Operational Manual

Model No.: JA1041OD

## 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 40~60°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 vacuum 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:	0.6~0.8 bar/ 8.7~11.6PSI
Air Consumption: :	150L/Min
Vacuum Degree:	0~-1 bar /-14.5PSI
Tank Capacity:	70L
Cylinder Capacity: :	9L
Oil tray volume:	20L
Working Temperature:	40~60°C
Package:	Cylinder/box, oil tank/box
Carton size:	255*255*540mm/470*440*940mm
<b>Suction probes:</b>	
Φ5*L800mm,(Cu,1 PCS)	Suction speed: 1.9 L/Min.
Φ6*L800mm,(Cu,1 PCS)	Suction speed: 3.2 L/Min.
Φ6*L700mm,(PVC,1PCS)	Suction speed: 4.2 L/Min.
Φ8*L700mm,(PVC,1PCS)	Suction speed: 6.2 L/Min.
Φ6*L800mm,(PVC,1PCS)	Suction speed: 3.7 L/Min.
Φ8*L800mm,(PVC,1PCS)	Suction speed: 5.2 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**

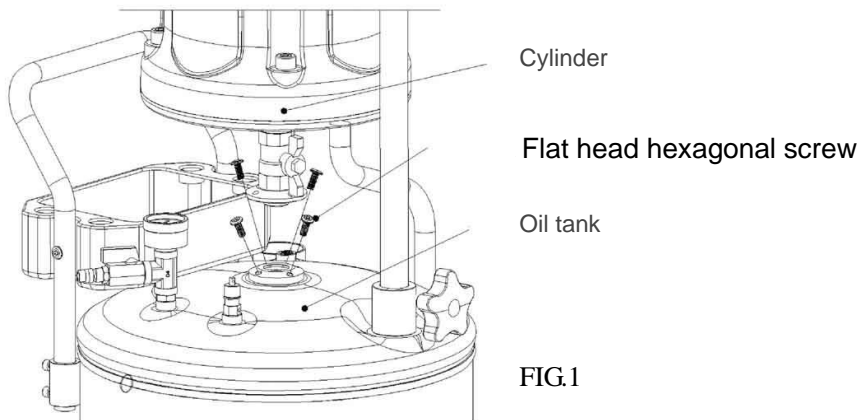
### **1) Setup**

#### **Cylinder**

1. Open the carton and take the complete cylinder set out from the carton.
2. Screw the cylinder on the oil tank with clock-wise direction.
3. Then screw the "Fasten Nut" fixed on the top of the tank with Cylinder

#### **Oil Tray**

1. Open the carton to take out the oil tray, check to see if there is any damage. If so, please contact with your distributor immediately.
2. Pull out the lift pole and Screw the oil tray on with clock-wise direction.
3. Take out the cylinder, connect it to the oil tank with ball valve handle in vertical seating.
4. Fix the cylinder in the correct direction with the inside hexagonal screw.
5. Ensure the lift pole is perpendicular to the equipment
6. For the convenience in installation, please lift up the lift pole in proper height fixing with a locating ring to avoid rubbing against between cylinder and oil tray.



## 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 in the engine should between 40~60°C. Start the vehicle for a while to heat the oil.

## 3) Vacuum Generation (Fig.2)

Operating air pressure: 6~8 bar/87~116PSI

Consumption of air: 150L/Min

**If ONLY extract measuring glass/cylinder to be vacuum.**

1. Turn off all valves BEFORE use.
2. Connect the air compressor to the air inlet① gradually turn on the air inlet ball valve for vacuumization.
3. Gradually turn on the air inlet valve (which equipped by customer himself) for vacuum generation.
4. When finger reaching to the MAX. area on the vacuum gauge, turn off the air inlet valve Estimated time for vacuum generation within 20~30seconds)
5. Turn off air source after completion (To ensure the suction speed remains in stable negative pressure for continuously extraction required. please continue vacuum generation)

Now it is ready for extraction

**Tips: ball Valve should be on the position off when only extract vacuum for the cylinder, in order to have a view of the quality and quantity of the waste oil.**

**If extract to be vacuum for both measuring glass and tank**

1. According to the SAME first and second steps described in the previous steps.
2. Open the valve③
3. Gradually turn on the air inlet valve for vacuum generation.
4. When finger reaching to the MAX. area on the vacuum gauge, turn off the air inlet valve (estimated time for vacuum generation within 4~5 minutes)
5. Remove the pipe of air compressor.
6. Now it is ready for extraction

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

**Tips:**

1. Benefits for gradually and slowly turn on air inlet valve is for reducing air-consumption and a quicker speed for vacuum-generation.
2. Benefits for vacuum generation of both cylinder and oil tank is fasting the speed of oil transferring.
3. We suggest extract both cylinder and tank to be vacuum when the machine is needed to be used to the place without air compressor. That will benefit long time continuously working.

**4) Extraction**

1. Choose suitable probe (which is the largest diameter one can be inserted into the engine) and tightly connect it to the extraction pipe connector. (refer to Fig.01)

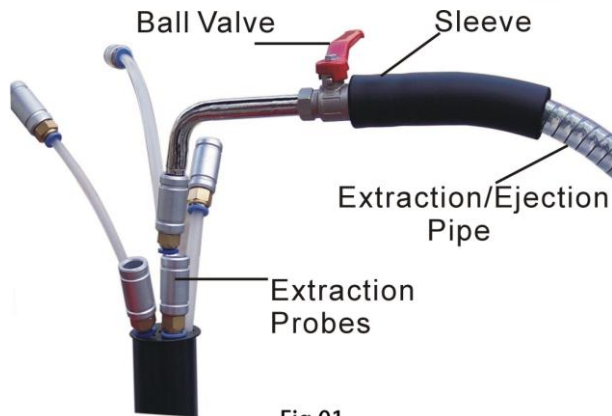


Fig.01

2. Insert the end of the probe into the engine oil inlet hole of the engine.(Fig.3)
3. Turn on the ball valve (Fig.01)
4. If waste oil only extracted into the **cylinder**. Please making sure the valve is closed.
5. If waste oil extracted to the **oil tank** through the cylinder. Please open the ball valve accordingly. Also the oil tank need to be vacuum before extraction operation.
6. After finish extraction, turn off the extraction ball valve (Fig.01)

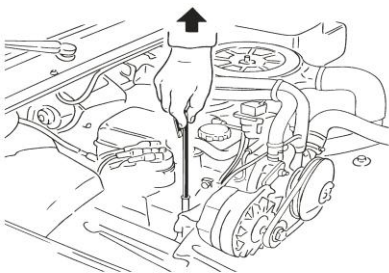


Fig.2

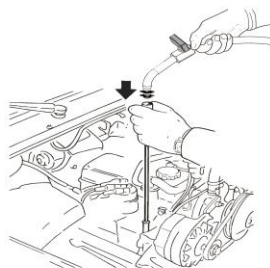


Fig. 3

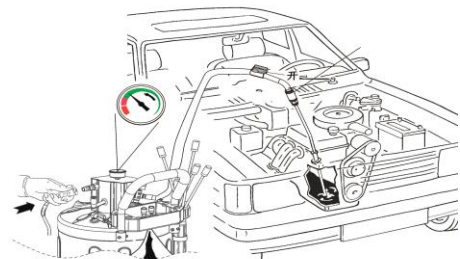


Fig.4

it

could bring to machine failure.

## 5) Ejection

### Oil ejection from cylinder to underside oil tank

1. When the oil level reached cylinder 'STOP' warning line, please empty the cylinder with oil ejection.
2. Turn on ball valve③, at the same time turn on mini ball valve from the hose⑥ to release cylinder pressure and oil drain into the oil tank.
3. Turn off valves③and ⑥after ejection.

### More about oil ejection from cylinder





- 1 Turn on valve ③, if vacuum existed in the tank, and then oil from cylinder will be fast transferred into the tank.
- 2 If no vacuum existed in the tank, turn on the ball valve (Fig.01) for helping making a quicker transferring of waste oil into the tank.
- 3 Turn off valve1 and ball valve (Fig.01) after ejection finished.
- 4 Continuously repeating above operation steps for oil ejection before oil contained in the cylinder reaching “STOP” level on the sticker of cylinder.(Which is eject oil before cylinder reaching full)

#### **TIPS**

**It will be faster for transferring of waste oil from transparent measuring glass into oil tank, if vacuum generated in both transparent measuring glass and oil tank.**

#### **6) Oil Collection (Fig.3)**

- 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.
3. Ensure ball valve⑤is off
4. Open the wing valve⑦(by rotating it in anticlockwise direction, vertical sitting as open)
5. Open the mini ball valve④, release tank pressure
6. Waste oil is transfer from the oil tray to the oil tank

#### **7) 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
4. Turn on the mini ball valve ④ gradually, adding tank 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/15.4PSI, turn off the air compressor immediately and quickly drop the tank pressure below 0.8bar/11.6PSI, otherwise it could lead to serious incident)

### **WARNING!!!**

- 1. The ball valve (Fig.1) must be closed in order to prevent air enter causing transparent measuring glass damaged.**
- 2. Please hold the end of Ejection Hook to avoid waste oil spattering out, cause an injury of eye, dirty of clothes.**
- 3. Before disconnect extraction/ejection tube with fast couple (male), making sure no any pressure existed in the tank. Otherwise, oil will spray out.**

### **Safety Device**

**A safety valve will release pressure when pressure is over 35PSI/2.5kgs during ejection.**

### **Trouble Shooting**

A: Vacuum gauge don't work

- Check the air pressure: standard air pressure through "air inlet valve "should between **86~114PSI /6~8Bar**; Air consumption is 52 Gallons/min (200L/Min).
- Make sure all the valves are on the correct place.
- Check vacuum operator-to-tank seal.

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

- Check extraction hose-to-probe seal.
- Temperature of waste oil is too low or not?(ordinary temperature of oil should between 40~50°C.
- Extract grease oil or other oil with high density, which is, avoided.
- Make sure the ball valve is open.
- Make sure that extraction pipe do not block off and probe don't touch the bottom of tank.

### **Ordinary Maintenance**

- 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.

**Notes**

- a) Application for oil change with probe: for metal probe big suction capacity: 3.1L/Min, small suction capacity 0.8L/Min; for plastic probe the biggest one suction capacity 4.3L/Min, the smallest one 0.8L/Min.
- b) If you work for suction oil for a long time, please check the adapter/O seals of the cylinders/adaptors for leakage.

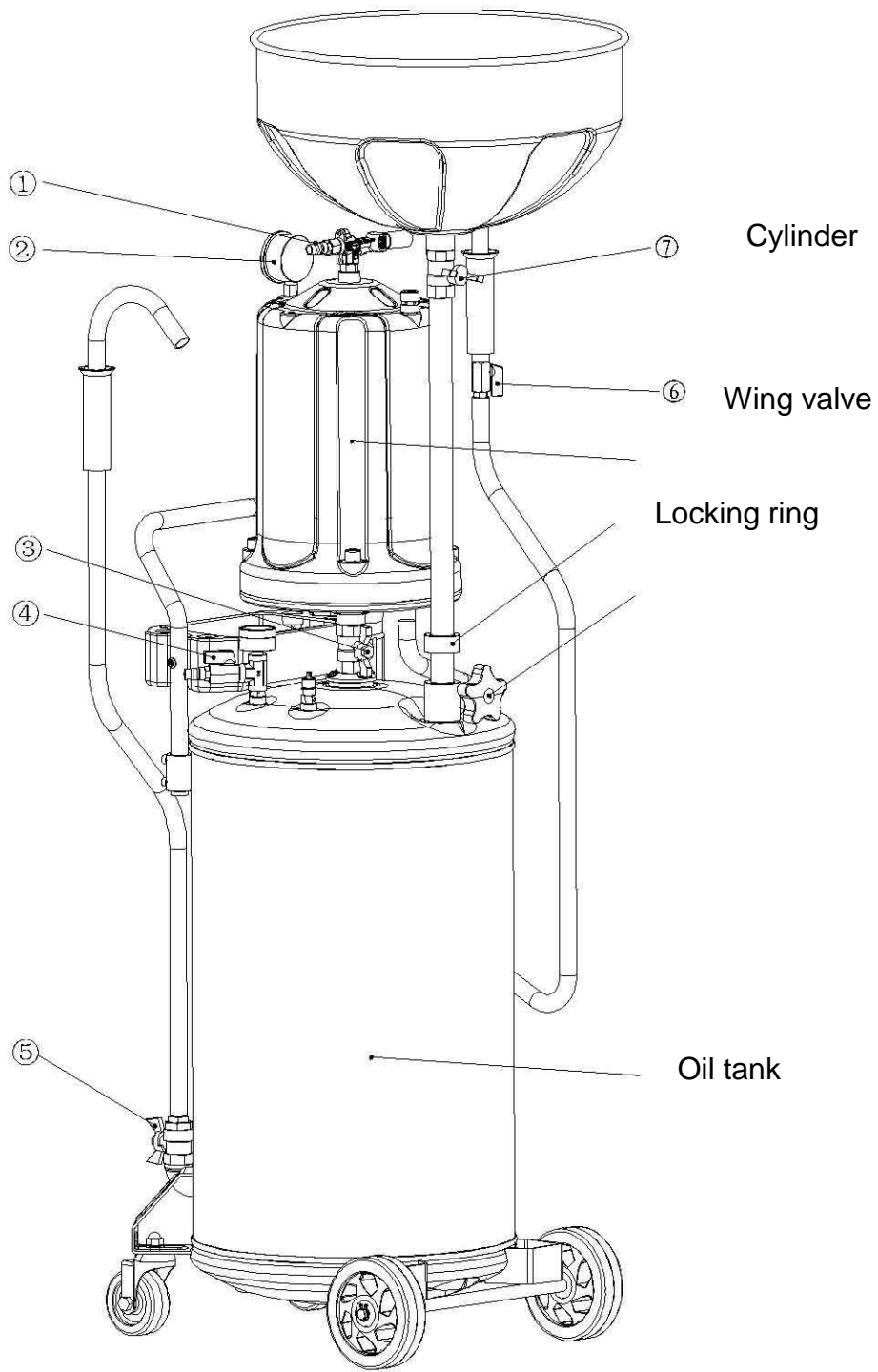
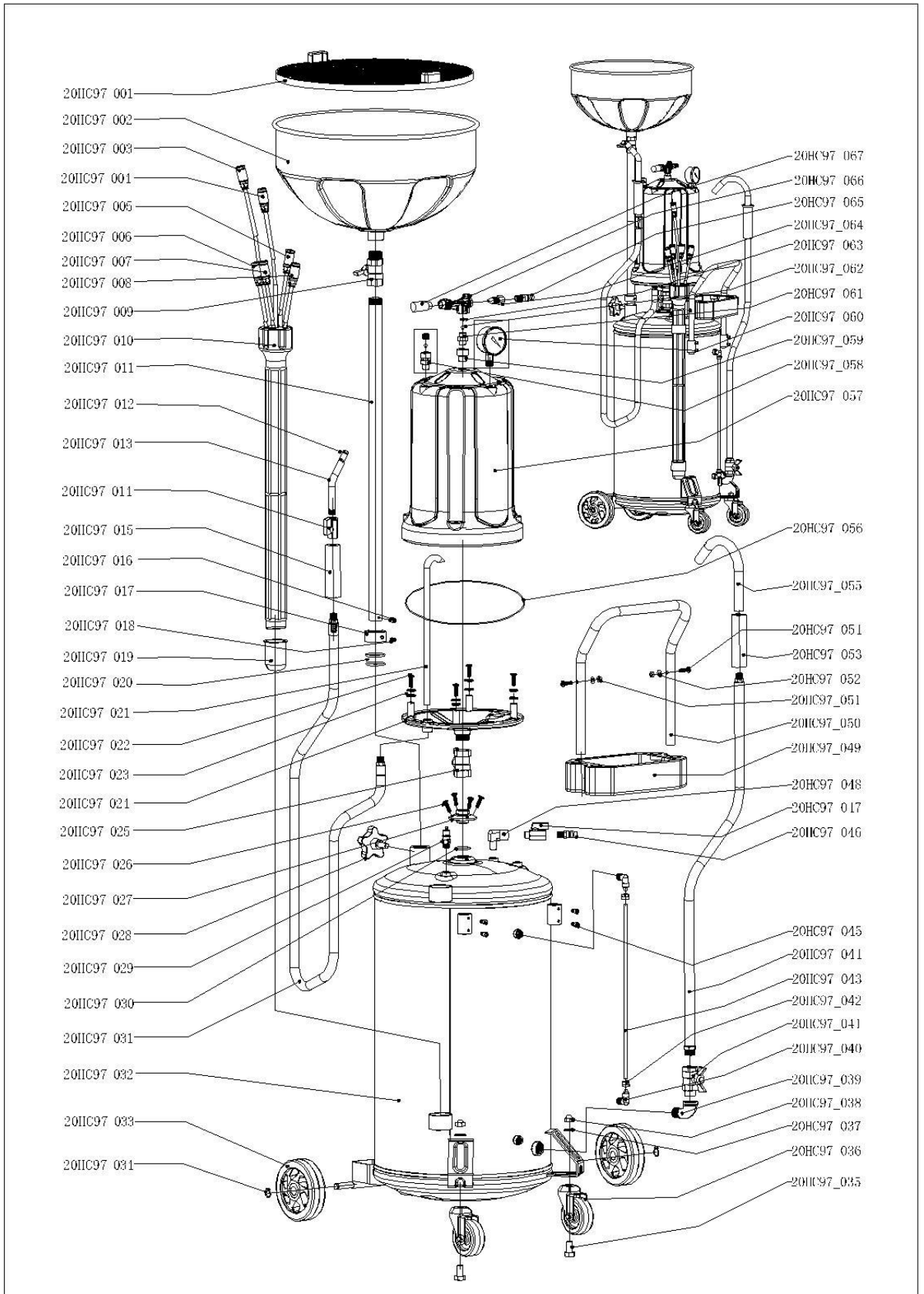


FIG.3





Parts List

Parts No.	Des.	qty	Parts No.	Des.	qty
20HC97_001	inside metal strainer	1	20HC97_035	hexagonal screw	2
20HC97_002	Oil tray	1	20HC97_036	universal wheel	2
20HC97_003	oil extraction probe	1	20HC97_037	Gasket	2
20HC97_004	oil extraction probe	1	20HC97_038	Nut	2
20HC97_005	oil extraction probe	1	20HC97_039	Elbow Connector	1
20HC97_006	oil extraction probe	1	20HC97_040	Elbow Connector	2
20HC97_007	oil extraction probe	1	20HC97_041	Wing ball valve	1
20HC97_008	oil extraction probe	1	20HC97_042	Hexagonal case	2
20HC97_009	wing ball valve	1	20HC97_043	Transparent hose	1
20HC97_010	probe sleeve	1	20HC97_044	Oil extraction hose	1
20HC97_011	lift pole	1	20HC97_045	inside hexagonal screw	4
20HC97_012	O-ring	2	20HC97_046	wind nozzle	1
20HC97_013	Sucker crotch	1	20HC97_047	G1/4` mini ball valve	1
20HC97_014	Mini ball valve	1	20HC97_048	Elbow connector(male/female)	1
20HC97_015	handle	1	20HC97_049	Tool box	1
20HC97_016	inside hexagonal screw	1	20HC97_050	handle	1
20HC97_017	Locking ring	1	20HC97_051	hexagonal screw	2
20HC97_018	hexagonal screw	1	20HC97_052	Gasket	2
20HC97_019	O-ring	2	20HC97_053	Handle set	1
20HC97_020	Oil cup	1	20HC97_054	Flat head hexagonal screw	2
20HC97_021	ejection hose	1	20HC97_055	Exhibit crotch	1
20HC97_022	Flat head hexagonal screw	1	20HC97_056	O ring	1
20HC97_023	O-ring	2	20HC97_057	Cylinder	1
20HC97_024	Cylinder base	1	20HC97_058	Safety valve	1
20HC97_025	Wing ball valve	1	20HC97_059	Connector	1
20HC97_026	Flat head hexagonal screw	4	20HC97_060	Pressure gauge	1
20HC97_027	Cylinder base	1	20HC97_061	Bead valve	1
20HC97_028	plum knob	1	20HC97_062	bead	1
20HC97_029	Safety valve	1	20HC97_063	Snap rings	1
20HC97_030	O-ring	2	20HC97_064	Bolt	1
20HC97_031	steel wire hose	1	20HC97_065	wind nozzle	1
20HC97_032	Oil tank	1	20HC97_066	Vacuum generator	1
20HC97_033	directional wheel	2	20HC97_067	silencer	1
20HC97_034	snap rings	2			



**CERTIFICATE**

**CERTIFICATE**  
Of Conformity  
With EU MD 2006/42/EC  
LVD 2006/95/EC

Registration No.: AT0712644M-2  
Page 1 of 3

Applicant :

Manufacturer :

Product Name : Pneumatic Lubrication Equipment  
Model No. : HC-2080, HC-2081, HC-2085, HC-2090, HC-2097  
HC-2190, HC-2195, HC-2270, HC-2275, HC-2280  
HG-2930, HG-2940

Applicable Standards : EN ISO 12100:2010  
EN 60204-1:2006+A1:2009

TCF Number(s) : 200712704M-2

The certificate of conformity is based on an evaluation of a sample of the above-mentioned product. Technical report and documentation are at the applicant's disposal. This is to certify that the tested sample is in conformity with all requirements of EU Machinery Directive 2006/42/EC & Low Voltage Directive 2006/95/EC, the certificate does not imply assessment of the production and does not permit the use of Lab's logo. The applicant of the certificate is authorized to use this certificate in connection with EC declaration of conformity to the Directive.



Certified by  
  
Daniel Zhu  
Chief Executives

Nov. 26, 2011  
Date



The CE Marking may only be used if all relevant and effective EC Directives are complied with



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