



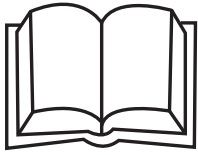
Bowl Assembly

Model Nos. JDI-20EV-B & JDI-20COMBO-B

Operator's Manual



Safety & Warning Instructions



READ THIS MANUAL CAREFULLY BEFORE INSTALLING, OPERATING OR SERVICING THIS EQUIPMENT

It is responsibility of the employer to place this information in the hands of the operator.
Keep for future reference.

SAFETY ALERTS USED IN THE MANUAL

	<p>Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury</p>
	<p>Indicates a potentially hazardous situation which, if not avoided, may result in death or serious injury.</p>
	<p>Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate personal injury It may also warn of unsafe practices</p>

OPERATING AND SAFETY PRECAUTIONS

DANGER

- Hot motor oil removed from an engine may exceed 220°F and cause severe burns or injuries if it comes in contact with skin or clothing.
- Allow oil temperature to reach 194°F or less before extracting.
- Always wear proper personal protection equipment. Use extreme care when handling hoses, probes, evacuating drain and shut off valves to prevent burns or injury.
- Motor oil and lubricants are flammable. Keep away from sparks and open flames as a fire will result

WARNING

- DO NOT** exceed 120 psi (8.0 bar) supply pressure when creating the vacuum.
- DO NOT** leave the bowl unattended while creating the vacuum.
- The handle must return to full up position and the valve closed before applying compressed air to the drain tank to begin the evacuation process. Failure to do so may result in pressurizing the bowl chamber which may cause the bowl to crack, leak, or explode.
- DO NOT** exceed 10 psi supply pressure when evacuating the drain.
- DO NOT** use if vacuum gauge is damaged. Replace immediately.

CAUTION

- Use care when rolling drain to prevent tipping or personal injury
- NEVER** exceed the **MAX** vacuum reading on the vacuum gauge.
- Monitor fluid level in bowl and on drain. **DO NOT** overfill.
- Closely monitor the flow out of the discharge flow to spills when evacuating oil from the drain tank.
- Inspect all hoses and probes before use for cracks, kinks, damage, or blisters. Replace damaged hoses and probes immediately.

Assembly

1. Place the bowl into the drain and tighten the collar to secure the bowl to the oil drain tank.
2. Replace the quick connect fitting to match the shop air system fittings as necessary.

Overview (FIG. 1)

Plunger:

The plunger is controlled by the black handle (A). Pull handle to release locking pin and move to one of three desired positions.

- **FULL UP:** To close bowl chamber and create vacuum.
- **CENTER:** To release vacuum.
- **FULL DOWN:** To empty oil from the bowl chamber to the tank.

Venturi Valve:

Connect to the ball valve (B) and adjust the valve to control the flow of air to the venturi.

Suction Hose Valve:

Use the ball valve (C) to control the flow into the bowl chamber while extracting fluid

Vacuum gage (D):

Indicates the amount of vacuum on the chamber bowl.

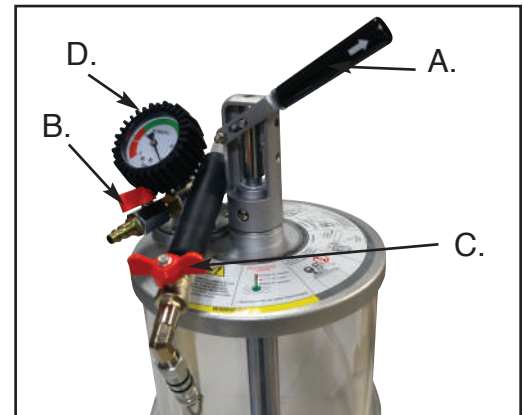


Fig. 1

Note there is an internal safety check valve in the top of the bowl to prevent the buildup of air pressure inside the bowl should the plunger not completely seal when evacuating the oil drain tank.

Operation:

Step A: Create Vacuum

1. Set plunger (A) to the full up position.
2. Close the venturi valve (B) and suction hose valve (C)
3. Connect air supply of 100-120 psi (7-8 bar) to venturi quick connect fitting
4. Open venturi valve to create vacuum until the gauge needle is in the green zone.



Fig. 2

Step B: Extract Fluid

1. Close venturi valve (B)
2. Disconnect the air supply
3. Attach the appropriate probe to the end of the suction hose. (Fig. 2)
4. Insert the probe into the engine, gear box, or other item to be drained.
5. Open the suction hose valve (C) to control the extraction process.
6. Close valve when complete.



Fig. 3a

Step C: Drain Fluid Form the Bowl Chamber to the Oil Drain Tank

1. Move the handle (A) to the center position to release the vacuum (Fig. 3a).
2. Then move the handle (A) to the full down position to empty the oil from the bowl chamber to the tank. (Fig. 3b)

Step D: Evacuate the Oil Drain Tank

1. Move handle (A) to the full up position.
2. Refer to evacuating instructions provided with the oil drain tank



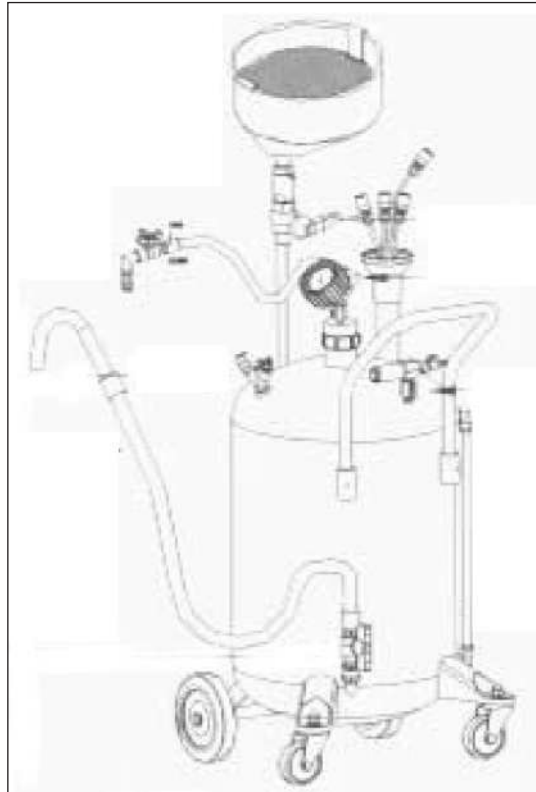
Fig. 3b



20-Gallon Self-Evacuating Portable Oil Drain & Fluid Evacuator

Model JDI-20COMBO
Owner's Manual





Assembly:

1. Insert the handle into the seats provided and fasten it with the two (2) screws supplied. **(See Fig. 1)**
2. To raise or lower the funnel - loosen the funnel height adjustment lock and move the drain tube up or down to desired height. **(See Fig. 2)**
3. Wheel Assembly:
 - a. Insert the casters into caster brackets.
 - b. Place lock washer over caster threaded stud.
 - c. Place nut onto threaded stud.
 - d. Tighten. **(See Fig. 3)**

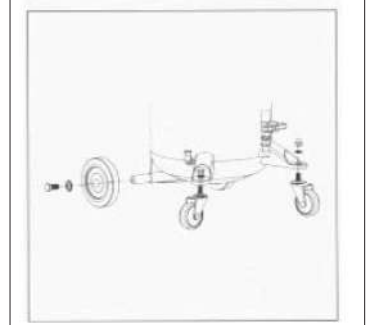
Fig. 1



Fig. 2



Fig. 3



Operation:

1. Charging the tank (creating a vacuum):
 - a. Open vacuum gauge valve A and venturi assembly B and valve C. (See Fig. 4)
 - b. Close suction probe valve D, discharge valve F, air valve E and the upper valve G.
 - c. Connect compressed air to the quick connect coupling. When the vacuum - gauge indicator comes onto the green band and stops (approx. 30-40 seconds), closed valve B and C and disconnect the air supply. (See Fig. 5)

IMPORTANT!

The compressed-air supply must always be between 100 and 120 psi to achieve a full vacuum.

2. Fluid evacuation:
 - a. Position the evacuator next to the vehicle to be serviced. Turn off the vehicle and remove the dipstick from the motor. (See Fig 6)

IMPORTANT!

The motor oil or other fluid to be evacuated must be hot at a temperature between 150/170°F. Suction of oil from the motor must be done when the motor is off.

- b. Insert the appropriate suction probe into the dipstick tube as deep as possible without touching the bottom. Choose the largest diameter probe for the best results.
- c. Place the suction-probe coupler into the coupling of the suction probe. Make sure it is completely seated into the coupler.
- d. Open suction-probe valve D to begin
- e. When the evacuation is complete, close valve D and disconnect it from the suction probe (evacuation is complete when the needle on the vacuum gauge begins to flutter).
- f. Remove the suction probe from the dipstick tube and proceed with normal oil-change procedures.

IMPORTANT!

Never fill the tank over the maximum limit that can be seen on the level indicator.

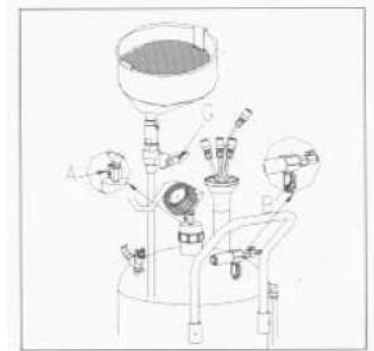


Fig. 4

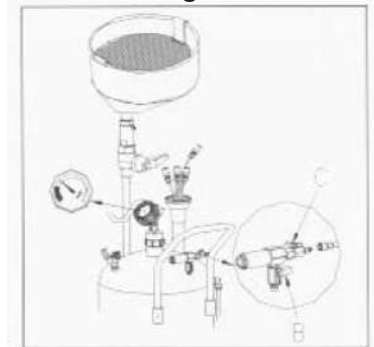


Fig. 5

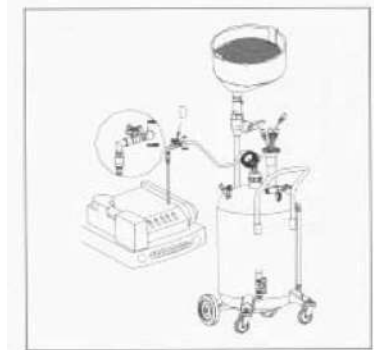


Fig. 6

Operation:

3. Oil recovery with gravity systems:

- a. To position the off-center oil collection pan in the desired position and lock the tube with the screw.
- b. When emptying the oil from the vehicle, open valve G. Open the air valve E, close the discharge valve F, the oil flows into underlying tank. (See Fig. 7)
- c. Level indicator indicates the quantity of oil recovered in the tank.



Fig. 7

IMPORTANT!

Never fill the tank over the maximum limit that can be seen on the level indicator.

Close the upper ball valve and open the lower ball valve before connecting the air supply. When the tank is empty, close air valve E and disconnect the air supply. (See Fig. 8)

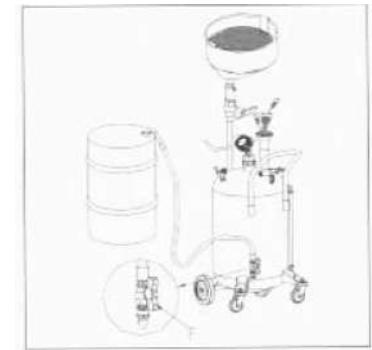


Fig. 8

IMPORTANT!

Do Not use air pressure in excess of 10 psi. The evacuator is fitted with a safety valve calibrated at 20 psi.

Troubleshooting:

THE MACHINE DOES NOT GENERATE A VACUUM

- This could be due to insufficient pressure in workshop compressed supply.
- Use air pressure of at least 100-150 psi.
- The vacuum meter is incorrectly calibrated (this can easily happen due to impact or other events).
- Replace it.
- Valve should be open.

THE VACUUM METER NEEDLE DOES NOT MOVE

- The vacuum meter could be broken (this can easily happen due to impact or other accident).
- The device functions all the same, try blowing in air for 2-3 minutes and check if it works.
- Remove the vacuum meter and check whether the air input is clear.
- The vacuum meter is incorrectly calibrated (this can easily happen due to impact or other events).
- Replace it.
- Valve A should be closed.

THE MACHINE DOES NOT EXTRACT THE USED OIL

- This ball valve on the extractor pipe is closed, open the valve.
- This could be due to the oil being cold.
- Bring the oil to a temperature of °F before extracting, always extract oil with engine off.
- This cause could be the probe touching the bottom of the sump.
- Lift the probe a couple of millimeters.
- Check the probe.

THE MACHIN DOES NOT MAINTAIN VACUUM

- The machine OR's could be worn.
- Check OR's and replace if necessary.
- The probe is broken.
- Replace it.