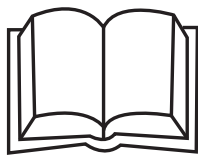




**Models: JDI-6EV & JDI-20EV
6-Gallon & 20-Gallon Fluid Evacuators &
Oil Drains
Operator's Manual**



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.

- Wear proper safety equipment and clothing, safety glasses/goggles.
- Hot automotive fluids can burn and injure eyes and body.
- Opening a hot system can cause these fluids to be forcibly sprayed in all directions.
- Use motor oil is flammable. Keep away from flames, sparks, and other sources fo ignition.
- **DO NOT** exceed 10 PSI (0.7 MPa) supply pressure when emptying used oil from this drain.
- **DO NOT** exceed 120 PSI (8.2 MPa) supply pressure when generating the vacuum.

U.S. Environmental Regulations

- Certain automotive fluids are considered to be compatible for recycling used oil per the US Environmental Agency (EPA). Other types of fluids my not be mixed with used motor oil and must be handled as separately. See definitions below:

Used Oil is:

- Synthetic Oil
- Engine Oil
- Transmission Oil
- Brake Fluid
- Hydraulic Oils Cutting / Metal-working Oils

NOT Used Oil:

- Antifreeze
- Gasoline
- Kerosene
- Petroleum distillates and Solvents
- Vegetable or Animal Oil

- Tank should be in good condition with no visible leaks. Repair leaks and clean up spills and properly dispose of waste material.
- Close all valves when the oil drain is not being filled or emptied.

Product Specifications by Model:

Prodcut Specification	JDI-6EV	JDI-20EV
Tank Capacity	6.5 gallons (24.6 liters)	
Overall Dimensions (H x W x D)	35" x 16" 15"	38" x 19" x 21"
Metric Units (cm)	89 x 41 x 38	97 x 48 x 53
Weight (Dry)	32 lb (14.5 kg)	50 lb (22.7 kg)
Air Supply Pressure (Evacuate Drain)	100-120 PSI (6.9 - 8.2 MPa) Max.	
Air Supply Pressure (Vacuum Mode)	10 PSI (0.7 MPa) Max.	

Assembly Instructions for JDI-6EV

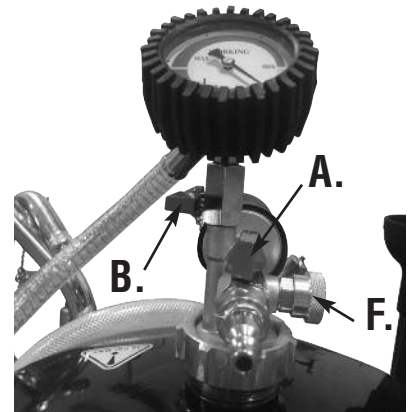
Tools required: 4mm hex wrench

1. Place flexible probes and metal probes in rings on side of tank
2. Secure handle to tank using 4 mm hex wrench
3. Screw on pressure gauge assembly (3/4" diameter hose attached) and hand tighten
4. Connect 1" diameter discharge hose

Assembly Instructions for JDI-20EV

Tools required: 3/4" wrench, 1/2" wrench & Phillips head screwdriver

1. Assemble front casters, washers, lock washers and cap nuts using 3/4" wrench
2. Assemble rear wheels, washers and screws using 1/2" wrench
3. Place flexible probes and metal probes in rings on side of tank
4. Secure handle to tank using Phillip's head screwdriver
5. Screw on pressure gauge assembly (with 3/4" diameter hose) and hand tighten

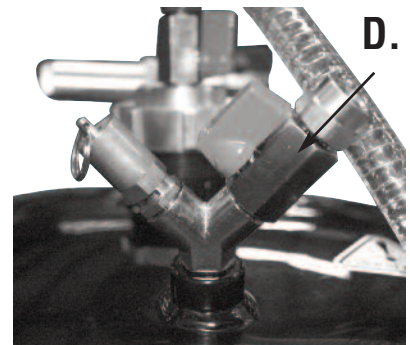
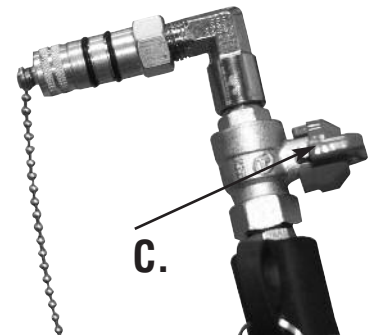


Generating the Vacuum

1. Close all ball valves as shown including:

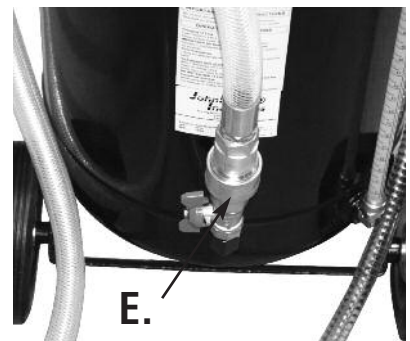
- A. Air shut off valve (A)
- B. Below venturi (B) to tank
- C. Probe coupler connection (C)
- D. Air into tank (with safety valve), used to empty tank (D)
- E. Discharge hose (E) at base of tank

2. Open the handwheel (F) by turning it counter clockwise.
3. Connect air supply to the venturi port. (Quick connect fitting not included) **Supply air pressure should be between 100 and 120 psi to achieve optimum vacuum.**
4. Open air supply and venturi valves (A) & (B) to generate the vacuum inside the tank. Monitor the vacuum gauge and turn off the air when the gauge indicates that it is in the green zone, close the ball valves, and disconnect the air supply. The tank is ready to be used to extract oil.



Extracting Oil from Vehicle / Gear Case

1. Select the appropriate size probe and insert into the engine oil dip stick tube or gear case port. Remove protective cap and connect to the probe connector.
2. Open the probe coupler ball valve (C) to begin the extraction of oil from the vehicle / gear case.
3. Close valve (C) and remove probe.



Emptying the Drain

1. Place hook end of discharge hose in the used oil collection tank.
2. Close all ball valves except the ball valve **(E)** below the drain hose connector.
3. Connect shop air to the tank connector (with safety valve)
Do not exceed 10 psi supply pressure
4. Open the tank ball valve **(D)** to evacuate the used oil from the drain and discharge into the bulk used oil collection tank.

Maintenance & Storage

1. Periodically check fittings for visible leaks. Service as necessary.
2. Close all ball valve when not in use. Please cap over probe connector.
3. Close the handwheel **(F)** by turning it clockwise.

Replacement Parts:

Item	Description	Qty	Model JDI-6EV	Model JDI-20EV
1	Vacuum Gauge	1	6EV-1	6EV-1
2	Venturi Vacuum Generator	1	6EV-2	6EV-2
3	Suction Hose	1	6EV-3	6EV-3
4	Sight Glass	1	6EV-4	20DCE-8
5	Probe Tube	1	6EV-6	6EV-6
6	Probe Link	1	6EV-38	6EV-38
7	Evacuation Hose	1	25HDC-1	25HDC-1
8	Casters	2	N/A	20DCE-3
9	Fixed Wheel	2	20DCE-7	20DCE-7

Replacement Probes:

Description	Part No.
Differential Probe Adapter	6EV-DP
Flexible Probe 3/16" x 27" (5 x 700 mm)	PR5-700
Flexible Probe 9/16" x 27" (6 x 700 mm)	PR6-700
Flexible Probe 3/16" x 41" (7 x 1000 mm)	PR7-1000
Flexible Probe 13/16" x 59" (8 x 1500 mm)	PR8-1500
Flexible Probe 11/16" x 27" (8 x 700 mm)	PR8-700
Metal Probe 3/16" x 27" (5 x 700 mm)	PRM6-700
Metal Probe 9/16"x 27" (6 x 700 mm)	PRM6-700
BMW Adapter	ADP-BMW
Mercedes Adapter	ADP-MCD
Volkswagen Adapter	ADP-VW



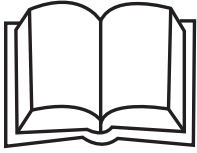
Bowl Assembly

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

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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.

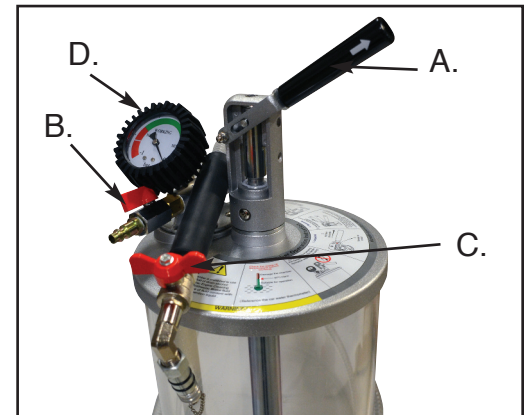


Fig. 1

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