



LIQUIDYNAMICS™

# MOBILE USED OIL DRAIN

## Instruction & Parts Manual

Model 24177



### **! WARNING**

These oil drains are not for use with flammable, explosive or corrosive products such as gasoline, diesel fuel or chemicals.

This manual contains important warnings and information. READ AND KEEP FOR REFERENCE.

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# **WARNING**

This symbol indicates a potentially hazardous situation which, if not avoided, may result in death or serious injury.

### Introduction:

The model 24177 Used Oil Drain will provide years of reliable operation. It is designed to collect used oil, transmission fluid and anti-freeze in its large 21 gallon reservoir and allow easy transfer of these fluids by connecting the included dry break quick connection to a double diaphragm pump.

## **WARNING**

Do not use this drain with flammable, explosive or corrosive products such as Gasoline, Diesel Fuel or Chemicals. Do not do any welding on the reservoir. Do not expose the reservoir to any source of heat.

## **WARNING**

While draining high temperature oils, keep hands and face protected. Only use the device for the purpose for which it has been designed. Do not modify any components of the equipment. Use only original spare parts.

### Assembly of Collection Bowl

Reference Fig. 1 and 3

1. Attach the collection bowl, item #3, to the swivel connection #6, and tighten the two Allen head screws.
2. Insert the filter grate #2, into the collection bowl, attach the extension funnel #1 to the collection bowl and secure with screws provided.

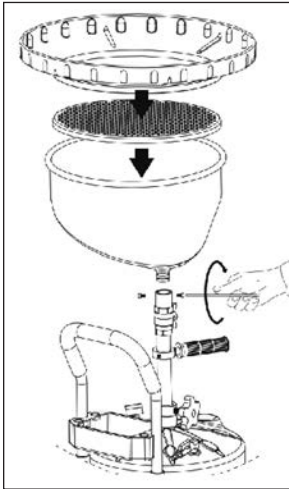


Figure 1

### Operating Instructions

Reference Fig. 3

#### 1. To Raise or Lower Drain Pan

Loosen hand knob, #17, and use the lift handle #13, to raise or lower drain pan to the desired height. Secure the drain pan height position by hand tightening hand knob #17.

## **CAUTION**

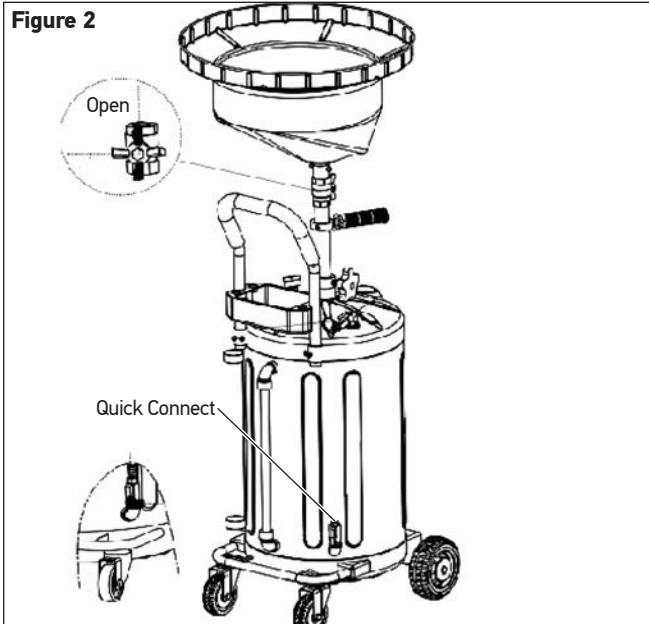
Never fill the container over the maximum level indicated by the sight gauge #35, located on the side of the reservoir.

# **CAUTION**

This symbol indicates a potentially hazardous situation which, if not avoided, may result in injury or damage to equipment.

#### 2. Use of Drain

Position oil drain underneath vehicle engine to be drained, raise or lower drain pan to desired position. Open drain valve #8 (to allow oil to drain into reservoir) and air vent valve #19 (allows air to escape as oil fills reservoir), proceed to drain engine oil.



#### 3. Emptying Reservoir

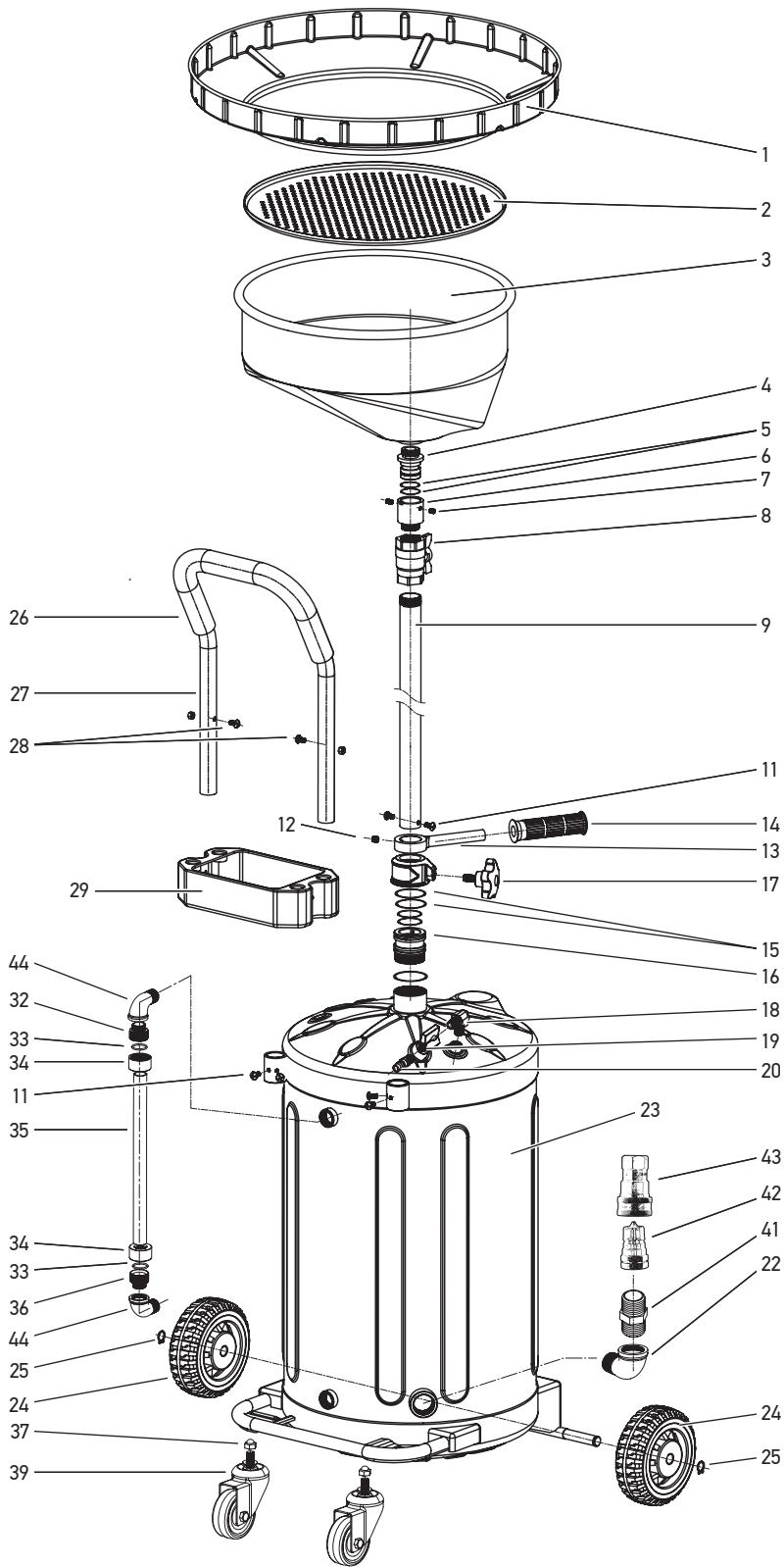
Reference Fig.2 and 3

- a. Open drain valve #8 and air vent valve #19 to complete oil drainage from the collection bowl and allow air into tank as used oil is removed by the external double diaphragm pump.
- b. Connect 3/4" dry break coupler #43 to dry break adapter #42 (coupler to be connected to double diaphragm pump suction hose)
- c. Turn on double diaphragm pump to evacuate oil drain. **NOTE:** it is best to operate the double diaphragm pump at low to medium flow rate to prevent pump cavitation.
- d. After fluid has been removed from the oil drain, stop pump operation by shutting off air supply to the pump and disconnect dry break coupler #43.

## **WARNING**

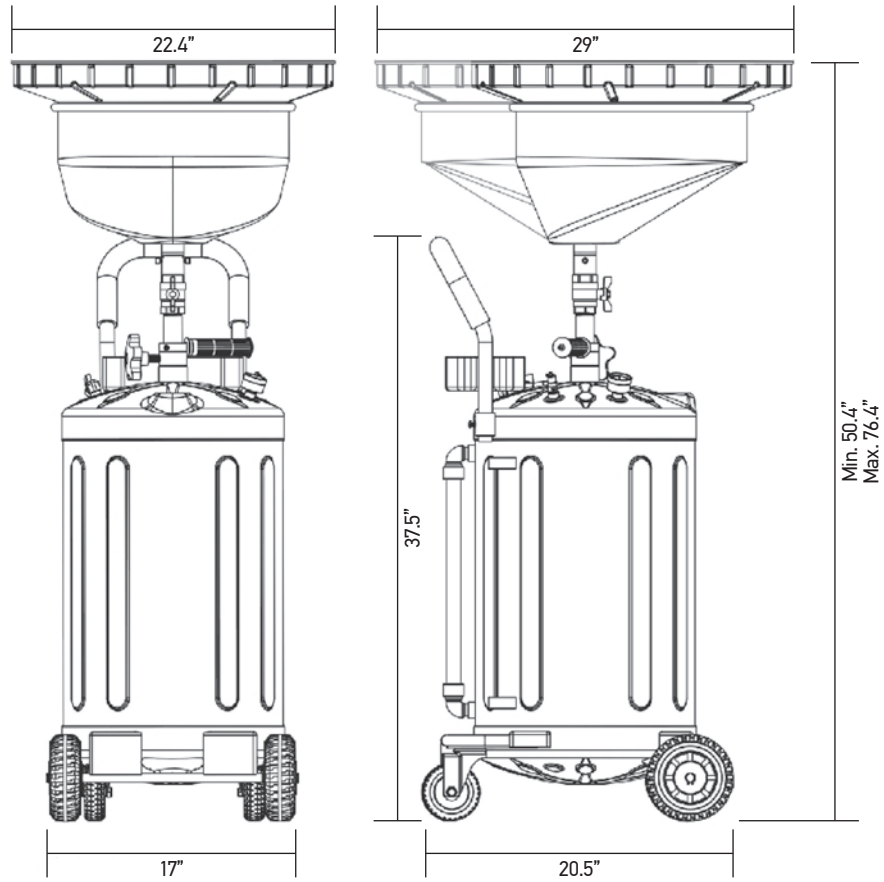
This tank is designed to be used with a double diaphragm pump for evacuation of used oil. Do not pressurize this tank with air to evacuate used oil. This tank is not equipped with a relief valve, therefore there is a danger of tank explosion!

## Exploded Parts Items (Tank Assembly):



ITEM	PART NO.	DESCRIPTION	QTY
1	S46100-01	Extension Funnel	1
2	S46100-02	Filter Grate	1
3	S46100-03	Collection Bowl	1
4	S46100-04	Swivel Connection	1
5	S46100-05	O-ring	2
6	S46100-06	Swivel Connection	1
7	S46100-07	Nut	2
8	S46100-08	Ball Valve	1
9	S46100-09	Riser Tube	1
11	S46100-11	Screw	6
12	S46100-12	Screw	1
13	S46100-13	Lift Handle Bar	1
14	S46100-14	Handle, Sleeve	1
15	S46100-15	O-Ring	2
16	S46100-16	Connector	1
17	S46100-17	Knob	1
18	S46100-18	Right Angle Adapter	1
19	S46100-19	Ball Valve	1
20	S46100-20	Quick Plug	1
22	S46100-22	Adapter	1
23	S46100-23	Tank	1
24	S46100-24	Wheel	2
25	S46100-25	Retainer, Wheel	2
26	S46100-26	Handle Sleeve	1
27	S46100-27	Handle	1
28	S46100-28	Screw	2
29	S46100-29	Tool Tray	1
32	S46100-32	Level Gauge Adapter	1
33	S46100-33	O-Ring	2
34	S46100-34	Nut, Level Gauge	2
35	S46100-35	Level Gauge	1
36	S46100-36	Level Gauge Adapter	1
37	S46100-37	Nut, Acorn	2
39	S46100-39	Caster	2
41	900397-HPS	Close Nipple, 3/4"	1
42	900295	Adapter, Dry Break, 3/4"	1
43	900294	Coupler, Dry Break, 3/4"	1
44	S46100-44	Elbow	2

Figure 3



<b>Specifications:</b>	
Model Number	24177
Tank Capacity	21 Gallons
Collection Bowl Capacity	20 Quarts
Collection Bowl Diameter	22"
Collection Bowl Effective Dia.	29"
Maximum Working Height	76.4"
Minimum Working Height	50.4"
Discharge Hose Length	6.5'
Weight (empty)	63 lb.
Shipping Weight	69 lb.



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