

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

# LIQUIDYNAMICS

## Pressurized Waste Oil Drain

### Model 24175 – Instruction & Parts Manual



#### **WARNING**

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

# WARNING

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

## Introduction:

The model 24175 Waste Oil Drain will provide years of reliable operation. It is designed to collect waste oil, transmission fluid and anti-freeze in its large 21 gallon reservoir and allow easy transfer of these fluids either by pressurizing the tank with approximately 10 PSI of shop air or by use of an optional 1/2" dry break disconnect.

# 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.

# CAUTION

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:

Insert the handle into the holding fixtures (fig. 1) provided on the reservoir



Fig. 1

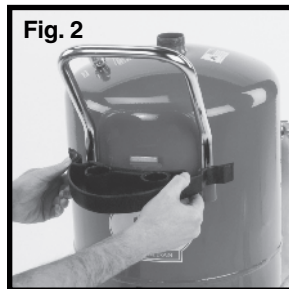


Fig. 2

and tighten the 3 mm Allen head screws. Place the tool tray 'A' on the bracket (fig. 2) provided by pushing the bracket firmly against the reservoir and then down onto the bracket. It may be necessary to use a mallet to gently tap the

tray into place.

Attach the riser tube assembly to the drain pan (fig. 3) and tighten snugly with a 1 1/2" open end wrench.



# CAUTION

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

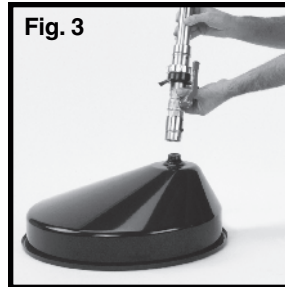


Fig. 3

Connect the assembled riser tube/catch basin assembly to the reservoir tank (fig. 5) by tightening ring nut 'B' with a spanner wrench or large slip joint pliers. Place the filter grate

'C' inside the drain pan as shown (fig. 4). Attach the hose 'D' with the hose clamp provided using a flat head screw driver (fig. 5).

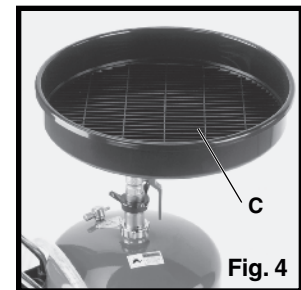


Fig. 4

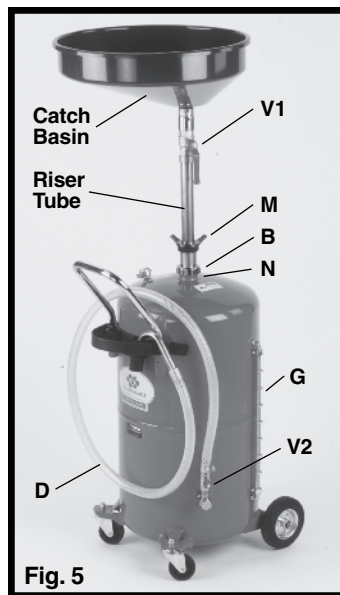


Fig. 5

## Operating Instruction:

Daily use: To raise and lower the catch basin, loosen compression wing nut 'M' (fig. 5) and hand tighten after reaching the desired height.

Make sure that the four air vents 'N' (fig. 5) are unobstructed by not raising the riser tube assembly to its full up and locked position. These vents allow air to escape while oil is

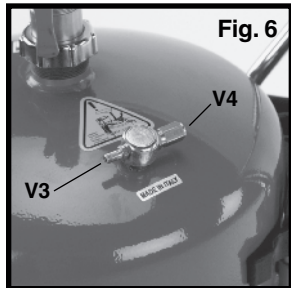
draining into the reservoir via the riser tube.

With drain valve 'V1' (fig. 5) closed, drained oil remains in the pan (pan capacity is 25 quarts). To drain oil from the pan to the tank, open drain valve 'V1' (fig. 5).

**Note:** Never fill the reservoir over the "STOP" level indicated by the sight gauge 'G' (fig. 5) on the side of the reservoir. Ensure that the discharge valve 'V2' (fig. 5) is closed to prevent inadvertent drainage of oil.

## Emptying the Reservoir:

- 1.) Raise the catch basin/riser tube assembly (fig. 5) to its full up and locked position. This seals off the four small air vents 'N' at the bottom of the riser tube (fig. 5) and allows the reservoir to be pressurized.
- 2.) Close valve 'V1' (fig. 5).
- 3.) Attach the end of the drain hose to a suitable waste oil container.



- 4.) Pressurize the reservoir to approximately 7-10 PSI via Schrader valve 'V3' (fig.6) and open discharge valve 'V2' (fig. 5). You may leave a regulated air supply (7-10 PSI) connected to the Schrader valve to allow

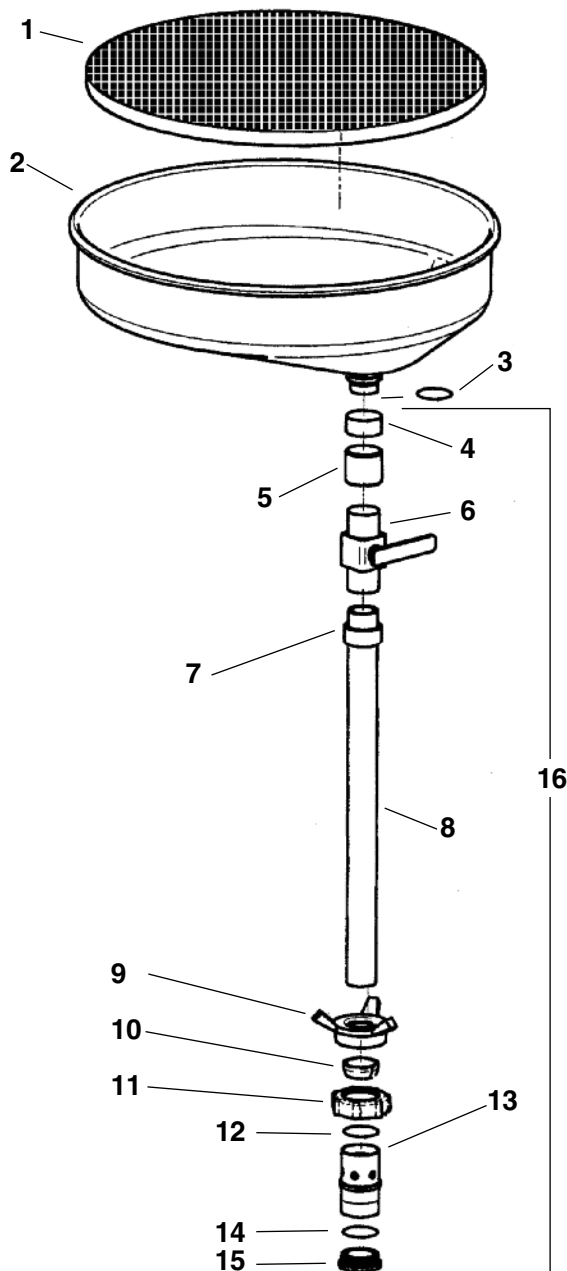
continuous evacuation of the reservoir OR you may charge the reservoir to 7-10 PSI as necessary (two or three times) to empty the reservoir completely.

**Note:** Safety relief valve 'V4' (fig. 6) will release air at approximately 15 PSI.

- 6.) After the fluid has been transferred from the reservoir, close valve 'V2' (fig. 5) and slightly lower (1-2 inches) the catch basin/riser tube (fig. 5) to once again allow air to escape while draining oil into the reservoir.

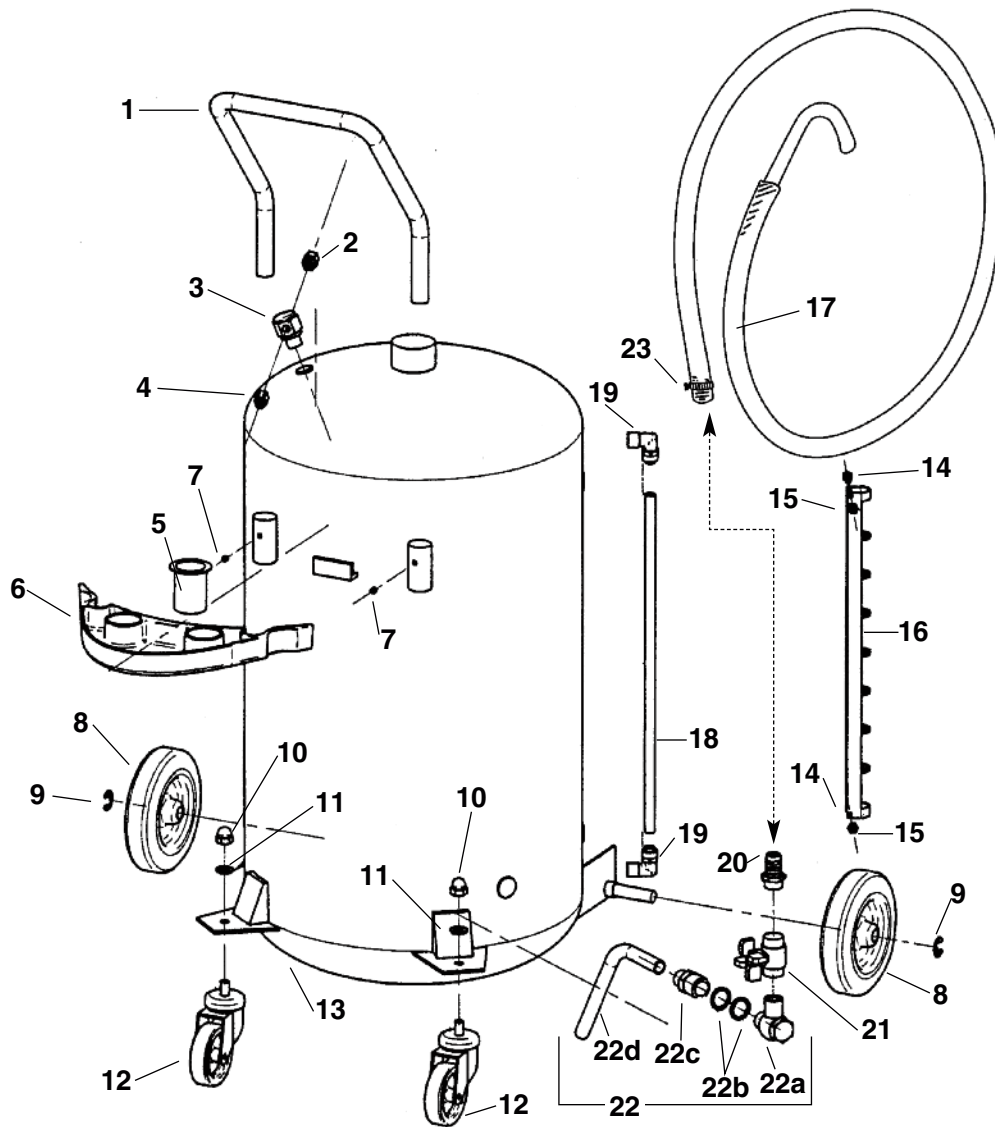
### Specifications:

Model Number:	24175
Tank Capacity:	21 Gallons
Collection Bowl Capacity:	25 Quarts
Collection Bowl Diameter:	21"
Collection Bowl Effective Dia.:	31"
Maximum Working Height:	64"
Minimum Working Height:	49"
Discharge Hose Length:	6½'
Weight (empty):	64 lb.
Shipping Weight:	75 lb.



### Exploded Parts Items (Drain Pan Assembly):

Assy	P/N	Item	Description
	P/N K4412	Riser Tube Seal Kit (7 pcs.)	
1	P/N S3207	Filter Grate	
2	P/N S3206	Drain Pan	
3	P/N S3201	'O' Ring, Drain Pan Seal (1 ea.)	
4	P/N S3215	Swivel Fitting	
5	P/N S3210	Bowl Swivel Retainer Fitting, Assy. (w/ 2 ea. seals)	
6	P/N S3209	Ball Valve, 1"	
7	P/N S3208	Cap Fitting, Top	
8	P/N S3221	Tube, Riser	
9	P/N S3216	Compression Wing Nut	
10	P/N S3218	Compression Fitting	
11	P/N S3217	Collar, Ring	
12	P/N S3204	'O' Ring, Union Nut	
13	P/N S3219	Tube, Vent, Assy. (w/ 2 ea. seals)	
14	P/N S3205	'O' Ring, Air Vent Seal (1 ea.)	
15	P/N S3222	Cap Fitting, Bottom	
16	P/N K4411	Riser Tube Assembly (incl. items 4-15)	



**Exploded Parts Items (Tank Assembly):**

Assy P/N S3226	Air Valve Assy. (items 2, 3 & 4)	12	P/N S3237	Caster, Swivel	
1	P/N S3223	Handle	13	P/N S3238	Tank, Reservoir, 21 gal.
2	P/N S3224	Schrader Valve Assy.	14	P/N S3239	Screw
3	P/N S3227	'T' Fitting	15	P/N S3240	Nut
4	P/N S3228	Safety Relief Valve	16	P/N S3241	Guard, Sight Tube, 21 gal.
5	P/N S3229	Drip Cup	17	P/N S3242	Hose, Assembly
6	P/N S3231	Tool Tray	18	P/N S3243	Sight Tube, 21 gal.
7	P/N S3232	Allen Screw, 3 mm (2 ea.)	19	P/N S3244	Elbow Fitting, Sight Tube
8	P/N S3233	Wheel, fixed	20	P/N S3245	Fitting, Hose
9	P/N S3234	Clip, Retainer	21	P/N S3246	Valve, Discharge
10	P/N S3235	Nut, Acorn	22	P/N S3247	Siphon Tube Assembly (items 22a-d)
11	P/N S3236	Washer	23	P/N S3263	Clamp, hose



**LIQUIDYNAMICS™**  
VALUE WORLDWIDE