



Needleguns



Walk-Behind Scarifiers



Impact Tools



Sanders



Specialty Tools



Industrial Vacuums



Dominator II

15-30-55 Gallon Electric Vacuums
ULPA Filtration and Wet/Dry Configurations



Dominator II Vacuum Configurations

Part	Tank	Filtration	Pickup
340.839105.15	15 Gal, Stainless Steel	5-stage, w/ULPA	Dry only
340.39105.15	15 Gal, Stainless Steel	2-stage, (optional)	Wet or Dry
340.839105.30	30 Gal, Steel, Painted	4-stage, w/ULPA	Dry only
340.39105.30	30 Gal, Steel, Painted	2-stage, (optional)	Wet or Dry
340.839105.55	55 Gal, Steel, Painted	4-stage, w/ULPA	Dry only
340.39105.55	55 Gal, Steel, Painted	2-stage, (optional)	Wet or Dry

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Contents

1.0	GENERAL INFORMATION	1
1.1 1.2 1.3 1.4 1.5 1.6	Introduction Technical Specifications Accessories Consumables Provisioning of Vacuum Consumables Critical Filtration and Vacuum Efficiency Filtration Stages and Maintenance Steps	
2.0	SAFETY	4
2.1 2.2 2.3 2.4 2.5	READ OPERATING INSTRUCTIONS	4 4 5
3.0	OPERATING INSTRUCTIONS	6
3. 3.2 3.2 3. 3.	.1.1 Inspection .1.2 Jobsite Setup	
4.0	MAINTENANCE	_
5.0	TROUBLESHOOTING	
6.0	SCHEMATICS	9
6.1 6.2 6.3 6.4 6.5	MAIN ASSEMBLY LID ASSEMBLY – ULPA CONFIGURATION LID ASSEMBLY – WET/DRY CONFIGURATION TANK ASSEMBLY – 15 GALLON TANK ASSEMBLY – 30 & 55 GALLON	
6.6 6.7	ADAPTER ASSEMBLYDOLLY ASSEMBLY	
6.8	BAG ASSEMBLY	



1.0 General Information

1.1 Introduction

This manual is furnished with each new DESCO Dominator II Vacuum. This provides the necessary operating and preventive maintenance instructions. Operators must read and understand this manual before operating or servicing this machine.

This machine was designed to give you excellent performance and efficiency. For best results and minimal cost, please follow the general guidelines below:

- Operate the machine with reasonable care.
- Follow the manufacturers suggested maintenance instructions as provided in this booklet.
- Use original Desco supplied parts.

1.2 Technical Specifications

Footure	Tank Size			
Feature	15 Gallon	30 Gallon	55 Gallon	
Power	1	15V, 15A, 50' cor	d	
Air Flow		115 cfm		
Water Lift		105"		
Weight (lbs)	51	90	104	
Dry Capacity (CU-FT)	.82	3.6	7.2	
Wet Capacity (Gallons)	12	27	47	

1.3 Accessories

Part	Description
300.082	Vacuum hose 1.5" x 10', replacement, complete
340.000001	Vacuum hose 1.5" x 25', replacement, complete
300.039	Vacuum hose 1.5" x 25', extension, coupler required
340.390014	Inlet coupler, 1.5", w/swivel cuff
300.066	Hose cuff, 1.5"
340.490024.1	Tool kit, plastic, 7 piece
340.490025.1	Tool kit, aluminum, 11 piece





1.4 Consumables

	Configurations			
Consumable Item	Critical Filtration 340.839105.15 (<i>15</i> gal) 340.839105.30 (<i>30</i> gal) 340.839105.55 (<i>55</i> gal)	Wet/Dry 340.39105.15 (<i>15</i> gal) 340.39105.30 (<i>30</i> gal) 340. 39105.55 (<i>55</i> gal)		
ULPA Filter	340.110029 Pictured w/ULPA filter on vacuum head	n/a Pictured w/wet-dry float-ball shut off.		
Pre-Filter Sleeve	340.110030PKG (6 pk)	n/a		
Cloth Bag	340.805058 (gray)	340.805015 (white) (Optional, dry only)		
Paper Filter Protector	340.805038PKG (12 pk)	340.805038PKG (12 pk) (Optional, dry only)		
Drum Liner	15 gal – n/a 30 gal – 340.805037 55 gal – 340.805046	15 gal - n/a 30 gal - 340.805037 55 gal - 340.805046 (Optional, dry only)		
Collection Bag	15 gal – 340.760598PKG (10 pk) 30 gal – n/a 55 gal – n/a	n/a		





1.5 Provisioning of Vacuum Consumables

Below are guidelines designed to give an idea of how many consumable items should be on hand to keep a vacuum system running efficiently. Actual consumable requirements vary widely due to the number of variables involved, including: tank size, debris volume, and particle size. As a result, there is no accurate way to predict consumable consumption. Therefore, the guidelines below should be used for initial provisioning. Once you have usage data, you can adjust to suit your actual needs.

Recommended Initial Provisioning

•		Vacuum Systems Provisioned				•				
Stage	Item	1 Vacuum		2 Vacuums		3 Vacuums		ns		
Sta	nem	Qty	Pkg	Order	Qty	Pkg	Order	Qty	Pkg	Order
•,		Rec	Qty	Pkgs	Rec	Qty	Pkgs	Rec	Qty	Pkgs
1	Collection Bag	20	10	2	30	10	3	40	10	4
2	Paper Filter Protector	10	10	1	20	10	2	30	10	3
3	Cloth Bag	2	1	2	3	1	3	4	1	4
4	Pre-Filter Sleeve	2	6	1	3	6	1	4	6	1
5	ULPA Filter	1	1	1	2	1	2	3	1	3

1.6 Critical Filtration and Vacuum Efficiency

- Efficiency is a balance of: 1) maintaining effective particle removal as measured by the ULPA specification while, 2) maintaining rated vacuum air flow as measured in cubic feet per minute (CFM).
- Maintaining air flow volume is critical to maintain the level of cleanliness required by the process.
- Air flow declines as particulate embeds in the filter fabric. As a result, efficiency decreases as filter use increases.
- · Efficiency is maintained by checking and servicing filters often before vacuum air flow declines significantly.
- Multi-stage filtration is sacrificial. Meaning each filtration stage sacrifices itself to save the next stage. Changing early
 filtration stages often (such as collection bag & filter protector) will greatly extend the life of the later filtration stages. Key to
 understand is that besides being an efficiency measure, this is also an economy measure as the early stages of filtration
 are far less expensive than the ULPA filter.

1.7 Filtration Stages and Maintenance Steps

- 1) Collection Bag A disposable container where dust particles are accumulated for disposal.
 - Particle containment efficiency: 90% at 5 microns, Typical Life: Up to 12.5 hours
 - Check space available every 4 hours of operation. More often for heavy volume pickup.
 - Change when ¾ full. Change more frequently when collecting fine dust particles, such as concrete dust.
 - Always change. Never empty and reuse.
 - Always check stages 2-5 when changing collection bag.
- Paper Filter Protector A disposable filter designed to catch particles that pass through the collection bag (Stage 1) and to protect the cloth bag (Stage 3).
 - Particle containment efficiency: 97% at 5 microns, Typical Life: Up to 25 hours
 - Change when compromised: punctured, visibly contaminated or air flow is restricted.
 - If not visibly compromised, change with every second collection bag.
 - Always change. Never clean and reuse.
 - When replaced, stage 1 should also be replaced.
- Cloth Bag A reusable filter designed to catch particles that pass through the Paper Filter Protector (Stage 2) and to protect the Pre-Filter Sleeve (Stage 4).
 - Particle containment efficiency: 95% at 3 microns, Typical Life: Up to 125 hours
 - Always change when vacuum has been used with HAZMAT. Never clean and reuse.
 - Reusable only when you are certain the vacuum has not been used for HAZMAT. Clean by vacuuming exterior of the bag with a second vacuum.
 - Change when compromised: punctured, visibly contaminated or air flow is restricted.
 - When replaced, stages 1 and 2 should also be replaced.
- Pre-Filter Sleeve A reusable filter designed to catch particles that pass through the Cloth Bag (Stage 3) and to protect the ULPA filter (Stage 5).
 - Particle containment efficiency: 99% at 1-3 microns, Typical Life: Up to 250 hours
 - Always change when vacuum has been used with HAZMAT. Never clean and reuse.
 - Reusable only when you are certain the vacuum has not been used for HAZMAT. Clean by vacuuming
 exterior of the sleeve with a second vacuum.
 - Change when compromised: punctured, visibly contaminated or air flow is restricted.
 - When replaced, stages 1, 2 and 3 should also be replaced.
- 5) **ULPA Filter** A disposable filter designed to catch particles that pass through the Pre-filter Sleeve (Stage 4).
 - Particle containment efficiency: 99.999% at 0.12 microns, Typical Life: Up to 1,000 hours
 - Change when compromised: punctured, visibly contaminated or air flow is restricted.
 - Always change. Never clean and reuse.
 - When replaced, stages 1, 2, 3 and 4 should also be replaced.







2.0 Safety



2.1 Read Operating Instructions

Always become familiar with all the instructions and warnings before operating any machine or power tool.

2.2 Hazardous Material and Safety

Safety is your primary concern when working with or near hazardous material (HAZMAT). This applies to yourself, your co-workers and the environment in which you are working. In this regard, please observe the following:

- **Your Responsibility** It is your responsibility to understand the risks of the substances being cleaned and other job site hazards. Then put in place safety precautions to address the hazards that are situation appropriate.
- **Situation Appropriate** Safety practices for HAZMAT handling are substance dependent and safety precautions must be situation appropriate. For risks and mitigating precautions, consult a qualified safety professional.
- Personal Protection Equipment Safety precautions may require use of personal protection equipment. This may include: A. Eye protection (goggles), B. Respiratory protection (mask or respirator), C. Skin protection (gloves and/or other protective clothing), and/or D. Other safety precautions. For risks and mitigating precautions, always consult a qualified safety professional.
- **Safety Professional** For substance and situation appropriate safety handling guidelines, always consult an appropriate safety professional, such as an Industrial Hygienist or Radiological Protection professional.
- Regulatory Compliance Procedures for safe handling and disposal of HAZMAT should conform to EPA and local regulations.
- **Scope of Manual** The scope of this manual is general safety, use and maintenance required to safely operate the vacuum unit. Health and safety risks directly related to the specific HAZMAT being handled is not covered in this manual.

2.3 Static Electricity Warning

Air operated equipment can generate static electricity during use. Static dissipating arching can be generated and occur if equipment and accessories are not grounded. Risk of explosion is possible if operated near explosive materials or vapors. Do not operate this equipment near flammable materials such as solvents, thinners, fuels or grain dust.





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2.4 WARNING – Reduce Risk of fire, Electric Shock, or Injury

- Do not leave appliance when plugged in. Unplug from outlet when not in use and before servicing.
- To avoid electrical shock, do not expose to rain, store indoors.

2.5 WARNING – Reduce Risk of Personal Injury

- Use only as described in this manual. Use only manufacturer's recommended attachments.
- Do not use with damaged cord or plug. If appliance is not working as it should, has been dropped, damaged, left outdoors, or dropped into water, return it to a service center.
- Do not pull or carry by cord, use cord as a handle, close a door on cord, or pull cord around sharp edges or corners. Do not run appliance over cord. Keep cord away from heated surfaces.
- Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- Do not handle plug or appliance with wet hands.
- Do not put any object into openings. Do not use with any opening blocked; keep free of dust, lint, hair, and anything that may reduce air flow.
- Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.
- Do not pick up anything that is burning or smoking, such as cigarettes, matches, or hot ashes.
- Do not use without dustbag and/or filters in place.
- Turn off all controls before unplugging.
- Use extra care when cleaning on stairs.
- Do not use to pick up flammable or combustible liquids such as gasoline or use in areas where they may be present.
- Connect to a properly grounded outlet only. See grounding instructions.

SAVE THESE INSTRUCTIONS





3.0 Operating Instructions

3.1 Pre-Operation

3.1.1 Inspection

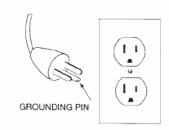
- Physical Inspection Carefully inspect the vacuum head and tank for physical damage that would affect safety or performance. For example, inspect: 1) tank for punctures, 2) head/tank gasket for proper seal, 3) tank latches are securely holding vacuum head on tank. Correct or repair as required.
- Filtration Consumables Inspect filtration components to insure they are properly installed and have remaining life that is sufficient to complete the task at hand. See section 1.7 for inspection and maintenance guidelines.

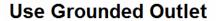
3.1.2 Jobsite Setup

- Locate Vacuum Position vacuum unit on stable ground within hose reach of work site. Secure vacuum to stationary object if necessary to insure safety.
- Install Suction Hose Attach clasp end of hose to vacuum tank and cuff end of hose to vacuum tool.
- Attach power cord This machine is designed to operate on a standard 15 amp. 115 volt, 60 hz, AC circuit. Voltages below 105 volts AC or above 125 volts AC could cause serious damage to the motor.

3.1.3 Grounding Instructions

This appliance must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances. No adapter should be used with this appliance.







Adapter NOT Recommended

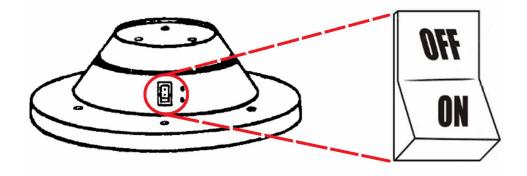




3.2 Operation

3.2.1 Power On/Off

Power to the vacuum is controlled with a rocker type switch. Select the *ON* or *OFF* status by pressing the corresponding part of the switch as illustrated below.



3.2.2 Power Sequence

Note: This paragraph applies only when the vacuum is used in conjunction with a tool with a dust collection system.

The *power on/off sequence* is **critical** to effective dust containment. The vacuum must be turn on before the tool started and the vacuum must remain on until the tool has come to a complete stop.

Sequence	First Action	Second Action
On	Vacuum On	Tool On
	ON	
Off	Tool Off	Vacuum Off
		OFF.

3.2.3 Periodically Check Airflow

Vacuum airflow is vital to maintaining performance and efficiency. Vacuum efficiency is a balance of: 1) maintaining effective particle removal as measured by the ULPA specification while, 2) maintaining rated vacuum air flow as measured in cubic feet per minute (CFM).

The key factor affecting airflow is filter maintenance. Dirty filters reduce air flow. See paragraph 1.7 for filtration stages and maintenance steps.





4.0 Maintenance

- No user serviceable components are employed in the vacuum lid power head.
- No lubrication of the motor is required.
- All service and repair should be performed by qualified vacuum service representative or technician.

5.0 Troubleshooting

Malfunction	Probable Cause	Solution
Loss of vacuum air flow	Filter(s) clogged	Check & replace filters as needed. See paragraph 1.7 for further information.
	Other malfunction	Contact your Desco representative for evaluation and repair assistance.





6.0 Schematics

6.1 Main Assembly

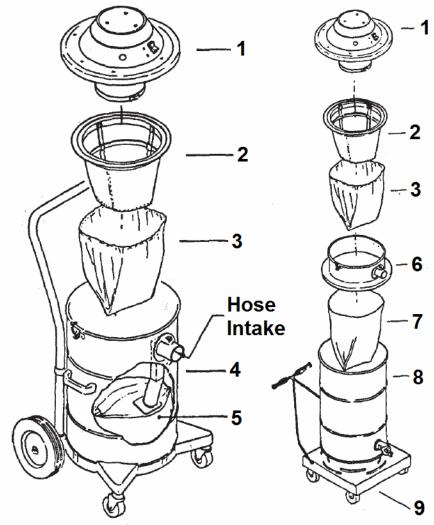


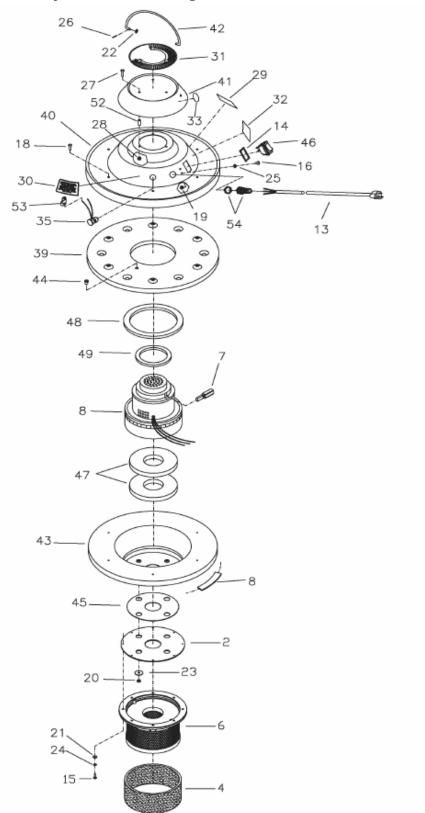
Figure 1 Figure 2

Ref	Part	Description
1	340.801105	(105) Lid Assy Comp
2	340.805058	Cloth Bag Assy Comp
3	340.805038	Pkg Disposable Fliter Protector Pkg of 12
4	340.750221-01	Tank Assy Comp 15 Gallon Stainless Steel
5	340.760598	Pkg Disposable Paper Bag
6	340.C80601-70	Adapter Comp 30 Gallon
	340.C80601-80	Adapter Comp 55 Gallon
7	340.805037	Pkg Drum Liner 30 Gallon
	340.805046	Pkg Drum Liner 55 Gallon
8	340.C90007-80	30 Gallon Drum
	340.900015	55 Gallon Drum
9	340.900048	Dolly Cart Comp 30/55 Gallon





6.2 Lid Assembly – ULPA Configuration







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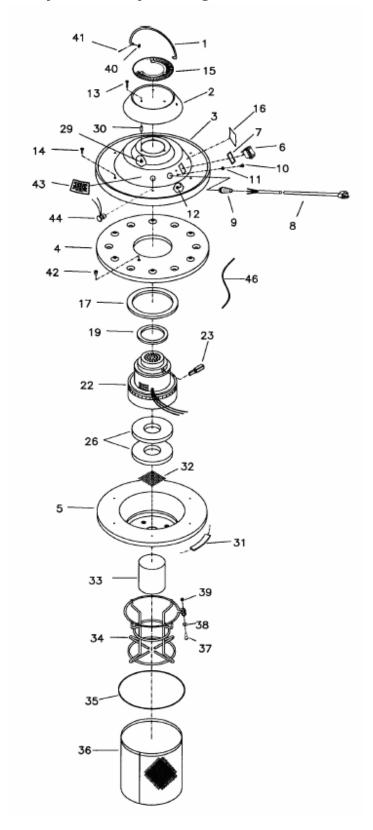
6.2 Lid Assembly – ULPA Configuration – Cont'd.

Ref	Part	Description
2	340.110012	MOUNTING PLATE (110039)
4	340.110030PKG	PREFILTER SLEEVE, PKG OF 6 (110039)
6	340.110039	FILTER-ULPA, X839 SERIES
7	340.255008	BRUSH, CARBON - 105/130
8	340.255039	VACUUM MOTOR, BYPASS 115V-105
9	340.290030	LID GASKET DIECUT 15G 290
13	340.381020	CORD-16GA-3 50FT MED GREY
14	340.450088	SPACER-SWITCH, FOAM
15	340.710329	SCR-MC 8-32 X .50 ZINC
16	340.710355	SCR-MC RD HD 10-32 X .50 ZINC
18	340.711126	SCR-ST-B 10 X .75
19	340.711310	NUT-HEX 10-32 ST PL
20	340.711373	NUT-NYLOC 1/4-20
21	340.711502	WSR-FLT #8
22	340.711505	WSR-FLT 1/4
23	340.711519	WSR-FLT .25 X 1.01 X .06
24	340.711552	WSR-INT LOCK #8
26	340.711803	PIN-COTTER .06 X .75
27	340.712532	SCR-MC 10-24 X 1.00 SS
28	340.712908	NUT-FLANGED WIZZ 10-24
29	340.715029	DECAL-NAME PLATE SERIAL
30 31	340.715069	DECAL-FILTERS CHECK
32	340.715103	DECAL-DESCO DECAL-WARNING PV DRY
33	340.715115 340.715501	DECAL-MADE IN USA
34	340.740014	QC-14-16G 1/4 FULL INS FEMALE
35	340.740088	SWITCH-VAC LIGHT SENSOR
39	340.760896PLT	SHROUD, MOTOR PLATED
40	340.760897PLT	MOTOR COVER PLATED P/V
41	340.760898PLT	CAP MOTOR P/V PLATED
42	340.760899	HANDLE BAIL PIC VAC
43	340.760903	MOTOR LID ASY PV HEPA
44	340.760904	BUSHING-SNUB .375 X .469 X .43
45	340.760905	GASKET, FILTER MOUNTING PLATE
46	340.809754	SWITCH-ROCKER
47	340.828995	GASKET-NEOP 2.5X6X.62
48	340.831478	GASKET-NEOP 6 X 7.5 X .37
49	340.831484	GASKET 3.5 X 4.5 X .37
51	340.831626	GASKET 4 X 7.37 X .250
52	340.831652	SPACER264 X .344 X .750 ALM
53	340.832070	CONNECTOR
54	340.833237	STRAIN RELIEF W/ NUT





6.3 Lid Assembly – Wet/Dry Configuration







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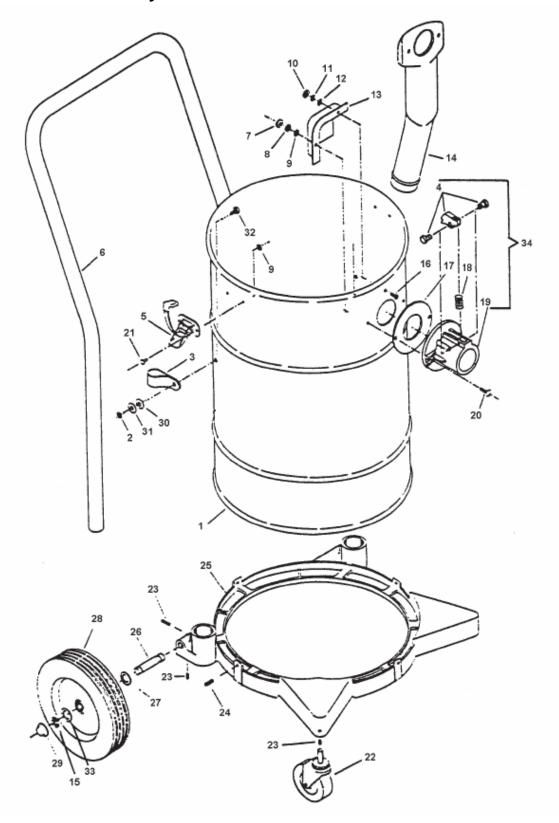
6.3 Lid Assembly – Wet/Dry Configuration – Cont'd.

Ref	Part	Description
1	340.760899	Handle Bail
2	340.760898PLT	Cap, Motor
3	340.760897PLT	Cover, Motor
4	340.760896	Shroud, Motor
5	340.760895PLT	Pan, Motor
6 7	340.809754	Switch, Rocker
	340.450088	Spacer, Switch
8	340.381020	Gray Cord Ste 16-3 50'
9	340.833237	Strain Relief
10	340.710355	SCR-MC 10-32 x .50 STPL
11	340.711553	WSR-Internal Lock #10
12	340.711310	Nut-Hex 10-32 x .50 STPL
13	340.712823	SCR-THMS 10-24 x 1.00 STPL
14	340.711126	SCR-ST-B 10 x .75 STPL
15	340.715105	Decal, Desco
16	340.715086	Decal, Warning
17	340.831478	Gasket, Neop 6 x 7.5 x .37
19	340.831484	Gasket, 3.5 x 4.5 x .31
22	340.255039	Vac Motor, Bypass 115V-105
23	340.255008	Brush, Carbon-105
25	340.711124	SCR-ST-B 10 x .37
26	340.828995	Gasket, Neop 2.5 x 6 x .62
29	340.712908	Nut-Flanged Wizz 10-24
30	340.831652	Spacer
31	340.290030	Lid Gasket
32	340.807051	Screen Filter SS 85/105
33	340.830987	Float
34 35	340.833454	Float Cage
36	340.760260 340.760901	Spring, Bag Retainer Lint Filter
37	340.712569	SCR-MC1/4-20 x 1.50 SS
38	340.711506	WSR-Flat 5/16 ST PL
39	340.7112667	Nut-Hex 1/4-20 SS Nyloc
40	340.711505	WSR-Flat 1/4
41	340.711803	Cotter Pin
42	340.760904	Snub Bushing
43	340.715069	Decal, Check Filters
44	340.740088	Vac Light
45	340.740116	Ground Wire
46	340.760212	Vac Sensor Tube
-1 0	070.700212	Vac Ochoci Tube





6.4 Tank Assembly – 15 Gallon







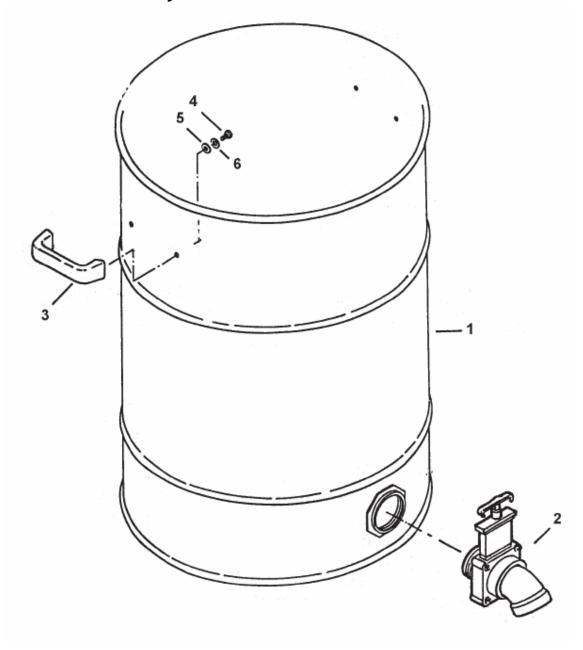
6.4 Tank Assembly – 15 Gallon – Cont'd.

Ref	Part	Description
1	340.900003POL	Tank, Polished 15 Gal SS
2	340.711352	Nut-Acorn 1/4-20
3	340.900038	Clamp, Handle
4	340.390001	Trigger with Pins
5	340.761054	Latch
6	340.900037PLT	Handle, Plated
7	340.711310	Nut-Hex 10-32 ST PL
8	340.711543	Washer-Helical #10
9	340.711503	Washer-Flat #10
10	340.711304	Nut-Hex 8-32
11	340.711542	Washer-Helical #8
12	340.711502	Washer-Flat #8
13	340.900035	Deflector, Intake
14	340.390016	Molded Downtube, New Style
15	340.711713	Retaining Ring-E Ext
16	340.710530	SCR-MC 8-32 x .5 BR
17	340.390087	Gasket
18	340.390002	Spring
19	340.390101	Intake Aluminum
20	340.710154	SCR-MC 10-32 x .562 SS
21	340.711915	Rivet-Tube .19X.28
22	340.900033	Caster, Swivel
23	340.711005	SCR-SK 1/4-20 x .31
24	340.711006	SCR-SK 1/4-20 x .62
25	340.760984PTD	Bracket, Wheel
26	340.900066	Axle
27	340.711524	Washer-Wave .52 x .87 x .01
28	340.900040	Wheel
29	340.130032	Cap, Retainer
30	340.711591	Washer-Rubber
31	340.711505	Washer-Flat
32	340.711202	BIt-HH 1/4-20 X .50
33	340.711594	Washer-Flat .88 x .03 NI
34	340.390110	Intake Assy Aluminum





6.5 Tank Assembly – 30 & 55 Gallon

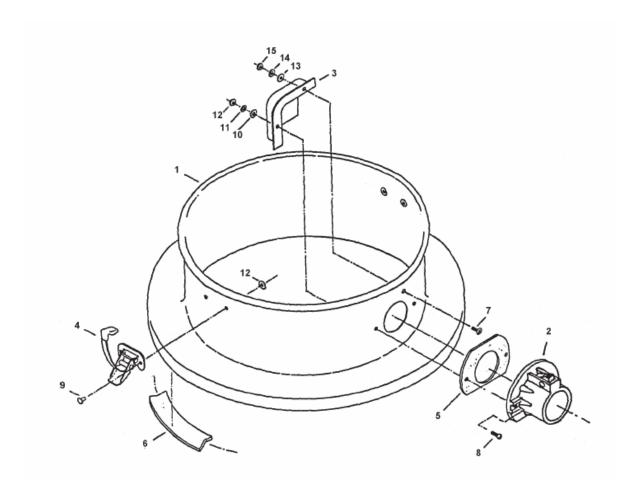


Ref	Part	Description
1	340.900078PTD	Tank 30 Gal. PTD Less Handles
1	340.900015PTD	Tank 55 Gal. PTD Less Handles
2	340.900047	Dump Valve
3	340.900031POL	Handle, Tank Polished
4	340.711203	BLT, HH 1/4-20 x .62
5	340.711591	Washer, Rubber
6	340.711505	WSR, Flat 1/4





6.6 Adapter Assembly

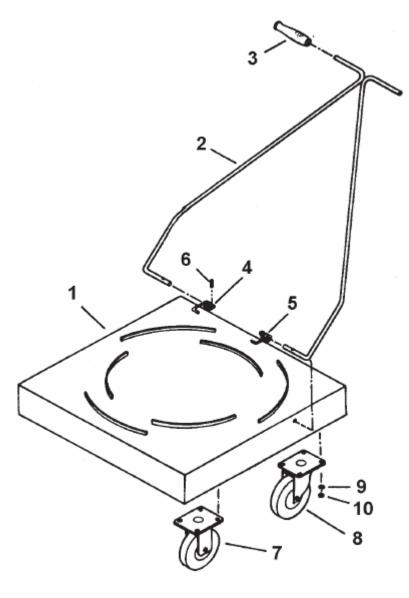


Ref	Part	Description
1	340.806016PTD	55 Gal. Adapter Painted
	340.806015PTD	30 Gal. Adapter Painted
2	340.390110	Intake Assy Aluminum
3	340.900035	Deflector, Intake
4	340.761054	Latch
5	340.390087	Gasket Diecut Poron Intake
6	340.806006	Gasket, Raw
7	340.710530	SCR-MC 8-32 x .50 BR
8	340.712824	SCR-THMS 10-24 x .75 STPL
9	340.711915	Rivet-Tube .19 x .28 NI PL
10	340.711503	WSR-Flat #10
11	340.711543	WSR-Helical #10
12	340.712638	Nut Hex 10/24 SS Nyloc
13	340.711502	WSR-Flat #8
14	340.711542	WSR-Helical #8
15	340.711304	Nut-Hex 8-32 STPL





6.7 Dolly Assembly

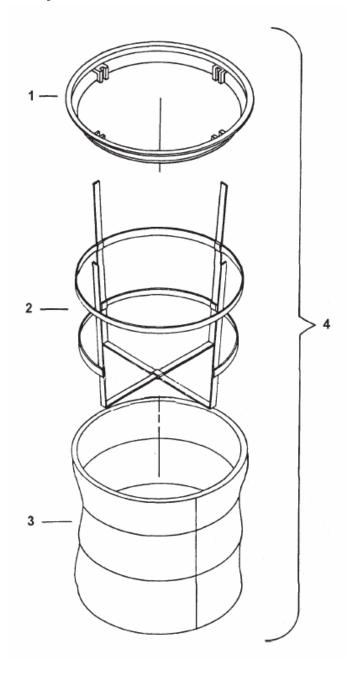


Ref	Part	Description
1	340.750045	Weldment, dolly 30/55
2	340.900051	Weldment, handle
3	340.900052	Grip, handle
4	340.900080	Spring, torsion RH
5	340.900081	Spring LH
6	340.711642	Rollpin
7	340.761050	Caster, rigid 5"
8	340.761049	Caster, swivel 5"
9	340.711545	WSR, helical Spr Loc 5/16
10	340.711379	Nut-Flanged Wizz 5/16-18





6.8 Bag Assembly



Ref	Part	Description
1	340.760131	Molded bag ring
2	340.750097	Bag frame
3	340.805054	Cloth bag only
4	340.805058	Bag assy. complete

