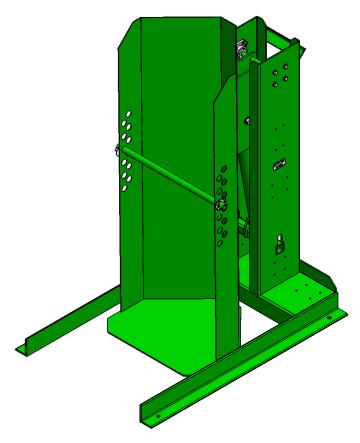


LOW LEVEL HYDRAULIC DRUM DUMPER



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Notice to Purchaser

All statements, technical information, and recommendations related to Hercules products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must determine if it is suitable for your intended application or situation. You assume all risks and liability associated with such use or implementation.

Product Testing

We perform vigorous in-house safety and durability testing to ensure that the performance of our products meets the demands of the workplace. We also expect the same from manufactures who supply components for our products. We do this to ensure that Hercules is a name that our customers trust and associate with quality.

Publication Revision Notice

Following is a history of changes to this publication, including the current revision.

Previous Revisions: none

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Safety

Read and understand all safety information and become familiar with all safety symbols contained in this section before moving, operating or performing maintenance on this equipment.

Safety Overview

The following general safety precautions must be observed during all phases of operation, service, and repair of this equipment. Failure to comply with these precautions or with specific safety messages elsewhere in this manual may impair the protection provided by the equipment. Such noncompliance would also violate safety standards of design, manufacture, and intended use of the instrument.

- Observe all safety signs posted in your facility.
- Observe warnings, cautions, handling information, storage requirements and other information on all container labels.
- Wear safety glasses with side shields.
- Wear the proper protective clothing, gloves and other protective equipment before handling any chemicals.
- Group the containers for the move by Hazard Class. Do not move acids with toxics, or oxidizers.
- Use maximum care and good judgment in preventing accidents and injuries and seeking first aid.
- Report unsafe conditions, equipment, practices, and on-job injuries.
- Understand your supervisor's instructions. Ask questions if you do not know how to do the job safely.
- Do not engage in tasks which you believe might be unsafe without consulting your supervisor.
- Clean up the work area and equipment upon job completion.
- Before you start work on any electrical system or circuit, check all
 power sources to ensure that the system or circuit is de-energized.
- Know the hazardous or potentially hazardous substances you work with or are present in your work area. Review Material Safety Data Sheets (MSDS) on these substances, or contact your supervisor.

Safety Message Conventions

There are three types of safety notices that may be contained in this manual: **Danger**, **Warning** and **Caution** notices. These notices precede the procedural step or portion of text that presents the safety hazard.

A DANGER

 DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations.

A WARNING

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

A CAUTION

 CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices

Material Safety Data Sheets (MSDS)

A Material Safety Data Sheet (MSDS) provides information on the safe use, handling and potential hazards of a product. This information assists with the proper response in the event of an emergency.

Hercules maintains material safety data sheets (MSDSs) on all our products. You are urged to obtain copies of the relevant MSDSs before using our products to protect yourself and others against any known health or safety hazards described in these MSDSs. Hercules strives to make safety a top priority. Do not hesitate to contact us to discuss any safety aspects of our products.

The relevant MSDS codes are listed below.

- www.conocophillips.com
 Super ATF Transmission Oil, MSDS Code 778846
 Super-Sta Grease, MSDS Code 775440
- www.batteriesplus.com
 Sealed Lead Acid Battery
 SLA for the English version
 SLA Sp for the Spanish version
- Paint
 Contact Hercules Customer Service at 1-800-525-4515 or on the Web at www.HerculesEquip.com

Additional Safety Information

As with any mechanical device, care must be taken during the installation, operation, and maintenance of the device in order to realize the maximum benefit from its ownership.

Note: All personnel involved in the use and maintenance of this device should be thoroughly familiar with the information contained in this manual. Furthermore, it is recommended that all personnel be given adequate instruction and a sufficient period of training in its actual use to insure safety of personnel and proper care of the equipment. It is suggested that the units be initially operated empty until becoming familiar with how the unit handles.

Product Description

The **Low Level Drum Dumper** is a heavy duty, all welded steel dumper to accommodate drums up to 24" in diameter. Models available in load capacities of either 1000 lbs or 1500 lbs.

Specifications

The Low Level Drum Dumper specifications are shown in Table 1.

Table 1. Specifications

Dimensions	36 in. x 52 in.
Weight	Model dependant
Load Capacity	Model dependant 1000 lbs or 1500 lbs

Features

The Low Level Drum Dumper offers many advanced features.

- Available in 1000 lb or 1500 lbs capacities
- Available in dump heights of 36", 48" and 60"
- 45° dump angle
- NEMA12 1/60/110V power unit (PU/GD)
- 1 HP motor / 1 GPM hydraulic pump
- Rotary switch control to power chute up
- Gravity down system with flow control to safely lower chute
- Accommodates containers up to 24" in diameter
- Adjustable hold down bar for various drum heights
- Carbon steel construction with enamel finish

Receiving and Inspecting

When unpacking this equipment, inspect the equipment for damage or mishandling. If damage is noted, file a damage claim with the carrier within 24 hours and call Hercules at 1-800-525-4515. Do not attempt to use the equipment.

Compare the contents of the shipment with the bill of lading. Report any missing items to the carrier and to Valley Craft immediately.

Installation

Only authorized, properly trained personnel should be permitted to install this equipment. Unless designed to be a portable piece of equipment, this machine must be properly secured to the floor. Use a minimum floor anchor size of at least ½" diameter and use steel shims and concrete grout as required. Ensure there is adequate clearance prior to installation. Utilizing provisions of proper electrical codes, connect to the appropriate power supply. Consult nameplate on motor for pertinent information.

- Read and comply with all instructions and recommendations prior to operating unit.
- Clean the installation area after removing all steel strapping and the wooden skids on which the unit was shipped.
- Place the unit in the position in which it is to be installed. When moving the unit, make sure it is picked from under the base frame.
- Position the Drum Dumper unit to provide safe overhead and horizontal operating clearances.
- Install anchors in stationary units, lagging the Drum Dumper unit securely to the
 floor. (Make sure that the base mounting legs are fully supported along their
 entire length with shims or concrete grout). NOTE: Anchoring holes should be
 drilled using existing holes in the base legs as a template. (1/2" anchor bolt
 minimum)
- All units are pre-wired and supplied with 10 feet of power cord. Utilizing
 provisions of applicable electrical codes, connect to the appropriate power supply.
- Check the level of the hydraulic fluid by removing reservoir fill plug. Add if necessary. Fluid level should be ¾ of reservoir capacity. NOTE: Do not overfill reservoir.
- Raise and lower the unit several times for the full cycle without a load. Check for any interference problems with existing framework of floor structure. Check for leaks in the hydraulic connections that may have loosened during shipment. Also, check for any damages that may have occurred during shipment.

Operating Procedures

Only authorized, properly trained personnel should be permitted to operate or service this equipment. Note: Stationary drum dumpers must be securely anchored to the floor prior to operation. If using a portable drum dumper, be sure the floor lock is in the down position prior to operation. It is recommended that the drum dumper initially be operated empty until the operator is familiar with controls and operation of the dumper. When loading the dumper, do NOT exceed the capacity rating on the dumper.

- Stabilize Drum Dumper unit by following installation instructions before operation.
- Position load into the center of the chute. WARNING: DO NOT EXCEED MAXIMUM CAPACITY OF DUMP UNIT. CONSULT THE LOAD CAPACITY DECAL AFFIXED TO THE DRUM DUMPER.
- Position drum hold down bar in position closest to the top of drum.
- Stand clear of the chute and depress the "up" control to initiate the dump cycle.
- Release the "Up" control to stop the chute at that level. The chute will stop at the set dump height when the hydraulic cylinder runs out of strok.
- Stand clear of the chute, and depress the "Down" control to lower the chute.
- Release the "Down" control to stop the chute at that level. The chute will stop when the cylinder runs out of stroke at proper dump height.
- When chute is completely lowered, remove the empty container and repeat the cycle as required.

Operation Tips

- Always load the Drum Dumper properly, centering the load into the chute as much as possible.
- The Drum Dumper should be initially operated empty until the operator is thoroughly familiar with the cycle sequence and operation of the controls.
- Ensure that all personnel are clear of the chute before raising and lowering.
- Do no exceed the maximum load capacity rating. Consult load capacity decal affixed to the dump unit.
- Never use the Drum Dumper if it is in need of repairs or in case of a malfunction.
- Notify your maintenance personnel in case of machine malfunction.
- Do not continue to depress the "Up" or "Down" control after the Drum Dumper unit has reached the end of it's travel or if the unit is not cycling. Damage could occur to the unit.

Maintenance and Adjustments

Maintenance and Adjustment Procedures

To keep this equipment operating properly, timely maintenance and adjustments are required. These procedures should be performed only by qualified personnel who are familiar with the equipment. Ensure dumper is disconnected from power and chute is in down position prior to inspecting and performing maintenance and adjustment procedures.

Maintenance and adjustment procedures are shown in Table 2.

Table 2. Maintenance and Adjustment Procedures

Component	Frequency	Operation	Procedure
Bearings / Pivot Points	Monthly	Grease	Apply grease as required
Hydraulic Fluid Level	Monthly	Visually inspect	Should fluid level become low or appear dirty or "milky", replace fluid with Super ATF Transmission fluid. Fluid level should be approximately 1-1/2" below fill hole.
Structural components	Monthly	Visually inspect	Replace as required
Hydraulic System	Monthly	Visually Inspect	Inspect for leaks and damaged hydraulic lines and correct as required
Electrical System	Monthly	Visually Inspect	Inspect for damaged or frayed wires and correct as required

Troubleshooting

Troubleshooting Procedures

If troubleshooting or maintenance should be required, it should be performed only by qualified personnel trained to perform such procedures.

Table 3. Trouble Shooting Procedures

Problem	Possible Cause	Corrective Action
Power Unit will not run / Chute will not raise	Not getting power	Use volt meter to ensure 120V is being supplied to the unit
	Bad Hydraulic power pack	Use volt meter to ensure power pack is getting power when "Up" control is being engaged. If power pack is getting 120V but still does not run, contact Valley Craft for replacement
	Damaged wiring or bad switch	If power pack is not getting power, repair damaged wire or switch. Contact Valley Craft for replacement.
Chute will not lower	Not getting power	Use volt meter to ensure 120V is being supplied to the unit
	Damaged wiring or bad switch	Use volt meter to ensure power is getting to the solenoid (coil). If not, repair damaged wire or switch. Contact Valley Craft for replacement.
	Faulty Solenoid (coil) or stuck valve	Use volt meter to ensure power is getting to the solenoid. If solenoid is getting 120V but valve won't shift. Replace coil or clean / replace valve.
Chute lowers to fast or slow	Flow control valve not adjusted properly	Adjust flow control on lower cylinder port to a safe speed for your application

Replacement

Replacement Procedures

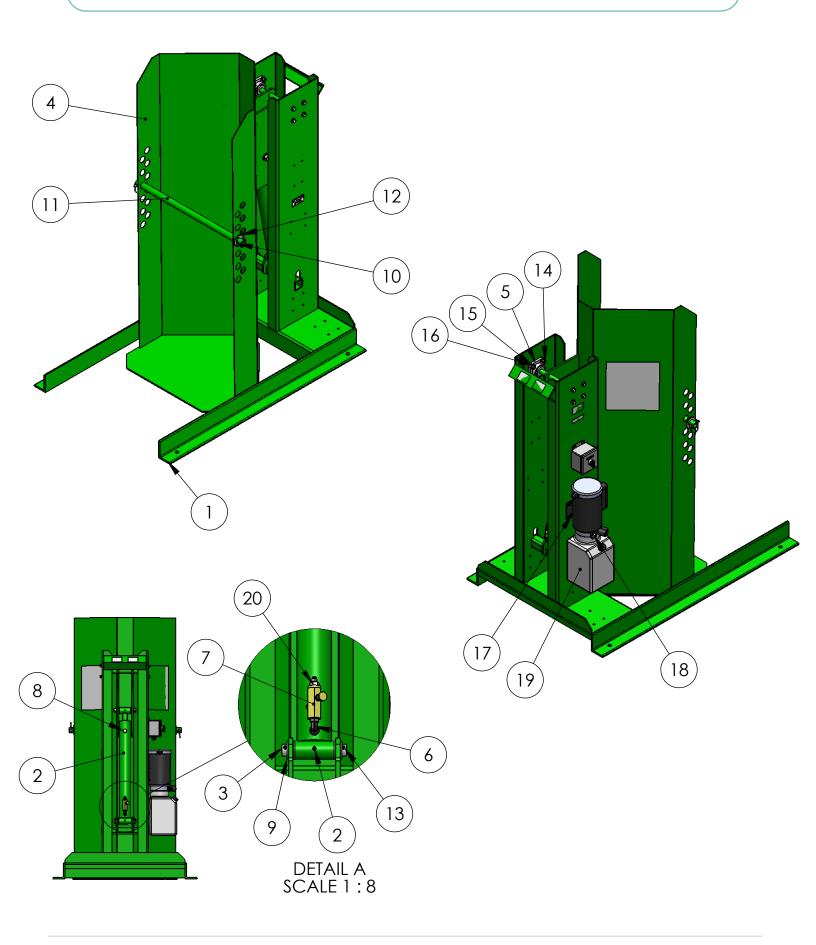
Occasionally, it will be necessary to replace a part that has been Damaged or worn. Many parts on this product are replaceable. If Replacement of a part is required, it should be performed only by Qualified personnel who are familiar with the equipment.

See Sheet 12 for available replacement parts. Identify the part number you need. Contact Hercules Customer Service at 1-800-525-4515 or on the Web at www.HerculesEquip.com

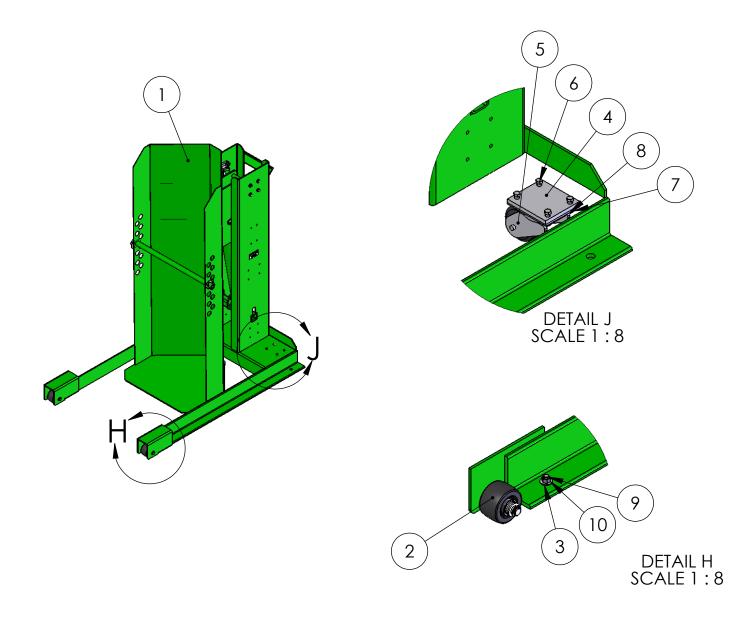
Information required when contacting Hercules:

- A. Company name and address
- B. Contact persons name
- C. Telephone number
- D. E-Mail address
- E. Model Number
- F. Date of manufacture
- G. Part umber of Parts ordering

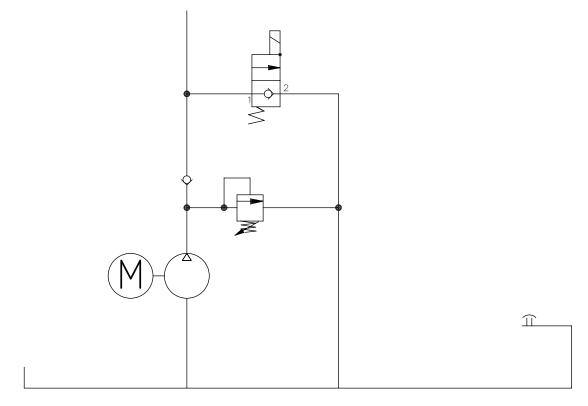
The model number and date of manufacture is stamped on a metal tag located on the frame by the switch.



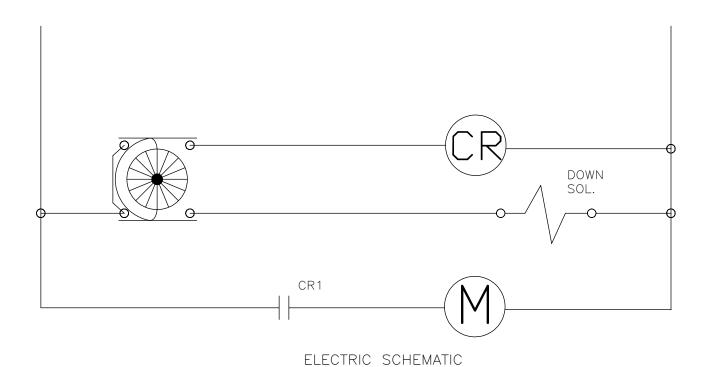
ITEM	PART	DECODIDION	OTV
NO.	NUMBER	DESCRIPTION	QTY.
1	F60992A8	BASE WLDMT 48/APOLLO	1
2	Z20841A0	CYL-2-1/2X1-1/2X20 DD	1
3	F54297A0	AXLE-CYL	2
4	F61965A0	CHUTE WLDMNT 48DH/LL DD 1000#	1
5	Z30765A5	BRG FLG 1" 4-HOLE	2
6	Z20749A4	FTG 90 6807-6-6-0	1
7	Z20750A3	FLOW CONTROL #6 SAE	1
8	Z20733A1	BREATHER 6 SAE SINTERED	1
9	Z10013A3	BUSH-MACH 1x10GAx1-1/2 OD	8
10	Z10239A1	PIN SNAP 5/16X2	2
11	F50803	HOLD DOWN/DD	1
12	Z10556A2	WASHER-1-1/4 FLAT X2.280X1/8	2
13	Z10072A1	PIN-SPG 1/4X1-1/2	4
14	Z10690A0	S-HHC 7/16-14 X 1-1/2 GRD 5	8
15	Z10215A9	WASHER-7/16 LOCK MD	8
16	Z10019A7	NUT-HEX FULL 7/16-14	8
17	Z10112A3	S-HHC 1/4-20X1	8
18	Z20585A7	FTG 90 6801-4-6-NWO	1
19	Z20515A1	PP-120V/1P WITH CNTRL	1
20	Z20597A5	FTG STR 6400-4-6-0	1



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	F80167A7	D D APOLLO-48 S VC	1
2	F62989A0	WHL-ASSY/APOLLO	2
3	Z10331A8	WASHER-1/2 FLAT SAE	2
4	F55703A7	WHL-SPCR/APOLLO	2
5	Z30766A4	CSTR-3-1/4 X 2 SWL PHN	2
6	Z10124A9	S-HHC 5/16-18X1-1/4	12
7	Z10201A5	WASHER-5/16 FLAT USS	12
8	Z10036A6	NUT-HEX KEPS 5/16-18	12
9	Z10691A9	S-FHM 1/2-13x1-1/4	2
10	Z10393A3	NUT-LOCK 1/2-13	2



HYDRAULIC SCHEMATIC



Warranty and Limitation of Liability

Hercules products are warranted for a period of one (1) year from date of shipment from Hercules plant to be free from defects in material and workmanship under correct use, normal operation and proper application. However, parts of other than Hercules manufacture are subject ONLY to the original manufacturer's warranty. Hercules obligation under warranty shall be limited to repair or exchange, at Hercules option, FOB origin factory, of any Hercules product or part which proves to be defective as provided herein. Hercules reserves the right to either inspect the product at Buyer's location, or require it to be returned to the factory for inspection. The warranty contained herein does not extend to goods damaged, or subject to accident, abuse or misuse after shipment from Hercules factory, nor to goods altered or repaired by anyone other than an authorized Hercules representative.

Buyer or user shall not alter, modify or use a Hercules product for anything other than its intended function. Hercules shall not in any way be responsible for the consequences of any such alteration, modification or misuse.

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Technical Assistance/Warranty Procedure

What's Covered:

- Parts and Labor to correct manufacturer's defect within one year of purchase.
- Freight Cost

What's Not:

Normal wear items (seal kits, bearings, tires, etc.)

What Voids the Warranty:

- Dirt/Grime that directly causes malfunction of product
- Abuse (i.e. Overloading, damaged, not property maintained, etc.)
- Product altered by customer
 - *See "Items not Under Warranty" below for items that have the warranty voided.

Items Under Warranty (less than one year old):

 Warranty replacement parts are provided only when the problem can be identified with near certainty. If not, the customer will return item to Hercules, freight collect, for troubleshooting and/or repair. When repaired, product will be returned to customer,



Valley Craft is a modern metals fabricating manufacturer specializing in material handling, storage and specialized solutions designed with safety and usability in mind, and the simplification of even the heaviest of workloads. Since developing the first hand truck with a brake in 1952, Valley Craft has been a true pioneer in safety-conscious material handling and solution-driven products. Our commitment to continuous improvement in a Lean Manufacturing environment results in safe, functional, quality equipment at affordable prices.

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