



HLD-SERIES HYDRAULIC DRUM DUMPERS

INSTRUCTION MANUAL



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NOTE: Compliance with regulations, codes, and/or statutory (non-voluntary) standards enforced in the location where the drum dumper is *used* is exclusively the responsibility of the end-user.

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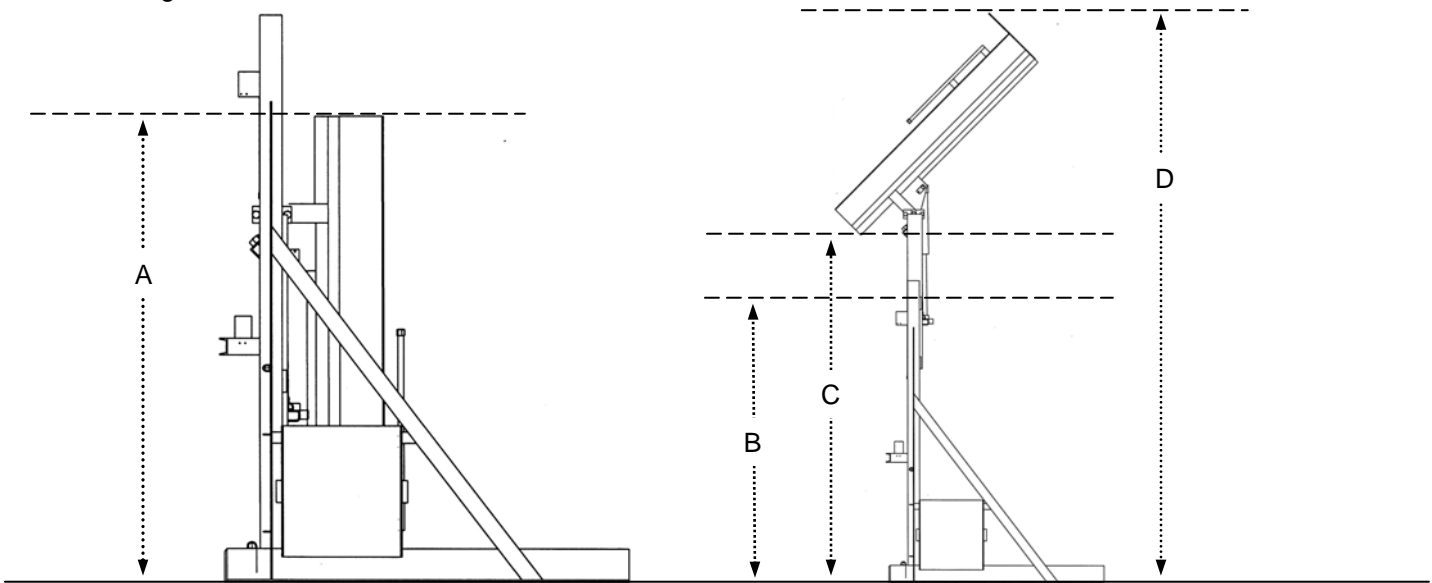
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PRODUCT INTRODUCTION



Thank you for purchasing an HLD-series hydraulic drum dumper ("drum dumper", "dumper" or "HLD") made by Vestil Manufacturing Corporation ("Vestil"). Our dumpers are durable, high-quality products that are rigorously engineered to incorporate safety-enhancing features into an uncomplicated, reliable product design. Although use and maintenance procedures are relatively intuitive, any person who might use or maintain this product must be familiar with the instructions provided in this manual.

All steel HLD-series lifter-dumpers interface with steel, plastic and fiber drums. Standard design features include: solid steel chute assembly, upper travel limit switch, brass emergency velocity fuse in BOTH the chute-tilting cylinder AND the chute-lifting cylinder, and vertically adjustable drum-restraining clamps. Mobile units, denoted with the "-P" suffix, include 2 rigid casters, 2 swivel casters, and 2 threaded floor locks. Dimensions and other product specifications appear in the following tables:



MODEL	A. Chute height when fully lowered in inches (~cm)	B. Minimum height of chute when dumped in inches (~cm) [Chute not raised first]	C. Maximum height of chute when dumped in inches (~cm) [Chute fully raised, then dumped]	D. Maximum height with chute dumped in inches (~cm)	Overall dimensions of frame in inches (~cm)	Maximum rated load in pounds (~kg)	Net weight in pounds (~kg)
HLD-94-10-P	87 (~221cm)	48 (~122cm)	94 (~239cm)	166 (~422cm)	44 x 69 (~112 x 175¼) cm	1,000 (~455kg)	1,372 (~624)
HLD-116-10-P	87 (~221cm)	60 (~152cm)	116 (~295cm)	195 (~495cm)	44 x 77 (~112 x 196) cm	1,000 (~455kg)	1,460 (~664kg)
HLD-94-15-P	87 (~221cm)	48 (~122cm)	94 (~239cm)	166 (~422cm)	44 x 69 (~112 x 175¼) cm	1,500 (~682kg)	1,392 (~633kg)
HLD-116-15-P	87 (~221cm)	60 (~152cm)	116 (~295cm)	195 (~495cm)	44 x 77 (~112 x 196) cm	1,500 (~682kg)	1,480 (~673kg)
HLD-94-10-S	86 (~218cm)	48 (~122cm)	94 (~239cm)	165 (~419cm)	44 x 58 (~112 x 147) cm	1,000 (~455kg)	1,434 (~611kg)
HLD-116-10-S	86 (~218cm)	60 (~152cm)	116 (~295cm)	194 (~493cm)	44 x 66 (~112 x 168) cm	1,000 (~455kg)	1,522 (~692kg)
HLD-94-15-S	86 (~218cm)	48 (~122cm)	94 (~239cm)	165 (~419cm)	44 x 58 (~112 x 147) cm	1,500 (~682kg)	1,454 (~661kg)
HLD-116-15-S	86 (~218cm)	60 (~152cm)	116 (~295cm)	194 (~493cm)	44 x 66 (~112 x 168) cm	1,500 (~682kg)	1,542 (~701kg)

Models that include the "-P" suffix are portable (mounted on 4 wheels). All portable models have maximum dump angle = 40°.

Models that include the "-S" suffix are stationary (bolt to floor). All stationary models have maximum dump angle = 45°.

Safety Principles

Vestil Manufacturing Corp. recognizes the critical importance of workplace safety. However, although Vestil diligently strives to identify foreseeable hazardous situations, this manual cannot address every conceivable danger. The end-user is ultimately responsible for exercising sound judgment at all times.

This manual will acquaint persons--authorized to use and/or maintain this drum dumper--with safe use and maintenance procedures. **Therefore, each person, who might use or perform maintenance on the drum dumper, must read and understand every instruction BEFORE using the device or performing maintenance.** Users should have access to the manual at all times and should routinely review the directions.

This manual uses SIGNAL WORDS to classify personal injury risks and situations that might lead to property damage, as well as to draw attention to safety message(s). The reader must understand that each signal word indicates the seriousness of the identified hazard.



Identifies a hazardous situation which, if not avoided, WILL result in DEATH or SERIOUS INJURY. Use of this signal word is limited to the most extreme situations.



Identifies a hazardous situation which, if not avoided, COULD result in DEATH or SERIOUS INJURY.



Indicates a hazardous situation which, if not avoided, COULD result in MINOR or MODERATE injury.



Identifies practices likely to result in product/property damage, such as operation that might damage the drum dumper.

Employers are responsible for training employees to use the product properly. If you do not understand an instruction, ask your supervisor or employer for assistance, because failure to follow the directions in this manual might result in serious personal injury or even death.

Vestil is **not liable** for any injury or property damage that occurs as a consequence of failing to apply either: 1) the instructions that appear in this manual; or 2) the information provided on labels affixed to the product. Furthermore, failure to exercise good judgment and common sense might result in property damage, serious personal injury or death. Such failure is solely the fault of the person(s) using the drum dumper.

SAFETY GUIDELINES

Failure to read and understand the instructions included in this manual before using or servicing the box dumper constitutes misuse of the product.

Study the entire manual before you use the product for the first time and before each subsequent use. Read the manual to refresh your understanding of the safe installation, use, and inspection procedures explained on p. 4-7. DO NOT attempt to resolve any problems with the dumper unless you are authorized to do so and are certain that it will be safe to use afterwards.



Electrocution might result if any part of the dumper contacts electrified wires. Reduce the likelihood of operator or bystander electrocution by applying **common sense:**

- DO NOT *contact* electrified wires with any part of the dumper;
- DO NOT install the HLD in an area where contact with electrified wires is likely;
- DO NOT use the dumper *close to* electrified wires or other sources of electricity;
- Before using the dumper, always inspect the usage area for unusual conditions that require special precautions.



Material handling is dangerous. Improper or careless operation might result in serious personal injuries sustained by the operator and/or bystanders. Drum dumper users should conform to the following:

- ONLY use the drum dumper as a means for emptying appropriately sized drums (see "Load the dumper" on p. 5), and ALWAYS properly load the dumper according to the directions on p. 5.
- DO NOT use a damaged dumper. Referring to Fig. 8 on p. 11, examples of structural damage include: broken, corroded, rusted, or severely deformed drum-retaining clamp(s), cylinder mount bracket(s), chute mounting block, frame. Inspect the dumper before each use according to the inspection instructions on p. 6. DO NOT use the HLD unless it passes every element of the inspection, or until authorized maintenance personnel approve the dumper for service.
- DO NOT stand beneath or travel under the dumper chute while it is elevated or allow others to do so.
- DO NOT lift people with the chute or allow people to ride on the chute.
- DO NOT use UNLESS each label shown in Fig. 9 on p. 13 is affixed to the dumper, undamaged and readable.
- DO NOT exceed the maximum rated load (capacity) of the dumper. The weight of the drum to be dumped plus the weight of its contents must not exceed the maximum rated load.
- DO NOT modify the box dumper in any way UNLESS you first obtain express, written approval from Vestil. Unauthorized modifications might make the dumper unsafe to use, and could result in operator and/or bystander injury.

⚠ WARNING

(Continued from p. 3)

- This machine has a drum chute that elevates and pivots. The operator and/or bystanders might sustain serious personal injuries if the drum dumper is improperly used. Reduce the likelihood of injury by conforming use to the following recommendations:
- DO NOT operate dumper unless BOTH drum-engaging clamps (see Figures 2A and 2B on p. 5) are in normal condition and can securely engage the loaded drum.
- DO NOT the dumper unattended if the chute is elevated and/or tilted. Immediately after dumping a drum, return the chute to vertical position, fully lower it, and remove dumped drum.
- DO NOT modify machine in any way. Modifications may cause malfunctions and might make dumper unsafe to use.
- Instruct all people to clear the area around the dumper BEFORE operating it.
- DO NOT load or operate the dumper UNLESS it is securely attached to floor (models ending with -S).

NOTICE

DO NOT fill the hydraulic system with brake fluid or jack oils. Only fill the hydraulic system with either anti-wear hydraulic oil, viscosity grade 150 SUS at 100°F (ISO 32cSt at 40°C) or Dexron transmission fluid.

Installation instructions [HLD-94-10-S, -94-15-S, -116-10-S, -116-15-S Models]

Responsibility for compliance will local building code requirements, municipal/county ordinances, state OSHA requirements, etc. rests exclusively with the end-user. The instructions that appear below are recommendations about essential, minimum steps necessary for safe installation. If law enforced where the dumper is used requires you to depart from these directions, Vestil is not responsible for *any* consequential damages sustained as a result of the installation.

Installation requires at least:

- Forklift rated for loads equal to the net weight of your HLD model (see Table on p. 2);
- Lag bolts: ½ in. by at least 4in. (length) [approximately equivalent to 1.3cm by at least 10.2cm]
- Masonry drill and ½ in. masonry drill bit
- Wrench: ½ in.
- Grout and steel shims
- Power supply circuit: matched to motor voltage and current requirements

NOTE: End-user is responsible for providing over-current and short circuit protection.

Step 1: Position the dumper as desired with a forklift.

Step 2: Drill holes approximately 4in. (10cm) deep.

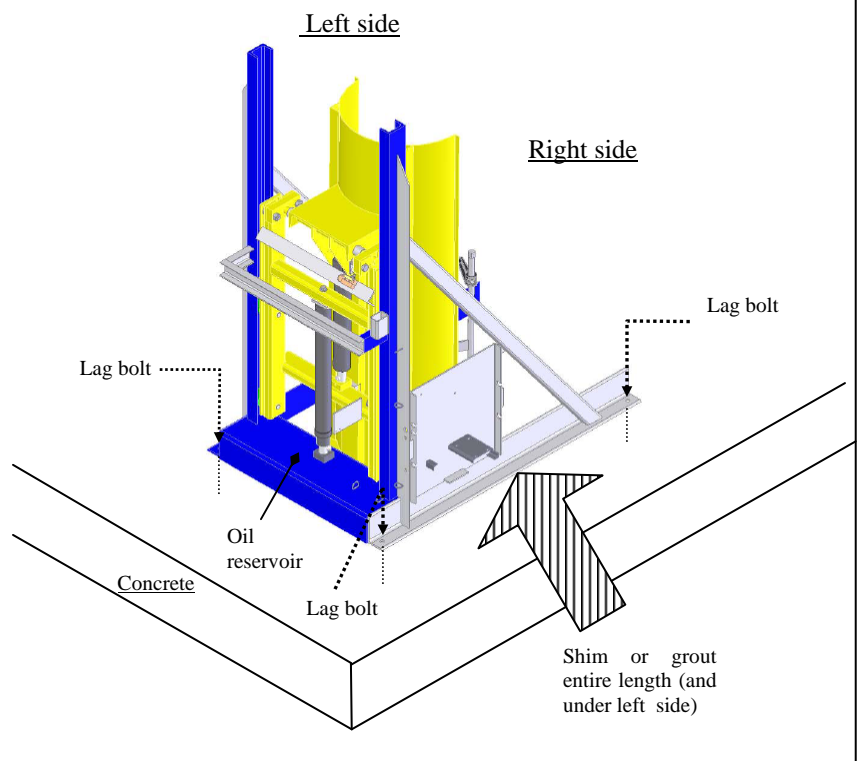
Step 3: Secure the dumper to the floor by inserting the lag bolts through the (5/8 in.) bolt holes in the anchor brackets (dotted lines in FIG. 1).

Step 4: Shim and/or grout the sides of the frame.

Step 5: Connect the power cord to the power supply.

Step 6: Run the dumper through several complete cycles. Press the “UP” button of the hand controller until the chute raises as far as it can, and then lower it completely. Repeat the cycle a few more times to confirm that the product operates properly.

Step 7: Check the oil level in the reservoir (see FIG. 1). Fully raise the chute (to the 45° “dumping position,” and then observe the level of oil in the reservoir. The surface of the oil should be 1 to 1½ inches below the fill hole.

FIG. 1: Installation diagram

Operation instructions (all models)

Load the dumper:

1. Place the drum inside the chute: the drum should rest against the back of the chute

NOTE: Use only properly sized drums: HLD's are designed to dump open-top drums. Drum width and height must be such that both drum-engaging clamps (see Fig.'s 2A and 2B) can securely engage the lip of the drum.

2. Secure the drum to the chute with the clamps: to prevent the drum from sliding out of the chute along with the trash, adjust the position of each clamp along the clamp rail to match the height of the drum, by pressing down on the end of a clamp spring (see Fig. 2B). Rotate the clamps inwardly--towards the drum--until the lip hooks are inside the drum, and then press the clamps down until they solidly contact the top of the drum. Rotate the clamps so that the lip hooks fit snugly against the inside of the lip.

3. Dump the container:

- a. Adjust the height of the chute/drum to the height of the waste receptacle that will receive the trash from the drum. To raise the chute without tilting it, press the 4-point controller button in the "RAISE LIFT" direction (see FIG. 3). The cylinders will extend and elevate the chute only while the operator continues to press the button. The chute will maintain its position as of the instant the button is released.
- b. To tilt the chute and dump the drum, press the "RAISE TILT" button on the pendant controller to raise the chute to the dumping position. The cylinders will extend and raise the chute only while the operator continues to press the button. The chute will maintain its position as of the instant the button is released.

NOTE: If the net weight of the drum and its contents exceeds the maximum rated load of the dumper, a relief valve (incorporated into the hydraulic system) will open. While the relief valve is open, the hydraulic cylinders will not extend, and therefore the chute will not be able to elevate or dump.

4. Return the chute to the loading position: press the "LOWER TILT" button on the controller to return the chute to the vertical (untilted) position; then press the "LOWER LIFT" to lower the chute to the loading position.

5. Remove the emptied drum.

FIG. 2A: HLD side view

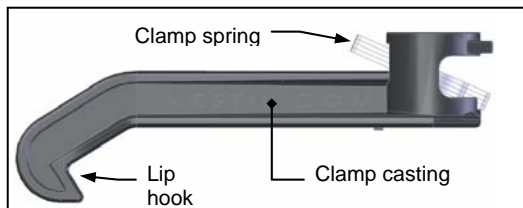


FIG. 2B: Drum-Engaging Clamp Assembly

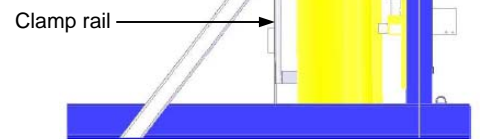
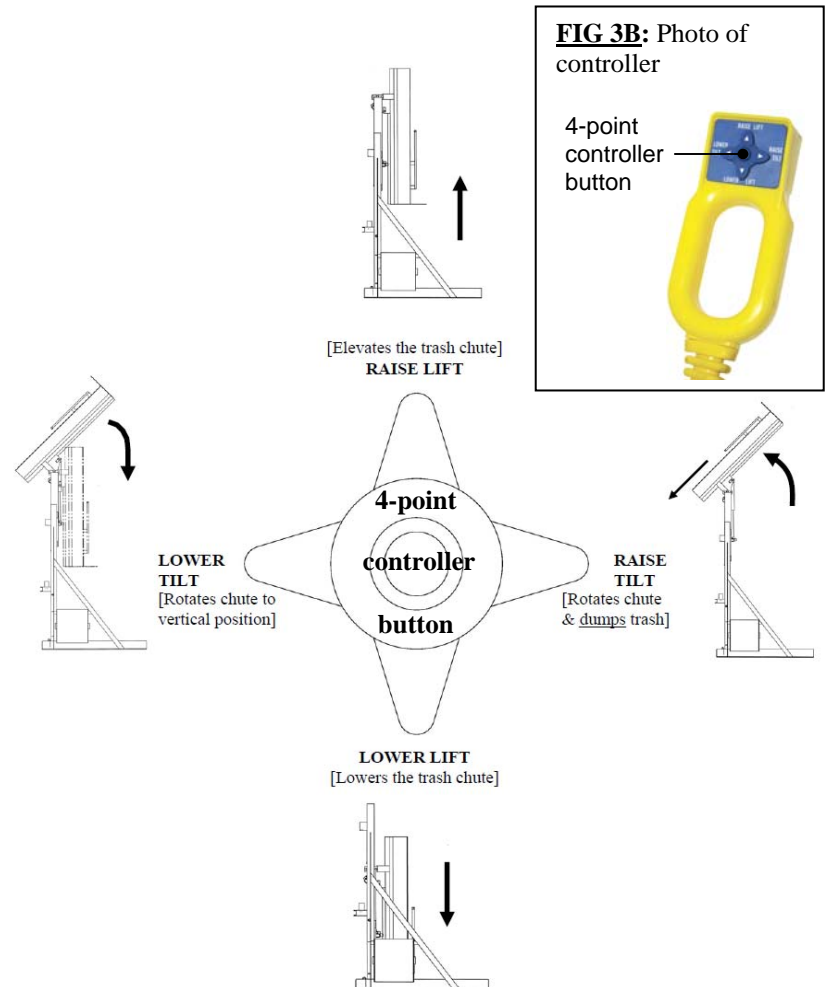


FIG. 3A: Pendant controller functions

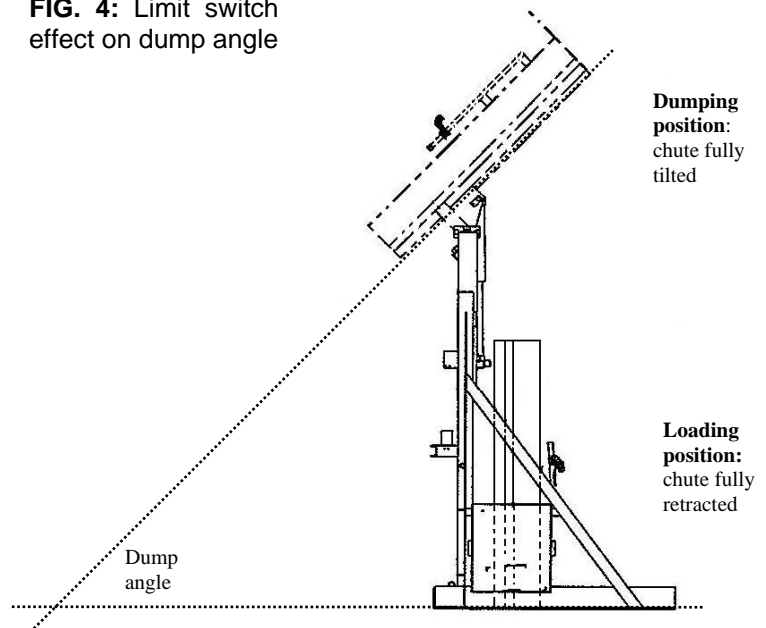


Inspections

Before each use, inspect the listed components:

1. Wires: look for frays;
2. Hydraulic system: check lines for chafes, pinches or leaks, and the reservoir for punctures or leaks;
3. Drum-retaining clamps: damage, deformation, looseness of fit;
4. Frame: check the cylinder brackets, vertical and horizontal frame members, horizontal cross-member, and angle cross member, hinge blocks, and pivot shaft and spacer assemblies for cracking, deformation and corrosion;
5. Dump angle limit switches (See FIG. 4): verify normal function. The chute should not rotate beyond:
 - Stationary [-S] units: 45 degrees
 - Mobile [-P] units: 40 degrees
6. Also listen for unusual sounds that might indicate binding or grinding during operation and watch for erratic movement(s). Contact maintenance personnel if you observe any unusual sound or movement and do not use the dumper until approved for service.

FIG. 4: Limit switch effect on dump angle



At least once per month, inspect the dumper as follows:

1. Oil level: fully elevate and raise the chute to the "dumping position," and then observe the level of oil in the reservoir. The surface of the oil should be 1 to 1½ inches below the fill hole.
2. Pivot points: check the dumper for excessive wear at the pivot points between hydraulic cylinders and cylinder brackets, and between pivot shafts and hinge blocks;
3. Floor connection points: anchor bolts should prevent the frame from lifting off the ground during chute operation. Concrete around each anchor bolt should be intact—no cracking or flaking;
4. Fasteners: check each fastener connection. Tighten all loose connections;
5. Hoses and wires: check each wire and hose for damage (fraying, binding, etc.);
6. Labels: labels should be easily readable and undamaged, affixed to the dumper in the locations as shown in FIG. 8 on p. 14.
7. Drum-retaining clamps and springs: inspect the clamps and clamp springs (see FIG. 2A & 2B) for damage deformation, looseness of fit. If a clamp cannot remain securely in place because the spring allows the clamp to slide down the clamp rail, then the clamp will not prevent a drum from sliding out of the chute. DO NOT use the drum dumper until the clamp springs have been replaced.

At least once per year, change the hydraulic oil if it becomes gritty or looks milky (water present in the oil). With the chute in the fully lowered position, drain the oil and replace it with either Dexron transmission fluid or anti-wear hydraulic oil, viscosity grade 150 SUS at 100°F (ISO 32 cSt at 40°C).

Power unit operation

The drum dumper utilizes an electric motor directly coupled to a gear pump to pressurize the hydraulic fluid. Fluid pressure moves the cylinders up or down, and this movement performs the work required to raise and lower the chute. A hydraulic manifold bolted directly onto the gear pump houses the hydraulic control components; each component is rated for 3,000psi working pressure.

Important components of the power unit include:

- Electric motor: when ordered, the owner of this box dumper selected either a single-phase or three-phase AC motor. Regardless of phase capabilities, every motor is dual-voltage capable.
- Gear pump: shaft coupled directly to the shaft of the electric motor. Several displacements are available that correspond to the horsepower of the motor selected.
- Check valve: prevents backflow of fluid through the pump and thereby allows the chute maintain a given position indefinitely.
- Pressure relief valve: opens a path for fluid to flow back to the reservoir if fluid pressure exceeds 3,000psi.
- Lowering solenoid valve: electrically-operated cartridge valve with an integral screen to keep contaminants from entering the valve.

- Pressure compensated flow control spool: located beneath the lowering valve, the spool determines the lowering speed of the cylinders. This component allows the chute to lower at the constant rate independent of the weight of the drum and its contents. Several sizes are available.
- Hydraulic cylinders: 1,000 lb. and 1,500 lb. rated load models utilize displacement style cylinders. Each cylinder includes a bleeder valve (located at top end) for removing air from the hydraulic system.
- Velocity fuse: a safety device installed in the hose port of each cylinder. If a hose is punctured while the HBD is in use, the velocity fuse closes automatically. The chute remains stationary until pressure is reapplied to the system.
- Hydraulic fluid: HO150 hydraulic fluid. To replenish the fluid, add anti-wear hydraulic fluid with a viscosity grade of 150 SUS at 100°F (ISO 32 @ 40°C) like AW-32 or Dexron transmission fluid.

Sequence of operation:

To elevate the chute assembly, press the “RAISE LIFT” button of the 4-point controller button (p. 5). The motor turns and spins the gear pump. Oil flows out of the reservoir, through the suction filter and into the pump.

- The pump propels oil through the check valve to the lift cylinder (#16 in diagram on p. 11).
- Releasing the RAISE LIFT button during operation immediately halts all chute movement.
- Additionally, an upper travel limit switch automatically turns off the motor when the chute reaches a preset elevation.

To lower the chute, press the “LOWER LIFT” button.

- Lowering valve opens and bypasses the check valve, which allows oil in the cylinders to flow to the reservoir (through return hoses).
- Releasing the LOWER LIFT button during operation causes all downward movement to stop. The chute will remain in the same position until you press the LOWER LIFT button again and allow it to lower completely.

To tilt the chute, press the “RAISE TILT” button. The motor turns and spins the gear pump. Oil is drawn from the reservoir, through the suction filter and into the pump.

- The pump propels oil through the check valve to the tilt cylinder (#15 in diagram on p. 11).
- Releasing the RAISE TILT button during operation immediately halts all chute movement.
- Additionally, an upper travel limit switch automatically turns off the motor when the chute reaches a preset 40° (mobile units) or 45° (stationary/bolt-down) tilt angle.

To lower the chute, press the “LOWER TILT” button.

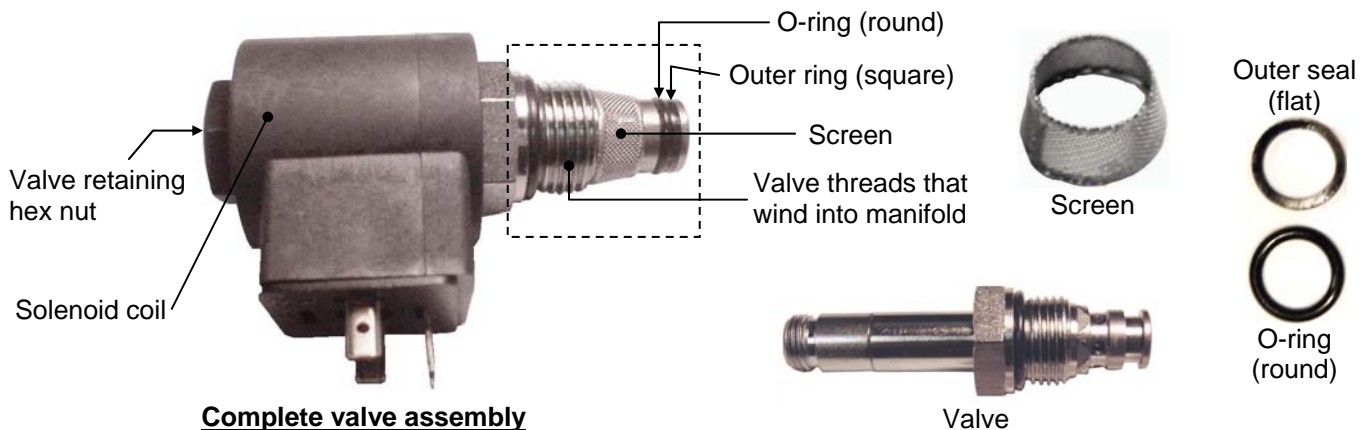
- Lowering valve opens and bypasses the check valve, which allows oil in the cylinders to flow to the reservoir (through return hoses).
- Releasing the LOWER TILT button during operation causes all chute rotation to stop. The chute will remain in the same position until you press the LOWER TILT button again and allow it to rotate back to the vertical orientation.

Issues and solutions:

If the chute slowly untilts without pressing the LOWER TILT button, or loses elevation without pressing the LOWER LIFT button, then remove, inspect, and clean the lowering cartridge valve for the effected cylinder as follows:

1. Press the LOWER TILT button until no rotation occurs. Lower the chute completely.
2. Disconnect all power to the equipment.
3. If loaded, remove the load from the chute.
4. [For either the tilt cylinder (#15 on p. 11) or the lift cylinder (#16 on p. 11)] Remove the valve retaining nut that fastens the solenoid coil to the valve stem, and then unscrew the valve from the manifold (not shown).

NOTE: Referring to “Complete valve assembly” below, the end of the valve surrounded by a dashed line box winds into the manifold, and therefore will not be visible until the valve is unscrewed from the manifold.



5. Inspect the outside of the valve and inside of the valve cavity (of the manifold; not shown) for debris. Replace the valve if the valve stem is bent.

6. Inspect the o-ring and the outer seal for cuts, tears etc.
7. If necessary, remove debris from the valve:
 - a. Use a small pocket screwdriver to press the end of the valve. Insert the screwdriver into the valve as shown in the photo below. A poppet inside the valve is held closed by light spring tension. If the poppet is unaffected by debris, it will move approx 1/16 in. when pressed (if the poppet cannot move when pressed, the valve might be damaged). If available, use compressed or canned air to blow through the valve while pressing the poppet open. Additionally, mineral-spirits or kerosene can be used to flush debris out of the valve.



- b. Replace the valve if the poppet cannot move.

NOTE: Some models feature a flow control spool that is located inside the lowering valve cavity of the manifold. It is visible once the valve is removed: the outer body is threaded into the cavity; the inner part of the spool has a spring behind it and can move under gentle pressure. Use a small standard head screwdriver to gently press on the flow control spool to determine if it can move freely up and down. If the spool does not move, the spring or the entire spool must be replaced.

- c. Reinstall the screen, followed by the o-ring and then the outer seal.
8. Reinstall the valve into the manifold and tighten it to 20 lb-ft of torque.

If the chute tilts slowly when pressing the LOWER TILT button, or elevates slowly while pressing the LOWER LIFT button, air in the tilt or lift cylinder might be the culprit. Air causes the velocity fuse to close, which prevents oil from flowing out of the cylinders. To bleed air from the system:

- Fully untilt and lower the chute;
- If loaded, remove the load from the chute.
- Find the bleeder valve (it looks like a grease zirk) located at the top of the appropriate cylinder: 1) if tilting slowly, cylinder #15 in diagram on p. 11; 2) if the chute assembly elevates slowly, cylinder #16. Hold a rag over the valve and open it about 1/2 turn with a 3/8" or 5/16" wrench. Oil and air will sputter from the valve. Jog the motor by pressing the UP button for just a second. If air continues to escape from the bleeder valve, jog the motor several more times. Wait at least 5 seconds between successive jogs.
- As soon as air no longer is observed and only a clear stream of oil flows from the bleeder valve, close the (bleeder) valve.
- Check the oil level in the reservoir. If the surface of the oil is more than 1 to 1½ in. below the fill hole, add oil until it is between 1 and 1½ inches of the fill hole.

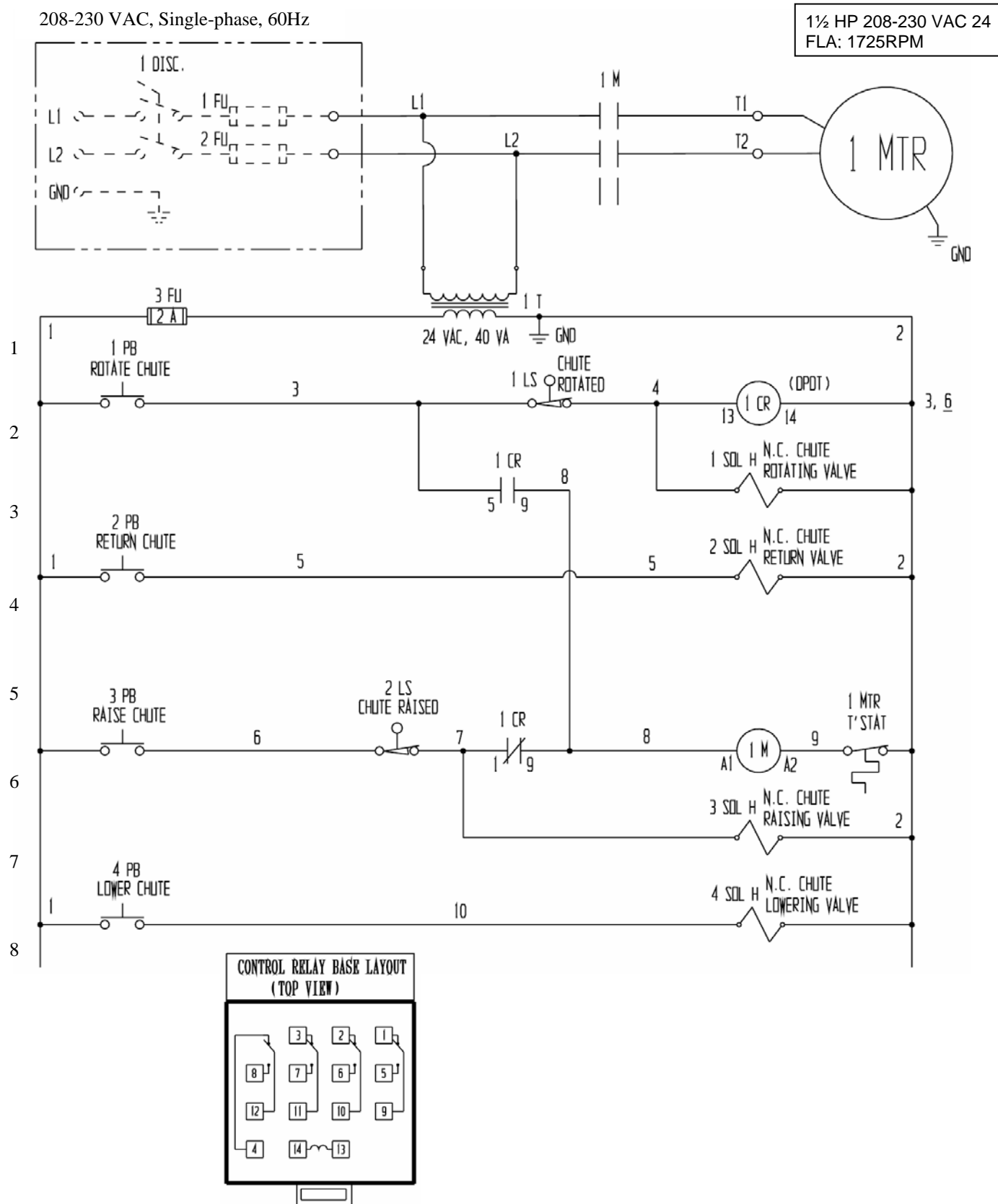
FIG. 5: Single phase electrical system diagram

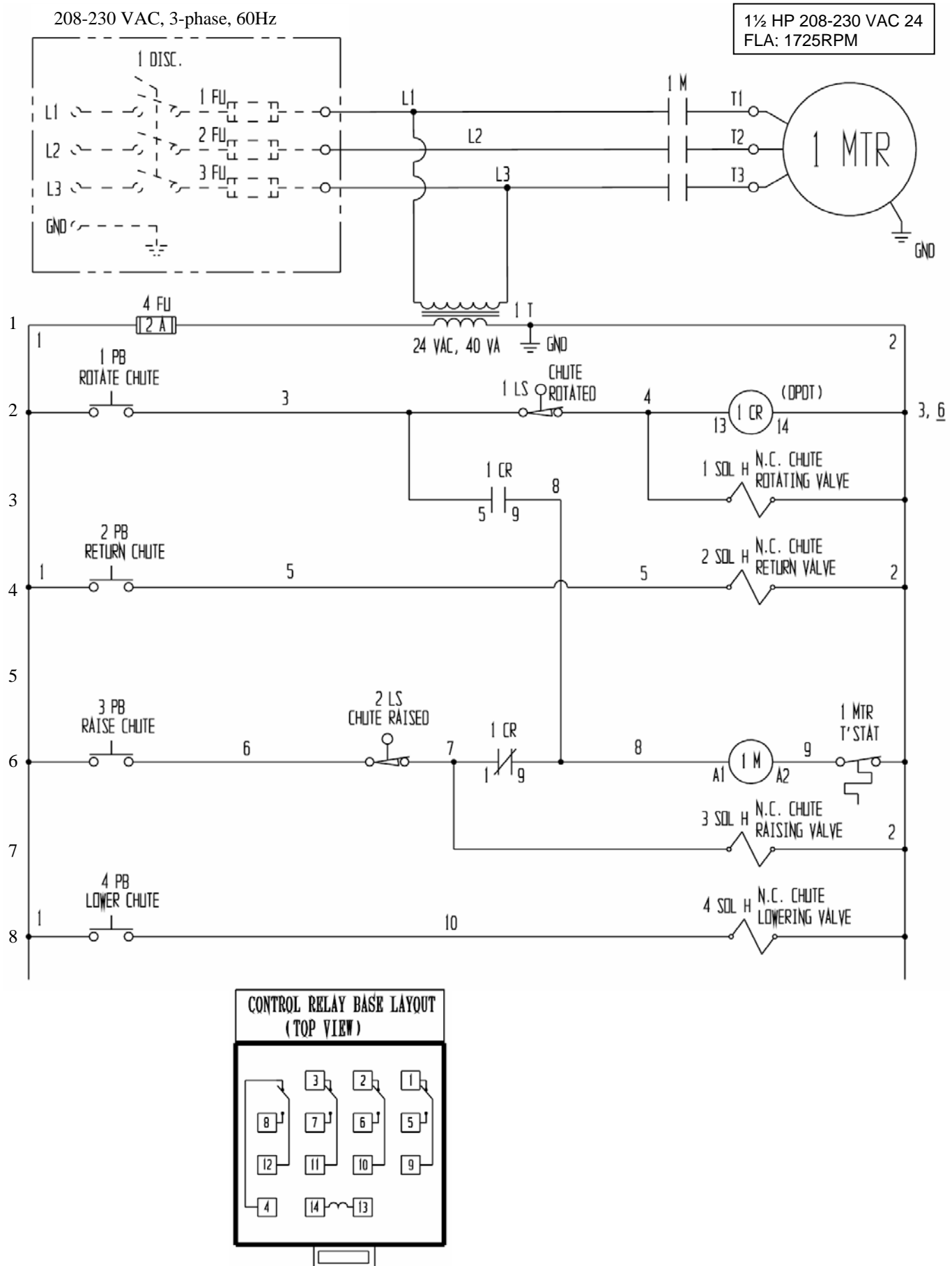
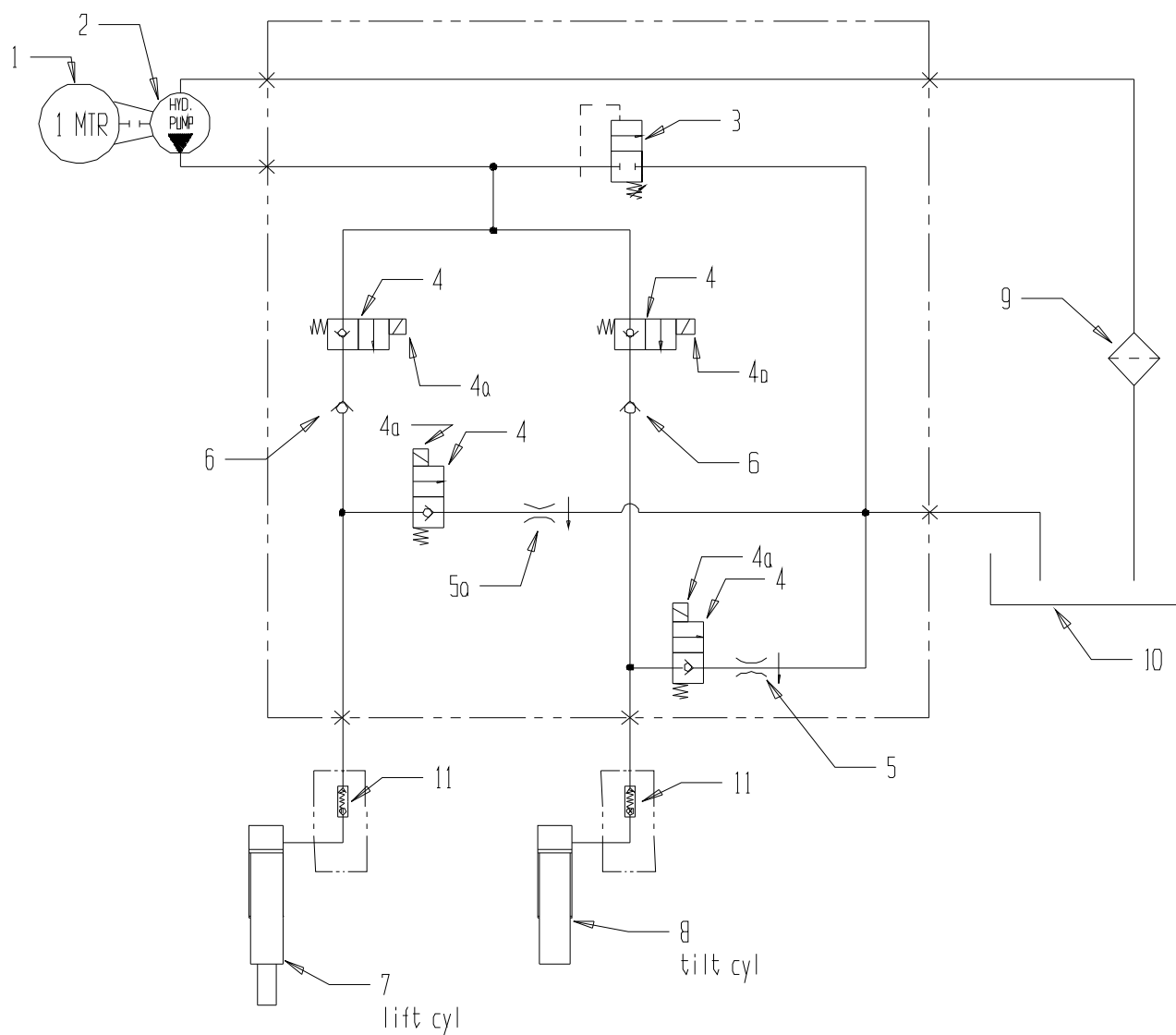
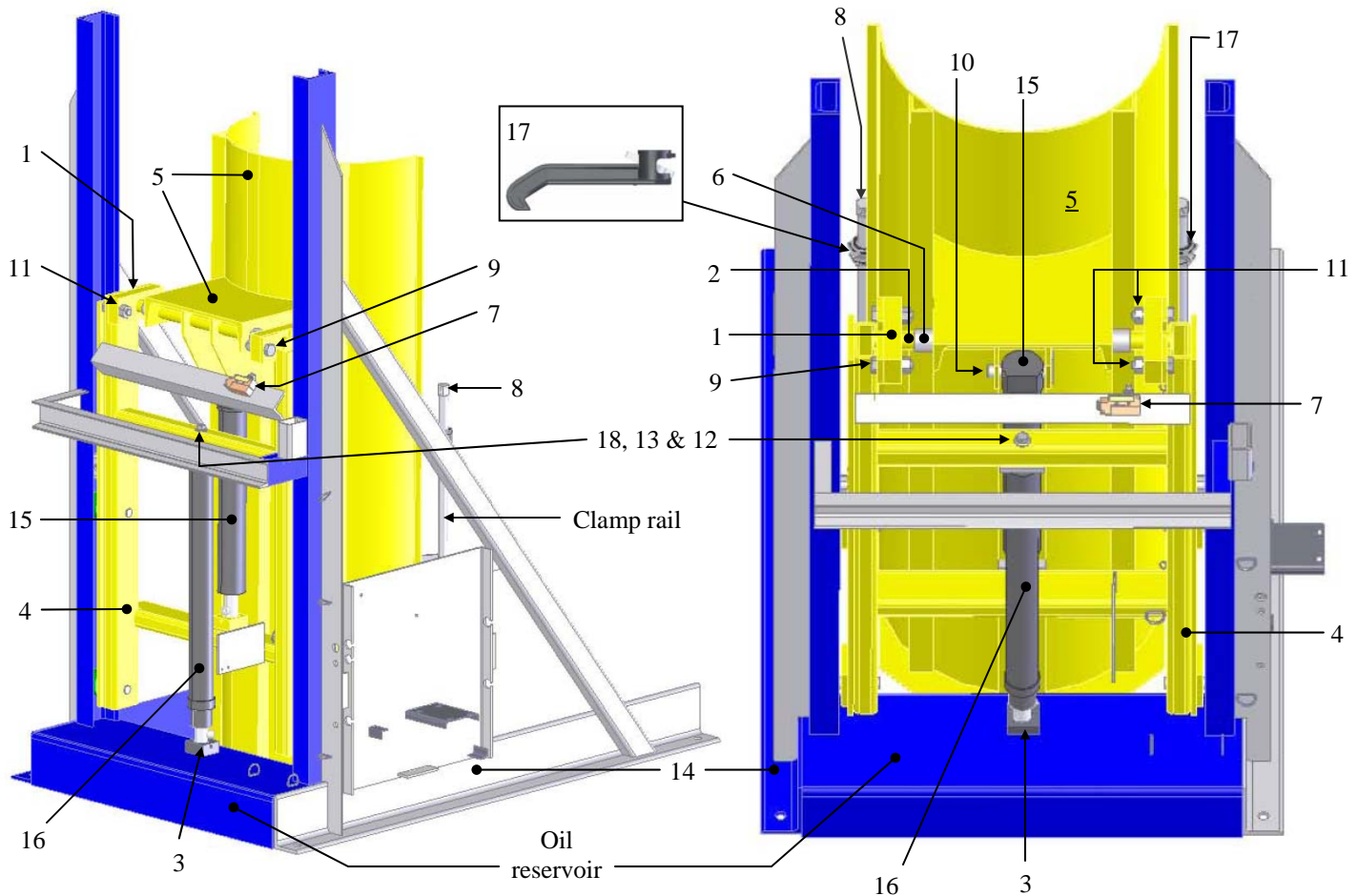
FIG. 6: 3-phase electrical system diagram

FIG. 7: Hydraulic system diagram

Item no.	Part no.	Description	Quantity
1	Motor	See purchase order for details	1
2	Pump	See purchase order for details	1
3	99-153-005	Relief valve	1
4	99-153-015	N.C. solenoid valve	4
4a	Valve coil	See purchase order for details	4
5	Flow control	See purchase order for details	1
5a	Flow control	See purchase order for details	1
6	99-153-011	Check valve	2
7	Lift cylinder	See purchase order for details	1
8	Tilt (dump) cylinder	See purchase order for details	1
9	01-031-005	Inlet screen	1
10	04-023-001	Hydraulic oil reservoir	1
11	01-531-001	Velocity fuse	2

FIG. 8: Exploded parts diagrams

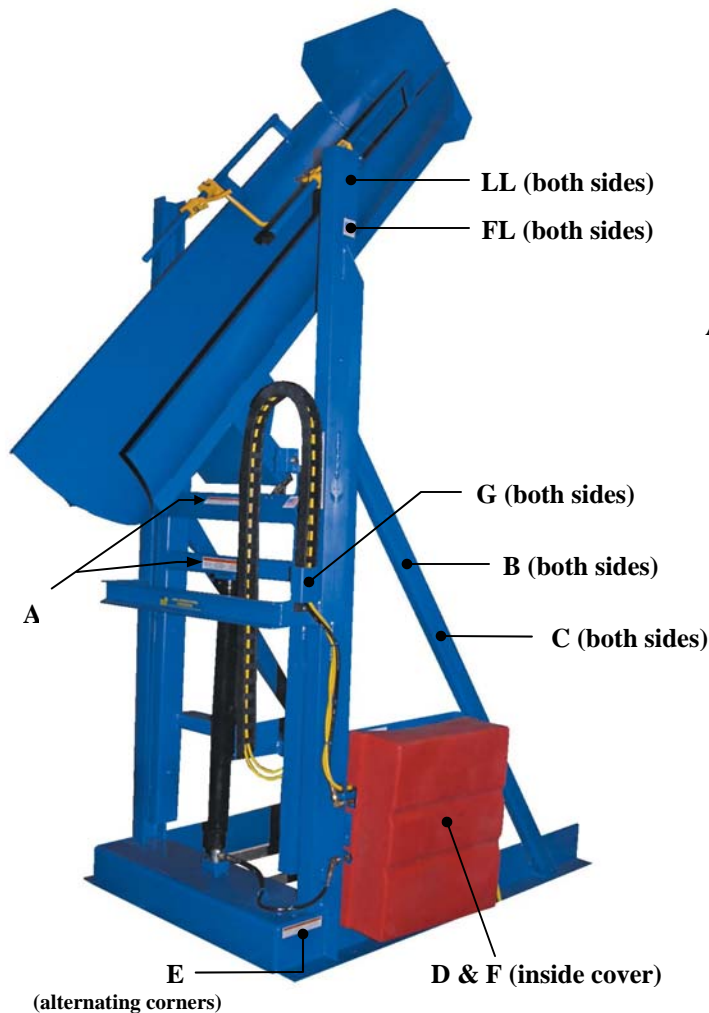
Item No.	Part No.	Description	Quantity
1	09-016-103	Chute mounting block	2
2	09-026-004	Chute pivot shaft	1
3	01-011-007	Cylinder mounting bracket	1
4	09-538-021 09-538-020	Carriage subassembly: HLD-94- models HLD-116- models	2 2
5	09-545-012 09-545-020	Chute subassembly: HLD-94- models HLD-116- models	1 1
6	09-113-008	½ in. SCH 40 x 1-9/16 in. spacer	1
7	AF-0523-01	Limit switch	1
8	MV-0525-01	Pipe cap	4
9	12365	¾ in. – 10 x 3 in. HHCS #5 plain bolt	1
10	09-612-011	Drum dumper cylinder pin assembly	1
11	37039	¾ in. – 10 nylock nut	1
12	33012	½ in. USS z-plated flat washer	2
13	33625	½ in. lock washer	1
14	09-514-100 09-514-099	Base weldment: HLD-94- models HLD-116- models	1 1
15	09-021-015	2½ in. x 18 in. long hydraulic cylinder	1
16	15-021-012 15-021-013	Telescoping cylinder: HLD-94- models HLD-116- models	2 2
17	09-537-013	Clamp stop subassembly	1
18	12217	½ in. - 13 x 3½ in. HHCS #5	4

Troubleshooting Guide

⚠ WARNING DO NOT attempt to resolve any issue described below UNTIL the chute is fully lowered and the power supply is disconnected.

<u>Issue:</u>	<u>Possible cause(s):</u>	<u>Solution:</u>
1. Power unit doesn't run when "RAISE" button is pressed.	1a. Transformer fuse is blown. b. No supply voltage. c. Upper-travel limit switch is engaged or bad. d. Faulty connection in control circuit. e. Bad control transformer. f. Open motor relay coil. g. (DC units) Low battery voltage.	1a. Test with meter; replace if bad. b. Test with meter. Check fuses, breakers, and overloads to determine the cause. c. Inspect and test switch. Replace if bad. d. Test all parts of circuit with meter. e. Check for 24 VAC; replace if bad. f. Test with meter; replace if bad. g. Test with meter. Charge battery if low (is motor relay LED on?)
2. Motor runs properly, chute doesn't move. Motor and pump not noisy.	2a. Incorrect motor rotation. b. Pump failure. c. Low hydraulic fluid level.	2a. Verify motor shaft rotates counterclockwise. b. Consult factory for replacement. c. Ensure reservoir is filled.
3. Motor or control enclosure hums, chatters, or buzzes, or some type of squeal can be heard; the chute does not move, or the chute moves only slowly.	3a. See 2b above. b. Excess voltage drop to motor due to power wire size too small, wire run too long, or incoming voltage too low. c. Motor is "single-phasing". d. Pressure relief opening at full pressure. e. Debris in the oil preventing the lowering valve or the check valve from closing.	3a. Same as 2b. b. Check power installation for adequacy. Check incoming voltage <i>while motor is running</i> . Correct problem(s). c. Determine cause of loss of voltage on one phase; correct. d. Check for structural damage or binding of the rollers, etc. Check for chute overload condition. e. Remove and inspect. Clean the valve with mineral spirits.
4. Chute elevates; then drifts down.	4. See 3e above.	4. Same as 3e.
5. Chute lowers too slowly.	5a. Flow control spool is stuck. b. Pinched hose. c. Velocity fuse locking (chute only slowly creeps down).	5a. Remove plug from FC port; push down on the center of the flow spool to ensure it moves freely. b. Check pressure, supply, and return hoses for kinks. c. Same as 7 (below).
6. Chute lowers too quickly.	6a. See 3e. b. Flow control spool is stuck.	6a. Same as 3e. b. Same as 5a.
7. Spongy or jerky chute motion.	7. Air in the hydraulic cylinders.	7. Bleed air per procedure described in this manual.

FIG. 9: Product Markings and Labels



LL: Vestil Large Logo



FL: 2" "Made in USA"



A: Label #220

⚠ WARNING	⚠ ADVERTENCIA	⚠ AVERTISSEMENT
KEEP CLEAR WHEN IN USE	MANTENGASE ALEJADO CUANDO SE ESTA OPERANDO	SE TENIR À DISTANCE LORS DU FONCTIONNEMENT
VESTIL MANUFACTURING CORPORATION • Angola, Indiana USA • Phone (260) 665-7586 • sales@vestil.com • www.vestil.com 220 Rev 08/03		

B: Label #287

MODEL/MODÉLO/MOÛLE	_____
CAPACITY	_____ lbs.
CAPACIDAD/CAPACITÉ	_____ kgs.
SERIAL/SERIE/SÉRIE	_____
VESTIL MANUFACTURING CORPORATION	
sales@vestil.com • www.vestil.com	
287	REV 03/03

C: Label #250

⚠ WARNING
The drum chute of this machine elevates and rotates. Consequently, the operator and/or bystanders might sustain serious personal injuries if the drum dumper is improperly used. Reduce the likelihood of injury by applying the following practices:
<ul style="list-style-type: none"> • DO NOT exceed maximum rated load. • DO NOT operate dumper unless BOTH rim clamps securely engage drum. • DO NOT lift people with chute or allow people to ride on chute. DO NOT pass beneath or stand under chute when raised or tilted or allow others to do so. • DO NOT leave elevated or tilted drum unattended. Immediately after dumping drum, return chute to vertical position, fully lower it, and remove dumped drum. • DO NOT modify machine in any way. Modifications may cause malfunctions and might make dumper unsafe to use. • Instruct all people to clear area BEFORE operating dumper. • DO NOT load or operate dumper UNLESS securely attached to floor.
717

D: Label #221

⚠ DANGER	ELECTRICAL SHOCK Shut power off and consult owners manual before working on this equipment.
⚠ PELIGRO	EL GOLPE ELECTRICO Corte la corriente consulte el manual de propietario antes de trabajar en este equipo.
⚠ DANGER	CHOC ELECTRIQUE Couper le courant et consulter le manuel d'utilisation avant de travailler sur cet équipement
VESTIL MANUFACTURING CORPORATION Angola, Indiana USA • Phone (260) 665-7586 • Fax (260) 665-1339 • www.vestil.com 221 Rev 03/05	

E: Label #204

⚠ WARNING	⚠ ADVERTENCIA	⚠ AVERTISSEMENT
SECURE FRAME TO FLOOR	ASEGURE EL BASTIDOR AL PISO	FIXER SOLIDEMENT LE CADRE AU PLANCHER
Vestil Manufacturing Corporation • Angola, Indiana USA • Phone (260) 665-7586 • www.vestil.com 204 Rev 10/05		

F: Label #206

ISO 32 / 150 SUS
HYDRAULIC OIL OR NON-SYNTHETIC TRANSMISSION FLUID
ACEITE HIDRAULICO O LIQUIDOS DE TRANSMISION NO SINTETICOS
HUILE OU LIQUIDE HYDRAULIQUE NON-SYNTHÉTIQUE
VESTIL MANUFACTURING CORPORATION • Phone (260) 665-7586 • www.vestil.com

G: Label #208 (on both left and right sides)

⚠ WARNING	⚠ ADVERTENCIA	⚠ AVERTISSEMENT
KEEP CLEAR OF PINCH POINT	MANTENGASE ALEJADO DEL PUNTO DE CORTE	SE TENIR À DISTANCE DU POINT DE PINCEMENT
VESTIL MANUFACTURING CORPORATION • Phone (260) 665-7586 • Fax (260) 665-1339 • sales@vestil.com • www.vestil.com 208 Rev 10/05		