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AIR-THL
PNEUMATIC LOAD TILTER

Receiving Instructions

After delivery, remove the packaging from the product. Inspect the product closely to determine whether it sustained damage during transport. If damage is discovered, record a complete description of it on the bill of lading. If the product is undamaged, discard the packaging.

Notes: 1) The manufacturer continually develops all equipment and accessories. It reserves the right to make changes to the models from time to time. No claims may be made based on the information and illustrations contained in this manual. 2) The end-user is solely responsible for confirming that product design, use, and maintenance comply with laws, regulations, codes, and mandatory standards applied where the product is used.

Technical Service & Replacement Parts

For answers to questions not addressed in these instructions and to order replacement parts, labels, and accessories, call our Technical Service and Parts Department at (260) 665-7586. The Department can also be contacted online at https://www.vestil.com/page-parts-request.php.

Electronic Copies of Instruction Manuals

Additional copies of this instruction manual may be downloaded from https://www.vestil.com/page-manuals.php.

Contents

1. Introduction

We provide our customers with tools to improve product quality, increase safety and hygiene in the manufacturing process, and reduce operating costs. This manual is an extension of our commitment to the success of our customers and the safe, optimal performance of our equipment.

1.1 Using This Manual

The purpose of this manual is to provide equipment-specific information that can be used to train personnel and generate in-house procedures for safely operating and maintaining this equipment. This manual is intended for users with a basic understanding of industrial/automated equipment.

The information within this manual is not intended to replace good judgement and personal responsibility.

1.1.1 Symbols

The following symbols are used in this manual to identify information on hazards and prevention, as well as protection of the equipment.

DANGER: Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

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

CAUTION: Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE: Indicates a practice that is not related to personal injury.

1.1.2 Terms and Definitions

The list below contains common terms and abbreviations used in this manual, along with definitions.

Term	Definition
Supplier	Equipment manufacturer
User, Owner	Individual or corporation that utilizes and/or owns the equipment
Personnel, Operator	Individual employed on behalf of or by the user/owner
Hazard	Potential cause of harm
In-house	Conducted from within your organization
PPE	Personal Protective Equipment
ANSI	Approved American National Standard
OSHA	Occupational Safety & Health Administration

2. Description of Equipment

This equipment is engineered to improve productivity by controlling the flow of materials. We provide robust, high-quality equipment that has been refined over time, to minimize required maintenance and maximize equipment lifespan. This section describes the specifications of your equipment.

2.1 Specifications

The table below contains Floor Level Container Tilter (FLT) model information.

Model Number	29-900 | Floor Level Container Tilter - Foot Valve Operated
	29-950 | Floor Level Container Tilter - Hand Valve Operated
	29-951 | 29-950 with Larger Bucket
Additional Options	29-186 | Caster Retrofit
	29-300 | Safety Ratchet Retrofit
	29-188 | Electric Vibrator
	29-189 | Pneumatic Vibrator

The FLT is designed to tilt Gaylord boxes of material as they are emptied. The FLT can be loaded/unloaded with a pallet truck or a fork lift. Tilting begins when cargo weight is less than 900 lbs.

Specifications	
Dimensions	52" x 70.5" x 36" high [132.1 x 179.1 x 91.4 cm] NOTE: 29-951 model dimensions, reflecting larger bucket size are the 64" x 70.5" x 36" high [162.6 x 179.1 x 91.4 cm]
Floor space requirements	71" x 80" [180.3 x 203.2 cm]
Table height	Floor
Initial Tilt Weight	900 lbs [408.2 kg] NOTE: Tilting begins at 900 lbs. regardless of starting weight in Gaylord.
Maximum box size	48" x 48" x 60" tall [121.9 x 121.9 x 152.4 cm]
Base frame material	7 gauge steel
Bucket material	7 gauge steel
Wand holder	¾" dia. steel extension bar with 3½" ID wand holder [1.9 cm; 8.9 cm]
Shipping weight	430 lbs [195 kg]
Tilt actuator	Heavy duty, multi-ply airbag
Air requirement	60 PSI, 2 CFM usage per cycle [3.4 m^3/hr]
Regulator setpoint	Tamper-proof air regulator, pre-set to 43 PSI [2.96 bar]
Control options	Hand control valve or foot control valve

3. Safety

WARNING: Read and understand this manual before using this machine. Failure to follow operating instructions could result in death or serious injury.

Always observe the safety precautions below, as well as in-house guidelines and federal, state, and local codes/standards. Read and understand all operating information and drawings/schematics before using this equipment.

3.1 User/Owner Responsibility

Above all, it is the responsibility of the user/owner to provide a safe working environment, including:

- Compliance with all applicable health and safety codes/standards
- Training for all personnel
- Provision of appropriate PPE
- Proper maintenance and operation of systems/equipment

3.2 Safety Guidelines

It is the responsibility of the user/owner to select and implement the appropriate protective equipment (in accordance with federal, state, and local codes/standards).

The customer is responsible for evaluation of the noise level emitted by the equipment and provision of appropriate PPE, as required.

Installation, service, and maintenance of this equipment must only be performed by experienced, qualified personnel.

DO NOT operate this equipment until you have been fully trained.

DO NOT wear any items that could get caught in the moving parts of this equipment.

Never place any part of your body under or near rotating members or moving parts of machinery.

Before operating equipment, always confirm that the operating envelope is clear of personnel.

Perform scheduled inspections and maintenance of the equipment (refer to the Maintenance section for additional information). Repair/replace defective components immediately, and do not operate the equipment until it is in proper operating condition.

Your equipment must have a lockable isolation/relief device for each energy source. If these device(s) are not purchased with the equipment, the customer must provide and install a lockable isolation/relief device for each energy source (in accordance with federal, state, and local codes/standards).

Isolate energy and perform your lockout/tag-out procedure before adjusting, servicing, repairing, maintaining, or clearing blockages from this equipment. Refer to the Energy Isolation section for additional information.

Ensure that the motor (as applicable) and frame of the equipment are grounded in accordance with all federal, state, and local codes/standards.

Do not use a damaged electrical supply cable or a connection that is not approved by federal, state, and local codes/standards.

DO NOT wash down electric motors (unless wash-down rated).

If any safety decal is damaged or not readable, shut down the equipment and do not resume operation until the decal is replaced. For current pricing and delivery, contact the manufacturer to reorder safety decals.

3.3 Material Safety

DANGER: Do not process flammable, explosive, toxic, or otherwise hazardous materials without first performing an appropriate Process Hazard Analysis (PHA).

The manufacturer cannot be an expert in the chemical and biological properties of the infinite number of materials that could be handled by this equipment. This equipment is not designed to safely process hazardous materials unless additional precautions are taken.

Before processing any materials that are or can react to become flammable, explosive, toxic, or otherwise hazardous, the user/owner must perform a thorough risk assessment and Process Hazard Analysis of the entire process, including contingency plans for dealing with processing errors and upset conditions.

3.4 Energy Isolation

DANGER: Electrical enclosures contain hazardous voltage that will result in electrical shock or burn. Turn off and lock out equipment before servicing.

DANGER: Equipment within the electrical enclosure poses a shock and arc flash hazard that may cause severe injury or death. Wear proper protective equipment before opening or performing diagnostic measurements or testing while energized. Only qualified persons should open or work within the electrical enclosure.

This equipment must have a lockable isolation/relief device for each energy source. If these device(s) are not purchased with the equipment, the customer must provide and install a lockable isolation/relief device for each energy source (in accordance with federal, state, and local codes/standards).

3.4.1 Energy Sources

This equipment incorporates separate energy sources. Proper shutdown and lockout/tag-out must only be performed by qualified personnel, and must include disabling of all energy sources including but not limited to the following:

NOTE: Your system may not use all energy sources listed below.

- Electrical: Shut off and lock out all electrical disconnects. Verify electrical power is in the *off* state.
- Pneumatic: Disconnect/shut off air supply, bleed air from the equipment, and lock out. Verify that energy is relieved/restrained appropriately.

3.4.2 Energy Isolation Method

Before adjusting, servicing, repairing, maintaining, or clearing blockages from this equipment, complete the procedure below.

1. Review and become familiar with all documentation and schematics. Identify energy sources and stored energy.
2. Wear appropriate PPE.
3. Fully lower the FLT bucket.
4. Shut off/disconnect the main air supply. Allow air to fully bleed from equipment.
5. Identify and release stored energy as necessary.

6. If applicable: Shut off/disconnect the main electrical power source.
7. Perform your in-house lockout/tag-out procedure.
8. Verify that all energy sources are in the off/neutral state.

4. Installation

WARNING: Installation must only be performed by qualified professionals with the appropriate credentials for all required tasks.

4.1 Pre-Shipment Planning

Prior to shipment of the equipment:

1. Ensure that your facility has an adequate foundation to support the equipment. Consider the equipment weight, material weight, and torque when the equipment is operating.
2. Determine the appropriate anchoring method for the equipment.
3. Ensure that your facility entrances can accommodate the equipment.
4. Determine the equipment required to move the FLT, including vehicles and rigging. Allow only qualified professionals to operate the equipment and move the FLT.

4.2 Inspection of Shipment

Upon receiving the equipment:

1. Ensure that all pieces of equipment are present and not damaged.
    a. Report shipping damage to the carrier before the carrier leaves your facility. All claims must be filed before the carrier leaves the unloading site.
    b. Report any missing components immediately.
2. Remove shipping supports from the equipment (if present).

4.3 Installation Guidelines

NOTICE: The customer is responsible for evaluation and guarding of any open sides of the equipment.

NOTICE: All plumbing and wiring must meet or exceed all federal, state, and local codes/standards, and must be installed by qualified personnel.

WARNING: Before use, FLT must be secured to floor using four holes in bottom of frame. If the caster package is installed on the FLT, the FLT unit should be lowered to the floor (casters raised) instead of anchoring.

WARNING: The air regulator is pre-set to 43 PSI [2.96 bar] and cannot be adjusted to higher pressure. Operating at a higher pressure can rupture airbag.

1. Level the FLT, then anchor it to the floor using (4) holes in bottom of frame. If the caster package is installed on the FLT, the FLT unit should be lowered to the floor (casters raised) instead of anchoring.
2. Ensure pneumatic hoses within the frame of the machine are secured to the frame (where possible) and clear of the rotating bucket, pivot points, and/or any moving parts.
3. Connect air supply (50-100 PSI nominal; 3.45-6.89 bar) to ball valve.
4. Turn ball valve to open position to enable air pressure.

For information on installation and setup of major purchased components, refer to manufacturer documentation.

4.4 Retrofit Packages

For information on installation and setup of Caster Retrofit 29-186 and Safety Ratchet Retrofit 29-300 packages, refer to corresponding Retrofit section of this manual.

5. Sequence of Operation

5.1 Operating Sequence

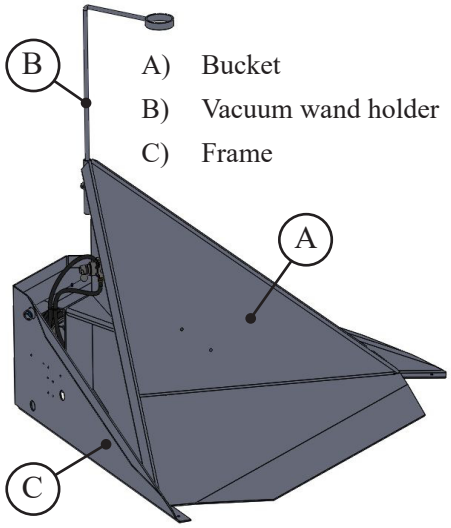
WARNING: Do not stand behind bucket or put any part of your body under, in, or near bucket when bucket is raising/tilting or raised/tilted.

WARNING: Machine operation occurs automatically. Do not place any part of the body on or near moving devices/components of the machine.

WARNING: Do not adjust Gaylord position in bucket when bucket is raised—fully or partially. This can result in the Gaylord tipping and falling from the bucket, which can cause personal injury. Lower the bucket if adjustment of the Gaylord is required.

CAUTION: If repositioning the vacuum wand holder, support the vacuum wand holder before loosening the screw securing it in place. This prevents the vacuum want holder from quickly lowering and potentially causing personal injury.

NOTICE: Bucket must be flat on floor before loading.



A) Bucket
B) Vacuum wand holder
C) Frame

1. Start with the FLT bucket (A) fully lowered.
2. Load Gaylord so it fits tightly into rear corner of bucket (A).
3. Lower vacuum wand holder (B) into hole on FLT frame and tighten screw at base.
4. Insert vacuum wand into wand holder (B) and into full Gaylord.
5. Place pedal/hand valve in the inflate position, as described below.

   As weight in Gaylord decreases, bucket lifts and rotates from floor position. Lifting begins when cargo weight is less than 900 lbs [408.2 kg] (*)
6. When Gaylord is empty, place control valve in deflate position, as described below, to lower the bucket.
7. Unload the Gaylord from the bucket.

(*) If the material in the Gaylord has a low flowability or high bulk density, the initial tilt weight may be affected. More material may remain in the outer corner of the Gaylord, causing the container to begin to tilt later than expected.

5.2 Foot Pedal Operation

NOTE: Pedal can be positioned on either side of frame for operation.

- Full forward - Inflates airbag to raise bucket when cargo weight reduces to less than 900 lbs
- Flat pedal - Holds bucket in current position
- Full back - Deflates airbag and lowers bucket

5.3 Hand Valve Operation

- C1 - Deflates airbag and lowers bucket
- N - Holds bucket in current position
- C2 - Inflates airbag to raise bucket when cargo weight reduces to less than 900 lbs

6. Maintenance

6.1 Considerations

The recommendations below are a guide; they are not all-inclusive. Use these recommendations, along with the OEM recommendations, to develop a preventative maintenance plan that is fitting for the environment of your equipment.

WARNING: NO persons, other than qualified personnel, should maintain or service this equipment.

WARNING: Use caution when servicing fluid power systems. Improper maintenance procedures involving pneumatic or hydraulic systems can cause a device to move unexpectedly, resulting in equipment damage or personnel injury. Safeguard or restrain moveable devices in accordance with applicable safety standards before servicing.

WARNING: Before performing maintenance on this equipment, ensure that all energy sources are properly isolated as described in the Safety–Energy Isolation section.

6.2 Maintenance Schedule

Periodically grease pivot pin through grease fitting on center of pivot tube.

Periodically apply oil or lubricant to airbag pivot pin.

Refer to manufacturer documentation for maintenance of purchased components.

Replace damaged or worn components before operating FLT.

Inspect the airbag(s) monthly for the following items: dry-rot cracks, rub marks, deformation, abrasion, or areas near which an accident occurred that may compromise the integrity of the airbag. If defect(s) are observed, replace the airbag before returning the FLT to operation.

As applicable, inspect the safety ratchet monthly for the following items: worn pawl, worn gear teeth, and loose hardware. Tighten loose hardware. If defect(s) are observed, replace the defective component.

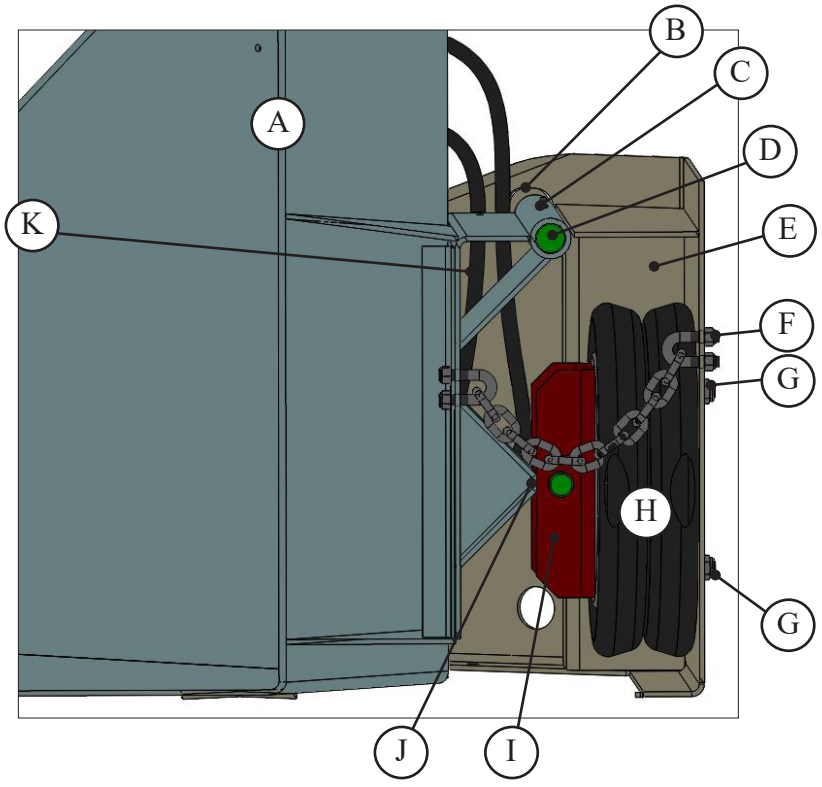
Section continues on following page.

6.3 Airbag Replacement

WARNING: NO persons, other than qualified personnel, should maintain or service this system.

WARNING: Before performing maintenance on this system, ensure that all energy sources are properly isolated as described in the Safety–Energy Isolation section.

1. Ensure bucket (A) is empty and fully lowered.
2. Turn off and isolate energy sources, and perform in-house lock-out/tag-out procedure.
3. Remove bucket pivot pin (D) from frame pivot tubes (B) and bucket pivot tube (C).
   NOTE: Remove retaining bolts to allow removal of pivot pin.
4. Disconnect safety chain (H) from frame (D).
5. Disconnect airbag (H) from rear side of FLT frame (E) by removing nuts (G) from airbag bolts.
6. Disconnect air hose (K) from airbag.
7. Move bucket assembly (A) slightly forward from frame (E) to provide space for airbag removal.
8. Unbolt and remove airbag (H) from airbag bracket (I).
9. Replace the airbag as follows:
   a. Locate new airbag (H) on airbag bracket (I), and replace and tighten bolts.
   b. Move bucket assembly (A) into frame.
   c. Re-connect air hose (K) to airbag.
   d. Re-connect safety chain (F) to frame.
   e. Insert bucket pivot pin (D) through frame and bucket pivot tubes (B), (C), then install retaining bolt at each end of bucket pivot pin.
   f. Replace and tighten nuts (G) on back of frame to re-connect airbag (H) to frame (E).



A) Bucket
B) Frame Pivot Tubes (2)
C) Bucket Pivot Tube
D) Bucket Pivot Pin
E) Frame
F) Safety Chain/Nuts
G) Airbag Nuts (2)
H) Airbag
I) Airbag Bracket
J) Bucket Airbag Pivot
K) Air Hose to Airbag

7. Caster Retrofit Package

7.1 Installation

WARNING: NO persons, other than qualified personnel, should maintain or service this system.

WARNING: Before performing maintenance on this system, ensure that all energy sources are properly isolated as described in the Safety–Energy Isolation section.

1. Ensure bucket is empty and fully lowered.
2. Turn off and isolate energy sources, and perform in-house lock-out/tag-out procedure.
3. Remove the bucket from the FLT frame as follows:
   a. Remove nuts (on back of frame) holding airbag to frame.
   b. Remove nuts (on back of frame) holding safety chain to frame.
   c. Remove bucket pivot pin from frame and bucket pivot tubes. NOTE: Retaining bolts at each end must removed to allow bucket pivot pin to be removed.
   d. Move bucket (with airbag attached) forward, out of frame leaving enough room to work. NOTE: As needed, FLT hand valve can be un-bolted from bucket for additional air hose length when moving bucket out of frame.
4. Mount the caster assemblies to the FLT frame as follows:
   a. Facing rear outside of the frame, with caster retracted, drill holes and mount rear caster assembly to center rear side of frame.
   b. Facing rear outside of the frame, with caster retracted, place left caster assembly under lip of left hand side of frame and move it forward until caster assembly stops. Drill holes and mount left caster assembly.
   c. Facing rear outside of the frame, with caster retracted, place right caster assembly under lip of right hand side of frame and move it forward until caster assembly stops. Drill holes and mount right caster assembly.
5. Install the caster hand valve as follows:
   a. Facing rear outside of the frame, drill and mount caster hand valve on right hand side of frame.
   b. Remove hose and hose barb from existing FLT air regulator assembly. NOTE: The opposite end of this hose is connected to the FLT hand valve inlet port.
   c. Insert 1/4" nipple into regulator.
   d. Thread 1/4" NPT tee into nipple.
   e. Install 1/4" hose barb on each end of tee.
   f. Connect 1/4" hose from one of the two hose barbs (installed in previous step) to caster hand valve inlet port (left hand port).
   g. Re-connect hose disconnected in step b. to second hose barb (installed in step e.). The opposite end of this hose is connected to the FLT hand valve inlet port.
   h. Using clips, attach hoses to frame.
6. Re-install bucket in FLT frame as follows:
   a. Carefully move bucket (with airbag assembly attached) back into FLT frame, aligning frame and bucket pivot tubes.
   b. Insert bucket pivot pin through frame and bucket pivot tubes, then re-install retaining bolts.
   c. Facing rear outside of the frame, re-install nuts (on back of frame) holding airbag to frame.

d. Facing rear outside of the frame, re-install nuts (on back of frame) holding safety chain to frame.

e. If FLT hand valve was removed from bucket, fasten FLT hand valve to bucket.

7.2 Operation

WARNING: If the caster package is installed on the FLT, the FLT unit should be lowered to the floor (casters raised) before operation.

CAUTION: Casters are only for use in moving FLT when bucket is EMPTY.

CAUTION: Test caster system before using.

7.2.1 Hand Valve Operation

Hand valve positions include:

- C1 - Deflates caster airbags, lowering FLT (casters up)
- N - Holds casters in place when air supply is removed for movement of FLT
- C2 - Inflates caster airbags, raising FLT (casters down)

8. Safety Ratchet Retrofit Kit

8.1 Installation

WARNING: NO persons, other than qualified personnel, should maintain or service this system.

WARNING: Before performing maintenance on this system, ensure that all energy sources are properly isolated as described in the Safety–Energy Isolation section.

Components diagrams are located on the next page.

1. Ensure bucket (I) is empty and fully lowered.
2. Turn off and isolate energy sources, and perform in-house lock-out/tag-out procedure.
3. Unbolt hand valve (A) from bucket (I).
4. Remove bucket pivot pin (K) from frame pivot tubes (B) and bucket pivot tube (J).
   NOTE: Remove retaining bolts to allow removal of pivot pin.
5. Disconnect safety chain (H) from frame (D).
6. Remove airbag pivot pin (F) from airbag bracket (E). NOTE: Remove cotter pin from either end of airbag pivot pin to allow removal.
7. Move bucket (I) away from frame (D) then orient bucket to allow access to rear corner (Figure 5).
8. Mount ratchet assembly (M, N, O) as follows:
   a. Locate ratchet assembly (M, N, O) on the outer rear corner of the bucket (I) as shown in Figure 5.
   b. Trace the (8) holes on the ratchet bracket (M) onto the bucket (I).
   c. Center punch holes traced in previous step.
   d. With 21/64" drill bit, drill clearance holes into pilot holes.
   e. Using 5/16" bolts and 5/16" locknuts, fasten the ratchet assembly (M, N, O) in place.
9. Mount ratchet gear (P) as follows:
   a. Facing inside of frame (D), locate ratchet gear (P) on holes in frame—location (Q). The ratchet gear should be oriented teeth down.
   b. Install 5/16" bolts, lock washers, and flat washers (in order listed), lift ratchet gear (P) as high as high as possible, then loosely fasten gear ratchet in place. NOTE: Permanent tightening will take place after final adjustment.
10. Re-connect bucket (I) to frame (D) as follows:
    a. Move the bucket (I) into the inside of frame (D), and align bucket airbag pivot (L) with holes in airbag bracket (E). Insert airbag pivot pin (F) and insert cotter pins through pivot pins.
    b. Re-connect safety chain (H).
    c. Insert bucket pivot pin (K) through frame and bucket pivot tubes (B), (J); then install retaining bolt at each end of bucket pivot pin. NOTE: Pivot pins can be lubricated at this time.
    d. Fasten hand valve (A) in original location on bucket.

Procedure continues after Component Diagrams page (next).

8.1.1 Components Diagrams

Figure 1

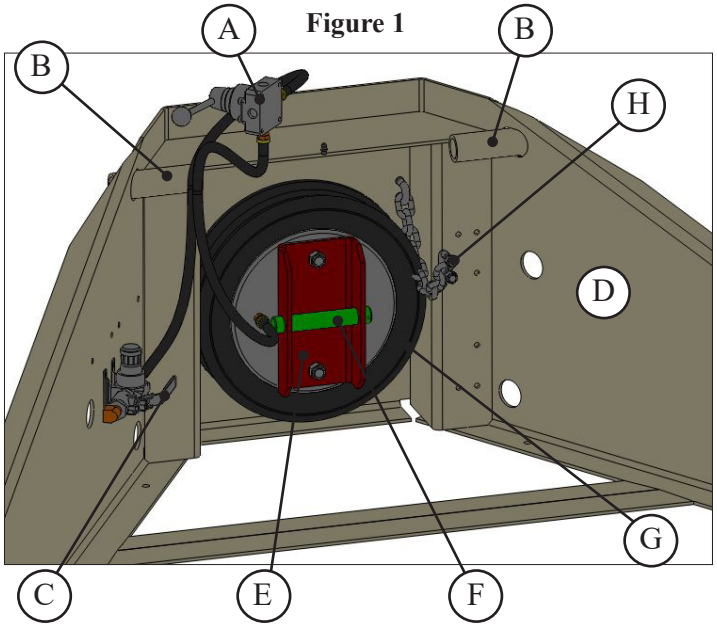
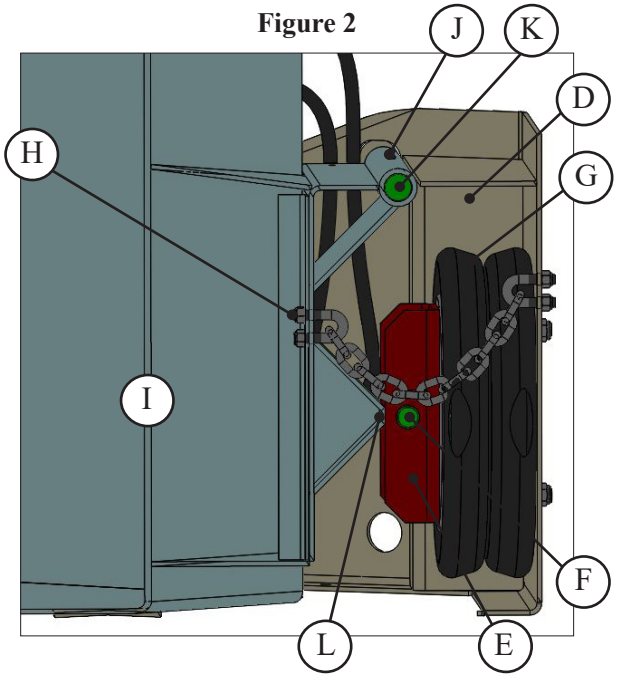


Figure 2



A) Hand Valve
B) Frame Pivot Tubes (2)
C) Ball Valve & Regulator
D) Frame
E) Airbag Bracket
F) Airbag Pivot Pin
G) Airbag
H) Safety Chain
I) Bucket
J) Bucket Pivot Tube
K) Bucket Pivot Pin
L) Bucket Airbag Pivot
M) Ratchet Bracket
N) Ratchet Cylinder
O) Ratchet Pawl
P) Ratchet Gear
Q) Ratchet Gear Location

Figure 3

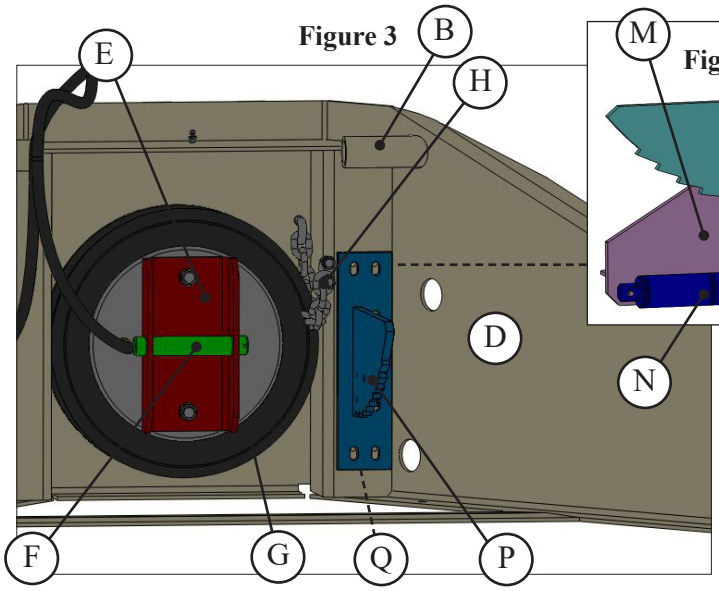


Figure 4

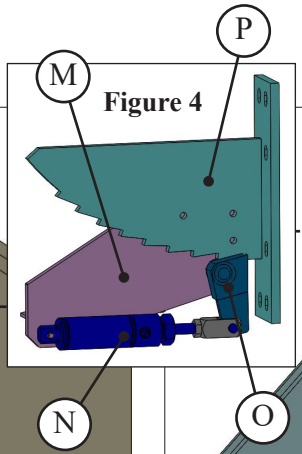
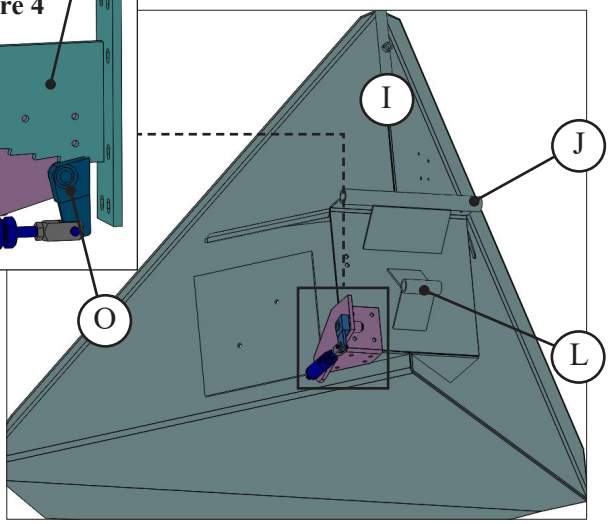


Figure 5

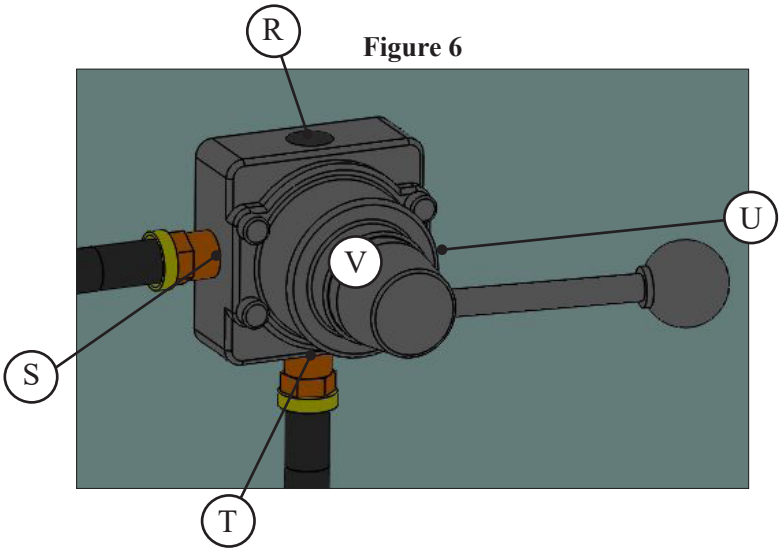


8.1.2 Air Connection—Hand Valve (29-950)

Connect air to the ratchet as follows:

1. Connect the end of the hose segment to the air inlet on the ratchet cylinder.
2. Run air hose under bucket where bucket pivot pin is located. Attach hose to clips at current hose junction.
3. Remove hex plug from top port (R) on hand valve (V).
4. Thread hose barb into top port (R) on hand valve, then connect hose to barb. NOTE: The bottom port (T) connects to the airbag, and the left hand port (S) connects to the regulator. A muffler is installed in the right hand port (U).

Figure 6



R) Top Port
S) Left Hand Port
T) Bottom Port
U) Right Hand Port
V) Hand Valve

8.1.3 Air Connection—Food Pedal (29-900)

Connect air to the ratchet as follows:

1. Connect the end of the hose segment to the air inlet on the ratchet cylinder.
2. Run air hose under bucket where bucket pivot pin is located. Attach hose to clips at current hose junction.
3. Unbolt foot pedal from mount plate.
4. Remove hex plug from front left hand port on foot pedal and replace with muffler.
5. Remove hex plug from front right hand port on foot pedal. Install the following items in the order listed: hex nipple, female elbow, and hose barb. Connect hose to hose barb. NOTE: The rear left hand port connects to the regulator and the rear right hand port connects to the airbag.
6. Bolt foot pedal to mount plate.

8.1.4 Final Adjustments

1. Restore air pressure to FLT.
2. Using foot pedal or hand valve, raise the empty FLT bucket.

3. Lower the FLT bucket and observe ratchet operation. The pawl should move as closely along the ratchet gear as possible without touching the ratchet gear.
4. With the ratchet gear positioned as close as possible to the pawl without touching it, tighten the bolts to secure the ratchet gear in place.

9. Warranty

(Seller) warrants products manufactured by it and supplied hereunder to be free of defects in materials and workmanship under normal use and proper maintenance for a period of one (1) year from the date of shipment. If within such period, any such products shall be proved to Seller's sole discretion to be defective, such products shall be at Seller's option repaired or replaced. Seller shall be responsible for labor charges in connection with repair or replacement for a period of ninety (90) days from date of shipment, but only for repair or replacement within the continental United States and Canada. All other labor charges shall be billed to Buyer at Seller's then prevailing rates, including travel and lodging expenses. Seller's obligation and Buyer's exclusive remedy hereunder shall be limited to such repair and replacement and shall be conditioned upon Seller receiving written notice of any alleged defect no later than ten (10) days after its discovery within the warranty period. At Seller's option, the Seller may require return of such products to Seller when such return is feasible. Seller reserves the right to satisfy all of its warranty obligations by reimbursing Buyer for all amounts Buyer has paid to Seller for such product upon which Buyer shall immediately return the product(s) to Seller. The foregoing warranty is not applicable to: (i) accessories and components not manufactured by Seller, which are warranted only to extent, if any, of the manufacturer's warranty for such accessories and components (but the warranty term for any such warranty shall be the expiration date of such warranty, or one year from date of shipment, whichever is the first to occur), or (ii) damages caused by shipping. Seller shall be responsible for freight charges for replacement parts only if shipped within the continental United States or Canada.

The foregoing warranty is exclusive and in lieu of all other express and implied warranties (except of title) including but not limited to implied warranties of merchantability, fitness for a particular purpose, performance, or otherwise. All other warranties are expressly disclaimed. Buyer agrees that in no event shall the Seller be liable for claims (based upon breach of express or implied warranty, negligence, product liability, or otherwise) for any other damages, whether direct, indirect, immediate, incidental, foreseeable, consequential, special or based on any other claim.