NEW LEADER®

MODEL MULTIBIN

UNIT SERIAL NUMBER _____

MANUAL NUMBER: 306997-B

EFFECTIVE 07/2015

Hi-Way® NEW LEADER®

Highway Equipment Company

Building the best since 1939.

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INSERT CURRENT NEW LEADER WARRANTY

The Model MULTIBIN is a 304 stainless steel hopper style spreader for insertion into the compatible New Leader spreader.

Inserting the MULTIBIN will convert the spreader to a 3 or 4 hopper unit, which can be used independently or together for straight and variable rate applications. The front two hoppers dispense fertilizer products while the single or dual hopper at the rear dispense(s) micronutrients or seeding products. The micronutrient hopper features a removable internal panel to convert between 3 and 4 bin configurations. The rear bin(s) are sloped forward to improve chassis weight distribution. Material is distributed from the front bin by conveyor and from the rear bin(s) by passing through a meter wheel, material dividers and 24-inch (60.96 cm) diameter dished discs.

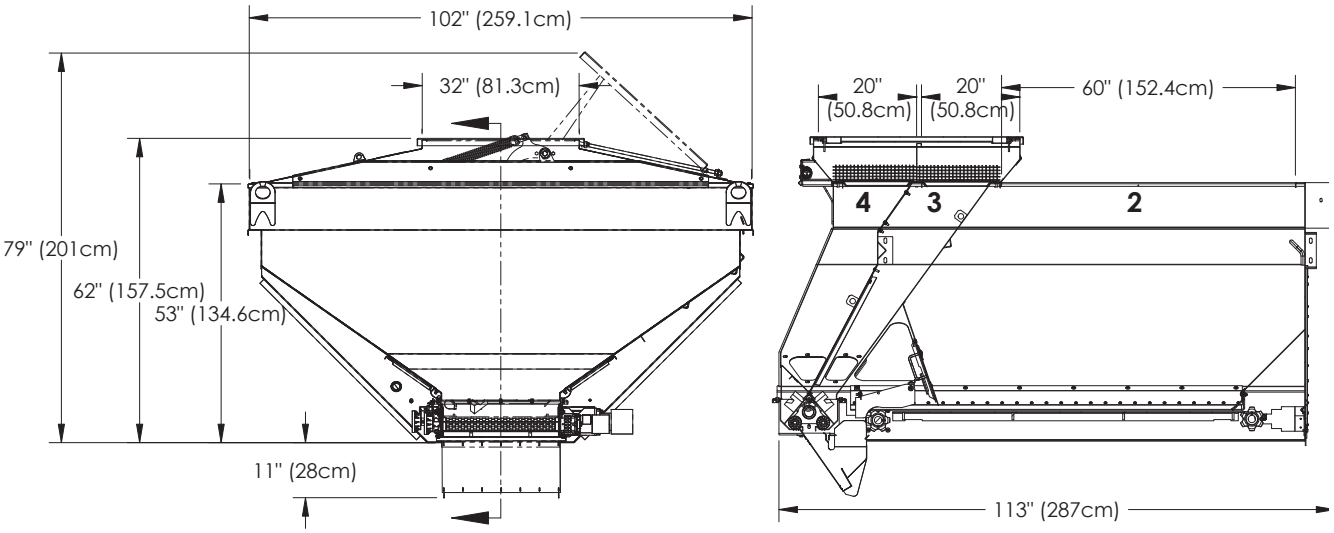
The MULTIBIN also comes equipped with an upper and lower material divider which improves material placement on the spinner for a more effective spread pattern.

Bin sensors are installed to warn when materials are low in each micronutrient bin.

There is an optional stainless steel micronutrient cover which opens and closes with a stainless steel air cylinder.

Screens installed on micronutrient bins separate material as it enters the bins.

This product is intended for commercial use only.



Bin 1 = main spreader bin (not shown)
Bin 2 = MULTAPPLIER bin
Bin 3 = front micronutrient bin
Bin 4 = rear micronutrient bin

	Overall	Bin 2	Bin 3	Bin 4
Length - Inches (cm)	113 (287)	60 (152.4)	20 (50.8)	20 (50.8)
Struck Capacity Cu Yd (Cu M) Cu Ft	NA	5.3 (4.05) 143	.85 (.65) 23	.78 (.6) 21
Weight - Lbs (Kg)	*1695 (769)	NA	NA	NA

* - With optional cover

⚠	Refer to *Safety* section in the spreader manual before proceeding with any installation, operation or maintenance.

NOTICE!	Hydraulic and truck requirements must be determined prior to installation of the MULTIBIN.

Refer to *Dimensions & Capacities* section for bin location.

Perform installation of all kit items including:

1. Front Feedgate Adjustment
2. MULTIBIN
3. Lower Divider
4. Cover (if applicable)
5. Controls
6. Panel(s) (to change bin quantity)
7. Screens (if applicable)

PUMP AND PTO REQUIREMENTS:

Hydraulic Requirements

NOTICE!	Excessive engine speed will cause more hydraulic oil to be pumped than is required to drive spinners, conveyor and meter wheels and may result in overheating the oil. Too low an engine speed may not provide sufficient hydraulic oil flow to maintain spread width or to keep the conveyor running at the speed required to deliver the desired quantity of material being spread.

Relief Pressure: 1500 PSI (103.4 bar)
Pump Flow: 9 GPM (34.1 LPM)

HECO Supplied Pump:

Pump Part Number - tandem rear section: (Must have compatible front pump part # 304424.)	304425
Pump Size:	.93 CID (15.24 CC)
Theoretical Pump Flow 100% Efficiency:	9 GPM (34.1 LPM)
Pump RPM:	2236 RPM

TRUCK REQUIREMENTS

Before installing the MULTIBIN spreader, the following major questions must be considered:

1. Does the CA (Cab to Axle) dimension of the truck permit the addition of the MULTIBIN?
2. Is the truck's GAWR (Gross Axle Weight Rating) and the GVWR (Gross Vehicle Weight Rating) adequate to carry the fully loaded spreaders?

Refer to your New Leader dealer to find the GAWR and GVWR for most trucks, and how to calculate the weight distribution on each axle and total loaded vehicle weight.

CHECKING INSTALLATION

See *Initial Start-Up* procedure.

FRONT FEEDGATE ADJUSTMENT

WARNING	Stay out of the spreader. If it's necessary to enter the spreader, return to the shop, empty body, turn off all power, set vehicle brakes, lock engine starting switch and remove keys before entering. Tag all controls to prohibit operation. Tags should be placed, and later removed, only by person working in the body.

The front feedgate on the MULTIBIN controls bin 1 product flow to the spinner.

Adjust the MULTIBIN's front feedgate prior to installation.

To adjust main bin's feedgate opening when a MULTIBIN will be installed: position front feedgate on MULTIBIN as necessary to achieve a 1-1/2 inch (3.81 cm) (Figure 1) to 4 inch (10.16 cm) (Figure 2) opening in 1/2 inch increments.

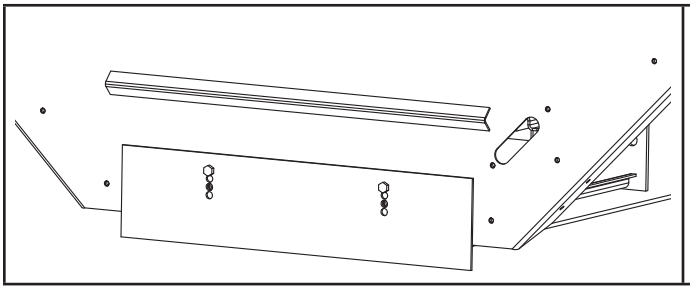


Figure 1 - 1-1/2" (3.81cm) Opening

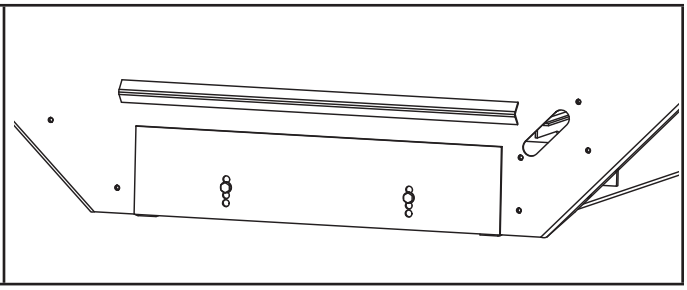


Figure 2 - 4" (10.16cm) Opening

*Visit **www.newleadervip.com** and enter parameters to determine minimum and maximum application rates and gate openings for optimal performance of your spreader.

INSERT INSTALLATION

⚠	**WARNING**	Use only lifting devices that meet or exceed OSHA standard 1910.184. Never exceed work load limits or lift equipment over people. Empty spreader before lifting. Loads may shift or fall if improperly supported, causing injury.

Before installing the MULTIBIN: Remove the Inverted V and Hillside Flow Divider from the spreader, if so equipped. Adjust the MULTIBIN's front feedgate to the proper opening. Support endgate by attaching a hoist to the lift hooks. Remove hardware from both sides of the endgate and hoist from the spreader.

Always inspect unit lift points for signs of wear, cracking, corrosion, gouges, alterations, or distortion.

Always use a sling, spreader bar, or lifting bar that attaches to the lifting points with a minimum of 60 degrees from horizontal. It is preferable to use an "H" style lifting bar that keeps the attaching chains in a near vertical orientation.

MULTIBIN

Parts Needed:

Description	Qty
MULTIBIN	1
Capscrew - 1/2 x 1 1/4 Grade 8	8
Flat Washer - 1/2 Grade 8	16
Lock Washer - 1/2 Grade 8	8
Hex Nut - 1/2 Grade 8	8

1. Make sure rubber sealer hardware is loose. If not, loosen.

Figure 3A

Figure 3B

2. To install MULTIBIN:
   a. Figure 3A - Hoist MULTIBIN into position and slide MULTIBIN between main bin's side sheets.
   b. Figure 3B - Align MULTIBIN's and main bin's front and rear mount brackets.
   c. Make sure MULTIBIN is resting on inside of main bin, and not resting on tops of side sheets.
   d. Release tension on hoist but do not remove.

Figure 4A (uninstalled)

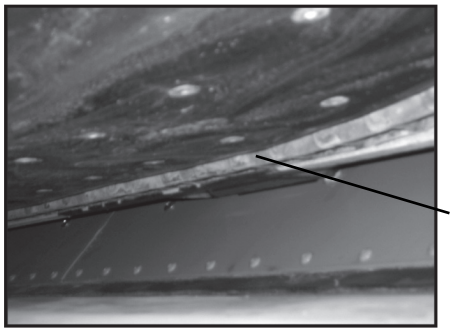


Figure 4B (shown installed)
View from rear of unit.

3. Figures 4A-4B - Visually make sure MULTIBIN is centered from side to side in main bin and rear pads are resting on main bin.

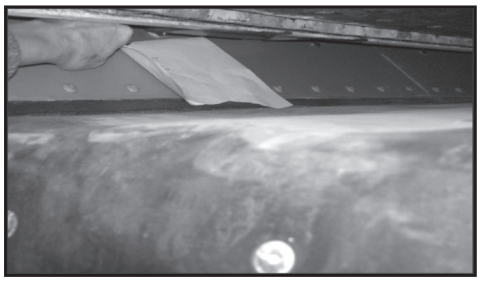


Figure 5

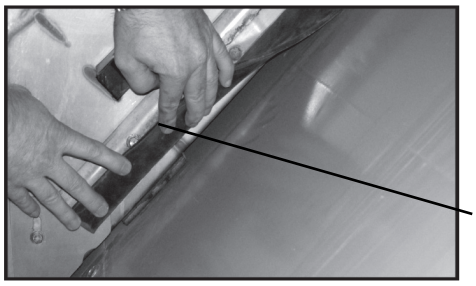


Figure 6

4. Figure 5 - There must be contact between rear pads and main unit. Check for contact by trying to slide paper between pads and main bin. If no contact, adjust MULTIBIN.

5. Figure 6 - Inside main unit, locate front pads by lifting rubber sealers on front endgate.

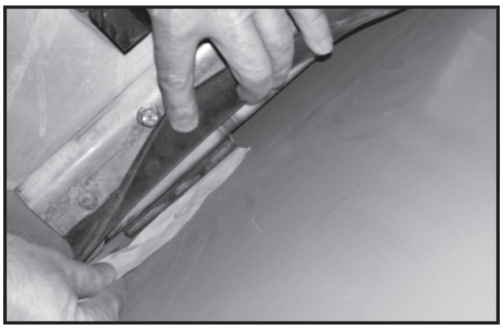


Figure 7A

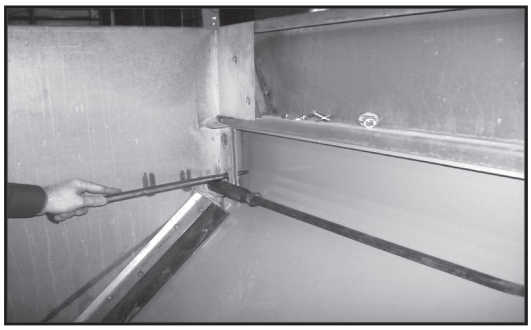


Figure 7B

6. Figures 7A-7B - There must be contact between front pads and main unit. Check for contact by trying to slide paper between pads and main bin. If no contact, adjust MULTIBIN.
   NOTE: Pry MULTIBIN at mount brackets if necessary.

Figure 8

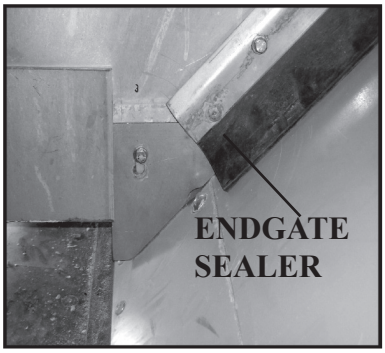


Figure 9

Figure 10

7. Figure 8 - Once both front pads make contact, insert hardware in front mount brackets' lower holes. Shim between main bin and MULTIBIN brackets if distance is larger than 1/8" (.32cm). Tighten hardware per torque recommendations in this manual.

8. Figure 9 - Make sure front feedgate is level. Lower endgate sealers so flush with chain shields and tighten hardware.

NOTICE!	Leakage of material may occur if the sealer belts are not set properly on the front of the MULTIBIN. Highway Equipment Company is not liable for lost material due to improperly installed sealer belts.

9. Figure 10 - Make sure there is a complete seal covering the gap between the MULTIBIN and the main bin's side sheets. Tighten all hardware on rubber sealers at front of MULTIBIN.

10. Make sure rear pads are still in place against main bin. Install hardware in lower holes of rear mount brackets. Shim between main bin and MULTIBIN brackets if distance is larger than 1/8" (.32cm). Tighten hardware per torque recommendations in this manual.

11. Make sure MULTIBIN's side sheets are not resting on top of main bin's side sheets.

12. Install hardware in all four mount brackets' upper holes. Tighten hardware per torque recommendations.

13. Remove hoist.

14. Inspect unit for foreign debris in meter wheel area.

Lower Divider

Parts Needed:

Description	Qty
Divider - Lower Weldment	1
Capscrew - 5/16 x 1	4
Washer - Flat 5/16	8
Nut - Lock 5/16 SS	4

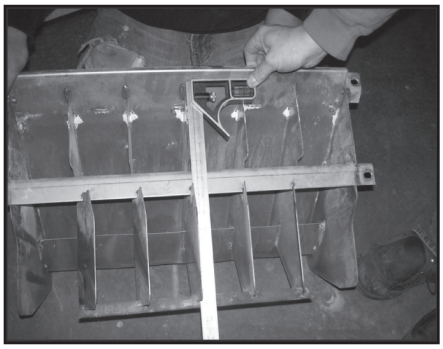


Figure 11

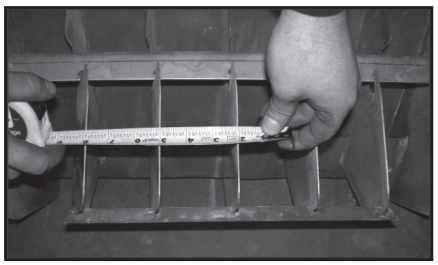


Figure 12

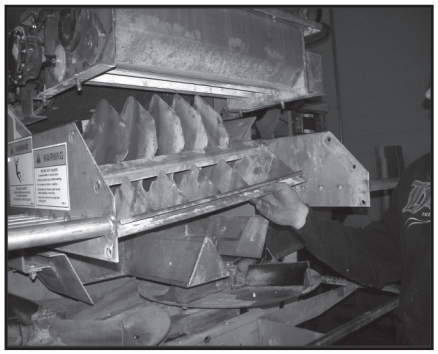


Figure 13

1. Figure 11 - Make sure center fin is square to rear panel.

2. Figure 12 - Measure distance between Lower Divider fins to make sure they are all 3” apart. Adjust top of fin as necessary.

3. Figure 13 - Slide Lower Divider between bottom of MULTIBIN and Spinner Divider as shown.

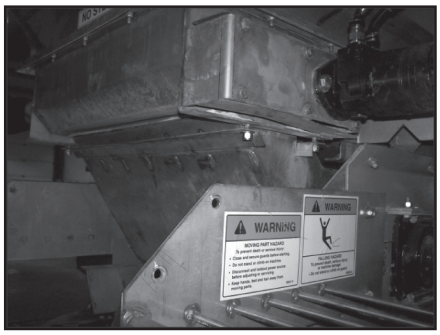


Figure 14

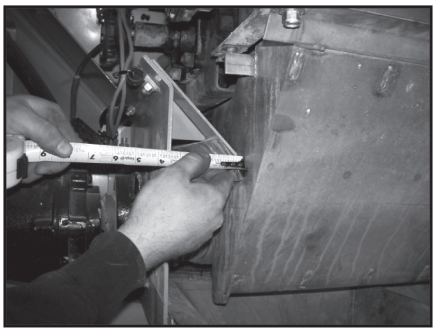


Figure 15

4. Figure 14 - Lift Lower Divider to bottom of MULTIBIN, align holes and loosely install front and rear hardware.

5. Figure 15 - Verify Lower Divider is square by measuring from each side to main bin’s chain shields. Make sure distances are equal.

6. Make sure Lower Divider is centered over Material Divider. Contact Highway Equipment Company if they cannot be aligned.

7. Tighten front and rear hardware per torque recommendations in this manual.

HYDRAULICS

Attach MULTIBIN hoses to spreader hoses as shown in Figure 16A or 16B. Plug in rate sensor.

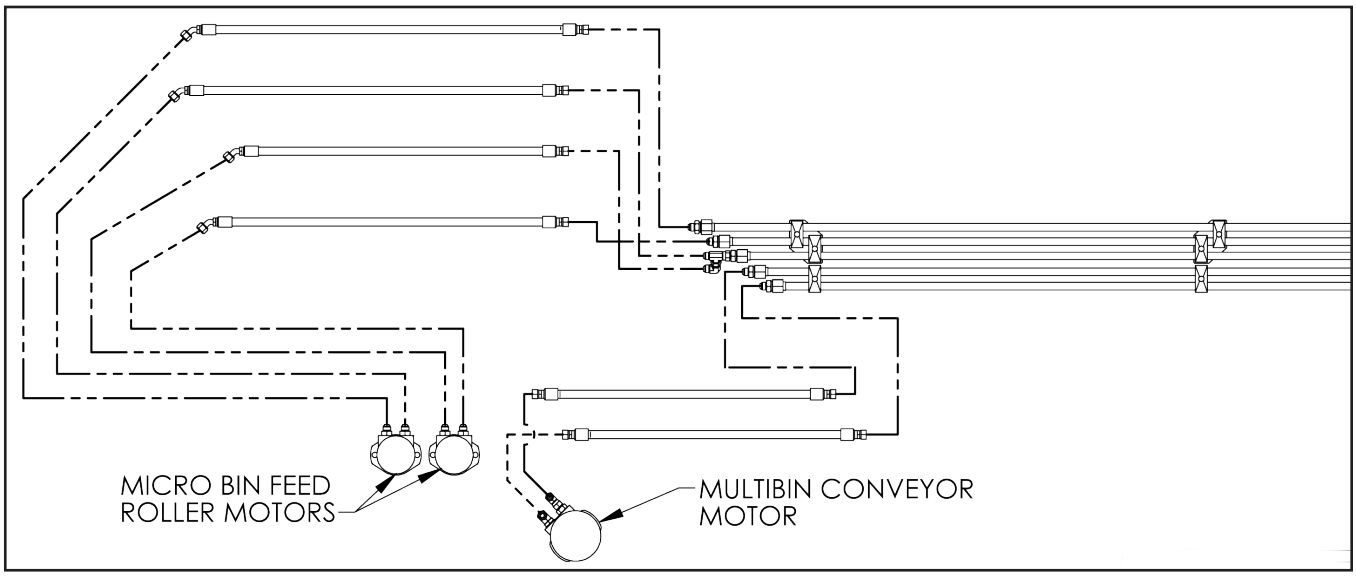


Figure 16A – MULTIBIN Operation Dual Micro

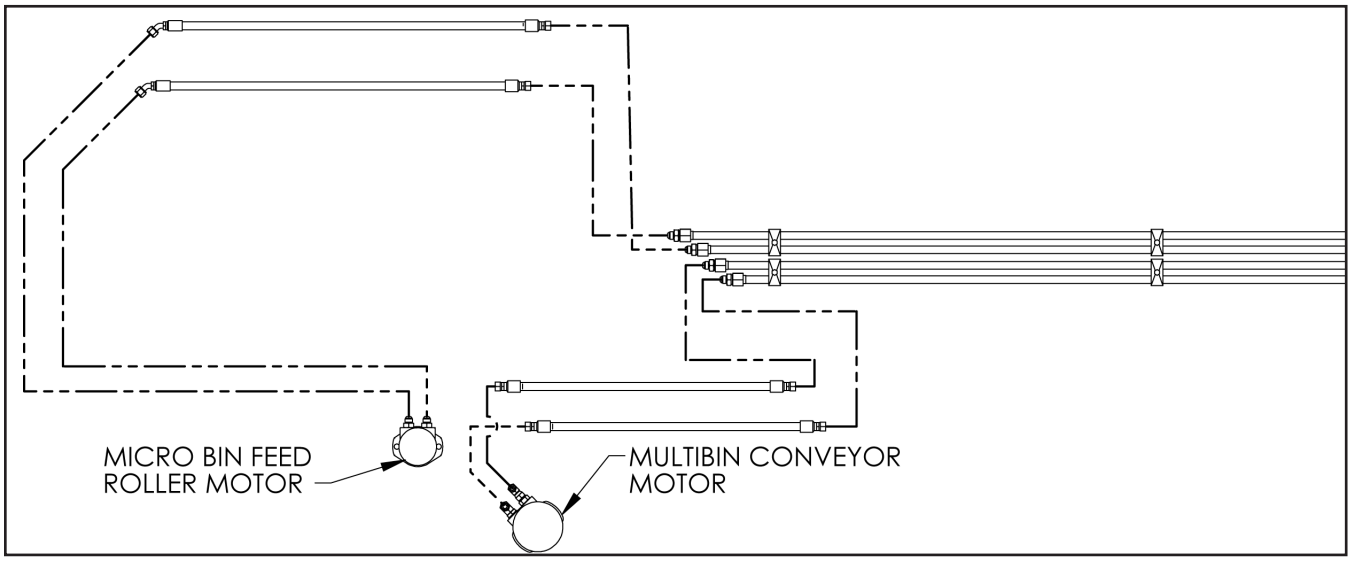


Figure 16B – MULTIBIN Operation Single Micro

Hydraulic Hose Installation

See spreader manual for hose installation instructions.

HYDRAULICS – COMPLETE INSTALLATION

If spreader was purchased separately from MULTIBIN, refer to parts pages for hydraulic installation. Install valve mount bracket on two right hand front stakes as shown in Figure 17.

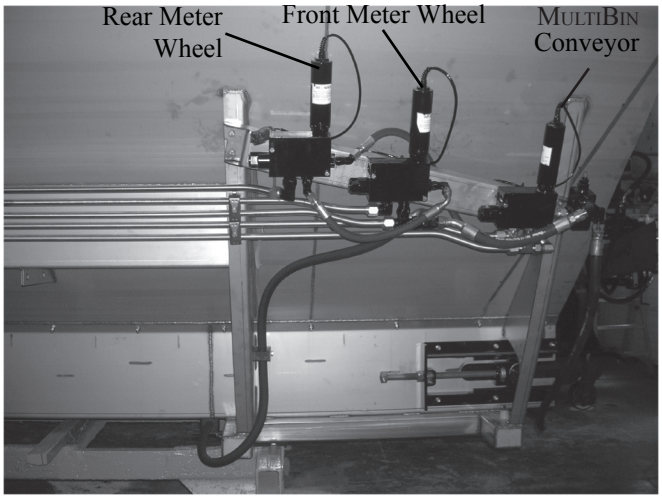


Figure 17 - Hydraulic Installation

COVER INSTALLATION

Air Supply and Electrical Requirements

Auxiliary Supply Line:
Dry Air - 85 PSIG (5.86 Bar)

Refer to *Pneumatic Lid* parts page for airline connections.

Electrical Connections:
Red = 12 V
Black = Ground

Refer to "Air Schematic" page in the *Troubleshooting* section for additional electrical information.

Make sure all hardware on insert is torqued before installing cover.

WARNING

Pressurized air may cause sudden movement of parts. Do not service cover components until safety precautions have been performed.

- Take preventative measures to prevent falling or runaway of cylinder or mechanism before maintenance and restart of spreader.
- Exhaust all residual air and cut the pressure supply for components before servicing.
- Injury can occur if precautions are not taken.

WARNING

Open cover lid with air prior to removing actuator pin and block cover lid to prevent closing. Unintentional closing could cause injury.

Fasten a three-point lifting device to two lift hooks and one hole in guide mount as shown in Figure 18. Hoist cover onto MULTIBIN as shown in Figure 19. Align slots and attach hardware. Tighten to recommended torque. Secure fittings and airline tubing on MULTIBIN with wire ties as shown in Figure 20. Connect to air and electrical systems. Open lid and install additional hardware inside cover. Install screens.

Refer to "Air Schematic" page in the *Troubleshooting* section for air supply requirements.

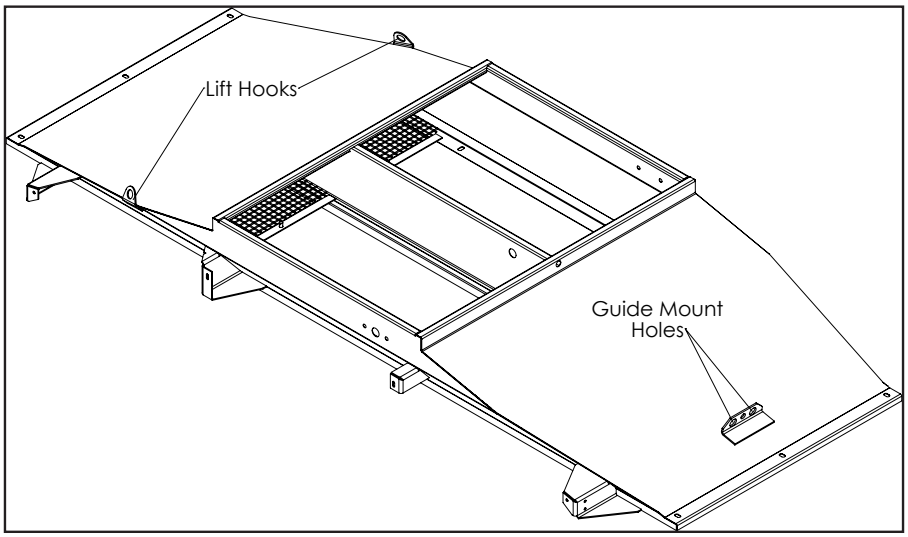


Figure 18 - Lift Hooks & Guide Mount

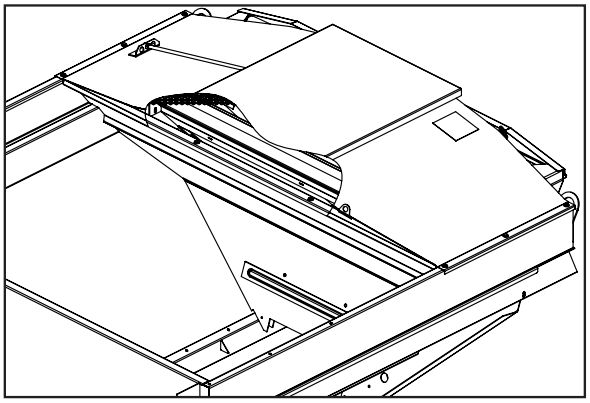


Figure 19 - Cover Placement

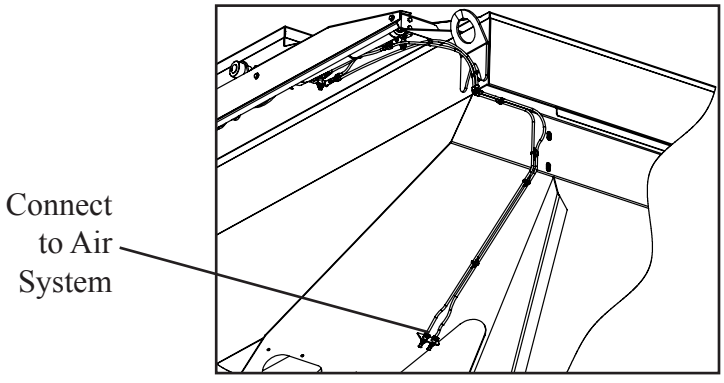


Figure 20 - Cover Airline Tubing

ELECTRICAL CONNECTIONS

Connect all electrical control circuits. The supply conductor should be connected directly to the battery. All wiring should be approved automotive insulated wire, supported adequately with insulating ties or straps, and located where it will not interfere with any control or access. Make sure wiring does not contact any moving parts or sharp edges and is kept away from hydraulic lines and heated parts.

MULTIBIN REMOVAL / ENDGATE INSTALLATION

Remove MULTIBIN and reinstall endgate, Inverted V, single conveyor Hillside Divider, etc. by following installation instructions in reverse order. Make sure the MULTIBIN hydraulics, electrical connections and airlines are disconnected from the spreader before removal. See "Inverted V" in spreader manual.

Hydraulics Removal

Route hydraulic hoses on the spreader and the MULTIBIN as shown in Figure 21A or 21B.

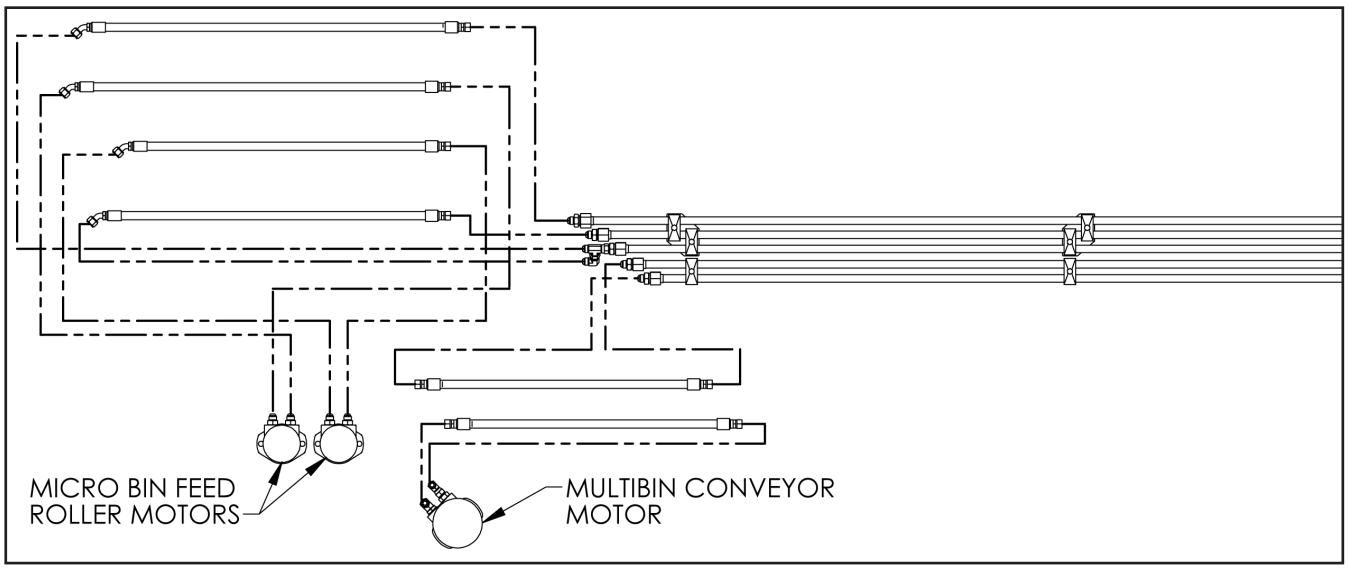


Figure 21A – Detach Dual Micro

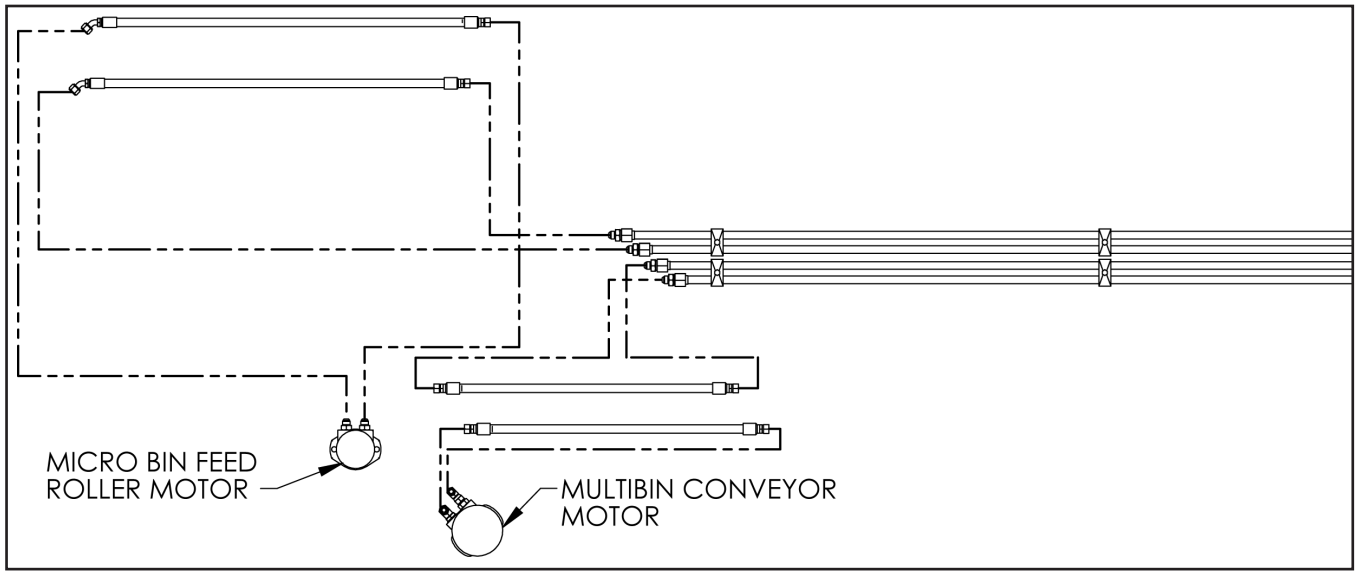


Figure 21B – Detach Single Micro

WARNING Stand clear of moving machinery.

NOTE: Do not load spreader with material.

1. Check entire unit to make sure all fasteners are in place and properly tightened per *Standard Torques National Coarse (NC) Capscrews* section in this manual.
2. Make sure no other persons are in vicinity of truck or spreader.
3. Make sure no loose parts are in unit or on conveyor or spinner.
4. Read initial start-up instructions.
5. Make sure the controller is programmed and setup to operate the MULTIBIN. Refer to the control's operation manual for instructions.
6. Run both conveyors to make sure they start and stop properly. Run the meter wheel(s) to make sure it starts and stops properly.
   NOTE: See "Constants" below.

DANGER Do not check leaks with hands while system is operating as high pressure leaks can be dangerous! If skin is pierced with hydraulic fluid at high pressure seek immediate medical attention as fluid injected into the skin could cause gangrene if left untreated. Relieve pressure before disconnecting hydraulic lines or working with system. Make sure all hydraulic fluid connections are tight and all hydraulic hoses and lines are in good condition before applying pressure to the system. Wear protective gloves and safety glasses or goggles when working with hydraulic systems.

WARNING DO NOT check for hydraulic leaks adjacent to moving parts while system is operating as there may be danger of entanglement!

7. Check all connections in hydraulic system to make sure there are no leaks.
8. Check all airline connections, if equipped, to make sure there are no leaks.

Unit is now ready for field testing.

CONTROLLER CONSTANTS

NOTE: These are starting points only. Calibrate conveyor and meter wheel(s) before spreading material using a 180 encoder.

BIN 2 (conveyor)		
Feedgate Opening	**NL7 CFR**	**Controllers with Spreader Constant**
1.5" (3.81cm)	.144	833.3
2"(5.08cm)		625.0
2.5"(6.35cm)		500.0
3"(7.62cm)		416.7
3.5"(8.89cm)		357.1
4"(10.16cm)		312.5
4.5"(11.43cm)		277.8
5"(12.7cm)		250.0

BIN 3 & 4 (meter wheels)	
NL7 CFR	Controllers with Spreader Constant
.0364	4945

(*Visit **www.newleadervip.com** for more information.)

The following procedure is a guide:

1. Read spreader manual's *Field Testing* section. The spreader manual includes instructions for the conveyor and spinner.
2. Make sure unit has been properly serviced. Do not load spreader.

DANGER	Take proper safety precautions when observing operation while vehicle is in motion! These may include use of suitable mirrors clamped to permit observation by a safely seated observer, following the spreader in another vehicle at a safe distance, or other suitable means. Do not stand on fenders, in body or on any part of spreader as there is danger of falling off the vehicle or into moving parts! Use great care in performing this test!

3. Refer to control's operation manual for channel (conveyor and meter wheel) operating instructions. The MULTIBIN's meter wheel(s) operate as separate channel(s). Set program to operational mode and begin forward travel. Move conveyor switch to "on" position. Conveyor and meter wheel(s) should start immediately when vehicle moves and should continue to run at speeds which vary directly with the vehicles road speed; the conveyor and meter wheel(s) should speed up as truck speed increases and slow down as truck speed reduces.

NOTICE!	The MULTIBIN's rear bin(s) are intended for dispensing micronutrients and seeds only—NOT HERBICIDES. The manufacturer is not liable for damage resulting from improper use.

NOTICE!	The spinner may damage seeds, especially at higher spinner speeds. Check seeds distributed from spinner. Slow spinner speeds if seeds show signs of damage.

1. Read *General Operating Procedures* section of spreader manual.
2. Make sure unit has been properly serviced and is in good operating condition. Field test unit prior to first use, prior to each spreading season's use and following overhaul or repair work, to verify that all components and systems are functioning properly. See *Field Testing* section in spreader manual.
3. Set rear feedgate opening to obtain yield desired.

   To adjust MULTIBIN rear feedgate: pull hairpins and move feedgate. Measure from conveyor to bottom of feedgate to set a 1.5" (3.81cm) to 5" (12.7cm) opening—holes are at 1/2-inch (1.27cm) intervals. Replace hairpins.

   To adjust main bin's product flow at MULTIBIN front feedgate, see front "Feedgate Adjustment" under *MULTIBIN Installation* instructions.

4. Drive to location where spreading is to be done.
5. Fill hoppers with materials to be spread.
6. Set controller program to desired values for each hopper in use.
7. Engage pump drive PTO.

CAUTION	Drive only at speeds which permit good control of vehicle!

8. Drive at speeds that allow engine to turn at proper RPM.

   If necessary, shift transmission into lower gears so engine speed can be maintained to allow adequate hydraulic oil delivery from pump.

*Visit **www.newleadervip.com** for interactive tools to calculate yield, proper feedgate opening, conveyor revolutions per minute, and mph to maximize the performance of your spreader.

PREVENTATIVE MAINTENANCE PAYS!

The handling and spreading of commercial fertilizers is a most severe operation with respect to metal corrosion. Establish a frequent, periodic preventative maintenance program to prevent rapid damage to spreading equipment. Proper cleaning, lubrication and maintenance will give you longer life, more satisfactory service and more economical use of your equipment.

WARNING	Shut off all power and allow all moving parts to come to rest before performing any maintenance operation.

CONVEYOR CHAIN

WARNING	Stay out of the spreader. If it's necessary to enter the spreader, return to the shop, empty body, turn off all power, set vehicle brakes, lock engine starting switch and remove keys before entering. Tag all controls to prohibit operation. Tags should be placed, and later removed, only by person working in the body.

Hose down unit and remove any material build-up on sprockets and under chain.

Lubrication

Make sure unit is clean and completely dry. Lubricate conveyor chain bi-weekly and at end of each season with Fluid Film™ or equivalent. Shut down spinner and run conveyor at 20 RPM for two full revolutions to lubricate chain. After each unit washing, allow to dry, then lubricate.

Tension

Proper chain tension is also a factor in chain and sprocket life (Figure 22). Measure from rear of unit forward to achieve proper chain tension. MULTIBIN conveyor touches bottom of sill only at center when properly tensioned. Make sure chain is tensioned equally on both sides. This adjustment is made on each side of the unit with the extended idler take-up at the rear.

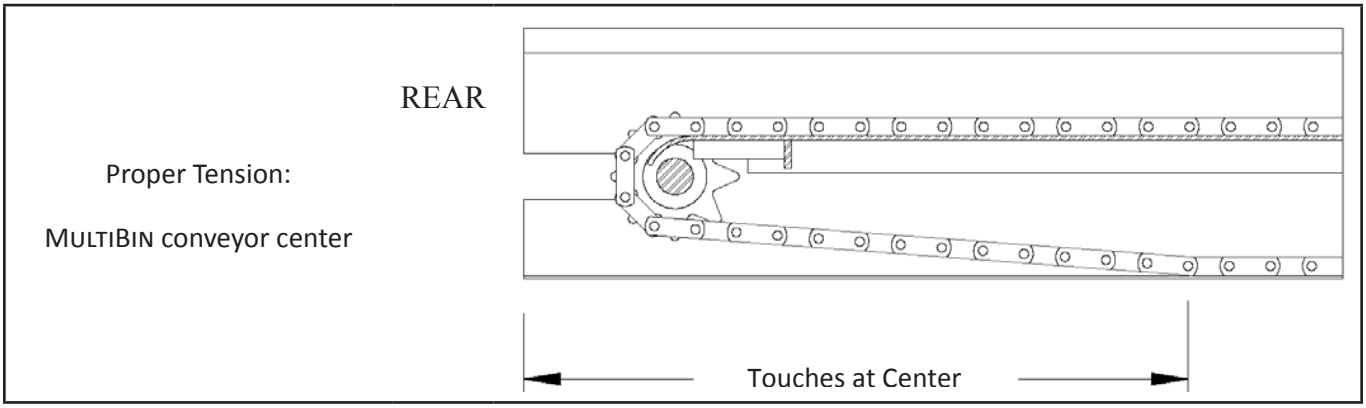


Figure 22 - Chain Tension

Conveyor chains that are too tight will tend to stretch, causing excess sprocket wear and eventually breakage. Excess slack presents the possibility of chain catching on sub-frame parts. Bent or distorted chain bars will cause damage as well. Straighten or replace bent or distorted chain bars immediately. It also causes fertilizer leakage with chain conveyors.

CONVEYOR BELT MAINTENANCE

Standard belt for the #4 chain is MOR (moderate oil resistant) that is impervious to moisture, weathering, or normal action which can be used with chemical impregnated fertilizer or oil based additives. Inspect belt fastener occasionally for wear or "raveling" of belt grip area.

LUBRICATION OF BEARINGS

Grease in a bearing acts to prevent excessive wear of parts, protects ball races, and balls from corrosion and aids in preventing excessive heat within the bearing. It is very important the grease maintain its proper consistency during operation. It must not be fluid and it must not channel.

Make sure all fittings are thoroughly cleaned before grease is injected. Points to be lubricated by means of a grease gun have standard grease fittings.

Lubricate bearings by pumping grease slowly until it forms a slight bead around the seals. This bead indicates adequate lubrication and also provides additional protection against the entrance of dirt.

HYDRAULIC SYSTEM

See spreader manual.

METER WHEEL(S) REMOVAL

If meter wheel is broken, sections can be replaced. To service meter wheel(s) (Figure 23): Disconnect and remove encoder. Remove guards and break chain. Remove retainer hardware and retainer on each side of micro assembly. Slide meter wheel assembly up and out.

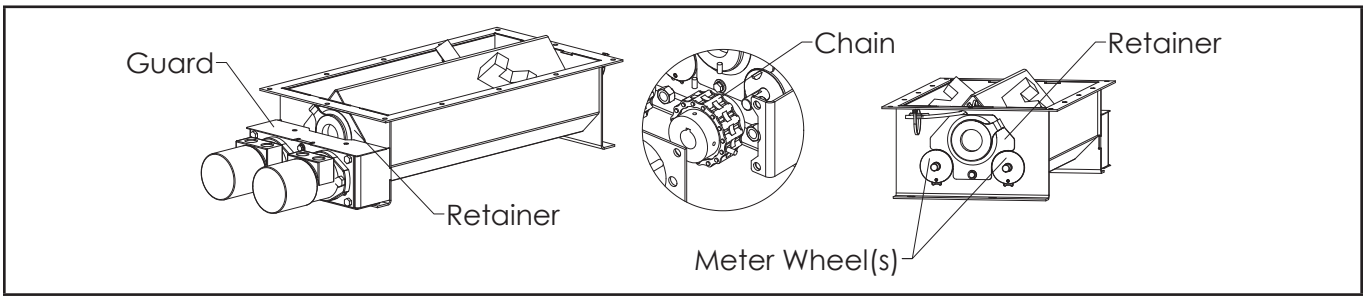


Figure 23 - Meter Wheel(s) Removal

BIN LEVEL SENSOR(S) REMOVAL

Disconnect bin sensor to be removed. Remove retainer and cover access panel on one side (Figure 24). Remove bin sensor hardware through retainer opening and pull bin sensor up through cover access panel opening.

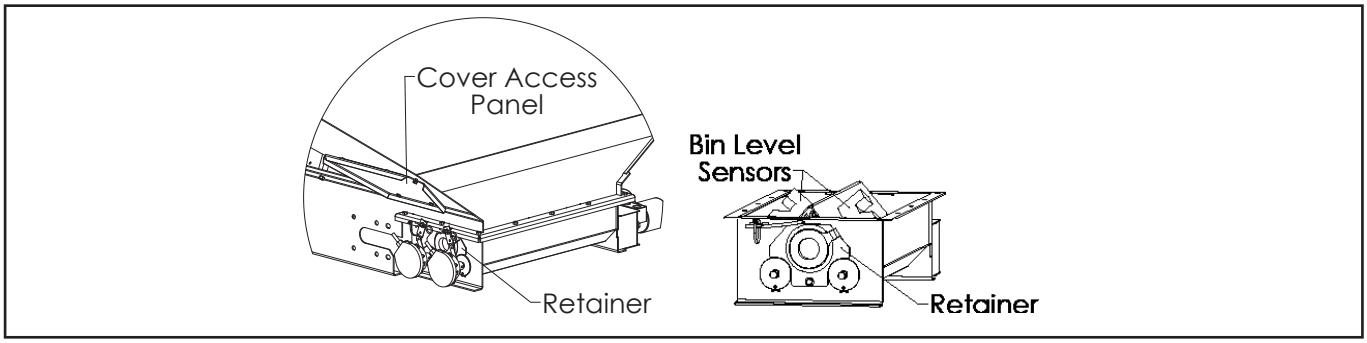


Figure 24 - Bin Level Sensor(s) Removal

CLEAN UP

Meter Wheel(s)

Pull inspection plug located on side of micro assembly. Blow air onto meter wheel(s).

Unit

NOTICE!	High pressure wash can inject water and/or fertilizer into control components, causing damage. Use caution when cleaning these areas.

Thoroughly wash unit every two to three days during the operating season to maintain minimal maintenance operation. Hose unit down under pressure to free all sticky and frozen material.

It is important the unit be thoroughly cleaned at the end of each operating season. All lubrication and maintenance instructions should be closely followed. Repaint worn spots to prevent formation of rust.

FASTENERS

Tighten all screw fasteners to recommended torque's after first week of operation and annually thereafter. If loose fasteners are found at anytime, tighten to recommended torque. Replace any lost or damaged fasteners or other parts immediately. Check body mounting hardware every week.

NOTICE!	The lubricant distributor and/or supplier is to be held responsible for results obtained from their products. Procure lubricants from distributors and/or suppliers of unquestionable integrity, supplying known and tested products. Do not jeopardize your equipment with inferior lubricants. No specific brands of oil are recommended. Use only products qualified under the following oil viscosity specifications and classification recommended by reputable oil companies.

GREASE GUN LUBRICANT

Use a waterproof ball and roller bearing lithium base lubricant with a minimum melting point of 300°F (148.8° C). This lubricant should have a viscosity which assures easy handling in the pressure gun at prevailing atmospheric temperatures. The grease should conform to NLGI No. 2 consistency.

CHAIN OIL MIXTURE

Use Fluid Film™ or equivalent.

LUBRICATION & MAINTENANCE CHART

WARNING Shut off all power and allow all moving parts to come to rest before performing any maintenance operation.

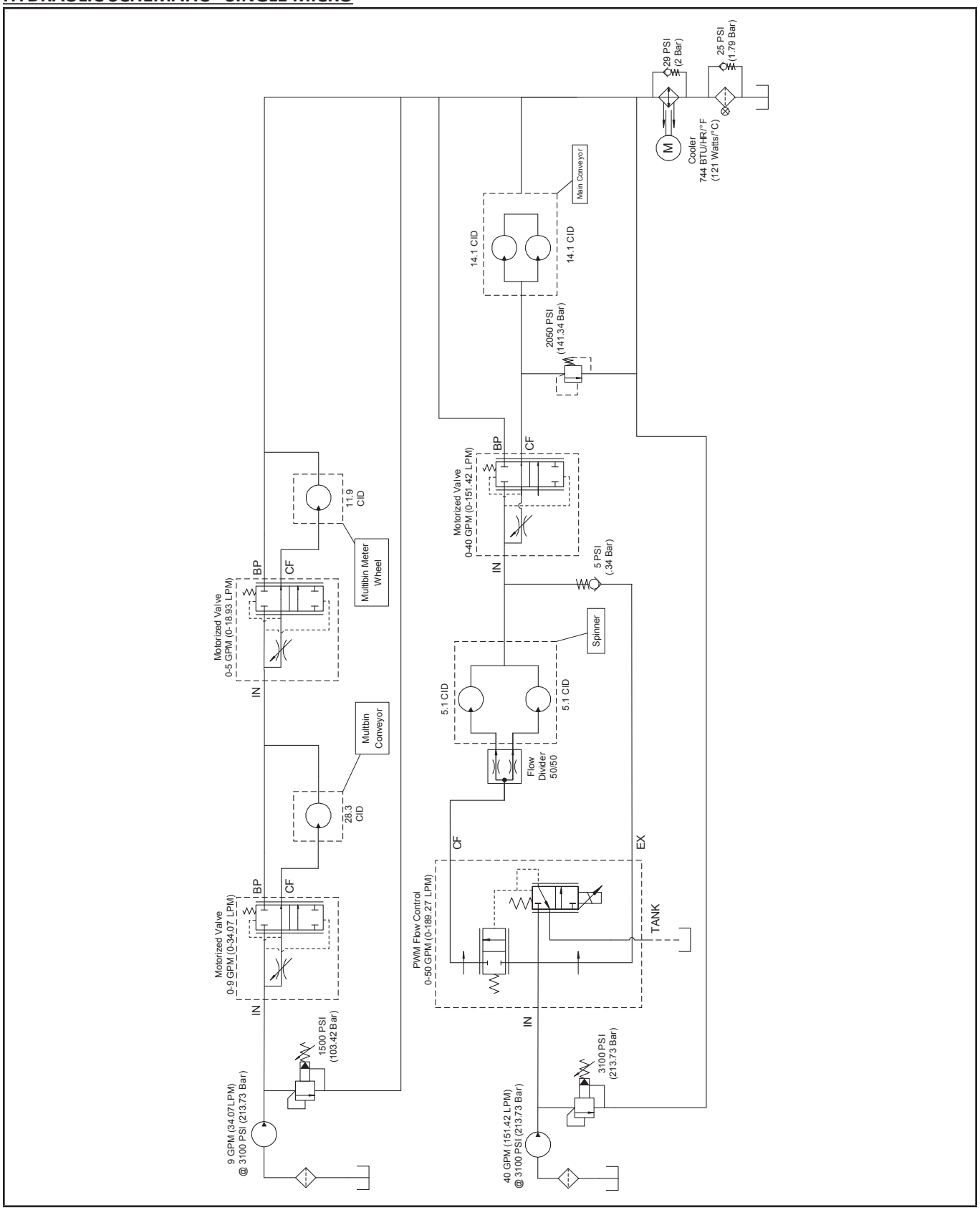
The spreader should be regularly lubricated with the lubricants recommended in this manual in accordance with the following chart:

LOCATION	PLACES	METHOD	FREQUENCY
Conveyor			
Dragshaft Bearings	2	Grease Gun	Weekly
Idler Shaft Bearings	2	Grease Gun	Weekly
Chain	2 Strands	Fluid Film™	Bi-Weekly
Micro Assembly			
Chain Coupling	1-2	Fluid Film™	Monthly

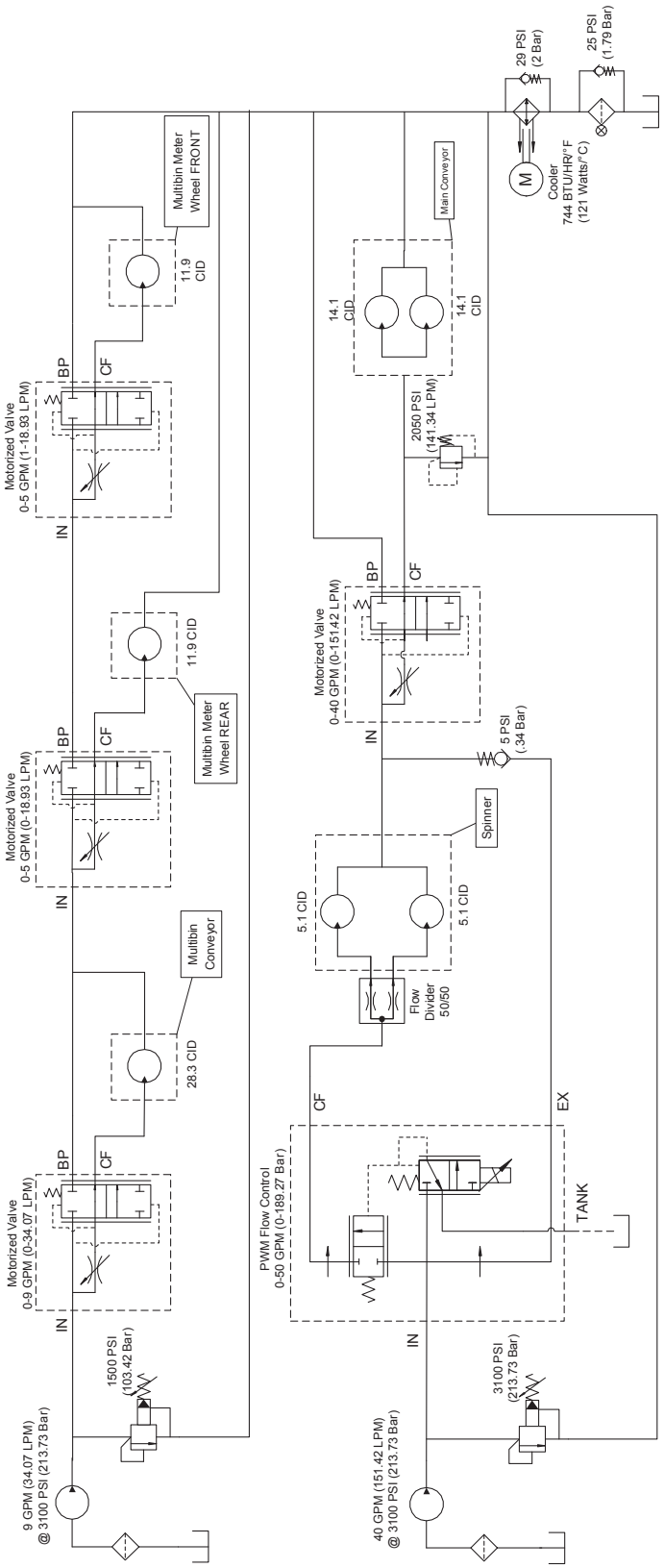
NOTE: Unusual conditions, such as excessive dust, temperature extremes or excessive moisture may require more frequent lubrication of specific parts.

*See *Lubricant and Hydraulic Oil Specifications* for types of lubricants and oil to be used.

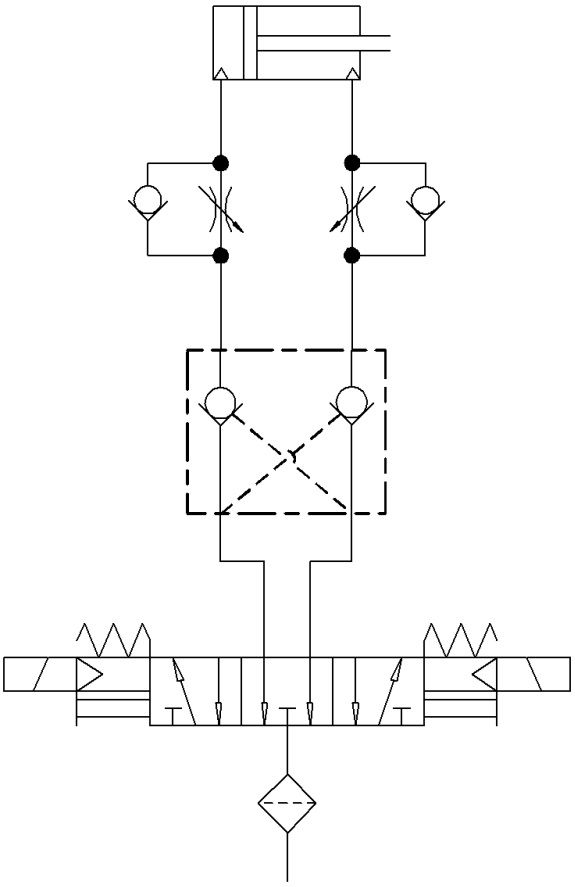
HYDRAULIC SCHEMATIC - SINGLE MICRO



HYDRAULIC SCHEMATIC - DUAL MICRO



AIR SCHEMATIC (for Cover Lid)



AUXILLARY SUPPLY LINE
DRY AIR
85 PSIG

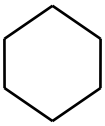
Auxiliary Supply Line
Dry Air
85 PSIG (5.95 kg/cm^2)
Electrical = 24 V-DC, 5.4 Watt Coils

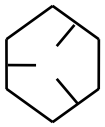
- Symptom: Spinners turn but conveyor and/or meter wheel does not run in manual mode. See reasons 1, 2, 3, 4, 9 & 10.
- Symptom: Console in operation mode, but the conveyor and/or meter wheel does not move when the machine moves. See reasons 1, 2, 3, 4, 9 & 10.
- Symptom: Conveyor and/or meter wheel does not run with cab control "On", PTO engaged and vehicle driving forward. See reasons 7, 9 & 10.
- Symptom: Conveyor and/or meter wheel runs when control switch in cab is in "Off" position. See reasons 5, 6, 8, & 10.
- Symptom: Conveyor starts to run when PTO is engaged. See reasons 5, 7, 9, 10 & 12.
- Symptom: Peak conveyor revolutions cannot be achieved. See reasons 10 & 11.
- Symptom: Controller application or programming. Refer to the control manual's *Troubleshooting* section.
- Symptom: Undesirable spread pattern. See *G4 Spread Pattern* section at the back of the spreader manual.
- Symptom: Lid does not function properly. See reasons 12 & 13.

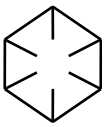
Reason:	Correction:
1. MULTIBIN relief valve open to return line.	Using relief valve testing adapter and flow meter, test valve for opening pressure. If not 1500 PSI (103.4 b), replace relief valve.
2. Jammed or frozen conveyor/meter wheel.	Free up conveyor/meter wheel.
3. Jammed or frozen conveyor/meter wheel hydraulic motor.	Replace motor.
4. Conveyor/meter wheel hydraulic motor shaft key sheared.	Replace key.
5. Excessive oil is being pumped.	1. PTO percentage too high. Change PTO to smaller percentage or use smaller pump. 2. Pump is too large. Do not exceed 9 GPM (34 LPM) for MULTIBIN conveyor and 5 GPM (19 LPM) (for meter wheel pumping rate. Change to smaller pump or use smaller percentage PTO. 3. Pressure drop in control valve is sufficient to run lightly loaded conveyor motor. Shut off pump drive by disengaging PTO shaft.
6. Conveyor valve not set properly.	Consult New Leader dealer for adjustments.
7. Defective radar.	Check speed on console. Repair or replace radar as required.
8. Control processor's power is in "Off" position.	Turn on control processor.
9. Involves the controller.	Refer to control manual.
10. MULTIBIN hydraulic circuit is not routed correctly.	Route hydraulic circuit per instructions specific to spreader.
11. MULTIBIN runs by using excess hydraulic flow from spreader.	Increase feedgate opening or slow driving speed.
12. Low air inlet pressure.	Check air supply.
13. Low voltage, blown fuse or poor ground.	Check battery connection, fuse and wiring.

STANDARD TORQUES NATIONAL COARSE (NC) CAPSCREWS

CAP SCREW GRADE IDENTIFICATION - MARKINGS ON HEAD

SAE GRADE 2  NO MARKINGS

SAE GRADE 5  THREE MARKS - 120 DEGREES APART

SAE GRADE 8  SIX MARKS - 60 DEGREES APART

USE GRADE 2 TORQUES FOR STAINLESS STEEL FASTENERS AND CARRIAGE BOLTS.

	TORQUE - FOOT-POUNDS					
CAP SCREW SIZE	GRADE 2		GRADE 5		GRADE 8	
	DRY	LUBE	DRY	LUBE	DRY	LUBE
1/4”	5	4	8	6	12	9
5/16”	11	8	17	13	25	18
3/8”	20	15	30	23	45	35
7/16”	30	24	50	35	70	55
1/2”	50	35	75	55	110	80
9/16”	65	50	110	80	150	110
5/8”	90	70	150	110	220	170
3/4”	100	120	260	200	380	280
7/8”	140	110	400	300	600	460
1”	220	160	580	440	900	650

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Hi-Way NEW LEADER
Highway Equipment Company
Building the best since 1939.

Order from the **AUTHORIZED DEALER** in your area.

1. Always give the pertinent model and serial number.

2. Give part name, part number and the quantity required.

3. Give the correct address to where the parts are to be shipped, and the carrier if there is a preference.

Unless claims for shortages or errors are made immediately upon receipt of goods they will not be considered. Any part returns should be directed through the dealer from which they were purchased.

When broken goods are received, a full description of the damage should be made by the carrier agent on the freight bill. If this description is insisted upon, full damage can always be collected from the transportation company.

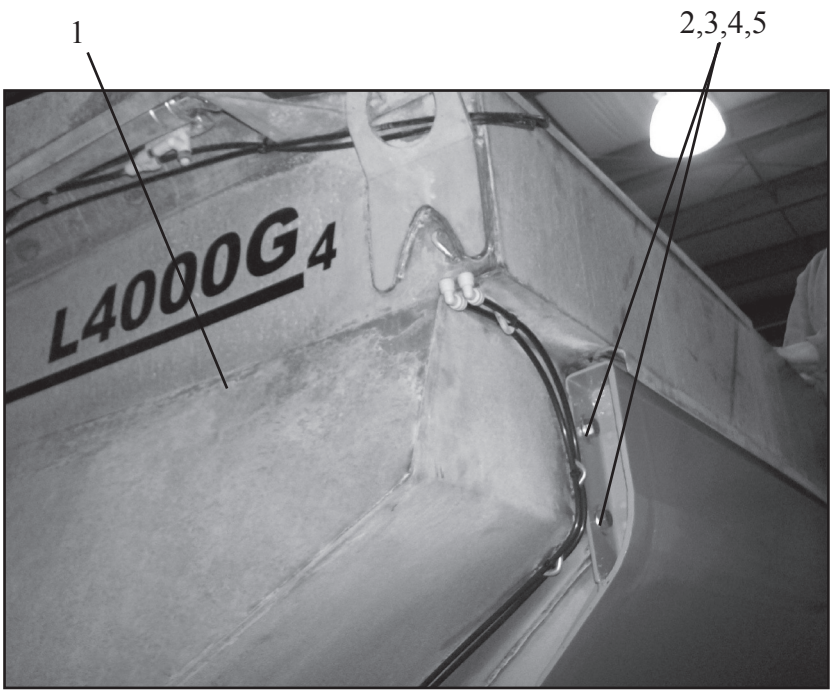
No responsibility is assumed for delay or damage to merchandise while in transit. Our responsibility ceases upon delivery of shipment to the transportation company from whom a receipt is received showing that shipment was in good condition when delivered to them, therefore, claims (if any) should be filed with the transportation company and not with Highway Equipment Company.

If your claims are not being handled (by the transportation company) to your satisfaction, please call the Parts Manager at Highway Equipment Company (319-363-8281) for assistance.

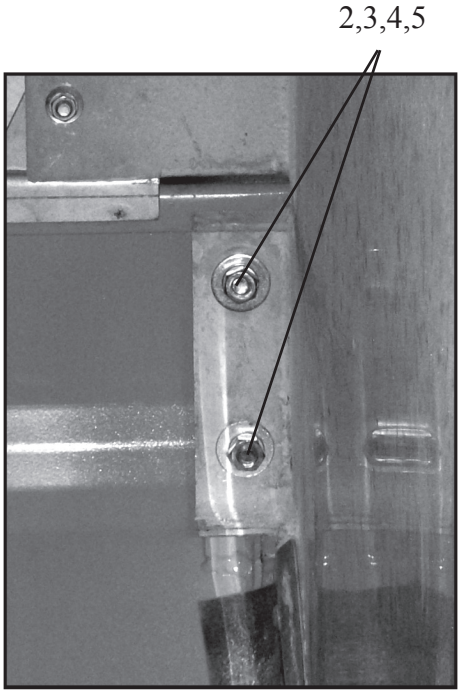
In the parts list the following symbols and abbreviations stand for:

* - Not Shown
AR – As Required
CS – Carbon Steel
SS – Stainless Steel

The parts listed under the different steel types (CS, 409 SS and 304 SS) are for that type of unit and do not necessarily mean the part is made of that type of steel.



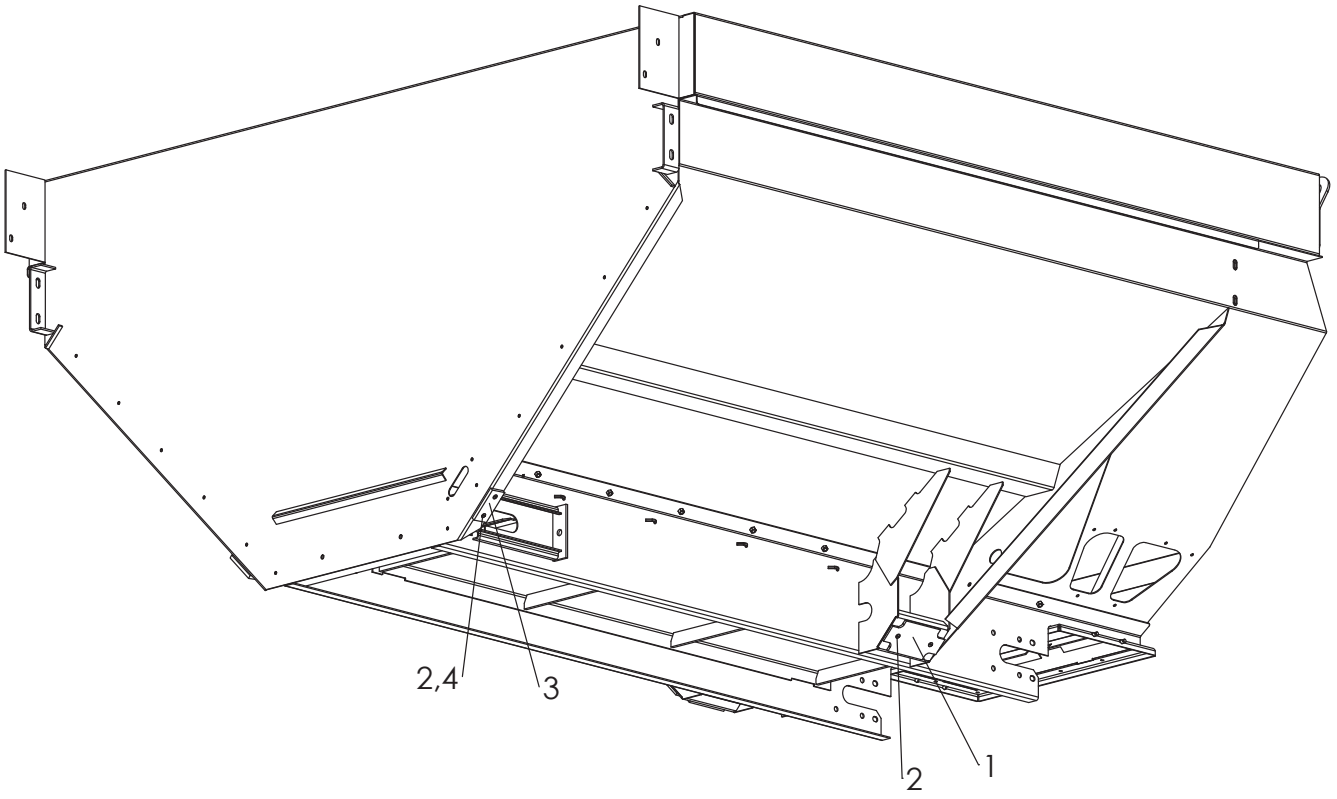
Outside Rear of Unit



Inside Front of MULTIBIN

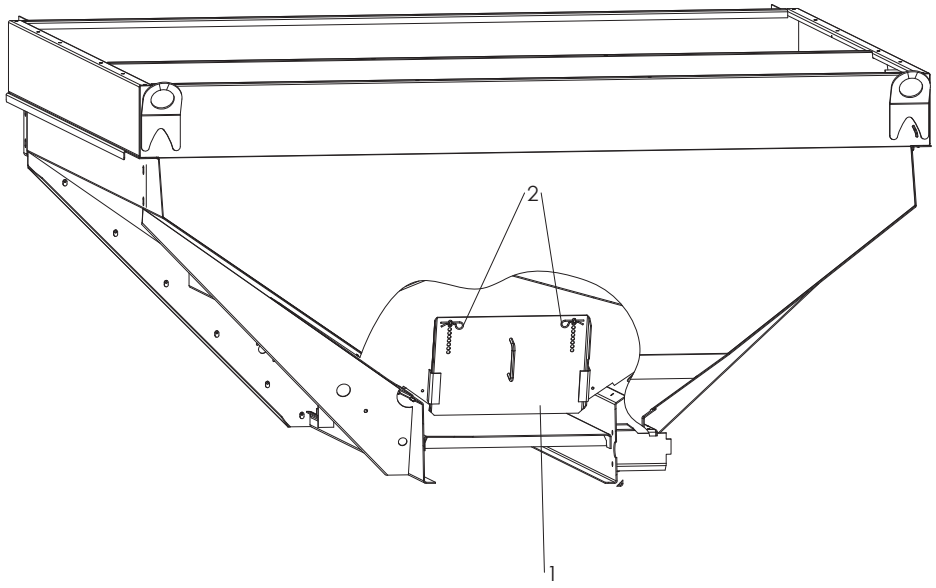
ITEM	PART NO.	DESCRIPTION	QTY
	307129	Hardware – Kit Mount	
1	306505	MULTIBIN	1
2	20129-X1	Cap Screw – 1/2 x 1 1/2 Grade 8	8
3	20695	Washer – Flat 1/2	16
4	20714	Washer – Lock 1/2	8
5	20646	Nut – Hex 1/2	8

MOUNTING PADS



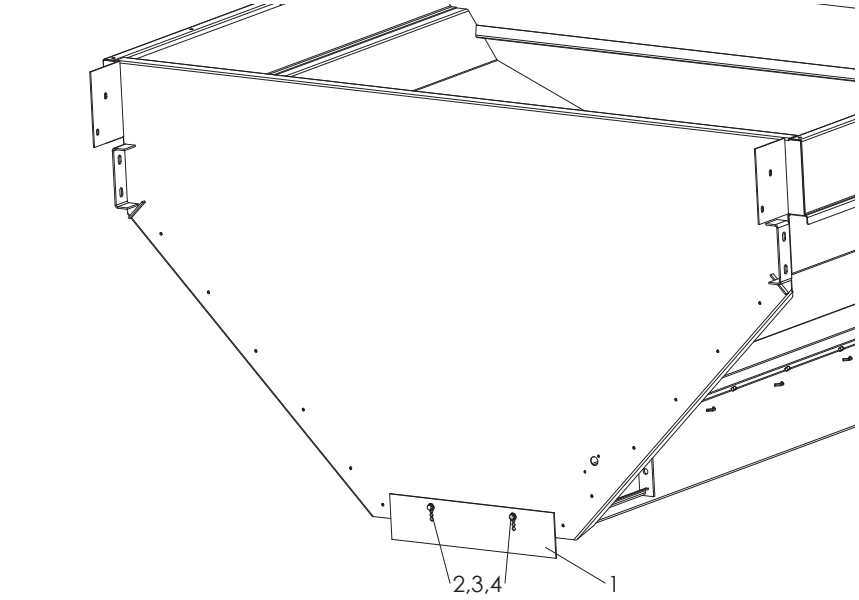
ITEM	PART NO.	DESCRIPTION	QTY
1	306924	Mount - Foot Pad	2
2	47268	Screw - Flathead 1/4-20 x 1 SS	8
3	307097	Mount - Pad	2
4	42034	Nut - Lock 1/4-20 SS	4

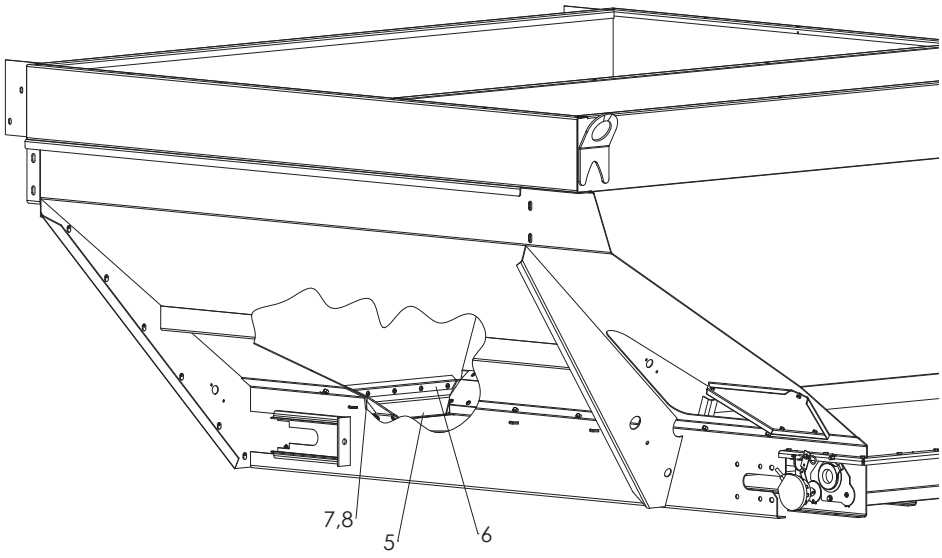
FEEDGATE



ITEM	PART NO.	DESCRIPTION	QTY
1	306578	Feedgate - Weldment 304	1
2	36429	Pin - Hair	2

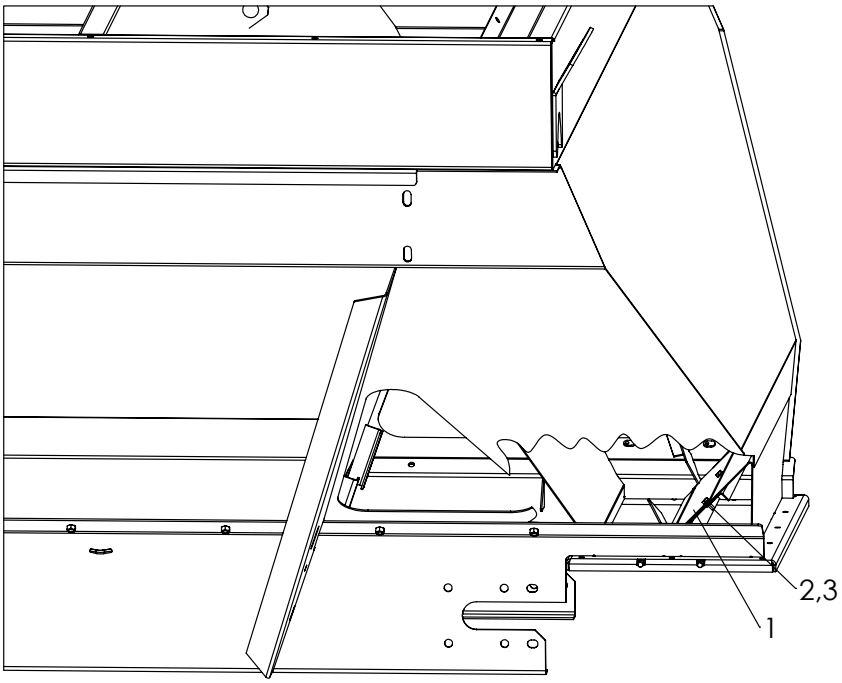
FRONT FEEDGATE & WIPER





ITEM	PART NO.	DESCRIPTION	QTY
1	306583	Feedgate 304	1
2	36293	Cap Screw - 3/8 x 3/4 SS	2
3	36425	Washer - Flat 3/8 SS	2
4	36420	Washer - Lock 3/8 SS	2
5	306545	Wiper - Belt Front	1
6	306546	Retainer - Wiper 304	1
7	42033	Screw - Truss Head 1/4 x 1 SS	5
8	36412	Nut - Hex 1/4 SS	5

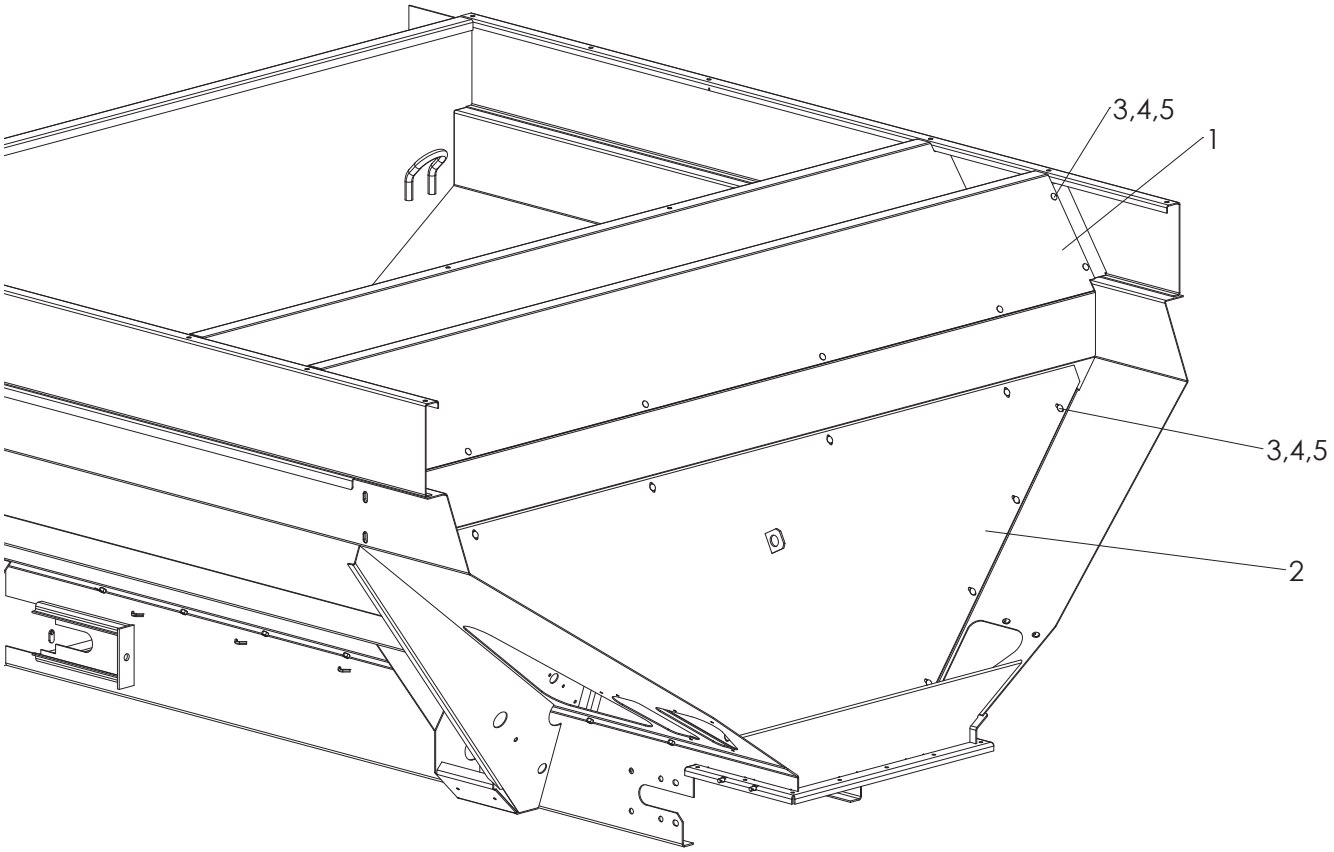
PANEL - SINGLE



* - Parts removed for clarity.

ITEM	PART NO.	DESCRIPTION	QTY
1	306532	Panel - Weldment Rear 304	1
2	36393	Cap Screw - 1/4-20 x 3/4 SS	3
3	36418	Washer - Lock	3

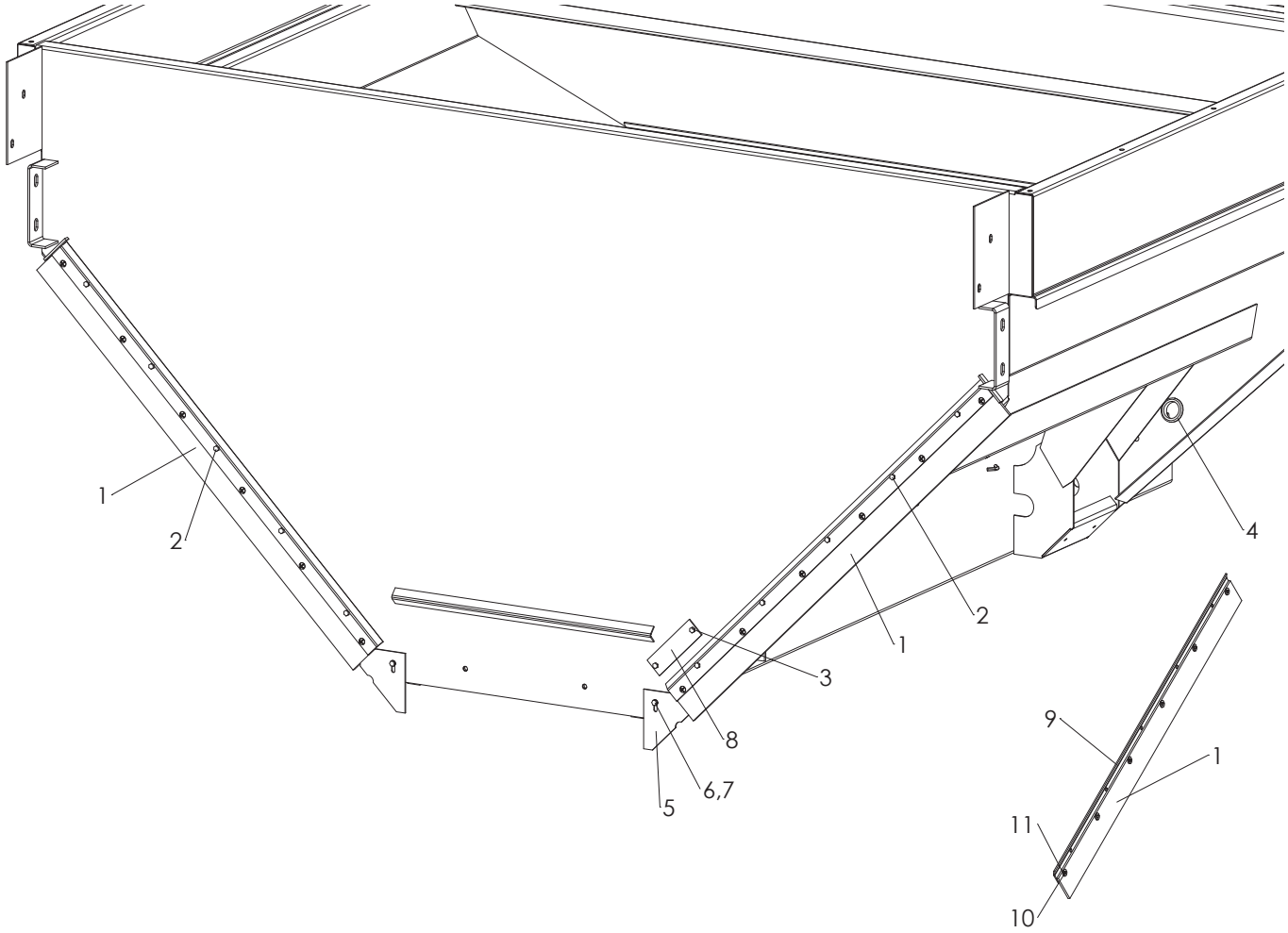
PANEL - DUAL



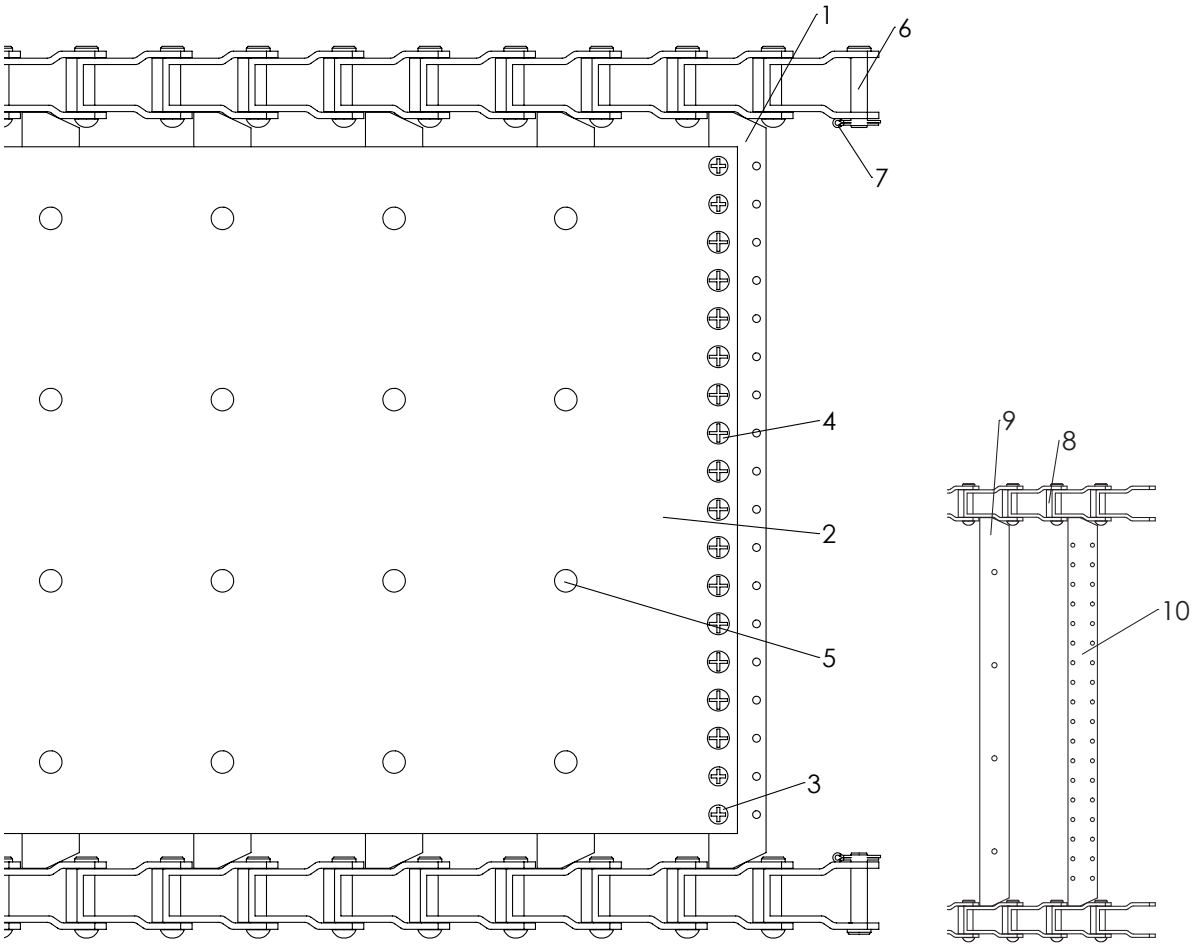
* - Rear Endgate removed for clarity.

ITEM	PART NO.	DESCRIPTION	QTY
1	306528	Panel - Insert Upper 304	1
2	306529	Panel - Weldment Lower 304	1
3	42639	Bolt - Carriage 5/16 x 1 SS	26
4	36424	Washer - Flat 5/16	26
5	42221	Nut - Lock 5/16 SS	26

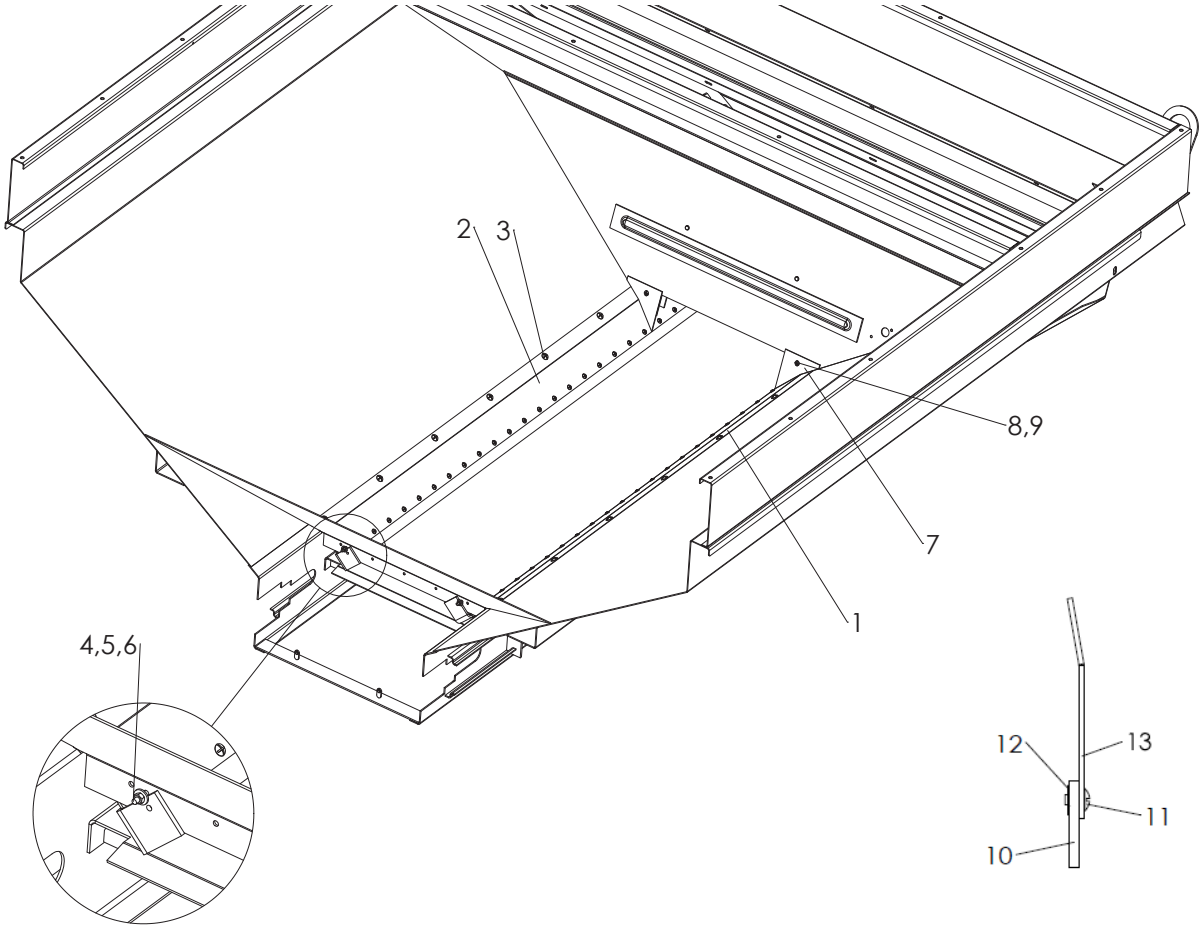
SEALER - FRONT



ITEM	PART NO.	DESCRIPTION	QTY
	306637	Seal - Assy 304, Includes 1, 9-11	
1	306582	Seal - 3 x 1/4 x 45	2
2	36395	Cap Screw - 1/4 x 1 SS	10
3	36393	Cap Screw - 1/4 x 3/4 SS	2
4	34129	Grommet - Rubber	1
5	306707	Sealer - Endgate Bolt-In 304	2
6	36418	Washer - Lock 1/4 SS	2
7	40750	Cap Screw - 14 x 1-1/4 SS	2
8	307125	Plate - Bin Sensor 304	1
9	306581	Retainer - Seal 304	2
10	56258	Screw - Truss Head 1/4-20 x 1/2	12
11	88931	Nut - Tee 1/4 x 1/4	12

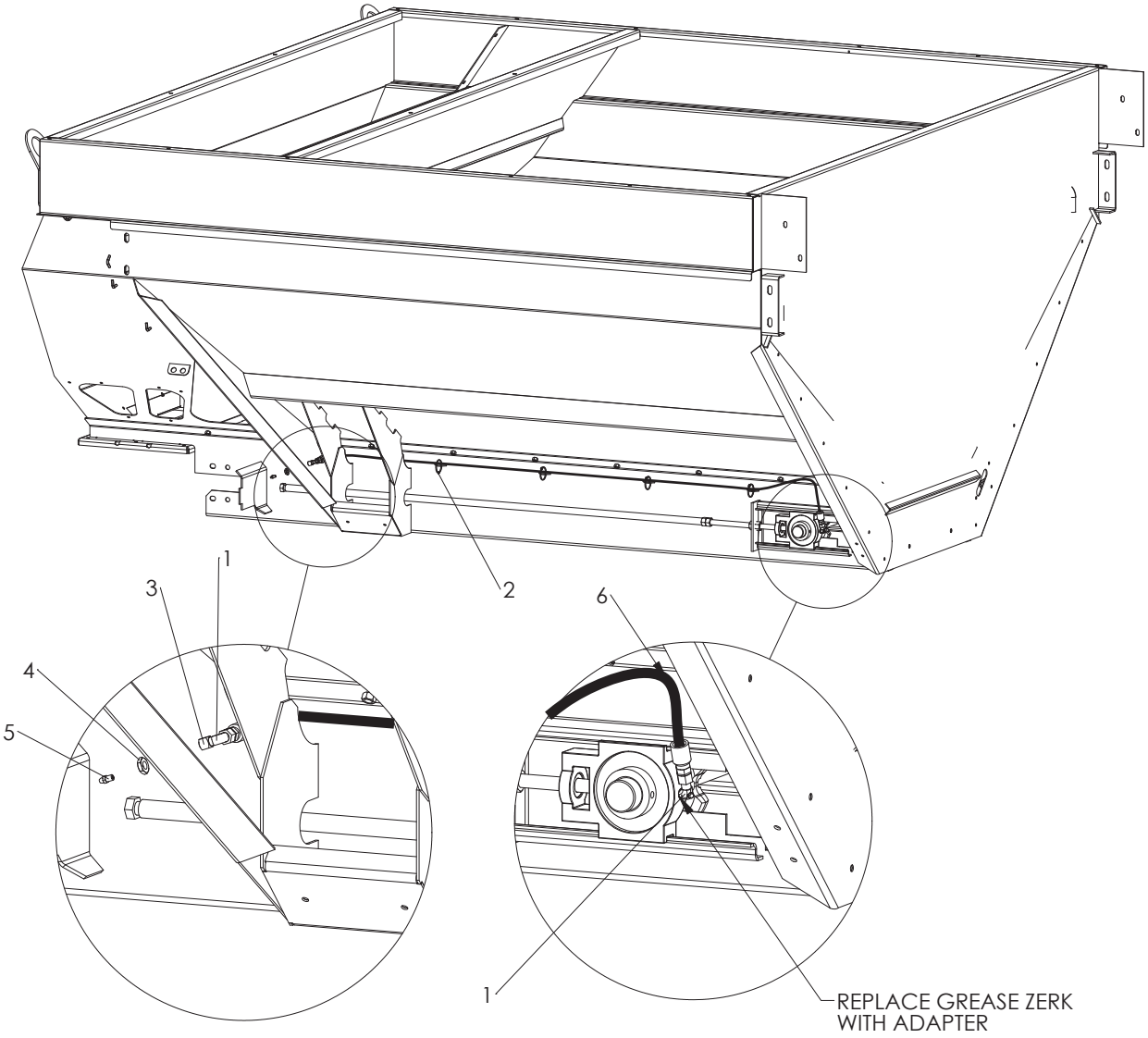


ITEM	PART NO.	DESCRIPTION	QTY
	308712-AC	7’ #4 Belt-Over-Chain	
1	308654	Chain - Wldmt #4	1
2	304304-AB	Belt - 18” x 132” MOR	1
3	20617	Screw - Flat 1/4 x 1/2	8
4	20624	Screw - Truss 1/4 x 1/2	28
5	308534	Screw - 1/4-20 x 1/2 #4 BOC	144
6	21118	Pin - Chain Pintle	2
7	20817	Pin - Cotter	2
8	305637	Chain - Assembly 75 Link	2
9	305642	Bar - Cross	36
10	70473	Bar - Splicer	1

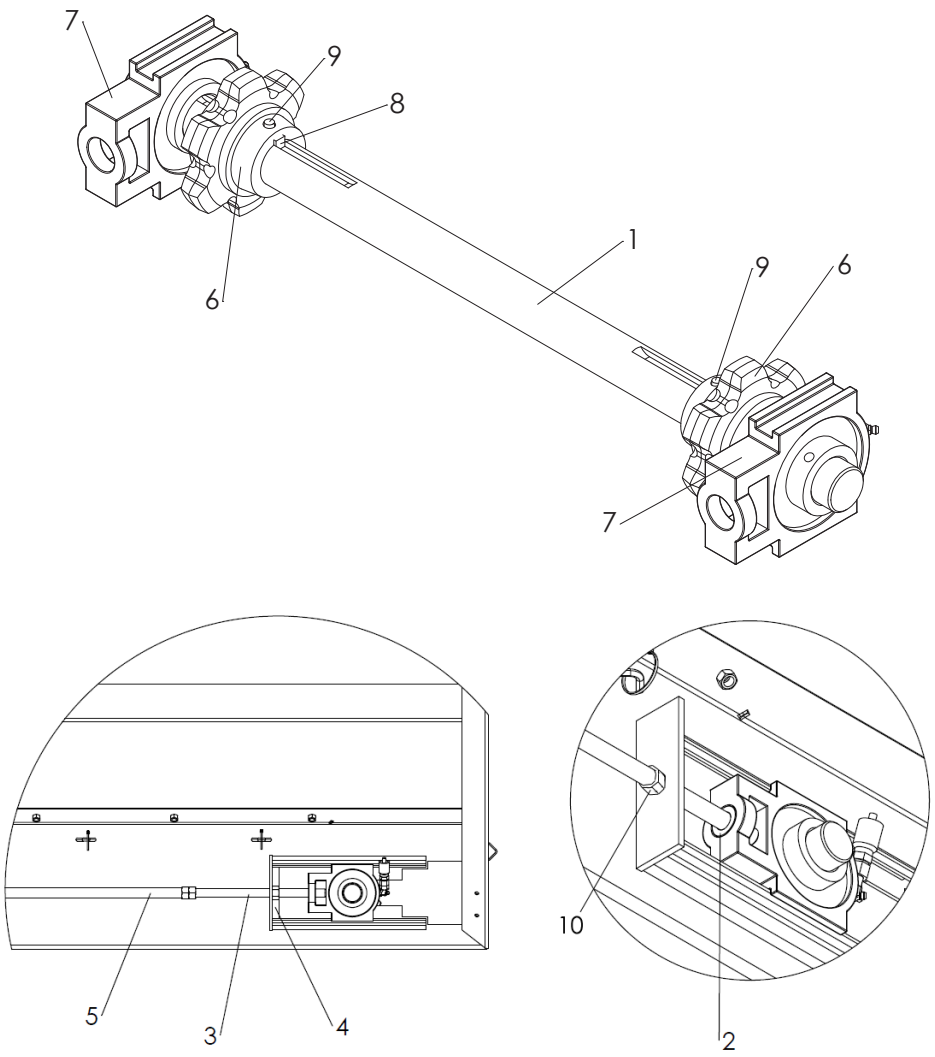


ITEM	PART NO.	DESCRIPTION	QTY
1	306542-AA	Shield - Chain Assembly LH 304, Includes 10-13	1
2	306542-AB	Shield - Chain Assembly RH 304, Includes 10-13	1
3	71829	Screw - Truss Head 3/8 x 1 SS	16
4	42033	Screw - Truss 1/4 x 1 SS	2
5	36423	Washer - Flat 1/4 SS	2
6	36412	Nut - Hex 1/4 SS	2
7	306558	Sealer - Feedgate Bolt-In 304	2
8	32446	Screw - Truss Head 1/4 x 3/4 SS	2
9	42034	Nut - Lock 1/4 SS	2
10	305975	Belting - Sealer Strip MOR	2
11	56258	Screw - Truss Head 1/4-20 x 1/2 SS	54
12	88931	Nut - Tee 1/4 x 1/4	54
13	306543	Shield - Chain 304	2

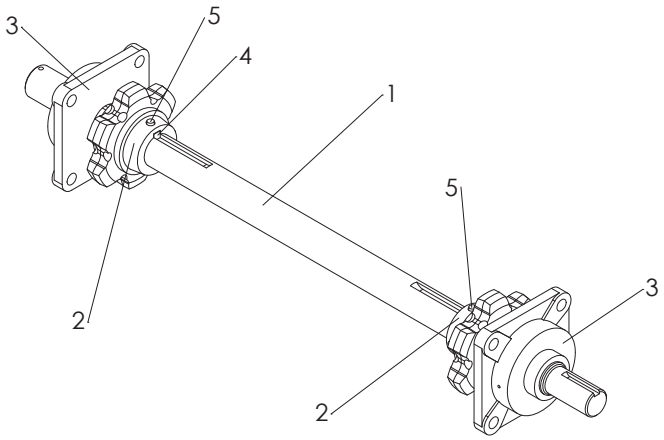
IDLER ZERK

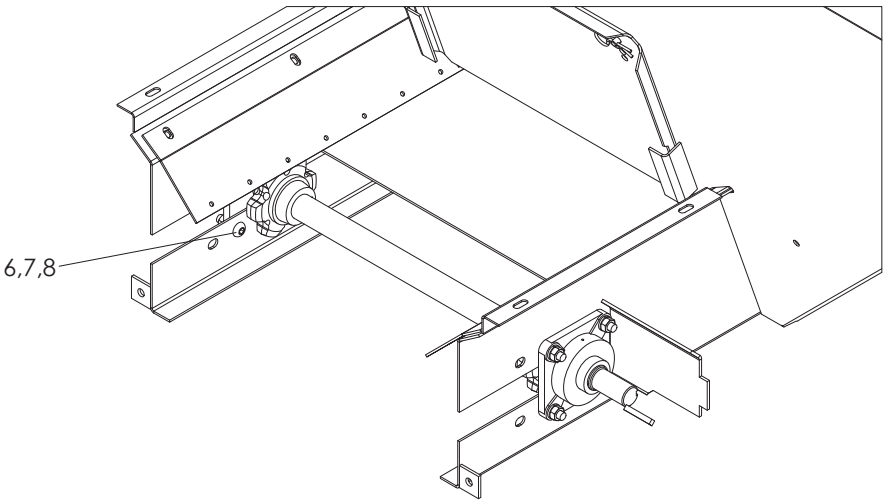


ITEM	PART NO.	DESCRIPTION	QTY
1	34734	Adapter - Elbow	2
2	99674	Tie - Cable	8
3	301332	Connector - Bulkhead	2
4	301333	Nut - Lock Connector	2
5	6072	Zerk - Grease	2
6	307128	Hose - Assembly 1/4 100R1 x 80	2



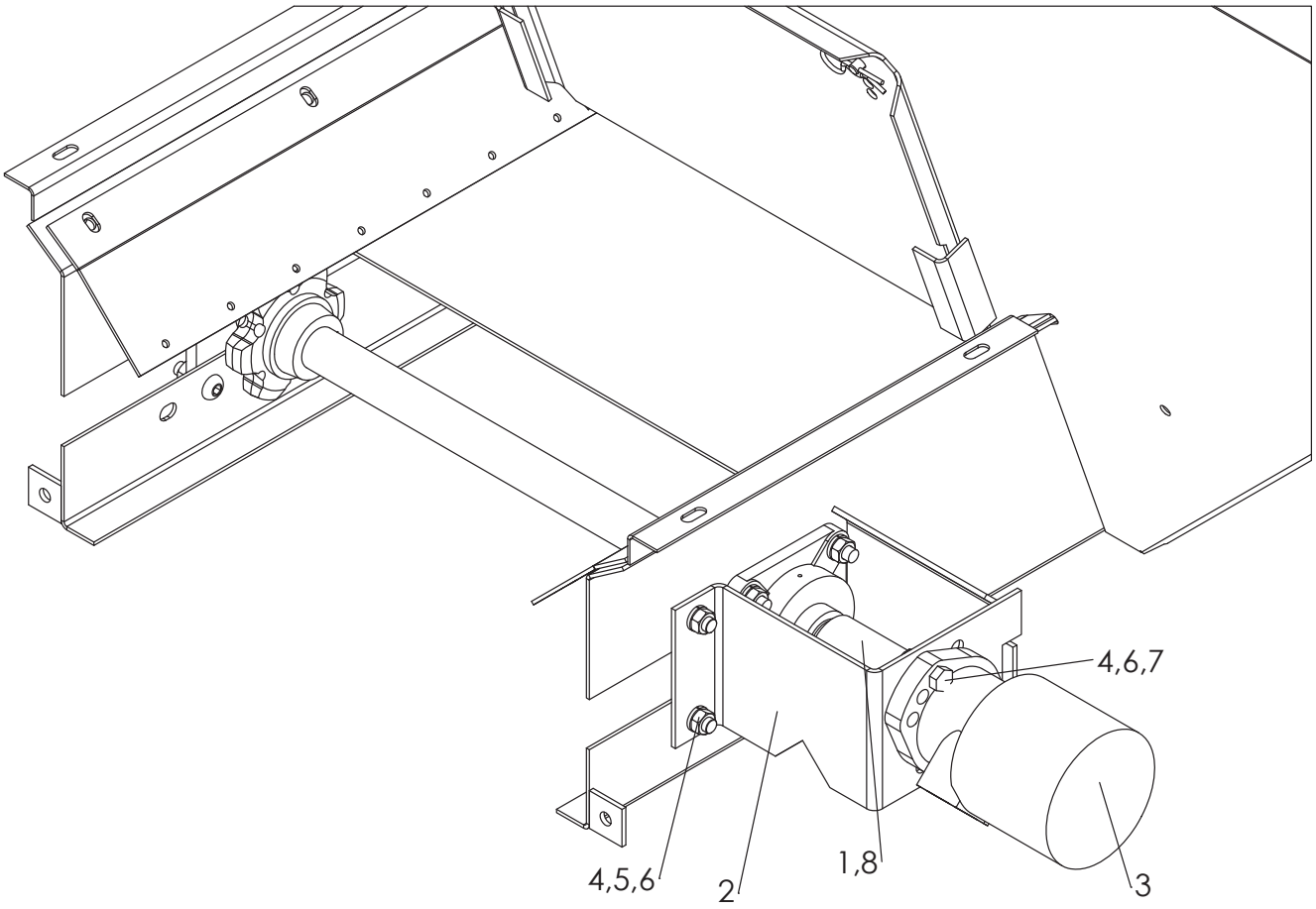
ITEM	PART NO.	DESCRIPTION	QTY
	89780	Idler - Assy, Includes 1, 6-9	
1	89779	Shaft - Idler	1
2	17078	Collar - Set	2
3	87857	Bolt - Weldment Takeup 304	2
4	87856	Nut - Weldment 304	2
5	306595	Pipe - Weldment Adjustment 304	2
6	86757	Sprocket	2
7	22511	Bearing - Takeup 1-1/2	2
8	6131	Key - Square 3/8 x 1-1/2	2
9	20743	Screw - Set 5/16 x 3/8	4
10	36417	Nut - Hex	2





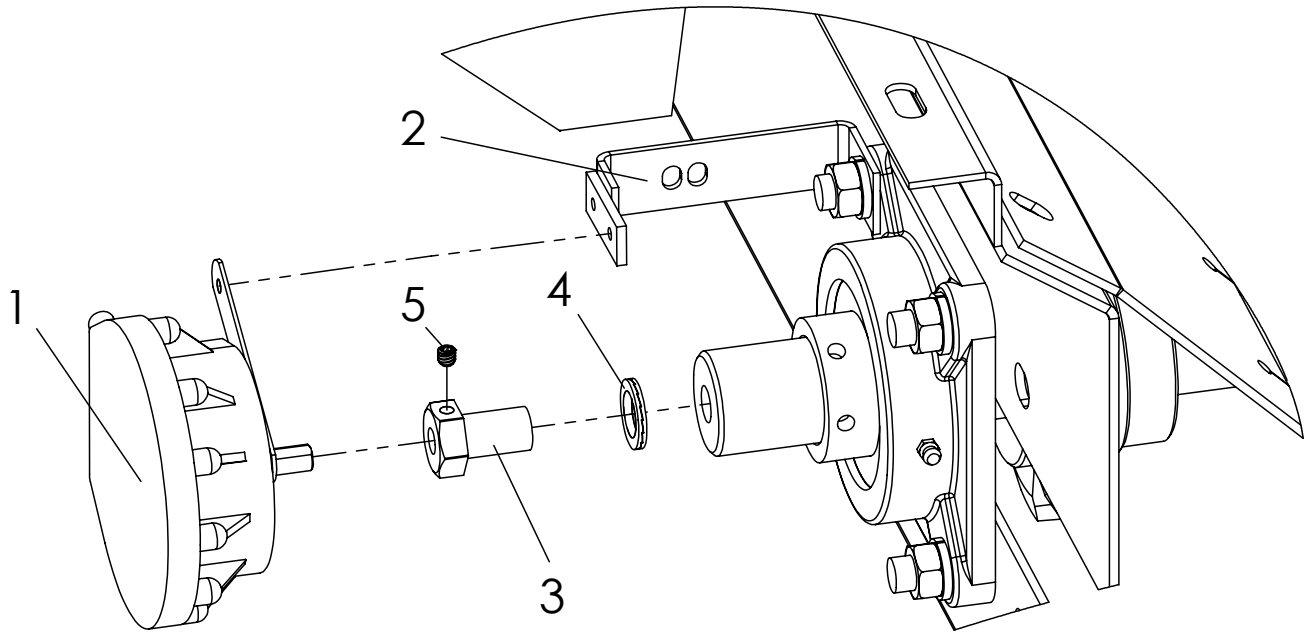
ITEM	PART NO.	DESCRIPTION	QTY
	86759-X1	Drive - Assy Shaft, Includes 1-5	
1	86761-X2	Shaft	1
2	86757	Sprocket - 6 Tooth	2
3	6697	Bearing	2
4	6131	Key	2
5	20743	Screw - Set 5/16	4
6	36416	Nut - Hex 1/2 SS	8
7	36422	Washer - Lock 1/2 SS	8
8	304484	Screw - Button Head 1/2 x 1-1/2	8

CONVEYOR MOTOR



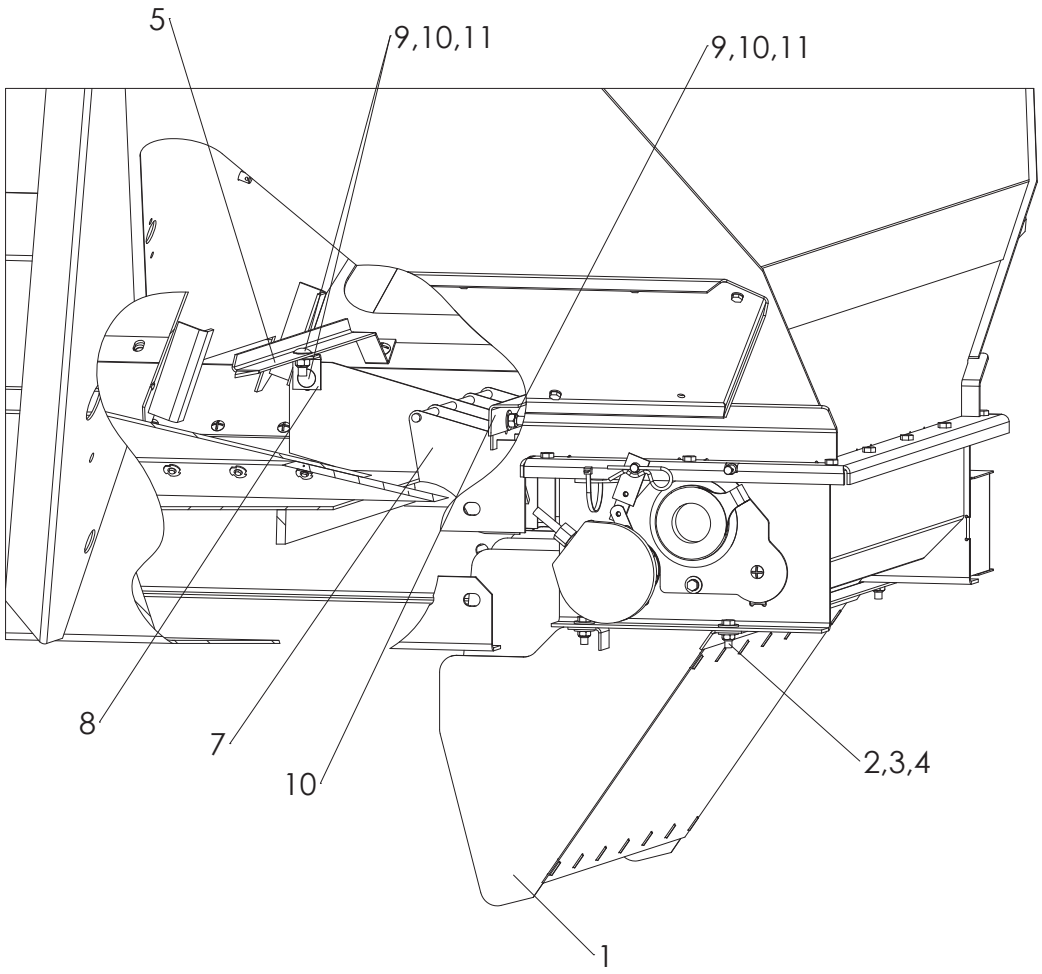
ITEM	PART NO.	DESCRIPTION	QTY
1	86762	Coupler - Shaft 1-1/4	1
2	86766	Mount - Motor Hydraulic	1
3	311056	Motor 29.1 CID	1
	56327	Seal Kit	1
4	36416	Nut - Hex 1/2 SS	4
5	72056	Bolt - Carriage 1/2 x 1 SS	2
6	36422	Washer - Lock 1/2 SS	4
7	36539	Cap Screw - 1/2 x 1-1/2 SS	2
8	4059	Key - Square 5/16 x 5/16 x 1-1/2 86883	1

CONVEYOR ENCODER

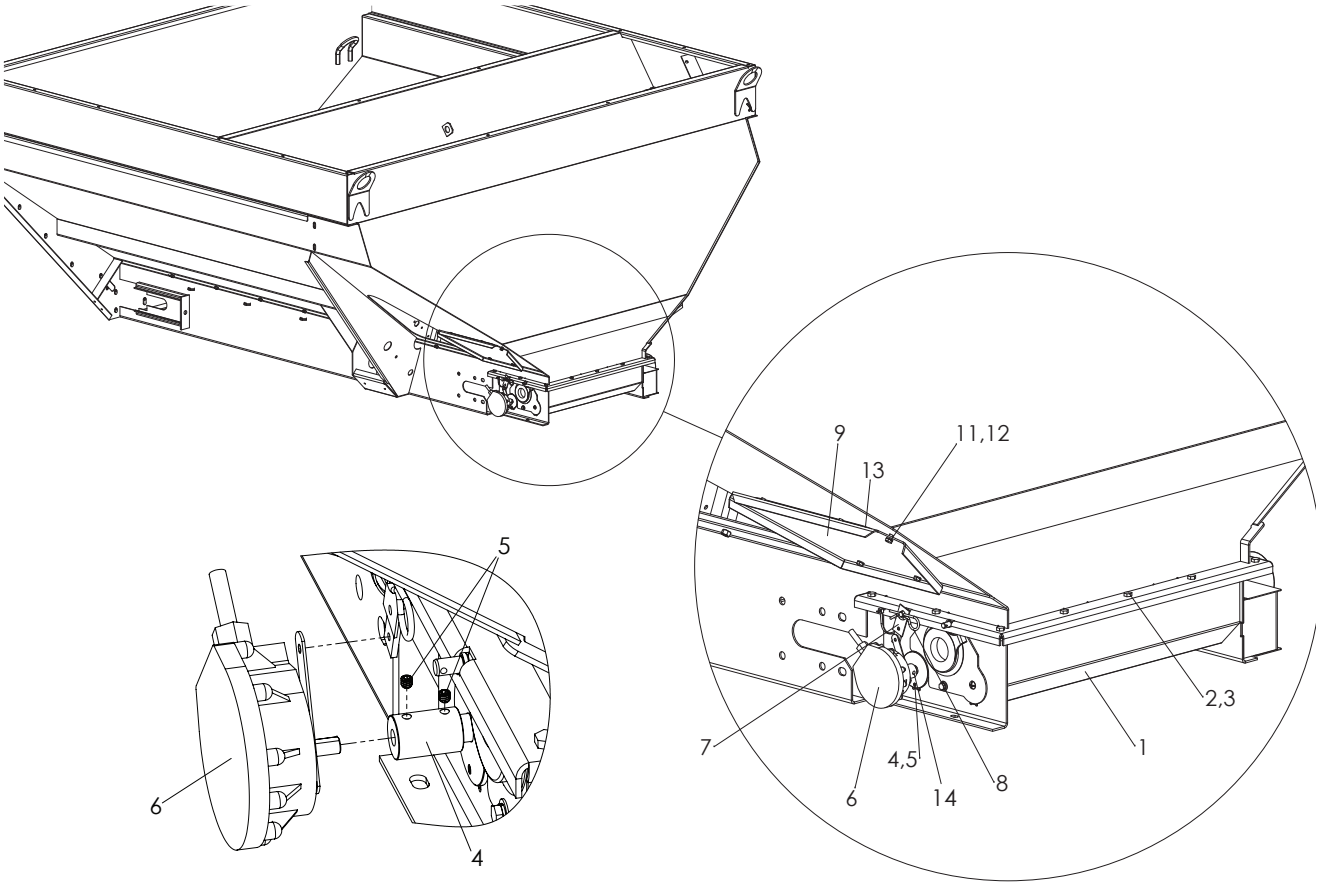


ITEM	PART NO.	DESCRIPTION	QTY
1	303994	Encoder - 180 Count DJ	1
2	304953-X1	Bracket - Dickey John Encoder	1
3	310601	Coupler - Rate Sensor SS	1
4	310602	Washer - Lock Special	1
5	310603	Screw - Set 1/4-20NC X 1/4 SS	1

DIVIDER

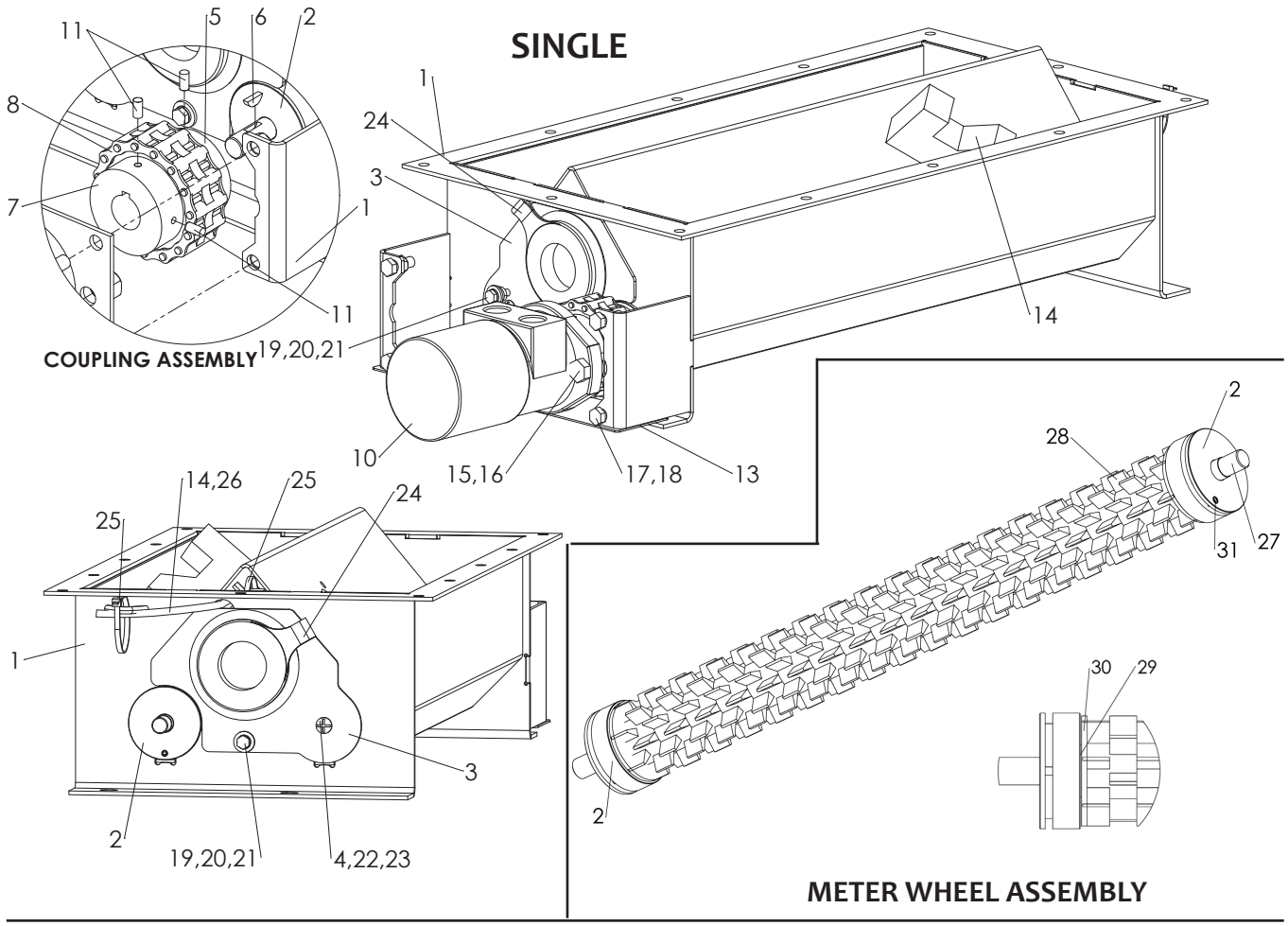


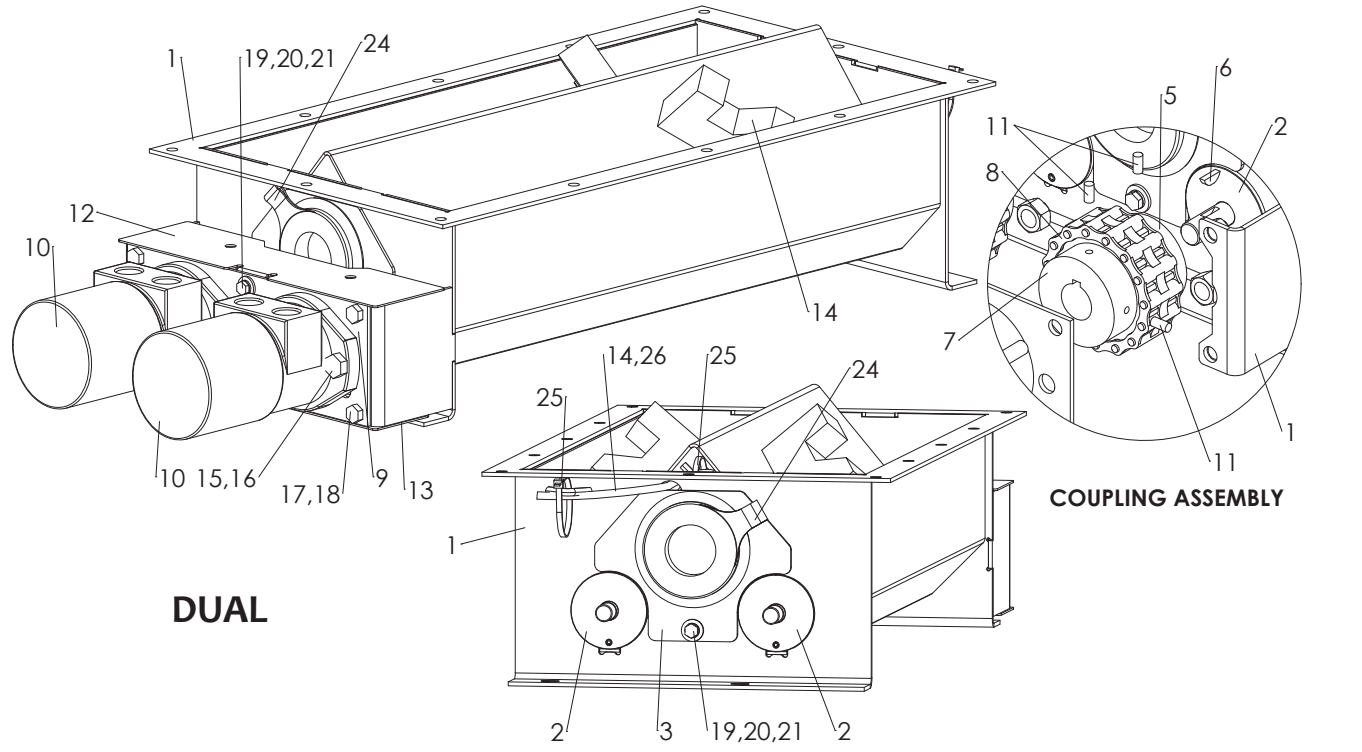
ITEM	PART NO.	DESCRIPTION	QTY
1	306712	Divider - Weldment Lower 304	1
2	34580	Cap Screw - 5/16 x 1	4
3	36424	Washer - Flat 5/16	8
4	42221	Nut - Lock 5/16 SS	4
5	306576	Support - Divider 304	1
6	306577	Support - Divider 304	1
7	306570	Divider - Weldment Upper 304	1
8	306575	Clamp - Angle 304	1
9	36408	Bolt - Carriage 3/8 x 1 SS	4
10	36425	Washer - Flat 3/8 SS	4
11	72054	Nut - Lock 3/8 SS	4


9
11,12
13
5
2,3
7
4,5
1
6
14
8
6
4

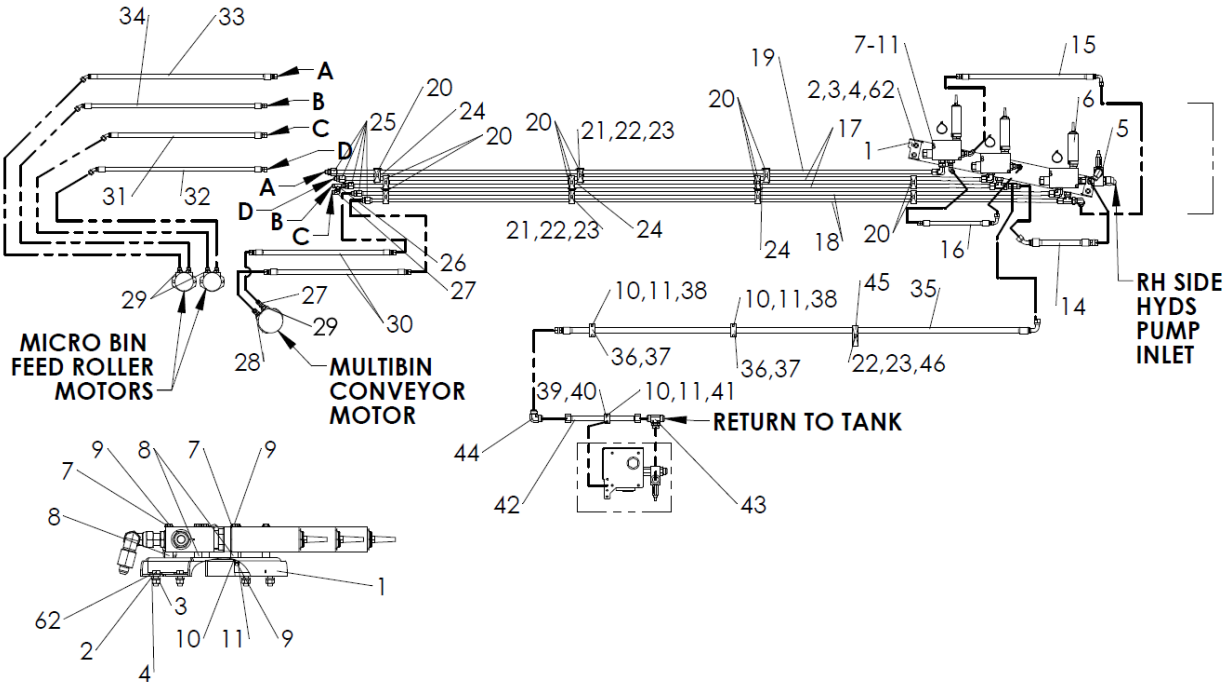
ITEM	PART NO.	DESCRIPTION	QTY
1	306584	Micro - Assembly Single (see next page)	1
	306585	Micro - Assembly Dual (see next page)	1
2	56858	Cap Screw - 5/16 x 3/4	12
3	42221	Nut - Lock 5/16 SS	AR
4	304170	Coupling - Encoder 5/8 Shaft	AR
5	310603	Screw - Set 1/4-20NC X 1/4 SS	AR
6	303994	Encoder - 180 Count DJ with Mount Kit	AR
	303994-AA	Encoder	AR
	303994-AB	Mount - Kit	AR
7	306553	Torque Arm - Encoder 304	AR
8	36429	Pin - Hair	AR
9	306706-AA	Cover - Multibin Access LH 304	1
10	*306706-AB	Cover - Multibin Access RH 304	1
11	36418	Washer - Lock 1/4 SS	12
12	36393	Cap Screw - 1/4 x 3/4 SS	12
13	306819	Seal - Rubber	10 ft.
14	20735	Screw - Set 1/4 x 1/4	AR

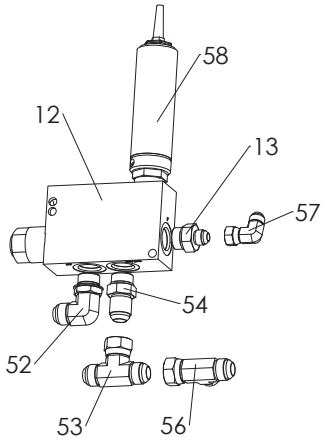
* - Not Shown


SINGLE
11
5
6
2
8
7
1
11
19,20,21
COUPLING ASSEMBLY
1
24
3
1
14
10
15,16
17,18
13
14,26
25
24
25
1
3
2
19,20,21
4,22,23
2
28
31
27
30
29
2
METER WHEEL ASSEMBLY

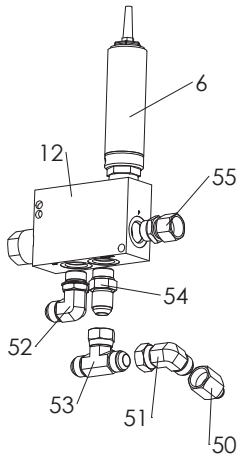

1
19,20,21
24
12
10
14
10
15,16
17,18
9
13
6
5
11
2
8
7
1
11
COUPLING ASSEMBLY
14,26
25
24
25
1
2
3
19,20,21
2
DUAL

ITEM	PART NO.	DESCRIPTION	QTY
	306584	Micro - Assembly Bottom Single 304 Includes 1-31	
	306585	Micro - Assembly Bottom Dual 304 Includes 1-3, 5-21, 24-31	
	304131	Wheel - Assembly Meter, Includes 2, 27-31	
1	306534	Micro - Weldment Bottom 304	1
2	304125	Hub - Bearing	AR
3	306555	Retainer - Cover Single 304	AR
	306556	Retainer - Cover Dual 304	AR
4	306557	Guide Retainer 304	AR
5	39685	Coupling - Chain, Half	AR
6	34562	Key - Woodruff 5/32 x 5/8	AR
7	11409	Coupling - Chain, Half	AR
8	306865	Chain - Assembly 304	AR
9	306547	Mount - Motor Single 304	1
	306548	Mount - Motor Dual 304	1
10	304129	Motor - Hydraulic 11.9 CID	AR
11	20737	Screw - Set 1/4 x 1/2	AR
12	306549	Guard - Weldment Upper 304	1
13	306551	Guard - Weldment Lower 304	1
14	98787-AB	Sensor - Bin Level 18” Lead	AR
15	36539	Cap Screw - 1/2 x 1-1/2	AR
16	39016	Nut - Lock 1/2 SS	AR
17	36398	Cap Screw - 3/8 x 1 SS	4
18	72054	Nut - Lock 3/8 SS	4
19	36393	Cap Screw - 1/4 x 3/4 SS	4
20	36423	Washer - Flat 1/4 SS	4
21	36418	Washer - Lock 3/8	4
22	32446	Screw - Truss Head 1/4 x 3/4	2
23	42034	Nut - Lock 1/4 SS	2
24	306807	Plug - Inspection	2
25	99674	Tie - Wire	2
26	58728	Conduit - Flexible	1.5 ft.
27	304130	Shaft - Meter Wheel	AR
28	304134-AA	Wheel - Meter Section	AR
29	304133	Washer	AR
30	96066	Washer - Rubber	AR
31	56313	Pin - Roll	AR

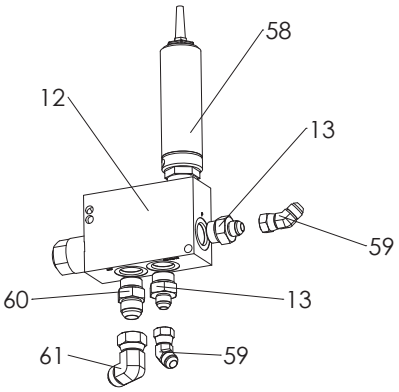




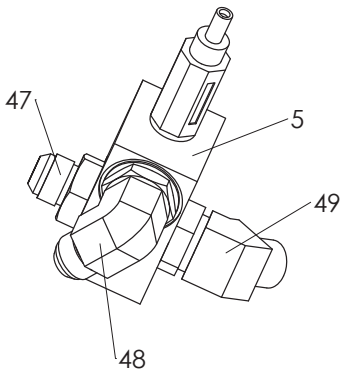
306647 - 5 GPM



306646 - 9 GPM



306648 - 5 GPM



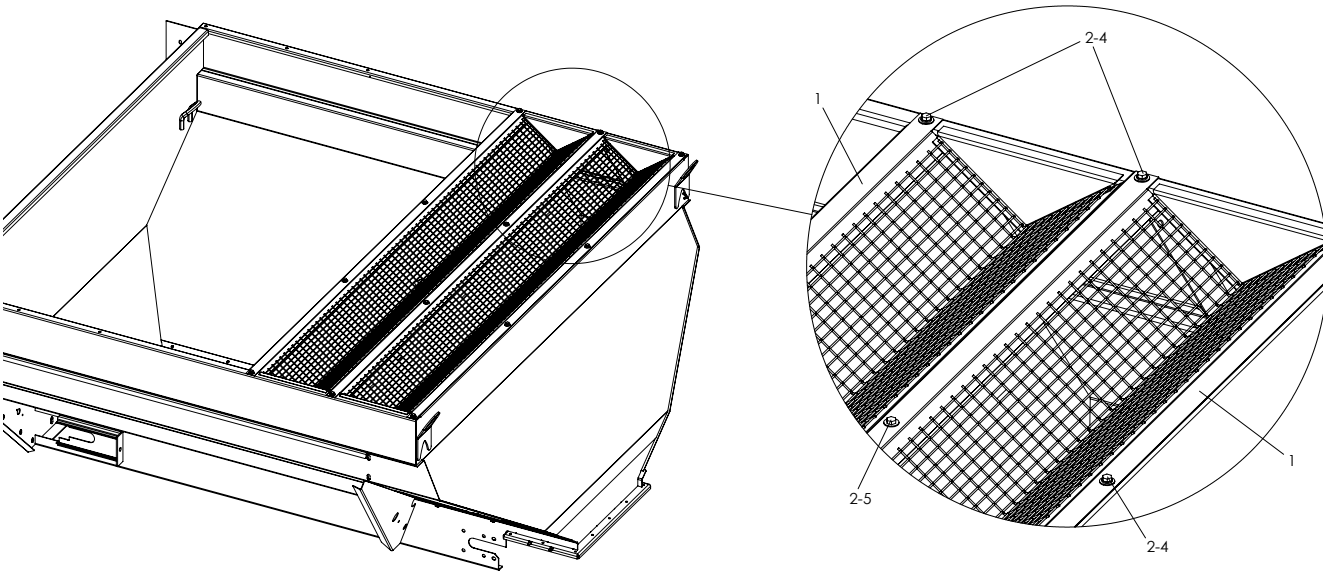
306747 - RELIEF VALVE

ITEM	PART NO.	DESCRIPTION	QTY
	306646	Valve - Sub-Assembly 9 GPM SFP, Includes 6, 12, 50-55	
	306647	Valve - Sub-Assembly 5 GPM-A SFP Includes 12-13, 52-58	
	306648	Valve - Sub-Assembly 5GPM-B SFP Includes 12-13, 58-61	
	306747	Valve - Relief Assembly 1500 PSI @ 40 GPM Soft Start, Includes 5, 47-49	
	306273	Valve - Control Assembly 5 GPM, Includes 12 & 58	
	306276	Valve - Control Assembly 9 GPM, Includes 6 & 12	
1	306638	Bracket - Valve Mounting	1
2	36398	Cap Screw - 3/8-16 x 1 SS	4
3	36420	Washer - Lock 3/8 SS	4
4	36414	Nut - Hex 3/8-16 SS	4
5	77498	Valve - Relief 1500 PSI	1
6	306277	Valve - Flow Control 9 GPM	1
7	302097	Washer - Step	4
8	302098	Washer - Step	4
9	56396	Cap Screw - 1/4-20 x 3-1/4 SS	4
10	36423	Washer - Flat 1/4 SS	10
11	42034	Nut - Lock 1/4-20 SS	10
12	306274	Manifold - 5-25 GPM SFP	2
13	34842	Fitting - 8-12 070120	2
14	306630	Hose - Return 3/4 x 15-3/4	1
15	80463	Hose - 1/2 100R1 x 39-3/4	1
16	74766	Hose - 1/2 100R1 x 16-3/8	1
17	306642-AA	Tube - 3/4OD x 119-7/16 304	2
	306642-AC	Tube - 3/4OD x 131-7/16 304	2
18	306642-AB	Tube - 3/4OD x 129-15/16 304	2
	306642-AD	Tube - 3/4OD x 141-15/16 304	2
19	306640-AA	Tube 1OD x 111-1/2 304	2
	306640-AB	Tube 1OD x 123-1/2 304	2
20	75036	Clamp - Tubing Twin 3/4	11
21	71830	Cap Screw - 5/16-18 x 2-1/2 SS	11
22	36424	Washer - Flat 5/16	9
23	42221	Nut - Lock 5/16-18 SS	12
24	306639	Bracket - Twin Clamp	3
25	306743	Fitting - 12-8 070101S 304	5

ITEM	PART NO.	DESCRIPTION	QTY
26	306744	Fitting - 8-8-8 070432S 304	1
27	306742	Fitting - 8-8 070221S 304	2
28	306741	Fitting - 8-10 070220S 304	1
29	306740	Fitting - 8-10 070120S 304	5
30	306691	Hose - 1/2 100R1 x 30 SS	2
31	306692	Hose - 1/2 100R1 x 33-51/64 SS	1
32	306695	Hose - 1/2 100R1 x 36-13/32 SS	1
33	306693	Hose - 1/2 100R1 x 40 SS	1
34	306694	Hose - 1/2 100R1 x 39 SS	1
35	306748	Hose - Return 3/4 x 99	1
36	96926	Clamp - Pair 1-1/4 Tube	2
37	96925	Plate - Top 1-1/4 Tube	2
38	36396	Cap Screw - 1/4 x 3 SS	4
39	86557	Clamp - Tube 1”	1
40	86556	Plate - Cover Hydraulic Tube Clamp	1
41	34865	Cap Screw - 1/4-20 x 2-1/4	2
42	302436	Tube - 1OD x 14-3/4 304	1
43	34750	Fitting - 16-16-16 070429	1
44	29783	Fitting - 16-16 070201	1
45	305928	Clamp - Tubing Twin 1-1/4	1
46	306030	Cap Screw - 5/16-18 x 3-1/4 SS	1
47	29835	Fitting - 12-16 070120	1
48	29829	Fitting - 12-16 070220	1
49	56269	Fitting - 12-16 070320	1
50	56406	Fitting - 12-8 070123	1
51	34709	Fitting - 12-12 070221	1
52	29847	Fitting - 12-12 070220	2
53	29809	Fitting - 12-12-12 070433	2
54	303226	Fitting - 12-12 Special STR.	2
55	29788	Fitting - 12-12 S1040-30 Non Standard	1
56	29781	Fitting - 12-12-12 070432	1
57	34803	Fitting - 8-8 070221	1
58	306275	Valve - Flow Control 5	2
59	34805	Fitting - 8-8 070321	2
60	29789	Fitting - 12-12 070120	1
61	34709	Fitting - 12-12 070221	1

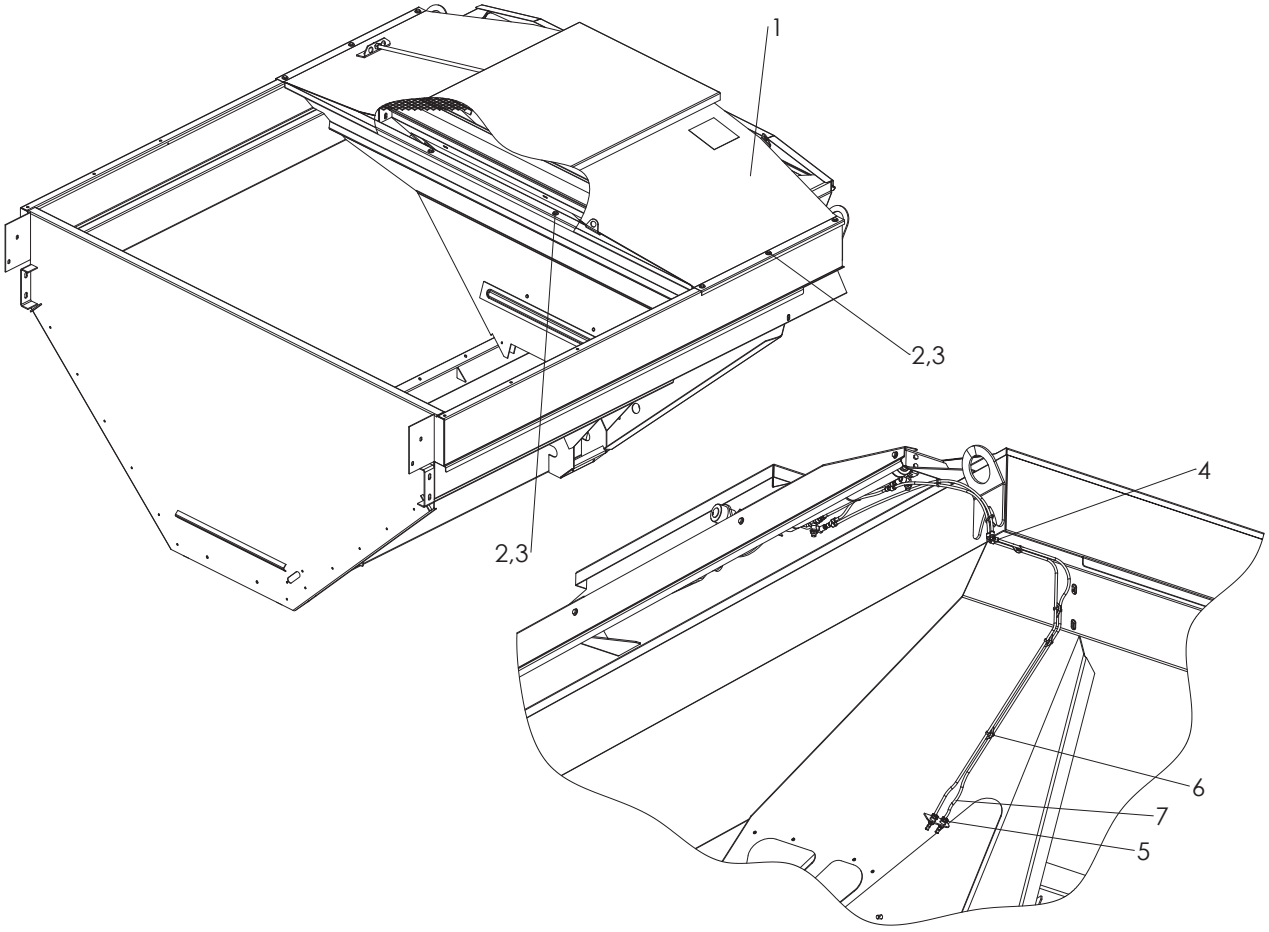
ITEM	PART NO.	DESCRIPTION	QTY
62	36425	Washer - Flat 3/8 SS	4
63	*306771	Compound - Antisieze Torque Tight A/G Stainless Steel	AR

* - Not Shown



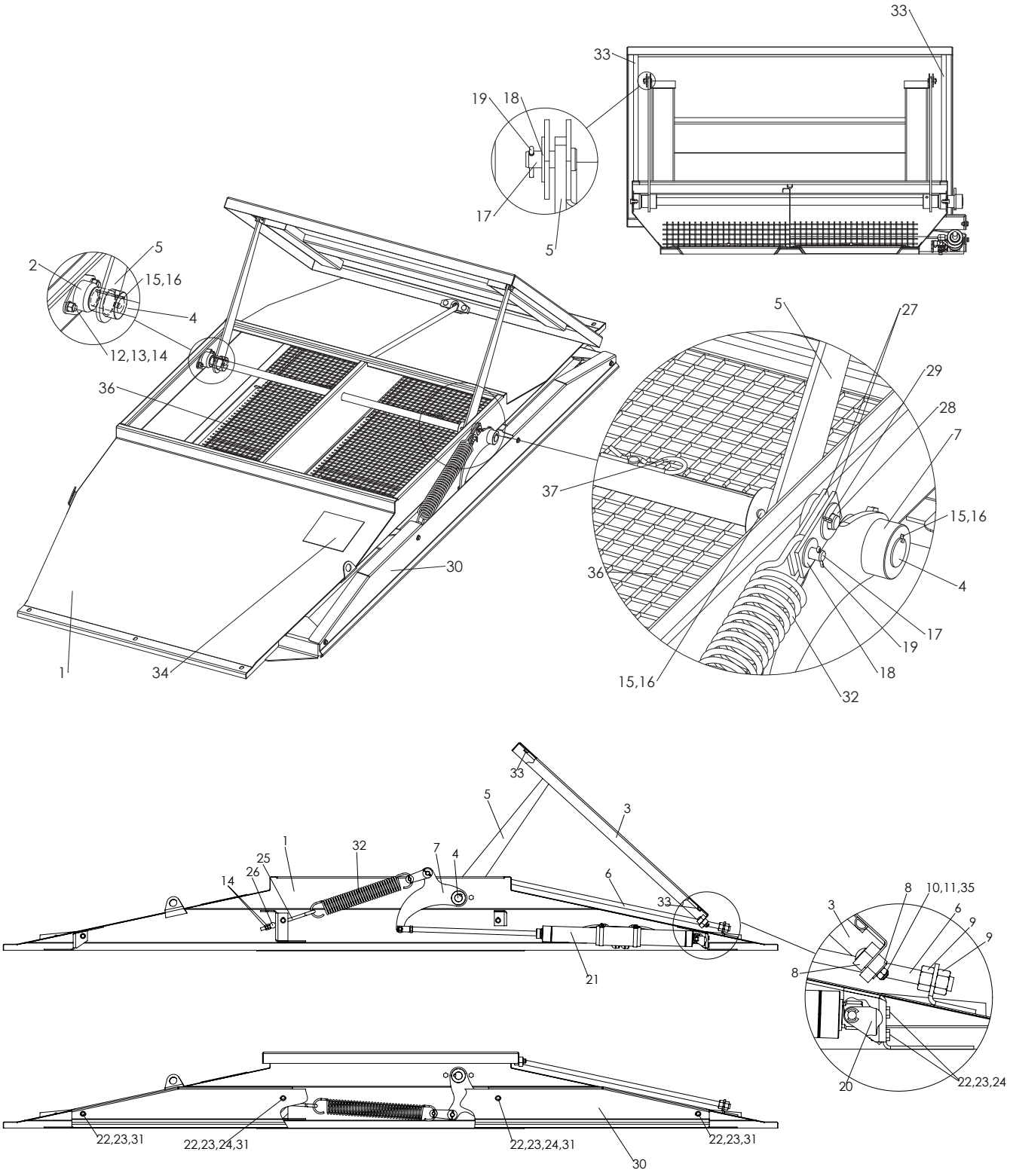
ITEM	PART NO.	DESCRIPTION	QTY
1	306931	Screen - Weldment 304	AR
2	36293	Cap Screw - 3/8-16 x 3/4 SS	AR
3	36425	Washer - Flat 3/8 SS	AR
4	36420	Washer - Lock 3/8 SS	AR
5	72054	Nut - Lock 3/8 SS	2

COVER GROUP



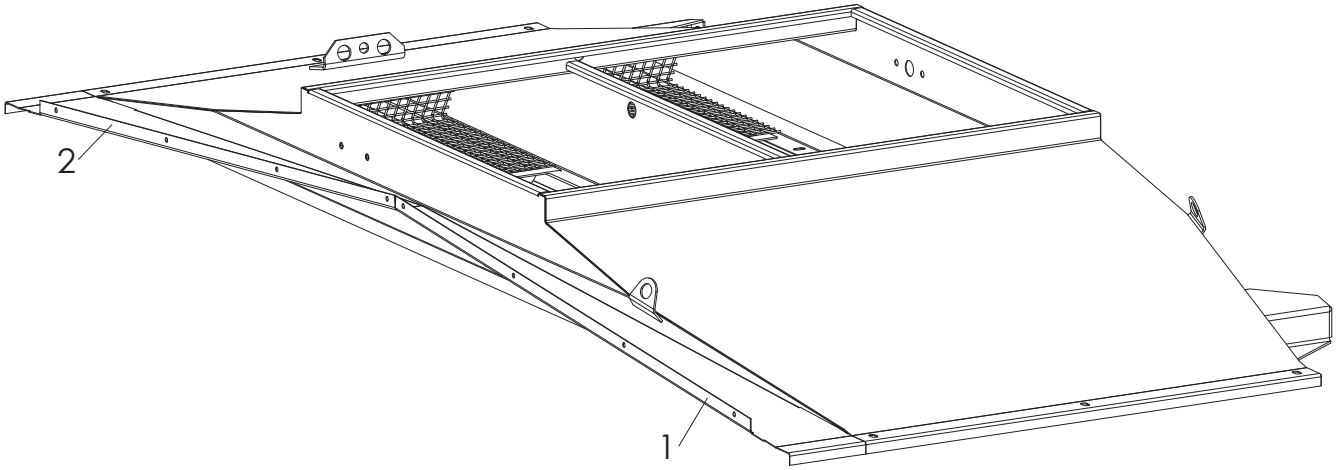
ITEM	PART NO.	DESCRIPTION	QTY
1	306629	Cover - Assembly MULTIBIN 304 (see next page)	1
2	36398	Cap Screw - 3/8 x 1 SS	10
3	36425	Washer - Flat 3/8 SS	10
4	306833	Fitting	2
5	306829	Fitting	2
6	99674	Wire - Tie	6
7	9005-0-7761	Tubing - 1/4 OD Airbrake Lock	11 ft.

COVER ASSEMBLY



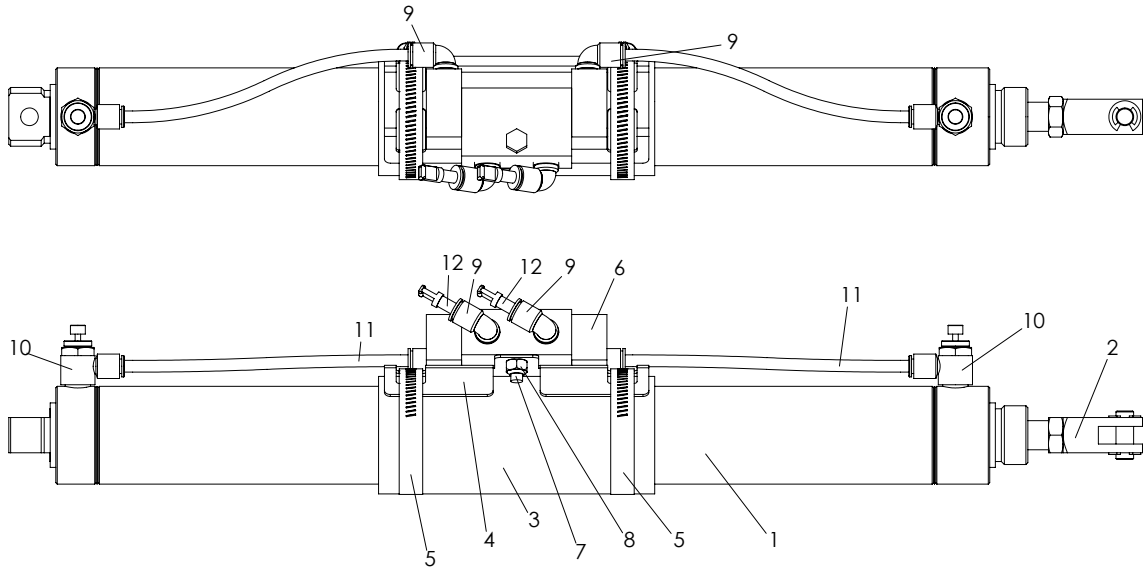
ITEM	PART NO.	DESCRIPTION	QTY
	306629	Cover - Assembly	
1	306586	Cover - Weldment	1
2	306711	Bearing - Flange 1”	2
3	306597	Lid - Weldment 304	1
4	306710	Shaft - Pivot 304	1
5	306709	Link - Weldment 304	2
6	306607	Rod - Guide 304	1
7	306697	Pivot - Weldment 304	1
8	306809	Block - Guide	2
9	36417	Nut - Hex 5/8 SS	2
10	42221	Nut - Lock 5/16 SS	2
11	36424	Washer - Flat 5/16	2
12	36293	Cap Screw - 3/8 x 3/4 SS	4
13	36420	Washer - Lock 3/8 SS	4
14	36414	Nut - Hex 3/8 SS	5
15	2212	Key - Square 1/4 x 1-1/2	3
16	20742	Screw - Set 5/16 x 5/16	6
17	306816	Pin - Clevis	3
18	36425	Washer - Flat 3/8 SS	3
19	306817	Pin - Cotter	3
20	306811	Clevis - Base Cylinder SS	1
21	311034	Cylinder - Assembly	1
22	36393	Cap Screw - 1/4 x 3/4 SS	6
23	36418	Washer - Lock 1/4 SS	6
24	36412	Nut - Hex 1/4 SS	4
25	306814	Eyebolt - Wire 3/8 x 6 SS	1
26	306618	Pivot - 304	1
27	311040	Plate - Clevis Spring 304	2
28	36426	Washer - Flat 1/2 SS	1
29	36427	Pin - Cotter 1/8 x 1	1
30	306806	Guard - Rear 304	1
31	36423	Washer - Flat 1/4 SS	6
32	306813	Spring	1
33	306818	Seal - Rubber	12.25 ft.
34	55241	Decal - Danger Pinch Point	1
35	8804	Bolt - Carriage 5/16 x 1 SS	2
36	306870	Screen - Weldment 304	2
37	36429	Pin - Hair	4

TARP TRANSITION

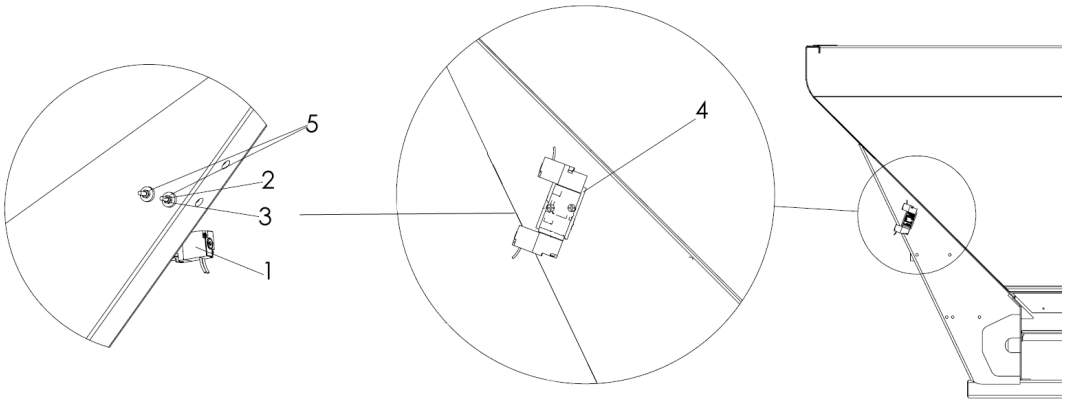


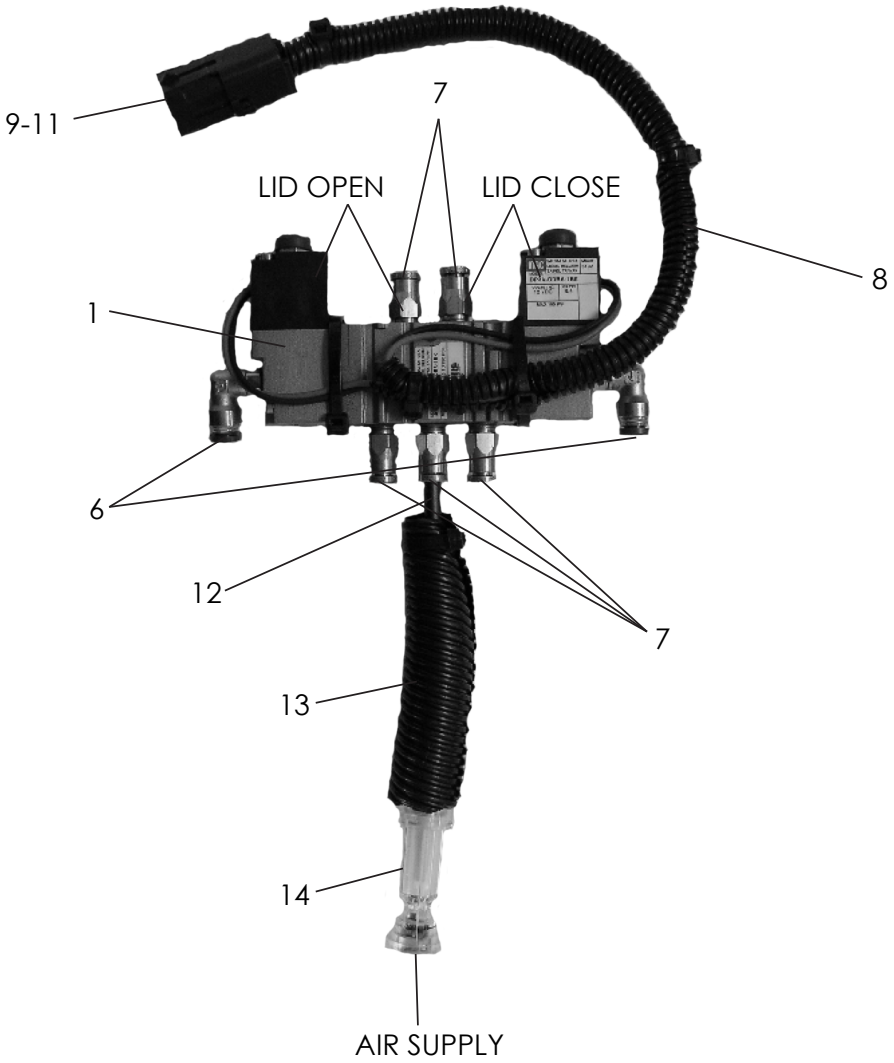
ITEM	PART NO.	DESCRIPTION	QTY
1	306927-AA	Transition - Tarp LH 304	1
2	306927-AB	Transition - Tarp RH 304	1

AIR CYLINDER - COVER

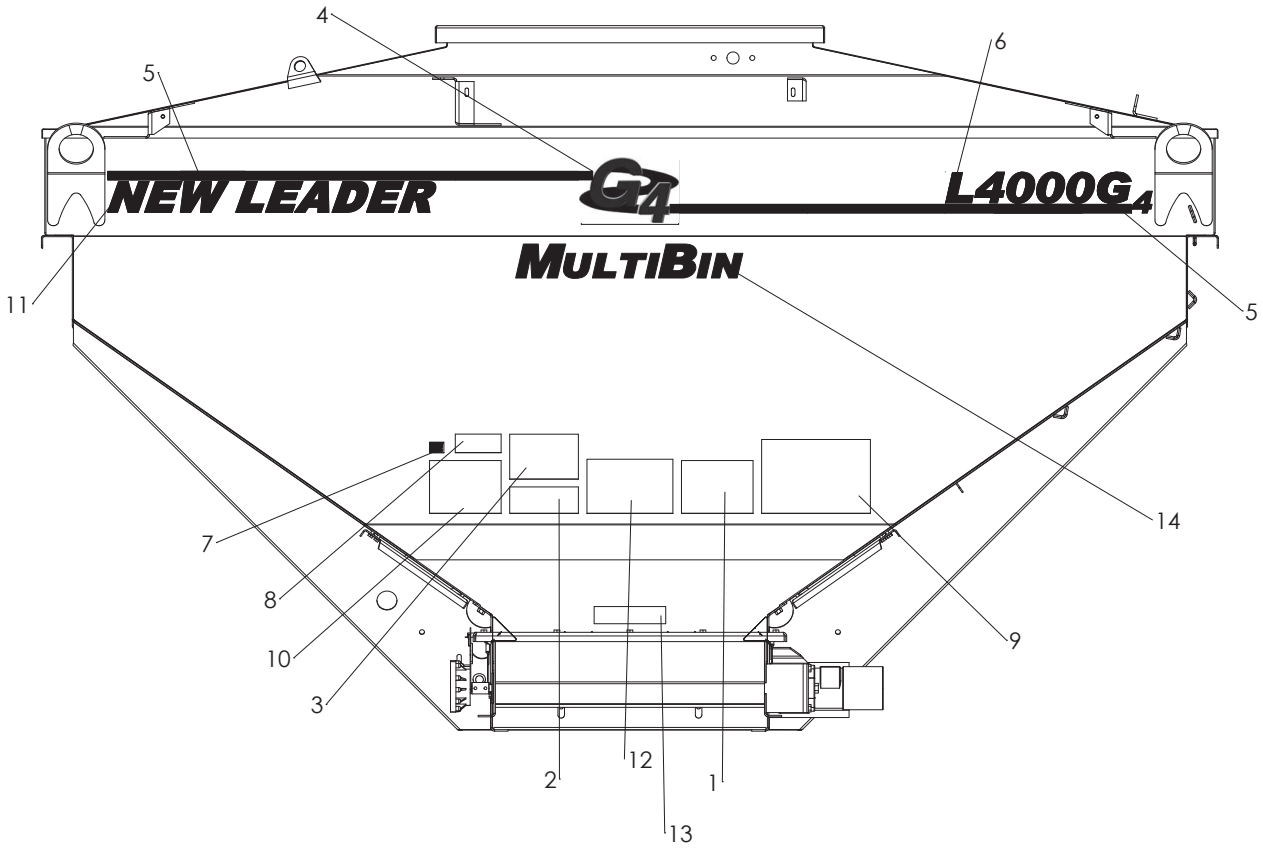


ITEM	PART NO.	DESCRIPTION	QTY
	311034	Cylinder Assy	
1	306810	Cylinder - Air 2 x 16 SS	1
2	306812	Clevis - Rod Cylinder SS	1
3	311038	Isolator - Tube	1
4	311037	Mount - Valve 304	1
5	308029	Clamp - Hose SAE 36 SS	2
6	311035	Valve - Dual Pilot Check	1
7	42448	Cap Screw - 1/4-20NC x 1-1/2 SS	1
8	42034	Nut - Lock 1/4-20NC SS	1
9	308222	Fitting - 4-4 630202K	4
10	311036	Valve - Speed Control	2
11	9005-0-7761	Tubing -1/4 OD Airbrake Black	1.33 ft.
12	306828	Fitting - 4 630101K	2


5
2
3
1
4


9-11
7
LID OPEN
LID CLOSE
8
1
6
12
7
13
14
AIR SUPPLY

ITEM	PART NO.	DESCRIPTION	QTY
	307186	Valve - Assy includes 6-14	1
1	307185	Valve - Assy includes 8-11	1
2	307598	Screw - Truss Head #8-32NC x 2 SS	2
3	45168	Nut - Lock #9-32NC	2
4	307596	Spacer - Air Valve Mntg	1
5	307597	Washer - Step	2
6	307187	Fitting - 4-0 630220B	2
7	9005-0-7833	Fitting - 4-2 630102B	5
8	58728	Conduit - Flexible	.375 ft.
9	303730-BD	Connector - Male Sealed	1
10	303730-EC	Seal - Cable	4
11	303730-DC	Terminal - Male Sealed	4
12	9005-0-7761	Tubing - Air Brake	38 ft.
13	308219	Conduit - Flexible	.33 ft.
14	311039	Filter - In-Line	1


4
5
6
NEW LEADER
G4
L4000G4
MULTIBIN
11
5
14
7
8
10
3
9
2
12
1
13

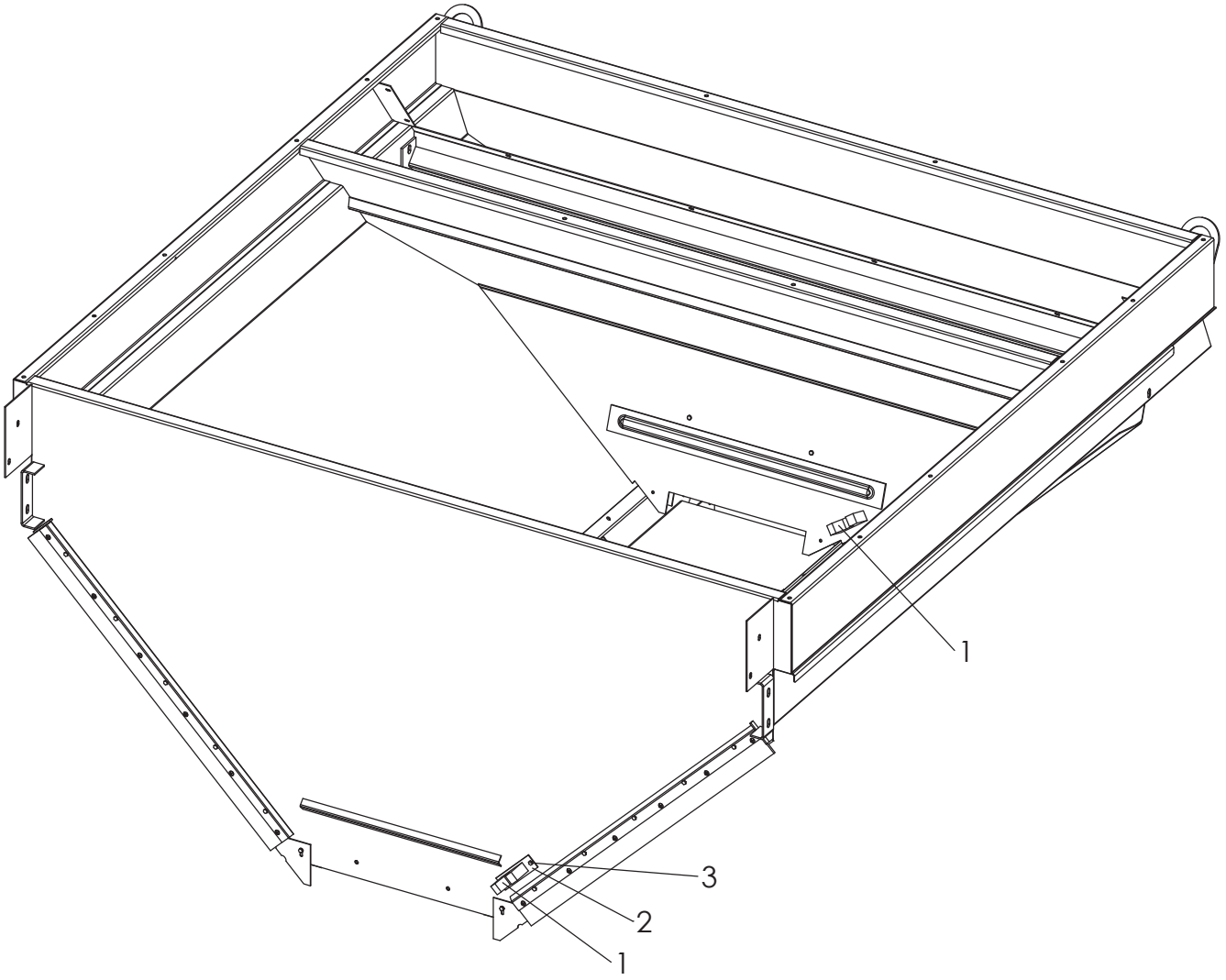
DECALS CONTINUED

ITEM	PART NO.	DESCRIPTION	QTY
1	321	Decal - Caution Hazardous Material	1
2	304206	Decal - Notice No Herbicide	1
3	55631	Decal - Warning Moving Part Hazard	1
4	87122	Decal - G4 Black/Red	1
5	87162	Decal - 3/4 Striping Black	8
6	306151	Decal - L4000G4 Black	1
7	97367	Decal - Patents	1
8	302601	Decal - Patient 6,817,551	1
9	368	Decal - Flying Material	1
10	21476	Decal - Notice Conveyor Chain Life	1
11	87164	Decal - New Leader Black	1
12	71526	Decal - Spread Pattern	1
13	39017	Decal - No Step	1
14	306518	Decal - Multibin Black	1
15	*37285	Serial Plate - HECO	1
16	*6276	Screw - Drive #4 1/4 SS	4

* - Not Shown

See *Cover Assembly* for additional decal.

BIN SENSORS



ITEM	PART NO.	DESCRIPTION	QTY
1	98787-AB	Sensor - Bin Level 18” Lead	2
2	307124	Mount - Sensor 304	1
3	36393	Cap Screw - 1/4 x 3/4 SS	2
4	*307130	Cable - Jumper 102”	1
5	*98787-AD	Cable - 27’ Bin Level Sensor	2

* - Not Shown