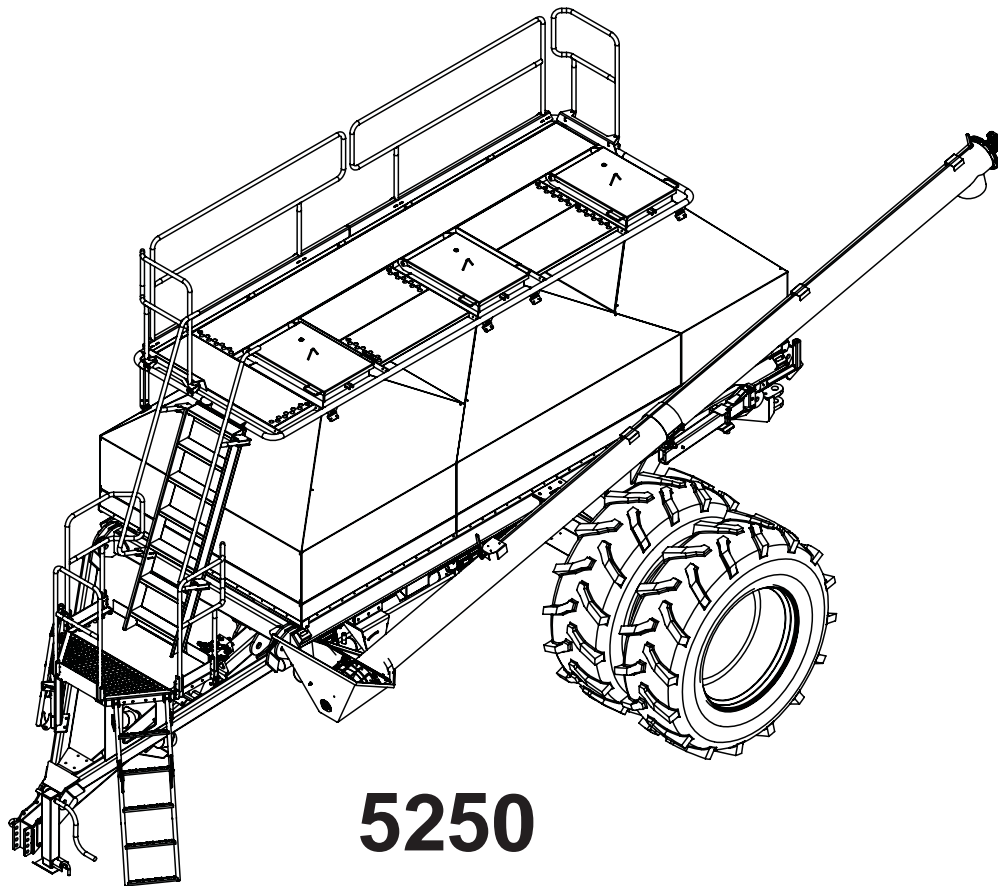


Amity

TECHNOLOGY



OWNERS OPERATING MANUAL



5250 2012 AIR CART

P/N 330285

Amity Technology, LLC
2800 7th Avenue North
Fargo, ND 58102
(701) 232-4199
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AMITY TECHNOLOGY, LLC LIMITED WARRANTY FOR NEW PRODUCTS

1. **General Provisions.** This Warranty shall apply to the original purchaser of (1) any new and unused machine manufactured by Amity Technology, LLC ("Amity"), and (2) any new and unused part which is manufactured by Amity for use in an Amity machine, jointly referred to as "Products," whether such Product is purchased through a dealer or directly from Amity. Under this Warranty, Amity will repair or replace, as it chooses in its sole discretion, any covered Product, or any component thereof, which Amity determines to be defective. This Warranty shall be in effect for a period of twelve (12) months ("the Warranty Period"), beginning on the date of delivery of the covered machine or part by the dealer or Amity to the purchaser ("the Warranty Start Date"). The purchaser must pay the cost of transportation of a Product to be repaired or replaced to and from an authorized Amity dealer. This Warranty may not be transferred from the original purchaser of a Product to any other person. This Warranty does not give a purchaser the right to any relief other than repair or replacement of the Product, and it specifically does not allow for consequential or incidental damages, exemplary or punitive damages, or costs and fees.
2. **Scope and Limitations of Warranty.** With respect to machines, this Warranty is void if any part not supplied by Amity is used in assembly or repair of the machine, or if the machine has been altered, abused or neglected, as determined by Amity. With respect to parts, this Warranty is void if the part is used in any manner other than that for which it is intended. This Warranty does not extend in any way to tires and any other component of a Product warranted by another manufacturer, a copy of which warranty is provided herewith ("Third-Party Warranties"). In the event Amity determines that a Product is not defective, or that any other provision of this Paragraph 2 operates to limit the Warranty, this Warranty shall not apply and the purchaser shall be responsible for transporting the Product from the authorized Amity dealer's location within 10 days of notice by Amity.
3. **Procedures for Obtaining Service.** To secure Warranty service, a purchaser must (1) report the defect to an authorized dealer and request repair within 45 days of the failure and within the Warranty Period; (2) present evidence that this Warranty applies to the Product; (3) present evidence of the Warranty Start Date; and (4) bring the Product to an authorized Amity dealer within a reasonable period of time after reporting the defect.
4. **LIMITATION OF IMPLIED WARRANTIES AND OTHER REMEDIES.** To the extent allowed by law, neither Amity, its dealers, nor any company affiliated with Amity makes any warranties, representations, or promises as to the quality, performance, or freedom from defect of any Product covered by this Warranty.
AMITY HEREBY WAIVES, TO THE EXTENT APPLICABLE, ANY AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. A PURCHASER'S ONLY REMEDIES IN CONNECTION WITH THIS WARRANTY ARE THOSE SET FORTH ON THIS PAGE. IN NO EVENT WILL AMITY, ITS DEALERS, OR ANY COMPANY AFFILIATED WITH AMITY BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES.
Some states do not allow waivers of certain warranties, so the above waivers may not apply to you. You may also have other rights which vary from state to state.
5. **No Dealer Warranty.** This is the exclusive warranty applicable to Amity Products. No dealer has any authority to make any other warranty, modify, limit, or expand the terms of this Warranty in any fashion, or make any representation or promise on behalf of Amity.
6. **Dispute Resolution.** Any controversy or claim arising out of or relating to this Warranty must be settled by arbitration in Fargo, North Dakota, at a time and location designated by the arbitrator, but not exceeding 30 days after a demand for arbitration has been made, and may be conducted by electronic, video, or other technical means. Arbitration will be conducted by the American Arbitration Association in accordance with its Rules of Commercial Arbitration, and judgment upon the award rendered by the arbitrator may be entered in any court having jurisdiction thereof. The arbitrator will have the authority to order Amity to undertake a repair or replace any Product, at its election, if the arbitrator finds that this Warranty requires Amity to do so. The arbitrator will not have the authority to impose any other remedy against Amity, including without limitation consequential or incidental damages, exemplary or punitive damages, or costs and fees.

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Prices subject to change without notice

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CONGRATULATIONS!

Congratulations on your purchase of an Amity Technology Air Cart! Your Model 5250 Air Cart has been designed to be durable, versatile, and simple to use.

Your Air Cart features stainless steel tanks and metering components, a streamlined and reliable meter system, a fill/unload auger with cupped poly lighting, and a world class ISOBUS-compatible monitoring and control system.

The following pages contain a wealth of important information on your Air Cart's features, equipment and systems. Read this manual carefully to learn how to set up, operate and use this equipment.

PRECAUTIONS

Safety First

The purpose of this manual is to assist you in safely operating and maintaining your Amity Technology equipment. It is the responsibility of the owner to ensure that anyone operating this equipment thoroughly reads and understands the information in this document.

It is not possible to overstate the importance of safety. Serious injury or death can result from improper operation of any farm equipment. We have taken great care to point out potential hazards that require special consideration.

Warning and Caution Symbols



This manual uses the following symbols to signify caution and warning. For your own safety take note of these symbols and exercise caution when working with this equipment.



Warnings

***ALWAYS** know your equipment. Read the owners manual before operating.*

***DO NOT** allow anyone to ride on the Air Cart.*

***ALWAYS** install and transport stops when transporting the drill.*

***ALWAYS** use an adequate tow vehicle.*



***ALWAYS** remember to properly secure the safety chain.*

***DO NOT** Transport at speed greater than 20 MPH (32 KmPH).*

***DO NOT** modify or alter this equipment without first contacting Amity Technology, LLC.*

Caution

***ALWAYS** keep decals free of dirt and replace if they become damaged. See the parts section for proper placement.*



***ALWAYS** avoid high-pressure fluids. Use a piece of cardboard to search for suspected hydraulic leaks.*

FEATURES AND SPECIFICATIONS

Air Cart

Feature	AS5250
Hopper Capacity	525 Bu (175 front, 225 center, 125 rear)
Blower Drive	Hydraulic Drive
Meter Drive	Hydraulic Drive
Wheel Spacing	Inside Duals 118" OC Outside Duals 182" OC
Tire Size	620/70R42 Duals
Fill/Unload Auger Cupped steel flighting (poly flighting optional)	10" x 25' (25.4 cm x 7.6 m)
Total height	15' 4" (4.67 m)
Total length	29' 4" (8.94 m)
Max width	17' 6" (5.33 m)
Fill height	12' 2" (3.71 m)
Minimum ground clearance	18" (45.72 cm)
Empty weight	15,750 lbs (7144 kg)

Conversion Factors

1 Hectare = 2.47 Acres	1 lb = 0.45359 kg	1 bushel = 1.2445 cubic ft
1 acre = 43,560 square feet	1 lb = 16 oz	1 bushel = 0.0352 cubic meters
1 acre = .404 Hectares	1 kg = 35.3 oz	1 bushel = 9.31 gallons
1 inch = 2.54 cm	1 oz = 0.028 kg	1 PSI = 6.8948 kPa
1 foot = 0.3048 m	1 mph = 1.609 kph	1 GPM = 3.785 LPM
	1 mile = 1.609347 km	

Formulas

$$\text{Rate (lbs/min)} = \frac{\text{Width (ft)} * \text{Speed (mph)} * \text{Field Rate (lbs/acre)}}{495}$$

$$\text{Performance (acres/hr)} = \frac{\text{Width (ft)} * \text{Speed (mph)}}{8.25}$$

MECHANICAL SYSTEMS - SETUP AND OPERATION

Safety Railing / Ladder

Your Air Cart is equipped with a ladder and safety railings for access to the top of the tanks. Always make sure that the safety railings are secured in the raised position when operating the air cart. The railings may be lowered for storage if required.

To lower the railings, remove spring pins and fold down the side railings over the top of the tank, then proceed to fold down the front and rear hand rails over the side rails. Reinsert the spring pins for storage.



Caution

Do not lower the railings while standing on the catwalks. Use a suitable ladder and lower them from below. Always have the railings raised when working on top of the air cart.



Safety railings

Product Bin Lids

The compartment lids on the air cart compartments must be properly closed and sealed for the meters to deliver product properly.

Periodically check the lid for proper adjustment and inspect the seal for damage.

To determine whether the lid is adjusted properly, observe the lid when it is unlatched. It should incline slightly toward the latch end. A firm pull on the latch handle should be required to over-center the latch.

To adjust the hinge end of the lid, loosen or tighten the jam nuts on the hold down bar. (See photo)

To adjust the latch, loosen or tighten the nuts on the toggle u-bolt. (See photo)

In the off season, it is recommended that the latch be released to relieve pressure on the gasket.



Caution

If equipped with screen baskets, do not step or lean on the screens. They will not support a person's weight and may fall into the tank, resulting in injury.



Lid and latch with toggle u-bolt adjustment



Jam nuts on hold-down bar

Auger

Your Air Cart is equipped with an auger for loading and unloading the product bins. The auger is mounted on a swing arm that allows a flexible discharge hose to be moved to each compartment without moving the hopper. The swing arm also enables the auger to be turned around to unload and clean out the compartments.

The auger's hydraulic drive is supplied with oil from the blower hydraulics. A diverter valve in front of the machine directs oil to the auger. This may be switched with the blower running.

The auger also has a three position variable speed valve mounted on it to run the auger forward, backward or to stop.

A diverter valve in front of the machine selects either the fan or auxiliary (auger and/or winch) function. Push the knob in to run the blower. Pull the knob out to run the auger or winch.

Using the Auger to Load Products

The auger can be used to load and unload the seed tanks. Use the diagram on the right to help in locating the auger arms to the correct position. **Always find a level area to fill the cart, if not, arms may be difficult to move.**

To place the auger in operating position:

1. Drop the lock pin into the neutral position.
2. Pull down the spring loaded pin on the inner arm and the outer arm into the detent position.
3. Remove the Auger from the clamp and pull the inner arm into position by swinging the hopper away from the Air Cart.
4. Once the inner arm is in position to fill the desired bin, release the detent pin on the inner arm and lock into place. Pull down the outer arm pin so the auger is free to move from the inner arm.
5. Position the auger over the lid of the tank which you would like to fill.

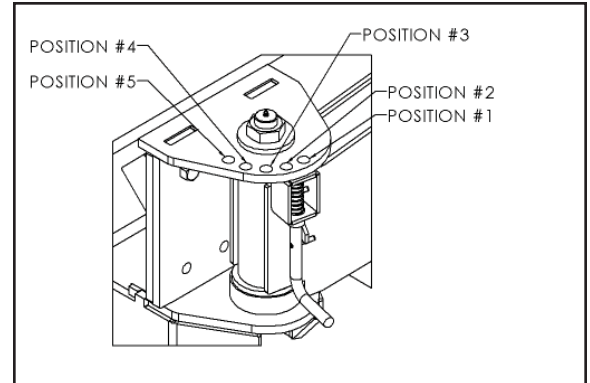
Tip

Place the hopper on the ground in a position perpendicular to the center tank lid. From this position the discharge end of the auger should be able to be moved between compartments without moving the hopper.

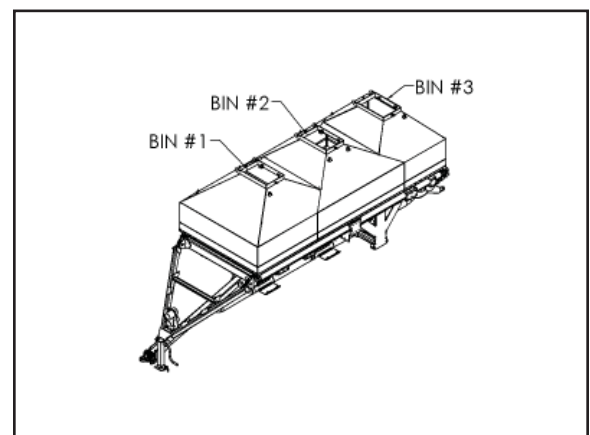
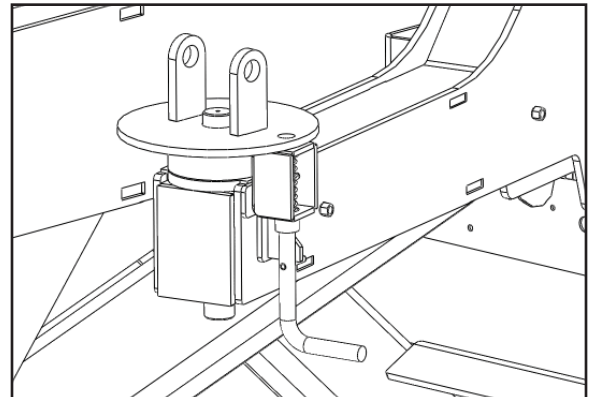
Note

When moving to a different compartment, remember to return the spring loaded pin into the detent position or damage may occur.

A diverter valve in front of the cart selects fan or auxiliary (auger and/or winch) function. Push the knob in to run the blower. Pull the knob out to run the auger or winch.



PIN LOCATION REFERENCE			
	BIN #1	BIN #2	BIN #3
POSITION #1	STOWED	STOWED	STOWED
POSITION #2	UNUSED	UNUSED	LOAD
POSITION #3	UNLOAD	LOAD	UNLOAD
POSITION #4	LOAD	LOAD	LOAD
POSITION #5	UNUSED	UNUSED	UNUSED



Using the Auger to Unload Products

1. Swing the inner arm far enough away from the machine to allow the hopper to fit in front of the wheels. See diagram for inner arm position.
2. Place the hopper under the meter for the compartment you wish to empty.

Tip

For the rear tank, the outer arm will have to swing greater than 180 degrees in order to achieve this.

3. Close the metering slide.
4. Remove the product meter door.
5. Open the metering slide to control flow from the compartment.

Note

Removing the pointer allows the gate to be opened without changing the rate setting.



Placing the hopper under the meter



The meter with door removed

Cleaning Out the Auger

1. Tip the hopper upside down to empty.
2. Run the auger backwards until the auger tube is empty.



Hopper in the upright position

Hydraulic Systems

The hydraulic system on 5250 air carts consists of a blower control circuit, an auger control circuit, and a hydraulic meter drive control circuit. A combination of various control valves enables all three circuits to be powered by one hydraulic remote on the tractor. This system was designed to function under a maximum hydraulic pressure of 2900 psi.

Hydraulic Capacity

Fan w/ Hyd Drive	12cc Fan Motor w/5 gal meter priority	
Fan Speed (rpm)	Flow (gpm)	Pressure (psi)
3000	15	1200-1700
4000	18	1600-2100
5000	21.5	2000-2500
6000	25	2400-2900

Fan Only	12cc Fan Motor	
Fan Speed (rpm)	Flow (gpm)	Pressure (psi)
3000	10	1000-1500
4000	13	1400-1900
5000	16.5	1800-2300
6000	20	2200-2700

Air Cart to Drill Hydraulic Couplers (tow behind cart)

The couplers connecting the air cart to the drill/implement are (3/4") #12 ISO 7241 Series B, high-flow couplers. Using these reduces the pressure drop across the coupler and enables the operator to easily disconnect the air cart from the drill/implement. It is important to ensure that the pressure line on the tank is connected to the pressure line on the drill.

The blower motor case drain line employs a (5/8") #10 ISO 7241 Series B coupler. This smaller size ensures that it cannot be confused with the larger couplers.



Caution

Be sure that the case drain line on the blower motor is not connected to pressure. Damage to the shaft seal or motor will result.



Hydraulic Couplers

Air Cart to Tractor Hydraulic Couplers (tow between cart)

The couplers connecting the air cart to the tractor are (1/2") #10 ISO 5675 (Pioneer) tip couplers connect the blower pressure and return lines to the tractor.

A (3/8") #8 ISO 16028 (flat-face) coupler tip on the drill connects the case drain line to the tractor. This line must be connected or the blower motor will be damaged. If a case drain return port is not available on your tractor, contact your dealer for assistance in determining how to connect this line to the tractor's hydraulic reservoir.

A (3/4") #12 ISO 7241-1 Series A low-pressure return tip is included with all Amity implements. It is also available through Amity Service Parts P/N (69120). If your tractor has a low-pressure port available, this tip can be used on the 3/4 inch blower return line to eliminate the pressure drop caused by the 1/2 inch Pioneer tip and the tractor's hydraulic valve on the return side. This tip can also be used on the case drain line, if the 3/8 inch flat face port is not available and the 3/4 inch low pressure return port is.

Do not install a tee connecting the blower return line and the blower case drain lines together. The blower case line must always be connected to a direct return to the hydraulic reservoir or blower motor failure will result.

The hydraulic line marked Pressure must be used to operate the blower. A check valve is installed in the blower circuit to protect the motor from an accidental pressurization of the return line and prevents cavitation during shutdown.

Note

The 3/4 inch low pressure return tip is not compatible with the 3/4 inch high flow fittings used at the front of the cart. They look similar, but they are not compatible.

Hydraulic Drive

This air cart is equipped with the hydraulic drive option that uses electric-over-hydraulic (EOH) technology to control the meter speed independently of ground speed. This gives the operator the benefit of a faster calibration procedure and on-the-go rate changing capability as well as the potential to apply product to a prescription map using GPS.

The hydraulic drive control valve diverts 5 GPM of hydraulic fluid flow from the right hand fan circuit to power the hydraulic drive motors. An electro-proportional flow-control valve controls the speed of each motor, allowing the meters to turn at speeds completely independent of each other.



Tractor Hydraulic Connections (1)



Tractor Hydraulic Connections (2)



Hydraulic drive Control Valve

The hydraulic drive motors mount to the meter housing and provide a direct drive of the meter shaft. The motor has a built-in speed sensor to provide accurate meter speed feedback to the electronics system.



Hydraulic drive Meter Drive Motor

Blower

The air cart's blower system generates air pressure/flow to carry the seed or other input products through the system to the implement. The blower is driven by a hydraulic motor and two 3/4" hydraulic lines supply oil to the blower.

The only serviceable part on the blower is the shaft seal. This may be replaced if the motor leaks at the shaft. Do not disassemble the motor to replace the shaft seal. It is secured by a snap ring and can be removed with a seal pick.



The blower and associated hydraulics



Caution

Be sure that the case drain line on the blower motor is not connected to pressure. Damage to the shaft seal or motor will result.



Warning

Do not under any circumstances disassemble the motor. It is very difficult to assemble correctly and motor destruction will result from running an incorrectly assembled motor.

Setting Blower Speed

The blower should be operated at as slow a speed as possible to prevent damage to seed. If operated too slowly, line blockage will occur. Typical blower speeds are between 3000 and 6000 RPM. Drill width, product, rate, humidity and other factors affect blower speed.

If you do not have a run blockage monitor, carefully watch to see that all runs are operating after changing blower speeds. To check runs, turn meter(s) with blower running and look to see that there is product at each ground opener.

Tip

If high rates are being applied with this implement and it is equipped with two fans, use the fan only circuit with the low pressure return fitting, if applicable. This will help alleviate the backpressure in the circuit and give the maximum output.

Note

The number of outlets on the drill will directly affect the blower rpm. The more outlets in use, the higher the pressure required to maintain blower rpm. See your dealer for hydraulic adjustments to your tractor, if necessary.



Note

A diverter valve (2) in front of the cart selects fan or auxiliary (auger and/or winch) function. Push the knob in to run the blower. Pull the knob out to run the auger or winch.



Warning

Do not under any circumstances disassemble the motor. It is very difficult to assemble correctly and motor destruction will result from running an incorrectly assembled motor.

Tires and Rims

Inflate tires to the pressure indicated in the adjacent table. Torque lug nuts to 500 ft/lbs oiled and retighten after the first 10 hours of operation.



Caution!

Maximum speed of the air cart is 20 mph.



CAUTION!



TIRE PRESSURES

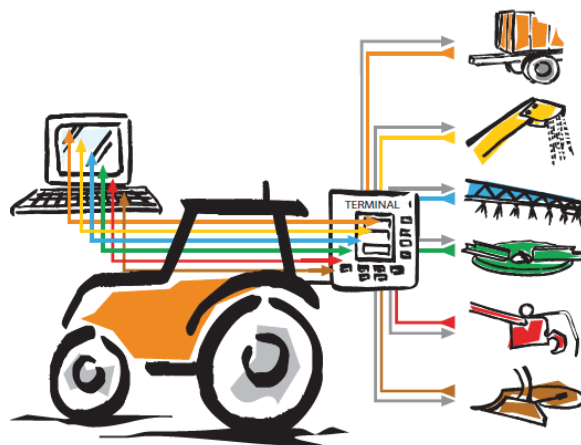
Tire Size	Load Index	Tire Pressure
620/70R42	166 A8	15 psi loaded field 30 psi loaded road

D3 SYSTEM OVERVIEW

Your Air Cart utilizes a state-of-the-art electronic system to monitor and control the air cart's functions. The D3 ISO Monitor system is based on the ISO 11783 standard, often also referred to as ISOBUS. ISOBUS is a communications standard that enables a variety of agricultural electronics systems to talk to each other. Its purpose is to integrate all current and future farm functions by standardizing communication between tractor and implement. ISOBUS permits the use of the same tractor terminal on a number of different machines and hence control of a wide range of implements without the need to reprogram a system.

D3 System Hardware

The D3 ISO System includes a D3 electronic control unit (ECU), which connects to a variety of sensors and an electric-over-hydraulic (EOH) meter drive system. The ECU communicates with a virtual terminal (VT) located inside the tractor cab. The VT displays information and enables you to configure, calibrate and operate multiple systems from a single user interface.



D3 Electronic Control Unit

The ECU is mounted on the air cart. It monitors all system sensors and controls the meter drives. The ECU connects to the VT in the tractor cab via an interconnecting cable that plugs into the front of the ECU on one end and into the standard ISOBUS connector on the tractor at the other end.



D3 ECU

Virtual Terminal

The VT in the tractor cab provides a user interface for the system, communicating with the D3 ECU and (any other ISOBUS-compatible equipment you may add to your equipment). Your VT could be the Amity-supplied VT, the tractor's OEM VT, or any other ISOBUS-compatible VT.

Several companies manufacture ISOBUS-compatible virtual terminals. All terminals use the same screen icons to represent the main functions. The control screens, or pages, for the implement (which are displayed in the central area of the screen) are identical for any ISOBUS-compatible terminal.

Currently the following virtual terminals can be used with your ISO Drill Manager system:

- GTA Console 1 and Console 2 (AGCO)
- AFS Pro 600 & Pro 700 (Case IH)
- GreenStar2 & GreenStar3 (John Deere)
- IntelliView II IntelliView Plus II (New Holland)
- IntelliAg (DICKEY-john)
- LH6000 (TeeJet)



C1000



C2000

Blower Speed Sensor

An inductive sensor on the blower fan provides speed information to the ECU.



Bin Level Sensor

Optical bin sensors indicate when the level of product in the bin has decreased to the level of the sensor. The same sensor detects all types of products. The sensor height can be adjusted vertically to set the alarm point at any desired level.



Meter Box Flow Sensor

A capacitive sensor detects when the meter box is empty. This indicates if the bin is completely empty, or if the product has stopped flowing into the meter box because of bridging or a leaky lid on the bin.



Meter Shaft Speed Sensor (Hydraulic drive)

If the air cart was purchased with the hydraulic drive option, an integral speed sensor is provided with the hydraulic motor. This sensor is very accurate and provides the precise meter speed control that is needed.



Ground Speed Sensor

This unit is equipped with a GPS speed sensor. This is used for speed sensing only and cannot be used for mapping.



PLEASE REFERENCE
ISO MANUAL
FOR MONITOR OPERATION



2012 Cart Control System

Operators Manual



Selecting Air Stream (Dual Chute Only)

In dual chute equipped systems; one can switch air streams for any desired product combination.

To switch air streams:

- 1.Remove wing nuts from baffle slide & plug
- 2.Remove slide and direct into the air stream desired
- 3.Replace plug and wing nuts

Note

Do not use wrench to tighten wing nuts. Over tightening will cause failure to stud (330031).

- 4.Switch pressurization tube to the desired stream.

Note

If switching frequently:

Apply small amounts of Anit-Seize to stainless studs. This will prevent them from seizing and breaking off.



Caution!

If the pressurization tube is not switched seeding rates will become inaccurate.

Adjusting Product Meters

The product meters deliver seed or fertilizer from the product bins to the air stream via a fluted roller. The amount of the roller that is being used determines the rate at which products are applied.

There are two moveable components in the meter that determine the rate setting.

The primary setting is a flow plate adjusted by a rod connected to a pointer. When a rate setting is selected, the pointer is simply placed by measuring from the meter slide fully close to the desired number on the tape measure. A lock bolt on the pointer rod secures the setting.

The second part of the adjustment is the meter shut off slide. For any rate setting the proper place for shut off slide is against the stop on the pointer. This opens the bottom of the tank compartment the proper amount for the rate setting. A ½" drive ratchet supplied in the toolbox is used to adjust the meter shut off slide.

Any time that a new rate is set, the rate setting should be confirmed by calibrating the meter.

A scale and catch bag are supplied in the tool box for calibration.

Once a rate setting is determined from the rate charts and the meter is set to that setting, perform the following calibration procedures.

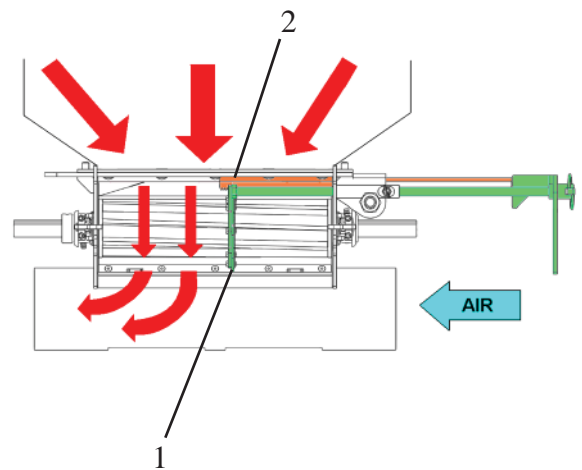
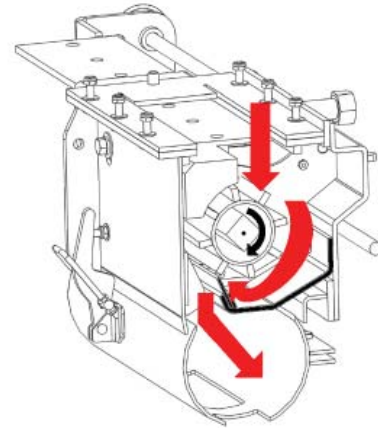
When using all of the tanks for one product, determine the rate for each meter by splitting the desired rate by the ratio of the tanks (33/43/24). This will result in all tanks emptying at the same time.

Example

If you desire to seed 120 lbs of wheat using all meters, split the desired pounds per acre rate to the ratio of the size of the tanks. i.e. If the Air Cart is a 33/43/24 split, set the meters as follows: 39.6 lbs (120.33), 51.6 lbs (120*.43), and 28.8 lbs (120*.24)*

Note

When decreasing the meter setting, it may be necessary to close the shutoff slide and turn the meter to empty it. This will empty the meter and allow the plate to move to a smaller setting.



Note

Plate (1) controls how much of meter roller will be used. The shut off slide (2) is opened to the stop on the pointer for any rate setting. When making large rate reductions, close the slide and empty the meter to allow the plate to move to the lower setting. Remember to reopen the slide until it contacts the stop on the pointer.

Hydraulic Drive Calibration and Operation

Calibration is done in four parts. First, you must prepare the system for calibration. Second, you prime the meter. Third, you take a sample and weigh it. Finally, you enter the sample, or Accumulated weight into the virtual terminal.

Preparing to Calibrate the Meter

Hydraulic power is needed for calibration. The following procedure sets up the air cart for the calibration procedure.

1. Ensure that the air cart's hydraulic lines are connected to a tractor.
2. Verify that the tractor hydraulic remote for the blower is in neutral until hydraulic power is needed.
3. Ensure that the monitor wire harness is properly connected to the tractor.
4. Power up the monitor in the tractor.
5. Verify that the VT in the cab is communicating with the Air Cart ECU.
6. Ensure that the meter door is properly attached to the meter.
7. Ensure the bin is at least 25% full of the product that will be applied.
8. Set the meter gate to the appropriate position for the rate being applied.
9. Ensure the auger selector valve is directing oil to the fan/meter circuit.
10. Close the blower ball-valve.
11. Actuate the tractor remote controlling the blower circuit.
12. Make sure the blower is not spinning for the following steps. If the blower is spinning, check the ball valve to make sure that it is full closed and blocking all flow to the blower..
13. Open the cleanout door below the meter you wish to calibrate.



The Auger Selector Valve



Adjusting the Meter Gate

The meter must be calibrated if:

- *The gate setting has been changed*
- *A different product is being used*
- *A different meter roll is being used*

Each meter must be calibrated individually, even if all the gates are set the same.

Meter Gate Setting Guide – Hydraulic Drive - High Capacity Meter Roll				
Rate lbs/ac <i>(kg/Ha)</i>	30 ft <i>(9m)</i>	40 ft <i>(12m)</i>	50 ft <i>(15m)</i>	60 ft <i>(18m)</i>
50 (56)	3" (76 mm)	4" (102 mm)	5" (127 mm)	6" (152 mm)
100 (112)	4" (102 mm)	6" (152 mm)	8" (203 mm)	10" (254 mm)
150 (168)	6" (152 mm)	8" (203 mm)	10" (254 mm)	Max
200 (224)	8" (203 mm)	10" (254 mm)	Max	Max

Priming the Meter

To ensure accurate calibration, the meter must be primed with product.

1. On the ECU keypad, locate the button with the number corresponding to the meter you are calibrating. This is called the ECU Calibration button.
2. Press the ECU Calibration button once.
The meter roll begins spinning.
3. Allow the meter to spin 2 to 3 revolutions to ensure that the meter is full of product.
4. Press the same button again to stop the meter.
The meter is now primed.

Note

Each time the calibration button on the ECU is pressed to activate the meter the ECU counts the revolutions of the meter roll. This count is reset each time this process is performed. Once you stop the meter roll, the bag must be weighed. If you did not collect enough product in the bag to obtain a measurable weight, you must dump the bag and start over with an empty bag.

Taking a Sample for Calibration

1. Using the weigh scale included with your system, hang the calibration bag (also included) on the scale and turn the adjustment dial to zero out the weight of the bag.
2. Place the calibration bag below the cleanout opening.
Be careful to ensure all product will flow into the bag.
3. Press the ECU Calibrate button to activate the meter.
4. Allow the meter to spin until the bag is at least half full.
5. Press the ECU Calibrate button again to stop the meter.
6. Weigh the bag with the supplied scale.
7. Convert the weight to pounds and record the value.

This value is the Accumulated Weight value you will enter into the VT.

Note

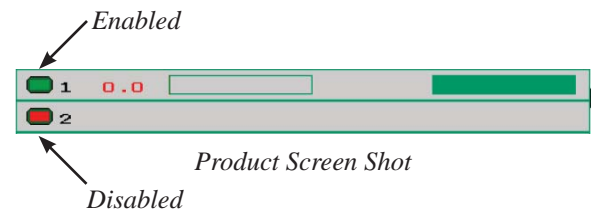
Do not press the ECU Calibrate button again until the Accumulated weight is entered into the VT. Pressing the ECU Calibrate button before the weight is entered will clear the rotation counter and void the sample.

8. Repeat the previous steps to obtain sample weights for the rest of the meters.
9. When all the weights have been found, go back to the tractor and enter the calibration weights into the Product page on the Virtual Terminal.



Note

To calibrate a product meter it must be enabled (active) on its Product page.



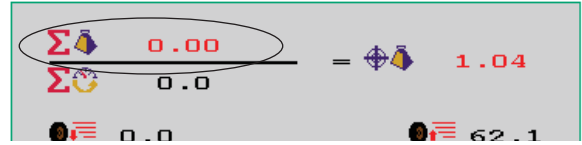
Entering Accumulated Weight on the VT

1. On the Home page, press the soft key for the desired bin.
The Product page for the selected bin appears
2. On the Product page, select Accum (lbs).
3. Enter the accumulated weight value obtained in the meter calibration procedure in pounds.

Repeat Steps 1 to 3 for each additional bin.

Note

Once you enter the Accum value the monitor automatically calculates the Motor Cal value. The Motor Cal value is the number of pounds (lbs) of product applied per revolution of the meter roller. E.g. If the Motor Cal value is 1.2, The meter will deliver 1.2 lbs of material during each revolution of the meter roll.



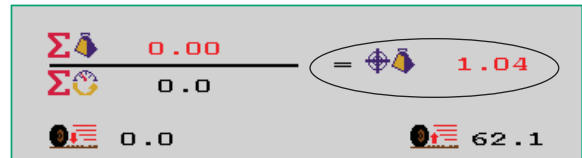
What is Min and Max Speed?

After the Accum value has been entered, the D3 System calculates the Min Speed and Max Speed values (in mph). These values define the range of speeds you can travel while maintaining accurate application per acre. During planting, if you travel at a speed less than the minimum or greater than the maximum your application accuracy will be compromised.

Manually setting Motor Cal Value for a VR system

Set the Motor Cal value in the D3 System as follows:

1. On the VT, navigate to the Product page.
2. Select Motor Cal.
3. Enter the desired Motor Cal value.



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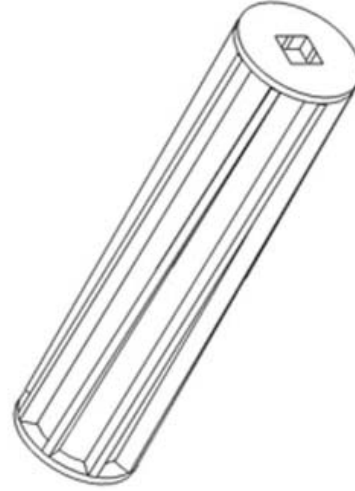
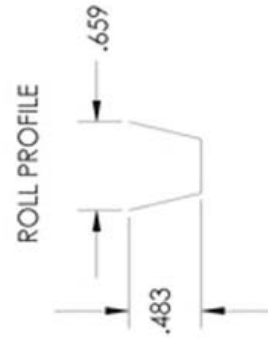
WHEAT

High Capacity Flute P/N 65705
1/4" WIDE X 1/2" DEEP BARS

GROUND DRIVE ONLY
17T GEAR BOX SPROCKET W/ 18.4 R26 TIRES
15T GEAR BOX SPROCKET W/ 23.1 R26 TIRES

WIDTH (FT)	APPLICATION RATE (LBS PER ACRE)																		
	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240
20	2.7	3.1	3.6	4.0	4.5	5.0	5.4	5.8	6.3	6.7	7.2	7.6	8.1	8.5	8.9	9.4	9.8	10.3	10.8
25	3.4	3.9	4.5	5.0	5.6	6.2	6.8	7.3	7.8	8.4	8.9	9.5	10.1	10.6	11.2	11.8	12.3	12.9	13.4
30	4.1	4.7	5.4	6.0	6.8	7.4	8.1	8.8	9.4	10.1	10.7	11.4	12.1	12.8	13.4				
35	4.7	5.5	6.3	7.0	7.9	8.7	9.5	10.2	10.9	11.7	12.5	13.3							
40	5.4	6.3	7.2	8.0	9.0	9.9	10.8	11.7	12.5	13.4									
45	6.1	7.1	8.1	9.0	10.1	11.1	12.2	13.2											
50	6.8	7.9	9.0	10.0	11.3	12.4	13.5												
55	7.4	8.7	9.9	11.0	12.4	13.6													
60	8.1	9.4	10.8	12.0	13.5														

APPROXIMATE POINTER SETTING



FERTILIZER (60 LBS PER CUBIC FT.)

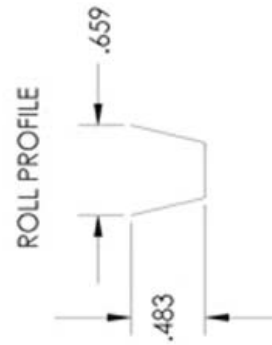
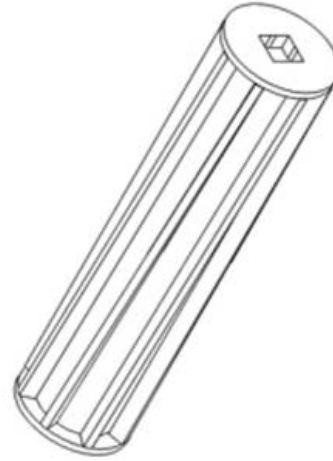
High Capacity Flute P/N 65705
 1/4" WIDE X 1/2" DEEP BARS

GROUND DRIVE ONLY
 17T GEAR BOX SPROCKET W/ 18.4 R26 TIRES
 15T GEAR BOX SPROCKET W/ 23.1 R26 TIRES

APPLICATION RATE (LBS PER ACRE)

WIDTH (FT)	APPLICATION RATE (LBS PER ACRE)																		
	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240
20	2.3	2.7	3.1	3.5	3.8	4.2	4.6	5.0	5.4	5.8	6.1	6.5	6.9	7.3	7.7	8.1	8.4	8.8	9.2
25	2.9	3.4	3.8	4.3	4.8	5.3	5.8	6.2	6.7	7.2	7.7	8.2	8.6	9.1	9.6	10.1	10.6	11.0	11.5
30	3.5	4.0	4.6	5.2	5.8	6.3	6.9	7.5	8.1	8.6	9.2	9.8	10.4	10.9	11.5	12.1	12.7	13.2	13.8
35	4.0	4.7	5.4	6.0	6.7	7.4	8.1	8.7	9.4	10.1	10.8	11.4	12.1	12.8	13.4				
40	4.6	5.4	6.1	6.9	7.7	8.4	9.2	10.0	10.8	11.5	12.3	13.1	13.8						
45	5.2	6.0	6.9	7.8	8.6	9.5	10.4	11.2	12.1	13.0	13.8								
50	5.8	6.7	7.7	8.6	9.6	10.6	11.5	12.5	13.4										
55	6.3	7.4	8.4	9.5	10.6	11.6	12.7	13.7											
60	6.9	8.1	9.2	10.4	11.5	12.7	13.8												

APPROXIMATE POINTER SETTING



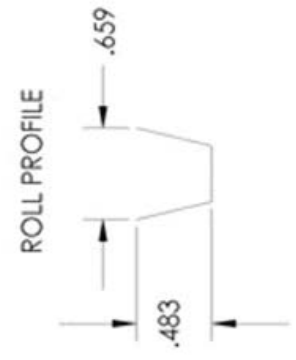
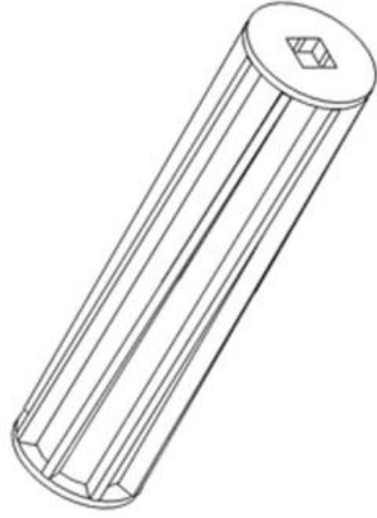
SOYBEANS

High Capacity Flute P/N 65705
1/4" WIDE X 1/2" DEEP BARS

GROUND DRIVE ONLY
17T GEAR BOX SPROCKET W/ 18.4 R26 TIRES
15T GEAR BOX SPROCKET W/ 23.1 R26 TIRES

WIDTH (FT)	APPLICATION RATE (LBS PER ACRE)																		
	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240
20	3.1	3.6	4.1	4.6	5.2	5.7	6.2	6.7	7.2	7.7	8.2	8.8	9.3	9.8	10.4	10.9	11.4	11.9	12.4
25	3.9	4.5	5.2	5.8	6.4	7.1	7.8	8.4	9.0	9.6	10.3	10.9	11.6	12.2	12.9	13.6			
30	4.7	5.4	6.2	6.9	7.7	8.6	9.3	10.1	10.8	11.6	12.3	13.1	13.9						
35	5.4	6.3	7.2	8.0	9.0	10.0	10.9	11.7	12.6	13.5									
40	6.2	7.2	8.3	9.2	10.3	11.4	12.4	13.4											
45	7.0	8.1	9.3	10.4	11.6	12.8	14.0												
50	7.8	9.1	10.3	11.5	12.9	14.0													
55	8.5	10.0	11.4	12.6	14.2														
60	9.3	10.9	12.4	13.8															

APPROXIMATE POINTER SETTING



BARLEY

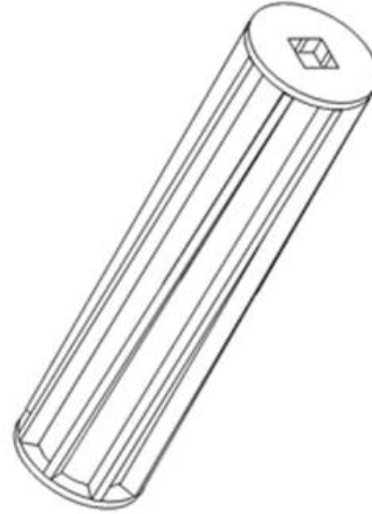
High Capacity Flute P/N 65705
1/4" WIDE X 1/2" DEEP BARS

GROUND DRIVE ONLY
17T GEAR BOX SPROCKET W/ 18.4 R26 TIRES
15T GEAR BOX SPROCKET W/ 23.1 R26 TIRES

APPLICATION RATE (LBS PER ACRE)

WIDTH (FT)	APPLICATION RATE (LBS PER ACRE)																		
	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240
20	3.4	3.9	4.5	5.0	5.6	6.2	6.7	7.3	7.8	8.4	8.9	9.5	10.1	10.7	11.2	11.8	12.3	12.9	13.4
25	4.2	4.9	5.6	6.3	7.0	7.7	8.4	9.1	9.8	10.5	11.2	11.9	12.6	13.3					
30	5	5.8	6.7	7.6	8.4	9.2	10.1	10.9	11.8	12.6	13.4								
35	5.9	6.8	7.8	8.8	9.8	10.8	11.7	12.8	13.7										
40	6.7	7.8	8.9	10.1	11.2	12.3	13.4												
45	7.5	7.0	10.0	11.4	12.6	13.8													
50	8.4	9.8	11.1	12.6	14.0														
55	9.2	10.7	12.2	13.9															
60	10.1	11.7	13.4																

APPROXIMATE POINTER SETTING



ROLL PROFILE

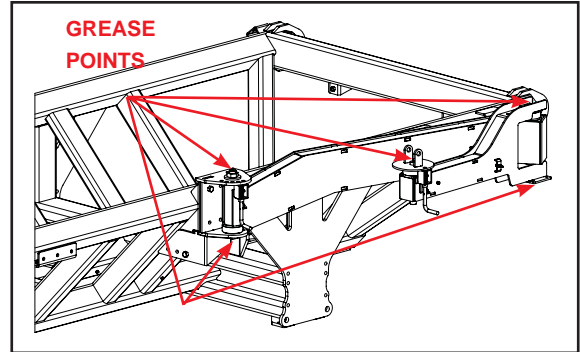


MECHANICAL SYSTEMS - MAINTENANCE AND TROUBLESHOOTING

Routine Maintenance

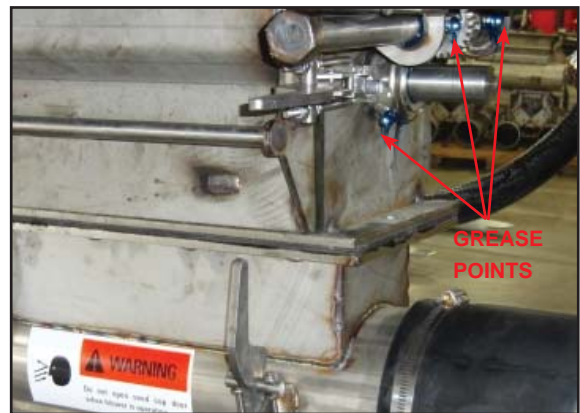
Hinge Points

Lubricate seasonally with SAE multipurpose grease.



Meter Box

Lubricate all drive components every 50 hours with SAE multipurpose grease.



Hydraulic Motor

The hydraulic motor can only be damaged by heat or foreign material. Keep your tractor hydraulic oil and filter serviced regularly to ensure long life from your hydraulic components.



Wheel Bearings

Annually check wheel bearings for tightness. Adjust if needed. Repack every three (3) years.



Changing Metering Rolls - Hydraulic drive System

To change metering rolls on a VR System:

1. Close the meter gate or ensure the bin is empty.
2. Remove the meter door and set aside.
3. Remove the (2) ½” bolts holding the hydraulic motor to the motor mount.
4. Remove the two nuts that hold the bearing on the meter shaft (motor-end only).
5. Pull the shaft out of the meter (with the motor still attached) while holding on to the meter roll.
6. Remove the meter roll.
7. Re-assemble the meter in reverse order with the desired meter roll.



Meter Roll Options

Amity's standard high capacity and optional medium capacity meter rollers are constructed of stainless steel for lifetime performance

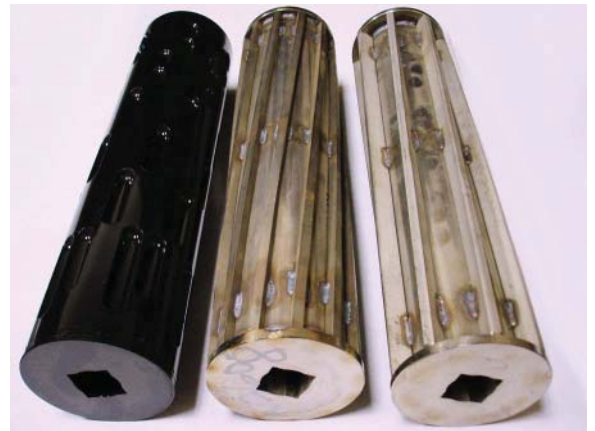
Four meter roll options are available.

The high capacity roll has eight ½” deep bars and is used for most applications.

The medium capacity roll has twelve ¼” deep bars and is used on smaller machines or for consistently lower seeding or fertilizer rates.

The low volume has a pattern of short, shallow depressions to gradually larger, deeper depressions for very low seeding rate.

The fine product meter roll has a continuous pattern of shallow depressions for very low seeding rates with high accuracy.



Other Meter Adjustments

The following adjustments are done at the factory and should only be done by a trained service technician.

Shims

- The meter roll should have a small gap (.030") between the roll and the meter housing for proper operation. If the gap is too large product can leak around the meter roll into the air stream. If the gap is too tight the meter roll will bind on the housing and cause problems with the meter drive system.
- A .030" thick shim (Amity P/N 65744) can be installed between the meter roll and the meter housing to reduce this gap. The meter shaft needs to be removed to install this shim, see the section on changing meter rolls on the procedure to remove the shaft.
- Ensure the meter roll turns freely after installing or removing any shims. If the meter roll does not turn freely, DO NOT operate the air cart until enough shims have been removed to allow the meter roll to turn freely.



Deflector Block

The black plastic deflector block in the rear of the meter prevents seed from flowing around the back side of the meter roll. If needed, this block can be adjusted vertically to increase or decrease the clearance to the meter roll. To adjust, loosen the two nuts on the back side of the meter housing, move the block to the desired position, and tighten the nuts to lock the block into place.



Meter Door Tray

The tray on the meter door can be adjusted vertically in order to increase or decrease the tension between the rubber seal on the tray and the meter roll. To adjust, loosen the three nuts holding the tray to the meter door, move the tray to the desired position, and tighten the nuts to lock the tray into place.



Meter Door and Cleanout Door Latches

The tension on these latches can be adjusted to increase or decrease the preload on the meter door and the cleanout door. If the preload is too small, the doors will not seal properly. If the tension is too tight, the latches will be difficult to close. The tension can be adjusted by unlocking the latch and screwing the two stop-nuts evenly in or out. Ensure the door preload is adequate before putting the unit back into service.

Mechanical Systems Troubleshooting: Common Problems and Solutions

Symptom	What it means	Recommended Action
Seed cups will not engage	Product is off	Turn product on from VT
	Minimum speed condition not met.	Be sure unit is moving faster than minimum speed setting
Seed is flowing without cups turning. (A small amount of seed flow is normal and not a cause for concern.)	Rubber deflector is not down tightly on flute.	Lower the deflector.
	Rubber wiper on seed cup door damaged or not up tightly against flute.	Raise door or replace rubber wiper if damaged.
	Product is building up in air delivery system.	Increase blower speed.
Excessive seed cracking is occurring	Air stream velocity is too great.	Reduce blower speed or adjust blower baffle on dual air stream machines.
Seed boots are plugging	Turning corners too sharply with boots in the ground.	Always raise ground opener before making a sharp turn.
	Ground openers have been left in the ground when backing up.	Always raise ground opener before backing up.
Product distribution is uneven	A one inch hose may be plugged.	Re-route or cut 1" hoses to eliminate sags. Clear any obstruction in hoses or boots.
	Splitter not calibrated.	Calibrate splitter equally
	Pressurization tube in wrong stream (dual chute only).	Switch to stream being used
Uneven delivery rate	Loss of tank pressure.	Check tank lids for leaks. Inspect and replace faulty gaskets.
Oil showing up on seed lines	Shaft seal failure on hydraulic motor.	Replace seal. WARNING: DO NOT DISASSEMBLE HYDRAULIC MOTOR!! THE SHAFT SEAL IS AN EXTERNAL REPLACEMENT ITEM.
Hydraulic motor slow	Monitor set to wrong blower speed setting (See Monitor Section).	See Monitor Section
	Tractor is not putting out adequate oil.	Have tractor dealer inspect tractor hydraulics.
	Bad couplers.	Check couplers on tractor and hoses. Try different couplers.

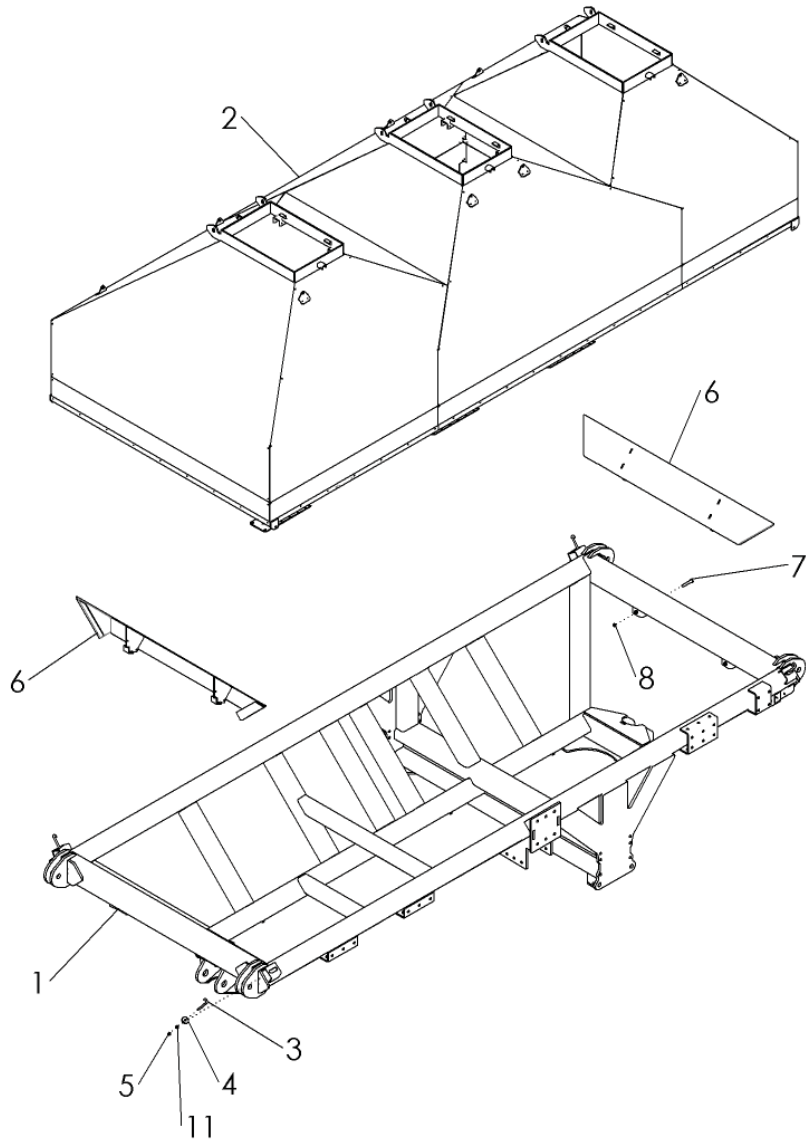
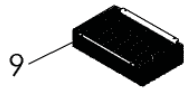
Storage

- Fully open the seed meters.
- Open clean out doors on the bottom of the air tube.
- Clean any remaining product from tanks.
- Use water to thoroughly clean any compartment used for fertilizer
- Thoroughly clean fertilizer and dirt from cup area.
- Clean the inside of the seed meter door. Fertilizer, seed and dirt accumulate in this area.
- Clean any remaining product from the auger and leave the auger slide open.
- Grease all lubrication points.
- Release the latch on the tank lids to relieve pressure on the lid gaskets.

AIR CART ASSEMBLY PARTS

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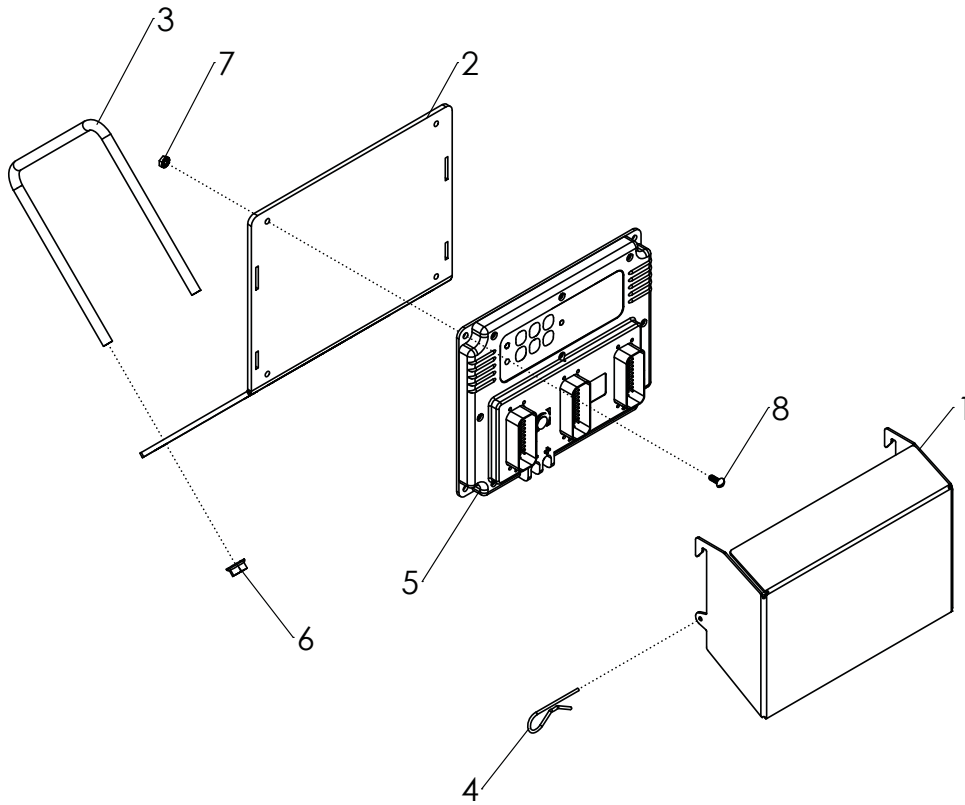
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M6101-B

ASSY-TANK/FRAME

Ref.	Part No.	Description	Qty.
1	37501	WLDMT-FRAME 525 BU CART	1
2	37450	WLDMT-TANK 525 BU CART	1
3	37496	BOLT-J: .50-13 X 3.00 THL 6" OVAL	4
4	37719	PLATE-WASHER ZP	4
5	1027461	NUT-TOPLOCK: .50 NC GR5 ZP	4
6	37090	WLDMT-TANK TENSION SLIDER	2
7	1032273	BOLT-HEX: .63 X 3.50 NC GR5 ZP FULL	4
8	1026259	NUT-JAM: .63 NC GR2 ZP	4
9	1026562	WLDMT-SCREEN BASKET	3
10	66550	KIT-LOW VOLUME TANK INSERT (OPTIONAL)	3
11	1011581	WASHER-LOCK: .50 ZP	4



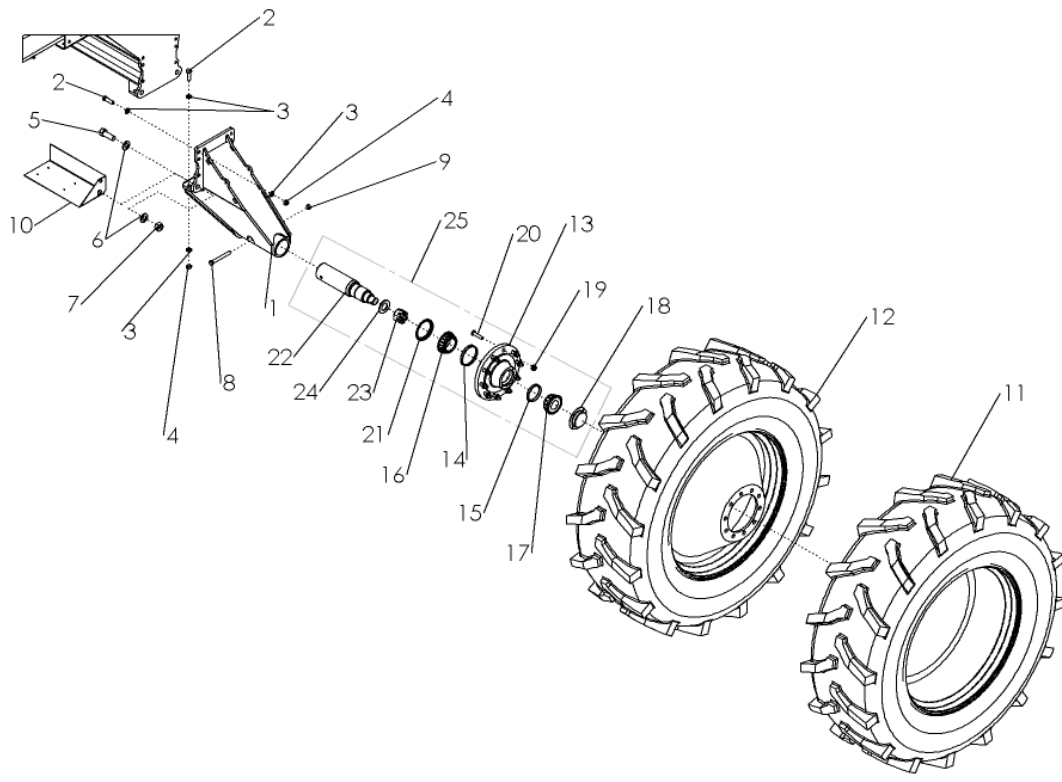
M6102-B

ASSY-ECU MOUNT & ELECTRICAL

Ref.	Part No.	Description	Qty.
1	330297	PLATE-ECU COVER	1
2	330298	WLDMT-ECU MOUNT	1
3	37532	U-BOLT: .375 X 7.00 X 6 X 7.00 ZP	2
4	1012901	PIN-HAIR: .13 X 2.50 ZP	2
5	330339	ECU-D3 ISO CONTROLLER (ICON)	1
6	44118	NUT-FLANGE SERR .38 NC ZP GR2	4
7	1032059	NUT-K-LOCK: 18-8 SS .19 NC	4
8	66353	SCREW-P-H: .19 X .50 NC SS	4
9	67643	HARNESS-TANK (NOT SHOWN)	1
10	66585	CLIP-WIRE HARNESS PURSE LOCK WHITE (NOT SHOWN)	20
11	67492	HARNESS-ISO TANK COMPONENT SHORT (NOT SHOWN)	3
12	67494	HARNESS-ISO 3 WAY MOTOR ADAPTER (NOT SHOWN)	1
13	67489	HARNESS-METER SPEED (NOT SHOWN)	3
14	37034	HARNESS-TANK BULKHEAD (NOT SHOWN)	3

ASSY-PRESSURIZATION KIT

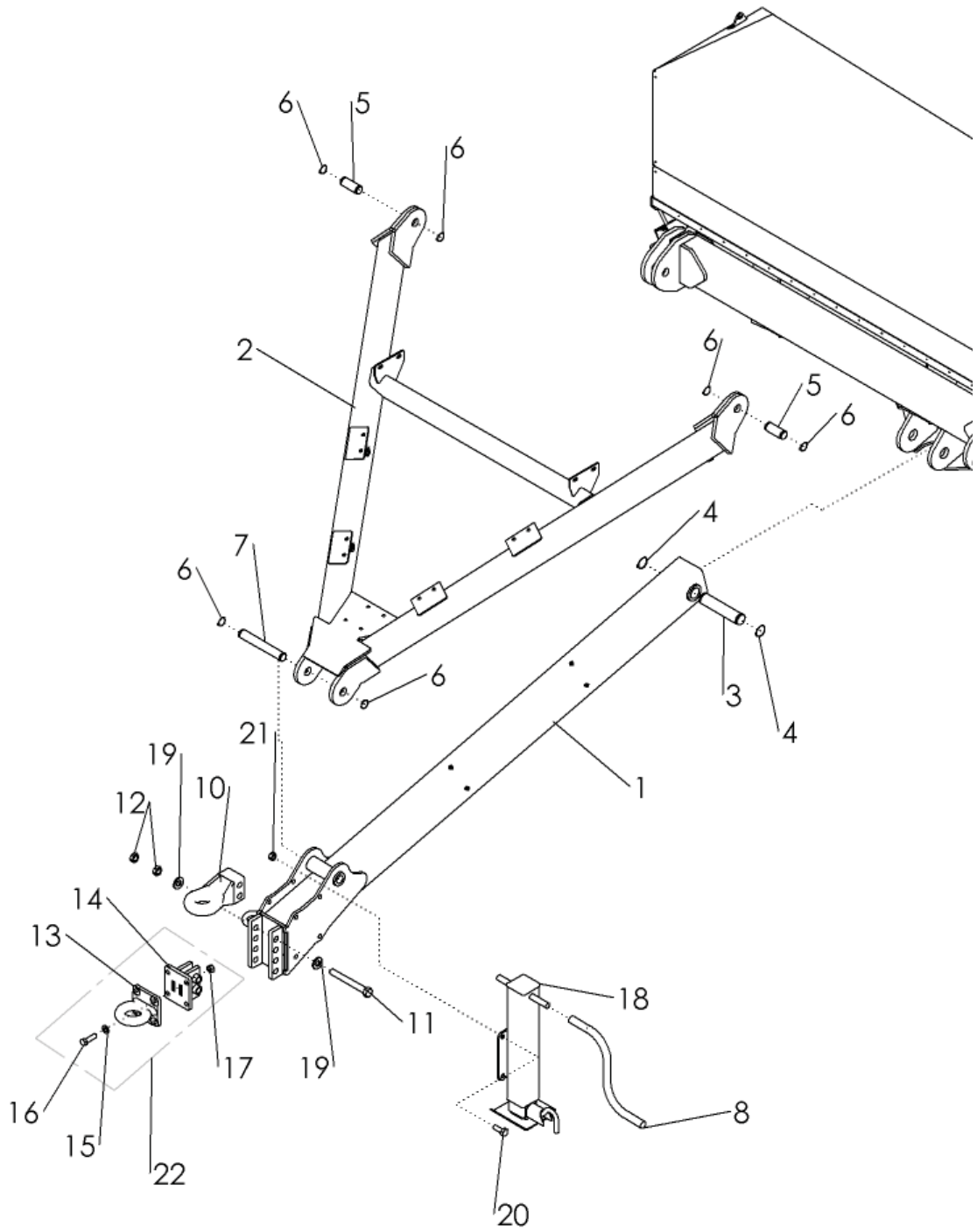
Ref.	Part No.	Description	Qty.
1	37760	HOSE-HANAFLEX 112 1.25 X 48"	1
2	1026358	CLAMP-HOSE: #16 0.81-1.50	2



M6104-A

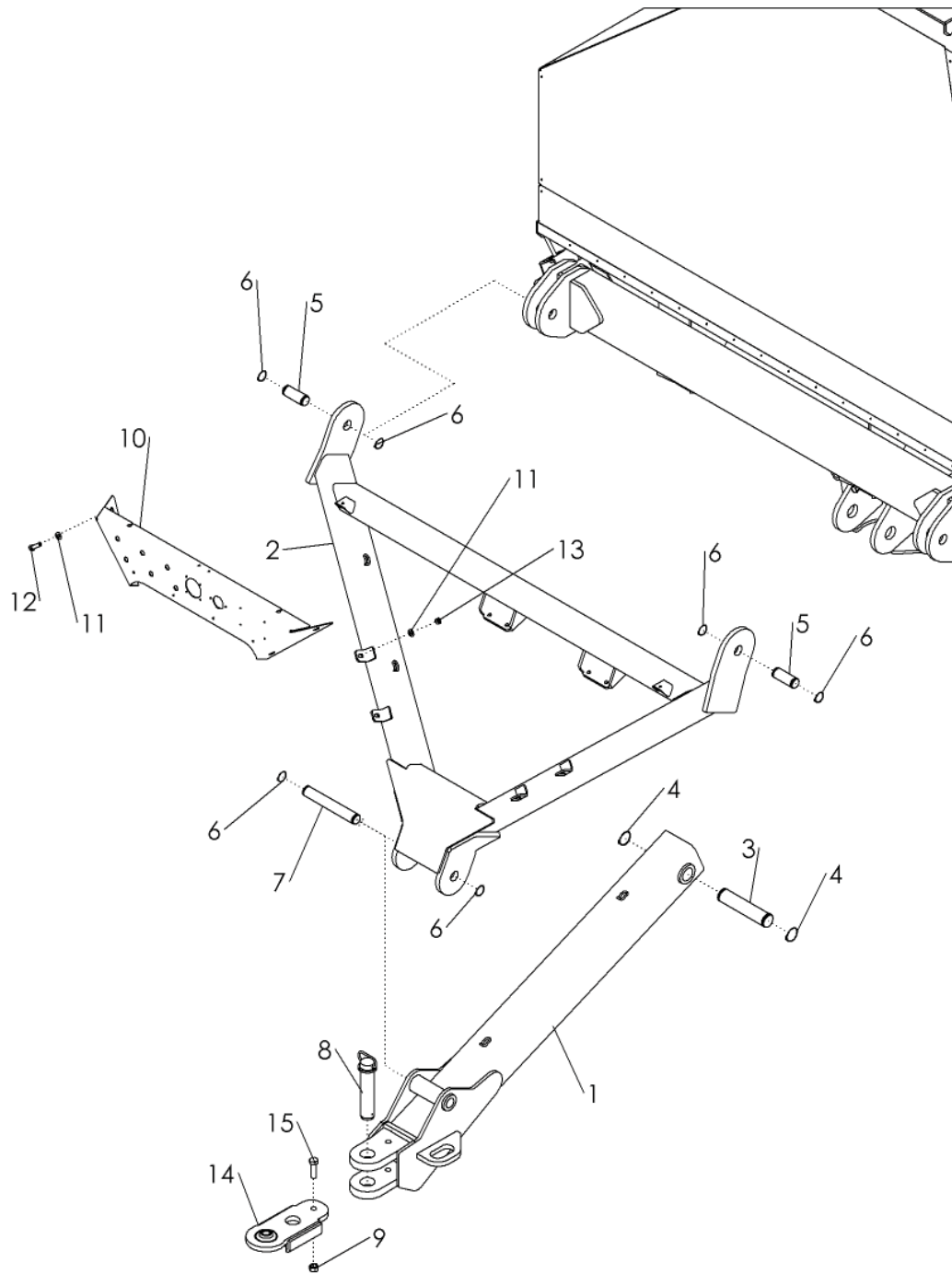
ASSY-AXLE HUB AND SPINDLE

Ref.	Part No.	Description	Qty.
1	37555	WLDMT-OUTER AXLE	1
2	66495	BOLT-HEX: .75 X 2.75 NC GR8 YZP	8
3	35132	WASHER-FLAT: SAE .75 GR8 YZP	16
4	66501	NUT-HEX: .75 NC GR8 YZP	8
5	37530	BOLT-HEX: 1.25 X 3.50 NC GR8 YZP	2
6	66499	WASHER-FLAT: SAE 1.25 GR8 YZP	4
7	37531	NUT-HEX: 1.25 NC GR8 YZP	2
8	1016718	BOLT-HEX: .75 X 6.50 NC GR5 ZP	1
9	1017000	NUT-TOPLOCK: .75N NC GR5 ZP	1
10	37731	PLATE-TOOLBOX MOUNT	1
11	37600	ASSY-TIRE/WHEEL 620/70R42 RH-16" OS	1
12	37601	ASSY-TIRE/WHEEL 620/70R42 LH-16" OS	1
13	37314	HUB-5250	1
14	72977	CUP-INNER	1
15	72978	CUP-OUTER	1
16	72979	CONE-INNER	1
17	72980	CONE-OUTER	1
18	72981	CAP-HUB	1
19	37739	NUT-FLANGE LUG .875 NF	10
20	37766	STUD-WHEEL .875 X 3.41 GR8 NF	10
21	72972	SEAL-10 BOLT HUB	1
22	330076	SPINDLE-4.50 HR C 1045	1
23	320163	NUT-HEX: 2.00 NF NP	1
24	320164	WASHER-FLAT: 4.00 X 2.03	1
25	37309	ASSY-HUB/SPINDLE 5250 (INCLUDES ITEMS 13-24)	1



ASSY-FRONT HITCH

Ref.	Part No.	Description	Qty.
1	37535	WLDMT-FRONT HITCH LOWER	1
2	37540	WLDMT-FRONT HITCH UPPER	1
3	330350	PIN-HITCH 2.00	1
4	330333	SNAP RING 2.00 EXTERNAL HD YZP	2
5	330352	PIN-HITCH 1.50 X 5.00	2
6	330332	SNAP-RING 1.500 EXTERNAL HD YZP	6
7	330351	PIN-HITCH 1.50 LONG	1
8	330014	HANDLE-10K JACK W/HRDWR (BLACK)	1
9	36223	SAFETY CHAIN #80000 (NOT SHOWN)	1
10	66053	HITCH PERFECT CAT 4 PAINTED (USED ON TOW BETWEEN)	1
11	1033376	BOLT-HEX: 1.00 X 8.50 NC GR8 ZP	2
12	1026880	NUT-HEX JAM: 1.00 NC GR2 ZP	2
13	35801	TOW RING 66,000 LB	1
14	35640	WLDMT-PINTLE HITCH	1
15	35132	WASHER-FLAT: SAE .75 GR8 YZP	8
16	62096	BOLT-HEX: .75 X 2.50 NC GR8 YZP	4
17	1011434	NUT-TOPLOCK: .75 NC GR8 YZP	4
18	330004	WLDMT-JACK 10K	1
19	1030728	WASHER-FLAT: SAE 1.00 GR8 YZP	4
20	1012060	BOLT-HEX: .75 X 2.00 NC GR5 ZP	4
21	1017000	NUT-TOPLOCK: .75 NC GR5 ZP	4
22	36062	KIT-PINTLE ADAPTER 5250 (USED ON TOW BEHIND)	1

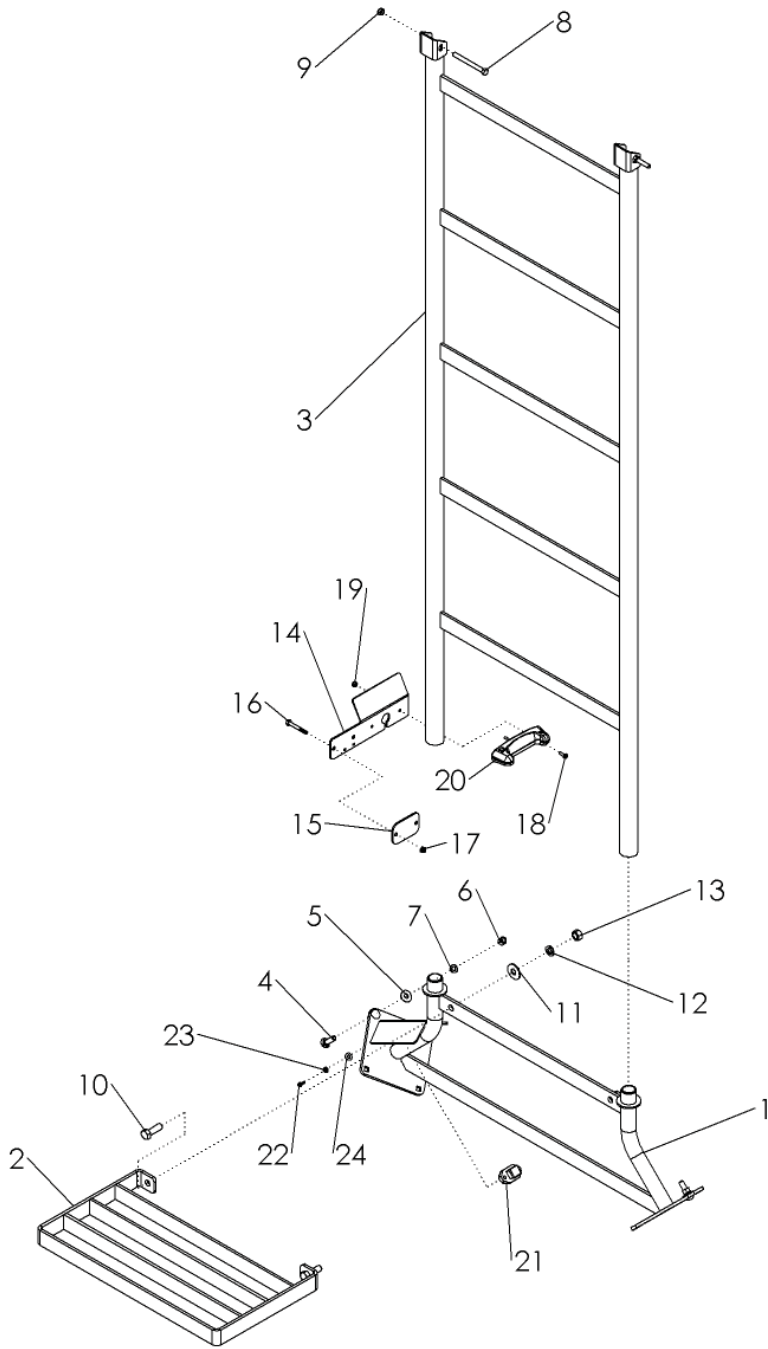


M6106

ASSY-REAR HITCH

Ref.	Part No.	Description	Qty.
1	37513	WLDMT-REAR HITCH LOWER	1
2	37521	WLDMT-REAR HITCH SUPPORT	1
3	330350	PIN-HITCH 2.00 ZP	1
4	330333	SNAP-RING 2.000 EXTERNAL HD YZP	2
5	330352	PIN-HITCH 1.50 X 5.00 ZP	2
6	330332	SNAP-RING 1.500 EXTERNAL HD YZP	6
7	330351	PIN-HITCH 1.50 LONG ZP	1
8	37209	PIN-HITCH 2.0 X 8.5 W/HANDLE	1
9	1011434	NUT-TOPLOCK: .75 NC GR8 ZP	1
10	37528	PLATE-HOSE HOLDER	1
11	1011584	WASHER-FLAT: SAE .50 ZP	8
12	1011607	BOLT-HEX: .50 X 1.50 NC GR5 ZP	4
13	1027461	NUT-TOPLOCK: .50 NC GR5 ZP	4
14	37808	WLDMT-5250 UNI BALL ADAPTER	1
15	62096	BOLT-HEX: .75 X 2.50 NC GR8 ZP	1

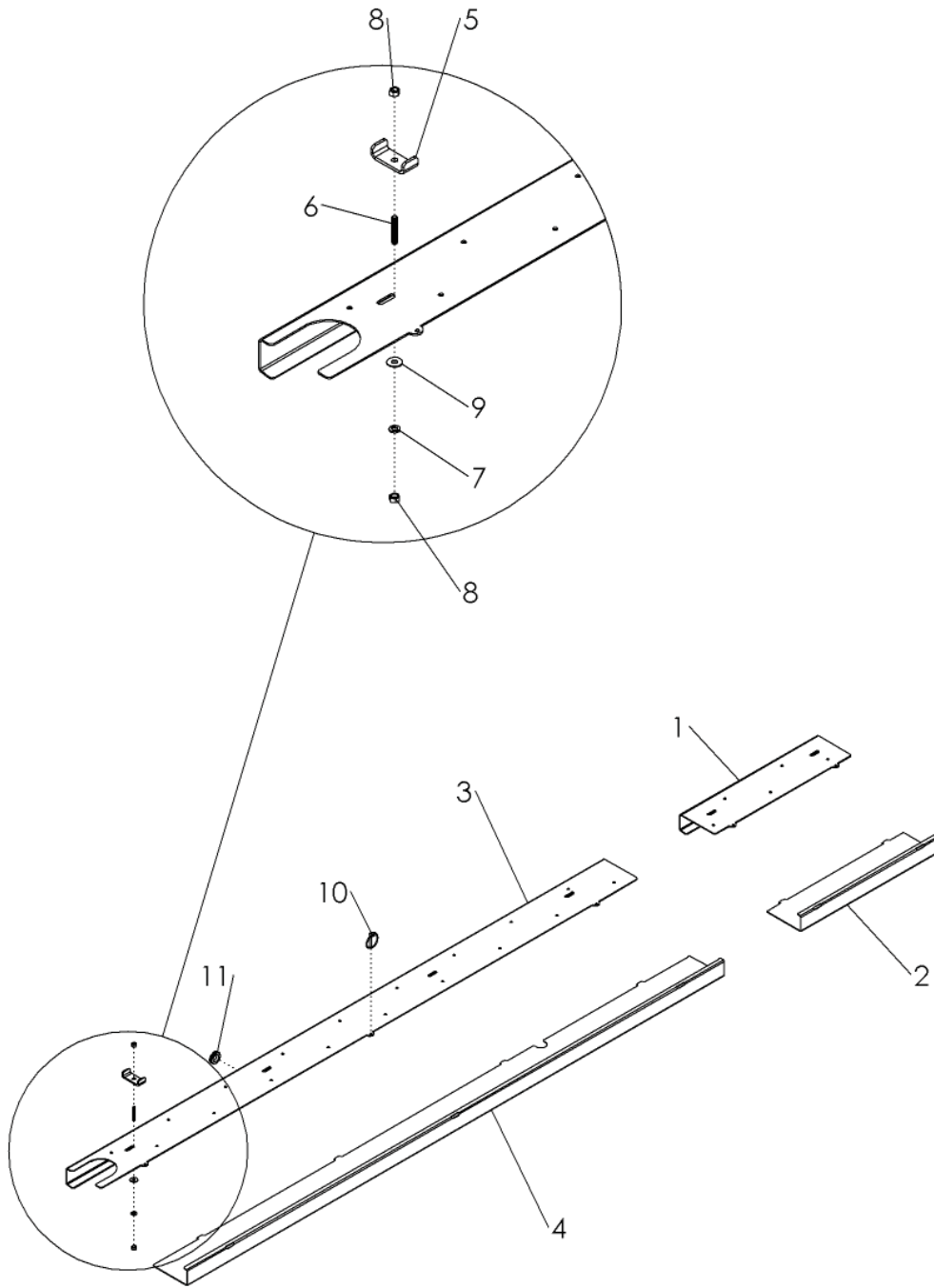
ITEMS 8, 9, 14, 15 ARE USED WITH TOW BEHIND OPTION



M6107-B

ASSEMBLY-TANK LADDERS

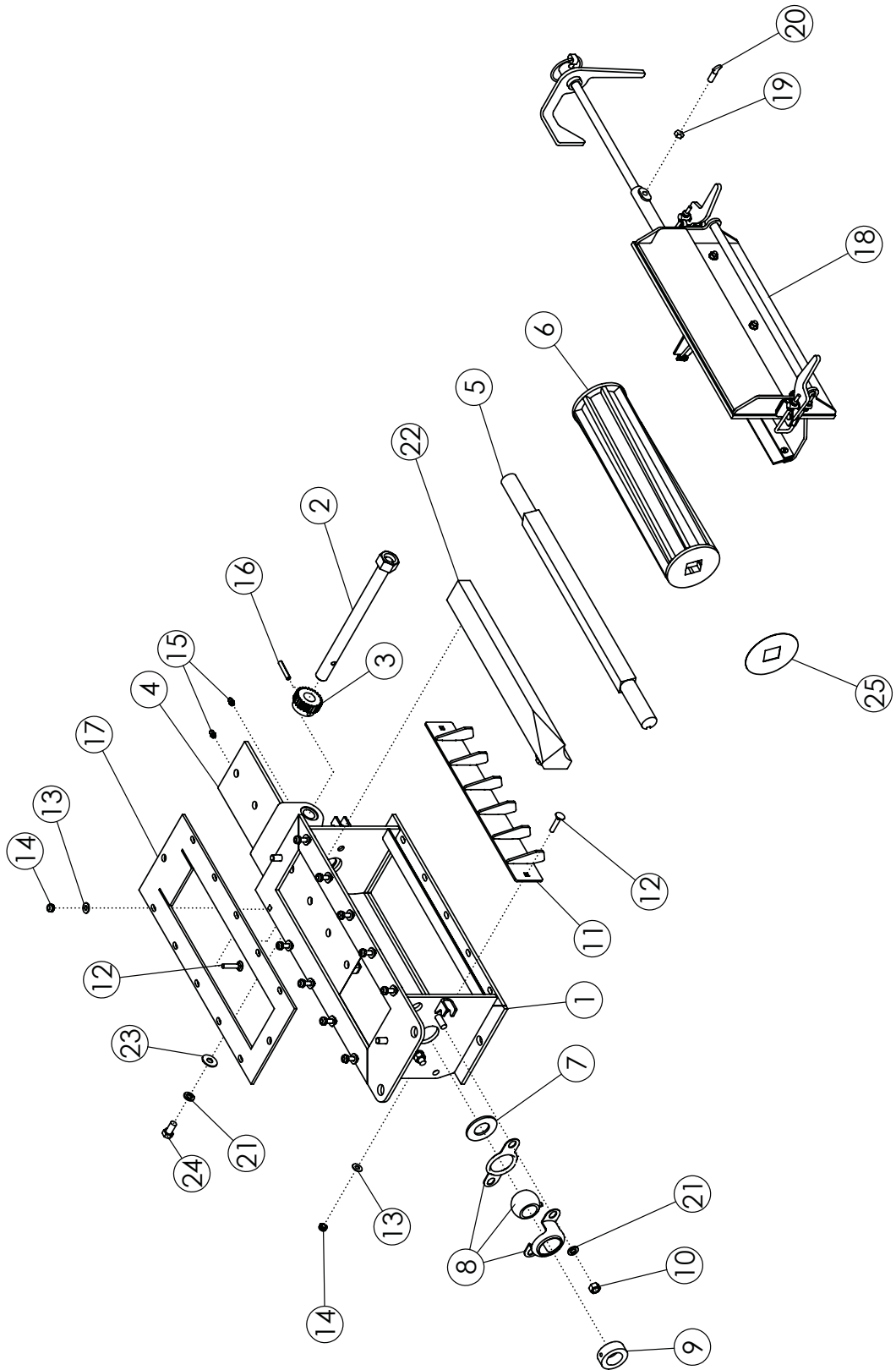
Ref.	Part No.	Description	Qty.
1	37481	WLDMT-LOWER LADDER	1
2	37148	WLDMT-LADDER PLATFORM	1
3	37482	WLDMT-UPPER LADDER	1
4	37357	BOLT-CRG:SS .38 X 1.50 NC	8
5	65778	WASHER-FLAT: SS .38	2
6	1032089	NUT-HEX:SS .38 NC	2
7	65706	WASHER-LOCK:SS .38	2
8	37495	BOLT-HEX: SS .31 X 3.50	2
9	37494	NUT-NYLOCK: SS .31 NC	2
10	37763	BOLT-HEX:SS .50 X 1.50 NC	2
11	373566	WASHER-FLAT:SS .50	2
12	37355	WASHER-LOCK:SS .50	2
13	1032090	NUT-HEX:SS .50 NC	2
14	65836	MOUNT-BIN LEVEL SENSOR	1
15	65837	PLATE-BOLTING	1
16	65838	BOLT-HEX: SS .25 X 2.00 NC GR5	2
17	1033269	NUT-NYLOCK: SS .25 NC GR2	2
18	65839	SCREW-P-H: #10 X .75 NC SS	2
19	65712	NUT-NYLOCK: #10-24 SS	2
20	66509	BIN LEVEL SENSOR	1
21	37034	HARNESS-TANK BULKHEAD	3
22	37492	BOLT-HEX: SS M5-0.8 X 16MM NC	6
23	65696	WASHER-LOCK: SS .25	6
24	65695	WASHER-FLAT: SS .25	6



M6108-B

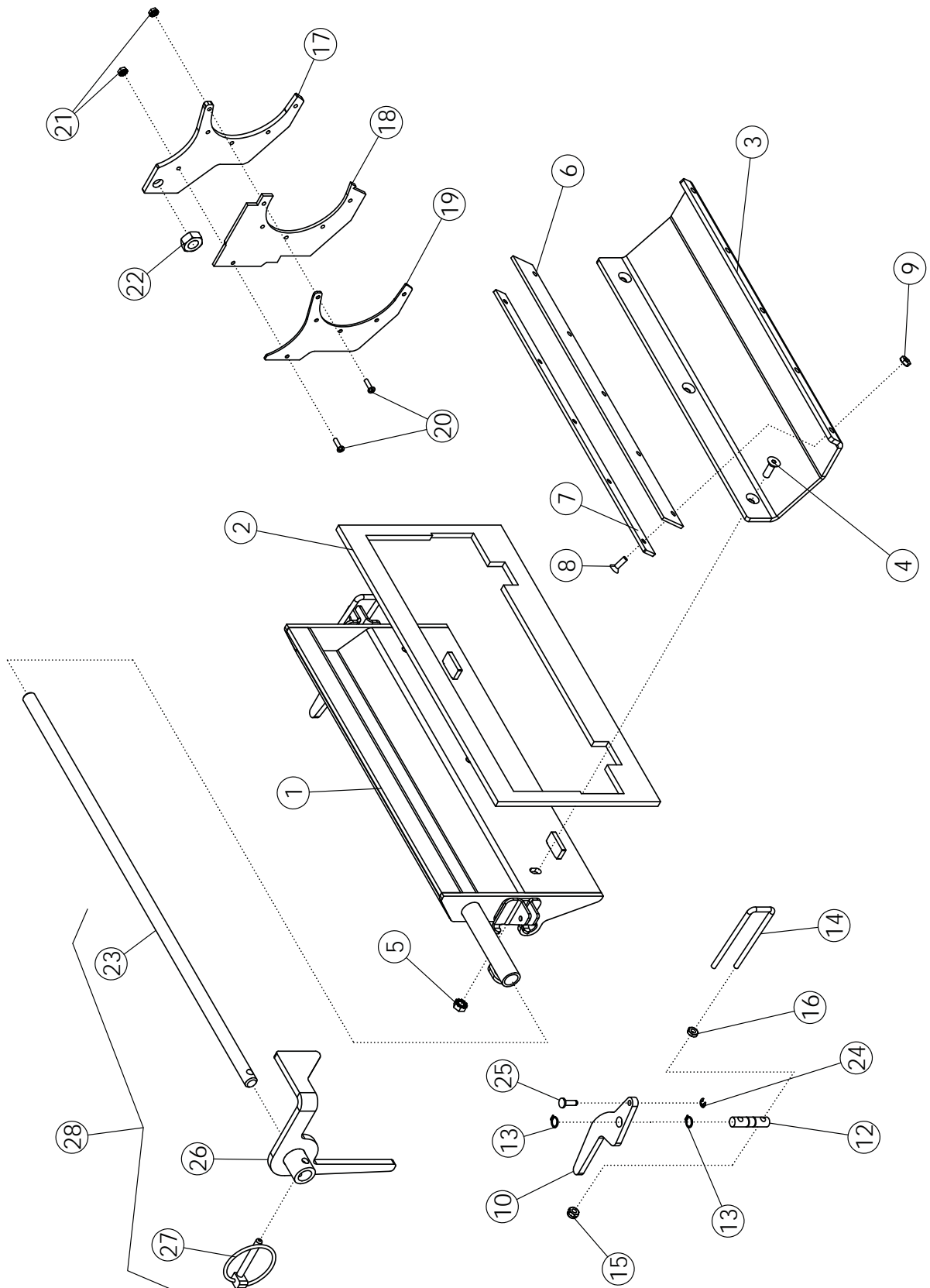
ASSEMBLY-WIRE MOUNT & SHIELD

Ref.	Part No.	Description	Qty.
1	330356	SHEET-WIRE MOUNT REAR	1
2	330357	SHEET-WIRE COVER REAR	1
3	330354	SHEET-WIRE MOUNT	1
4	330355	SHEET-WIRE COVER	1
5	50714	CLAMP .50 ZP	6
6	330045	STUD-.375-16 X 2.00 ZP	6
7	1011586	WASHER-LOCK: .38 ZP	6
8	1011576	NUT-HEX: .38 NC GR2 ZP	12
9	1011828	WASHER-FLAT: .38 ZP	6
10	63511	PIN-LYNCH: .25 X 1.563	5
11	330091	GROMMET-RUBBER 1.00 ID	1



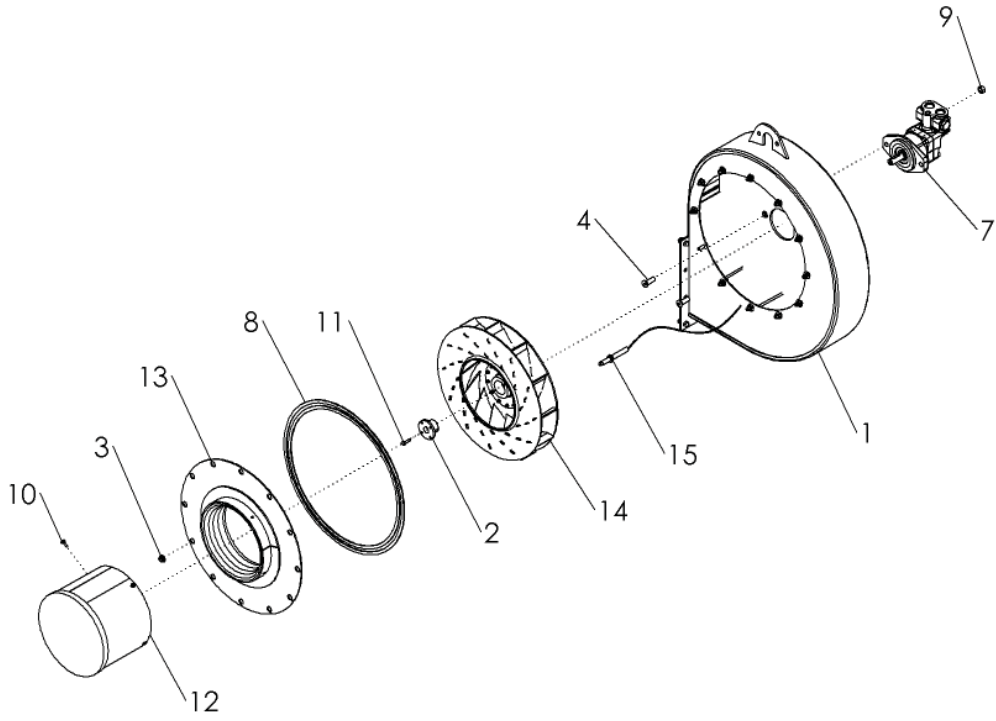
ASSY-METER BOX

Ref.	Part No.	Description	Qty.
1	67242	WLDMT-METER BOX FLAT BOTTOM	1
2	65630	BOLT-SS PIN ADJUSTMENT	1
3	65707	PINION-SS	1
4	65632	WLDMT-TOP SLIDE IN DOOR	1
5	34813	SHAFT-METER ROLL	1
6	65705	WLDMT-METER ROLL - HIGH VOLUME	1
	1012608	WLDMT-METER ROLL - MEDIUM VOLUME	
	33851	WLDMT-METER ROLL - LOW VOLUME	
	67639	WLDMT-METER ROLL - FINE PRODUCT	
7	1012978	WASHER-RUBBER	2
8	1012986	BEARING-FLANGE/A	2
9	65694	COLLAR-SET: 1.00 SS	1
10	1032089	NUT-HEX: SS .38 NC	4
11	67484	WLDMT-MB AIR DAM	1
12	66043	BOLT-CRG: SS .250 X 1.25 NC	12
13	65695	WASHER-FLAT: SS .25	12
14	1033269	NUT-NYLOCK: SS .25 NC GR2	12
15	1011748	ZERK-GREASE	2
16	1021512	PIN-ROLL: .25 X 1.38 ZP	1
17	65512	GASKET-SEEDBOX	1
18	66306	ASSY-MB DOOR	1
19	1023719	NUT-JAM: SS .31 NC	1
20	66316	SCREW-THUMB SP HEAD .313-18 X .75 SS	1
21	65706	WASHER-LCOK: SS .38	6
22	66062	BLOCK METER TOP	1
23	66375	BOLT-HEX: SS .38 X .75 NC	2
24	65778	WASHER-FLAT: SS .38	2
25	65744	PLATE-METER ROLL SPACER	AR



ASSY-METER BOX DOOR

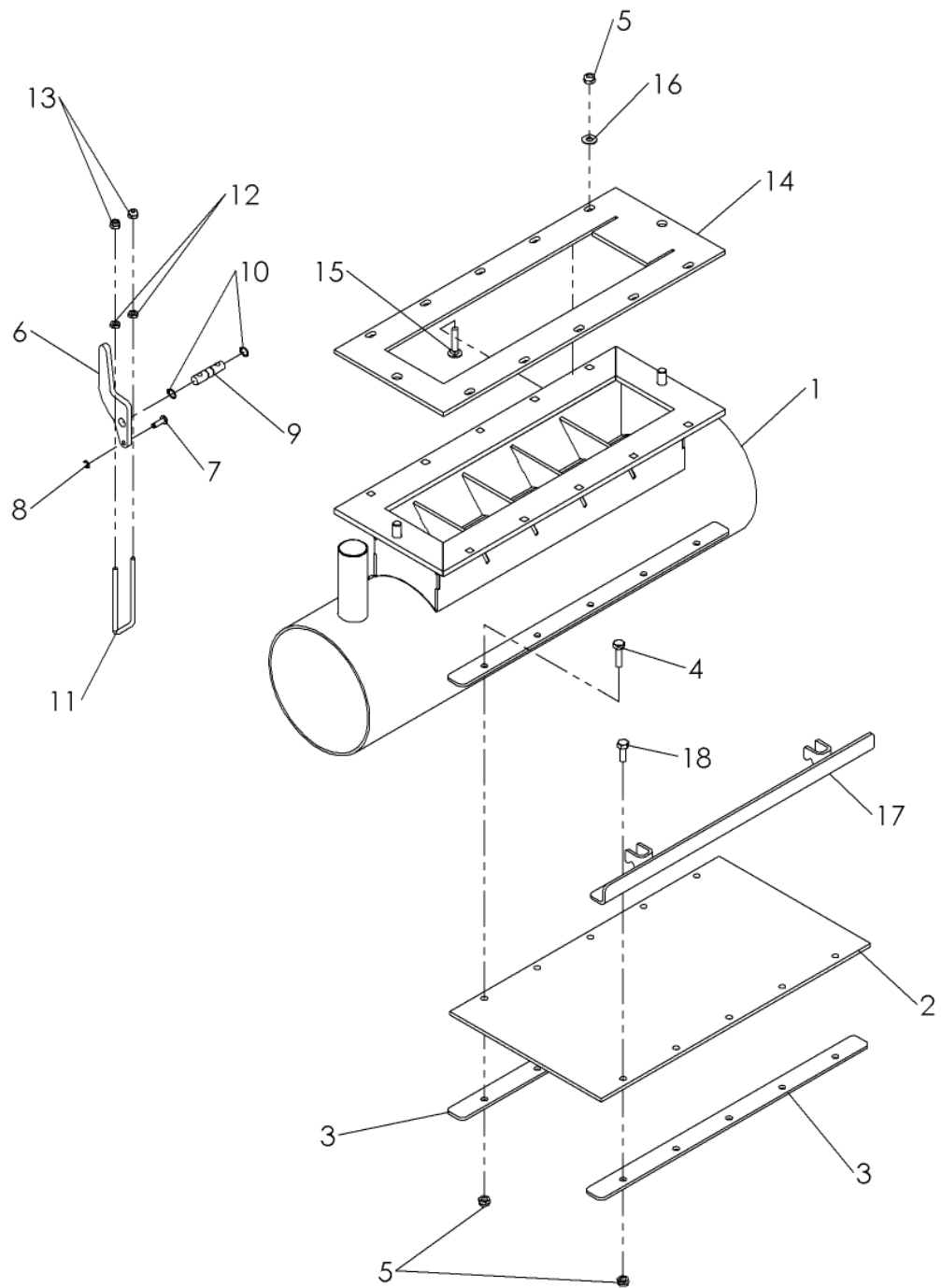
Ref.	Part No.	Description	Qty.
1	66305	WLDMT-MB DOOR	1
2	66344	GASKET-RUBBER MB DOOR	1
3	66300	PLATE-MB SEED TRAY	1
4	66347	SCREW F-H-S-C: .25 X .75 NC SS	3
5	66348	NUT-K-LOCK: .25 NC SS	3
6	66345	WIPER RUBBER	1
7	66310	SHEET-MB WIPER MOUNT	1
8	1032095	SCREW-F-H-S-C: .19 X .625 NC SS	5
9	1032059	NUT-K-LOCK: 18-8 SS .19 NC	5
10	65640	PLATE-METER CLAMP HANDLE	2
12	65639	SHAFT-METER LATCH	2
13	67499	RING-RETAINING .375 SS	4
14	65655	U-BOLT: SS .188 X 3.25 X .875 X 3.25	2
15	65712	NUT-NYLOCK: 10-24 GR2 SS	4
16	65348	NUT-HEX: SS 10-24	4
17	66307	PLATE-MB FLOW CONTROL	1
18	66346	SEAL-RUBBER FLOW CONTROL	1
19	66309	PLATE-MB FLOW CONTROL	1
20	1032093	SCREW-P-H: #6 X .50 NC SS	6
21	1032094	NUT-K-LOCK: 18-8 SS .19 NC	6
22	1032190	NUT-JAM: .50 NC SS	1
23	65661	ROD-FLOW CONTROL	1
24	67498	E-CLIP: .188 SS	2
25	67497	PIN-METER LATCH	2
26	65662	WLDMT-INDICATOR	1
27	65311	PIN-LYNCH: .25 X 1.563	1
28	65651	ASSY-FLOW CONTROL ROD	1



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ASSY-BLOWER

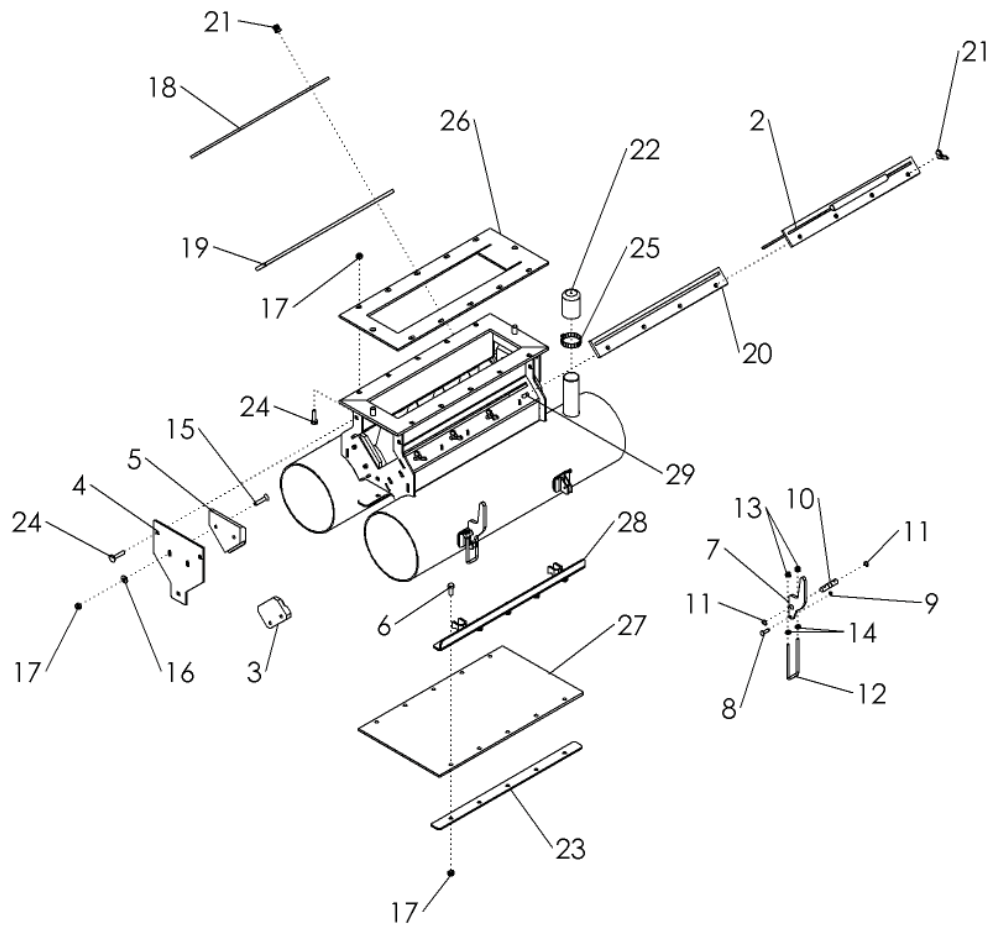
Ref.	Part No.	Description	Qty.
1	330414	HOUSING-REM RT176CW	1
2	330381	BUSHING-SPLIT TAPER H X 20MM	1
3	330419	NUT-FLANGE SERR .38 NC ZP GR2	12
4	330420	SCREW-F-H-S-C: .50 X 1.50 NC ZP	2
5	44118	NUT-FLANGE SERR .38 NC ZP GR2	4
6	1011600	BOLT-HEX: .38 X 1.00 NC GR5 ZP	4
7	330329	MOTOR-HYDRAULIC W/CHECK PAINTED	1
8	330418	NEOPRENE 1/8 X 3/8 X 5.25 FT	1
9	1027461	NUT-TOPLOCK: .50 NC GR5 ZP	2
10	1011595	BOLT-HEX: .25 X .75 NC GR5 ZP	4
11	1013423	BOLT-HEX: .25 X 1.00 NC GR5 ZP	2
12	330416	SCREEN-INLET REM RT176CW	1
13	330417	PLATE-SIDE INLET REM RT176CW	1
14	330415	ROTOR-REM RT176CW BALANCED	1
15	66510	SENSOR-FAN SPEED (ISO)	1



M6131-A

ASSY-SINGLE AIRSTREAM

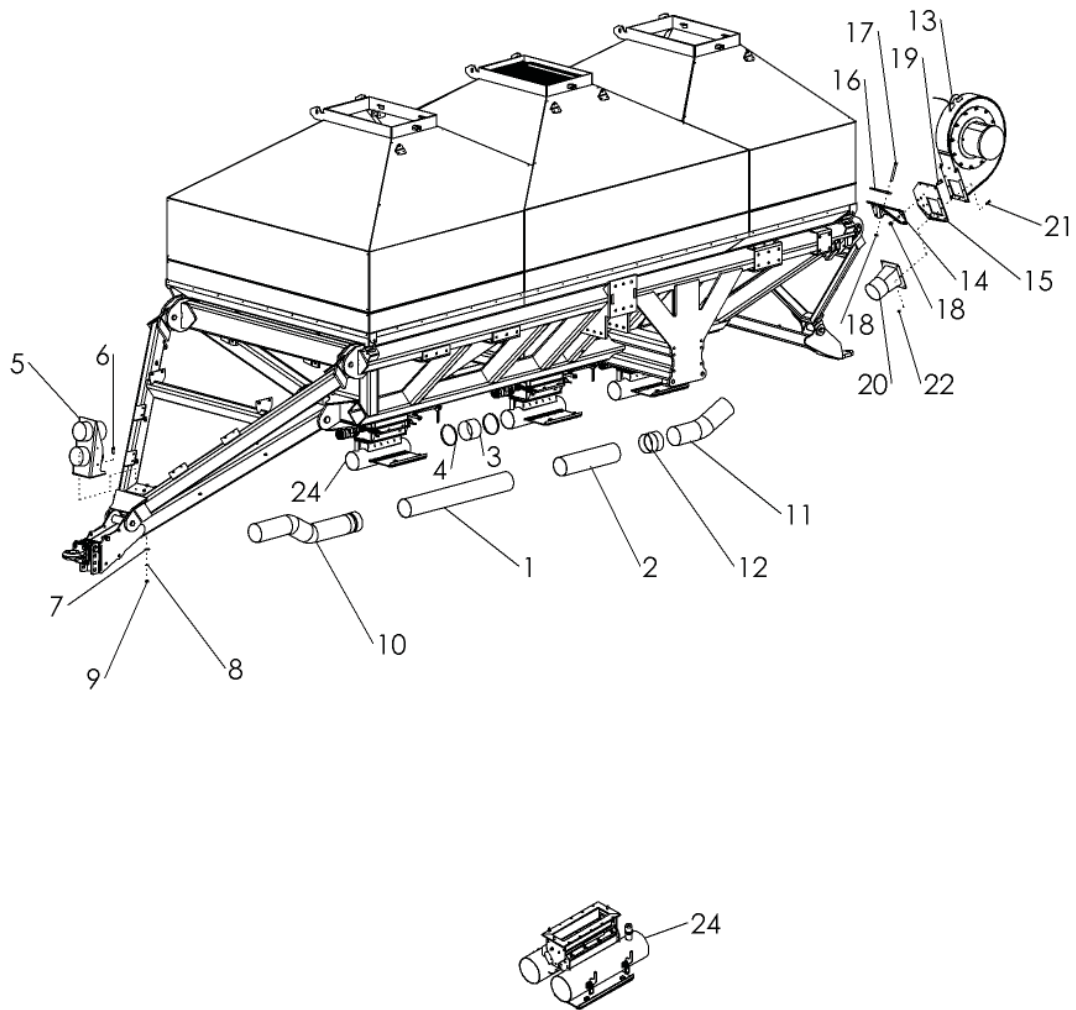
Ref.	Part No.	Description	Qty.
1	330359	WLDMT-SINGLE STREAM TUBE 6"	1
2	65708	RUBBER-CLEANOUT DOOR	1
3	65629	PLATE-CLEANOUT RETAINER	2
4	66077	BOLT-HEX: SS .25 X 1.00 NC	5
5	1033269	NUT-NYLOCK: SS .25 CH GR2	20
6	65640	PLATE-METER CLAMP HANDLE	2
7	67497	PIN-METER CLAMP HANDLE	2
8	67498	E-CLIP .188 SS	2
9	65639	SHAFT-METER LATCH	2
10	67499	RING-RETAINING .375 SS	4
11	65655	U-BOLT-SS: .188 X 3.25 X .875 X 3.25	2
12	65348	NUT-HEX: #10-24 SS	4
13	65712	NUT-NYLOCK: #10-24 SS	4
14	65512	GASKET-SEEDBOX	1
15	66043	BOLT-CRG: SS .25 X 1.25 NC	10
16	65695	WASHER-FLAT: SS .25	10
17	65626	WLDMT-ANGLE LATCH	1
18	1033270	BOLT-HEX: SS .25 X .75 NC	5
19	64504	SEALANT-PROGLAZE (300M/TUBE)	45ML



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ASSY-DUAL CHUTE

Ref.	Part No.	Description	Qty.
1	330334	WLDMT-BAFFLE 6"	1
2	330033	WLDMT-BAFFLE SLIDE GATE	1
3	330027	BLOCK-BAFFLE SLIDE GATE POLY	4
4	330036	PLATE-BAFFLE END PLATE	2
5	330028	BLOCK-BAFFLE SLIDE PRESSURE POLY	2
6	1033270	BOLT-HEX: SS .25 X .75 NC	10
7	65640	PLATE-METER CLAMP HANDLE	4
8	67497	PIN-METER LATCH SS	4
9	67498	E-CLIP .188 SS	4
10	65639	SHAFT-METER LATCH	4
11	67499	RING-RETAINING .375 SS	8
12	65655	U-BOLT-SS: .188 X 3.25 X .875 X 3.25	4
13	65712	NUT-NYLOCK: #10-24 SS	8
14	65348	NUT-HEX: #10-24 SS	8
15	330300	SCREW-F-H-S-C: .25 1.25 NC SS	12
16	65695	WASHER-FLAT: .25 SS	12
17	1033269	NUT-NYLOCK: SS .25 NC GR2	38
18	330037	PLATE-BAFFLE PLUG	1
19	330324	GASKET-PLUG NEOPRENE	1
20	330323	GASKET-SLIDE GATE NEOPRENE	1
21	330046	NUT-WING: .25 SS	8
22	37624	CAP-TUBE	1
23	65629	PLATE-CLEANOUT RETAINER	4
24	66043	BOLT-CRG: SS .25 X 1.25 NC	26
25	1026358	CLAMP-HOSE: #16 .081-1.50	1
26	65512	GASKET-SEEDBOX	1
27	65708	RUBBER-CLEANOUT DOOR	2
28	65626	WLDMT-ANGLE LATCH	2
29	330031	STUD-.25 X .625 KNURLED	8
30	64504	SEALANT-PROGLAZE (300ML/TUBE)	70ML



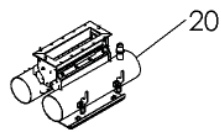
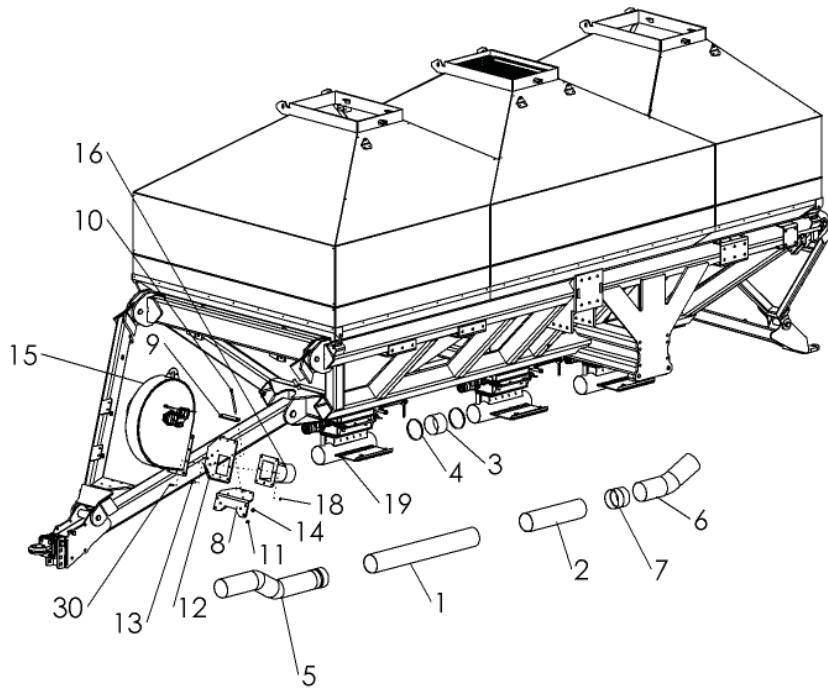
M6132-A

ASSY-SINGLE FAN TOW BEHIND

Ref.	Part No.	Description	Qty.
1	330372	TUBE-SS LONG 6"	1
2	330373	TUBE-SS SHORT 6"	1
3	330371	SLEEVE STRAIGHT RUBBER	4
4	66221	CLAMP-HOSE: #104 4.13-7.00	8
5	330374	WLDMT-6" DUAL BULKHEAD	1
6	1011607	BOLT-HEX: .50 X 1.50 NC GR5 ZP	4
7	1014443	WASHER-FLAT: .50 ZP	4
8	1011581	WASHER-LOCK: .50 NC ZP	4
9	1011577	NUT-HEX: .50 NC GR5 ZP	4
10	330392	HOSE-KANAFLEX 100 URD 6.00 X 9FT	1
11	330393	HOSE-KANAFLEX 100 URD 6.00 X 4FT	1
12	36155	CLAMP-6" SPIRAL (POWER LOCK)	4
13	330382	ASSY-BLOWER REM RT176CW	1
14	330424	WLDMT-FAN MOUNT TOW BEHIND	1
15	330423	WLDMT-FAN MOUNT	1
16	330430	PLATE-FAN MOUNT BOLTING	2
17	1032514	BOLT-HEX: .50 X 7.50 NC GR5 ZP	4
18	1027461	NUT-TOPLOCK: .50 NC GR5 ZP	7
19	1011607	BOLT-HEX: .50 X 1.50 NC GR5 ZP	3
20	330431	WLDMT-FAN TRANSITION	1
21	1011601	BOLT-HEX: .38 X 1.25 NC GR5 ZP	7
22	1016999	NUT-TOPLOCK: .38 NC GR5 ZP	7
23	330364	ASSY-SINGLE AIR STREAM TUBE 6"	3

ASSY-DUAL FAN TOW BEHIND

Ref.	Part No.	Description	Qty.
1	330372	TUBE-SS LONG 6"	2
2	330373	TUBE-SS SHORT 6"	2
3	330371	SLEEVE STRAIGHT RUBBER	8
4	66221	CLAMP-HOSE: #104 4.13-7.00	16
5	330374	WLDMT-6" DUAL BULKHEAD	1
6	1011607	BOLT-HEX: .50 X 1.50 NC GR5 ZP	4
7	1014443	WASHER-FLAT: .50 ZP	4
8	1011581	WASHER-LOCK: .50 NC ZP	4
9	1011577	NUT-HEX: .50 NC GR5 ZP	4
10	330392	HOSE-KANAFLEX 100 URD 6.00 X 9FT	2
11	330393	HOSE-KANAFLEX 100 URD 6.00 X 4FT	2
12	36155	CLAMP-6" SPIRAL (POWER LOCK)	2
13	330382	ASSY-BLOWER REM RT176CW	2
14	330424	WLDMT-FAN MOUNT TOW BEHIND	2
15	330423	WLDMT-FAN MOUNT	2
16	330430	PLATE-FAN MOUNT BOLTING	2
17	1032514	BOLT-HEX: .50 X 7.50 NC GR5 ZP	4
18	1027461	NUT-TOPLOCK: .50 NC GR5 ZP	10
19	1011607	BOLT-HEX: .50 X 1.50 NC GR5 ZP	6
20	330431	WLDMT-FAN TRANSITION	2
21	1011601	BOLT-HEX: .38 X 1.25 NC GR5 ZP	7
22	1016999	NUT-TOPLOCK: .38 NC GR5 ZP	7
24	330358	ASSY-DUAL AIR STREAM TUBE 6"	3



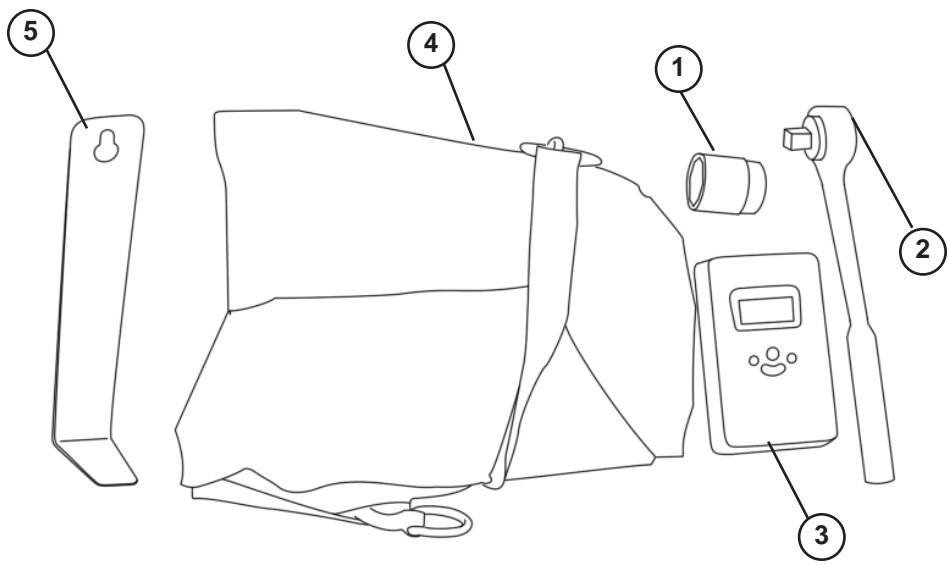
M6133-A

ASSY-SINGLE FAN TOW BETWEEN

Ref.	Part No.	Description	Qty.
1	330372	TUBE-SS LONG 6"	1
2	330373	TUBE-SS SHORT 6"	1
3	330371	SLEETVE STRAIGHT RUBBER 6"	4
4	66221	CLAMP-HOSE: #104 4.13-7.00	8
5	330393	HOSE-KANAFLEX 100 URD 6.00 X 4FT	1
6	37762	HELI-TUBE (SPIRAL CUT) #1-1/4 UR	1
7	36155	CLAMP-6" SPIRAL (POWER LOCK)	2
8	330425	WLDMT-FAN MOUNT TOW BETWEEN	1
9	330430	PLATE-FAN MOUNT BOLTING	2
10	1032514	BOLT-HEX: .50 X 7.50 NC GRR5 ZP	4
11	1027461	NUT-TOPLOCK: .50 NC GR5 ZP	1
12	330423	WLDMT-FAN MOUNT	1
13	1011607	BOLT-HEX: .50 X 1.50 NC GR4 ZP	3
14	1027461	NUT-TOPLOCK: .50 NC GR5 ZP	3
15	330382	ASSY-BLOWER REM RT176CW	1
16	330431	WLDMT-FAN TRANSITION	1
17	1011601	BOLT-HEX: .38 X 1.25 NC GR5 ZP	7
18	1016999	NUT-TOPLOCK: .38 NC GR5 ZP	7
19	330364	ASSY-SINGLE AIR STREAM TUBE 6"	3

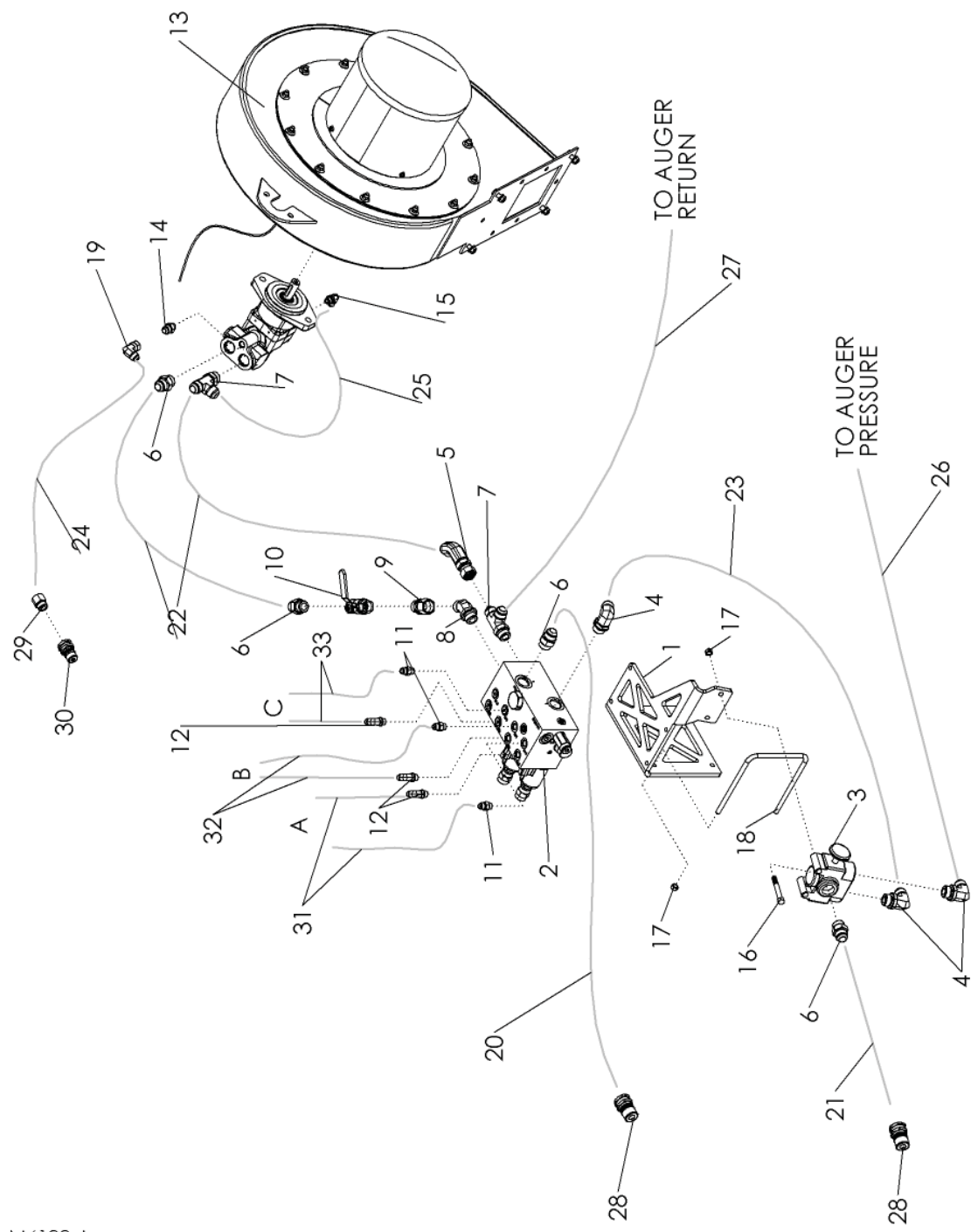
ASSY-DUAL FAN TOW BETWEEN

Ref.	Part No.	Description	Qty.
1	330372	TUBE-SS LONG 6"	2
2	330373	TUBE-SS SHORT 6"	2
3	330371	SLEETVE STRAIGHT RUBBER 6"	8
4	66221	CLAMP-HOSE: #104 4.13-7.00	16
5	330393	HOSE-KANAFLEX 100 URD 6.00 X 4FT	2
6	37762	HELI-TUBE (SPIRAL CUT) #1-1/4 UR	2
7	36155	CLAMP-6" SPIRAL (POWER LOCK)	4
8	330425	WLDMT-FAN MOUNT TOW BETWEEN	2
9	330430	PLATE-FAN MOUNT BOLTING	4
10	1032514	BOLT-HEX: .50 X 7.50 NC GRR5 ZP	4
11	1027461	NUT-TOPLOCK: .50 NC GR5 ZP	4
12	330423	WLDMT-FAN MOUNT	2
13	1011607	BOLT-HEX: .50 X 1.50 NC GR4 ZP	6
14	1027461	NUT-TOPLOCK: .50 NC GR5 ZP	6
15	330382	ASSY-BLOWER REM RT176CW	2
16	330431	WLDMT-FAN TRANSITION	2
17	1011601	BOLT-HEX: .38 X 1.25 NC GR5 ZP	14
18	1016999	NUT-TOPLOCK: .38 NC GR5 ZP	14
20	330358	ASSY-BAFFLE 6" DUAL CHUTE	3



ASSY-CALIBRATION COMPONENTS

Ref.	Part No.	Description	Qty.
1	66354	SOCKET-1.125" (.50" DRIVE)	1
2	65890	RATCHET-.50" DRIVE	1
3	67641	SCALE-CALIBRATION DIGITAL	1
4	1032048	BAG-CALIBRATION KIT	1
5	35569	PLATE-WRENCH SEED DEPTH	1
6	65891	SCREWDRIVER-FLOW SENSOR (NOT SHOWN)	1



M6138-A

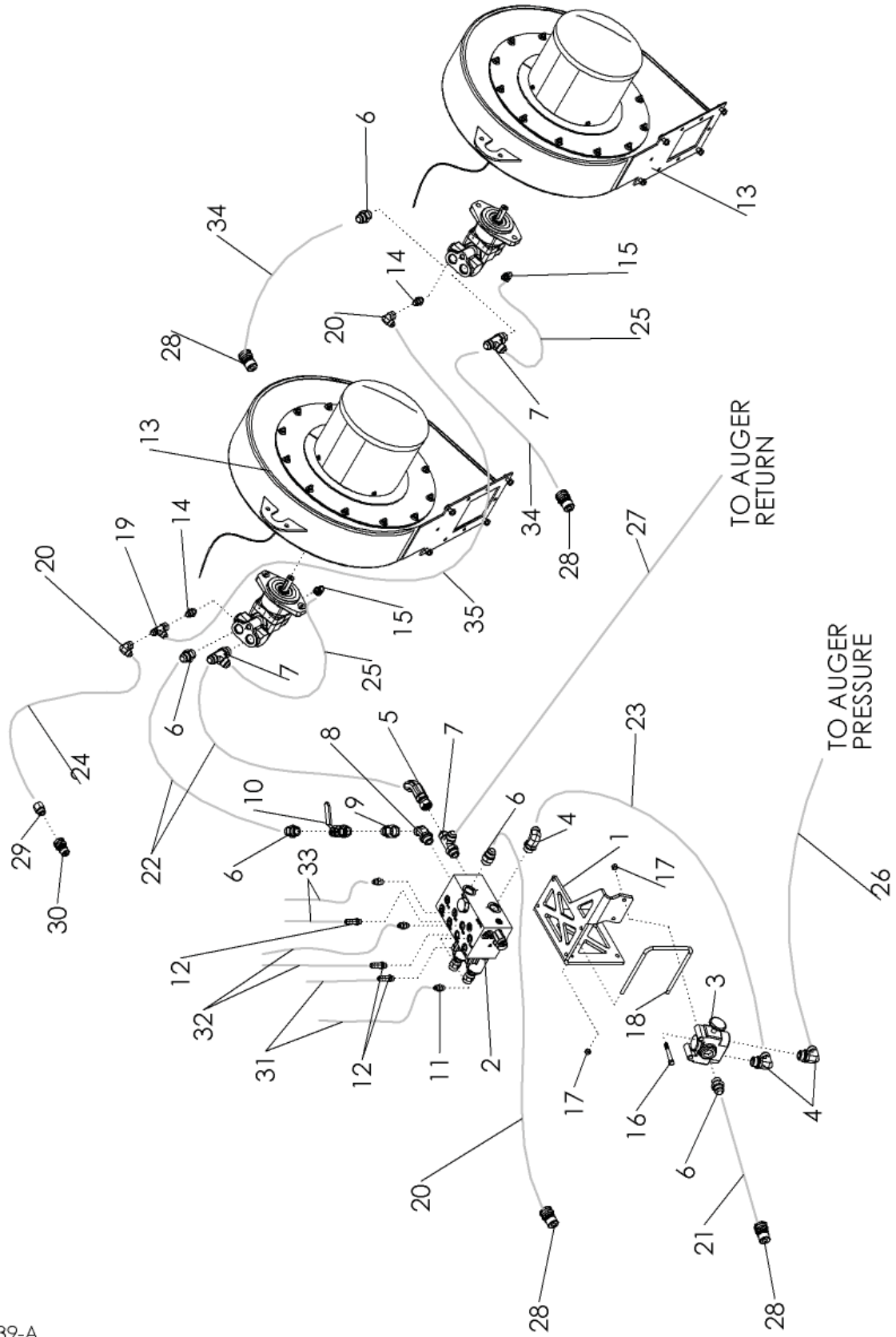
ASSY-BLOWER HYDRAULIC DRIVE SINGLE FAN TOW BEHIND

Ref.	Part No.	Description	Qty.
1	37533	PLATE-VALVE BLOCK MOUNT	1
2	66938	VALVE-VARIABLE RATE 2-BANK W/CHECK	1
	67495	ASSY-METER VALVE CARTRIDGE & COIL (NOT SHOWN)	1
3	65846	VALVE-SELECTOR PAINTED (3-WAY)	1
4	64060	FTG-ELBOW: 12MB-12MJ-90	3
5	62014	FTG-ELBOW: 12MJ-12FJX-45	1
6	65918	FTG-ADAPTER: 12MB-12MJ	4
7	66248	FTG-TEE: 12MB-12MJ-12MJ	2
8	63699	FTG-ELBOW: 12MB-12MJ-45	1
9	66249	FTG-ADAPTER: 12MB-12FJX	1
10	33641	VALVE-BALL 3/4 SAE	1
11	37259	FTG-ADAPTER: 6MB-6MJ	3
12	57754	FTG-ELBOW: 6MB-6MJ 90	3
13	330382	ASSY-BLOWER REM RT176CW	1
14	62024	FTG-ADAPTER: 6MB-8MJ	1
15	66270	FTG-RESTRICTOR: 6MB-6MJ-90 .032	1
16	1013239	BOLT-HEX: .38 X 3.00 NC GR5 ZP	2
17	1016999	NUT-TOPLOCK: .38 NC GR5 ZP	6
18	37532	U-BOLT: .375 X 7.00 X 6 X 7.00 ZP	2
19	57668	FTG-ELBOW: 8MJ-8FJX-90	1
20	330094	HOSE: .75 X 132 12MB-12FJX90	1
21	37707	HOSE: .75 X 120 12MB-12FJX	1
22	37697	HOSE: .75 X 224 12FJX-12FJX90	2
23	66245	HOSE: .75 X 24 12FJX-12FJX	1
24	37701	HOSE: .50 X 348 8FJX-8MB	1
25	66269	HOSE: .50 X 20 12FJX-6FJX90L	1
26	37332	HOSE; .50 X 382 12FJX-12FJX	1
27	37333	HOSE: .50 X 382 12FJX-12JFX90	1
28	37064	QUICK COUPLING MALE 12-12 ORB	2
29	37692	FTG-ADAPTER: 10MB-8FB	1
30	37065	QUICK COUPLING MALE 10-8 ORB	1
31	37698	HOSE: .38 X 48 6FJX-6FJX90	2
32	37699	HOSE: .38 X 113 6FJX-6FJX90	2
33	37700	HOSE: .38 X 156 6JFX-6FJX90	2

+ CASE DRAIN COUPLERS AT TRACTOR

Ref.	Part No.	Description	Qty.
34	69119	FTG-CASE DRAIN JD & CNH (NOT SHOWN)	AR
35	69120	FTG-MOTOR RETURN LINE (NOT SHOWN)	AR
36	66199	PIONEER TIP 8010-15 (NOT SHOWN)	AR
37	66961	FTG-ADAPTER: 8FB-12MB (NOT SHOWN)	AR
38	37066	QUICK COUPLING-FEMALE -12-12 ORB (NOT SHOWN)	AR
39	37067	QUICK COUPLING-FEMALE -8-10 ORB (NOT SHOWN)	AR

M6139-A

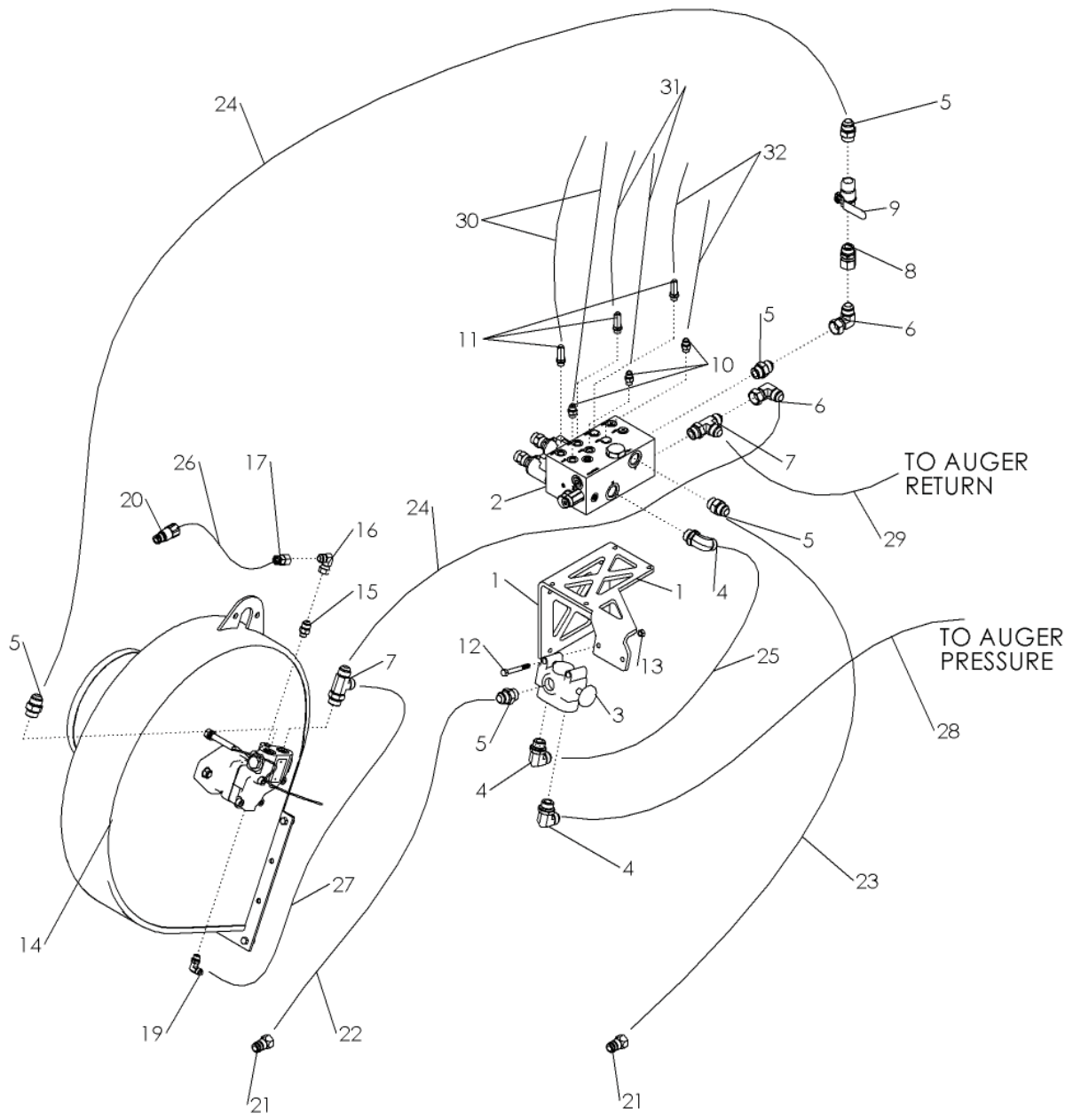


ASSY-BLOWER HYDRAULIC DRIVE DUAL FAN TOW BEHIND

Ref.	Part No.	Description	Qty.
1	37533	PLATE-VALVE BLOCK MOUNT	1
2	66938	VALVE-VARIABLE RATE 2-BANK W/CHECK	1
	67495	ASSY-METER VALVE CARTRIDGE & COIL (NOT SHOWN)	1
3	65846	VALVE-SELECTOR PAINTED (3-WAY)	1
4	64060	FTG-ELBOW: 12MB-12MJ-90	3
5	62014	FTG-ELBOW: 12MJ-12FJX-45	1
6	65918	FTG-ADAPTER: 12MB-12MJ	5
7	66248	FTG-TEE: 12MB-12MJ-12MJ	3
8	63699	FTG-ELBOW: 12MB-12MJ-45	1
9	66249	FTG-ADAPTER: 12MB-12FJX	1
10	33641	VALVE-BALL 3/4 SAE	1
11	37259	FTG-ADAPTER: 6MB-6MJ	3
12	57754	FTG-ELBOW: 6MB-6MJ 90	3
13	330382	ASSY-BLOWER REM RT176CW	2
14	62024	FTG-ADAPTER: 6MB-8MJ	2
15	66270	FTG-RESTRICTOR: 6MB-6MJ-90 .032	2
16	1013239	BOLT-HEX: .38 X 3.00 NC GR5 ZP	2
17	1016999	NUT-TOPLOCK: .38 NC GR5 ZP	6
18	37532	U-BOLT: .375 X 7.00 X 6 X 7.00 ZP	2
19	57668	FTG-ELBOW: 8MJ-8FJX-90	2
20	330094	HOSE: .75 X 132 12MB-12FJX90	1
21	37707	HOSE: .75 X 120 12MB-12FJX	1
22	37697	HOSE: .75 X 224 12FJX-12FJX90	2
23	66245	HOSE: .75 X 24 12FJX-12FJX	1
24	37701	HOSE: .50 X 348 8FJX-8MB	1
25	66269	HOSE: .50 X 20 12FJX-6FJX90L	2
26	37332	HOSE; .50 X 382 12FJX-12FJX	1
27	37333	HOSE: .50 X 382 12FJX-12JFX90	1
28	37064	QUICK COUPLING MALE 12-12 ORB	2
29	37692	FTG-ADAPTER: 10MB-8FB	1
30	37065	QUICK COUPLING MALE 10-8 ORB	1
31	37698	HOSE: .38 X 48 6FJX-6FJX90	2
32	37699	HOSE: .38 X 113 6FJX-6FJX90	2
33	37700	HOSE: .38 X 156 6FJX-6FJX90	2
34	37702	HOSE: .75 X 348 12FJX90-12MB	2
35	330435	HOSE: .50 X 044 8FJX-8FJX90	1

+ CASE DRAIN COUPLERS AT TRACTOR

Ref.	Part No.	Description	Qty.
35	69119	FTG-CASE DRAIN JD & CNH (NOT SHOWN)	AR
36	69120	FTG-MOTOR RETURN LINE (NOT SHOWN)	AR
37	66199	PIONEER TIP 8010-15 (NOT SHOWN)	AR
38	66961	FTG-ADAPTER: 8FB-12MB (NOT SHOWN)	AR
39	37066	QUICK COUPLING-FEMALE -12-12 ORB (NOT SHOWN)	AR
40	37067	QUICK COUPLING-FEMALE -8-10 ORB (NOT SHOWN)	AR



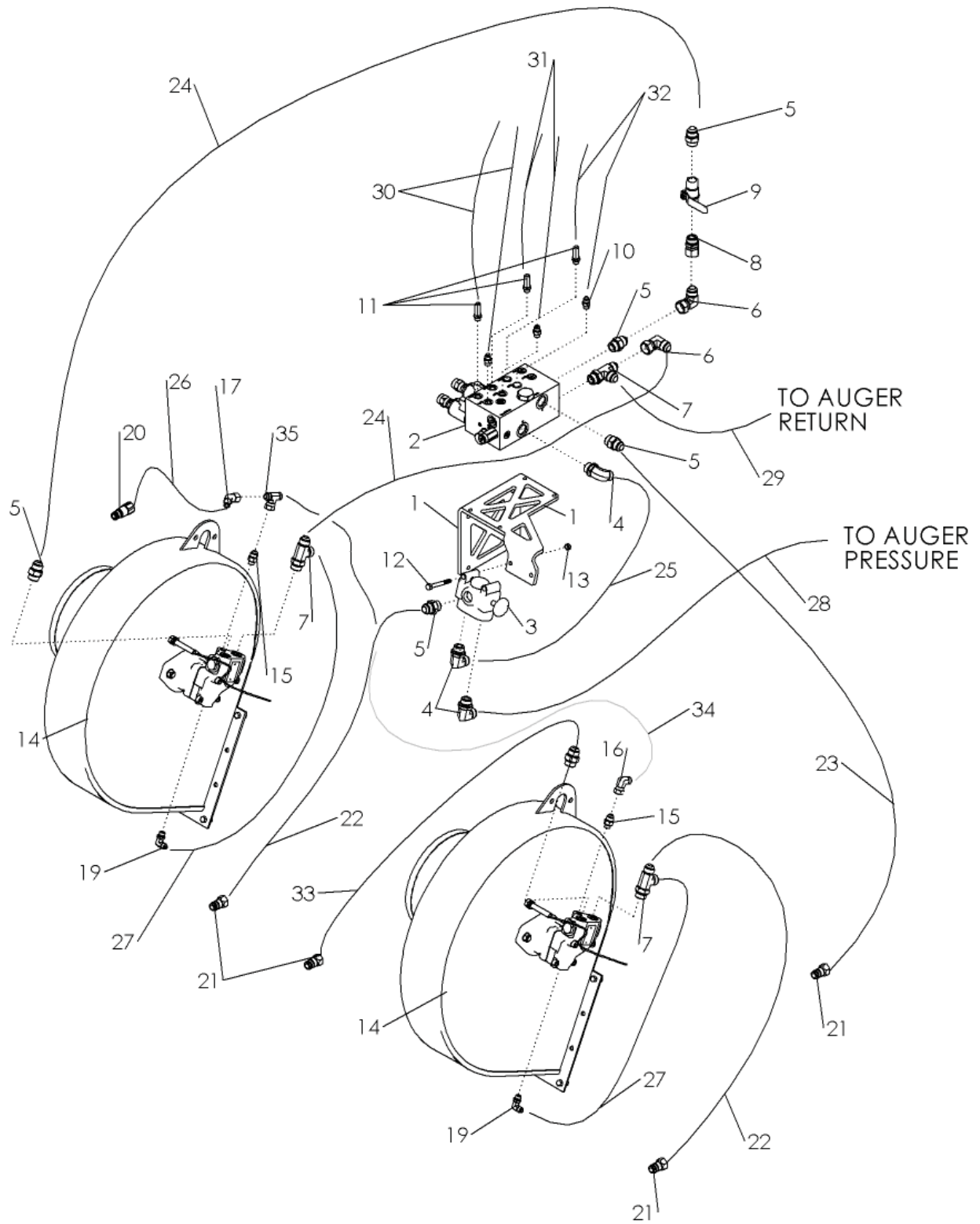
M6140-A

ASSY-BLOWER HYDRAULIC DRIVE SINGLE FAN TOW BETWEEN

Ref.	Part No.	Description	Qty.
1	37533	PLATE-VALVE BLOCK MOUNT	1
2	66938	VALVE-VARIABLE RATE 2-BANK W/CHECK	1
	67495	ASSY-METER VALVE CARTRIDGE & COIL (NOT SHOWN)	1
3	65846	VALVE-SELECTOR PAINTED (3-WAY)	1
4	64060	FTG-ELBOW: 12MB-12MJ-90	3
5	65918	FTG-ADAPTER: 12MB-12MJ	5
6	59041	FTG-ELBOW: 12MJ-12FJX-90	2
7	66248	FTG-TEE: 12MB-12MJ-12MJ	2
8	66249	FTG-ADAPTER: 12MB-12FJX	1
9	33641	VALVE-BALL 3/4 SAE	1
10	37259	FTG-ADAPTER: 6MB-6MJ	3
11	57754	FTG-ELBOW: 6MB-6MJ 90	3
12	1013239	BOLT-HEX; .38 X 3.00 NC GR5 ZP	2
13	1016999	NUT-TOPLOCK: .38 NC GR5 ZP	6
14	330382	ASSY-BLOWER REM RT176CW	1
15	62024	FTG-ADAPTER: 6MB-8MJ	1
16	57668	FTG-ELBOW: 8MJ-8FJX-90	1
17	57663	FTG-ELBOW: 8MJ-8FJX-45	1
18	37532	U-BOLT: .375 X 7.00 X 6 X 7.00 ZP (NOT SHOWN)	2
19	66270	FTG-RESTRICTOR: 6MB-6MJ-90 .032	1
20	69119	FTG-CASE DRAIN JD & CNH	1
21	36291	PIONEER TIP 8010-16P (#10 ORB)	2
22	330098	HOSE: .75 X 156 10MB-12FJX	1
23	330097	HOSE: .75 X 168 10MB-12FJX90	1
24	330095	HOSE: .75 X 41 12FJX-12FJX45	2
25	66245	HOSE: .75 X 24 12FJX-12FJX	1
26	330096	HOSE: .50 X 144 8MB-8FJX	1
27	66269	HOSE: .50 X 20 12FJX-6FJX90L	1
28	37332	HOSE: .50 X 382 12FJX-12FJX	1
29	37333	HOSE: .50 X 382 12FJX-12JFX90	1
30	37698	HOSE: .38 X 48 6FJX-6FJX90	2
31	37699	HOSE: .38 X 113 6FJX-6FJX90	2
32	37700	HOSE: .38 X 156 6JFX-6FJX90	2

+ CASE DRAIN COUPLERS AT TRACTOR

Ref.	Part No.	Description	Qty.
33	69120	FTG-MOTOR RETURN LINE (NOT SHOWN)	AR
34	66199	PIONEER TIP 8010-15 (NOT SHOWN)	AR
35	66961	FTG-ADAPTER: 8FB-12MB (NOT SHOWN)	AR
36	37066	QUICK COUPLING-FEMALE -12-12 ORB (NOT SHOWN)	AR
37	37067	QUICK COUPLING-FEMALE -8-10 ORB (NOT SHOWN)	AR



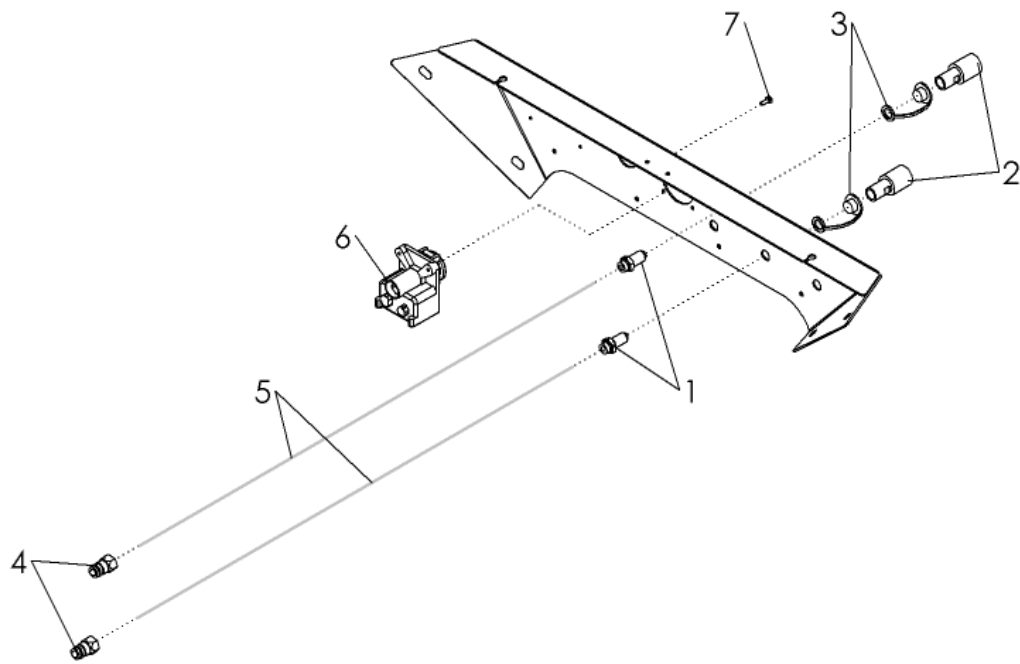
16141-A

ASSY-BLOWER HYDRAULIC DRIVE DUAL FAN TOW BETWEEN

Ref.	Part No.	Description	Qty.
1	37533	PLATE-VALVE BLOCK MOUNT	1
2	66938	VALVE-VARIABLE RATE 2-BANK W/CHECK	1
	67495	ASSY-METER VALVE CARTRIDGE & COIL (NOT SHOWN)	1
3	65846	VALVE-SELECTOR PAINTED (3-WAY)	1
4	64060	FTG-ELBOW: 12MB-12MJ-90	3
5	65918	FTG-ADAPTER: 12MB-12MJ	5
6	59041	FTG-ELBOW: 12MJ-12FJX-90	2
7	66248	FTG-TEE: 12MB-12MJ-12MJ	2
8	66249	FTG-ADAPTER: 12MB-12FJX	1
9	33641	VALVE-BALL 3/4 SAE	1
10	37259	FTG-ADAPTER: 6MB-6MJ	3
11	57754	FTG-ELBOW: 6MB-6MJ 90	3
12	1013239	BOLT-HEX; .38 X 3.00 NC GR5 ZP	2
13	1016999	NUT-TOPLOCK: .38 NC GR5 ZP	6
14	330382	ASSY-BLOWER REM RT176CW	2
15	62024	FTG-ADAPTER: 6MB-8MJ	1
16	57668	FTG-ELBOW: 8MJ-8FJX-90	1
17	57663	FTG-ELBOW: 8MJ-8FJX-45	1
18	37532	U-BOLT: .375 X 7.00 X 6 X 7.00 ZP (NOT SHOWN)	2
19	66270	FTG-RESTRICTOR: 6MB-6MJ-90 .032	2
20	69119	FTG-CASE DRAIN JD & CNH	1
21	36291	PIONEER TIP 8010-16P (#10 ORB)	4
22	330098	HOSE: .75 X 156 10MB-12FJX	2
23	330097	HOSE: .75 X 168 10MB-12FJX90	1
24	330095	HOSE: .75 X 41 12FJX-12FJX45	2
25	66245	HOSE: .75 X 24 12FJX-12FJX	1
26	330096	HOSE: .50 X 144 8MB-8FJX	1
27	66269	HOSE: .50 X 20 12FJX-6FJX90L	2
28	37332	HOSE: .50 X 382 12FJX-12FJX	1
29	37333	HOSE: .50 X 382 12FJX-12JFX90	1
30	37698	HOSE: .38 X 48 6FJX-6FJX90	2
31	37699	HOSE: .38 X 113 6FJX-6FJX90	2
32	37700	HOSE: .38 X 156 6JFX-6FJX90	2
33	330099	HOSE: .75 X 156 10MB-12FJX90	1
34	330435	HOSE: .50 X 044 8FJX-8FJX90	1
35	66603	FTG-TEE: 8MJ-8MJ-8FJX	1

+ CASE DRAIN COUPLERS AT TRACTOR

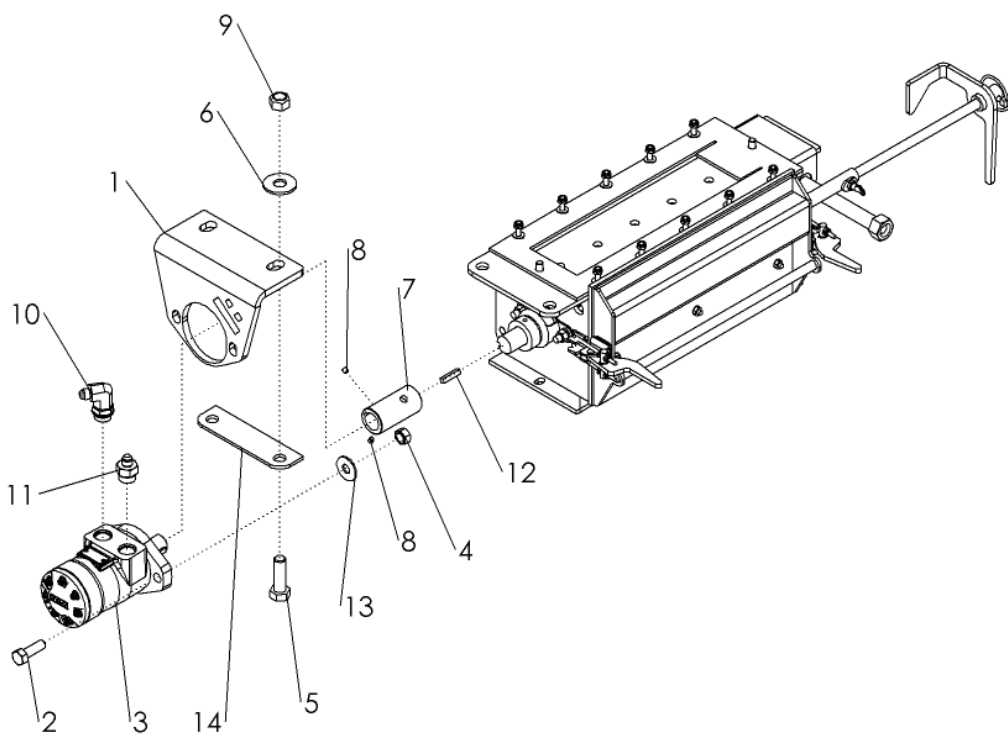
Ref.	Part No.	Description	Qty.
36	69120	FTG-MOTOR RETURN LINE (NOT SHOWN)	AR
37	66199	PIONEER TIP 8010-15 (NOT SHOWN)	AR
38	66961	FTG-ADAPTER: 8FB-12MB (NOT SHOWN)	AR
39	37066	QUICK COUPLING-FEMALE -12-12 ORB (NOT SHOWN)	AR
40	37067	QUICK COUPLING-FEMALE -8-10 ORB (NOT SHOWN)	AR



M6121

ASSY-TOW BETWEEN COUPLERS & ELECTRIC

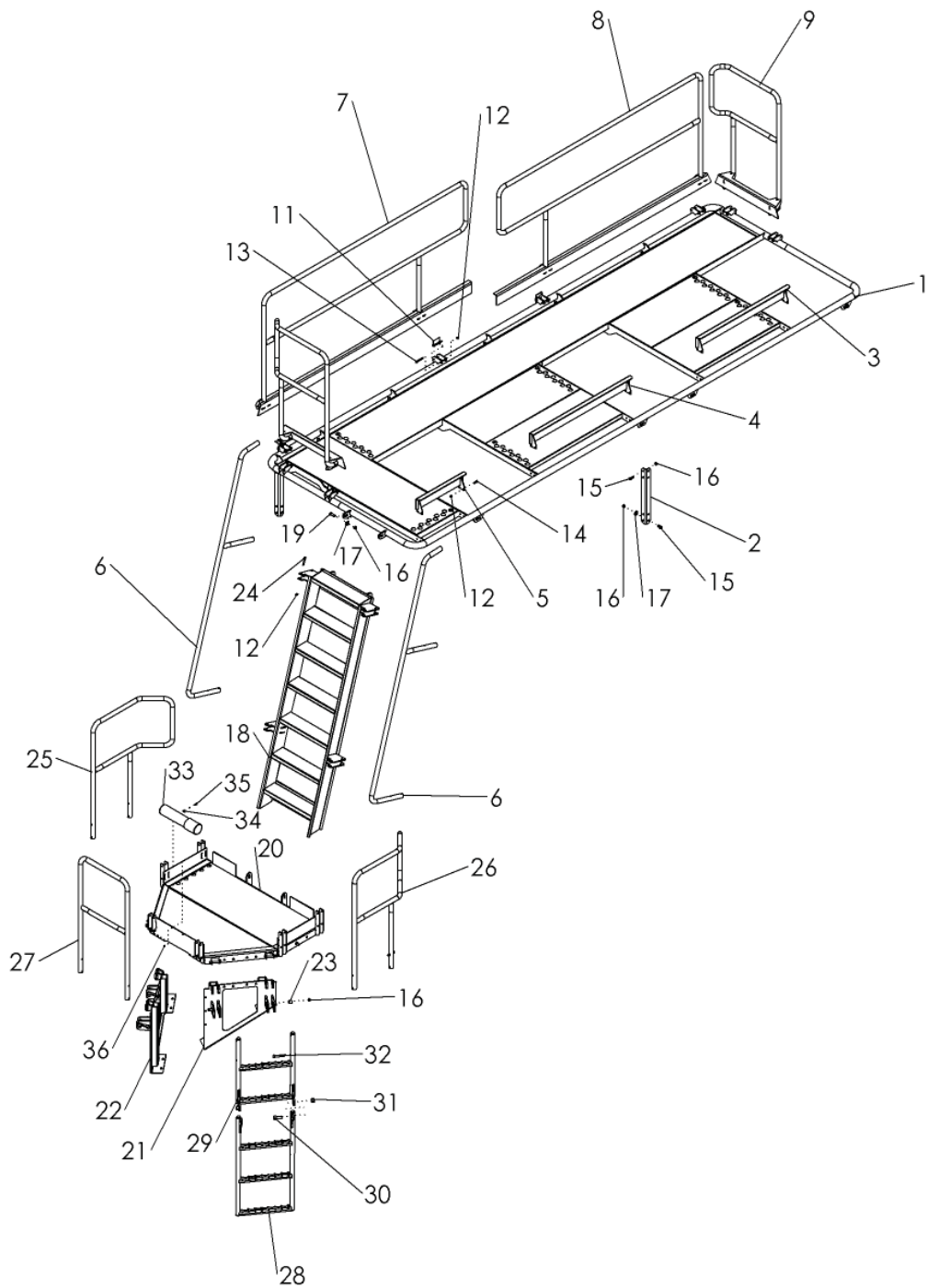
Ref.	Part No.	Description	Qty.
1	37267	FTG-BULKHEAD: 8MB-8MJ	6
2	37266	COUPLER-FEMALE #8250-15	6
3	37268	DUST-PLUG-HYD COUPLE	6
4	36290	PIONEER TIP 8015-15P (#8 ORB)	6
5	67374	HOSE: .50 X 400 8FJX-8MB	6
6	67698	HARNESS-TANK W/BOX REAR	1
7	67686	SCREW-S-TAP: .25 X .63 ZP	4



M6122

ASSY-HYDRAULIC DRIVE - METERS

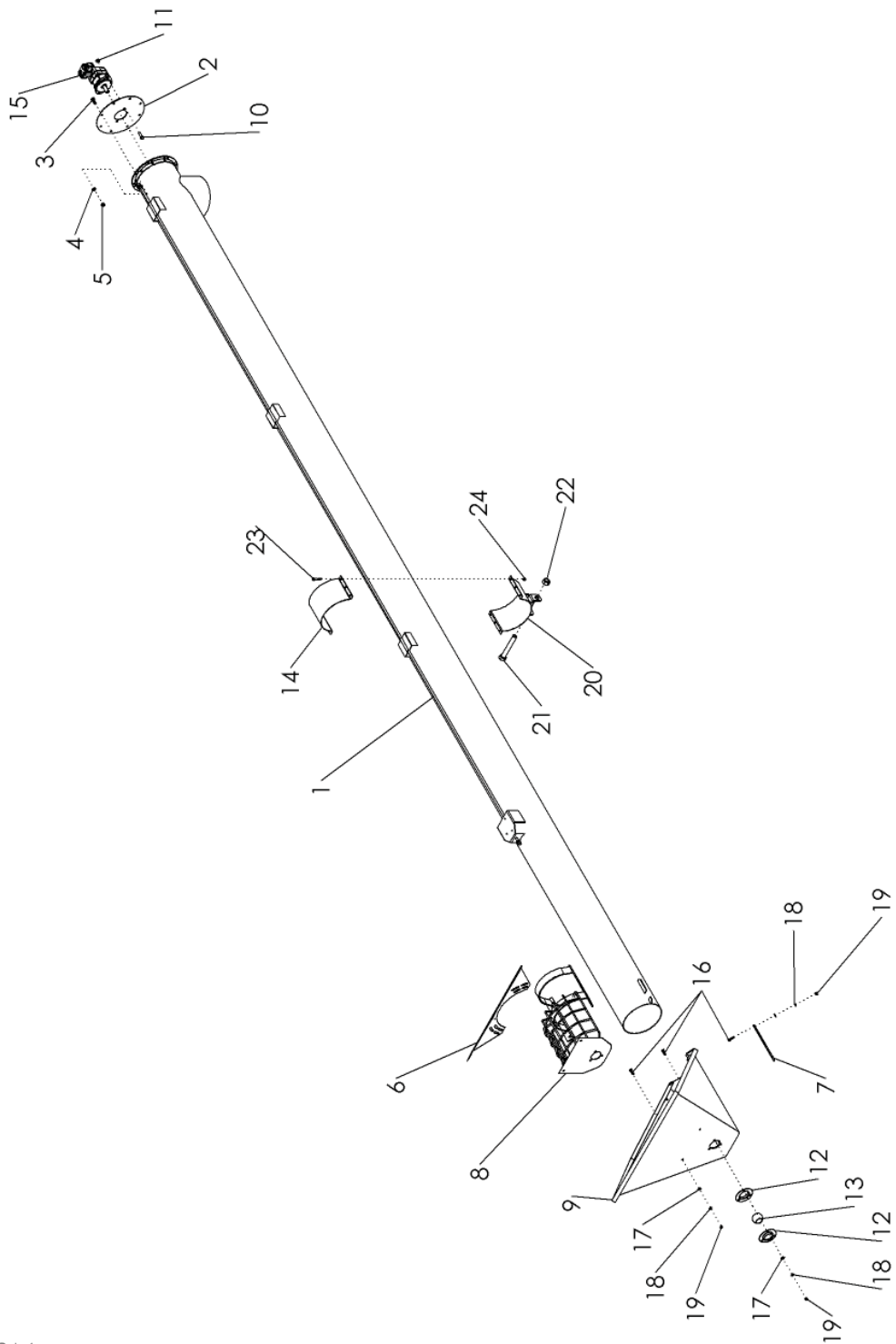
Ref.	Part No.	Description	Qty.
1	34038	MOUNT-HYD MOTOR METER	1
2	67063	BOLT-HEX: SS .50 X 2.00	2
3	67481	MOTOR-METER DRIVE 9.7 CID W/SPEED	1
	67518	SENSOR METER SPEED (NOT SHOWN)	
4	67659	NUT-NYLOCK: SS .50 NC GR2	2
5	34808	BOLT-HEX: SS .63 X 2.00 NC	2
6	67496	WASHER-FLAT: .63 SS	2
7	65552	COUPLER	1
8	1013044	SCREW-SET: .25 X .25 NC GR8 NP	2
9	66445	NUT-NYLOCK: .63 NC GR2 SS	2
10	37042	FTG-ELBOW: 10MB-6MJ 90	1
11	66939	FTG-ADAPTER: 6MJ-10MB	1
12	65715	KEY .250 X .250 X 1.250 SS	1
13	37356	WASHER-FLAT: SS .50 ZP	2
14	66381	PLATE-MB CLAMP SPACER	1
15	67489	HARNESS-METER SPEED (NOT SHOWN)	1



M6123-B

ASSY-CATWALKS & RAILINGS & LADDERS

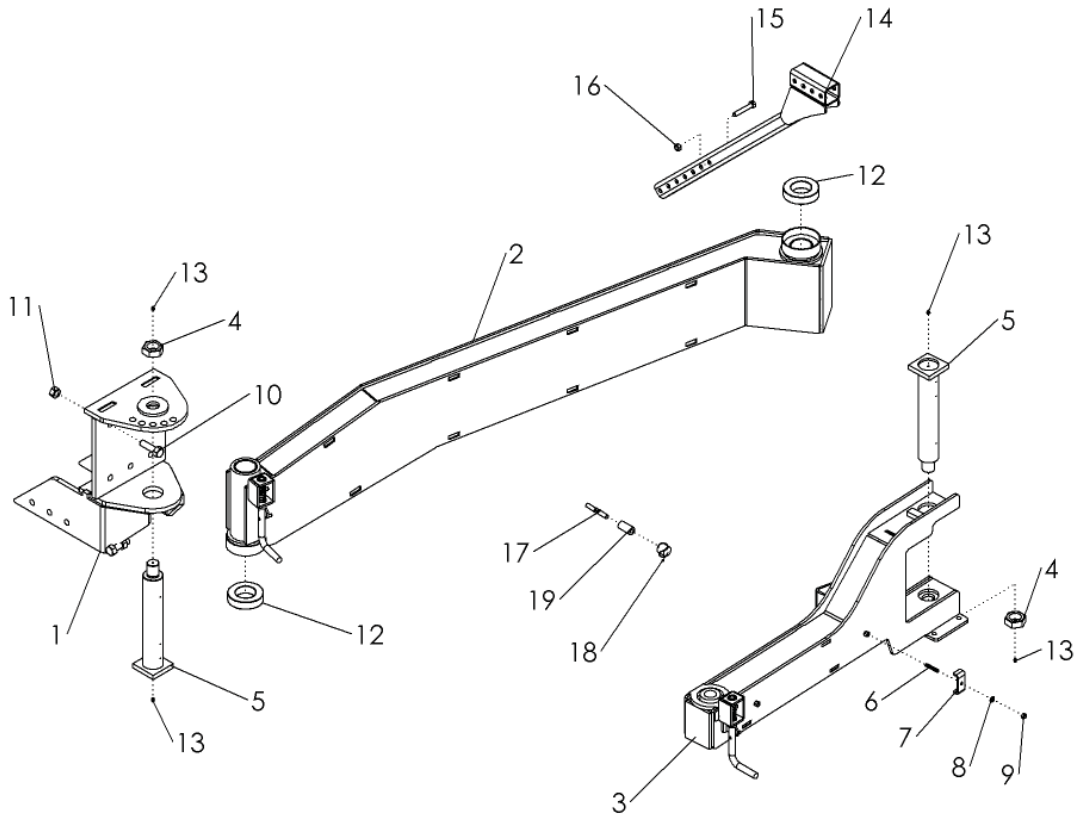
Ref.	Part No.	Description	Qty.
1	37370	WLDMT-MAIN CATWALK 525 BU	1
2	37361	PLATE-CATWALK BRACE	4
3	37365	WLDMT-KICK RAIL 38.25"	1
4	37366	WLDMT-KICK RAIL 42"	1
5	37367	WLDMT-KICK RAIL 20"	1
6	37179	WLDMT-TUBE LADDER HANDRAIL	2
7	37395	WLDMT-FRONT SIDE HANDRAIL	1
8	37398	WLDMT-REAR SIDE HANDRAIL	1
9	37369	WLDMT-BACK HANDRAIL	1
10	37399	WLDMT-FRONT HANDRAIL	1
11	37661	SPRING PIN .38 X 2.50	12
12	1016999	NUT-TOPLOCK: .38 NC GR5 ZP	40
13	1015174	BOLT-HEX: .38 X 2.50 NC GF5 ZP	8
14	1011600	BOLT-HEX: .38 X 1.00 NC GR5 ZP	12
15	1011096	BOLT-HEX: .50 X 1.00 NC GR5 ZP	16
16	1027461	NUT-TOPLOCK: .50 NC GR5 ZP	52
17	1014443	WASHER-FLAT: .50 ZP	24
18	37255	WLDMT-LADDER	1
19	1011607	BOLT-HEX: .50 X 1.50 NC GR5 ZP	28
20	37606	WLDMT-FRONT CATWALK	1
21	37580	WLDMT-CATWALK MOUNT LH	1
22	37585	WLDMT-CATWALK MOUNT RH	1
23	65254	TUBE-SPACER ZP	8
24	59390	BOLT-HEX: .38 X 2.25 NC G5 ZP	20
25	37591	WLDMT-RAILING RIGHT	1
26	37588	WLDMT-RAILING LEFT	1
27	37594	WLDMT-FRONT RAILING	1
28	37599	WLDMT-LOWER LADDER	2
29	37597	WLDMT-LADDER TOP	2
30	62412	BOLT-HEX: .75 X 1.75 NC GR5 ZP	4
31	101700	NUT-TOPLOCK: .75 NC GR5 ZP	4
32	1017719	BOLT-HEX: .50 X 3.25 NC GR5 ZP	8
33	234313	STORAGE TUBE-OWNERS MANUAL	1
34	1020416	WASHER-FLAT: .25 ZP	2
35	1011595	BOLT-HEX: .25 X .75 NC GR5 ZP	2
36	1030946	NUT-TOPLOCK: .25 NC GR5 ZP	2
37	223329	HOLDER-LIGHT PLUG (NOT SHOWN)	1
38	1013423	BOLT-HEX: .25 X 1.00 NC GR5 ZP (NOT SHOWN)	2
39	1030946	NUT-TOPLOCK: .25 NC GR5 ZP (NOT SHOWN)	2



M6124-A

ASSY-AUGER

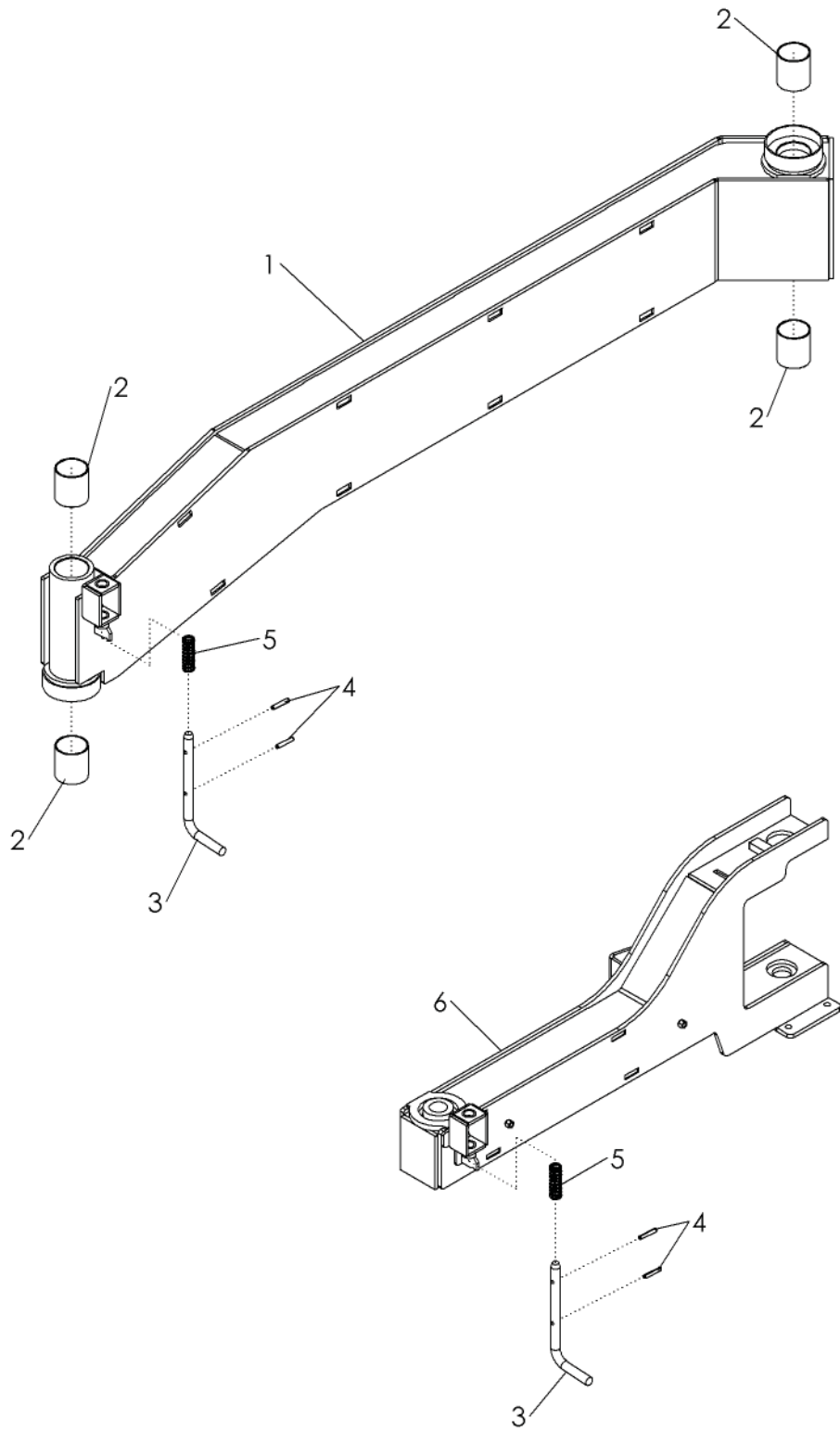
Ref.	Part No.	Description	Qty.
1	37400	TUBE-AUGER 10" X 25 FT	1
	37401	FLIGHTING-POLY 9" X 25 FT (NOT SHOWN)	1
2	66257	PLATE-MOTOR MOUNT 10"	1
3	1011606	BOLT-HEX: .50 X 1.25 NC GR5 ZP	8
4	1011581	WASHER-LOCK: .50 ZP	8
5	1011577	NUT-HEX: .50 NC GR2 ZP	8
6	66377	MESH-HOPPER 10"	1
7	65913	PLATE-BACKING HOPPER MOUNT	2
8	66258	MOUNT-HOPPER 10"	1
9	66277	HOPPER-POLY 10"	1
10	1011607	BOLT-HEX: .50 X 1.50 NC GF5 ZP	2
11	1027461	NUT-TOPLOCK: .50 NC GR5 ZP	2
12	65914	BEARING-FLANGE	2
13	65915	BEARINGP-WOOD	1
14	66253	CLAMP-TOP BRACKET	6
15	1032092	MOTOR-HYDRAULIC	1
16	1011601	BOLT-HEX: .38 X 1.25 NC GR5 ZP	9
17	1014608	WASHER-FLAT: SAE .38 ZP	9
18	1011586	WASHER-LOCK: .38 ZP	9
19	1011576	NUT-HEX: .38 NC GR2 ZP	9
20	66254	CLAMP-BOTTOM BRACKET	1
21	65721	BOLT-HEX: 1.00 X 7.00 NC GR5 ZP	1
22	1016969	NUT-TOPLOCK: 1.00 NC GR5 ZP	1
23	1011725	BOLT-HEX: .38 X 2.00 NC GR5 ZP	6
24	1016999	NUT-TOPLOCK: .38 NC GR5 ZP	6



M6134-A

ASSY-AUGER MOUNTING COMPONENTS

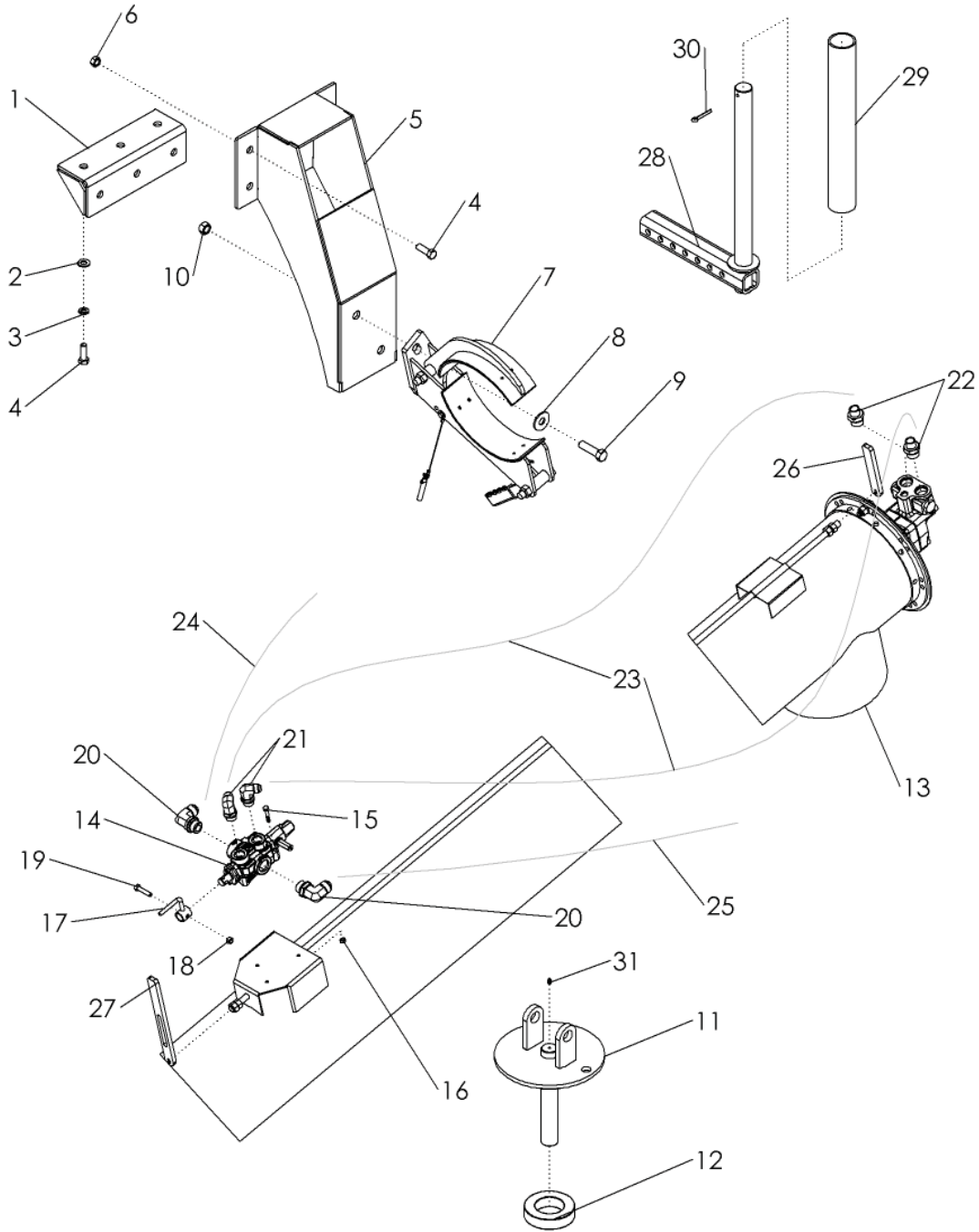
Ref.	Part No.	Description	Qty.
1	330176	WLDMT-AUGER MOUNT 5250	1
2	330186	ASSY-INNER AUGER ARM 5250	1
3	330205	ASSY-OUTER AUGER ARM 5250	1
4	35914	NUT-JAM: 1.50 NF NYLOCK GR2 ZP	2
5	330184	WLDMT-KING PIN ZP	2
6	330045	STUD-.375 X 3.00 NC	10
7	50714	CLAMP 1/2" ZP	10
8	1011586	WASHER-LOCK: .38 ZP	10
9	1011576	NUT-HEX: .38 NC GR2 ZP	10
10	1016598	BOLT-HEX: .75 X2.50 NC GR5 ZP	12
11	1017000	NUT-TIOPLOCK: .75 NC GR5 ZP	12
12	35567	BEARING-THRUST: TIMKIN T251	2
13	1011748	ZERK-GREASE: .25 UNF STRAIGHT	4
14	330270	WLDMT-UPPER MOUNT	1
15	1011611	BOLT-HEX: .50 X 3.00 NC GR5 ZP	2
16	1027461	NUT-TOPLOCK: .50 NC GR5 ZP	2
17	330436	STUD-.50-13 X 3.50 BLACK THREADED	1
18	330437	BUMPER-RUBBER 1.250 X .75 X 1/2-13	1
19	330442	TUBE-SPACER 1.00 1.875 ZP	1



M6136-A

ASSY-INNER & OUTER AUGER ARMS

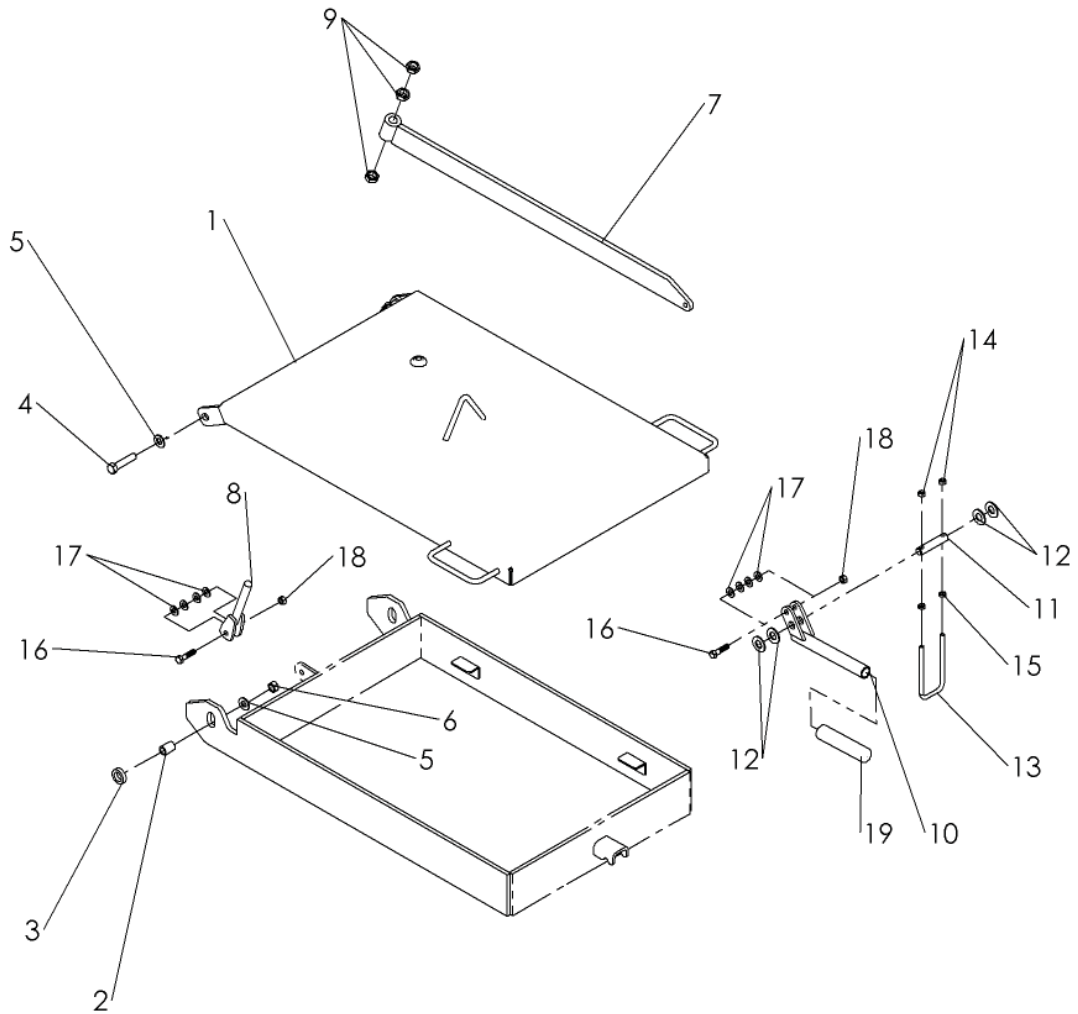
Ref.	Part No.	Description	Qty.
1	330187	WLDMT-INNER AUGER ARM 5250	1
2	35594	BUSHING-MACH 2.51 X 2.75 X 3.0L	4
3	37787	LATCH-HANDLE ZP	2
4	1030793	PIN-ROLL: .31 X 1.75 ZP	4
5	36335	SPRING-SDD TOOLBAR LOCK	2
6	330201	WLDMT-OUTER AUGER ARM 5250	1



M6135-A

ASSY-AUGER & HYDRAULICS

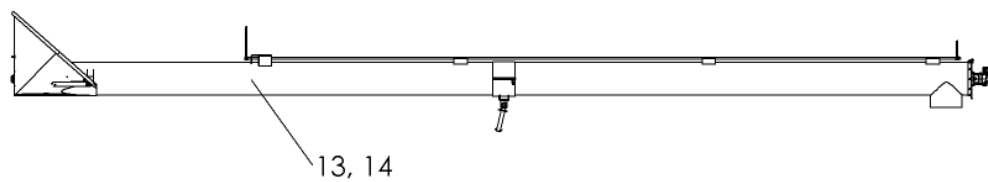
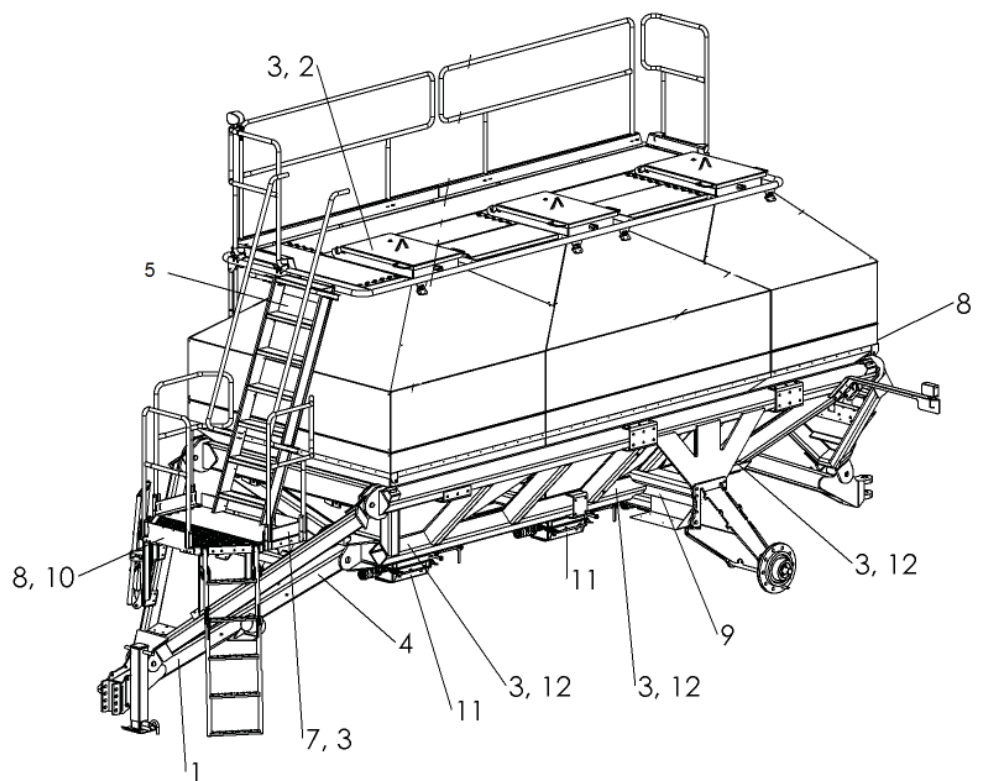
Ref.	Part No.	Description	Qty.
1	330213	WLDMT-LOWER AUGER CLAMP GUSSET	1
2	1011584	WASHER-FLAT: SAE .50 ZP	3
3	1011581	WASHER-LOCK: .50 ZP	3
4	1011607	BOLT-HEX: .50 X 1.50 NC GR5 ZP	9
5	330216	WLDMT-LOWER AUGER CLAMP BRACKET	1
6	1027461	NUT-TOPLOCK: .50 NC GR5 ZP	6
7	66255	ASSY-CLAMP 10"	1
8	1013024	WASHER-FLAT: .63 ZP	2
9	1017526	BOLT-HEX: .63 X 2.25 NC GR5 ZP	2
10	1016595	NUT-TOPLOCK: .63 NC GR5 ZP	2
11	330222	WLDMT-AUGER PIVOT	1
12	35567	BUSHING-THRUST: TIMKEN T251	1
13	37402	ASSY-AUGER POLY 10" 25FT W/HOPPER	1
14	65845	VALVE-CONTROL 4WAY PAINTED	1
15	1019550	BOLT-HEX: .25 X 1.50 NC GR5	3
16	1030946	NUT-TIOPLOCK: .25 NC GR5 ZP	3
17	66107	HANDLE AUGER VALVE ZP	1
18	1030700	NUT-TOPLOCK: .31 NC GR5 ZP	1
19	1014124	BOLT-HEX: .31 X 1.50 NC GR5 ZP	1
20	64060	FTG-ELBOW: 12MB-12MJ-90	2
21	65901	FTG-ELBOW: 10MB-8MJ-90	2
22	58195	FTG-ADAPTER: 10MB-8MJ	2
23	37426	HOSE: .50 X 240 8FJX-8JFX-90	2
24	330400	HOSE: .50 X 394 12FJX-12FJX	1
25	330401	HOSE: .50 X 394 12FJX-12FJX-90	1
26	66443	TOP HANDLE	1
27	66442	BOTTOM HANDLE	1
28	330274	WLDMT-UPPER ADJ ARM	1
29	330262	PIPE: ABS BLACK, 1.50 SCH40 X 17.5"	1
30	1016944	PIN-COTTER: .25 X 2.00 ZP	1
31	1011747	ZERK-GREASE: .25 UNF 90 DEG	1



M6127

ASSY-DOORS

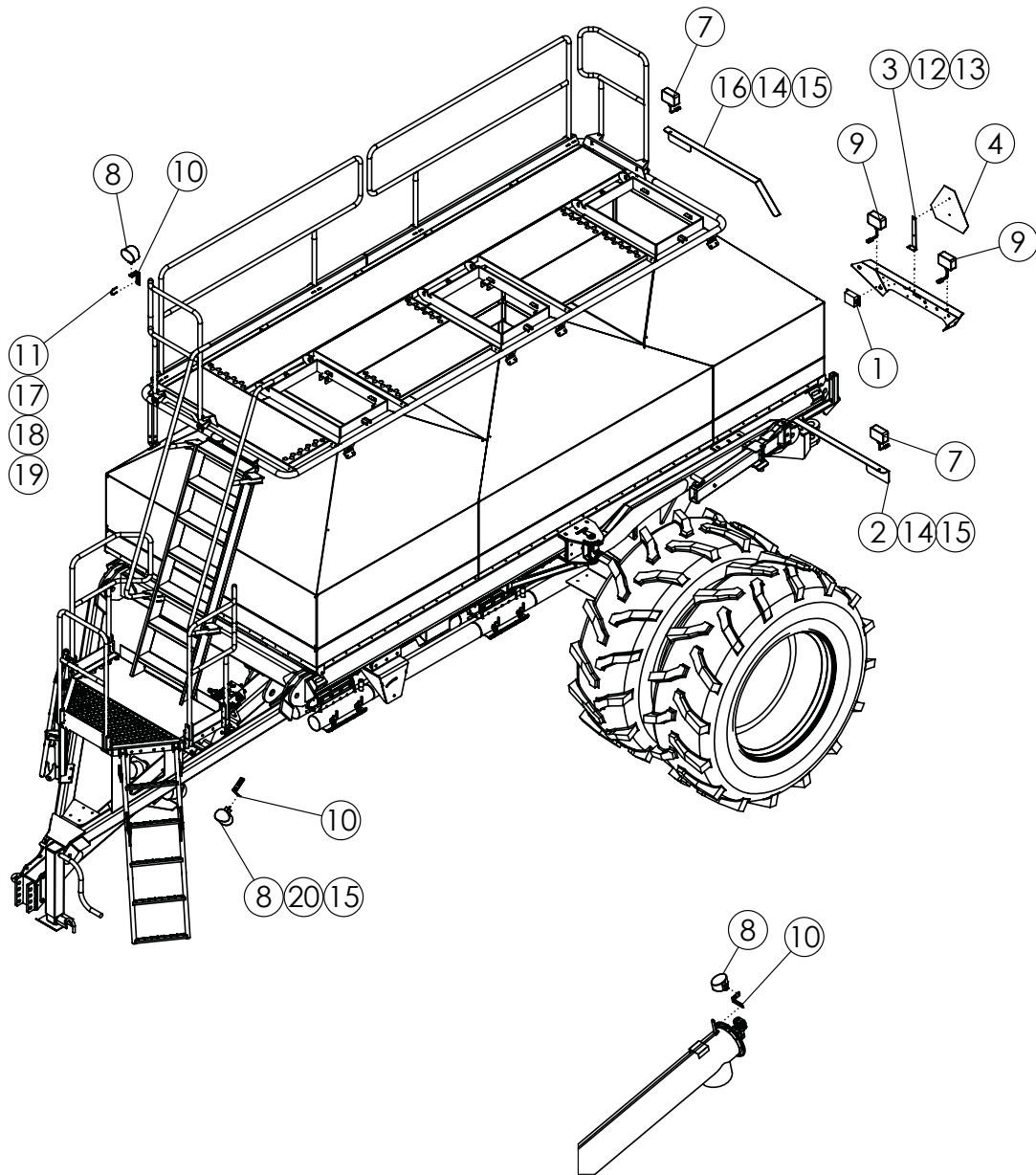
Ref.	Part No.	Description	Qty.
1	65558	WLDMT-TOP DOOR	1
2	65555	SPACER-DOOR HINGE	2
3	65554	SPACER-DOOR HINGE	2
4	1017708	BOLT-HEX: .50 X 2.25 NC GR5 ZP	2
5	1011584	WASHERPFLAT: SAE .50 ZP	4
6	1027461	NUT-TOPLOCK: .50 NC GR5 ZP	2
7	65559	WLDMT-CLAMP LEVER	1
8	65556	ROD-ADJUSTMENT ZP	1
9	1026259	NUT-JAM: .63 NC GR2 ZP	3
10	65557	WLDMT-CLAMP ADJ TUBE ZP	1
11	65560	PIIN-CLAMP LEVER	1
12	1013004	WASHER-FLAT: SAE .63 ZP	4
13	65656	U-BOLT: .313 X 5.00 X 2 X 5.00	1
14	1030700	NUT-TOPLOCK: .31 NC GR5 ZP	2
15	1020506	NUT-JAM: .31 NC GR2 ZP	2
16	1011602	BOLT-HEX: .38 X 1.50 NC GR5 ZP	2
17	1014608	WASHER-FLAT: SAE .38 ZP	8
18	1016999	NUT-TOPLOCK: .38 NC GR5 ZP	2
19	65902	GRIP-BLACK 1" ID X 5.06"L	1
20	66078	PLUG-PIPE .25 NPT ALLEN HEAD SS (NOT SHOWN)	1
21	64504	SEALANT-PROGLAZE (NOT SHOWN)	100
22	1026562	SCREEN BASKET (OPTIONAL - NOT SHOWN)	2
23	65722	GASKET-RUBBER DOOR (NOT SHOWN)	1



M6128

ASSY-DECALS AIR CART 5250

Ref.	Part No.	Description	Qty.
1	9971163	DECAL, SAFETY SET	2
2	997862	DECAL, HIGH VOLTAGE, DANGER	6
3	9971010	DECAL, CHEMICAL HAZARD, WARNING	4
4	997866	DECAL, FLUID UNDER PRESSURE, WARNING	2
5	9971016	DECAL, FALL OFF HAZARD, DANGER	3
6	997862	DECAL, HIGH VOLTAGE, DANGER	5
7	9971016	DECAL, FALL OFF HAZARD, WARNING	2
8	9971018	DECAL, SPEED SIGN, 20MILE/H	1
9	9971008	DECAL, CRUSHING HAZARD, WARNING	4
10	997860	DECAL, READ MANUAL, WARNING	1
11	9971012	DECAL, MOVING PART HAZARD, WARNING	3
12	9971239	DECAL, FLYING OBJECT, FACE WARNING	3
13	9971240	DECAL, AUGER ENTANGLEMENT, HAND, DANGER	1
14	9971022	DECAL, ELECTROCUTION, DANGER	1
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ASSY-SAFETY LIGHTS

Ref.	Part No.	Description	Qty.
1	65341	MODULE-INTERFACE	1
2	37511	PLATE HAZARD ARM LH	1
3	37264	PLATE-SMV MOUNT	1
4	65329	SIGN-SMV	1
5	1011595	BOLT-HEX: .25 X .75 NC GR5 ZP	4
6	1030946	NUT-TOPLOCK: .25 NC GR5 ZP	4
7	65334	LAMP-AMBER FLASHING	2
8	37498	LIGHT-FLOOD OVAL 38 WATT	3
9	65333	LAMP-RED TAIL	2
10	37499	SHEET-WORK LIGHT BRACKET	3
11	44186	U-BOLT: RND .31 X 1.50 X 2.19 ZP	1
12	0100615	BOLT-HEX: .19 X .75 NC GR5 ZP	4
13	1026591	NUT-K-LOCK: #10-24NC GR2 ZP	4
14	1011096	BOLT-HEX: .50 X 1.00 NC GR5 ZP	4
15	1027461	NUT-TOPLOCK: .50 NC GR5 ZP	4
16	37512	PLATE-HAZARD ARM RH	1
17	1011575	NUT-HEX: .31 CN GR2 ZP	2
18	1011583	WASHER-FLAT: .31 ZP	2
19	1029115	WASHER-LOCK: .31 ZP	2
20	1011606	BOLT-HEX: .50 X 1.25 NC GR5 ZP	1
21	37496	HARNESS-SAFETY LIGHT (NOT SHOWN)	1
22	37497	HARNESS-LIGHT EXTENSION 5250 (NOT SHOWN)	2
23	66323	CLIP-WIRE HARNESS (NOT SHOWN)	14
24	62833	CLAMP-ADHESIVE BACKED CABLE (NOT SHOWN)	10