

Product: Flexi-Coil 1330 Plus/40 Series/2640/50 Series Air Cart Service Repair Manual  
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# AIR CART

## SERVICE MANUAL

GI-043V2

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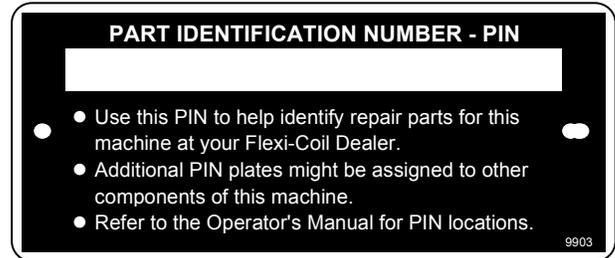
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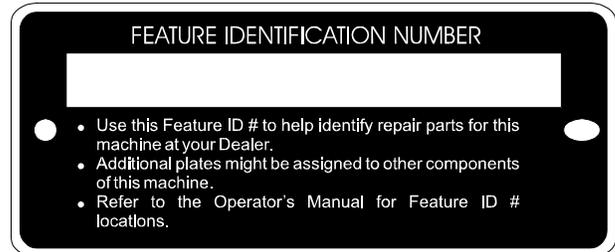
### REPAIR PART IDENTIFICATION

Each air cart has two types of identification numbers. The first is a Serial Number which identifies the complete air cart (tires, fan, tank size, auger etc.).

There is also at least one Parts Identification Number (PIN) plate attached to identify the machine components. There may be separate Parts Identification Numbers for the Fan, Tank and Frame, Axle, Caster, and Auger. The plate looks like the sample with a 14-character number stamped on.



In June 2001, the Parts Identification Plate was changed to a Feature Identification Number Plate as shown.



For easy reference, locate the PIN or FIN plates at the locations shown on one of the following figures, depending on your model and configuration.

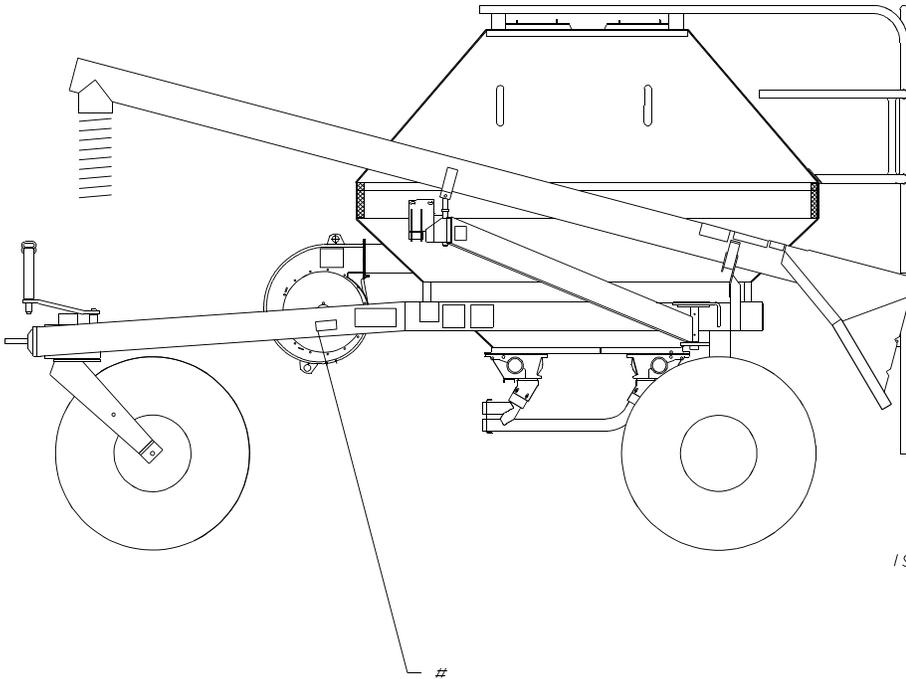
The identification numbers are used to track when the machine and components were manufactured and which configuration and options are installed. Use the identification numbers when ordering parts.

**REPAIR PARTS**

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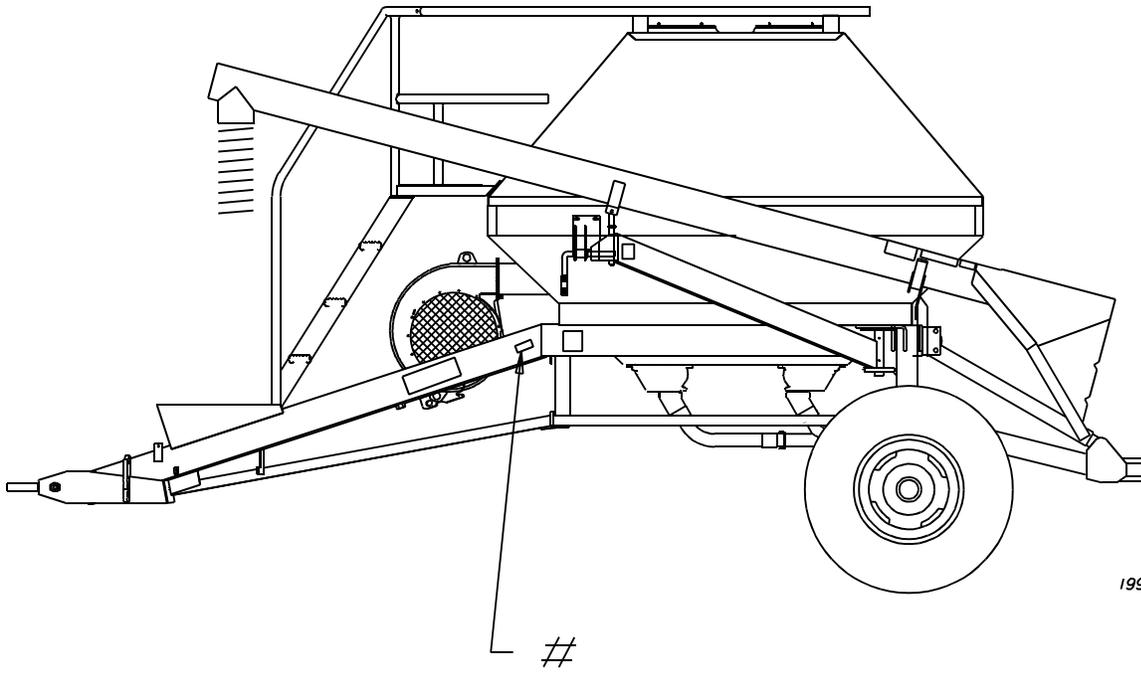
**1330 Plus**

**TOW BEHIND AIR CART**



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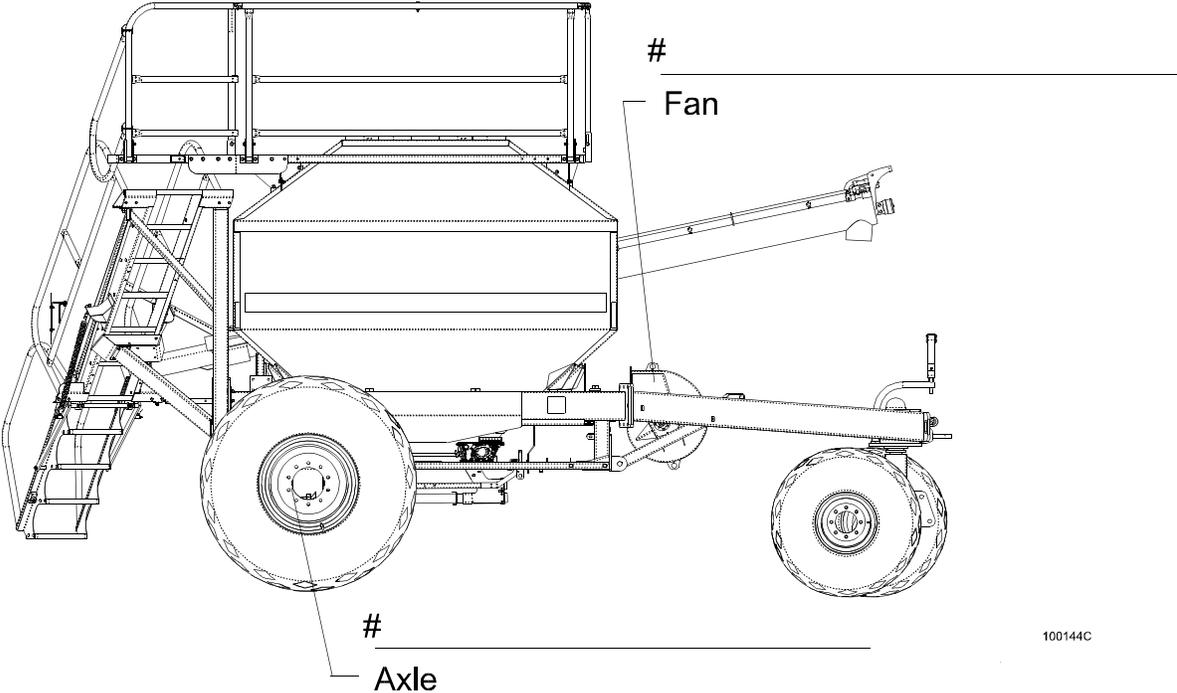
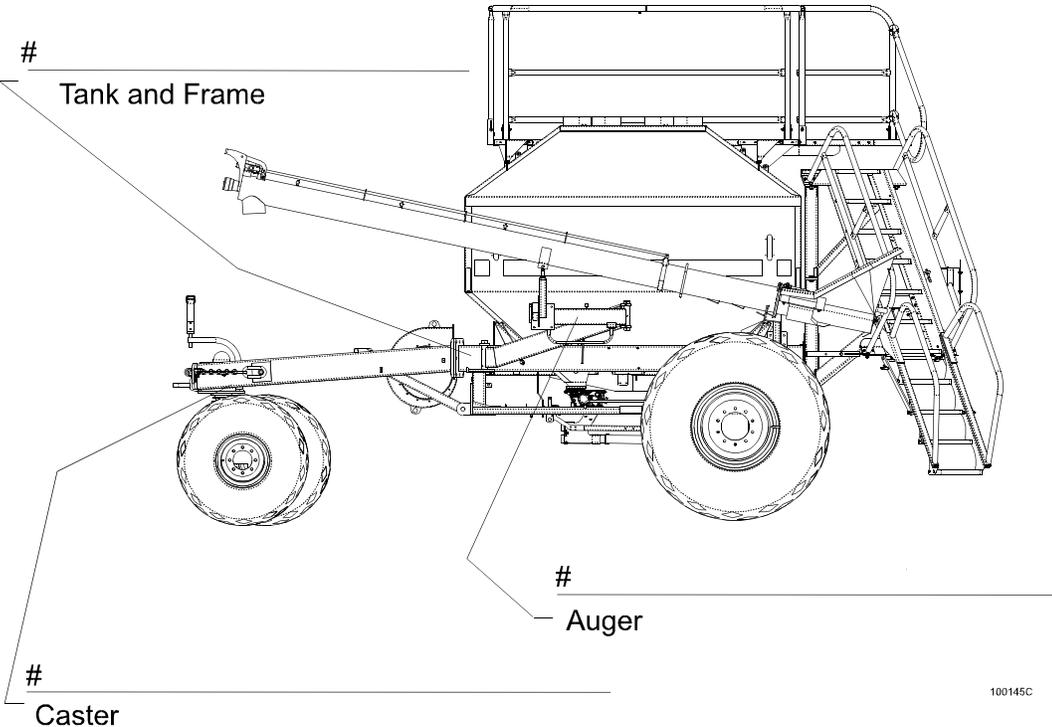
**TOW BETWEEN AIR CART**



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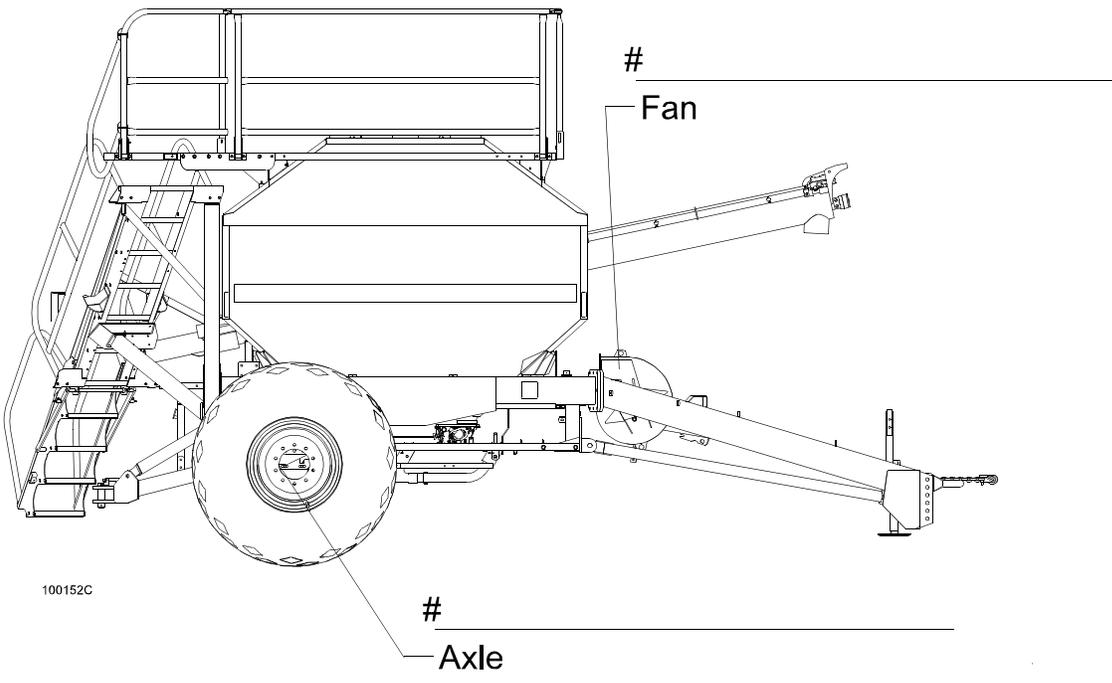
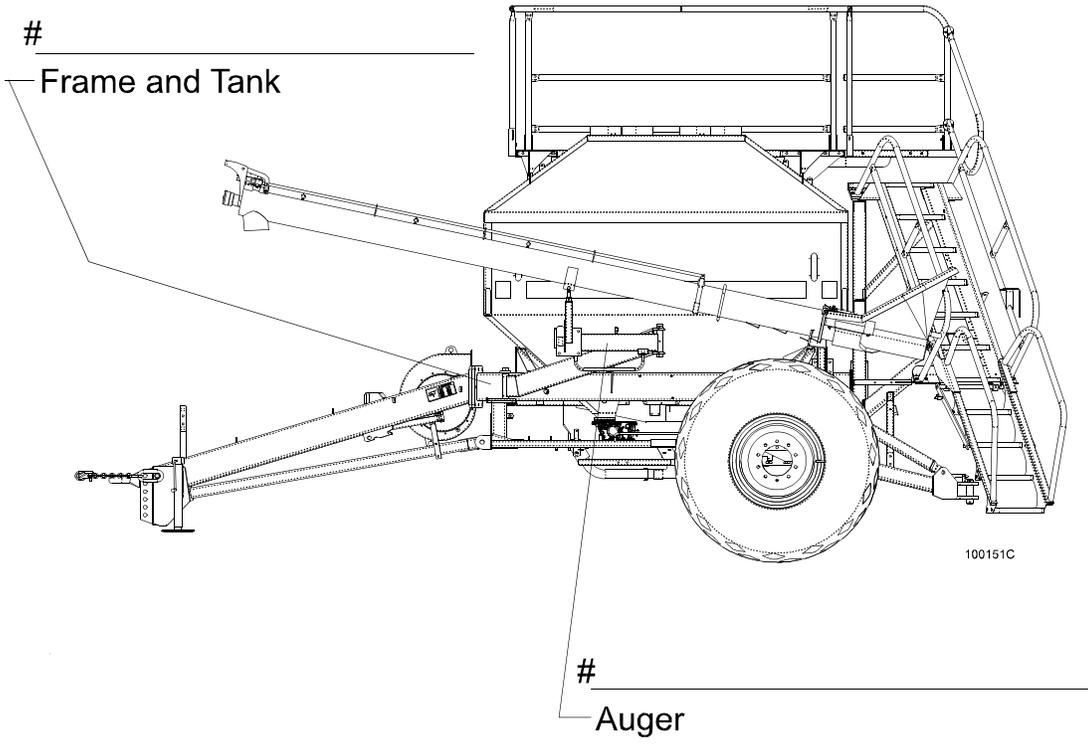
40 SERIES

TOW BEHIND AIR CARTS



**REPAIR PARTS**

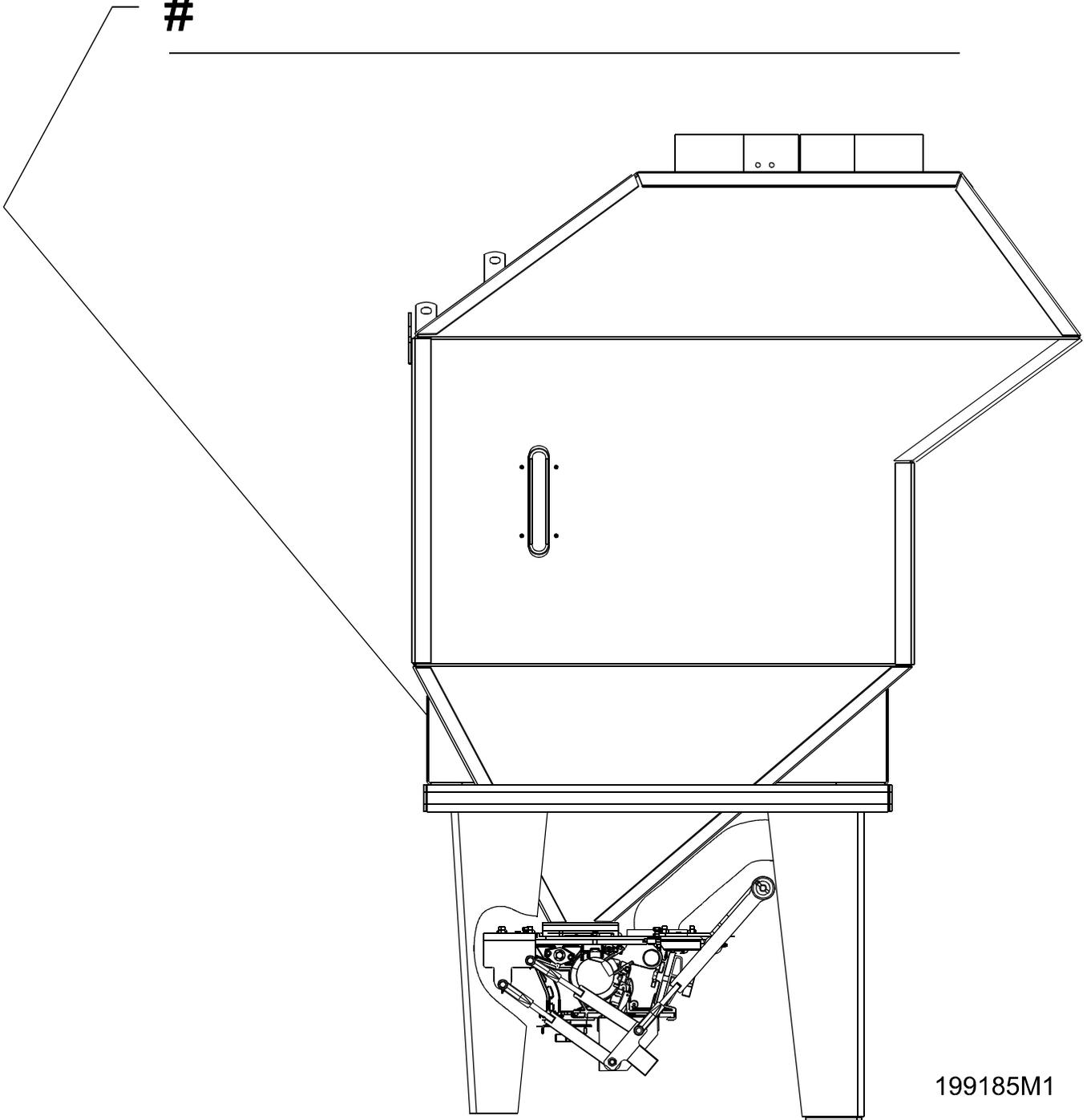
**TOW BETWEEN AIR CARTS**



REPAIR PARTS

3<sup>rd</sup> TANK

#

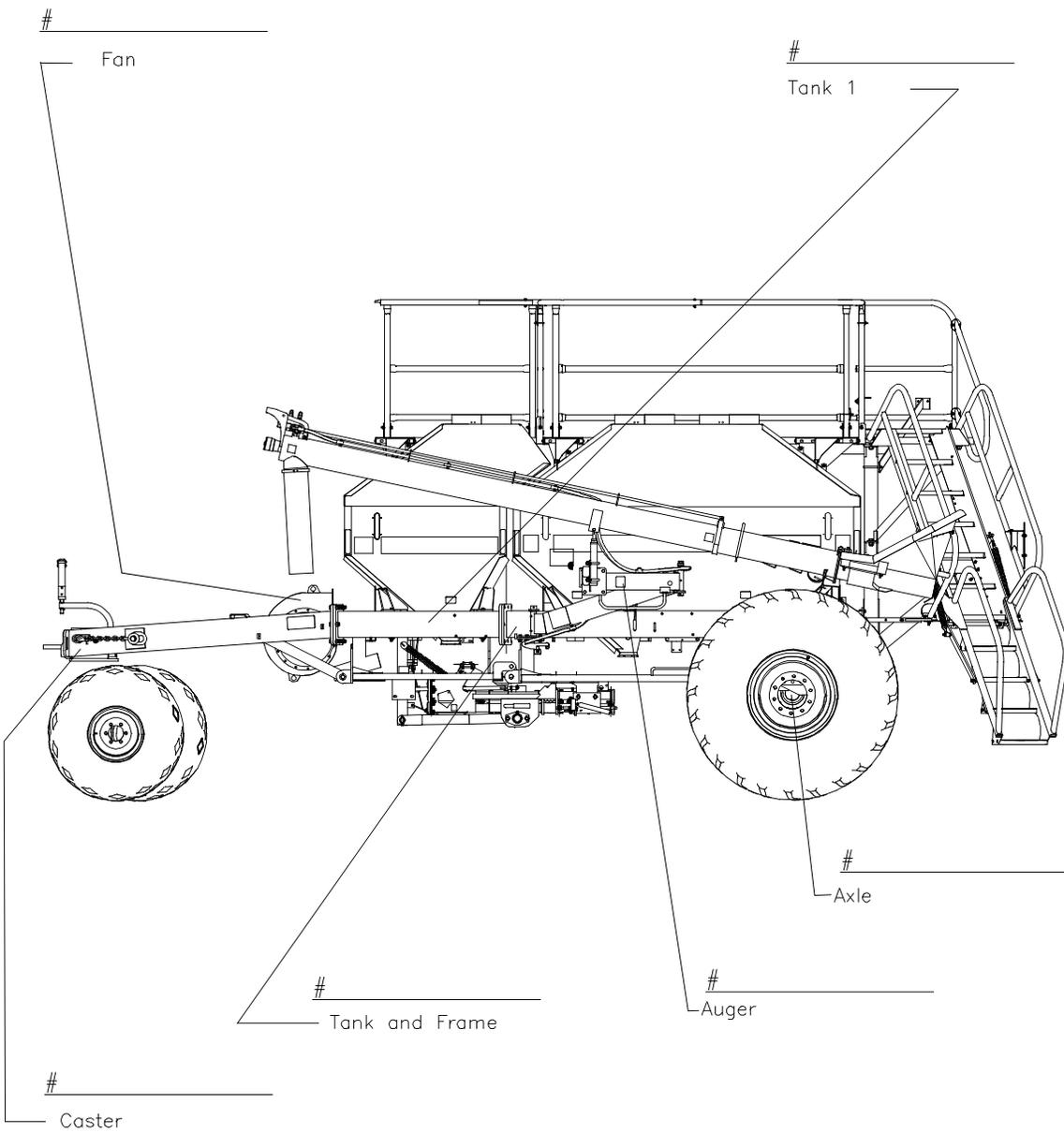


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**REPAIR PARTS**

**2640 AIR CART**

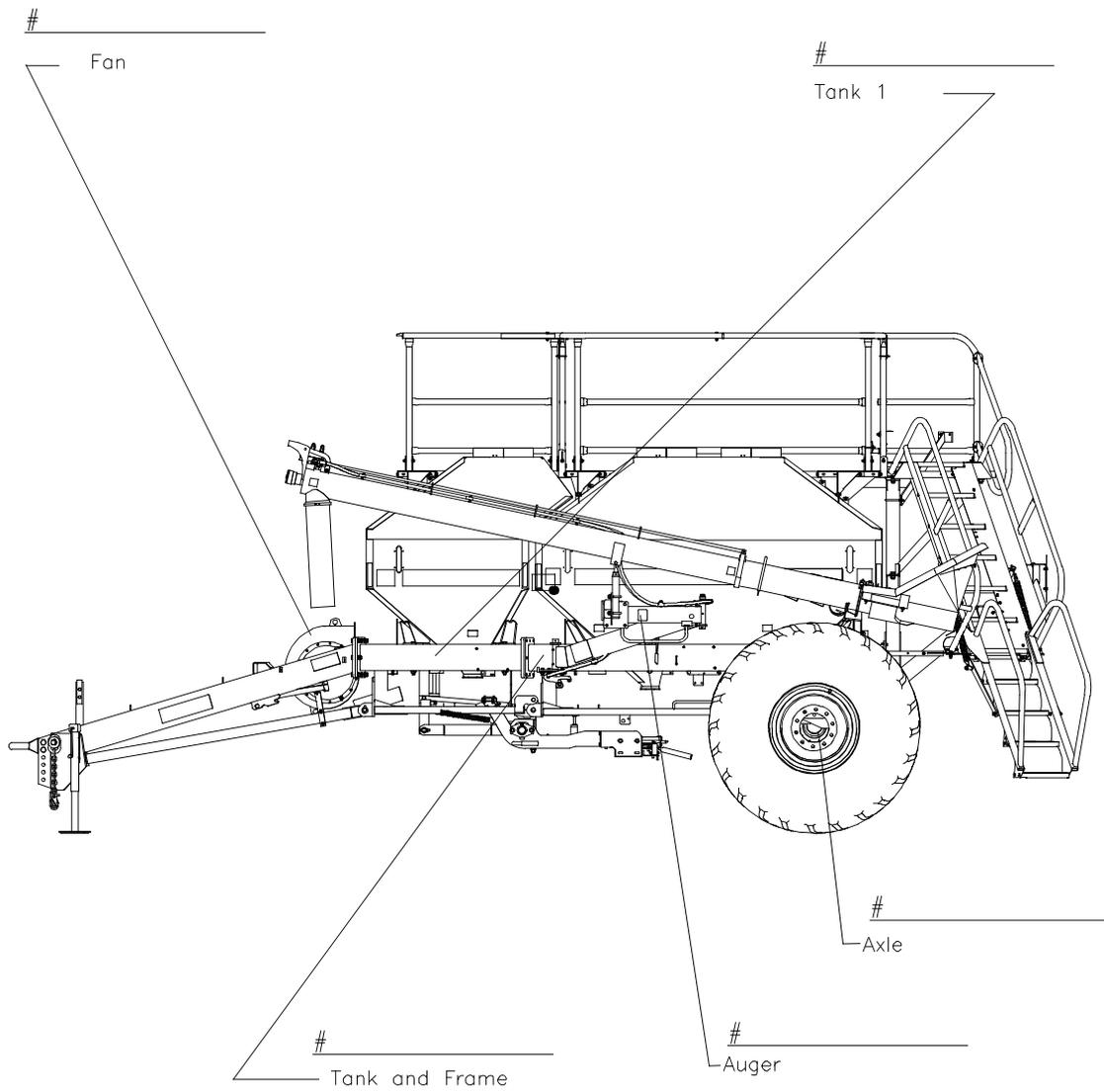
**TOW BEHIND AIR CART**



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# REPAIR PARTS

## TOW BETWEEN AIR CART

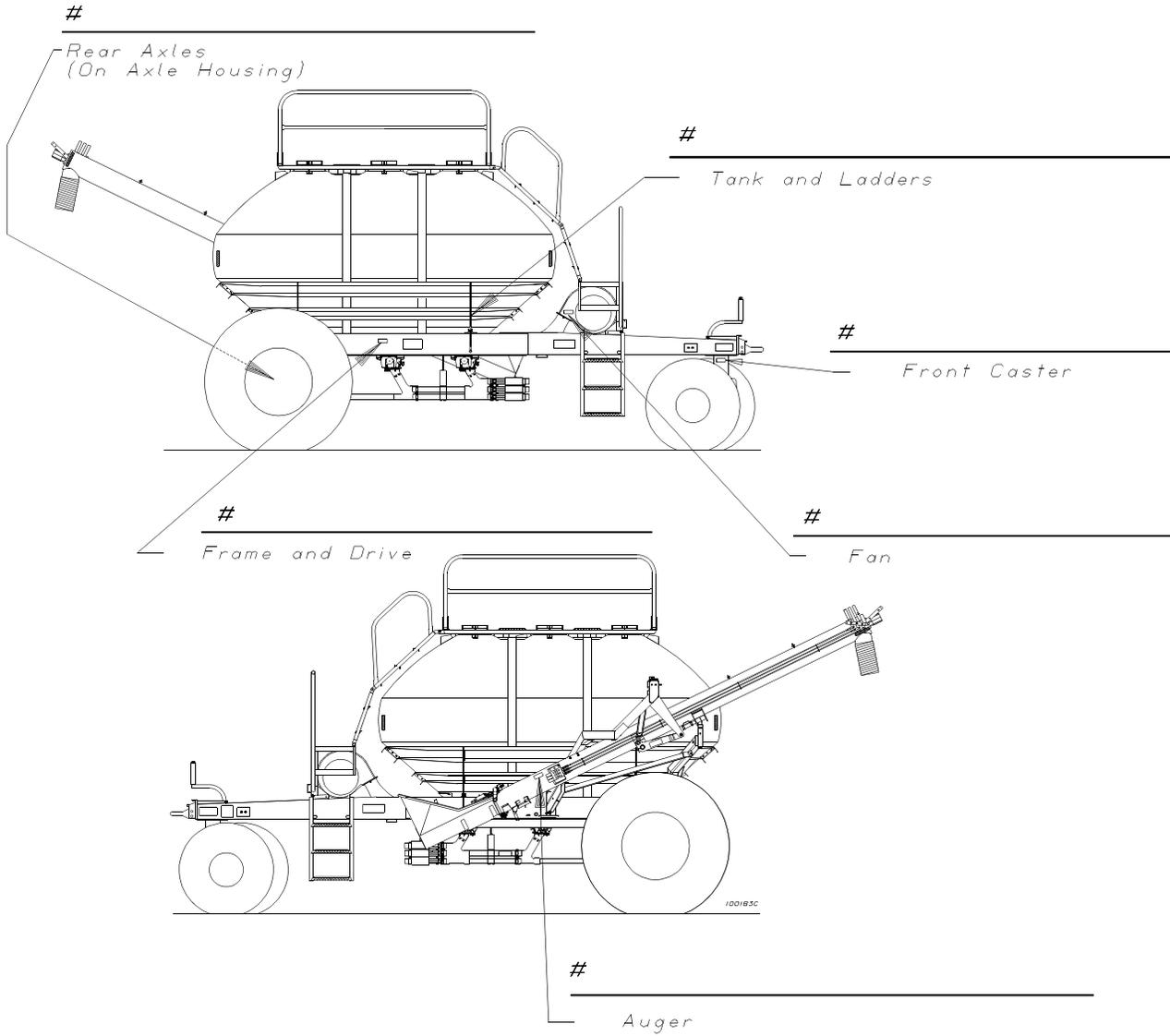


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**REPAIR PARTS**

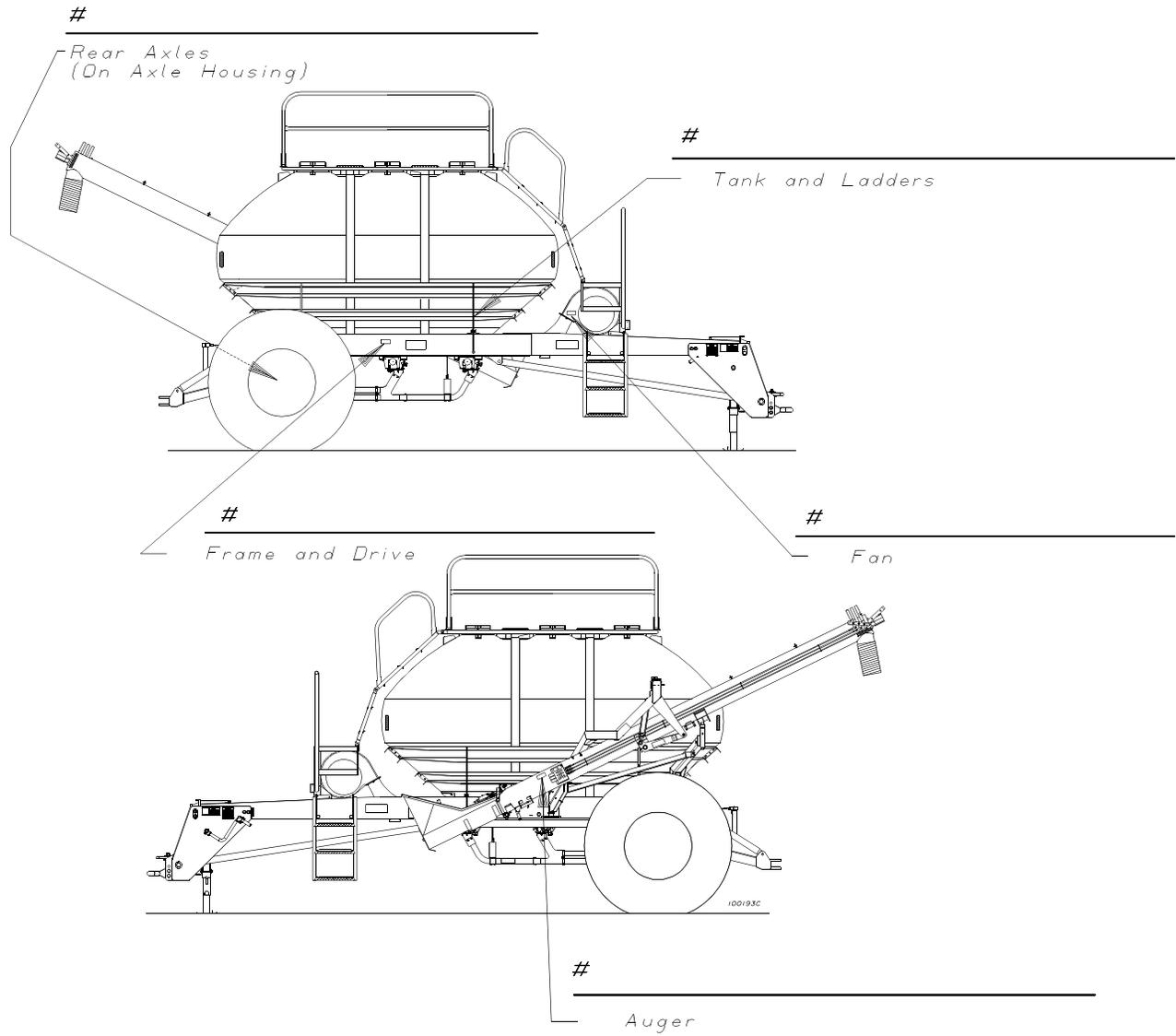
**50 SERIES**

**TOW BEHIND AIR CARTS**



# REPAIR PARTS

## TOW BETWEEN AIR CARTS



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## SERVICE BULLETINS

Refer to the list of Service Bulletins for bulletin information. Contact your dealer for more information.

### 1330 PLUS SERVICE BULLETINS

NAME	DESCRIPTION	DATE ISSUED	MANUAL REFERENCE
Service Bulletin #07	<p>Serial Number Range: G1330.A0-P055601 to G1330.B0-U092020, Shipped Before January 25, 2000</p> <p>It can be difficult to adjust your air baffles to the proper position in the 1330 seed cart. This can result in high air flow velocities which may cause product carry-over and uneven distribution. Replace air plenum to improve air flow.</p>	February 15, 2000 re-issued March 19, 2001	Section 3

### 40 SERIES SERVICE BULLETINS

NAME	DESCRIPTION	DATE ISSUED	MANUAL REFERENCE
Service Bulletin #01	<p>PIN Range: 117100A-1000 to 117100A-10100 117110A-1000 to 117110A-10100 117140A-1000 to 117140A-10030</p> <p>Due to an error on the 40 Series Air Carts, some carts were shipped with the wrong safety chain installed.</p> <p><b>Tow Behind Carts</b> Check that the safety chain between the seeding tool and tractor is rated 40,400 lb on the tag. The chain between the seeding tool and the cart should be rated 30,300 lb on the tag. If you find the chains installed in the reverse order, move them to their correct positions.</p> <p><b>Tow Between Carts</b> Check all tow between carts that the safety chain between the cart and tractor is rated 40,400 lb on the tag. The chain between the cart and the seeding tool should be rated 30,300 lb on the tag. If you find the chains installed in the reverse order, move them to their correct positions.</p>	May 28, 1999	

## SERVICE BULLETINS

NAME	DESCRIPTION	DATE ISSUED	MANUAL REFERENCE
Service Bulletin #02	<p>Serial Number Range: 3 2 3 4 - 0 9 6 1 0 1 t o 3234-096130 3 1 7 4 - 0 9 6 2 0 1 t o 3174-096211</p> <p>The manifold latch mechanism for the third tank option does not over-center to latch positively.</p> <p>Order and install the Third Tank Manifold Kit. Replace components re-adjust.</p>	May 25, 1999	Section 6
Service Bulletin #03	<p>PIN Range: 117100A-10001 - 117100A-10081 117110A-10002 - 117110A-10036 117140A-10001 - 117140A-10034 117260A-10001 - 117260A-10062</p> <p>The Bison motor used on the Variable Rate drive is equipped with shielded bearings. Because these bearings are exposed to dusty conditions, they could possibly seize up. Order kit and replace the seized bearings.</p>	February 2, 2000	Section 2
Service Bulletin #04	It may be difficult to properly adjust the tank lid to prevent air leakage. The tank lid design has been updated.	February 15, 2000	Section 6

### 50 SERIES SERVICE BULLETINS

NAME	DESCRIPTION	DATE ISSUED	MANUAL REFERENCE
Service Bulletin #01	<p>Serial Number Range: G50.A000-T077001-G50.A000-T077100</p> <p>The first 50 Series carts in production required updates to the following components.</p> <ol style="list-style-type: none"> <li>1. Three way single/double/triple shoot valve assembly</li> <li>2. Intermediate manifold lockout</li> <li>3. Safety and operational decals</li> <li>4. Center manifold adjustments</li> <li>5. Meter shaft sensor targets</li> <li>6. Review of hydraulic hoses</li> </ol>	December 15, 1997	n/a

**SERVICE BULLETINS**

<b>NAME</b>	<b>DESCRIPTION</b>	<b>DATE ISSUED</b>	<b>MANUAL REFERENCE</b>
Service Bulletin #02	<p>Serial Number Range: G50.A000-T077001-G50.A000-T079480</p> <p>The first 50 Series carts in production required updates to the following components.</p> <ol style="list-style-type: none"> <li>1. Auger hydraulics and transport locks</li> <li>2. Tank lids and seals</li> <li>3. Area sensor wiring</li> <li>4. Safety harness wiring</li> <li>5. Meter drive box shield</li> <li>6. Center manifold seals</li> </ol>	December 15, 1997	n/a
Service Bulletin #03	<p>PIN Range: 114133A-10001 to 114133B-10030 114135A-10001 to 114135B-10056</p> <p>In certain situations, the original jack on the 50 Series Tow Between Carts proved to be a safety concern. With a full tank, the existing jack could collapse causing injury and/or damage. Replace the jack on tow between air carts.</p>	May 19, 1998	n/a
Service Bulletin #04	<p>Serial Number Range: G50.A000-T077001-G50.A000-U091701</p> <p>Problems related to the restriction of the hydraulic supply to the torque generators may occur; There may be erratic meter rates, blown fuses and failed electric drive motors. This restriction is caused by filter or flow control problems. Install new flow controls and filters.</p>	January 14, 1999	Section 2
Service Bulletin #05	<p>Serial Number Range: G50.A000-T077001-G50.A000-U091701</p> <p>There have been a few carts that have experienced some water entering into the tanks. A software update is also required for all 50 Series remote modules. The remotes that require a software update are: Mechanical, Variable Rate, Seed Treatment Unit, Air Control, and the Gateway remotes. Install a water leak kit as required and update all software.</p>	January 15, 1999	Section 6
Service Bulletin #06	<p>PIN Range: 114132B-10008 - 114132B-10105 114133B-10005 - 114133B-10037 114134B-10010 - 114134B-10100 114135B-10005 - 114135B-1007</p> <p>Update the decals and tank straps.</p>	January 14, 1999	n/a

**SERVICE BULLETINS**

<b>NAME</b>	<b>DESCRIPTION</b>	<b>DATE ISSUED</b>	<b>MANUAL REFERENCE</b>
Service Bulletin #07	<p>PIN Range: 114132A-10001 - 114132B-10093 114133A-10001 - 114133B-10035</p> <p>We have experienced some erratic operation with the wrap spring clutch solenoids. They may not engage or disengage the meter roller if the solenoid has filled up with dust or dirt. Clean solenoid. If this does not solve the problem, replace the solenoid.</p>	March 24, 1999	Section 2
Service Bulletin #08	<p>PIN Range: 114134A-10001 - 114134B-10113 114135A-10001 - 114135B-10088</p> <p>The Bison motor used on the Variable Rate drive is equipped with shielded bearings. Because these bearings are exposed to dusty conditions, they could possibly seize up. Order kit and replace the seized bearings.</p>	February 2, 2000	Section 2
Service Bulletin #09	<p>It may be difficult to properly adjust the tank lid to prevent air leakage. The tank lid design has been updated.</p>	February 15, 2000	Section 6
Service Bulletin #10	<p>PIN Range: 114132A-10001 to 114135C-10100</p> <p>Moisture may be leaking into some 50 series air cart tanks. Repair leak.</p>	February 22, 2000	Section 6

**SEED TREATMENT UNIT SERVICE BULLETINS**

<b>NAME</b>	<b>DESCRIPTION</b>	<b>DATE ISSUED</b>	<b>MANUAL REFERENCE</b>
Service Bulletin #01	<p>Serial Number Range: GST.A000-S069901 to GST.A000-S069975</p> <p>The mechanical agitation would seize up and the electric drive motor was susceptible to chemical entering it. The pump was unable to apply treatment to low rate products. The console was unable to incrementally vary the agitation speed and unable to control the new pump.</p> <p>An update kit was supplied to improve the agitation system and, and to add a new optical encoder and pump to apply treatment to low rate products. The console was also replaced.</p>	February 5, 1997	Section 8

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## GENERAL INFORMATION

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**SECTION 1 - GENERAL INFORMATION**

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**IMPORTANT INFORMATION**

All repair and maintenance works listed in this manual must be carried out only by qualified dealership personnel, strictly complying with the instructions given; and using, whenever required, the special tools.

Anyone who carries out the above operations without complying with the procedures shall be responsible for the subsequent damages.

The manufacturer and all the organizations of its distribution chain, including - without limitation - national, regional, or local dealers, reject any responsibility for damages due to the anomalous behavior of parts and/or components not approved by the manufacturer himself, including those used for the servicing or repair of the product manufactures or marketed by the manufacturer.

In any case, no warranty is given or attributed on the product manufactured or marketed by the manufacturer in case of damages due to an anomalous behavior of parts and/or components not approved by the manufacturer.

The information in this manual is up-to-date at the date of the publication. It is the policy of the manufacturer for continuous improvement. Some information could not be updated due to modifications of a technical or commercial type, as well as to suit the law regulations of different countries.

In case of disagreement, refer to your Sales and Service Networks.

## SECTION 1 - GENERAL INFORMATION

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### SERVICE TOOLS

There are several tools available through the parts department, for ease of diagnosis and servicing the air carts

14531	Kit, Connector Service 40/50 Series Air Carts
13345V2	Kit, Connector Service 20/30/50 Series Air Carts
8393	Sensor tester for 5 & 12volt sensors.
14420K	Jumper wires for diagnosing Air Cart electrical problems, as well as adaptor wires for using the 8393 sensor tester on 40/50 series Air Cart sensors.
13889V2	Signal Simulator, to simulate ground speed, meter rpm, pressure, and flow.
13776	Bin sensor aiming tool
8396V1	Benchtop AC power supply to power Flexi-Coil consoles.
8476V1	DC adaptor harness to power Flexi-Coil consoles
86991297	Kit, Serial Flash Programmer. Used to update software in Flexi-Coil products.
CC-009KV1	Set of cables for updating all Flexi-Coil products in the field.(where the power to the modules is supplied by the tractor)
CC-010KV1	Set of cables for updating all Flexi-Coil products on a desktop.(provides an AC power supply and a DC adaptor cable)
GL-117A	Meter box seal tool. Used to change meter box seals.
GM-304K	Tank pull down tool. Used only on 50 Series Air carts when replacing tanks or seals.
86991930	Use to repair subhopper leaks on the 50 Series Air carts, without having to remove the tanks.

**SAFETY-ALERT SYMBOL**



This symbol is used to denote possible danger and care should be taken to prevent bodily injury.  
This symbol means **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**

**THIS SYMBOL APPEARS WITH TEXT READING “DANGER!”, “CAUTION!”, OR “WARNING!” THESE WORDS INDICATE THREE LEVELS OF POSSIBLE HAZARDS, THAT ARE DESCRIBED BELOW.**

**DANGER!**



Indicates an immediate hazardous situation which if not avoided, will result in death or serious injury. The color associated with Danger is RED.

**WARNING!**



Indicates a potentially hazardous situation that if not avoided, could result in death or serious injury. The color associated with Warning is ORANGE.

**CAUTION!**



Indicates a potentially hazardous situation which if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices. The color associated with Caution is YELLOW.

**A CAREFUL OPERATOR IS THE BEST INSURANCE AGAINST AN ACCIDENT.**

## SECTION 1 - GENERAL INFORMATION

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### GENERAL SAFETY PRACTICES

REVIEW this manual before each season of use.

NEVER allow anyone unfamiliar, untrained, or complacent to operate the implement.

USE EXTREME CARE when cleaning, filling, or adjusting the implement.

MAINTAIN YOUR AIR CART in proper working condition. Unauthorized modifications to the machine may impair function and/or safety and affect machine life.

KEEP CHILDREN AWAY from chemicals and equipment.

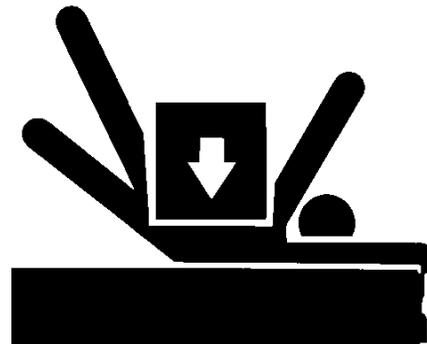
#### **CAUTION!**



Use rubber gloves, protective eye wear and protective clothing when cleaning or working with components covered with active chemical. Shut down the tractor, be sure all moving parts have stopped and all pressure in the systems is relieved before cleaning, adjusting or lubricating the equipment. Always be certain that all pressure in the hydraulic circuits is relieved before servicing or disconnecting the hydraulics from the tractor.

PARK ON LEVEL GROUND and block adequately.

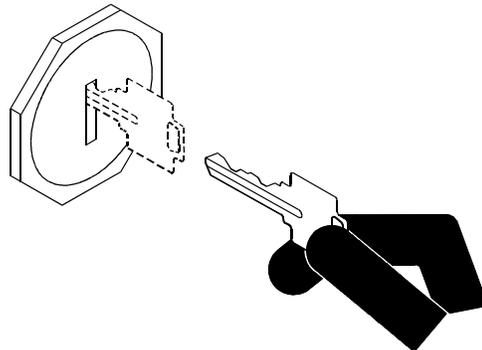
AVOID moving machines.



098001M1

DISENGAGE POWER AND SHUT DOWN the tractor engine (remove the key from the tractor ignition) and be certain that all moving parts have stopped, and all pressure in the system is relieved before cleaning, adjusting, or lubricating the equipment.

KNOW the operator's manual well.

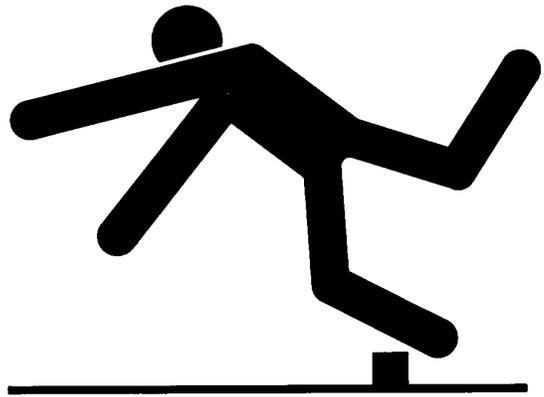


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**SECTION 1 - GENERAL INFORMATION**

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KEEP service area clean.



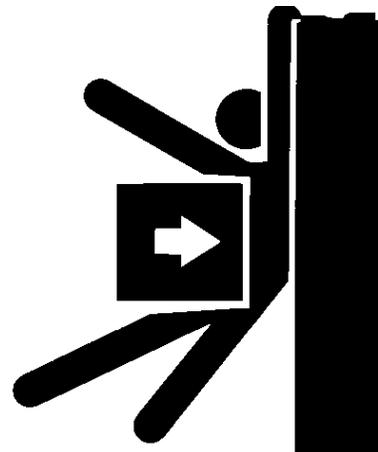
098002M1

DO NOT enter tank unless another person is present.



196149C

DO NOT enter tight areas.



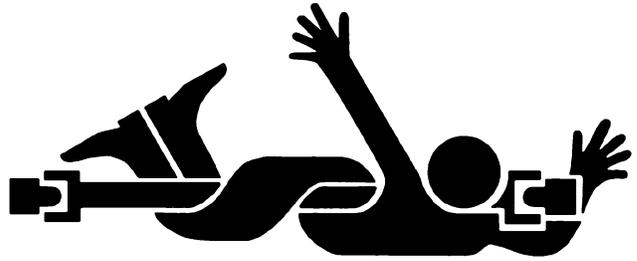
098003M1

BE CERTAIN machine is tagged out of order or work area is supervised.

**SECTION 1 - GENERAL INFORMATION**

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DO NOT work around rotating equipment. Loose clothing, rings, watchbands, etc. may get caught and cause serious injury.



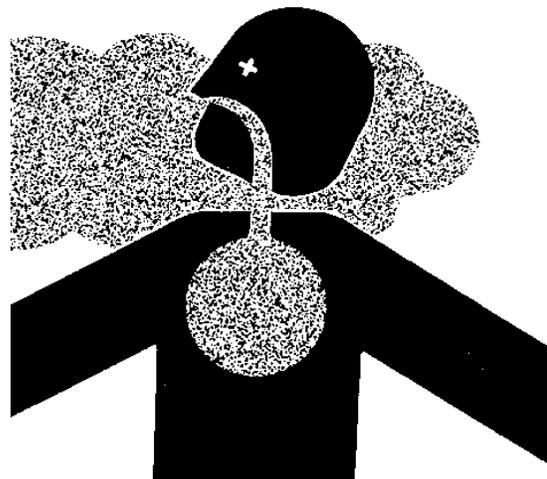
097001S

BE CERTAIN all moving parts have stopped before servicing.



098004M1

AVOID toxic vapors. Breathe clean air.



0960039S

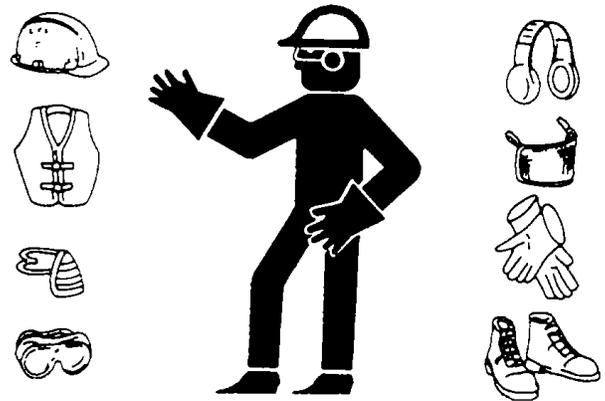
**SECTION 1 - GENERAL INFORMATION**

DO NOT permit smoking.



196150S

WEAR protective clothing.



192078S

**AIR AND AIR HOSES**

COMPRESSOR HOSES may move unexpectedly when suddenly disconnected.

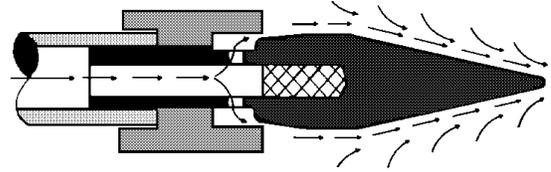


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## SECTION 1 - GENERAL INFORMATION

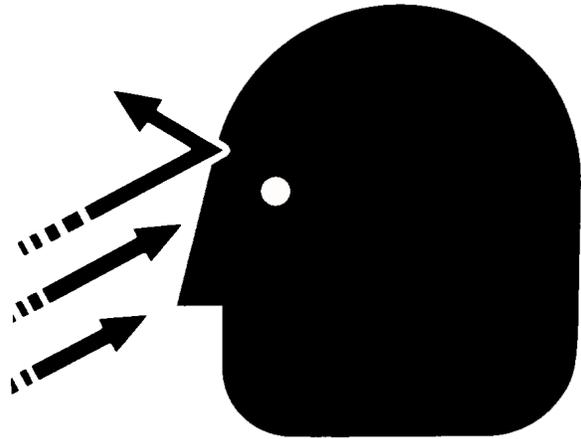
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USE PROPER air nozzles. Never use compressed air to clean off clothes or otherwise direct it toward yourself.



098006M1

AVOID getting chemicals into eyes. Use eye protection.



098007M1

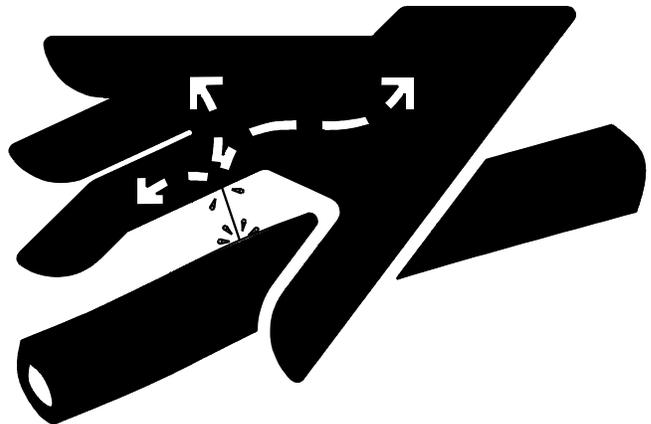
### HYDRAULICS AND HYDRAULIC LEAKS

AVOID high-pressure fluids.

ESCAPING HYDRAULIC FLUID IS A SERIOUS HAZARD. Escaping hydraulic fluid that is under pressure can penetrate the skin causing serious injury. Relieve pressure before disconnecting the hydraulic lines. Check/tighten all connections **BEFORE** applying pressure.

BEWARE excessive hydraulic pressure. Explosive structural failure can result.

BEWARE air locks in cylinders. Large cylinder displacements can occur without hydraulic oil flow.



## SECTION 1 - GENERAL INFORMATION

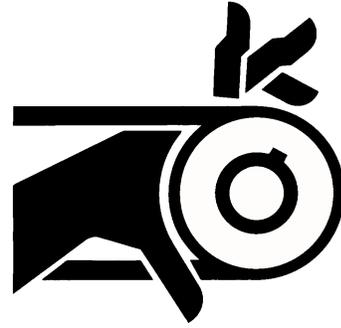
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### SHIELDS

REPAIR any damaged shields.

KEEP all shields in place.

BE EXTRA CAUTIOUS when repairing or servicing without protective shields.



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### ELECTRICAL

REMOVE the ground wire to avoid arcing contacts.

REMOVE the ground wire when welding.



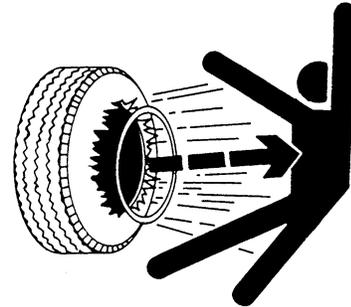
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### TIRES

USE A CAGE IF POSSIBLE when setting tires on rims.

AVOID excessive air pressure.

DO NOT OVER-INFLATE tires. NEVER lean over a tire while inflating it.



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### WARNING!



Do not remove, install or make repairs to a tire on a rim. If required, the tire and wheel rim should be removed from the machine by a qualified field tire technician with the proper equipment. If required, the field technician should take the tire and wheel rim to a tire shop where persons with special training and special safety tools are available. If the tire is not in correct position on the rim, or if too full of air, the tire bead can loosen on one side and cause air to leak at high speed and with large force. Because the air leak can thrust the tire in any direction, and with much force, you will be in danger of injury.

### SAFETY DECALS

KEEP SAFETY DECALS CLEAN. Wipe clean when necessary.

REPLACE missing or unreadable decals. New decals are available from your dealer.

1. Remove old decal and clean area where the new decal will be affixed.
2. Remove the decal backing and carefully affix the decal to the implement.
3. Using a clean piece of paper or the backing itself, work the air bubbles out from under the decal.

### TOW BEHIND 1330 PLUS

