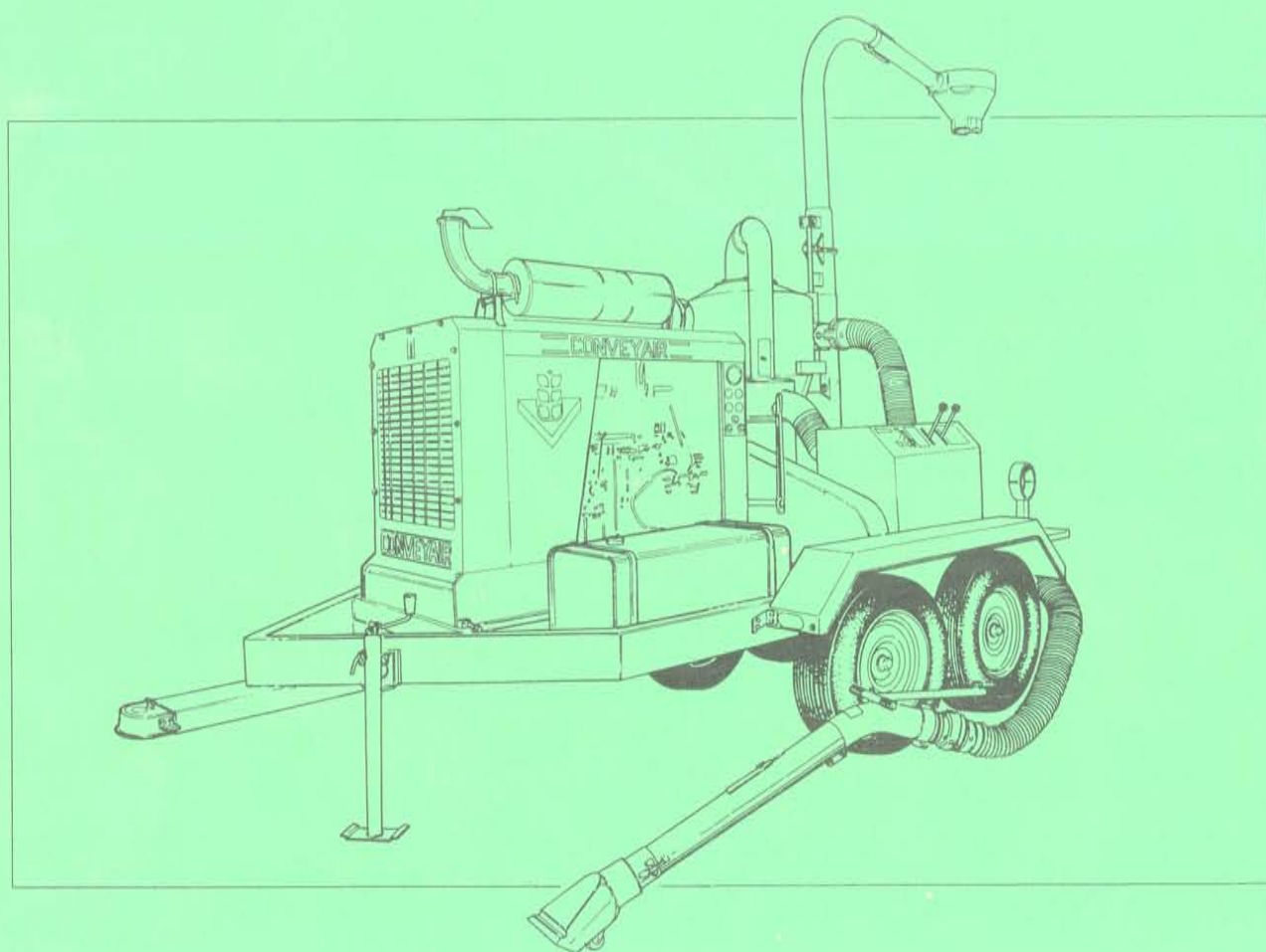




CONVEYAIRTM

G R A I N V A C

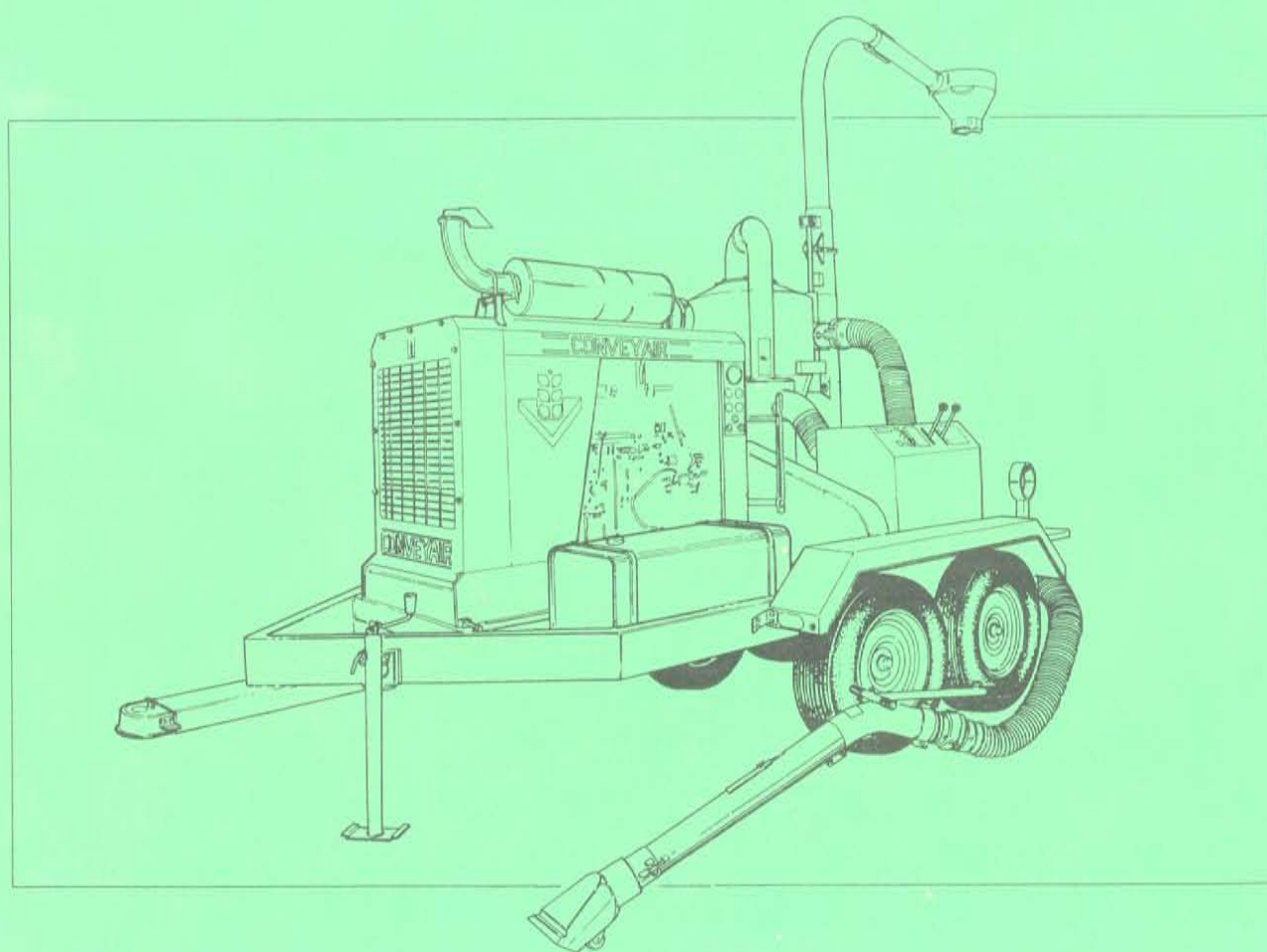


OPERATOR'S MANUAL

CONVEYAIR SD



CONVEYAIRTM
G R A I N V A C



OPERATOR'S MANUAL
CONVEYAIR SD

CONVEYAIR SD

WARRANTY REGISTRATION FORM & INSPECTION REPORT

WARRANTY REGISTRATION

This form must be filled out by the dealer and signed by both the dealer and the customer at the time of delivery.

Customer's Name _____ Dealer _____
Address _____ Address _____
City, State, Zip _____ City, State, Zip _____
CONVEYAIR MODEL # _____ DATE PURCHASED _____
CONVEYAIR SERIAL # _____
AIR PUMP SERIAL # _____ CHECK ONE:
ENGINE SERIAL # _____ COMMERCIAL _____ FARM USE _____

INSPECTION REPORT

Date _____ Inspected By _____
(PRINT NAME)

☐ BELT TENSION & ALIGNMENT	ENGINE CHECKS	SAFETY
☐ HYDRAULIC FITTINGS	☐ ENGINE OIL LEVEL	☐ ALL SAFETY PROCEDURES IN MANUAL HAVE BEEN REVIEWED WITH CUSTOMER
☐ HYDRAULIC LINES	☐ ENGINE COOLANT LEVEL	☐ ALL WARNING DECALS ARE IN PLACE, CLEAN AND LEGIBLE
AIR PUMP RESERVOIR LEVELS	☐ ENGINE GAUGE OPERATION	☐ INSTRUCT CUSTOMER TO REVIEW SAFETY AND OPERATING PRACTICES WITH ALL OPERATORS ANNUALLY
☐ FRONT ☐ REAR	☐ ENGINE CLUTCH OPERATION	
☐ ALL LIGHTS AND REFLECTORS IN PLACE		
☐ WHEEL BOLTS TIGHT		
☐ TIRE AIR PRESSURE (32 PSI)	SELF CONTAINED HYDRAULICS	
☐ ALL GREASE FITTINGS GREASED	☐ HYDRAULIC OIL LEVEL	
☐ CAM LOCK COUPLERS OPERATE FREELY	☐ HYDRAULIC CONTROL OPERATION	
☐ ALL SHIELDS IN PLACE		

I have thoroughly inspected the machine and made adjustments and corrections as needed.

Signature _____ (Dealer Inspector)

I have thoroughly instructed the buyer on the above described equipment which review included the Operator's Manual content, equipment care, adjustments, safe operation and applicable warranty policy.

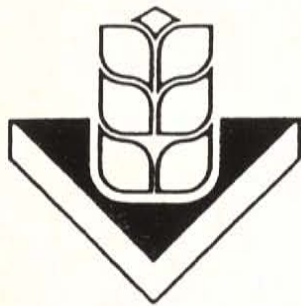
Date _____ Dealer's Rep. Signature _____

The above equipment and Operator's Manual have been received by me and I have been thoroughly instructed as to care, adjustments, safe operation and applicable warranty policy.

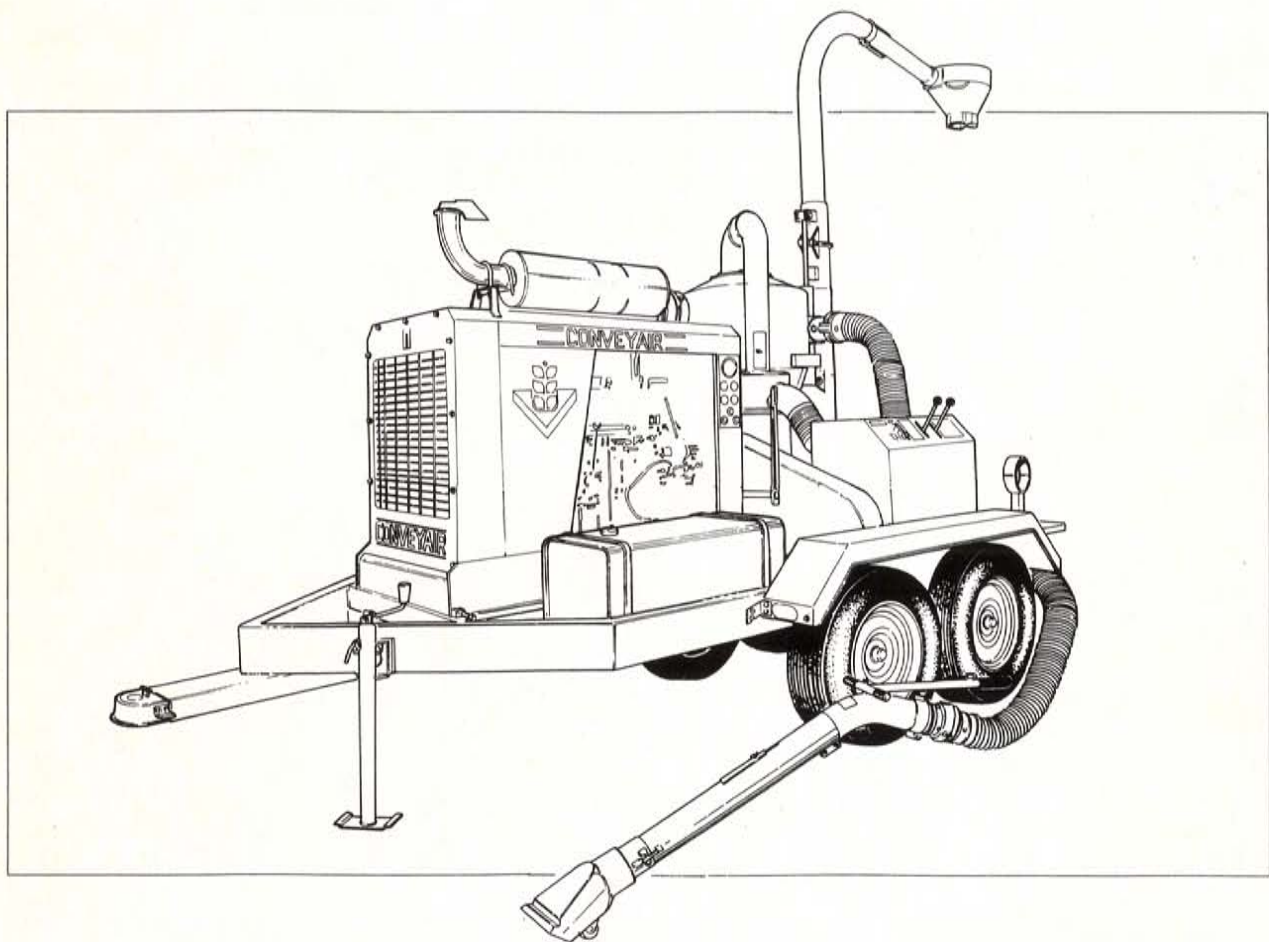
Date _____ Owner's Signature _____

WHITE	YELLOW	PINK
VANA	DEALER	CUSTOMER

CONVEYAIR SD



CONVEYAIRTM
G R A I N V A C



OPERATOR'S MANUAL

TABLE OF CONTENTS

SECTION	DESCRIPTION	PAGE
1	Introduction	1
2	Safety	2
	2.1. General Safety	3
	2.2. Operating Safety	4
	2.3. Maintenance Safety	4
	2.4. Transport Safety	5
	2.5. Safety Signs	5
	2.6. Training Sign-Off	6
3	Safety Decals	7
4	Operation	9
	4.1. To The New Operator or Owner	10
	4.2. Principles of Operation	10
	4.3. Glossary of Terms	11
	4.4. Engine Break-In	12
	4.5. Conveyair Break-In	12
	4.6. Pre-Start Inspection	13
	4.7. Pre-Start Preparation	14
	4.8. Pre-Operation Set-Up	15
	4.9. Conveyair Set-Up	16
	4.10. Operation	17
5	Applications	20
	5.1. General	20
	5.2. Long Distance Blowing	20
	5.3. Long Distance Suction	20
	5.4. Clean Up	21
	5.5. Seed Drill Clean Out	21
	5.6. Filling Bins and Temporary Storage	22
	5.7. Clean Up of Spills and Ground Stored Grain	22
	5.8. Dual Inlet	22
	5.9. Permanent Installation	23
6	Shut Down And Transport	24
	6.1. General	24
	6.2. Transport Safety	24
	6.3. Transport Preparation	25
	6.4. Controls and Instruments	26
	6.5. Conveyair Control Console	27
7	Lubrication and Services	28
	7.1. Fuels, Fluids and Lubricants	28
	7.2. Greasing	29
	7.3. Service Record	32

1.

INTRODUCTION

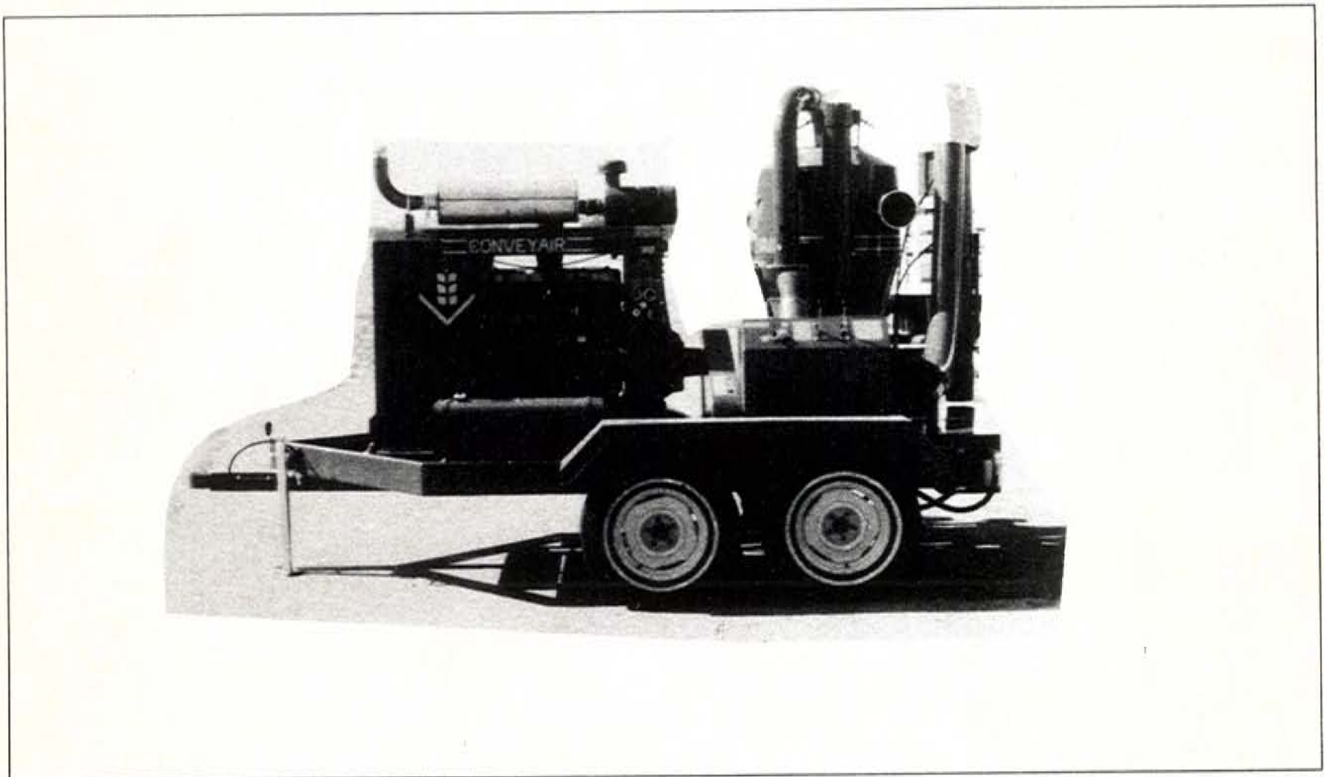
CONVEYAIR SD

Congratulations on the purchase of your new CONVEYAIR SD. We feel that you have made a wise choice to effectively move a wide variety of grain.

Use this manual as your guide. Familiarize yourself with the information contained within the manual. Follow all the operating and safety instructions and your machine will give you many years of reliable service.

The manual contains instructions on Safety, Set Up, Operations, Adjustments and Maintenance. Use the Table of Contents to guide you to specific areas.

Call your local Dealer if you need any assistance or further information.



Right hand (R/H) and left hand (L/H) designations are determined when standing at the rear of the machine looking over the machine at the engine.

Safety

It is your responsibility to read and understand all the safety instructions in this manual before operating this machine. The manual will take you step by step through your working day and alert you to good safety practices while operating the machine. Remember YOU are the key to safety. Good safety practices protect not only you but also the people around you. Make these practices a working part of your safety program. Be certain that EVERYONE operating this machine is familiar with the procedures recommended and follows safety precautions. Remember, most accidents can be prevented. Do not risk injury or death.

Everyone must be given operating instructions before starting to operate the CONVEYAIR and at least annually thereafter per OSHA regulation 1928.57.

1. Do not modify the CONVEYAIR grain vac. Unauthorized modification may impair the function and/or safety and affect machine life and warranty.
2. The most important safety device on this machine is a safe operator. It is the operator's responsibility to read and understand all safety and operating instructions in the manual and to follow them. Accidents can be avoided.

2.1. General safety

1. Read and understand the Operator's Manual and all Safety signs before operating the CONVEYAIR SD.



2. Have a first-aid kit and fire extinguisher available for use should the need arise and know how to use them.



3. Never operate the unit inside a closed building.
4. Chock wheels and block hitch.
5. Install and properly secure all shields and guards before operating.
6. Clear the area of people, especially small children, and foreign objects from the area before starting and operating.
7. Wear suitable ear protection for prolonged exposure to excessive noise.
8. Review safety related items with all operators annually.

2.4. Transport safety

1. Clean the SMV, other reflectors and lights before transporting.
2. Always connect electrical wiring.
3. Never transport the machine on public roads during times of limited visibility without taking special precautions.
4. Never tow at speeds exceeding 80 kilometers (50 miles) per hour. Check with local authorities on regulations covering towed equipment on public highways.
5. Make sure towing vehicle is equipped with electric brake package to provide stability during braking and maneuvering during transport.
6. Securely fasten ball and socket connection and lock with mechanical latching device before transporting.
7. Always use a safety chain when transporting.

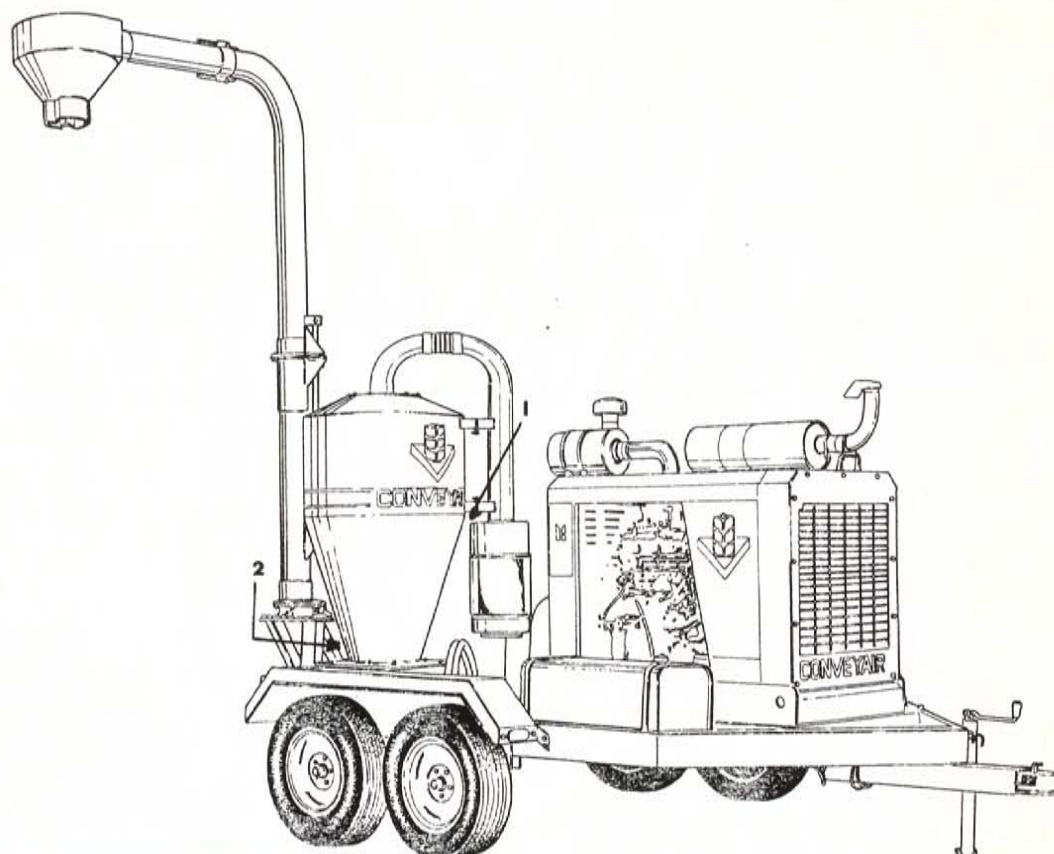
2.5. Safety signs

1. Keep safety decals clean and legible at all times.
2. Replace safety decals that are missing or become illegible.
3. If original parts on which a safety decal was installed are replaced, be sure the repair part also has the current safety decal installed.
4. Safety decals are available from your Dealer Parts Department.
5. To install safety decals:
 - Be sure the installation area is clean and dry.
 - Decide on the exact position before you remove the backing paper.
 - Remove the smaller portion of the split backing paper.
 - Place the decal in position and slowly peel back the remaining paper, smoothing the decal as it is applied.
 - Small air pockets can be smoothed out or pricked with a pin.

3. SAFETY DECALS

The types of decals and locations on the equipment are shown in the illustration below. Good safety requires that you familiarize yourself with the various Safety Decals, the type of warning and the area, or particular function related to that area, that requires your SAFETY AWARENESS.

- Think SAFETY! Work SAFELY!



1.

	CAUTION
ROTATING PARTS HAZARD	
Disengage clutch, stop hydraulic power and wait for all moving parts to stop before opening access door.	
FAILURE TO FOLLOW THESE INSTRUCTION COULD RESULT IN SERIOUS INJURY OR DEATH	

2.

	CAUTION
ROTATING PARTS HAZARD	
Disengage clutch, stop hydraulic power and wait for all moving parts to stop before removing elbow for airlock discharge.	
FAILURE TO FOLLOW THESE INSTRUCTION COULD RESULT IN SERIOUS INJURY OR DEATH	

REMEMBER - If Safety Decals have been damaged, removed, become illegible or parts replaced without decals, new decals must be applied. New decals are available from your authorized dealer.

4. OPERATION



OPERATING SAFETY

- Read and understand the Operator's Manual and all Safety signs before starting and operating.
- Install and properly secure all shields and guards before operating.
- Clear the area of people, especially small children, and foreign objects from the area before starting and operating.
- Be sure the PTO clutch and hydraulics are in neutral before starting.
- Chock wheels and block hitch before operating.
- Put PTO clutch in neutral, turn-off engine and wait for all moving parts to stop before servicing, adjusting, lubricating or unplugging machine.
- Always be aware of the location of overhead wires and obstacles before moving or putting machine into operating position. Electrocution can occur without direct contact.
- Never operate machine in a closed building.
- Wear suitable ear protection for prolonged exposure to excessive noise.
- Keep hands, feet, clothing and hair away from moving parts and inlet nozzle.

4.3. Glossary of terms

Discharge Cyclone

Discharge Boom

Boom Cylinder

Boom Hinge

Receiver Tank

Swivel Lock

Air Lock

Filter

Fuel Tank

Engine

Frame

Hydraulic Pump

PTO Clutch Control

Auxiliary Air Slide

Control Console

Access Cover

Hydraulic Tank

Instrument Panel

Clean Up Accessories

Hitch Jack

Belt Drive

Clean Up Flair

Air Slide

4.6. Pre-start inspection

Do the following before starting engine each day:

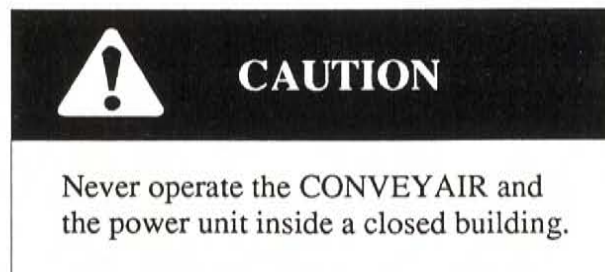
1. Check engine, hydraulic tank and blower reservoir oil levels.
2. Check engine coolant level.
3. Check radiator and grill to ensure that neither are plugged with dirt and chaff.
4. Check fan, hydraulic pump, alternator and air pump belt tension.
5. Make sure all shields are in place and securely fastened.
6. Check fuel level. Add if required.
7. Walk around machine and inspect for leaking fittings, seals and loose hardware. Repair or tighten as required.
8. Service and lubricate the unit per the schedule defined in the “Maintenance” section.

4.8. Pre-operation set-up

You can now move the machine to the job site. But before moving it into position and setting it up, take the following precautions:

1. Inspect the working area for:
 - Debris and foreign objects and
 - Overhead electrical wires and obstacles.
2. Make sure the working area is reasonably level and as dry as possible.
3. Make sure there is adequate room and clearance for the CONVEYAIR SD and grain receiving unit.

Use good judgement in selecting the working site and in positioning of the equipment to ensure safe, efficient operation. The machine is now ready to be positioned for operation.



The following set-up must be done prior to starting the machine:

1. Position the CONVEYAIR so that the intake remains as straight and short as possible to give maximum capacity.
2. Locate the CONVEYAIR in such away that the grain receiving unit can be easily and conveniently positioned.
3. The unit can be operated with the towing vehicle attached. If unhooking, remove hitch jack from its stowed position and secure in position to support the hitch before unhooking the ball and socket.
4. If the towing unit is unhooked be sure to chock the wheels and block the hitch before operating the CONVEYAIR SD.

4.10. Operation

Your machine has now been positioned correctly so that there is sufficient space for the CONVEYAIR SD and for the trucks, trailers or other receiving equipment. There also should be sufficient space to allow the intake tube to be as straight and short as possible to give maximum capacity.

The following steps should be followed when starting the machine:

1. Clear the area of all bystanders and remove foreign objects from the machine and working area.
2. Lubricate and service the machine per the direction given in the "Maintenance" section.
3. Place the PTO clutch and all hydraulic controls in neutral.
4. Push throttle in to low idle position.
5. Turn key in clockwise direction to crank the engine. Release the key when engine starts.
6. Move throttle to keep the engine running but avoid excessive RPM during warm-up.

Note

Refer to engine manual for starting in cold weather.

8. Keep the engine speed at idle RPM and place the airlock control in the forward position to turn the airlock.

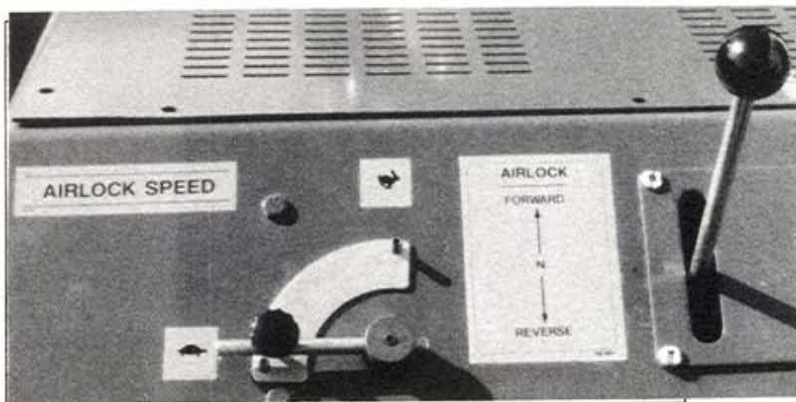


Fig. 6 AIRLOCK CONTROL

The speed of the airlock ranges from 0 to 75 RPM and its setting is dependent upon the material being conveyed. The general rule is that the larger and heavier the kernel, the faster the airlock should turn. The above guidelines apply specifically to truck loading. Airlock speed is also affected by suction and discharge lengths, the moisture content and density of the material. The operator may have to experiment a little to determine the optimum setting.

14. Open the airslide on the intake nozzle approximately 2 inches.
Insert the nozzle into the grain.
15. To achieve maximum capacity, slowly close the airslide on the intake nozzle until the machine starts to surge. Slowly open the airslide until the surging stops.



Fig. 8 SIGHT GLASS

16. It may be necessary to change the speed of the airlock slightly to maintain the proper level of grain in the receiving tank. The proper level is the sight glass 1/2 - 2/3 covered (Fig. 8).
17. When it is necessary to change the position of the discharge cyclone, release the latch on the boom swivel and turn the swivel using the handle provided. The boom can be rotated for convenient positioning of the discharge cyclone.

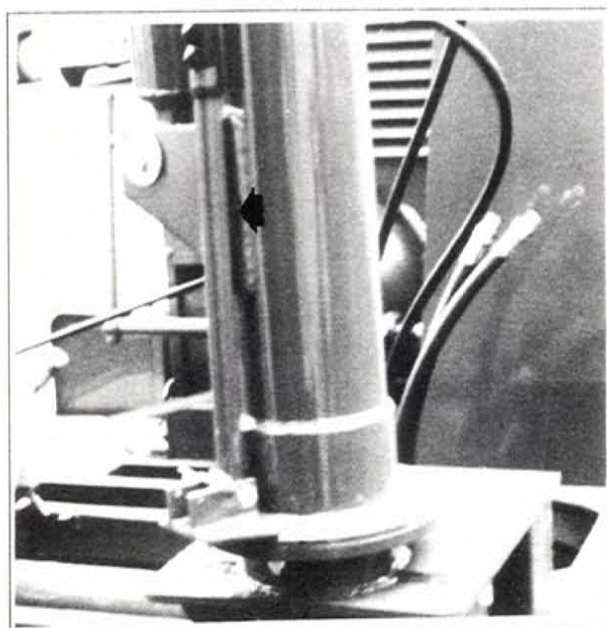


Fig. 9 BOOM LATCH

The unit has a latch to position the discharge boom and can be secured in 15° increments.

5.4. Clean up

When using the machine to clean out grain storage, use a combination of steel flex line and poly in place of the hose straight piping. It will give the needed flexibility to easily get into corners and around obstructions for clean up. It is not recommended to use steel flex or poly hose for large jobs because flow is restricted due to the rougher tube walls and bends associated with flex line. Capacity can be lowered by 20% to 40% with flex line as compared to straight piping.

IMPORTANT

Poly hose is meant for clean up only. Avoid storing the poly hose in direct sunlight. When using the poly hose ensure that there are no sharp obstructions that could cut or puncture the poly hose. Do not dent or stretch steel flex line excessively or attempt to bend it more than 90 degrees.

5.5. Seed drill clean out

When using the seed drill clean out kit, operate the engine at idle only to reduce suction air flow. The receiver tank can be used as a holding tank by stopping the airlock until the seed can be discharged into a truck or storage.

IMPORTANT

Use only proper seed drill clean out kit for this application

5.9. Permanent installation

The Conveyair SD can be used as a stand alone machine or used as a part of a permanent installation. The following illustrations show the recommended installations.

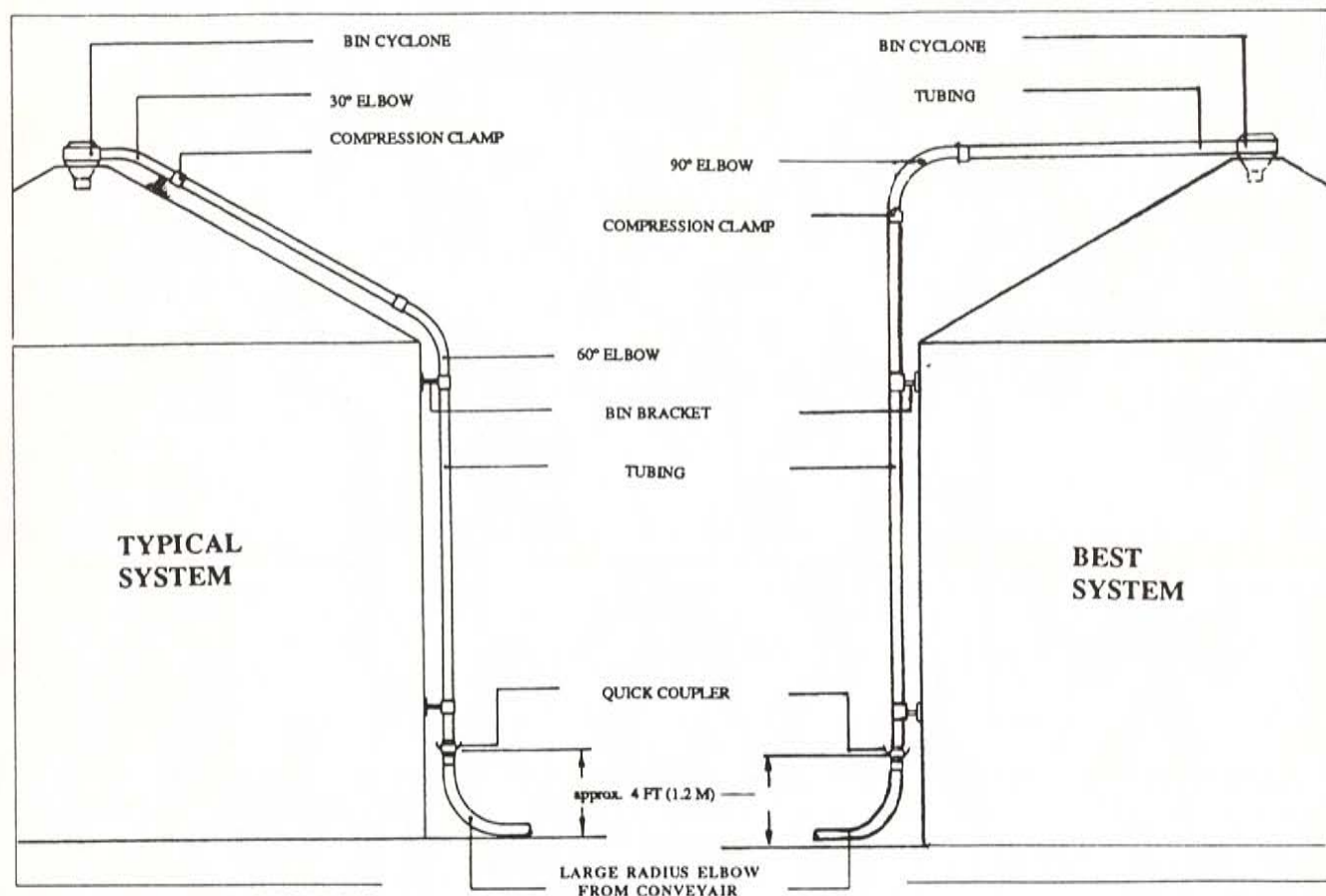


Fig. 13 BIN FILL SYSTEMS

To obtain maximum capacity from your machine, use the minimum number of elbows.

When installing tubing to multiple bins, follow the suggested multiple bin hook-up.

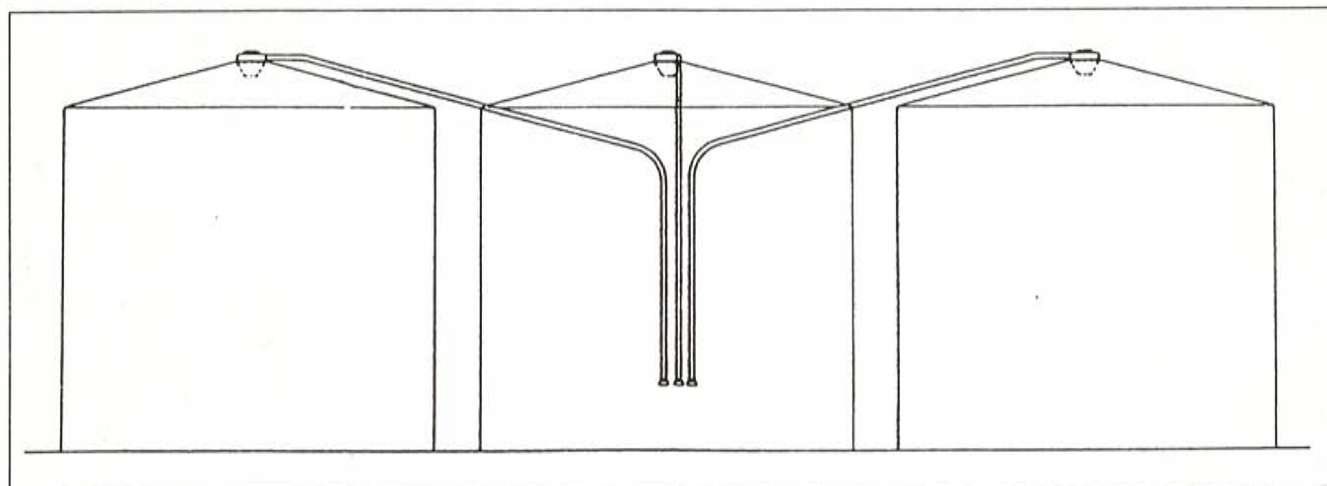


Fig. 14 MULTIPLE BIN FILL SYSTEM

4. Clean the SMV, reflectors and lights before transporting.
5. Never tow at speeds exceeding 80 kilometers (50 miles) per hour.
6. Never transport the machine on a public road during times of limited visibility without taking special precautions.
7. Stay away from overhead electrical wires and obstructions when moving the machine.

6.3. Transport preparation

The CONVEYAIR SD can be towed on public roads behind towing vehicles providing the following precautions are taken:

1. Make sure all components and attachments are retracted and securely stowed before preparing to transport.
2. The towing vehicle must be equipped with a 2 5/16" ball (specified to SAE Standards) and secured with a lock nut, a 6 pin connector to supply electrical power to trailing unit and an electric brake controller in the cab.
3. Place the socket over the ball, and lock in position using the mechanical latch provided.
4. Retract and stow the hitch jack.
5. Attach and secure safety chain.
6. Connect the trailer electrical harness to the towing vehicle and check the function of all lighting systems and the electric brakes.
7. Remove the chokes from the wheels.
8. The unit is now ready for transporting.

Inexperienced and new drivers should use extra care until they get the feeling for the trailed unit. Test the brakes in an open area at slow speeds to become familiar with the response. Always leave plenty of space for braking and maneuvering when transporting. Then proceed to the new destination.

PTO Clutch

Handle movement to the right disengages the PTO clutch. Clutch lever movement to the left engages the main clutch. Be sure to push lever over center to fully engage the clutch.

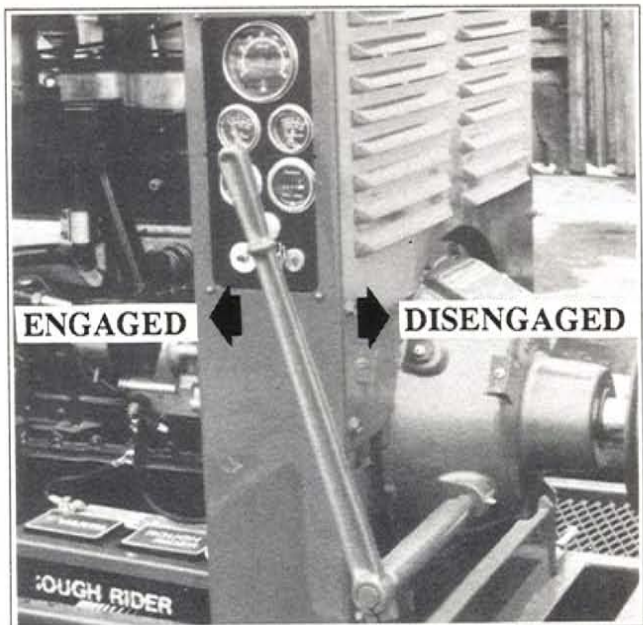


Fig. 17 PTO CLUTCH CONTROL

6.5. Conveyair control console

Airlock Speed - Controls the RPM of the airlock. Move to the right (clockwise) to increase the speed and left to slow down.

Airlock - Move lever to the forward position to turn on the airlock. Move to the reverse position to change the direction of rotation of the airlock to clear obstructions.

Boom Cylinder - Move lever slowly to the up position to raise the discharge boom and down to lower the boom.

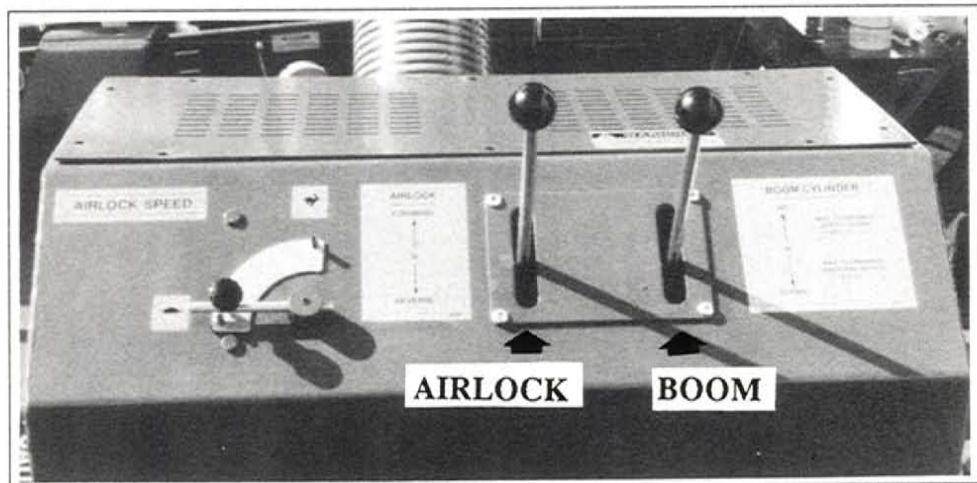


Fig. 18 CONTROL CONSOLE

IMPORTANT

Do not operate the airlock direction control in the reverse position as there is no hydraulic relief valve protection in this position.

IMPORTANT

Move the boom cylinder control slowly to prevent sudden or excessively fast boom movement.

BLOWER OIL RESERVOIR

Use 15 W40 or 10 W30 SAE Class SF or CC engine oil for normal ambient temperatures.

NOTE

Do not mix oil types or viscosities.

GREASE

Use an SAE multi-purpose high temperature grease with extreme pressure (EP) performance and containing at least 1.5% molybdenum disulfide. Also acceptable is an SAE multi-purpose lithium base grease.

STORING LUBRICANTS

Your machine can operate at top efficiency only if clean lubricants are used. Use clean containers to handle all lubricants. Store them in an area protected from dust, moisture and other contaminants.



LUBRICATION SAFETY

1. Always disengage PTO clutch and hydraulic power, shut off engine and wait for all moving parts to stop before lubricating, servicing, adjusting, or unplugging.
2. Reinstall all shields after servicing.
3. Relieve hydraulic pressure and disconnect hoses before working on hydraulic system.

7.2. Greasing

See "Recommended lubricants and capacities" in this section for recommended grease. Use the Maintenance Checklist provided to keep a record of scheduled maintenance.

1. Wipe grease fitting with a clean cloth before greasing, to avoid injecting dirt and grit.
2. Inject grease through fitting with grease gun until grease overflows fitting.
3. Leave excess grease on fitting to keep out dirt.
4. Replace any loose or broken fittings immediately.
5. If fitting will not take grease, remove and clean thoroughly. Also clean lubricant passageway. Replace fitting if necessary.

100 HOURS

1. Change air pump reservoir oil.
2. Grease PTO clutch control lever pivots at 2 locations (1 shot). See Fig. 22
3. Grease suspension system at 2 locations (1 shot). See Fig. 23
4. Change engine crankcase oil and filter.
5. Change hydraulic reservoir oil and filter.

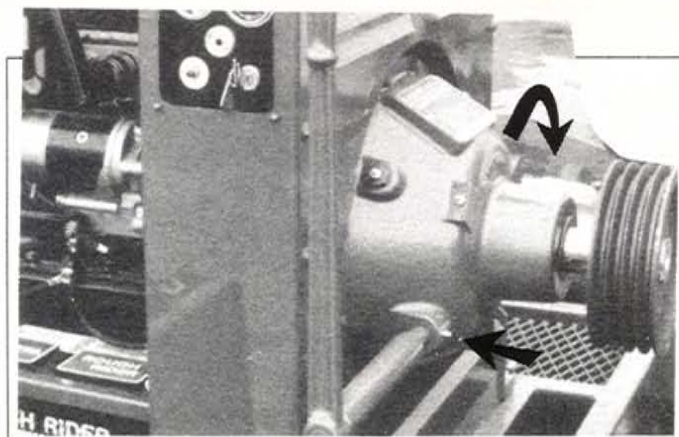


Fig. 22 CLUTCH LEVER PIVOTS

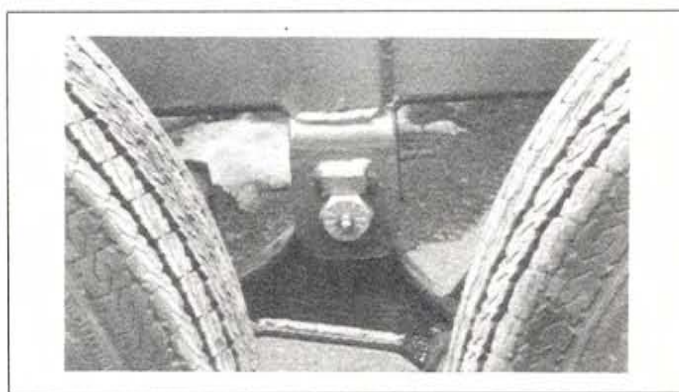


Fig. 23 SUSPENSION SYSTEMS

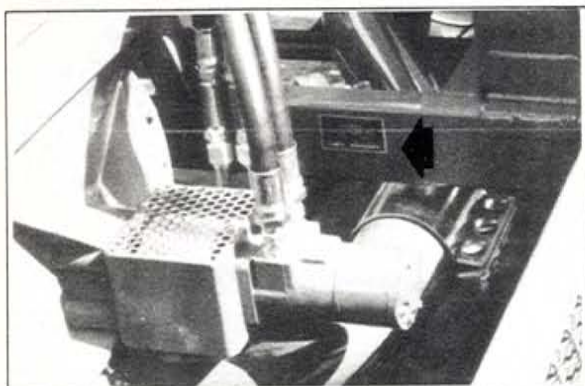
500 HOURS OR ANNUALLY

1. Repack wheel bearings.
2. Replace engine air filter.

SECTION	DESCRIPTION	PAGE
8	Maintenance	33
8.1.	Airlock Adjustment	34
8.2.	V-belt Adjustment	35
8.3.	Engine Air Filter	36
8.4.	Air Pump Oil Reservoir	36
8.5.	Air Pump Oil Reservoir Breather	37
8.6.	Engine Fan Belt	38
8.7.	Hydraulic Pump Belt	38
8.8.	Hydraulic Oil Reservoir	39
8.9.	Wheels, Brakes and Axles	40
8.10	Machine Filter	40
9	Accessories	41
10	Trouble Shooting	42
11	Specifications and Capacities	45
11.1	Mechanical Systems	45
11.2	Capacities	45
11.3	Hydraulic System Schematic	46
11.4	Wiring Schematic	46
12	Index	47

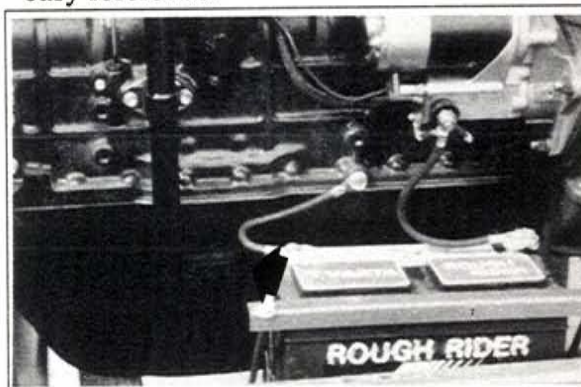
SERIAL NUMBERS

Always give your dealer the Model and Serial Number of the machine when ordering parts or requesting service information.

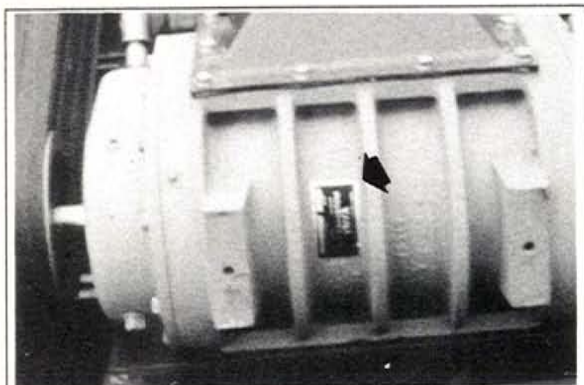


MACHINE SERIAL NO.

The Serial Number Plate is located where indicated. Please mark the Model and Serial Numbers in the space provided for easy reference.



ENGINE SERIAL NO.



BLOWER SERIAL NUMBER

Machine Serial No. _____

Engine Serial No. _____

Blower Serial No. _____

Date Purchased _____ 19____

Dealer _____

8. MAINTENANCE

For maximum machine efficiency and capacity, the clearance between the airlock tips and the inside of the airlock shell must be maintained within specifications. To check this clearance, proceed as follows:

1. Disengage PTO clutch, place airlock control in neutral and shut-off engine. Wait for all moving parts to stop.
2. Relieve the pressure in the hydraulic lines.
3. Remove hydraulic lines from the airlock drive motor (Fig. 24) to allow rotation of the airlock or place airlock control lever in forward position.

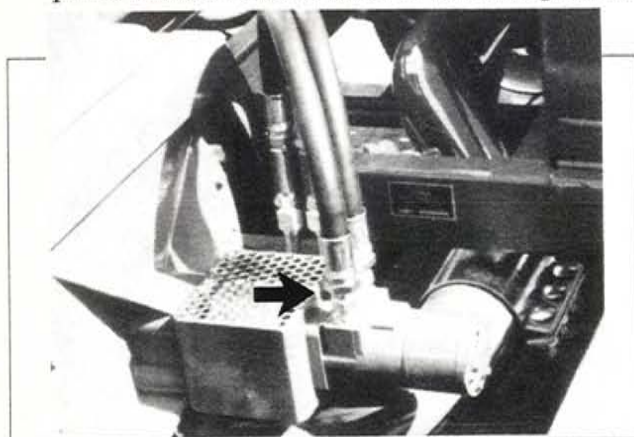


Fig. 24 AIRLOCK DRIVE MOTOR



CAUTION

High-pressure fluids can penetrate the skin and cause infection and toxic reaction.

4. Open the inspection door on the receiver tank. Use a feeler gauge to check the clearance between the tips and the shell.

IMPORTANT

For best performance the clearance is set at the factory at .006 to .007" (.2 mm). The clearance should not exceed 0.015" (.38 mm). If more, it must be adjusted.

8.2. V-belt adjustment

The V-belts on the input drive should always be adjusted to have approximately 1" deflection in the center. If the belt is too loose, it will slip causing heat to build up and loose power. If it is too tight, it will overload the bearings leading to premature belt and bearing failures.

To adjust the belt tension, proceed as follows:

1. Disengage PTO clutch and place airlock hydraulic control in neutral and shut-off engine.
2. Unlatch belt shield cover and open cover.
3. Loosen jam nuts on adjuster bolts and loosen the engine frame hold down bolts.
4. Use the adjusting bolts to move the engine to give proper tension to the belts and also to properly align the pulleys with each other.
5. Place a straight edge across the faces of the two pulleys. Maximum misalignment allowable is 2 mm (1/16") on any of the pulley edges. Adjust as required.
6. Be sure the belts are correctly tensioned.
7. Tighten the engine frame mount bolts and the jam nuts.
8. Close and latch the belt cover.



Fig. 28 ENGINE BOLTS

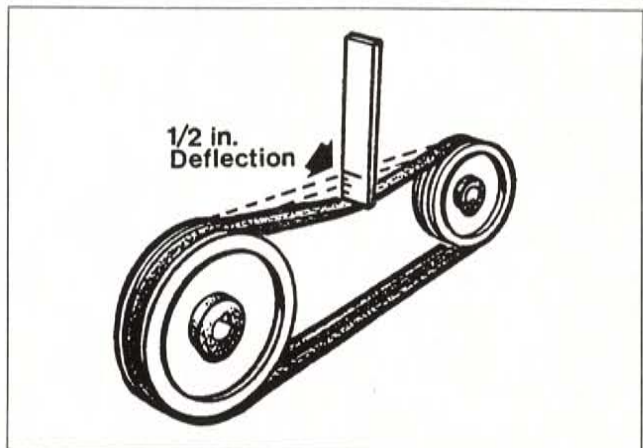


Fig. 29 BELT TENSION

IMPORTANT

Be sure belts are tensioned properly and pulleys aligned. Do not overtighten belts.



CAUTION

Always close and latch belt cover before operating.

1. To change oil, remove the fill plugs and vents (see figure. 31).
2. Remove the drain plugs on the bottom of each reservoir. A gallon container will be large enough to hold the oil.
3. Wait 10 minutes for the reservoir to drain completely. Then reinstall the drain plugs and tighten them.
4. Add oil through fill pipes. See "Lubricants" section for oil specs.
5. To check the oil level, of the air pump on CONVEYAIR, check the sight glass on the front and rear reservoir.
6. The oil level must be maintained at the middle of the sight glass. Low oil level will mean there is insufficient oil for lubrication. Too much oil will lead to churning and overheating.

IMPORTANT

Do not fill to more than 1/2 sight glass.
Do not overfill.

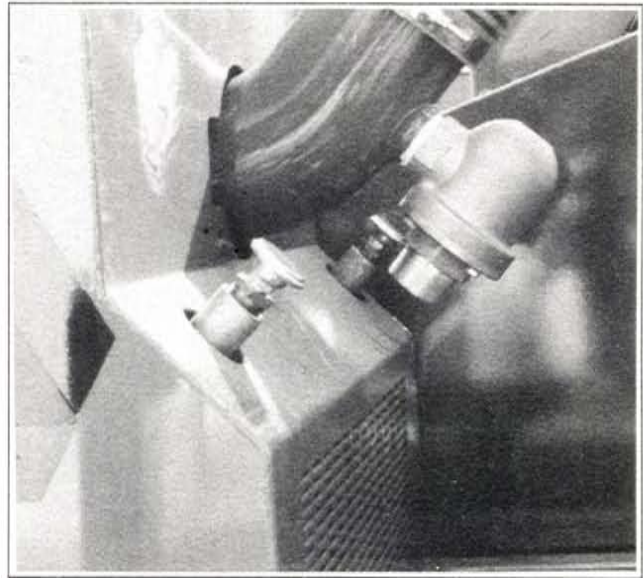


Fig. 31 RESERVOIR BREATHERS

7. Reinstall breather caps and console cover.

8.5. Air pump oil reservoir breather

Both oil reservoirs have breathers to allow for expansion and contraction as the blower heats up and cools off. It is necessary that these breathers function properly to prevent seal leaking.

1. To clean, remove breather and wash with a solvent to remove the dust. (See figure 31).
2. Dry using compressed air.
3. Reinstall and tighten. Reinstall console cover and secure.
4. If the breather is heavily caked with dust, let soak in solvent for 1 hour before cleaning. Proceed as normal.

4. Loosen the adjuster bolt.
5. Move the pump upwards over the pivot bolt until the proper belt tension is achieved. Retighten the bolts.
6. The same procedure is followed to change the belt.
7. Reinstall the fan guard and secure.

8.8. Hydraulic oil reservoir

The CONVEYAIR SD has a self-contained hydraulic system to handle all hydraulic requirements. To insure proper operation, the fluid level should be maintained at its recommended level and the oil and filter changed at the suggested times. To service proceed as follows:

1. To check the oil level, look at the sight glass on the end of the reservoir next to the filter. The recommended level is when the oil is at the middle of the sight glass. (See figure 34)

NOTE

Check with machine level and oil cool.

2. To change the oil, remove the drain plug on the bottom of the tank. Use a 10 gallon pan to collect the oil. Let drain for 10 minutes.
3. Reinstall the drain plug and tighten.
4. Add oil through the filler cap opening.



Fig. 34 HYDRAULIC RESERVOIR

NOTE

Do not overfill. Do not mix oil types or viscosities.

9. ACCESSORIES

Recommended Accessory Package

CONVEYAIR SD only

- 1 - 5" Cleanup Nozzle (see Figure 38)
- 1 - 5" x 14' Poly Hose c/w couplers
- 2 - 6" x 10' Steel Flex Hose c/w couplers
- 1 - 6" Full Bin Nozzle



Fig. 38 ACCESSORY PACKAGE

PROBLEM	CAUSE	SOLUTION
Pulsation	Insufficient air at intake.	Open slide until grain flow becomes even.
	Improper airlock speed.	Adjust airlock speed until grain is at level of the inspection door (see section 4.9, page 18).
	Engine running too slow.	Increase engine to full throttle.
	Belts are slipping.	Tighten belts. (see page 35)
	Excessive airlock tip clearance.	Adjust airlock tips.
	Airlock turning too fast.	Adjust airlock speed until grain is at proper level of inspection door.
	Airlock turning too slow.	Adjust airlock speed until grain is at proper level of inspection door.
	Obstruction in suction line.	Shut down machine and clear obstruction.
Filter plugs up.	Airlock turning too fast.	Decrease airlock speed, until grain is at the level of the inspection door. (see page 18)
	Airlock turning too slow.	Increase airlock speed, until grain is at the level of the inspection door. (see page 18)
	Airlock not turning at all.	Shift airlock control from FORWARD to REVERSE and back to FORWARD. If the obstruction does not clear up, shut off engine, open up inspection door and remove the cause of obstruction.
Airlock not turning fast enough.	Hydraulic pump belt slipping.	Adjust belt. (see page 38)
	Flow control valve for airlock speed set too low.	Reset flow control to increase airlock speed.
	Faulty hydraulics.	Use different control setting.
	Hydraulic filter plugged.	Replace filter element.
	Hydraulic oil low.	Fill to proper level. (see page 39)

11. SPECIFICATIONS AND CAPACITIES

11.1 Mechanical systems

LENGTH: 4.20 m (13 ft. 9 in.)

WIDTH: 2.41 m (7 ft. 11 in.)

HEIGHT (Transport): 2.48 m (8 ft. 2 in.)

MAXIMUM CLEARANCE: Under cyclone (standard) 3.82 m (12 ft. 5 in.)

MAXIMUM CLEARANCE: Under cyclone (optional) 4.3 m (14 ft.)

WEIGHT: 2491 kg (5480 lbs.)

TIRE PRESSURE: (32 PSI)

RATED ENGINE SPEED: 2800 RPM

ENGINE HORSEPOWER: (150 HP.)

11.2 CAPACITIES

ENGINE COOLANT: 36 L (10 U.S. gal)

ENGINE OIL: 5.3 L (6 U.S. quarts)

ENGINE FUEL TANK: 180 L (48 U.S. gal.)

HYDRAULIC SYSTEM: 65 L (17 U.S. gal.)

12. INDEX

A

Accessories 41

Airlock

Controls 17
Speed Setting 18

Applications

Bins and Temporary Storage 22
Clean Up 21
Dual Inlet 22
Ground Grain 22
Long Distance Blowing 20
Long Distance Suction 20
Permanent Installations 23
Seed Drill Clean Out 21

B

Break-In

Conveyair SD 12
Engine 12

C

Control Console 27

Controls and Instrumentation 26, 27

F

Fuel, Fluids and Lubricants 28, 29

G

Glossary of Terms 11

Greasing 29, 30, 31

I

Introduction 1

M

Maintenance

Air Cleaner 36
Airlock 33, 34

Drive Belt 35
Fan Belt 38
Hydraulic Pump Belt 38
Machine Air Filter 40
Oil Reservoir (Air Pump) 36, 37
Oil Reservoir (Hydraulic System) .. 39, 40
Wheels, Brakes and Axles 40

O

Operation 9, 17, 18, 19

P

Pre-Start Inspection 13

Principles of Operation 10

S

Safety 2, 3, 4, 5

Safety Decals 7, 8

Serial Number Locations ii

Service Record 32

Set-Up

Conveyair SD 16
Pre-Operation 15
Pre-Start 14

Shut Down 24

Specifications 45

T

Table of Contents i

Training Sign-Off 6

Transport

Preparation 25

Trouble Shooting 42, 43, 44

VANA INDUSTRIES LTD.
WINNIPEG, MANITOBA, CANADA

ISSUE DATE: AUGUST 1988

PART NUMBER 90.002



VANA INDUSTRIES LTD.
WINNIPEG, MANITOBA, CANADA