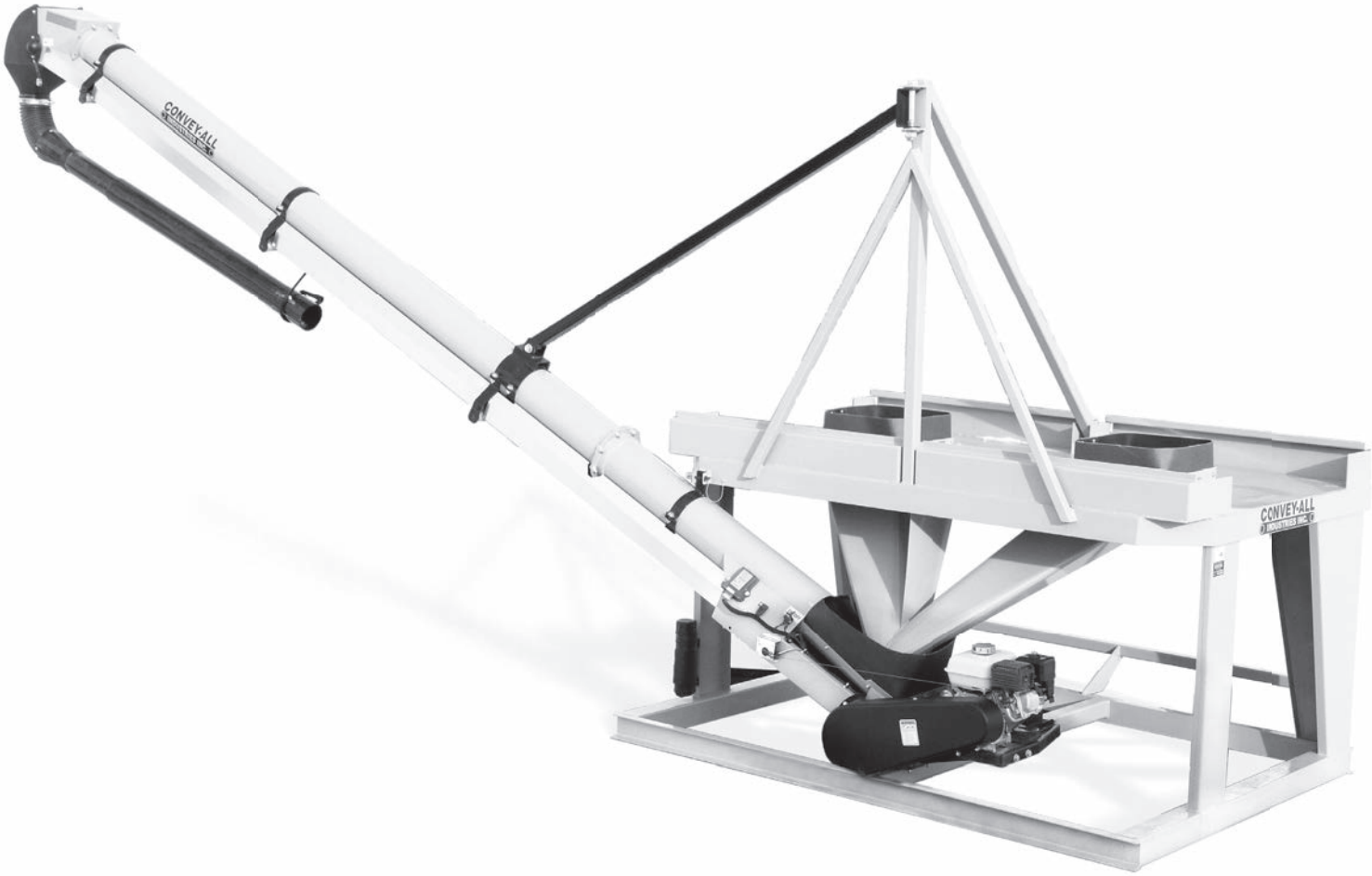
CONVEY-ALL INDUSTRIES INC.



PROBOX TENDER

Model:

PT-100

OPERATOR'S MANUAL

LIMITED WARRANTY

Convey-All warrants to the buyer that the new machinery is free from defects in material and workmanship.

This warranty is only effective as to any new machinery which has not been altered, changed, repaired or treated since its delivery to the buyer, other than by Convey-All or its authorized dealers or employees, and does not apply to accessories, attachments, tools or parts, sold or operated with new machinery, if they have not been manufactured by Convey-All.

Convey-All shall only be liable for defects in the materials or workmanship attributable to faulty material or bad workmanship that can be proved by the buyer, and specifically excludes liability for repairs arising as a result of normal wear and tear of the new machinery or in any other manner whatsoever, and without limiting the generality of the foregoing, excludes application or installation of parts not completed in accordance with Convey-All operator's manual, specifications, or printed instructions.

Written notice shall be given by registered mail, to Convey-All within seven (7) days after the defect shall have become apparent or the repairs shall have become necessary, addressed as follows:

Convey-All Industries Inc., Box 2008, 130 Canada Street
Winkler Manitoba R6W 4B7
Canada

This warranty shall expire one (1) year after the date of delivery of the new machinery.

If these conditions are fulfilled, Convey-All shall at its own cost and at its own option either repair or replace any defective parts provided that the buyer shall be responsible for all expenses incurred as a result of repairs, labor, parts, transportation or any other work, unless Convey-All has authorized such expenses in advance.

The warranty shall not extend to any repairs, changes, alterations, or replacements made to the new equipment other than by Convey-All or its authorized dealers or employees.

This warranty extents only to the original owner of the new equipment.

This warranty is limited to the terms stated herein and is in lieu of any other warranties whether expressed or implied, and without limiting the generality of the foregoing, excluded all warranties, expressed or implied or conditions whether statutory or otherwise as to quality and fitness for any purpose of the new equipment. Convey-All disclaims all liability for incidental or consequential damages.

This machine is subject to design changes and Convey-All shall not be required to retrofit or exchange items on previously sold units except at its own option.

WARRANTY VOID IF NOT REGISTERED

CONVEY-ALL
PROBOX TENDER

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 _____

Address _____

City, _____

State/Prov, Code _____

Phone Number (____)_____

Probox Tender Model Number _____

Probox Tender Serial Number _____

Delivery Date _____

Dealer's Name _____

Address _____

City _____

State/Prov, Code _____

Application:
☐ Private
☐ Commercial

DEALER INSPECTION REPORT

☐ All Fasteners Tight
☐ Drive System Rotates Freely
☐ Driveline Secured to Machine
☐ Conveyor Belt Aligned and Tensioned
☐ Drive Belts Aligned and Tensioned
☐ All Belts Move Freely
☐ Checked Engine Fluid Levels
☐ Machine Lubricated

SAFETY

☐ All Guards, Shields Installed and Secured
☐ All Safety Signs Installed and Legible
☐ Reflectors and SMV Clean
☐ Reviewed Operating and Safety Instructions

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
CONVEY-ALL	DEALER	CUSTOMER

SERIAL NUMBER LOCATION

Always give your dealer the serial number of your Probox Tender when ordering parts or requesting service or other information.

The tender's serial number is located on the rear leg of the tender. Please mark the number in the space provided for easy reference.

Fig 1 - Serial Number Location

Probox Tender Model Number: _____

Probox Tender Serial Number: _____

Engine Model Number: _____

Engine Serial Number: _____

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Section 1: INTRODUCTION

Congratulations on your choice of a Convey-All Probox Tender to complement your seed delivery system in your agricultural operation. This equipment has been designed and manufactured to exceed the exacting standards for such equipment in the agricultural industry and will keep your seed delivery operation working at optimum efficiency.

Safe, efficient and trouble free operation of your Probox Tender system requires that you and anyone else who will be operating or maintaining the machine, read and understand the Safety, Operation, Service and Maintenance, and Trouble Shooting information contained within thIs Operator's Manual.

This manual covers the Probox Tender manufactured by Convey-All Industries Inc.

Use the Table of Contents as a guide to locate required information.

Keep this manual handy for frequent reference and to pass on to new operators or owners. Call your Convey-All Industries Inc., dealer or distributor if you need assistance, information, additional hard copies or digital copies of the manuals.

OPERATOR ORIENTATION - The directions left, right, front and rear, as mentioned throughout this manual, are as seen from the driver's seat and facing in the direction of travel.

The conveyor is situated on the front, left corner and faces forward during transportation.

Section 2: SAFETY

This Safety Alert symbol means:
ATTENTION! BECOME ALERT!
YOUR SAFETY IS INVOLVED!

Why is SAFETY important to you?

3 Big Reasons:
- Accidents Disable and Kill
- Accidents Cost
- Accidents Can Be Avoided

The Safety Alert symbol identifies important safety messages on the Convey-All Probox Tender and in this manual. When you see this symbol, be alert to the possibility of equipment damage, personal injury or death. Follow the instructions in the safety message.

SIGNAL WORDS:

Note the use of the signal words: DANGER, WARNING and CAUTION with the safety messages. The appropriate signal word for each message has been selected using the following guide-lines.

DANGER - Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations typically for machine components which, for functional purposes, cannot be guarded.

WARNING - Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

CAUTION - Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

If you have any questions not answered in this manual, require additional hard copies, a digital copy of this manual or the manual is damaged, please contact your dealer or Convey-All Industries Inc.

2.1 SAFETY ORIENTATION

YOU are responsible for the SAFE operation and maintenance of your Convey-All Probox Tender. Be sure that you and anyone else who will be operate, maintain or working around it be familiar with the safety, operating and maintenance procedures in this manual. This manual will take you step-by-step through your working day and alerts you to all good safety practices that should be adhered to while operating the tender.

Remember, you are the key to safety. Good safety practices not only protect you but also the people around you. Make these practices a working part of your safety program. Be certain that EVERYONE operating this equipment is familiar with the recommended operating and maintenance procedures and follows all the safety precautions. Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

- Seed tender owners must give operating instructions to operators or employees before allowing them to operate the machine, and at least annually thereafter per OSHA (Occupational Safety and Health Administration) regulation 1928.57.

- The most important safety device on this equipment 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. Most accidents can be avoided.

- A person who has not read and understood all operating and safety instructions is not qualified to operate the machine. An untrained operator exposes himself and bystanders to possible serious injury or death.

- Do not modify the equipment in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the equipment.

- Think SAFETY! Work SAFELY!

2.2 GENERAL SAFETY

1. Read and understand the Operator's Manual and all safety signs before plugging in, operating, maintaining, adjusting the tender.

2. Only trained competent persons shall operate the tender. An untrained operator is not qualified to operate the machine.

3. Have a first-aid kit available for use should the need arise and know how to use it.

4. Provide a fire extinguisher for use in case of an accident. Store in a highly visible place.

5. Do not allow riders.

6. Do not allow children, spectators or bystanders within hazard area of machine.

7. Wear appropriate protective gear. This list includes but is not limited to:
   - Hard hat
   - Protective shoes with slip resistant soles
   - Eye protection
   - Heavy gloves
   - Hearing protection
   - Respirator or filter mask

8. Place all controls in neutral or off, stop engine, remove ignition key and wait for all moving parts to stop before servicing, adjusting or repairing.

9. Review safety related items annually with all personnel who will be operating or maintaining the tender.

2.3 EQUIPMENT SAFETY GUIDELINES

1. Safety of the operator and bystanders is one of the main concerns in designing and developing a tender. However, every year many accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment.

   You, the operator, can avoid many accidents by observing the following precautions in this section. To avoid personal injury or death, study these precautions and insist those working with you, or for you, follow them also.

2. In order to provide a better view, certain photographs or illustrations in this manual may show an assembly with a safety guards removed. Equipment should never be operated in this condition. Keep all guards in place. If removal becomes necessary for repairs, replace the guard prior to use.

3. Replace any safety or instruction sign that is not readable or is missing.

4. Never use alcoholic beverages or drugs which can hinder alertness or coordination while operating this equipment.

   Consult your doctor about operating this machine while taking prescription medications.

5. Under no circumstances should young children be allowed to work with this equipment. Do not allow persons to operate or assemble this unit until they have read this manual and have developed a thorough understanding of the safety precautions and of how it works. Review the safety instructions with all users annually.

6. This equipment is dangerous to children and persons unfamiliar with its operation. The operator should be a responsible, properly trained and physically able person familiar with farm machinery and trained in this machines's operations. If the elderly are assisting with farm work, their physical limitations need to be recognized and accommodated.

7. Never exceed the limits of a piece of machinery. If its ability to do a job, or to do so safely, is in question - DON'T TRY IT.

8. Do not modify the equipment in any way. Unauthorized modification result in serious injury or death and may impair the function and life of the equipment.

9. The design and configuration of this tender includes safety signs and equipment. Hazard controls and accident prevention are dependent upon the personnel operating and maintaining it. Their awareness, concern, prudence and proper training are crucial.

2.4 SAFETY TRAINING

1. Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be wiped out by a single careless act of an operator or bystander.

2. Hazard control and accident prevention are dependent upon the personnel operating and maintaining the Probox Tender. Their awareness, concern, prudence and proper training are crucial.

3. It has been said, "The best safety feature is an informed, careful operator." We ask you to be that kind of an operator. It is the operator's responsibility to read and understand ALL Safety and Operating instructions in the manual and to follow them.

4. Working with unfamiliar equipment can lead to careless injuries. Read this manual before operating, to acquaint yourself with the machine. If this machine is used by any person other than yourself, or is loaned or rented, it is the machine owner's responsibility to make certain that the operator, prior to operating:
   - Reads and understands the operator's manuals.
   - Is instructed in safe and proper use.

5. Know your controls and how to stop the tractor, Probox Tender's engine, and conveyor quickly in an emergency. Read this manual and the one provided with your power unit.

6. Train all new personnel and review instructions frequently with existing workers. Be certain only a properly trained and physically able person will operate the machinery.

   A person who has not read and understood all operating and safety instructions is not qualified to operate the machine. An untrained operator exposes himself and bystanders to possible serious injury or death.

   If the elderly are assisting with farm work, their physical limitations need to be recognized and accommodated.

2.5 SAFETY SIGNS

1. Keep safety signs clean and legible at all times.

2. Replace safety signs that are missing or have become illegible.

3. Replaced parts that displayed a safety sign should also display the current sign.

4. All safety signs have a part number in the lower right hand corner. Use this part number when ordering replacement parts.

5. Safety signs are available from your authorized Distributor or Dealer Parts Department or the factory.

2.5.1 How to Install Safety Signs:

1. Be sure that the installation area is clean and dry.

2. Ensure temperature is above 50°F (10°C).

3. Determine exact position before you remove the backing paper.

4. Remove the smallest portion of the split backing paper.

5. Align the sign over the specified area and carefully press the small portion with the exposed sticky backing in place.

6. Slowly peel back the remaining paper and carefully smooth the remaining portion of the sign in place.

7. Small air pockets can be pierced with a pin and smoothed out using the piece of sign backing paper.

2.6 WORK PREPARATION

1. Never operate the tractor/truck, engine and conveyor until you have read and completely understand this manual, the power unit Operator's Manual, and each of the Safety Messages found on the safety signs on the power unit and machine.

2. Personal protection equipment including:
   - hard hat
   - safety glasses
   - safety shoes
   - gloves

   are recommended during installation, placement, operation, adjustment, maintaining, repairing and removal of the implement.

3. Do not allow long hair, loose fitting clothing or jewelry to be around equipment.

4. PROLONGED EXPOSURE TO LOUD NOISE MAY CAUSE PERMANENT HEARING LOSS!
   Agricultural equipment can often be noisy enough to cause permanent, partial hearing loss. We recommend that you wear hearing protection on a full-time basis if the noise in the Operator's position exceeds 80db.

   Noise over 85db on a long-term basis can cause severe hearing loss.

   Noise over 90db adjacent to the operator over a long-term basis may cause permanent, total hearing loss.

   Note:
   Hearing loss from loud noise
   (tractors, chain saws, radios, etc.)
   is cumulative over a lifetime
   without hope of natural recovery.

5. Clear working area of stones, branches or hidden obstacles that might be hooked or snagged, causing injury or damage.

6. Operate only in daylight or good artificial light.

7. Be sure machine is properly mounted, adjusted and in good operating condition.

8. Ensure that all safety shielding and safety signs are properly installed and in good condition.

9. Before starting, give the machine a "once over" for any loose bolts, worn parts, cracks, leaks, frayed belts and make necessary repairs. Always follow maintenance instructions.

2.7 GAS MOTOR SAFETY

CAUTION: Before Starting Engine
Read and understand the operating and maintenance manuals that came with your engine.

WARNING: DO NOT

1. DO NOT run engine in an enclosed area. Exhaust gases contain carbon monoxide, and odourless and deadly poison.
2. DO NOT place hands or feet near moving or rotating parts.

3. DO NOT store, spill, or use gasoline near an open flame, or devices such as a stove, furnace, or water heater which use a pilot light or devices which can create a spark.
4. DO NOT refuel indoors where area is not well ventilated. Outdoor refuelling is preferred.
5. DO NOT refuel while engine is running. Allow engine to cool for 5 minutes before refuelling. Store fuel in approved safety containers.
6. DO NOT remove fuel cap while engine is running.
7. DO NOT operate engine if gasoline is spilled. Move machine away from the spill and avoid creating any ignition until gasoline has evaporated.
8. DO NOT smoke while filling fuel tank.
9. DO NOT choke carburetor to stop engine. Whenever possible, gradually reduce engine speed before stopping.
10. DO NOT run engine above rated speeds. This may result in injury.
11. DO NOT tamper with governor springs, governor links or other parts which may increase the governed speed.
12. Do not tamper with the engine speed selected by the original equipment manufacturer.
13. DO NOT check for spark with spark plug or spark plug wire removed.
14. DO NOT crank engine with spark plug removed. If engine is flooded, crank until engine starts.
15. DO NOT strike flywheel with a hard object or metal tool as this may cause flywheel to shatter in operation. Use proper tools to service engine.
16. DO NOT operate engine without a muffler. Inspect periodically and replace, if necessary. If engine is equipped with a muffler deflector, inspect periodically and replace, if necessary with correct deflector.
17. DO NOT operate engine with an accumulation of grass, leaves, dirt or other combustible materials in the muffler area.
18. DO NOT use this engine on any forest covered, brush covered, or grass covered unimproved land unless a spark arrester is installed on the muffler. The arrester must be maintained in effective working order by the operator. In the state of California the above is required by law (section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal land.
19. DO NOT touch hot muffler, cylinder or fins because contact may cause burns.
20. DO NOT run engine with air cleaner or air cleaner cover removed.

WARNING: DO!

1. Always do remove the wire from the spark plug when servicing the engine or equipment to prevent accidental starting. Disconnect the negative wire from the battery terminal if equipped wit a 12 volt starting system.
2. Do keep cylinder fins and governor parts free of grass and other debris which can affect engine speed.
3. Do examine muffler periodically to be sure it is functioning effectively. A worn or leaking muffler should be repaired or replaced as necessary.
4. Do use fresh gasoline. Stale fuel can gum carburetor and cause leakage.
5. Do check fuel lines and fittings frequently for cracks or leaks. Replace if necessary

2.8 OPERATING SAFETY

1. Please remember it is important that you read and heed the safety signs on the tender. Clean or replace all safety signs if they cannot be clearly read and understood. They are there for your safety, as well as the safety of others. The safe use of this machine is strictly up to you, the operator.

2. Stop the engine. Place all controls in neutral, remove ignition key and wait for all moving parts to stop before servicing, adjusting, or repairing or unplugging.

3. Make sure that anyone who will be operating the tender or working on or around the unit reads and understands all the operating, maintenance and safety information in the operator's manual. Review safety related items annually.

4. Keep all bystanders, especially children, away from the machine when loading or unloading is being done, or when authorized personnel are carrying out maintenance work.

5. Establish a lock-out tag-out policy for the work site. Be sure all personnel are trained in and follow all procedures. Lock-out tag-out all power sources before servicing the unit or working around loading/unloading equipment.

6. Be familiar with machine hazard area. If anyone enters hazard areas, shut down machine immediately. Clear the area before restarting.

7. Keep hands, feet, hair and clothing away from all moving and/or rotating parts.

8. Do not allow riders on tender when transporting.

9. Keep working area clean and free of debris to prevent slipping or tripping.

10. Stay away from overhead obstructions and power lines during operation and transporting. Electrocution can occur without direct contact.

11. Do not operate machine when any guards are removed.

2.9 LOCK-OUT TAG-OUT SAFETY

1. Establish a formal Lock-Out Tag-Out program for your operation.

2. Train all operators and service personnel before allowing them to work around the unloading system.

3. Provide tags on the machine and a sign-up sheet to record tag out details.

2.10 REFUELING SAFETY

1. Handle fuel with care. It is highly flammable.

2. Allow engine to cool for 5 minutes before refueling. Clean up spilled fuel before restarting engine.

3. Do not refuel the machine while smoking or when near open flame or sparks.

4. Fill fuel tank outdoors.

5. Prevent fires by keeping machine clean of accumulated trash, grease and debris.

2.11 MAINTENANCE SAFETY

1. Review the Operator's Manual and all safety items before working with, maintaining or operating the tender's conveyor.

2. Place all controls in neutral or off, stop engine, remove ignition key and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.

3. Follow good shop practices:
   - Keep service area clean and dry.
   - Be sure electrical outlets and tools are properly grounded.
   - Use adequate light for the job at hand.

4. Keep hands, feet, hair and clothing away from all moving and/or rotating parts.

5. Make sure there is plenty of ventilation. Never operate the engine in a closed building. The exhaust fumes may cause asphyxiation.

6. Clear the area of bystanders, especially children, when carrying out any maintenance and repairs or making any adjustments.

7. Before resuming work, install and secure all guards when maintenance work is completed.

8. Keep safety signs clean. Replace any sign that is damaged or not clearly visible.

2.12 PLACEMENT SAFETY

1. Move only with a tractor or truck. Never move by hand.

2. Locate tender to provide ample space for trucks to unload.

3. Be familiar with the machine hazard area. If anyone enters hazard area, shut down machine immediately. Clear the area before restarting.

2.13 BATTERY SAFETY

1. Keep all sparks and flames away from batteries, as gas given off by electrolyte is explosive.

2. Avoid contact with battery electrolyte: wash off any spilled electrolyte immediately.

3. Wear safety glasses when working near batteries.

4. Do not tip batteries more than 45 degrees, to avoid electrolyte loss.

5. To avoid injury from spark or short circuit, disconnect battery ground cable before servicing any part of electrical system.

2.14 TRANSPORT SAFETY

1. Comply with all local laws governing safety and transporting of equipment on public roads.

2. Check that all the lights, reflectors and other lighting requirements are installed and in good working condition.

3. Be sure that the trailer is equipped with brakes that are in good working order. Be familiar with their operation.

4. Do not exceed a safe travel speed. Slow down for rough terrain and when cornering.

5. Stay away from overhead power lines. Electrocution can occur without direct contact.

6. Plan your route to avoid heavy traffic.

7. Always engage conveyor's transport lock before transporting.

8. Do not drink and drive.

9. Be a safe and courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc. Watch for traffic when operating near or crossing roadways.

10. Never allow riders on the tender.

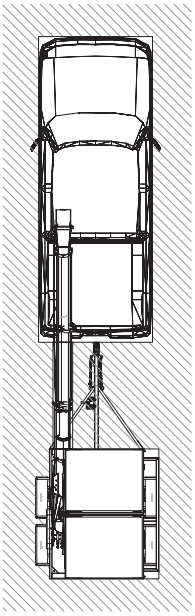


Fig 2 - Transport Hazard Area

2.15 STORAGE SAFETY

1. Store the tender on a firm, level surface.

2. Store in an area away from human activity.

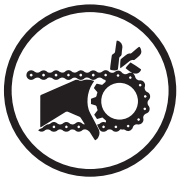
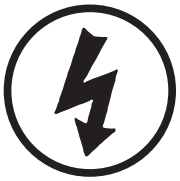
3. If required, make sure the unit is solidly blocked up.

4. Make certain all mechanical locks are safely and positively connected before storing.

5. Do not permit children to play on or around the stored machine.

2.16 SAFETY SYMBOL IDENTIFICATION

There are many types of safety symbols on signs in many locations on the Probox Tender. Good safety requires that you familiarize yourself with the various safety signs, the type of warning and the area, or particular function related to that area, that requires your SAFETY AWARENESS.

Rotating Part Hazard	 Rotating Part Hazard	Rotating Part Hazard
 Electrocution Hazard	No Smoking	

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

Section 3: OPERATION

Operating Safety

- Read and understand the Operator's Manual, and all safety signs, before using.
- Stop the engine. Place all controls in neutral, remove ignition key and wait for all moving parts to stop before servicing, adjusting, or repairing or unplugging.
- Clear the area of bystanders, especially children, before starting.
- Be familiar with machine hazard area. If anyone enters hazard areas, shut down machine immediately. Clear the area before restarting.
- Keep hands, feet, hair and clothing away from all moving and/or rotating parts.
- Do not allow riders on the bean tender or tractor/truck when transporting.
- Stay away from overhead obstructions and power lines during operation and transporting. Electrocution can occur without direct contact.
- Do not operate machine when any guards are removed.
- Set park brake on tractor/truck, chock wheels of bean tender trailer before starting.
- Keep working area clean and free of debris to prevent slipping or tripping.
- Establish a lock-out tag-out policy for the work site. Be sure all personnel are trained in and follow all procedures. Lock-out tag-out all power sources before servicing the unit or working around loading/unloading equipment.

The Convey-All Probox Tender is designed to efficiently move grain, pulse crops, or granular material from storage containers, through the tender, to a seeder. Power is provided by a gas engine. Be familiar with the machine before starting.

It is the responsibility of the owner or operator to read this manual and to train all other operators before they start working with the machine. Follow all safety instructions exactly. It is everyone's business. By following recommended procedures, a safe working environment is provided for the operator, bystanders and the area around the work site.

The design and configuration of this tender includes safety signs and equipment. Hazard controls and accident prevention are dependent upon the personnel operating and maintaining it. Their awareness, concern, prudence and proper training are crucial.

Many features incorporated into this machine are the result of suggestions made by customers like you. Read this manual carefully to learn how to operate the machine safely and how to set it to provide maximum efficiency. By following the operating instructions in conjunction with a good maintenance program, your bean tender will provide many years of trouble free service.

3.1 MACHINE COMPONENTS

The Convey-All Probox Tenders are designed as bulk seed transfer units to feed large amounts of seed or fertilizer into a planter or drill.

Bulk seed, stored in containers, are placed on top of the tender. The containers have their own gates to control the flow of seed into the conveyor hopper. They unload into the tender, feeding the conveyor. The conveyor belt can be swung along the left side of the frame to transfer the seed into planters or drills as appropriate.

A gas engine is mounted on the conveyor. A centrifugal clutch on the engine output shaft engages when the engine speed reaches 1400 RPM. A belt drive system transmits power from the engine to the conveyor.

A 3-Stage Down Spout on the end of the conveyor allows for convenient distribution.

Each tender must be mounted to a brake equipped trailer for convenient transporting.

Brake equipped trailers are available from Convey-All.

a. Seed Container Platform
b. Gas Engine
c. Drive Belt
d. Conveyor
e. Swing Arm
f. Product Funnels
g. Hopper
h. Discharge Spout
i. 3-Stage Down Spout
j. 2 Button Remote Control
k. Remote Control Receiver
l. Transport Lock
m. Document Holder

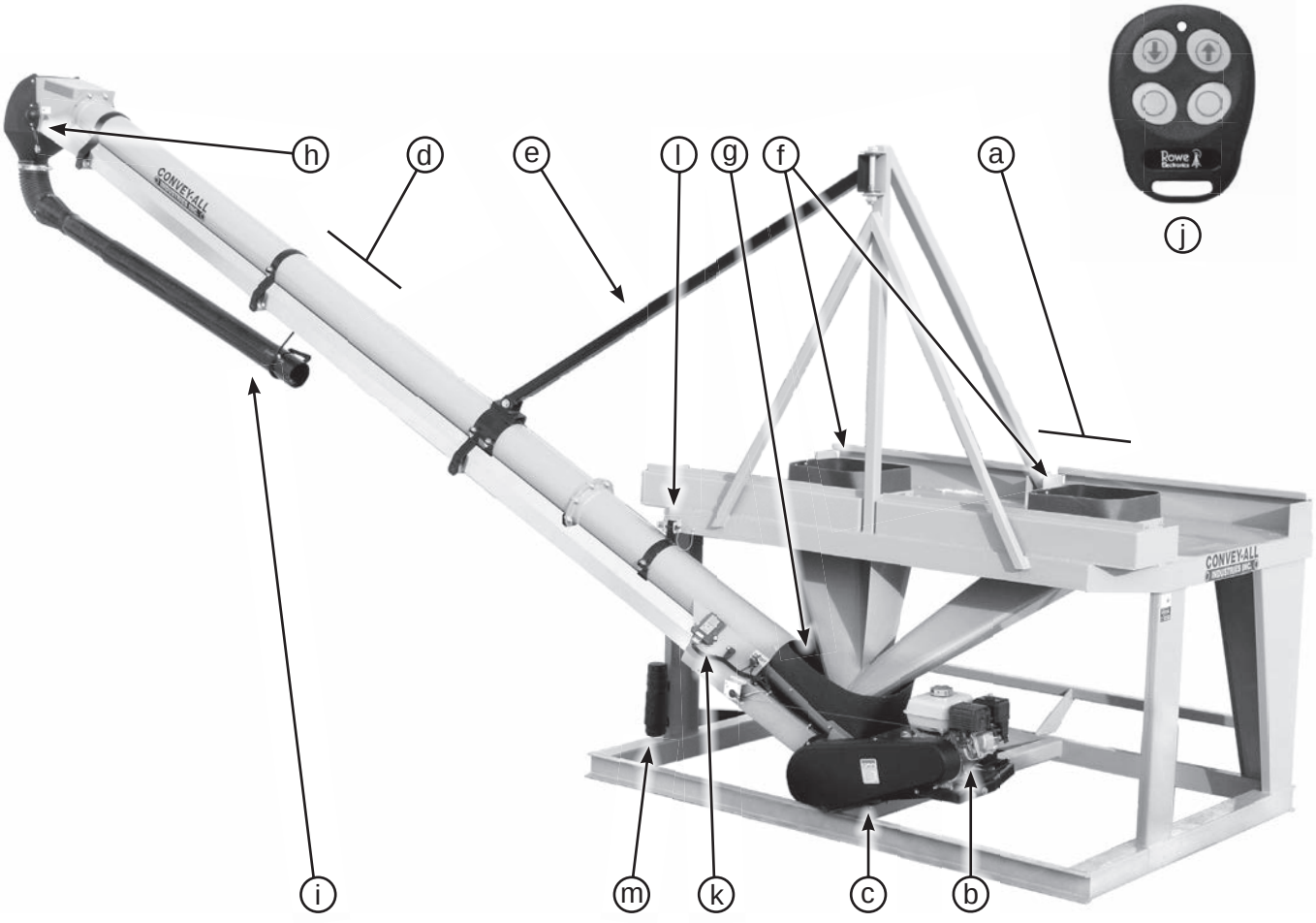


Fig 3 - Probox Tender

3.2 MACHINE BREAK-IN

There are no operation restrictions on the Probox Tender when using it for the first time. Before leaving the factory, the conveyor belt was adjusted to run without product. Under load conditions, adjustments may need to be made.

It is recommended that the following mechanical items be checked:

Before Starting work:

1. Read the Probox Tender and engine operator manuals.

2. Follow the Pre-Operation Checklist before starting machine. Refer to Section 3.3

After 1/2, 5 and 10 hour:

3. Check fuel level and engine oil.
   Top up as required.

4. Lubricate the conveyor belt rollers. Section 4.2.1.

5. Check the tension and alignment of the conveyor belt. Refer to Sections 4.3.1 and 4.3.2

6. Check the tension and alignment of the drive belt. Refer to Section 4.3.4 and 4.3.5

7. Check hardware, fasteners and trailer wheel bolts. Tighten to their specified torque.

8. Check that the trailer brakes are connected and functioning as required.

After 10 Hours:

9. Change the engine oil. Replace with the specified oil. Refer to Section 4.3.8

3.3 PRE-OPERATION CHECKLIST

Efficient and safe operation of the tender requires that each operator reads and understands the operating procedures.

It is important for both the personal safety and maintaining the good mechanical condition of the machine, that it be checked before each start-up.

1. Check work site. Clean up area to prevent slipping or tripping.

2. Ensure that the discharge and hopper areas are free of obstructions.

3. Lubricate and service the unit. Refer to Section 4

4. Check the fuel and engine oil levels.
   Add as required.

5. Check that all guards are installed, secured and functioning as intended.

   Do not operate with missing or damaged shields.

6. Check the drive and conveyor belts tension and alignment. Tension and align as required.
   Refer to Section 4

7. Check that conveyor belt is not frayed or damaged.

3.4 CONTROLS

Before starting work, all operators should familiarize themselves with the location and function of the controls.

Gas Engine:

a. Ignition Switch:
This switch controls the electrical power to the engine electrical system. Turn clockwise to start, vertical position is ON.
Turn the key counterclockwise to turn OFF.

b. Circuit Protector:
This protector monitors the engine electrical circuit. Its LED will illuminate when the circuit exceeds its preset value and trip the breaker. Depress indicator to reset the breaker and the light will go out.

c. Engine Mount:
The bolts on the engine mount, set the position of the engine base. Loosen the bolts moves the engine base away from the drive pulley and disengage the belt. Tighten bolts to engage drive belt.

Always disengage belt when starting or stopping engine. Set the belt tension so the belt does not slip during operation.

d. Choke (See Figure 4):
This lever controls the position of the choke. Slide the lever to the left to close the choke valve for starting when the engine is cold. Slide to the right to open the choke as the engine warms. Always open the choke fully when operating the machine.

e. Throttle (See Figure 41):
This lever controls the engine RPM. Move the lever left to increase the engine speed and right to decrease. Always run at maximum engine RPM when operating.

f. Fuel Shut-Off Switch (See Figure 41):
This switch controls the flow of fuel to the engine. Move the switch to the right to open the valve and start the flow of fuel. Move the switch left to close the valve and the engine will run.

g. Starting Rope (See Figure 41):
This retracting rope and T-bar is used to turn the engine over for starting. Grasp the T-bar firmly and pull the rope sharply to start the engine. Close the choke if the engine is cold.

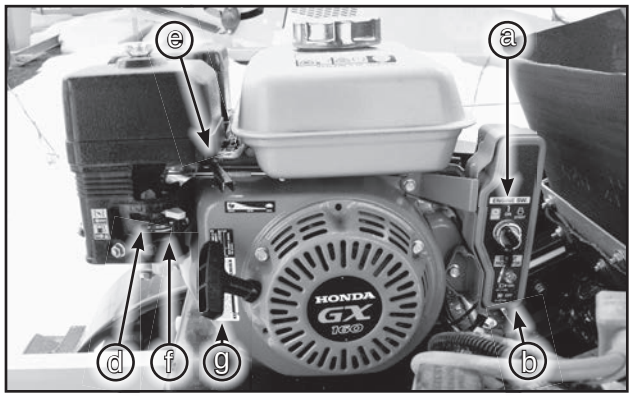


Fig 4 - Gas Engine

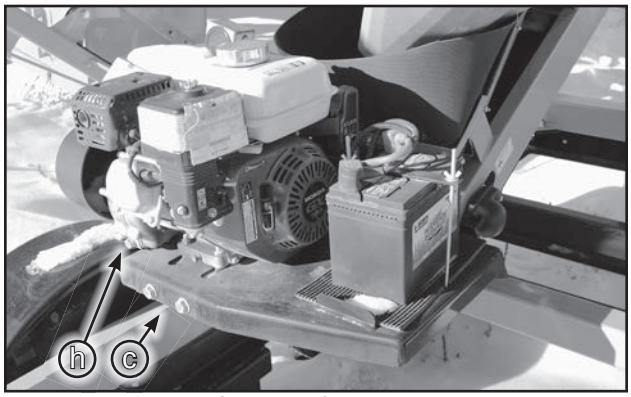


Fig 5 - Engine Mount

h. Centrifugal Clutch:
This clutch engages when the engine speed exceeds 1400 RPM to drive the conveyor.

Increasing the engine speed will increase the unloading rate.

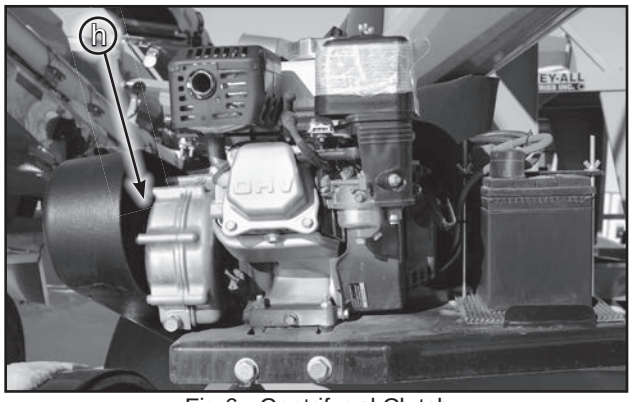


Fig 6 - Centrifugal Clutch

Transport Lock:
A pin is used to anchor the conveyor to the frame of the tender.

Fig 7 - Transport Lock

Conveyor Pivot:
The conveyor can pivot 180 degrees. At 90 degrees, the conveyor sticks out 17' 8" from the tender frame. It swings on a radius of 18' 4".

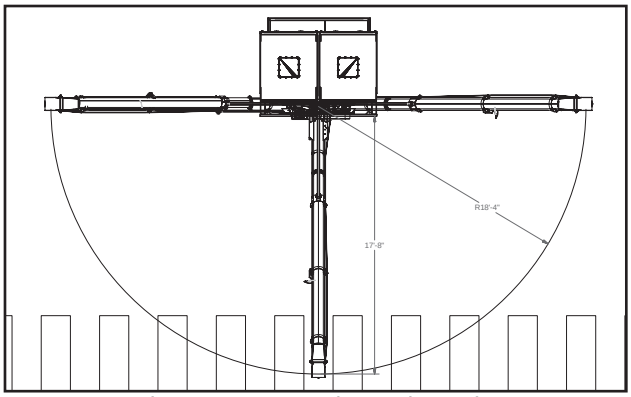


Fig 8 - Conveyor Pivot Schematic

Side Panels:
Side panels on the right side of tender are designed to drop down, to facilitate the loading of seed containers onto the frame by forklift.

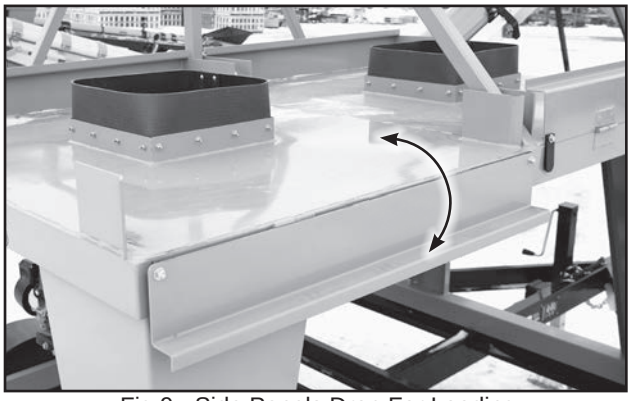


Fig 9 - Side Panels Drop For Loading

3-Stage Down Spout (Optional):

The tender is shipped from the factory with the down spout not attached to the discharge spout. Refer to Machine Preparation, Section 4.5.2

Fig 10 - Discharge Spout with 3-Stage Down Spout

Two Button Remote Control:

This remote control regulates the speed of the conveyor belt. One button to increase and the other to decrease the speed.

Fig 11 - 2 Button Remote Control

The remote control receiver is mounted on the left side of the conveyor tube, up from the hopper. Turn on the remote with the On/Off switch

Refer to the remote control`s instruction manual for more detailed instructions.

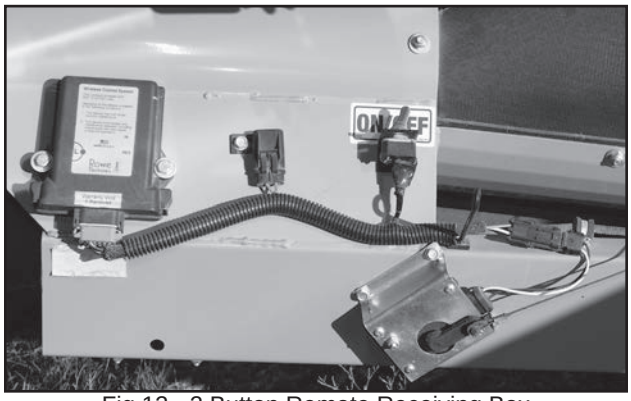


Fig 12 - 2 Button Remote Receiving Box

3.5 MACHINE PREPARATION

3.5.1 Install on a Truck or Trailer:
The Probox Tender is shipped from the factory as an individual unit. It is not mounted on a truck, or trailer.

If installed on a trailer, it must have sufficient load capacity and be equipped with electric brake. Convey-All does build, and can supply a trailer specifically matched to the tender.

Non-Convey-All trailers must be checked to verify load carrying capacity. It must also be equipped with electric brakes to help with stopping. Always attach the emergency brake cable to the tow vehicle when hooking up to the truck.

1. Clear the area of bystanders, especially small children.

2. Use a forklift, crane or hoist with adequate capacity to lift the unit.

3. Attach hook to the centre cross-frame when lifting. Be sure to keep the frame balanced.

4. Lift frame and move over truck or trailer frame.

5. Set down on deck.

6. Secure to the deck.

7. Install the anchor bolts at each corner of the frame when mounting on trailer.

3.5.2 Install 3-Stage Down Spout:
1. Lay the down spout on the ground. Cut four, 2-inch slits into the end of the corrugated tube, quartering it. See Figure 16

   This will allow it to slide over the end of the discharge spout.

2. Slide the clamp over the tube.

3. Slide the tube over the discharge spout until it is seated against the enlarged section of the spout.

4. Secure by tightening the clamp.

5. Stow in the storage cradle.

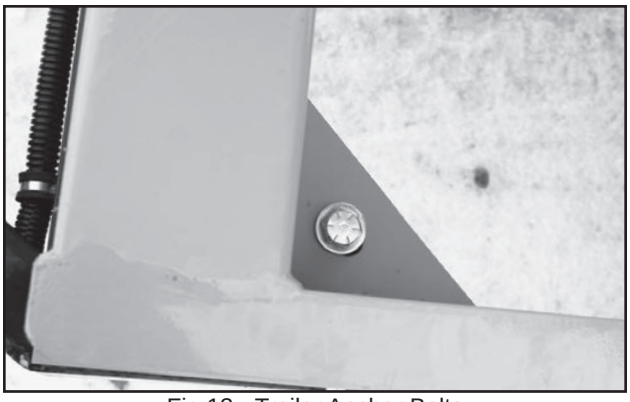


Fig 13 - Trailer Anchor Bolts

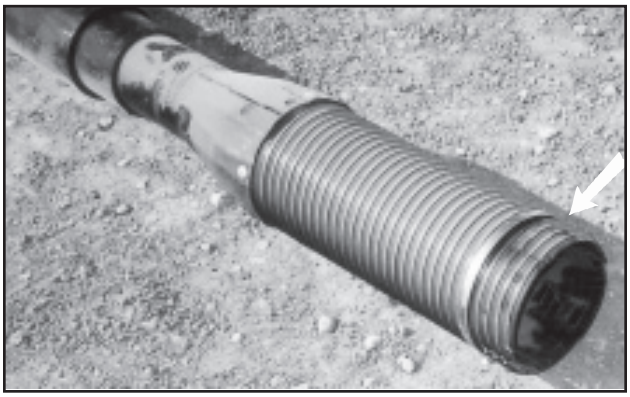


Fig 14 - 3-Stage Down Spout

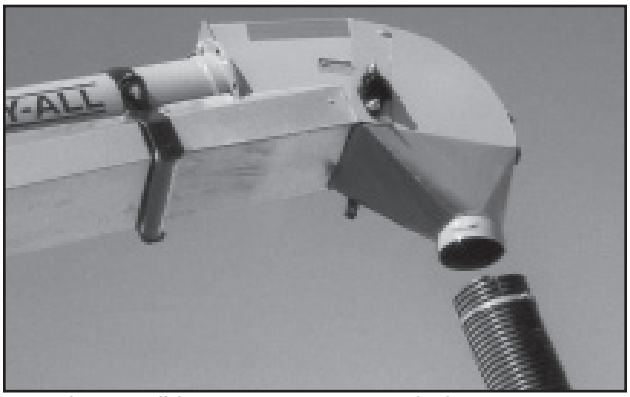


Fig 15 - Slide Down Spout Over Discharge Spout

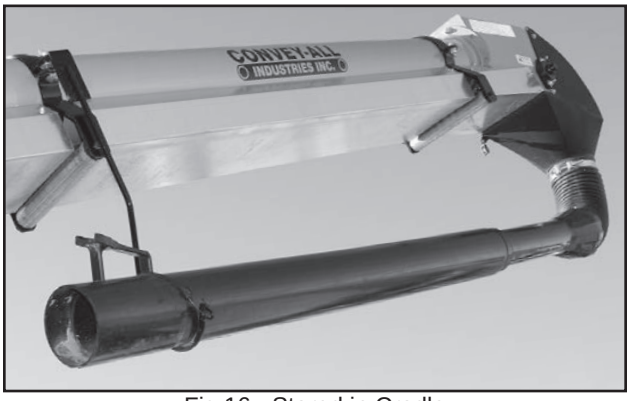


Fig 16 - Stored in Cradle

3.6 FIELD OPERATION

The Convey-All Probox Tender is designed to handle containers storing product, transport it and transfer it into planters and drills as required.

Inspect the machine at the start of each day to be sure it is in good mechanical condition.

1. Attach trailer to the towing truck.

2. Review and follow the pre-operation checklist. Refer to Section 3.3

WARNING: Upending Hazard
Always load container onto tender above front hopper first to prevent the tender and trailer from upending.

3. Load containers filled with product. Front first, then load containers onto rear.

4. Conveyor must face forward. Ensure transport lock between tender frame and the conveyor is secured.

5. Transport to the working area.

6. Drive up to the planter or drill.

7. Shut off engine on tow vehicle, set park brake.

8. Disconnect transport lock.

9. Pivot conveyor to position discharge spout over the drill or planter seed boxes.

10. Start the engine.

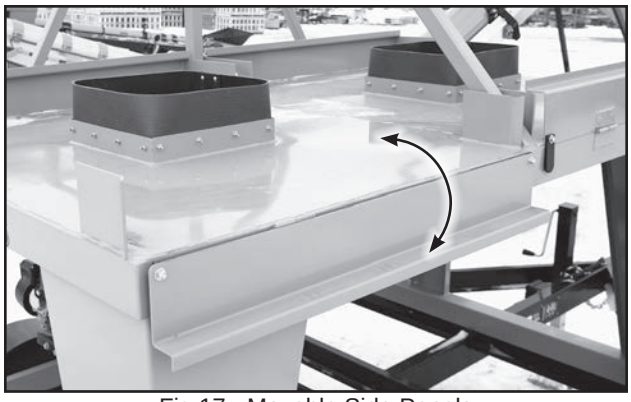


Fig 17 - Movable Side Panels

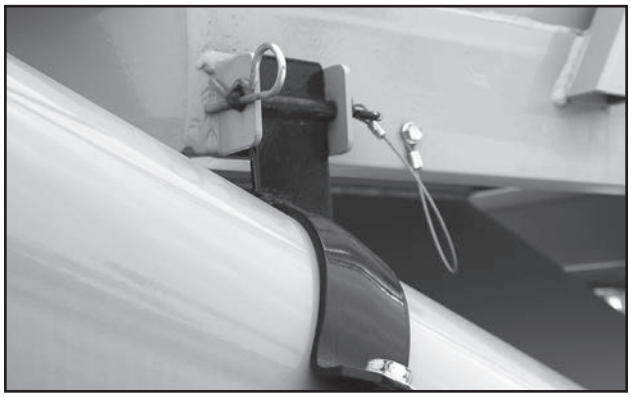


Fig 18 - Transport Lock

Fig 19 - Pivot

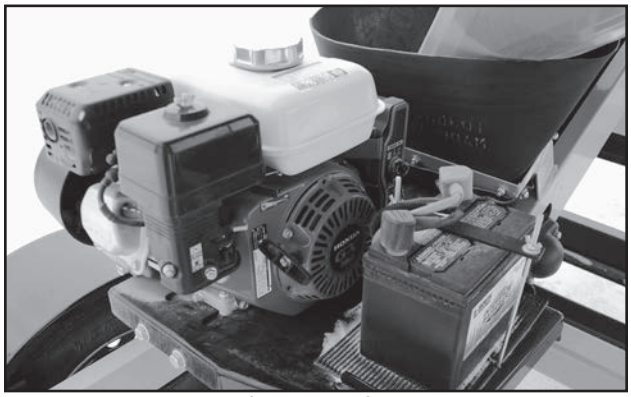


Fig 20 - Engine

11. Remove down spout from storage cradle.

12. Extend the down spout over one of the bins.

WARNING: Upending Hazard
Always unload container above rear hopper first to prevent tender from upending.

13. Increase the engine speed until the centrifugal clutch engages, and conveyor starts.

14. Open gate on one of the containers.

15. Increase and decrease conveyor belt speed with the 2 button remote control.

16. Fill the box or bin.

17. Reduce engine RPM to low idle to stop the conveyor belt.

18. Move down spout to next box/bin and increase engine RPM to fill the next one.

19. Repeat with the remaining boxes or bins.

IMPORTANT:
Always fill and unload tender in correct order;
fill front hopper first, unload rear hopper first.
to keep the weight on the hitch
and prevent upending.

When the job is finished...

20. Stop engine and remove ignition keys.

21. Close container gate.

22. Stow down spout.

23. Pivot conveyor to the front and secure transport lock.

24. Transport to the next location.

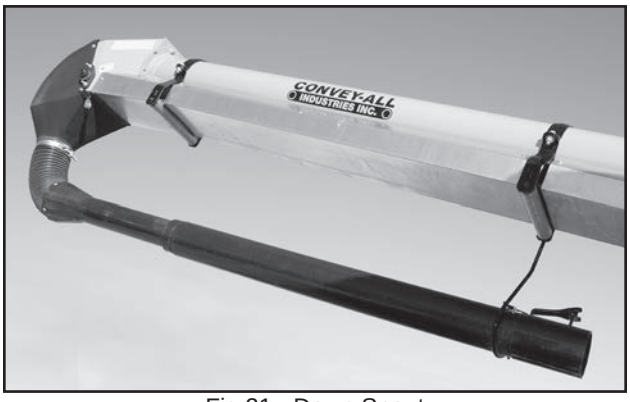


Fig 21 - Down Spout

Fig 22 - Engine

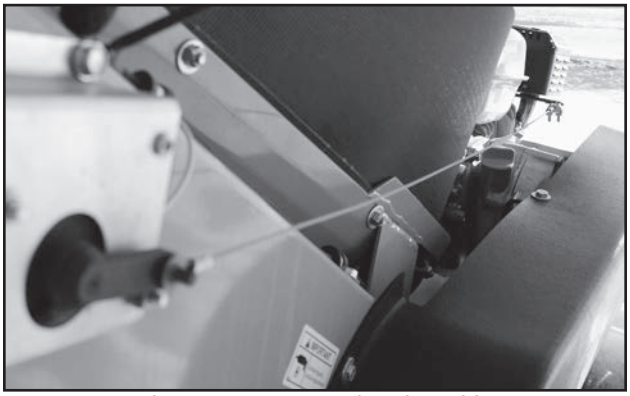


Fig 23 - Remote to Throttle Cable

3.6.1 Stopping Conveyor

1. Close container gate.
2. Run until conveyor belt is empty.
3. Reduce engine speed to low idle, to stop the conveyor belt.
4. Turn off engine.

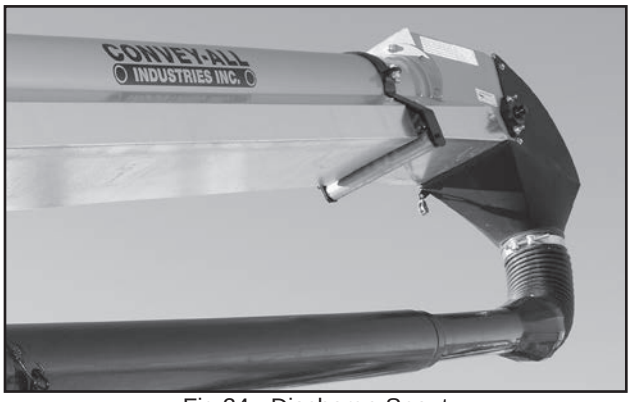


Fig 24 - Discharge Spout

3.6.2 Unplugging:

If conveyor becomes plugged, follow this procedure:

1. Close container gate.
2. Stop engine and remove ignition key.
3. Remove down spout.
4. Unplug product from within discharge spout.
5. Remove any obstruction from between the hopper funnel and conveyor.
6. Attach and secure the discharge spout.
7. Restart engine.

   If the conveyor belt is full, restart at a low RPM. It may be necessary to tighten the drive belt slightly, by adjusting the engine mount positioning bolts.

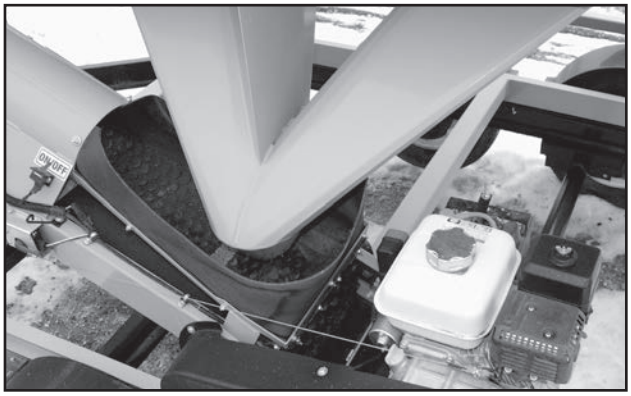


Fig 25 - Hopper Funnels and Conveyor

3.7 OPERATING HINTS:

- Be sure the trailer is always securely attached to the towing vehicle. Use a mechanical retainer through the hitch. Ensure the safety chain, lighting harness and brake emergency cable are all securely connected.

- Always maintain weight on the hitch to prevent upending. Load on top of front hopper first. Unload from the rear hopper first.

- Swing the conveyor into the best possible position for convenient and easy unloading.

- Always listen for any unusual sounds or noises. If any are heard, stop the machine and determine the source. Correct the problem before resuming work.

- Never allow anyone into the workplace hazard area. If anyone enters, stop immediately. The visitor must leave before resuming work.

- For best results, conveyor belt should rotate at the maximum speed, 650 ft./min.

- Do not run the machine for long periods of time with no material on the belting. This increases the wear. Try to run only when moving material.

- The conveyor hopper is designed with flashing to seal the junction of the belt with the sides of the hopper. It must be kept in good condition to prevent the material from "leaking" out of the hopper. Replace flashing if "leakage" occurs.

3.8 TRANSPORTATION

Transporting Safety

- Read and understand ALL the information in the Operator's Manual regarding procedures and SAFETY when moving or transporting the conveyor.
- Check with local authorities regarding conveyor transport on public roads. Obey all applicable laws and regulations.
- Ensure all lights and reflectors on the trailer, are clean and can be seen clearly by all overtaking and oncoming traffic.
- Attach tender to towing vehicle with a pin and retainer. Always attach the safety chain.
- Always use hazard warning flashers on tractor when transporting unless prohibited by law.
- Do not allow riders on tender when transporting.
- Keep to the right and yield the right-of-way to allow faster traffic to pass. Drive on the road shoulder, if permitted by law.

Convey-All Probox Tenders are designed to be easily and conveniently moved from place to place.

When transporting the unit, follow this procedure:

1. Be sure all bystanders are clear of the machine.
2. Align the drawbar of the truck with tender's hitch.
3. Set the park brake before dismounting.
4. Insert the hitch pin and use a retainer. Secure the safety chain around the drawbar cage to prevent unexpected separation.
5. Ensure all lights and reflectors on the trailer are clean and working.
6. Remove chocks from around wheels.
7. Keep to the right and yield the right-of-way to allow faster traffic to pass. Drive on the road shoulder, if permitted by law.
8. Do not allow riders on the tender.

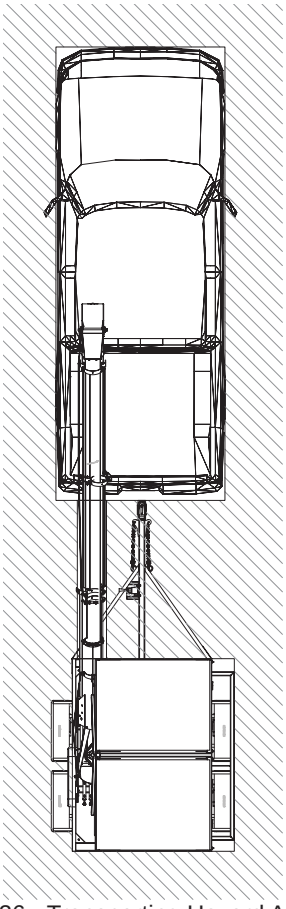


Fig 26 - Transporting Hazard Area

3.9 STORAGE

Storing Safety

- Store the unit in an area away from human activity.
- Do not permit children to play on or around the stored machine.
- Store the unit in a dry level area. Support the frame with planks if required.

After the season's use or when the unit will not be used for an extended period of time, the tender should be thoroughly inspected and prepared for storage.

Repair or replace any worn or damaged components. This will prevent any unnecessary down time at the start of next season.

To have a long, trouble free life, this procedure should be followed when preparing the unit for storage:

1. Inspect all moving or rotating parts to see if anything has become entangled in them. Remove the entangled material.
2. Wash the entire machine thoroughly using a pressure washer to remove all left over material, dirt, debris or residue.
3. Lubricate all roller bearings (refer to Section 4.2.1). Make sure that all grease cavities have been filled with grease to remove any water residue from the washing. This also protects the bearing seals.
4. Check condition of drive belt and pulleys. Adjust or replace as required.
5. Check condition of conveyor belt. Replace if necessary.
6. Touch up all paint nicks and scratches to prevent rusting.
7. Remove ignition key and store in a secure location.
8. Remove the battery and store in a cool, dry area. Sit it on wooden blocks or pallet. Charge it monthly to maintain an adequate charge.
9. Select a storage area that is dry, level and free of debris. Away from daily activity.

   If the machine cannot be placed inside, cover the gas engine with a water proof tarpaulin and tie securely in place.

IMPORTANT:

If the tender has been stored for more than 6 months, run the engine for 2-3 minutes. This warms the oil, then change it while still warm to remove any condensation.

Section 4: SERVICE AND MAINTENANCE

Servicing Safety

- Follow good shop practices:
  - Keep service area clean and dry.
  - Be sure electrical outlets and tools are properly grounded.
  - Use adequate light for the job at hand.
- Review the Operator's Manual and all safety items before working with, maintaining or operating the machine.
- Place all controls in neutral. Wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.
- Keep hands, feet, hair and clothing away from all moving and/or rotating parts.
- Make sure there is plenty of ventilation. Never operate the engine in a closed building. The exhaust fumes may cause asphyxiation.
- Clear the area of bystanders, especially children, when carrying out any maintenance and repairs or making any adjustments.
- Before resuming work, install and secure all guards when maintenance work is completed.
- Keep safety signs clean. Replace any sign that is damaged or not clearly visible.

By following the operating instructions, in conjunction with a good maintenance program, your Probox Tender will provide many years of trouble free service.

4.1 FLUIDS AND LUBRICANTS

Grease:
Use an SAE multipurpose high temperature grease with extreme pressure (EP) performance. Also acceptable, SAE multipurpose lithium based grease.

Engine Oil (Honda gas engine):
Use an SAE 1 OW30 multi-viscosity oil meeting the Amercian Petroleum Institute (API) classification of SF or SG tor normal operating temperatures.

Consult the engine manual for unusual operating conditions. Do not mix oil types or viscosities.

Capacity: 0.58 Litres (0.61 US qts)

Engine Gasoline:
Use a standard automotive unleaded gasoline for all operating conditions.

Fuel Tank Capacity: 3.1 Litres (3.3 US qts)

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.

4.1.1 Greasing

Use the Maintenance Checklist provided to keep a record of all scheduled maintenance.

1. Use a hand-held grease gun for all greasing.
2. Wipe grease fitting with a clean cloth before greasing, to avoid injecting dirt and grit.
3. Recommended greasing is 1 small stroke every 2 weeks.
4. Replace and repair broken fittings immediately.
5. If fittings will not take grease, remove and clean thoroughly. Also clean lubricant passageway. Replace fitting if necessary.

4.2 SERVICING INTERVALS

As the belt alignment is preset to run true under a condition of no load, it is important to check alignment and make adjustments, if required during the initial few minutes of loaded operation.

Check bearings for wear daily. They are sealed, greasable bearings, requiring minimal grease. Recommended greasing is 1 small stroke every 2 weeks. Be careful not to over grease as this may push the seal out.

The periods recommended below are based on normal operating conditions. Severe or unusual conditions may require more frequent lubrication or oil changes.

4.2.1 After 10 Hours or Daily:

1. Check fuel level. Add as required.
2. Check engine oil level. Add as required.
3. Check the oil level in the centrifugal clutch.
4. Grease conveyor's drive roller bearings on both sides.
5. Grease conveyor's discharge roller bearings on both sides

Fig 27 - Gas Engine

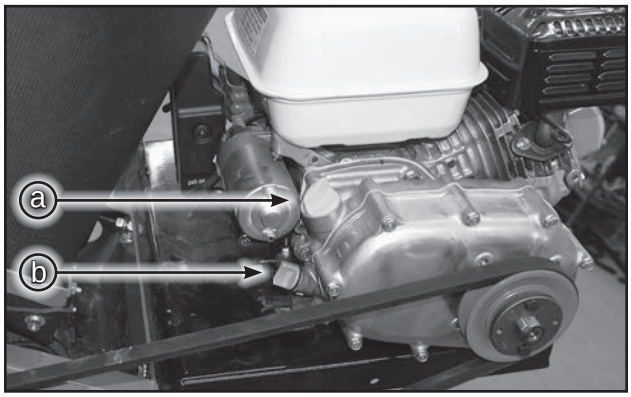


Fig 28 - Centrifugal Clutch Oil (a), Engine Oil (b)

Fig 29 - Drive Roller Bearings

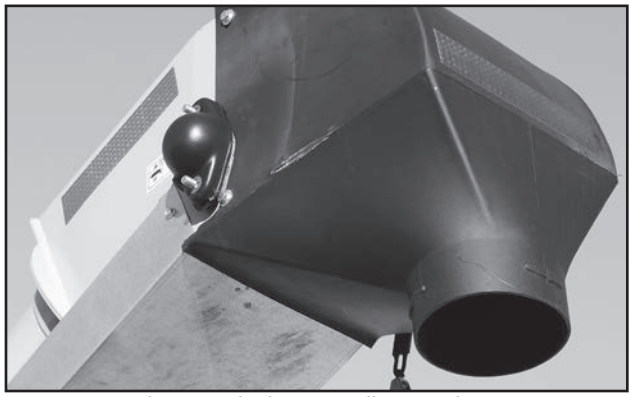


Fig 30 - Discharge Roller Bearings

4.2.2 After 50 Hours or Weekly:

6. Check conveyor belt tension and alignment. Refer to Section 4.3.1 and 4.3.2

Note:
A properly tensioned belt will not slip when in operation.

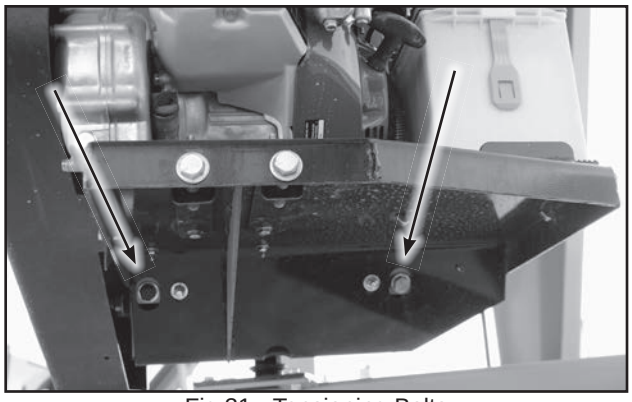


Fig 31 - Tensioning Bolts

7. Check condition of conveyor's rubber hopper flashing. Be sure it still seals the hopper to prevent leaking. See Figure 35

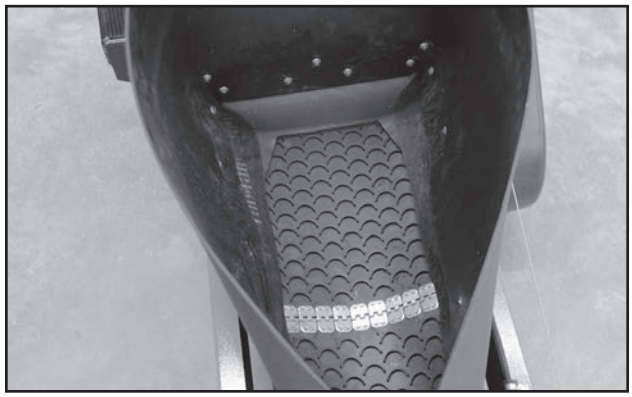


Fig 32 - Conveyor Hopper

8. Check drive belt tension and alignment. Refer to Section 4.3.4 and 4.3.5

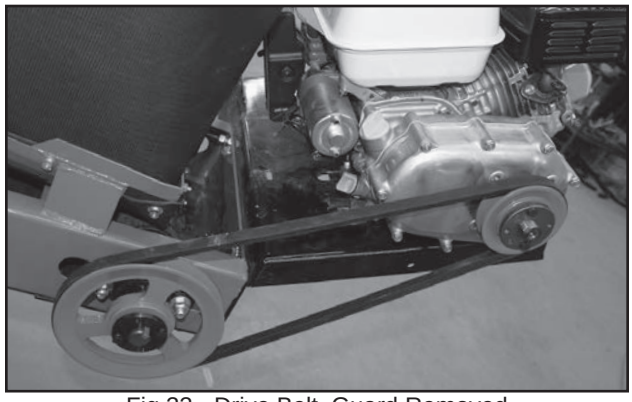


Fig 33 - Drive Belt, Guard Removed

9. Clean air filter. Refer to Section 4.3.7

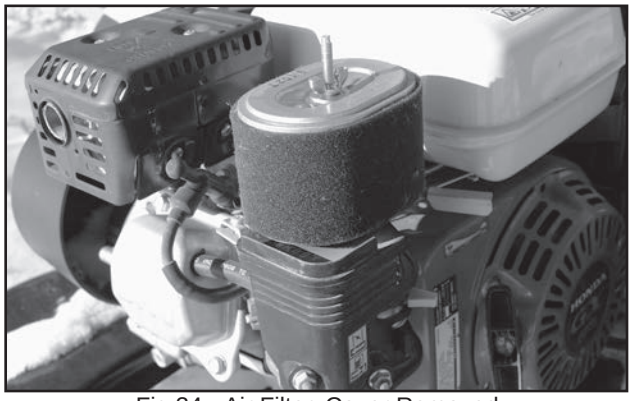


Fig 34 - Air Filter, Cover Removed

4.2.3 After 200 hours or Annually:

10. Change engine oil. Refer to Section 4.3.8

11. Change oil in the centrifugal clutch. Refer to Section 4.3.9

12. Wash the machine

4.3 MAINTENANCE

By following a careful service and maintenance program for your machine, you will enjoy many years of trouble-free service.

4.3.1 Conveyor Belt Tension:

The tension of the belt should be checked weekly, or more often if required. Be sure that it does not slip.

WARNING: Rotating Part Hazard
Turn off engine and wait for all belts to stop rotating.

1. Loosen the roller bearing housing anchor bolts on both sides.
2. Loosen the tension bolt jam nuts connected to the drive roller.
3. Adjust both tension bolts to set the tension of the belt.
4. Tighten the jam nuts.

Note:
The conveying belt should not slip
on its rollers during operation.

4.3.2 Conveyor Belt Alignment:

The belt is properly aligned when it runs in the centre of the rollers on the discharge end and in the drive housing. As with tensioning, the alignment should be checked weekly, or as required.

1. Rotate the conveyor belt a half revolution when the belt is new and check that the belt sits in the middle of the rollers.
2. Loosen the roller bearing anchor bolts.

Note:
If belt is out of alignment,
it will move to the loose side.
Tighten loose side or loosen tight side.

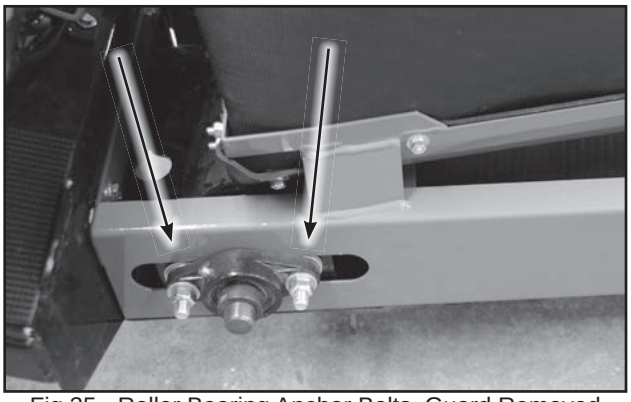


Fig 35 - Roller Bearing Anchor Bolts, Guard Removed

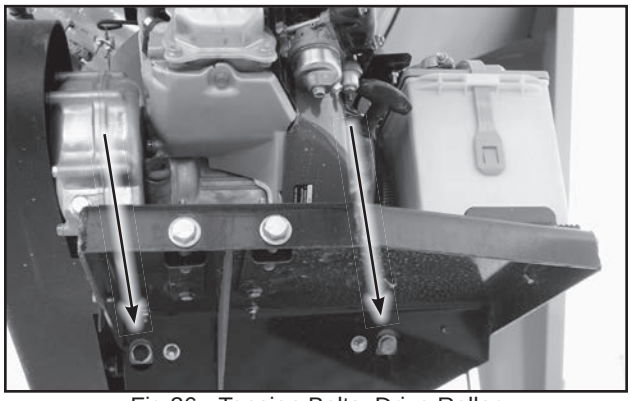


Fig 36 - Tension Bolts, Drive Roller

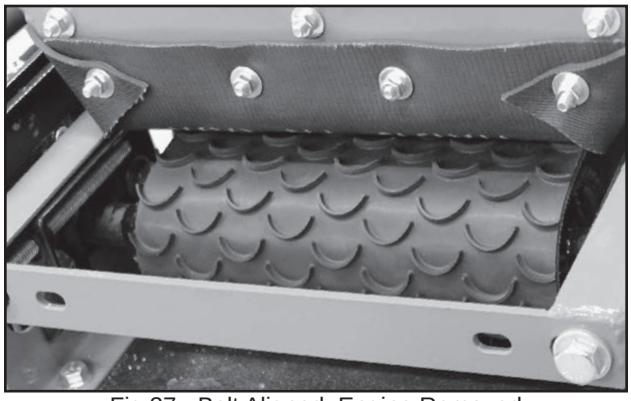


Fig 37 - Belt Aligned, Engine Removed

3. Use the tensioning bolts to set the position.

4. Tighten roller bearing anchor bolts.

5. Rotate the belt another revolution and check the alignment. Adjust as needed.

Check frequently during the first few minutes of operation and then several times during the first 10 hours.

The belt normally seats itself during the first 10 hours of operation and can be checked weekly after that.

Fig 38 - Conveyor Belt

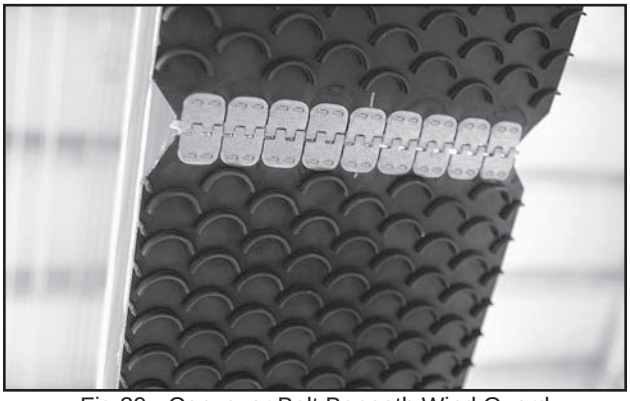


Fig 39 - Conveyor Belt Beneath Wind Guard

4.3.3 Conveyor Belt Replacement:

1. Rotate the belt until the lacing is positioned underneath, at the opening in the wind guard.

2. Loosen the roller bearing housing anchor bolts on both sides.

3. Loosen the tension bolts under engine mount. See Figure 39

4. Pull the slack to the lace area. Remove the lacing pin and open the belt.

5. Attach one end of the replacement belt to the end of the existing belt which is hanging closest to the hopper.

   Ensure the direction of the pattern on the replacement belt matches the direction on the old belt.

6. Pull the end of the old belt which is coming from the direction of the discharge spout. The new belt will follow and be threaded into place.

7. Disconnect the old belt.

8. Connect the lacing of the new belt. Place the pin in the lacing and crimp the ends.

9. Set the belt tension. Refer to Section 4.3.1

10. Check and set the belt alignment. Refer to Section 4.3.2

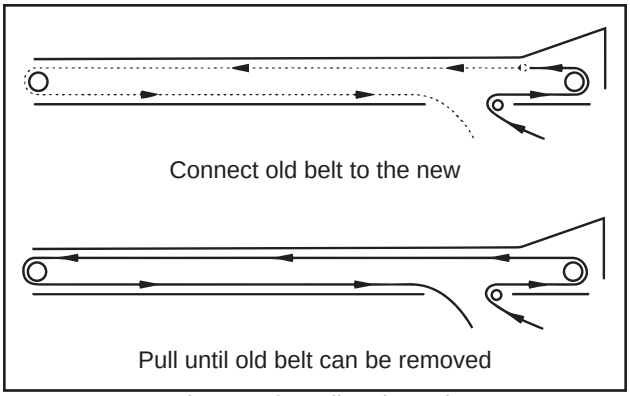


Fig 40 - Threading the Belt

4.3.4 Drive Belt Tension:
The drive belt is tightened by moving the engine base with the mount positioning bolts.

WARNING: Rotating Part Hazard
Turn off engine and wait for all belts to stop rotating.

1. Open the guard over the V-belt drive system.
2. Loosen the jam nuts on the engine mount positioning bolts.
3. Use the nut on the position bolt to move the motor mount to the required position to set belt tension.
4. Check the belt tension.
5. Calculate the tension (See Figure 46):
   - Measure the length of span between pulleys
   - Allow 1/64" of deflection per inch of span
6. Tighten the jam nuts to their specified torque.
7. Place guard over the belt and bolt to secure.

WARNING: Rotating Part Hazard
Always install and secure guards before starting engine and resuming work.

4.3.5 Check Pulley Alignment:
1. Use a straight edge across both drive and driven pulleys to check alignment.
2. Use the tapered lock hub in the center of the pulley to adjust the position of a pulley if required.
3. Move a pulley to align if there is more than a 1/32 inch gap between the edge of the pulley and the straight edge.

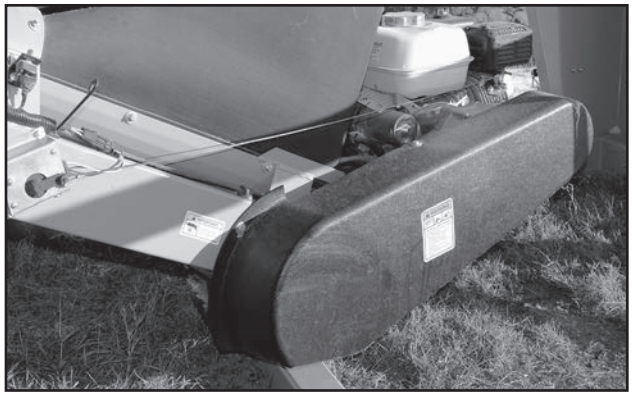


Fig 41 - Drive Roller

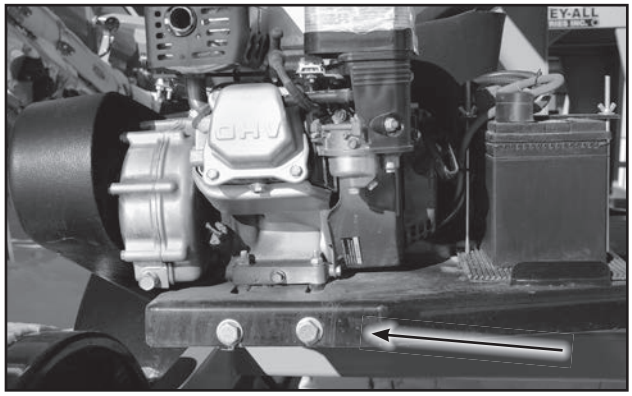


Fig 42 - Engine Mount

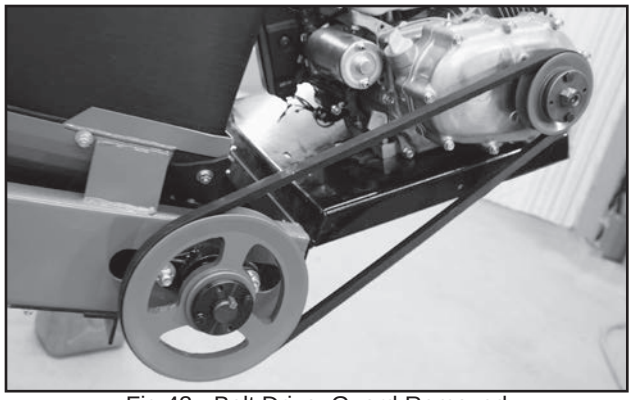


Fig 43 - Belt Drive, Guard Removed

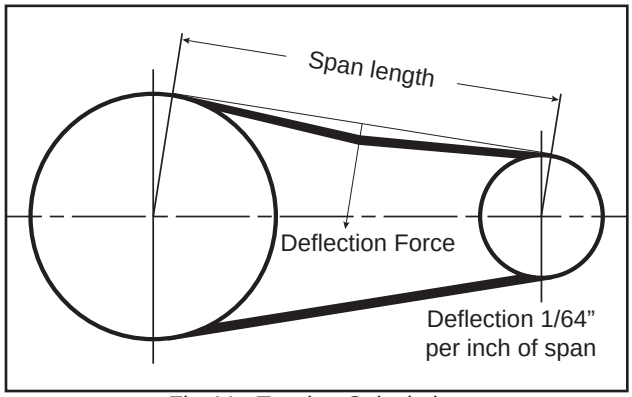


Fig 44 - Tension Calculation

4.3.6 Drive Belt Replacement:

1. Move engine mount to its loosest position. See Figure 47
2. Remove old belt.
3. Install replacement belt.
4. Set belt tension. Refer to instructions in Section 4.3.4.
5. Check pulley alignment. Refer to Section 4.3.5

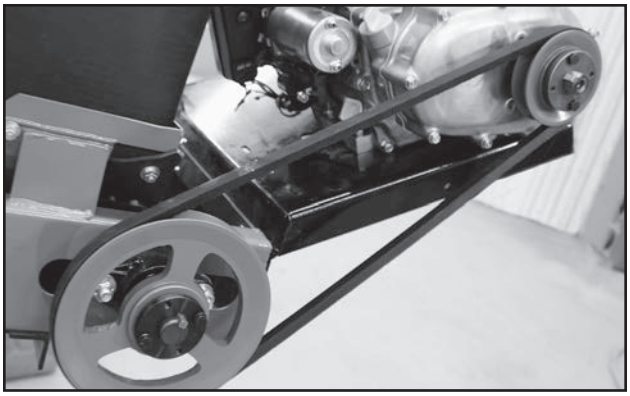


Fig 45 - Drive Belt

Cross Section	Smallest Sheave Diameter Range	RPM Range	Belt Deflection (Force Pounds)			
			Uncogged Hy-T® Belts and Uncogged Hy-T® Torque Team®		Cogged Torque Flex® and Machined Edge Torque Team® Belts	
			Used Belt	New Belt	Used Belt	New Belt
A, AX	3.0 - 3.6	1000-2500 2501-4000	3.7 2.8	5.5 4.2	4.1 3.4	6.1 5.0
	3.8 - 4.8	1000-2500 2501-4000	4.5 3.8	6.8 5.7	5.0 4.3	7.4 6.4
	5.0 - 7.0	1000-2500 2501-4000	5.4 4.7	8.0 7.0	5.7 5.1	9.4 7.6
B, BX	3.4 - 4.2	860-2500 2501-4000	n/a	n/a	4.9 4.2	7.2 6.2
	4.4 - 5.6	860-2500 2501-4000	5.3 4.5	7.9 6.7	7.1 6.2	10.5 9.1
	5.8 - 8.6	860-2500 2501-4000	6.3 6.0	9.4 8.9	8.5 7.3	12.6 10.9
C, CX	7.0 - 9.0	500-1740 1741-3000	11.5 9.4	17.0 13.8	14.7 11.9	21.8 17.5
	9.5 - 16.0	500-1740 1741-3000	14.1 12.5	21.0 18.5	15.9 14.6	23.5 21.6
D	12.0 - 16.0	200-850 851-1500	24.9 21.2	37.0 31.3	n/a	n/a
	18.0 - 20.0	200-850 851-1500	30.4 25.6	45.2 38.0	n/a	n/a
			Uncogged Hy-T® Wedge Belts and Uncogged Hy-T® Wedge Torque Team®		Cogged Hy-T® Wedge Belts and Hy-T® Wedge Machine Edge Torque Team®	
			Used Belt	New Belt	Used Belt	New Belt
5V	4.4 - 6.7	500-1749 1750-3000 3001-4000	n/a	n/a	10.2 8.8 5.6	15.2 13.2 8.5
	7.1 - 10.9	500-1740 1741-3000	12.7 11.2	18.9 16.7	14.8 13.7	22.1 20.1
	11.8 - 16.0	500-1740 1741-3000	15.5 14.6	23.4 21.8	17.1 16.8	25.5 25.0

Table 1 - Belt Deflection Force

4.3.7 Clean Air Filter

1. Review the Operator's Manual for the engine.

WARNING: Rotating Part Hazard
Turn off engine and wait for all belts to stop rotating.

2. Remove the cover over the air cleaner.

3. Remove the foam from the engine. Use an air hose to blow the dust and debris out of the foam.

4. Reinstall foam and secure the cover.

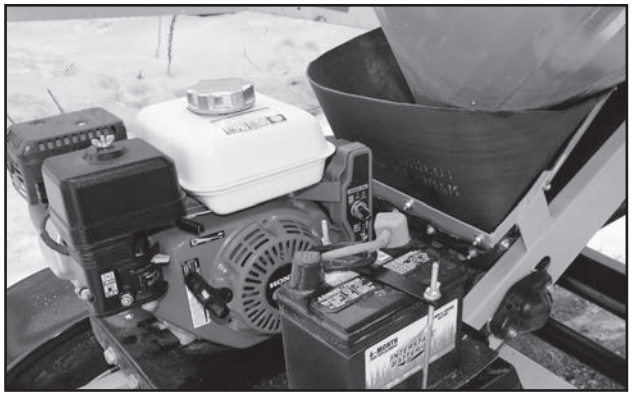


Fig 46 - Gas Engine

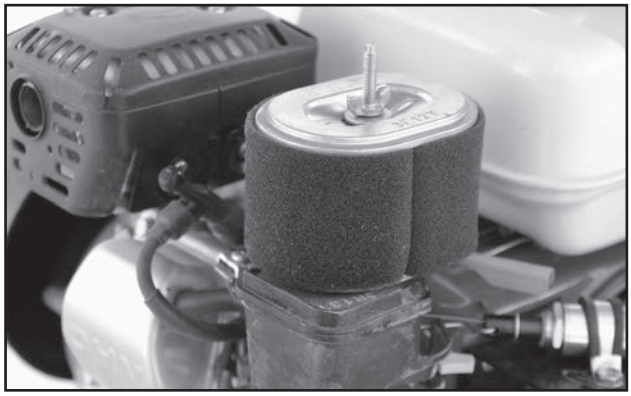


Fig 47 - Air Filter with Cover Removed

4.3.8 Changing Engine Oil And Filter

1. Review the Operator's Manual for the engine.

DANGER: Hot Components
Allow the engine to cool before changing the oil. Hot oil can cause burns if it contacts exposed skin.

Note:
It is best to change oil while engine is warm to keep contaminants in suspension.

2. Place a pan under the drain plug. Remove the drain and allow the oil to drain for 10 minutes.

3. Install and tighten the drain plug, and dispose of the used oil in an approved container.

4. Fill the crankcase with oil. Refer to Section 4.1

5. Run the engine for 1-2 minutes and check for oil leaks. If leaks are found, tighten drain plug slightly.

6. Check engine oil level. Top up as required.

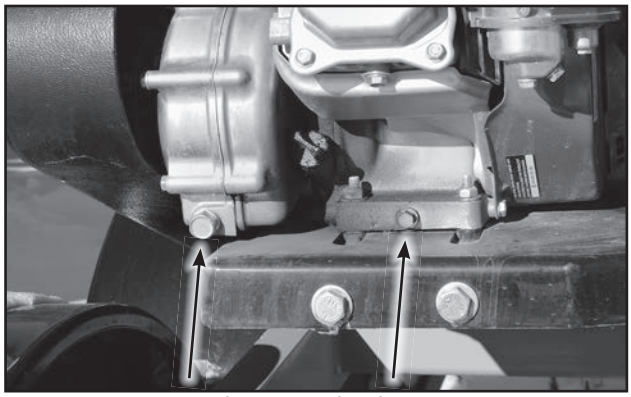


Fig 48 - Drain Plugs

4.3.9 Change Centrifugal Clutch Oil

1. Remove drain plug and drain for 10 minutes.

2. Fill with clutch case with oil.

3. Tighten plug and check for leaks.

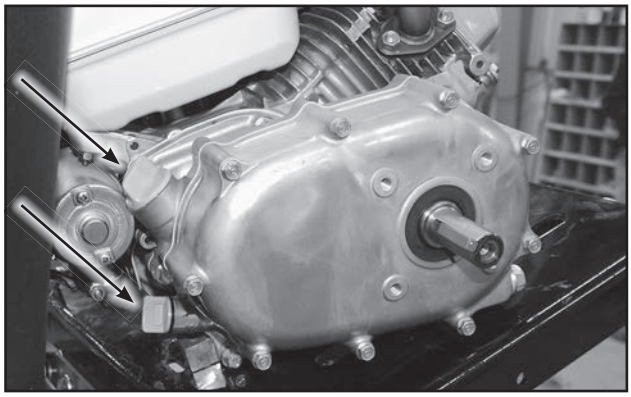


Fig 49 - Fill Plugs

4.4 SERVICE RECORD

See Lubrication and Maintenance Sections for details of service.

Copy this page to continue record.

Maintenance / Hours														
Maintenance / Serviced By														
10 Hours or Daily														
Check Fuel Level														
Check Oil Level														
Check Oil Level in Centrifugal Clutch														
Grease Conveyor Drive Roller Bearings														
Grease Discharge Roller Bearings														
50 Hours, or Weekly														
Check Conveyor Belt Tension and Alignment														
Check Hopper Flashing														
Check Drive Belt Tension and Alignment														
Clean Air Filter														
200 Hours or Annually														
Change Engine Oil														
Change Centrifugal Clutch Oil														
Wash Machine														

4.5 ORDERING PARTS

Always give the Model Number and Serial Number when ordering parts.

To get your parts promptly the following information will be required:
- The part name and number
- Your Name, Address, Town, Province/State, Country
- Complete information for shipping

Confirm all phoned in orders in writing. If Purchase Orders are required please note the number on the written order.

Unless claims for shortages or errors are made immediately upon receipt of goods, they will not be considered.

Inspect all goods received immediately upon receipt. When damaged goods are received, insist that a full description of the damage is made with the carrier against the freight bill. If this is insisted upon, full damage can be collected from the transport company.

No responsibility is assumed for delay or damage to merchandise while in transit. Dealers responsibility ceases upon delivery or pickup of shipment from or to the transportation company. Any freight damage claims must be made with the transportation company, not with the dealer.

Section 5: TROUBLE SHOOTING

In the following trouble shooting section, we have listed many of the problems, causes and solutions to the problems which you may encounter.

If you encounter a problem that is difficult to solve, even after having read through this trouble shooting section, please contact your authorized dealer, distributor or the factory. Before you call, please have this operator's manual and the serial number from your machine ready.

Problem

Possible Cause	**Possible Remedy**

Engine won't start

No fuel	Refuel
Low battery	Recharge or replace
Cold engine	Open choke
Air cleaner dirty	Clean the air cleaner, and/or replace the air filter

Engine labouring

Belt is sticky on the back side, because of oily product or wet/snowy conditions	Clean the belt
Hopper flashing too tight	Adjust to loosen the flashing

Movements are jerky, when operating with the remote control

Low battery power	Recharge battery or replace

Conveyor swings the wrong way when using remote control

Cables are connected to the pivot motor in opposite polarity.	Disconnect cables. Then reattach opposite to how they were. Refer to page 3.8, Figure 31

Conveyor belt doesn't turn or is slipping

Hopper flashing may be stuck to belt, because it is running dry and rubber is heating up	Turn off unit! Manually peel flashing up and off hopper. Then run dry product through to create barrier between flashing and belt
Belt loose	Tighten and align
Conveyor belt loose because it has stretched	Shorten belt
Belt frozen to tube from operating in high humidity conditions in extreme cold	Remove tender from area of high humidity and continue to run empty so the belt dries prior to freezing.

Problem - cont'd

Possible Cause	**Possible Remedy**
Conveyor belt doesn't turn or is slipping - cont'd	
Drive belt loose	Tighten drive belt
No power	Start engine, increase speed to maximum RPM
Drive roller is slipping	Replace V-belt
Seized bearing	Check all bearings, Replace any that are rough or seized
Belt/roller is jammed	Check for sticks, stones, other objects jammed in belt drive area and remove.
Failed centifugal clutch	Replace clutch
Conveyor belt doesn't align correctly	
Roller lagging may be worn	Replace roller or have it relagged
Conveyor Belt Fraying	
Belt not aligned	Align and adjust tension
Product leakage	
Product may be getting under the belt at the hopper, traveling up inside the belt and leaking off discharge end	Replace hopper flashing
Low conveying capacity	
Drive roller is slipping	Replace V-belt
Conveyor belt slipping	Tighten and align

Section 6: SIGN-OFF FORM

Convey-All follows the general Safety Standards specified by the American Society of Agricultural Engineers (ASAE), and the Occupational Safety and Health Administration (OSHA). Anyone who will be operating and/or maintaining the Probox Tender must read and clearly understand ALL Safety, Operating and Maintenance information presented in this manual.

Do not operate or allow anyone else to operate this equipment until such information has been reviewed. Annually review this information before the season start-up.

Make these periodic reviews of SAFETY and OPERATION a standard practice for all of your equipment. We feel that an untrained operator is unqualified to operate this machine.

The following Sign-Off Form is provided for your record keeping to show that all personnel who will be working with the equipment have read and understand the information in the Operator's Manual and have been instructed in the operation of the equipment.

DATE	EMPLOYEE'S SIGNATURE	EMPLOYER'S SIGNATURE

Section 7: REFERENCE

This section contains useful material.

For information not included here, or for a digital copy of this manual, please call your dealer, or Convey-All Industries Inc. directly for assistance (1-800-418-9461).

7.1 MEASUREMENTS

Model	Length in Feet	Total Units (Bushels)	Conveyor Size	Hopper Length	Hopper Width	Hopper Height
PT-100	23' 2"	100 (80)	8" tube 10" belt	8' 3"	n/a	n/a

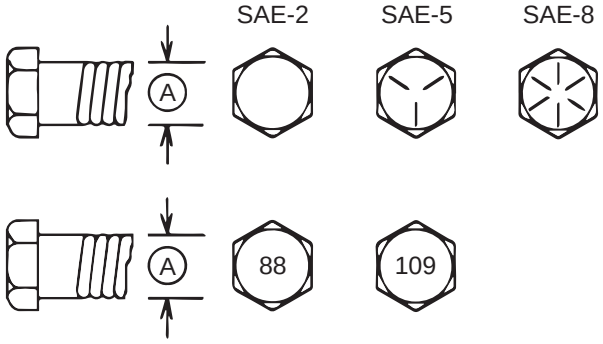
Model	Conveyor Height (plus trailer)	Discharge Height	Discharge Rate	Weight
PT-100	10' 7"	8' 11"	1,500 lbs/min	1,277 lbs

7.2 BOLT TORQUE

The tables shown below give correct torque values for various bolts and capscrews. Tighten all bolts to the torques specified in chart unless otherwise noted. Check tightness of bolts periodically, using bolt torque chart as a guide. Replace hardware with the same strength bolt.

ENGLISH TORQUE SPECIFICATIONS						
Bolt Diameter "A"	Bolt Torque*					
	SAE 2 (N.m)	(lb-ft)	SAE 5 (N.m)	(lb-ft)	SAE 8 (N.m)	(lb-ft)
1/4"	8	6	12	9	17	12
5/16"	13	10	25	19	36	27
3/8"	27	20	45	33	63	45
7/16"	41	30	72	53	100	75
1/2"	61	45	110	80	155	115
9/16"	95	60	155	115	220	165
5/8"	128	95	215	160	305	220
3/4"	225	165	390	290	540	400
7/8"	230	170	570	420	880	650
1"	345	225	850	630	1320	970

METRIC TORQUE SPECIFICATIONS				
Bolt Diameter "A"	Bolt Torque*			
	8.8 (N.m)	(lb-ft)	10.9 (N.m)	(lb-ft)
M3	0.5	0.4	1.8	1.3
M4	3	2.2	4.5	3.3
M5	6	4	9	7
M6	10	7	15	11
M8	25	18	35	26
M10	50	37	70	52
M12	90	66	125	92
M14	140	103	200	148
M16	225	166	310	229
M20	435	321	610	450
M24	750	553	1050	774
M30	1495	1103	2100	1550
M36	2600	1917	3675	2710



Torque figures indicated above are valid for non-greased or non-oiled threads and heads unless otherwise specified. Therefore, do not grease or oil bolts or capscrews unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

* Torque value for bolts and capscrews are identified by their head markings.

CONVEY-ALL INDUSTRIES INC.
BOX 2008, 130 CANADA STREET
WINKLER MANITOBA R6W 4B7
CANADA
P: (204) 325-4195
F: (204) 325-8116
1-800-418-9461

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