

CONVEY-ALL

INDUSTRIES INC.



TRANSFER CONVEYOR

Models:

UBGN-1014, UBSNH-1015,
UBSNH-1016-RC, UBSNH-1418

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 extends 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
TRANSFER CONVEYOR**

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's Name _____
Address _____	Address _____
City, _____	City _____
State/Prov., Code _____	State/Prov., Code _____
Phone Number (____) _____	
Conveyor Model Number _____	Application:
Conveyor Serial Number _____	<input type="checkbox"/> Private
Delivery Date _____	<input type="checkbox"/> Commercial

DEALER INSPECTION REPORT

- All Fasteners Tight
- Drive System Rotates Freely
- Drive Belts Aligned and Tensioned
- Driveline Secured to Machine
- Conveyor Belt Aligned and Tensioned
- All Belts Move Freely
- Hydraulic Hoses Free and Fittings Tight
- Checked Engine Fluid Levels
- Lubricated Machine

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 Transfer Conveyor when ordering parts or requesting service or other information.

The conveyor's serial number is located on the top of the conveyor tube just above the hopper. Please mark the number in the space provided for easy reference.



Fig 1 - Serial Number Location

Conveyor Model Number: _____

Conveyor Serial Number: _____

Engine/Motor Model Number: _____

Engine/Motor Serial Number: _____

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Section 1: INTRODUCTION

Congratulations on your choice of a Convey-All Transfer Conveyor to complement your seed delivery system in your agricultural operation. This equipment has been designed and manufactured to meet 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 Transfer Conveyor system requires that you and anyone else who will be operating or maintaining the machine, read and understand the Safety, Operation, Service & Maintenance and Trouble Shooting information contained within this Operator's Manual.

This manual covers the Transfer Conveyor 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 a digital copy of the manuals.

OPERATOR ORIENTATION - The directions; left, right, as mentioned throughout this manual, are as seen from the hopper and facing in the discharge hood.

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 Transfer Conveyor 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 or 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 conveyor. Be sure that you and anyone else who will be operate, maintain or working around the conveyor 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 conveyor.

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.

- Conveyor 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 conveyor. 
2. Only trained competent persons shall operate the conveyor. 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 or motor, remove ignition key or disable power source 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 conveyor.

2.3 EQUIPMENT SAFETY GUIDELINES

1. Safety of the operator and bystanders is one of the main concerns in designing and developing a conveyor. 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 the following precautions and insist those working with you, or for you, follow them.
2. In order to provide a better view, certain photographs or illustrations in this manual may show an assembly with a safety guards removed. However, 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 sign 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 equipment'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 conveyor 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 conveyor. 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. Accidents can be avoided.
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, conveyor engine or motor, and machine 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, motor, 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
 - glovesare recommended during 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 (from 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 with 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 ELECTRICAL SAFETY

1. Have only a qualified electrician supply power. All wiring should comply with the ANSI/NFPA 70 electrical requirements.



For North America make certain that sufficient amperage, at proper voltage and appropriate frequency for your geographical area is available before connecting power. All wiring should comply with ANSI/NFPA 70 electrical requirements. Have a licensed electrician provide power to the machine.

2. Make certain that the conveyor motor is properly grounded at the power source.
3. Make certain that all electrical switches are in the OFF position before plugging the Belted Conveyor in.
4. Turn machine OFF, shut down and lock out power supply (safety lock-out devices are available through your Convey-All dealer parts department) and wait for all moving parts to stop before assembling, servicing, adjusting, maintaining or repairing.
5. Disconnect power before resetting any motor.
6. Replace any damaged electrical plugs, cords, switches and components immediately.
7. Do not work on the conveyor's electrical system unless the power cord is unplugged or the power supply is locked out.

2.9 HYDRAULIC SAFETY

1. Always place all hydraulic controls in neutral before disconnecting and working on hydraulic systems.
2. Make sure that all components in the hydraulic system are kept in good condition and are clean.
3. Replace any worn, cut, abraded, flattened or crimped hoses.
4. Do not attempt any makeshift repairs to the hydraulic fittings or hoses by using tape, clamps or cements. The hydraulic system operates under extremely high-pressure. Such repairs will fail suddenly and create a hazardous and unsafe condition.

5. Wear proper hand and eye protection when searching for a high-pressure hydraulic leak. Use a piece of wood or cardboard as a backstop instead of hands to isolate and identify a leak.







6. If injured by a concentrated high-pressure stream of hydraulic fluid, seek medical attention immediately. Serious infection or toxic reaction can develop from hydraulic fluid piercing the skin surface.



7. Relieve pressure in hydraulic system before maintaining or working on machine.

2.10 OPERATING SAFETY

1. Please remember it is important that you read and heed the safety signs on the conveyor. 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 or motor. Place all controls in neutral, set park brake, 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 conveyor 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. Do not place hands, arms or body between one conveyor and another to prevent pinching or crushing. Components can move unexpectedly. 
7. Be familiar with machine hazard area. If anyone enters hazard areas, shut down machine immediately. Clear the area before restarting.
8. Keep hands, feet, hair and clothing away from all moving and/or rotating parts. 
9. Do not allow riders on the conveyor or tractor when transporting.
10. Keep working area clean and free of debris to prevent slipping or tripping.

11. Stay away from overhead obstructions and power lines during operation and transporting. Electrocutation can occur without direct contact. 
12. Do not operate machine when any guards are removed.
13. Close valve in hydraulic line when machine positioned or before transporting.

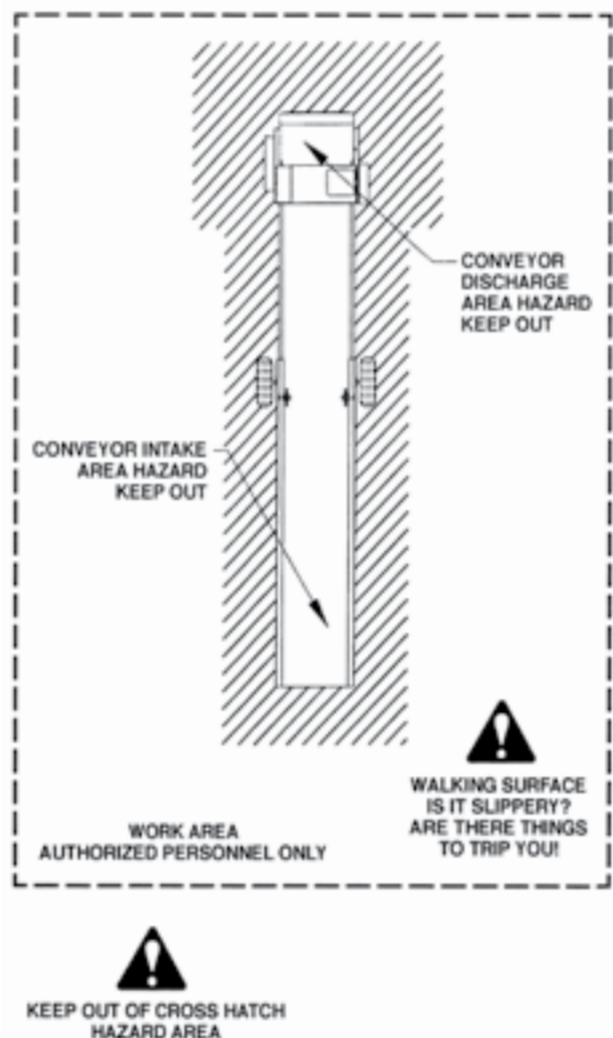





Fig 2 - Workplace Hazard Area

2.11 MAINTENANCE SAFETY

1. Review the Operator's Manual and all safety items before working with, maintaining or operating the conveyor. 
2. Place all controls in neutral or off, stop motor or engine, remove ignition key or disable power source 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. Before applying pressure to a hydraulic system, make sure all components are tight and that hoses and couplings are in good condition.
5. Relieve pressure from hydraulic circuit before servicing or disconnecting from tractor.
6. Keep hands, feet, hair and clothing away from all moving and/or rotating parts. 
7. Make sure there is plenty of ventilation. Never operate the engine in a closed building. The exhaust fumes may cause asphyxiation.
8. Clear the area of bystanders, especially children, when carrying out any maintenance and repairs or making any adjustments.
9. Place stands or blocks under the frame before working beneath the machine.
10. Before resuming work, install and secure all guards when maintenance work is completed.
11. Keep safety signs clean. Replace any sign that is damaged or not clearly visible.

2.12 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.

2.13 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.

2.14 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.

2.15 TIRE SAFETY

1. Failure to follow procedures when mounting a tire on a wheel or rim can produce an explosion and may result in serious injury or death.
2. Do not attempt to mount a tire unless you have the proper equipment and experience to do the job.
3. Have a qualified tire dealer or repair service perform required tire maintenance.
4. When replacing worn tires, make sure they meet the original tire specifications. Never undersize.

2.16 STORAGE SAFETY

1. Store the conveyor 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.

2.17 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. If transporting on a trailer, be sure that it 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. Plan your route to avoid heavy traffic.
6. Do not drink and drive.
7. 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.
8. Never allow riders on the conveyor.

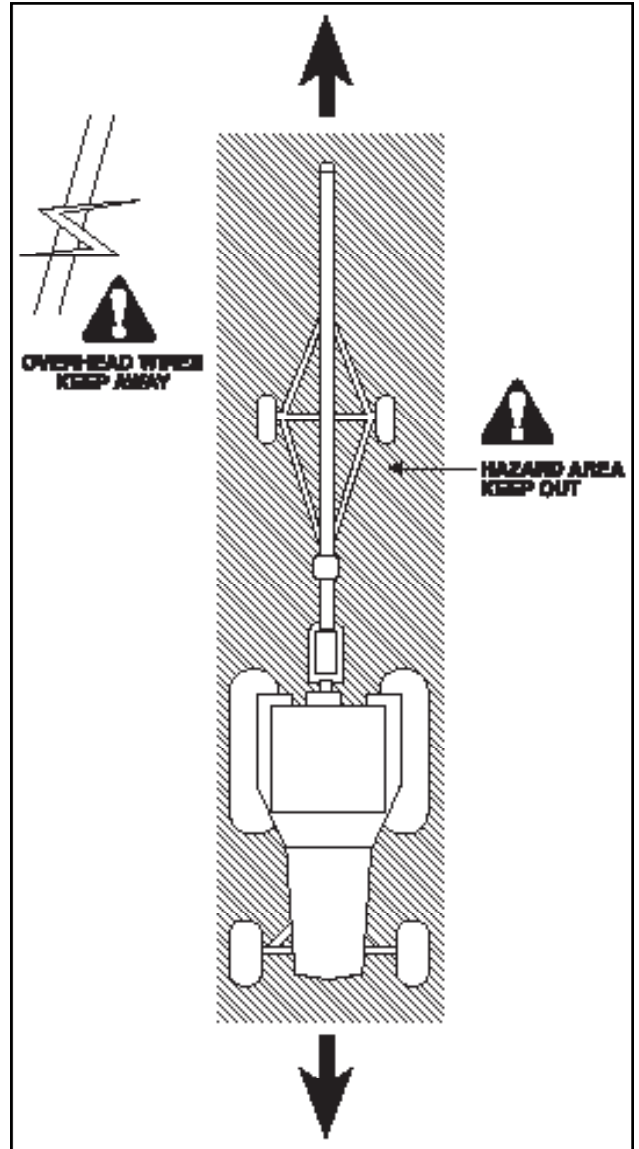


Fig 3 - Transporting Hazard Area

2.18 SAFETY SYMBOL IDENTIFICATION

There are many types of safety symbols on signs in many locations on the transfer conveyor. 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.

 <p>Rotating Part Hazard</p>	 <p>Rotating Part Hazard</p>	 <p>Rotating Part Hazard</p>
 <p>Moving Parts Hazard</p>	 <p>High Pressure Fluid Hazard</p>	 <p>High Pressure Fluid Hazard</p>
 <p>Electrocution Hazard</p>	 <p>No Smoking</p>	

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 or motor. Place all controls in neutral, set park brake, 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 conveyor or tractor when transporting.
- Stay away from overhead obstructions and power lines during operation and transporting. Electrocutation can occur without direct contact.
- Do not operate machine when any guards are removed.
- Set park brake on tractor, chock wheels of conveyor 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 Transfer Conveyor is designed to efficiently move grain, pulse crops, or granular material from under a truck, rail car, storage facility and to another conveyor. Power is provided by an gas engine, electric or hydraulic motor. 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. Safety 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. Untrained operators are not qualified to operate the machine.

The design and configuration of this conveyor 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 conveyor will provide many years of trouble free service.

3.1 MACHINE COMPONENTS

The Transfer Conveyor is portable and low enough to fit under trucks or low storage facilities. The "RC" models have an extra low profile to fit under rail cars. Normally the discharge is directed into another conveyor or conveying system.

A gas engine, electric or hydraulic motor can supply power to the belt drive located at the discharge end. Material enters the hopper on the bottom end and exits through the discharge hood at the top.

A manual winch is used to raise and lower the hopper sides.

- a. Incline Tube
- b. Horizontal Frame
- c. Discharge Hood
- d. Hopper
- e. Hopper Winch
- f. Drive Belt(s)
- g. Engine/Motor Mount
- h. Hitch
- i. Document Holder

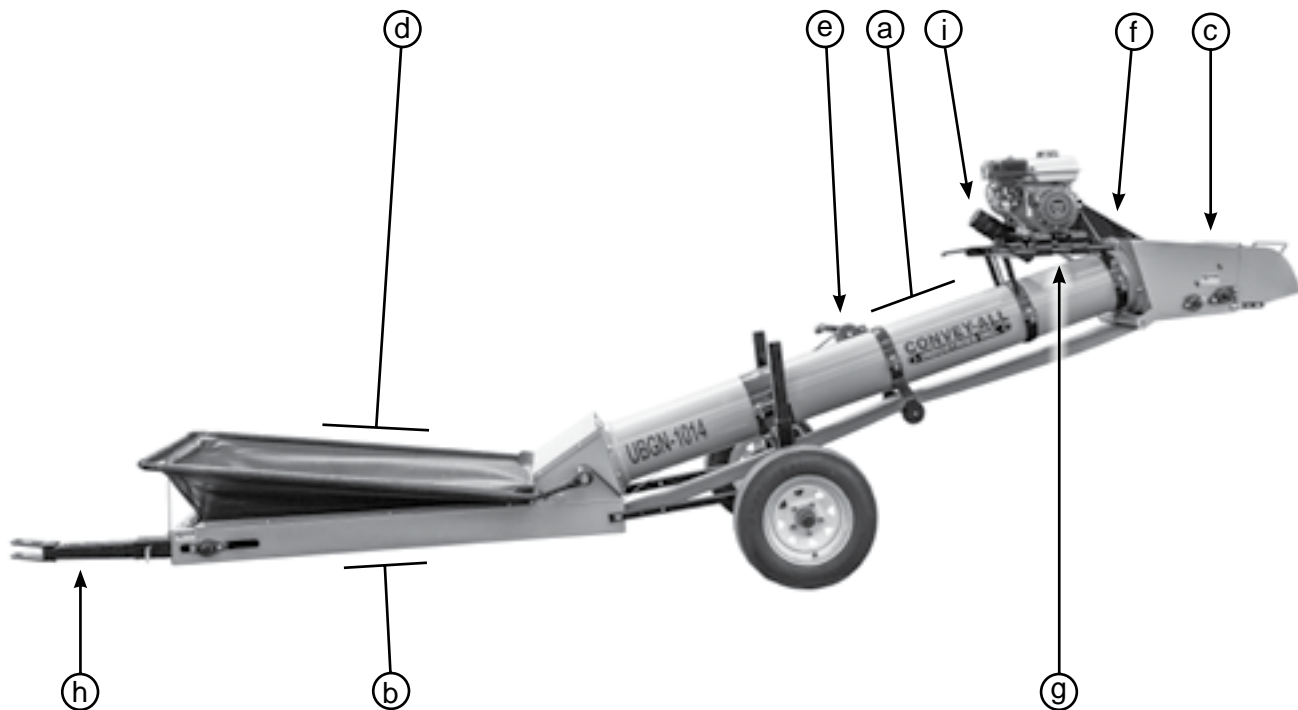


Fig 4 - Transfer Conveyor

3.2 MACHINE BREAK-IN

Although there are no operational restrictions on the conveyor when used for the first time, it is recommended that the following mechanical items be checked:

Before Starting Work:

1. Read the conveyor and power unit operator's manuals.
2. Run the unit for half an hour to seat the belting and flashing around the hopper. It is normal for rubber from the flashing to be expelled out the discharge and form a pattern on the belt.

After Operating or Transporting for 1/2 hour:

1. Re-torque all the wheel bolts fasteners and hardware.
2. Check the drive and conveying belt tension and alignment. Tension or align as required.
3. During the conveyors first few minutes of operation, check belt alignment to ensure preset alignment and tension does not vary under loaded conditions.
4. Check the flashing seal on the hopper. If any grain comes out of the hopper around the flashing, stop, loosen flashing mounting screws and adjust. Retighten anchor screws and try again. Repeat until no grain is lost.
5. Check that all guards are installed and working as intended.

After Operating for 5 Hours and 10 Hours:

1. Repeat steps 1 through 5 above.
2. Change gas engine crankcase oil (if equipped).
3. Go to the normal servicing and maintenance schedule as defined in the Section 4: Service and Maintenance.

3.3 PRE-OPERATION CHECKLIST

Efficient and safe operation of the conveyor requires that each operator reads and understands the operating procedures and all related safety precautions outlined in this section. A pre-operation checklist is provided for the operator. It is important for both the personal safety and maintaining the good mechanical condition of the conveyor that this checklist is followed.

Before operating the conveyor and each time thereafter, the following areas should be checked off:

1. Service the machine per the schedule outlined in the Section 4.
2. Use only an engine or motor of adequate power to operate the conveyor.
3. Check that all guards are installed, secured and functioning as intended. Do not operate with missing or damaged shields.
4. Check work site. Clean up working area to prevent slipping or tripping.
5. Check the drive and conveyor belt tension and alignment. Tension or align as required.
6. Check that conveyor belt is not frayed or damaged.
7. Be sure conveyor wheels are chocked.
8. Check that discharge and hopper areas are free of obstructions.

3.4 CONTROLS

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

Hopper:

This machine is designed with a collapsible intake hopper that can be raised or lowered with a winch. When the hopper sides are raised, the maximum conveying capacity is obtained.

Hopper Winch:

Use to raise and lower the hopper sides.

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 position:

This lever sets the position of the engine base. Move the lever up to slide the engine base away from the drive pulley and disengage the belt. Move downward 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:

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:

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:

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.



Fig 5 - Hopper Winch



Fig 6 - Hopper Winch on RC Models

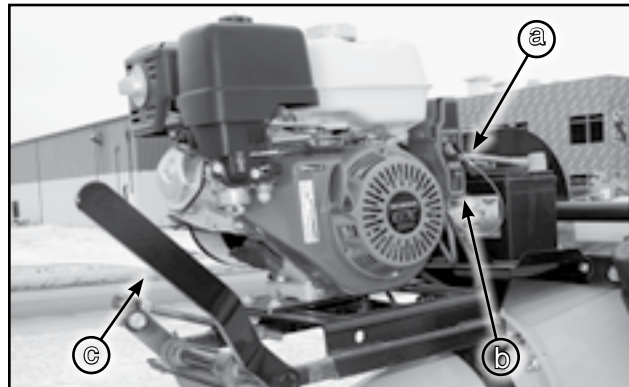


Fig 7 - Gas Engine with Electric Start

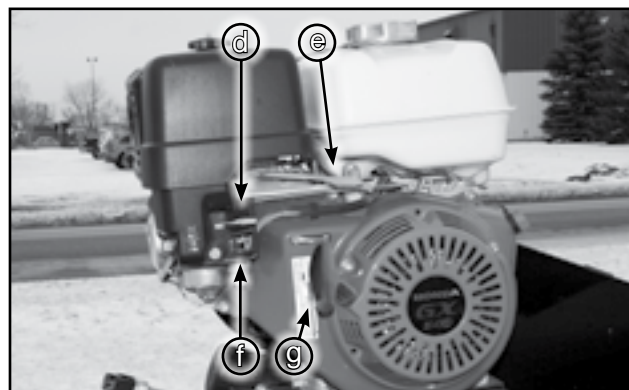


Fig 8 - Gas Engine

g. Starting Rope (See Figure 7):

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.

Electric Motor:

All conveyors with electric power option rely on the dealer and customer to select the motor with the appropriate horsepower and to hire a licensed electrician to provide power, as per the National Electrical Code ANSI/ NFPA 70 and local codes.

A variety of switches can be used. Install an ON/OFF switch next to the motor for the convenience of the operator.

Minimum Power Requirements:

Model	Electric HP
UBGN-1014	5hp
UBSNH-1015	7.5hp
UBSNH-1016-RC	7.5hp
UBSNH-1418	10hp

Table 1 - Power Requirements

Hydraulic Motor:

Position the power unit next to the conveyor, and connect hydraulic hoses to the couplers.

Frame Height/Angle:

The machine is designed with an adjustable wheel frame that can be used to set the frame angle or discharge height.

Set at the height appropriate for your application. Keep the angle as low as possible to insure that the conveying capacity is at the maximum.

To change the balance of the machine for moving around the yard; loosen the clamp around the tube. Slide or tap the undercarriage to adjust its position along the tube. Tighten the clamp again.

Discharge Hood:

The Discharge hood is designed with brackets that allow it to tilt or be removed. This will facilitate throwing material at a different angles from the end of the machine. Set the hood appropriately for the application.



Fig 9 - Electric Motor



Fig 10 - Hydraulic Motor, Hoses not Attached



Fig 11 - Wheel Frame



Fig 12 - Adjustable Hood

3.5 ATTACH TO TOW VEHICLE

The transfer conveyor may be attached to a truck or tractor whenever it is moved. It is road worthy and may be transported by a truck over long distances.

Follow this procedure when attaching to or unhooking from a tow unit:

1. Make sure that bystanders, especially small children, are clear of the working area.
2. The hitch is removable. Install hitch and secure with the anchor pin and retainer before using hitch.
3. Be sure that there is sufficient room and clearance to back up to the conveyor.
4. Lift the hopper to the drawbar height on the towing vehicle and install the pin with its retainer.
5. Secure the safety chain around the drawbar cage to prevent unexpected separation.
6. Set the park brake before dismounting.
7. Remove the chocks from the wheels.
8. Move the machine out of its working or storage location.
9. Reverse the above procedures when unhooking.



Fig 13 - Hitch

3.6 CONVEYOR PLACEMENT

Follow this procedure when placing the Transfer Conveyor into its working position:

1. Clear the area of bystanders, especially small children, before starting.
2. Be sure there is enough clearance from other equipment to move the machine into its working position.
3. Move the machine under the grain truck or to the secondary conveyor and storage facility.

Note:

The machine is evenly balanced.
Push down slightly on discharge end
to raise hopper off the ground
and maneuver easily.

4. Place chocks in the front and rear of each wheel.
5. Position the next conveyor or conveying system under the discharge hood and secure.
6. For the Electric Motor Unit:
 - Have a certified electrician provide power to the machine.
 - Provide convenient shutdown switches and comply with local electrical codes.
 - Use a totally enclosed electric motor. Be sure electric motor is properly grounded.
7. For the Hydraulic Drive Unit:
 - Position the power unit next to the conveyor.
 - Chocks the front and rear wheels of the power unit.
 - Connect hydraulic hoses to the couplers.



Fig 14 - Conveyor Under Truck



Fig 15 - Hopper Sides Raised



Fig 16 - Wheels Chocked



Fig 17 - Next Conveyor

3.7 FIELD OPERATION

3.7.1 Starting Conveyor

Gas Engine Units:

1. Move engine assembly to its loosest drive belt tension.
2. Turn ignition switch on.
3. Move throttle to its 1/4 position for starting.
4. Close choke if engine is cold.
5. Pull sharply on the starting rope until the engine starts.
6. Run until the engine warms and the choke is opened.
7. Move engine assembly to engage drive belt.
8. Increase engine speed to full throttle.
9. Start flow of material.



Fig 18 - Gas Engine



Fig 19 - Electric Motor

Electric Motor Units:

1. Turn the electric motor ON.
2. Start the flow of material and unload.

Hydraulic Drive Units:

1. Place all controls in neutral.
2. Start tractor engine and run at low idle.
3. Place hydraulic lever in detent.
4. Increase engine speed to rated RPM.
5. Begin unloading into the hopper.



Fig 20 - Hydraulic Motor

3.7.2 Stopping Conveyor

Gas Engine Units:

1. Run until conveyor belt is empty.
2. Reduce speed to low idle.
3. Move engine assembly to disengage drive belt.
4. Shut off engine

Electric Motor Units:

1. Run until the conveying belt is empty.
2. Turn off motor and lock out power source.

Hydraulic Drive Units:

1. Run until conveying belt is empty.
2. Reduce engine speed to low idle.
3. Place hydraulic lever in neutral.
4. Shut off engine.



Fig 21 - Working Conveyor

3.7.3 Emergency Stopping

Although it is recommended that the conveyor belt be emptied before stopping, in an emergency situation, stop or shut-down the power source immediately.

Correct the emergency before resuming work.

3.7.4 Restarting after Emergency Stop

When the machine is shut down inadvertently or in an emergency, the conveyor belt will still be covered with material.

Since the start-up torque loads are much higher than normal when the belt is covered, restart at a low speed. It may be necessary to tighten the drive belt slightly to handle the heavier than normal loads.

3.7.5 Belt Speed

The best results are obtained when the input drives are set to provide a belt speed of 400 to 500 ft./min.

Count the number of belt revolutions per unit time to determine belt speed. Use the lacing as a reference when counting belt revolutions.

Contact your dealer or the factory for the appropriate drive components to give the recommended belt speed.

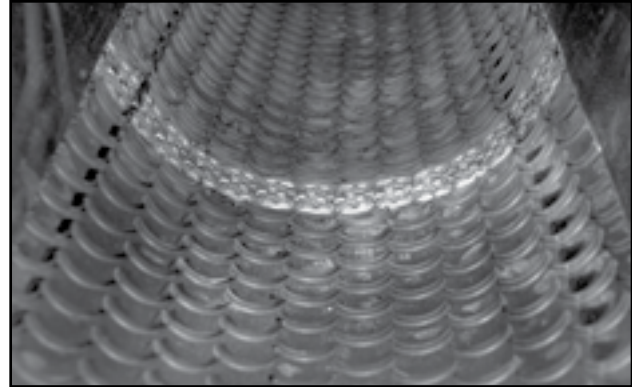


Fig 22 - Conveyor Lacing

3.7.6 Unplugging

In unusual moisture, crop or material conditions, the machine can plug. When unplugging, follow this procedure:

1. Place all controls in neutral or off, stop engine or motors and disable power source.
2. Remove the material from the discharge and the intake area.
3. Reposition unit if discharge area plugs due to lack of clearance.
4. Restart unit.



Fig 23 - Under Discharge Hood

3.7.7 Hold Down Wheels on UBGN models

In situations where the conveying belt jams or is overtightened, the belt can come out from under the hold down wheels at the transition point. To correct situation:

1. Run until machine is empty or remove all material from machine.
2. Turn engine or motors off and disable the power source.
3. Move conveyor belt into its loosest position. Refer to Section 4.3.1
3. Remove transition cover.
4. Push conveyor belt under hold down wheels.
5. Set tension and alignment. Refer to Section 4.3.1
6. Install and secure transition cover.

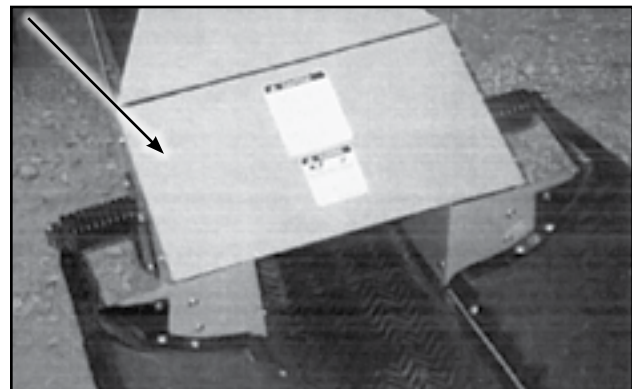


Fig 24 - Transition Cover



Fig 25 - Hold Down Wheel Location

3.8 OPERATING HINTS:

- 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.
- The machine is available in 10" and 14" diameter tubes, as well as 16" and 22" belts. The larger the tube and wider the belt, the higher the capacity will be.
- Never allow anyone into the workplace hazard area. If anyone enters, stop immediately. The visitor must leave before resuming work.
- Position discharge hood appropriately for the application. Refer to Section 3.4
- For best results, conveyor belt should rotate at a speed of 400 to 500 ft./min. Refer to Section 3.7.5.
- 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.
- Keep the hopper full for maximum capacity.
- Most efficient results will be obtained when flow of incoming material is directed to the front of the hopper (closer to the tube).
- The 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.



Fig 26 - Feeding Hopper

3.9 TRANSPORTING



TRANSPORT 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.
- Always travel at a safe speed. Use caution when making corners or meeting traffic.
- Make sure the SMV (Slow Moving Vehicle) emblem and all the lights and reflectors that are required by the local highway and transport authorities are in place, are clean and can be seen clearly by all overtaking and oncoming traffic.
- Do not allow riders on the Conveyor or the tractor when transporting.
- Close valve in hydraulic line (if equipped).
- Attach conveyor to towing vehicle with a pin and retainer. Always attach the safety chain.
- 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.
- Do not exceed 20 mph (32 km/h). Reduce speed on rough roads and surfaces.
- Always use hazard warning flashers on tractor when transporting unless prohibited by law.

Convey-All Transfer Conveyors are designed to be easily and conveniently moved from place to place.

When transporting, follow this procedure:

1. Review the Transport Safety Schematic before starting.
2. Be sure all bystanders are clear of the machine.
3. Electric Motor Units:
Unplug the power cord, wrap it around frame and secure to prevent dragging.
4. Hydraulic powered units:
Disconnect hydraulic hoses, remove power source, wrap hose around frame and secure to prevent dragging.
5. The unit is highway safe. It can also be placed on a transport vehicle or trailer and tied down securely.
6. Hitch is removable. Place hitch, then attach it to a tractor or truck using a hitch pin with a retainer and a safety chain.

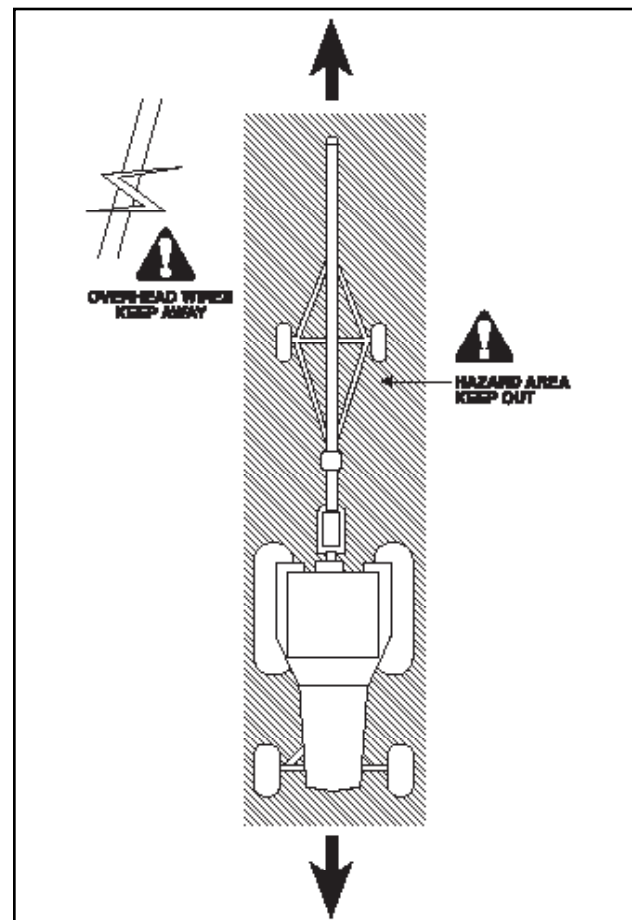


Fig 27 - Transporting Hazard Area

7. Remove chocks from the wheels.
8. Slowly pull away from the working area.
9. Ensure the SMV (Slow Moving Vehicle) emblem and all the lights and reflectors that are required by the local highway and transport authorities are in place, are clean and can be seen clearly by all overtaking and oncoming traffic.
10. 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.
11. Do not allow riders on the machine or tractor.
12. During periods of limited visibility, use pilot vehicles or add extra lights to the machine.
13. Always use hazard flashers on the tractor when transporting unless prohibited by law.



Fig 28 - Wheel Chocks

3.10 STORAGE



STORAGE SAFETY

- Store the unit in an area away from human activity.
- Do not permit children to play on or around the stored machine.

After the season's use, the conveyor should be thoroughly inspected and prepared for storage.

Repair or replace any worn or damaged components to 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. Wash the entire machine thoroughly using a water hose or pressure washer to remove all dirt, mud, debris or residue.
2. Lubricate all grease fittings (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.
3. Inspect all moving or rotating parts to see if anything has become entangled in them. Remove the entangled material.
4. Apply a light coat of oil to the roller chain coupler to prevent rusting.
5. Hydraulic Drive Units:
Inspect all hydraulic hoses, fittings, lines, couplers and fittings. Tighten any loose fittings. Replace any hose that is badly cut, nicked or abraded or is separating from the crimped end of the fitting.
6. Touch up all paint nicks and scratches to prevent rusting.
7. Select a storage area that is dry, level and free of debris.

If the machine cannot be placed inside, cover the gas engine or electric motor with a water proof tarpaulin and tie securely in place.
8. Store machine in an area away from human activity.
9. Do not allow children to play on or around the stored machine.

Section 4: SERVICE AND MAINTENANCE



SERVICE AND MAINTENANCE SAFETY

- Review the Operator's Manual and all safety items before working with, maintaining or operating the machine.
- Place all controls in neutral, stop motor, unplug the cord. Wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.
- 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.
- Before applying pressure to a hydraulic system, make sure all components are tight and that hoses and couplings are in good condition.
- Relieve pressure from hydraulic circuit before servicing or disconnecting from tractor.
- 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.

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 Crankcase Oil (Honda gas engine):

Use an SAE 1 OW30 multi-viscosity oil meeting the American Petroleum Institute (API) classification of SF or SG for normal operating temperatures.

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

Crankcase Capacity:
1.1 Litres (1.16 US qt, 1.94 Imp pt)

Engine Gasoline:

Use a standard automotive unleaded gasoline for all operating conditions.

Fuel Tank Capacity: 6.1 Litres (6.4 U.S. quart)

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

Gas Engine Units:

1. Check fuel level. Add as required.
2. Check crankcase oil level. Add as required.

Electric Motor Units:

3. Grease counter shaft bearings. See Figure 30



Fig 29 - Gas Engine



Fig 30 - Counter Shaft Grease Zerks

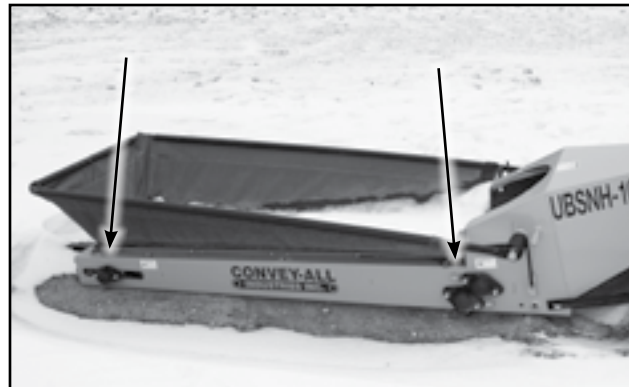


Fig 31 - Hopper Roller Bearing

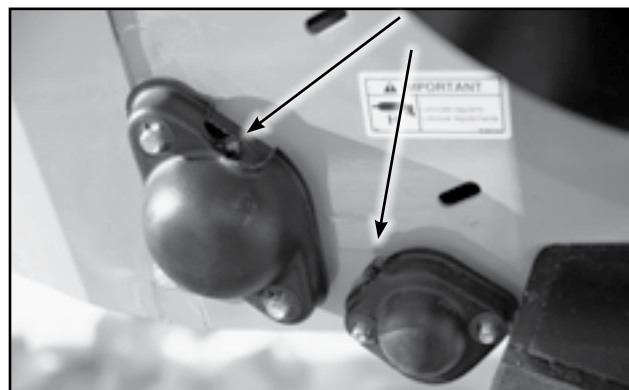


Fig 32 - Discharge Roller Bearings Zerks

Conveyor:

- Grease hopper roller bearings on both sides (6 locations).
- Grease discharge roller bearings. on both sides (4 locations).

4.2.2 After 50 Hours or Weekly

Conveyor:

- 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.

- Check the condition of rubber hopper flashing. Be sure it still seals the hopper to prevent leaking. See Figure 34

Gas Engine and Electric Motor Units:

- Check drive belt tension and alignment. Refer to Section 4.3.4 and 4.3.5
- Clean air filter. Refer to Section 4.3.8

Hydraulic Drive Units:

- Oil input drive coupler.

UBGN Models:

- Check hold down wheels for wear on rubber wrap. Replace if necessary. Refer to Section 4.3.7

4.2.3 After 200 hours or Annually

Gas Engine Units:

- Change engine oil. Refer to Section 4.3.9

Conveyor:

- Repack wheel bearings.
- Wash the machine

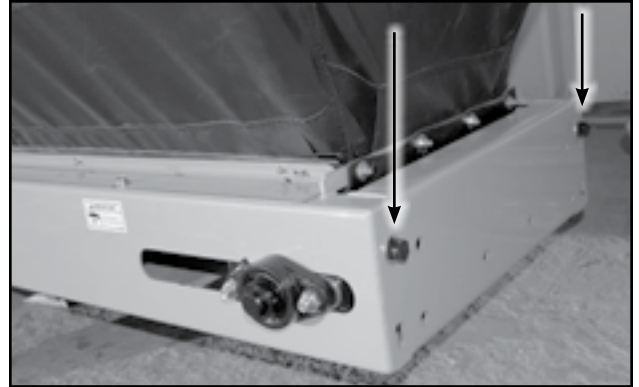


Fig 33 - Tension Bolts

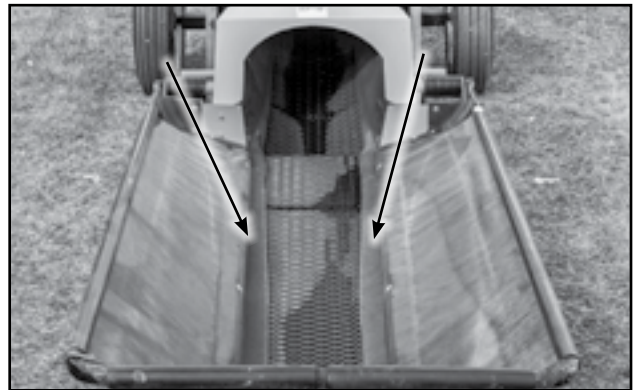


Fig 34 - Hopper Flashing

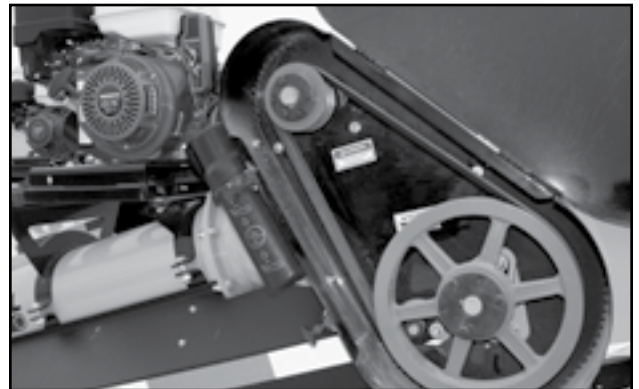


Fig 35 - Drive Belt



Fig 36 - Hold Down Wheel Location

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 Conveying Belt Tension:

The tension and alignment of the belt should be checked weekly, or more often if required. Be sure that it does not slip or run to one side.

To maintain the belt, follow this procedure:



WARNING: Rotating Part Hazard
Turn off engine or motor, remove power supply and wait for all belts to stop rotating.

1. Use the idler roller tension bolts to set the tension of the belt.

The conveying belt should not slip on its drive and idler 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 ends and in the drive housing. As with tensioning, the alignment should be checked weekly, or as required.



WARNING: Rotating Part Hazard
Turn off engine or motor, remove power supply and wait for all belts to stop rotating.

1. Rotate the conveyor belt a half revolution when the belt is new and check the drive and idler rollers.

NOTE:

If belt is out of alignment,
it will move to the loose side.

Tighten the loose side or loosen the tight side.

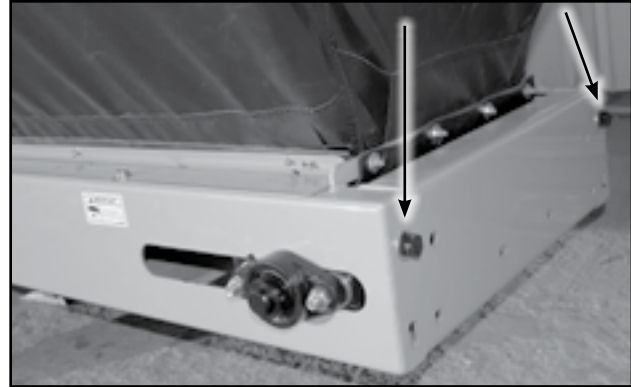


Fig 37 - Idler Roller Tension Bolt

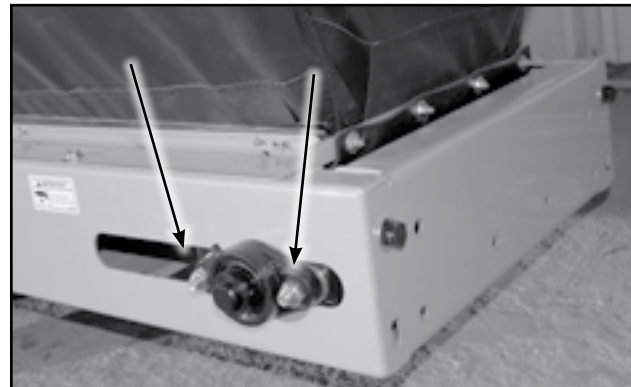


Fig 38 - Roller Bearing Anchor Bolts



Fig 39 - Belt Aligned in Discharge Hood

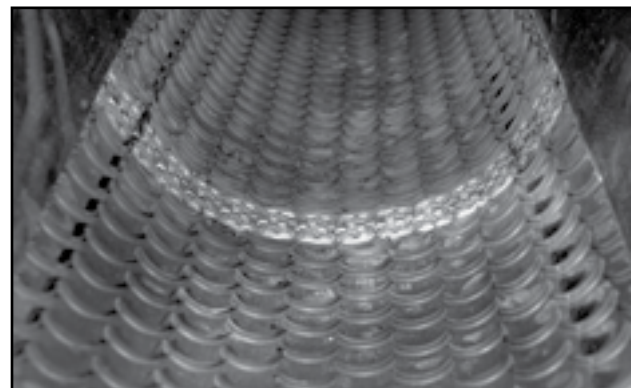


Fig 40 - Belt Centred in Tube

2. Loosen the roller bearing anchor bolts and use the tension bolts to set the position.
3. Tighten mounting bolts.
4. 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.

4.3.3 Conveyor Belt Replacement:

1. Rotate the belt until the seam is positioned under the tube and is accessible.
2. Adjust the tension bolt in the idler housing to its loosest position. See Figure 37
3. Pull all the slack to the seam area.
4. Remove the lacing pin and open the belt.
5. Attach one end of the replacement belt to the end of the existing belt (to be removed) 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 hood. The new belt will follow and be threaded into place.
7. Disconnect the old belt.
8. Connect the ends of the new belt.
9. Place the pin in the lacing and crimp the ends.
10. Set the belt tension. Refer to Section 4.3.1
11. Check and set the belt alignment. Refer to Section 4.3.2



Fig 41 - Conveyor Belt Access Panel

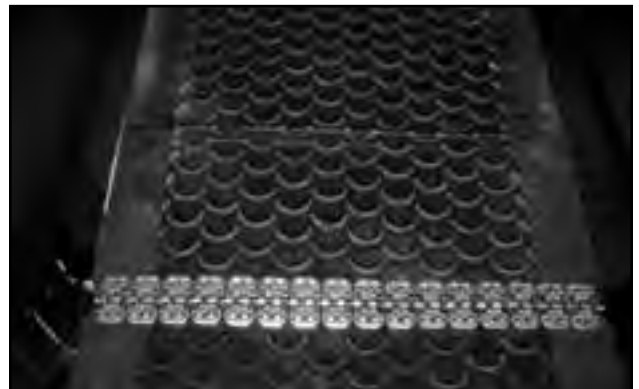


Fig 42 - Conveyor Belt Seam under Tube

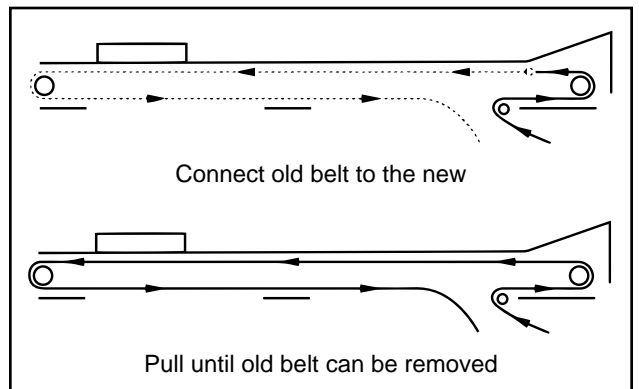


Fig 43 - Threading New Belt

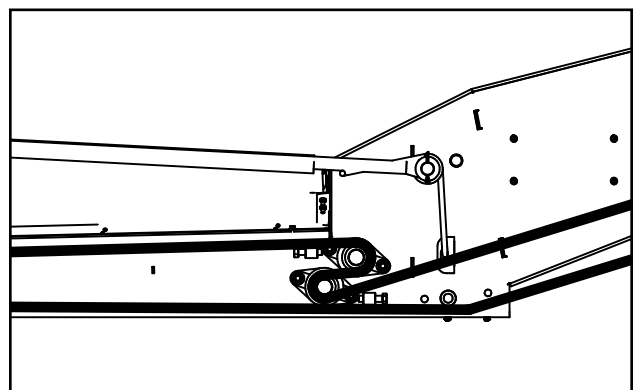


Fig 44 - S-Transition

4.3.4 Drive Belt Tension:

To adjust belt tension, follow this procedure:



WARNING: Rotating Part Hazard
Turn off engine or motor, remove power supply and wait for all belts to stop rotating.

First, set tension on the “counter shaft to drive” belt.

1. Open the guard over the V-belt pulleys.
2. Loosen counter shaft bearing mount anchor bolts and jam nuts.
3. Use bearing mount position bolts to adjust countershaft position and set belt tension.

Calculate the tension (See Figure 47):

- Measure the length of span between pulleys
- Allow 1/64” of deflection per inch of span

4. Tighten bearing mount anchor bolts.
5. Tighten jam nuts on the adjusting bolts.
6. Close and secure guard over pulleys.

Second, set tension on the “engine to counter shaft” belt.

7. Open the guard over the V-belt pulleys.
8. Loosen engine/motor mount bolts and jam nuts.
9. Use motor mount bolts to set belt tension.

Calculate the tension (See Figure 47):

- Measure the length of span between pulleys
- Allow 1/64” of deflection per inch of span

10. Tighten motor mount anchor bolts.
11. Tighten jam nuts on the adjusting bolts.
12. Close and secure guard over pulleys.

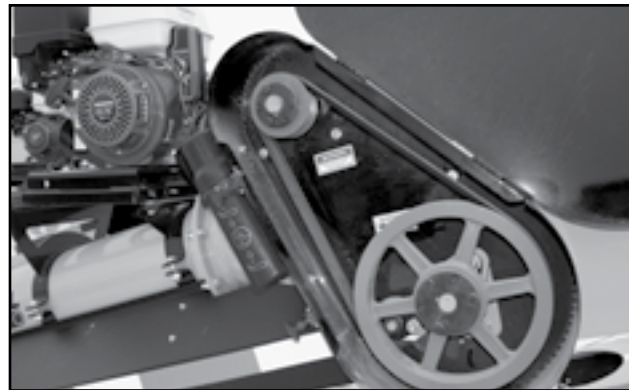


Fig 45 - Counter Shaft to Belt Roller Belt

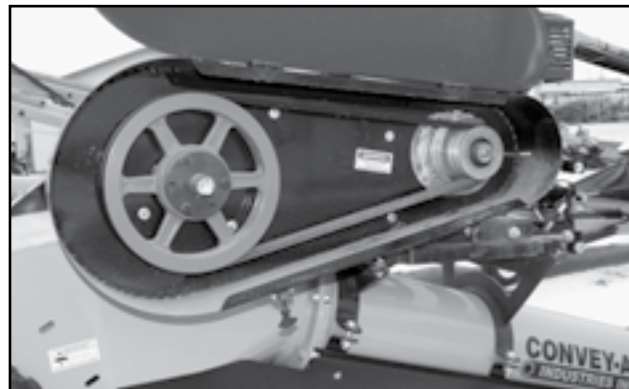


Fig 46 - Engine to Counter Shaft

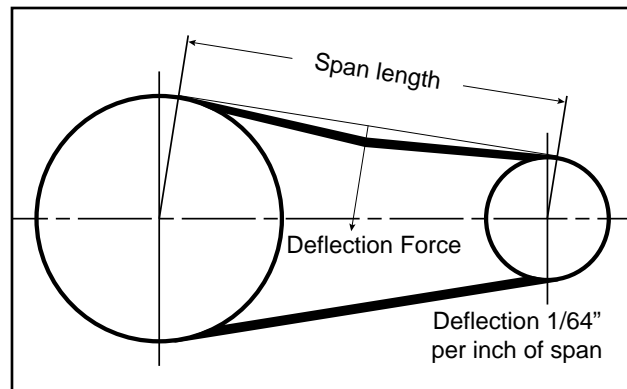


Fig 47 - Tension Calculation



Fig 48 - Electric Motor, Speed Reduction Drive

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.

4.3.6 Drive Belt Replacement:

1. Place drive system into its loosest position.
2. Remove old belt.
3. Install replacement belt.
4. Set belt tension.
Refer to instructions in Section 4.3.5
See Figure 47
5. Check pulley alignment. Refer to Section 4.3.7

4.3.7 UBGN Hold Down Wheels Replacement:

1. Remove transition cover. See Figure 24
2. Remove bolts which face the open hopper (a). There are 2 bolts on either side. See Figure 49
3. Remove bolts which are inside the tube (b). 1 on either side. See Figure 49
4. Now, these side brackets are loose, but still attached to the hopper flashing. Folded both sides out, to lay on hopper. This will give access to the wheels.
5. Remove the bolts, then remove worn wheels (c).
4. Insert the new wheels and tighten bolts.
5. Fold side brackets back into place. Bolt and tighten.
6. Secure transition cover to guard hopper transition.

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 2 - Belt Deflection Force

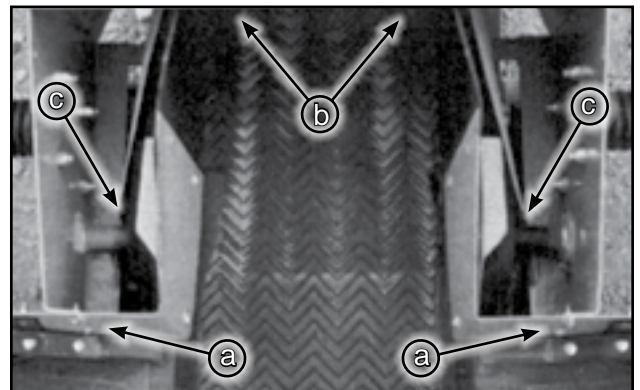


Fig 49 - Bolts Facing Hopper (a), Bolts Inside (b), Wheels (c)

4.3.8 Clean Air Filter

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



WARNING: Rotating Part Hazard
Turn off engine or motor, remove power supply and wait for all belts to stop rotating.

2. Remove the cover over the air cleaner.
3. Remove the foam from the engine.
4. Use an air hose to blow the dust and debris out of the foam.
5. Reinstall foam and secure the cover.

4.3.9 Changing Engine Oil And Filter

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



WARNING: Rotating Part Hazard
Turn off engine or motor, remove power supply and wait for all belts to stop rotating.



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.
3. Remove the drain and allow the oil to drain for 10 minutes.
4. Install and tighten the drain plug, and dispose of the used oil in an approved container.
5. Fill the crankcase with oil. Refer to Section 4.1
6. Run the engine for 1-2 minutes and check for oil leaks. If leaks are found, tighten drain plug slightly.
11. Check engine oil level. Top up as required.

Fig 50 - Hold Down Wheels

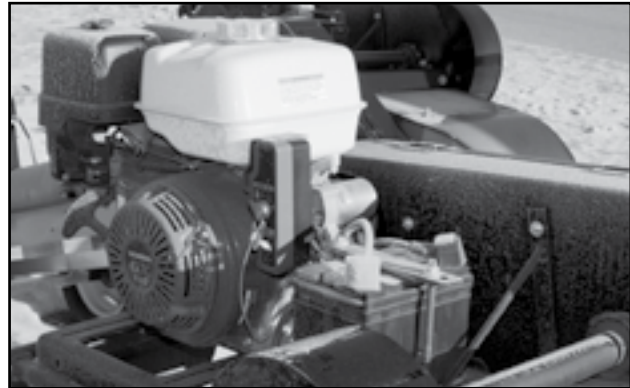


Fig 51 - Gas Engine



Fig 52 - Air Filter with Cover Removed

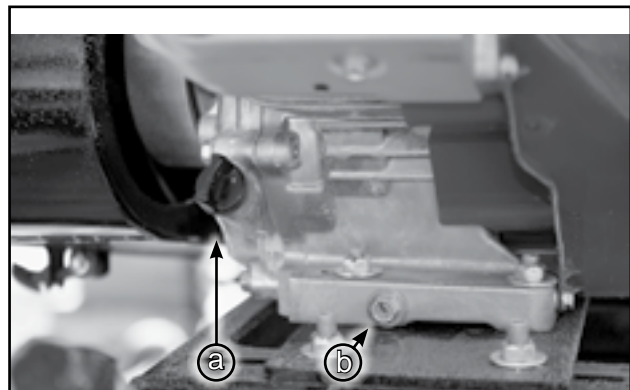


Fig 53 - (a) Fill Plug and (b) Drain Plug

4.4 SERVICE RECORD

See specific Maintenance sections for details of service. Copy this page to continue record.

Maintenance	Hours																		
	Serviced By																		
10 Hours or Daily																			
Grease Jack Shaft																			
Grease Hopper Belt Roller Bearings																			
Grease Discharge End Belt Roller Bearing																			
50 Hours, or Weekly																			
Check Convey Belt Tension																			
Check Convey Belt Alignment																			
Check Hopper Flashing																			
Check Drive Belt Tension and Alignment																			
Check Hold Down Wheels																			
200 Hours or Annually																			
Change Engine Oil																			
Repack Wheel Bearings																			
Clean 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/Motor won't start

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

Hydraulic system - No hydraulic flow

Flow valve closed or plugged	Open flow circuit valve
	Replace plugged hydraulic filter

Engine/Motor 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

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 conveyor from area of high humidity and continue to run empty so the belt dries prior to freezing.
Drive belt loose	Tighten drive belt
No power	Start engine, increase speed to maximum RPM

Problem

Possible Cause	Possible Remedy
----------------	-----------------

Conveyor belt doesn't turn or is slipping - cont'd

Gas/Electric system - Drive roller is slipping	Replace V-belt
Hydraulic system - valve, pump or motor could be malfunctioning	Check and adjust pressure set screw on valve. Test flow from pump. Check for oil leaks under motor. Replace what is needed.
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.

Conveyor belt doesn't track correctly

Roller lagging may be worn	Replace roller or have it re-lagged
----------------------------	-------------------------------------

Conveyor Belt Fraying

Belt not aligned	Align and adjust tension
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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

Gas/Electric system - 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 Transfer Conveyor 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 SPECIFICATIONS

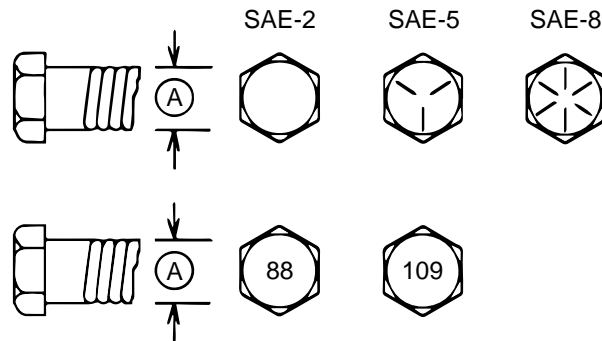
Model	Discharge Height to Ground	Hopper to Ground	Overall Length	Hopper Length	Tube Diameter	Belt Width
UBGN-1014	36" - 48" adjustable	6 ¹ / ₂ "	15' 4"	4' 9"	10"	12"
UBSNH-1015	38" - 48" adjustable	6 ¹ / ₂ " - 7 ³ / ₄ "	17' 4"	5' 10"	10"	16"
UBSNH-1418	38" - 48" adjustable	6 ¹ / ₂ " - 7 ³ / ₄ "	20' 2"	5' 10"	14"	22"
UBSNH-1016-RC	36" - 48" adjustable	4 ⁵ / ₈ "	20'	7'	10"	16"
UBSNH-1418-RC	36" - 48" adjustable	4 ⁵ / ₈ "	21' 6"	7'	14"	22"

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.

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