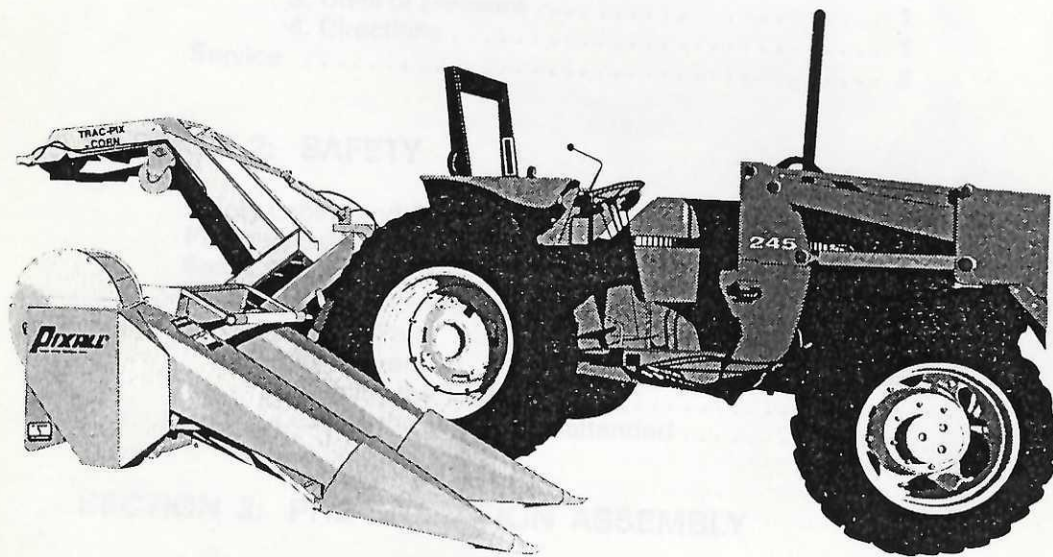


OPERATOR'S MANUAL
ONE-ROW TRAC-PIX FOR CORN

EFFECTIVE: 1990



Manufactured By

PIXALL®

CLEAR LAKE, WISCONSIN 54005

P/N 9003-0185

FAN BELT NAPA B75

Pixall One-Row Trac-Pix for Corn

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SAFETY-ALERT SYMBOL FOR AGRICULTURAL EQUIPMENT

Proposed by the Engineering Policy Committee of Farm and Industrial Equipment Institute; approved by ASAE Power and Machinery Division Standards Committee; adopted by ASAE February 1972; reconfirmed and reclassified as a Standard, March 1977; reconfirmed December 1981; approved by ANSI as an American National Standard December 1982; reconfirmed December 1986.

SECTION 1-PURPOSE

1.1 The purpose of this Standard is to establish a Safety-Alert Symbol for use on agricultural equipment, and to provide a symbol which means **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**

SECTION 2-SCOPE

2.1 This Standard presents the general uses, limitations on use, and appearance of the Safety-Alert Symbol.

SECTION 3-DESCRIPTION

3.1 The Safety-Alert Symbol shall be an equilateral triangle with rounded corners and with an exclamation mark located in the center as shown in Figure 1. The dimensions are optional.

3.2 The Safety-Alert Symbol should be of contrasting colors which will cause the exclamation mark to stand out.

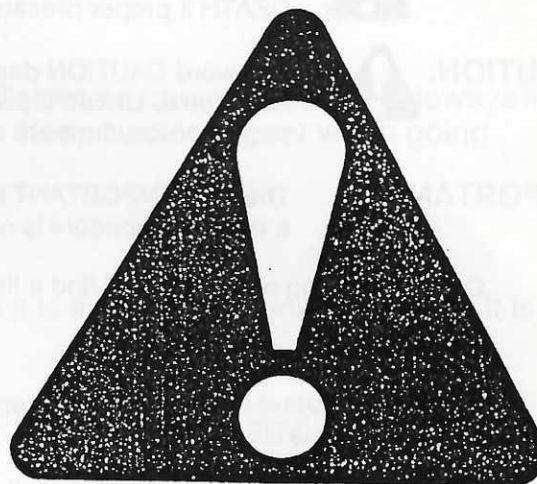


FIG. 1—SAFETY-ALERT SYMBOL

SECTION 4-APPLICATION


- 4.1 The symbol should be used:
- 4.1.1 In conjunction with warning statements and signs.
 - 4.1.2 In instruction manuals.
 - 4.1.3 In connection with agricultural equipment safety standards.
 - 4.1.4 On communications which concern agricultural equipment safety.
- 4.2 The symbol should *not* be used:
- 4.2.1 To indicate safety compliance or a safety characteristic.
 - 4.2.2 Alone on equipment for safety purposes.





Included throughout this manual and on machine decals you will see this Safety-Alert Symbol followed by precautionary statements such as **DANGER!**, **WARNING!**, and **CAUTION!**

After these statements will be specific instructions that must be followed both for your personal safety as well as for the safety of those working with you. **PLEASE READ THEM CAREFULLY.**

SAFETY DEFINITIONS

DANGER:  The word **DANGER** denotes an **EXTREME INTRINSIC HAZARD** exists which would result in a high probability of **DEATH** or **IRREPARABLE INJURY** if proper procedures are not taken.

WARNING:  The word **WARNING** denotes a **HAZARD** exists which can result in **INJURY** or **DEATH** if proper precautions are not taken.

CAUTION:  The word **CAUTION** denotes a reminder of **SAFETY** practices, or directs attention to **UNSAFE** practices which could result in **PERSONAL INJURY** if proper precautions are not taken.

IMPORTANT: The word **IMPORTANT** is used to inform of the possibility of harvester damage if a certain procedure is not followed.

On the following pages you will find a listing of all decals on the harvester.

It is very important that these decals remain intact and visible at all times. all decals must be replaced if they become illegible or missing.

Any new equipment components installed during repair must include current safety signs as specified by the manufacturer to be affixed to the replacement component.

New safety decals can be requested through:

PIXALL CORPORATION
100 Bean Street, P.O. Box 17
Clear Lake, WI 54005

Phone: 715/263-2112
Telex: 9102403159
FAX: 715/263-2102

To affix new safety decals, area must be thoroughly cleaned with a moist towel and allowed to dry. After area has thoroughly dried, remove backing and place decal in appropriate area being sure to keep all air bubbles from behind decal.

If air bubbles do appear, work them to the nearest edge with a squeegee.

Now you can remove the protective covering from the decal.

SAFETY PRECAUTIONS

Most machine accidents can be avoided by the observance of a few simple safety precautions.

1. Do not attempt to lubricate or make any adjustments while it is in motion or tractor is running.
2. Do not permit anyone to ride on harvester.
3. Be especially careful when operating on hillsides as tractor could tip sideways if it strikes a hole, ditch, or other irregularity. Keep tractor in gear when going downhill.
4. Keep all shields in place.
5. Do not work under 3-point harvester when it is in the raised position unless it is properly blocked.
6. Be sure tractor engine is off and parking brake is engaged before leaving control area.
7. Keep children away from harvester at all times.

IMPORTANT NOTES

2. TRACTOR REQUIREMENTS

3. UNITS OF MEASURE

This manual gives the measurements in U.S. units followed by S.I. metric units in parentheses.

EXAMPLE: (1.631 m)

4. DIRECTIONS

"Right" and "Left" refer to the sides of the machine when facing in the direction the machine is moving.

FEATURE	BENEFIT
Four Blade Disc Harrow	1. 100% soil depth 2. 100% soil coverage
Open Support Proper Values	Quick and easy adjustments
Light Discs Discs	Proven field stability
Light Metal Branding	Easy maintenance
Roller Roller	Stable soil handling
Castor Type with Brake System	Easy wheel market quality work

SAFETY DECALS

<u>PART NUMBER</u>	<u>NO. USED</u>	<u>PART DESCRIPTION</u>
A3000-0160	4	Warning Decal
A3000-0187	3	Warning Decal Driveline
A3000-0222	1	Decal Shield Missing
A3000-0192	1	Decal Fan Discharge Area
A3000-0186	1	Decal Rotating Fans
A3000-0189	2	Decal Keep Hands From Pulleys
A3000-0210	2	Danger Decal
A3000-0184	2	Warning Decal

SMALL CORPORATION
 100 Cedar Street, P.O. Box 17
 Cedar Lake, WI 53006

Phone: 715/923-8112
 Telex: 5107403180
 FAX: 715/923-8100

To order new safety decals, write Small Corporation, Dept. S-4, 100 Cedar Street, P.O. Box 17, Cedar Lake, WI 53006. Please allow 4-6 weeks for delivery.

If you are unable to reach Small Corporation, please contact the Wisconsin Department of Safety, 1000 Wisconsin Avenue, Madison, WI 53706.

New you can help protect your family and friends.

USING THIS MANUAL

This manual has information about the operation, adjustment, maintenance, troubleshooting, and service of your Pixall Trac-Pix corn picker. Study this manual carefully before operating your machine, even if you have prior experience with corn pickers. By following the instructions carefully, you will get the top performance from your corn picker--and the most from your investment!

IMPORTANT NOTES

1. SAFETY WARNINGS



This safety symbol appears next to important safety information. Read all safety warnings carefully and follow them exactly. Failure to do so could result in serious injury.

2. TRACTOR REQUIREMENTS

- Two double-acting hydraulic outlets
- A 540 rpm PTO

3. UNITS OF MEASURE

This manual gives measurements in U.S. units followed by S.I. metric units (in parentheses).

EXAMPLE: $\frac{1}{8}$ " (0.31 cm.)

4. DIRECTIONS

"Right" and "Left" sides refer to the sides of the machine when facing in the direction the picker is moving.

SECTION 1: Introduction

PIXALL ONE-ROW TRAC-PIX FOR CORN

Congratulations! You are now the owner of the industry-leading fresh market sweet corn harvester. Properly operated it will harvest an acre per hour of a broad range of yellow and white sweet corn.

The Trac-Pix unique cleaning system puts it a level above the competition by leaving trash in the field not bringing it in the packing house.

Pixall's One-Row Trac-Pix offers these features:

<u>FEATURE</u>	<u>BENEFIT</u>
Ten Blade Stalk Rolls	Quickly and cleanly removes stalk
Quick Adjust Stripper Plates	Quick and easy adjustments
John Deere Gear Boxes	Proven field reliability
Quick Attach Shielding	Easy maintenance
Rubber Gathering Belts	Gentle corn handling
Cascade Type Fan with Stalk Cutter	Cleaner fresh market quality corn

SERVICE

You can get service and replacement parts for your Pixall One-Row Trac-Pix from your local dealer or direct from Pixall. Write the serial number of your corn picker below. Use this serial number when ordering parts for your machine.

SERIAL NUMBER



This symbol appears on the front of the machine. Read all instructions carefully and follow them exactly. Failure to do so could result in injury or death.

TRACTOR REQUIREMENTS

- Two double-acting hydraulic pumps
- A 1400 rpm PTO

UNITS OF MEASURE

This manual gives measurements in U.S. units followed by SI metric units in parentheses.

EXAMPLE: 5 (0.91 m)

DIRECTIONS

"Right" and "Left" refer to the sides of the machine when facing in the direction the picker is moving.

SECTION 1: Introduction

- What's New
- Why Buy This Model
- Product Details
- How to Get the Most Out of Your Trac-Pix

PIXALL ONE-ROW TRAC-PIX FOR CORN

Congratulations! You are now the owner of the industry-leading head market model corn harvester. Properly operated it will harvest an acre per hour of a broad range of yellow and white sweet corn.

The Trac-Pix adapts clearing system cuts to a level above the combine or leaving trash in the field not cutting it in the working rows.

Pixall's One-Row Trac-Pix offers these features:

FEATURE	BENEFIT
Quick Attach Swapping	Quick and easy
Rubber Gathering Bars	Quick and easy
Cascade Type Fan with Blank Cutter	Quick and easy
Easy maintenance	Quick and easy
Simple corn handling	Quick and easy
Easy water tank	Quick and easy
Quick Adjust Ripper Bars	Quick and easy
John Deere Star Case	Quick and easy
Easy water tank	Quick and easy
Quick Attach Swapping	Quick and easy
Rubber Gathering Bars	Quick and easy
Cascade Type Fan with Blank Cutter	Quick and easy

SECTION 2: Safety

PLEASE READ CAREFULLY!

SAFETY LABELS AND DECALS

For your safety and that of others working around you, Pixall puts safety decals on its machines. These decals provide essential information with regard to possible danger areas which should be treated with extreme caution.

PERSONAL SAFETY

DANGER



The word danger denotes an extreme intrinsic hazard exists which would result in a high probability of death or irreparable injury if proper precautions are not taken.

WARNING



The word warning denotes a hazard exists which can result in injury or death if proper precautions are not taken.

CAUTION



The word caution denotes a reminder of safety practices or directs attention to unsafe practices which could result in personal injury if proper precautions are not taken.

IMPORTANT!

The word important is used to inform of the possibility of harvester damage if a certain procedure is not followed.

SAFETY PROCEDURES

Most machine accidents can be prevented by following a few simple safety rules:

Machine Operation

1. Allow only the operator on the tractor. Never allow anyone to ride on the corn picker.
2. Never let children ride, play on, or operate the corn picker.
3. Be careful when operating the corn picker on hillsides. The machine could tip sideways if it strikes a hole, ditch, or other irregularity. Keep the tractor in gear when going downhill.
4. Use flashing lights or reflectorized signs when transporting the corn picker on highways and roadways.

Moving Parts

1. Keep hands and feet away from moving parts.
 2. Never wear loose clothing (shirts, sleeves, ties, etc.) around moving parts.
 3. Keep all shields in place while the corn picker is in operation.
 4. Do not lubricate, adjust, or clean the corn picker while it is moving or while the tractor engine is running.
 5. Always lower the corn picker to the ground and turn off the tractor engine before trying to clear obstructions.
- c. Get medical attention immediately if you are injured by high pressure hydraulic fluid. Hydraulic fluid can cause serious infection if not treated.
3. Replace frayed belts before they break.
 4. Do not make modifications to the machine or any of its safety features.

Fire Prevention

1. Keep tractor engine area clear of dust, chaff, and straw.
2. Have a fire extinguisher handy. Mount it on the tractor platform.

Servicing the Trac-Pix

1. Do not work under the picker when it is in the raised position unless it is properly blocked with PTO disengaged, parking brake set, and tractor turned off.
2. Avoid contact with hydraulic fluid under pressure.
 - a. Check all connections, lines, pipes, and hoses before applying pressure to the system.
 - b. Never use your hands to check for hydraulic leaks.

Leaving the Trac-Pix Unattended

When leaving the One-Row Trac-Pix unattended, be sure to:

1. Lower the corn picker to the ground.
2. Turn off tractor engine and set parking brake.
3. Remove key from tractor.
4. Keep children away from corn picker at all times.

SECTION 3: Pre-Operation Assembly

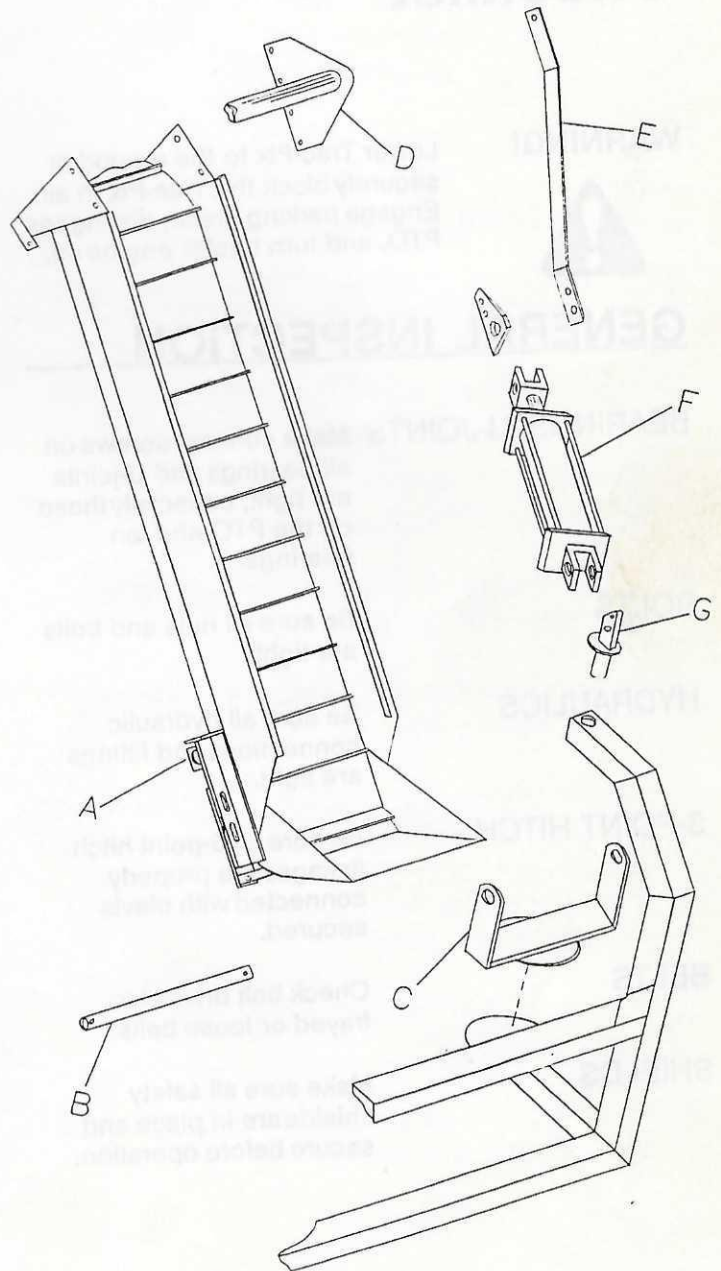
Depending on where you bought your Pixall One-Row Trac-Pix, some assembly may be required before it can be operated in the field.

MACHINE BOUGHT FROM	PRE-OPERATION CHECKLIST COMPLETED BY	REAR ELEVATOR ASSEMBLED BY
----- Pixall Dealer	----- Pixall Dealer	----- Pixall Dealer
----- Pixall Factory	----- Customer	----- Customer

REAR ELEVATOR ASSEMBLY

The rear elevator (A) fits onto the elevator mounting shaft (B). It is secured to elevator yoke (C) with two cotter pins.

1. Support the upper end of the elevator (D) with the two elevator hangers (E). Attach hangers to the hydraulic cylinder (F). Attach hydraulic cylinder to sun dial (G).
2. Secure the elevator hangers with two $\frac{5}{8}$ " x $\frac{3}{4}$ " hex head bolts (H).
3. Tighten the $\frac{5}{8}$ " bolts to 55 ft. lbs.
4. Couple the hydraulic lines.



SECTION 4: Pre-Operation Checklist

WARNING!



Lower Trac-Pix to the ground or securely block the Trac-Pix in air. Engage parking brake, disengage PTO, and turn tractor engine off.

GENERAL INSPECTION

BEARINGS, U-JOINTS Make sure set screws on all bearings and U-joints are tight, especially those on the PTO and fan bearings.

BOLTS Be sure all nuts and bolts are tight.

HYDRAULICS Be sure all hydraulic connections and fittings are tight.

3-POINT HITCH Be sure all 3-point hitch linkages are properly connected with clevis secured.

BELTS Check belt drives for frayed or loose belts.

SHIELDS Make sure all safety shields are in place and secure before operation.

LUBRICATION

IMPORTANT!

The One-Row Trac-Pix was lubricated before it left the Pixall factory. Do not over lubricate the machine.

Refer to the diagrams in SECTION 10: Maintenance and Service to lubricate the following lubrication points.

GREASE

- Cross conveyor bearings (4)
- Fan Bearings (2)
- Elevator Bearings, Top, Middle, Bottom (6)
- Elevator yoke (1)
- Sun Dial (1)
- PTO U-joints (4)

OIL

- Gear Box
- NOTE:** Use 80-90 gear lube
- John Deere Row Unit
- NOTE:** Use John Deere gear lube

RUN TO CHECK MOVING PARTS

1. Turn on tractor engine and engage tractor PTO clutch (slowly) to start the corn picker in motion.

WARNING!



Do not make adjustments while tractor is running. Lower Trac-Pix to the ground or securely block the Trac-Pix in air. Engage parking brake, disengage PTO, and turn tractor engine off.

2. Check to see that all shafts are operating freely and smoothly.

- PTO shafts
- Row unit shafts
- Cross conveyor shafts
- Elevator shafts
- Fan Shaft

3. Check to see that all belts are operating freely, are in proper alignment, and under the correct tension.

- Fan belt
- Gathering belts
- Cross conveyor belt
- Elevator belt

See SECTION 8 for instructions on how to adjust and align belts.

IMPORTANT!

Belts have been adjusted and aligned at the factory. They should be running properly when your machine is delivered. Do not tighten belts excessively.

4. Check to see that the fan rotor turns smoothly and does not rub fan housing.

5. Let the corn picker run for several minutes then recheck:

- Set screws and bolts
- Belts and chain drives for proper alignment
- Conveyor belts for proper operation

SECTION 5: Attaching and Detaching

ATTACHING THE TRAC-PIX TO THE 3-POINT HOOK UP

CAUTION Be sure both the tractor and the corn picker are on level ground.

1. Slowly back tractor up to Trac-Pix mounting linkage.
2. Lower tractor 3-point linkage to match the height of Trac-Pix linkage.
3. Turn off tractor engine and set parking brake before attaching 3-point hook-up.
4. Attach tractor lower link to Trac-Pix lower link mounts with link pins and lynch pins supplied. Attach tractor upper link and Trac-Pix upper link mount with supplied link and lynch pins.
5. Attach PTO shaft to Trac-Pix gear box and tractor PTO.
6. Make sure linkages and PTO are secure before starting tractor.

HYDRAULIC ATTACHMENT

The hydraulic system of the Trac-Pix consists of one double-acting cylinder, two hydraulic motors, and one flow control.

Pixall recommends that quick couplings are used for connecting and disconnecting the Trac-Pix from the tractor.

IMPORTANT!

The tractor engine must be turned off when attaching/detaching hydraulic hoses to relieve hydraulic pressure.

IMPORTANT!

Make sure hydraulic hoses are clear of all moving parts.

IMPORTANT!

To avoid contaminating the hydraulic system, clean all hydraulic couplings before connecting.

WARNING!



Be sure the Trac-Pix is lowered to the ground, the tractor engine turned off, PTO is disengaged, and parking brake is set before attempting to connect or disconnect hydraulic hoses.

BEFORE DRIVING

SECTION 6: Road Operation

The Pixall One-Row Trac-Pix can be transported over roadways while still attached to the tractor.

ATTENTION: Check local laws about the operation of heavy equipment on roadways before transporting the Trac-Pix over highways or roadways.

IMPORTANT! Be sure you are familiar with all tractor controls before transporting the Trac-Pix on public roadways.

1. Check all 3-point linkages
 - Be sure Trac-Pix link mount bolts are tight.
 - Make sure link pins are secure.
 - Check Lynch pins, they should be snapped down and around link pins.
 - Make sure tractor linkage is secure.
 - Use stationary lockout elevator.
 - Check PTO, it should be free to telescope.
2. Raise Trac-Pix off the ground.
 - Transport with Trac-Pix raised to maximum height.
 - Periodically check to be sure harvester is not lowering due to hydraulic leakage in tractor.
 - Be sure Trac-Pix does not hit tractor tire.

PERSONAL SAFETY

DANGER!



Never allow any passengers to ride on the Trac-Pix or tractor.

WARNING



Always slow down when making sharp turns.

WARNING



Avoid excessive road speeds.

CAUTION!



Use warning flashers and turn signals unless prohibited by law.

CAUTION!

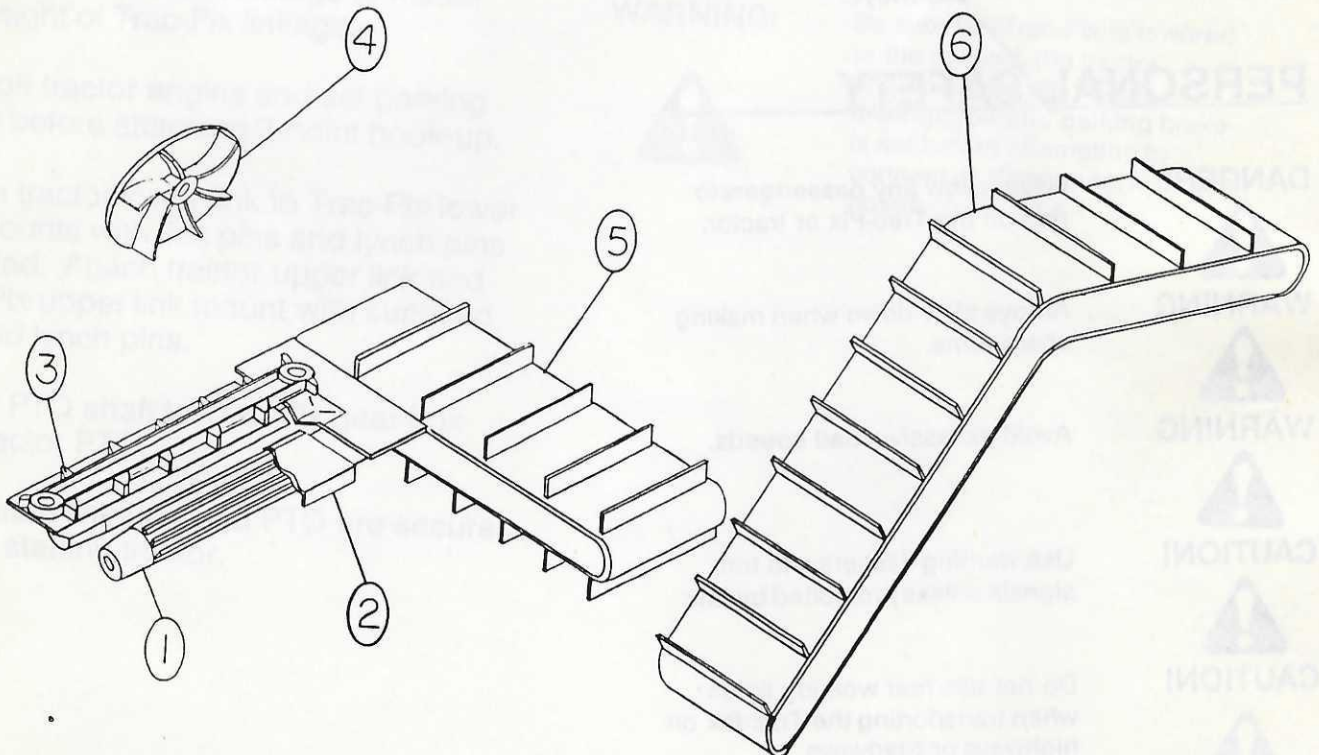


Do not use rear working lights when transporting the Trac-Pix on highways or roadways.

SECTION 7: Corn Picker Operation

HOW THE TRAC-PIX WORKS

1. Snapping rolls grab stalk and pulls toward ground.
2. The ear of corn hits stop plates and is popped from the stalk.
3. Gathering belts convey corn to cross conveyors.
4. Chopper fan cleans any trash or stalk and blows it back into field.
5. Cross conveyor belt moves corn to elevator.
6. Elevator deposits corn in trailer.



OPERATION IN THE FIELD

Starting the Tractor and Trac-Pix

DANGER!



Make sure that everyone is clear of the tractor and Trac-Pix before starting the equipment. Become familiar with the equipment and how it works before attempting to start it.

1. Link tractor and Trac-Pix together.
2. Put tractor engine in low idle.
3. Raise Trac-Pix to correct picking height. (Row unit 8-10" below ear)
4. Engage tractor PTO.

WARNING



Never attempt any adjustments or lubrication while tractor engine is running or PTO is engaged.

5. Adjust tractor PTO speed to match picking ground speed.

<u>Tractor PTO Speed</u>
175 RPM
300 RPM
540 RPM

<u>Picking Ground Speed</u>
1.5 mph
2.5 mph
3.5 mph

DANGER!



Do not let anyone near fan discharge area while it is in operation.

Driving in the Field

1. Approach corn rows.

DANGER!



To avoid machine roll over, be careful when operating on hillsides. Do not turn sharply on a hillside.

2. Adjust ground speed to about $\frac{1}{2}$ mph. Picker ground speed is correct when the corn head is not:

- Pushing stalks forward
- Pulling stalks backward

3. After traveling about 100 feet in a new field, check the corn picker's performance. If necessary adjust:

- Header height
- Header speed
- Ground speed

4. At the end of the row, turn off PTO. Make a smooth turn and re-enter the field.

WARNING



Make sure all people, livestock and equipment are clear of fan discharge area when turning.

5. After harvesting several rows stop the corn picker, lower unit to the ground, and stop tractor engine. Make the following checks:

<u>CHECK</u>	<u>FOR</u>
Bearings	Heating
Bolts	Tightness
Hydraulic Fittings	Leaks
Belts	Proper Adjustment

Driving Tips

1. Keep Trac-Pix carefully aligned with corn rows.
2. Keep picking unit 8-10" below ear.
3. Do not drive so fast that the Trac-Pix becomes overloaded. Start out slowly, gradually increasing ground speed until the Trac-Pix operates at maximum efficiency.
4. Listen for unusual sounds, such as slipping clutches, etc.

IMPORTANT!

To prevent plugging, keep the forward speed of the tractor about the same speed as the backward speed of the gatherer belts.

TRAC-PIX PICKING UNIT, GATHERING BELT, FAN SPEED

The Trac-Pix picking unit, gathering belt, and fan speed are all driven off the tractor PTO. Therefore, all the speeds are directly related.

To achieve the highest performance a blend of these three speeds must be achieved.

Ground speed $\frac{1}{2}$ mph, tractor PTO speed 300 is a good place to start.

IMPORTANT!

Due to the efficient cleaning system of the Trac-Pix, tractor PTO speed should be kept under 500 rpm or cobs could be lost out the fan.

SECTION 8: Gatherer Points

LEVELING GATHERER POINTS

WARNING!



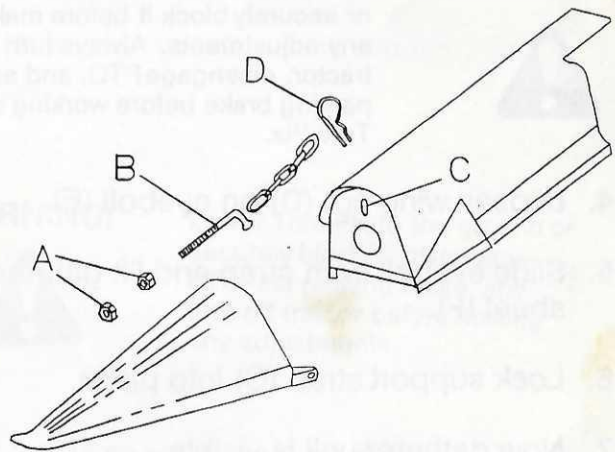
Never work under the Trac-Pix unless it is properly blocked with PTO disengaged, parking brake set, and tractor turned off.

Adjust height of the gatherer point by tightening and loosening the two adjusting nuts (A) on the hook bolt (B).

1. Insert chain link through the point support (C).
2. To raise the gatherer point, remove cotter pin (D), adjust chain to proper height, replace cotter pin.
3. To lower the gatherer point, remove cotter pin (D), adjust chain to proper height, replace cotter pin.

NOTE:

Small adjustment of gatherer point can be accomplished by loosening and tightening adjusting bolts (A).



REMOVING AND INSTALLING GATHERER SHEETS AND POINTS

The gatherer points on the Pixall Trac-Pix have sheets. Both gatherer sheets can be removed to gain access to the row units.

Gatherer sheet (A) is bolted to the frame (B). Support strap (C) holds the gatherer sheet when it is raised.

DANGER!



Never operate the Trac-Pix with the gatherer sheets raised or removed.

Raising Gatherer Sheets and Points

1. Set tractor parking brake, raise Trac-Pix, and disengage PTO.
2. Block Trac-Pix securely, lower Trac-Pix onto blocking.
3. Turn off tractor, leave parking brake set.

WARNING!



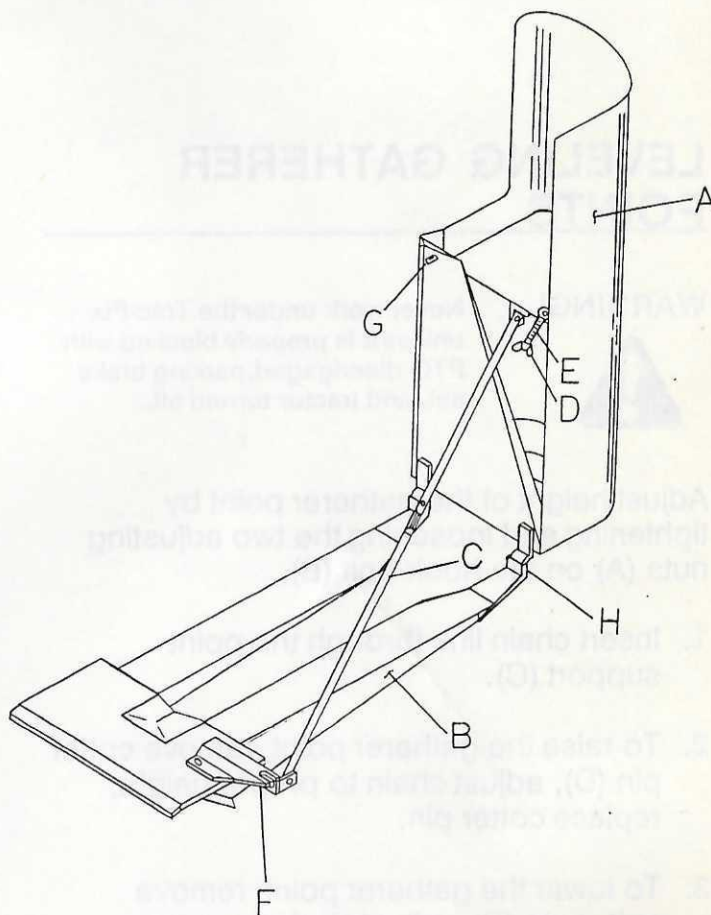
Always lower Trac-Pix to ground or securely block it before making any adjustments. Always turn off tractor, disengage PTO, and set parking brake before working on Trac-Pix.

4. Loosen wing nut (D) on eyebolt (E).
5. Slide eyebolt from strap and lift gatherer sheet (F).
6. Lock support strap (C) into place.
7. Now gatherer unit is visible.

CAUTION!



Be sure support strap is securely locked in place before releasing hold of gatherer sheet.



To Remove Gatherer Sheet

1. Remove support strap bolts

CAUTION!



Two people may be required due to the bulkiness of the gatherer sheet.

2. Raise gatherer sheet and lift off Trac-Pix at the hinge point.

Installing Gatherer Sheets

1. Set gatherer sheet (A) on hinge (H).
2. Reinstall support strap (C).
3. Lower gatherer sheet until locator pin (J) aligns with locator pin hole.
4. Align eyebolt (E) to slot in hanger (F).
5. Tighten eyebolt.

ADJUSTING GATHERER BELT TENSION

For correct gatherer belt tension, the idler tension spring should be compressed to $8\frac{1}{2}$ " in length.

To Adjust Gatherer Belt Tension

1. Repeat steps 1-7 Raising Gatherer Sheets.
2. Loosen jam nut (A).
3. Turn spring tension bolt (B) clockwise until spring (C) is compressed to $8\frac{1}{2}$ " in length.
4. Retighten jam nut.
5. Lower gatherer sheet and secure with wing nut.

WARNING!



Never make any adjustments on the Trac-Pix while tractor is running. Lower Trac-Pix to the ground or securely block it, disengage PTO, set parking brake, and turn off tractor.

SEE ILLUSTRATION ON PAGE 14.

WARNING!



Lower Trac-Pix to the ground or securely block it, disengage PTO, set parking brake, and turn off tractor before making any adjustments.

SEE ILLUSTRATION ON PAGE 14.

ADJUSTING CONVEYOR BELT

The Pixall Trac-Pix has two conveyor belts:

- Cross Conveyor
- Rear Elevator

IMPORTANT!

Belts have been adjusted and aligned at the Pixall factory. They should be running properly when your Trac-Pix is delivered.

IMPORTANT!

Over tightening belts may cause belt lacing, rollers, or bearing failure.

WARNING!



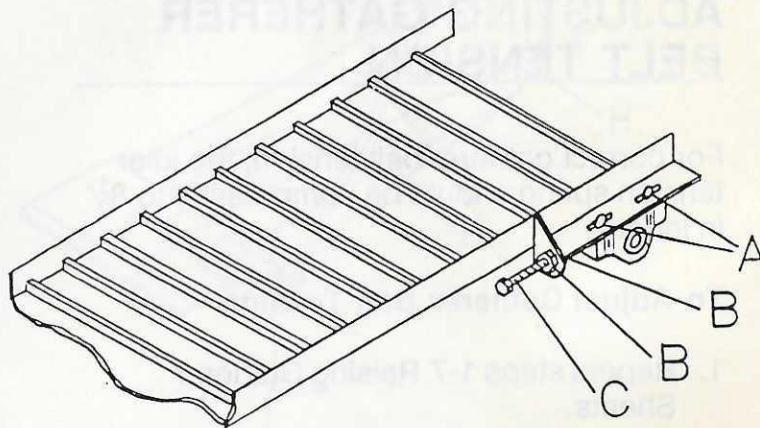
To avoid personal injury, be sure PTO is disengaged, parking brake is set, and tractor engine is shut off before making any adjustments on the Trac-Pix.

Adjusting Cross Conveyor Belts

1. Loosen bearing bolts (A).
2. Loosen jam nuts (B) on adjusting bolt (C).
3. To tighten the belt, turn adjusting bolt (C) clockwise.
4. To loosen the belt, turn adjusting bolt (C) counterclockwise.
5. Retighten jam nut and bearing bolts.
6. Repeat on the opposite side of the roller.

IMPORTANT!

Be sure to adjust each side of the belt equally.



Adjusting the Rear Elevator Belt

1. Loosen bearing bolts (A).
2. Loosen jam nut (B) on adjusting bolt (C).
3. To tighten the belt, turn adjusting bolt (C) clockwise.
4. To loosen the belt, turn adjusting bolt (C) counterclockwise.
5. Retighten jam nut and bearing bolts.
6. Repeat on the opposite side of the roller.



IMPORTANT!

Be sure to adjust both sides of the belt equally.

WARNING!

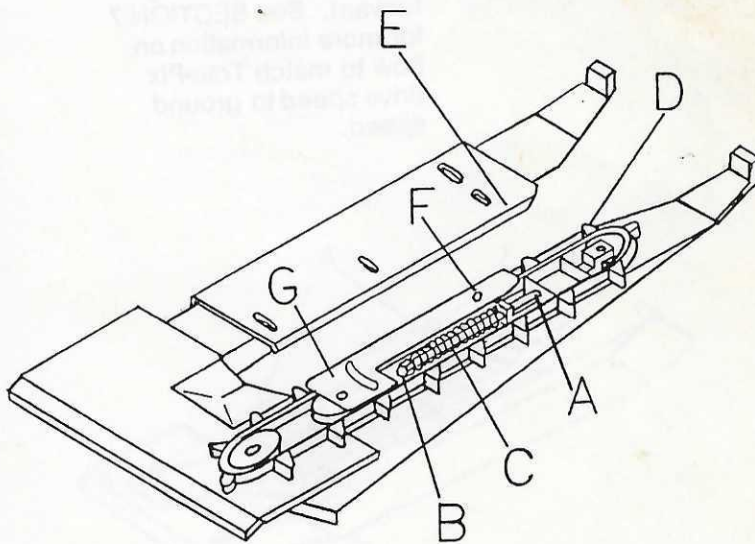


Lower Trac-Pix to the ground or securely block it, disengage PTO, set parking brake, and turn off tractor before making any adjustments.

ADJUSTING GATHERER BELT FLIGHTS

For proper position of the gatherer belt flights, $\frac{1}{4}$ " of the flight (D) should be exposed past the rear edge of the stop plate (E). To adjust the gatherer belt flights:

1. Repeat steps 1-7 Raising the Gatherer Sheet.
2. Loosen live guide cap screws (F).
3. Position the live guide (G) until $\frac{1}{4}$ " of flight is exposed past the rear edge of the stop plate.
4. Retighten live guide cap screws.
5. Lower gatherer sheets and secure with wing nuts.



WARNING!



Lower Trac-Pix to the ground or securely block it, disengage PTO, set parking brake, and turn off tractor before making any adjustments.

ADJUSTING CONVEYOR BELT

SECTION 9: Row Units

The row unit snaps the ears of corn off the stalk and moves them to the cross conveyor belts. The row unit consists of the:

- Gathering Belts
- Stripper Plates
- Stalk Rolls
- Trash Knives

IMPORTANT!

To prevent plugging, the speed of the row unit must be synchronized with the speed at which the Trac-Pix is moving forward. See SECTION 7 for more information on how to match Trac-Pix drive speed to ground speed.

ADJUSTING THE TRASH KNIVES

Trash knives keep weeds and trash from wrapping around the stalk rolls.

IMPORTANT!

Trash knives should be set as close as possible to stalk rolls without actually touching the stalk roll knives.

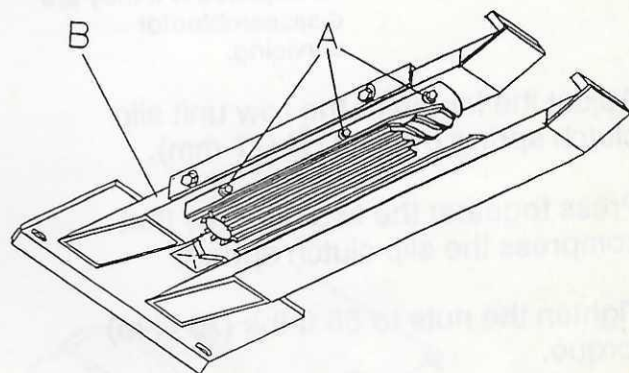
1. Loosen bolts (A) which attached the trash knives to the row unit (B).

DANGER!



Always lower Trac-Pix to the ground or securely block it before making any adjustments. Be sure to disengage PTO, set parking brake, and turn off tractor before working on the Trac-Pix.

2. Adjust trash knives so that there is no more than $\frac{1}{16}$ " (1.5 mm) distance between the trash knife and the highest stalk roll knife.
3. Tighten bolts to 85 ft-lbs (120 N-m) torque.



ADJUSTING STRIPPER PLATES

1. Turn bolt (A) clockwise to close gap or counterclockwise to open gap.

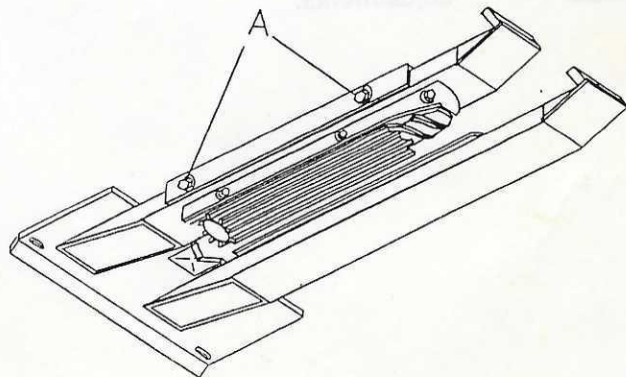
IMPORTANT!

Be sure to adjust both plates equally.

DANGER!



Always lower Trac-Pix to the ground or securely block it before making any adjustments. Be sure to disengage PTO, set parking brake, and turn off tractor before working on the Trac-Pix.



ADJUSTING SLIP CLUTCHES

Slip clutches on the row unit drives protect the drives in case of overloading or plugging.

IMPORTANT!

All slip clutches have been properly adjusted at the Pixall factory prior to delivery. The only time the slip clutches should be adjusted is if they are disassembled for servicing.

1. Adjust the length of the row unit slip clutch spring (A) to $2 \frac{13}{16}$ " (71 mm).
2. Press together the two nuts (B) that compress the slip clutch spring.
3. Tighten the nuts to 55 ft-lbs (75 N-m) torque.

IMPORTANT!

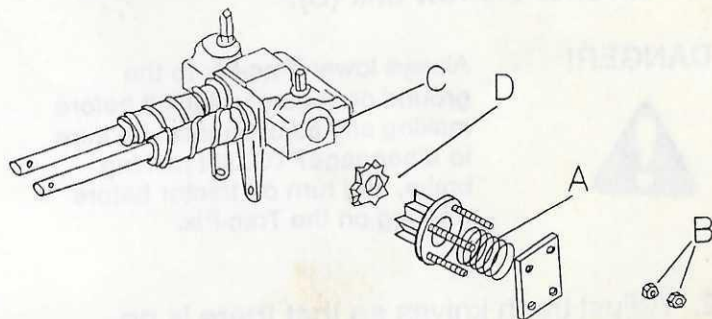
Do not tighten nuts so tight that the clutch will not slip.

4. Grease the thrust washer (C). Do not grease the clutch facings (D).

WARNING!



Lower Trac-Pix to the ground or securely block it, disengage PTO, set parking brake, and turn off tractor before making any adjustments.



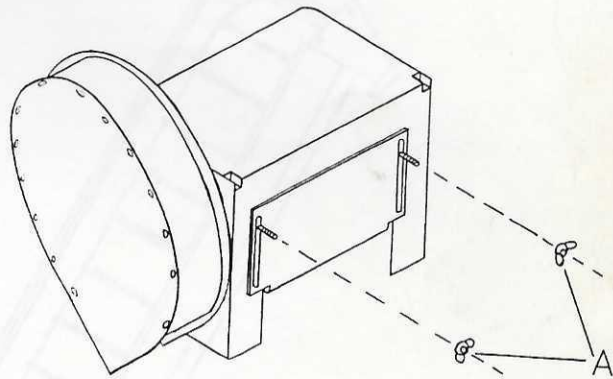
ADJUSTING THE CLEANING FAN AIR GATES

One adjustable air gate, located on the front of the intake housing, controls the volume of air that flows through the cleaning system.

<u>AIR GATE POSITION</u>	<u>AMOUNT OF CLEANING</u>	<u>USE FOR:</u>
Down	Maximum	Wet conditions, heavy trash
Up	Minimum	Dry conditions, light trash

The air gates can be adjusted to any position between full up and full down. Under normal field conditions the air gate should be in the center position. To change the position of the air gates:

1. Loosen the two wing nuts (A).
2. To increase the air volume, lower the air gate.
3. To decrease the air volume, raise the air gate.
4. Tighten the two wing nuts.

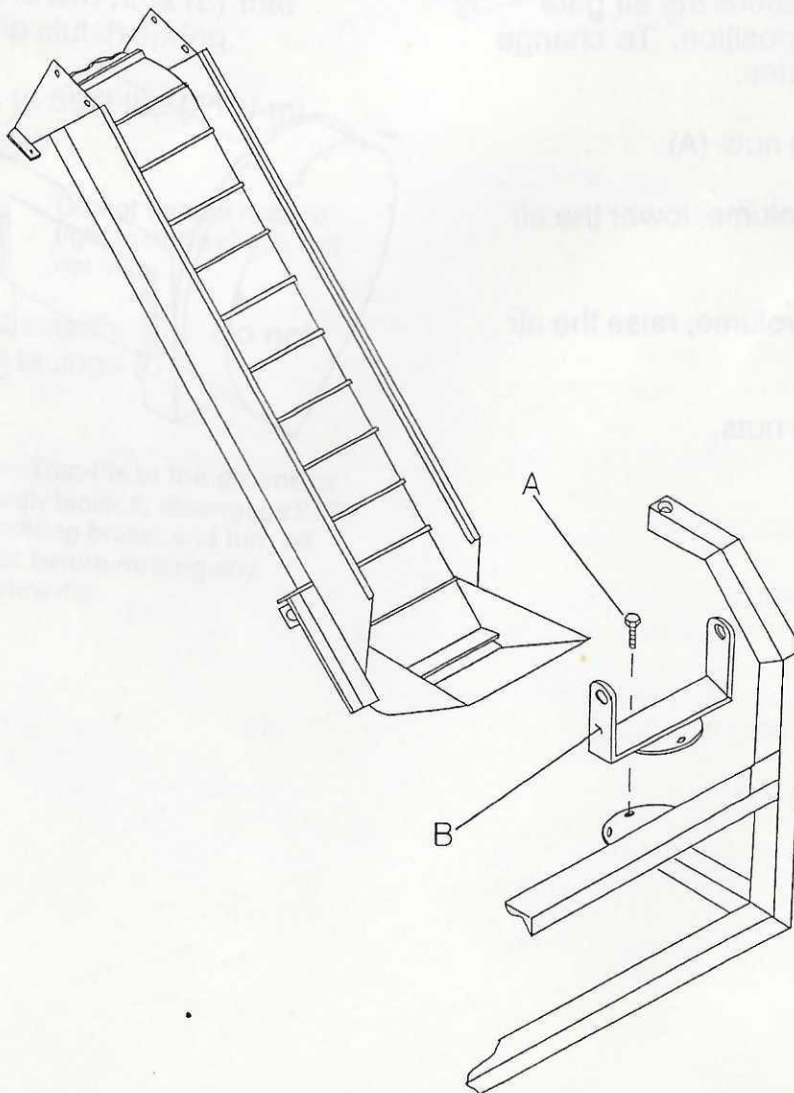


ADJUSTING ELEVATOR SWING

The Pixall Trac-Pix is equipped with a swinging elevator. Load into a pull behind wagon, or side load into a truck whichever you prefer. The Pixall Trac-Pix is versatile enough to accomplish both.

To Adjust Swinging Elevator

1. Remove Bolt (A) from elevator yoke (B).
2. Swing elevator to desired position.
3. Replace bolt (A) in appropriate hole and tighten.



SECTION 10: Maintenance and Service

PART A: SAFETY PRECAUTIONS

DANGER!



Some pictures in this section show the Trac-Pix with protective shielding removed. **THIS IS FOR CLARITY ONLY!** Be sure to close or replace all shielding before operating the Trac-Pix.

WARNING!



To prevent personal injury, observe the following safety precautions before performing any adjustments or maintenance:

1. Put all drives in neutral.
2. Lower Trac-Pix to the ground OR raise picker and securely block harvester.
3. Put on parking brake and turn off tractor engine.
4. Reinstall and/or close shielding before operating the Trac-Pix.

IMPORTANT!

Be sure to use SAE 30 grease and multipurpose oil when servicing your Pixall Trac-Pix corn picker.

PART B: SCHEDULED MAINTENANCE

All checks and services in this section **MUST** be performed at the hour intervals shown. Use the hour meter on the tractor tachometer to determine when maintenance is required.

IMPORTANT!

Failure to perform the required maintenance at the intervals shown may result in rapid wear and unnecessary downtime.

IMPORTANT!

These hour intervals apply to machines operated under average conditions. If you operate your machine under severe conditions, service it more often than the recommended intervals.

Within each hour interval, maintenance items are listed in order, starting from the left front side of the Trac-Pix and working counterclockwise around the harvester.

PRE-SEASON MAINTENANCE

Before beginning the harvest after winter storage, take the following steps to make sure the Trac-Pix is in good working condition:

1. Clean the Trac-Pix thoroughly.
2. Lubricate the entire Trac-Pix according to all the maintenance schedules in this section.
3. Check all belts for proper alignment and tension.
4. See that all bolts are tight and all cotter pins are spread.
5. Run Trac-Pix at slow speed for a few minutes. Check all bearings for heat or looseness.
6. Run all Trac-Pix functions. Check for abnormal movement of components. Listen for unusual noises.
7. Review this manual.

DAILY INSPECTION AND MAINTENANCE

Your Trac-Pix is a big investment. Careful inspection and service before each day's operation will prevent needless downtime in the field. Take the following steps before each day or work shift:

1. Check all belts and belt drives carefully for proper alignment and tension.

IMPORTANT!

Excessive belt wear is a sign of improper tension or alignment.

IMPORTANT!

New belts will stretch slightly during the first several hours of use.

2. Check for loose hardware and hydraulic fittings. Tighten or replace as necessary.
3. Check all hydraulic lines for damage or fatigue. Replace as necessary.
4. Lubricate the Trac-Pix according to maintenance schedules in this section.

IMPORTANT!

If you operate your machine in severe conditions, lubricate it more often than recommended in this section.

10-HOUR (or Daily) MAINTENANCE

<u>GREASE</u>	<u>FIGURE</u>
Fan Bearings (2 ea)	10-1
PTO Bearings (3 ea)	10-2
Cross Conveyor Drive Shaft Bearings (2 ea)	10-3
Cross Conveyor Idler Shaft Bearings (2 ea)	10-3
Elevator Drive Shaft Bearings (3 ea)	10-4
Elevator Idler Shaft Bearings (2 ea)	10-4
Elevator Return Idler Shaft Bearings (2 ea)	10-4

50-HOUR (or Weekly) MAINTENANCE

<u>GREASE</u>	<u>FIGURE</u>
Check Row Unit gear case grease level at inspection plug. Lubricant should be $1\frac{1}{2}$ " (38 mm) from top of hold.	10-5
Grease Row Unit gear case.	10-5
Grease PTO U-Joints.	

SEASONAL MAINTENANCE

<u>ITEM</u>	<u>FIGURE</u>
Change Row Unit gear box grease.	10-5
Change hydraulic system oil.	
Change wheel bearing grease.	

3. Check all bearings for proper lubrication.
4. Check for loose hardware and fastenings.
5. Check all hydraulic lines for damage or leaks. Replace as necessary.
6. Lubricate the front wheel bearings.
7. Inspect the rear wheel bearings.

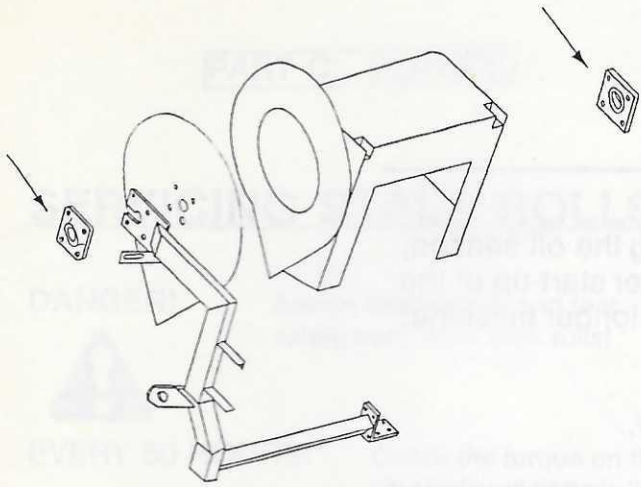


FIGURE 10-1

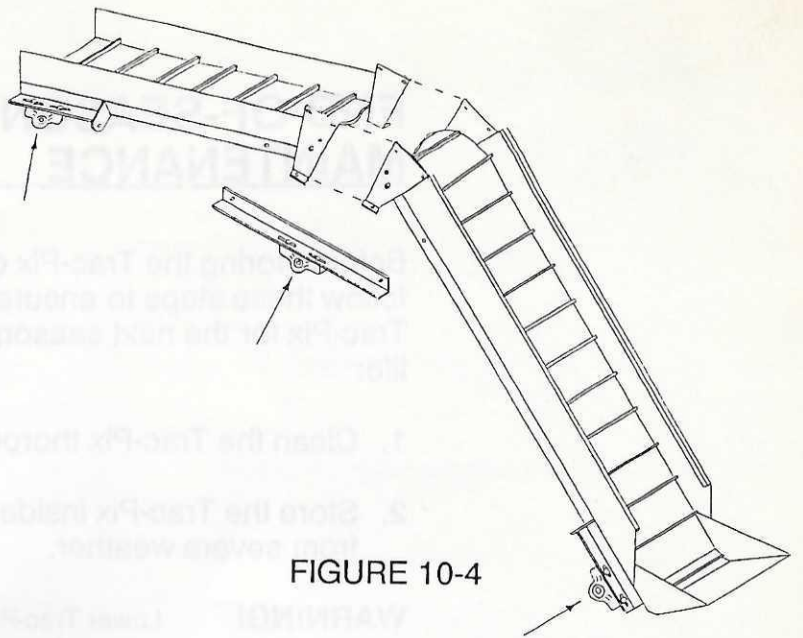


FIGURE 10-4

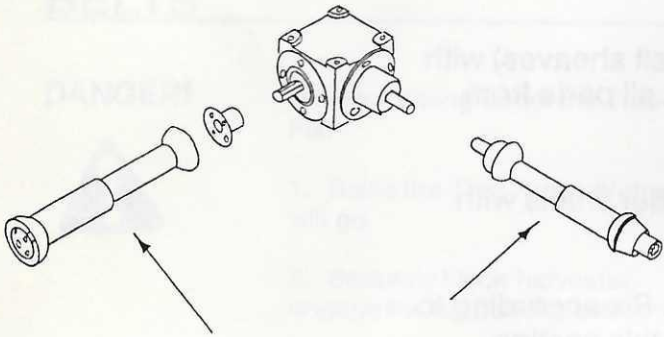


FIGURE 10-2

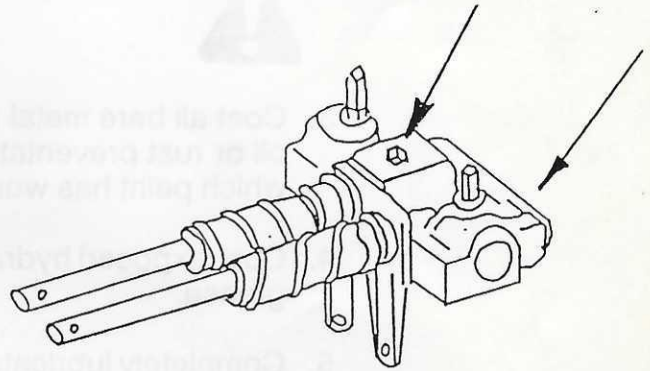


FIGURE 10-5

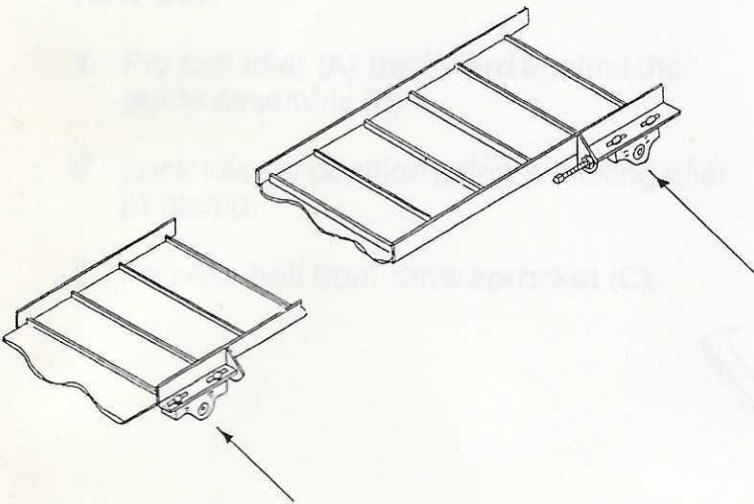


FIGURE 10-3

END-OF-SEASON MAINTENANCE

Before storing the Trac-Pix during the off season, follow these steps to ensure easier start-up of the Trac-Pix for the next season and longer machine life:

1. Clean the Trac-Pix thoroughly.
2. Store the Trac-Pix inside a building to protect it from severe weather.

WARNING!

Lower Trac-Pix to the ground and remove from tractor for winter storage.



3. Coat all bare metal (except belt sheaves) with oil or rust preventative. Paint all parts from which paint has worn.
4. Coat exposed hydraulic cylinder shafts with grease.
5. Completely lubricate the Trac-Pix according to all maintenance schedules in this section.
6. Release tension from all belts.
7. Order replacement parts needed for next season.

SERVICING STALK ROLLS

DANGER!

Always keep hands and feet safely away from stalk rolls!



EVERY 50 HOURS:

Check the torque on the two stalk roll bolts. Torque should be 110 ft-lbs (149 N-m).

SERVICING GATHERER BELTS

DANGER!

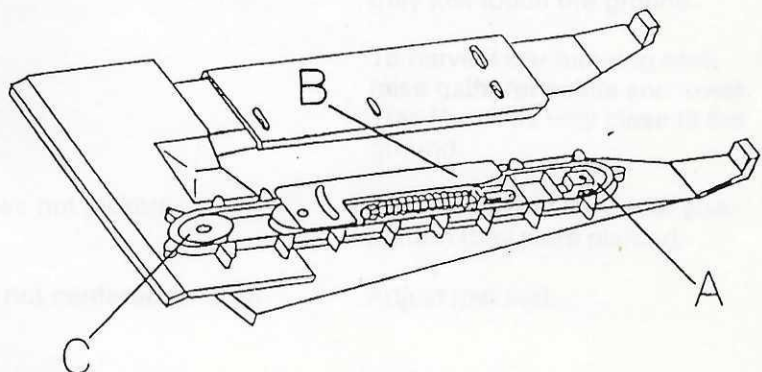
Before working under the Trac-Pix:



1. Raise the Trac-Pix as high as it will go.
2. Securely block harvester, engage tractor parking brake.
3. Shut off the power source or tractor engine.

Removing the Gatherer Belt from the Row Unit

1. Pry belt idler (A) backward against the guide assembly (B).
2. Lock idler in position using a locking plier or clamp.
3. Remove belt from drive sprocket (C).

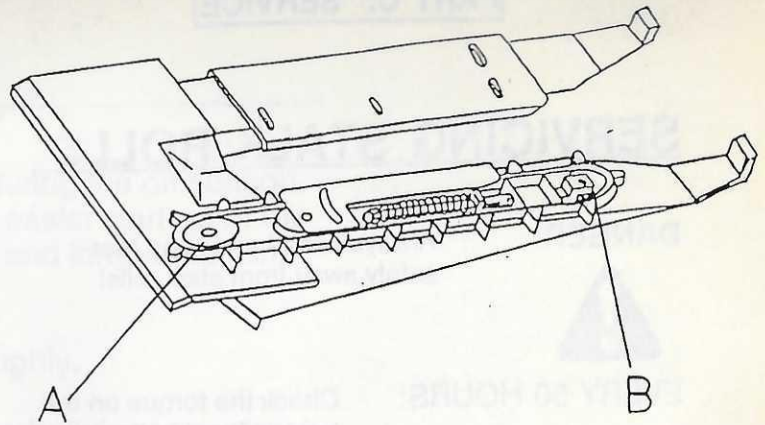


Replacing the Gatherer Belt

IMPORTANT!

Check gatherer belts regularly for signs of wear. Replace belts at least every season. Replace sooner if belts are badly worn.

1. Put gathering belt loosely on driver (A) and idler (B).
2. Release locking plier or clamp.



SERVICING THE HYDRAULIC SYSTEM

1. Check hydraulic system daily for leaks.
2. Check hydraulic fluid level daily.
3. Change hydraulic fluid annually.

WARNING!



High pressure hydraulic fluid can cause serious injury. Never check for leaks with your hand. If injured by high pressure hydraulic fluid, see a physician immediately or serious infection may occur.

SECTION 11: Troubleshooting

IMPORTANT: MOST PROBLEMS WITH THE PIXALL ONE-ROW TRAC-PIX CORN PICKER ARE CAUSED BY IMPROPER ADJUSTMENTS.

PROBLEM	CAUSE	SOLUTION
Cornstalks pulled up	Deck plates too close together.	Spread deck plates about $\frac{1}{8}$ " (3 mm) at a time, until stalks feed smoothly through stalk rolls.
	Ground speed too fast for gatherer belt speed.	Slow down ground speed or increase Trac-Pix drive speed.
	Gatherer belt flights pulling up cornstalk roots.	Lower gatherer points.
	Stalk rolls worn out.	Replace stalk rolls.
	Corn very dry or down.	Take off center shield and ear savers.
Ears slide out through deck plate throat.	Ear savers not adjusted properly.	Adjust ear savers.
	Ear savers worn out.	Replace ear savers.
Ears of corn lost in the field.	Gatherer points too high.	Adjust gatherer points so that they just touch the ground. To harvest low hanging ears, raise gatherer points and lower Trac-Pix skids very close to the ground.
	Planter rows not picked.	Harvest rows in the order and pattern they were planted.
	Row units not centered on corn rows.	Adjust row unit.

PROBLEM	CAUSE	SOLUTION
Ears of corn lost in the field (Continued).	Ears slide out over gatherer belts.	Use ear savers.
	Travel speed too fast or too slow.	Adjust ground speed to meet field conditions. Match ground speed and Trac-Pix drive speed. (See SECTION 7).
Ears fall ahead of gatherer belts.	Gatherer belt speed too fast or too slow.	Adjust speed of feeder house shaft.
	Ground speed faster than gatherer belt speed.	Match ground speed to gatherer belt speed.
Ears slide out before getting to gatherer.	Gatherer belt speed too slow.	Adjust speed of feeder house shaft.
	Ground speed slower than gatherer belt speed.	Match ground speed to gatherer belt speed.
Ears lost due to weak or broken stalks (usually due to disease or insects).	Gatherer belt speed too fast.	Adjust speed of feeder house shaft.
	Stalks contacting ear savers.	Take off ear savers.
Damage to harvested corn (butt damage, side damaged, husking, etc).	Ears down or lodged. Loose ears on the ground.	Reset the position of the gatherer belts so that they are directly opposite each other.
	Ground speed too fast.	Slow down ground speed.
	Ground speed too fast for gatherer belt speed.	Match the gatherer belt speed to the ground speed by adjusting the speed of the feeder house shaft.
	Stalk rolls worn out.	Replace stalk rolls.
Excessive trash in harvested corn.	Excessive trash restricting the flow of ears through the picker.	See "Excessive Trash in Harvested Corn" below.
	Picker speed too fast.	Decrease picker speed to match ground speed.
	Ground speed too fast.	Slow down ground speed to match picker speed and/or crop conditions.
Excessive trash in harvested corn.	Corn head carried too high.	Adjust picker to run just below lowest ears.
	Picker stripper plate gap set too wide.	Decrease stripper plate gap.
Excessive trash in harvested corn.	Cleaning fan speed too slow.	Increase cleaning fan speed.

PROBLEM

CAUSE

SOLUTION

Fan belts broken.

Check belts. Replace if necessary.

Ground speed too fast.

Slow down ground speed to allow picker to clear trash.

Picker speed too slow.

Increase picker speed to allow picker to clear trash.

Picker carried too low.

Adjusted picker to operate just below the lowest ears.

Picker not centered on the corn rows.

Keep picker centered on rows to avoid breaking stalks. Match row spacing to gathering unit spacing.

Stripper plates not adjusted to center line of stalk rolls.

Adjust stripper plates so that each is the same distance from the center of the stalk rolls.

Corn picker plugs up.

Stalks breaking in deck plates or stalk rolls.

Open deck plates.

Make sure deck plates are centered over center of stalk rolls.

Trash winding around stalk rolls.

Adjust trash knives closer to stalk rolls.

Material catching on sheet metal.

Check for broken or bent sheet metal.

Material going into the Trac-Pix too fast.

Slow down ground speed.

Match ground speed to gatherer belt speed.

Stalks plugging up gatherer throat opening.

Take off ear savers.

Planter rows not picked.

Pick rows in the order and pattern they were planted.

Gatherer belts loose.

Check and adjust gatherer belts.

Stalk rolls worn out.

Replace stalk rolls.

Hoses not connected.

Connect hoses.

Cross conveyor belt broken.

Repair/replace cross conveyor belt.

Cross conveyor belts loose.

Tighten cross conveyor belts.

Cross conveyor jammed.

Clear out cross conveyor belt.

Gear box coupler broken.

Replace gear box coupler.

Cross conveyors will not operate.