

Operator's Manual and Parts Book

1000 Accumulator

**Effective: Nov 2013
Revision "E"**

Serial No.: 05316-Current

HOELSCHER

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Each operator should read and understand the contents of this manual before using the machine.

Introduction

The purpose of this manual, is to explain the safe operation and maintenance of the Model 1000 Bale Accumulator. Everyone who will be using the machine should first acquaint themselves with the safety and operational procedures explained in this manual. Your dealer will review the safety precautions, operation, maintenance and adjustment procedures with you at the time of delivery. He will assist in filling out the Warranty Registration, which should be returned to us within 10 days of you taking receipt of the equipment.

Contents

General	
Warranty.....	1
Specifications.....	1
Machine Identification.....	1
Safety	
Safety Words.....	2
Equipment Safety Guidelines.....	3
Lighting and Marking.....	3
Safety Sign Care.....	3
Tire Safety.....	3
Before Operation.....	4
During Operation.....	4
Following Operation.....	4
Highway and Transport Operations.....	5
Performing Maintenance.....	5
Safety Sign Locations.....	6
Set-up and Pre-operation	
Installation and Pre-operation.....	7, 8
Set-up Instructions.....	9
Caster Brake Assembly & Adjustment.....	10
Attaching to Conventional Baler.....	11
Attaching to Center-line Baler.....	12
Bale Length Adjustment.....	13
Control Lever and Detent Adjustment.....	14
Hydraulic System Conversion.....	15
Use of Actuating Screw.....	16
Side Rail and Control Bar Adjustment.....	17
Safety Valve Adjustment & Cleaning.....	18
Lubrication.....	19
Arm Speed Control.....	20
Operation	
Operation.....	21, 22
Troubleshooting	
Troubleshooting.....	23, 24
Options	
Wagon Hitch.....	25
15 Bale Conversion.....	26
Side Hill Kit.....	27
Hold-down Kit.....	28
Bed Extension Kit.....	29
Hydraulic Power Pack.....	30
Dolly Wheel.....	31
Parts	
Frame Assembly.....	32
Push-over Arm Assembly.....	33
Bed Assembly.....	34
Hydraulic Assembly.....	35
Hydraulic Control Assembly.....	36
Appendix	
Bolt Torque.....	37
Tire Inflation.....	37
Tire Warranty Information.....	37

Limited Warranty

Each new machine produced by **HOELSCHER, INC.**, is eligible to be covered by a manufacturer's warranty. If the machine has not been altered, abused, or neglected, and has been properly assembled, adjusted, serviced, and operated, it is guaranteed against defective material and workmanship, for a period of 12 months after the date of retail sale. It is the customer's responsibility to verify that the correct mounting brackets, hydraulic system, etc., are in use.

HOELSCHER, INC., at its option, shall repair or replace any defective part, which has been reported in writing to **HOELSCHER, INC.**, within 60 days of the failure.

Replacement parts will be shipped, freight prepaid, by regular ground delivery services. These shipments (including the cost of the part, plus freight) will be invoiced to the customer. If the defective part is returned to **HOELSCHER INC.**, freight prepaid, and the part is deemed defective, the amount of the invoice will be credited to the customer's account. When returning defective parts, freight must be prepaid. If next day delivery service is requested by the customer, any additional charges will be invoiced at the customer's expense.

This warranty does not apply to tires or other consumable items which are used on **HOELSCHER, INC.** products.

This warranty is in lieu of all other warranties, whether express, implied, or statutory. **HOELSCHER** equipment is not warranted for merchantability or fitness of purpose. **HOELSCHER, INC.** is not liable for consequential damages on account of any of its products.

Specifications

Length.....	118" (3000mm)	Oil volume required to fill system.....	1.15 US gal (4.4litre)
Width.....	124" (3150mm)	Hydraulic flow required from pump.....	12-18 gpm (45-68 l/m)*
Height.....	51" (1295mm)	Hydraulic pressure required from pump..	1200-2500 psi (82-165 Bar)*
Weight.....	1680 (762 kg)	Tires.....	(2) 26x12.00-12, 6 ply
Bale capacity (14"x18" bales)**.....	10 (std) 36"-50" (965-1270mm) long, or 15 (optional) 33" (864mm) long***		

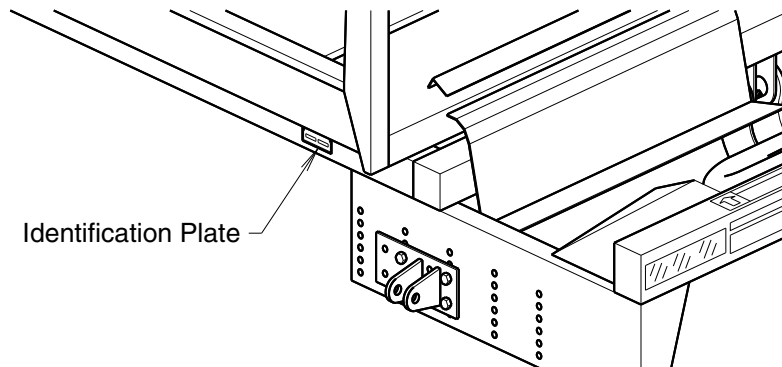
* Required flow and pressure depend on baling conditions.

** 16"x18" bales require the "Bed Extension" kit. See page 29.

*** The optional "15 Bale Conversion" kit is required. See page 26.

Identification

The Identification Plate of your machine is located on the front of the frame of the accumulator. Record this information in the space below, and refer to it when making any correspondence concerning your unit.



Model No.: _____ Serial No.: _____ Date: _____

Purchased from: _____ Salesman: _____

Location: _____ Phone: _____

Safety Symbol

Take note! This SAFETY ALERT SYMBOL found throughout this manual, and on safety signs, is used to call your attention to instructions involving your personal safety and the safety of others. Failure to follow these instructions can result in injury or death.



This symbol means:

-YOUR SAFETY IS INVOLVED!

-BECOME ALERT!

-ATTENTION!

Signal Words

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



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 questions not answered in this manual, or require additional copies, contact:
HOELSCHER INC - 312 S Main St - Bushton, KS 67427
620-562-3575 - www.hoelscherinc.com



SAFETY...YOU CAN LIVE WITH IT



Equipment Safety Guidelines

Safety of the operator is one of our main concerns, and we have built in as many safety features as possible. However, accidents occur which could have been avoided by the operator's careful approach to handling equipment. You, the operator, can avoid many accidents by observing the following precautions in this manual. To avoid personal injury, study the following precautions and insist that those working with you follow them.

Replace any CAUTION, WARNING, DANGER, or instruction safety sign that is not readable or is missing. The locations of such signs are indicated on page 6, in this manual.

Do not attempt to operate this equipment under the influence of drugs or alcohol.

Review the safety instructions with all users periodically.

This equipment is dangerous to children and persons unfamiliar with its operation. The operator should be a responsible adult familiar with farm machinery and trained in this equipment's operations. Do not allow persons to operate or assemble this unit until they have read this manual and have developed understanding of the safety precautions and of how the machine works.

To prevent injury or death, use a tractor equipped with a Roll Over Protective System (ROPS). Do not paint over, remove or deface any safety signs on your equipment. Observe all safety signs and practice the instructions on them.



Lighting and Marking

It is the responsibility of the customer to know the lighting and marking requirements of the local highway authorities, and to install and maintain the equipment to provide compliance with the regulations. Add extra lights when transporting at night or during periods of limited visibility.



Safety Sign Care

- * Keep safety signs clean and legible at all times.
- * Replace safety signs that are missing or have become illegible.
- * Replaced parts that displayed a safety sign should also display the proper sign.
- * Safety signs are available from your dealer, or the factory.

How to Install Safety Signs:

- * Be sure that the installation area is clean and dry.
- * Decide on the exact position before you remove the backing paper.
- * Remove a portion of the split backing paper.
- * Align the decal over the specified area and carefully press the exposed portion of the sign into place.
- * Peel back the remaining backing paper and smooth the remaining portion of the sign into place.



Tire Safety

- * Failure to follow procedures when mounting a tire on a wheel or rim can produce an explosion, which may result in serious injury or death.
- * Do not attempt to mount a tire unless you have the proper equipment and experience to do the job.
- * Inflating or servicing tires can be dangerous. Whenever possible, trained personnel should be called to service and/or mount tires.
- * Always order and install tires and wheels with appropriate capacity to meet or exceed the anticipated weight to be placed on the equipment.
- * Always maintain proper tire inflation.

Before Operation

- * Carefully study and understand this manual.
- * Do not wear loose-fitting clothing which may catch in moving parts.
- * Assure that tires are inflated properly.
- * Give the unit a visual inspection for any loose bolts, worn or cracked parts, etc. Follow the maintenance safety instructions included in this manual.
- * Be sure that there are no tools lying on or in the equipment.
- * Do not start the unit until you are sure that the area is clear, especially children and animals.
- * Never touch the Arm Control Lever, or allow anything else to touch it. The Push-over Arm moves fast and could seriously injure you.
- * Because it is possible that this equipment may be used in dry areas, or in the presence of combustibles, special precautions should be taken to prevent fires, and fire fighting equipment should be readily available.
- * Don't hurry the learning process. Ease into it and become familiar with the equipment.
- * Practice operation of your equipment and its attachments. Completely familiarize yourself and other operators with its operation before using.

During Operation

- * Never touch the Arm Control Lever, or allow anything else to touch it. The Push-over Arm moves fast and could seriously injure you. Be sure that the hydraulic system is disengaged and the tractor engine stopped before approaching the machine.
- * Beware of bystanders, particularly children! **NO PASSENGERS ALLOWED.** This machine operates automatically, and its movements are rapid and powerful. Always look around to make sure that it is safe to start the engine of the towing vehicle or move the unit. This is particularly important with higher noise levels and quiet cabs, as you may not hear people shouting.
- * Never stand alongside of unit with engine running.
- * Allow for extra length and width when making turns. The accumulator will swing wide when turning.
- * Keep hands and clothing clear of moving parts.
- * Do not clean, lubricate or adjust your equipment while it is powered.
- * When halting operation, even periodically, set the towing vehicle brakes, disengage the hydraulic system, shut off the engine and remove the ignition key.
- * Be observant of the operating area and terrain. Watch for holes, rocks, or other hidden hazards.
- * Do not operate near the edge of drop-offs or banks.
- * Do not operate on steep slopes, as overturn may result.
- * Be extra careful when working on inclines.
- * Periodically clear the equipment of debris, chaff, or other combustible materials.
- * Maneuver the tractor or towing vehicle at safe speeds.
- * Avoid overhead wires or other obstacles. Contact with overhead lines could cause serious injury or death.
- * Do not walk or work under raised components unless securely positioned and blocked.
- * Keep all bystanders, pets and livestock clear of the work area.
- * Operate the towing vehicle from the operator's seat only.
- * Never leave running equipment unattended.
- * Recheck equipment and hardware every 100 hours of operation. Correct all problems while following the maintenance safety procedures.

Following Operation

- * When disconnecting from the towing vehicle, set the brakes, disengage the hydraulic system, shut off engine and remove the ignition key.
- * Store the unit away from human activity.
- * Do not park equipment where it will be exposed to livestock. Equipment damage, and livestock injury could result.
- * Do not permit children to play on or around the stored unit.
- * Make sure all parked machines are on a hard, level surface and engage all safety devices.
- * Wheel chocks may be needed to prevent unit from rolling.



Highway and Transport Operations

- * Adopt safe driving practices.
- * Do not travel on the road with bales on the accumulator's bed. They could slide off and cause a hazard.
- * Always disengage the hydraulic system before road travel.
- * Caster wheels may whip at high speeds and cause you to lose control. Do not exceed 15 mph (24 kph).
- * Allow for extra length and width when on the road. The accumulator will swing wide when turning.
- * Keep the brake pedals latched together at all times. Never use independent braking with a machine in tow. Loss of control and/or upset can result.
- * Always drive at a safe speed relative to local conditions and ensure that your speed is low enough for an emergency stop to be safe and secure. Keep speed to a minimum.
- * Avoid sudden uphill turns on steep slopes.
- * Always keep the towing vehicle in gear to provide engine braking when going downhill. Do not coast.
- * Do not drink and drive!
- * Comply with state and local laws governing safety and movement of farm machinery on public roads.
- * Use approved accessory lighting, flags and necessary warning devices to protect operators of other vehicles on the highway during daylight and nighttime transport. Various safety lights and devices are available from your dealer.
- * The use of flashing amber lights is acceptable in most localities. However, some localities prohibit their use. Local laws should be checked for all highway lighting and marking requirements.
- * When driving the tractor and equipment on the road at under 20 mph (40 kph) at night or day, use flashing amber warning lights and a slow moving vehicle (SMV) emblem.
- * Plan your route to avoid heavy traffic.
- * Be observant of bridge load ratings and widths. Do not cross bridges of insufficient ratings or widths.
- * Watch for obstructions overhead and to the side while transporting.
- * Always operate equipment in a position to provide maximum visibility at all times. Make allowances for increased length and weight of the equipment when making turns, stopping, etc.



Performing Maintenance

- * Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.
- * Make sure there is plenty of ventilation. Never operate the engine of the towing vehicle in a closed building. The exhaust fumes may cause asphyxiation.
- * Before working on this machine, stop the towing vehicle, set the brakes, disengage the hydraulic system, disengage the PTO, shut off engine, and remove the ignition key.
- * Be certain all moving parts have come to a complete stop before attempting to perform maintenance.
- * Always use a safety support and block the wheels. Never use a jack to support the machine.
- * Always use the proper tools or equipment for the job at hand.
- * Use extreme caution when making adjustments.
- * Follow the torque chart in this manual when tightening bolts and nuts.
- * Never use your hands to locate a hydraulic leak. Use a small piece of cardboard or wood. Hydraulic fluid escaping under pressure can penetrate the skin.
- * Openings in the skin and minor cuts are susceptible to infection from hydraulic fluid. If injured by escaping hydraulic fluid, see a doctor at once. Gangrene can result. Without immediate medical treatment, serious infection and reactions can occur.
- * When disconnecting hydraulic lines, shut off the tractor, and relieve all hydraulic pressure by moving the tractor's hydraulic levers both ways several times.
- * After servicing, be sure all tools, parts and service equipment are removed.
- * Do not allow grease or oil to build up on any step or platform.
- * Never replace hex bolts with less than grade five bolts unless otherwise specified. Refer to bolt torque charge for head identification marking.
- * Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your equipment to original specifications. The manufacturer will not claim responsibility for use of unapproved parts and/or accessories and damages as a result of their use.
- * If equipment has been altered in any way from original design, the manufacturer does not accept any liability for injury or warranty.
- * A fire extinguisher and first aid kit should be readily accessible while maintaining or using this equipment.

Part No: 01395

Part No: 01264

Part No: 01896

WARNING
HIGH PRESSURE FLUID HAZARD
 To prevent serious injury or death:
 • Relieve pressure on hydraulic system before servicing or disconnecting hoses.
 • Wear proper hand and eye protection when searching for leaks. Use wood or cardboard instead of hands.
 • Keep all components in good repair.

DANGER
Do not touch
 this lever if the hydraulic system is energized. The Push-over arm will raise and may hurt you.

NOTICE
 THE DETENT MUST CONTACT THE CONTROL LEVER WITH SUFFICIENT FORCE TO ACTIVATE THE VALVE.
 ADJUST THE NUTS SO THAT THE CONTROL LEVER IS VERTICAL WHEN IN THE REAR (ACTIVATED) POSITION AND THE VALVE SPOOL IS "0".
 DO NOT PULL THE CONTROL LEVER BY HAND. THE PUSH-OVER ARM MAY RAISE AND INJURE YOU.

Part No: 01262

WARNING
STAY CLEAR OF THIS MACHINE.
 ALL OPERATIONS ARE AUTOMATIC. UNIT SWINGS WIDE WHILE TURNING. NEVER ALLOW RIDERS ON MACHINE.

Amber-Part No: 02299

WARNING
MOVING PARTS HAZARD
 DO NOT REACH BEYOND THIS POINT OR MOVE THE "ARM CONTROL LEVER" MANUALLY. THE "PUSH-OVER ARM" MAY RAISE AND INJURE YOU.

DISENGAGE THE HYDRAULIC SYSTEM AND STOP THE TRACTOR ENGINE BEFORE ATTEMPTING ANY ADJUSTMENT OR MAINTENANCE.
 USE THE "ACTUATING SCREW" IF IT IS NECESSARY TO RAISE THE "PUSH-OVER ARM." SEE THE OWNER'S MANUAL FOR INSTRUCTIONS.
 FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY!

Part No: 01370

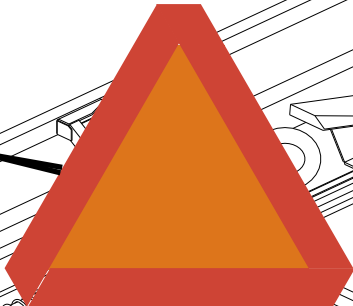
NOTICE
 THE FRONT EDGE OF THE FRONT BALE SHOULD BE HERE WHEN THE "PUSH-OVER ARM" BEGINS TO RAISE. DISTANCE FROM HERE TO THE "ARM CONTROL LEVER" SHOULD EQUAL THE LENGTH OF TWO BALES.
 REFER TO THE OPERATOR'S MANUAL FOR COMPLETE ADJUSTING INSTRUCTIONS.

Part No: 01265

NOTICE
 TO PREVENT DAMAGE TO YOUR HYDRAULIC SYSTEM:
 THIS MACHINE IS DESIGNED FOR USE WITH OPEN-CENTER OR CLOSED-CENTER HYDRAULIC SYSTEMS. IT MUST BE SET FOR THE SYSTEM OF INTENDED USE OR MECHANICAL DAMAGE MAY RESULT. SEE "HYDRAULIC SYSTEM CONVERSION", IN THE OPERATOR'S MANUAL FOR THIS MACHINE.

Part No: 01263

Important
 These Safety Signs are attached to the equipment for your safety, and to prevent mechanical damage. Replace these signs if they become damaged or illegible.



Part No: 02326

Part No: 01261

WARNING
CRUSHING HAZARD
 DO NOT WORK UNDER OR AROUND THIS MACHINE, WHILE THE HYDRAULIC SYSTEM IS ENGAGED.
 DISENGAGE THE HYDRAULIC SYSTEM AND STOP THE TRACTOR ENGINE BEFORE ATTEMPTING ANY MAINTENANCE. THE BED MUST BE BLOCKED BEFORE WORKING UNDER IT.
 FAILURE TO FOLLOW THESE PRECAUTIONS MAY RESULT IN INJURY.



Orange-Part No: 02300



Red-Part No: 02298

WARNING
STAY CLEAR OF THIS MACHINE.
 ALL OPERATIONS ARE AUTOMATIC. UNIT SWINGS WIDE WHILE TURNING. NEVER ALLOW RIDERS ON MACHINE.


Amber-Part No: 02299

Part No: 01262

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 SAFETY & NOTICE SIGN LOCATIONS

Installation and Pre-operation

1. Assemble the accumulator, as shown on page 9 and 10.
2. Mount the accumulator to the baler with a hitch as described on page 11 or 12, depending on the type of baler that you are using.
3. Route the hydraulic hoses to the tractor's remote quick couplers (or to the optional Hydraulic Power Pack). Secure the hoses to the baler, so as to avoid cutting, crushing, or scuffing. Do not attach near moving parts, such as the needle carriage, pick-up, PTO, or where they might rub the ground.
4. Check all bolts and hydraulic fittings for tightness.
5. Grease all lubrication points. See "Lubrication", page 19.
6. Adjust the accumulator for the desired length of bale, as shown on page 13. If the Arm Control Lever must be relocated to allow for a different length of bale, the Detent must also be moved accordingly, see page 14. Since there is no oil in the hydraulic system at this time, the Push-over Arm may be raised by hand to verify adjustments. This is a good time to study the operation of the Detent in relation to the Arm Control Lever. This is the most critical adjustment on the machine.
Lower the Push-over Arm and check adjustment of the retractable Piston in the Arm. For most conditions, it should be set to the dimensions shown on page 33.
7. If any options are to be installed, do so now. i.e.: 15 Bale Conversion, Side-hill Kit, Hold-down Kit, or Bed Extension Kit.
8. Refer to the tractor's operator's manual to find the type of hydraulic system the tractor is equipped with, "open-center" or "closed-center". Set the accumulator appropriately, as shown on page 15. If your tractor uses a "load-sensing" hydraulic system, it is usually best to set the accumulator for "open-center". With these systems, it is important to adjust the tractor's hydraulic flow control for the minimum amount of oil required for proper operation of the Push-over Arm. Higher flow rates will cause excessive heat in the hydraulic system.
If in doubt of which system your tractor has, try both settings, and use the setting that puts the least load on the tractor.
If your tractor has a "priority valve", this should be used to power the accumulator.

 **CAUTION** Incorrect setting of the accumulator's hydraulic system may result in damage to the tractor's hydraulic system.

9. Connect the hydraulic hoses to their respective couplers on the tractor. The smaller hose is the "pressure", and the large hose is the "Return". With everyone standing clear, energize the hydraulic system by holding the tractor's hydraulic control lever "back".

It will take a few seconds to purge air from the system. Let the oil circulate for 30 seconds. If the Push-over Arm or Bed of the accumulator moves, immediately move the tractor's hydraulic control lever to neutral. No part of the accumulator should move at this time. If the Push-over Arm did raise, reverse the hoses at the tractor's couplers. Each time the hydraulic system is energized, verify that the hoses are connected to the tractor, so that no part of the accumulator moves.

It is best if the hoses are connected to the tractor, so that the hydraulic control lever is pulled "back" to energize the accumulator. The reason for this is, if the hydraulic control lever is pushed "forward", the lever could inadvertently be pushed it into "float" position. In "float", the hydraulic system does not provide flow.

Pre-operation, cont'd

▲ CAUTION If the hoses are connected to the tractor incorrectly, or if the tractor's hydraulic control lever is moved in the wrong direction, the Push-over Arm and Bed will raise, and could cause severe damage. It is important to always connect the hoses to the tractor correctly, and pull "back" on the hydraulic control lever.

In operation, the tractor's hydraulic lever will need to be secured in the "back" position. If the tractor does not have a means of locking the control lever back, a tarp strap may be used.

10. Disengage the hydraulic system and kill the tractor. Follow the procedure on page 16, "Use of Actuating Screw". Be sure that everyone is clear of the machine. Start the tractor and engage the hydraulic system. The Push-over Arm will raise quickly and forcefully to the top of its stroke. Disengage the hydraulic system and kill the tractor, set the brake and remove the ignition key.

Verify that the Spool of the Safety Valve has extended out, as shown on page 18. If not, it may be stuck from setting without oil in it for some time. If necessary, remove the square block on back of the Safety Valve and tap on the spool to loosen it.

Turn the Actuating Screw counter-clockwise fully and install the hairpin clip.

With everyone clear of the accumulator, start the tractor and engage the hydraulic system. The Push-over Arm will return down quickly and forcefully.

▲ DANGER Never touch the Arm Control Lever by hand if the tractor is running. If the hydraulic system is engaged, the Push-over Arm will move quickly and could cause serious personal injury or death.

11. Check for any leaks in the hydraulic system. Due to the volume of hydraulic oil used to fill the hoses, valves, and cylinders of the accumulator, it will be necessary to fill the tractor's hydraulic reservoir.

12. Check for proper tire inflation. Maximum pressure is 30 psi (207 kPa). Lower pressure may be used to allow for a smoother ride. Minimum pressure provides for a rolling radius (distance from the ground to the center of the spindle) of 10.9" (277mm) when loaded.

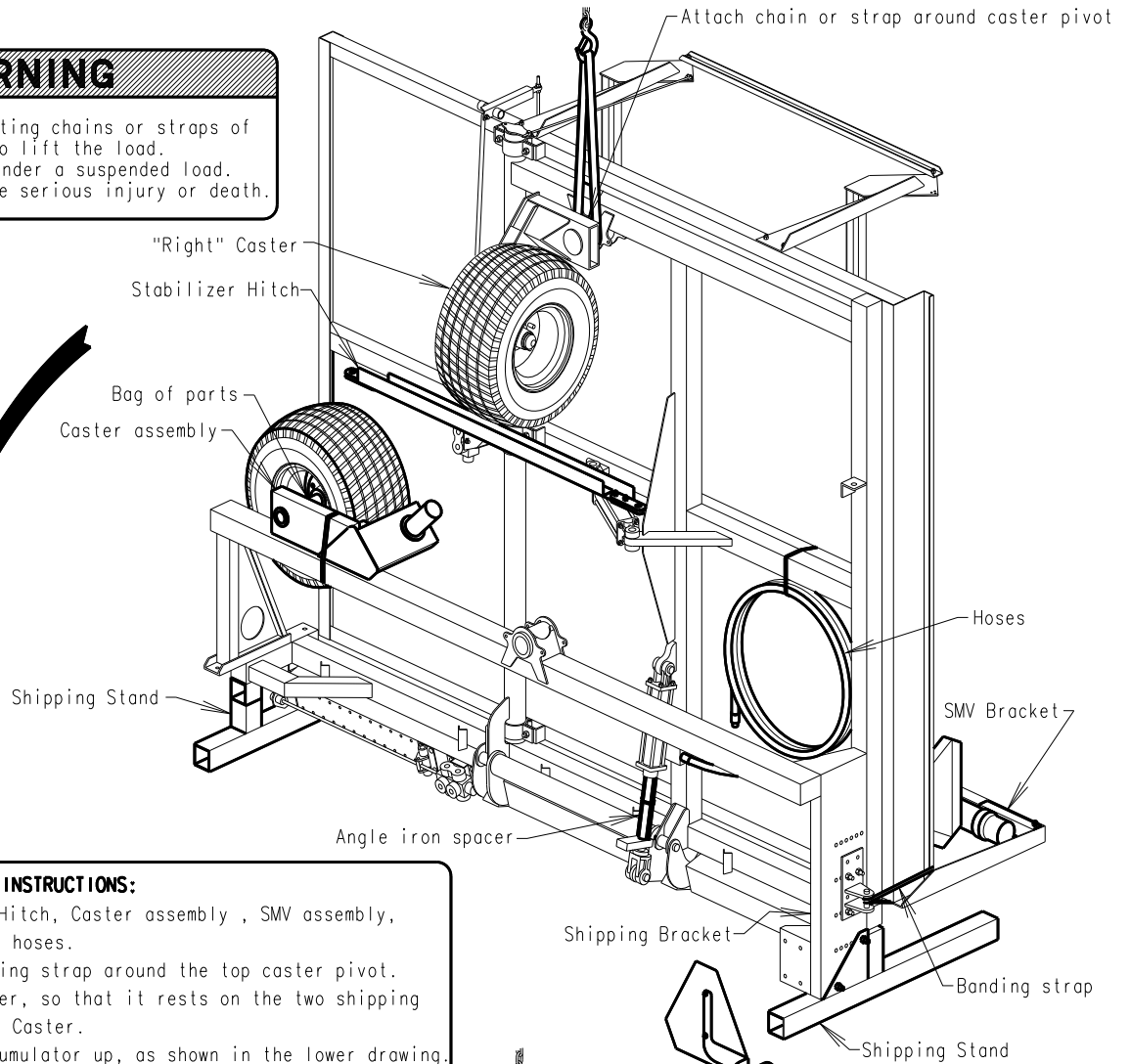
13. It is the responsibility of the customer to know the lighting and marking requirements of the local highway authorities, and to maintain the equipment to provide compliance with the regulations. Add extra lights when transporting at night or during periods of limited visibility.

14. With steps 1 through 13 completed, the accumulator should now be ready for final adjustments, which are best made in the field.

⚠ WARNING

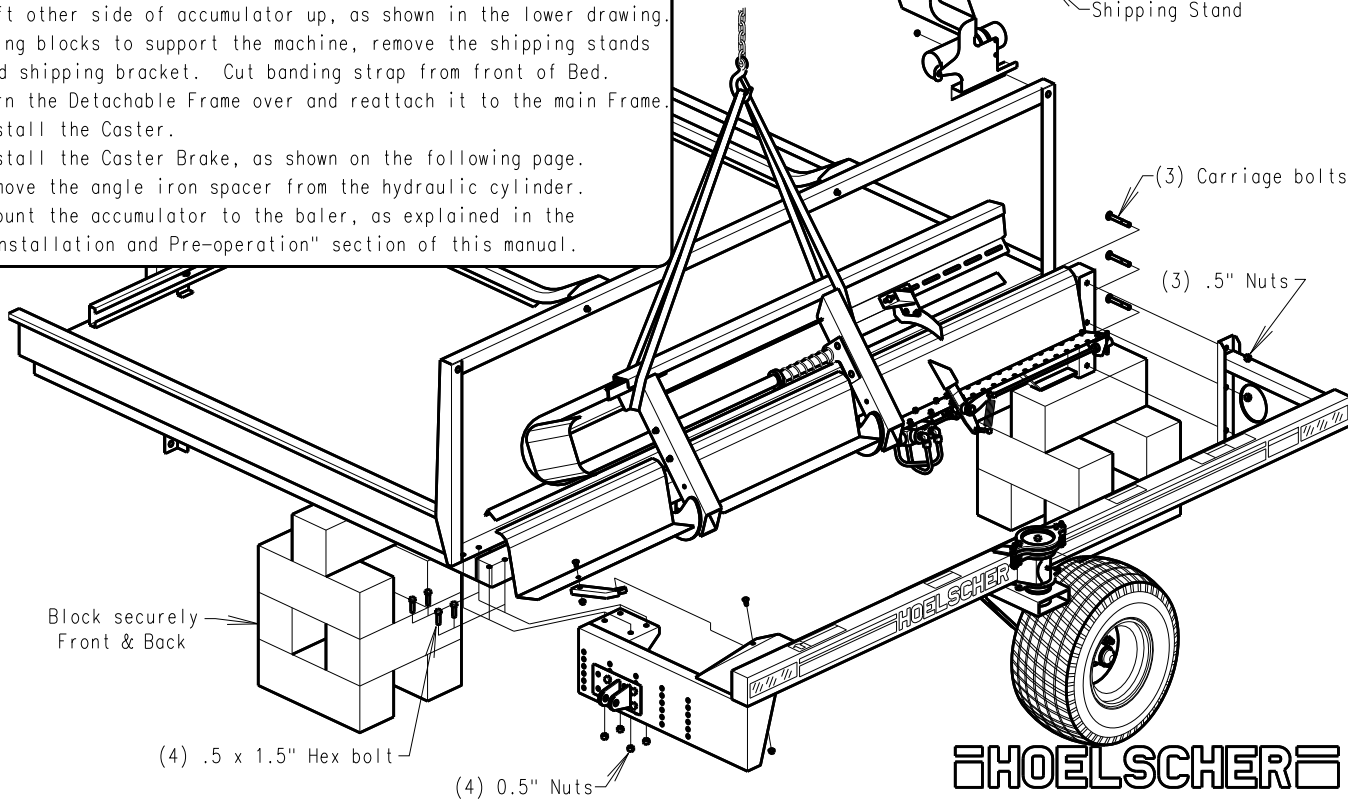
Only use approved lifting chains or straps of sufficient strength to lift the load.
Never walk or work under a suspended load.
A falling load could cause serious injury or death.

Lay over



INSTRUCTIONS:

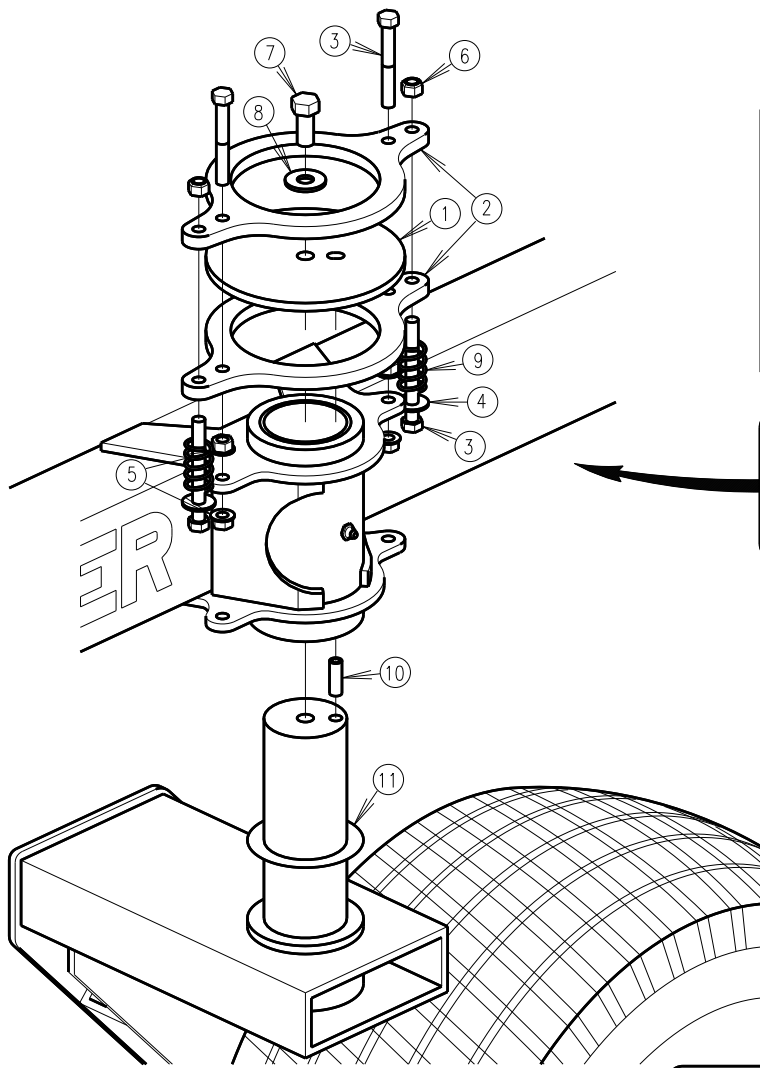
1. Remove the Stabilizer Hitch, Caster assembly, SMV assembly, bag of parts, and long hoses.
2. Attach a chain or lifting strap around the top caster pivot.
3. Lay the Accumulator over, so that it rests on the two shipping stands and the "right" Caster.
4. Lift other side of accumulator up, as shown in the lower drawing.
5. Using blocks to support the machine, remove the shipping stands and shipping bracket. Cut banding strap from front of Bed.
6. Turn the Detachable Frame over and reattach it to the main Frame.
7. Install the Caster.
8. Install the Caster Brake, as shown on the following page.
9. Remove the angle iron spacer from the hydraulic cylinder.
10. Mount the accumulator to the baler, as explained in the "Installation and Pre-operation" section of this manual.



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SET-UP INSTRUCTIONS

SERIAL NO: 05316-CURRENT



NO	DESCRIPTION	PART NO	QTY
1	DISK	01643	1
2	PAD	01824	2
3	BOLT-.375 X 2.5 NC HEX	01458	4
4	WASHER-.375 FLAT	01444	2
5	NUT-.375 NC FLANGE	01443	4
6	NUT-.375 NC LOCK	01454	2
7	BOLT-.5 X 1.0 NC HEX	01603	1
8	WASHER-.5 FLAT	01493	1
9	SPRING	01648	2
10	ROLL PIN-.375 X 1.0 HD	01647	1
11	WASHER-2.50 NARROW RIM	01531	1

ASSEMBLY INSTRUCTIONS:

1. Insert Caster into the pivot tube.
2. Assemble Brake parts as shown to the left.
3. Apply "Loc-Tite" to the 0.5" bolt (7).

⚠ WARNING

Implements with caster wheels should not be pulled faster than your ability to maintain control in the event that the wheels begin to shimmy rapidly.

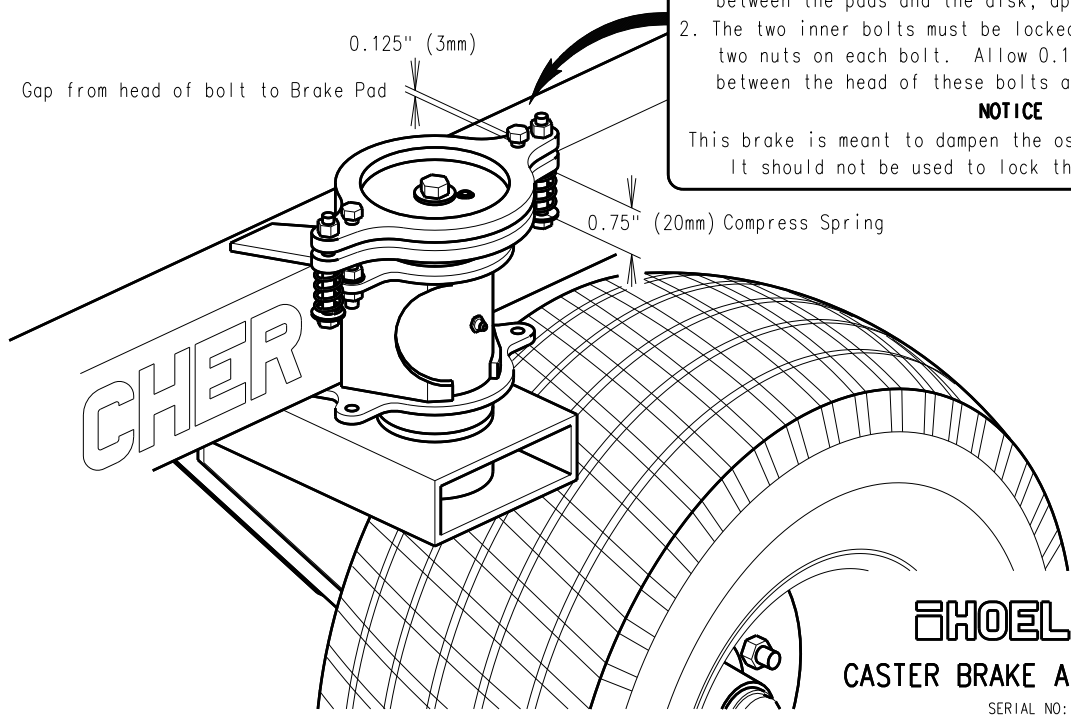
Any irregular surface can cause caster wheels to be deflected to the side, which could cause the entire baler/accumulator unit to swerve. This may cause you to loose control and have an accident.

ADJUSTMENT INSTRUCTIONS:

1. Adjust the two outer bolts to maintain required friction between the pads and the disk, approximately 0.75" (20mm).
2. The two inner bolts must be locked in position by the two nuts on each bolt. Allow 0.125" (3mm) clearance between the head of these bolts and the top brake pad.

NOTICE

This brake is meant to dampen the oscillations of the caster. It should not be used to lock the caster in place.



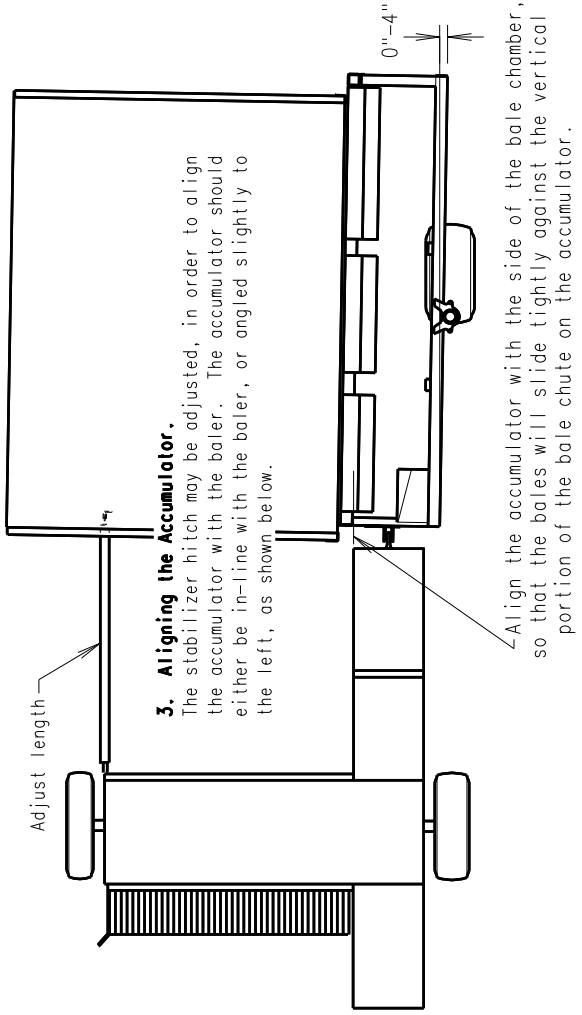
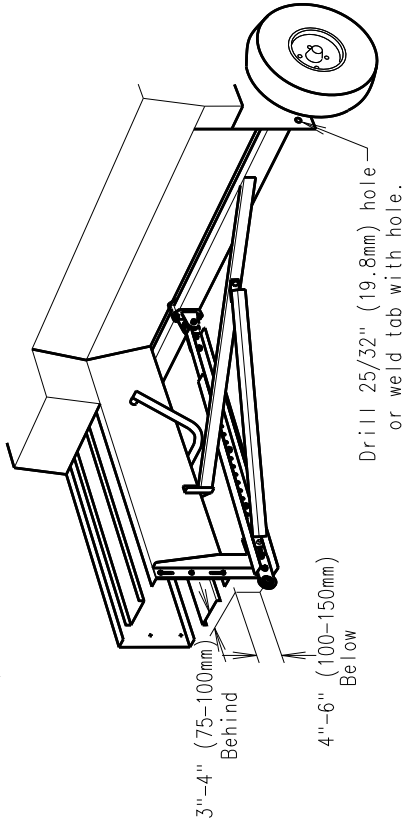
HOELSCHER

CASTER BRAKE ASS'Y & ADJUSTMENT

SERIAL NO: 02500-CURRENT

1. Basic hitch requirements.

If your baler does not have a wagon hitch, one will need to be added. The hitch must attach to the axle of the baler. Do not use a hitch that only attaches to the bottom of the bale chamber. Structural damage may result to the baler. To keep the bale chamber from flexing, supports may need to be added from one side to the other. The hitch may be centered under the chamber, or to the side, as shown.



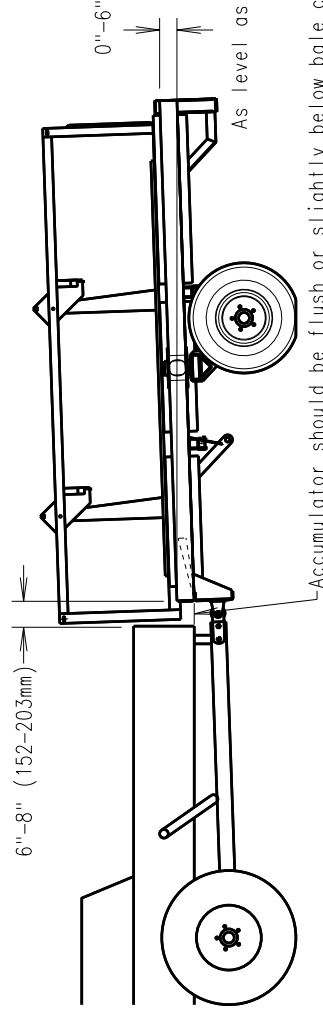
3. Aligning the Accumulator.

The stabilizer hitch may be adjusted, in order to align the accumulator with the baler. The accumulator should either be in-line with the baler, or angled slightly to the left, as shown below.

Align the accumulator with the side of the bale chamber, so that the bales will slide tightly against the vertical portion of the bale chute on the accumulator.

2. Installing the Accumulator.

Mount the accumulator to the baler, using the dimensions shown below. The clevis on front of the accumulator is adjustable. The front channel of the accumulator should be even with the bottom of the bale chamber, and 6"-8" behind. The "right" side of the bale chamber should be aligned with the vertical portion of the chute of the accumulator, as shown in Step 3. If the accumulator is more than 6" off level, raise the front of the baler, as shown in Step 4. Excessive angle will cause the bales to bow.



4. To lower front of baler (if necessary)

If the back of the accumulator is too high, compared to the front it may be necessary to lower the front of the baler. On some models of balers this may be done by moving the hitch to the top of the tongue, as shown below. CAUTION: Do not move the hitch so far as to bind the PTO drive line.



WARNING

Because the accumulator will cause a change in balance of the baler, the hitch pin should be secured with a clip to prevent the baler from unhitching from the tractor. Use a safety chain.

Do not tow at speeds in excess of 15 mph (24 kph)
Caster wheels can whip and cause you to lose control.

Be extra cautious when towing with any vehicle other than a tractor.

As level as possible

HOELSCHER
ATTACHING TO CONVENTIONAL BALER

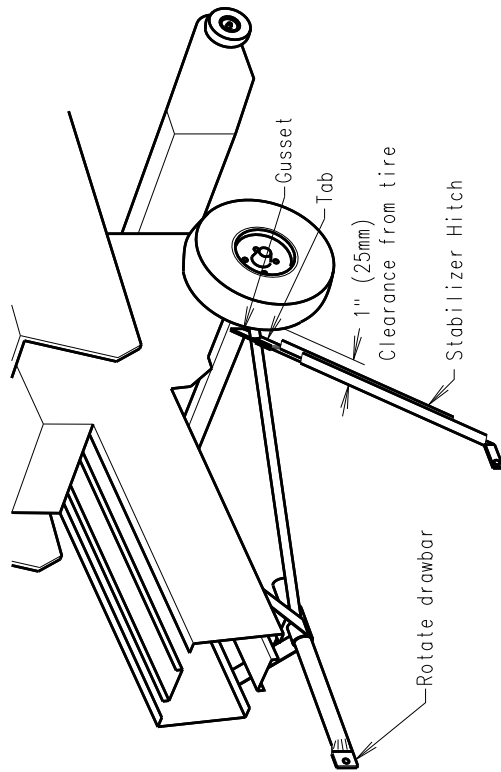
SERIAL NO.: 01161-CURRENT

1. Basic Hitch Requirements

A wagon hitch available from the center-line baler manufacturer is recommended for attaching the accumulator. Some modifications will be necessary, as shown below.

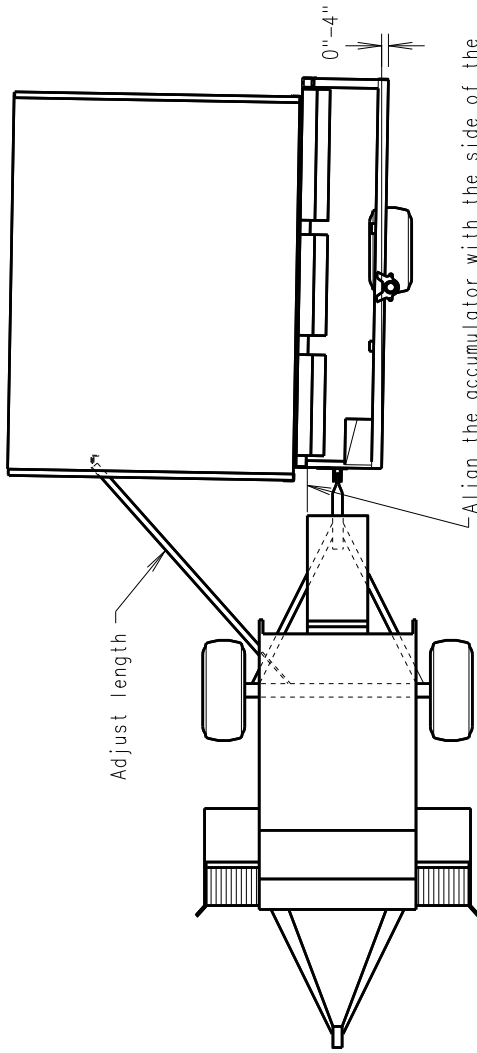
A tab, made of 0.25" x 2" (6 x 50mm) steel must be welded on. It must have a 25/32" (19.8mm) diameter hole for the pin.

A gusset will also be necessary to prevent the hitch from breaking. The drawbar will need to be rotated, so that the hitch pin will be horizontal, instead of vertical.



3. Aligning the Accumulator.

The stabilizer hitch may be adjusted, in order to align the accumulator with the baler. The accumulator should either be in-line with the baler, or angled slightly to the left, as shown below.



Align the accumulator with the side of the bale chamber, so that the bales will slide tightly against the vertical portion of the bale chute on the accumulator.

WARNING

Because the accumulator will cause a change in balance of the baler, the hitch pin should be secured with a clip to prevent the baler from unhitching from the tractor. Use a safety chain.

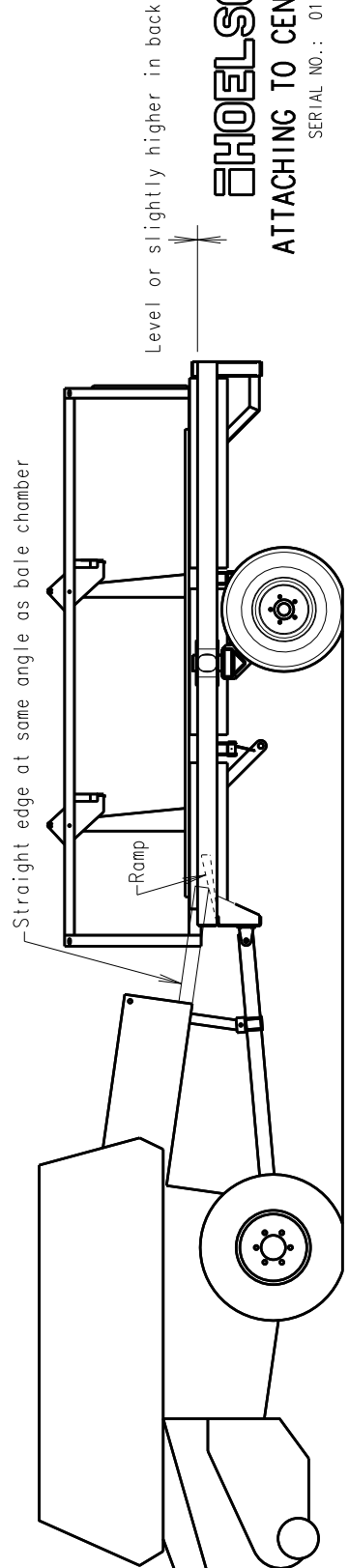
Do not tow at speeds in excess of 15 mph (24 kph)

Caster wheels can whip and cause you to lose control.

Be extra cautious when towing with any vehicle other than a tractor.

2. Accumulator installation

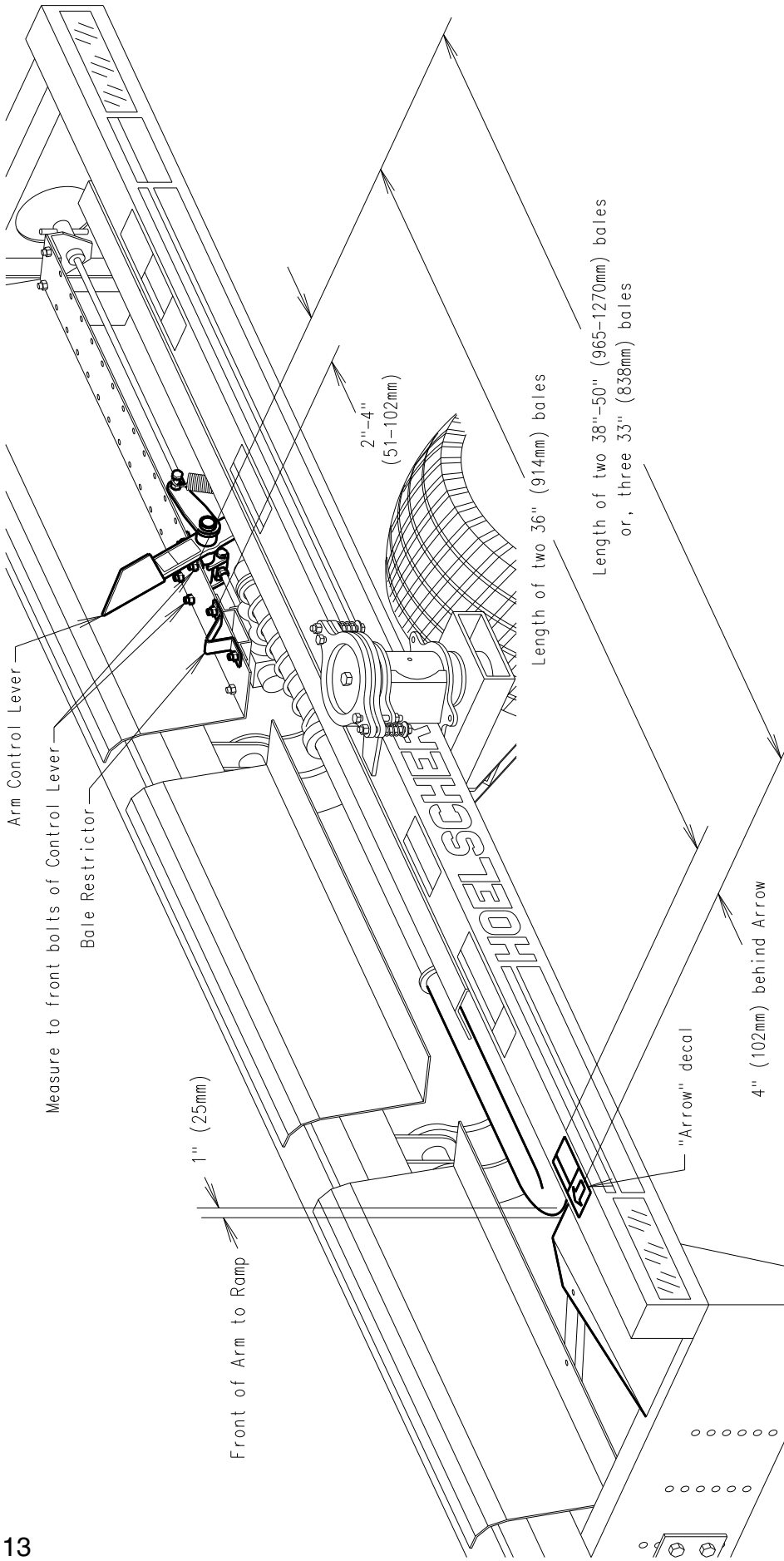
Due to the angle of the baler's chamber, the accumulator must be mounted far enough back to allow the bales to transition from the baler onto the accumulator. This is accomplished by blocking the accumulator up level. With the baler hitched to the tractor, place a straight edge in the bale chamber and vary the distance between the baler and accumulator so that the straight edge will contact the center of the ramp.



HOELSCHER

ATTACHING TO CENTER-LINE BALER

SERIAL NO. : 01161-CURRENT



NOTICE

- To set the accumulator for your length of bale:
1. The distance from the "Arrow" decal, to the bolts that attach the Control Lever, should equal the length of two (or three) bores.
 2. Mount the Arm Control Lever in the appropriate position.
 3. Adjust the Detent in relation to the Control Lever. See "Control Lever and Detent Adjustment", page 14.
 4. Mount Bale Restrictor as shown on this page.
 5. The Piston of the Push-over Arm should be 1" (25mm) behind the Ramp.

▲ DANGER

Do not attempt this adjustment, without first disengaging the hydraulic system and stopping the tractor. Serious personal injury, or death may result if safety precautions are not taken.

HOELSCHER
BALE LENGTH ADJUSTMENT

SERIAL NO.: 05316-CURRENT

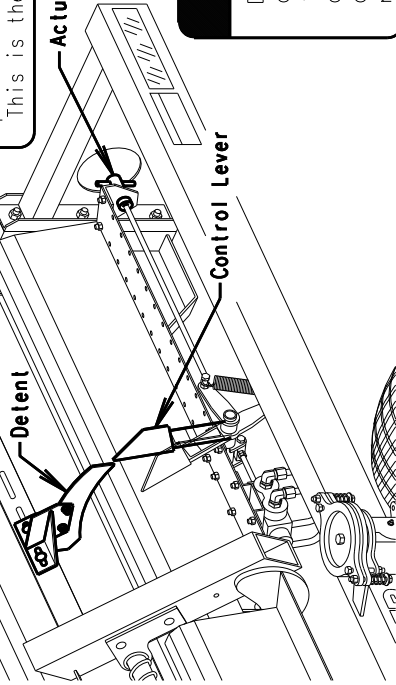
Adjustment Procedure:

1. Mount the Arm Control Lever in the desired position, as found in "Bale Length Adjustment".
2. With the Push-over Arm down and the hydraulic power off. Adjust the "front" nuts on the rod so that the Control Lever is "vertical" when in the actuated (rear) position.
3. Adjust the "rear" nuts on the rod to compress the Spring to 2" (50mm).
4. Position the Detent so that it will safely go by the Control Lever as the Push-over Arm raises.
5. Turn the Actuating Screw completely "in". See "Use of Actuating Screw".
6. Clear everyone and any tools from the area.
7. Start the tractor and engage hydraulic system. The Push-over Arm will raise to top of its stroke.
8. Disengage the hydraulic system and stop the tractor engine.
9. Adjust the Detent to obtain the dimensions, as shown on this page.
10. Turn Actuating Screw completely "out" and replace the hairpin clip.
11. Clear everyone and any tools from the area.
12. Start the tractor, energize the hydraulic system. The Push-over Arm will immediately lower down.

NOTICE

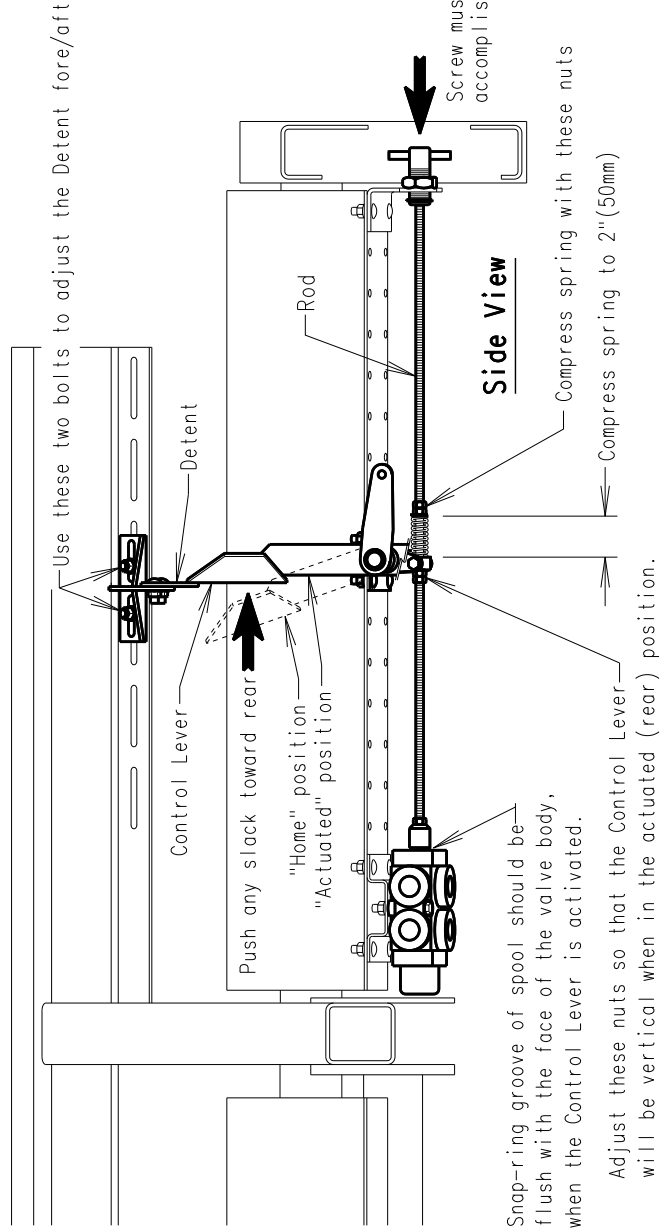
The purpose of the Detent, is to hold the Control Lever in the "activated" (rear) position, so that the Push-over Arm will complete it's cycle in a consistent speed. The Detent must hold the Control Lever tightly, in order to keep the spool of the valve pushed in positively. Improper adjustment of the Detent will cause erratic operation of the Push-over Arm. This is the most critical adjustment on the accumulator.

Actuating Screw



⚠ DANGER

Do not attempt this adjustment, without first disengaging the hydraulic system and killing the tractor. The Push-over Arm moves quickly, and with great force. Serious personal injury, or death may result, if safety precautions are not taken.



Use these bolts to adjust Detent up/down, in/out

0.38"-0.50" (9-12mm)

Clearance

0.50"-0.75" (12-19mm)

Overlap

Rear View

Screw must be "IN", to accomplish this procedure.

HOELSCHER

CONTROL LEVER & DETENT ADJUSTMENT

SERIAL NO.: 01161-CURRENT

NOTICE

The accumulator's hydraulic system must be set for the type of hydraulic system that the tractor has. Improper setting of the accumulator may cause excessive heat in the hydraulic system. This can cause damage to components.

Conversion Procedure

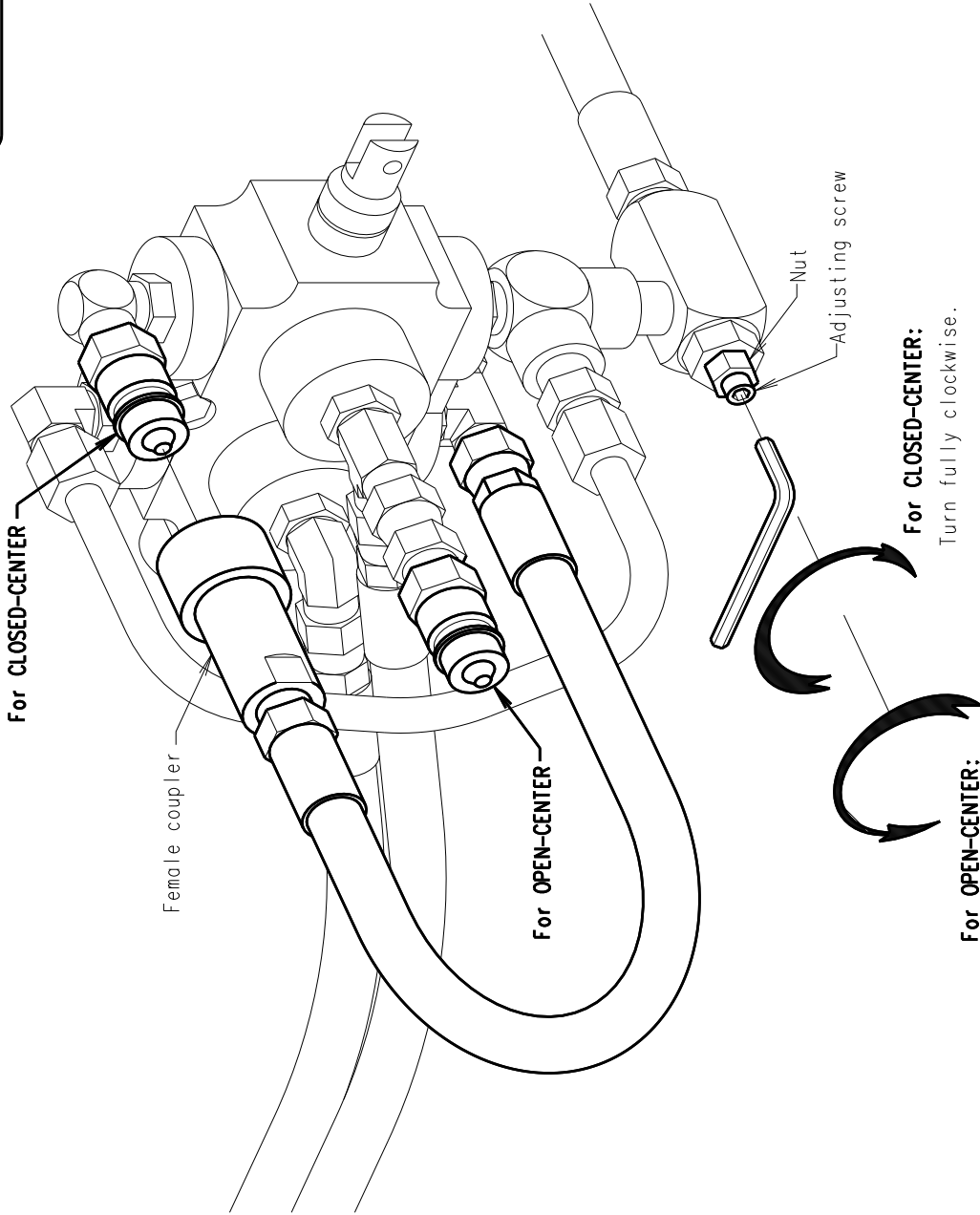
- Changing from one type of hydraulic system to another, requires three procedures:
1. Check your tractor's operator's manual for its type of hydraulic system.
 2. Attach the female coupler to the proper male tip on the valve.
 3. Properly set and lock the adjusting screw of the restrictor.

Note

With a closed-center setting, the Bed will be "power" down. With open-center, the Bed is lowered by gravity.

With an open-center system, it is important to have the least amount of restriction in the return hose as possible. It may be necessary to bypass the tractor remote outlet on the return hose and dump the oil directly into the tractor's hydraulic reservoir.

Normally, a "load-sensing" system should be treated as an open-center system. Be sure to use the priority (#1) valve of the tractor, and reduce the flow to the minimum necessary for proper operation of the accumulator.

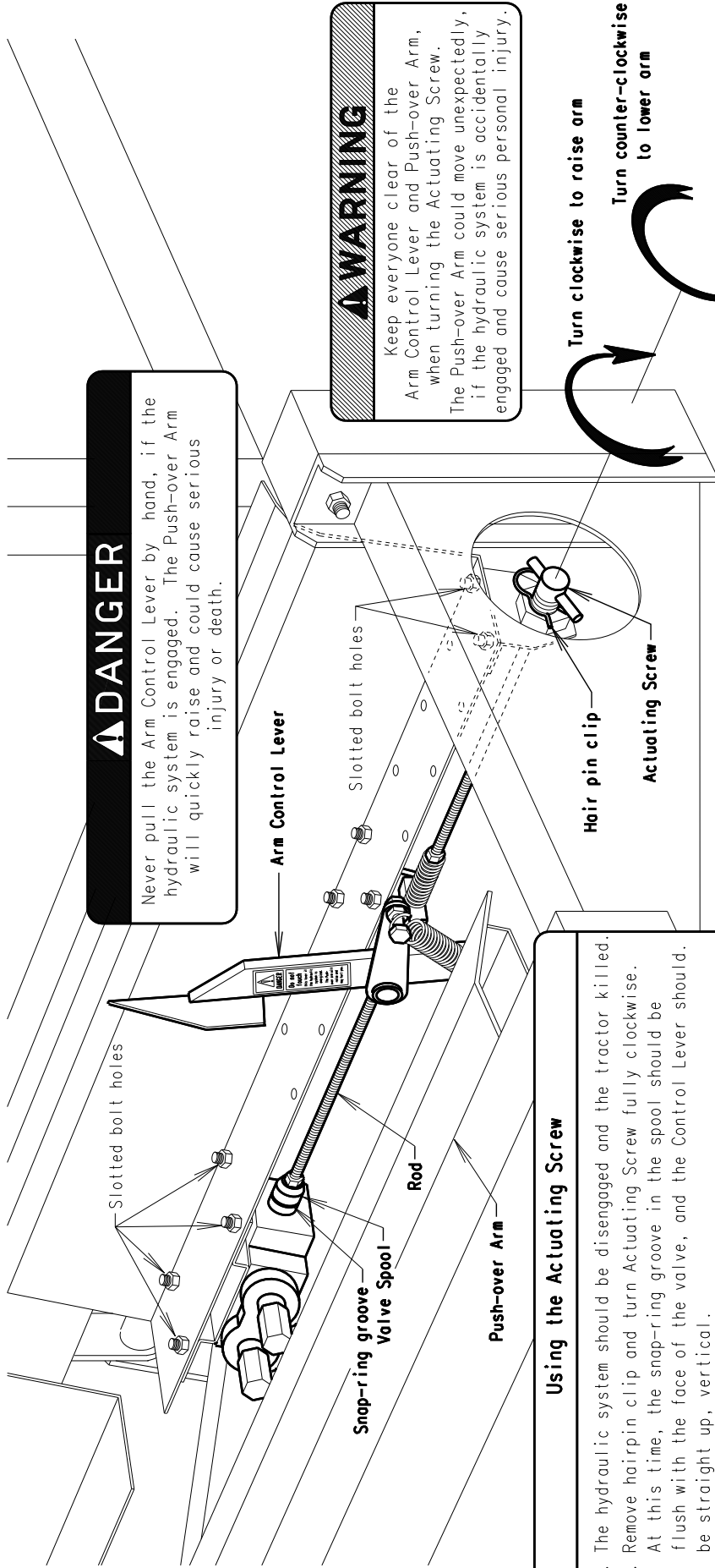


Adjust for desired rate of descent of the Bed.
(Clockwise=slower, counter-clockwise=faster)



HYDRAULIC SYSTEM CONVERSION

SERIAL NO.: 01161-CURRENT



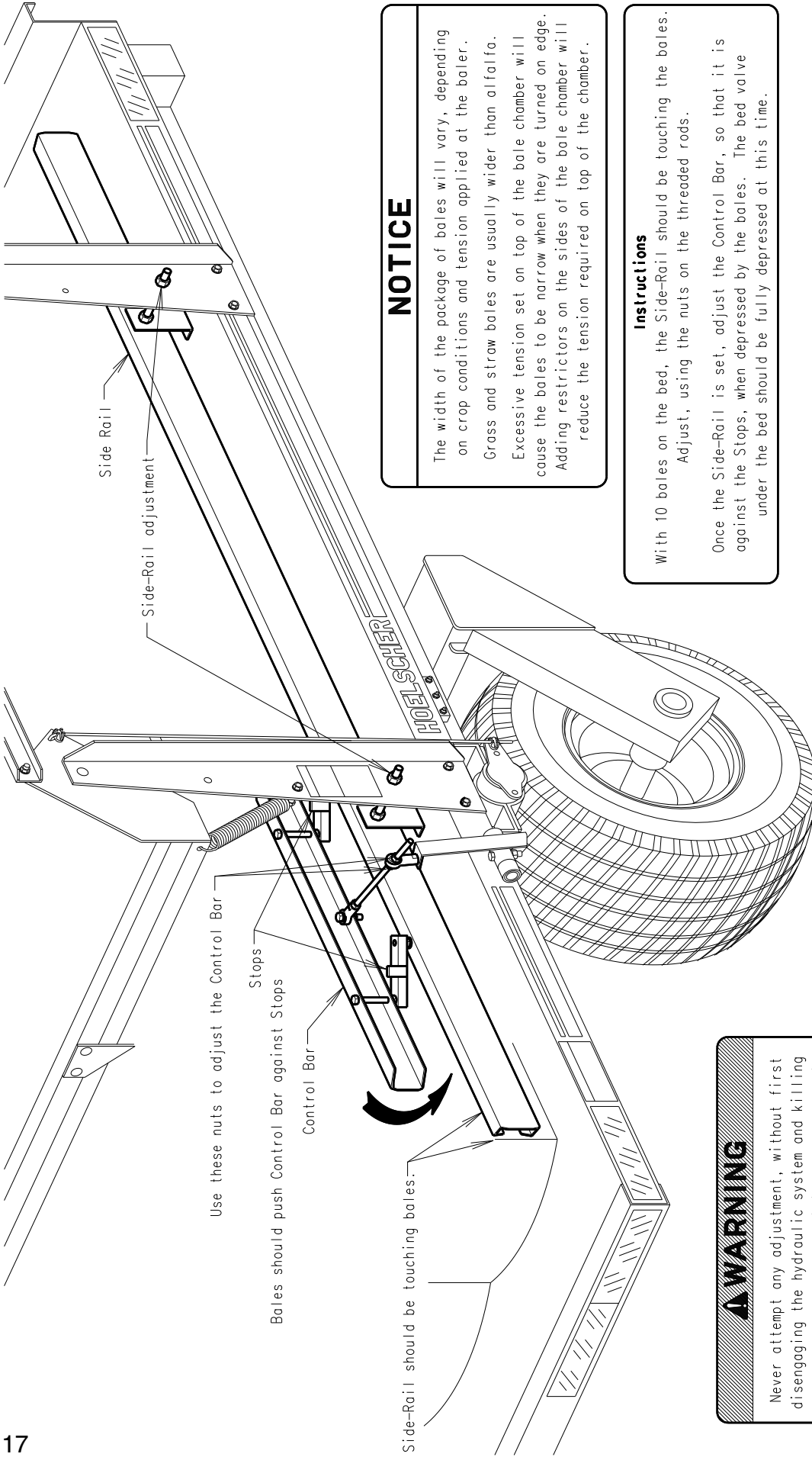
⚠ DANGER
 Never pull the Arm Control Lever by hand, if the hydraulic system is engaged. The Push-over Arm will quickly raise and could cause serious injury or death.

⚠ WARNING
 Keep everyone clear of the Arm Control Lever and Push-over Arm, when turning the Actuating Screw. The Push-over Arm could move unexpectedly, if the hydraulic system is accidentally engaged and cause serious personal injury.

NOTICE
 The purpose of the Actuating Screw, is to allow raising the Push-over Arm to check adjustments or to remove a bale which has been trapped under the arm. The Actuating Screw pushes on the threaded Rod, which in turn, operates the Control Lever, and pushes the Spool of the valve in.

- Using the Actuating Screw**
1. The hydraulic system should be disengaged and the tractor killed.
 2. Remove hairpin clip and turn Actuating Screw fully clockwise. At this time, the snap-ring groove in the spool should be flush with the face of the valve, and the Control Lever should be straight up, vertical. If the snap-ring groove is not flush with the face of the valve, the valve and or Actuating Screw bracket may be adjusted closer together. Their mounting bolts are in slotted holes.
 3. Clear everyone and any tools away from the area.
 4. Start tractor and engage the hydraulic system. The Push-over Arm will immediately raise to the top of its stroke.
 5. Disengage hydraulics and stop tractor engine.
 6. Perform necessary maintenance (adjustment or removing a bale).
 7. Turn Actuating Screw counter-clockwise until it stops, then replace the Hairpin Clip.
 8. Clear everyone and any tools away from the area.
 9. Be sure that everyone is clear of the machine, then start the tractor and engage the hydraulics. The Push-over Arm will immediately come down forcefully.

Turn clockwise to raise arm
 Turn counter-clockwise to lower arm



NOTICE

The width of the package of bales will vary, depending on crop conditions and tension applied at the baler. Grass and straw bales are usually wider than alfalfa. Excessive tension set on top of the bale chamber will cause the bales to be narrow when they are turned on edge. Adding restrictors on the sides of the bale chamber will reduce the tension required on top of the chamber.

Instructions

With 10 bales on the bed, the Side-Rail should be touching the bales. Adjust, using the nuts on the threaded rods.

Once the Side-Rail is set, adjust the Control Bar, so that it is against the Stops, when depressed by the bales. The bed valve under the bed should be fully depressed at this time.

⚠ WARNING

Never attempt any adjustment, without first disengaging the hydraulic system and killing the tractor. Personal injury may result if safety precautions are not taken.

HOELSCHER

SIDE-RAIL & CONTROL BAR

SERIAL NO.: 02624-CURRENT

NOTICE

The purpose of the safety valve, is to prevent the Bed from raising when the Push-over Arm is up. Each time the Push-over Arm raises, the Spool of the Safety valve should extend out 3/8" (9.5mm).

WARNING

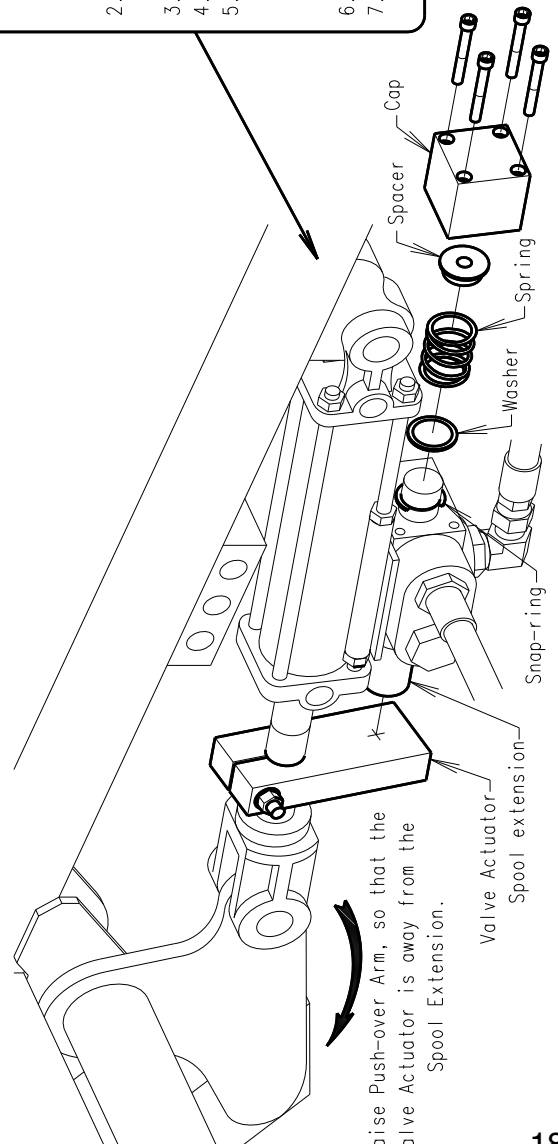
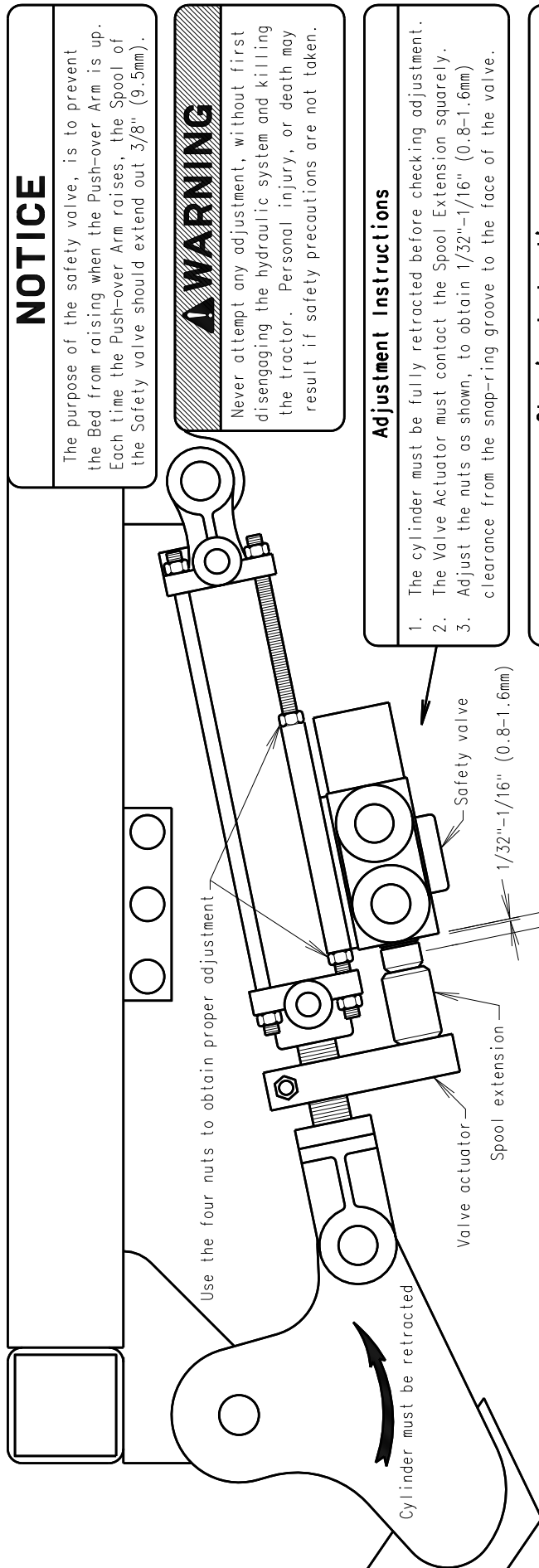
Never attempt any adjustment, without first disengaging the hydraulic system and killing the tractor. Personal injury, or death may result if safety precautions are not taken.

Adjustment Instructions

1. The cylinder must be fully retracted before checking adjustment.
2. The Valve Actuator must contact the Spool Extension squarely.
3. Adjust the nuts as shown, to obtain 1/32"-1/16" (0.8-1.6mm) clearance from the snap-ring groove to the face of the valve.

Cleaning Instructions

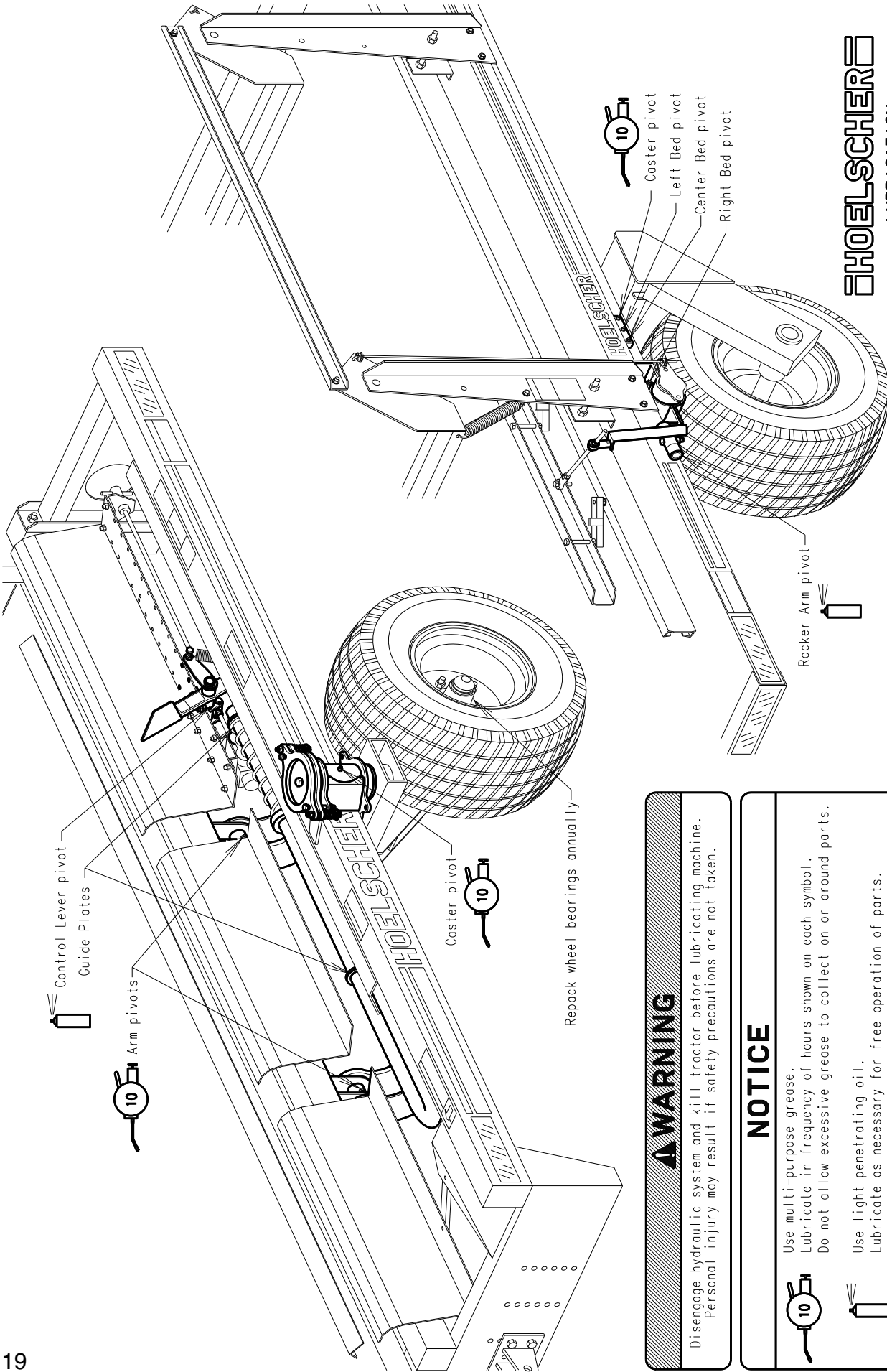
1. With the tractor turned OFF, raise the Push-over Arm manually and place a 4"x4" block between it and the frame. This causes the Valve Actuator to move away from the Spool Extension. If you can not lift the Push-over Arm manually, move the tractor's hydraulic lever to "float" position. This will allow the oil to flow back to the tractor.
2. Remove the Cap, using the four socket head bolts. Use caution when removing the bolts. A spring is compressed inside the Cap.
3. Clean all parts.
4. Clean both ends of the Spool and wash with penetrating oil.
5. If the Spool will not move, tap it loose with a block of wood. The Spool should move 3/8" (9mm). The snap-ring should move in to the face of the valve. Work the Spool back and forth until it moves freely.
6. Reassemble the valve and lower the Push-over Arm.
7. If cleaning the valve does not allow the spool to move freely, the seals inside the valve may need to be replaced.



HOELSCHER

SAFETY VALVE ADJUSTMENT & CLEANING


SERIAL NO.: 01161-CURRENT




Repack wheel bearings annually

▲ WARNING
 Disengage hydraulic system and kill tractor before lubricating machine.
 Personal injury may result if safety precautions are not taken.

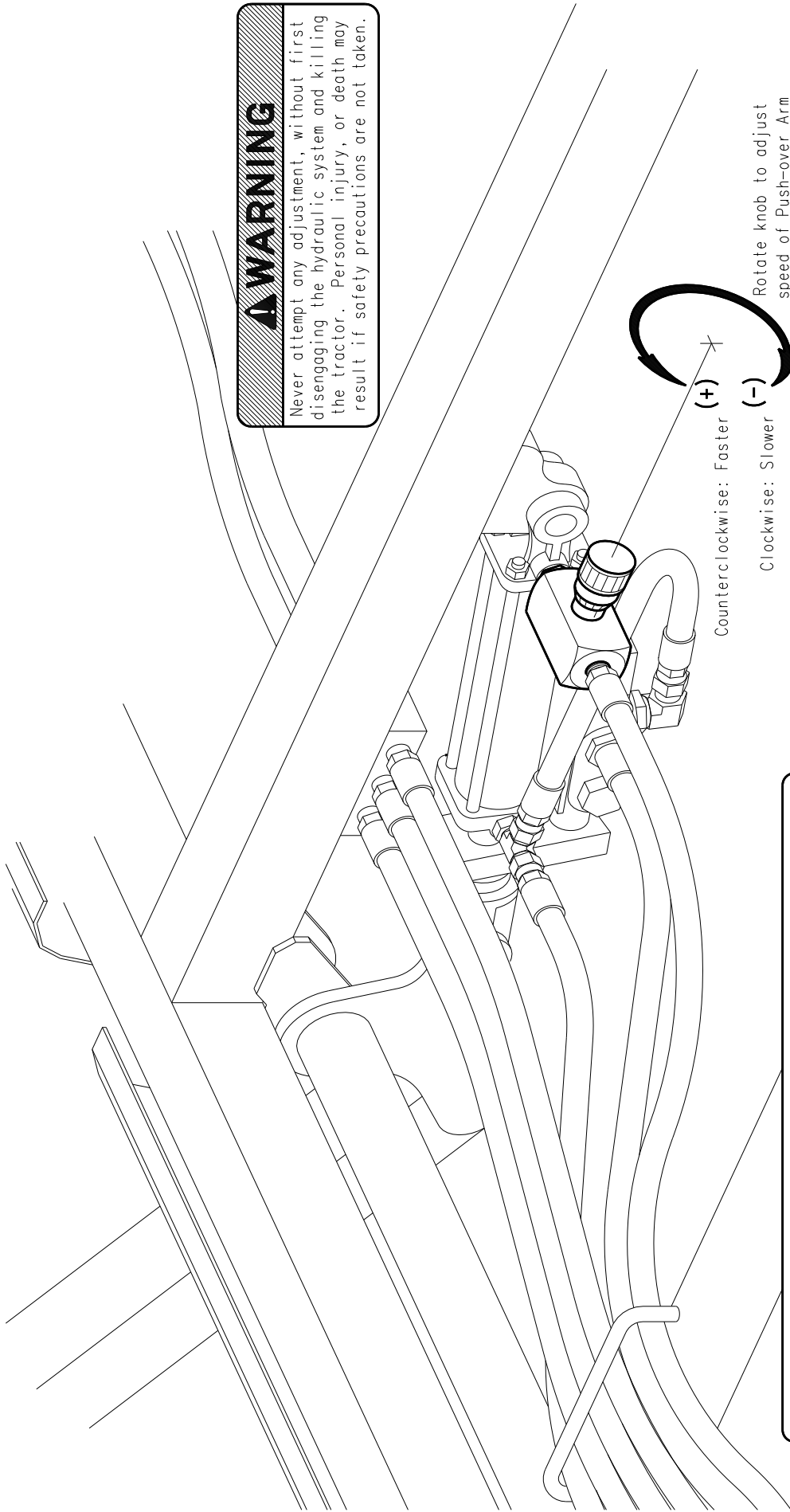
NOTICE

 Use multi-purpose grease.
 Lubricate in frequency of hours shown on each symbol.
 Do not allow excessive grease to collect on or around parts.

 Use light penetrating oil.
 Lubricate as necessary for free operation of parts.

HOELSCHER
 LUBRICATION

SERIAL NO.: 05316-CURRENT



⚠ WARNING

Never attempt any adjustment, without first disengaging the hydraulic system and killing the tractor. Personal injury, or death may result if safety precautions are not taken.

NOTICE

The preferred method of controlling the speed of the Push-over Arm is by use of the tractor's flow control. If your tractor has excessive flow, but no flow control valve, the needle valve is to be used to slow the Push-over Arm. The Arm should not throw the bales on to the Bed. It should just move quick enough to place the bales on the Bed and return down, without banging down.

To slow the Push-over Arm, turn the Needle Valve clockwise "IN".

Counterclockwise: Faster (+)
 Clockwise: Slower (-)
 Rotate knob to adjust speed of Push-over Arm

HOELSCHER

ARM SPEED CONTROL

SERIAL NO. : 05316-CURRENT

Operation

1. When in the field and everyone is clear of the machine, start the baler and energize the hydraulic system. Always watch the accumulator when energizing the hydraulic system to verify that the hydraulic hoses are attached properly to the tractor. Nothing on the accumulator should move at this time. The tractor's hydraulic control lever will need to be secured in the "back" position. If there is no provision to lock the lever back, a tarp strap may be used.
2. Start baling and proceed until the first bale almost reaches the Arm Control Lever. Stop baling, disengage the hydraulic system, stop the baler, and turn off the tractor.
3. Check to see if the bale length is correct and meets the conditions shown in "Bale Length" on page 13. If the Arm Control Lever of the accumulator has been set to the desired bale length, adjust the bale length on the baler as necessary to maintain that length.

If it appears that the combined length of both bales is more than 8" (203mm) from the desired length, remove those bales before resuming baling. These bales will need to be rebaled to the proper length.

▲ DANGER Never attempt any adjustment while the hydraulic system is energized or if the tractor is running. Serious personal injury or death could result.

4. Adjust the speed of the Push-over Arm as necessary. For tractors with adjustable hydraulic flow control, use only enough speed to make the Push-over Arm cycle without catching the next bale out of the baler, as the Arm returns down. Excessive flow will cause heat build up in the hydraulic system and the bales will be thrown, rather than placed into position. If the tractor does not have a flow control, use the Needle Valve shown on page 20.
5. Start the tractor and baler, and engage the hydraulic system. Resume baling until 10 (or 15) bales are on the accumulator's bed. If the Bed does not dump, or if the bales do not slide off evenly, stop baling. Disengage the hydraulic system, stop the baler, and kill the tractor. Check adjustment of the Side-rail and Bed Control Bar. See page 17.
6. Adjust rate of decent of the Bed, as shown on page 15. It should return down slowly, but before the next bales are ready to be loaded onto the Bed. With a closed-center hydraulic system, the restrictor should be completely "in".
7. With the above adjustments verified, the accumulator should now be ready for use. The baler will produce bales of varying length depending on crop conditions, and will require periodic adjustment to maintain a length compatible with the accumulator's setting. Also, when baling different crops, the Bed Side-rail and Control Bar may need to be readjusted. See the "Troubleshooting" section of this manual if you experience difficulties in operation.
8. If a bale should get caught under the Push-over Arm, stop, disengage the hydraulic system, stop the baler, and kill the tractor. The Push-over Arm should be raised, so that the bale can be safely removed, by following the procedures explained in "Actuating Screw", page 16.

▲ DANGER Never attempt to remove the bale while the hydraulic system is energized, or if the tractor is running. Serious personal injury or death could result.

This condition is usually caused by the bale length being shorter than the setting of the accumulator, or the speed of the Push-over Arm is too slow. Adjust the bale length of the baler accordingly, or increase hydraulic flow from the tractor (or adjust the Needle Valve).

Operation, continued

9. If a bale should get wedged between the Push-over Arm and Mount Tube above the Bed, or the front upright, stop baling. Disengage the hydraulic system, stop the baler and kill the tractor. If the bale can not be manually dislodged, it will need to be cut and the crop material will need to be removed.

▲ DANGER Do not put any part of your body within the movement area of the Push-over Arm. When the material is removed, the Arm could move and cause serious personal injury or death. Always verify that the hydraulic system has been disengaged and the tractor turned off.

This condition is usually caused by the bale length being longer than the setting of the accumulator, or the Push-over Arm moving too fast. Adjust the bale length of the baler accordingly, or decrease hydraulic flow from the tractor. If the tractor does not have a flow control, use the Needle Valve on the accumulator as shown on page 20.

10. If the Push-over Arm does not cycle at a consistent rate, the Detent is probably not holding the Control Lever back properly. Check adjustment of the Arm Control Lever and Detent, page 14, by using the procedure explained in Use of Actuating Screw, page 16.

11. Always disengage the hydraulic system, stop the baler, kill the tractor, set parking brake, and remove the ignition key before leaving the tractor.

12. See Troubleshooting, pages 23 and 24 for other problems encountered.

Troubleshooting

Symptom	Cause	Remedy
Bale catches on front corner of bed, as the Push-over Arm is pushing the bales onto the bed.	<ol style="list-style-type: none"> 1. Bale length is too long. 2. Arm Control Lever is too far forward. 	<ol style="list-style-type: none"> 1. Shorten bale length of baler. 2. Move Arm Control Lever rearward. Page 13
Bale is trapped under push-over arm, as the arm is returning down.	<ol style="list-style-type: none"> 1. Bale length is too short. 2. Arm control lever is too far back. 3. Push-over Arm is moving too slowly. 4. Traveling too fast for hydraulic flow. 	<ol style="list-style-type: none"> 1. Increase bale length of baler. 2. Move Arm Control Lever forward. Page 13 3. Increase hydraulic flow from the tractor. 4. Reduce travel speed.
Bales are bent as they slide onto the accumulator.	<ol style="list-style-type: none"> 1. Too much angle between the baler and accumulator. 	<ol style="list-style-type: none"> 1. Level the baler as much as possible. 2. Increase distance between baler and accumulator.
Bale contacts the Arm Control Lever, but the Push-over Arm does not move.	<ol style="list-style-type: none"> 1. Hydraulic system is not operating. 2. Control Lever linkage is malfunctioning. 	<ol style="list-style-type: none"> 1. Engage the tractor's hydraulic system. 2. Check linkage for damage or binding.
Push-over Arm raises part way, then returns down, or continues up slowly.	<ol style="list-style-type: none"> 1. The Detent is not holding the Arm Control Lever back positively for the full stroke of the Push-over Arm. 	<ol style="list-style-type: none"> 1. Adjust Arm Control Lever and Detent, page 14
Push-over Arm raises part way, then returns back down and then raises again immediately.	<ol style="list-style-type: none"> 1. A bale sliding back may briefly contact the Arm Control Lever prematurely. As the Push-over Arm starts up, the bale slides forward, releasing the Control Lever. When the baler makes its next stroke, the bale again activates the Arm Control Lever. This usually occurs in extremely dry, slick conditions. 	<ol style="list-style-type: none"> 1. Verify that the four bolts holding the Arm Valve are installed with the head on bottom. See page 16 2. Bale Restrictor should be mounted 2"-4" (50-100mm) ahead of the Arm Control Lever. See page 13
Push-over Arm does not return down.	<ol style="list-style-type: none"> 1. The Detent is not releasing the Arm Control Lever. 2. The Arm valve or linkage is sticking. 3. The Safety Valve is sticking. 	<ol style="list-style-type: none"> 1. Adjust as shown on page 14. 2. Clean or adjust valve and linkage as necessary. 3. Clean and adjust as shown on page 18.
Bales do not set properly on Bed.	<ol style="list-style-type: none"> 1. Push-over Arm does not push the bales far enough. 2. Push-over Arm moves too fast, and throws the bales. 	<ol style="list-style-type: none"> 1. Detent is not holding Arm Control sufficiently. 2. Reduce hydraulic flow from the tractor, or adjust the Needle valve, as shown on page 20.
Bales do not pivot properly while being pushed to the Bed.	<ol style="list-style-type: none"> 1. Bales are not close enough to the vertical part of the Bale Chute of the accumulator. 2. Push-over Arm moves too fast, and throws the bales. 	<ol style="list-style-type: none"> 1. Move the entire accumulator to the left as far as possible, in relation to the baler. Pages 11 and 12. 2. Reduce hydraulic flow from the tractor, or adjust the Needle valve, as shown on page 20.
Bales slide on the Bed and contact the Bed Control Bar before the Bed is fully loaded.	<ol style="list-style-type: none"> 1. Working on excessive incline. 2. Push-over Arm is operating too fast. 	<ol style="list-style-type: none"> 1. Travel in other direction if possible. 2. Reduce hydraulic flow from the tractor, or adjust 3. Reverse the Dogs on the Hold-down Bars, so that the bales contact the vertical side, instead of the tapered side.

Troubleshooting, cont'd

Bales fall back onto the Push-over Arm, after being placed on the Bed.

1. The Push-over Arm did not travel through it's full cycle, and the bales were not completely on the Bed.
2. Working on excessive incline.

1. Check adjustment of the Arm Control Lever and Detent. See page 14.
2. Install Side-hill Kit, as shown on page 27.

Push-over Arm operates inconsistently.

1. Arm Control Lever and Detent are not adjusted properly.

1. Adjust as shown on page 14.

Bales catch on Upright, on left side of Bed while dumping.

1. The bales were not completely on the Bed.
2. Working on excessive incline.
3. Accumulator is not properly aligned with the baler.

1. Verify that the Push-over Arm is making its full cycle. Adjust as necessary. See page 14.
2. Install Side-hill Kit, as shown on page 27.
3. The accumulator should be mounted, so that the rear is to the "left". See page 11 or 12.

The Bed raises too slowly, allowing the bales to separate

1. Bed Control Bar is not fully depressed.
2. Insufficient hydraulic flow to the Bed cylinder.

1. Check adjustment as shown on page 17.
2. Check the Restrictor on the Bed valve for debris that may be blocking flow.

Bed will not raise.

1. Bales have not contacted the Bed Control Bar.
2. Bales are not pushed far enough to contact Control Bar.
3. Safety Valve is not being depressed by the Valve Actuator.

1. Adjust Side-rail and Control Bar. Page 17.
2. Check adjustment of the Arm Control Lever and Detent. See page 14.
3. Check operation of the Safety Valve. Page 18.

Bed raises but will not return down.

1. Bed Control Bar or Bed Valve are sticking.
2. Restriction in the return hose to the tractor. (On Open-center systems, the Bed is not powered down)
Restrictions are most likely caused by a quick-coupler, or a damaged hose.

1. Inspect, clean and lubricate.
2. Replace quick-coupler on return hose and check for damaged hoses between the Bed Valve and the tractor.

Bed descends too slowly.

1. Restrictor is restricting too much. If the accumulator is set for open-center, the Bed needs a free reverse flow.

1. Adjust Restrictor, as shown on page 15.

Bales catch on Bed Control Bar, as the Bed is dumping.

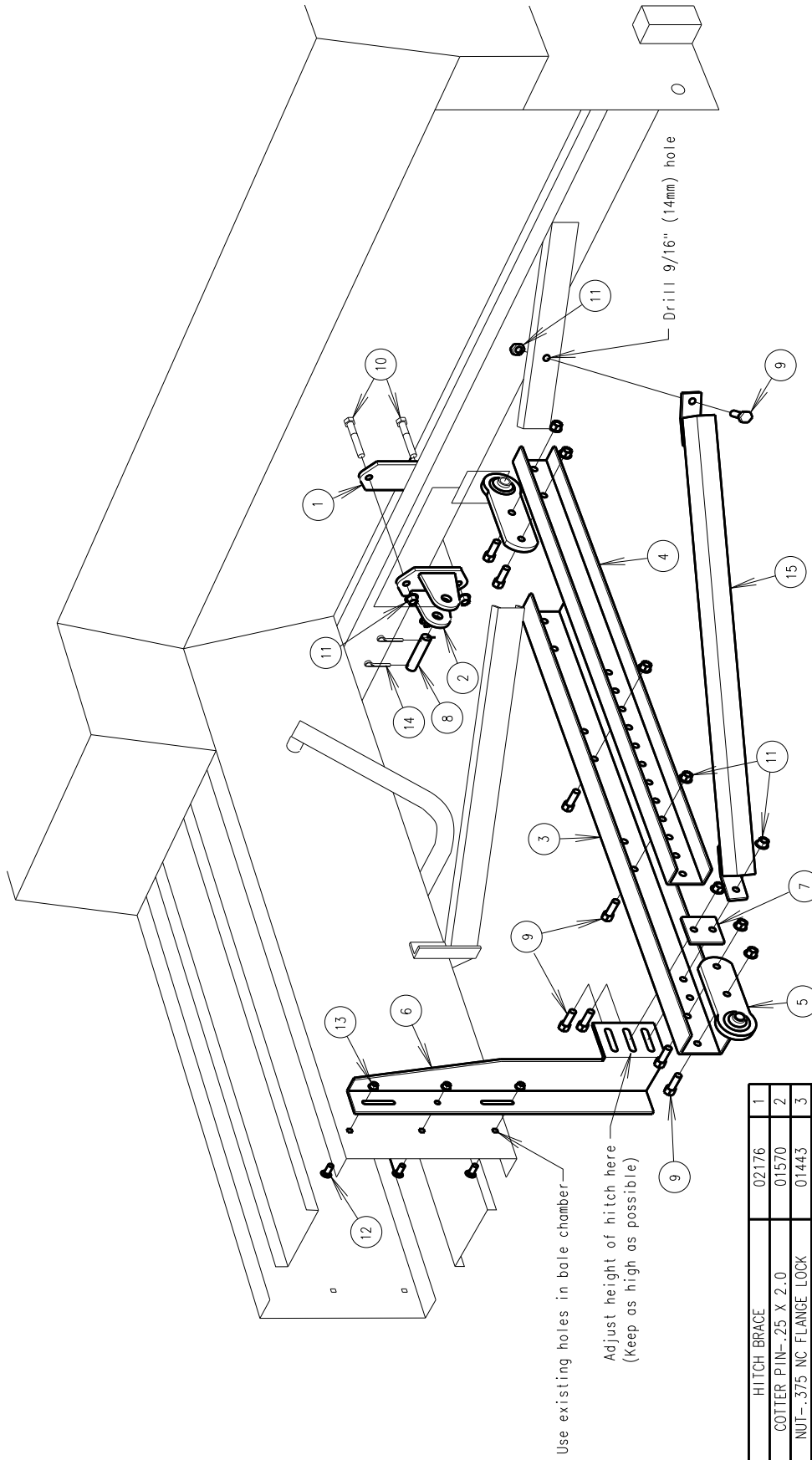
1. Control Bar is not flush with the Side-rail.

1. Move the Side Rail in, towards the bales. Then readjust the Control Bar, as shown on page 17.

Bale falls out of bale chamber of center-line baler, and is caught under the Push-over Arm.

1. Due to the distance between the baler and accumulator, bales less than 38" (965mm) are released from the chamber prematurely. (Center-line balers only)

1. Add restrictors (wedges) inside the chamber, as near the rear as possible. Preferably, within 1" (25mm).



Use existing holes in bale chamber

Adjust height of hitch here
(Keep as high as possible)

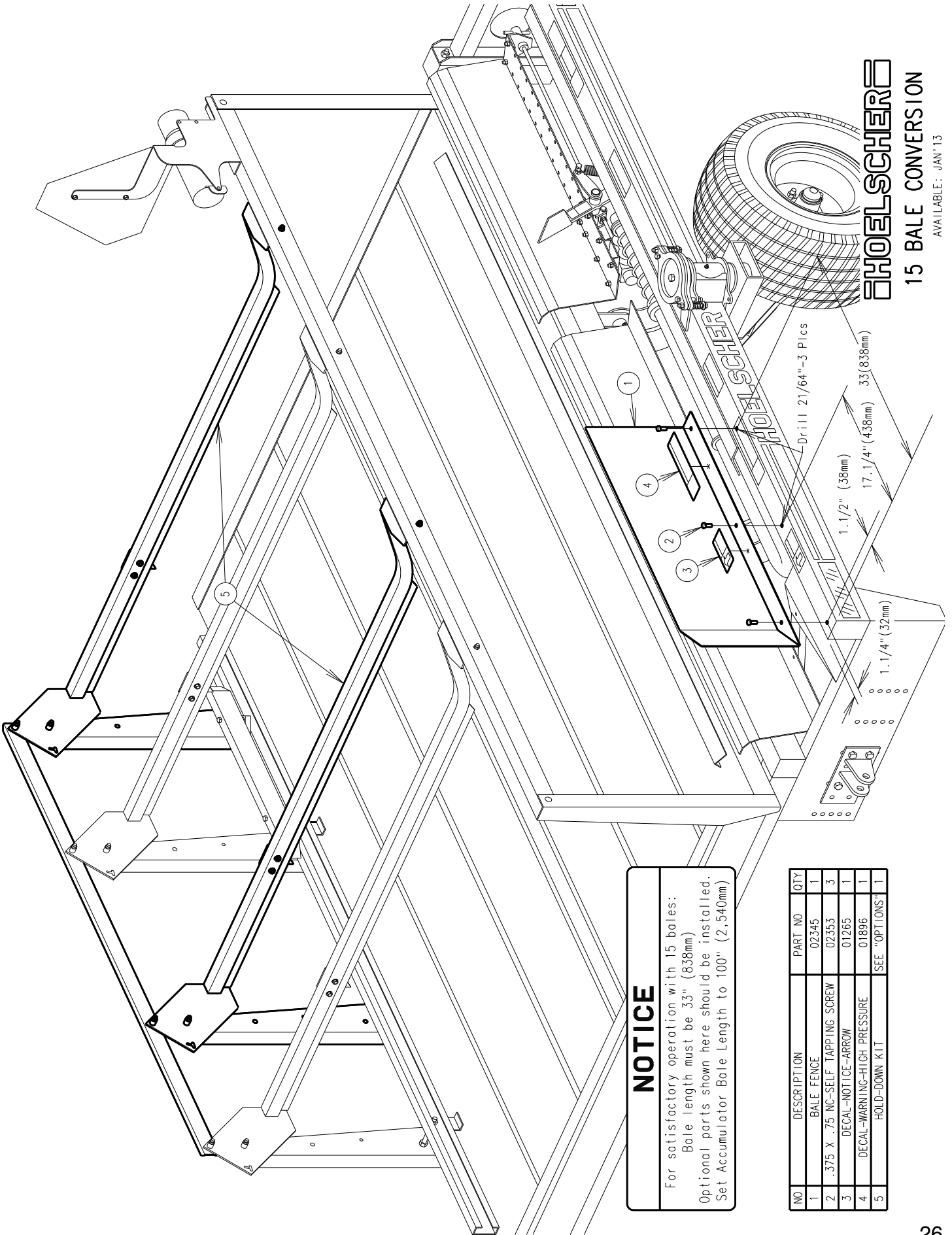
Drill 9/16" (14mm) hole

NO	DESCRIPTION	PART NO	QTY
15	HITCH BRACE	02176	1
14	COTTER PIN-.25 X 2.0	01570	2
13	NUT-.375 NC FLANGE LOCK	01443	3
12	BOLT-.375 X 1.00 NC CARRIAGE	01448	3
11	NUT-.5 NC FLANGE	01449	11
10	BOLT-.50 X 5.0 NC HEX	01958	2
9	BOLT-.50 X 1.50 NC HEX	01450	9
8	PIN-.75 X 3.50	01080	1
7	BACK-UP PLATE	01957	1
6	MOUNT BRACKET	01935	1
5	BALL END	01934	2
4	DRAWBAR-3.0"	01933	1
3	DRAWBAR-3.5"	01932	1
2	CLEVIS WELDMENT	02130	1
1	PLATE	02230	1
NO	DESCRIPTION	PART NO	QTY



WAGON HITCH

AVAILABLE: 1JAN00 REV'D: AUG'11



HOELSCHER

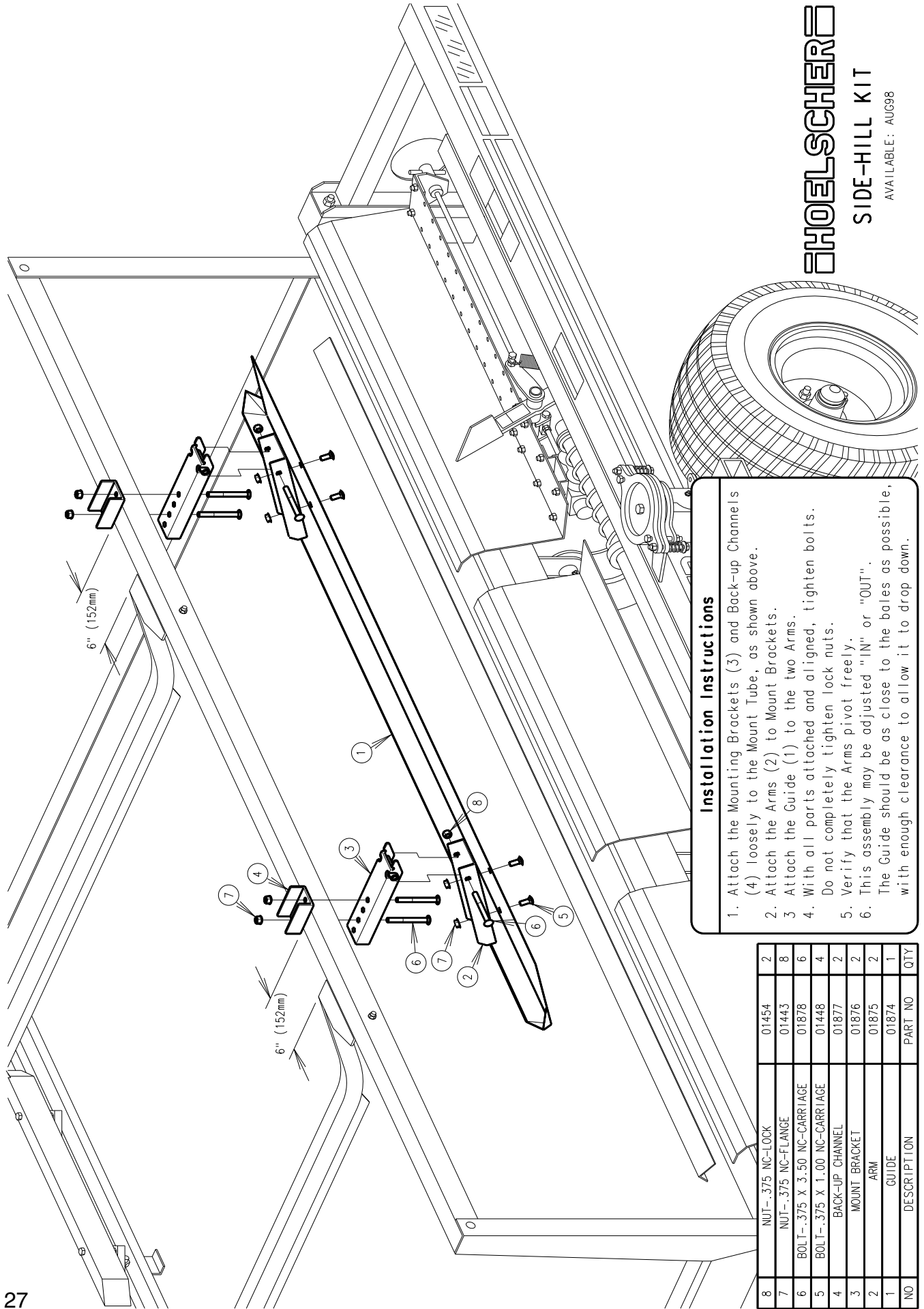
15 BALE CONVERSION

AVAILABLE: JAN '13

NOTICE

For satisfactory operation with 15 bales:
 Bale length must be 33" (838mm)
 Optional parts shown here should be installed.
 Set Accumulator Bale Length to 100" (2,540mm)

NO	DESCRIPTION	PART NO	QTY
1	BALE FENCE	02345	1
2	.375 X .75 NC-SELF TAPPING SCREW	02353	3
3	DECAL-NOTICE-ARROW	01265	1
4	DECAL-WARNING-HIGH PRESSURE	01896	1
5	HOLD-DOWN KIT	SEE "OPTIONS"	1



HOELSCHER

SIDE-HILL KIT

AVAILABLE: AUG98

Installation Instructions

1. Attach the Mounting Brackets (3) and Back-up Channels (4) loosely to the Mount Tube, as shown above.
2. Attach the Arms (2) to Mount Brackets.
3. Attach the Guide (1) to the two Arms.
4. With all parts attached and aligned, tighten bolts. Do not completely tighten lock nuts.
5. Verify that the Arms pivot freely.
6. This assembly may be adjusted "IN" or "OUT". The Guide should be as close to the bales as possible, with enough clearance to allow it to drop down.

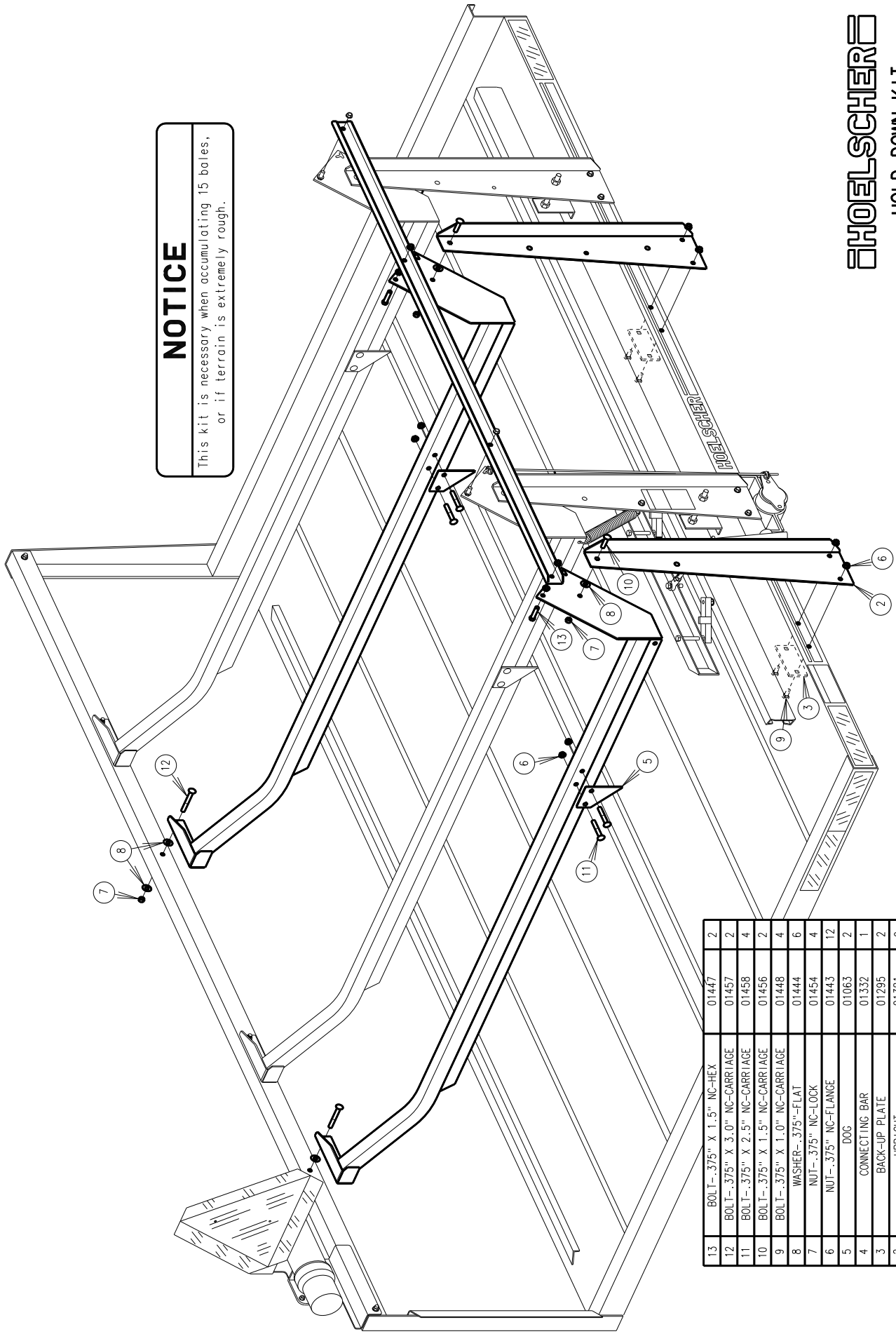
NO	DESCRIPTION	PART NO	QTY
8	NUT-.375 NC-LOCK	01454	2
7	NUT-.375 NC-FLANGE	01443	8
6	BOLT-.375 X 3.50 NC-CARRIAGE	01878	6
5	BOLT-.375 X 1.00 NC-CARRIAGE	01448	4
4	BACK-UP CHANNEL	01877	2
3	MOUNT BRACKET	01876	2
2	ARM	01875	2
1	GUIDE	01874	1

HOELSCHER

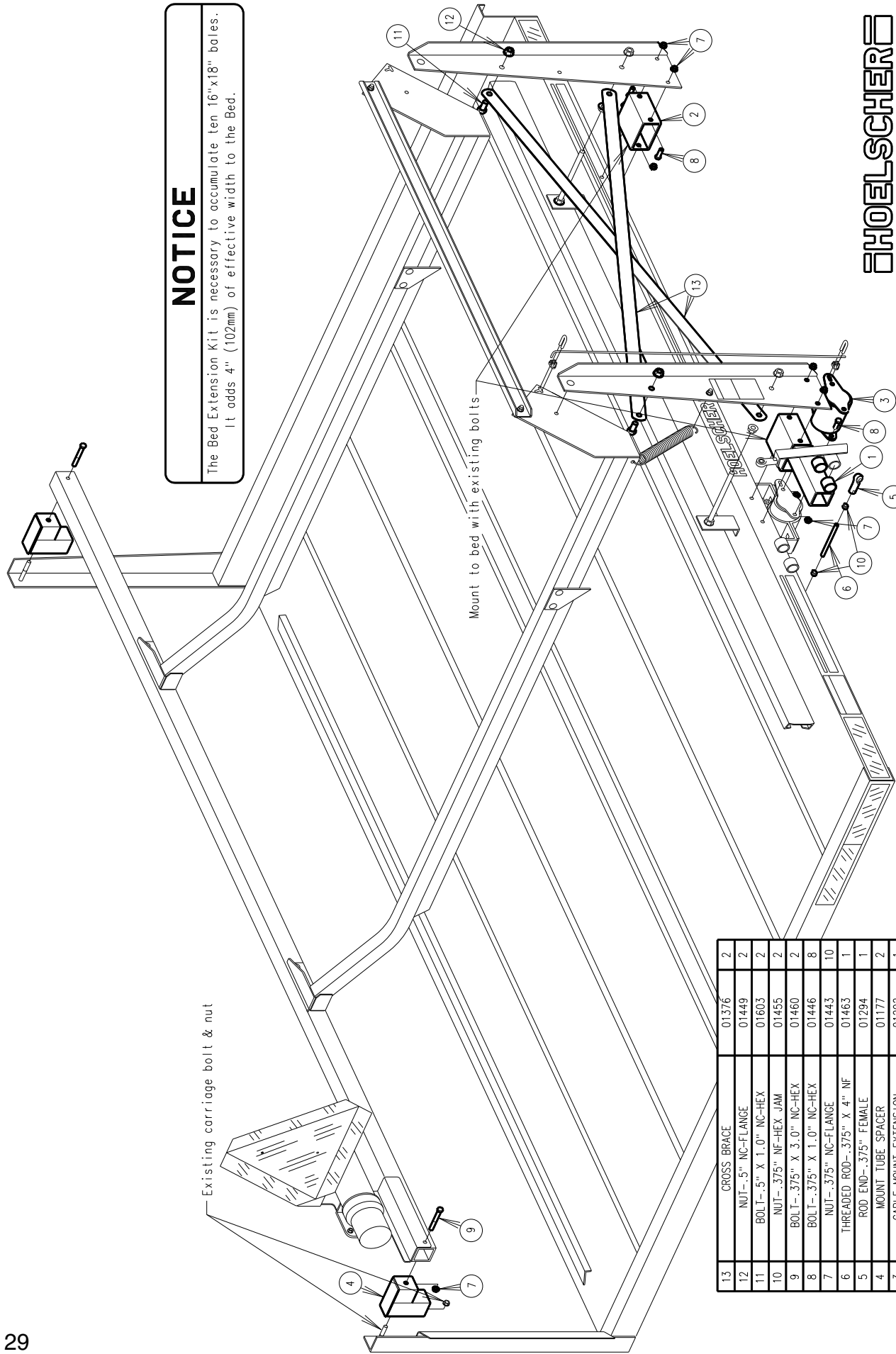
HOLD-DOWN KIT

AVAILABLE: DEC 91

NOTICE
 This kit is necessary when accumulating 15 bales,
 or if terrain is extremely rough.



NO.	DESCRIPTION	PART NO.	QTY.
13	BOLT--.375" X 1.5" NC-HEX	01447	2
12	BOLT--.375" X 3.0" NC-CARRIAGE	01457	2
11	BOLT--.375" X 2.5" NC-CARRIAGE	01458	4
10	BOLT--.375" X 1.5" NC-CARRIAGE	01456	2
9	BOLT--.375" X 1.0" NC-CARRIAGE	01448	4
8	WASHER--.375"-FLAT	01444	6
7	NUT--.375" NC-LOCK	01454	4
6	NUT--.375" NC-FLANGE	01443	12
5	DOG	01063	2
4	CONNECTING BAR	01332	1
3	BACK-UP PLATE	01295	2
2	UPRIGHT	01381	2
1	HOLD-DOWN BAR	01281	2
NO.	DESCRIPTION	PART NO.	QTY.

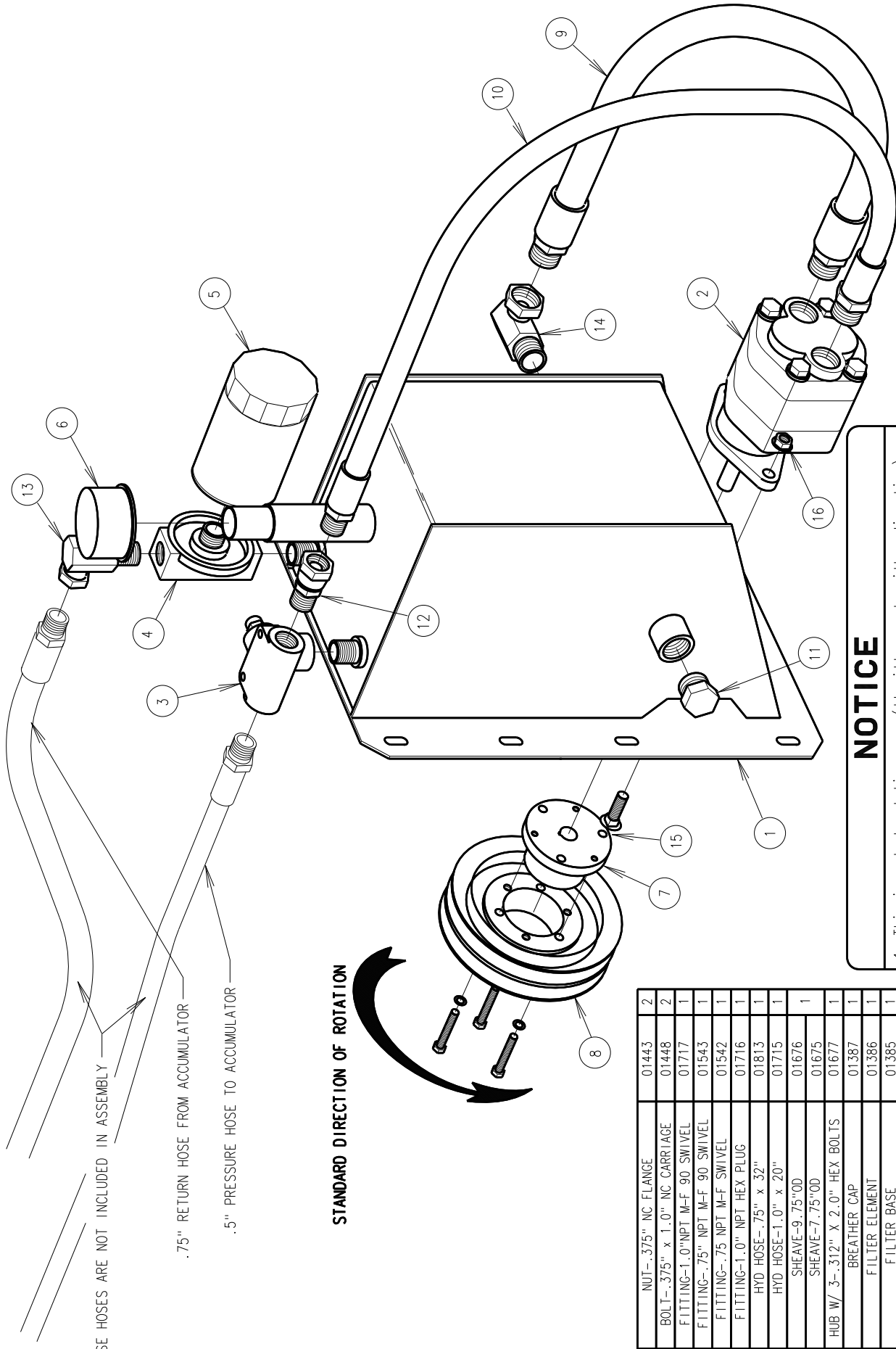


NOTICE
 The Bed Extension Kit is necessary to accumulate ten 16"x18" bores. It adds 4" (102mm) of effective width to the Bed.

NO	DESCRIPTION	PART NO	QTY
13	CROSS BRACE	01376	2
12	NUT--5" NC-FLANGE	01449	2
11	BOLT--5" X 1.0" NC-HEX	01603	2
10	NUT--.375" NF-HEX JAM	01455	2
9	BOLT--.375" X 3.0" NC-HEX	01460	2
8	BOLT--.375" X 1.0" NC-HEX	01446	8
7	NUT--.375" NC-FLANGE	01443	10
6	THREADED ROD--.375" X 4" NF	01463	1
5	ROD END--.375" FEMALE	01294	1
4	MOUNT TUBE SPACER	01177	2
3	CABLE MOUNT EXTENSION	01292	1
2	UPRIGHT SPACER	01375	1
1	UPRIGHT SPACER W/ PIVOT	01176	1
NO	DESCRIPTION	PART NO	QTY

Replace the male rod end in the valve control rod with the all-thread stud & female rod end, use jam nuts to lock both ends of the stud.

HOELSCHER
BED EXTENSION KIT
 AVAILABLE: APR 92



THESE HOSES ARE NOT INCLUDED IN ASSEMBLY

.75" RETURN HOSE FROM ACCUMULATOR

.5" PRESSURE HOSE TO ACCUMULATOR

STANDARD DIRECTION OF ROTATION

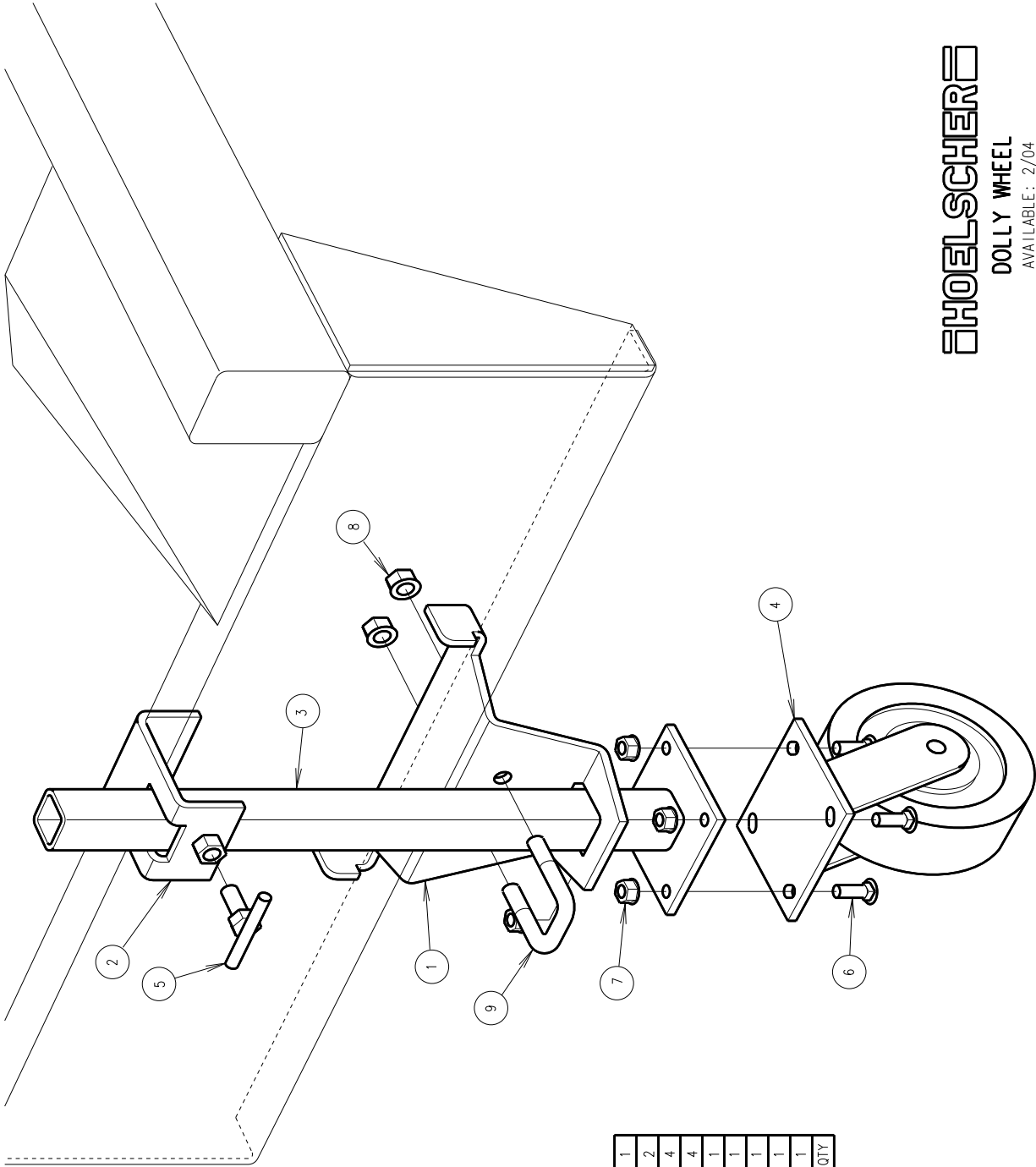
NOTICE

1. This is a dual rotation pump (it will operate either direction).
2. When rotation is as shown, the assembly should be as shown.
3. If rotation is opposite direction, the hoses, fittings, valve, and filter must be exchanged, side to side.
4. When driven by a 22" diameter flywheel, 01675 sheave must be used. For a 26" diameter flywheel, Use the 01676 Sheave.
5. When using this pump, the accumulator must be set for Open-Center. See "Hydraulic System Conversion", page 15.

NO	DESCRIPTION	PART NO	QTY
16	NUT-.375" NC FLANGE	01443	2
15	BOLT-.375" x 1.0" NC CARRIAGE	01448	2
14	FITTING-1.0"NPT M-F 90 SWIVEL	01717	1
13	FITTING-.75" NPT M-F 90 SWIVEL	01543	1
12	FITTING-.75 NPT M-F SWIVEL	01542	1
11	FITTING-1.0" NPT HEX PLUG	01716	1
10	HYD HOSE-.75" x 32"	01813	1
9	HYD HOSE-1.0" x 20"	01715	1
8	SHEAVE-9.75"OD	01676	1
	SHEAVE-7.75"OD	01675	1
7	HUB W/ 3-.312" X 2.0" HEX BOLTS	01677	1
6	BREATHER CAP	01387	1
5	FILTER ELEMENT	01386	1
4	FILTER BASE	01385	1
3	RELIEF VALVE	01384	1
2	PUMP	01718	1
1	RESERVOIR	01152	1
	DESCRIPTION	PART NO	QTY

HOELSCHER
HYD POWER PACK ASS'Y

AVAILABLE: JAN 97-CURRENT



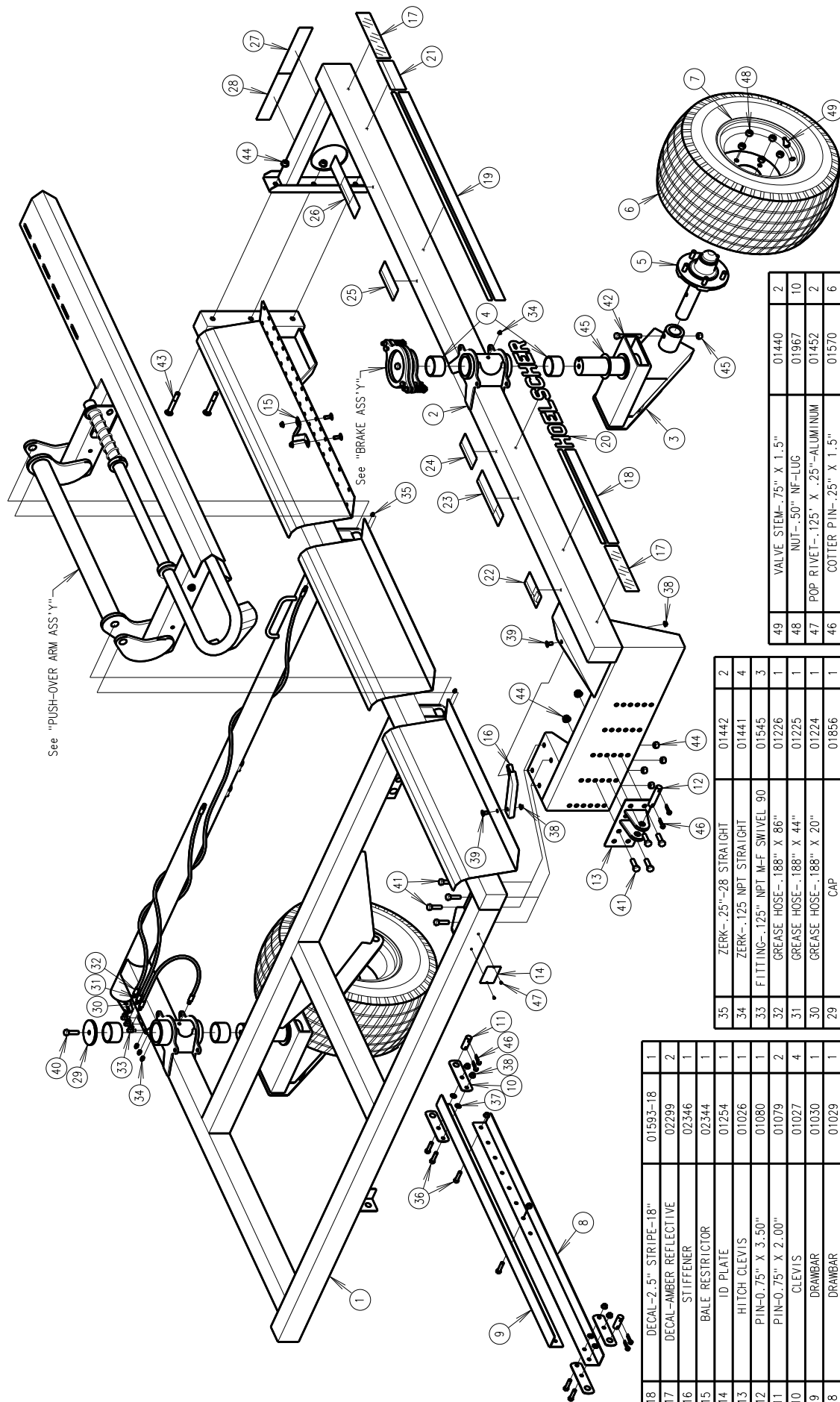
HOELSCHER
DOLLY WHEEL
 AVAILABLE: 2/04

9	U-BOLT-.50 X 1.50-SQUARE	01244	1
8	NUT-.500 NC-FLANGE	01449	2
7	NUT-.375 NC-FLANGE	01443	4
6	BOLT-.375 X 1.00 NC-CARRIAGE	01448	4
5	HAND SCREW	02143	1
4	CASTER-6"X2"	02142	1
3	STEM	02141	1
2	CLIP	02140	1
1	MOUNT BRACKET	02139	1
NO	DESCRIPTION	PART NO	QTY

HOELSCHER

FRAME ASSEMBLY

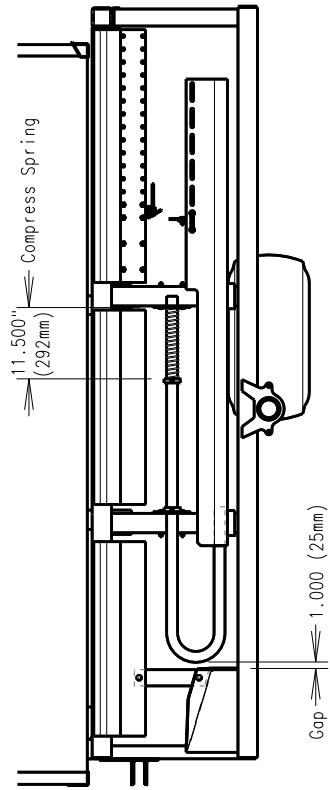
SERIAL NO.: 05316-CURRENT



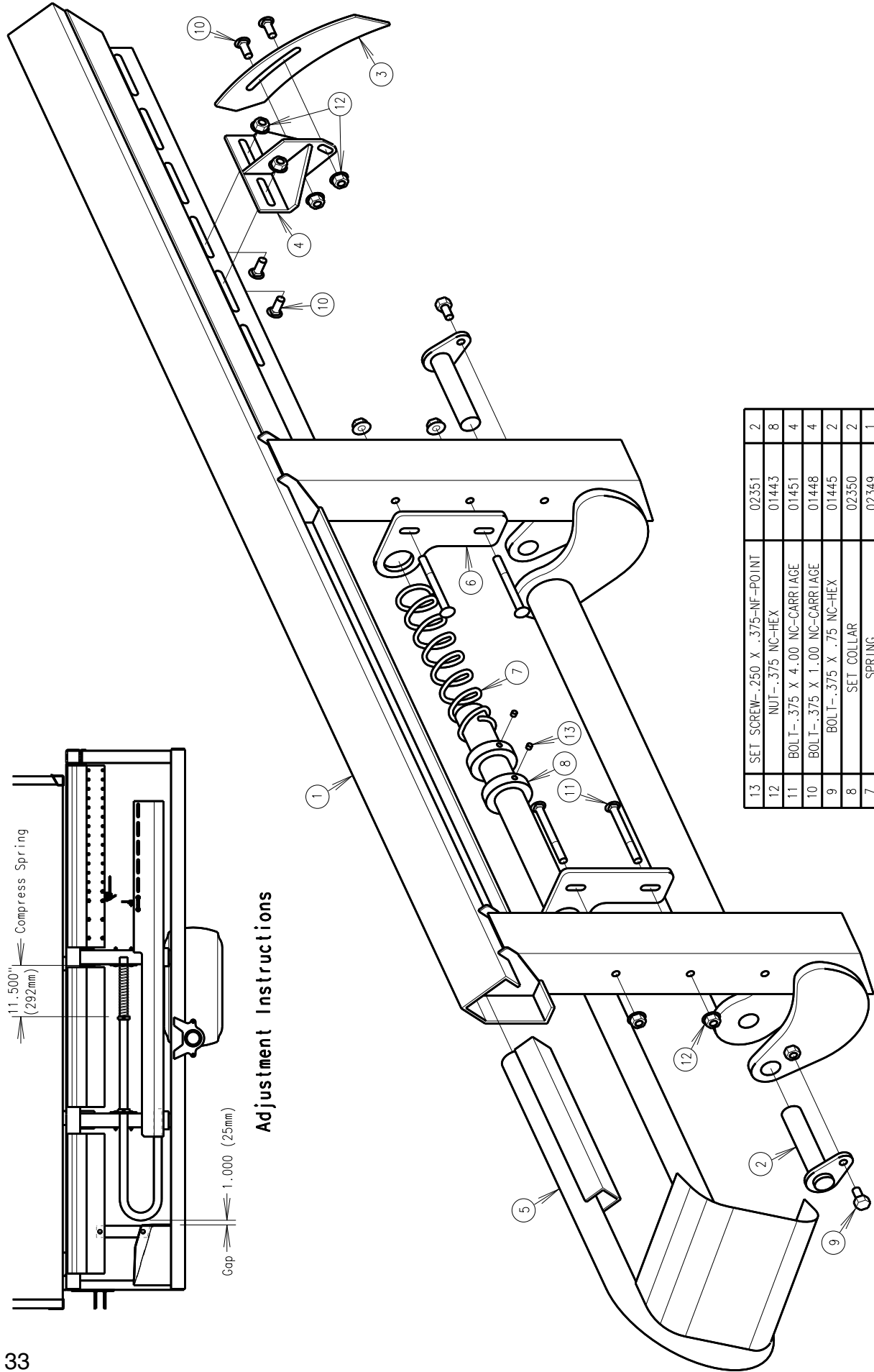
NO	DESCRIPTION	PART NO	QTY
18	DECAL-2.5" STRIPE-18"	01593-18	1
17	DECAL-AMBER REFLECTIVE	02299	2
16	STIFFENER	02346	1
15	BALE RESTRICTOR	02344	1
14	ID PLATE	01254	1
13	HITCH CLEVIS	01026	1
12	PIN-0.75" X 3.50"	01080	1
11	PIN-0.75" X 2.00"	01079	2
10	CLEVIS	01027	4
9	DRAWBAR	01030	1
8	DRAWBAR	01029	1
7	WHEEL-12X9.5-5 BOLT	01806	2
6	TIRE-26-12X12.00	01810	2
5	HUB & SPINDLE ASSY	01805	2
4	BUSHING	01433	4
3	CASTER WELDMENT	01804	2
2	DETACHABLE FRAME	01229	1
1	FRAME WELDMENT	01230	1
NO	DESCRIPTION	PART NO	QTY

35	ZERK-.25"-28 STRAIGHT	01442	2
34	ZERK-.125 NPT STRAIGHT	01441	4
33	FITTING-.125" NPT M-F SWIVEL 90	01545	3
32	GREASE HOSE-.188" X .86"	01226	1
31	GREASE HOSE-.188" X .44"	01225	1
30	GREASE HOSE-.188" X .20"	01224	1
29	CAP	01856	1
28	DECAL-ORANGE FLUORESCENT	02300	1
27	DECAL-RED REFLECTIVE	02298	1
26	DECAL-NOTICE-ADJUSTMENT	01264	1
25	DECAL-WARNING-MOVING PARTS	01370	1
24	DECAL-NOTICE-HYD SYSTEM	01263	1
23	DECAL-WARNING-HIGH PRESSURE	01896	1
22	DECAL-ARROW	01265	1
21	DECAL-WARNING-STAY CLEAR	01262	1
20	DECAL-2.5" NAME	01122	1
19	DECAL-2.5" STRIPE-41"	01593-41	1

49	VALVE STEM-.75" X 1.5"	01440	2
48	NUT-.50" NC-FLANGE	01967	10
47	POP RIVET-.125" X .25" ALUMINUM	01452	2
46	COTTER PIN-.25" X 1.5"	01570	6
45	NUT-.50" NC-LOCK	01787	2
44	NUT-.50" NC-HEX	01449	8
43	BOLT-.50" X 4.0" NC-CARRIAGE	01451	3
42	BOLT-.50" X 3.25" NC-HEX	01879	2
41	BOLT-.50" X 1.5" NC-HEX	01450	8
40	BOLT-.50" X 1.0" NC-HEX	01603	2
39	BOLT-.375" X 1.0 NC-CARRIAGE	01448	4
38	NUT-.375" NC-FLANGE	01443	8
37	WASHER-FLAT	01444	4
36	BOLT-.375" X 1.0" NC-HEX	01446	6



Adjustment Instructions

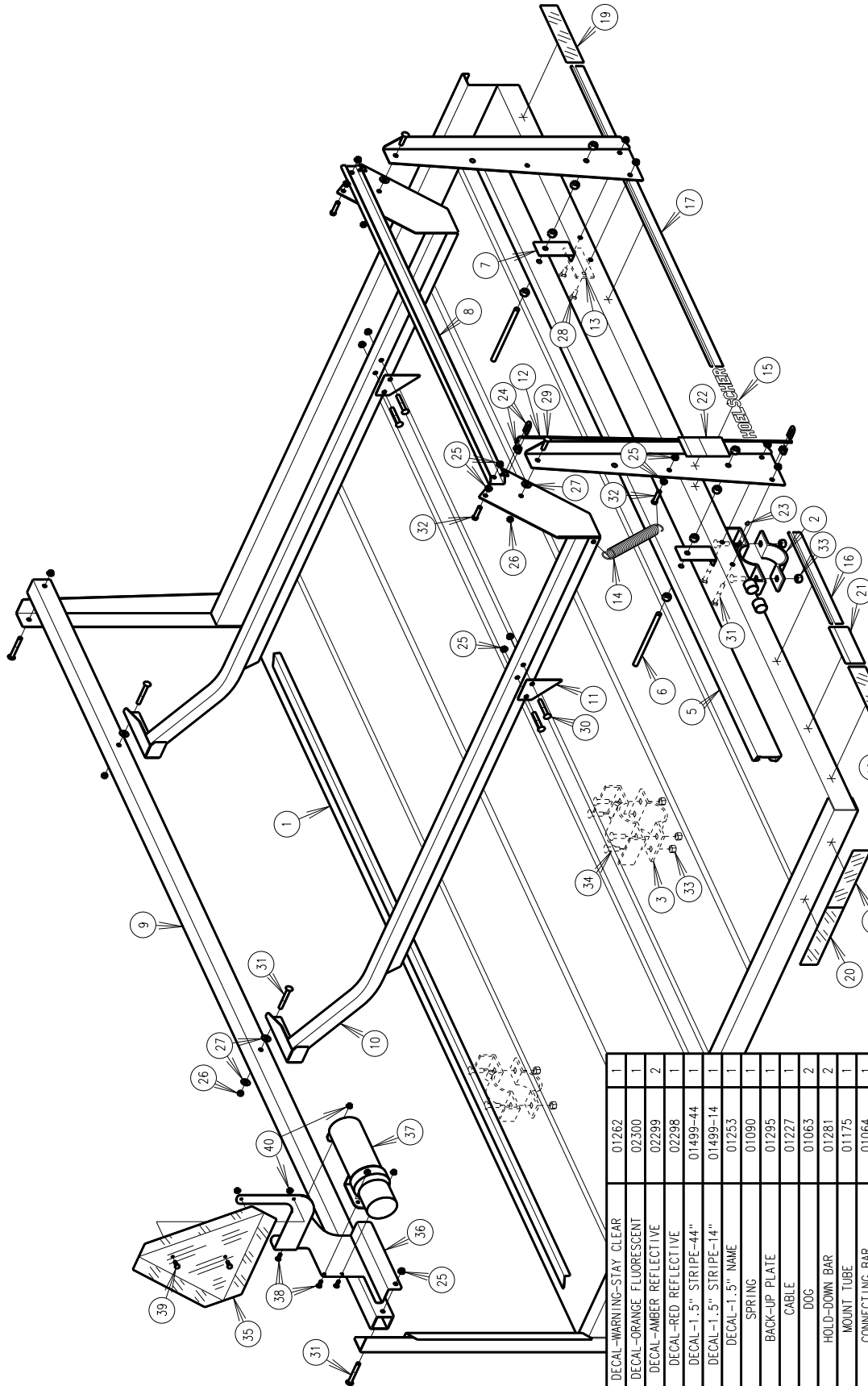


NO	DESCRIPTION	PART NO	QTY
13	SET SCREW-.250 X .375-NF-POINT	02351	2
12	NUT-.375 NC-HEX	01443	8
11	BOLT-.375 X 4.00 NC-CARRIAGE	01451	4
10	BOLT-.375 X 1.00 NC-CARRIAGE	01448	4
9	BOLT-.375 X .75 NC-HEX	01445	2
8	SET COLLAR	02350	2
7	SPRING	02349	1
6	GUIDE PLATE	02348	2
5	PISTON	02347	1
4	DETENT MOUNT	01062	1
3	DETENT	01012	1
2	PIN	01123	2
1	PUSH-OVER ARM	02169	1
NO	DESCRIPTION	PART NO	QTY

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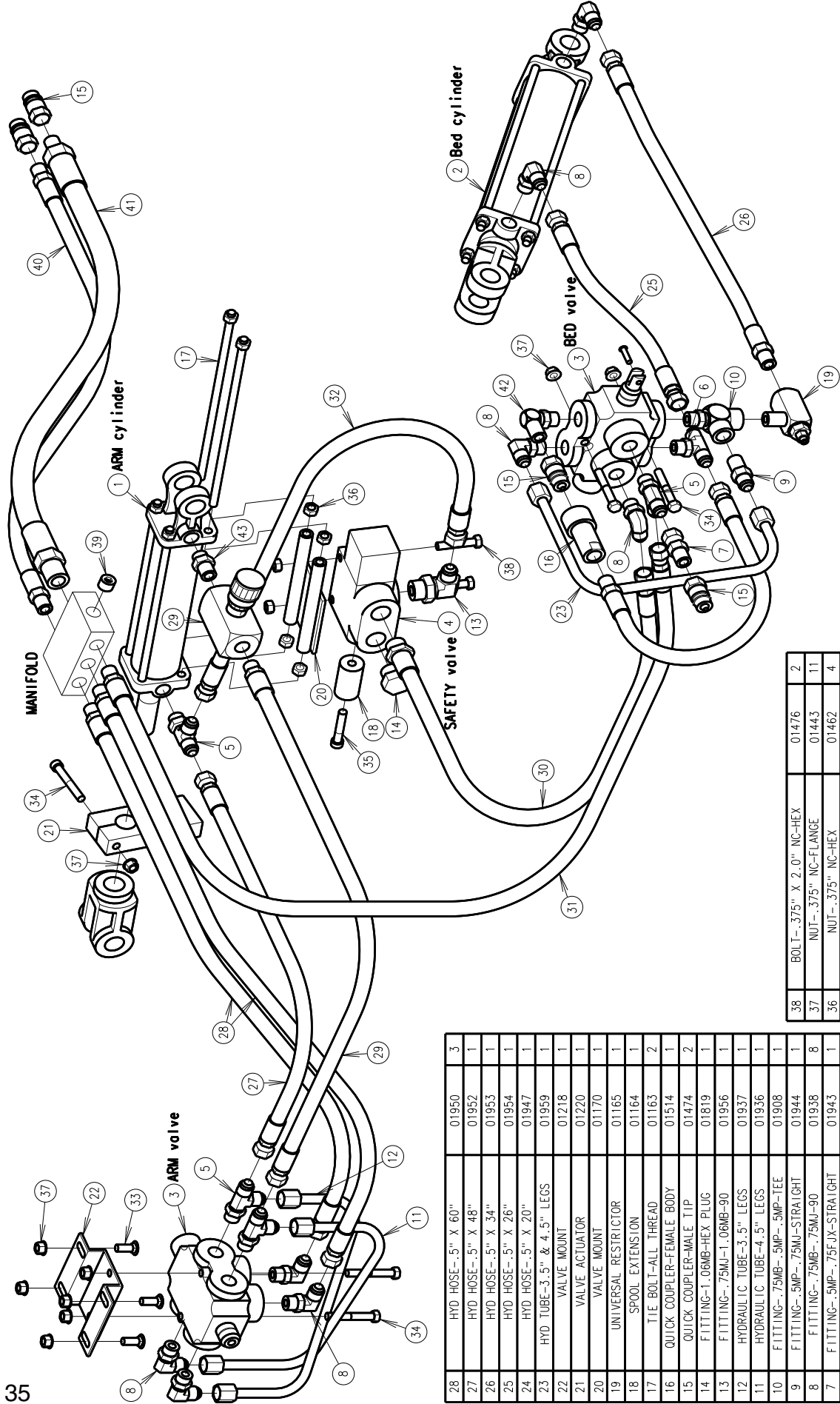
PUSH-OVER ARM ASS'Y

SERIAL NO.: 05316-CURRENT



NO	DESCRIPTION	PART NO	QTY
21	DECAL-WARNING-STAY CLEAR	01262	1
20	DECAL-ORANGE FLUORESCENT	02300	1
19	DECAL-AMBER REFLECTIVE	02289	2
18	DECAL-RED REFLECTIVE	02298	1
17	DECAL-1.5" STRIPE-44"	01499-44	1
16	DECAL-1.5" STRIPE-14"	01499-14	1
15	DECAL-1.5" NAME	01253	1
14	SPRING	01090	1
13	BACK-UP PLATE	01295	1
12	CABLE	01227	1
11	DOG	01063	2
10	HOLD-DOWN BAR	01281	2
9	MOUNT TUBE	01175	1
8	CONNECTING BAR	01064	1
7	LEG	01591	2
6	ROD	01169	2
5	SIDE RAIL	01168	1
4	UPRIGHT	01381	2
3	4" SADDLE CAP	01076	1
2	2" SADDLE CAP	01075	2
1	BED WELDMENT	01835	1
	DESCRIPTION	PART NO	QTY

30	BOLT-.375" X 2.5" NC-CARRIAGE	01548	4
29	BOLT-.375" X 1.5" NC-CARRIAGE	01456	2
28	BOLT-.375" X 1.0" NC-CARRIAGE	01448	2
27	WASHER-.375-FLAT	01444	6
26	NUT-.375 NC-LOCK	01454	4
25	NUT-.375" NC-FLANGE	01443	16
24	CABLE CLAMP-.188	01453	2
23	GREASE ZERK-.125 NPT-STRAIGHT	01441	1
22	DECAL-WARNING-CRUSHING HAZARD	01261	1
40	NUT-.25" NC-FLANGE	01505	5
39	BOLT-.25" X .50" NC-HEX	01566	2
38	BOLT-.25" X .625" NC-CARRIAGE	02318	3
37	CANNISTER	02282	1
36	SMW MOUNT	02339	1
35	SMW SIGN	02326	1
34	BOLT-.50" X 1.5" NC-CARRIAGE	01459	8
33	NUT-.50" NC-FLANGE	01449	8
32	BOLT-.375" X 1.5" NC-HEX	01447	3
31	BOLT-.375" X 3.0" NC-CARRIAGE	01457	6



HOELSCHER
HYDRAULIC SYSTEM ASS'Y

SERIAL NO. : 05316-CURRENT

NO	DESCRIPTION	PART NO	QTY
28	HYD HOSE-.5" X 40"	01950	3
27	HYD HOSE-.5" X 48"	01952	1
26	HYD HOSE-.5" X 34"	01953	1
25	HYD HOSE-.5" X 26"	01954	1
24	HYD HOSE-.5" X 20"	01947	1
23	HYD TUBE-3.5" & 4.5" LEGS	01959	1
22	VALVE MOUNT	01218	1
21	VALVE ACTUATOR	01220	1
20	VALVE MOUNT	01170	1
19	UNIVERSAL RESTRICTOR	01165	1
18	SPOOL EXTENSION	01164	1
17	TIE BOLT-ALL THREAD	01163	2
16	QUICK COUPLER-FEMALE BODY	01514	1
15	QUICK COUPLER-MALE TIP	01474	2
14	FITTING-T.06MP-HEX PLUG	01819	1
13	FITTING-.75MJ-1.06MB-90	01956	1
12	HYDRAULIC TUBE-3.5" LEGS	01937	1
11	HYDRAULIC TUBE-4.5" LEGS	01936	1
10	FITTING-.75MB-.5MP-.5MP-TEE	01908	1
9	FITTING-.5MP-.75MJ-STRAIGHT	01944	1
8	FITTING-.75MB-.75MJ-90	01938	8
7	FITTING-.5MP-.75MJ-STRAIGHT	01943	1
6	FITTING-.75MB-.75MJ-TEE	01939	1
5	FITTING-.75MB-.75MJ-.75MJ-TEE	01941	4
4	VALVE	01236	1
3	VALVE	01235	2
2	HYDRAULIC CYLINDER-2.5" X 10	01923	1
1	HYDRAULIC CYLINDER-2"X8"	01922	1
	DESCRIPTION	PART NO	QTY

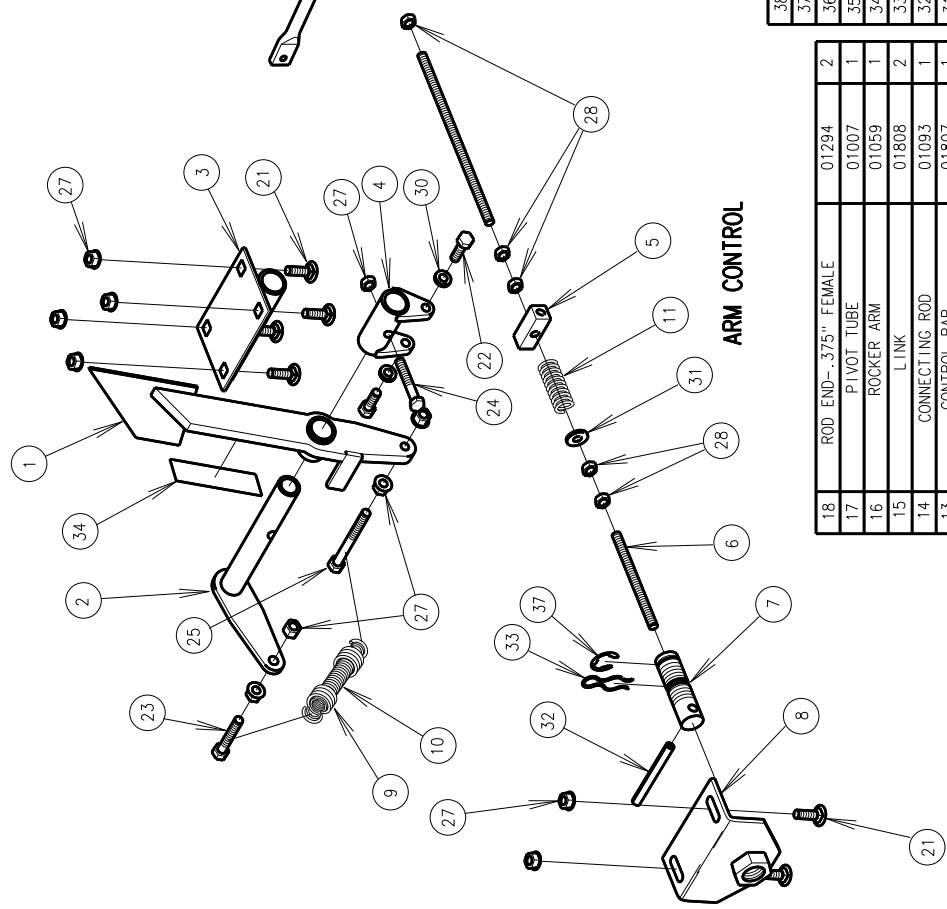
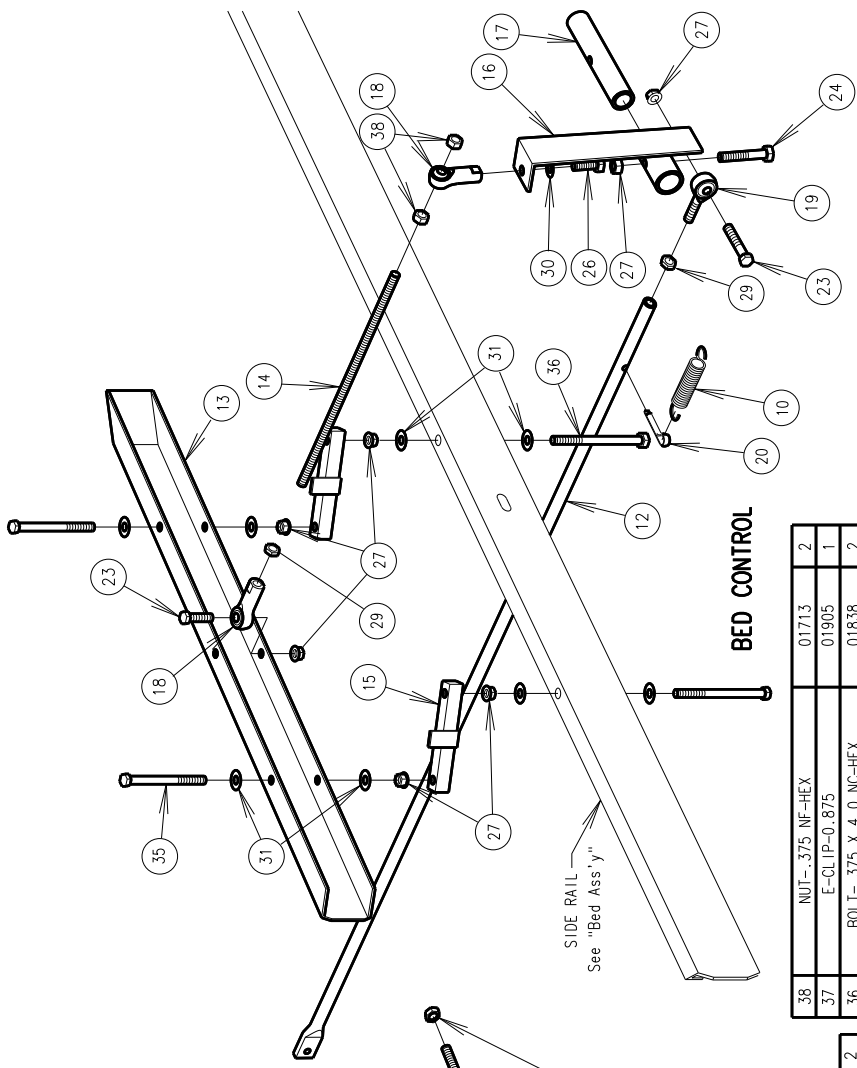
38	BOLT-.375" X 2.0" NC-HEX	01476	2
37	NUT-.375" NC-FLANGE	01443	11
36	NUT-.375" NC-HEX	01462	4
35	BOLT-.375" X 2.0"-SOCKET HEAD	01475	1
34	BOLT-.375" X 2.5"-SOCKET HEAD	01458	4
33	BOLT-.375" X 1.0" NC-CARRIAGE	01448	4
32	HYD HOSE-.5" X 15"	01955	1
31	HYD HOSE-.5" X 72"	01948	1
30	HYD HOSE-.5" X 72"	01949	1
29	NEEDLE VALVE	02354	1

43	FITTING-.75MB-.5MP-STRAIGHT	02355	1
42	FITTING-.75MB-.5MP-90	01942	1
41	HYD HOSE-.75" X 312"	01380	1
40	HYD HOSE-.5" X 312"	01379	1
39	PLUG-.5" NPT-HOLLOW HEX	01575	1

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HYDRAULIC CONTROL ASS'YS

SERIAL NO.: 02624-CURRENT






NO	DESCRIPTION	PART NO	QTY
38	NUT--.375 NF-HEX	01713	1
37	E-CLIP-0.875	01905	1
36	BOLT--.375 X 4.0 NC-HEX	01838	2
35	BOLT--.375 X 3.5 NC-HEX	01840	2
34	DECAL-DANGER	01395	1
33	CLIP--.188" x .75"-HAIR PIN	01478	1
32	PIN--.375" x 3.0"-ROLL	01477	1
31	WASHER--.375"-FLAT	01444	9
30	WASHER--.375"-LOCK	01461	3
29	NUT--.375" NF-JAM	01455	4
28	NUT--.375" NC-HEX	01462	5
27	NUT--.375" NC-FLANGE	01443	17
26	BOLT--.375" x 1.0" NF-HEX	01551	1
25	BOLT--.375" x 3.0" NC-HEX	01460	1
24	BOLT--.375" x 2.0" NC-HEX	01476	3
23	BOLT--.375" x 1.5" NC-HEX	01447	3
22	BOLT--.375" x .75" NC-HEX	01445	2
21	BOLT--.375" x 1.0" NC-CARRIAGE	01448	8
20	PIN--.25 X 1.5-COTTER	01570	1
19	ROD END--.375" MALE	01293	1

NO	DESCRIPTION	PART NO	QTY
18	ROD END--.375" FEMALE	01294	2
17	PIVOT TUBE	01007	1
16	ROCKER ARM	01059	1
15	LINK	01808	2
14	CONNECTING ROD	01093	1
13	CONTROL BAR	01807	1
12	CONTROL ROD	01249	1
11	COMPRESSION SPRING	01266	1
10	EXTENSION SPRING	01086	2
9	EXTENSION SPRING	01085	1
8	BULKHEAD BRACKET	01221	1
7	ACTUATING SCREW	01222	1
6	CONTROL ROD	01223	1
5	PIVOT BLOCK	01074	1
4	CONTROL FORK	01065	1
3	PIVOT MOUNT	01048	1
2	PIVOT	01054	1
1	ARM CONTROL LEVER	01053	1

Bolt Torque Specifications

The table below gives correct torque values for various bolts and capscrews used for attaching flat surfaces together. Tighten all bolts to these specifications, unless otherwise noted. Check tightness of bolts periodically. Replace hardware of the same strength bolt. Torque values shown are for non-lubricated threads. Do not grease or oil bolts unless otherwise specified. When using locking elements, increase torque values by 5%. Lock nuts used to adjust devices such as a spring, should not be torqued to these values.

Bolt Size in-tpi	 Grade 2		 Grade 5		 Grade 8	
	ft.lb.	Nm	ft.lb.	Nm	ft.lb.	Nm
1/4-20	5.6	7.4	8	11	12	16
1/4-28	6	8.5	10	13	14	18
5/16-18	11	15	17	24	25	33
5/16-24	13	17	19	26	27	37
3/8-16	20	27	31	42	44	59
3/8-24	22	31	35	47	49	67
7/16-14	32	43	49	67	70	95
7/16-20	36	49	55	75	78	105
1/2-13	49	66	76	105	105	145
1/2-20	55	75	85	115	120	165
9/16-12	70	95	110	150	155	210
9/16-18	79	105	120	165	170	235
5/8-11	97	130	150	205	210	285
5/8-18	110	150	170	230	240	325
3/4-10	170	235	265	360	375	510
3/4-16	190	260	295	405	420	570
7/8-9	165	225	430	585	605	820
7/8-14	185	250	475	640	670	905
1-8	250	340	645	875	910	1230
1-12	275	370	705	955	995	1350

Tire Inflation

12-12x12.00, 6 ply: 30 psi (207 kPa) maximum

Lower pressure may be used to allow for a smoother ride. Minimum pressure provides a rolling radius (distance from ground to center of wheel) of 10.9" (277mm).

Tire Warranty Information

All tires are warranted by the original manufacturer of the tire. For assistance or information, contact your nearest farm tire retailer that sells the appropriate brand.

HOELSCHER

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620-562-3575

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