

Tool Bar

Owner's Manual



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PATRIOT
EQUIPMENT

1302 K ROAD
MINDEN, NE 68959
308-832-0220
www.patriotequip.com

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INTRODUCTION

Thank you for purchasing a Patriot Equipment tool bar. This tool bar is designed to be pulled by a ROPS protected tractor of proper size. The purpose of this tool bar is to provide a means to perform a tillage/planting operation for row crops. All product users must read and understand this manual prior to equipment operation. This manual is considered part of your machine and should remain with the machine at all times. Do not allow anyone to operate or maintain this equipment if they have not fully read and comprehended this manual. Failure to follow the recommended procedures may result in personal injury, death or equipment damage.

Information in this manual is designed to help owners and operators to obtain the best results and safe operation from their investment. The life of any machine depends largely on the care it is given and we suggest that the manual should be read and understood and referred to frequently. If for any reason you do not understand the instructions and safety requirements, please contact your authorized dealer. The intent of this manual is to provide guidelines to cover general use and to assist in avoiding accidents and injuries.

There may be times when circumstances occur that are not covered in the manual. At those times it is best to use common sense and contact your authorized dealer or our factory.

The requirements of safety cannot be emphasized enough in this publication. We urge you to make safety your top priority when using and maintaining the equipment. We strongly advise that anyone allowed to operate this equipment be thoroughly trained and tested, to prove they understand the fundamentals of safe operation.

Some photographs, diagrams or illustrations in this manual may show doors, guards and shields opened or removed to aid in clarity and understanding of a particular procedure. All guards, shields and safety devices must be in their proper position prior to operation.

SAFETY AND OPERATION RULES

General Safety Statements

Safety precautions are essential when the use of any mechanical equipment is involved. These precautions are necessary when using, storing, and servicing mechanical equipment. Using this equipment with the respect and caution demanded will considerably lessen the possibilities of personal injury. If safety precautions are overlooked or ignored, personal injury or property damage may occur.

The machine was designed for a specific application. It should not be modified and/or used for any application other than which it was designed. If there are any questions regarding its application, please write or call. Do not use this unit until you have been advised. For more information, call 1-308-832-0220.

Read this entire manual carefully. Know your equipment. Consider the application, limitations, and the potential hazards specific to your unit. Occupational safety is of prime concern to us. This manual was written with the safety of the operator and others who come in contact with the equipment. This manual was written to help you understand the safe operating procedures of the tool bar. We want you as our partner in safety. A copy of this manual should be available to all persons who may operate this machine.

It is your responsibility as an owner, operator, or supervisor to know what specific requirements, precautions, and work hazards exist and to make these known to all other personnel working with the equipment or in the area, so that they too may take any necessary safety precautions that may be required. Avoid any alterations of the equipment. Such alterations may create a dangerous situation where serious injury or death may occur and will void warranty.

Why is SAFETY important? Three reasons:

1. Accidents disable and kill
2. Accidents cost money
3. Accidents can be avoided

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

DANGER – An immediate and specific hazard which will result in severe personal injury or death if proper precautions are not taken.

WARNING – A specific hazard or unsafe practice which could result in severe personal injury or death if proper precautions are not taken.

CAUTION – Unsafe practices which could result in personal injury if proper precautions are not taken or a reminder of good safety practices.

Safety Alert Symbol



BE ALERT! YOUR SAFETY IS INVOLVED!

The Symbol Shown Above Is Used To Call Your Attention To Instructions Concerning Your Personal Safety. Watch for This Symbol - It Points Out Important Safety Precautions. It Means ATTENTION! Become Alert! Your Personal Safety Is Involved! Read The Message That Follows And Be Alert To The Possibility Of Personal Injury Or Death.

Read this manual before operating or working around the tool bar! This manual must be delivered with the equipment to its owner and operator. Failure to read this manual and its safety instructions is a misuse of equipment.

Safety Equipment

Please, remember safety equipment provides important protection for persons around a tool bar that is in operation. Be sure ALL safety shields and protective devices are installed and properly maintained. If you find any shields or guards damaged or missing, contact Patriot Equipment for the correct items.

Safety Procedures



1. Use only lifting equipment with the proper capacity when assembling, removing, or servicing the tool bar. Forklifts with too little capacity may tip towards the front where the lifted weight is.
2. Always support the tool bar when mounting or working of the attachments or the tool bar itself.
3. Hydraulics:
 - a. Be sure all connections are tight and cylinders are full of hydraulic oil when installing the hydraulic hose and cylinders.
 - b. Relieve pressure in the hydraulic lines before uncoupling hoses from the source.
 - c. Inspect hydraulic lines and replace any worn or damaged lines. Do not use a damaged hose!
4. Do not operate unit without safety shields or guards in place.
5. IMPORTANT: Use caution when transporting. Be alert of the transport unit's overall width when approaching obstacles, such as post sign and poles, along the road. Check the transport width of the unit to ensure clearance before entering. Check the unit's overall height to avoid contact with power lines and overhead obstructions.
6. Comply with all safety warnings and cautions in this manual and in the tractor operator's manuals.
7. Do not allow any riders on the tool bar or near the tool bar when in use or in storage.
8. Be sure work area is clear before folding or unfolding wings.
9. Use the raise/lower cylinder stops when transporting or storing the tool bar.
10. Drive slowly over rough ground.
11. Always slow down with turning.
12. Never attempt to adjust the equipment that is attached to the tool bar while in motion.
13. Periodically check bolts, replace worn ones.
14. Use caution around the tool bar attachments as they may become sharp as they wear from use.
15. Never allow children to play on or near the tool bar while in use or in storage.

16. In case of any defect or awareness of potential danger, please contact Patriot Equipment at 308-832-0220 immediately.

Pre-Assembly Instructions

1. All references to right hand and left hand sides are determined by sitting in the operator's seat facing forward.
2. Check the packing lists and report any missing parts within 30 days.
3. Lubricate all moving parts and bearings as recommended.
4. Follow assembly instructions in the order shown



Shutdown and Storage

1. Avoid Crushing!
2. Make sure personnel are clear of the machine.
3. Lower the machine to the ground.
4. Place the tow vehicle in park.
5. Turn off the engine.
6. Remove the key.

Use bar stands and cylinder stops to support the machine. Store the machine on a clean, dry, and level surface. An uneven surface could cause the machine to shift or fall which could result in an injury or death as well as damage to the machine. Securely support the machine components that must be raised. Be sure the machine is stored away from human activity.

Transport Safety

- Engage transport locking devices prior to transport
- Plan your route to avoid traffic and yield to traffic in all situations
- Maximum transport speed is 20 mph (32 kph). Various conditions will require speed to be reduced. Be sure to travel at a speed that will allow for complete control of stopping and steering.
- Avoid electrocution and be aware of overhead power lines. Use extreme caution when operating the machine near power lines. Injury or death can occur if power lines come in contact with or are in close proximity of the machine.
- Know the machine width, height, and weight so to avoid narrow roads and bridges. Be sure bridges are rated to hold the load of the machine and tow vehicle.
- Be sure the Slow Moving Vehicle (SMV) placard is mounted to the machine and is clearly visible to other motorists.
- Allow for the size of the machine to avoid sudden stops which can lead to loss of control. If the machine does not have brakes, reduce towing speed. Sudden stopping can cause machine to swerve or rollover and result in injury or death.
- Never coast! The towing vehicle needs to be in gear to provide engine braking when traveling downhill.
- Always follow state and local laws that govern implement transport.

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 if necessary.
- Oversized machines and moving vehicles create a hazard when being transported on public roadways.
- Be sure all warning, safety lights, and turning signals are working and clean. Replace any missing or damaged lighting immediately. Comply with all state and local laws governing implement safety lighting.

Safe Operation

Read and understand the entire contents of this manual before operating or servicing the machine. The machine is to be operated by qualified personnel only. Never let children operate the machine. A full understanding of the safety precautions, operation, and maintenance is required before using the machine.

Be aware of overhead power lines and avoid electrocution. Use extreme caution when operating the machine near power lines.

Know the height, width, and weight of the machine that is being operated to avoid overhead obstructions, narrow passage routes, and bridges that are rated below the combined machine and transport vehicle weight.

To avoid rollover, do not fold or unfold the machine and avoid sharp turns on hillsides as a shift in weight can cause a rollover. Operate the machine a safe distance from terrain obstacles and obstructions that can cause a rollover.

To avoid crushing, make sure all personnel are clear of the machine at all times the machine is in motion. Be aware of obstructions above, below, and around the machine when in operation or transport. Injury or death can occur as a result of being struck by the machine.

NO RIDERS are ever allowed on the tow vehicle or the machine as injury or death can occur by being thrown from the machine or struck by a foreign object as well as hindering the visibility of the operator.

Maintenance Safety

Correct maintenance is your responsibility. Neglecting maintenance or poor maintenance practices can result in injury or death. Always use the correct tools when performing maintenance to the machine. When performing maintenance, to avoid crushing, make sure all personnel are clear of the machine, the machine is lowered to the ground, the tow vehicle is in park with the engine off and the key removed.

Store the machine on a clean, dry and level surface using bar stands and cylinder stops to support the machine. An uneven surface could cause the machine to shift or fall, resulting in injury or death as well as implement damage. Any machine components that must be raised are to be securely supported. The machine is to be stored away from human activity.

To avoid entanglements, never lubricate or service the machine while it is in motion. Keep away from power driven parts while in motion and disengage power sources prior to maintaining the machine. Injury or death can result from coming in contact with power driven parts when in motion.

To avoid crushing, never stand between the tow vehicle and the machine when connecting or disconnecting the machine. Injury or death can result from being trapped between the tow vehicle and the machine.

To avoid fluid penetration, relieve hydraulic system pressure before connecting or disconnecting the tow vehicle. Escaping pressurized hydraulic fluid can penetrate the skin resulting in injury or death.

NEVER USE BODY PARTS to check for suspected hydraulic leaks, use cardboard or wood to check for leaks. Always wear protective gloves and safety eyewear (glasses or goggles) when working with the hydraulic system. If an accident occurs, see a doctor immediately for correct treatment.

Other safe maintenance practices:

- Never operate a combustion engine in an enclosed area. Exhaust fumes can cause asphyxiation. Always be sure there is adequate ventilation.
- Be careful when working around unshielded sharp edges to avoid injury by coming in contact with sharp edges.
- Keep all parts in good condition and correctly installed, replace damaged or broken parts immediately.
- Remove tools and unused parts before using the machine.
- Be prepared for fires by having a readily accessible fire extinguisher at all times.
- Keep a readily stocked first aid kit available at all times as well as having emergency numbers posted.
- Wear protective clothing and equipment.
- Service tires safely. Tire and rim separation can result in serious injury or death. Never overinflate tires. Only mount and dismount tires if you have the correct equipment, otherwise contact a trained professional. Always maintain correct tire pressure. Inspect tires and wheels daily and never operate tires with inadequate pressure, cuts, visible damage or missing hardware.

Operator Qualifications



Operation of the tool bar shall be limited to competent and experienced persons. In addition anyone who will operate or work around a tool bar must use good common sense. In order to be qualified, they must also know and meet all other requirements, such as:

1. Some regulations specify that no one under the age of 18 may operate power machinery. This may include the tool bar. It is your responsibility to know what these regulations are in your own area or situation.
2. Current Occupational Safety Health Administration regulations state in part: “At the time of initial assignment and at least annually thereafter, the employer shall instruct every employee or user in the safe operation and servicing of all equipment with which the employee or user is, or will be involved.”
3. Unqualified persons are to stay out of the work area.
4. A person who has not read and understood all operating and safety instruction is not qualified to operate the machine.

Safety Overview

YOU are responsible for SAFE operation and maintenance of the tool bar. YOU must ensure that you and anyone who is going to operate and maintain or work around the tool bar must be familiar with the operating, maintenance, and safety information contained in the manual.

Remember YOU are the key to safety. GOOD PRACTICES protect not only you but also the people around you. Make these practices a working part of your safety program. Be certain EVERYONE operating this machine is familiar with the procedures recommended and follows safety precautions. Remember, most accidents can be prevented. Do not risk injury or death by ignoring any information addressed.

Tool bar owners must give operating instructions to operators before allowing them to operate the tool bar. They must be reviewed at least annually thereafter per OSHA regulation 1928.57.

The most important safety device on the equipment is a SAFE OPERATOR. It is the operator's responsibility to read and understand ALL instructions in the manual and to follow them. All accidents can be avoided!

Any person who has not read and understood all operation and safety instructions is not qualified to operate the tool bar. An untrained operator exposes himself and bystanders to possible serious injury or death.

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

Safety Affirmation

1. I have read and understand the operator's manual and all safety signs before operation, maintenance, adjusting, or unplugging the tool bar.
2. I will allow only trained persons to operate the tool bar. *An untrained operator is not qualified to operate this equipment.
3. I have access to a fire extinguisher.
4. I have all guards in place and will not operate the tool bar without them.
5. I will not allow riders on the tool bar.
6. I understand the danger of moving parts and will stop engine before servicing.
7. I recognize the danger of the tool bar coming in contact with power lines.
8. I have the safety lock up pins and know and understand where and when to use them.
9. I understand that any accidents that occur with the tool bar are my responsibilities.
10. I understand that Patriot Equipment will not be held responsible for any accidents that involve the tool bar.

Sign Off Sheet

(This sheet should be signed annually as part of your safety program)

As a requirement of OSHA, it is necessary for the owner/employer to train the employee in the safe operation and safety procedures with the tool bar. We include this sign off sheet for your convenience and personal record keeping.

DATE	EMPLOYER SIGNATURE	EMPLOYEE SIGNATURE

Machine Inspection

After delivery of your new tool bar and/or completion of assembly, and before each use, inspection of the machine is mandatory. This inspection should include, but not be limited to:

1. Check to see that all guards are in place, secured and functional.
2. That all fasteners are tight.
3. That all Hydraulic lines are free from leaks and defects.
4. That all electronics are working properly and wires are in good condition.

Serial Number

To ensure efficient and prompt service, please furnish us with the model and serial number of your toolbar in all correspondence or other contact. The serial number is located near the center link of the tool bar.

Safety Decals

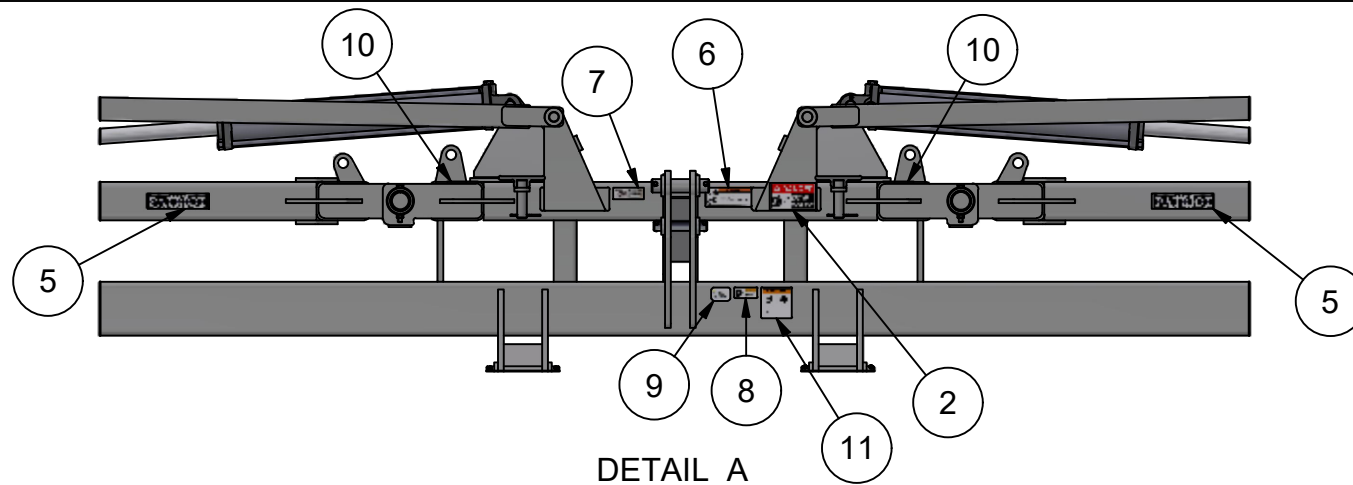
1. Keep safety decals clear and legible at all times.
2. Replace decals and signs that are missing or have become unreadable.
3. Safety signs are available from your Dealer or the Manufacturer.

How to install Safety Decals

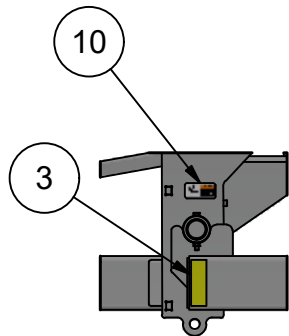
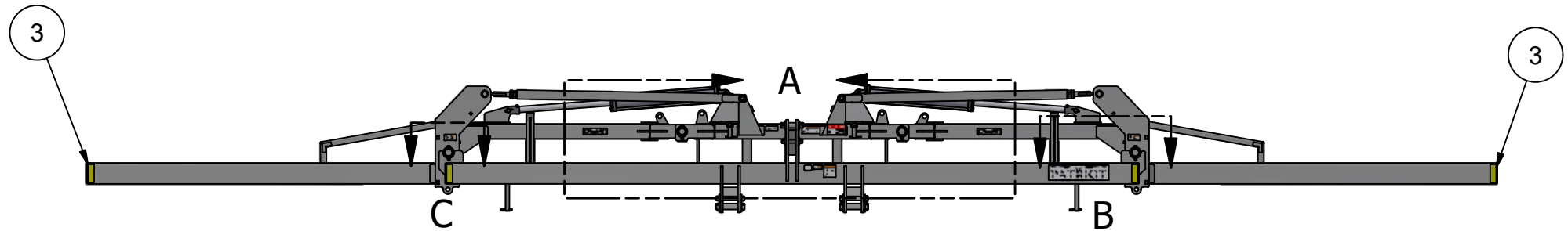
1. Be sure that the installation area is clean and dry.
2. Decide on the exact position before you remove the backing paper.
3. Align the decal over the specified area and carefully press the small portion with the exposed sticky backing in place.
4. Slowly peel back the remaining paper and carefully smooth the remaining portion of the decal in place.
5. Small air pockets can be pierced with a pin and smoothed out using a piece of decal backing paper.

Safety Decals

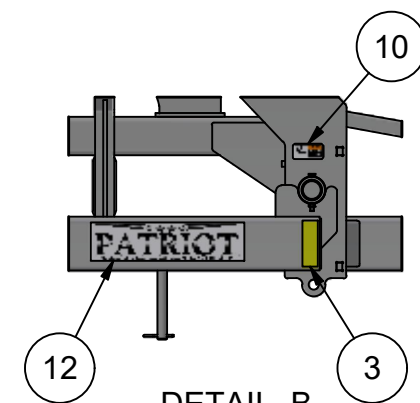
Decal Placement for 12R38 Stacking Tool Bar



DETAIL A



DETAIL C

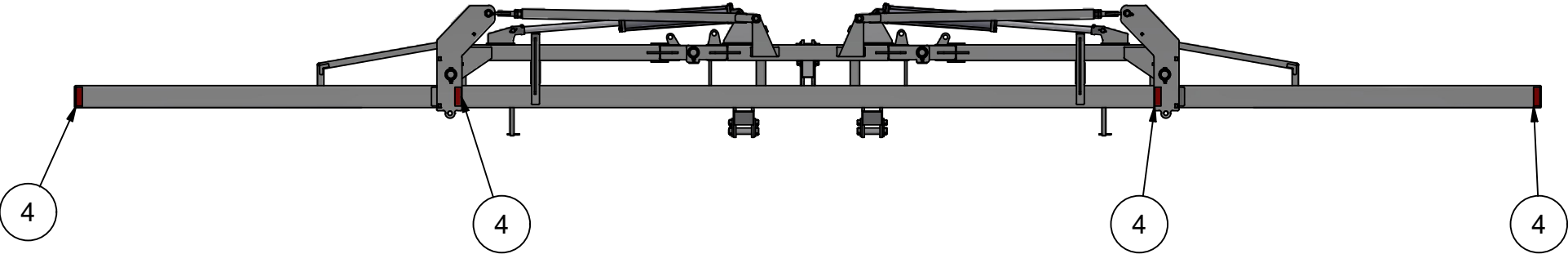


DETAIL B

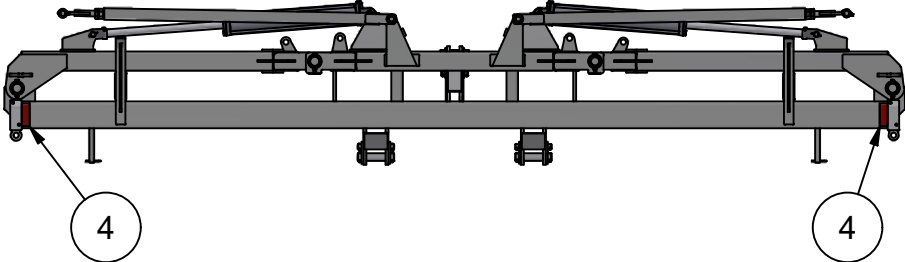
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Decal Placement for
12R38 Stacking Tool Bar



Wings removed to show Red reflective decals on main bar on the rear of the bar.



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Decal Placement for
12R38 Stacking Tool Bar

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	TB-SBP1238-A002	Complete 1238 Planter Stacker Bar
2	1	TB1000	Wings in Power Lines
3	4	TS2007-2	DOT Reflective Tape Amber
4	6	TS2007-R	Red DOT Tape
5	2	TS2004	Patriot Decal
6	1	BC2515	Hydraulic Oil Warning
7	1	TS2003	Serial Number Decal
8	1	TS2017	Read Manual Before Use
9	1	TS2018	P65 California Warning
10	4	TS2012	Single Pinch Point
11	1	TS2013	Machine Operating Warning
12	1	TS2001 White	5x20 Patriot Decal White

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Decal Placement for 12R38 Stacking Tool Bar



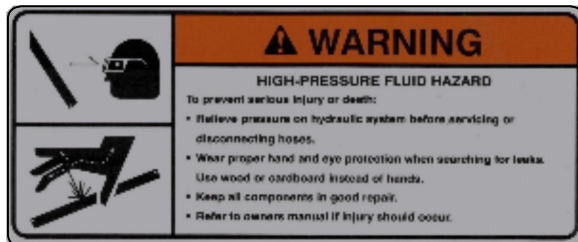
TB1000



TS2007-2



TS2007-R



BC2515



TS2003



TS2004



TS2017



TS2018



TS2012



TS2013



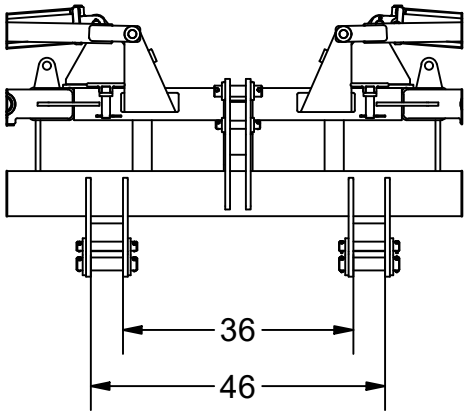
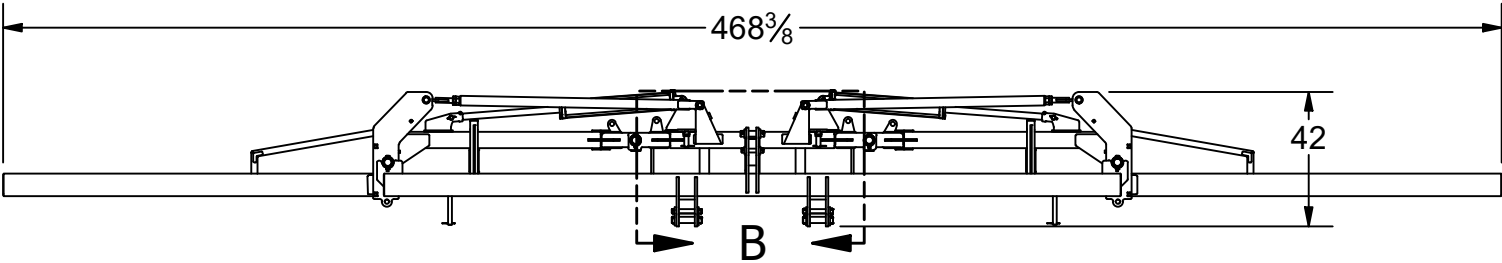
TS2001 WHITE

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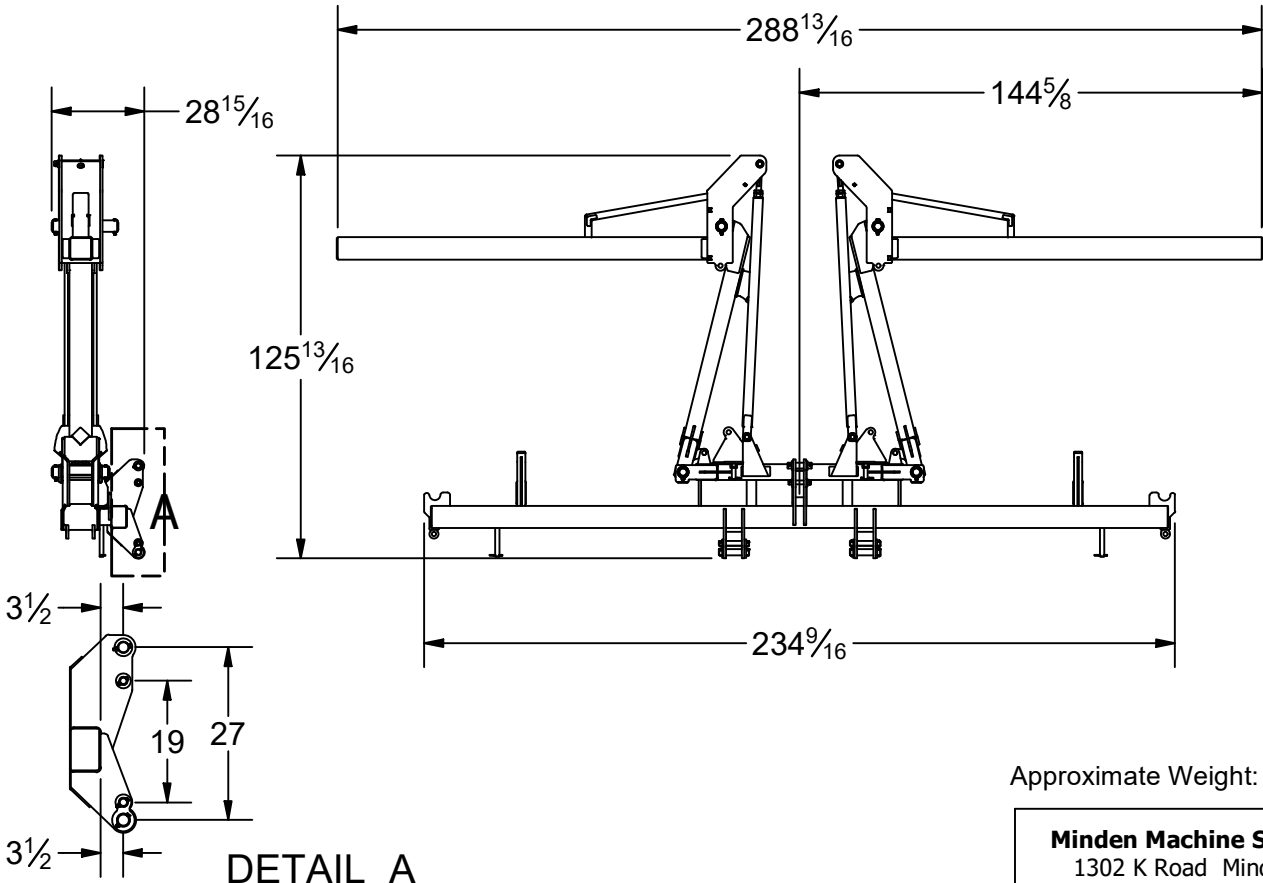
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Machine Measurements

DIMENSIONS FOR 12 ROW 38" SPACING
STACKING TOOL BAR



DETAIL B



Approximate Weight: 4,300 lbs.

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Operation

TOOLBAR SET UP AND GETTING THE TOOLBAR READY FOR USE



DO NOT ATTEMPT TO RAISE WINGS UNTIL YOU HAVE READ THE FOLLOWING PAGES!

PREPARING THE TOOLBAR

- Inspect the decals that they are in good condition, clean, and are legible. Replace any decals that are in poor condition.
- Ensure that the tractor hydraulics are in good working order. The Stacker Bar is designed for a 3,000 p.s.i. system.
- Check that the hydraulic tips and outlets are free of foreign debris. Foreign debris can ruin hydraulic components which can ruin hydraulic components that can result in adverse toolbar operation.
- The Stacker Toolbar can come with two hydraulic hose configurations. One configuration uses two hoses that are plumbed together and will allow the wings to raise and lower together. The second configuration uses four hoses that are independent and will allow one wing to be raised at a time.



CAUTION! RAISING ONE WING AT A TIME CAUSES THE CENTER OF GRAVITY TO SHIFT WHICH WILL RESULT IN ROCKING AND UNBALANCED EQUIPMENT! USE EXTREME CAUTION WHEN MOVING EQUIPMENT THAT IS UNBALANCED, THE TRACTOR AND IMPLEMENT ARE MORE LIKELY TO TIP.

- Connect the hydraulic hoses to the tractor. Be sure to not fold the wings before removing the lock pins! Adjust the tractor hydraulic flow for the desired speed of raise and lower. It is recommended to raise and lower the wings at a slower rate for the operator to view the work area and to make sure that no one is in the work area.

All operators must read and understand the operator's manual before they attempt to connect the implement to the tractor or operating implement. Read and understand all operator's manuals for machinery used in conjunction with the Stacking Toolbar.

Before each use, check all pins and hardware for wear and correct torque. Replace damaged or missing hardware with hardware of an identical grade to restore implement to original specifications.

IMPLEMENT TO TOW VEHICLE CONNECTION



AVOID CRUSHING! DO NOT STAND BETWEEN THE TOW VEHICLE AND THE IMPLEMENT WHEN CONNECTING OR DISCONNECTING THE IMPLEMENT. INJURY OR DEATH CAN OCCUR FROM BEING TRAPPED BETWEEN THE TRACTOR AND IMPLEMENT.

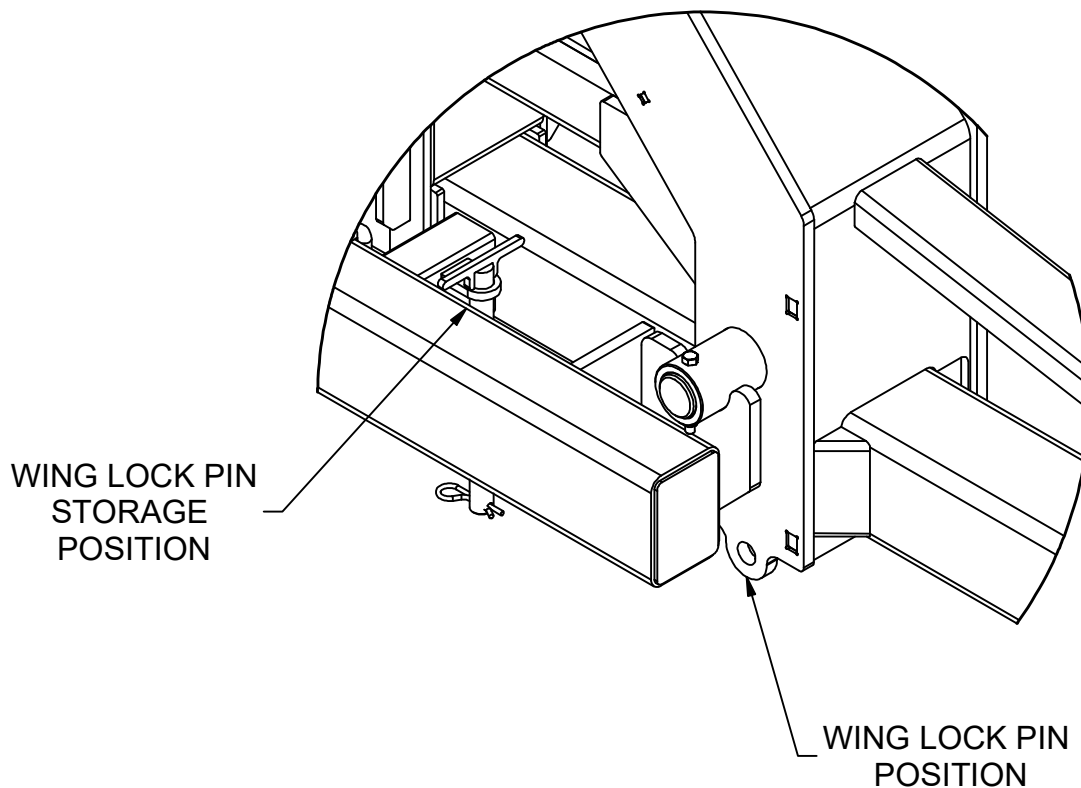
AVOID CRUSHING. Make sure all personnel are clear of the implement. Lower the implement to the ground, place the tow vehicle in park, set the parking brake, turn off the engine, and remove the key.

USE THE IMPLEMENT STANDS TO SUPPORT THE IMPLEMENT. Store the implement on a level, clean, and dry surface. Securely support all implement components that must be raised. Store implement away from any human activity.

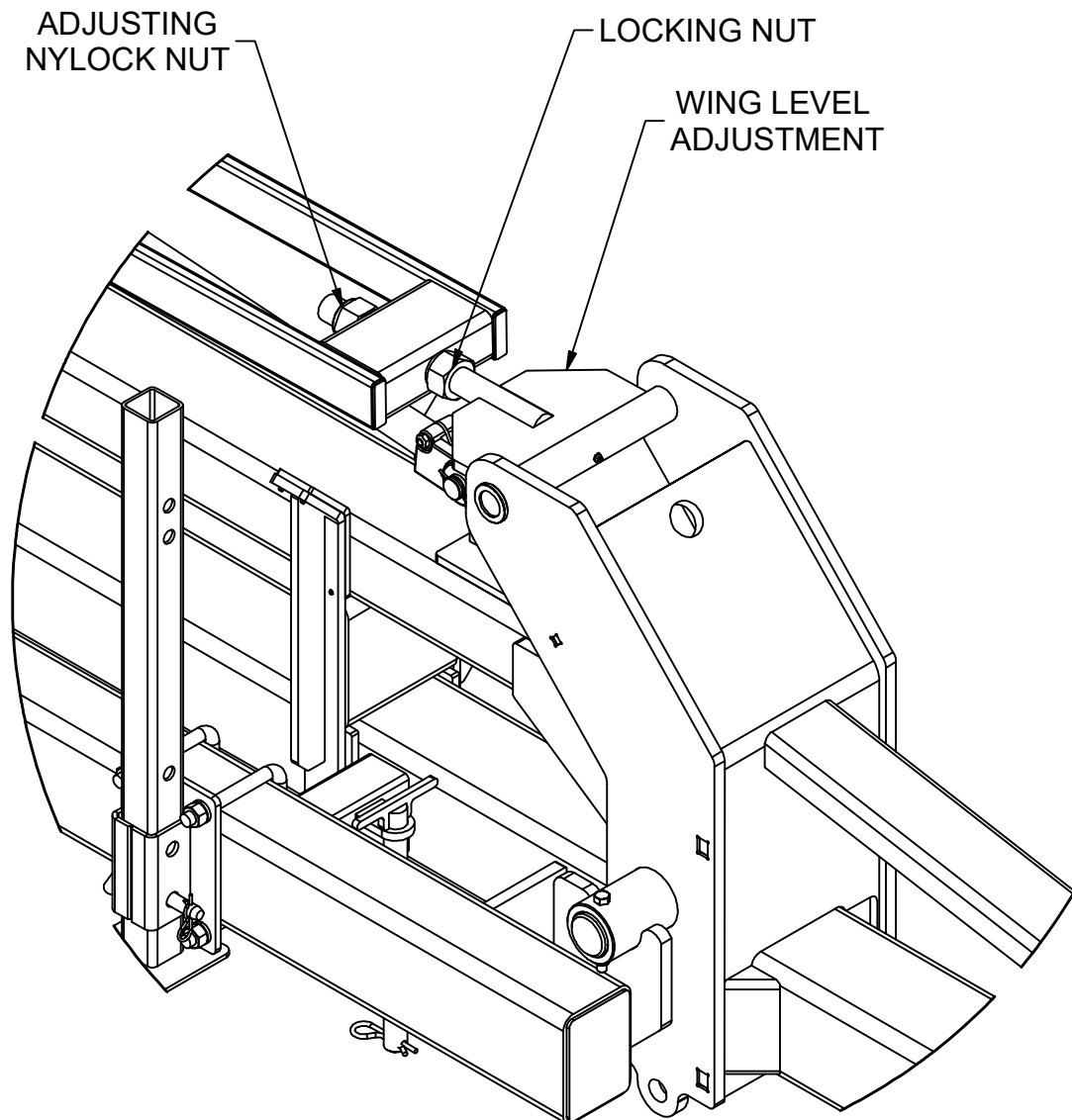
TOOLBAR SET UP AND GETTING THE TOOLBAR READY FOR USE

The Stacking Toolbar is delivered with the wings down and the wing locking pins installed. The wing locking pins must be removed and placed in their storage position before the wings are stack folded.

The wings will stack fold by applying hydraulic pressure with the tractor.



LEVEL THE WINGS



TO LEVEL THE WINGS

- LOOSEN THE LOCK NUT
- TURN THE ADJUSTING NYLOCK NUT TO THE RIGHT OR LEFT TO ADJUST
- TIGHTEN THE LOCK NUT WHEN THE WING IS LEVEL

Field Operation

- Inspect hitch pins and be sure they are not worn excessively. Replace hitch pins if they are worn.
- Make sure the machine is securely attached to the tow vehicle hitch
- Check that the tow vehicle cab hydraulic control configuration is easily accessible and to the preference of the operator.
 - The wing cylinders do not have an orifice to limit flow. The operator **MUST** adjust the hydraulic flow of the tow vehicle to the wing cylinders. Wings should fold and unfold at a slow rate to operate correctly and safely. See the tow vehicle operator manual to adjust flow to hydraulic outlets.
- Be sure the tow vehicle is correctly ballasted for safe operation. Refer to the tow vehicle operator's manual.
- After the machine is attached to the tow vehicle, raise the toolbar and raise the bar stands. Any cylinder lock mechanisms will have to be set in operation mode before operating in the field.
 - The operator can adjust the rate of drop of the 3 point hitch. Adjust the rate so that the machine lowers at a safe rate that will not 'drop' the machine and cause damage.
- Wing lock pins will have to be removed and placed in the storage position to allow the wings to be raised and lowered.
- Once in the field, the wings can be pinned so they are rigid. The pins will have to be removed if the wings are to be raised.
- Correct depth of the machine can be set with adjustment of the gauge wheels and/or from the tractor cab by adjusting the 3-point hitch height.

Torque Data for Standard Nuts, Bolts, and Capscrews

Tighten all bolts to torques specified in chart unless otherwise noted. Check tightness of bolts periodically, using bolt chart as guide. Replace hardware with same grade bolt.

Note: Unless otherwise specified, high-strength Grade 5 hex bolts are used throughout assembly of equipment.

Bolt Torque for Standard Bolts

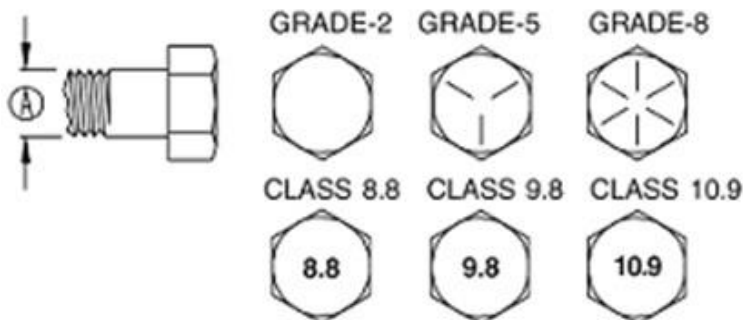
Bolt Size A	Grade 2		Grade 5		Grade 8	
	lb-ft	(N.m)	lb-ft	(N.m)	lb-ft	(N.m)
1/4"	6	8	9	12	12	16
5/16"	10	13	18	25	25	35
3/8"	20	27	30	40	45	60
7/16"	30	40	50	70	80	110
1/2"	45	60	75	100	115	155
9/16"	70	95	115	155	165	220
5/8"	95	130	150	200	225	300
3/4"	165	225	290	390	400	540
7/8"	170	230	420	570	650	880
1"	225	300	630	850	970	1310

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

Bolt Torque for Metric Bolts

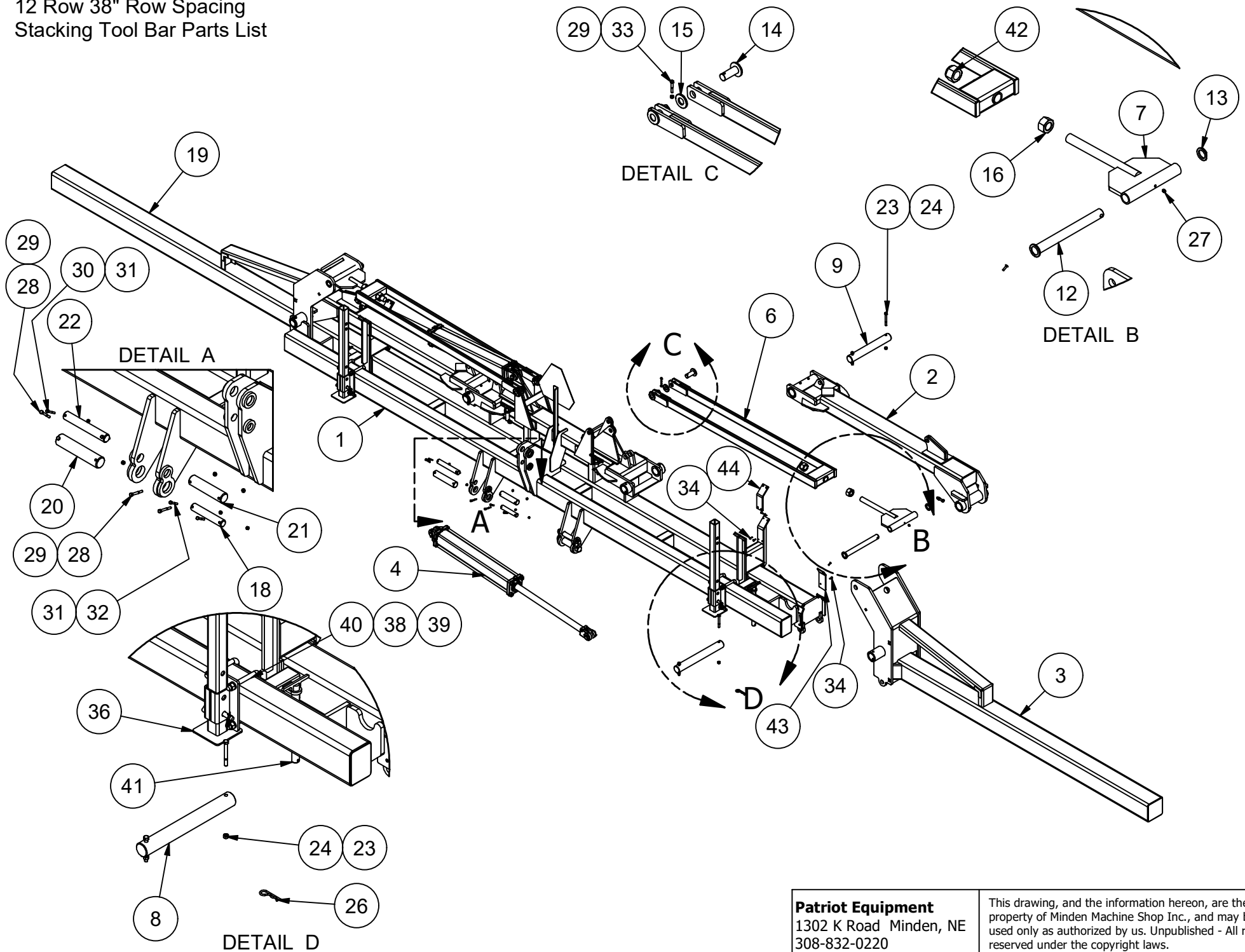
Bolt Size A	Class 8.8		Class 9.8		Class 10.9	
	lb-ft	(N.m)	lb-ft	(N.m)	lb-ft	(N.m)
6	9	13	10	14	13	17
7	15	21	18	24	21	29
8	23	31	25	34	31	42
10	45	61	50	68	61	83
12	78	106	88	118	106	144
14	125	169	140	189	170	230
16	194	263	216	293	263	357
18	268	363	..	..	364	493
20	378	513	..	..	515	689
22	516	699	..	..	702	952
24	654	886	..	..	890	1206

Grade or Class value for bolts and capscrews are identified by their head markings.



Parts Diagrams

12 Row 38" Row Spacing Stacking Tool Bar Parts List



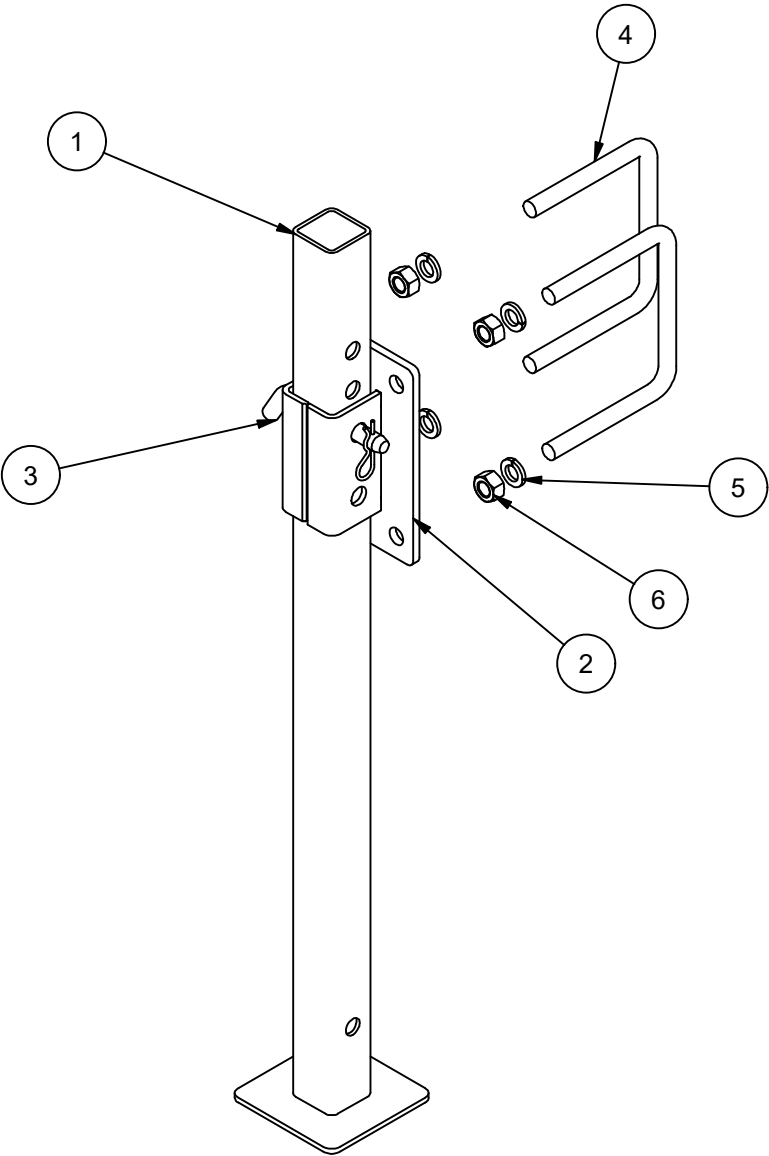
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TB-SB1238 PARTS LIST				TB-SB1238 PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION	ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	TB-SBP1238-A001	12R38 Stacker Bar Center Section	31	6	N1/4NYL	Nylock Nut
				32	2	B1/4x1.75	Hex Bolt
2	2	TB-SBCP-A003	WING TIE TUBE ASSEMBLY	33	4	B5/16x2.0	Hex Bolt
3	1	TB-SBP1238-A003	1238 STACKER WING ASSEMBLY	34	24	B1/4x1.0 HSFCH	Hexagon Socket Flat Countersunk Head Cap Screw
4	2	Hyd. Cylinder 5X30	Hydraulic Cylinder 5 x 30	35	2	TB-SBCP-A011	Lock Pin Wings Down
6	2	TB-SBCP-A007	WING LEVEL ASSEMBLY	36	2	TB-SBCP-A015	Lock Pin Wings in Transport
7	2	TB-SBCP-A008	WING LEVEL ADJUSTMENT	35	1	TB-CP-A052	SMV Mount Assembly
8	2	TB-SBCP-P044	WING PIVOT PIN	36	2	TB-CP-A062	
9	2	TB-SBCP-P045	WING PIVOT PIN INNER	38	8	W3/4L	Lock Washer
12	2	TB-SBCP-A009	WING LEVEL PIN	39	8	N3/4N	Hex Nut
13	2	TB-SBCP-P047	WING LEVEL WASHER	40	4	UB1020	3/4 U-Bolt for 5 x 7 Tube
14	4	TB-SBCP-A010	WING LEVEL PIN	41	2	TB-SBCP-A011	WING LOCK PIN
15	4	TB-SBCP-P050	WING LEVEL SHORT PIN WASHER	42	2	N1-1/2NYL	1 1/2 Std NC Nylock Nut
				43	4	TB-SBCP-P023	Stabilizer Side Replacement Shim
16	2	N1-1/2N	Hex Nut	44	4	TB-SBCP-P086	Replaceable Upper Tube Shim
18	1	TBCP-114-UpperPin	Cat. III Upper Pin				
19	1	TB-SBP1238-A004	1238 STACKER WING ASSEMBLY				
20	2	TB-CP-P105	CAT IV LOWER HITCH PIN				
21	1	TB-CP-P106	CAT IV UPPER HITCH PIN				
22	2	TB-CP-P107	CAT III LOWER HITCH PIN				
23	8	B1/2x4.5	Hex Bolt				
24	10	N1/2DL	Lock Nut				
25	2	B1/2x2.5	Hex Bolt				
26	4	PNCP6667	1/4 X 4 "R" Clip				
27	10	1_8 Pipe Grease Zerk	1/8 Pipe Grease Zerk				
28	6	B5/16x2.5	Hex Bolt				
29	10	N5/16DL	Lock Nut				
30	4	B1/4x2.0	Hex Bolt				

Tool Bar Parking Stand

Parking Stands come in pairs.



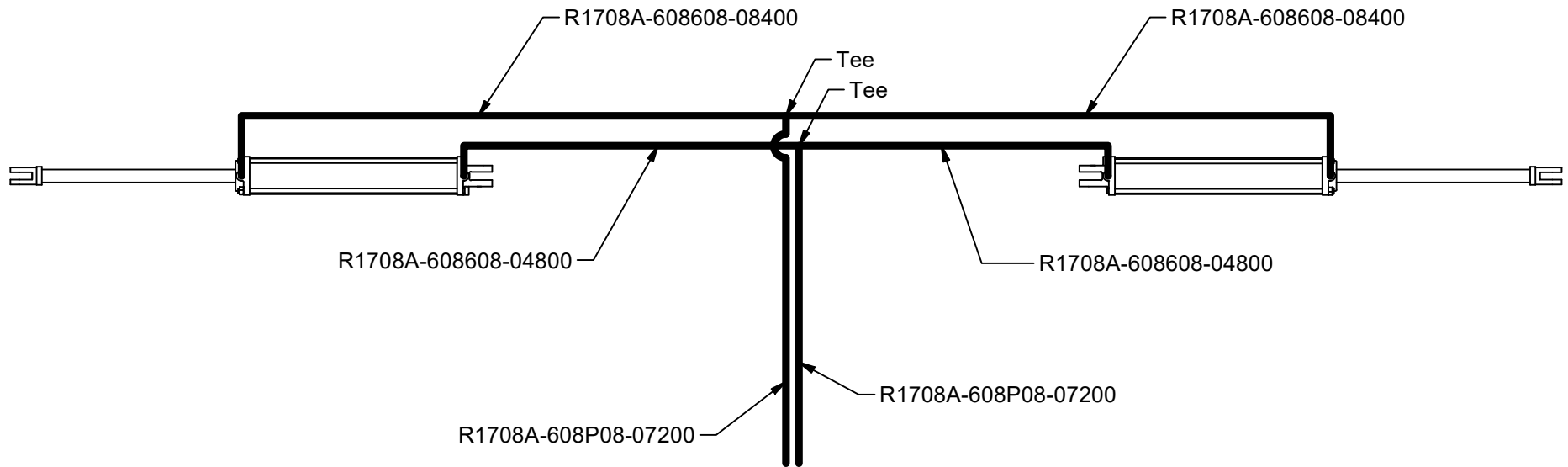
Parts List

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	TB-CP-A007	Tool Bar Stand Assembly
2	1	TB-CP-A008	Tool Bar Stand Mount
3	1	90146A215	3/4" Bent Pin 4-1/2" usable length with hair pin
4	2	UB1020	3/4x7x6.5 U-bolt
5	4	W3/4L	Lock Washer
6	4	N3/4N	Hex Nut

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Hydraulics

12 Row 38 Stackfold Tool Bar Wing Hydraulics Plumbed Together



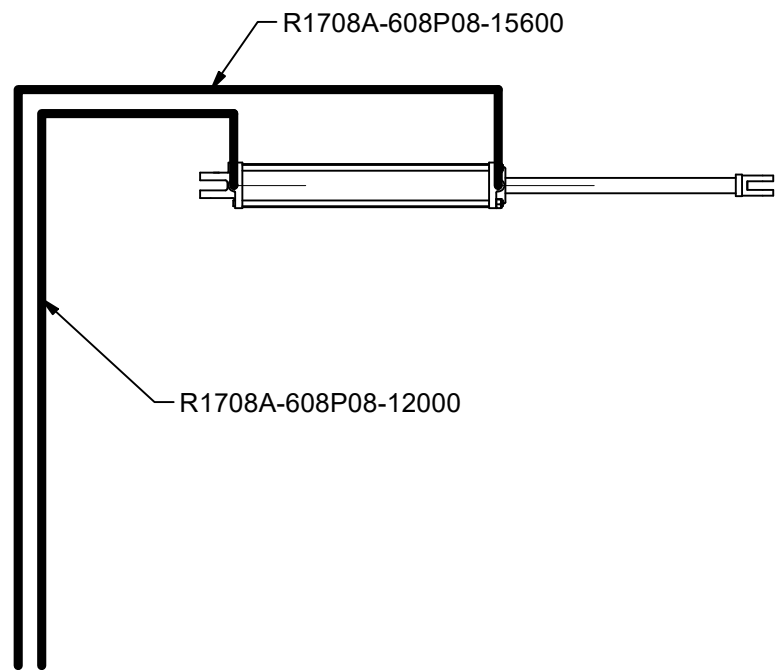
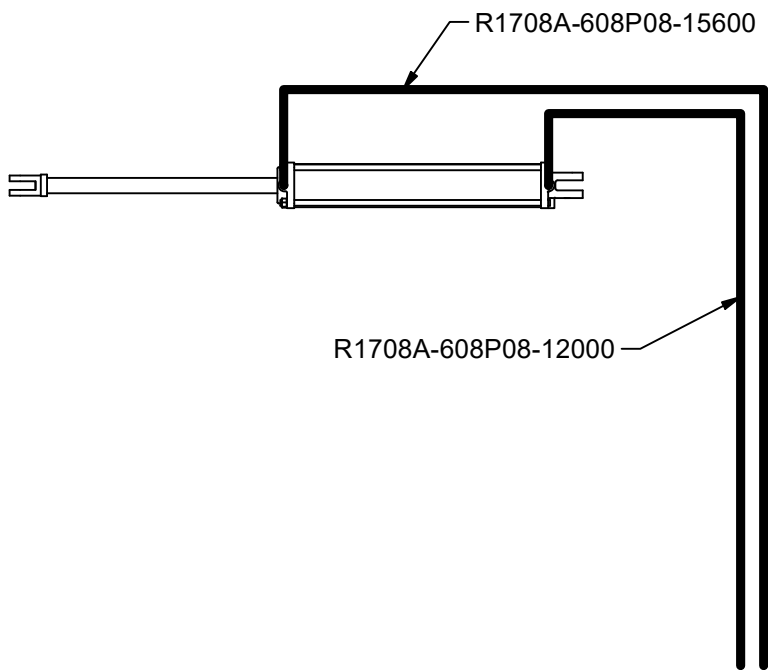
12R30 Tool Bar Hydraulics Together

Part Number	Qty	Description	Location
1216919	4	6801 08 08	Cylinder Fittings
2286034	2	Poppet Style Connector #8 SAE	Tips
1206576	2	2603 08 08 08	Tee (Join Hoses)
5x30 Cylinder	2	5x30 Tie Rod Cylinder, #8 SAE	Wing Folding
Hose	2	R1708A-608608-04800	Inside Cylinder
Hose	2	R1708A-608608-08400	Outside Cylinder
Hose	2	R1708A-608P08-07200	Connecting Hose

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12 Row 38 Stackfold Tool Bar Separate Wing Hydraulics



12R30 Tool Bar Hydraulics Separate			
Part Number	Qty	Description	Location
1216919	4	6801 08 08	Cylinder Fittings
2286034	4	Poppet Style Connector #8 SAE	Tips
5x30 Cylinder	2	5x30 Tie Rod Cylinder, #8 SAE	Wing Folding
Hose	2	R1708A-608P08-12000	Inside Cylinder
Hose	2	R1708A-608P08-15600	Outside Cylinder

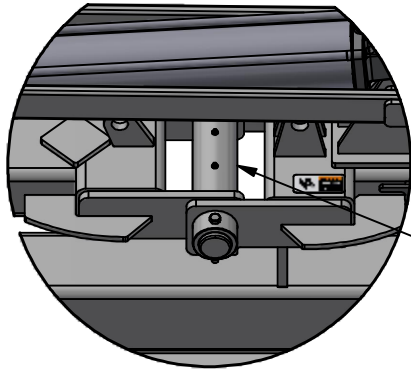
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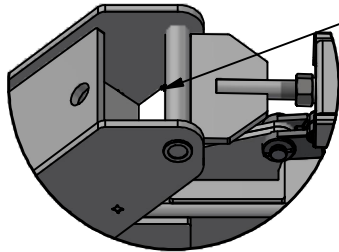
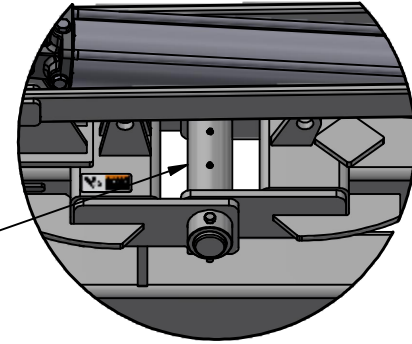
Service and Maintenance

LUBRICATION

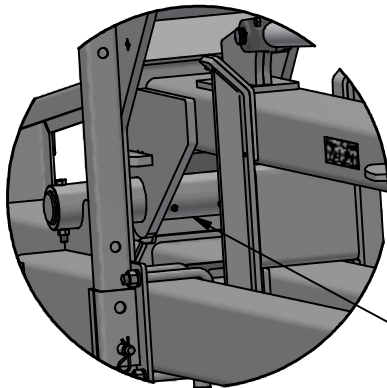
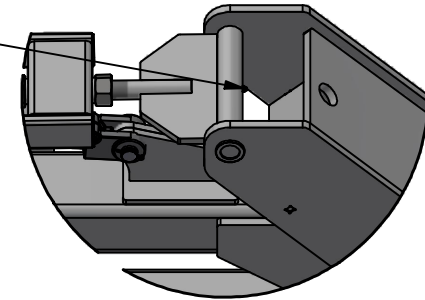
- Grease ten zerks total per 12R38 Stack Fold Toolbar
- Grease - use a high quality multi-purpose grease
- Grease the locations every 50 hours or more frequently depending upon wing fold frequency.



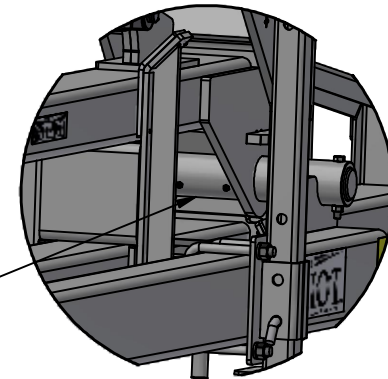
Inner Hinge Grease Zerks



Wing Level Grease Zerk



Outer Hinge Grease Zerks



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Proposition 65

California Proposition 65

The Safe Drinking Water and Toxic Enforcement Act of 1986 (California Proposition 65, commonly known as Prop 65) applies to companies doing business in the State of California. The regulation is administered by the Office of Environmental Health Hazard Assessment (OEHHA) and mandates that no person in the course of doing business shall knowingly expose any individual to a chemical known to the State of California to cause cancer and/or reproductive toxicity without first giving clear and reasonable warning to individuals. If the business can prove that the exposure level poses no significant risk to the end consumer no warning is necessary.

Minden Machine Shop, Inc. is providing the information below to educate about the chemicals that are or could be found in the products that Minden Machine Shop, Inc. produces or uses in their products.

Material	Chemical	CAS #	Cancer, Reproductive Harm or Both?
Cast Iron	Nickel	7440-02-0	Cancer
	Arsenic	7440-38-2	Both
	Cobalt	7440-48-4	Cancer
	Lead	7439-92-1	Both
Steel	Nickel	7440-02-0	Cancer
Stainless Steel	Nickel	7440-02-0	Cancer
Paint Finishes	Carbon Black	1333-86-4	Cancer
	Toluene	108-88-3	Reproductive Harm
	Lead	7439-92-1	Both
Rubber Compounds	Acrylonitrile	107-13-1	Cancer
	Butadiene	106-99-0	Both
	DEHP	117-81-7	Both
EPDM	Carbon Black	1333-86-4	Cancer
Petroleum	Cadmium	-----	Both
Petroleum	Isoprene	78-79-5	Cancer

Additional information on Proposition 65 can be obtained by visiting the State of California's Proposition 65 website:

<https://oehha.ca.gov/proposition-65/about-proposition-65>

Summary of Proposition 65 requirements:

<https://oehha.ca.gov/proposition-65/general-info/proposition-65-plain-language>

Clear and reasonable notice requirements:

<https://oehha.ca.gov/proposition-65/crn/notice-adoption-article-6-clear-and-reasonable-warnings>

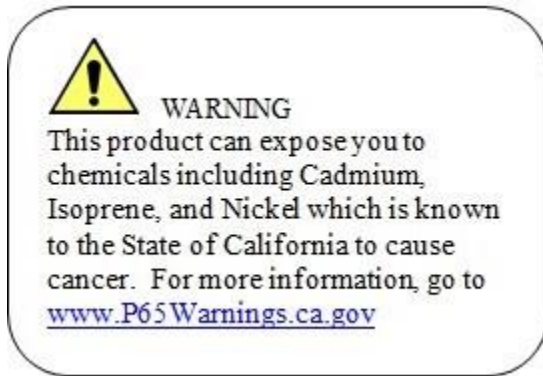
Chemicals and substances regulated by Proposition 65:

<https://oehha.ca.gov/proposition-65/proposition-65-list>

Proposition 65 Laws and Regulations:

<https://oehha.ca.gov/proposition-65/law/proposition-65-law-and-regulations>

Minden Machine Shop, Inc. has placed this decal on our products to alert the user to the possible exposures.



Minden Machine Shop Inc

LIMITED WARRANTY

Minden Machine Shop Inc warrants all products manufactured by it to be free of defect in material and workmanship for a period of one (1) year from the date of purchase.

This Minden Machine Shop Inc. warranty does not cover:

1. Parts and accessories supplied by Minden Machine Shop Inc. but manufactured by others. Minden Machine Shop Inc. will facilitate the other manufacturer warranty for the benefit of the purchaser but will not be bound thereby (example: augers, motors, trailers, tanks, etc.).
2. Products that have been altered by anyone other than a Minden Machine Shop Inc. employee or are used by the purchaser, for purposes other than what was intended at time of manufacture or used in excess of the "built specifications".
3. Products that are custom manufactured by Minden Machine Shop Inc. utilizing the purchaser's design which deviates from Minden Machine Shop Inc. normal production line manufactured or customized features of the products.
4. Malfunctions or damages to the product from misuse, negligence, customer alteration, accidents or product abuse due to incoming material or poor material flow ability or lack of required performance or required maintenance (e.g., poor material flow ability caused by incoming wet fertilizer or hot soybean meal, etc).
5. Loss of time, inconvenience, loss of material, down time or any other consequential damage.
6. Product use for a function that is different than designed intent (e.g., storing soybean meal in grain bin, unacceptable material in the bin such as hot bean meal when product originally designed for other application, etc).
7. Minden Machine Shop Inc is not responsible for any equipment that this product is attached to or mounted on.

To activate this warranty, the purchaser must make contact in writing with Minden Machine Shop Inc. within one (1) year of date of purchase. After contact, Minden Machine Shop Inc. has the right to determine the cause and qualify the legitimacy of the claim. Minden Machine Shop Inc., upon acceptance of a warranty claim, shall have a reasonable time to plan any repair or replacement and may affect repair or replacement out of its factory or through contract with a local repair service. If a purchaser after warranty notice is made, chooses to make the repair itself, Minden Machine Shop Inc. must approve any expenses before they are incurred to be responsible for customer reimbursement. Minden Machine Shop Inc. shall be liable on a warranty claim for repair or replacement of any defective products and this is the purchaser's sole and exclusive remedy. Minden Machine Shop Inc. will not be liable for any other or further remedy including claims for personal injury, property damage or consequential damage. The law of the State of Nebraska shall govern and any such claim and any issues with regard to the same shall be resolved in the Nebraska District Court for the county of Kearney.

RETURN OF MERCHANDISE

Merchandise may not be returned without written approval from the factory. All returns must have a return authorization number. Obtain this number before the return and show it on all return items. A 15% restocking charge is made on merchandise returned. Returned merchandise must be shipped pre-paid.

RECEIVING MERCHANDISE AND FILING CLAIMS

When receiving merchandise it is important to check both the number of parts and their description with packing slip. The consignee must make all claims for freight damage or shortage within 10 days from the date of delivery.

When the material leaves the factory it becomes the property of the consignee. It is the responsibility of the consignee to file a claim on any possible damage or loss. Please list your preferred routing on purchase orders.

MODIFICATIONS

It is the policy of Minden Machine Shop Inc. to improve its products whenever possible and practical to do so. We reserve the right to make changes, improvements and modifications at any time without incurring the obligation to make such changes, improvements and modifications on any equipment sold previously.

WARRANTY REGISTRATION

To register equipment, or file a claim, copy and paste the words on this page into an email or word document, fill out the appropriate information completely, and email it to larry@mindenmachine.com with the subject as EQUIPMENT WARRANTY, or fill it out and fax it to 308-832-1340.

Dealer Information: Not Applicable, check here: []

Dealer Name:

Address:

City:

State:

Zip Code:

Phone #:

Email:

End User Information:

Purchaser:

Address:

City:

State:

Zip Code:

Phone #:

Email:

Equipment:

Serial #:

Date Of Purchase: / /