

Wil-Rich 357 Inline Ripper



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1 Introduction

Wil-Rich 357 Inline Ripper

Congratulations on the choice of a Wil-Rich 357 Inline Ripper to complement the farming operation. These implements are ideal for heavy residue conditions, featuring a strong, rugged design to penetrate even the hardest ground.

All persons authorized to operate this implement are responsible for reading and understanding the contents of this Operator's Manual, especially the Safety Section. The owner or operator (user) should seek assistance from the dealer, distributor or manufacturer for any information not fully understood regarding the safe operation adjustment, maintenance, or repair of this implement.

The user is responsible for inspecting the machine and for having components repaired or replaced when continued use of this product would cause damage or excessive wear to other components.

Keep this Operator's Manual in a clean, dry place that is easily accessible for reference when more detailed information is required to perform tasks related to the operation, adjustment, maintenance, or repair of this implement. It is further recommended that the contents of this Operator's Manual be reviewed at least annually by persons operating, adjusting, maintaining, or repairing this implement, and any time a new person is assigned to any of the above mentioned tasks.

Any information in this Operator's Manual that is not fully understood should be clarified by contacting the dealer, distributor, or manufacturer and requesting assistance.

The contents of this Operator's Manual are accurate up to the time of printing.

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

Address inquiries to:

- Väderstad Inc. PO Box 1030, Wahpeton, ND 58074
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1.1 Description of the Machine

The Wil-Rich 357 Inline Ripper is available with rigid or spring reset options, plus multiple shank options, such as parabolic, minimal disturbance, and low disturbance shanks. The box frame design provides the 357 Inline Ripper with superior strength and adjustable gauge wheels have eight settings to ensure uniform working depth in all soil types and conditions.

Three styles of shanks are available. Choose from 1.25" (3.2 cm) wide parabolic shanks, 1.25" (3.2 cm) wide low disturbance shanks, or 0.75" (1.9 cm) wide minimal disturbance shanks. Depending on the shanks used, multiple ripper options are available, ranging from 3 - 8" (7.6 - 20.3 cm).

Additional options include a massive 4,250 lb (1,928 kg) twin reset trip assembly that keeps shanks in the ground, 20" (51 cm) spring-loaded coulters to easily slice through residue and a pull type hitch featuring hydraulic lift wheels. A three-point rigid mount hitch is also available.

1.2 Intended Use

Your Wil-Rich 357 Inline Ripper was designed to give you years of satisfactory performance. As with any tillage unit this machine was designed to operate within defined capabilities. For the best performance and reliability an understanding of this range of operation is important.



All references to "LEFT" and "RIGHT", as used throughout this manual, are determined by facing the direction of the machine's normal forward travel when in use.



Some images in this Operator's Manual may show the machine with shields removed to better show the subject of the picture. The implement must NEVER be operated with any of the shields either opened or removed. Ensure that ALL shields are attached, closed and in good working condition prior to operating the Wil-Rich implement.

1.3 Illustrations of the Machine



Figure 1.1 Wil-Rich 357-8FF (Front)



Figure 1.2 Wil-Rich 357-8FF (Rear)

Introduction

1.4 Machine Serial Number

[Refer to Section “2.13.1 Location of Safety Signs on page 13” for more information on the location of the safety decals and the serial number plate.](#)

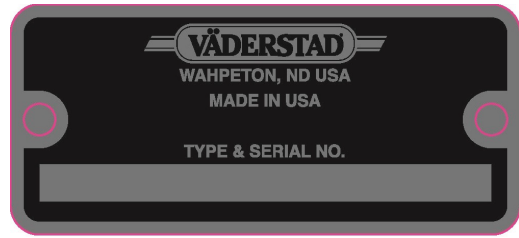


Figure 1.3 Serial No. Decal

1.4.1 Serial Number Data Sheet

Record the machine model and serial number in the spaces provided below. Use these numbers when contacting the dealer for repair parts, warranty or service assistance.

Serial Number(s)

Implement(s) Serial Range: 0000000000 - 0000000000		
Implement	Model	Serial Number(s)
Ripper		
Other		

1.5 Technical Data Sheet

Table 1.1 Technical Data Sheet: 2025 357 Inline Ripper (3-Point Mounted Rigid Models)

Models	3-5 Shank 3-Pt. 30"	5 Shank 3- Pt. 30"	5-7 Shank 3-Pt. 30"	4 Shank 3- Pt. 30"	4-6 Shank 3-Pt. 30"	8 Shank 3- Pt. 30"
Dimensions						
Working Width, ft (m)	12.5 (3.8)	12.5 (3.8)	17.5 (5.3)	10.0 (3)	15 (4.6)	20 (6.1)
Shank Spacing, in (cm)	30 (76)	30 (76)	30 (76)	30 (76)	30 (76)	30 (76)
Transport Width, ft (m)	10.8 (3.3)	10.8 (3.3)	16.2 (4.9)	10.8 (3.3)	14.3 (4.4)	20.2 (6.1)
Transport Height, ft (m)	-	-	-	-	-	-
Weight, lbs (kg)	1,222 (554.2)	1,190 (539.8)	1,875 (850.5)	1,190 (539.8)	1,529 (693.5)	1,840 (834.6)
Specifications						
Number of Shanks	5	5	7	4	6	8
Horsepower Requirement	175 – 250	175 – 250	245 — 350	140 — 200	210 — 300	280 — 400

Table 1.2 Technical Data Sheet: 2025 357 Inline Ripper (Folding Models)

Models	8 Shank 3-Pt. 30" (Flat Fold)
Dimensions	
Working Width, ft (m)	20 (6.1)
Shank Spacing, in (cm)	30 (76)
Transport Width, ft (m)	12 (3.7)
Transport Height, ft (m)	11 (3.4)
Weight, lbs (kg)	2,607 (1,182.5)
Specifications	
Number of Shanks	8
Horsepower Requirement	280 — 400

Table 1.3 Technical Data Sheet: 2025 357 Inline Ripper (Folding Over Models)

Models	12 Shank Pull 30"
Dimensions	
Working Width, ft (m)	30 (9.1)
Shank Spacing, in (cm)	30 (76)
Transport Width, ft (m)	16.4 (4.6)
Transport Height, ft (m)	15 (4.6)
Weight, lbs (kg)	6,909 (3,133.9)
Specifications	
Number of Shanks	12
Horsepower Requirement	420 — 600

2 Safety

2.1 Safety Alert Symbols

2.1.1 Safety Information

The Safety Alert Symbol(s) are intended to direct the attention of the machine user to important safety information both published in the Operator's Manual and applied to the machine. Any time Safety Alert Symbol(s) are seen, it means that associated information is provided for recognizing, appropriately responding to and avoiding potentially hazardous situation(s).

A triangle shape surrounding an exclamation point indicates a potentially hazardous situation. Information included in a safety sign or printed in the Operator's Manual describes the hazardous situation and indicates appropriate response(s) and / or avoidance procedures.

This Safety Alert Symbol means:



Attention Be Alert!



DANGER! Indicates an imminently hazardous situation that, if not avoided, **WILL** result in death or serious injury if the proper precautions are not taken.



WARNING! Indicates a potentially hazardous situation that, if not avoided, **COULD** result in death or serious injury if the proper precautions are not taken.



CAUTION! Indicates a potentially hazardous situation that, if not avoided, **MAY** result in minor or moderate injury if the proper practices are not taken, or, serves as a reminder to follow appropriate safety practices.



NOTE! Used to clarify information.



IMPORTANT! The information next to this symbol may be worth noting since it is a hint containing particularly useful information on how to handle the machine. Failure to follow these notices may result in damage to the machine.

2.2 Safety Sign Information

Safety Sign Legibility: All safety signs applied to the implement must be visible and legible. Keep dust and dirt cleared from safety signs and ensure that visibility is not obscured.

Safety Sign Replacement: Safety signs may be ordered through the dealer or distributor. Contact Väderstad Inc. if unable to obtain replacement safety signs from a dealer or distributor.

Damaged or Deteriorated Safety Signs: Remove and replace any safety signs that have either been damaged or show signs of deterioration.

Safety Signs on Replacement Parts: Ensure that parts or components that are replaced on the implement that had a safety sign attached originally include a safety sign.



For parts and decal replacement, contact your local dealer parts department.





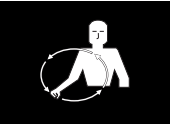
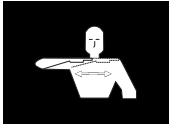
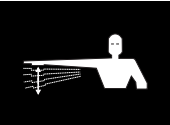





Affixing Safety Signs to the Implement

1. Ensure proper position and orientation before installing.
2. Ensure installation area is clean and dry.
3. Ensure ambient temperature is above 50°F (10°C).
4. Remove backing material to expose label adhesive.
5. Place one edge of label to machine surface.
6. Slowly press the label onto the surface.
7. Ensure no air pockets are present or become trapped under surface or label. To remove air pocket, pierce the bubble in the label with a pin, this will let the trapped air out, and then press the label down.

2.3 Hand Signals

Hand signals are an important means of communication on farms where noise levels and distance can hinder regular communication between workers. These 11 hand signals were created so that two or more persons can communicate effectively and safely.

Table 2.1 Hand Signals

	Lower Equipment: Make a circular motion with either hand pointing to the ground.		Raise Equipment: Make a circular motion with either hand at head level.
	Come to me: Raise the arm vertically overhead, the palm to the front, and rotate in large horizontal circles.		This far to go: Place palms at ear level facing the head and move laterally inward to indicate remaining distance to go.
	START THE ENGINE: Simulate cranking of vehicles by moving arm in a circular motion at waist level.		STOP THE ENGINE: Draw right hand, palm down, across the neck in a “throat cutting” motion from left to right.
	Slow it down / decrease speed: Extend the arm horizontally to the side, palm down, and wave arm downward 45 degree minimum, repeat.		Speed it up / increase speed: Raise the hand to the shoulder, fist closed, thrust the fist upward to the full extent of the arm and back to the shoulder rapidly, repeat several times.
	Move-Out: Face the desired direction of movement, hold the arm extended to the rear; swing it overhead, forward in the direction of the desired movement until it is horizontal, palm down.		Move toward me / follow me: Point toward person(s), vehicle(s), or unit(s) beckon by holding the arm horizontally to the front, palm up, and motioning toward the body.
	Stop: Raise hand upward to the full extent of the arm, palm to the front. Hold that position until the signal is understood.		To perform any / or all of these signals, stand out of the pathway of the moving implement.

2.4 Operator Responsibilities

Responsibility for the safe operation, adjustment, maintenance and repair of this machine falls to the main user. It is the responsibility of the owner, or authorized person in charge, to ensure all persons who operate, adjust, maintain and/or repair this implement be familiar with the information provided in this Operator's Manual before performing any other tasks listed above.

A safe user is the key to safety. Good safety practices not only protect the user, but also persons who may be in the vicinity of the implement. Make good safety practices a part of the farming operation. Ensure that all persons operating, adjusting, maintaining and/or repairing this implement are familiar with the procedures recommended in this manual.

Always read safety warnings and follow recommended safety precautions to avoid hazardous situations. DO NOT risk personal injury or death by ignoring safety warning and safety precautions.

2.4.1 Key Safety Reminders

The most important safety device is a safe and qualified user.

A safe and qualified user is one who has read and understands the contents of the Operator's Manual prior to performing any tasks related to the machine. Owners have a responsibility to provide training to persons who may operate, adjust, maintain and/ or repair the implement prior to performing any of these tasks.

DO NOT perform any unauthorized modifications to the implement or use the implement for any purpose other than what is described in the contents of this Operator's Manual.

Owners must give operating instructions to operators and employees before allowing them to operate the implement, and at least annually thereafter per OSHA regulation 1928.57.

2.5 General Safety

Read and understand the contents of this Operator's Manual prior to operating, adjusting, maintaining and/or repairing the implement. Review at least annually thereafter.

Locate, read and understand all safety signs applied to the implement before performing any tasks.

Review the contents of this Operator's Manual at least annually, and, any time a new person is assigned to perform any tasks with the implement.

Ensure that all bystanders, especially small children, and pets/animals are kept at a safe distance while performing any tasks with the implement. Keep all personnel away from moving parts.

Do not stand between the tractor and implement to install the hitch pin while the tractor engine is running.



DO NOT allow riders on any part of the implement.

When parking, park the machine and the tractor on a solid level surface. Put all controls in neutral and apply the tractor park brake. Stop the tractor engine and take the key with you.

Always lower the machine when not in use and relieve the pressure in the hoses and cylinders.

Ensure all guards and shields are intact and in place prior to operating the implement.

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

Stop the engine, lower the implement, set the parking brake, remove the ignition key, and allow time for moving parts to stop prior to adjusting, maintaining, and/or repairing the implement.

Ensure that all implement lighting and marking is intact, secure, clean and operating properly prior to traveling on public roads. Check with local highway authorities to confirm implement is properly equipped for highway travel.

Provide a fully stocked First-Aid Kit in a highly visible and easily accessible location.

Ensure a fire extinguisher is available for use should the need arise and that the operator is familiar with its proper use.

Clear the implement of any and all foreign objects before beginning operation.

Ensure that the implement is securely blocked and supported prior to working underneath.

Do not work with the machine during thunderstorms and when there is a risk of lightning strikes. Do not stand on or next to the machine.

Always wear suitable ear protection for prolonged exposure to excessive noise.

Use caution when working around high pressure hydraulic systems.

Reduce speed when cornering on field ends and when operating on or across dead furrows.

Do not attempt to remove any obstruction while the machine is in motion.

Use extreme caution when operating close to ditches, fences or on hillsides.

No one other than the operator should ride on the tractor.

In the event of a fire in a crop / field setting, use a water type fire extinguisher or other water source. For fires involving anything other than crop, such as oil or electrical components. Use a dry chemical fire extinguisher with an ABC rating.

2.6 Maintenance Safety

Read and understand all information provided in the Operator's Manual covering operation, adjustment, maintenance and repair prior to performing any of these tasks. Plan work to ensure proper tools, equipment, and personal protective equipment is available prior to working on implement.

Wear appropriate clothing when performing tasks around implement. Ill-fitting and/or frayed clothing as well as loose or dangling items should not be worn when working near the implement.

Stop the engine, lower the implement, set the parking brake, remove the ignition key, and allow time for moving parts to stop prior to adjusting, maintaining, and/or repairing the implement.

Ensure that all moving parts have come to a complete stop before performing adjustments, maintenance and/or repairs.

Ensure that hydraulic oil pressure in hoses, lines, and components is fully relieved prior to performing any maintenance, and/or repairs.

Ensure that wings are either fully lowered or fully raised and secured using transport/cylinder locks (if equipped) or securely block the wings if raised to perform adjustments, maintenance and/or repairs as needed.

Securely block main frame and/or wings (any raised components) if adjustments, maintenance, and/or repairs are required.

Wear personal protective equipment, such as gloves, eye protection, etc. when inspecting the hydraulic system for leaks. Use a small piece of cardboard or wood to detect leaks.

Ensure that all guards and shields are intact and in place after performing adjustments, maintenance and/or repairs prior to operating implement.

Store flammable fluids in approved containers and store out of access by unauthorized persons, especially children.

Replace the safety chain if one or more links or end fittings are broken, stretched or otherwise damaged or deformed.

Do not allow children or other unauthorized persons within the implement operational area.

Do not modify the equipment or substitute parts in any way. Unauthorized modification may impair the function and / or safety of the machine.

Use a suitable lifting device for components which could cause personal injury by pinching, crushing or weight. Be sure lifting device is rated to handle the weight.

Always inspect lifting chains and slings for damage or wear.

Ensure all hydraulic connectors are cleaned of any dirt or debris regularly to ensure proper connection to tractor.

2.7 Hydraulic Safety

Always place all tractor hydraulic controls in neutral before dismounting.

Ensure that all hydraulic system components are kept clean and in proper working condition.

Relieve pressure before working on hydraulic system.

Use a piece of cardboard or wood to check for hydraulic leaks.

Wear personal protective equipment, such as gloves, eye protection, etc. if unsure if residual pressure may exist in hydraulic components during troubleshooting and/or making repairs.

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

Check hydraulic hoses regularly for wear and tighten/replace as needed. Contact your local Dealer parts department to purchase replacement hoses specifically designed for Wil-Rich machines.

When connecting the hoses to the cylinders, tubings or fittings; always use one wrench to prevent the hose from twisting and another wrench to tighten the union. Excessive twisting will shorten hose life and loosen hose fittings.

DO NOT attempt any makeshift repairs to the hydraulic lines, fittings or hoses by using tape, clamps or cements. The hydraulic system operates under extremely high-pressure. Such repairs will fail suddenly and create a hazardous and unsafe condition.

Do not over-tighten hydraulic fittings, excessive torque may cause them to crack.

Always contact the nearest Wil-Rich dealer or service professional when replacing hydraulic hoses.

When replacing hoses always route hoses the same as the one being replaced to ensure that the part is not subjected to wear, rubbing, kinking, etc. Make repairs following instructions provided by the manufacturer.

Ensure all fittings, couplings, and other hydraulic connections are intact and properly tightened before operating implement hydraulic system.



DO NOT touch pressurized hose assemblies with any part of the body. If fluid punctures the skin, seek immediate medical attention.

Hydraulic fluids are highly flammable. Always keep open flames and ignition sources away from hydraulic fluids.

2.8 Electrical Safety

Ensure that the machinery is shut off and all electrical components are disconnected before doing any work on the machine. Ensure all live connections are not receiving power.

Check electrical wires regularly for wear related to usage and weathering. Replace any damaged wires or components immediately.

Use insulated tools whenever performing service to any electrical system or components and always wear proper protective equipment.

2.9 Transport & Towing Safety

Read and understand ALL the information in the Operator's Manual regarding procedures and SAFETY when moving the implement in the field / yard or on the road.



DO NOT allow riders on any part of the implement.

Ensure that implements are attached to the tractor properly.

Ensure transport cylinder locks are in place and functioning properly (if equipped).

Ensure safety tow chain is securely attached and retaining clip is securely locked in place.

Ensure all lighting and implement marking devices are intact and visible.

Ensure implement is properly marked according to local road regulations.

Read and follow all local road traffic regulations.



DO NOT exceed recommended transport speeds (*Maximum: 20 mile/hr / 32 km/hr for wheel-driven machines, 15 mile/hr / 24 km/hr for track-driven machines*). The implements are not designed for high speed use. Ensure all local traffic rules/regulations are followed. Reduce speed and use caution when making corners and meeting traffic.

Make sure you understand the speed, steering, stability and load characteristics of this machine before you travel on public roads. Use good judgement when traveling on public roads. Maintain complete control of the machine at all times. Never coast down hills.

Be aware that the implement is wider than the tractor when transporting. Always have the wings completely folded (if equipped) when transporting on public roads.

Watch for overhead wires and other obstructions. Avoid contact with electrical power lines. Contact with electrical power lines can cause electrical shock, resulting in very serious injury or death.

Make sure SMV (Slow Moving Vehicle) emblem and all lights and reflectors that are required by the local highway and transport authorities are in place, are clean and can be seen clearly by all overtaking and oncoming traffic.

Keep to the right and yield the right-of-way to allow faster traffic to pass. Drive on the road shoulder, if permitted by law.

Always use hazard warning flashers on tractor when transporting unless prohibited by law.

Frequently check for traffic, especially during turns.



Always bring the machine to a complete stop before folding/unfolding. Switching between transport and working positions while in motion may result in damage to the implement.



When in working position, ensure wing fold cylinders are fully extended prior to field operation.

2.10 Storage Safety

Store the implement away from areas of human activity.



DO NOT allow children to play on or around the implement(s).

Store the implement on a dry, stable, and level surface away from areas of human activity. Support with planks if required.

2.11 Tire Safety

Ensure tire inflation pressure is maintained per specifications.

Do not attempt to mount a tire unless you have the proper equipment and experience to do the job.

Follow proper procedures for tire repairs, especially when mounting tire to the rim.

Seek assistance from a trained person for tire repairs or mounting, especially if specialized equipment is required.

2.12 Hazards

The key is to recognize hazards while working or living on a farm; avoid dangerous situations or at least minimize the exposure to them.

This section deals with danger points on agricultural equipment; those areas which can entangle, pinch, crush, or shear clothing and limbs. Possible danger points could be wing fold points, hydraulic cylinders and hydraulic lines on many types of equipment.

A slow-moving hydraulic arm can be as hazardous as a rapidly rotating power take-off shaft.

Recognize the dangers!

The first step to avoiding danger is to recognize that hazards exist. Identify the specific hazards associated with the equipment.

The next step is to consider how to use the equipment. Using it for tasks it was meant to perform? Following all safety precautions recommended by the manufacturer?

Most machinery accidents result from human error. The operator either forgot something, took a shortcut, ignored a warning, wasn't paying close attention, or failed to follow safety rules. Be familiar with the operator manual, know the limitations of the equipment, and follow safety measures automatically.

Carefully evaluate the operation of each implement for safety before starting work.

Check equipment guards.

Check guards on all equipment as part of a routine maintenance schedule. During seasons when equipment is used heavily, check guards more often.

Equipment guards cannot eliminate all injuries.

A transport lock will only work if it is engaged prior to road transport, and will not prevent accidents if it is not engaged.

Recognize secondary hazards.

Many farm injury victims recognize hazardous situations, but they misjudge the seriousness of the hazard because of secondary factors.

For example, spilled grain or debris in an unloading area could cause someone to slip and fall into the intake auger. Icy, muddy, or manure-covered surfaces make the work area slick and increase the risk of injury. Bystanders or children in the work area can distract the operator, or limit operator vision.

Never stand near the machine during operation. Debris can be thrown from the machine during operation possibly resulting in injury.



Be careful when operating along the side of a road or building. Rocks or other debris can be thrown from the machine during operation possibly resulting in injury.

High pressure hydraulic oil is a major hazard. Any leaks in the hydraulic system must be treated as a dangerous situation and should be dealt with accordingly.

Consider human factors.

Farm operators can overestimate their ability to stop or avoid a dangerous situation. This is common when operators work around powerful equipment every day and become comfortable with their ability to control the machinery.

Operators are also limited by their reaction time. Human reaction time is not quick enough to avoid an injury with machinery.

Gravity as well is faster than human reaction. For example, it is very dangerous to reach underneath the wing of a machine if the transport/safety locks are not correctly in place. If a hydraulic line breaks, gravity could pull the machine wings to the ground very quickly, crushing the operator.

Manufacturers have built safeguards into equipment but all hazards cannot be removed. Take a realistic approach to equipment safety and think about these principles for the operation of all machinery.

- Be aware of the dangers. Read the operator manuals and think about how to use the equipment.
- Regularly repair and replace protective guards or shields on all implements.
- Look for and remove secondary hazards, such as spilled grain or debris.
- Recognize the limitations of the user and the equipment.

Farm Machinery Safety: What to do?

- A few simple actions can reduce the risk of danger around farm machinery.
- Collect operator manuals for all farm equipment and place in a central location. Read the safety section in each manual.
- Evaluate how to anticipate using each implement and identify potential safety hazards not mentioned in the manual.
- Check condition of intake guards and shields on grain augers and other implements.
- Remove debris from grain unloading areas. Shut down equipment when other people enter the area.

2.13 Safety Signs

2.13.1 Location of Safety Signs

The types of safety decals and locations on the equipment are shown below. Safety requires that you familiarize yourself with the various safety decals, the type of warning and the area or particular function related to that area, that requires your safety awareness.



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

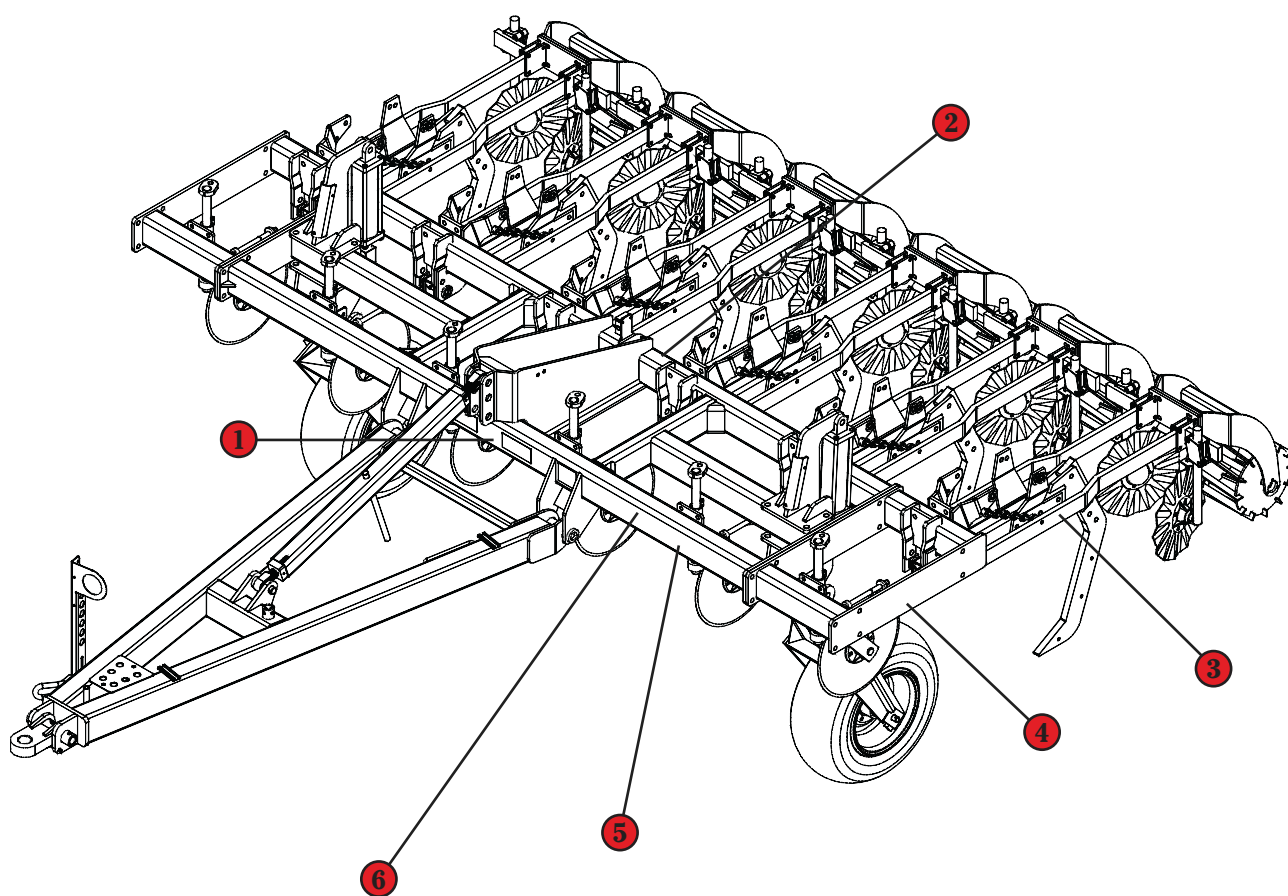


Figure 2.1 Location of Safety Signs

Safety

2.13.2 Safety Lights

2.13.2.1 8 Shank Folding Lights & Reflectors

8 Shank Folding Lights Legend

- (A) Red Light (P/N: 223144)
- (B) Amber Light (P/N: 223143)

[Refer to Section "2.13.3 Decals" for specific information on \(7\) reflectors.](#)

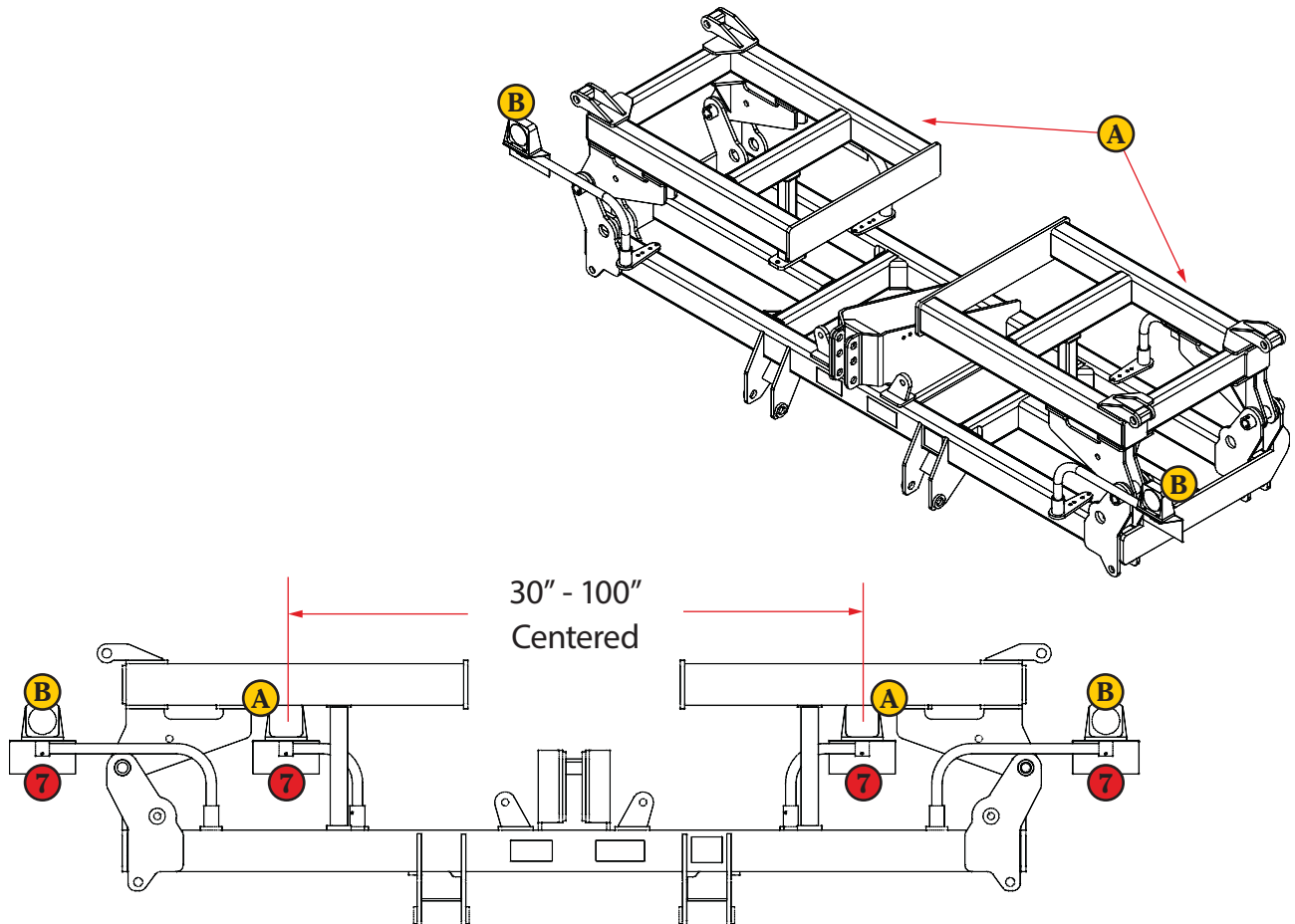


Figure 2.2 8 Shank Folding Lights & Reflectors

2.13.2.2 12 Shank Folding Lights & Reflectors

12 Shank Folding Lights Legend

- (A) Red Light (P/N: 223144)
- (B) Amber Light (P/N: 223143)

[Refer to Section "2.13.3 Decals" for specific information on \(7\) reflectors.](#)

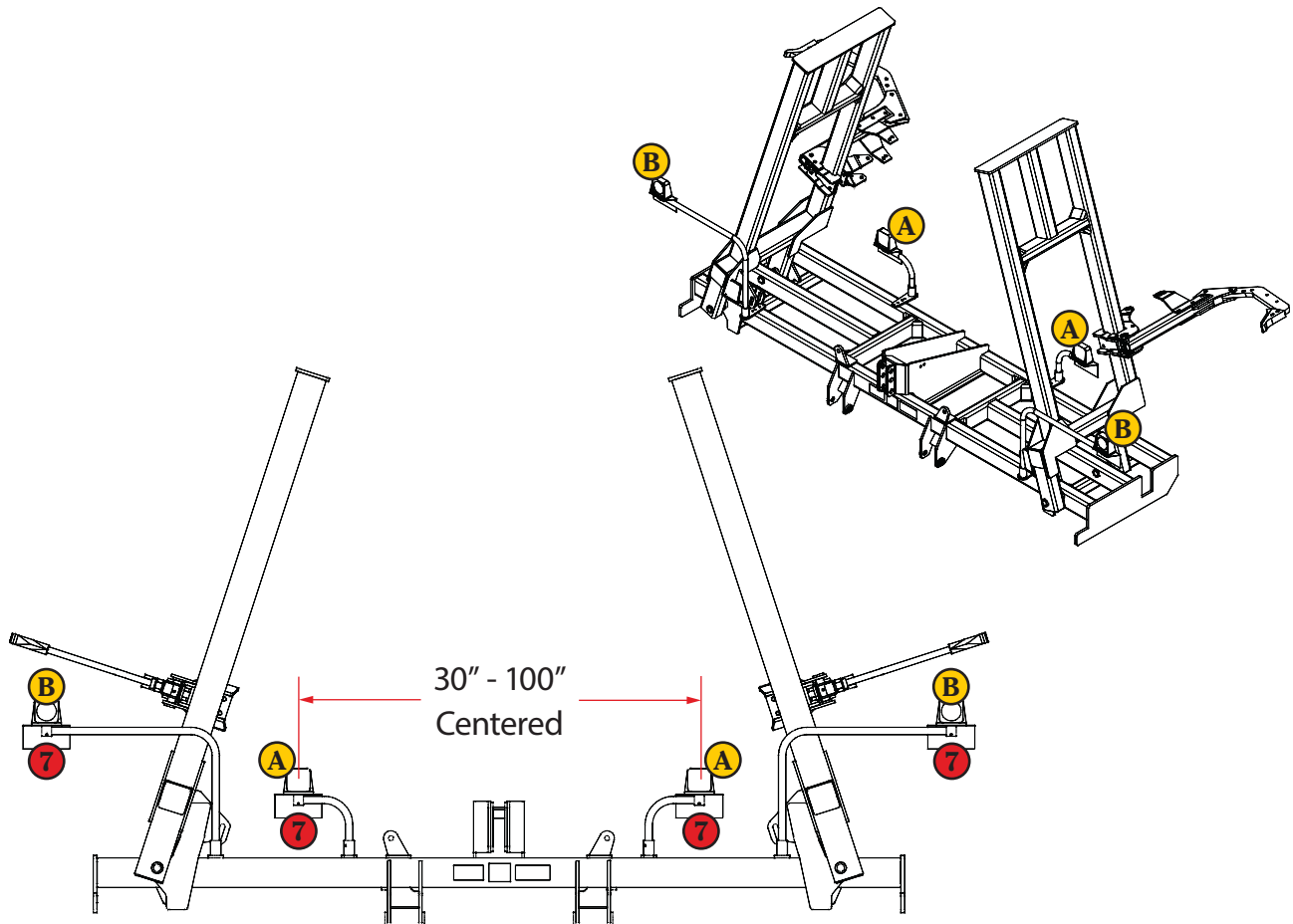


Figure 2.3 12 Shank Folding Lights & Reflectors

Safety

2.13.2.3 SMV Mounting Bracket

The bracket provided is designed to mount to numerous frame sizes and can be orientated in numerous positions to avoid interference with implement components.

- (A) SMV Mounting Bracket

Refer to Section “2.13.3 Decals“ for specific information on (2) the SMV indicator.

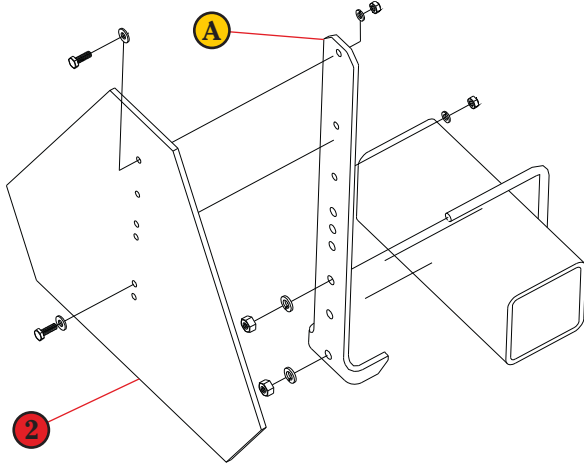
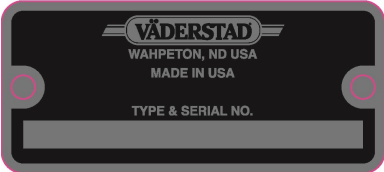







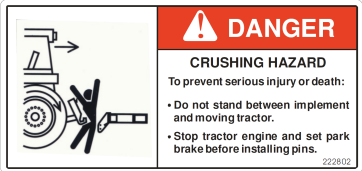


Figure 2.4 SMV Mounting Bracket

The SMV emblem is to be secured as near to the rear and centered, or as near to the left of center of the implement as possible.

Emblem is to be 2' — 6' (0.61 — 1.83 m) above the ground measured from the ground edge of the emblem.

2.13.3 Decals

Decal Image	Decal Name	Pin	Description
	Serial No. Plate	(1)	N/A
	SMV Slow Moving Vehicle Indicator	(2)	Identifies machines as a slow moving vehicle during transport.
	357 Inline Ripper Decal	(3)	Branding decal.

Decal Image	Decal Name	Pin	Description
	Wil—Rich Decal	(4)	Branding decal.
	<p>CAUTION Read to Avoid Injury Decal</p>	(5)	<p>Always lower the implement before servicing or when not in use.</p> <p>Do not allow anyone to ride on the implement. Keep everyone clear of tractor and implement while in use or while tractor is running.</p>
	<p>WARNING Read to Avoid Injury/ Machine Damage Decal</p>	(6)	<p>Read operator's manual.</p> <p>Use clean hazard flashers and SMV sign during transport and observe traffic regulations.</p> <p>Lower or block elevated components before performing maintenance.</p>
	<p>DANGER Crushing Hazard</p>	(7)	<p>Do not stand between implement and moving tractor.</p> <p>Stop tractor engine and set park brake before installing pins.</p>
	Red Reflector	(8)	<p>Variations:</p> 

3 Operation

3.1 To the Operator

Wil-Rich 357 IR comes in 3PT and pull type models only. Sizes are 4, 5, 6, 7, and 8 shank.

This machine is designed to operate at a maximum depth of 20 inches (50.8 cm). When operating in previously tilled soil, where top surface is loosened, the points could penetrate deeper. When determining operating depth the condition of the soil surface should be considered.

Operating depth is a decision which each user must make fit into their individual tillage strategy. It is recommended to till two to three inches below the depth of the hardpan.

The depth of the hardpan can be determined by looking at the cross section of most soils. Another procedure would be to till three to four inches deeper than the field is normally worked during primary tillage. This should give good breakup of the ground although the type of soil, soil moisture content, speed of operation, etc. will affect the breakup.

The reset shank assemblies are designed to hold at working depth until the trip pressure is exceeded. At that point the shank will trip up and back until the shank point pressure is relieved. There are three factors which determine shank load; depth of operation, speed of travel and soil condition. Soil condition refers to moisture content, type of soil, previous tillage operation and the presence of rocks.

The shank point load must exceed approximately 2500 lbs. (1133.98 kg) to trip. The trip uses the spring location and design to achieve the trip pressure. Once the shank has tripped only the spring force is available to reset the assembly.

To resist the shank point pressure, in the operating range specified, requires the high trip force is counter balanced by the operating conditions. However, higher speeds, deeper tillage depths, or tough soil conditions can transfer shock load to the machine and tractor which can eventually lead to component failure.

This is most likely to occur in rocky conditions and being aware of the factors noted previously will add to the reliability and performance of the machine.

Since the rest of the shank assembly is dependent on the force of the springs it is also affected by the factors noted. In most conditions the springs should move the shank assembly back to working position. If the unit is operating at the high end of any of the areas noted, the shank assembly may hesitate resetting into the ground. This is no different than any other spring reset assembly, as any design can be overpowered.

It should be noted that a shock load is present on resetting, with the same effects as noted above.

Overloading a tillage machine is as inefficient as overloading a tractor.

3.2 Hydraulic Connections

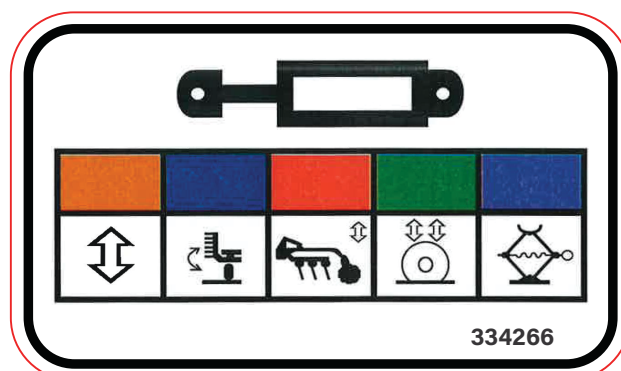


Figure 3.1 Tillage Hydraulic Connection Decal

3.3 Preparation

3.3.1 Tractor Preparation

[Refer to the operator's manual furnished with your tractor for recommended adjustments and weight distribution.](#)

Adjust the sway blocks to allow lateral flexibility, when in operation.



Sway must be locked out during transport.

3.3.2 Torque Check

Before using the implement a careful inspection must become routine.

Check to be sure that all hardware is securely tightened and moving parts properly lubricated.

It is recommended that all wheel bolts be checked for tightness before and after use. Paint or dirt can work out causing the wheel to become loose. Check periodically to be sure the wheel bolts are tight.

[Refer to Section "6.2 Standard Bolt Torques on page 32" for torque specifications.](#)

3.3.3 Hydraulics

On all new machines check the hydraulic system to be sure all fittings are tight.

[Refer to Section "6.3 Hydraulic Connection Torques" for hydraulic fitting torque specifications.](#)

3.3.4 Lubrication

[Refer to Section "5.2 Lubrication on page 29" for specific information on machine maintenance and lubrication procedures.](#)

Operation

3.3.5 Tire Inflation

The use of proper air pressure is the most important factor in satisfactory performance and maintenance of the implement tire. Low air pressure will damage the cord body of the tire and cause a series of diagonal breaks in the fabric of the sidewall area.

If the tire buckles or wrinkles, the air pressure must be increased to the point where the sidewall remain smooth while operating. Maximum recommended tire pressure is 52 *psi* (358.53 *kPa*).

Check the air pressure every two or three weeks and do not allow the pressure to drop below the recommended minimum pressure of 20 *psi* (137.90 *kPa*).



DO NOT over-inflate tires.

3.3.6 Bearing Assemblies

Bearing assemblies must be checked periodically for looseness. A loose bearing will cause costly damage after a short period of time. Clean and repack hub and spindle bearings once each season.

3.4 Connecting to the Implement



Never allow anyone between the tractor and implement when connecting or disconnecting until the implement is completely supported on the 3-point hitch, the engine is stopped and the park brake is applied.

1. Use the jack (A) to align the implement tongue (B) with the tractor drawbar (C). Slowly back the tractor onto the tongue (B) and install the pin (D).
2. Retract the jack until the implement tongue and hitch are supported by the tractor. Remove the pin (E) and remove the jack.

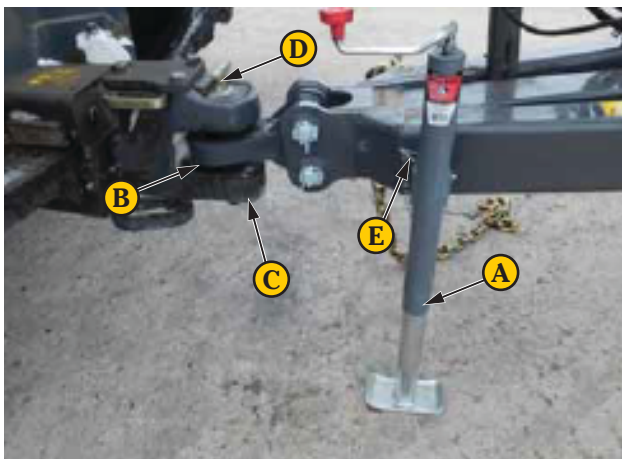


Figure 3.2 Connecting the Implement I



Be sure the pin mechanical lock device is in place. The device may be a pin lock plate as shown or a cross pin on the drop pin.

3. Install the jack (F) in the storage position on the drawbar as shown. Secure with the pin (G).



Figure 3.3 Connecting the Implement II

4. Install the safety chain (H) as shown.



Be sure the safety chain lock (I) is secured.

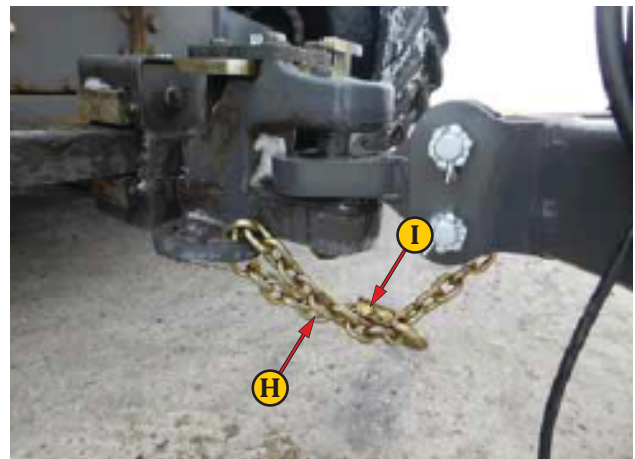


Figure 3.4 Connecting the Implement III

5. Install the hydraulic hoses on the tractor. Be sure the hose couplers are secured in the tractor couplers.
Refer to "Figure 3.1 Tillage Hydraulic Connection Decal on page 19".



Figure 3.5 Connecting the Implement IV

6. Install the safety light connector (J) on the tractor.



Figure 3.6 Connecting the Implement V

3.5 Transporting

1. A Slow Moving Vehicle (S.M.V.) emblem must be used at all times while traveling on public roads.

Be sure all safety lights are working. Obey all local, state and federal laws for lighting requirements.

2. Always fold the wings up before transporting (if equipped)



If the implement has been stored or out of operation for months or if hydraulic wing cylinders have recently been replaced perform the following procedure.

Fold and unfold the wings several times and hold the hydraulic lever in the extended position for 30 seconds each time to purge air from the system.

3. Be sure the wings are resting securely on the wing supports (if equipped).
4. Raise the implement. Shut off the engine, apply the park brake and remove the key from the tractor. Install the cylinder locks and pins (if equipped).
5. Start the engine and lower the main frame onto the cylinder locks (if equipped).



Always bring the machine to a complete stop before folding/unfolding. Switching between transport and working positions while in motion may result in damage to the implement.



When in working position, ensure wing fold cylinders are fully extended prior to field operation.

Operation

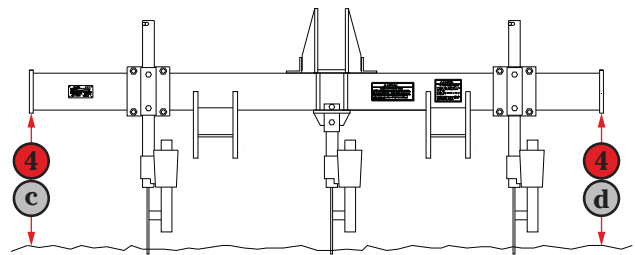
3.6 Leveling



Front to rear leveling is done with the tractor control arms. [Refer to Tractor's Operator Manual for specific information.](#)



Gauge wheels will carry a restricted portion of the machines weight. The gauge wheels are to stabilize the Ripper from side to side.



Leveling Legend

- (A) 3 Point Link
- (B) Bottom Link

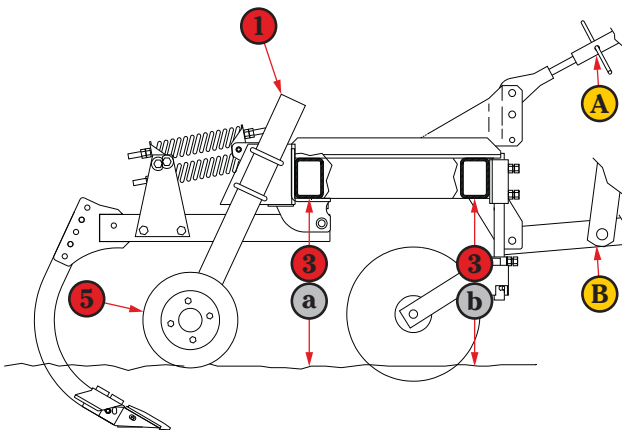


Figure 3.7 Leveling I

Figure 3.8 Leveling II

Leveling Procedure

1. Move gauge wheels up as far as possible and lock in place.
2. Move unit into field & lower to desired working depth.
3. Measure (a), measure (b) in center of implement, if measurements are different adjust tractor's 3-point link. [\(See Tractor's Operator's Manual\)](#)
4. Measure (c), measure (d) in same location on both sides, if (c) is different than (d) adjust the tractor's bottom link. [\(See Tractor's Operator's Manual\)](#)
5. Lower gauge wheels evenly from side to side. Adjust the gauge wheels evenly from side to side.

3.7 Coulters Settings & Shank Depth



The primary purpose of the coulters is to knock down and cut up trash for easier flow through shanks.

Coulters adjustments are limited to coulters depth and down pressure. At shallower depths coulters may need to be lowered to provide the best cutting action.

1. Coulters adjustments can be made to move the coulters up and down. This is done by loosening (2) set screws and turning the acme bolt.
2. If coulters blade is running on top of the soil the down pressure needs to be increased. Do this by tightening the adjustment nut.
3. The only adjustments on the minimum disturbance shank is by removing these two bolts and moving the shank up. The Grade 8 bolt goes in the top holes while the bottom hole has a fully threaded tap Grade 5 bolt. The parabolic shank has no adjustments. When using the minimum disturbance shank when working depth is 16" (40.64 cm) or less, the shank should be set in the upper position, when the working depth is 17" to 20" (43.18 to 50.8 cm) the shank should be set in the lower position. This will insure proper coulters depth.



To avoid injury when working on or around coulters blades care must be exercised in handling or tightening bolts near blades.



Coulters should be run at maximum depth at all times to help prevent wear on shanks.

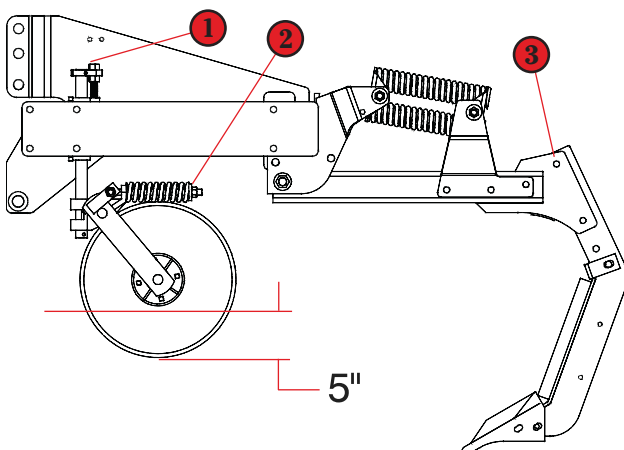


Figure 3.9 Coulters Settings & Shank Depth

3.8 3PT Hitching Categories

Wil-Rich 357 IR will hitch to a Category II or Category III Quick Hitch or Category III Free-Link by using hitch pins and spacers.

[Refer to your tractor's operator's manual for exact hitching procedures.](#)

Category II Quick Hitch Legend

- (A) Upper 3PT Pin
- (B) Lower 3PT Pin
- (C) Spacer 1-7/8 OD x 1-1/2 ID x 2.81 Long

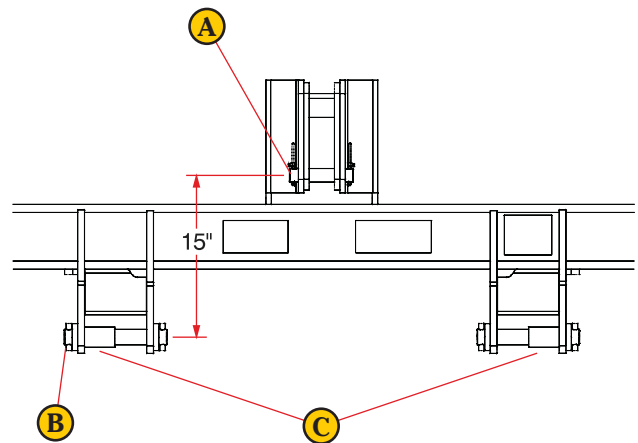


Figure 3.10 Category II Quick Hitch

Category III Quick Hitch Legend

- (A) Upper 3PT Pin
- (B) Lower 3PT Pin
- (C) Spacer 1-7/8 OD x 1-1/2 ID x 2.81 Long

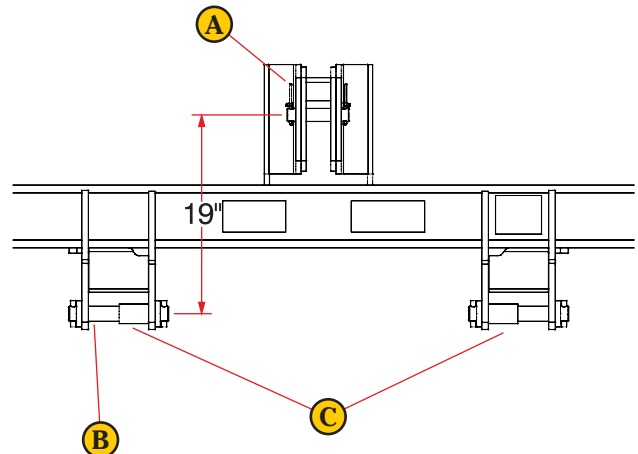


Figure 3.11 Category III Quick Hitch

Operation

Category III Free Link Legend

- (A) Upper 3PT Pin
- (B) Lower 3PT Pin
- (C) Spacer 1-7/8 OD x 1-1/2 ID x 2.81 Long

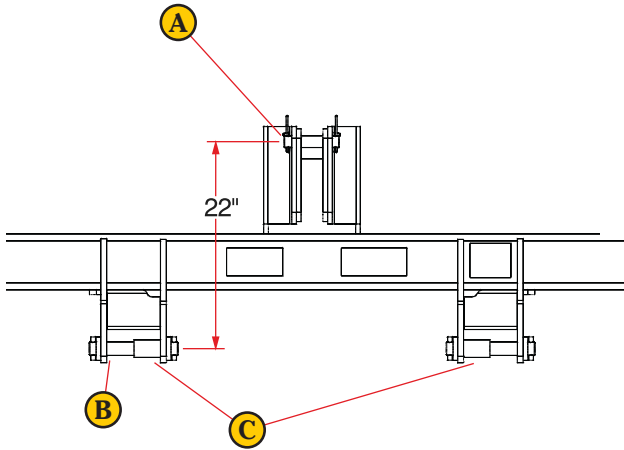


Figure 3.12 Category III Free Link

3.9 Miscellaneous

3.9.1 Safety Chain

Use a drawbar pin with provisions for a mechanical retainer.

Attach a safety chain before moving.

The safety chain should be hooked long enough to permit full turns. Unnecessary slack should be taken up.

Safety Chain Legend

- (A) Safety Chain
- (B) Safety Chain Mount

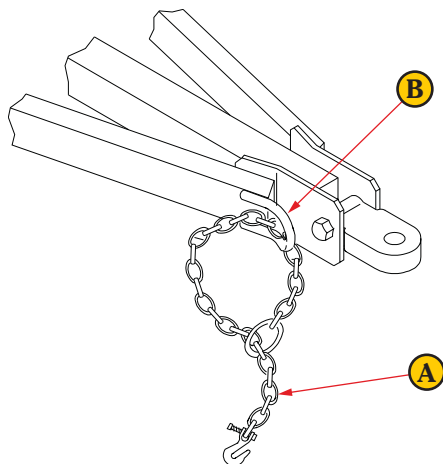


Figure 3.13 Clevis End to Tractor

Intermediate support is to be used if there is more than 6” of unsupported chain on either side of the primary attaching point.

The intermediate support should not be mounted more than 6” from the primary attaching point.

Intermediate Support Legend

- (A) Intermediate Support
- (B) 6” (15.24 cm) Max

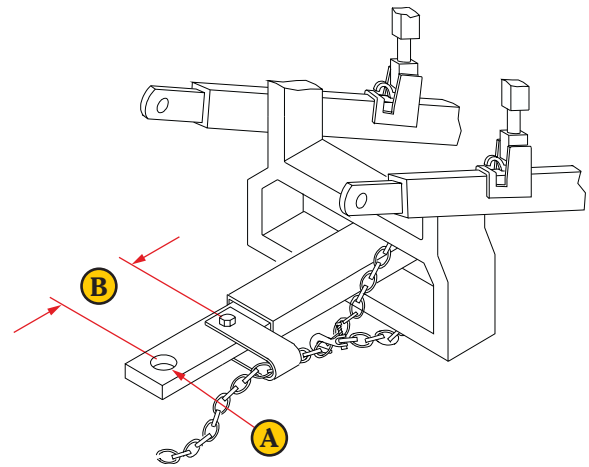


Figure 3.14 Intermediate Support

The intermediate support is available from your Wil-Rich dealer.

Keep to the right and yield the right of way to allow faster traffic to pass. Drive on the road shoulder, if permitted by law.

Always use hazard warning flashers on tractor when transporting unless prohibited by law.

Do not allow riders.

Do not exceed 20 mph (32 km/h) during transport.

3.9.2 Storage



If possible store your machine inside.

At the end of the season, clean implement thoroughly to remove any trash, soil or dirty grease which could hold moisture and cause rusting. Repaint any shipped, bare or rusted areas to prevent any further deterioration. Inspect the machine and adjust or replace as required.

See your Wil-Rich dealer for any parts and/or service which may be needed.

Thoroughly lubricate all grease fittings at the end of the season’s use and again before the first operation of the next season.

Coat the coultter blades with a good rust preventative. Coat the points with grease and place boards under the points and coultters to prevent components from settling into the ground. Keep direct sunlight off the tires.

Carefully rotate coultters to check for worn or damaged blades, damaged bearings and other parts which may need replacing.

4 Troubleshooting

4.1 Troubleshooting the 357 Inline Ripper

Table 4.1 Troubleshooting the 357 Inline Ripper

Possible Cause	Solution
Unit will not go into the ground.	
Incorrect leveling of machine when at operating depth.	Refer to Section “3.6 Leveling on page 22”.
Worn points.	Replace point.
Shanks will not reset.	
Not enough spring pressure.	Use optimal front hole settings for spring assembly. (Refer to Section “3.7 Coulter Settings & Shank Depth on page 23”)
Shearing shear bolts.	
Working speed to fast.	Slow down.
Too much spring pressure.	Use optimal front hole settings for spring assembly. (Refer to Section “3.7 Coulter Settings & Shank Depth on page 23”)
Breaking points.	
Working speed to fast.	Slow down.
Unit bouncing side to side.	
Too much weight on 3PT.	Lower gauge wheels. Refer to Section “3.6 Leveling on page 22”.

5 Maintenance

5.1 Maintenance Schedules

Coulter Assemblies

- Grease coulters daily.
- Periodically check the coulter assembly for loose or bent components that will cause excessive wear on parts.
- Clean off any dirt or grease that may accumulate on moving parts at regular intervals.



To avoid injury when working on or around coulter blades care must be exercised in handling or tightening bolts near blades.

Main Frame 3PT

- Periodic checks must be made to assure that all nuts and bolts remain securely tightened. Loose hardware is easily bent or lost and can cause excessive wear on parts. Replace any bent or broken bolts as soon as they are discovered.
- Clean off any dirt or grease that may accumulate on moving parts at regular intervals. This will prevent any abrasive action which could cause excess or premature wear. Thoroughly inspect the implement for loose or broken parts and adjust or replace as necessary.
- It is important that the implement be regularly lubricated as recommended to obtain the most efficient operation. Proper lubrication helps prevent down time due to excessive wear and increase machine life.

Gauge Wheel Assemblies

- Tighten spindle nuts so that there is a slight drag on the wheel when turned by hand.
- Each hub and spindle assembly comes with a grease fitting installed in the hub. These must be greased once a week during steady use.



DO NOT over grease the gauge wheel assemblies.

Shank Assemblies

- Grease daily when operating with moderate to heavy tripping and every other day with light tripping.
- Clean off any dirt or grease that may accumulate on moving parts at regular intervals. This will prevent any abrasive action which could cause excess or premature wear. Thoroughly inspect the shank assembly for loose or broken parts and adjust or replace as necessary.
- Point Maintenance:
 - Soil types greatly effect the point life. Check points daily for wear, damage and loose mounting hardware.

5.2 Lubrication

Lubrication Points Legend

- **(A)** Lift Wheel Hub
 - (1) Zerk located on each wheel hub.
- **(B)** Hitch Adjuster
 - (2) Zerks, (1) on each side of the hitch adjuster.
- **(C)** Lift Wheel Pivot
 - (1) Zerk on front of each assembly.
- **(D)** Front Hitch Ear
 - (1) Zerk on top of the tow ear.

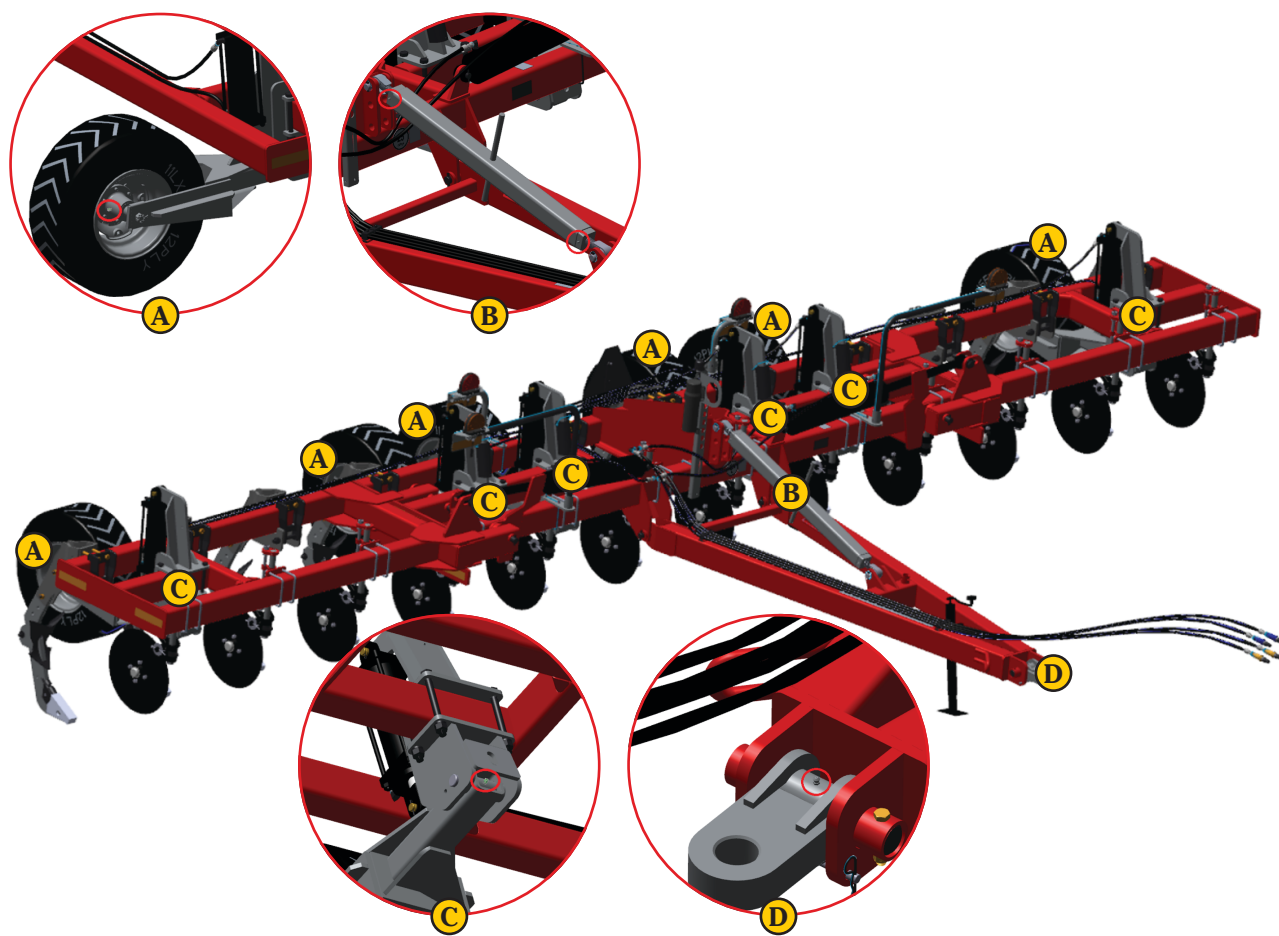


Figure 5.1 357 IR Lubrication Points

6 Specifications

6.1 Implement Specifications

Table 6.1 2025 357 Inline Ripper Specifications I

Models	4 Shank 3-Pt. 30"	5 Shank 3-Pt. 30"	3-5 Shank 3-Pt. 30"	4-6 Shank 3-Pt. 30"
Dimensions				
Shanks	4	5	5	6
Shank Spacing	30" (76.2 cm)	30" (76.2 cm)	30" (76.2 cm)	30" (76.2 cm)
Frame Extensions	-	-	-	1'9" (0.53 m) (2)
Frame Width	129-9/16" (3.29 m)	129-9/16" (3.29 m)	129-9/16" (3.29 m)	129-9/16" (3.29 m)
Cutting Width	120" (3.05 m)	150" (3.81 m)	150" (3.81 m)	180" (4.57 m)
Transport Width	130" (3.30 m)	130" (3.30 m)	130" (3.30 m)	172" (4.37 m)

Table 6.2 2025 357 Inline Ripper Specifications II

Models	5-7 Shank 3-Pt. 30"	8 Shank 3-Pt. 30"	8 Shank 3-Pt. 30" (Flat Fold)	12 Shank Pull 30"
Dimensions				
Shanks	7	8	8	12
Shank Spacing	30" (76.2 cm)	30" (76.2 cm)	30" (76.2 cm)	30" (76.2 cm)
Frame Extensions	2'8" (0.81 m) (2)	-	-	-
Frame Width	193-9/16" (4.92 m)	231-5/16" (5.86 m)	229" (5.82 m)	348-3/4" (8.86 m)
Cutting Width	210" (5.33 m)	240" (6.10 m)	240" (6.10 m)	360" (9.14 m)
Transport Width	184" (4.67 m)	242" (6.15 m)	144" (3.66 m)	197" (5.00 m)

Specifications

6.2 Standard Bolt Torques



Failure to follow these instructions may result in personal injury and/or equipment damage.

- Just before and during operation be sure no one is on or around the implement.
- Before activating the hydraulic system, check hoses for proper connections.
- Before lowering the wings for the first time, make sure the entire system has been charged with oil.
- With wings down always install hydraulic cylinder channel lock(s) for transporting.

When tightening bolts, they must be torqued to the proper number (ft-lbs) as indicated in the table unless specified. It is important that all bolts be kept tight.

On new machines, all nuts and bolts must be rechecked after a few hours of operation.

Table 6.3 Bolt Torques

Bolt Diameter	3/8"	1/2"	5/8"	3/4"	7/8"	1"
	(9.53 mm)	(12.7 mm)	(15.88 mm)	(19.05 mm)	(22.23 mm)	(25.4 mm)
Hex Head	9/16"	3/4"	15/16"	1-1/8"	1-5/16"	1-1/2"
	(14.3 mm)	(19.05 mm)	(23.83 mm)	(28.58 mm)	(33.34 mm)	(38.1 mm)
Torque ft/lbs (N.m)						
UNC GR2	18 (24.40)	45 (61.01)	89 (120.67)	160 (216.93)	252 (341.67)	320 (433.86)
UNC GR5	30 (40.67)	68 (92.19)	140 (189.81)	240 (325.39)	360 (488.09)	544 (737.56)
UNC GR8	40 (54.23)	100 (135.58)	196 (165.74)	340 (460.98)	528 (715.87)	792 (1073.81)
UNF GR2	21 (28.47)	51 (69.15)	102 (138.29)	178 (241.34)	272 (368.78)	368 (498.94)
UNF GR5	32 (43.39)	70 (94.91)	168 (227.78)	264 (357.94)	392 (531.48)	572 (775.53)
UNF GR8	48 (65.08)	112 (151.85)	216 (292.86)	368 (498.94)	792 (1073.81)	840 (1138.89)

When replacing a bolt, use only a bolt of the same grade or higher. Except in shear bolt applications, where you must use the same grade bolt.

Bolt Grades

- (A) Bolts with no marking are grade 2.
- (B) Grade 5 bolts furnished with the machine are identified by three radial lines on the head.
 - All U-bolts are grade 5.
- (C) Grade 8 bolts furnished with the machine are identified by six radial lines on the head.

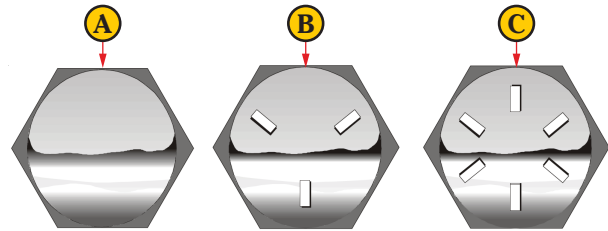


Figure 6.1 Bolt Grades

6.3 Hydraulic Connection Torques

Hydraulic Connection Torques Legend

- **(1)** Straight Thread O-ring Boss (ORB)
 - Example: 12MB — 12MJ is —12 male ORB to —12 male JIC
- **(2)** SAE 37°C (JIC)
 - Example: 8FJ — 8FJ is —08 female JIC

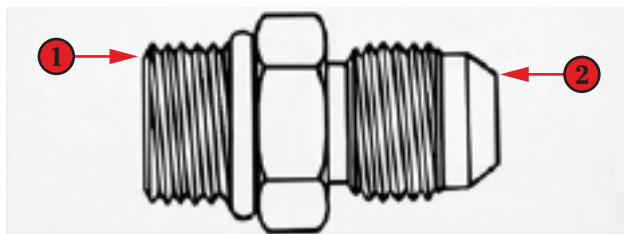


Figure 6.2 Hydraulic Connection Torques



SAE 37° fittings can be damaged if over torqued. Use caution when tightening these fittings.

Table 6.4 Straight Thread O-ring Boss (ORB)

Dash Size	Jam Nut or Straight Fitting Torque	
	ft/lbs	Newton Meters
-04	13 — 15	18 — 20
-05	14 — 15	19 — 21
-06	23 — 24	32 — 33
-08	40 — 43	55 — 57
-10	43 — 48	59 — 64
-12	68 — 75	93 — 101

Table 6.5 SAE 37°C (JIC)

Dash Size	Jam Nut or Straight Fitting Torque	
	ft/lbs	Newton Meters
-04	11 — 12	15 — 16
-05	15 — 16	20 — 22
-06	18 — 20	24 — 28
-08	38 — 42	52 — 58
-10	57 — 62	77 — 85
-12	79 — 87	108 — 119

Specifications

6.4 Hydraulic Circuits

6.4.1 Lift Hydraulics (6, 7 & 8 Shank 30")

- (A) 8FJX - 8F JX Hose 3/8" x 21"
- (B) 8MORB - 8FPT Adaptor
- (C) 8MJ - 8MPT Adaptor
- (D) 8F JX - 8F JX Hose 3/8" x 30"
- (E) 8MJ — 8MJ Union
- (F) 8F JX — 8F JX Hose 3/8" x 78"
- (G) 8MJ — 6F JX Elbow
- (H) 1/2" NPT Pilot Check Valve
- (I) 4MPT — 8FPT Elbow
- (J) 8MJ — 8MJ — 8MORB Tee
- (K) 1-3/4" Stop Package
- (L) 8MORB — 8MJ Adaptor
- (M) Quick Disconnect Coupler
- (N) 8MJX — 8MPT Adaptor
- (O) 8FJX — 8FJX Hose 1/2" x 204"
- (P) 8MJ — 8MJ — 8MJ Tee
- (Q) Flow Divider / Combiner
- (R) 6MJ — 6MORB Adaptor
- (S) 8FJX — 8FJX Hose 3/8" x 65"
- (T) 4" x 12" Hyd Cylinder
- (U) 8MJ x 8FJX Elbow (Used on 8 Shank Folding Units Only)



Cycle cylinders several times before lowering unit onto wheels. This must be done to purge all air out of the system.

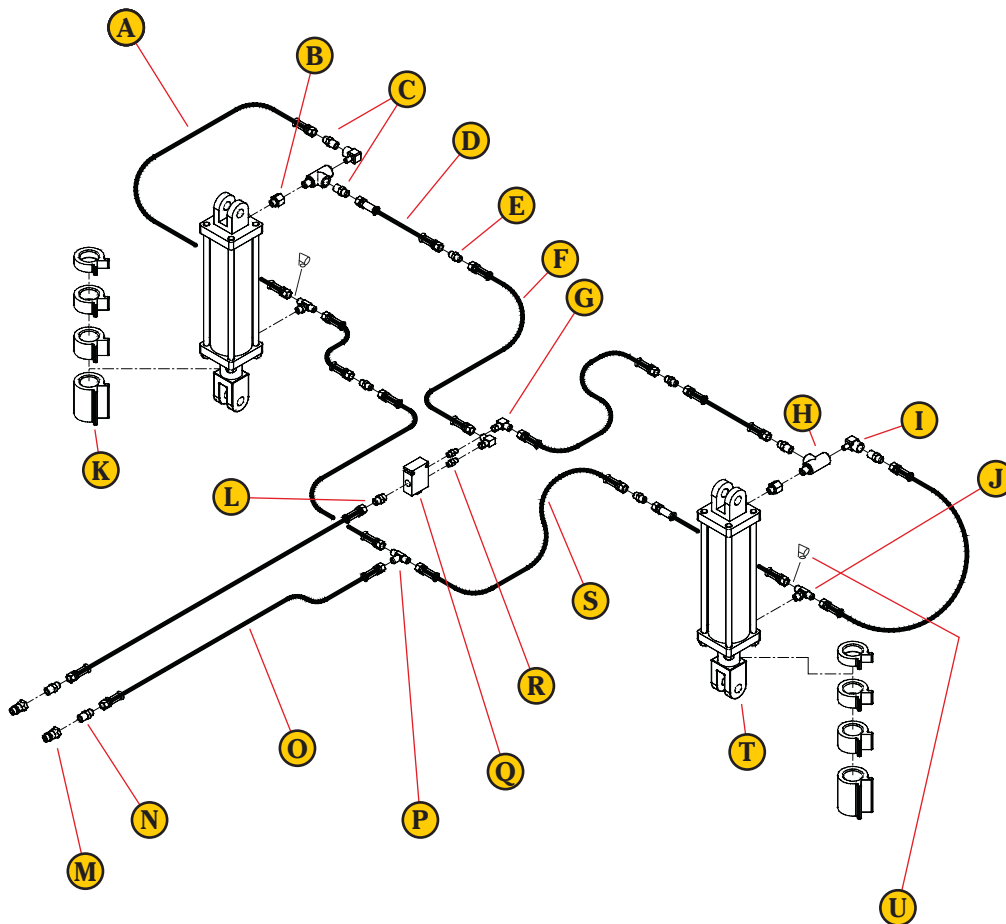


Figure 6.3 Lift Hydraulics (6, 7 & 8 Shank 30")

6.4.2 12 Shank Main Lift Hydraulics

- (A) 4–1/2" x 12" Hydraulic Cylinder
- (B) Hose 3/8" x 180" 8F JX — 8F JX
- (C) Hose 3/8" x 108" 8F JX — 8F JX
- (D) Hose 3/8" x 220" 8F JX — 8F JX
- (E) Hose 3/8" x 137" 8F JX — 8F JX
- (F) Hose 3/8" x 120" 8F JX — 8F JX
- (G) Elbow 8MORB x 8MJ
- (H) 4–3/4" x 12" Hydraulic Cylinder
- (I) Adapter 8MJ x 8MPT
- (J) Quick Disconnect Coupler
- (K) Hose 3/8" x 194" 8FJX — 8FJX
- (L) Tee 8MJ x 8MJ x 8MJ
- (M) Hose 3/8" x 21" 8FJX — 8FJX
- (N) 5" x 12" Hydraulic Cylinder
- (O) Hose 3/8" x 36" 8FJX — 8FJX

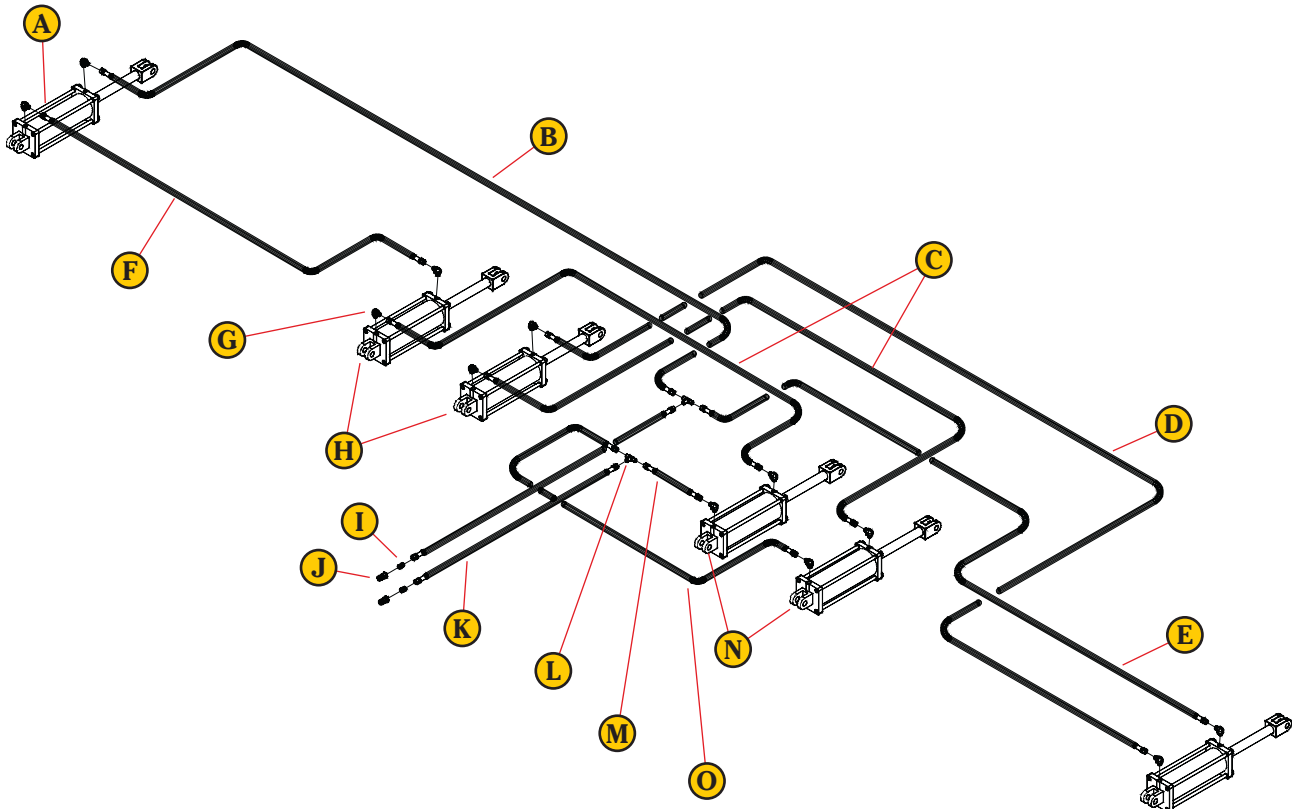


Figure 6.4 12 Shank Main Lift Hydraulics

Specifications

6.4.3 12 Shank Hydraulic Fold

- (A) Elbow 8MORB x 8MJ
- (B) Hose 3/8" x 62" 8FJX — 8FJX
- (C) Tee 8MJ x 8MJ x 8MORB
- (D) Elbow 8MJ x 8FJX
- (E) Hose 3/8" x 30" 8FJX — 8FJX
- (F) 5" x 24" Hydraulic Cylinder
- (G) 3/8" x 75" 8FJX — 8FJX Hose
- (H) Tee 8MJ x 8MJ x 8MJ
- (I) Quick Disconnect Coupler
- (J) Adaptor 8MJ x 8MPT
- (K) Hose 3/8" x 156" 8FJX — 8FJX

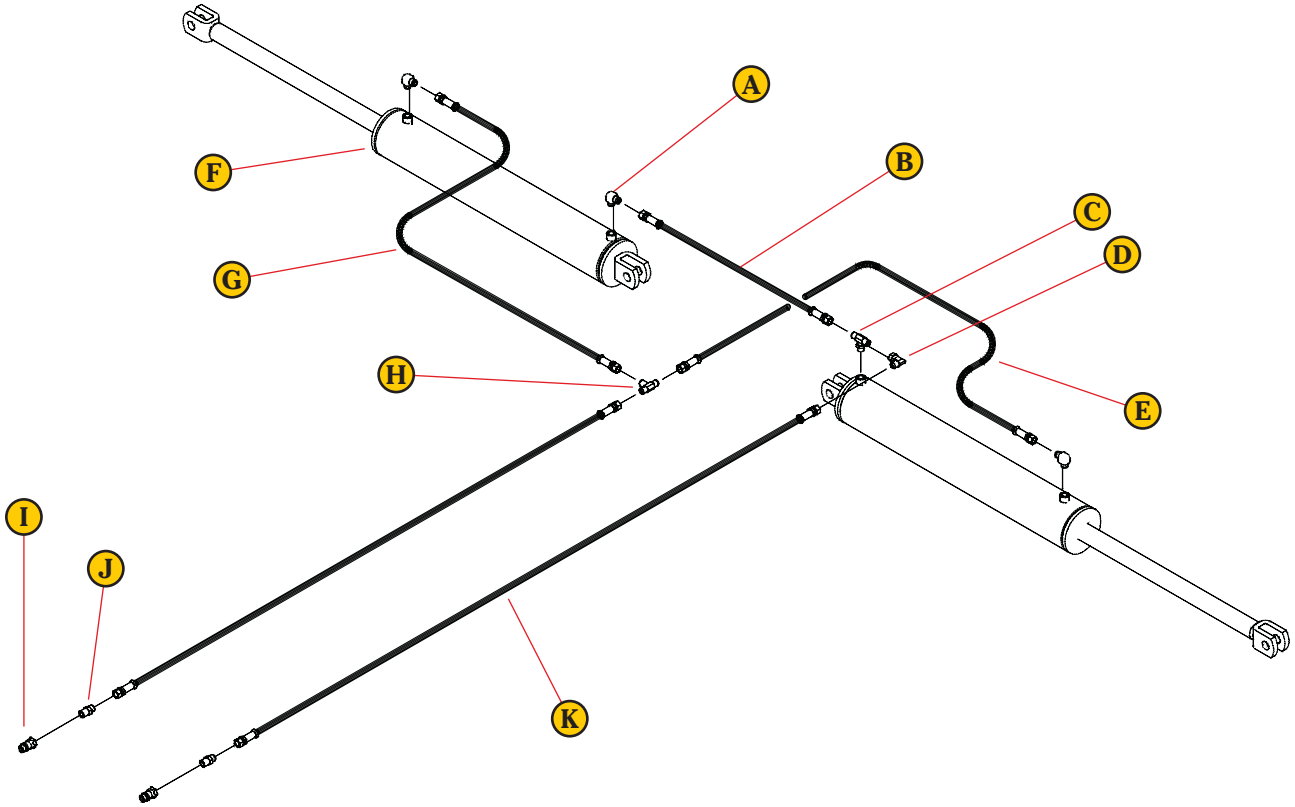


Figure 6.5 12 Shank Hydraulic Fold

6.4.4 8 Shank Hydraulic Fold

- (A) Elbow 8MORB x 8MJ
- (B) Hydraulic Hose 3/8" x 36" 8FJX — 8FJX
- (C) Tee 8MJ x 8MJ x 8MORB
- (D) Hydraulic Hose 3/8" x 30" 8FJX — 8FJX
- (E) 4" x 24" Hydraulic Cylinder
- (F) Hydraulic Hose 3/8" x 56" 8FJX — 8FJX
- (G) Tee 8MJ x 8MJ x 8MJ
- (H) Hydraulic Hose 3/8" x 156" 8FJX — 8FJX
- (I) Adapter 8MJ x 8MPT
- (J) Quick Disconnect Coupler

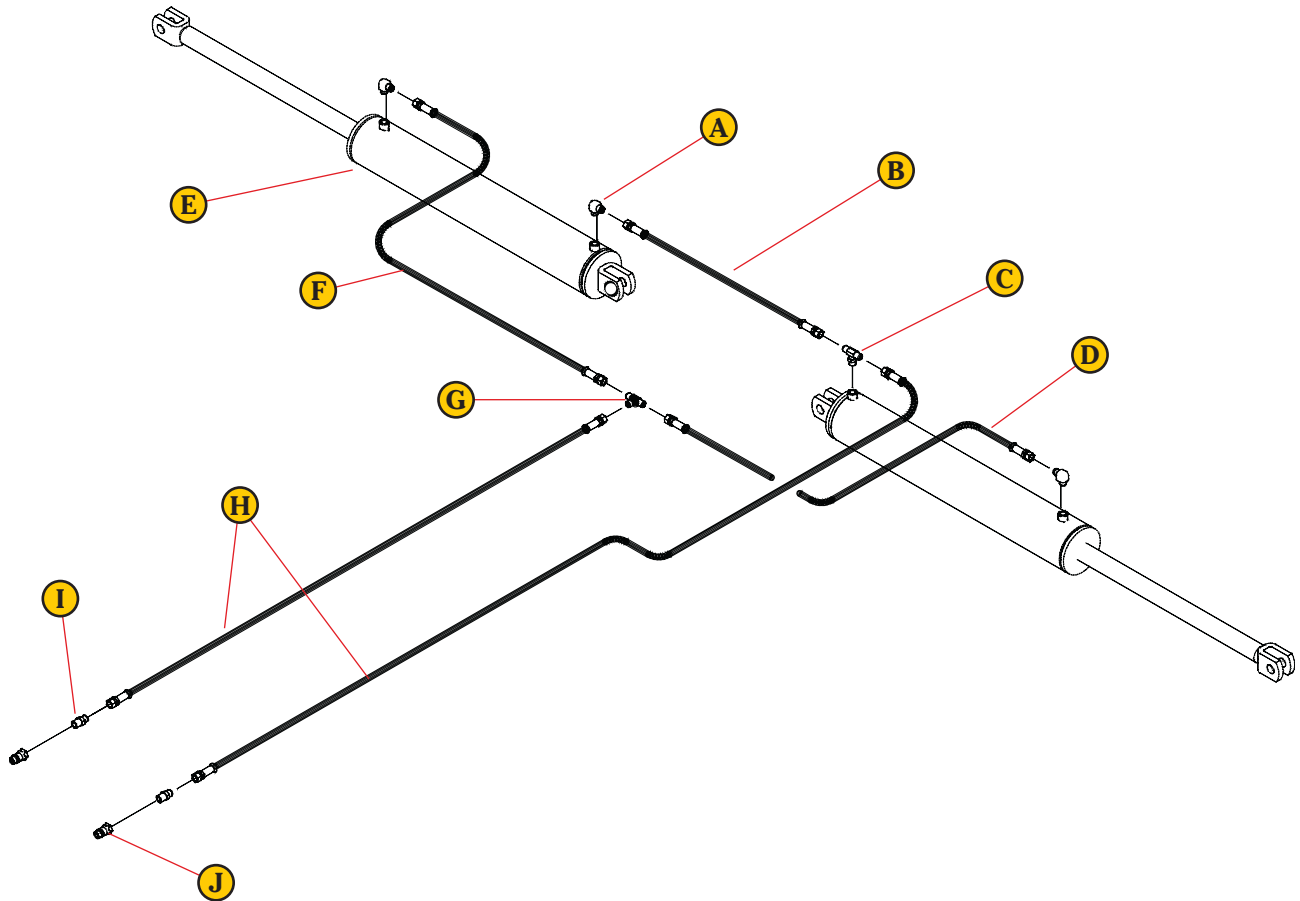


Figure 6.6 8 Shank Hydraulic Fold

Specifications

6.5 Shank & Coulter Placements

👁️ (*) Shank extensions can be used in heavy trash conditions to stagger shank pattern. (Optional equipment)

6.5.1 4 Shank 357 IR (129.56" Main Frame)

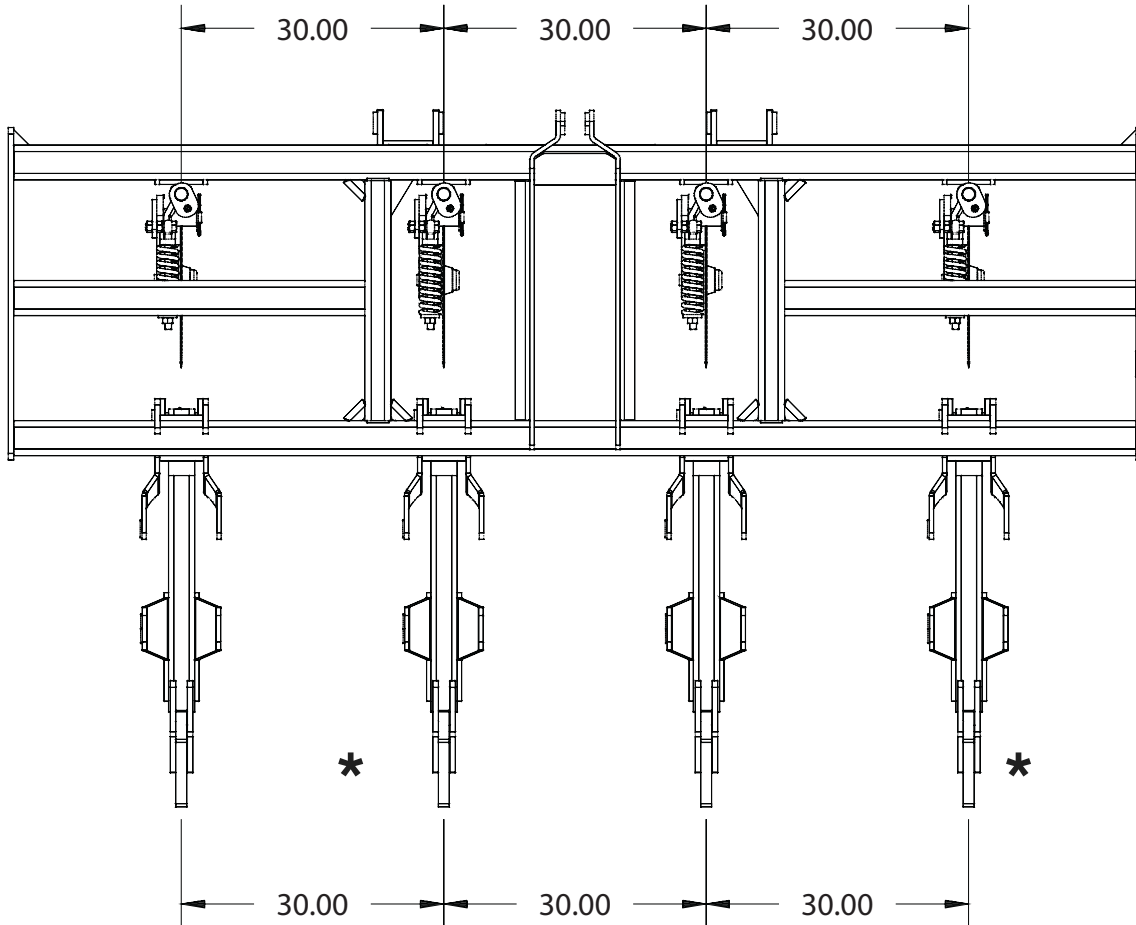


Figure 6.7 4 Shank 357 IR (129.56" Main Frame) (3.29 m)

6.5.2 5 Shank 357 IR (129.56" Main Frame)

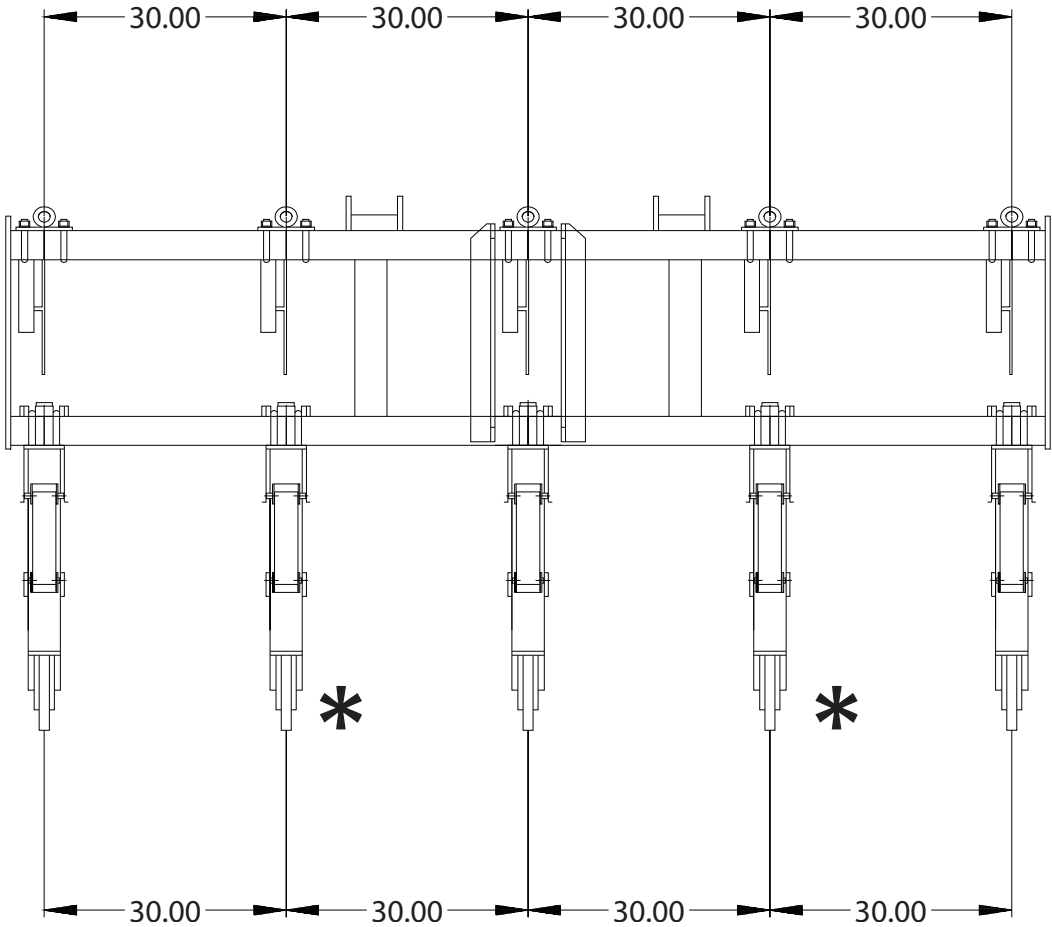


Figure 6.8 5 Shank 357 IR (129.56" Main Frame) (3.29 m)

Specifications

6.5.3 6 Shank 357 IR (129.56" Main Frame)

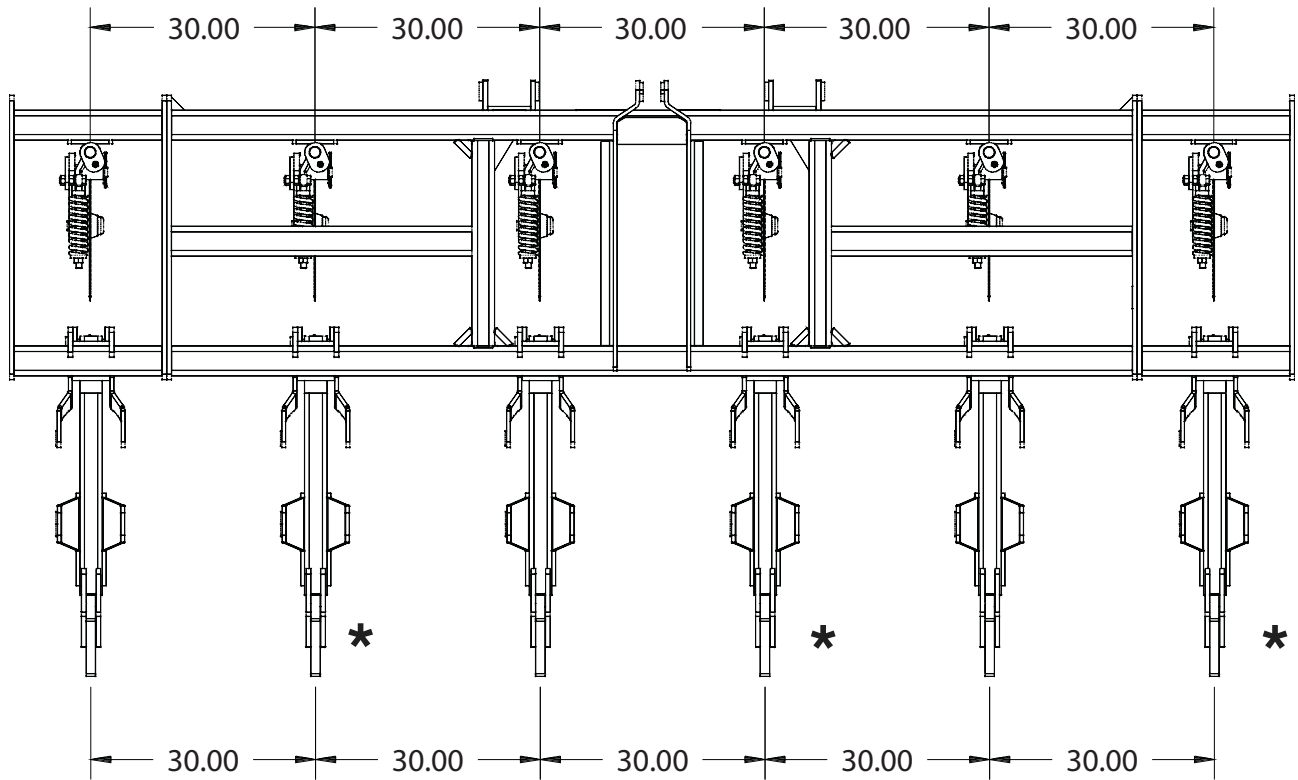


Figure 6.9 6 Shank 357 IR (129.56" Main Frame) (3.29 m)

6.5.4 7 Shank 357 IR (129.56" Main Frame)

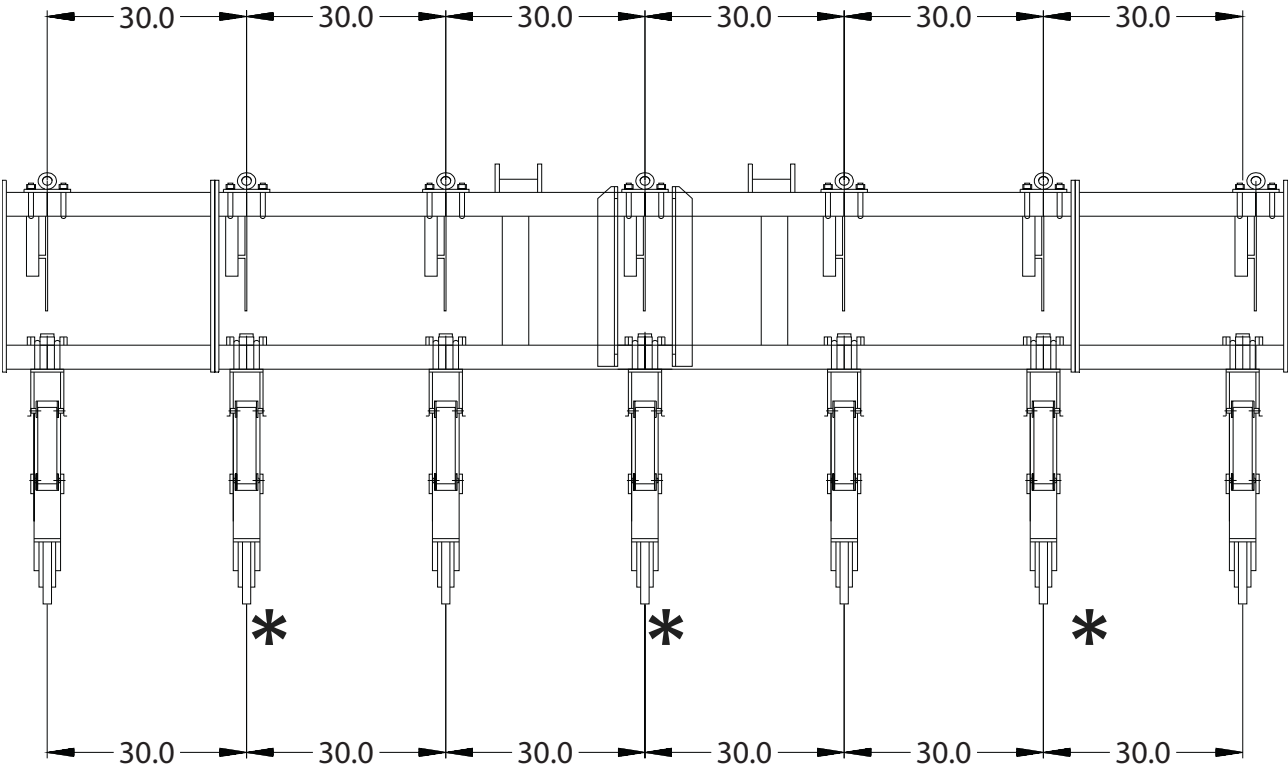


Figure 6.10 7 Shank 357 IR (129.56" Main Frame) (3.29 m)

Specifications

6.5.5 8 Shank 357 IR (231.56" Main Frame)

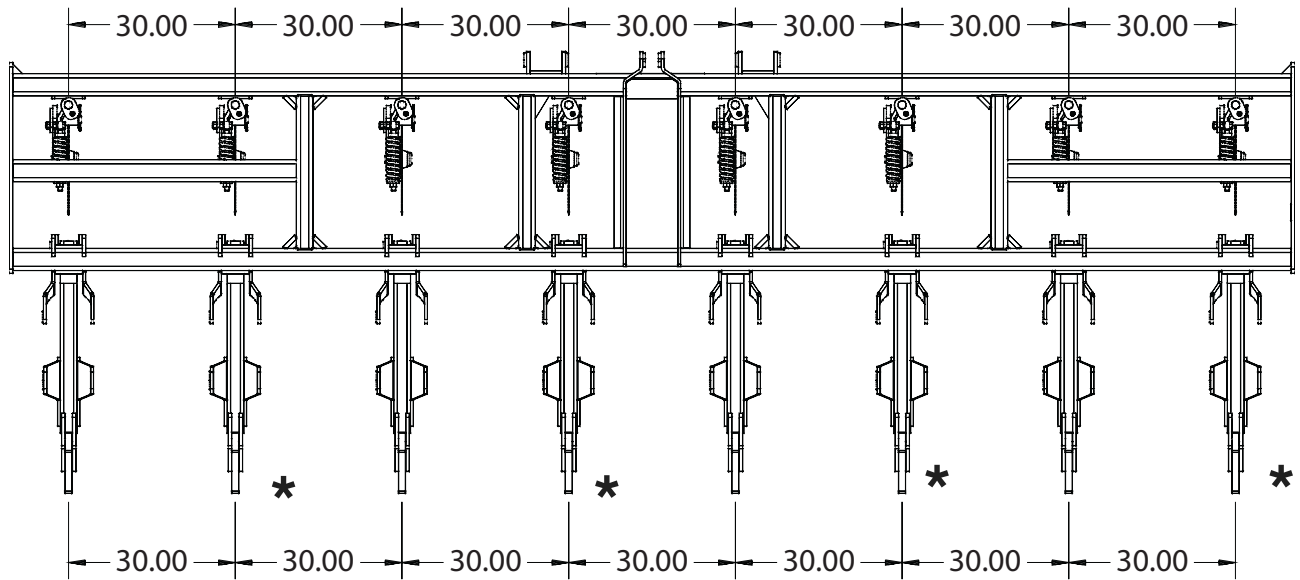


Figure 6.11 8 Shank 357 IR (231.56" Main Frame) (5.86 m)

6.5.6 8 Shank 357 IR (Folding)

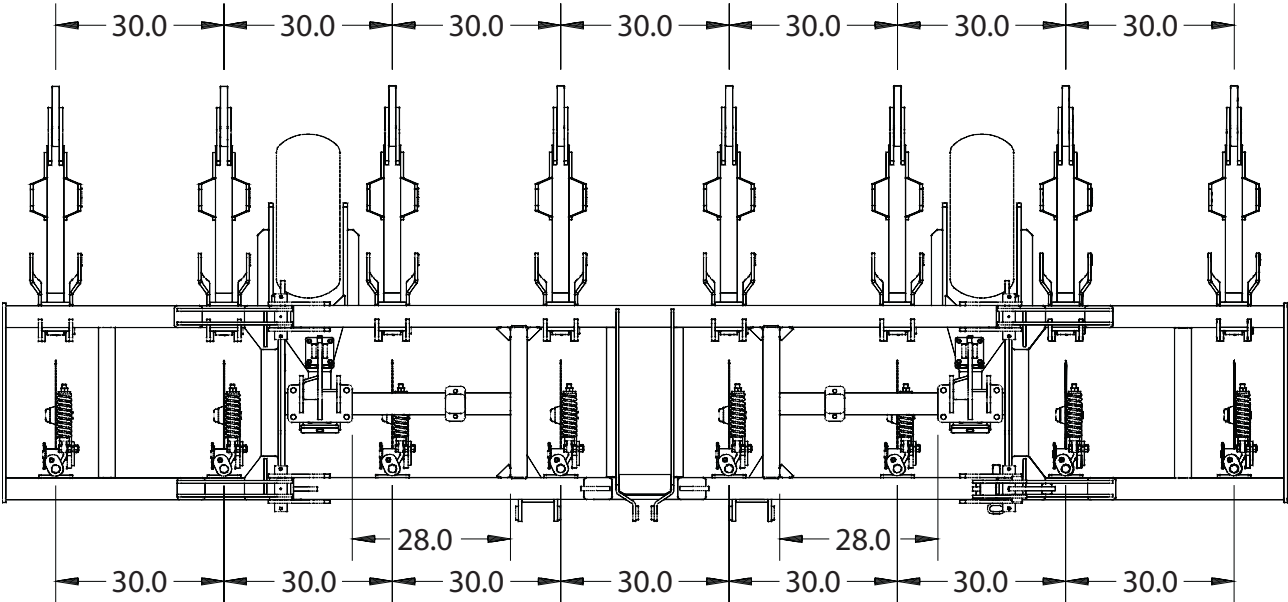


Figure 6.12 8 Shank 357 IR (Folding)

Specifications

6.5.7 12 Shank 357 IR (Folding)

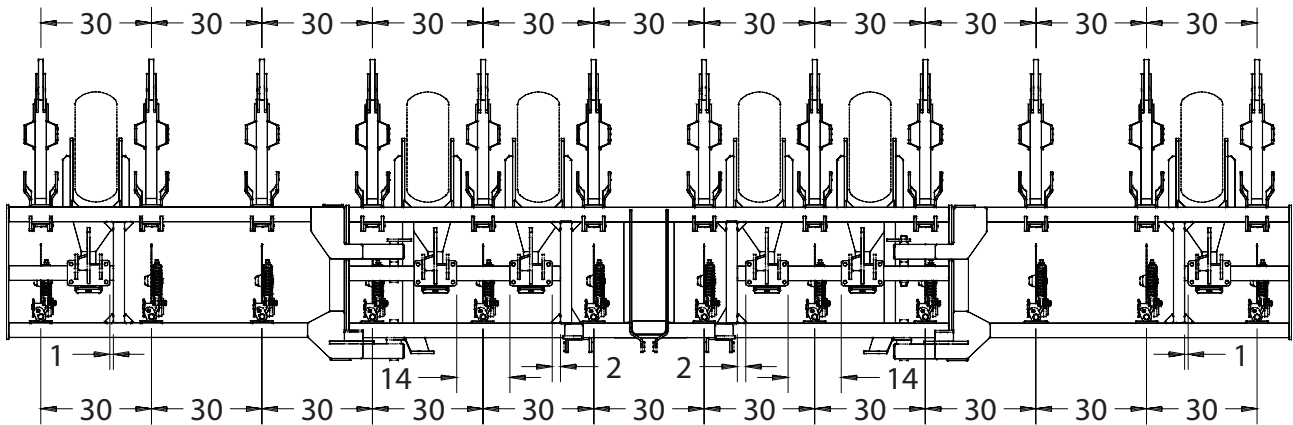


Figure 6.13 12 Shank 357 IR (Folding)

7 Aftermarket

7.1 Warranty



Väderstad Inc. Limited Warranty Terms and Conditions — United States and Canada, Effective for Equipment Retailed and Delivered after May 21, 2021.

7.1.1 What is Warranted

Väderstad Inc. warrants its new equipment to be free of defects in material and workmanship at time of delivery to the first retail purchaser, renter or lessee. These terms apply to all 10K, Amity, Concord, Wil-Rich and Wishek brands of new equipment originally marketed in the United States and Canada.

7.1.2 Warranty Period

- 12 months from the date of delivery to the first retail purchaser, renter or lessee.
- **483 Disk Chisel, Field Cultivator and Disk Cultivators:** 3 years on main frames, wing frames and shank assemblies.

7.1.3 Exceptions from this Warranty

- **Freight Charges:** This warranty does not cover freight charges.
- **Improvements, Changes, or Discontinuance:** Väderstad Inc. reserves the right to make changes and improvements in design or changes in specifications at any time to any product without incurring any obligations to owners of products previously sold.
- **Satellite Outages:** Interruptions in satellite interfaces and satellite communications are outside the control of this product and are not covered by this warranty. The company is not responsible for issues or degradation of system performance resulting from such interruptions in satellite interfaces and satellite communications where the issues are not related to defects in this product.
- **Repairs and Maintenance Not Covered Under Warranty:** This warranty does not cover conditions resulting from misuse, natural calamities, use of non-Väderstad Inc. parts, negligence, alteration, accident, use of unapproved attachments, usage which is contrary to the intended purposes, or conditions caused by failure to perform required maintenance. Replacement of wear or maintenance items (unless defective) such as but not limited to, filters, hoses, belts, lubricants, light bulbs, wheel alignment, tightening of nuts, belts, bolts and fittings, service tune-up, computer parameter adjustments and general adjustments which may from time to time be required are not covered.

- **Rubber Tire Warranty:** Rubber tires are warranted directly by the respective manufacturer only and not by Väderstad Inc.

7.1.4 Owners Obligation

It is the responsibility of the owner to transport the equipment or parts to the service shop of an authorized Väderstad Inc. dealer or alternatively to reimburse the dealer for any travel or transportation expense involved in fulfilling this warranty. This warranty does NOT cover rental of replacement equipment during the repair period, damage to products which have been declared a total loss and subsequently salvaged, overtime labor charges, freight charges for replacement parts, or special handling requirements (such as, but not limited to, the use of cranes).

7.1.5 Exclusive Effect of Warranty and Limitation of Liability



This warranty is in lieu of all warranties of merchantability, fitness for a purpose or other representations, warranties or conditions, expressed or implied.

The remedies of the owner set forth herein are exclusive. The company neither assumes nor authorizes any person to assume for it any other obligation or liability in connection with the sale of covered machines. Correction of defects, in the manner and for applicable period of time provided above, shall constitute fulfillment of all responsibilities of Väderstad Inc. to the owner, and Väderstad Inc. shall not be liable for negligence under contract or in any manner with respect to such machines.



In no event shall the owner be entitled to recover for incidental, special or consequential damages such as but not limited to, loss of crops, loss of profits or revenue, other commercial losses, inconvenience or cost of rental or replacement equipment.



Some states or provinces do not permit limitations or exclusions of implied warranties or incidental or consequential damages, so the limitations or exclusions in this warranty may not apply.

Väderstad Inc. as referred to herein with respect to sales in:

United States & Canada:

- Väderstad Inc.
- PO Box 1030
- Wahpeton, ND 58074

7.1.6 Additional Warranty Information

New Equipment Warranty

Equipment is eligible for warranty service only if it qualifies under the provisions of the new equipment warranty. The selling dealer will deliver this warranty to the original retail purchaser at the time of sale, and the dealer will register the sale and warranty with Väderstad Inc.

Subsequent Owners

This warranty covers the first retail purchaser and all subsequent owners of the equipment during the specified warranty period.

Should the Väderstad Inc. dealer sell this equipment to a subsequent owner, the dealer must deliver the warranty document to the subsequent owner so the subsequent owner can register ownership with Väderstad Inc. and obtain the remaining warranty benefits, if available, with no intermission in the warranty period. Subsequent owner procedure will apply. It is the responsibility of the subsequent owner to transport the equipment to the service shop of an authorized Väderstad Inc. dealer or alternatively to reimburse the dealer for any travel or transportation expense involved in fulfilling this warranty. This warranty does NOT cover charges for rental or replacement equipment during the repair period, products which have been declared a total loss and subsequently salvaged, overtime labor charges, freight charges for replacement parts, or units sold at auction.

Warranty Service

To be covered by warranty, service must be performed by an authorized Väderstad Inc. It is recommended that you obtain warranty service from the dealer who sold you the equipment because of that dealer's continued interest in you as a valued customer. In the event this is not possible, warranty service may be performed by any other authorized Väderstad Inc. dealers in the United States or Canada. It is the responsibility of the owner to transport the equipment to the service shop of an authorized Väderstad Inc. dealer or alternatively to reimburse the dealer for any travel or transportation expense involved in fulfilling this warranty.

Maintenance Service

The owner's manual furnished to you with the equipment at the time of delivery contains important maintenance and service information. You must read the manual carefully and follow all the maintenance and service recommendations. Doing so will result in greater satisfaction with your equipment and help avoid service and warranty problems. Please remember that failures due to improper maintenance of your equipment are not covered by warranty.

Maintenance Inspections

To insure the continued best performance from your agricultural equipment, we recommend that you arrange to make your equipment available to your selling dealer for a maintenance inspection 30 days prior to warranty expiration.

7.2 Aftermarket Options

Contact your local Väderstad dealer for more information when ordering aftermarket options.

7.2.1 Shank Options

Three styles of shanks are available. Choose from 1.25" (3.2 cm) wide parabolic shanks, 1.25" (3.2 cm) wide low disturbance shanks, or 0.75" (1.9 cm) wide minimal disturbance shanks.



Figure 7.1 Shank Options

7.2.2 Point (Ripper) Options

Depending on the shanks used, multiple ripper options are available, ranging from 3" - 8" (7.6 - 20.3 cm).



Figure 7.2 Point (Ripper) Options

7.2.3 Spring Reset Trip Assembly Option

A massive 4,250 lb (1,928 kg) twin reset trip assembly keeps shanks in the ground.



Figure 7.3 Spring Reset Trip Assembly Option

7.2.4 Coulter Options

The Inline Ripper is available with 20" (51 cm) spring-loaded coulters to easily slice through residue.



Figure 7.4 Coulter Options

7.2.5 Hitch Options

The Inline Ripper can be equipped with a pull type hitch, including hydraulic lift wheels. A three-point rigid mount is also available.



Figure 7.5 Hitch Options

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