



EN

Operation & Maintenance Manual

Three-Point Rotary Cutter



Rotary Cutter 48 S/N: B64500101 & Above
Rotary Cutter 60 S/N: B64600101 & Above
Rotary Cutter 72 S/N: B64700101 & Above

OPERATOR SAFETY WARNINGS



- Never operate without instructions. See machine safety signs (decals) and Operation & Maintenance Manual.
- Operator must have instructions before operating the machine. Untrained operators can cause injury or death.

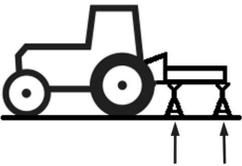
SAFETY EQUIPMENT

The machine and implement must be equipped with safety items necessary for each job.

- **SEAT BELT:** Check belt fasteners and check for damaged webbing or buckle.
- **OPERATOR CAB (ROPS):** It must be on the compact tractor with all fasteners tight.
- **MACHINE AND IMPLEMENT SAFETY SIGNS (DECALS):** Replace if damaged.
- **COMPACT TRACTOR PTO SHIELD:** Replace if damaged.
- **PARKING BRAKE.**
- **IMPLEMENT PTO SHIELD:** Replace if damaged.
- **PTO DRIVELINE GUARD:** Replace if damaged.



This check mark means: "Follow instructions for proper operations." Carefully read the message that follows.



- Securely block up the implement before working underneath.



- Use Roll-Over Protective Structure (ROPS) and fasten seat belt snugly.
- Never use machine without operator ROPS. Fasten seat belt when the ROPS is up.
- Always keep arms and feet inside the operator's area.



- Obey all traffic regulations when on public roads. Use slow moving vehicle (SMV) emblem and hazard flashers when required.
- Lock brake pedals together for road travel.

OPERATOR SAFETY WARNINGS



This Safety Alert Symbol means: "Attention! Be Alert! Your Safety is Involved!" Carefully read the message that follows.



- Use ROPS and fasten seat belt.
- Always check work area before operating three-point rotary cutter.



- Do not use machine or implement in an atmosphere with explosive dust, explosive gas, or when exhaust can contact flammable material.



- Never allow riders on equipment.
- Keep bystanders away when operating.



- Keep PTO master shield, implement shield, and driveline guards in place.
- Keep away from moving parts.
- Only operate from the operator's position.



- Do not put hands, feet, or objects under the deck when engine is running.
- To park, engage parking brake, put implement flat on the ground, and stop the engine.





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MANUFACTURER

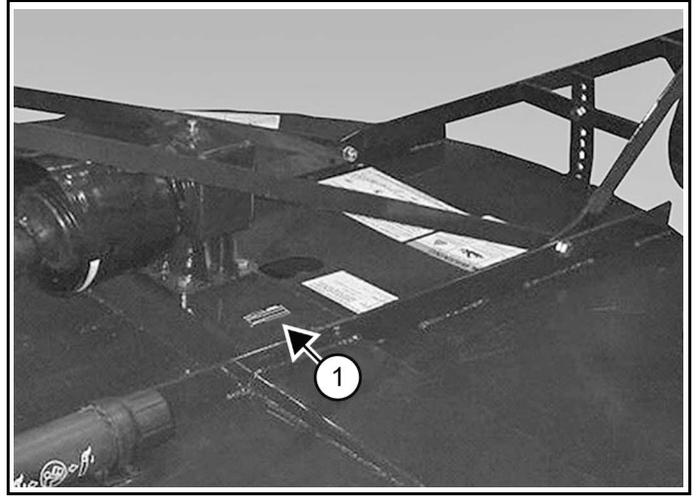
North America

Ignite Attachments
2741 20th Avenue South
Moorhead, MN 56560

SERIAL NUMBER LOCATION

Implement Serial Number

Figure 1

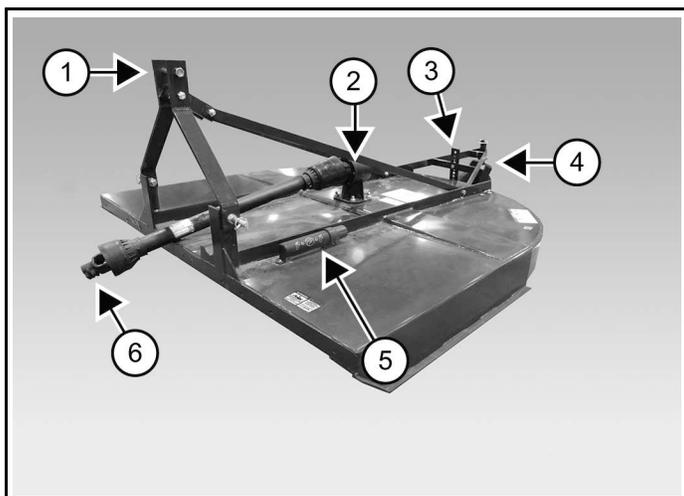


P142021b

Always use the serial number of the three-point rotary cutter when requesting service information or when ordering parts. Early or later models (identification made by serial number) may use different parts, or it may be necessary to use a different procedure in doing a specific service operation (Item 1) [Figure 1].

IMPLEMENT IDENTIFICATION

Figure 2



P142020b

REF.	Description
1	Three-Point Hitch (Category 1)
2	Gear Box
3	Height Adjustment Bar
4	Wheel Assembly
5	Manual Storage
6	PTO Driveline

FEATURES AND ACCESSORIES

Standard Items

The three-point rotary cutter is equipped with the following standard items:

- Category 1 Three-Point Hitch
- PTO Driveline with Plastic Guards
- Shear Bolt (Grade 2)
- Implement PTO Shield
- Caster Wheel

SAFETY INSTRUCTIONS

Safe Operation Is The Operator's Responsibility (Implement)



DANGER

The signal word **DANGER** on machine signs and in the manuals indicates a hazardous situation which, if not avoided, will result in serious injury or death. ◀

D-1002

WARNING

The signal word **WARNING** on the machine and in the manuals indicates a potentially hazardous situation which, if not avoided, could result in serious injury or death. ◀

W-2044

IMPORTANT

This notice identifies procedures which must be followed to avoid damage to the machine. ◀

I-2019

The machine and implement must be in good operating condition before use.

Check all of the items on the Service Schedule decal (if equipped) in the Every 10 Hours section or as shown in the Operation & Maintenance Manual.

Safe Operation Needs A Qualified Operator

For an operator to be qualified, he or she must not use drugs or alcoholic drinks which impair alertness or coordination while working. An operator who is taking prescription drugs must get medical advice to determine if he or she can safely operate a machine.

Use Safety Rules

- Read and follow instructions in the machine and the implement's Operation & Maintenance Manual before operating.
- Check for underground lines before operating implement (if applicable).
- In addition to the design and configuration of equipment, hazard control, and accident prevention are dependent upon the awareness, concern, prudence, and proper training of personnel involved

in the operation, transport, maintenance, and storage of equipment.

- Check that the implement is securely fastened to the machine.
- Make sure all the machine controls are in the neutral position before starting the machine.
- Operate the implement only from the operator's position.
- Operate the implement according to the Operation & Maintenance Manual.
- When learning to operate the implement, do it at a slow rate in an area clear of bystanders.
- DO NOT permit personnel to be in the work area when operating the machine and implement.
- The implement must be used ONLY on approved machines. Visit igniteattachments.com for an updated list of approved implements for each machine model.
- DO NOT modify equipment or add implements that are not approved by the manufacturer.
- DO NOT make any adjustments or repairs on the machine or implement while the engine is running.
- Keep shields and guards in place. Replace if damaged.

Call Before You Dig



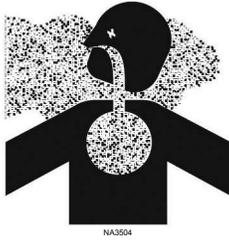
P200081

Dial 811 (USA Only)

Dial 1-888-258-0808 (USA & Canada)

When you call, you will be directed to a location in your state / province / city for information about buried lines (telephone, cable TV, water, sewer, gas, etc.).

Silica Dust Exposure



Silica dust can cause lung disease and is known to the state of California to cause cancer.

Cutting or drilling concrete containing sand or rock containing quartz may result in exposure to silica dust.

Do not exceed Permissible Exposure Limits (PEL) to silica dust as determined by OSHA or other job site Rules and Regulations. Use a respirator, water spray, or other means to control dust.

Safety Rules For Power Take-Off (PTO) Driven Attachments

- Keep power take-off (PTO) shields and all guards in place. Replace damaged or missing shields and guards before operating.
- Follow warnings and instructions on machine signs (decals). Replace damaged or missing decals.
- Do not wear loose or bulky clothing around the PTO or other moving parts.
- Keep bystanders away from PTO driven equipment, and never allow children near machines.
- Read and understand manuals for the PTO driven equipment and be aware of safe operating procedures and hazards that may not be readily apparent.
- Always walk around equipment to avoid coming near a turning PTO driveline. Stepping over, leaning across or crawling under a turning PTO driveline can cause entanglement.
- Position the machine and attachment hitch correctly to prevent driveline stress and separation.
- Use caution when turning. Turning too sharp can cause driveline damage.
- Use caution when raising PTO driven attachment. Excessive driveline angle can cause driveline damage. Use stops if needed.

Machine Requirements And Capabilities

- Fasten seat belt securely when ROPS is up and locked. DO NOT wear seat belt if ROPS is down.

- The machine must be equipped with sway bars or chains.
- Stop the machine and engage the parking brakes. Install blocks in front of and behind the rear tires of the machine. Install blocks underneath and support the implement securely before working under raised implements.
- Keep bystanders clear of moving parts and the work site. Keep children away.
- Use increased caution on slopes and near banks and ditches to prevent overturn.
- Make certain that the Slow Moving Vehicle (SMV) emblem is installed so that it is visible and legible. When transporting the equipment, use the machine flashing warning lights and follow all local regulations.
- Operate this equipment with approved ROPS. Always wear seat belt when the ROPS is up. Serious injury or death could result from falling off the machine.
- Before leaving the machine operator's seat:
 1. Park on flat level ground.
 2. Fully lower the loader arms and put the attachment flat on the ground (if equipped).
 3. Fully lower the three-point hitch or mid-mount implements (if equipped).
 4. Lock brake pedals together (if equipped) and engage the parking brake.
 5. Place all controls in neutral.
 6. Stop the engine, unfasten seat belt and remove the key.
- Never allow riders on the machine or implement. Falling off can result in serious injury or death.
- Start the machine only when properly seated in the operator's seat. Starting a machine in gear can result in serious injury or death.
- Operate the machine and attachments / implements from the operator's position only.
- Add the correct front ballast for rear three-point hitch implements and pull type implements. Add the correct rear ballast when using the loader and attachments. Front and rear ballast can be purchased from your Ignite Attachments dealer.
- Do not handle large objects (such as round bales or posts) unless the loader is equipped with the proper attachments and the load is secured.
- The parking brake must be engaged before leaving the machine operator's seat. Rollaway can occur

because the transmission may not prevent machine movement. Lock the brake pedals together (if equipped) before activating the parking brake.

FIRE PREVENTION



Maintenance

The machine and some attachments have components that are at high temperatures under normal operating conditions. The primary source of high temperatures is the engine and exhaust system. The electrical system, if damaged or incorrectly maintained, can be a source of arcs or sparks.

Flammable debris (leaves, straw, etc.) must be removed regularly. If flammable debris is allowed to accumulate, it can cause a fire hazard. Clean often to avoid this accumulation. Flammable debris in the engine compartment is a potential fire hazard.

The operator's area, engine compartment, and engine cooling system must be inspected every day and cleaned if necessary to prevent fire hazards and overheating.

All fuels, most lubricants, and some coolants mixtures are flammable. Flammable fluids that are leaking or spilled onto hot surfaces or onto electrical components can cause a fire.

Operation

Do not use the machine where exhaust, arcs, sparks, or hot components can contact flammable material, explosive dust, or gases.

Electrical



Check all electrical wiring and connections for damage. Keep the battery terminals clean and tight. Repair or replace any damaged part or wires that are loose or frayed.

Battery gas can explode and cause serious injury. Use the procedure in the Operation & Maintenance Manual for connecting the battery and for jump starting. Do not jump start or charge a frozen or damaged battery. Keep any open flames or sparks away from batteries. Do not smoke in battery charging area.

Hydraulic System

Check hydraulic tubes, hoses and fittings for damage and leakage. Never use open flame or bare skin to check for

leaks. Hydraulic tubes and hoses must be properly routed and have adequate support and secure clamps. Tighten or replace any parts that show leakage.

Always clean fluid spills. Do not use gasoline or diesel fuel for cleaning parts. Use commercial nonflammable solvents.

Fueling



Stop the engine and let it cool before adding fuel. No smoking! Do not refuel a machine near open flames or sparks. Fill the fuel tank outdoors.

Ultra Low Sulfur Diesel (ULSD) poses a greater static ignition hazard than earlier diesel formulations with higher sulfur content. Avoid death or serious injury from fire or explosion. Consult with your fuel or fuel system supplier to ensure the delivery system is in compliance with fueling standards for proper grounding and bonding practices.

Starting

Do not use ether or starting fluids on any engine that has glow plugs or an air intake heater. These starting aids can cause explosion and injure you or bystanders.

Use the procedure in the Operation & Maintenance Manual for connecting the battery and for jump starting.

Spark Arrester Exhaust System

The spark arrester exhaust system is designed to control the emission of hot particles from the engine and exhaust system, but the muffler and the exhaust gases are still hot.

Check the spark arrester exhaust system regularly to make sure it is maintained and working properly. Use the procedure in the Operation & Maintenance Manual for cleaning the spark arrester muffler (if equipped).

Welding And Grinding

Always clean the machine and implement, disconnect the battery, and disconnect the wiring from the Ignite Attachments controllers before welding. Cover rubber hoses, battery, and all other flammable parts. Keep a fire extinguisher near the machine when welding.

Have good ventilation when grinding or welding painted parts. Wear a dust mask when grinding painted parts. Toxic dust or gas can be produced.

Dust generated from repairing nonmetallic parts such as hoods, fenders, or covers can be flammable or explosive. Repair such components in a well-ventilated area away from open flames or sparks.

Fire Extinguishers



Know where fire extinguishers and first aid kits are located and how to use them. Inspect the fire extinguisher and service the fire extinguisher regularly. Obey the recommendations on the instructions plate.

PUBLICATIONS AND TRAINING RESOURCES

The following publications are also available for your Ignite Attachments machine. Access them online at igniteattachments.com.



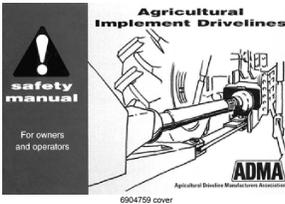
Operation & Maintenance Manual

Complete instructions on the correct operation and the routine maintenance of your Ignite Attachments machine.
7495890



AEM Safety Manual

69005820IG



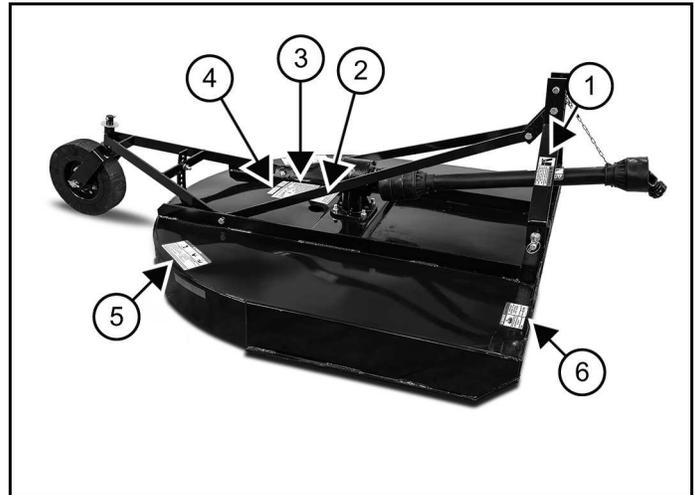
ADAM Safety Manual

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For the latest information on Ignite Attachments products and the Ignite Attachments Company, visit our website at igniteattachments.com

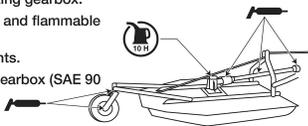
IMPLEMENT SIGNS (DECALS)

Figure 3



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REF.	DECAL
1	<p>Crush Warning</p> <p>Located near 3 point hitch, both sides</p> <p>71892000IG</p> <p>71892000G</p>
2	<p>Tighten Blade Mounting</p> <p>Located on deck near gear box</p> <p>71391870IG</p> <p>7139187enUS</p>

REF.	DECAL
3	<p align="center">Service Schedule</p> <p align="center">Located on deck near gear box</p> <p align="center">71391860IG</p> <div style="border: 1px solid black; padding: 5px;"> <p align="center">ROTARY CUTTER SERVICE SCHEDULE</p> <p>EVERY 10 HOURS OF OPERATION:</p> <ol style="list-style-type: none"> 1. Check blades and mounting plate for cracks or damage. Replace if necessary. 2. Check blade mounting hardware for proper torque 425 ft-lbs (575 Nm). Tap bolt head with hammer and retorque. Check blade mounting plate hardware. 3. Check chains, deck, shields. Repair if damaged or replace if necessary. 4. Check for damaged or missing decals. Replace if necessary. 5. Check for damaged or leaking gearbox. 6. Clean debris, leaves, grass and flammable material from deck area. 7. Lubricate all (5) grease points. 8. Check lubrication level in gearbox (SAE 90 gear lube).  <p align="center">SEE ATTACHMENT OPERATION & MAINTENANCE MANUAL FOR MORE INSTRUCTIONS.</p> </div>
4	<p align="center">Prop65</p> <p align="center">Located on deck near gear box</p> <p align="center">73536420IG</p> <div style="border: 1px solid black; padding: 5px;">  <p>WARNING: This product can expose you to chemicals including lead and lead compounds, mineral oils, and phthalates which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.</p> <p align="center">SW 21 73536420IG enUS</p> </div>

REF.	DECAL				
5	<p align="center">Thrown Objects and Rotating Blades Danger</p> <p align="center">Located on deck, both sides</p> <p align="center">67344400IG</p> <div style="border: 1px solid black; padding: 5px;"> <p align="center">⚠ DANGER</p> <table border="1" style="width: 100%;"> <tr> <td align="center"></td> <td align="center"></td> </tr> <tr> <td> <p align="center">THROWN OBJECTS</p> <ul style="list-style-type: none"> • Clear mowing area of debris. • Never operate mower in vicinity of other persons. • Objects can be thrown more than several hundred feet. • Keep all shields installed. Repair or replace if damaged or missing. • Check blades and mounting hardware. Replace if damaged. Never weld or modify. </td> <td> <p align="center">ROTATING BLADES</p> <ul style="list-style-type: none"> • Never put hands, feet or objects into or under mower when engine is running. • Keep bystanders away. • No riders. • Stop engine before servicing. </td> </tr> </table> <p align="center">THROWN OBJECTS OR ROTATING BLADES CAN CAUSE SERIOUS INJURY OR DEATH</p> </div>			<p align="center">THROWN OBJECTS</p> <ul style="list-style-type: none"> • Clear mowing area of debris. • Never operate mower in vicinity of other persons. • Objects can be thrown more than several hundred feet. • Keep all shields installed. Repair or replace if damaged or missing. • Check blades and mounting hardware. Replace if damaged. Never weld or modify. 	<p align="center">ROTATING BLADES</p> <ul style="list-style-type: none"> • Never put hands, feet or objects into or under mower when engine is running. • Keep bystanders away. • No riders. • Stop engine before servicing.
					
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6	<p align="center">Rotating Shaft Danger and Overspeeding Warning</p> <p align="center">Located on deck near 3 point hitch, both sides</p> <p align="center">71631770IG</p> <table border="1" style="width: 100%;"> <tr> <td align="center"> <p>⚠ DANGER</p>  <p>ROTATING SHAFT WILL CAUSE SERIOUS INJURY OR DEATH</p> <p>Keep shields and guards in place.</p> </td> <td align="center"> <p>⚠ WARNING</p> <p>OVERSPEEDING IMPLEMENT PTO CAN CAUSE SERIOUS INJURY OR DEATH</p> <p>Do NOT exceed the PTO speed of 540 RPM.</p> </td> </tr> </table>	<p>⚠ DANGER</p>  <p>ROTATING SHAFT WILL CAUSE SERIOUS INJURY OR DEATH</p> <p>Keep shields and guards in place.</p>	<p>⚠ WARNING</p> <p>OVERSPEEDING IMPLEMENT PTO CAN CAUSE SERIOUS INJURY OR DEATH</p> <p>Do NOT exceed the PTO speed of 540 RPM.</p>		
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ASSEMBLING THE ROTARY CUTTER

Tools Required:

- Tin Snips
- Screwdriver
- Vice Grips
- Ratchet
- Pliers
- Sockets and Wrenches: 9/16", 3/4", 15/16", 7/8", and 1-5/16". (Impact wrench is preferred)

Figure 4



P217920

1. Cut the zip ties and remove the PTO shaft from the backside of the rotary cutter [Figure 4].

Figure 5



P217921

2. Remove 3/8" – 16 x 2" bolt and nut from the tailwheel holder on the shipping boot, using a 9/16" wrench [Figure 5].

NOTE: Do not discard the hardware.

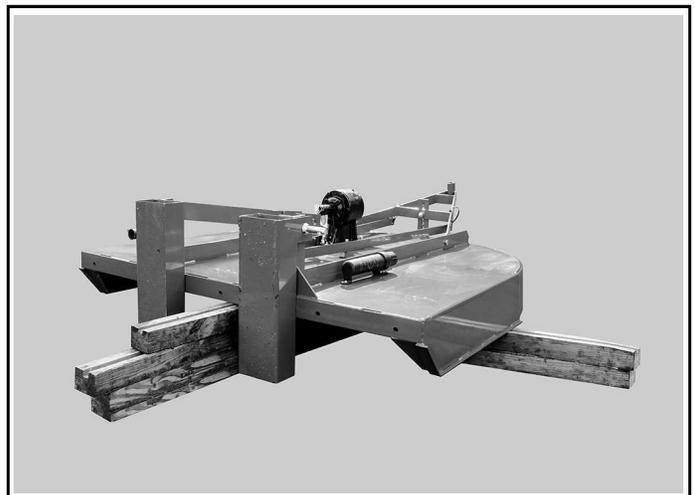
Figure 6



P217922

3. Remove the tailwheel and 3" washer [Figure 6].

Figure 7



P217923

4. Place the rotary cutter on a level spot. Block up the front and back of the rotary cutter [Figure 7].

Figure 8



P217924

5. Install the tailwheel with 3" washer on top. Secure with 3/8" – 16 x 2" bolt and nut and tighten [Figure 8].

Figure 9



P217925

Figure 10



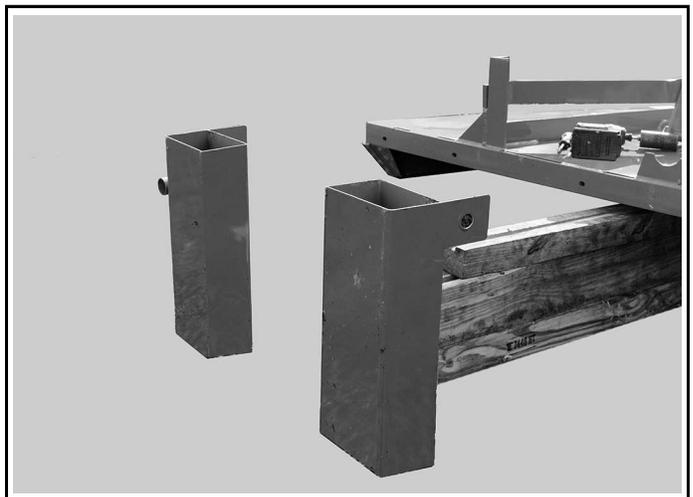
P217926

6. Using 1-5/16" wrench/socket, remove the CAT I pins from the shipping boots [Figure 9] and [Figure 10].

NOTE: Set aside the CAT 1 pins, bolts, washers, and bushings.

NOTE: The shipping boots may fall off.

Figure 11



P217927

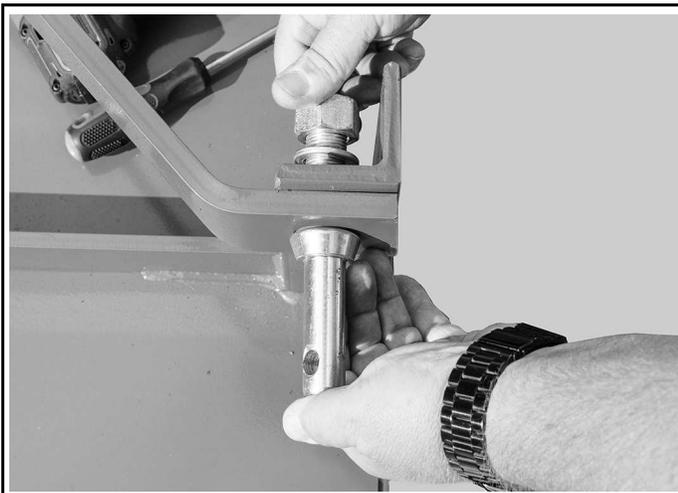
7. Once the CAT I pins are removed, lift up on the cutter to remove from the shipping boots [Figure 11].

Figure 12



P217928

Figure 13



P217929

8. Line up the holes on the A-frame [Figure 12] and re-insert CAT I pins, bushing, washer and nut [Figure 13]. Hand tighten only.

Figure 14



P217930

9. Remove the two zip ties from the tailwheel assembly and back braces [Figure 14].

Figure 15



P217931

⚠ WARNING

PINCHING HAZARD
 Failure to follow instructions can cause serious injury.
 Keep fingers and hands out of pinch points when assembling the unit. ◀

W-3180

10. Raise the lift arms in the upright position, using the bottom pivot point [Figure 15].

Figure 16



P217932

11. Remove nut on one side of the A-frame using 15/16" wrench [Figure 16].

Figure 17



P217933

12. Place the backstrap brace on the bolt [Figure 17] using the locknut. Hand tighten. Repeat for other side.

Figure 18



P217934

13. Pull lift arms until they are into place [Figure 18].

Figure 19



P217935

14. Go back and tighten the CAT I pins, on both sides, using a 1-5/16" wrench/socket [Figure 19].

Figure 20

P217936

15. Tighten the nuts on the backstraps [Figure 20].

Figure 21

P217937

16. Remove the shaft boot on the gear box [Figure 21].

17. Install the PTO driveline.
(See Installing The PTO Driveline on Page 17)

⚠ IMPORTANT

MACHINE DAMAGE

Failure to follow directions may result in machine damage.

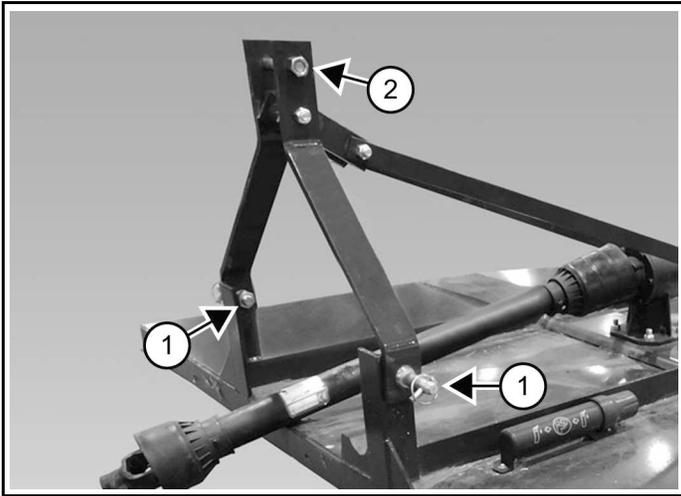
This unit was shipped without oil in the gearbox and without grease in the grease fittings. The unit must be serviced before use. *

12428

DAILY INSPECTION

Implement Mounting Frame

Figure 22



Inspect the lower implement mounts (Item 1) and upper mount (Item 2) [Figure 22] and all welds on the implement for wear and damage each time the implement is removed from the machine.

Check the following items at the start of a work day:

- Check for damaged or missing decals. Replace if necessary.
- Replace any worn or damaged parts immediately.

Three-Point Hitch

See your machine Operation & Maintenance Manual for detailed information on inspecting three-point hitch.

WARNING

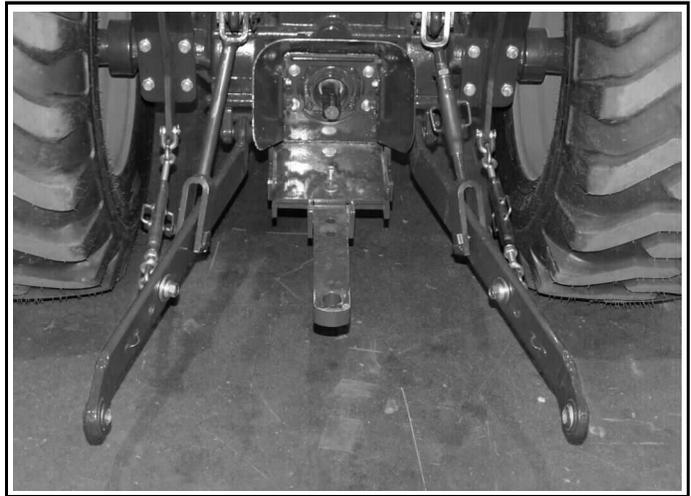
UNINTENDED MOVEMENT HAZARD

Failure to follow instructions can cause serious injury or death.

The parking brake must be engaged before leaving the operator's seat. Rollaway can occur because the transmission may not prevent machine movement. Lock the brake pedals together (if equipped) before activating the parking brake. ◀

W-2656

Figure 23



P138256

- Inspect the three-point hitch linkage, PTO shaft splines, guards, and shields. Replace if damaged or missing [Figure 23]. Repair broken or loose parts.

OPERATING PROCEDURE WITH COMPACT TRACTORS

Approved Compact Tractor Models And Requirements

	Rotary Cutter 48	Rotary Cutter 60	Rotary Cutter 72
Tractor HP	18–45	20–50	25–65

The chart shows the approved rotary cutter models for compact tractors based on horsepower.

Warranty on this implement is void if used on a non-approved carrier. Contact your Ignite Attachments representative for a current list of compatible carriers.

⚠ WARNING

MODIFICATION AND INSUFFICIENT INSTRUCTIONS HAZARD

Use of unapproved attachments, implements or improperly sized attachments can cause serious injury or death.

Attachments, implements and buckets for safe loads of specified densities are approved for each model. Never use attachments, implements or buckets which are not approved by Ignite Attachments. ◀

W-2709

Compact Tractor / Implement Setup

Setting Up The Ballast

Install the correct ballast on the compact tractor before installing the implement. See the compact tractor Operation & Maintenance Manual for ballast information.

Installing The PTO Driveline

⚠ WARNING

IMPACT AND INJECTION HAZARDS

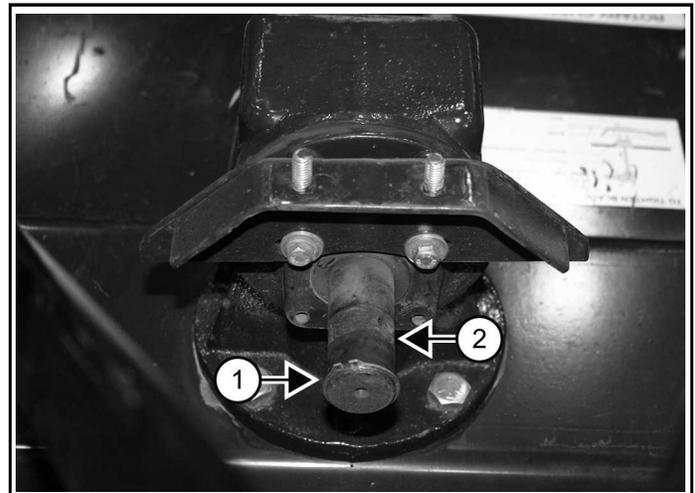
Flying debris or pressurized fluids can cause serious injury or death.

Wear safety glasses to prevent eye injury when any of the following conditions exist:

- When fluids are under pressure.
- Flying debris or loose material.
- Engine is running.
- Tools are being used. ◀

W-2019

Figure 24

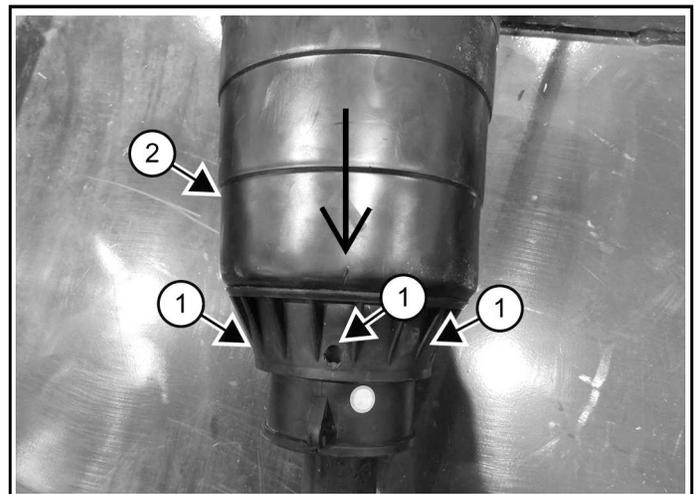


p-75810a

1. Remove the snap ring (Item 1) from the gear box shaft (Item 2) [Figure 24].

NOTE: Rotary Cutter PTO shield removed for picture clarity.

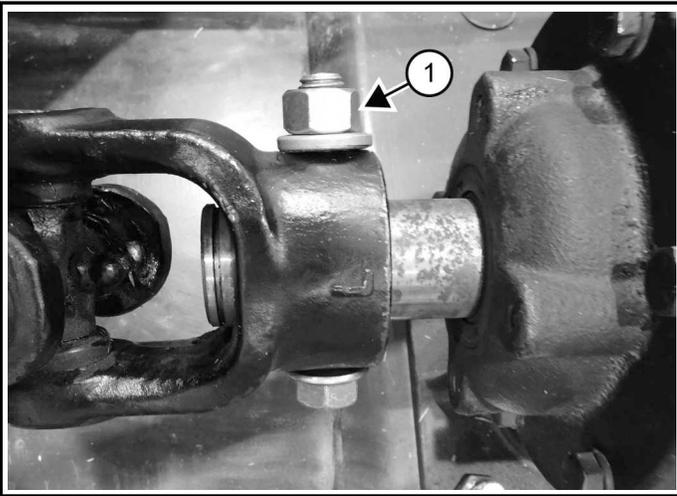
Figure 25



P142030a

2. Push down on the 3 holes (Item 1) in the PTO guard and pull down at the same time to disconnect the guard from the 3 plastic clips on the inside, and slide the guard (Item 2) [Figure 25] down the PTO driveline.

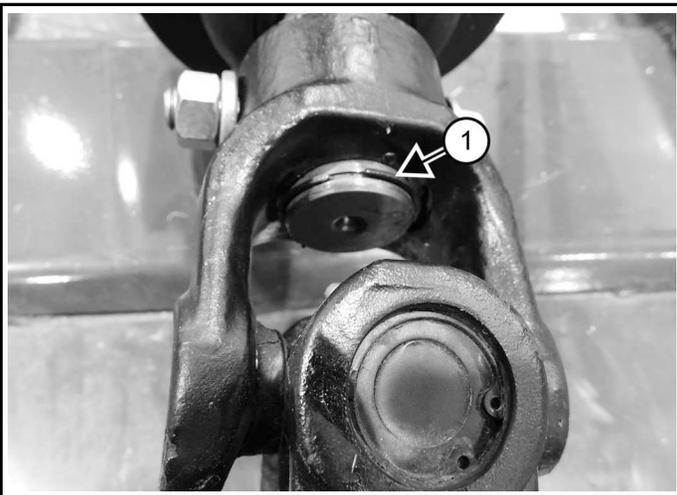
Figure 26



P142033a

3. Install the PTO driveline onto the gear box shaft. Align the hole of the PTO driveline with the hole in the gear box shaft [Figure 26].
4. Install the shear bolt (Item 1) [Figure 26] through the PTO driveline and rotary cutter gear box shaft and install the lock nut.

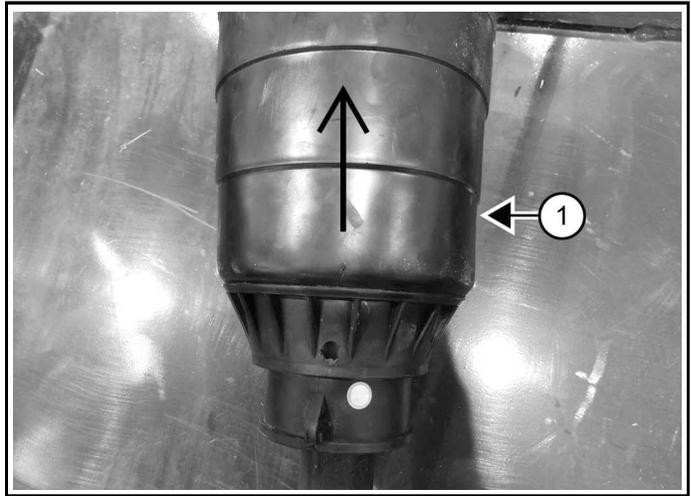
Figure 27



P142034a

5. Install the snap ring (Item 1) [Figure 27] securing the lower end of the PTO driveline to the rotary cutter gear box shaft.

Figure 28

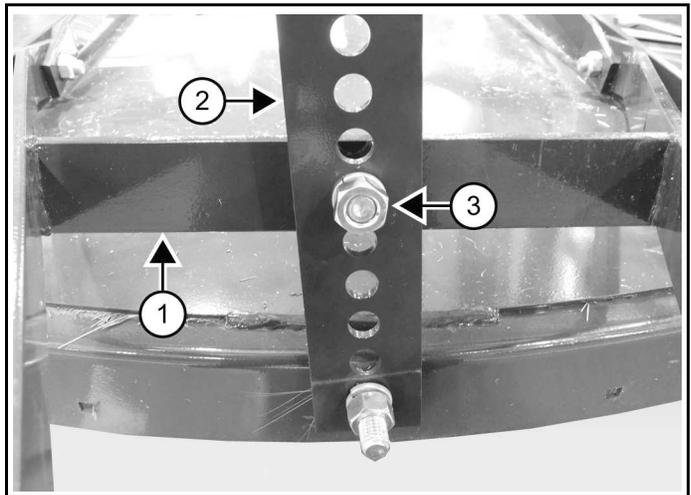


P142030b

6. Slide the guard (Item 1) [Figure 28] over the gear box connection and align the plastic tabs with locking collar on the PTO driveline until the guard locks in position.

Connecting The Wheel Assembly

Figure 29

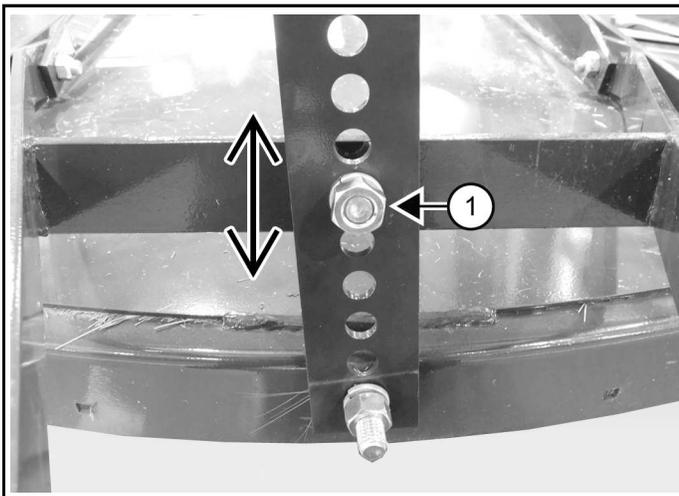


P142035a

1. Align the wheel assembly (Item 1) with height adjustment bar (Item 2). Install the bolt and nut (Item 3) [Figure 29] through the height adjustment bar and wheel assembly.
2. Tighten the lock nut (Item 3) [Figure 29].

Adjusting Rear Wheel Height

Figure 30



P142058b

1. Remove lock nut (Item 1) [Figure 30].

NOTE: The bottom holes of the height adjustment bar are to be used in rough terrain or when cutting tall grass. The top holes are used in smooth conditions and cutting fine grass. Adjust the height according to the work site.

2. Remove bolt, move the wheel assembly up or down to the desired cutting depth. Reinstall the bolt through the height adjustment bar and wheel assembly.
3. Install and tighten the lock nut (Item 1) [Figure 30].

Entering And Exiting The Compact Tractor

⚠ WARNING

GENERAL HAZARD

Failure to follow instructions can cause serious injury or death.

Use ROPS and fasten the seat belt.

Install the correct ballast (if required).

Never modify equipment. Never use unapproved implements or attachments.

Operate the compact tractor from the operator's seat only.

Keep bystanders away. Never carry riders. ◀

W-2807

See your compact tractor Operation & Maintenance Manual for detailed instructions on entering and exiting the machine.

Installing The Three-Point Implement

NOTE: Your machine and attachment and / or implement models may vary, but the procedure is the same. Always inspect the compact tractor three-point hitch and implement three-point mounting before installation. (See Daily Inspection on Page 16) .

⚠ WARNING

GENERAL HAZARD

Failure to obey warnings can cause serious injury or death.

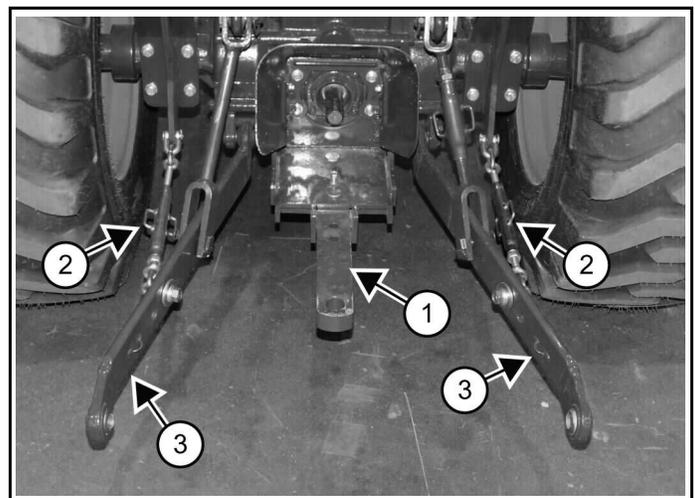
Obey all warnings on the machine and in the manuals. ◀

W-2744

Ballast may need to be added to the front of the compact tractor for proper operation when three-point hitch implements are installed. See the compact tractor Operation & Maintenance Manual for detailed information on installing the correct front ballast.

NOTE: The following images may not show your exact three-point implement but the procedure is the same.

Figure 31



c138256a

1. Move the drawbar (Item 1) [Figure 31] to the storage position or remove (if necessary). See the compact tractor Operation & Maintenance Manual for detailed information.

The three-point hitch lower links must be set wide enough to clear the implement mounting pins.

2. Adjust the sway bars (Item 2) (both sides) to move the lower links (Item 3) [Figure 31] as needed.

See the compact tractor Operation & Maintenance Manual for detailed information on adjusting sway bars.

⚠ WARNING

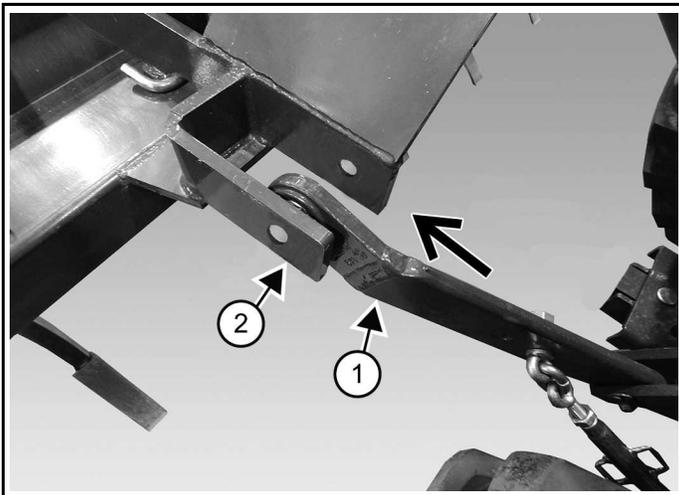
CRUSHING HAZARD

Contact with the machine can cause serious injury or death. Before backing the machine, look in all directions and make sure no bystanders are in the work area. Do not allow anyone between the machine and the implement when backing up to the implement for installation. ◀

W-2734

3. Enter the compact tractor
(See Entering And Exiting The Compact Tractor on Page 19) .
4. Start the engine and release the parking brake.

Figure 32



P142006a

5. Drive the compact tractor to the implement and align the lower links (Item 1) with the implement lower mounts (Item 2) [Figure 32] (both sides).
6. Lower or raise the compact tractor three-point hitch lower links (Item 1) until they are even with the lower mounts (Item 2) [Figure 32] (both sides) of the three-point implement.

See the compact tractor Operation & Maintenance Manual for detailed information on operating the compact tractor.
7. Stop the engine and exit the compact tractor.
(See Entering And Exiting The Compact Tractor on Page 19)

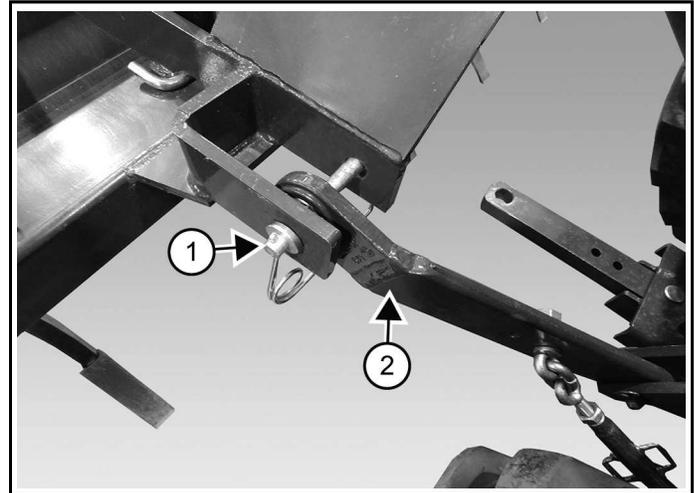
⚠ WARNING

PINCHING HAZARD

Failure to follow instructions can cause serious injury. Keep fingers and hands out of pinch points when installing and removing implement or attachments. ◀

W-2971

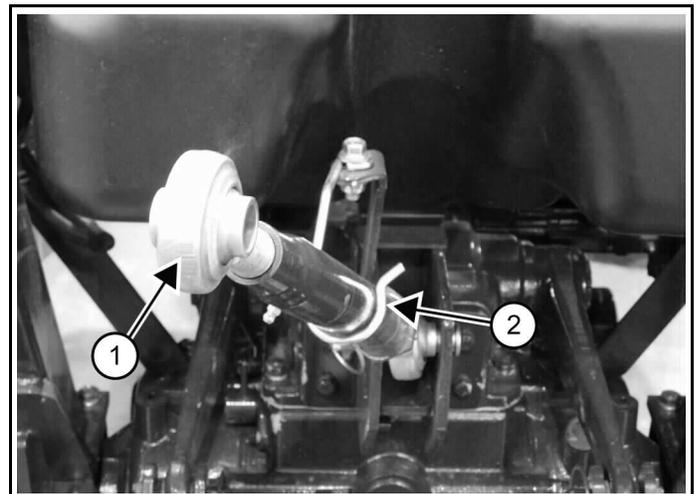
Figure 33



P142005a

8. Install the lower implement pin (Item 1) through the lower mounts and lower link (Item 2) [Figure 33] (both sides) and secure with retaining clip.

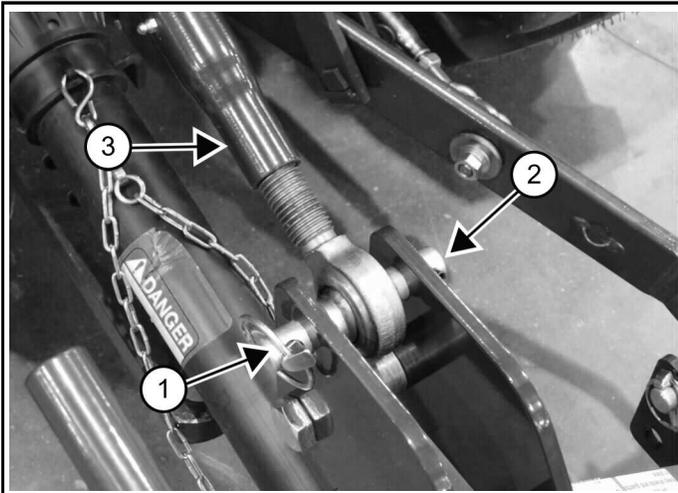
Figure 34



c138244a

9. Remove the top link (Item 1) from the storage position bracket (Item 2) [Figure 34].

Figure 35



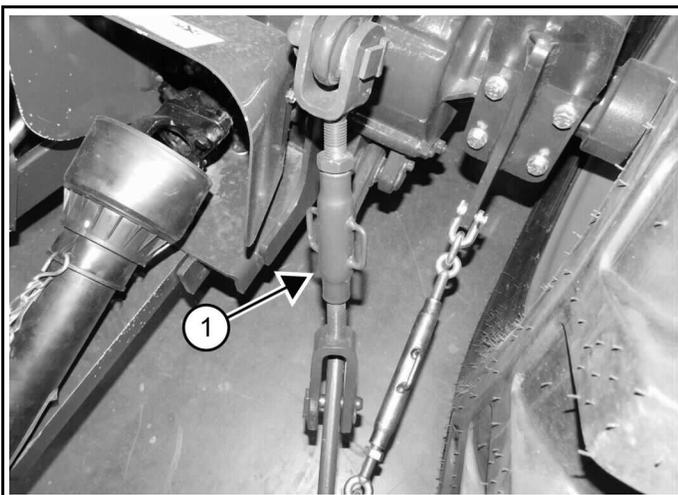
10. Lower the top link (Item 3) [Figure 35] until it aligns with the implement upper mounting hole.
11. Install the pin (Item 2) and retainer pin (Item 1) [Figure 35].

NOTE: It may be necessary to lengthen or shorten the top link to align it with the implement mounting hold [Figure 35].
(See Adjusting The Top Link on Page 21)

12. The implement can be leveled front to back by adjusting the top link.
(See Adjusting The Top Link on Page 21)
13. The implement side to side sway will need to be adjusted. (See Adjusting The Sway Bar on Page 22)

Adjusting The Lift Link

Figure 36

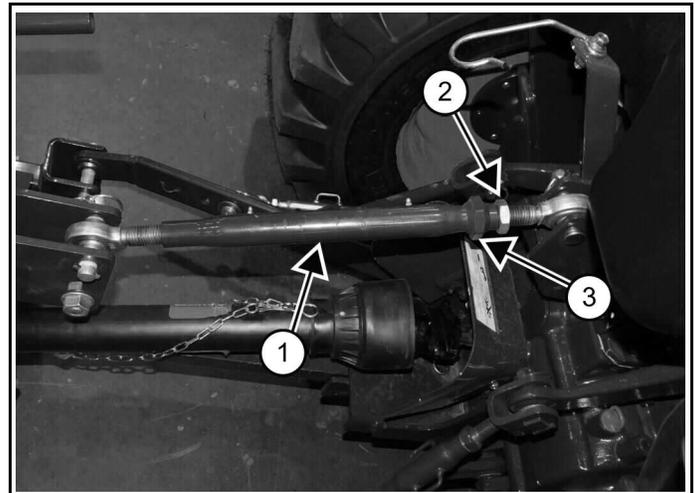


The lift link (Item 1) [Figure 36] is used to adjust the side to side level of the implement.

See the compact tractor Operation & Maintenance Manual for detailed information on adjusting the lift link.

Adjusting The Top Link

Figure 37

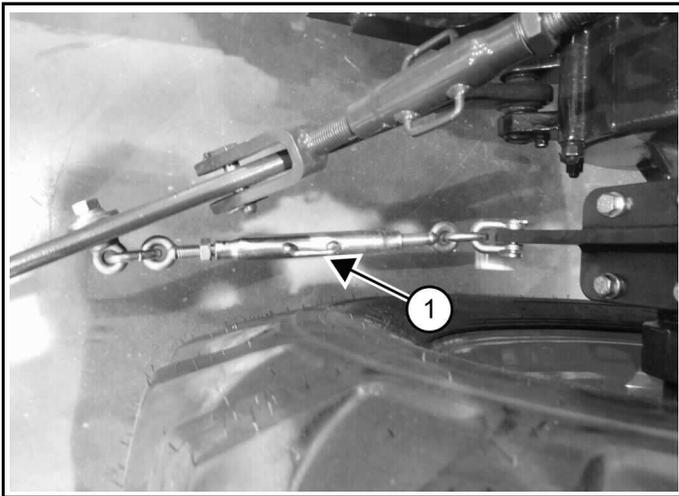


The top link (Item 1) [Figure 37] is used to adjust the front to back level of the implement.

1. Loosen the locknut (Item 2) and use the adjuster (Item 3) [Figure 37] to lengthen or shorten the top link.
2. Turn clockwise to lengthen the top link, turn counterclockwise to shorten top link.
3. After the implement has been leveled, tighten the locknut (Item 2) [Figure 37].

Adjusting The Sway Bar

Figure 38



The sway bar (Item 1) [Figure 38] (both sides) are used to center the implement between the tires and limits the implements side to side movement.

Adjust the sway bars to center the implement between the tires. See the compact tractor Operation & Maintenance Manual for detailed information on adjusting sway bars.

When adjusting the sway bars with implement installed, the implement will need to be raised slightly off the ground.

Rear Power Take-Off (PTO)

Installing The Rear Power Take-Off (PTO)

The compact tractor must be equipped with a rear - PTO that has a 540 revolutions per minute (rpm) PTO shaft.

1. Install the implement to the compact tractor. (See Installing The Three-Point Implement on Page 19)

⚠ WARNING

GENERAL HAZARD

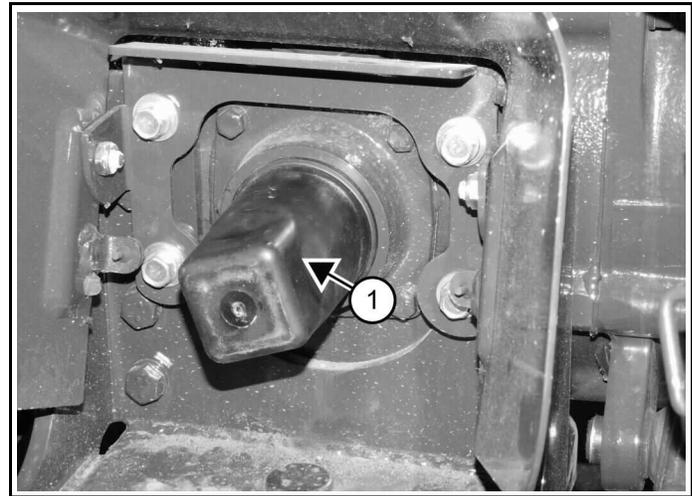
Failure to obey warnings can cause serious injury or death.

Obey all warnings on the machine and in the manuals.*

2. Stop the engine and exit the compact tractor. (See Entering And Exiting The Compact Tractor on Page 19)

Make sure the PTO driveline and all rotating components have come to a complete stop before exiting the compact tractor (if applicable).

Figure 39



3. Remove the PTO shaft cover (Item 1) [Figure 39]. (See the compact tractor Operation & Maintenance Manual for detailed information.)

NOTE: Reinstall the PTO shaft cover whenever the PTO is not being used.

4. Remove the PTO driveline from the implement storage position.

⚠ IMPORTANT

MACHINE DAMAGE HAZARD

Improper hitch installation can cause PTO driveline damage.

- **Do not modify the hitch or use an unapproved hitch.**
- **Make sure PTO driveline is of adequate length and that u-joints are in the correct phase.**
- **Use only approved PTO drivelines designated for the attachment and never use unapproved attachments.**

⚠ WARNING**GENERAL HAZARD**

Failure to follow instructions can cause serious injury or death.

Do NOT exceed the rated implement / attachment PTO speed.

Stay clear of rotating driveline.

Keep bystanders away.

Keep hands, feet, clothing, and long hair away.

Keep PTO shields and all guards in place.

Disengage PTO (rear and mid), engage the parking brake, stop the engine, and make sure all rotating components are stopped before exiting compact tractor.

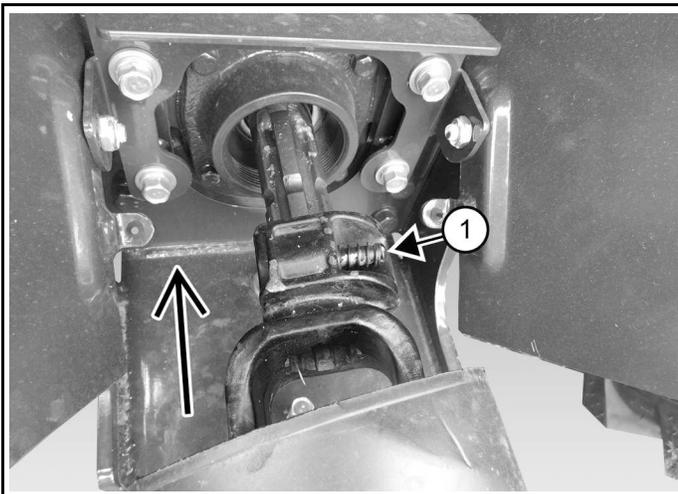
Do not service the compact tractor or implement / attachment with the PTO (rear or mid) engaged.

Do not service the implement / attachment in a raised position unless properly blocked and with all rotating components stopped.

Disengage PTO (rear and mid) for road travel. ◀

W-2697

Figure 40



P142031a

Use the correct PTO driveline for use with the compact tractor rear - PTO shaft and the implement PTO shaft.

5. Push in the pin (Item 1) [Figure 40] and slide the PTO driveline onto the compact tractor rear - PTO shaft. Release the pin and the driveline will lock onto the shaft. Push and pull the PTO driveline back and forth several times and make sure it is securely attached to the PTO shaft.

⚠ WARNING**ENTANGLEMENT HAZARD**

Failure to follow instructions can cause serious injury or death.

- Keep PTO shields and all guards in place.
- Keep away from moving parts.
- Keep bystanders away.
- Do not exceed 540 rear - PTO rpm or 2000 mid - PTO rpm. ◀

W-2699

*Removing The Rear Power Take-Off (PTO)*

Always park on flat level ground.

1. Fully lower the loader arms, put the attachment flat on the ground (if equipped).
2. Fully lower the implement(s) to the ground.
3. Stop the engine and exit the compact tractor. (See Entering And Exiting The Compact Tractor on Page 19)

Make sure the PTO driveline and all rotating components have come to a complete stop before exiting the compact tractor (if applicable).

⚠ WARNING**UNINTENDED MOVEMENT HAZARD**

Failure to follow instructions can cause serious injury or death.

Before you leave the operator's seat:

Fully lower the loader arms, put the attachment flat on the ground (if equipped).

Fully lower the implement(s) to the ground (if equipped).

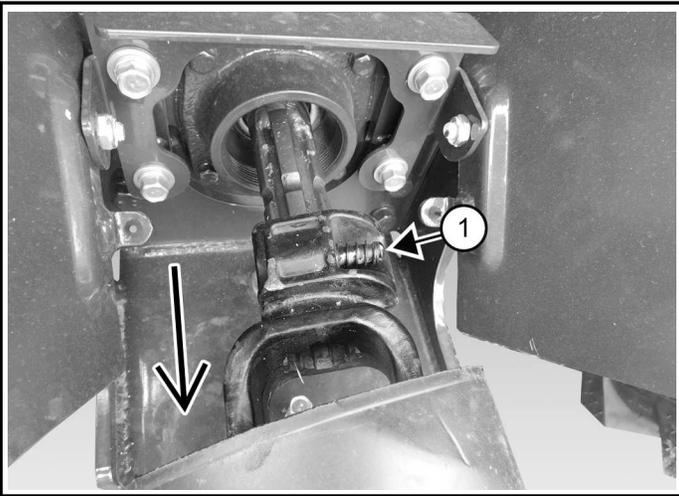
Lock brake pedals together (if equipped) and engage the parking brake.

Place all controls in neutral.

Stop the engine, unfasten the seat belt, and remove the key. ◀

W-3178

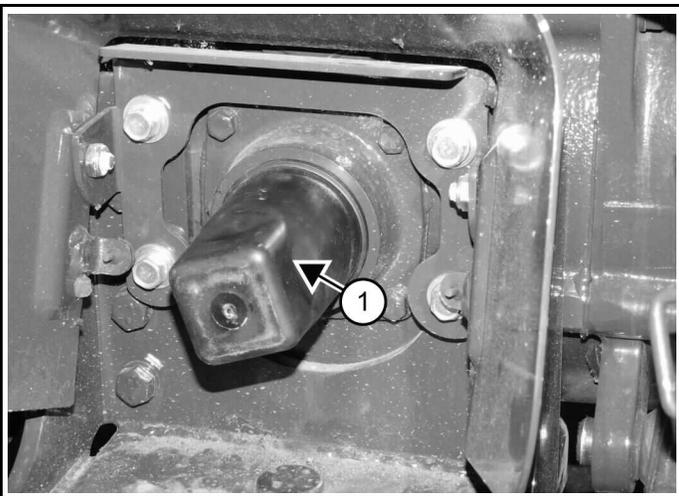
Figure 41



P142031b

4. Push in the pin (Item 1) [Figure 41] and pull the PTO driveline off the compact tractor rear - PTO shaft.
5. Place the PTO driveline into the implement storage position (if applicable).
6. Remove the implement from the compact tractor. (See Removing The Three-Point Implement on Page 31)

Figure 42



C138260a

7. Install the PTO shaft cover (Item 1) [Figure 42]. (See the compact tractor Operation & Maintenance Manual for detailed information.)

⚠ WARNING

GENERAL HAZARD

Failure to follow instructions can cause serious injury or death.

Do NOT exceed the rated implement / attachment PTO speed.

Stay clear of rotating driveline.

Keep bystanders away.

Keep hands, feet, clothing, and long hair away.

Keep PTO shields and all guards in place.

Disengage PTO (rear and mid), engage the parking brake, stop the engine, and make sure all rotating components are stopped before exiting compact tractor.

Do not service the compact tractor or implement / attachment with the PTO (rear or mid) engaged.

Do not service the implement / attachment in a raised position unless properly blocked and with all rotating components stopped.

Disengage PTO (rear and mid) for road travel. ◀

W-2697

Checking The PTO Driveline Length

NOTE: Due to variations in distances between tractor PTO shafts and implement input shafts, drivelines may need to be shortened or a longer shaft may be required. When fitting the implement to the compact tractor, the PTO driveline, with telescoping sections, must be inspected. When the sections are at the most compressed operating position, the sections must not "bottom out". At its shortest length, there must be at least 50,8 mm (2 in) of clearance between each section end and opposite section end at the most compressed operating position. When the sections are at the most extended position, there must be sufficient engagement between the sections. At its farthest operating extension, a minimum section engagement of 33% of shaft length must be maintained. (See Checking The PTO Driveline Engagement on Page 27)

Checking For PTO Driveline Bottoming Out

⚠ WARNING**GENERAL HAZARD**

Failure to follow instructions can cause serious injury or death.

Do NOT exceed the rated implement / attachment PTO speed.

Stay clear of rotating driveline.

Keep bystanders away.

Keep hands, feet, clothing, and long hair away.

Keep PTO shields and all guards in place.

Disengage PTO (rear and mid), engage the parking brake, stop the engine, and make sure all rotating components are stopped before exiting compact tractor.

Do not service the compact tractor or implement / attachment with the PTO (rear or mid) engaged.

Do not service the implement / attachment in a raised position unless properly blocked and with all rotating components stopped.

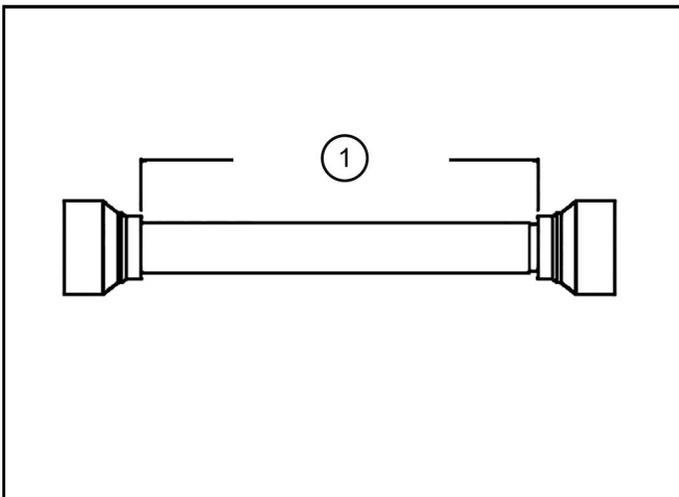
Disengage PTO (rear and mid) for road travel. ◀

W-2697

1. Stop the engine and exit the compact tractor. (See Entering And Exiting The Compact Tractor on Page 19)

Make sure the PTO driveline and all rotating components have come to a complete stop before exiting the compact tractor (if applicable).

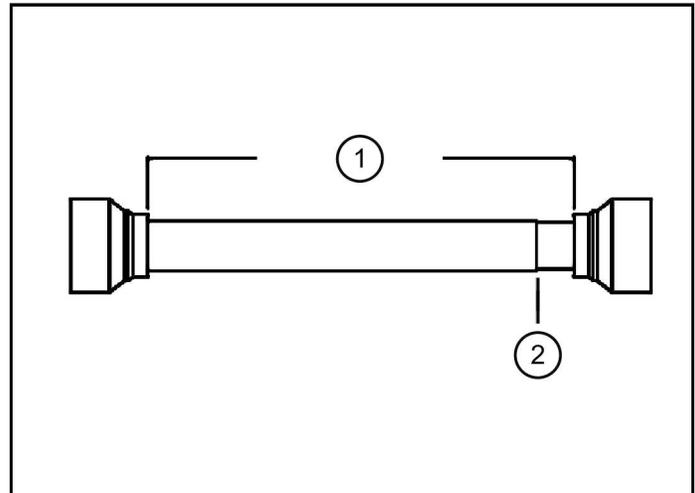
Figure 43



p-83762a

2. Disconnect the PTO driveline from the compact tractor and slide the PTO driveline together until fully retracted.
3. Measure the retracted length of PTO driveline (Item 1) [Figure 43].

Figure 44



p-83763a

4. Extend the PTO driveline 50.8 mm (2 in) (Item 1) from the retracted length and make a mark at the end of the outer shield on the inner shield (Item 2) [Figure 44].
5. Reattach the PTO driveline to the compact tractor PTO shaft.
6. Enter the compact tractor. (See Entering And Exiting The Compact Tractor on Page 19)
7. Start the engine.
8. With the rear PTO DISENGAGED, raise and lower the implement and watch the PTO driveline expand and retract.
9. If the outer PTO driveline plastic guard slides (retracts) over the mark at any point of travel, the PTO driveline needs to be shortened.

Reducing The PTO Driveline Length

⚠ WARNING

GENERAL HAZARD

Failure to follow instructions can cause serious injury or death.

Do NOT exceed the rated implement / attachment PTO speed.

Stay clear of rotating driveline.

Keep bystanders away.

Keep hands, feet, clothing, and long hair away.

Keep PTO shields and all guards in place.

Disengage PTO (rear and mid), engage the parking brake, stop the engine, and make sure all rotating components are stopped before exiting compact tractor.

Do not service the compact tractor or implement / attachment with the PTO (rear or mid) engaged.

Do not service the implement / attachment in a raised position unless properly blocked and with all rotating components stopped.

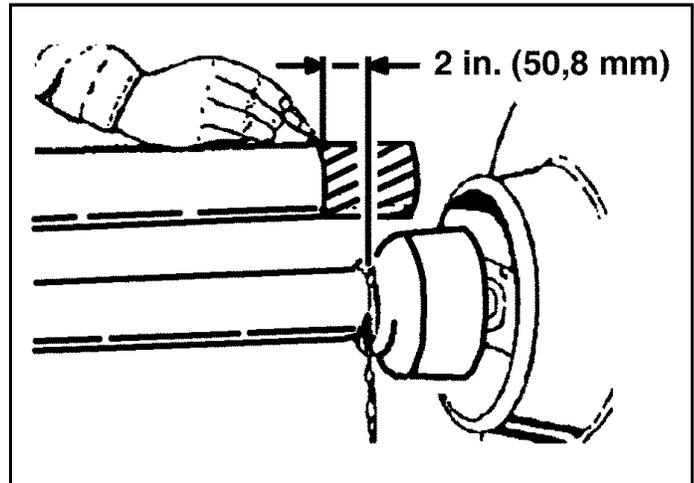
Disengage PTO (rear and mid) for road travel. ◀

W-2697

1. Stop the engine and exit the compact tractor. (See Entering And Exiting The Compact Tractor on Page 19)

Make sure the PTO driveline and all rotating components have come to a complete stop before exiting the compact tractor.
2. Remove the PTO driveline from the compact tractor and place in storage position (if equipped). (See Removing The Rear Power Take-Off (PTO) on Page 23)
3. Enter the compact tractor. (See Entering And Exiting The Compact Tractor on Page 19)
4. Start the engine and release the parking brake.
5. Raise or lower the three-point implement to get the shortest distance between the compact tractor PTO shaft and three-point implement gearbox PTO shaft.
6. Stop the engine and exit the compact tractor. (See Entering And Exiting The Compact Tractor on Page 19)
7. Pull the PTO driveline apart and reinstall each individual section; one half to the compact tractor PTO shaft and one half to the implement gearbox PTO shaft.

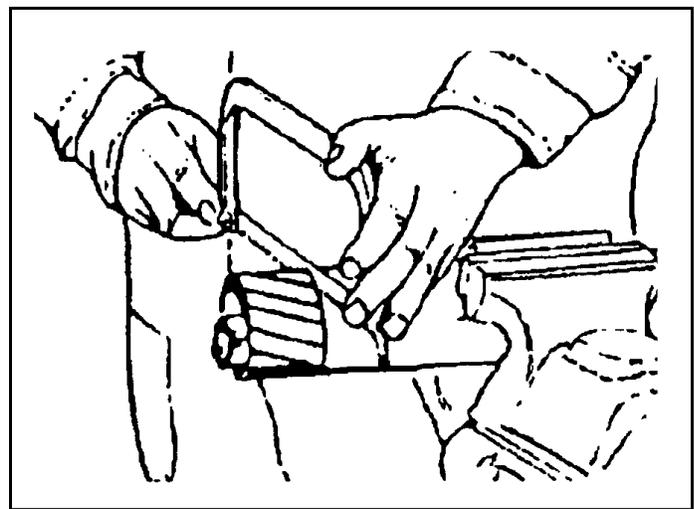
Figure 45



p-63791

8. Hold PTO driveline sections parallel to one another and measure back 50.8 mm (2 in) [Figure 45] from the yoke of each section and place a mark on opposite section.

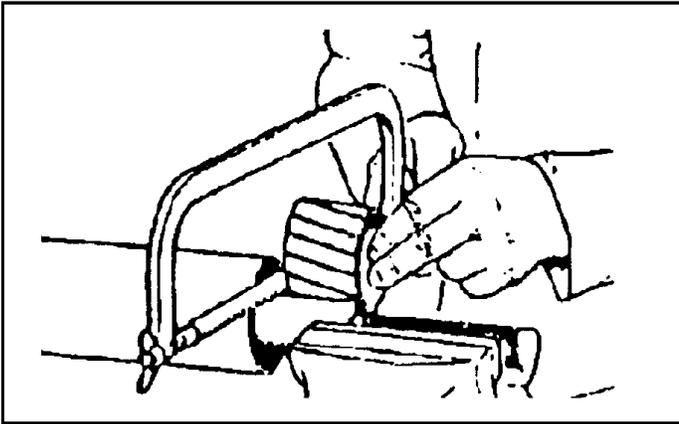
Figure 46



p-79011

9. Cut the plastic shield at this length [Figure 46].

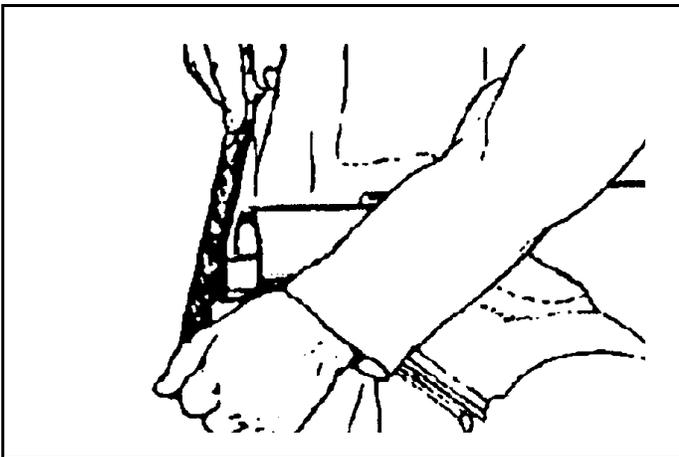
Figure 47



p-79012

10. Use the plastic shield length that was just cut and align it with the end of the inner shaft [Figure 47]. Cutting the same amount off the end of the inner shaft.

Figure 48



p-79013

11. Round off all sharp edges and debur [Figure 48].
12. Repeat steps 8-11 for the other shaft section. Equal amounts must be cut from each shaft.
13. Thoroughly grease and install the PTO driveline halves together.
14. Recheck for proper operation.

⚠ WARNING

ENTANGLEMENT HAZARD

Failure to follow instructions can cause serious injury or death.

- Keep PTO shields and all guards in place.
- Keep away from moving parts.
- Keep bystanders away.
- Do not exceed 540 rear - PTO rpm or 2000 mid - PTO rpm. ◀

W-2059



Checking The PTO Driveline Engagement

⚠ WARNING

GENERAL HAZARD

Failure to follow instructions can cause serious injury or death.

Do NOT exceed the rated implement / attachment PTO speed.

Stay clear of rotating driveline.

Keep bystanders away.

Keep hands, feet, clothing, and long hair away.

Keep PTO shields and all guards in place.

Disengage PTO (rear and mid), engage the parking brake, stop the engine, and make sure all rotating components are stopped before exiting compact tractor.

Do not service the compact tractor or implement / attachment with the PTO (rear or mid) engaged.

Do not service the implement / attachment in a raised position unless properly blocked and with all rotating components stopped.

Disengage PTO (rear and mid) for road travel. ◀

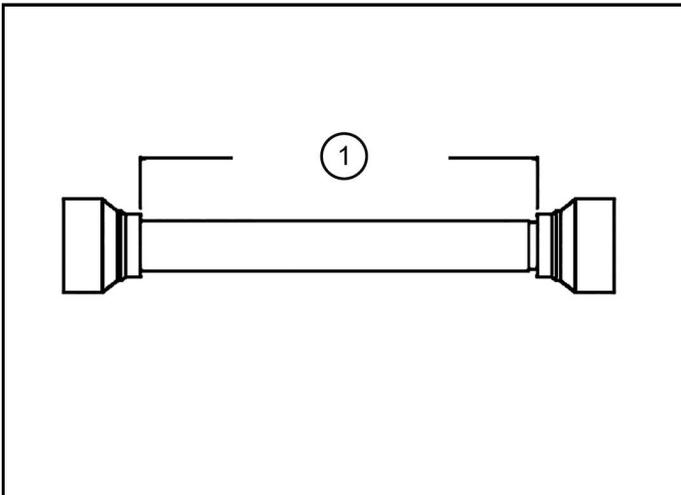
W-2097

1. Exit the compact tractor.
(See Entering And Exiting The Compact Tractor on Page 19)

Make sure the PTO driveline and all rotating components have come to a complete stop before exiting the compact tractor.

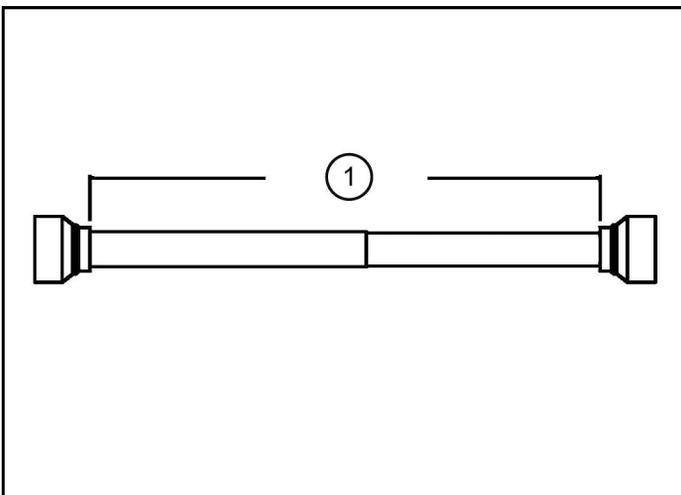
2. Disconnect the PTO driveline from the compact tractor and slide the driveline sections together until fully retracted.

Figure 49



- p-83792a
3. Measure the retracted (compressed) length of the PTO driveline between the bases of the plastic shields (Item 1) [Figure 49].
 4. Multiply the retracted driveline length by 1.667 to determine the PTO driveline Maximum Operating Length. (i.e.: 647,7 mm (25.5 in) x 1.667= 1079,7 mm (42.5 in) Maximum Operating Length).
 5. Attach the PTO driveline to the compact tractor PTO output shaft.
 6. Enter the compact tractor. (See Entering And Exiting The Compact Tractor on Page 19)

Figure 50



- p-83794a
7. With the PTO driveline attached, position the three-point implement to where the telescoping PTO driveline is at its maximum operating extension.

8. Exit the compact tractor. (See Entering And Exiting The Compact Tractor on Page 19)

Make sure the PTO driveline and all rotating components have come to a complete stop before exiting the compact tractor.

9. Measure the length of the PTO driveline between the bases of the plastic shields (Item 1) [Figure 50] to determine the maximum operating length.

If the measured maximum operating length is less than the Maximum Operating Length calculation (from Step 4), the PTO driveline has adequate engagement.

If the measured maximum operating length is equal to or more than the Maximum Operating Length calculation (from Step 4), the PTO driveline does not have adequate engagement and should be replaced with a longer driveline. See your Ignite Attachments dealer for available PTO drivelines.

Control Functions Three-Point Hitch (Implement)

The three-point hitch will be used to raise or lower the implement. (See the compact tractor Operation & Maintenance Manual for detailed information on operating the three-point hitch).

Control Functions Rear-PTO

Safety Rules For PTO Operation

⚠ WARNING

GENERAL HAZARD

Failure to follow instructions can cause serious injury or death.

Do NOT exceed the rated implement / attachment PTO speed.

Stay clear of rotating driveline.

Keep bystanders away.

Keep hands, feet, clothing, and long hair away.

Keep PTO shields and all guards in place.

Disengage PTO (rear and mid), engage the parking brake, stop the engine, and make sure all rotating components are stopped before exiting compact tractor.

Do not service the compact tractor or implement / attachment with the PTO (rear or mid) engaged.

Do not service the implement / attachment in a raised position unless properly blocked and with all rotating components stopped.

Disengage PTO (rear and mid) for road travel. ◀

W-2897

⚠ WARNING**GENERAL HAZARD**

Failure to obey warnings can cause serious injury or death.

Obey all warnings on the machine and in the manuals. ◀

W-2744

⚠ WARNING**UNINTENDED MOVEMENT HAZARD**

Failure to follow instructions can cause serious injury or death.

Before you leave the operator's seat:

Fully lower the loader arms, put the attachment flat on the ground (if equipped).

Fully lower the implement(s) to the ground (if equipped).

Lock brake pedals together (if equipped) and engage the parking brake.

Place all controls in neutral.

Stop the engine, unfasten the seat belt, and remove the key. ◀

W-3178

- Keep all shields in place. Replace damaged or missing shields before operating.
- Follow warnings and instructions on machine signs (decals). Replace damaged or missing decals.
- Do not wear loose or bulky clothing around the PTO or other moving parts.
- Keep bystanders away from PTO driven equipment, and never allow children near machines.
- Read and understand the manuals for the PTO driven equipment and be aware of safe operating procedures and hazards that may not be readily apparent.
- Always walk around equipment to avoid coming near a turning PTO driveline. Stepping over, leaning across or crawling under a turning PTO driveline can lead to entanglement.
- Never overspeed the PTO. See implement Operation & Maintenance Manual for correct PTO speed.
- Position the machine and implement hitch correctly to prevent driveline stress and separation.
- Use caution when turning. Turning too sharp can cause driveline damage.

Engaging The Rear-PTO

1. Enter the compact tractor.
(See Entering And Exiting The Compact Tractor on Page 19)
2. Start the engine and release the parking brake.

3. Lower the implement to the ground. (See the machine's Operation & Maintenance Manual for detailed information on operating the machine.)
4. Move the engine speed control lever to low engine speed.

⚠ IMPORTANT**MACHINE DAMAGE HAZARD**

Failure to follow directions can result in start-up overload on PTO driveline.

Reduce engine speed to low idle when engaging the PTO. After PTO driveline is rotating, increase engine speed. ◀

I-2272

5. Engage the rear - PTO system. (See the machine's Operation & Maintenance Manual for detailed information on operating the machine.)

The rear - PTO driveline will start to rotate.
6. Move the engine speed lever to increase engine speed to the correct rpm as indicated on the tachometer. This will cause the rear - PTO shaft to rotate at 540 rpm. Do Not exceed a rear - PTO speed of 540 rpm.

⚠ WARNING**ENTANGLEMENT HAZARD**

Failure to follow instructions can cause serious injury or death.

- Keep PTO shields and all guards in place.
- Keep away from moving parts.
- Keep bystanders away.
- Do not exceed 540 rear - PTO rpm or 2000 mid - PTO rpm. ◀

W-2659

⚠ WARNING

UNINTENDED MOVEMENT HAZARD

Failure to follow instructions can cause serious injury or death.

Before you leave the operator's seat:

Fully lower the loader arms, put the attachment flat on the ground (if equipped).

Fully lower the implement(s) to the ground (if equipped).

Lock brake pedals together (if equipped) and engage the parking brake.

Place all controls in neutral.

Stop the engine, unfasten the seat belt, and remove the key. ◀

W-3178



p-75310

Disengaging The Rear-PTO

1. Move the engine speed lever back to the low idle position.
2. Disengage the rear - PTO system. (See the machine's Operation & Maintenance Manual.)

Driving The Implement And Tractor To Worksite

The following images may not show your exact three-point implement but the procedure is the same.

⚠ WARNING

GENERAL HAZARD

Steering and braking can be affected by the loader attachment, implements, front wheel assist and the rear differential lock.

Always install the correct ballast. Do not exceed the Loader or Three-Point Hitch lift capacities.

Always carry loads low. Slow down when turning. Always lock the brake pedals together (if equipped) for road travel.

Unlock the brake pedals (if equipped) only when using brake pedals to assist in slow speed turns in work applications.

Make sure that the brakes are adjusted correctly so the compact tractor does not pull to one side when braking. ◀

W-2738

⚠ WARNING

INSTABILITY HAZARD

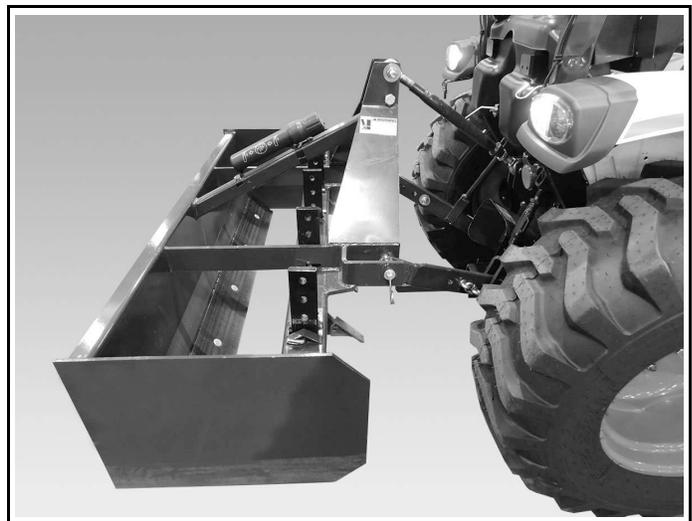
Failure to obey warnings can cause the machine to rollover.

- Use ROPS and fasten the seat belt.
- Install the correct rear ballast.
- Do NOT exceed the Loader lift capacity.
- Check tire condition and proper air pressure.
- Use tires with the correct load rating. ◀

W-3043

1. Enter the compact tractor. (See Entering And Exiting The Compact Tractor on Page 19)
2. Start the engine.

Figure 51



P1420079

3. Raise the implement to the travel position [Figure 51]. See the compact tractor Operation & Maintenance Manual for detailed information on operating the three-point hitch.
4. Drive the compact tractor and implement to the work area.
5. When operating on public road or highway, always follow local regulations. For example; Slow Moving Vehicle (SMV) emblem or directional signals and hazard / flasher lights may be required.
6. Park on flat level ground.
7. Lower the implement slightly above the ground. (See the compact tractor Operation & Maintenance Manual for detailed information on operating the three-point hitch.)

- Stop the engine and exit the compact tractor.
(See Entering And Exiting The Compact Tractor on Page 19)

WARNING

UNINTENDED MOVEMENT HAZARD
Failure to follow instructions can cause serious injury or death.

Before you leave the operator's seat:
Fully lower the loader arms, put the attachment flat on the ground (if equipped).
Fully lower the implement(s) to the ground (if equipped).
Lock brake pedals together (if equipped) and engage the parking brake.
Place all controls in neutral.
Stop the engine, unfasten the seat belt, and remove the key. ◀

W-3178

Operating The Rotary Cutter

- Adjust rear wheel height to the desired cutting depth.
(See Adjusting Rear Wheel Height on Page 19)
- Level the three-point rotary cutter deck from side to side. (See Adjusting The Lift Link on Page 21)
- Enter the compact tractor.
(See Entering And Exiting The Compact Tractor on Page 19)

WARNING

GENERAL HAZARD
Failure to follow instructions can cause serious injury or death.

- Fasten seat belt, start, and operate only from the operator's seat.
- Never wear loose clothing when working near machine. ◀

W-2135

- Start the engine and release the parking brake.

WARNING

CRUSHING HAZARD
Failure to follow instructions can cause serious injury or death.
Do not stand between the machine and attachment / implement.

Keep bystanders away.
Install support stands before disconnecting attachment / implement from the machine. ◀

W-2724

NOTE: Watch for and avoid obstructions and obstacles that could cause damage to the three-point rotary cutter and compact tractor.

NOTE: Damage to the three-point rotary cutter and compact tractor may occur by hitting hidden objects.

- Raise or lower the three-point hitch until the front of the deck is approximately 25-50 mm (1-2 in) lower than the rear of the deck. (See the compact tractor Operation & Maintenance Manual for detailed information on operating the compact tractor.)

NOTE: If applicable, place the three-point hitch position lever in the float operating mode. This allows the lower links to move up and down as the rotary cutter follows the contour of the ground.

Removing The Three-Point Implement

NOTE: In muddy conditions or to prevent the implement from freezing to the ground, put the implement on planks or blocks before removing the implement from the machine.

- Enter the compact tractor.
(See Entering And Exiting The Compact Tractor on Page 19)
- Start the engine and release the parking brake.
- Park on flat level ground.
- Lower the three-point setting the rotary cutter on the ground. (See the compact tractor Operation & Maintenance Manual for detailed information on operating the three-point hitch.)

WARNING

UNINTENDED MOVEMENT HAZARD
Failure to follow instructions can cause serious injury or death.

Before you leave the operator's seat:
Fully lower the loader arms, put the attachment flat on the ground (if equipped).
Fully lower the implement(s) to the ground (if equipped).
Lock brake pedals together (if equipped) and engage the parking brake.
Place all controls in neutral.
Stop the engine, unfasten the seat belt, and remove the key. ◀

W-3178

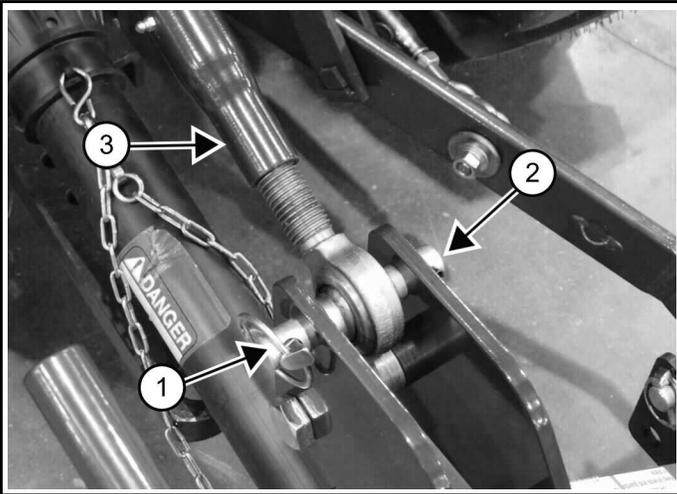
- Stop the engine and exit the compact tractor.
(See Entering And Exiting The Compact Tractor on Page 19)

Make sure the PTO driveline and all rotating components have come to a complete stop before exiting the compact tractor (if applicable).

- Block the wheels of the implement to keep it from moving (if applicable).

7. Disconnect the PTO driveline.
(See Removing The Rear Power Take-Off (PTO) on Page 23)

Figure 52

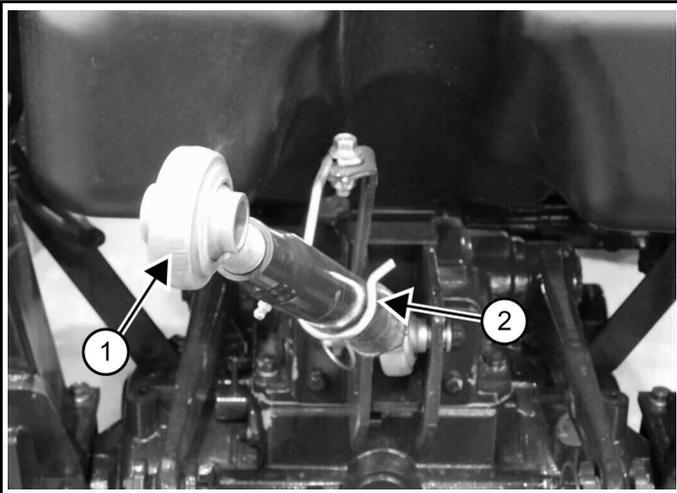


8. Remove the retainer pin (Item 1) and pin (Item 2) [Figure 52].

It may be necessary to lengthen or shorten the top link when removing the implement from the compact tractor. (See Adjusting The Top Link on Page 21)

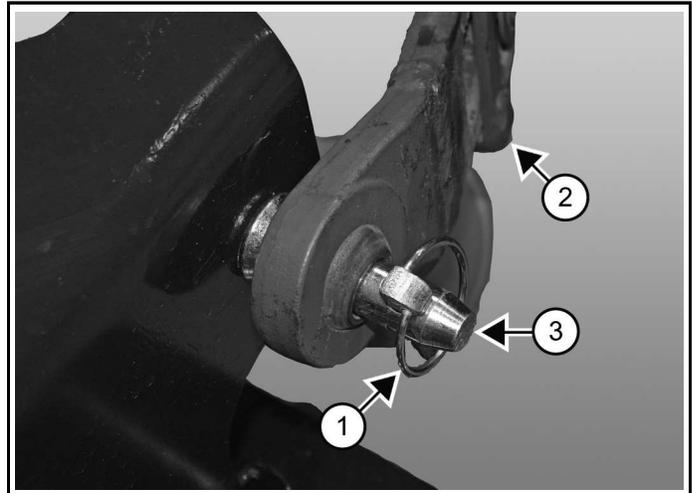
9. Remove the top link (Item 3) [Figure 52] from the implement.

Figure 53



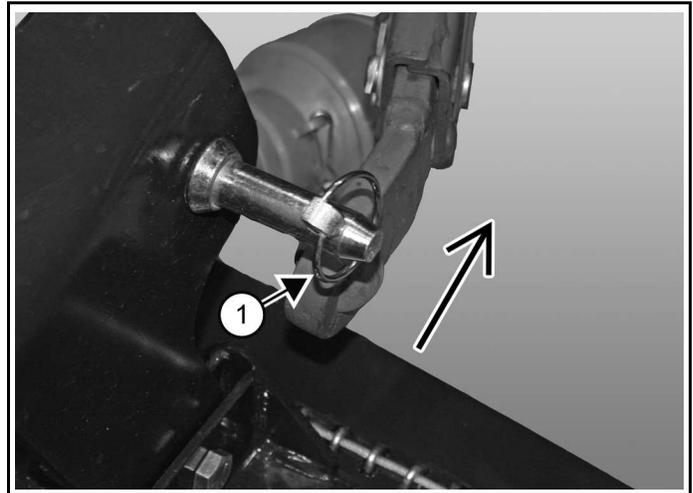
10. Place the top link (Item 1) into the storage position bracket (Item 2) [Figure 53].

Figure 54



11. Remove the retainer pins (Item 1) [Figure 54] from the three-point hitch lower links (both sides).
12. Move the lower links (Item 2) out from the implement pins (Item 3) [Figure 54] (both sides).
(See Adjusting The Sway Bar on Page 22)

Figure 55



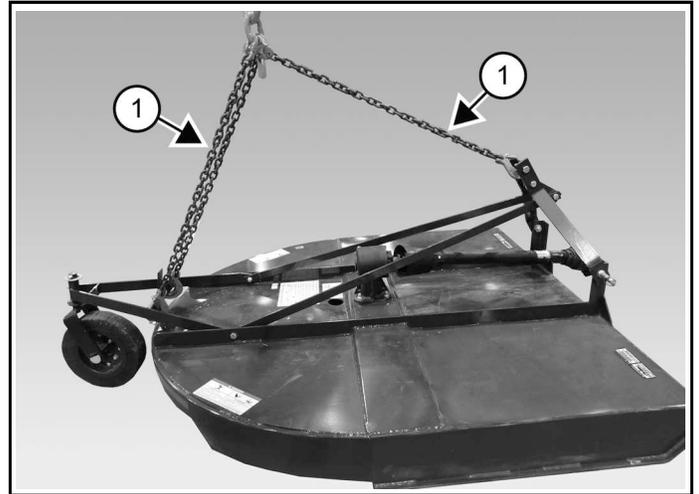
13. Install the retainer pins (Item 1) [Figure 55] from the three-point hitch lower links (both sides).
14. Enter the compact tractor.
(See Entering And Exiting The Compact Tractor on Page 19)
15. Start the engine and release the parking brake.
16. Slowly drive the compact tractor away from the implement [Figure 55].

17. Remove the front ballast from the compact tractor (if equipped).

LIFTING THE IMPLEMENT

Use chains that are in good condition and of adequate size to lift the implement.

Figure 56



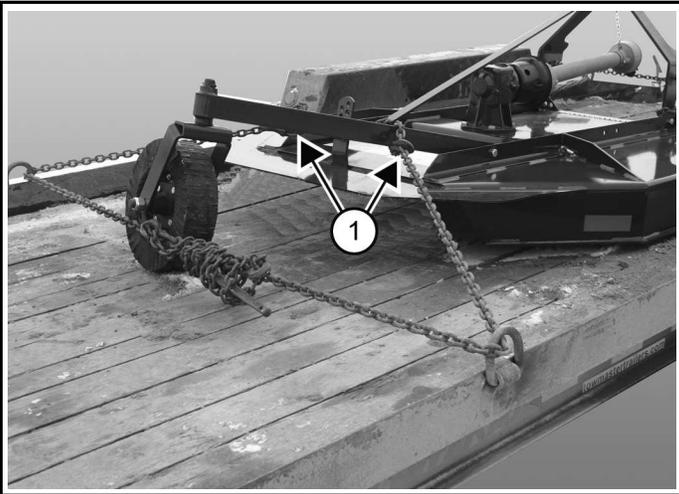
P142039b

- Fasten the chains (Item 1) [Figure 56] to the three-point rotary cutter.

TRANSPORTING THE IMPLEMENT ON A TRAILER

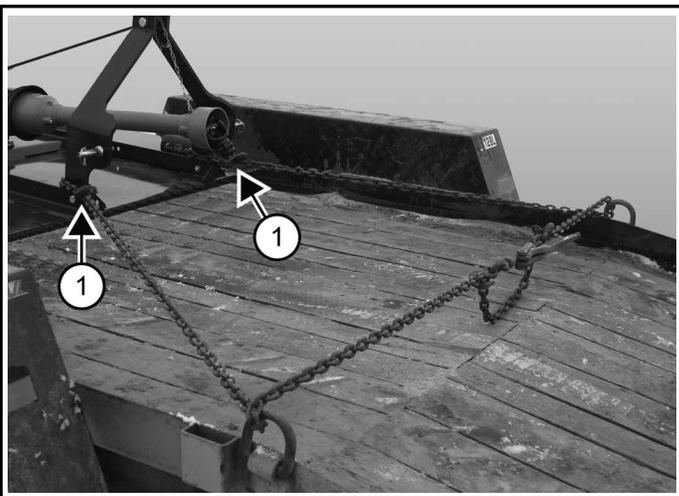
Fastening The Implement On A Trailer

Figure 57



P142037a

Figure 58



P142038a

1. Fasten the chains (Item 1) [Figure 57] and [Figure 58] to the three-point rotary cutter and fasten each end of the chain to the transport vehicle.
2. Use chain binders to prevent the three-point rotary cutter from moving during transport.

TRANSPORTING THE IMPLEMENT AND MACHINE ON A TRAILER

⚠ WARNING

INSTABILITY HAZARD

Wood ramps can break and cause personal injury. Use adequately designed ramps of sufficient strength to support the weight of the machine loading onto a transport vehicle. ◀

W-2058

Be sure the transport and towing vehicles are of adequate size and capacity for weight of machine and attachment / implement combination. (See machine and attachment Operation & Maintenance Manuals for specifications)

Loading

- The rear of the trailer must be blocked or supported when loading and unloading to prevent the front of the trailer from raising.
 - Load the heaviest end of the machine and attachment / implement combination first.
 - Lower the attachment / implement to the floor.
 - Turn the machine off.
 - Engage the parking brake (if equipped).
 - Exit the machine. (See the machine's Operation & Maintenance Manual for the correct procedure.)

Fastening

- Install the chains at the front and rear tie-down positions on the machine. (See the machine's Operation & Maintenance Manual to properly chain the machine to the transport vehicle.)
 - Install chains on the attachment / implement (if required).
 - Fasten each end of the chain to the transport vehicle.

NOTE: Use chain binders to prevent the attachment / implement and machine from moving during transport.



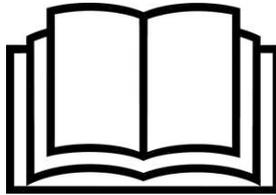
MAINTENANCE SAFETY WARNINGS



- Never service the Ignite Attachments attachment / implement without instructions. Read and understand the Operation & Maintenance Manual and safety signs (decals) on machine.
- Follow warnings and instructions in manuals when making repairs, adjustments or servicing. Check for correct function after adjustments, repairs or service. Untrained operators and failure to follow instructions can cause injury or death.



This Safety Alert Symbol means: "Attention! Be Alert! Your Safety is Involved!" Carefully read the message that follows.



- Never service attachments / implements without instructions. See Operation & Maintenance Manual and Attachment / Implement Service Manual.
- Cleaning and maintenance are required daily.
- Never service or adjust attachment / implement with the engine running unless instructed to do so in manual.
- Always lower the attachment / implement to the ground before lubricating or servicing.
- Avoid contact with leaking hydraulic fluid or diesel fuel under pressure. It can penetrate skin or eyes.
- Stop, cool, and clean engine of flammable materials before checking fluids.
- Keep body, loose objects, and clothing away from moving parts, electrical contacts, hot parts, and exhaust.
- Safety glasses are needed for eye protection from electrical arcs, battery acid, compressed springs, fluids under pressure, and flying debris or when tools are used. Use eye protection approved for type of welding.

Maintenance procedures which are given in the Operation & Maintenance Manual can be performed by the owner/operator without any specific technical training. Maintenance procedures which are not in the Operation & Maintenance Manual must be performed **ONLY BY QUALIFIED SERVICE PERSONNEL**. Always use genuine Ignite Attachments replacement parts.

TROUBLESHOOTING

Troubleshooting The Implement

WARNING

INSUFFICIENT INSTRUCTIONS HAZARD

Untrained operators or failure to follow instructions can cause serious injury or death.

- Read and understand the Operation & Maintenance Manual and decals on machine.
- Follow warnings and instructions in the manuals when making repairs, adjustments or servicing.
- Check for correct function after adjustments, repairs or service.*

W-2408

PROBLEM	CAUSE	CORRECTION
Poor Cutting	Travel speed too fast	Reduce travel speed.
	Debris on blade mounting plate	Clean mounting plate
	Blades worn or damaged	Replace blades
Blades will not rotate	Debris between blades and mounting plate	Remove debris
	Broken shear bolt	Replace shear bolt

SERVICE SCHEDULE

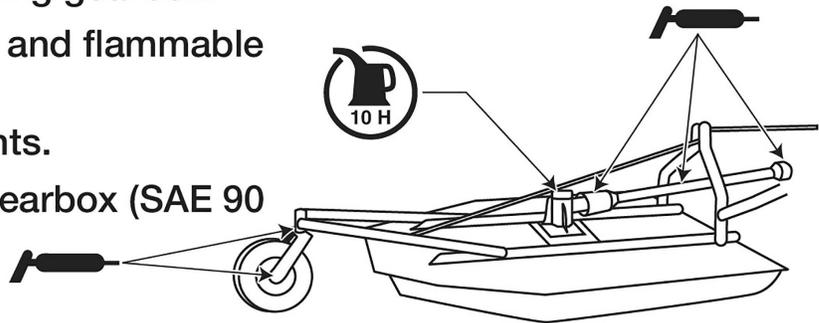
Maintenance Intervals

Maintenance work must be done at regular intervals. Failure to do so will result in excessive wear and early failures.

ROTARY CUTTER SERVICE SCHEDULE

EVERY 10 HOURS OF OPERATION:

1. Check blades and mounting plate for cracks or damage. Replace if necessary.
2. Check blade mounting hardware for proper torque 425 ft-lbs (575 Nm). Tap bolt head with hammer and retorque. Check blade mounting plate hardware.
3. Check chains, deck, shields. Repair if damaged or replace if necessary.
4. Check for damaged or missing decals. Replace if necessary.
5. Check for damaged or leaking gearbox.
6. Clean debris, leaves, grass and flammable material from deck area.
7. Lubricate all (5) grease points.
8. Check lubrication level in gearbox (SAE 90 gear lube).



SEE ATTACHMENT OPERATION & MAINTENANCE MANUAL
FOR MORE INSTRUCTIONS.

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Explanation of the service intervals:

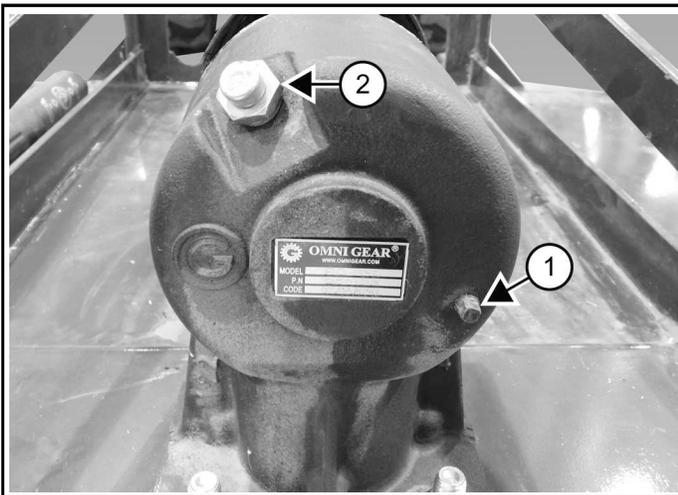
- **10:** Every 10 hours or daily (before starting the machine).
- **50:** Every 50 hours.
- **250:** Every 250 hours or every 12 months, whichever comes first.
- **500:** Every 500 hours or every 12 months, whichever comes first.
- **750:** Every 750 hours or every 12 months, whichever comes first.
- **1000:** Every 1000 hours or every 12 months, whichever comes first.
- **2000:** Every 2000 hours or every 24 months, whichever comes first.

Service Schedule		
O	Check condition / proper operation. Adjust or replace as needed.	
V	Refill as needed.	
G	Grease.	
Item	Service Required	Service Interval (hours)
		10
Mainframe	Check frame and welds	O
Deck	Check shields, blades, and chains	O
Hardware	Check all bolts and nuts are tight	O
Lubrication	Lubricate grease fittings	G
Gearbox	Check lubrication level	V

REGULAR MAINTENANCE ITEMS

Adding Gear Box Fluid

Figure 59



1. Remove check plug (Item 1) and fill plug (Item 2) [Figure 59].
2. Add SAE 90 gear lube through the top hole until gear lube flows out the lower hole. Install plugs (Item 1 and 2) [Figure 59].

Cleaning The Three-Point Rotary Cutter

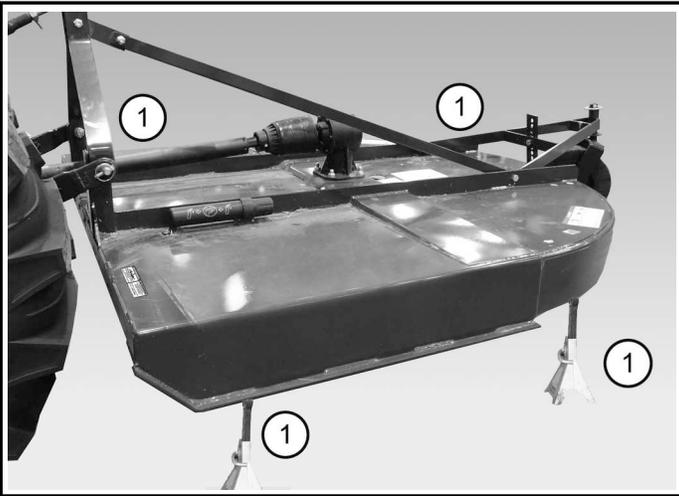
1. Stop the machine and implement on a flat level surface.

2. Raise the machine’s three-point hitch lift links high enough to allow jack stands to be placed under the deck. (See the machine’s Operation & Maintenance Manual for detailed information on operating the machine.)
3. Engage the parking brake.
4. Disengage the rear - PTO and place all controls in neutral.
5. Stop the engine, unfasten the seat belt, and remove the key.

⚠ WARNING

CRUSHING HAZARD
 Falling implement can cause serious injury or death. Securely block up the implement before working underneath. ◀

Figure 60



P142046b

6. Place jack stands (Item 1) [Figure 60] underneath the deck.
7. Move to the operator's position, fasten seat belt, start the engine and release the parking brake.
8. Lower the three-point hitch and three-point rotary cutter down until it is securely on top of the jack stands.
9. Disconnect the PTO driveline.

⚠ WARNING

IMPACT AND INJECTION HAZARDS
 Flying debris or pressurized fluids can cause serious injury or death.

Wear safety glasses to prevent eye injury when any of the following conditions exist:

- When fluids are under pressure.
- Flying debris or loose material.
- Engine is running.
- Tools are being used. ◀

W-2019

10. Use water or air pressure to clean debris from the three-point rotary cutter.

⚠ DANGER

ENTANGLEMENT HAZARD
 Rotating blades can cause serious injury or death. Never put hands, feet, or objects into or under rotary cutter when engine is running.

Keep bystanders away.
 No riders.
 Stop engine before servicing. ◀

D-1016

11. Use care when removing any obstructions that are wrapped around blades and driveline.

LUBRICATING THE IMPLEMENT

Lubrication Locations

Always use a good quality lithium base multi-purpose grease when lubricating the implement. Apply lubricant until extra grease shows.

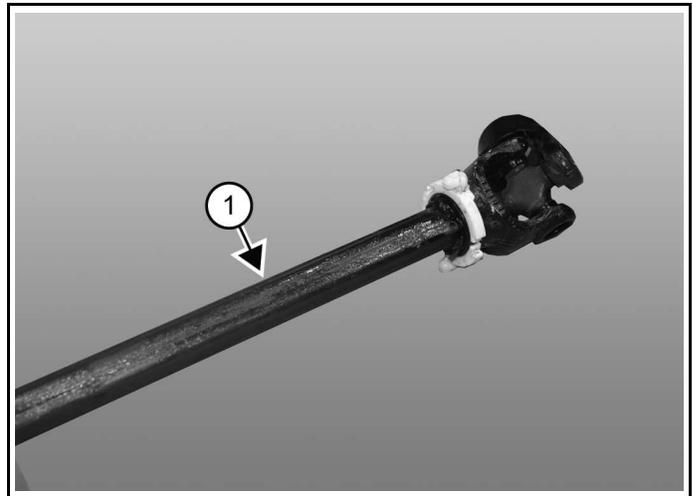
⚠ IMPORTANT

ENVIRONMENTAL HAZARD

Fluids such as engine oil, hydraulic fluid, coolants, grease, etc. must be disposed of in an environmentally safe manner. Some regulations require that certain spills and leaks on the ground must be cleaned in a specific manner. See local regulations for correct disposal methods. ◀

I-2067

Figure 61

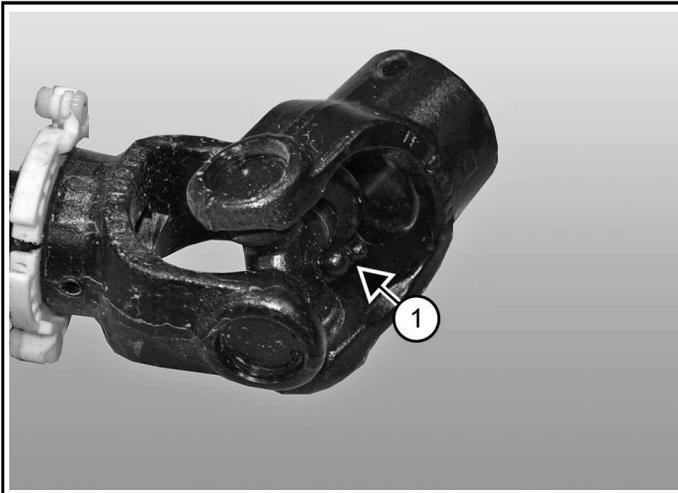


p-75088a

Lubricate the following every 10 hours of operation.

Apply grease to the PTO driveline (Item 1) [Figure 61].

Figure 62



p-75091a

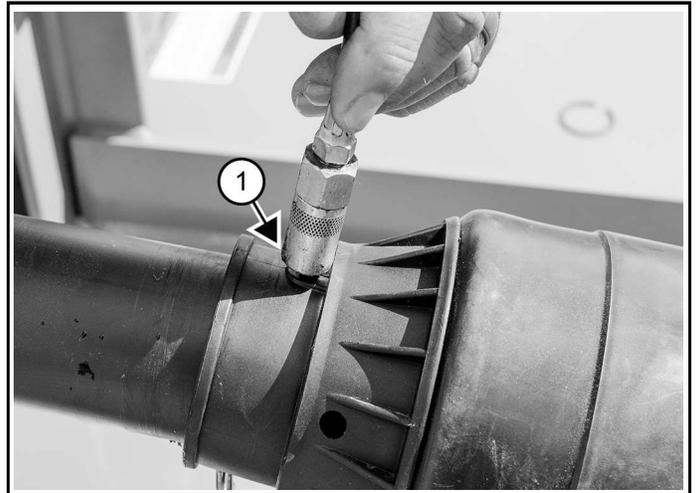
Figure 63



p-75092a

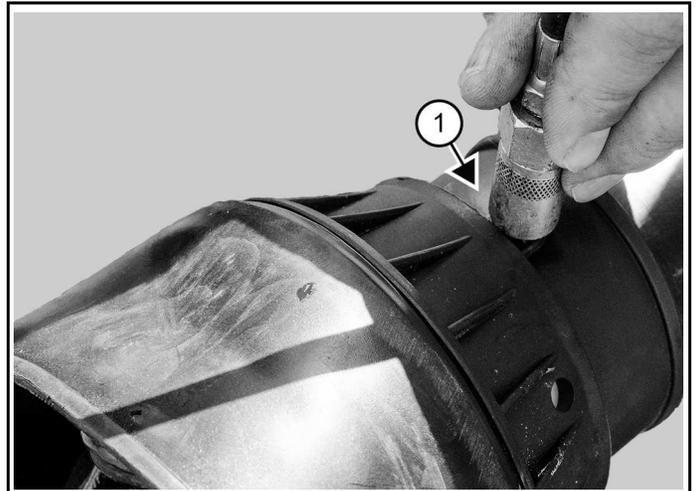
Lubricate the u-joints on the both ends of the PTO driveline (Items 1) [Figure 62] and [Figure 63].

Figure 64



P217915a

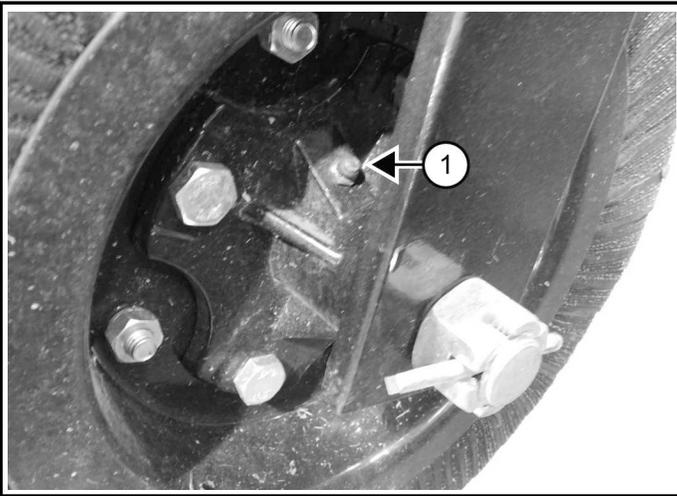
Figure 65



P217916a

Lubricate the two fittings on each end of the PTO shield (Items 1) [Figure 64] and [Figure 65].

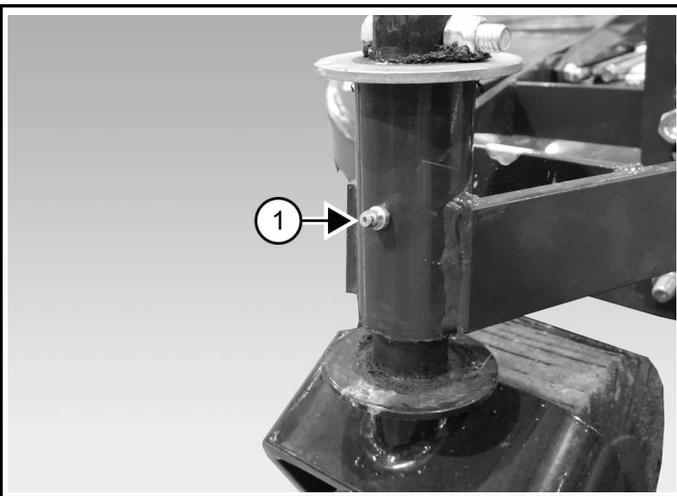
Figure 66



P142041a

Lubricate the fitting (Item 1) [Figure 66] on the wheel hub.

Figure 67



P142042a

Lubricate the fitting (Item 1) [Figure 67] on the pivot shaft.

REMOVING AND INSTALLING THE CUTTING BLADES

NOTE: Refer to the service schedule for maintenance checks. (See Service Schedule on Page 38)

⚠ WARNING

CRUSHING HAZARD

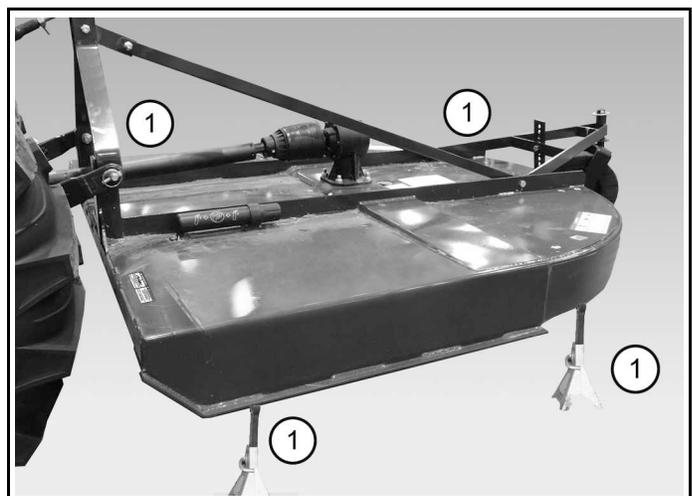
Falling implement can cause serious injury or death. Securely block up the implement before working underneath.

W-2665

Service the blades only when implement is attached to the compact tractor.

1. Stop the machine and implement on a flat level surface.
2. Raise the machine's three-point hitch lift links high enough to allow jack stands to be placed under the deck. (See the machine's Operation & Maintenance Manual for detailed information on operating the three point hitch.)
3. Lock the brake pedals together (if equipped) and engage the parking brake.
4. Fully lower the loader arms, put attachment flat on the ground (if equipped).
5. Disengage the rear - PTO and place all controls in neutral.
6. Stop the engine, unfasten the seat belt, and remove the key.
7. Install blocks in front of and behind the rear tires of the compact tractor.

Figure 68



P142048b

8. Place jack stands (Item 1) [Figure 68] underneath the deck.
9. Move to the operator's position, fasten seat belt, start the engine.
10. Lower the three-point hitch and three-point rotary cutter down until it is securely on top of the jack stands.
11. Disconnect the PTO driveline.

⚠ WARNING

IMPACT AND INJECTION HAZARDS

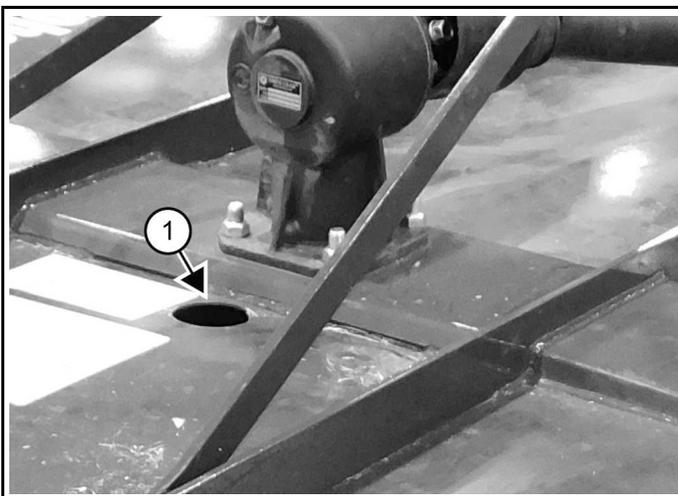
Flying debris or pressurized fluids can cause serious injury or death.

Wear safety glasses to prevent eye injury when any of the following conditions exist:

- When fluids are under pressure.
- Flying debris or loose material.
- Engine is running.
- Tools are being used.

W-2019

Figure 69



12. Locate the access hole (Item 1) [Figure 69].

⚠ DANGER

ENTANGLEMENT HAZARD

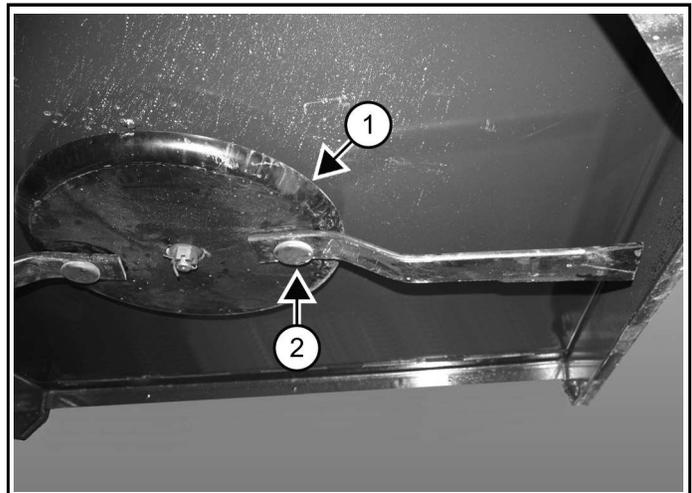
Rotating blades can cause serious injury or death. Never put hands, feet, or objects into or under rotary cutter when engine is running.

Keep bystanders away. No riders.

Stop engine before servicing.

D-1016

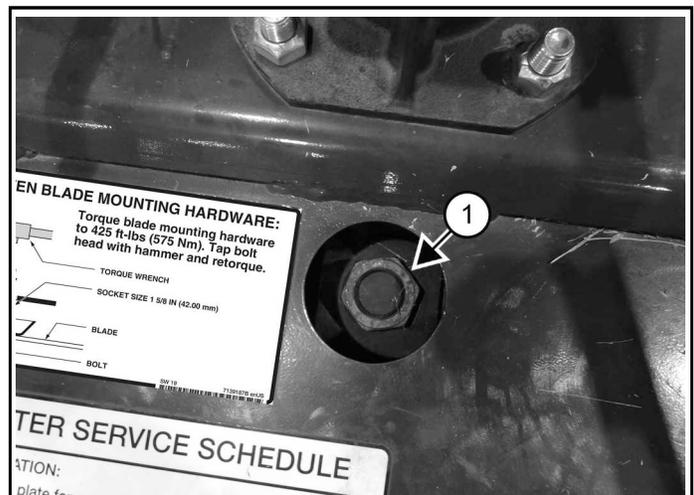
Figure 70



P142045a

13. Rotate the blade mounting plate (Item 1) until the bolt (Item 2) [Figure 70] is aligned with the access hole.

Figure 71



P142046a

14. Remove lock nut (Item 1) [Figure 71] from the blade bolt.

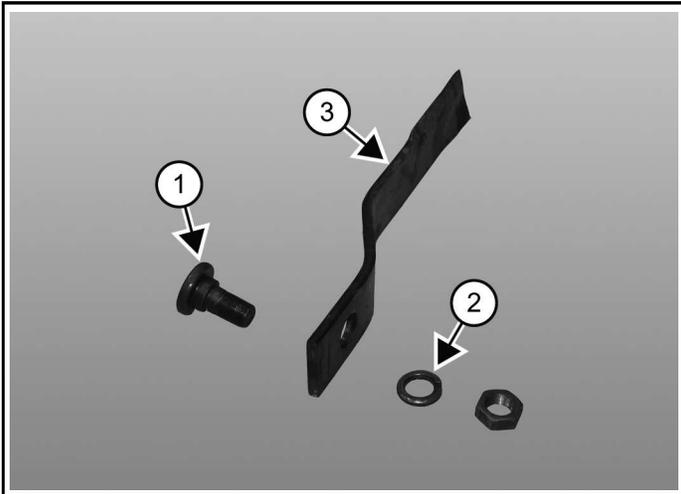
NOTE: Blade bolt and blade may fall from the mounting plate when the lock nut is removed. Support the blade bolt and blade during removal.

During installation, always use a new lock nut and bolt during assembly. Tighten the lock nut to 575 N•m (425 ft-lb) torque. Strike the head of the blade bolt (Item 2) [Figure 70] with a hammer and retorque. Repeat until the lock nut will not turn when torqued.

15. Repeat the procedure for the other blade.

16. Check the condition of the blade and mounting hardware. Replace worn parts as needed.
17. Rotate the debris cap and tighten nut.

Figure 72



18. The blade bolt (Item 1) will only fit in the mounting plate one way. Install the washer (Item 2) between the blade (Item 3) [Figure 72] and the mounting plate.

⚠ DANGER

ENTANGLEMENT HAZARD

Rotating blades can cause serious injury or death.

Never put hands, feet, or objects into or under rotary cutter when engine is running.

Keep bystanders away.

No riders.

Stop engine before servicing. ◀

D-1016

REMOVING AND INSTALLING THE SHEAR BOLT

⚠ WARNING

IMPACT AND INJECTION HAZARDS

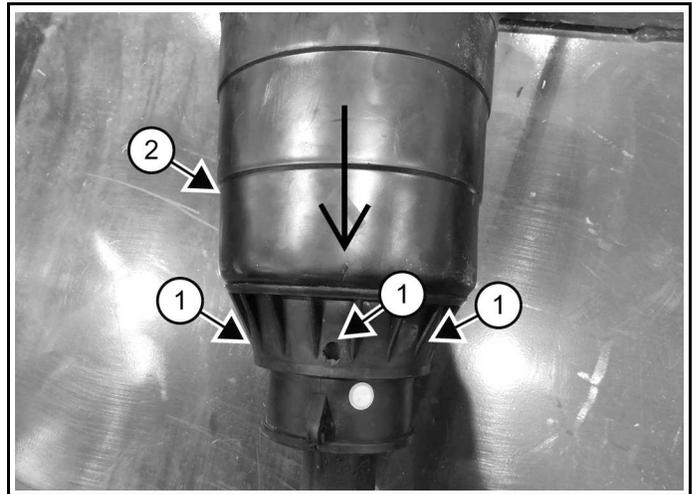
Flying debris or pressurized fluids can cause serious injury or death.

Wear safety glasses to prevent eye injury when any of the following conditions exist:

- When fluids are under pressure.
- Flying debris or loose material.
- Engine is running.
- Tools are being used. ◀

W-2019

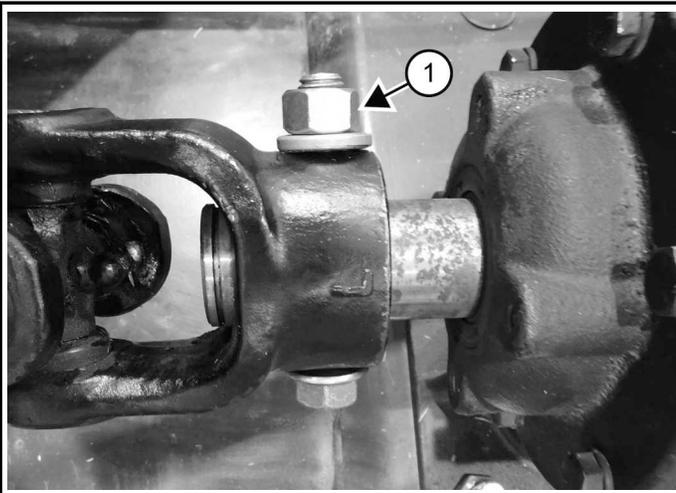
Figure 73



P142030a

1. Push down on the 3 holes (Item 1) in the PTO guard and pull down at the same time to disconnect the guard from the 3 plastic clips on the inside, and slide the guard (Item 2) [Figure 73] down the PTO driveline.

Figure 74



P142033a

2. Install the Grade 2 shear bolt (Item 1) [Figure 74] through the PTO driveline and rotary cutter gear box shaft and install the lock nut.

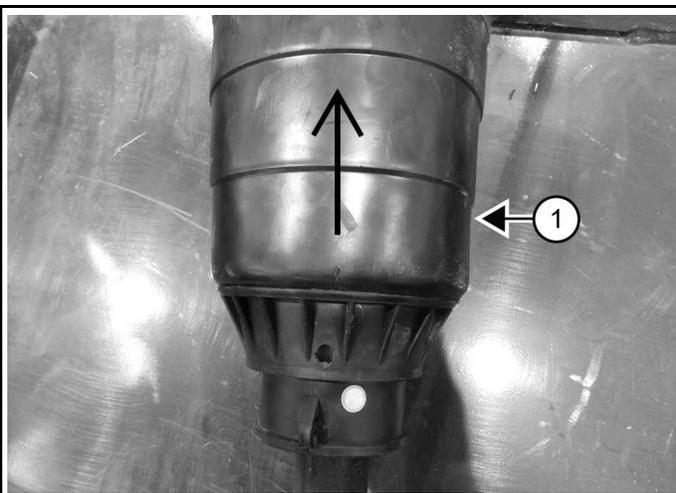
⚠ WARNING**ENTANGLEMENT HAZARD**

Failure to follow instructions can cause serious injury or death.

- Keep PTO shields and all guards in place.
- Keep away from moving parts.
- Keep bystanders away.
- Do not exceed 540 rear - PTO rpm or 2000 mid - PTO rpm. ◀

W-2659

Figure 75



P142033b

3. Slide the guard (Item 1) [Figure 75] over the gear box connection and align the plastic tabs with locking collar on the PTO driveline until the guard locks in position.

STORAGE AND RETURN TO SERVICE

Implement Storage

Sometimes it may be necessary to store your Ignite Attachments implement for an extended period of time. Below is a list of items to perform before storage.

- Thoroughly clean and wash the implement.
- Lubricate the implement (if applicable).
- Inspect the three-point mounts, mounting pins and all welds on the implement for wear and damage.
- Check for loose hardware, missing guards, or damaged parts.
- Check for damaged or missing decals. Replace if necessary.
- Replace worn or damaged parts.
- Place the implement in a dry protected shelter.
- Place the implement flat on the ground.
- In muddy conditions or to prevent the implement from freezing to the ground, put the implement on planks or blocks before removing the implement from the machine.

Return To Service

After the Ignite Attachments implement has been in storage, it is necessary to follow a list of items to return the implement to service.

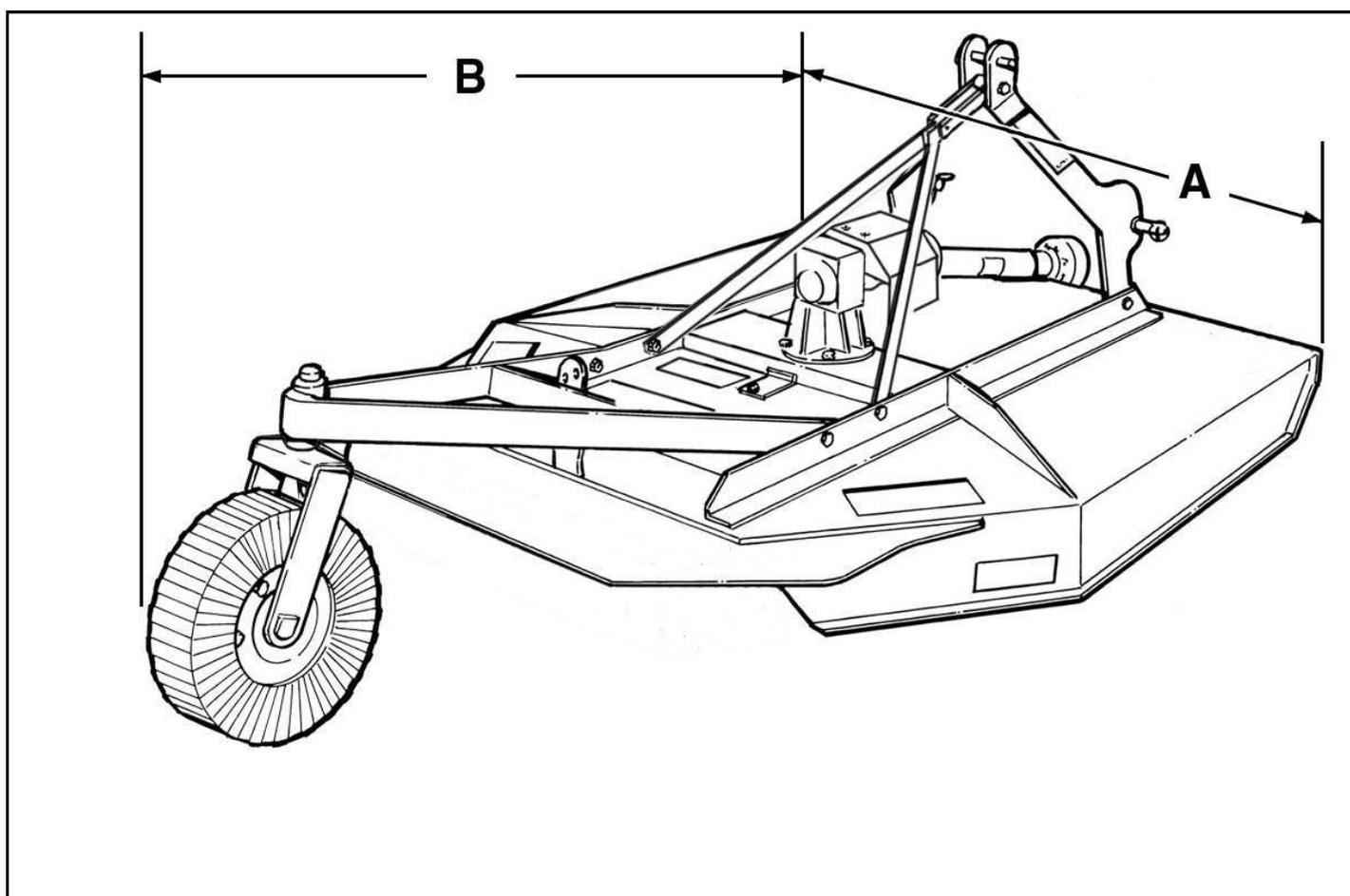
- Be sure all shields and guards are in place.
- Lubricate the implement (if applicable).
- Install and operate implement, check for correct function.

IMPLEMENT DIMENSIONS

Certain specification(s) are based on engineering calculations and are not actual measurements. Specification(s) are provided for comparison purposes only and are subject to change without notice. Specification(s) for your individual Ignite Attachments equipment will vary based on normal variations in design, manufacturing, operating conditions, and other factors.

- All dimension are shown in millimeters. Respective standard dimensions are given in inches enclosed by parentheses.
- Where applicable, specifications conform to SAE and ISO standards and are subject to change without notice.

Figure 76



P142032a

DESCRIPTION	ROTARY CUTTER 48	ROTARY CUTTER 60	ROTARY CUTTER 72
Overall Width (A)	1295 mm (51 in)	1626 mm (64 in)	1905 mm (75 in)
Overall Length (Including Tailwheel) (B)	1956 mm (77 in)	2184 mm (86 in)	2362 mm (93 in)

DESCRIPTION	ROTARY CUTTER 48	ROTARY CUTTER 60	ROTARY CUTTER 72
Cutting Width	1219 mm (48 in)	1524 mm (60 in)	1829 mm (72 in)
Operating Weight	210 kg (463 lb)	240 kg (530 lb)	283 kg (623 lb)
Three-Point Hitch	Category 1	Category 1	Category 1

PERFORMANCE SPECIFICATIONS

DESCRIPTION	ROTARY CUTTER 48	ROTARY CUTTER 60	ROTARY CUTTER 72
PTO Speed	540 rpm	540 rpm	540 rpm
Blade Tip Speed	3043 m/min (9,982 ft/min)	3803 m/min (12,478 ft/min)	4564 m/min (14,974 ft/min)
PTO Driveline Size	ASAE Cat 4 Shear Bolt Protection		
Cutting Height Range	38 - 228 mm (1.5 - 9.0 in)		
Rear PTO Hp Requirement	18 - 45	20 - 50	25 - 65
Gear Box Hp rating @540 rpm	45 HP	45 HP	45 HP

IMPLEMENT WARRANTY

A statement explaining the terms and conditions of the warranty coverage that applies to your implement is available by visiting Igniteattachments.com.

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shear bolt			
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silica dust exposure			
avoiding	6		
spark arrester exhaust system safety	8		
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Reference Information

Product Serial Number:

Engine Serial Number:

Dealer Information:



WARNING Cancer and Reproductive Harm. This product can expose you to chemicals including lead and lead compounds, mineral oils, and phthalates which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.