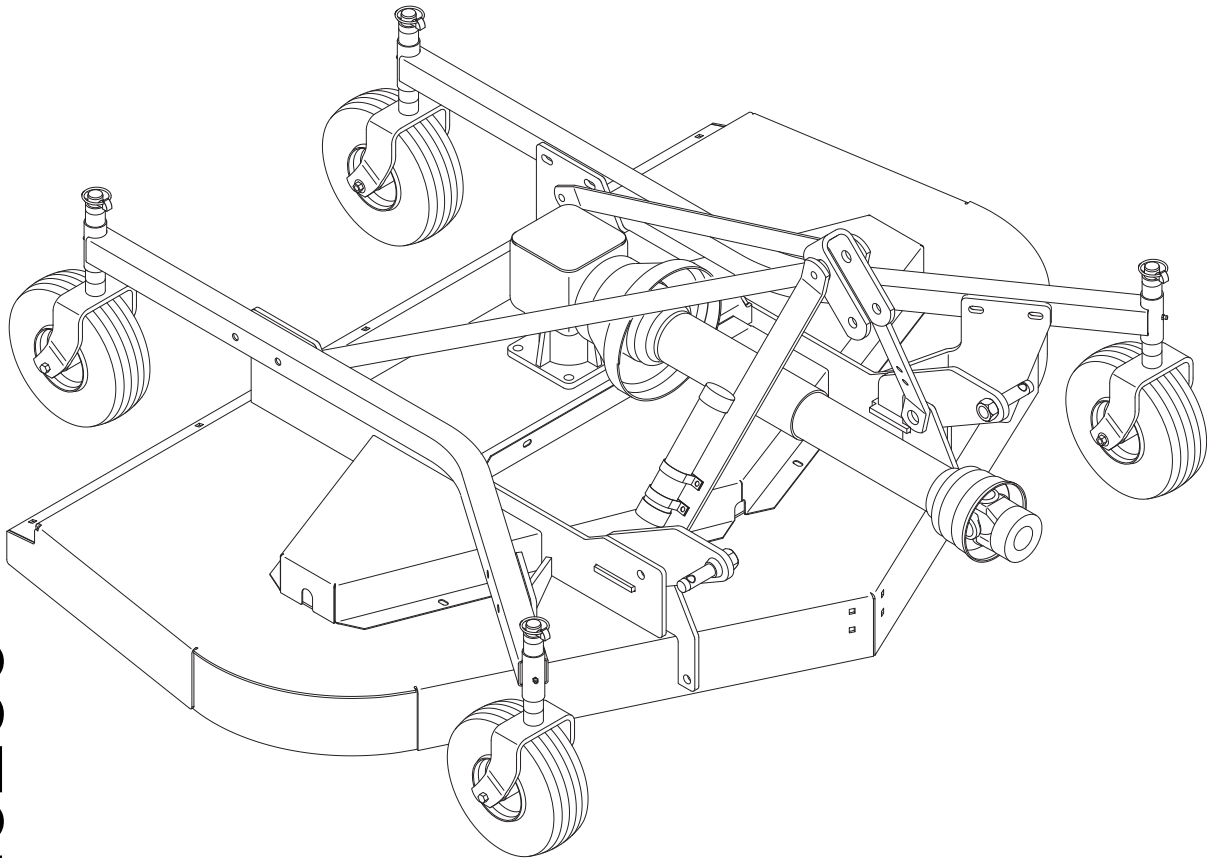


WOODS®

REAR DISCHARGE MOWER

**RDC54
RD60
RD72**



MAN0260
(Rev. 3/9/2021)

OPERATOR'S MANUAL

TO THE DEALER:

Assembly and proper installation of this product is the responsibility of the Woods® dealer. Read manual instructions and safety rules. Make sure all items on the Dealer's Pre-Delivery and Delivery Check Lists in the Operator's Manual are completed before releasing equipment to the owner.

The dealer must complete the online Product Registration form at the Woods Dealer Website which certifies that all Dealer Check List items have been completed. Dealers can register all Woods product at dealer.WoodsEquipment.com under Product Registration.

Failure to register the product does not diminish customer's warranty rights.

TO THE OWNER:

Read this manual before operating your Woods equipment. The information presented will prepare you to do a better and safer job. Keep this manual handy for ready reference. Require all operators to read this manual carefully and become acquainted with all adjustment and operating procedures before attempting to operate. Replacement manuals can be obtained from your dealer. To locate your nearest dealer, check the Dealer Locator at www.WoodsEquipment.com, or in the United States and Canada call 1-800-319-6637.

The equipment you have purchased has been carefully engineered and manufactured to provide dependable and satisfactory use. Like all mechanical products, it will require cleaning and upkeep. Lubricate the unit as specified. Observe all safety information in this manual and safety decals on the equipment.

For service, your authorized Woods dealer has trained mechanics, genuine Woods service parts, and the necessary tools and equipment to handle all your needs.

Use only genuine Woods service parts. Substitute parts will void the warranty and may not meet standards required for safe and satisfactory operation. Record the model number and serial number of your equipment in the spaces provided:

Model: _____ **Date of Purchase:** _____

Serial Number: (see Safety Decal section for location) _____

Provide this information to your dealer to obtain correct repair parts.

Throughout this manual, the term **NOTICE** is used to indicate that failure to observe can cause damage to equipment. The terms **CAUTION**, **WARNING**, and **DANGER** are used in conjunction with the Safety-Alert Symbol (a triangle with an exclamation mark) to indicate the degree of hazard for items of personal safety.



This is the safety alert symbol. It is used to alert you to potential physical injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



Indicates a hazardous situation that, if not avoided, will result in death or serious injury.



Indicates a hazardous situation that, if not avoided, could result in death or serious injury.



Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

**IMPORTANT
or NOTICE**

Is used to address practices not related to physical injury.

NOTE Indicates helpful information.

ALITEC™

CENTRAL FABRICATORS®

GANNON®

WAIN-ROY®

WOODS®

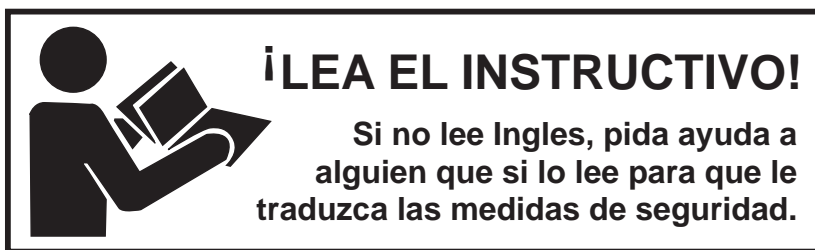
WOODS®

2 Introduction

Gen'l (Rev. 2/25/2016)

TABLE OF CONTENTS

INTRODUCTION	2
SPECIFICATIONS	4
GENERAL INFORMATION	4
SAFETY RULES	5
SAFETY DECALS	9
OPERATION	11
OWNER SERVICE	15
TROUBLESHOOTING	19
DEALER SERVICE	21
ASSEMBLY	28
DEALER CHECK LISTS	32
PARTS LISTS	33
BOLT TORQUE CHART	46
BOLT SIZE CHART & ABBREVIATIONS	47
INDEX	48
REPLACEMENT PARTS WARRANTY	49
PRODUCT WARRANTY	BACK COVER



This Operator's Manual should be regarded as part of the machine. Suppliers of both new and second-hand machines must make sure that this manual is provided with the machine.

SPECIFICATIONS

<u>MODEL</u>	<u>RDC54</u>	<u>RD60</u>	<u>RD72</u>
3-Point Hitch	Limited Cat. 1	Cat. 1	Cat. 1
Cutting Width	54"	60"	72"
Cutting Height Range	1" - 4-1/2"	1" - 4-1/2"	1" - 4-1/2"
Operating Weight with Chain Shielding	417 lbs.	521 lbs.	624 lbs.
Blade Speed (feet per minute)	16,200	18,000	18,100
Blade Spindles	3	3	3
Number of Blades	3	3	3
Universal Drive Series	ASAE Cat. 3	ASAE Cat. 3	ASAE Cat. 3
Caster Wheels	3.5 x 4 x 10	3.5 x 4 x 10	3.5 x 4 x 10
Tractor PTO Speed RPM	540	540	540
Recommended Maximum Tractor Horsepower	15-25	25-35	25-35
Mower Frame Thickness	10 GA	8 GA	8 GA

GENERAL INFORMATION

The purpose of this manual is to assist you in operating and maintaining your mower. Read it carefully. It furnishes information and instructions that will help you achieve years of dependable performance. These instructions have been compiled from extensive field experience and engineering data. Some information may be general in nature, due to unknown and varying operating conditions. However, through experience and these instructions, you should be able to develop procedures suitable to your particular situation.

The illustrations and data used in this manual were current at the time of printing. However, due to possible inline production changes, your machine may vary slightly in detail. We reserve the right to redesign and change the machines as may be necessary without notification.

Throughout this manual, references are made to right and left directions. These are determined by standing behind the tractor facing the direction of forward travel.

 **WARNING**

■ Some illustrations in this manual show the mower with safety shields removed to provide a better view. The mower should never be operated with any safety shielding removed.



SAFETY RULES

ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be wiped out by an operator's single careless act.

In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, judgement, and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.

It has been said "The best safety device is an informed, careful operator." We ask you to be that kind of operator.

TRAINING

■ This machine is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

■ Safety instructions are important! Read all attachment and power unit manuals; follow all safety rules and safety decal information. (Replacement manuals and safety decals are available from your dealer. To locate your nearest dealer, check the Dealer Locator at www.WoodsEquipment.com, or in the United States and Canada call 1-800-319-6637.) Failure to follow instructions or safety rules can result in serious injury or death.

■ If you do not understand any part of this manual and need assistance, see your dealer.

■ Know your controls and how to stop engine and attachment quickly in an emergency.

■ Operators must be responsible, trained, familiar with the instructions and be physically capable of the safe operation of the equipment, its attachments, and all controls. Do not allow anyone to operate this equipment without proper instructions.

■ Never allow children or untrained persons to operate equipment.

PREPARATION

■ Check that all hardware is properly installed. Always tighten to torque chart specifications unless instructed otherwise in this manual.

■ Always wear relatively tight and belted clothing to avoid entanglement in moving parts. Wear sturdy, rough-soled work shoes and protective

equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.

■ Make sure attachment is properly secured, adjusted, and in good operating condition.

■ Make sure spring-activated locking pin or collar slides freely and is seated firmly in tractor PTO spline groove.

■ Connect PTO driveline directly to power unit PTO shaft. Never use adapter sleeves or adapter shafts. Adapters can cause driveline failures due to incorrect spline or incorrect operating length and can result in personal injury or death.

■ Before starting power unit, check all equipment driveline guards for damage. Replace any damaged guards. Make sure all guards rotate freely on all drivelines. If guards do not rotate freely on drivelines, repair and replace bearings before putting equipment into service.

■ Power unit must be equipped with ROPS or ROPS cab and seat belt. Keep seat belt securely fastened. Falling off power unit can result in death from being run over or crushed. Keep foldable ROPS systems in "locked up" position at all times.

■ Remove accumulated debris from this equipment, power unit, and engine to avoid fire hazard.

■ Make sure all safety decals are installed. Replace if damaged. (See Safety Decals section for location.)

■ Make sure shields and guards are properly installed and in good condition. Replace if damaged.

■ A minimum 20% of tractor and equipment weight must be on the tractor front wheels when attachments are in transport position. Without this weight, tractor could tip over, causing personal injury or death. The weight may be attained with front wheel weights, ballast in tires or front tractor weights. Weigh the tractor and equipment. Do not estimate.

■ Inspect and clear area of stones, branches, or other hard objects that might be thrown, causing injury or damage.

■ Keep the area of operation clear of all bystanders, particularly small children [within 300 ft (92 m)]. Stop the machine and attachment(s) if anyone enters the area.



SAFETY RULES

ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



OPERATION

- Full chain shielding must be installed when operating in populated areas or other areas where thrown objects could injure people or damage property.
 - If this machine is not equipped with full chain shielding, operation must be stopped when anyone comes within 300 feet (92 m).
 - This shielding is designed to reduce the risk of thrown objects. The mower deck and protective devices cannot prevent all objects from escaping the blade enclosure in every mowing condition. It is possible for objects to ricochet and escape, traveling as much as 300 feet (92 m).
 - Check that chain shielding is in good condition and replace any damaged chain links.
- Do not put hands or feet near rotating parts or under the machine. Keep clear of the discharge opening at all times.
- To avoid damage to mower or driveline, make sure driveline holder is properly stored before operation.
- Never direct discharge toward people, animals, or property.
- Avoid discharging material against a wall or obstruction. It is possible for objects to ricochet and escape, traveling as much as 300 feet (92 m).
- Keep bystanders away from equipment.
- Stop the blade(s) when crossing gravel surfaces.
- Never go underneath equipment (lowered to the ground or raised) unless it is properly blocked and secured. Never place any part of the body underneath equipment or between moveable parts even when the engine has been turned off. Hydraulic system leak down, hydraulic system failures, mechanical failures, or movement of control levers can cause equipment to drop or rotate unexpectedly and cause severe injury or death. Follow Operator's Manual instructions for working underneath and blocking requirements or have work done by a qualified dealer.
- Do not operate machine when shields or guards are removed.
- Do not operate or transport equipment while under the influence of alcohol or drugs.
- Operate only in daylight or good artificial light.

- Keep hands, feet, hair, and clothing away from equipment while engine is running. Stay clear of all moving parts.
- Always comply with all state and local lighting and marking requirements.
- Never allow riders on power unit or attachment.
- Always sit in power unit seat when operating controls or starting engine. Securely fasten seat belt, place transmission in neutral, engage brake, and ensure all other controls are disengaged before starting power unit engine.
- Operate tractor PTO at 540 RPM. Do not exceed.
- Look down and to the rear and make sure area is clear before operating in reverse.
- Do not operate or transport on steep slopes. Refer to tractor manual for proper ballasting and slope recommendations.
- Use caution while operating near dropoffs.
- Power unit must be equipped with Roll Over Protection System (ROPS) or ROPS cab and seat belt. Keep seat belt securely fastened. Falling off power unit can result in death from being run over or crushed. Keep foldable ROPS system in "locked up" position at all times.
- Do not stop, start, or change directions suddenly on slopes. Make turns slowly and gradually.
- Use extreme care and reduce ground speed on slopes and rough terrain.
- Watch for hidden hazards on the terrain during operation.
- Do not operate machine under any condition where traction, steering, or stability is in question. Tires could slide even if the wheels are stopped.
- Stop power unit and implement immediately upon striking an obstruction. Dismount power unit, using proper procedure. Inspect and repair any damage before resuming operation.
- Do not leave a running machine unattended. Always park on level ground, disengage tractor PTO, set parking brake, and stop engine.
- Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the machine and the mowing activity. Never assume that children will remain where you last saw them.



SAFETY RULES

ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



■ Keep children out of the operating area and under the watchful care of a responsible adult other than the operator.

■ Do not carry children, even with the blade(s) shut off. Children could fall off and be seriously injured or interfere with safe machine operation. Children who have been given rides in the past could suddenly appear in the mowing area for another ride and be run over or backed over by the machine.

TRANSPORTATION

■ Use additional caution and reduce speed when under adverse surface conditions, turning, or on inclines.

■ Do not operate PTO during transport.

■ A minimum 20% of tractor and equipment weight must be on the tractor front wheels when attachments are in transport position. Without this weight, tractor could tip over, causing personal injury or death. The weight may be attained with front wheel weights, ballast in tires or front tractor weights. Weigh the tractor and equipment. Do not estimate.

■ Do not operate or transport on steep slopes. Refer to tractor manual for proper ballasting and slope recommendations.

■ Do not operate or transport equipment while under the influence of alcohol or drugs.

■ Always comply with all state and local lighting and marking requirements. Turn on flashing warning lights whenever traveling on a public roadway.

■ Never allow riders on power unit or attachment.

■ Never exceed 25 mph (40 kph) during transport.

MAINTENANCE

■ Before working underneath, carefully read Operator's Manual instructions, disconnect driveline, raise mower, securely block up all corners with jackstands, and check stability. Secure blocking prevents equipment from dropping due to hydraulic leak down, hydraulic system failures, or mechanical component failures.

■ Do not modify or alter or permit anyone else to modify or alter the equipment or any of its components in any way.

■ Always wear relatively tight and belted clothing to avoid entanglement in moving parts. Wear sturdy, rough-soled work shoes and protective

equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.

■ Make sure attachment is properly secured, adjusted, and in good operating condition.

■ Keep all persons away from operator control area while performing adjustments, service, or maintenance.

■ Make certain all movement of equipment components has stopped before approaching for service.

■ Never go underneath equipment (lowered to the ground or raised) unless it is properly blocked and secured. Never place any part of the body underneath equipment or between moveable parts even when the engine has been turned off. Hydraulic system leak down, hydraulic system failures, mechanical failures, or movement of control levers can cause equipment to drop or rotate unexpectedly and cause severe injury or death. Follow Operator's Manual instructions for working underneath and blocking requirements or have work done by a qualified dealer.

■ Frequently check blades. They should be sharp, free of nicks and cracks, and securely fastened.

■ Do not handle blades with bare hands. Careless or improper handling may result in serious injury.

■ Your dealer can supply genuine replacement blades. Substitute blades may not meet original equipment specifications and may be dangerous.

■ Tighten all bolts, nuts, and screws to torque chart specifications. Check that all cotter pins are installed securely to ensure equipment is in a safe condition before putting unit into service.

■ Keep machine in good working order. Replace worn or damaged parts.

■ Make sure all safety decals are installed. Replace if damaged. (See Safety Decals section for location.)

■ Make sure shields and guards are properly installed and in good condition. Replace if damaged.

■ Wear gloves when installing belt. Be careful to prevent fingers from being caught between belt and pulley.

■ Use care when installing or removing belt from spring-loaded idler. Springs store energy when extended and, if released suddenly, can cause personal injury.

STORAGE

■ Follow manual instructions for storage.

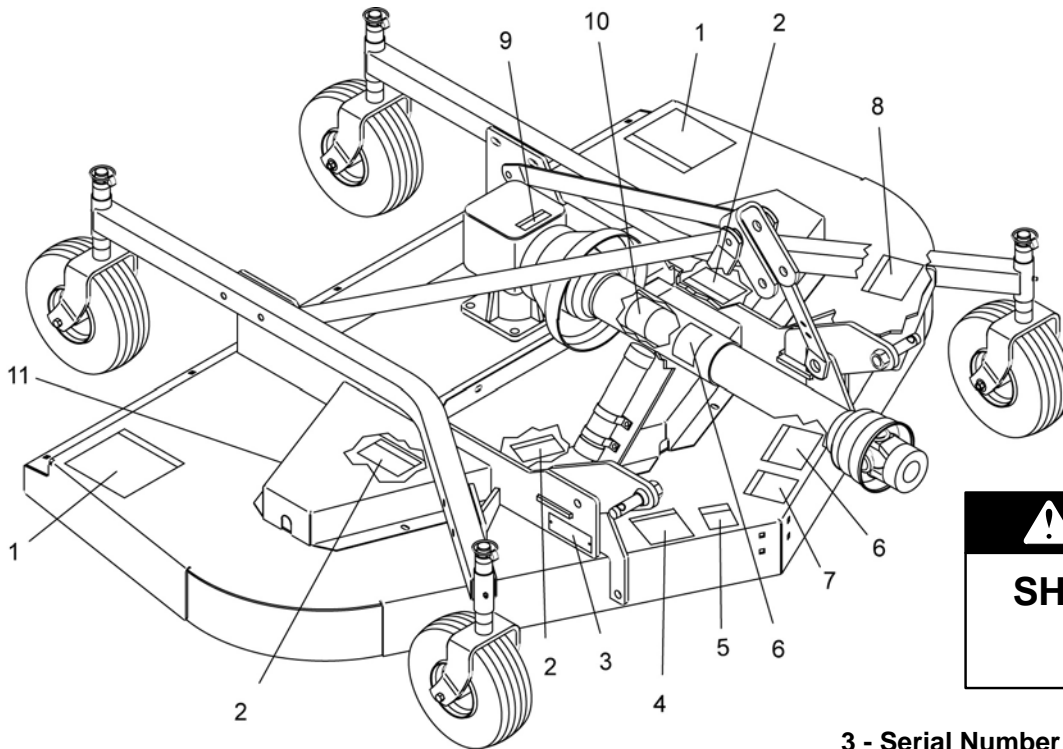
■ Keep children and bystanders away from storage area.



SAFETY & INSTRUCTIONAL DECALS



ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!
Replace Immediately If Damaged!



2 - 18867

⚠ DANGER

SHIELD MISSING

DO NOT OPERATE
PUT SHIELD ON

18867-B

11 - 20106 - Rear Reflector (RD60 & RD72 Only)

1 - 15503

⚠ DANGER

**ROTATING BLADES AND
THROWN OBJECTS**

- Do not put hands or feet under or into mower when engine is running.
- Before mowing, clear area of objects that may be thrown by blade.
- Keep bystanders away.
- Keep guards in place and in good condition.

**BLADE CONTACT OR THROWN OBJECTS CAN
CAUSE SERIOUS INJURY OR DEATH.**

15503-C

3 - Serial Number Plate

Model#
Serial#

(BAR CODE)

WOODS

Woods Equipment Company
Oregon, Illinois 61061 USA

4 - 1003751

⚠ WARNING

CRUSHING AND PINCHING HAZARD

- Be extremely careful handling various parts of the machine. They are heavy and hands, fingers, feet, and other body parts could be crushed or pinched between tractor and implement.
- Operate tractor controls from tractor seat only.
- Do not stand between tractor and implement when tractor is in gear.
- Make sure parking brake is engaged before going between tractor and implement.
- Stand clear of machine while in operation or when it is being raised or lowered.

**FAILURE TO FOLLOW THESE
INSTRUCTIONS COULD RESULT IN
SERIOUS INJURY OR DEATH.**

1003751-A



SAFETY & INSTRUCTIONAL DECALS

ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



Replace Immediately If Damaged!

WARNING

**DO NOT EXCEED PTO SPEED OF
540 RPM**

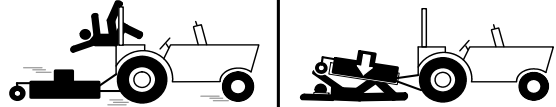
PTO speeds higher than 540 RPM can cause equipment failure and personal injury.

18866-D

5 - 18866

8 - 18865

WARNING



FALLING OFF CAN RESULT IN BEING RUN OVER.

- Tractor must be equipped with ROPS (or ROPS CAB) and seat belt. Keep foldable ROPS systems in "locked up" position at all times.
- Buckle Up! Keep seat belt securely fastened.
- Allow no riders.

RAISED EQUIPMENT CAN DROP AND CRUSH.

- Before working underneath, follow all instructions and safety rules in operator's manual and securely block up all corners of equipment with jack stands.
- Securely blocking prevents equipment dropping from hydraulic leak-down, hydraulic system failures or mechanical component failures.

FALLING OFF OR FAILING TO BLOCK SECURELY CAN RESULT IN SERIOUS INJURY OR DEATH.

18865-C

DANGER



**ROTATING DRIVELINE
CONTACT CAN CAUSE DEATH
KEEP AWAY!**

DO NOT OPERATE WITHOUT -

- All driveline guards, tractor and equipment shields in place
- Drivelines securely attached at both ends
- Driveline guards that turn freely on driveline

18864-C

6 - 18864

9 - 1004114

DANGER

If shaft connection is visible, shield is missing. Replace shield before operating equipment.

1004114

10 - 33347

DANGER



**GUARD MISSING.
DO NOT OPERATE.**

DANGER



**GUARD MISSING.
DO NOT OPERATE.**

33347E

DANGER

7 - 1002423

WARNING

TO AVOID SERIOUS INJURY OR DEATH:

- Read Operator's Manual before operating, servicing or repairing equipment. Follow all safety rules and instructions. (Manuals are available from your selling dealer.)
- Never allow riders.
- Keep bystanders away from equipment during operation.
- Operate from tractor seat only.
- Keep all shields in place and in good condition.
- Lower equipment to ground, stop engine, remove key and set brake before dismounting tractor.
- Never allow children or untrained persons to operate equipment.
- Do not transport towed or semi-mounted units over 20 MPH.

FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN INJURY OR DEATH.

1002423-B

BE CAREFUL!

Use a clean, damp cloth to clean safety decals. Avoid spraying too close to decals when using a pressure washer; high-pressure water can enter through very small scratches or under edges of decals causing them to peel or come off.

Replacement safety decals can be ordered free from your Woods dealer. To locate your nearest dealer, check the Dealer Locator at www.WoodsEquipment.com, or in the United States and Canada call 1-800-319-6637.

OPERATION

The operator is responsible for the safe operation of the mower. The operator must be properly trained. Operators should be familiar with the mower, the tractor, and all safety practices before starting operation. Read the safety rules and safety decals on page 5 through page 10.

This mower is designed for lawn and grass mowing. It is not designed for rough conditions or heavy weed mowing. It is equipped with suction type blades for best results in lawn mowing.

Recommended mowing speed for most conditions is from 2 to 5 mph.

⚠ DANGER

■ Full chain shielding must be installed when operating in populated areas or other areas where thrown objects could injure people or damage property.

- If this machine is not equipped with full chain shielding, operation must be stopped when anyone comes within 300 feet (92 m).
- This shielding is designed to reduce the risk of thrown objects. The mower deck and protective devices cannot prevent all objects from escaping the blade enclosure in every mowing condition. It is possible for objects to ricochet and escape, traveling as much as 300 feet (92 m).
- Check that chain shielding is in good condition and replace any damaged chain links.

⚠ WARNING

■ Never allow children or untrained persons to operate equipment.

■ Keep bystanders away from equipment.

■ Make sure spring-activated locking pin or collar slides freely and is seated firmly in tractor PTO spline groove.

■ Operate tractor PTO at 540 RPM. Do not exceed.

■ Before working underneath, carefully read Operator's Manual instructions, disconnect driveline, raise mower, securely block up all corners with jackstands, and check stability. Secure blocking prevents equipment from dropping due to hydraulic leak down, hydraulic system failures, or mechanical component failures.

■ Keep all persons away from operator control area while performing adjustments, service, or maintenance.

⚠ CAUTION

■ Stop power unit and implement immediately upon striking an obstruction. Dismount power unit, using proper procedure. Inspect and repair any damage before resuming operation.

■ Always wear relatively tight and belted clothing to avoid entanglement in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.

Tractor Stability

⚠ WARNING

■ A minimum 20% of tractor and equipment weight must be on the tractor front wheels when attachments are in transport position. Without this weight, tractor could tip over, causing personal injury or death. The weight may be attained with front wheel weights, ballast in tires or front tractor weights. Weigh the tractor and equipment. Do not estimate.

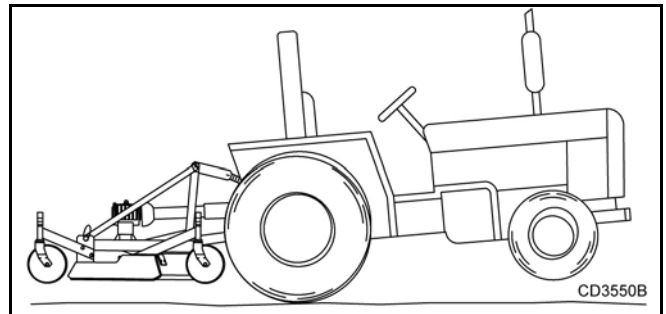


Figure 1. Tractor Stability

Attach Mower to Tractor

⚠ WARNING

■ Make sure spring-activated locking pin or collar slides freely and is seated firmly in tractor PTO spline groove.

The standard 1-3/8" 6B-spline driveline with a QD yoke is used to connect the mower to the tractor.

1. Attach the mower hitch pins to the lower tractor lift arms and secure.
2. Attach tractor top link (1), Figure 2, to mower top link bracket attachment point (A). Connect the driveline to the tractor PTO shaft.
3. Attach tether chain to tractor drawbar (Figure 3).
4. Adjust the tractor lower 3-point arm anti-sway devices to prevent mower from swinging side to side during transport.

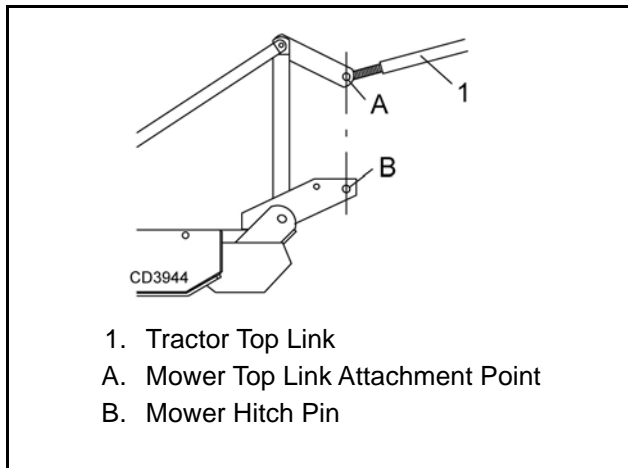


Figure 2. Attachment Points

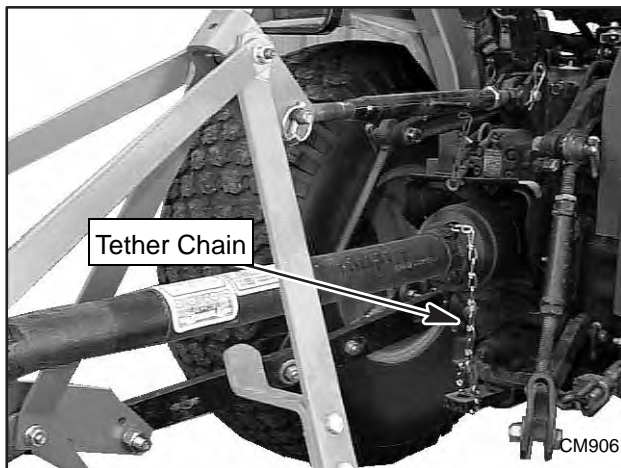


Figure 3 Attach Mower to Tractor

Adjust Cutting Height

⚠ WARNING

■ Keep all persons away from operator control area while performing adjustments, service, or maintenance.

NOTICE

■ Avoid low cutting heights. Striking the ground with blades produces one of the most damaging shock loads a mower can encounter. Allowing blades to contact ground repeatedly will cause damage to mower and drive.

1. Level mower from side to side. Check by measuring distance from mower frame to the ground at each deck rail.
2. Verify that the same amount of spacers are under all caster arms.
3. Control cutting height by adjusting front and rear caster wheels.

4. To raise rear of mower, move caster adjustment spacers under rear caster arms.
5. To raise front of mower, move spacers under front caster wheel arms.

Table 1: Cutting Height Chart

Spacers Required Under Caster Arm Pivot Tube		
Cut Height	1/2" Spacer	1" Spacer
1"	0	0
1-1/2"	1	0
2"	0	1
2-1/2"	1	1
3"	0	2
3-1/2"	1	2
4"	0	3
4-1/2"	1	3

Tractor Top Link Adjustment

When the cutting height is set, adjust tractor top link until mower top link attachment point (A), Figure 4, is aligned vertically with mower hitch pin (B). The front tires of the mower will lift off the ground before the rear tires when the unit is raised. This will allow the mower to follow the ground contour.

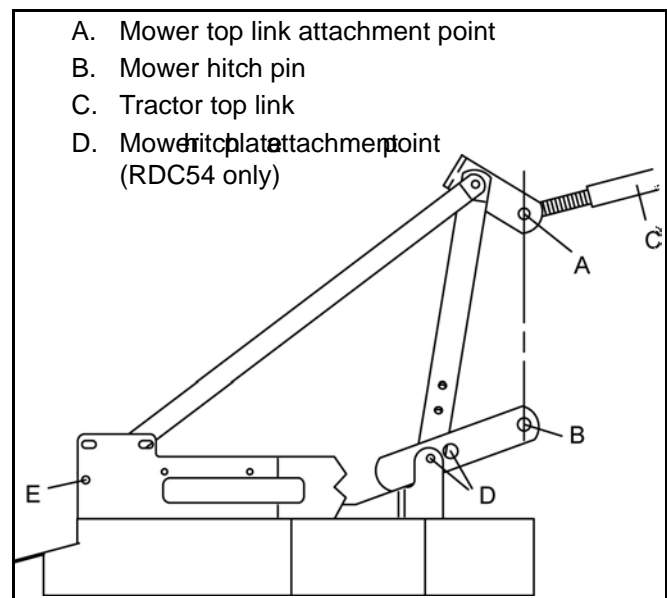


Figure 4. Top Link Adjustment

RDC54 Only

The RDC54 has two mower hitch plate attachment points (D). It may be necessary to change the mower

hitch plate attachment point to obtain proper tire clearance and/or lift height.

Front Caster Wheel Interference Check

NOTICE

■ **Do not operate tractor and mower until this interference check has been performed. If you change tractors, you must perform the check for that mounting.**

Perform this check with all of the spacers and springs above the caster wheel arm. This will place the caster wheels in their highest position and provide the lowest cutting height for the mower.

1. Raise mower with tractor hydraulics to 16" at dimension C, Figure 5, or maximum height of tractor lift, whichever is less.
2. Pivot both front caster wheels forward and check that there is clearance between caster wheels and tractor tires.
3. If there is interference on RDC54 model, adjust mower hitch plate point as shown in Figure 4. On model RD60 and RD72, the hitch plate is not adjustable; see tractor operator's manual and adjust tractor wheels accordingly.

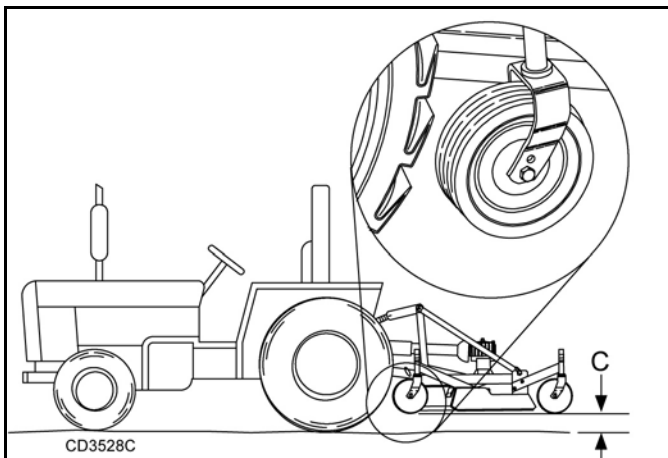


Figure 5. Front Caster Wheel Interference Check

Front Roller (Optional)

The caster wheels effectively reduce scalping in most cases. However, you may encounter areas where the caster wheels and/or side skids drop into depressions and allow center of the mower to contact ground and scalp. An optional front roller may be installed to minimize scalping. See page 40.

Operating Technique

CAUTION

■ **Stop power unit and implement immediately upon striking an obstruction. Dismount power unit,**

using proper procedure. Inspect and repair any damage before resuming operation.

Power for operating the mower is supplied by the tractor PTO. Operate PTO at 540 rpm. Know how to stop tractor and mower quickly in an emergency.

If mower becomes plugged causing belt to slip for over two seconds, follow these steps:

1. Maneuver equipment into a previously cut area and allow mower to clear accumulated material.
2. Continue running at least two minutes, allowing pulleys to cool. Stopping the mower when in contact with a very hot pulley will bake and ruin belt.

Proper ground speed will depend upon the terrain, the height, and type and density of material to be cut.

Normally, ground speed will range from 2 to 5 mph. Tall dense material should be cut at a low speed; thin medium-height material can be cut at a faster ground speed. Always operate tractor PTO at 540 rpm to maintain proper blade speed and produce a clean cut.

Under certain conditions, tractor tires may roll some grass down and prevent it from being cut at the same height as the surrounding area. When this occurs, reduce your ground speed, but maintain PTO at 540 rpm. The lower ground speed will permit grass to partially rebound.

In general, lower cutting heights give a more even cut and leave less tire tracks. However, it is better to cut grass frequently rather than too short. Short grass deteriorates rapidly in hot weather and invites weed growth during growing seasons. Follow local recommendations for the suitable cutting height in your area.

Operating Tips

WARNING

■ **Inspect and clear area of stones, branches, or other hard objects that might be thrown, causing injury or damage.**

Extremely tall material should be cut twice. Set mower at a higher cutting height for the first pass. Then cut at desired height, 90 degrees to the first pass. Remember, sharp blades produce cleaner cuts and require less power.

Analyze area to be cut to determine the best procedure. Consider height and type of grass and terrain type: hilly, level, or rough. Plan your mowing pattern to travel straight forward whenever possible. Mow with uncut grass to the right. This will distribute the clippings over the cut area.

Uneven Terrain

WARNING

- Do not operate or transport on steep slopes.
- Do not stop, start, or change directions suddenly on slopes.
- Use extreme care and reduce ground speed on slopes and rough terrain.
- Watch for hidden hazards on the terrain during operation.

Pass diagonally through sharp dips and avoid sharp drops to prevent hanging up tractor and mower. Practice will improve your skills in maneuvering rough terrain.

Removing Mower from Tractor - Storage

Follow cleaning procedure, page 18.

1. Disengage tractor PTO and raise mower with the 3-point hitch.
2. Disconnect mower driveshaft from tractor PTO.
3. Collapse driveshaft as far as possible and store it in PTO hanger bracket to prevent ground contact.
4. Place blocks under mower side skids. Lower mower onto blocks, disconnect mower from tractor 3-point hitch, and carefully drive tractor away from mower.

WARNING

- Keep children and bystanders away from storage area.

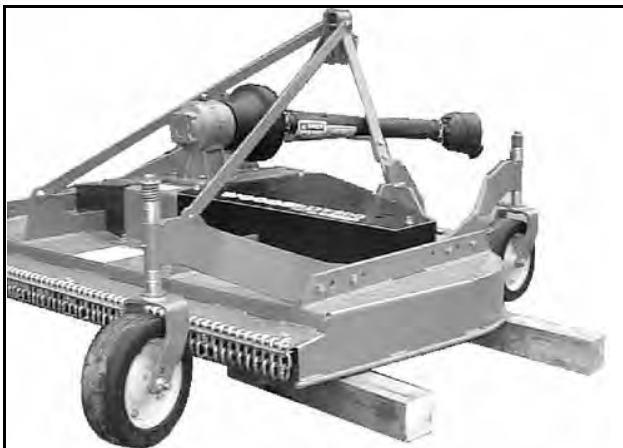


Figure 6. Mower Storage Position

OWNER PRE-OPERATION CHECK LIST

(OWNER'S RESPONSIBILITY)

- ___ Review and follow all safety rules and safety decal instructions on page 5 through page 10.
- ___ Check that all safety decals are installed and in good condition. Replace if damaged.
- ___ Check that all shields and guards are properly installed and in good condition. Replace if damaged.
- ___ Check that chain shielding is in good condition and replace any damaged chain links.
- ___ Check that all hardware and cotter pins are properly installed and secured.
- ___ Check to ensure blades are sharp, in good condition, and installed correctly. Replace if damaged.
- ___ Check that equipment is properly and securely attached to tractor.
- ___ Make sure driveline spring-activated locking pin or collar slides freely and is seated firmly in tractor PTO spline groove.
- ___ Make sure the driveline guards and tether chains are in good condition. Guards must rotate freely on driveline. Fasten tether chains to the tractor and the equipment as instructed.
- ___ Inspect area and remove stones, branches or other hard objects that might be thrown, causing injury or damage.
- ___ Do not allow riders.
- ___ Check all lubrication points and grease as instructed in "Lubrication Information" on page 15 & page 16. Make sure the PTO slip joint is lubricated and that the gearbox fluid levels are correct.
- ___ Set tractor PTO at correct rpm for your equipment.
- ___ Make sure tractor ROPS or ROPS cab and seat belt are in good condition. Keep seat belt securely fastened during operation.
- ___ Before starting engine, operator must be in tractor seat with seat belt fastened. Place transmission in neutral or park, engage brake, and disengage tractor PTO.

OWNER SERVICE

The information in this section is written for operators who possess basic mechanical skills. If you need help, your dealer has trained service technicians available. For your protection, read and follow the safety information in this manual.

CAUTION

■ Always wear relatively tight and belted clothing to avoid entanglement in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.

WARNING

■ Never allow children or untrained persons to operate equipment.

■ Keep bystanders away from equipment.

■ Before working underneath, carefully read Operator's Manual instructions, disconnect driveline, raise mower, securely block up all corners with jackstands, and check stability. Secure blocking prevents equipment from dropping due to hydraulic leak down, hydraulic system failures, or mechanical component failures.

■ Keep all persons away from operator control area while performing adjustments, service, or maintenance.

■ Make sure spring-activated locking pin or collar slides freely and is seated firmly in tractor PTO spline groove.

■ Operate tractor PTO at 540 RPM. Do not exceed.

BLOCKING METHOD

Do not work underneath mower unless it is properly attached to the tractor and blocked securely. When properly attached, the unit will be anchored to minimize front to rear movement.

Raise mower completely, set tractor brakes, turn engine off, remove key, block tractor wheels front and rear, and disconnect mower driveline from tractor.

The only approved blocking devices for this mower are jackstands with a load rating of 1000 pounds or more. One jackstand under each corner of the mower (four total) must be installed before working underneath this unit.

When blocking, you must consider overall stability of the unit. Just blocking under the unit will not ensure your safety. The working surface must be level and

solid to support the loaded weight of the jackstands. Test jackstand stability before working under any portion of the mower.

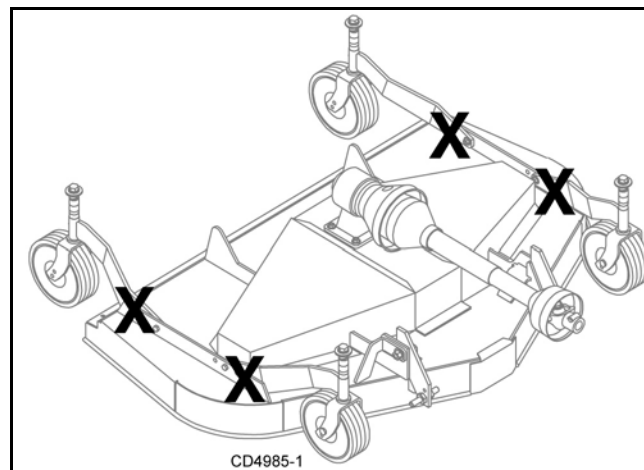


Figure 7. Jackstand Placement

Lubrication Information

Do not let excess grease collect on or around parts, particularly when operating in sandy areas.

Figure 8 shows the lubrication points. The accompanying chart gives the frequency of lubrication in operating hours, based on normal operating conditions.

Severe or unusual conditions may require more frequent lubrication. Some reference numbers have more than one location; be sure you lubricate all locations.

Use a lithium grease of #2 consistency with a MOLY (molybdenum disulfide) additive for all locations. Be sure to clean fittings thoroughly before attaching grease gun. When applied according to the lubrication chart, one good pump of most guns is sufficient.

Use SAE 90W gear lube in the gearbox. Fill to plug on side of gearbox.

Check gearbox daily for evidence of leakage at both seals and the gasket between the housing and cover. If leakage is noted, repair immediately. There may be a small amount of lube emitted from the vent plug; this is not considered leakage.

Overfilling the gearbox will cause the excess gear lube to blow out vent plug and ruin the belt.

Driveshaft Lubrication

Lubricate the driveshaft slip joint every 40 operating hours. Failure to maintain proper lubrication could result in damage to U-joints, gearbox, and driveshaft.

1. Lower mower to ground.

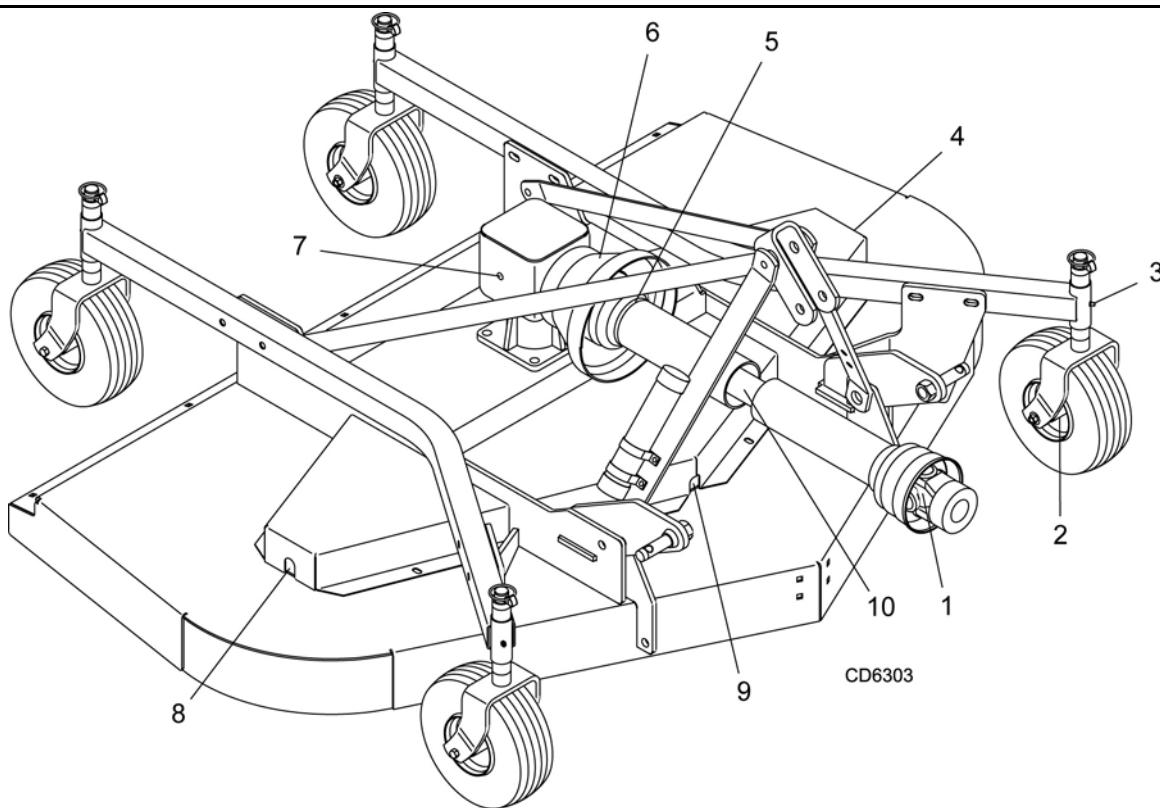
2. Remove front half of driveshaft.
3. Apply grease all around and along inner shaft.
4. Reassemble driveshaft halves.
5. Raise and lower mower several times to distribute grease.

SERVICE BELT

Replace Belt

One of the major causes of belt failure is improper installation. Before installing a new belt, check the following:

1. Check pulley shafts and bearings for wear.
2. Check pulley grooves for cleanliness.
3. Make sure spindles turn freely and without wobble.



Ref No.	Description	Frequency
1	Front U-Joint	8 Hours
2	Caster Wheel (Four wheels)	8 Hours
3	Caster Pivot (Four wheels)	8 Hours
4	Left Spindle (Access through hole)	40 Hours
5	Shield Bearings	8 Hours
6	Rear U-Joint	8 Hours
7	Gearbox (Fill to center of horizontal shaft with SAE 80W or 90W gear lube)	Check Daily For Leakage
8	Right Spindle (Access through hole)	40 Hours
9	Center Spindle (Access through hole)	40 Hours
10	Slip Joint	40 Hours

Figure 8 Lubrication Points & Chart

If grooves require cleaning, moisten a cloth with a non-flammable, non-toxic degreasing agent or commercial detergent and water.

Avoid excessive force during installation. Do not use tools to pry belt into pulley groove. Do not roll belt over pulleys to install. This can cause hidden damage and premature belt failure.

Install Belt

Refer to Figure 9.

1. Slide belt under drive pulley A and over idler arm. Position belt around drive pulley A.
2. It may be necessary to remove front bolts (1) and swing gearbox stand up to gain access to pulley A. Route belt around pulley B, idler C, and pulley D as shown.
3. Make sure belt is on drive pulley A and route around idler F.
4. Grasp belt between spindle pulley E, spring-loaded idler F and spindle pulley D. Pull spring-loaded idler with belt to obtain enough belt length to route it over pulley E. Make sure spring-loaded idler pivots freely with belt installed.

NOTICE

■ Use care when installing or removing belt from spring-loaded idler. Springs store energy when extended and, if released suddenly, can cause personal injury.

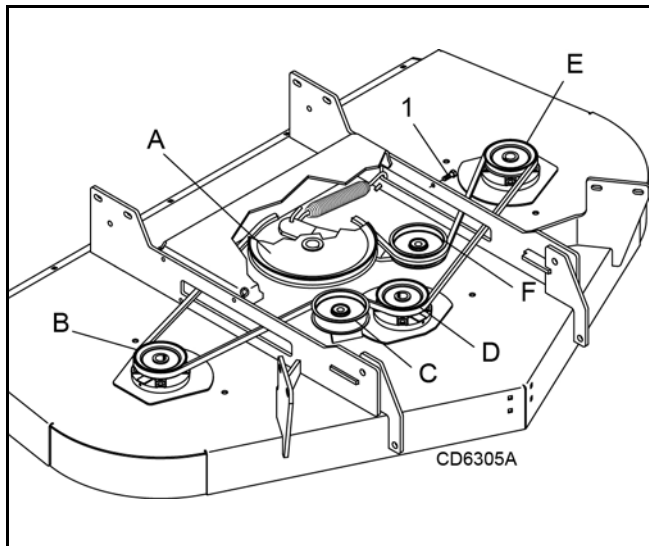


Figure 9. Belt Routing

SERVICE BLADE

WARNING

- Before dismounting power unit or performing any service or maintenance, follow these steps: disengage power to equipment, lower the 3-point hitch and all raised components to the ground, operate valve levers to release any hydraulic pressure, set parking brake, stop engine, remove key, and unfasten seat belt.
- Keep all persons away from operator control area while performing adjustments, service, or maintenance.

CAUTION

- Frequently check blades. They should be sharp, free of nicks and cracks, and securely fastened.
 1. Inspect blades before each use to determine that they are mounted securely and are in good condition.
 2. Replace any blade that is bent, excessively nicked, worn, or has any other damage.
 3. Small nicks can be ground out when sharpening.

Remove Blades

WARNING

- Do not handle blades with bare hands. Wear gloves. Careless or improper handling may result in serious injury.
 1. Remove bolt (1), Figure 11, which has right hand threads.
 2. Remove washer and blade.

Sharpen Blades

NOTICE

■ When sharpening blades, be sure to balance them. Unbalanced blades will cause excessive vibration that can damage blade spindle bearings. Vibration may also cause structural cracks in mower housings.

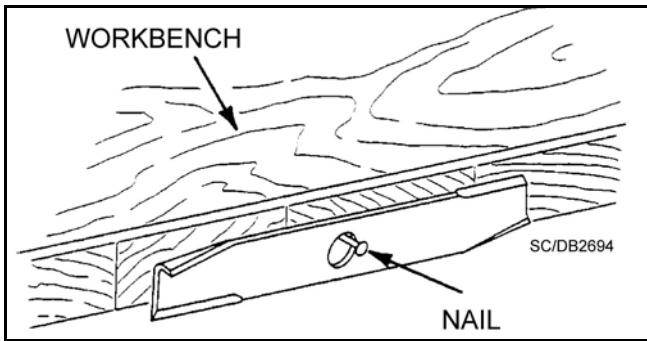


Figure 10. Blade Balancing

1. Follow original sharpening pattern.
2. Do not sharpen blade to a razor edge, but leave approximately 1/64" blunt edge.
3. Do not sharpen back side of blade.
4. Sharpen both cutting edges equally to keep blade balanced. Balance blade using the method shown in Figure 10.

Install Blades

CAUTION

■ Your dealer can supply genuine replacement blades. Substitute blades may not meet original equipment specifications and may be dangerous.

■ When installing blade, the lift of the blade must be toward the spindle blade housing as shown in Figure 11. Torque bolt (1) into shaft assembly to 100 lbs-ft.

1. Place blade over blade pilot on the bottom of the shaft assembly.
2. Place bell washer (2) over blade and insert blade bolt (1). Torque blade bolt to 100 lbs-ft.

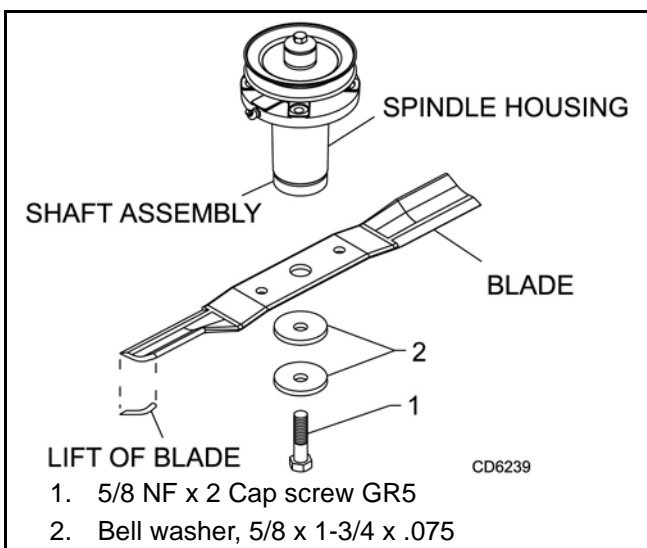


Figure 11. Blade and Spindle Assembly

Chain Shielding

DANGER

■ Full chain shielding must be installed when operating in populated areas or other areas where thrown objects could injure people or damage property.

- If this machine is not equipped with full chain shielding, operation must be stopped when anyone comes within 300 feet (92 m).
- This shielding is designed to reduce the risk of thrown objects. The mower deck and protective devices cannot prevent all objects from escaping the blade enclosure in every mowing condition. It is possible for objects to ricochet and escape, traveling as much as 300 feet (92 m).
- Check that chain shielding is in good condition and replace any damaged chain links.

Check that chain shielding is in good condition and replace any damaged chain links.

CLEANING

After Each Use

- Remove large debris such as clumps of dirt, grass, crop residue, etc. from machine.
- Inspect machine and replace worn or damaged parts.
- Replace any safety decals that are missing or not readable (supplied free by your Woods dealer).

Periodically or Before Extended Storage

- Clean large debris such as clumps of dirt, grass, crop residue, etc. from machine.
- Remove the remainder using a low-pressure water spray.
 1. Be careful when spraying near scratched or torn safety decals or near edges of decals as water spray can peel decal off surface.
 2. Be careful when spraying near chipped or scratched paint as water spray can lift paint.
 3. If a pressure washer is used, follow the advice of the pressure washer manufacturer.
- Inspect machine and replace worn or damaged parts.
- Sand down scratches and the edges of areas of missing paint and coat with Woods spray paint of matching color (purchase from your Woods dealer).
- Replace any safety decals that are missing or not readable (supplied free by your Woods dealer). See Safety Decals section for location drawing.

TROUBLESHOOTING

MOWING CONDITIONS

PROBLEM	POSSIBLE CAUSE	SOLUTION
Grass cut higher in center of swath than at edge	Height of mower higher at front than at rear	Adjust mower height and attitude so that mower rear and front are within 1/2 inch of same height. See instructions on page 12.
	Loose blade	Check blade hardware.
Grass cut lower in center of swath than at edge	Height of mower lower at front than at rear	Adjust mower height and attitude so that mower rear and front are within 1/2 inch of same height. See instructions on page 12.
	Loose blade	Check blade hardware.
Streaking conditions in swath	Conditions too wet for mowing	Allow grass to dry before mowing.
	Blades unable to cut that part of grass pressed down by path of tractor tires	Slow ground speed of tractor but keep engine running at full PTO rpm. Cutting lower will help. Adjust tractor tire spacing if possible.
	Dull blades	Sharpen or replace blades.
Material discharges from mower unevenly; bunches of material along swath	Loose blade	Check blade hardware.
	Material too high and too much material	Reduce ground speed but maintain 540 rpm at tractor PTO, or make two passes over material. Raise mower for the first pass and lower for the second and cut 90-degrees to first pass. Raise rear of mower high enough to permit material discharge, but not so high that conditions listed above occur.
	Grass is wet	Allow grass to dry before mowing. Slow ground speed of tractor but keep engine running at full PTO rpm.

TROUBLE SHOOTING

BELT CONDITIONS

PROBLEM	POSSIBLE CAUSE	SOLUTION
Belt slippage	Mower overloading; material too tall or heavy	Reduce tractor ground speed but maintain full PTO rpm. Cut material twice, one high pass and then mow at desired height. Cut 90-degrees to first pass.
	Oil on belt from over lubricating	Be careful not to over lubricate. Clean lubricant from belt and pulleys with clean rag. Replace oil-soaked belt.
	Belt hung up or rubbing	Check belt position in pulleys and idlers. Check belt for free travel in pulleys. Check under mower and around blade spindle shaft for wire, rags, or other foreign material. Clean all material from under mower.
Frayed edges on belt cover	Belt is misaligned	Re-align belt. Be sure belt does not rub any other part while running.
	Pulley is misaligned	Inspect to ensure belt is running in center of backside idler. Shim idler as necessary to align.
Belt rollover	Pulley is misaligned	Re-align.
	Damaged belt	Replace belt. *
	Foreign object in pulley groove	Inspect all pulley grooves for rust, paint, or weld spots and remove.
	Worn pulley groove	Replace pulley.
Damaged belt	Rollover, high shock loads or installation damaged	Replace belt. *
Belt breakage	High shock loads	Avoid abusive mowing. Avoid hitting the ground or large obstructions.
	Belt came off drive	Check pulleys for foreign material in grooves. Avoid hitting solid objects or ground.

* Check belt for damage by laying it flat on the floor. A belt that does not lie flat (has humps or twists, indicating broken or stretched cords) must be replaced.

DEALER SERVICE

The information in this section is written for dealer service personnel. The repair described here requires special skills and tools. If your shop is not properly equipped or your mechanics are not properly trained in this type of repair, you may be time and money ahead to replace complete assemblies.

WARNING

■ Before working underneath, read manual instructions, securely block up, and check stability. Secure blocking prevents equipment from dropping due to hydraulic leak down, hydraulic system failure, or mechanical component failure.

■ Keep all persons away from operator control area while performing adjustments, service, or maintenance.

CAUTION

■ Always wear relatively tight and belted clothing to avoid entanglement in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.

BLOCKING METHOD

Do not work underneath mower unless it is properly attached to the tractor and blocked securely. When properly attached, the unit will be anchored to minimize front to rear movement.

Raise mower completely, set tractor brakes, turn engine off, remove key, block tractor wheels front and rear, and disconnect mower driveline from tractor.

The only approved blocking devices for this mower are jackstands with a load rating of 1000 pounds or more. One jackstand under each corner of the mower (four total) must be installed before working underneath this unit.

When blocking, you must consider overall stability of the unit. Just blocking under the unit will not ensure your safety. The working surface must be level and solid to support the loaded weight of the jackstands. Test jackstand stability before working under any portion of the mower.

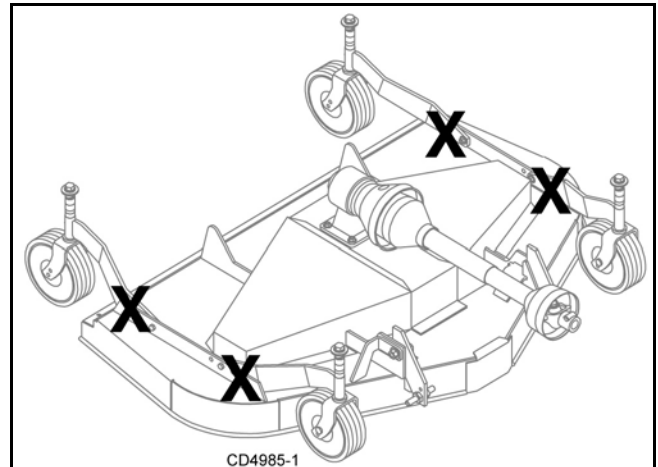


Figure 12. Jackstand Placement

BLADE SPINDLE REPAIR

Spindle repair requires special skills and tools. If your shop is not properly equipped or your mechanics are not trained in this type of repair, you may be time and money ahead to use a new spindle assembly.

For reference, the grease fitting is in the top of the spindle shaft.

Permatex[®] 3D Aviation Form-A-Gasket or equivalent is recommended as a sealant.

Remove Spindle

1. Remove belt shields from deck.
2. Remove belt.
3. Remove blade from spindle assembly.
4. Remove nuts (6) and bolts (9) that secure spindle to mower. (See Figure 13.)

Disassemble Spindle

1. Remove bolt (1) and washer (2) from the top of the spindle.
2. Remove sheave (3) and spacer (4).
NOTE: A wheel puller may be needed if sheave can not be removed by hand. Retain key (11).
3. Slide shaft assembly (12), lower bearing (5), and long spacer (10) out the bottom of spindle housing (8).
4. Remove upper bearing (5) and spacer (4) from top of spindle housing.
5. Inspect parts and replace as needed.

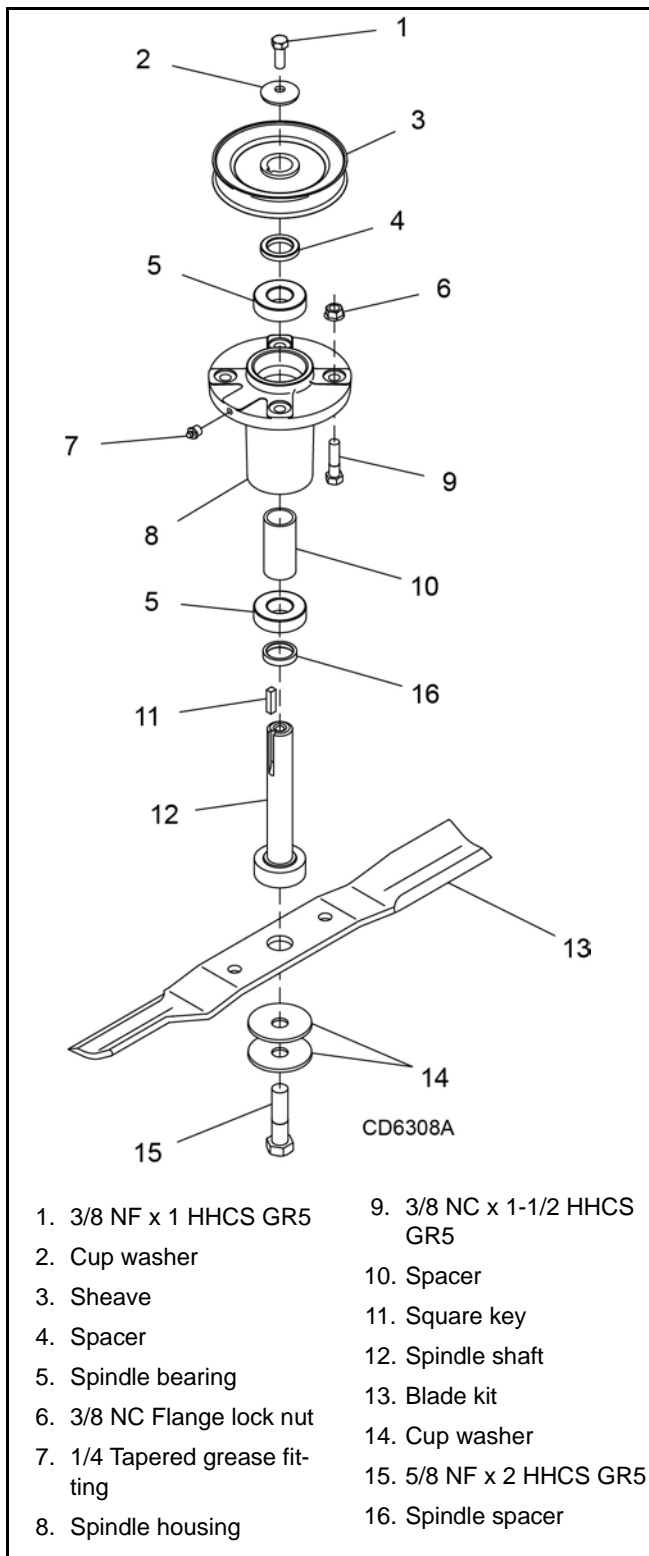


Figure 13. Blade Spindle Assembly

Assemble Spindle

1. Slide lower bearing (5) over spindle shaft(12) with seal down.
2. Slide long spacer (10) on spindle shaft.
3. Insert spindle shaft with bearing and spacer into spindle housing from the bottom.

4. Install upper bearing (5) over shaft with the seal facing up.
5. Install spacer (4) and sheave (3) over shaft.
6. Align keyways in shaft and sheave and insert key (11).
7. Install washer (2), and bolt (1). Torque bolt to 35 lbs-ft.
8. Rotate sheave and check for free movement.
9. Lubricate spindle.

GEARBOX REPAIR

Read this entire section before starting any repair. Many steps are dependent on each other.

Fill gearbox with SAE 80W or 90W gear lube until it runs out the side level plug.

Repair to this gearbox is limited to replacing bearings, seals, and gaskets. Replacing gears, shafts, and a housing is not cost effective. It is more economical to purchase a complete gearbox if repair to anything other than replacement of bearings, seals or gaskets is required.

Inspect gearbox for leakage and bad bearings.

Leakage is a very serious problem and must be corrected immediately.

Bearing failure is indicated by excessive noise and side to side or end play in gear shafts.

Seal Replacement

Recommended sealant for gearbox repair is Permatex® Aviation 3D Form-A-Gasket or equivalent.

Leakage can occur at the vertical or horizontal gaskets and shaft seals.

Leakage at the horizontal gasket or seal can be repaired without removing the gearbox from the mower.

Seal Installation

NOTE: Proper seal installation is important. An improperly installed seal will leak.

1. Clean area in housing where seal outer diameter (OD) seats. Apply a thin coat of Permatex.
2. Inspect area of shaft where seal seats. Remove any burrs or nicks with an emery cloth.
3. Lubricate gear shaft and seal lips.
4. Place seal squarely on housing, spring-loaded lip toward housing. Select a piece of pipe or tubing with an OD that will sit on the outside edge of the seal but will clear the housing. Tubing with an OD that is too small will bow seal cage and ruin seal.
5. Carefully press seal into housing, avoiding distortion to the metal seal cage.

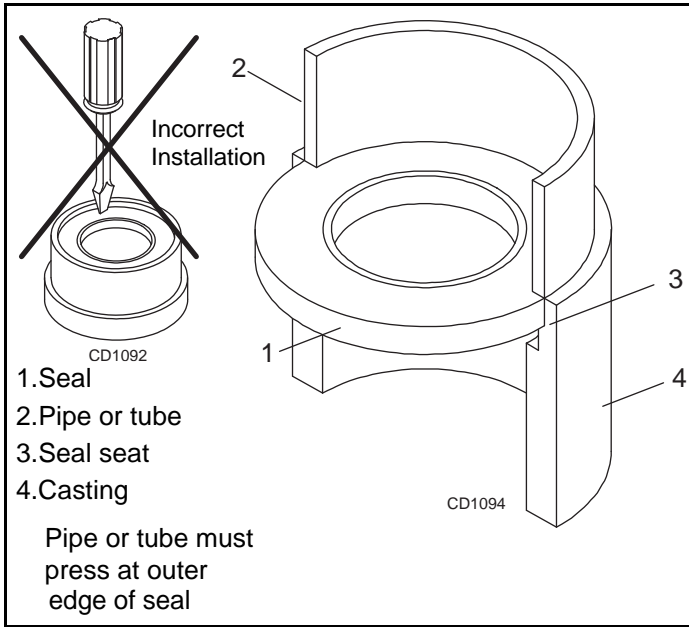


Figure 14. Seal Installation

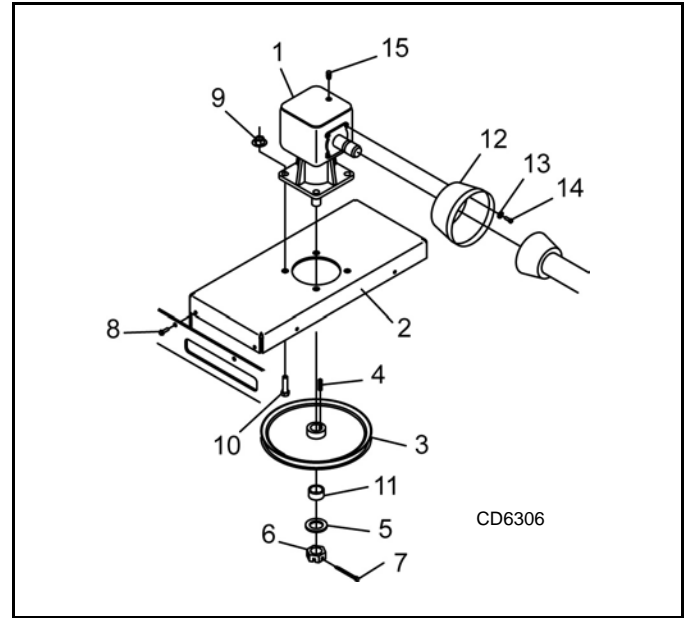


Figure 15. Gearbox Stand Assembly

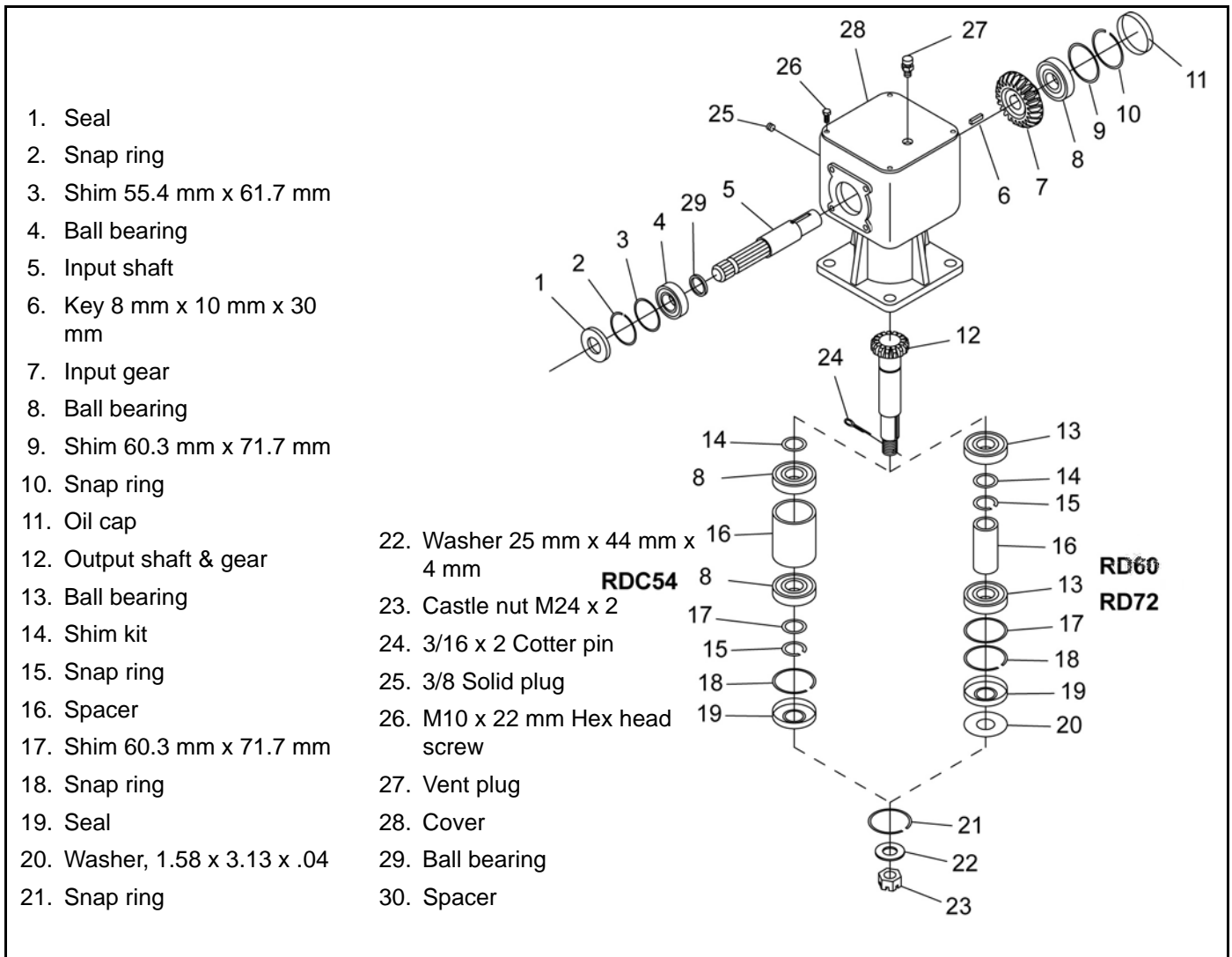


Figure 16. Gearbox Assembly

Vertical Shaft Seal Replacement

Refer to Figure 15.

1. Disconnect and remove the driveline from the gearbox.
2. Remove vent plug (15) and siphon gear lube from housing through this opening.
3. Remove gearbox stand from mower deck.
4. Remove gearbox and pulley from stand (2).
5. Remove vertical shaft seal. Replace with new seal (see Seal Replacement, page 22).

Vertical seal should be recessed in housing. Horizontal seal should be pressed flush with outside of housing.

NOTE: Distortion to seal cage or damage to seal lip will cause seal to leak.

6. Fill gearbox with SAE 80W or 90W gear lube until it runs out the level plug.
7. Assemble gearbox and pulley to gearbox stand. Attach gearbox stand to mower deck.

Horizontal Shaft Seal Replacement

1. Disconnect and remove the driveline from the gearbox.
2. Remove vent plug (27), Figure 16, and siphon gear lube from housing through this opening.
3. If the leak occurred at either end of horizontal shaft, remove oil cap (11) and/or oil seal (1). Replace with new one (see Seal Replacement, page 22).
4. Fill gearbox with SAE 80W or 90W gear lube until it runs out the level plug.

Remove Gearbox from Mower

1. Disconnect and remove the rear driveline from the gearbox.
2. Remove vent plug (15), Figure 15, and siphon gear lube from housing through this opening.
3. Remove gearbox stand (2) from mower deck by removing four hex screws (8).
4. Remove four cap screws (14) and washers (13) and remove shield (12) from gearbox.
5. Remove castle nut (6) and hardware from output shaft of gearbox.
6. Remove sheave (3) from gearbox.
7. Remove four bolts (10) that attach gearbox to gearbox stand and remove gearbox.

Disassemble Gearbox

1. Remove top cover (28), Figure 16, from housing. Turn gearbox upside down and pour out remaining gear oil from gearbox.
2. Remove oil cap (11) (to be replaced).
3. Remove snap ring (10) and shim (9) from input shaft (5).
4. Support gearbox in hand press and push on input shaft (5) to remove bearing (8).
5. Remove gear (7) from inside housing.
6. Remove oil seal (1) from front of housing (to be replaced).
7. Remove snap ring (2) and shim (3) from front of housing.
8. Remove input bearing (4) by using a punch and hammer from outside of housing.
9. Support housing in vise in a horizontal position.
10. The castle nut (23) and cotter pin (24) are already removed with the drive sheave. Remove the snap ring (18), washer (20), and seal (19).
11. Remove output shaft (12) and bearings by using a punch and hammer and tap on top to drive down.
12. Inspect gears for broken teeth and wear. Some wear is normal and will show on laded side. Forged gear surfaces are rough when new. Check that wear pattern is smooth.
13. Inspect vertical and horizontal shafts for grooves, nicks, or bumps in the areas where the seals seat. Resurface any damage with emery cloth.
14. Inspect housing and caps for cracks or other damage.

Reassemble Gearbox (RD60, RD74 shown, RDC54 similiar)

Refer to Figure 16.

NOTE: Repair to this gearbox is limited to replacing bearings, seals, and gaskets. Replacing gears, shafts, and a housing is not cost effective. Purchasing a complete gearbox is more economical.

1. Clean housing, paying special attention to areas where seals will be installed.
2. Wash housing and component thoroughly. Select a clean area for gearbox assembly. Replace all seals and bearings. All parts must be clean and lightly oiled before reassembling.

RD60 & RD72

3. Install upper output bearing (13), shims (14), and snap ring (15) on output shaft (12). Use new shims equal to the thickness of the original shims.
4. Press output shaft assembly into housing from the bottom opening.
5. Install spacer (16), lower output bearing (13), shims (17), and snap ring (18) in bottom of housing.

RDC54

3. Install shims (14), upper output bearing (8), spacer (16), lower output bearing (8), shims (17), and snap ring (15) on output shaft. Use new shims equal to the thickness of the original shims.
4. Press output shaft assembly into housing from the bottom opening.
5. Install snap ring (18) in bottom of housing.

All Models

6. Apply grease to lower seal lips (19), and press seal over output shaft (5), using a round tube of the correct diameter. Be sure not to damage the seal lip. Press in housing so that the seal is recessed.
7. Insert protective washer (20) (RD60 & RD72 only) by hand.
8. Install snap ring (21) and position it together with seal (19) by pressing it into position. Verify that the snap ring is seated properly.
9. Press bearing (8) into the housing, using a round tube of the correct diameter and a hand press. Secure with shims (9) and snap ring (10).
10. Install key (6) on input shaft (5).
11. Place gear (7) through top of housing and align the two gears so they match.
12. While holding gear (7) in place, slide input shaft (5) through the gear and bearing (8).
13. Slide spacer (29) (RDC54 only) and bearing (4) over input shaft (5) and press into housing, using a round tube of the correct diameter and a hand press.
14. Slide shim (3) over input shaft and secure with snap ring (2).
15. Check input shaft end float by moving the input shaft by hand. If the end float is more than .012", insert shim (9) between the rear bearing (8) and snap ring (10).
16. Check that gear backlash is between .006" and .016". You should not have to adjust the backlash.

17. Press in input seal (1), using a round tube of the correct diameter. Be careful not to damage the seal lip.
18. Press oil cap (11) on to the rear cover of housing, using a round tube of the correct diameter.
19. Check the gearbox housing for leaks by plugging all holes except one. Apply 4 psi compressed air and immerse the gearbox in water to verify that there are no leaks.
20. Remove the gearbox from water and dry off with compressed air. Add SAE 80W or 90W EP oil until it runs out of the side level hole. Tighten all plugs.

Install Gearbox

NOTE: Gearbox is heavy: do not attempt to move without mechanical assistance.

1. Set gearbox on gearbox stand and fasten with bolts and nuts. Torque bolts to 175 lbs-ft.
2. Attach drive sheave to output shaft. Secure using castle nut and hardware previously removed. Torque nut to 170 lbs-ft.
3. Attach gearbox stand to mower using four hex screws.

Install Drive Sheave

1. When gear stand is installed on mower, dimension A (from the top of the mower deck to the center line of the drive pulley) must be 2-1/16" ($\pm 1/32$ "). This is a critical dimension and must be carefully adjusted for proper belt life. Add or subtract shim washers under idler pulley to align with drive pulley.
2. Tighten gear stand hardware.
3. Fill gearbox half full with SAE 90W gear lube.
4. Check level after waiting five minutes to permit lube to work through bearings. Add lube, if necessary, until gearbox is half full.
5. Replace driveline shield. Attach driveline to gearbox.

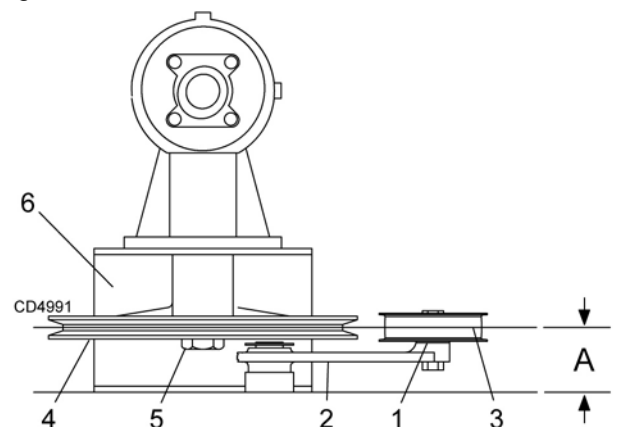


Figure 17 Drive Sheave Installation

UNIVERSAL JOINT REPAIR

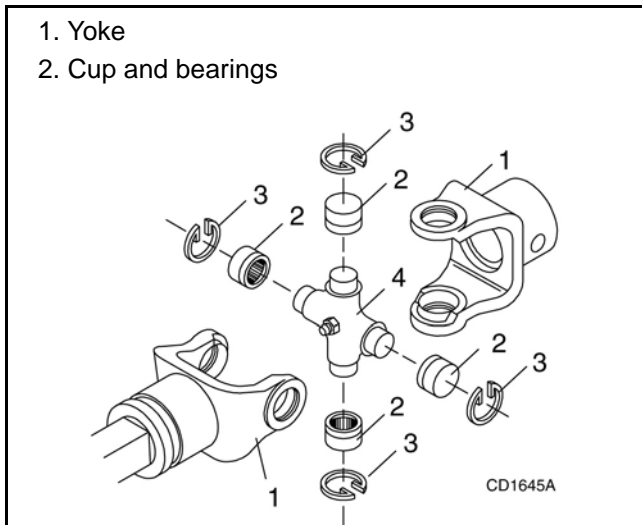


Figure 18. U-Joint Exploded View

U-Joint Disassembly

1. Remove external snap rings from yokes in four locations as shown in Figure 19.

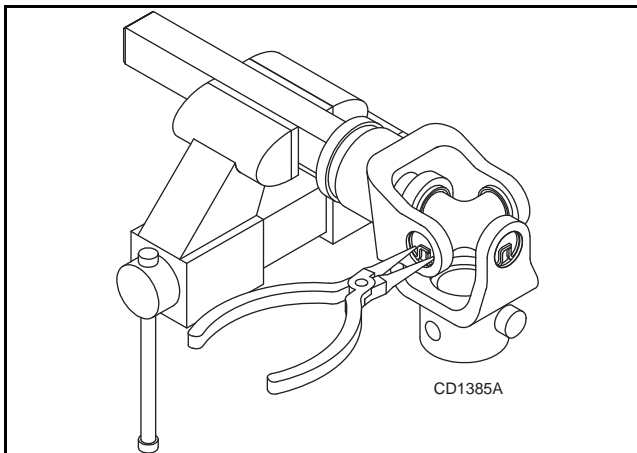


Figure 19

2. With snap rings removed, support drive in vise, hold yoke in hand and tap on yoke to drive cup up out of yoke. See Figure 20.
3. Clamp cup in vise as shown in Figure 21 and tap on yoke to completely remove cup from yoke. Repeat Step 2 & Step 3 for opposite cup.
4. Place universal cross in vise as shown in Figure 22 and tap on yoke to remove cup. Repeat Step 3 for final removal. Drive remaining cup out with a drift and hammer.

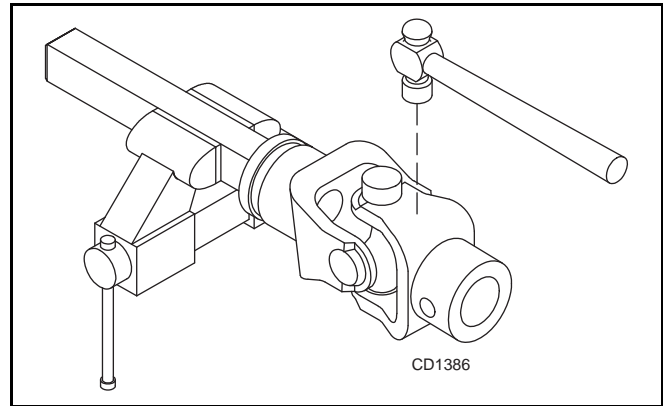


Figure 20

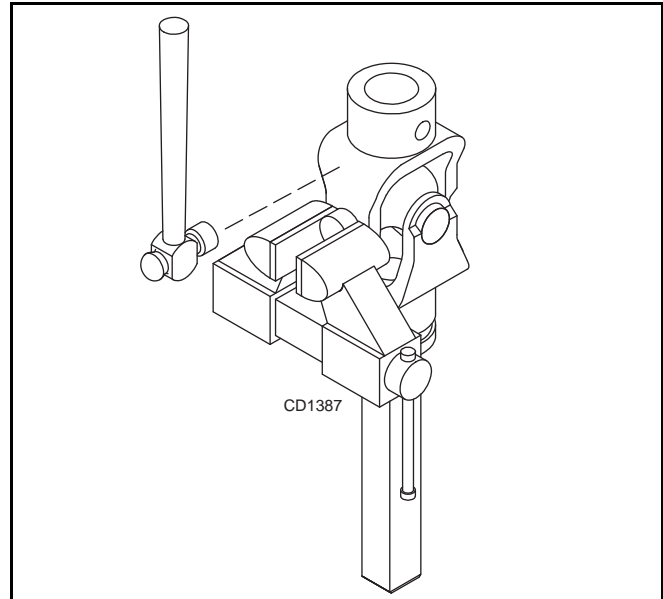


Figure 21

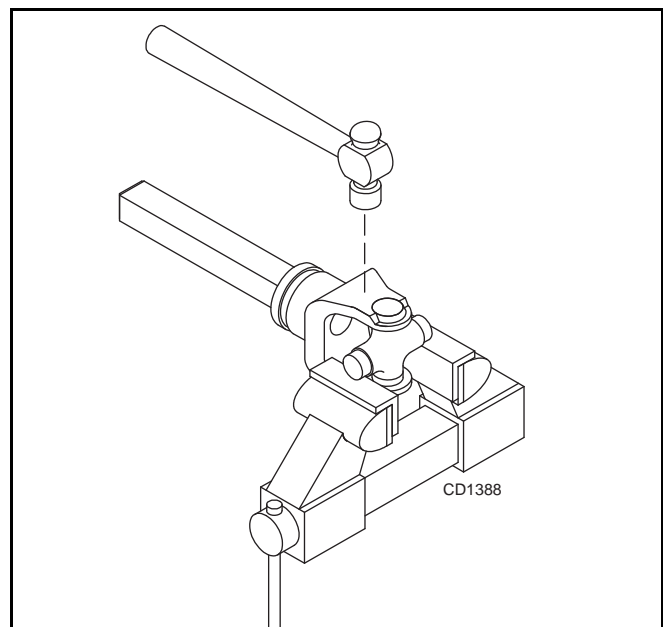


Figure 22

U-Joint Assembly

1. Place seals securely on bearing cups. Insert cup into yoke from outside and press in with hand pressure as far as possible. Insert journal cross into bearing cup with grease fitting away from shaft. Be careful not to disturb needle bearings. Insert another bearing cup directly across from first cup and press in as far as possible with hand pressure.
2. Trap cups in vise and apply pressure. Be sure journal cross is started into bearings and continue pressure with vise, squeezing in as far as possible. Tapping the yoke will help.
3. Seat cups by placing a drift or socket (slightly smaller than the cup) on cup and rap with a hammer. See Figure 23. Install snap ring and repeat on opposite cup.
4. Repeat Step 1 & Step 2 to install remaining cups in remaining yoke.
5. Move both yokes in all directions to check for free movement. If movement is restricted, rap on yokes sharply with a hammer to relieve any tension. Repeat until both yokes move in all directions without restriction.

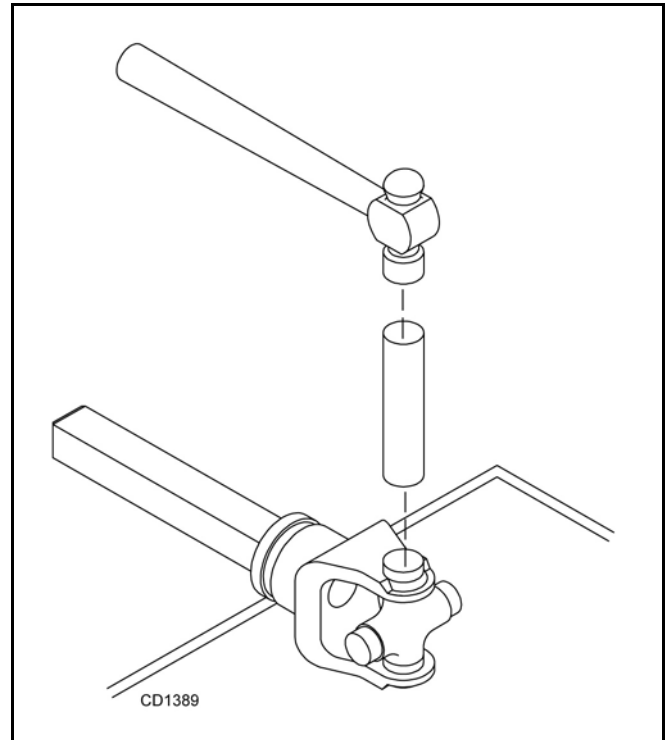


Figure 23

ASSEMBLY INSTRUCTIONS

DEALER SET-UP INSTRUCTIONS

Assembly of this mower is the responsibility of the Woods dealer. It should be delivered to the owner completely assembled, lubricated, and adjusted for normal cutting conditions.

Complete Dealer Check Lists on page 32 when you have completed the assembly.

The mower is shipped partially assembled. Assembly will be easier if components are aligned and loosely assembled before tightening hardware. Recommended torque values for hardware are located on page 43.

Select a suitable working area. Open parts boxes and lay out parts and hardware to make location easy. Refer to illustrations, accompanying text, parts lists and exploded view drawings.

WARNING

■ Before working underneath, carefully read Operator's Manual instructions, disconnect driveline, raise mower, securely block up all corners with jackstands, and check stability. Secure blocking prevents equipment from dropping due to hydraulic leak down, hydraulic system failures, or mechanical component failures.

CAUTION

■ Always wear relatively tight and belted clothing to avoid entanglement in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.

Uncrate Mower

1. Remove sides and top of mower shipping crate.
2. Remove lag screws and brackets that secure mower to crate base.
3. Remove driveshaft wired to mower deck.

Install A-Frame Arms

1. Loosen lock nuts (52) at lower hitch point and install A-frame arms (13) as shown.
2. Tighten nut securely.
3. Repeat for opposite side.

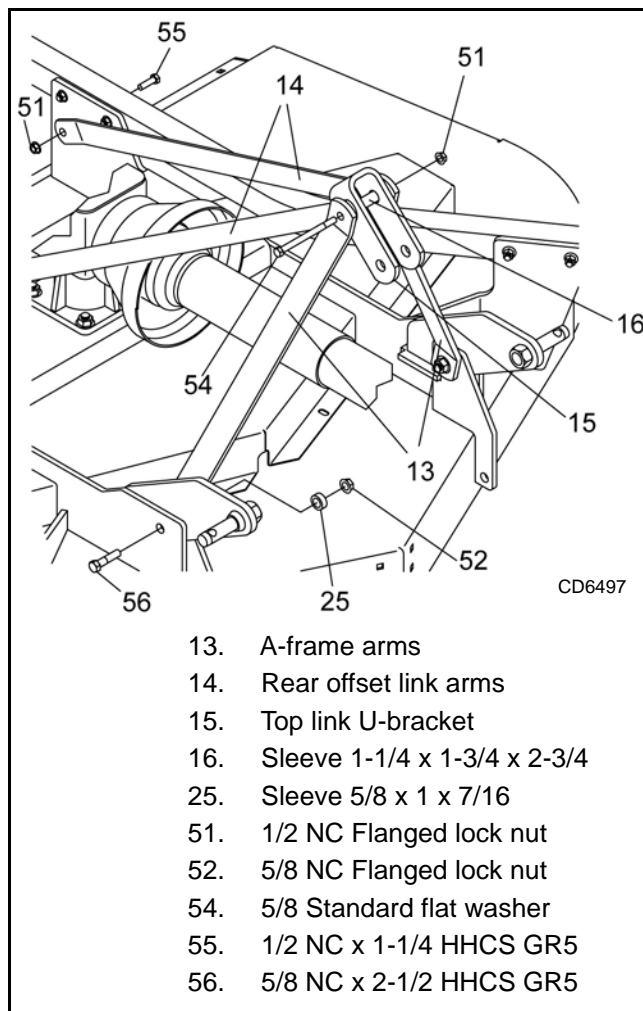


Figure 24. A-Frame Arms Installed

Install Rear Offset Link Arms

1. Loosen nut (51) and bolt (55) at rear frame lug and attach rear offset link arm (14) as shown in Figure 25. (Do not use wheel tube bolt.)
2. Repeat for opposite side.
3. Do not tighten at this time.

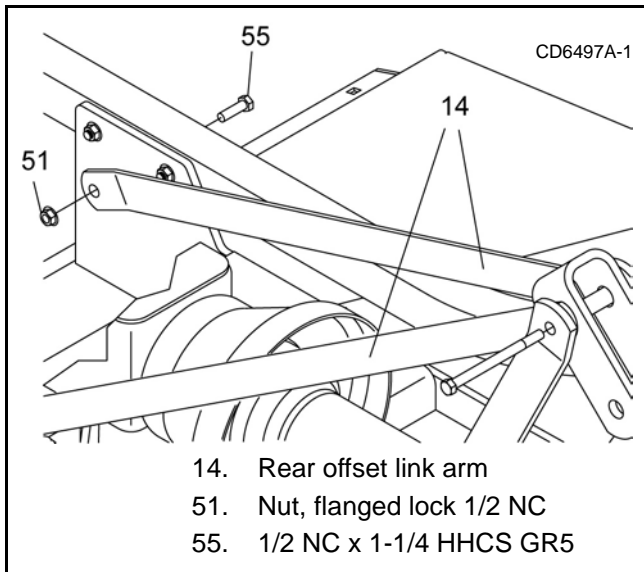


Figure 25. Right Rear Offset Link Installed

Install Top Link

1. Insert cap screw (54) through A-frame arms (13), U-bracket (15), sleeve (16) and rear offset link arms (14) and tighten securely with nut (51).
2. Tighten hardware on rear frame lug and offset link.

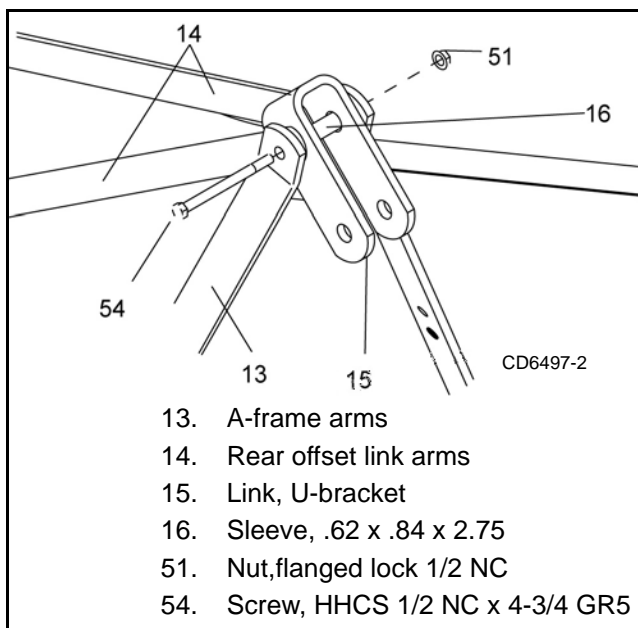


Figure 26. Top Link Assembled

Install Driveshaft

1. Slide QD yoke of driveshaft assembly onto gearbox shaft. Make sure QD yoke pin is seated securely in groove of gearbox shaft.
2. Attach shield anti-rotation chain to drive shield.

Fill Gearbox

1. Make sure vent plug hole is clear. Fill gearbox half-full with high quality gear oil that has a viscosity index of 80W or 90W and an API service rating of GL-4 or GL-5.
2. Fill gearbox until oil runs out the side plug on gearbox.
3. Pour in one pint of gear lube, wait five minutes and add additional gear lube until it just comes out of side hole.
4. Allow an additional five minutes for the lube to flow through bearings, then check to make sure oil level is at bottom of side hole. Replace side plug. Install vent plug.

NOTICE

- Gearbox is not filled at the factory. Prior to delivery, make sure each gearbox is filled half-full with 80W or 90W API GL-4 or GL-5 gear lube.

Install Chain Shielding (Optional)

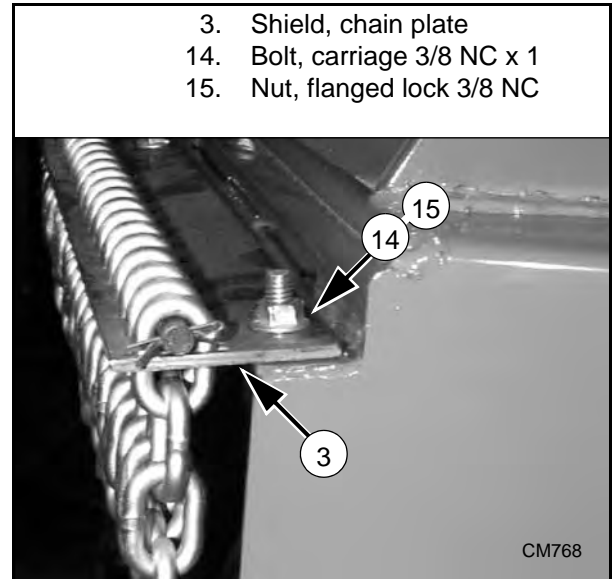


Figure 27. Chain Shielding Installed (RD60 & RD72 Only)

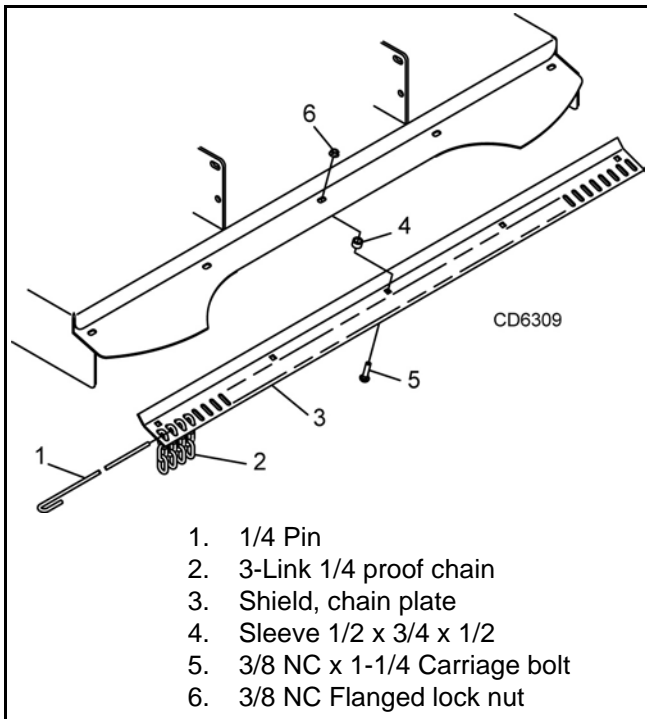


Figure 28. Chain Shield Installed (RDC54 Only)

1. 1/4 Pin
2. 3-Link 1/4 proof chain
3. Shield, chain plate
4. Sleeve 1/2 x 3/4 x 1/2
5. 3/8 NC x 1-1/4 Carriage bolt
6. 3/8 NC Flanged lock nut

⚠ DANGER

■ Full chain shielding must be installed when operating in populated areas or other areas where thrown objects could injure people or damage property.

- If this machine is not equipped with full chain shielding, operation must be stopped when anyone comes within 300 feet (92 m).
- This shielding is designed to reduce the risk of thrown objects. The mower deck and protective devices cannot prevent all objects from escaping the blade enclosure in every mowing condition. It is possible for objects to ricochet and escape, traveling as much as 300 feet (92 m).
- Check that chain shielding is in good condition and replace any damaged chain links.

1. Install chain shielding plate (3) to rear mower frame as shown.
2. Secure with carriage bolts (14) and flanged lock nuts (15).
3. Insert carriage bolts from bottom upward as shown.

Install Quick Hitch Kit (Optional) (RD60 & RD72 Only)

NOTE: Figure 29 shows RD60. Other models use the same assembly instructions.

NOTE: This kit allows mower to fit only Cat. 1 standard ASAE quick hitch.

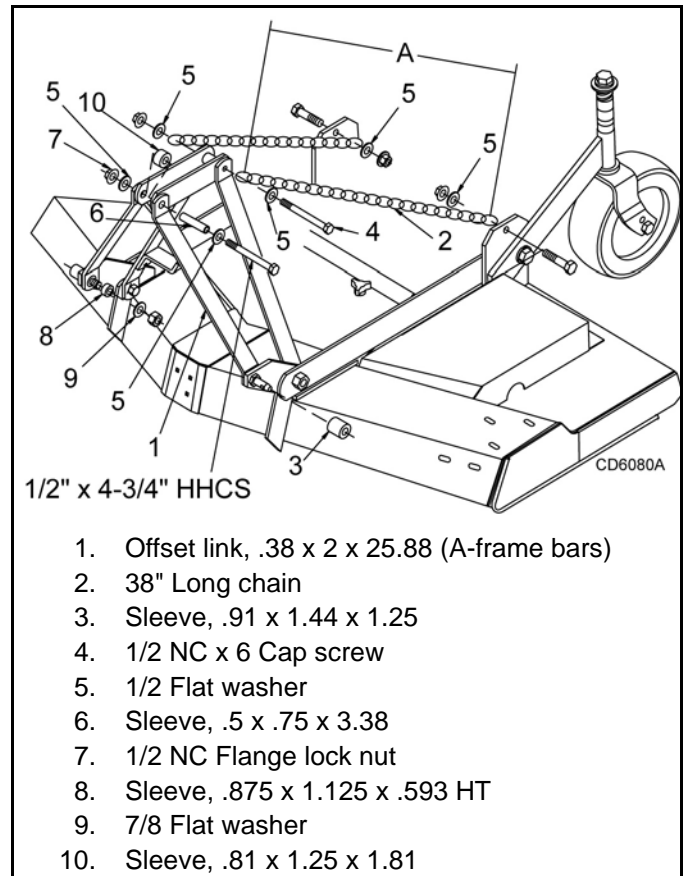


Figure 29. Quick Hitch Kit Installation

1. Offset link, .38 x 2 x 25.88 (A-frame bars)
2. 38" Long chain
3. Sleeve, .91 x 1.44 x 1.25
4. 1/2 NC x 6 Cap screw
5. 1/2 Flat washer
6. Sleeve, .5 x .75 x 3.38
7. 1/2 NC Flange lock nut
8. Sleeve, .875 x 1.125 x .593 HT
9. 7/8 Flat washer
10. Sleeve, .81 x 1.25 x 1.81

1. Attach offset link (1) to mounting pins, using 7/8" sleeve (8) and flat washer (9). Do not tighten hardware.
2. Attach upper end of offset link to pivot link, using flat washer (5), sleeves (6 & 10), flange lock nut (7), and 1/2" x 4-3/4" cap screw.
3. Remove rear offset links and replace with chains (2).
4. Attach chain to top of A-frame as shown, using cap screw (4), flat washer (5), and nut. Attach opposite end of chain (2) to rear mower frame as shown.
5. Cut chain to length (RD60 - 40", RD72 45"). Vary length slightly as desired. Twist chain to make finite adjustments in length until unit lifts level.

NOTE: Do not bottom out the drive on front of deck.
6. Install sleeve (3) on mounting pins and retain with klik pin.

Install Front Roller (Optional)

1. Insert four carriage bolts (8) through the front mower frame from inside out.
2. Place roller bracket (2) over bolts; then install flange lock nuts (9) on bolts and tighten.
3. Place front roller (1), sleeve (3), bearings (4), and washers (5) in roller bracket as shown in Figure 30.
4. Insert cap screw (3) through bracket and roller.
5. Secure with flanged lock nut (2). Do not overtighten, roller must spin freely.

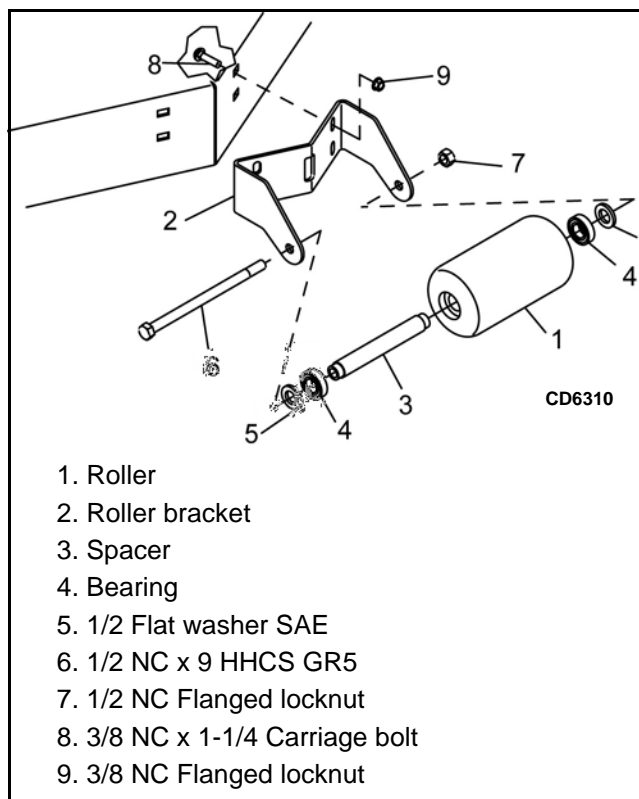


Figure 30. Front Roller Installation

DEALER CHECK LISTS

DEALER PRE-DELIVERY CHECK LIST (DEALER'S RESPONSIBILITY)

Inspect the equipment thoroughly after assembly to ensure it is set up properly before delivering it to the customer.

The following check lists are a reminder of points to inspect. Check off each item as it is found satisfactory or after proper adjustment is made.

- ___ Check that all safety decals are installed and in good condition. Replace if damaged.
- ___ Check that shields and guards are properly installed and in good condition. Replace if damaged.
- ___ Check all bolts to be sure they are properly torqued.
- ___ Check that all cotter pins and safety pins are properly installed. Replace if damaged.
- ___ Check and grease all lubrication points as identified in "lubrication information" on page 15.
- ___ Gearboxes are not filled at the factory. Prior to delivery, fill as specified in the "Service, lubrication information" on page 15 and check to see that there are no leaking seals.
- ___ Check that blades have been properly installed.

DEALER DELIVERY CHECK LIST (DEALER'S RESPONSIBILITY)

- ___ Show customer how to make adjustments and select proper PTO speed.
- ___ Instruct customer how to lubricate and explain importance of lubrication.
- ___ Point out the safety decals. Explain their meaning and the need to keep them in place and in good condition. Emphasize the increased safety hazards when instructions are not followed.
- ___ Present Operator's Manual and request that customer and all operators read it before operating equipment. Point out the manual safety rules, explain their meanings and emphasize the increased safety hazards that exist when safety rules are not followed.
- ___ Show customer how to make sure driveline is properly installed and that spring-activated locking pin or collar slides freely and is seated in groove on tractor PTO shaft.
- ___ Show customer the safe, proper procedures to be used when mounting, dismounting, and storing equipment.
- ___ Explain to customer the potential crushing hazards of going underneath raised equipment. Instruct that before going underneath to disconnect the driveline, securely block up all corners with jackstands and to follow all instructions in the "Service, blocking methods" section of the Operator's Manual. Explain that blocking up prevents equipment dropping from hydraulic leak down, hydraulic system failures, or mechanical component failures.
- ___ For mounted units, add wheel weights, ballast in front tires, and/or front tractor weight to enhance front end stability. A minimum 25% of tractor and equipment gross weight must be on front tractor wheels. When adding weight to attain 25% of tractor and equipment weight on front tractor wheels, you must not exceed the ROPS weight certification. Weigh the tractor and equipment. Do not estimate!
- ___ Make customer aware of optional equipment available so that customer can make proper choices as required.
- ___ Point out all guards and shields. Explain their importance and the safety hazards that exist when not kept in place and in good condition.

Rear Discharge Mowers:

RDC54

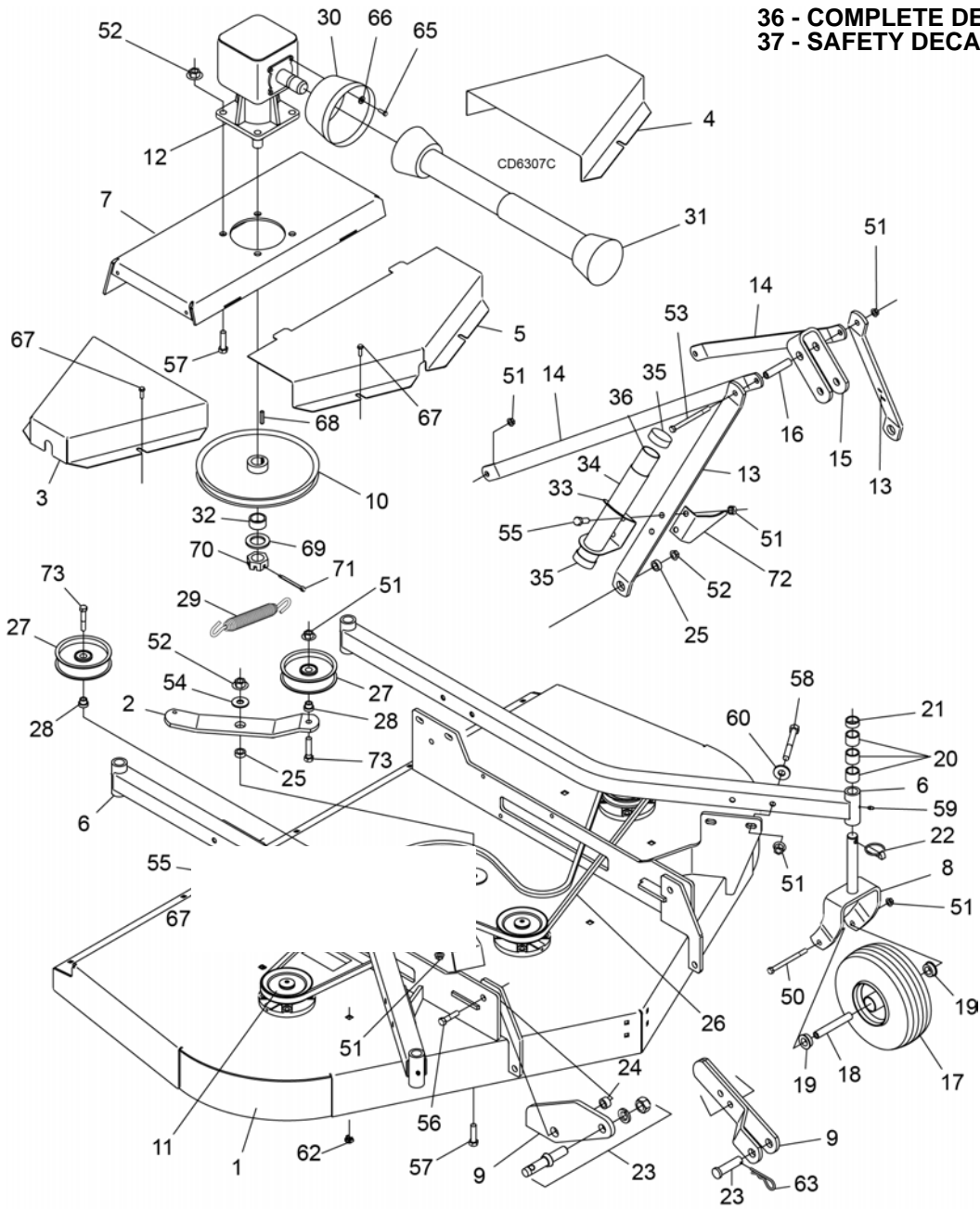
RD60

RD72

MAIN FRAME ASSEMBLY	34 & 35
RDC54, RD60 & RD72 GEARBOX ASSEMBLY	36
RD60 & RD7 GEARBOX ASSEMBLY	37
RDC54 DRIVELINE ASSEMBLY	38
RDC54 DRIVELINE ASSEMBLY (COMER)	39
RD60 & RD72 DRIVELINE ASSEMBLY	40
RD60 & RD72 DRIVELINE ASSEMBLY (COMER)	41
DRIVELINE ASSEMBLY (WALTERSCHEID TWO-LOBE)	42
BLADE & SPINDLE ASSEMBLY	43
BELT GUIDE	43
REAR CHAIN SHIELDING ASSEMBLY	44
FRONT ROLLER ASSEMBLY (OPTIONAL)	45

RDC54, RD60 & RD72 MAIN FRAME ASSEMBLY

36 - COMPLETE DECAL SET
37 - SAFETY DECAL SET



REF	RDC54 PART	RD60 PART	RD72 PART	QTY	DESCRIPTION
1	----	----	----	1	Main frame (not sold separately)
2	1008044	1008044	1008044	1	Idler arm
3	1008022	1008069	1008166	1	Right shield
4	1008023	1008069	1008166	1	Left shield
5	1008024	1008167	1008167	1	Center shield
6	1008025	1008085	1008125	2	Caster tube
7	1008028	1008169	1008169	1	Gearbox stand
8	1008030	1008030	1008030	4	Caster yoke (pneumatic tire)
8	1008032	1008032	1008032	4	Caster yoke (solid tire)
9	1008045	18824	18824	2	Hitch
10	1008056	1008056	1008056	1	Gearbox sheave
11	----	----	----	3	Spindle (see page 43)

34 Parts

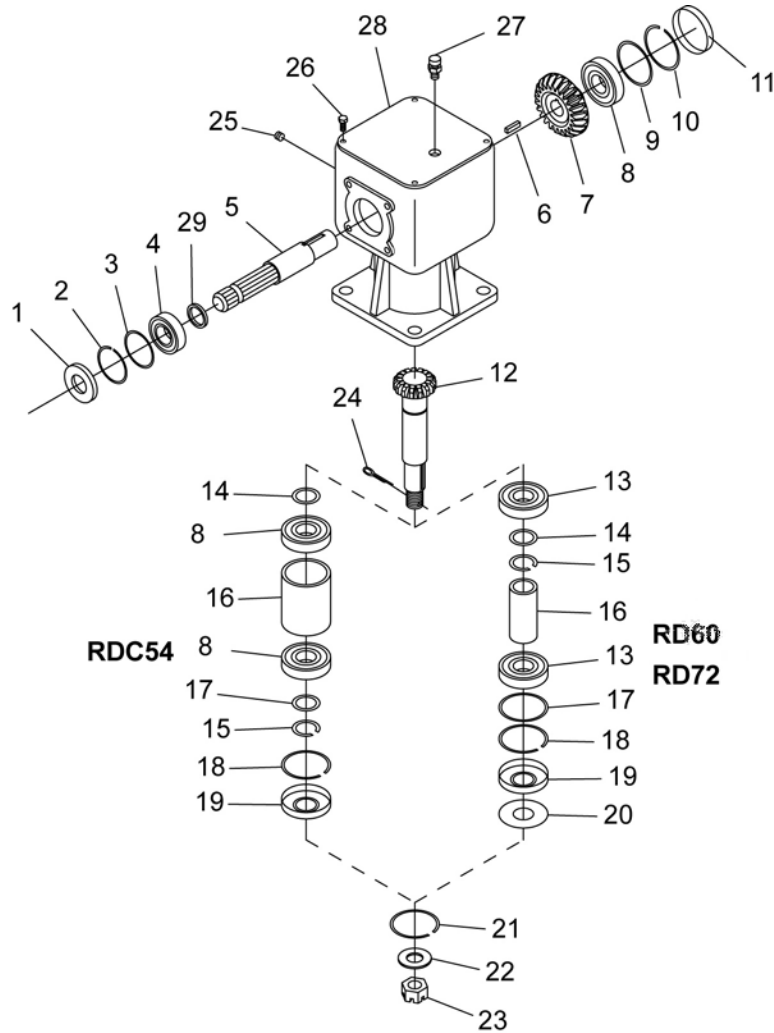
(Rev. 10/20/2015)
MAN0260 (8/6/2004)

RDC54, RD60 & RD72 MAIN FRAME ASSEMBLY

REF	RDC54 PART	RD60 PART	RD72 PART	QTY	DESCRIPTION
12	1006649	1006648	1006648	1	Gearbox (see page 36)
12	-----	611563RP	611563RP	1	Gearbox (see page 37) (RD60 Starting with S/N 10008172502001, RD72 Starting with S/N 10008193196001)
13	19579	19579	19579	2	A-frame arm
14	19056	55331	19578	2	Rear offset link arm
15	19605	19605	19605	1	Top link U-bracket
16	64814	64814	64814	1	Sleeve 1-1/4 x 1-3/4 x 2-3/4
17	WP1008097	WP1008097	WP1008097	4	Wheel, 10" pneumatic gray (includes items 19) -or-
17	WP1008096	WP1008096	WP1008096	4	Wheel, 10" solid gray (includes items 19)
18	19749	19749	19749	4	Sleeve 1/2 x 3/4 x 4-1/16 (pneumatic tire) -or-
18	29368	29368	29368	4	Sleeve 1/2 x 3/4 x 3-3/8 (solid tire)
19	24993	24993	24993	8	Ball bearing (pneumatic tire) -or-
19	65578	65578	65578	8	Flanged bushing (solid tire)
20	65130	65130	65130	12	1" Height spacer
21	65129	65129	65129	4	1/2" Height spacer
22	27542	27542	27542	4	7/16 Klik pin
23	20409	N/R	N/R	2	Clevis pin 7/8 x 3 -or-
23	N/R	33661	33661	2	Pin, Cat. 1 w/lockwasher & nut
24	N/R	1791	1791	2	Sleeve 5/8 x 1 x 9/16
25	484	484	484	3	Sleeve 5/8 x 1 x 7/16
26	20644	20644	18879	1	Belt
27	67283	67283	67283	2	5" Idler
28	67284	67284	67284	1	Shoulder sleeve
29	1042375	1042375	1042375	1	Spring
30	1002048	1002048	1002048	1	Shield
31	1008098	1008099	1008099	1	Driveline (Walterscheid)
31	1020903	1009508	1009508	1	Driveline (Comer)
32	N/R	1008113	1008113	1	Sleeve 1-1/4 x 1-3/4 x 3/4
32	-----	610197	610197	1	Sleeve 1-1/4 x 1-3/4 x 3/5 (RD60 Starting with S/N 10008172502001, RD72 Starting with S/N 10008193196001)
33	1008020	1008020	1008020	1	Manual tube holder
34	1004656	1004656	1004656	1	Manual tube - PVC
35	1004657	1004657	1004657	2	Caplug
36	1008196	1008196	1008196	1	Complete decal set
37	53591	53591	53591	1	Safety decal set

REF	PART	DESCRIPTION	REF	PART	DESCRIPTION
50	12305	* 1/2 NC x 5-1/2 HHCS GR5 (pneumatic tire) -or-	63	18270	* 3/16 Safety pin
50	23479	* 1/2 NC x 5 HHCS GR5 (solid tire)	65	39254	M8 x 1.25 x 16 mm Hex head screw
51	11900	* 1/2 NC Flanged locknut	66	4378	* 5/16 Standard flat washer
52	19025	* 5/8 NC Flanged locknut	67	62153	3/8 NC x 1 Hex flange serrated
53	23479	* 1/2 NC x 5 HHCS GR5	68	6593	* 1/4 x 1/4 x 1 Key
54	692	* 5/8 Standard flat washer	69	20893	25 x 44 x 4 mm Flat washer
55	6100	* 1/2 NC x 1-1/4 HHCS GR5	70	51946	M24 x 2 Hex castle nut
56	941	* 5/8 NC x 2-1/2 HHCS GR5	70	618208	M24 x 2 Hex castle nut (RD60 Starting with S/N 10008172502001, RD72 Starting with S/N 10008193196001)
57	19024	5/8 NC x 1-3/4 Hex head flanged cap screw GR5	71	64803	* 3/16 x 2 Cotter pin
58	3489	* 1/2 NC x 3 HHCS GR5	72	52893	PTO Hanger bracket
59	12296	1/4 - 28 Grease fitting	73	24576	1/2 NC x 1-3/4 HHCS GR5
60	854	* 1/2 Standard flat washer			* Standard Hardware, Obtain Locally
62	1008011	3/8 NC sq nut w/retainer			

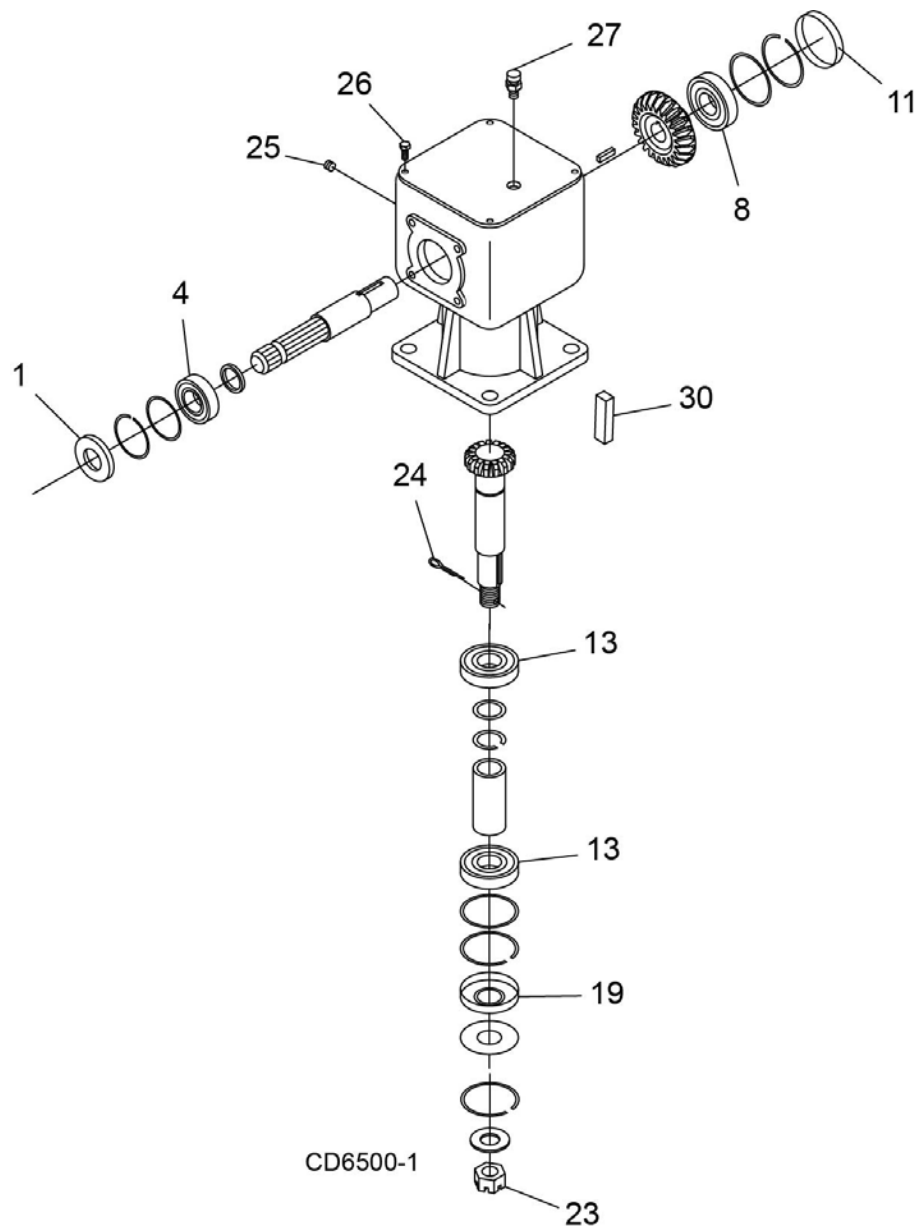
RD60 & RD72 GEARBOX ASSEMBLY
(RD60 UP TO S/N 10008172502000, RD72 UP TO S/N 10008193196000)



REF	RDC54 PART	QTY	RD60 / 72 PART	QTY	DESCRIPTION	REF	RDC54 PART	QTY	RD60 / 72 PART	QTY	DESCRIPTION
A	1006649		1006648		Complete gearbox	17	1007862	1	1007862	1	Shim kit
1	39275	1	39275	1	Seal	18	57466	1	39251	1	Snap ring
2	1007861	1	1007861	1	Snap ring	19	57463	1	20900	1	Seal
3	1007865	1	1007865	1	Shim kit	20	-----	1	20888	1	Washer, 1.58 x 3.13 x .04
4	51850	1	51850	1	Ball bearing	21	1007860	1	20897	1	Snap ring
5	N/S	1	N/S	1	Input shaft	22	20893	1	20893	1	Washer 25 x 44 x 4 mm
6	20894	1	20894	1	Key 8 x 10 x 30 mm	23	51946	1	51946	1	Castle nut M24 x 2
7	N/S	1	N/S	1	Input gear	24	64803	1*	64803	1*	3/16 x 2 Cotter pin
8	20890	4	20890	1	Ball bearing	25	N/S	1*	N/S	1*	3/8 Solid plug
9	1007864	1	1007864	1	Shim kit	26	N/S	4*	N/S	4*	M10 x 22 mm Cap screw
10	57466	1	57466	1	Snap ring	27	39325	1	39325	1	Vent plug
11	57374	1	57374	1	Oil cap	28	1007873	1	1007873	1	Cover
12	N/S	1	N/S	1	Output shaft & gear	29	1007857	1	-----	1	Spacer
13	-----	1	20891	2	Ball bearing						
14	1007866	1	1007863	1	Shim kit						
15	1007859	1	20895	1	Snap ring						
16	1007858	1	20886	1	Spacer						

* Standard hardware, obtain locally

RD60 & RD72 GEARBOX ASSEMBLY
(RD60 STARTING WITH S/N 10008172502001, RD72 STARTING WITH S/N 10008193196001)



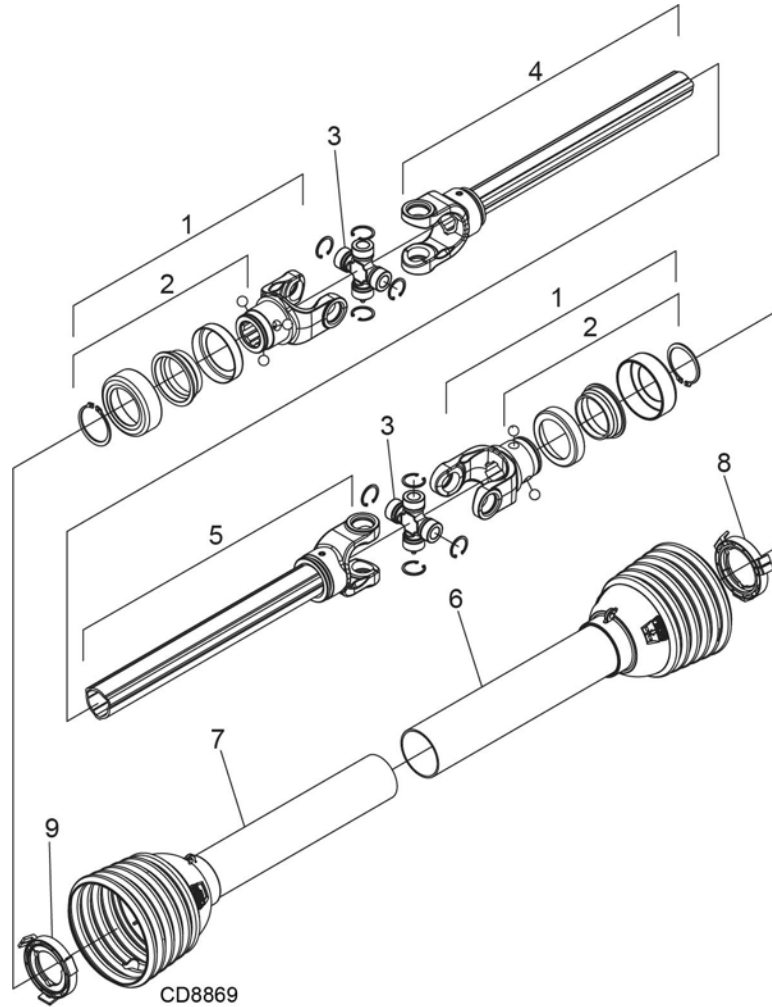
REF	PART	QTY	DESCRIPTION
A	611563RP		Complete gearbox
1	39275	1	Seal
4	51850	1	Ball bearing
8	20890	1	Ball bearing
11	57374	1	Oil cap
13	20891	2	Ball bearing
19	20900	1	Seal

REF	PART	QTY	DESCRIPTION
23	618208	1	Castle nut M24 x 2
24	64803	1*	3/16 x 2 Cotter pin
25	N/S	1*	3/8 Solid plug
26	N/S	4*	M10 x 22 mm Cap screw
27	39325	1	Vent plug
30	6093	1	Key

* Standard hardware,
obtain locally

RDC54 DRIVELINE ASSEMBLY

Identified by ribbed shields and grease fittings in cross bearing caps

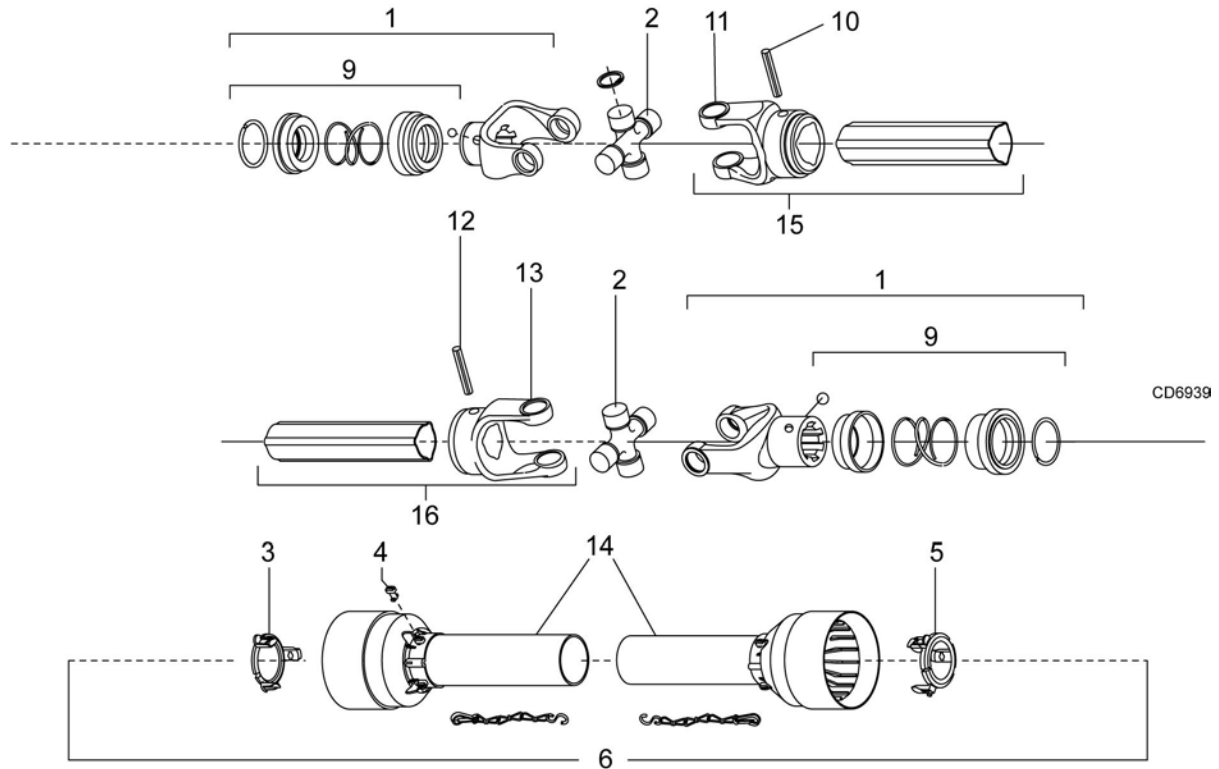


REF	PART	QTY	DESCRIPTION
A	601736	1	Complete driveline asy
1	1044051	1	Complete collar yoke C12 1-3/8 - 6
2	1044050	1	Lock collar repair kit
3	1044052	2	Cross & bearing kit
4	605257	1	Outer yoke & tube
5	605258	1	Inner yoke & tube
6	605259	1	Outer shield with bearing
7	605260	1	Inner shield with bearing
8	605784	1	Outer shield bearing
9	605785	1	Inner shield bearing

38 Parts

(Rev. 9/7/2007)
MAN0260 (8/6/2004)

RDC54 DRIVELINE ASSEMBLY (COMER)



NOTE: EXAMINE THE DRIVELINE PROFILE TO DETERMINE THE CORRECT REPAIR PARTS FOR THE UNIT

WALTERSCHEID
PROFILE

COMER
PROFILE



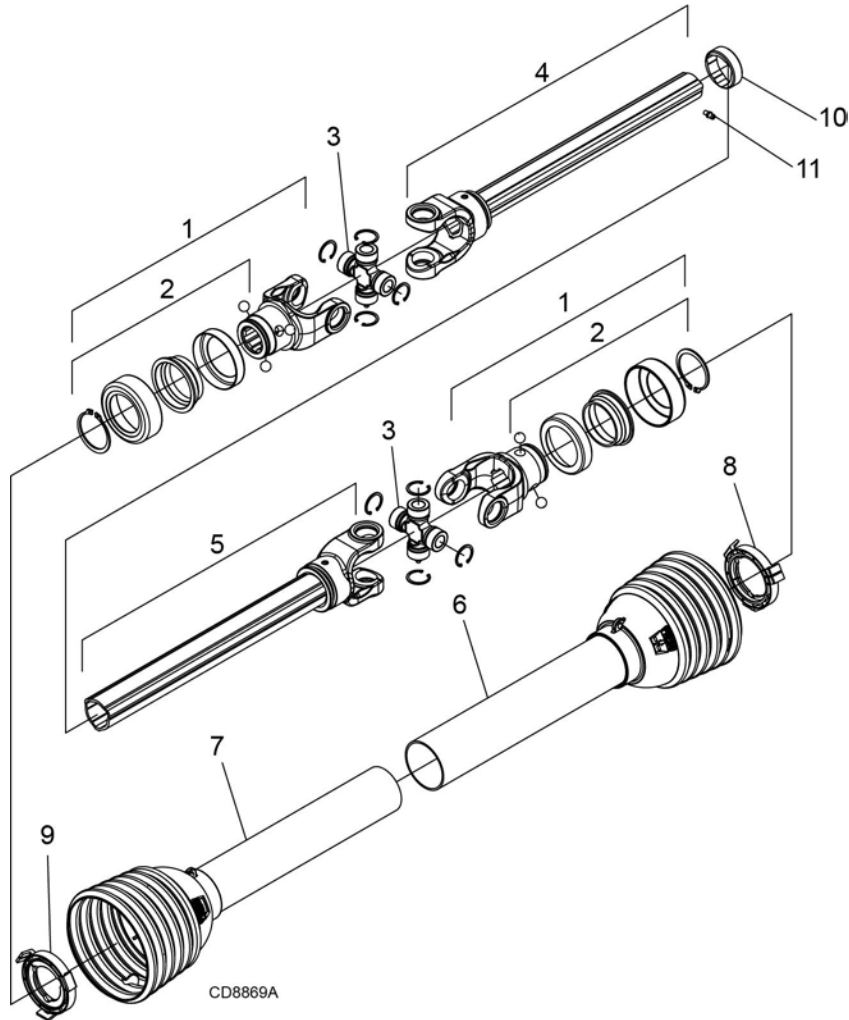
PG 39

PG 37

REF	PART	QTY	DESCRIPTION	REF	PART	QTY	DESCRIPTION
A	1020903	1	Complete driveline assembly	10	1001302	1	Flexible pin
1	1001300	2	Complete collar yoke C12 1-3/8 - 6	11	1001301	1	Outer yoke tube
2	38478	2	Cross and bearing kit	12	1001305	1	Flexible pin
3	1019442	1	Outer cone fix ring	13	1001306	1	Inner tube yoke
4	30922	6	Protection fixing screw	14	1021554	1	Complete shield
5	1019444	1	Inner cone fix ring	15	30926	1	Outer yoke & tube (must be cut to length)
6	30917	2	Chain shielding tether	16	30932	1	Inner yoke & tube (must be cut to length)
9	1001340	1	Lock collar repair kit				

RD60 & 72 DRIVELINE ASSEMBLY

Identified by ribbed shields and grease fittings in cross bearing caps

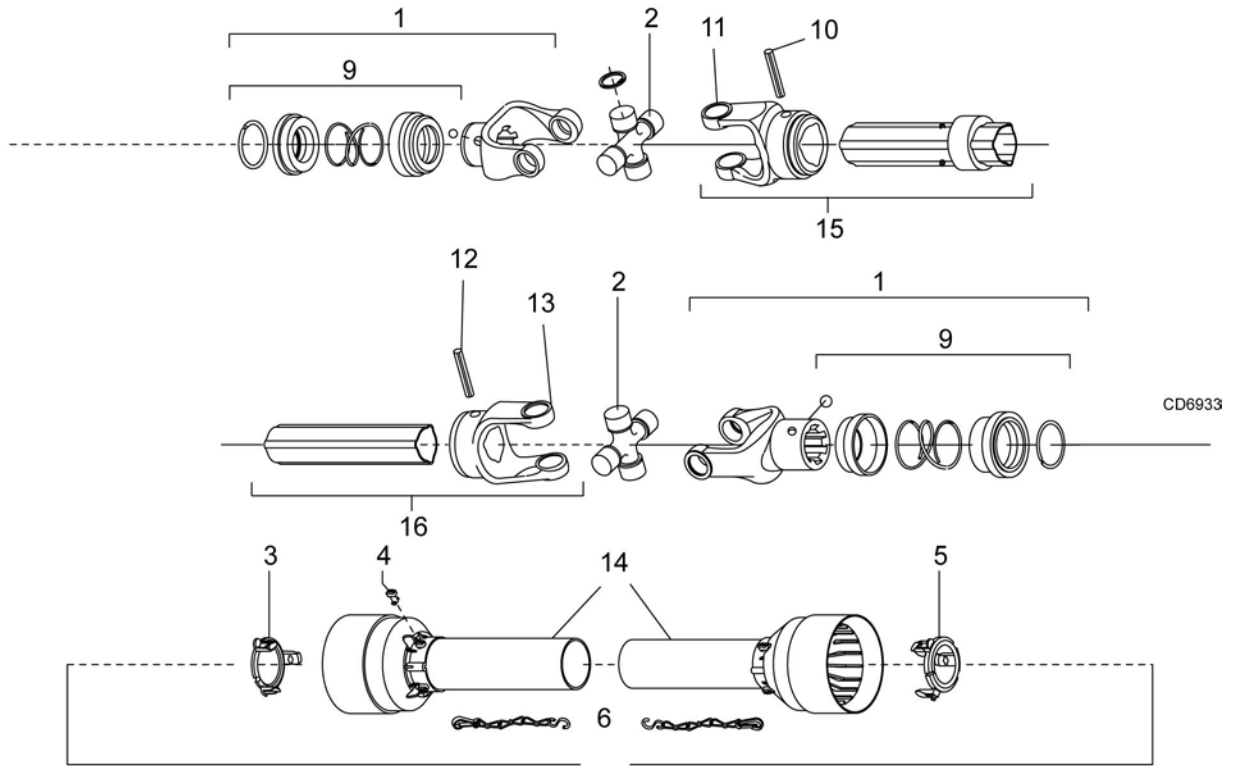


REF	PART	QTY	DESCRIPTION
A	601752	1	Complete driveline asy
1	1044051	1	Complete collar yoke C12 1-3/8 - 6
2	1044050	1	Lock collar repair kit
3	1044052	2	Cross & bearing kit
4	605261	1	Outer yoke & tube
5	605262	1	Inner yoke & tube
6	605263	1	Outer shield with bearing
7	605264	1	Inner shield with bearing
8	605784	1	Outer shield bearing
9	605785	1	Inner shield bearing
10	620299	1	Bearing outer tube
11	613791	1	Fitting, grease nipple M6-1

40 Parts

(Rev. 9/7/2007)
MAN0260 (8/6/2004)

RD60 & RD 72 DRIVELINE ASSEMBLY (COMER)



NOTE: EXAMINE THE DRIVELINE PROFILE TO DETERMINE THE CORRECT REPAIR PARTS FOR THE UNIT

WALTERSCHEID
PROFILE

COMER
PROFILE

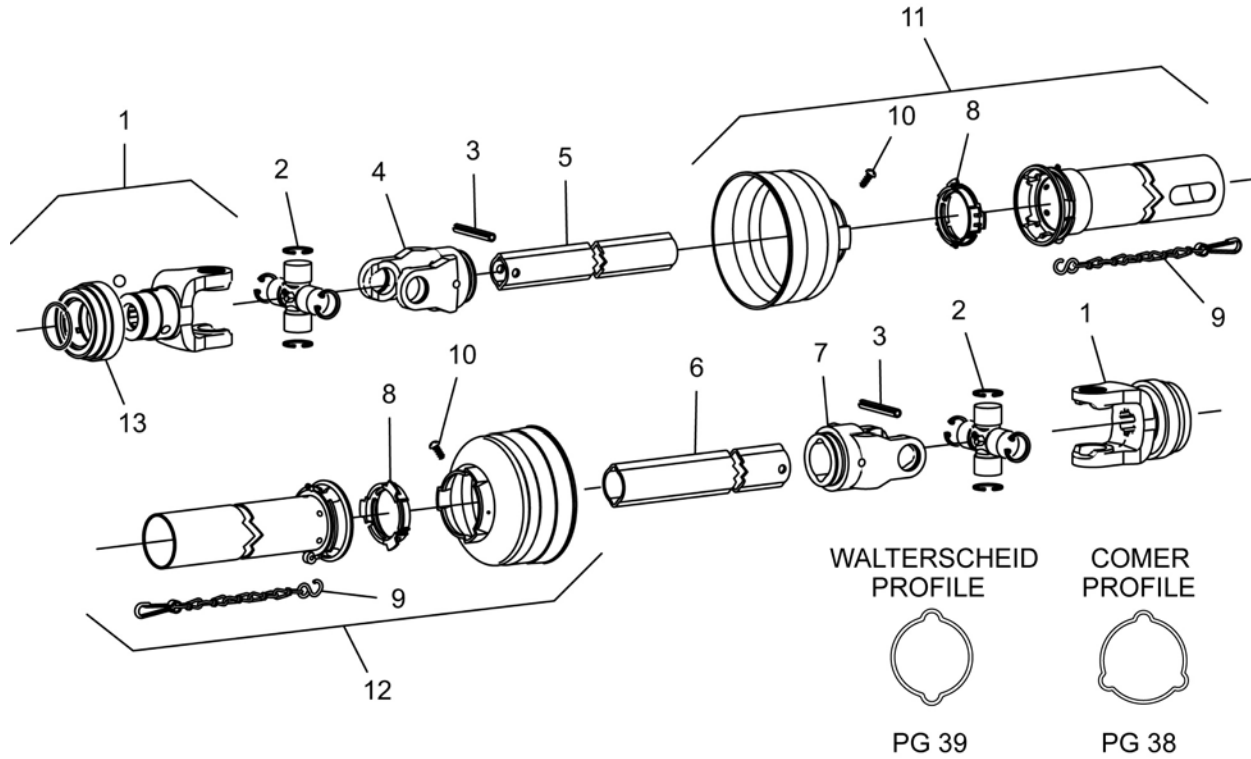


PG 39

PG 38

REF	PART	QTY	DESCRIPTION	REF	PART	QTY	DESCRIPTION
A	1009508	1	Complete driveline assembly	10	1001302	1	Flexible pin
1	1001300	2	Complete collar yoke C12 1-3/8 - 6	11	1001301	1	Outer yoke tube
2	38478	2	Cross and bearing kit	12	1001305	1	Flexible pin
3	1019442	1	Outer cone fix ring	13	1001306	1	Inner tube yoke
4	30922	6	Protective fixing screw	14	1021323	1	Complete shield
5	1019444	1	Inner cone fix ring	15	30926	1	Outer yoke & tube (must be cut to length)
6	30917	2	Chain shield tether	16	30932	1	Inner yoke & tube (must be cut to length)
9	1001340	1	Lock collar repair kit				

**RDC54, RD60 & RD72 DRIVESHAFT
WALTERSCHEID (TWO-LOBE SHAFT)**



REF	PART	QTY	DESCRIPTION
A	1008098	1	Complete driveline RDC54 -or-
B	1008099	1	Complete driveline RD60, RD72
1	40571	2	Yoke, 1-3/8 - 6-Spline QD
2	154	2	U-Joint repair kit L14R
3	40775	2	Pin, spring 10 mm x 65 mm
4	40572	1	Yoke, inner profile
5	40583	1	Drive tube, inner profile
6	40592	1	Drive tube, outer profile
7	40573	1	Yoke, inner profile

REF	PART	QTY	DESCRIPTION
8	40776	2	Bearing ring, guard
9	40777	2	Chain, guard anti-rotation
10	40778	2	Screw, guard
11	40759	1	Guard, outer half (also includes items 8, 9, 10)
12	40761	1	Guard, inner half (also includes items 8, 9, 10)
13	40589	2	Slide lock collar repair kit (without yoke)

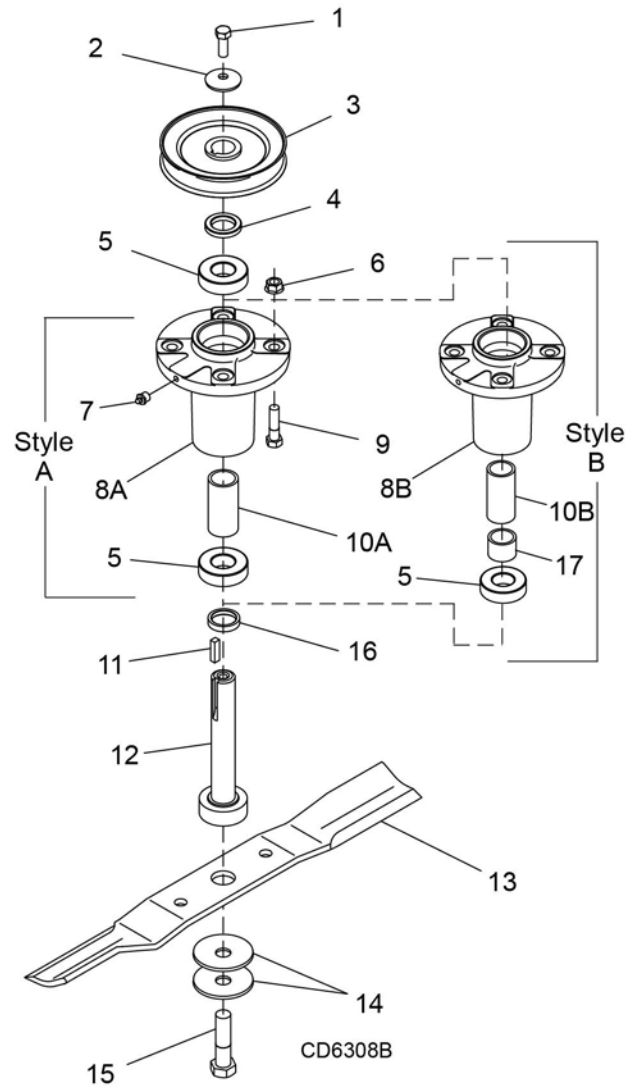
42 Parts

(Rev. 2/2/2021)
MAN0260 (8/6/2004)

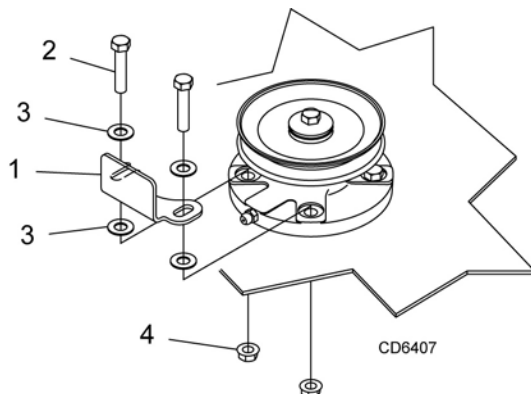
RDC54, RD60 & RD72 BLADE & SPINDLE ASSEMBLY (STYLE B STARTING WITH S/N 1008154818001)

REF	PART	QTY	DESCRIPTION
A	1009080	1	Complete spindle assembly (includes 1, 2, 4, 5, 7, 8, 10, 11, 12, 14, 15 & 16)
1	64518	1	3/8 NF x 1 HHCS GR5
2	70005	1	Cup washer
3	1008059	1	Sheave (RDC54) -or-
3	1008057	1	Sheave (RD60) -or-
3	1008040	1	Sheave (RD72)
4	1008055	1	Spacer
5	72933	2	Spindle bearing
6	14350*	4	3/8 NC Flange locknut
7	1972*	1	1/4 Tapered grease fitting
8A	1008053	1	Spindle housing
8B	-----†	1	Spindle housing
9	976*	4	3/8 NC x 1-1/2 HHCS GR5
10A	1008052	1	Spacer, 3.56
10B	-----†	1	Spacer, 3.54
11	70072*	1	Square key
12	1039925	1	Spindle shaft
13	78127KT	1	Blade kit, high suction 18.7" (includes 3 blades)(RDC54) -or-
13	1001513KT	1	Blade kit, high suction 21" (includes 3 blades)(RD60) -or-
13	1008199KT	1	Blade kit, high suction 25" (includes 3 blades)(RD72)
14	10635	2	Cup washer
15	1008095	1	5/8 NF x 2 HHCS GR5
16	78744	1	Spindle spacer
17	-----†	1	Bearing spacer

* Standard Hardware - Obtain Locally
† Style B complete spindle assembly not serviceable. Use 1009080.



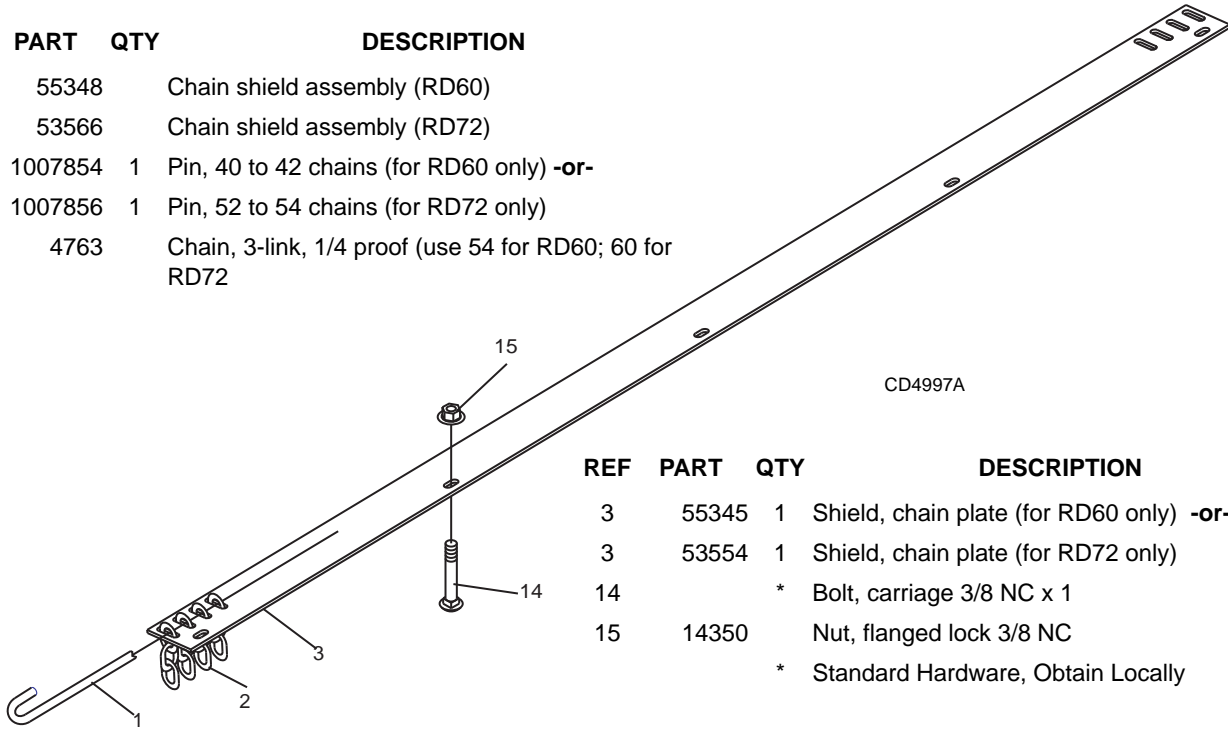
RDC54, RD60, RD72 BELT GUIDE



REF	PART	QTY	DESCRIPTION
A	1008181	1	Belt guide kit
1	N/A	1	Belt guide
2	3231*	2	3/8 NC x 2 Cap screw GR5
3	21757*	4	3/8 SAE Flat washer
4	14350*	2	3/8 NC Flange lock nut (not included)

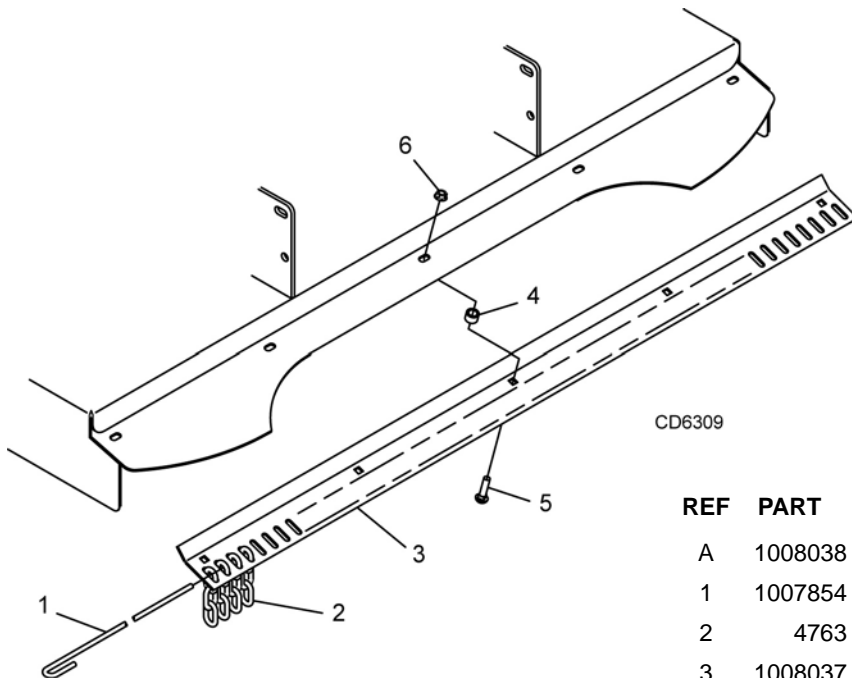
RD60 & RD72 REAR CHAIN SHIELDING ASSEMBLY (OPTIONAL)

REF	PART	QTY	DESCRIPTION
A	55348		Chain shield assembly (RD60)
B	53566		Chain shield assembly (RD72)
1	1007854	1	Pin, 40 to 42 chains (for RD60 only) -or-
1	1007856	1	Pin, 52 to 54 chains (for RD72 only)
2	4763		Chain, 3-link, 1/4 proof (use 54 for RD60; 60 for RD72)



REF	PART	QTY	DESCRIPTION
3	55345	1	Shield, chain plate (for RD60 only) -or-
3	53554	1	Shield, chain plate (for RD72 only)
14		*	Bolt, carriage 3/8 NC x 1
15	14350		Nut, flanged lock 3/8 NC
		*	Standard Hardware, Obtain Locally

RDC54 REAR CHAIN SHIELD ASSEMBLY (OPTIONAL)

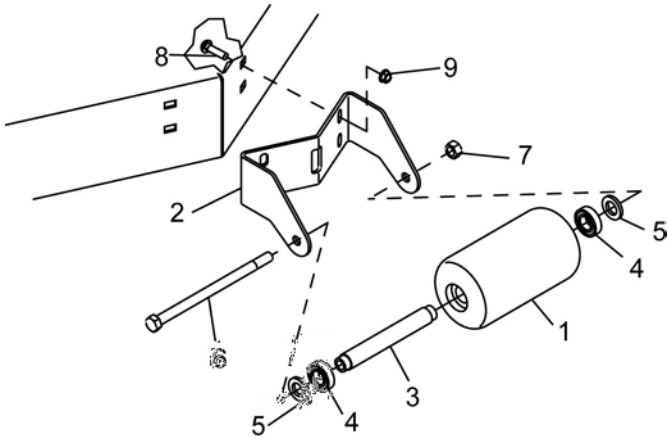


REF	PART	QTY	DESCRIPTION
A	1008038		Chain shield assembly
1	1007854	1	1/4 Pin
2	4763	49	3-Link 1/4 proof chain
3	1008037	1	Chain shield plate
4	22086	5	Sleeve 1/2 x 3/4 x 1/2
5	24890*	5	3/8 NC x 1-1/4 Carriage bolt
6	14350*	5	3/8 NC Flanged locknut
		*	Standard Hardware, Obtain Locally

44 Parts

(Rev. 12/15/2006)
MAN0260 (8/6/2004)

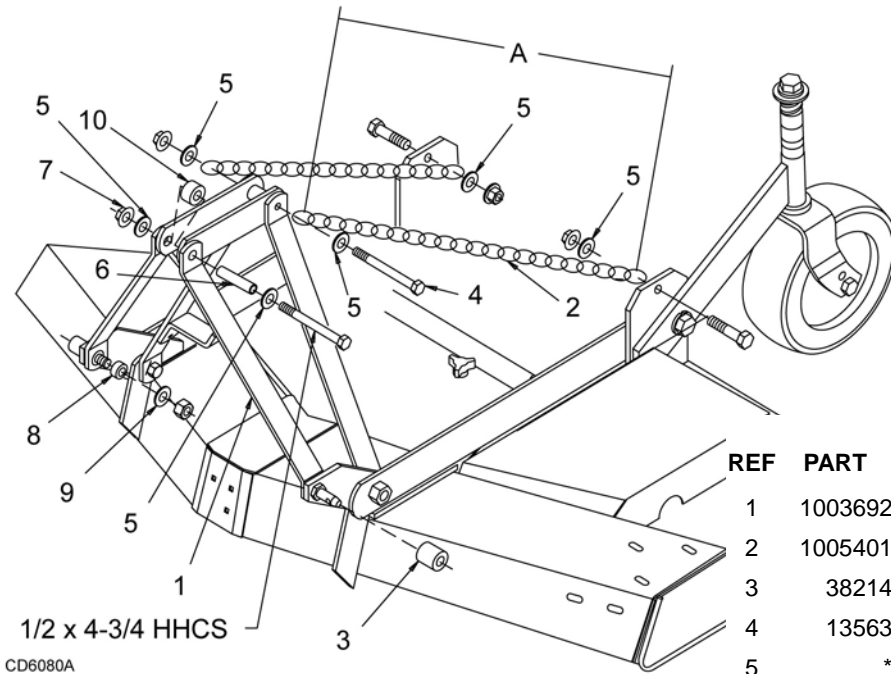
RDC54, RD60 & RD72 FRONT ROLLER ASSEMBLY (OPTIONAL)



REF	PART	QTY	DESCRIPTION
A	1008035KT		Front roller kit, complete
1	1006418	1	Roller
2	1008034	1	Roller bracket
3	1006420	1	Spacer
4	35193	2	Bearing
5	3598	2	1/2 Flat washer SAE
6	38107	1	1/2 NC x 9 HHCS GR5
7	11900	1	1/2 NC Flanged locknut
8	24890*	4	3/8 NC x 1-1/4 Carriage bolt
9	14350*	4	3/8 NC Flanged locknut

* Standard Hardware, Obtain Locally

RD60 & RD72 QUICK HITCH KIT (OPTIONAL)



REF	PART	QTY	DESCRIPTION
1	1003692	2	Link, offset .38 x 2.0 x 15
2	1005401	2	Chain 3/8 proof coil 38 link
3	38214	2	Sleeve, .91 x 1.44 x 1.25
4	13563	1	Screw, HHCS 1/2 NC x 6 GR5
5	*	6	Washer, flat 1/2 ZP
6	29368	1	Sleeve, .50 x .75 x 3.38
7	11900	1	Nut, flange lock 1/2 NC
8	29281	2	Sleeve, 7/8 x 1-1/8 x 19/32 HT
9	*	2	Washer, flat 7/8
10	1003614	1	Sleeve, .81 x 1.25 x 1.81

* Standard Hardware, Obtain Locally

BOLT TORQUE CHART

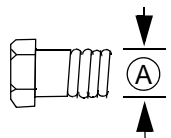
Always tighten hardware to these values unless a different torque value or tightening procedure is listed for a specific application.

Fasteners must always be replaced with the same grade as specified in the manual parts list.

Always use the proper tool for tightening hardware: SAE for SAE hardware and Metric for metric hardware.

Make sure fastener threads are clean and you start thread engagement properly.

All torque values are given to specifications used on hardware defined by SAE J1701 MAR 99 & J1701M JUL 96.



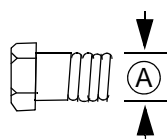
SAE SERIES TORQUE CHART



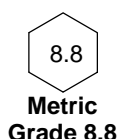
SAE Bolt Head Identification



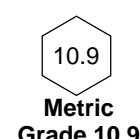
Ⓐ Diameter (Inches)	Wrench Size	MARKING ON HEAD					
		SAE 2		SAE 5		SAE 8	
		lbs-ft	N-m	lbs-ft	N-m	lbs-ft	N-m
1/4"	7/16"	6	8	10	13	14	18
5/16"	1/2"	12	17	19	26	27	37
3/8"	9/16"	23	31	35	47	49	67
7/16"	5/8"	36	48	55	75	78	106
1/2"	3/4"	55	75	85	115	120	163
9/16"	13/16"	78	106	121	164	171	232
5/8"	15/16"	110	149	170	230	240	325
3/4"	1-1/8"	192	261	297	403	420	569
7/8"	1-5/16"	306	416	474	642	669	907
1"	1-1/2"	467	634	722	979	1020	1383



METRIC SERIES TORQUE CHART

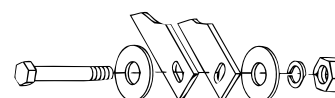
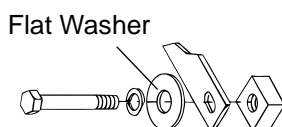
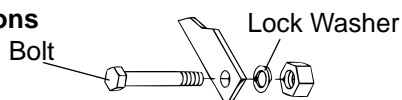


Metric Bolt Head Identification



Ⓐ Diameter & Thread Pitch (Millimeters)	Wrench Size	Coarse Thread				Fine Thread				Ⓐ Diameter & Thread Pitch (Millimeters)
		Marking on Head				Marking on Head				
		Metric 8.8		Metric 10.9		Metric 8.8		Metric 10.9		
		N-m	lbs-ft	N-m	lbs-ft	N-m	lbs-ft	N-m	lbs-ft	
6 x 1.0	10 mm	8	6	11	8	8	6	11	8	6 x 1.0
8 x 1.25	13 mm	20	15	27	20	21	16	29	22	8 x 1.0
10 x 1.5	16 mm	39	29	54	40	41	30	57	42	10 x 1.25
12 x 1.75	18 mm	68	50	94	70	75	55	103	76	12 x 1.25
14 x 2.0	21 mm	109	80	151	111	118	87	163	120	14 x 1.5
16 x 2.0	24 mm	169	125	234	173	181	133	250	184	16 x 1.5
18 x 2.5	27 mm	234	172	323	239	263	194	363	268	18 x 1.5
20 x 2.5	30 mm	330	244	457	337	367	270	507	374	20 x 1.5
22 x 2.5	34 mm	451	332	623	460	495	365	684	505	22 x 1.5
24 x 3.0	36 mm	571	421	790	583	623	459	861	635	24 x 2.0
30 x 3.0	46 mm	1175	867	1626	1199	1258	928	1740	1283	30 x 2.0

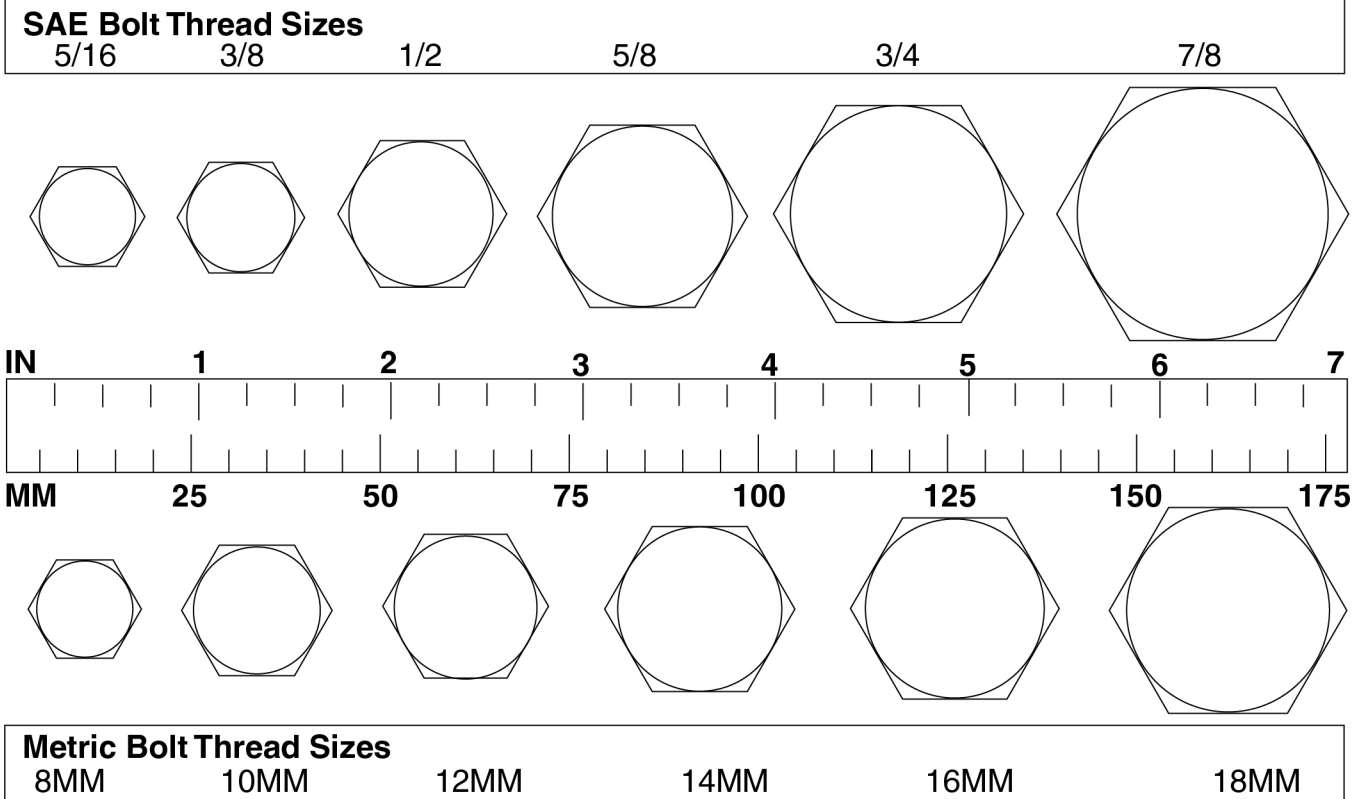
Typical Washer Installations



8/9/00

BOLT SIZE CHART

NOTE: Chart shows bolt thread sizes and corresponding head (wrench) sizes for standard SAE and metric bolts.



ABBREVIATIONS

AG.....Agriculture	MPa.....Mega Pascal
ASABE..... American Society of Agricultural & Biological Engineers (formerly ASAE)	N..... Newton
ASAE..... American Society of Agricultural Engineers	NC.....National Coarse
ATF..... Automatic Transmission Fluid	NF..... National Fine
BSPP..... British Standard Pipe Parallel	NPSM..... National Pipe Straight Mechanical
BSPTM..... British Standard Pipe Tapered Male	NPT..... National Pipe Tapered
CV..... Constant Velocity	NPT SWF..... National Pipe Tapered Swivel Female
CCW..... Counter-Clockwise	ORBM..... O-Ring Boss - Male
CW..... Clockwise	P..... Pitch
F..... Female	PBY..... Power-Beyond
FT..... Full Thread	psi.....Pounds per Square Inch
GA..... Gauge	PTO..... Power Take Off
GR (5, etc.)..... Grade (5, etc.)	QD..... Quick Disconnect
HHCS..... Hex Head Cap Screw	RH..... Right Hand
HT..... Heat-Treated	ROPS..... Roll-Over Protective Structure
JIC..... Joint Industry Council 37° Flare	RPM..... Revolutions Per Minute
LH..... Left Hand	RT..... Right
LT..... Left	SAE..... Society of Automotive Engineers
m..... Meter	UNC..... Unified Coarse
mm..... Millimeter	UNF..... Unified Fine
M..... Male	UNS..... Unified Special

INDEX

Assembly

- Dealer Set-up Instructions 28
- Gearbox
 - Fill Gearbox 29
- Install
 - Chain Shielding 29
 - Driveshaft 29
 - Front Offset Links 28
 - Front Roller 31
 - Quick Hitch Kit 30
 - Rear Caster Arm 29
 - Rear Offset Link 29
 - Top Link 29
- Uncrate Mower 28

Dealer Check List

- Delivery (Dealer's Responsibility) 32
- Pre-Delivery (Dealer's Responsibility) 32

Dealer Delivery Check List 32

Dealer Pre-Delivery Check List 32

Dealer Service

- Blade Spindle
 - Repair 21
- Blocking Method 21
- Gearbox
 - Assemble 24
 - Disassemble 24
 - Install 25
 - Remove 24
 - Repair 22
 - Seal Installation 22, 24
 - Seal Replacement 22
 - Vertical Shaft Repair 24
- Install Drive Sheave 25
- Universal Joint
 - Assembly 27
 - Disassembly 26
 - Repair 26

Gearbox Oil Fill 29

General

- Abbreviations 47
- Bolt Size Chart 47
- Bolt Torque Chart 46
- General Information 4
- General information 4
- Introduction 2
- Obtaining Replacement Manuals 2
- Product Registration 2
- Specifications 4
- Warranty
 - Product 50
 - Replacement Parts 49

Operation 10

- Adjustment
 - Cutting Height 11
 - Cutting Height Chart 11

- Tractor Top Link 11
- Attach Mower to Tractor 10
- Check List
 - Owner Pre-Operation (Owners Responsibility) 14
- Front Caster Wheel Interference Check 12
- Front Roller 12
- Operating
 - On Uneven Terrain 13
 - Technique 12
 - Tips 13
- Removing Mower from Tractor 13
- Tractor Stability 10

Owner Service

- Belt
 - Install 17
 - Replace 16
- Blade
 - Install 17
 - Service 17
- Blocking Method 15
- Chain Shielding 17
- Lubrication
 - Driveshaft 17
 - Information 15
 - Points 17

Parts

- Parts Index 33

Safety

- Blocking Method 15, 21
- Dealer Check List
 - Delivery (Dealer's Responsibility) 32
 - Pre-Delivery (Dealer's Responsibility) 32
- Owner Check List
 - Owner Pre-Operation (Owners Responsibility) 14
- Safety & Instructional Decals 8
- Safety Rules 5, 6, 7
- Safety Symbols Explained 2

Service

- Install Blades 18
- Remove Blades 17
- Service Blades 17
- Sharpen Blades 17
- Spindle Repair
 - Assemble Spindle 22
 - Disassemble Spindle 21
 - Remove Spindle 21

Trouble Shooting 19

- Belt Conditions 20
- Mowing Conditions 19



WARRANTY

(Replacement Parts For All Models Except Zero-Turn Mowers)

Woods Equipment Company (“WOODS”) warrants this product to be free from defect in material and workmanship for a period of ninety (90) days from the date of delivery of the product to the original purchaser with the exception of V-belts, which will be free of defect in material and workmanship for a period of 12 months.

Under no circumstances will this Warranty apply in the event that the product, in the good faith opinion of WOODS, has been subjected to improper operation, improper maintenance, misuse, or an accident. This Warranty does not cover normal wear or tear, or normal maintenance items.

This Warranty is extended solely to the original purchaser of the product. Should the original purchaser sell or otherwise transfer this product to a third party, this Warranty does not transfer to the third party purchaser in any way. There are no third party beneficiaries of this Warranty.

WOODS’ obligation under this Warranty is limited to, at WOODS’ option, the repair or replacement, free of charge, of the product if WOODS, in its sole discretion, deems it to be defective or in noncompliance with this Warranty. **The product must be returned to WOODS with proof of purchase within thirty (30) days after such defect or noncompliance is discovered or should have been discovered, routed through the dealer and distributor from whom the purchase was made, transportation charges prepaid.** WOODS shall complete such repair or replacement within a reasonable time after WOODS receives the product. THERE ARE NO OTHER REMEDIES UNDER THIS WARRANTY. THE REMEDY OF REPAIR OR REPLACEMENT IS THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE OF THIS WARRANTY. WOODS MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND WOODS SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY AND/OR ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

WOODS shall not be liable for any incidental or consequential losses, damages or expenses, arising directly or indirectly from the product, whether such claim is based upon breach of contract, breach of warranty, negligence, strict liability in tort or any other legal theory. Without limiting the generality of the foregoing, Woods specifically disclaims any damages relating to (i) lost profits, business, revenues or goodwill; (ii) loss of crops; (iii) loss because of delay in harvesting; (iv) any expense or loss incurred for labor, supplies, substitute machinery or rental; or (v) any other type of damage to property or economic loss.

This Warranty is subject to any existing conditions of supply which may directly affect WOODS’ ability to obtain materials or manufacture replacement parts.

No agent, representative, dealer, distributor, service person, salesperson, or employee of any company, including without limitation, WOODS, its authorized dealers, distributors, and service centers, is authorized to alter, modify, or enlarge this Warranty.

Answers to any questions regarding warranty service and locations may be obtained by contacting:

WOODS® | A Blount International Brand

2606 South Illinois Route 2
Post Office Box 1000
Oregon, Illinois 61061 USA

800-319-6637 tel
800-399-6637 fax
woodsequipment.com

ALITEC™
CENTRAL FABRICATORS®
GANNON®
WAIN-ROY®
WOODS®



WARRANTY

All Models Except Zero-Turn Mowers

Please Enter Information Below and Save for Future Reference.

Date Purchased: _____

From (Dealer): _____

Model Number: _____

Serial Number: _____

Woods Equipment Company ("WOODS") warrants this product to be free from defect in material and workmanship. Except as otherwise set forth below, the duration of this Warranty shall be for TWELVE (12) MONTHS COMMENCING ON THE DATE OF DELIVERY OF THE PRODUCT TO THE ORIGINAL PURCHASER.

All current model backhoes, loaders and mounts (except 3-pt. SAF-T-LOK® mounts) are warranted for two (2) years from the date of delivery to the original purchaser. The limited warranty covers any defects in the material and/or workmanship. Following the proper, recommended installation by an authorized Woods Dealer and normal use of a Woods mounting and backhoe or loader, if a tractor incurs damage resulting from the attachment, Woods will cover the existing tractor warranty in the event the manufacturer voids its tractor warranty because of the attachment. Warranty does not cover any misuse or abusive conditions that could cause premature wear or damage to attachment or tractor.

The warranty periods for specific parts or conditions are listed below:

Part or Condition Warranted	Model Number	Duration (from date of delivery to the original purchaser)
	All units invoiced after 4/30/2012	
Gearbox components	BB48.30, BB60.30, BB72.30, BB84.40, BB60.50, BB72.50, BB60.60, BB72.60, BB84.60, BB84.50, DS8.30, DS10.40, DS8.50, DSO8.50, DS10.50, DSO10.50, DBH5.31, DBH6.31	6 years
	BW12, BW10.50, BW10.50Q, BW15.50, BW15.50Q, BW10.60, BW10.60Q, BW13.70, BW13.70Q, BW13.70QREV, BW15.60, BW15.60Q, BW10.70, BW10.70Q, BW15.70, BW15.70Q, BW20.50, BW20.50Q, BW20.60, BW20.60Q, BW20.70, BW20.70Q, BW20.51, BW20.51Q, BW20.61, BW20.61Q, BW20.71, BW20.71Q, BW13.71, BW13.71Q, BW13.71QREV	
	BW240X, BW240XHD, BW1620X, BW2400X	
	RD990X, PRD6000, PRD7200, PRD8400, S15CD, S20CD, S22CD, S25CD, S27CD, S30CD, TC/R74, TC/R68, TC/R60, TBW144, TBW180, TBW204, TSG50, S12ED, S15ED, S18ED, S20ED, TPD25, TPD35, TPD65, TPD95, PD25.20, PD35.30, PD95.50, TKP60.40, TKP72.40, TKP84.40	3 years (1 year if used in rental or commercial applications)
TBW150C, RT/R42.30, RT/R48.30, RT/R60.40, RT/R72.40, RC3.5, RC4, RC5, RC6, RC42.20, RC48.20, RC60.20, RC72.20, TK60.20, TK72.20		
Blade spindles	RD990X, PRD6000, PRD7200, PRD8400, TBW144, TBW180, TBW204, TKP60.40, TKP72.40, TKP84.40	3 years

Under no circumstances will this Warranty apply in the event that the product, in the good faith opinion of WOODS, has been subjected to improper operation, improper maintenance, misuse, or an accident. This Warranty does not apply in the event that the product has been materially modified or repaired by someone other than WOODS, a WOODS authorized dealer or distributor, and/or a WOODS authorized service center. This Warranty does not cover normal wear or tear, or normal maintenance items. This Warranty also does not cover repairs made with parts other than those obtainable through WOODS.

This Warranty is extended solely to the original purchaser of the product. Should the original purchaser sell or otherwise transfer this product to a third party, this Warranty does not transfer to the third party purchaser in any way. There are no third party beneficiaries of this Warranty.

WOODS makes no warranty, express or implied, with respect to engines, batteries, tires or other parts or accessories not manufactured by WOODS. Warranties for these items, if any, are provided separately by their respective manufacturers.

WOODS' obligation under this Warranty is limited to, at WOODS' option, the repair or replacement, free of charge, of the product if WOODS, in its sole discretion, deems it to be defective or in noncompliance with this Warranty. **The product must be returned to WOODS with proof of purchase within thirty (30) days after such defect or noncompliance is discovered or should have been discovered, routed through the dealer and distributor from whom the purchase was made, transportation charges prepaid.** WOODS shall complete such repair or replacement within a reasonable time after WOODS receives the product. THERE ARE NO OTHER REMEDIES UNDER THIS WARRANTY. THE REMEDY OF REPAIR OR REPLACEMENT IS THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE OF THIS WARRANTY. WOODS MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND WOODS SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY AND/OR ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

WOODS shall not be liable for any incidental or consequential losses, damages or expenses, arising directly or indirectly from the product, whether such claim is based upon breach of contract, breach of warranty, negligence, strict liability in tort or any other legal theory. Without limiting the generality of the foregoing, Woods specifically disclaims any damages relating to (i) lost profits, business, revenues or goodwill; (ii) loss of crops; (iii) loss because of delay in harvesting; (iv) any expense or loss incurred for labor, supplies, substitute machinery or rental; or (v) any other type of damage to property or economic loss.

This Warranty is subject to any existing conditions of supply which may directly affect WOODS' ability to obtain materials or manufacture replacement parts.

No agent, representative, dealer, distributor, serviceperson, salesperson, or employee of any company, including without limitation, WOODS, its authorized dealers, distributors, and service centers, is authorized to alter, modify, or enlarge this Warranty. Answers to any questions regarding warranty service and locations may be obtained by contacting:

ALITEC™
CENTRAL FABRICATORS®
GANNON®
WAIN-ROY®
WOODS®



WOODS® | A Blount International Brand
 2606 South Illinois Route 2
 Post Office Box 1000
 Oregon, Illinois 61061 USA
 800-319-6637 tel
 800-399-6637 fax
 woodsequipment.com