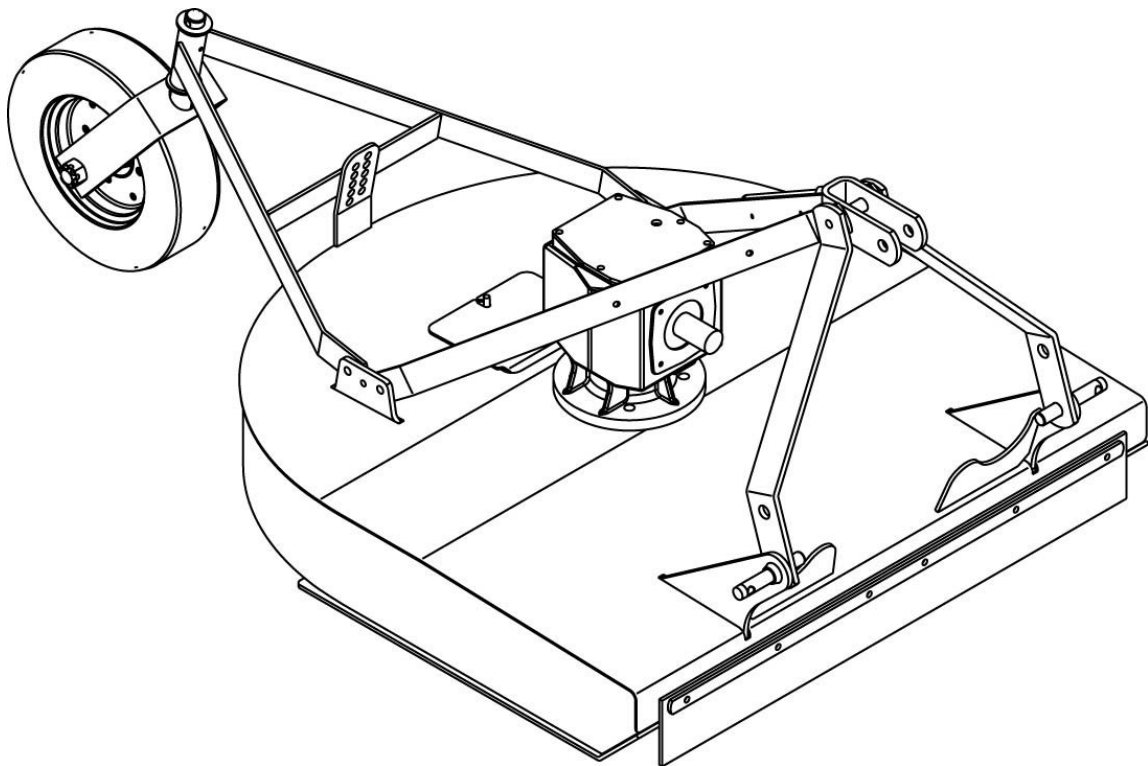


WOODS ROTARY CUTTERS RCC42

For Serial Number 1162806 and after
Includes Service and Repair Parts
Information for Serial Number 1162805 and before



MAN0224
(Rev. 4/19/2011)

WOODS[®]
Tested. Proven. Unbeatable.

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. Please contact your dealer to complete this form. 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 personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



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



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



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

**IMPORTANT
or NOTICE**

Is used to address practices not related to personal injury.

NOTE

Indicates helpful information.

WOODS®

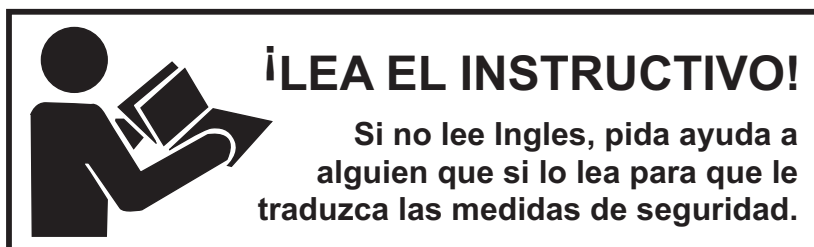
ALITEC™
BMP®
CENTRAL FABRICATORS®
GANNON®
GILL®
WAIN-ROY®
WOODS®

2 Introduction

Gen'l (Rev. 3/5/2010)

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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

3-Point Hitch	Category 1
Cutting Height	1" - 9"
Blade Spindle	1
Number of Blades	2
Blades	Heat Treated Alloy Steel
Blade Rotation	CCW
Tractor PTO RPM	540
Universal Drive	Category 3
Side Frame Thickness	11 Ga
Tailwheel	4" x 16"

RCC42

Cutting Width	42"
Overall Width	45"
Weight (Approximate lbs.)	350 lbs.
Blade Speed (Feet per minute)	11,400
Gearbox	1:1.92
Recommended Tractor HP	15 - 30

GENERAL INFORMATION

The purpose of this manual is to assist you in operating and maintaining your cutter. 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 but, 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.

WARNING

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

Throughout this manual, references are made to right and left direction. These are determined by standing behind the equipment facing the direction of forward travel. Blade rotation is counterclockwise as viewed from the top of the cutter.

BE SAFE!

BE ALERT!

BE ALIVE!

BE TRAINED

Before Operating Mowers!



ASSOCIATION OF
EQUIPMENT
MANUFACTURERS

*Safety Training
Does Make a Difference.*

Free Mower Safety Video

Fill out and return the order form and we will send you a FREE VHS or DVD video outlining ***Industrial and Agricultural Mower Safety Practices***. The 22 minute video, developed in cooperation with AEM (Association of Equipment Manufacturers), reinforces the proper procedures to follow while operating your mowing equipment. The video does not replace the information contained in the Operator's Manual, so please review this manual thoroughly before operating your new mowing equipment.

Also, available from the Association of Equipment Manufacturers:

A large variety of training materials (ideal for groups) are available for a nominal charge from AEM. Following is a partial list:

- **Training Package for Rotary Mowers/Cutters-English**
Contains: DVD & VHS (English)
 Guidebook for Rotary Mowers/Cutters (English)
 AEM Industrial/Agricultural Mower Safety Manual (English)
 AEM Agricultural Tractor Safety Manual (English)

- **Training Package for Rotary Mowers/Cutters-English/Spanish**
Contains: DVD & VHS (English/Spanish)
 Guidebook for Rotary Mowers/Cutters (English/Spanish)
 AEM Industrial/Agricultural Mower Safety Manual (English/Spanish)
 AEM Agricultural Tractor Safety Manual (English/Spanish)

AEM training packages are available through:

AEM at: www.aem.org

or

Universal Lithographers, Inc.

Email: aem@ulilitho.com

800-369-2310 tel

866-541-1668 fax



Free Mower/Cutter Safety Video Order Form

Please send me (Select one)
 VHS Format - VHS01052 Safety Video
 DVD Format - DVD01052 Safety Video

Name: _____ Phone: _____

Address: _____

Mower/Cutter Model: _____ Serial #: _____

Send to: ATTENTION: DEALER SERVICES
 WOODS EQUIPMENT COMPANY
 PO BOX 1000
 OREGON IL 61061-1000
 USA

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

- **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 instructed in and be 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.**
- **If equipped with driveline guard tether chains, make sure they are attached to the tractor and equipment as shown in the pamphlet that accompanies the driveline. Replace if damaged or broken. Check that driveline guards rotate freely on driveline 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.**
- **Before putting equipment into service, check and adjust driveline length as instructed in Operator's Manual. Driveline must not bottom out or pull apart throughout the full range of the tractor hitch. Do not operate until driveline length is correct.**
- **Inspect chain, rubber, or steel band shielding before each use. Replace if damaged.**
- **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 a loader, 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.**

OPERATION

- **Do not allow bystanders in the area when operating, attaching, removing, assembling, or servicing equipment.**

(Safety Rules continued on next page)

SAFETY RULES



ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



(Safety Rules continued from previous page)

■ Full chain, rubber, or steel band 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, rubber, or steel band 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).

■ Never direct discharge toward people, animals, or property.

■ 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.

■ 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.

■ 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.

■ 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.

■ Look down and to the rear and make sure area is clear before operating in reverse.

■ 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.

■ Stop power unit and equipment immediately upon striking an obstruction. Turn off engine, remove key, inspect, and repair any damage before resuming operation.

■ Leak down or failure of mechanical or hydraulic system can cause equipment to drop.

TRANSPORTATION

■ Always comply with all state and local lighting and marking requirements.

■ Never allow riders on power unit or attachment.

■ Do not operate PTO during transport.

■ Watch for hidden hazards on the terrain.

■ A minimum 20% of tractor and equipment weight must be on the tractor front wheels when attachments are in transport position. Without this weight, front tractor wheels could raise up resulting in loss of steering. The weight may be attained with front wheel weights, ballast in tires or front tractor weights. Weigh the tractor and equipment. Do not estimate.

■ 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 system in “locked up” position at all times.

■ Do not operate or transport on steep slopes.

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

MAINTENANCE

■ Before performing any service or maintenance, disconnect driveline from tractor PTO.

■ Before working underneath, disconnect driveline, raise cutter, and block cutter securely. Hydraulic system leak down and failure of mechanical or hydraulic system can cause equipment to drop.

■ 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

SAFETY RULES



ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



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.
- 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.

■ 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.

■ Leak down or failure of mechanical or hydraulic system can cause equipment to drop.

STORAGE

- Block equipment securely for storage.
- Keep children and bystanders away from storage area.
- Follow manual instructions for storage.



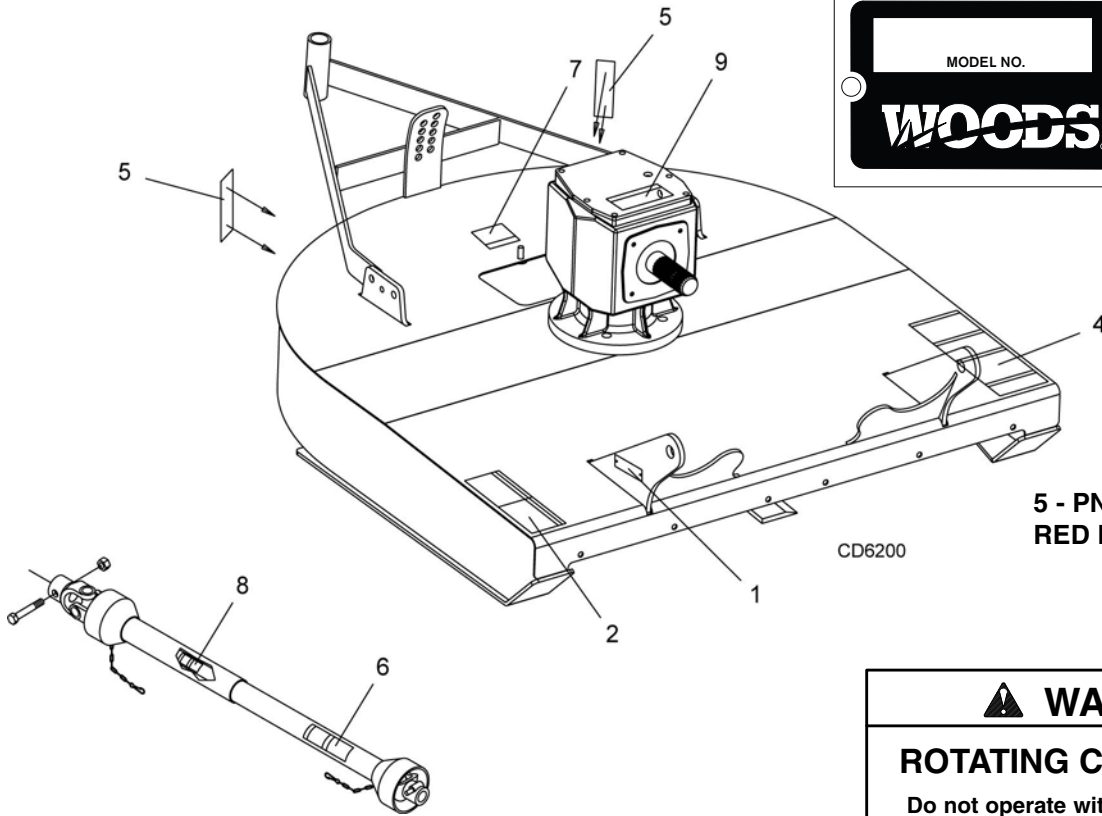
SAFETY & INSTRUCTIONAL DECALS



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



1 - SERIAL NUMBER PLATE



**5 - PN 20106
 RED REFLECTOR 9"**

CD6200

7- PN 15502

WARNING

ROTATING COMPONENTS

Do not operate without cover in place.
 Look and listen for rotation. Do not
 open cover until all components have
 stopped.

**CONTACT WITH ROTATING PARTS
 CAN CAUSE SERIOUS INJURY.**

15502-B

2 - PN 1006682

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.**

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



SAFETY & INSTRUCTIONAL DECALS

ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

Replace Immediately If Damaged!



4 - PN 1006681

⚠ 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.

⚠ WARNING

TO AVOID SERIOUS INJURY OR DEATH:

- Read Operator's Manual (available from dealer) and follow all safety precautions.
- Keep all shields in place and in good condition.
- Operate mower from tractor seat only.
- Lower mower, stop engine and remove key before dismounting tractor.
- Allow no children or untrained persons to operate equipment.
- Do not transport towed or semi-mounted units over 20 mph.

FAILURE TO OPERATE SAFELY CAN RESULT IN INJURY OR DEATH.

⚠ 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 from dropping from hydraulic leakdown, hydraulic system failures or mechanical component failures.

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

⚠ WARNING

DO NOT EXCEED PTO SPEED OF

540 RPM

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

1006681

8 - PN 33347

⚠ DANGER



GUARD MISSING. DO NOT OPERATE.

⚠ DANGER



GUARD MISSING. DO NOT OPERATE.

⚠ DANGER

9 - PN 1004114

⚠ DANGER

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

1004114

6 - PN 18864

⚠ 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

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 cutter. The operator must be properly trained. Operators should be familiar with the cutter, the tractor, and all safety practices before starting operation. Read the safety rules and safety decals on pages 3 to 7.

This standard-duty cutter is designed for grass and weed mowing and shredding.

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

! DANGER

■ Full chain, rubber, or steel band 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, rubber, or steel band 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).

! WARNING

- Never allow riders on power unit or attachment.
- 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 the rpm speed stated in "Specifications" section.

! CAUTION

- Stop power unit and equipment immediately upon striking an obstruction. Turn off engine, remove key, inspect, and repair any damage before resuming operation.
- Always wear relatively tight and belted clothing to avoid getting caught 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, front tractor wheels could raise up resulting in loss of steering. The weight may be attained with front wheel weights, ballast in tires or front tractor weights. Weigh the tractor and equipment. Do not estimate.

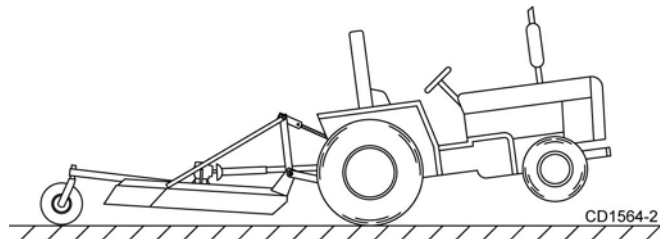


Figure 1. Tractor Stability

ATTACHING CUTTER TO TRACTOR

! WARNING

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

■ With cutter adjusted to transport position, set upper stop on tractor lift quadrant to prevent cutter from contacting the driveline when being raised.

1. Attach the cutter hitch pins to the lower tractor lift arms and secure.
2. Attach tractor top link to cutter clevis using forward hole.
3. Check driveline length. See page 34 for instructions on shortening driveline.
4. Connect driveline to tractor PTO shaft.

NOTE: You will need to adjust the top link; refer to **Top Link Adjustment**, page 13.

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

5. Adjust the tractor lower 3-point arm anti-sway devices to prevent cutter from swinging side to side during transport.
6. Adjust tractor drawbar so that it will not interfere with cutter or driveline.

INSTALLATION AND REMOVAL OF DRIVELINE (TRACTOR PTO)

To Install:

Pull locking collar back and at the same time push driveline onto tractor PTO shaft until locking device engages.

To Remove:

Hold driveline in position, pull locking collar back, and slide driveline off tractor PTO shaft.

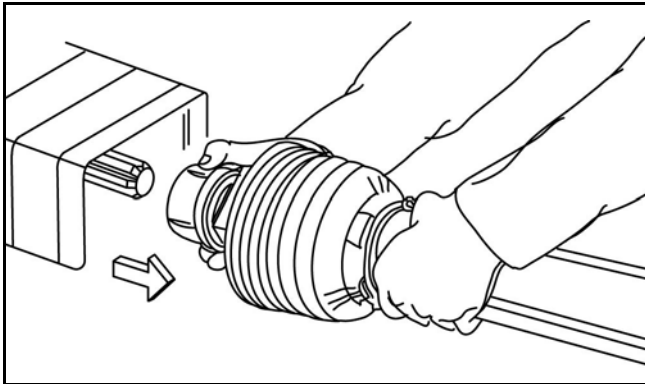


Figure 2. Lock Collar

SHREDDING

For shredding, set the cutter lower at rear. Determine how much lower to set the rear by experimenting in different situations.

CUTTING HEIGHT ADJUSTMENT

1. Level cutter from side to side. Check by measuring from cutter frame to the ground at each deck rail.
2. Adjust, using tractor 3-point arm leveling device.

NOTE: Keep the front of cutter slightly lower than rear for best mowing.

3. Control cutting height with tractor 3-point arms, rear tailwheel adjustment.
4. To raise rear of cutter, move tailwheel arm down.
5. To raise front of cutter, raise tractor 3-point arms.

The cutting height is the distance between the blade and the ground. The blades are approximately 5.5" below the deck. To check cutting height, do the following:

- a. Place a straight edge along top edge of deck.
- b. Select a cutting height; as an example, for an approximate cutting height of 3", set the center of the deck 8.5" above the ground.

$$\begin{aligned} & 3" - \text{desired cutting height} \\ & + 5.5 - \text{distance blade cutting edge is below deck} \\ & = 8.5 \end{aligned}$$

- c. Adjust the front-to-rear attitude from 1/2" to 3/4" higher than the front or from 9" to 9-1/4" at the rear.

⚠ WARNING

■ Before working underneath, disconnect driveline, raise cutter, and block cutter securely. Hydraulic system leak down and failure of mechanical or hydraulic system can cause equipment to drop.

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

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

TOP LINK ADJUSTMENT (FIGURE 3)

1. To mount tractor top link, use lowest hole provided in the tractor's top link attachment bracket.
2. Select a top link mounting pin that will swing through the cutter A-frame bars and attach rear portion of tractor top link in the first hole of cutter floating link.
3. Raise cutter to transport position and adjust tractor top link until cutter is level in the raised position.

NOTE: Some tractors are equipped with a short top link. If you cannot adjust the cutter level using the middle hole in the cutter floating link, use the front hole and adjust the cutter level in the transport position.

NOTICE

■ With cutter adjusted to transport position, set upper stop on tractor lift quadrant to prevent cutter from contacting the driveline when being raised.

■ Select a top link pin (maximum length 3-5/8") that will allow floating link to swing freely through the cutter A-frame bars.

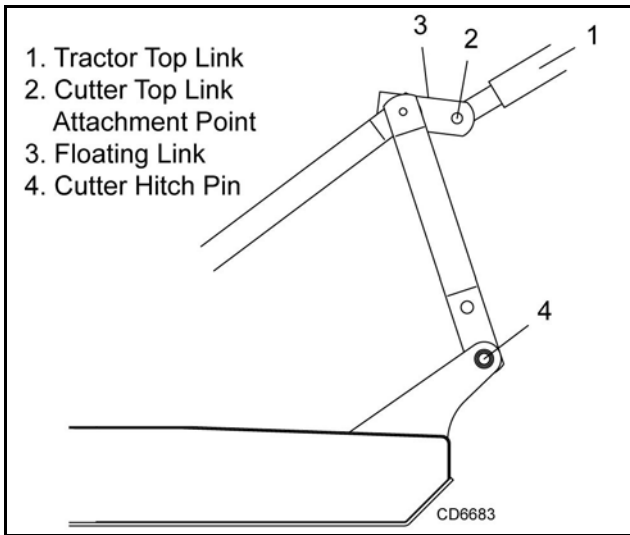


Figure 3. Top Link Adjustment

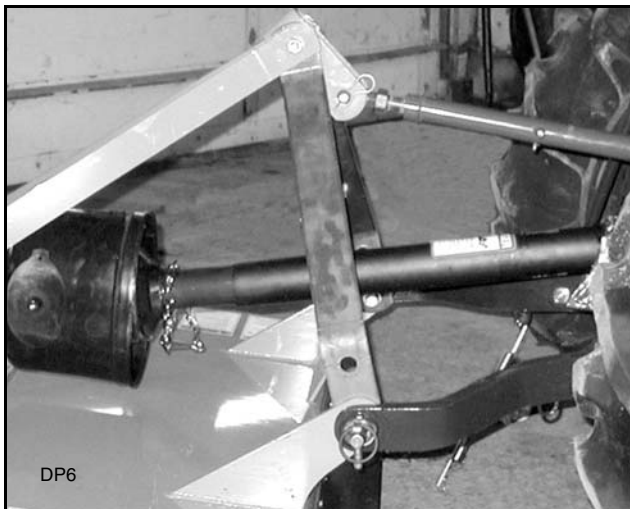


Figure 4. 3-Point Arms & Top Link Attached to Cutter

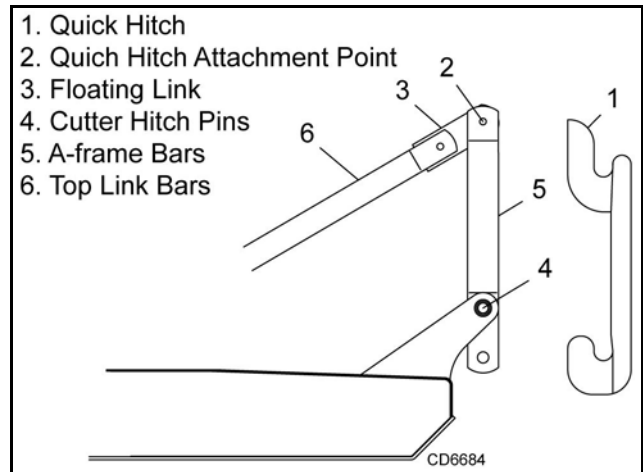


Figure 5. Quick Hitch Adjustment

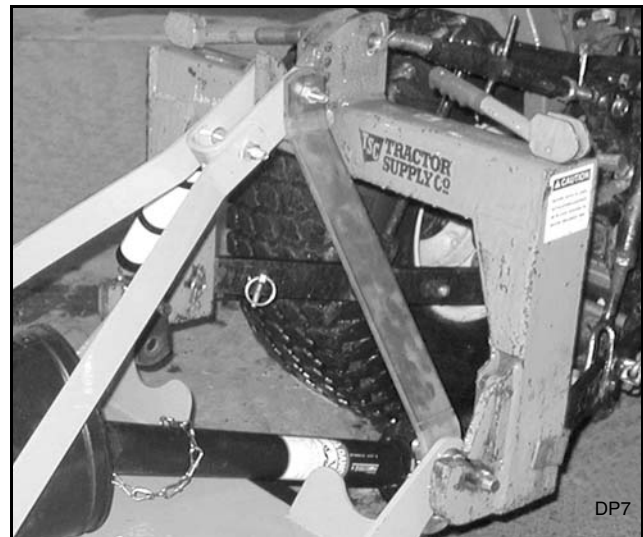


Figure 6. Quick Hitch Attached to Cutter

QUICK HITCH ATTACHMENT (FIGURE 5)

1. Remove nut and washer from hitch pin and lower A-frame bars to the second mounting hole.
2. Attach open end of floating link (3) to the A-frame bars (5). Attach closed end of floating link to top link bars (6).

NOTE: Quick hitch top hook will pick up on pin (2). Lower quick hitch hook will attach to cutter hitch pins (4).

3. Raise cutter to transport position and adjust tractor top link until cutter is level in the raised position.

NOTICE

■ With cutter adjusted to transport position, set upper stop on tractor lift quadrant to prevent cutter from contacting the driveline when being raised.

OPERATING TECHNIQUE

1. Power for operating the cutter is supplied by the tractor PTO. Operate PTO at 540 RPM. Know how to stop the tractor and cutter quickly in an emergency.
2. Engage PTO at a low engine RPM to minimize stress on the drive system and gearbox. With PTO engaged, raise PTO speed to 540 RPM and maintain throughout cutting operation.

Gearbox protection is provided by a slip clutch with replacement fiber disc or a shear bolt. The slip clutch is designed to slip and the shear bolt will shear when excessive torsional loads occur.

3. Move slowly into material. Adjust tractor ground speed to provide a clean cut without lugging the tractor engine. Use a slow ground speed for better shredding.

Proper ground speed will depend on the terrain and the material's height, type, and density.

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.

4. Always operate tractor PTO at 540 RPM to maintain proper blade speed and to produce a clean cut.
5. Under certain conditions tractor tires may roll down some grass and prevent cutting 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 rebound partially.

STORAGE

 **WARNING**

■ **Disconnect cutter driveshaft and secure up off ground. Raise cutter with 3-point hitch. Place blocks under cutter side skids. Lower cutter onto blocks. Disconnect cutter from tractor 3-point hitch and carefully drive tractor away from cutter.**

■ **Keep children and bystanders away from storage area.**

PRE-OPERATION CHECK LIST (OWNER'S RESPONSIBILITY)

- ___ Review and follow all safety rules and safety decal instructions on pages 3 through 7.

- ___ 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.
- ___ Set tractor PTO at 540 RPM.
- ___ Lubricate all grease fitting locations. Make sure PTO shaft slip joint is lubricated.
- ___ Check to be sure gear lube runs out the small check plug on side of gearbox.
- ___ Check that all hardware is properly installed and secured.
- ___ Check that blades are sharp and secure and cutting edge is positioned to lead in a counterclockwise rotation.
- ___ Check that shields and guards are properly installed and in good condition. Replace if damaged.
- ___ Check cutting height, front-to-rear attitude, and top link adjustment.
- ___ Place tractor PTO and transmission in neutral before starting engine.
- ___ Inspect area to be cut and remove stones, branches, or other hard objects that might be thrown and cause injury or damage.



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.

WARNING

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

■ **Before performing any service or maintenance, disconnect driveline from tractor PTO.**

■ **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.**

CAUTION

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

BLOCKING METHOD

To minimize the potential hazards of working underneath the cutter, follow these procedures.

1. Jackstands with a load rating of 1000 lbs. or more are the only approved blocking device for this cutter. Install a minimum of four jackstands, two in front and two in rear (refer to Xs in Figure 7) under the cutter before working underneath unit.
2. Do not position jackstands under wheels, axles, or wheel supports. Components can rotate and cause cutter to fall.
3. Consider the overall stability of the blocked unit. Just placing jackstands underneath will not ensure your safety.
4. The working surface must be level and solid to support the weight on the jackstands. Make sure

jackstands are stable, both top and bottom. Make sure cutter is approximately level.

5. With full cutter weight lowered onto jackstands, test blocking stability before working underneath.
6. If cutter is attached to tractor when blocking, set the brakes, remove key, and block cutter before working underneath.
7. Securely block rear tractor wheels, in front and behind. Tighten tractor lower 3-point arm anti-sway mechanism to prevent side-to-side movement.

LUBRICATION INFORMATION

1. Do not let excess grease collect on or around parts, particularly when operating in sandy areas.
2. See Figure 7 for lubrication points and frequency of lubrication based on normal operating conditions. Severe or unusual conditions may require more frequent lubrication.
3. Use a lithium grease of #2 consistency with a MOLY (molybdenum disulfide) additive for all locations unless otherwise noted. Be sure to clean fittings thoroughly before attaching grease gun. One good pump of most guns is sufficient when the lubrication schedule is followed.

Driveline Lubrication

1. Lubricate the driveline slip joint every eight operating hours. Failure to maintain proper lubrication could result in damage to U-joints, gearbox, and driveline.
2. Lower cutter to ground, disconnect driveline from tractor PTO shaft, and slide halves apart but do not disconnect from each other.
3. Apply a bead of grease completely around male half where it meets female half. Slide drive halves over each other several times to distribute grease.

Gearbox Lubrication

For gearbox, use a high quality gear oil with a viscosity index of 80W or 90W and an API service rating of GL-4 or -5 in gearboxes.

Fill gearbox until oil runs out the side plug on gearbox. Check gearbox daily for evidence of leakage, and contact your dealer if leakage occurs.

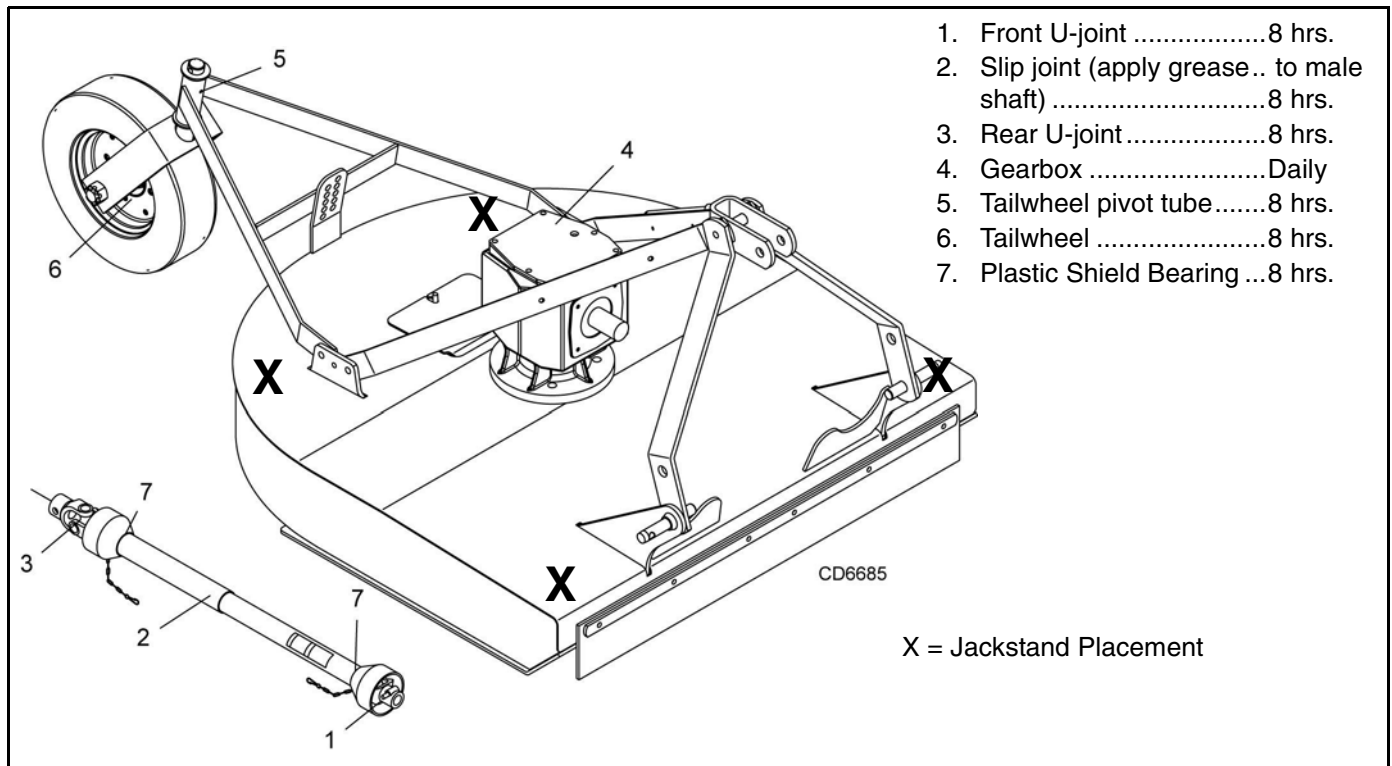


Figure 7. Jackstand Placement and Lubrication Points

SERVICING BLADES

Removing Blades

1. Disconnect driveline from tractor PTO.
2. Raise cutter and block securely (see Figure 7).
3. Open blade access cover and align crossbar (43) with blade access hole in the cutter frame. Remove nut (46) and lock washer (45) using a 1-11/16" socket. Carefully drive blade pin (28) out of crossbar.

NOTICE

■ If blade pin (28) is seized in crossbar and extreme force will be needed to remove it, support crossbar from below to prevent gearbox damage.

4. Rotate crossbar (43) and repeat for opposite blade.

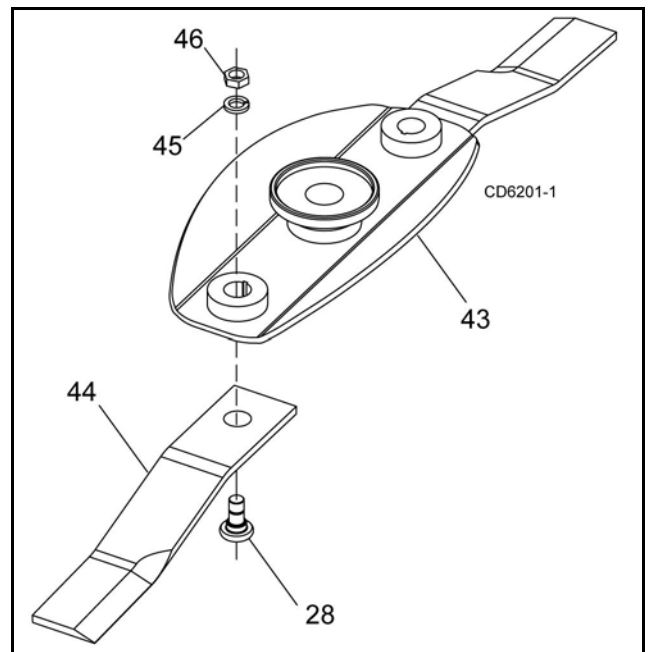


Figure 8. Blade Assembly

Sharpening Blades

NOTICE

■ When sharpening blades, grind the same amount on each blade to maintain balance. Replace blades in pairs. Unbalanced blades will cause excessive vibration, which can damage gearbox bearings. Vibration may also cause structural cracks to cutter.

1. Sharpen both blades at the same time to maintain balance. Follow original sharpening pattern.
2. Do not sharpen blade to a razor edge—leave at least a 1/16" blunt edge.
3. Do not sharpen back side of blade.

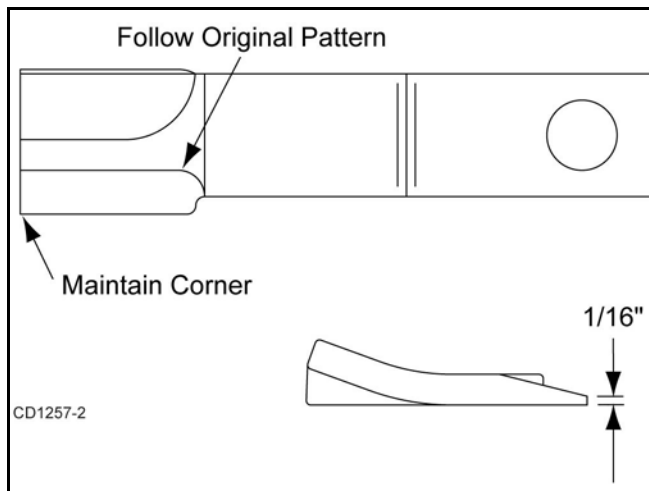


Figure 9. Blade Sharpening

Installing Blades (Figure 8)

CAUTION

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

■ Crossbar rotation is counterclockwise when looking down on cutter. Be sure to install blade cutting edge to lead in counterclockwise rotation.

NOTE: Always replace or sharpen both blades at the same time.

1. Inspect blade pin (28) for nicks or gouges, and if you find any replace the pin.
2. Insert blade pin through the blade. Blade should swivel on bolt; if it doesn't, determine the cause and correct.

3. Align crossbar (43) with blade access hole in cutter frame. Apply a liberal coating of Never-Seez® or equivalent to blade pin and crossbar hole. Make sure blade offset is away from cutter.
4. Insert blade pin (28) through blade. Align key on blade pin with keyway in crossbar and push blade pin through crossbar.
5. Insert lock washer (45) and nut (46) through blade access hole in the cutter frame. Install on blade pin (28) and tighten to 450 lbs-ft.

ADJUSTING SLIP CLUTCH

Comer

1. Turn off tractor engine and remove key.
2. Loosen nuts on springs until the springs can rotate freely, yet remain secure on the bolts.
3. Mark outer plates of slip-disc clutch as shown in Figure 10.
4. Securely attach implement to the tractor and start the tractor.
5. Engage PTO for several seconds then quickly disengage it.
6. Turn tractor off and remove key.
7. The friction lining plates should have "slipped". Check the marks placed on the outer plates of the slip-disc clutch in step 3 to make sure this is the case.
8. If clutch does not slip, check assembly for oil, grease and debris. Clean if necessary.
9. Reassemble clutch and tighten bolts no more than 1/8 of a turn at a time until desired setting of 1.26". See Figure 10.
10. If excessive slippage continues, check lining plates for excessive wear. They are 1/8" thick when new and should be replaced after 1/32" of wear to ensure proper operation.

Walterscheid

The slip clutch is designed to slip so that the gearbox and driveline are protected if the cutter strikes an obstruction.

A new slip clutch or one that has been in storage over the winter may seize. Before operating the cutter, make sure it will slip by performing the following operation:

1. Turn off tractor engine and remove key.
2. Remove driveline from tractor PTO.
3. Loosen six 10 mm cap screws (6) to remove all tension from spring plate (5).

4. Hold clutch hub (3) solid and turn shaft to make sure clutch slips.
5. If clutch does not slip freely, disassemble and clean the thrust plate faces (4), flange yoke (1), and clutch hub (3).
6. Reassemble clutch.
7. Tighten spring (5) until it is against the thrust plate (4) of the clutch, and then back off each of the six

nuts by 2 full revolutions. The gap between spring and thrust plate should be $1/8$ " as shown in Figure 10.

8. If a clutch continues to slip when the spring is compressed to $1/8$ " cap, check friction discs (2) for excessive wear. Discs are $1/8$ " when new. Replace discs after $1/16$ " wear. Minimum disc thickness is $1/16$ ".

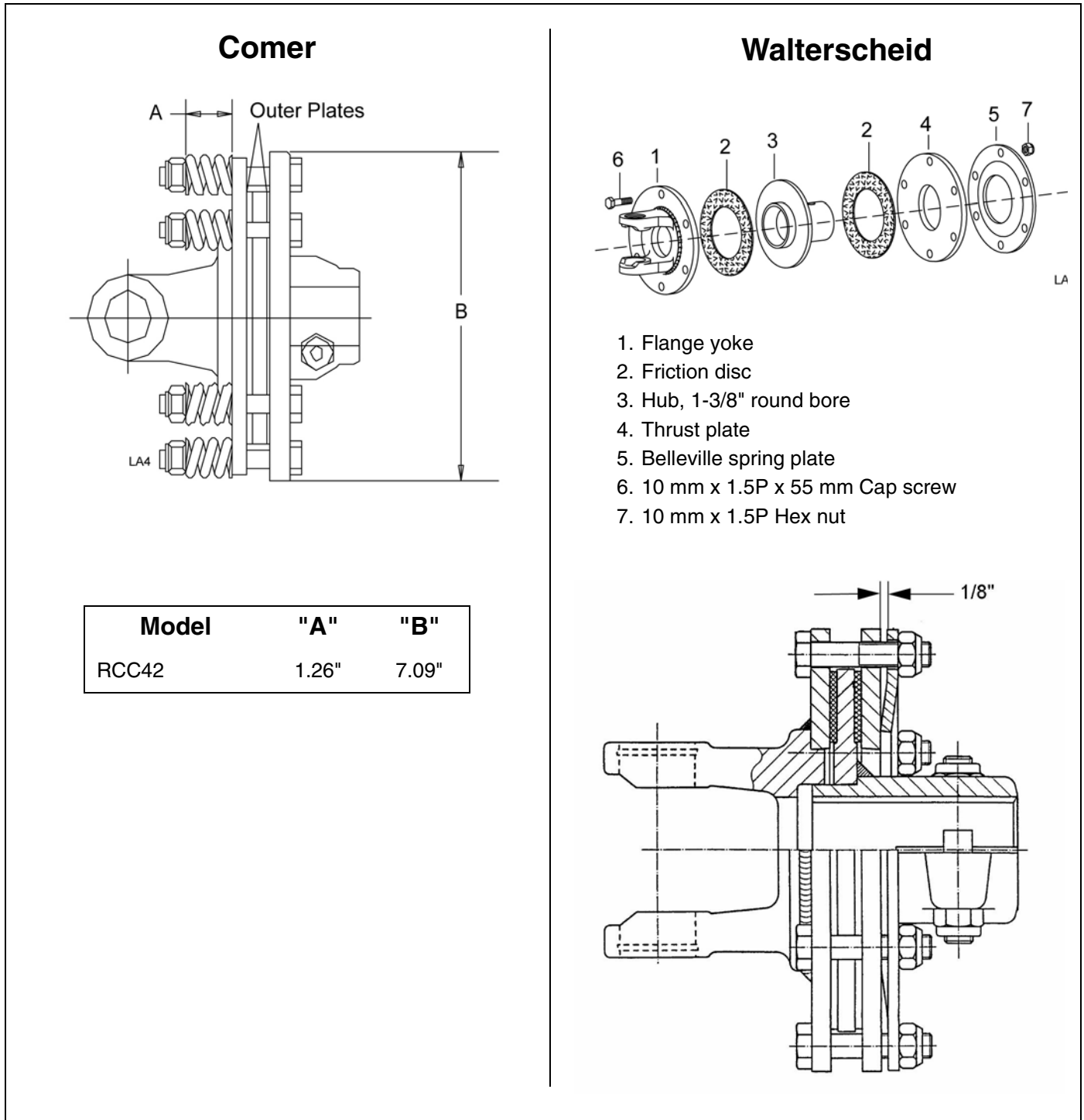


Figure 10. Slip Clutch Assembly

REPLACING SHEAR BOLTS

NOTICE

■ Always use approved 1/2" NC x 3" grade 2 shear bolt as a replacement part. Using a hardened bolt or shear pin may result in damage to driveline or gearbox.

1. Remove driveline shield bell (1).
2. Remove damaged shear bolt (7).
3. Rotate driveline to align holes in yoke and shaft.
4. Install new shear bolt and secure with new lock nut (8).
5. Replace driveline shield bell.

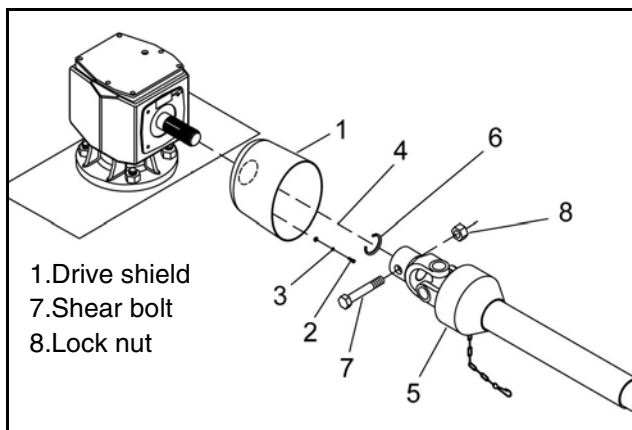


Figure 11. Shear Bolt Driveline Assembly

REPAIRING SHIELDING

! DANGER

■ Full chain, rubber, or steel band 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, rubber, or steel band 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).

Repairing Front Rubber Shield & Rear Band

1. Inspect front rubber shield and rear band each day of operation.
2. Replace if bent, cracked, or broken.

Repairing Optional Chain Shielding

Inspect chain shielding each day of operation and replace any broken or missing chains as required.

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.

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 lower in center of swath than at edge	Height of cutter lower at rear or front	Adjust cutter height and attitude so that cutter rear and front are within 1/2" of same height. See instructions.
Streaking conditions in swath	Conditions too wet for mowing	Allow grass to dry before mowing.
	Blades unable to cut that part of grass pressed by path of tractor tires	Slow ground speed of tractor but keep engine running at full PTO RPM. Cutting lower will help.
	Dull blades	Sharpen or replace blades.
Material discharges from cutter unevenly; bunches of material along swath	Material too high and too much material	Reduce ground speed but maintain 540 RPM at tractor PTO or make two passes over material. Raise cutter for the first pass and lower to desired height for the second and cut at 90° to first pass. Raise rear of cutter high enough to permit material to discharge but not so high to cause conditions listed above.
	Grass wet	Allow grass to dry before mowing. Slow ground speed of tractor but keep engine running at full PTO RPM. Cutting lower will help.
	Rear of cutter too low, trapping material under cutter	Adjust cutter height and attitude. (See Cutting Height Adjustment, page 13.)
Cutter will not cut (Shear bolt drive only)	Shear bolt sheared	Install new shear bolt.
Cutter will not cut all the time (Slip clutch drive only)	Slip clutch slipping	Adjust slip clutch according to instructions in Adjusting Slip Clutch (Optional), page 18.
Grass cut lower in center of swath than at edge	Height of cutter lower at rear or front	Adjust cutter height and attitude so that cutter rear and front are within 1/2" of same height. See instructions.

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, disconnect drive-line, raise cutter, lock in transport position, and block cutter securely. Hydraulic system leak down and failure of mechanical or hydraulic system can cause equipment to drop.

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

⚠ CAUTION

■ Always wear relatively tight and belted clothing to avoid getting caught 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.

GEARBOX MAINTENANCE

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

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.

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.

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

Seal Replacement (Figure 11)

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 cutter.

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.

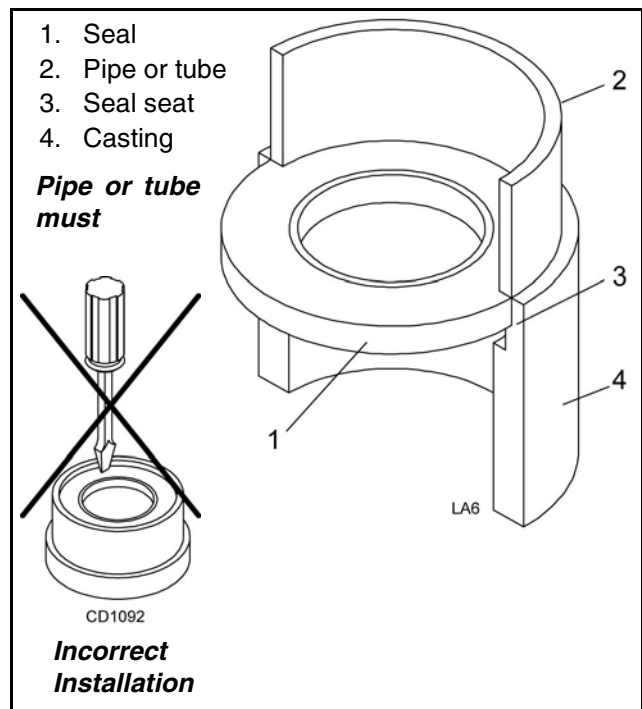


Figure 11. Seal Installation

SEAL REPAIR **(ON FLAT TOP, GEARBOX S/N 1162805** **AND BEFORE)**

(Figure 12)

Vertical Shaft Seal Repair

1. Disconnect and remove the rear driveline from the gearbox.
2. Remove vent plug (27) and siphon gear lube from housing through this opening.
3. Remove crossbar (see **Crossbar Removal, page 28**).
4. Remove vertical shaft seal (21). Replace with new seal (see **Seal Installation, 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.

5. Fill gearbox with SAE 80W or 90W gear lube until it runs out the level plug.
6. Remove and replace any seal damaged in installation.

Horizontal Seal Leak Repair

1. Disconnect and remove the rear driveline from the gearbox.
2. Remove vent plug (27) and siphon gear lube from housing through this opening.
3. If the leak occurred at either end of horizontal shaft, remove oil cap (23) and/or oil seal (22). Replace with new one (refer to **Seal Installation, page 22**).
4. Fill gearbox with SAE 80W or 90W gear lube until it runs out the level plug.

GEARBOX REPAIR **(ON FLAT TOP, GEARBOX S/N 1162805** **AND BEFORE)**

(Figure 12)

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.

Remove Gearbox from Cutter

1. Disconnect and remove the rear driveline from the gearbox.

2. Remove vent plug (27) and siphon gear lube from housing through this opening.
3. Remove cotter pin, washer, and nut from vertical shaft and remove crossbar (see **Crossbar Removal, page 28**).
4. Remove the four bolts that attach gearbox to cutter and remove gearbox.

Disassemble Gearbox

1. Remove 3/8" plug from side of gearbox and pour out gear oil.
2. Remove oil cap (23) (to be replaced).
3. Remove snap ring (12) and shim (15) from input shaft (3).
4. Support gearbox in hand press and push on input shaft (3) to remove bearing (9) and spacer (14).
5. Remove top cover (25) from housing. Remove gear (1) from inside housing.
6. Remove oil seal (22) from front of housing (to be replaced).
7. Remove snap ring (12) and shim (15) from front of housing (2).
8. Remove input bearing (8) by using a punch and hammer from outside of housing.
9. Support housing in vise in a horizontal position.
10. The castle nut (17), cotter pin (28), washer (18), and hub (24) are already removed with the stump jumper/crossbar. Remove the snap ring (10), washer (19), and seal (21).
11. Remove cotter pin (11), castle nut (16), and washer (20) from output shaft (4).
12. Remove output shaft (4) by using a punch and hammer and tap on top to drive down.
13. Remove gear (5) and shim (15) from inside housing.
14. Remove bearing (7) by using a punch and hammer from the top, outside the housing.
15. Support housing upside down (top cover surface) and remove bearing (6) by using a punch and hammer from the bottom side of the housing.
16. Inspect gears for broken teeth and wear. Some wear is normal and will show on loaded side. Forged gear surfaces are rough when new. Check that wear pattern is smooth.
17. Inspect vertical and horizontal shafts for grooves, nicks, or bumps in the areas where the seals seat. Resurface any damage with emery cloth.
18. Inspect housing and caps for cracks or other damage.

Reassemble Gearbox

1. Clean housing, paying specific attention to areas where gaskets will be installed.
2. Wash housing and all components thoroughly. Select a clean area for gearbox assembly. Replace all seals, bearings, and gaskets. All parts must be clean and lightly oiled before reassembling.
3. Insert output bearings (6 & 7) in the housing, using a round tube of the correct diameter and a hand press.
4. Slide output shaft (4) through both bearings (6 & 7) until it rests against bearing (6).
5. Slide shim (15) over output shaft (4).
6. Press gear (5) onto output shaft (4) and secure with washer (20), castle nut (16), and cotter pin (11).
7. Apply grease to lower seal lips (21) and press seal (21) over output shaft (4), using a tube of the correct diameter. Be sure not to damage the seal lip.

Press in housing so that seal is recessed. Insert protective washer (19) by hand. Install snap ring (10) and position it together with dual lip seal (21) by pressing it into position. Verify that snap ring is seated correctly.
8. Press bearing (8) into the housing, using a round tube of the correct diameter and a hand press. Secure with shim (15) and snap ring (12).
9. Secure snap ring (13) on input shaft (3) if not already secure.
10. Place gear (1) through top of housing and align gear (1) and gear (5) so that gear teeth are a match.

11. While holding gear (1) in place, slide input shaft (3) through gear (1) and bearing (8). Align splines on shaft (3) and gear (1).
12. Slide spacer (14) over input shaft (3) and press bearing onto input shaft (3), using a round tube of the correct diameter and a hand press.
13. Slide shim (15) over input shaft (3) and secure with snap ring (12).
14. Check input shaft end float by moving the input shaft (3) by hand. If end float is higher than 0.012", insert shim between input shaft (3) and rear bearing (8). Repeat until end float is less than 0.012". Check rotational torque by hand. The torque should be less than 2.2 lbs-inch.
15. Check that the gear backlash is between 0.006" and 0.016". You should not have to adjust the backlash.
16. Press in input oil seal (22), using tube of correct diameter. Be careful not to damage seal lip.
17. Press oil cap (23) on to cover the rear of housing, using a tube of the correct diameter.
18. Check 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.
19. Remove gearbox from water and dry off with compressed air. Add SAE 80W or 90W EP oil until it runs out of side level hole. Tighten all plugs.

Reinstall Gearbox

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

1. Set gearbox on cutter and fasten with bolts and nuts. Torque bolts to 175 lbs-ft.
2. Attach crossbar (See **Crossbar Installation, page 29**).

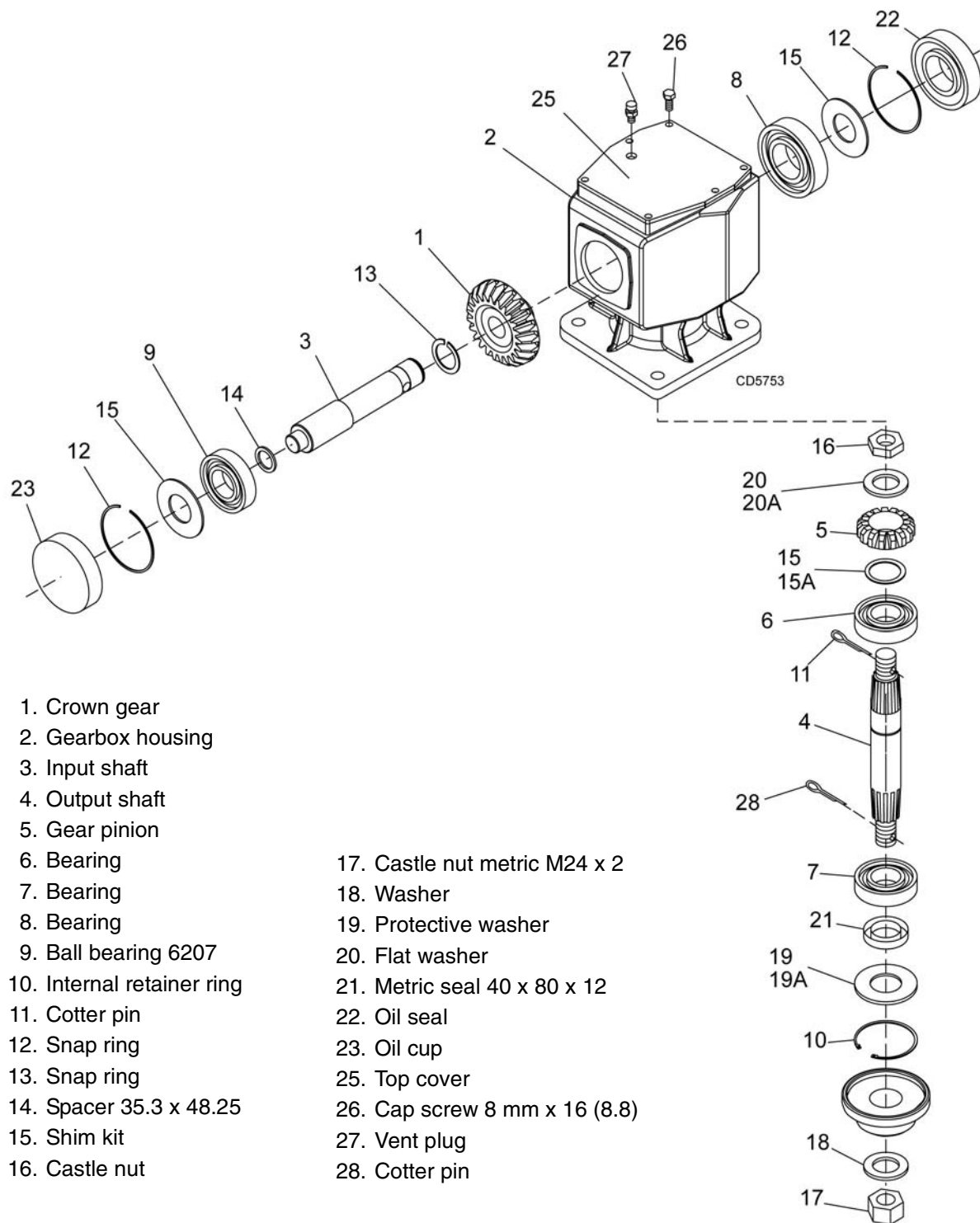


Figure 12. Gearbox Assembly (Flat Top)

**SEAL REPAIR
(ON CAST/CROWN TOP GEARBOX - S/N
1162806 AND ABOVE ONLY)**

(Figure 13)

Vertical Shaft Seal Repair

1. Disconnect and remove the rear driveline from the gearbox.
2. Remove vent plug (9) and siphon gear lube from housing through this opening.
3. Remove crossbar (see **Crossbar Removal, page 28**).
4. Remove output cap (17) and output seal (16) by removing four cap screws (13) and washers (12). Replace with new seal (see **Seal Installation, page 22**).

Vertical seal should be recessed in output cap.

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

5. Secure output cap (17) on to bottom of gearbox using four cap screws (13) and lock washers (12).

NOTE: Make sure output gasket (10) and (11) are in place.

6. Fill gearbox with SAE 80W or 90W gear lube until it runs out the side level plug.
7. Remove and replace any seal damaged in installation.

Horizontal Seal Leak Repair

1. Disconnect and remove the rear driveline from the gearbox.
2. Remove vent plug (9) and siphon gear lube from housing through this opening.
3. Remove input seal (4). Replace with new one (refer to **Seal Installation, page 22**).
4. Fill gearbox with SAE 80W or 90W gear lube until it runs out the side level plug.

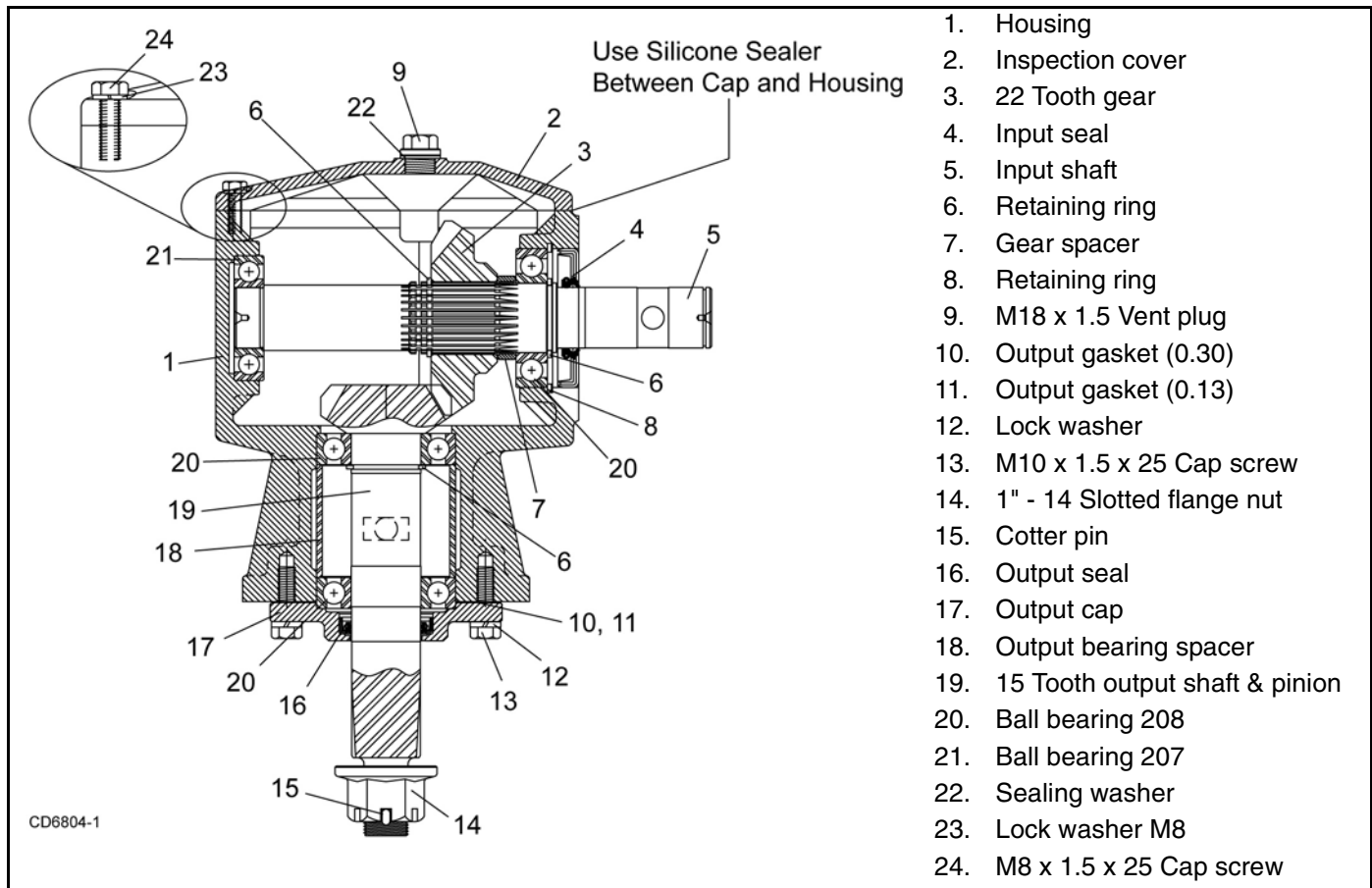


Figure 13. Cast/Crown Top Gearbox Assembly

GEARBOX REPAIR
(ON CAST/CROWN TOP GEARBOX - S/N
1162806 AND ABOVE ONLY)
(Figure 13)

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.

NOTE: Replacing a complete flat top gearbox with a complete crown top gearbox will require replacing the cross bar assembly. See pages page 46 and 48.

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

Remove Gearbox from Cutter

1. Disconnect and remove the rear driveline from the gearbox.
2. Remove vent plug (9) and siphon gear lube from housing through this opening.
3. Remove cotter pin or wire, washer, and nut from vertical shaft and remove crossbar (see **Crossbar Removal, page 28**).
4. Remove the four bolts that attach gearbox to cutter and remove gearbox.

Disassemble Gearbox

1. Remove plug from side of gearbox and pour out remaining gear oil.
2. Support housing in vise in a vertical position.
3. Remove input seal (4) (to be replaced).
4. Remove retaining rings (6) and (8).
5. Remove the six cap screws (24), washers (23) and top cover (2) from housing.
6. Remove retaining ring (6) behind gear (3).
7. Support gearbox in hand press and pull input shaft (5) through gear (3). Remove ball bearing (21).
8. Remove ball bearing (20) and gear spacer (7) from input shaft (5).
9. Support housing in vise in a horizontal position.
10. With the hub/stump jumper/crossbar, castle nut, cotter pin, wire and washer already removed, remove the four cap screws (13), lock washers (12) and output cap (17).
11. Remove output gaskets (11) and (10).
12. Push output shaft and pinion (19) down and remove ball bearing (20), output bearing spacer (18), and retaining ring (6). Remove output shaft and pinion (19).

13. Inspect gears for broken teeth and wear. Some wear is normal and will show on loaded side. Forged gear surfaces are rough when new. Check that wear pattern is smooth.
14. Inspect vertical and horizontal shafts for grooves, nicks, or bumps in the areas where the seals seat. Resurface any damage with emery cloth.
15. Inspect housing and caps for cracks or other damage.

Reassemble Gearbox - Cast Top

1. Clean housing, paying specific attention to areas where gaskets will be installed.
2. Wash housing and all components thoroughly. Select a clean area for gearbox assembly. Replace all seals, bearings, and gaskets. All parts must be clean and lightly oiled before reassembling.
3. Slide ball bearing (20) on to output shaft and pinion (19). Place against gear and secure with retaining ring (6).
4. Push output shaft and pinion (19), ball bearing (20) and retaining ring (6) into housing until ball bearing (20) seats flat in housing socket.
5. Insert output bearing spacer (18) and ball bearing (20) over output shaft until seats against inside roller bearing (20).
6. Secure output cap (17) with new output seal (16) installed to bottom of gearbox housing using the four 10mm x 1.5 x 25 cap screws (13) and lock washers (12).
NOTE: Be sure output gaskets (10 and 11) are in place. Apply grease to output seal (16) lip for easy installation.
7. Place ball bearing (21) at back of housing and press in socket using a round tube of the correct diameter and a hand press until fully seated.
8. Insert input shaft (5) part way through housing and slide gear (3) and retaining ring (6) over input shaft (5). Keep gear (3) and retaining ring (6) loose.
9. Insert input shaft (5) into roller bearing (21) until seated against each other.
10. Slide gear (3) forward and attach retaining ring (6) in groove closest to front of input shaft (5). Slide gear (3) back against retaining ring (6).
11. Check that the gear backlash is between 0.006" and 0.016". You should not have to adjust the backlash.
12. Slide gear spacer (7) and roller bearing (20) on input shaft (5) and secure with retaining rings (6) and (8).

13. Slide input seal (4) onto input shaft (5) and press into housing flush with front using a tube of correct diameter. Be careful not to damage seal lip.
14. Check 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.
15. Remove gearbox from water and dry off with compressed air. Add SAE 80W or 90W EP oil until it runs out of side level hole. Tighten all plugs.

CROSSBAR REMOVAL

1. It is necessary to gain access to bottom side of cutter for crossbar removal. See Blocking Method, page 16.

NOTE: You will need to use either the puller screw (Item 6, Figure 15) or a small hydraulic jack to remove the crossbar.

2. To make crossbar removal easier, remove blades. See Figure 14.

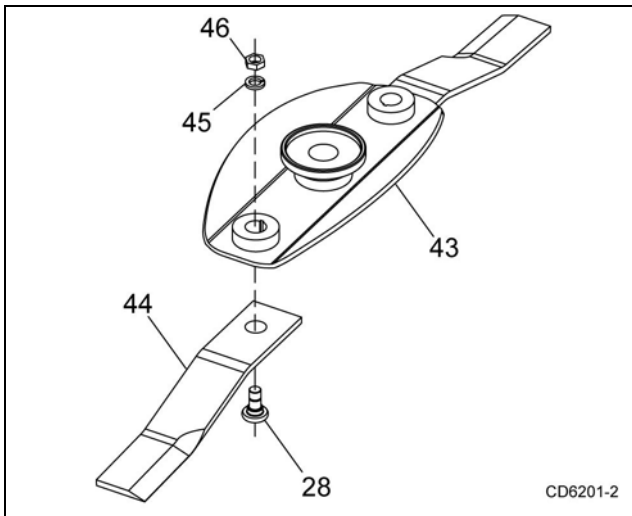


Figure 14. Blade Removal

3. **Refer to Figure 15.** Remove retaining wire from bottom of crossbar and remove nut and washer.
4. Attach a clevis (1) to each end of crossbar, using blade pins, washers, and nut.
5. Position tube assembly (5) with threaded nut toward crossbar for puller screw removal or down for hydraulic jack removal.
6. For removal with puller screw, attach tube (5) to each clevis with bolts (2) and nuts (3). Place pad (4) in nut and thread puller screw (6) into nut from bottom. Tighten until pad is solid against gearbox shaft. For best results, strike head of puller screw with a hammer while tightening with a wrench.
7. For removal with a jack, attach tube to each clevis with puller links (7), bolts (2), and nuts (3). Place

jack on tube with end of jack pressing against gearbox shaft. Slowly apply force with jack.

NOTE: Hydraulic jack will not operate if tipped more than 90 degrees. Use care to prevent bending crossbar during removal.

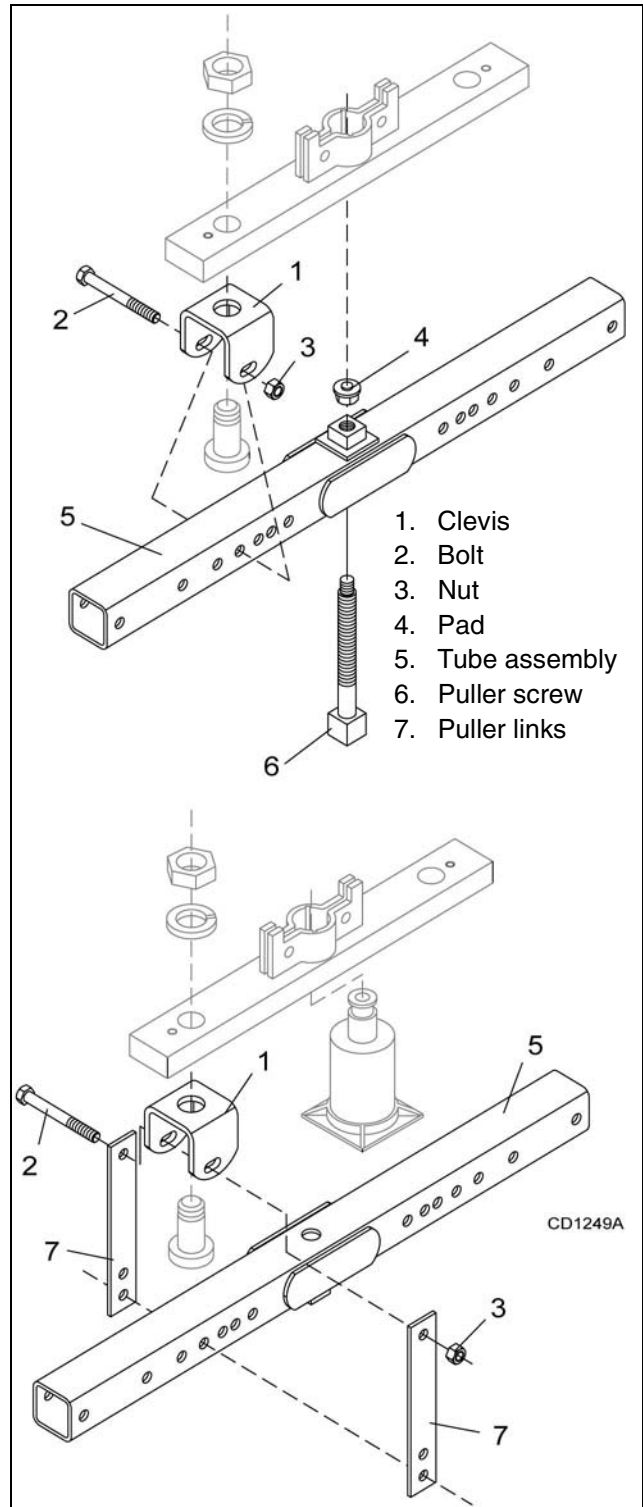


Figure 15. Crossbar Removal

Crossbar Installation

- Using emery cloth (220 or finer), remove surface rust, Loctite®, and foreign material from hub, splined gearbox vertical shaft, and crossbar as shown in Figure 16.

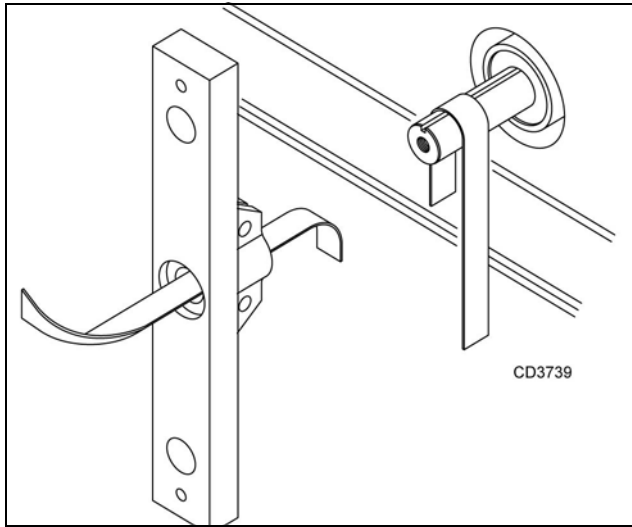


Figure 16. Typical Crossbar Assembly

Refer to Figure 17

- Install crossbar (2) on splined shaft. Install washer (3) and nut (4). Torque nut 200 lbs-ft.
- Install 6" section of 9 gauge wire (not supplied) through gearbox shaft and slots in nuts. Twist ends of wire together.
- If you have removed blades, reinstall them using existing hardware. Torque blade pin nut to 450 lbs-ft.

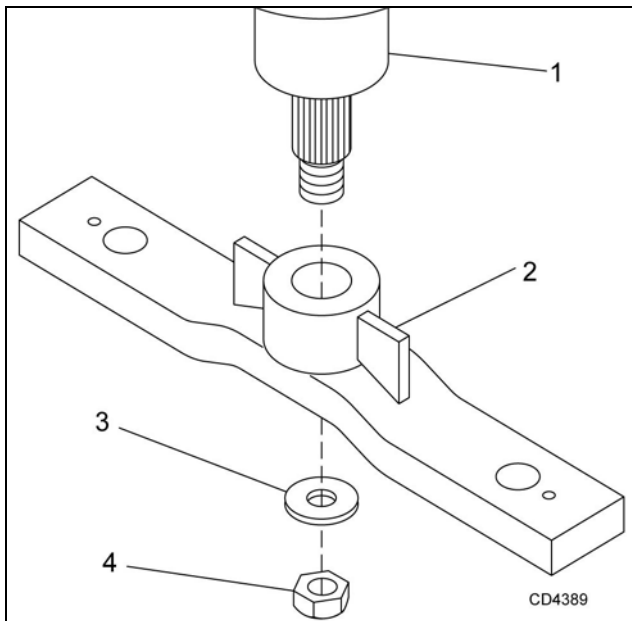


Figure 17. Typical Crossbar Installation

UNIVERSAL JOINT REPAIR

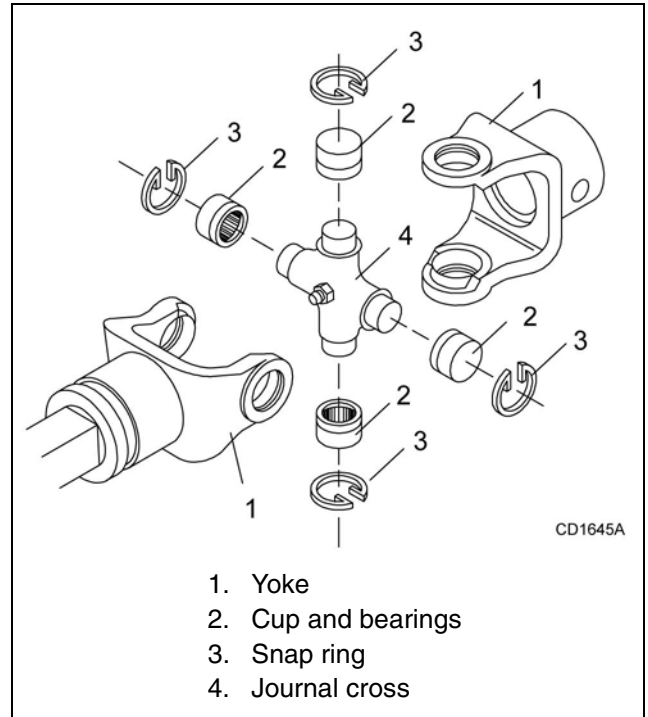


Figure 18. U-Joint Exploded View

U-Joint Disassembly

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

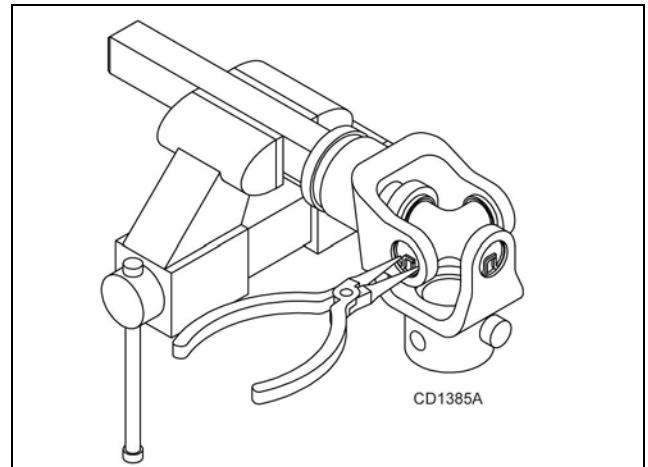


Figure 19. Remove Snap Rings

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.

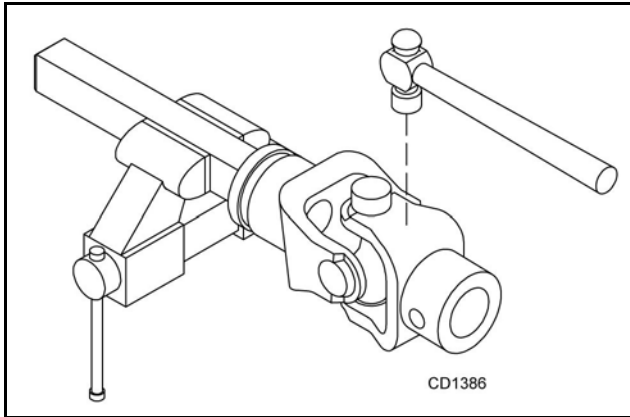


Figure 20. Remove Bearing Cups

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.

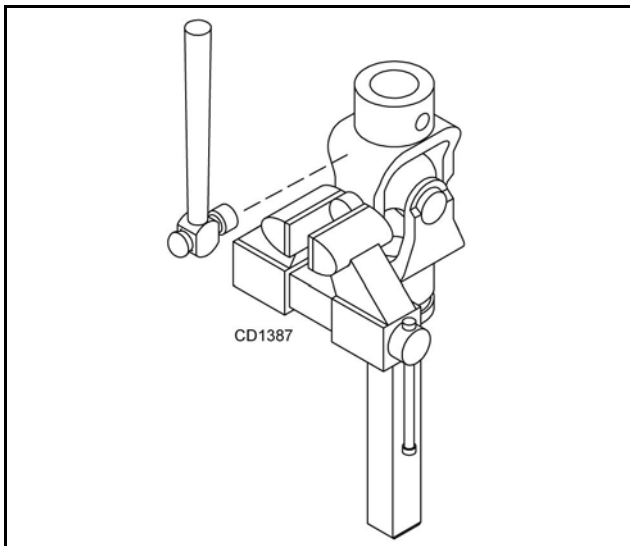


Figure 21. Remove Bearing Cups

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.

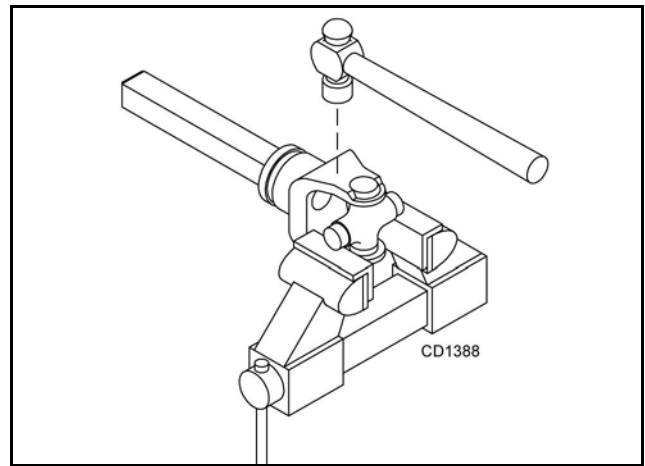


Figure 22

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. 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.
2. 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.
3. Repeat Step 1 & Step 2 to install remaining cups in remaining yoke.
4. 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.

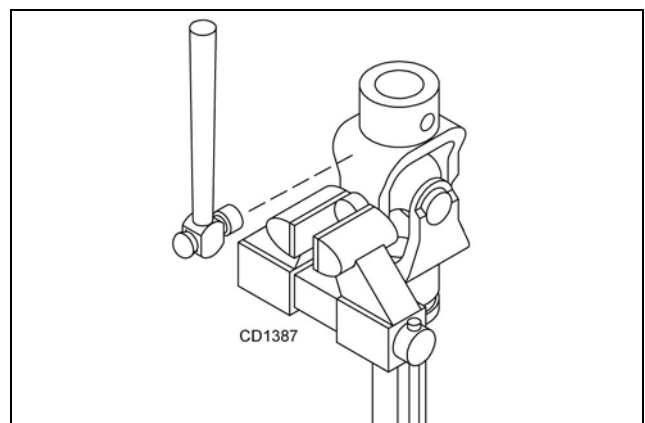


Figure 23

NOTES

ASSEMBLY INSTRUCTIONS

DEALER SET-UP INSTRUCTIONS

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

Complete check lists on page 30 when you have completed the assembly.

The cutter is shipped partially assembled. Assembly will be easier if aligned and loosely assembled before tightening hardware. Recommended torque values for hardware are located in the Bolt Torque Chart, page 48.

DANGER

■ **Full chain, rubber, or steel band 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, rubber, or steel band 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).

WARNING

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

Assemble Cutter

Refer to Figure 24.

1. Position cutter on a flat surface and block off the ground using the Blocking Method, page 16
2. Remove all parts that are wired or strapped to cutter. Remove lock nuts that are securing brace arms (3) to the cutter.
3. Rotate pivot arms (4) up off the cutter.
4. Remove 1/2 NC x 1-1/2 cap screws from brace arm and height adjustment bracket (D). See circle insert in Figure 24.

5. Place brace arms (3) inside the frame rails and install in brace pivot mounting holes (A). Secure with 1/2 NC x 1-1/2 cap screws.
6. Remove pivot link (5) and hardware from top of pivot arms.
7. Place brace arms (3) and pivot link (5) inside pivot arms (4). Secure using hardware previously removed.

NOTE: Torque hitch pins (8) to 475 lbs-ft.

8. Remove hardware that secures tailwheel bracket (2) to height adjustment bracket (D). Rotate tailwheel bracket as needed and insert tailwheel assembly (E) into tailwheel bracket. Secure with spiral pin and washer found inside Wheel shaft.
9. Place tailwheel bracket in desired height adjustment holes. Secure with hardware previously removed. It may be necessary to adjust cutting height when cutter is fully assembled and attached to tractor.
10. Tighten all hardware to torque specifications found on page 48.

Install Rear Driveline

1. Select either the standard shear bolt or optional slip clutch driveline.

Install Shear Bolt Driveline

NOTICE

■ **A grade 2 bolt must be used for the shear bolt to provide gearbox protection.**

1. Position shield (1) against gearbox. Secure shield to gearbox using four cap screws (2), lock washers (3), and flat washers (4).
2. Torque hardware to 12 lbs-ft.
3. Remove rear drive shield (5) from driveline.
4. To prevent seal damage, carefully push driveline onto gearbox input shaft until it contacts the gearbox housing.
5. Place retaining ring (6) in slot on input shaft and snap into place.
6. Align the holes in the driveline yoke and gearbox input shaft. Install and tighten shear bolt (7) and nut (8).
7. Attach rear drive shield to driveline.
8. Lubricate rear driveline half and install front driveline half.

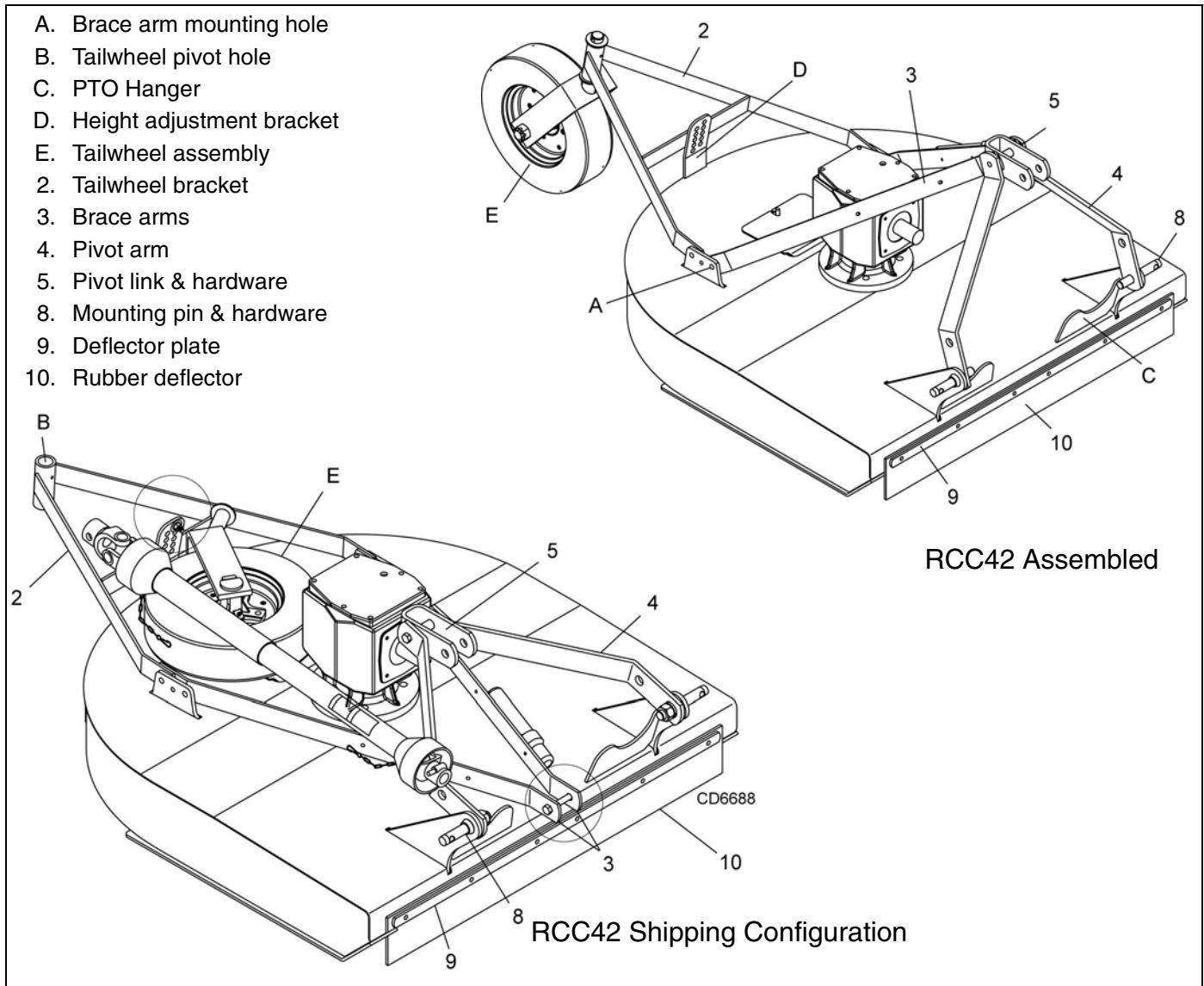


Figure 24. RCC42 Shipping Configuration and Assembled Unit

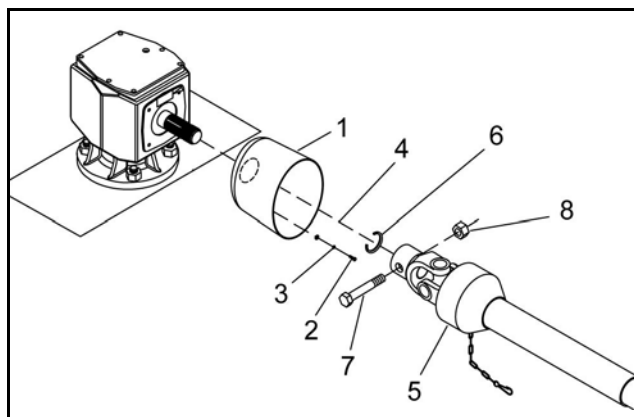


Figure 25. Shear Bolt Driveline Assembly

Install Slip Clutch Driveline

NOTICE

■ A grade 8 bolt must be used to attach clutch driveline to gearbox.

NOTE: A new slip clutch, or one that has been in storage over the winter, may seize.

1. Before operating slip clutch, make sure it will slip. Refer to Slip Clutch Adjustment on page 18.
2. Position shield (1) against gearbox. Secure shield to gearbox using four cap screws (2), lock washers (3), and flat washers (4).
3. Torque hardware to 12 lbs-ft.
4. Install driveline slip clutch onto gearbox input shaft.

- Align the holes in the driveline slip clutch and gearbox input shaft. Install and tighten bolt (5) and nut (6).
- Lubricate rear driveline half and install front driveline half.

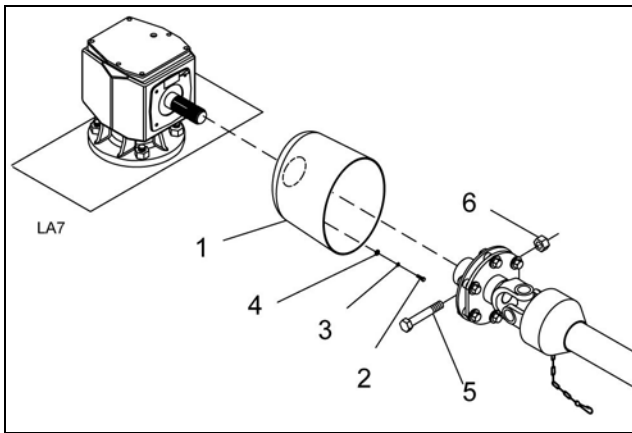


Figure 26. Optional Slip Clutch Driveline Assembly

Shorten Driveline for Specific Tractor

NOTE: Kubota BX tractor requires 3-3/4 inches removed from plastic shield and outer profile. Follow instruction below for proper procedures.

- Attach the cutter to the tractor 3-point hitch.
- Raise and lower the cutter to determine the minimum distance between the tractor PTO shaft and the gearbox input shaft.
- Leave the cutter in the minimum position.
- Separate the driveline into two halves and connect them to the tractor PTO and gearbox.
- Place the two halves parallel to one another to determine how much the driveline must be shortened. See Figure 27.



Figure 27. Drive Halves Placed Parallel

- Measure from the end of the upper shield to the base of the bell on the lower shield (A). Add 1-9/16" to dimension (A). See Figure 28.

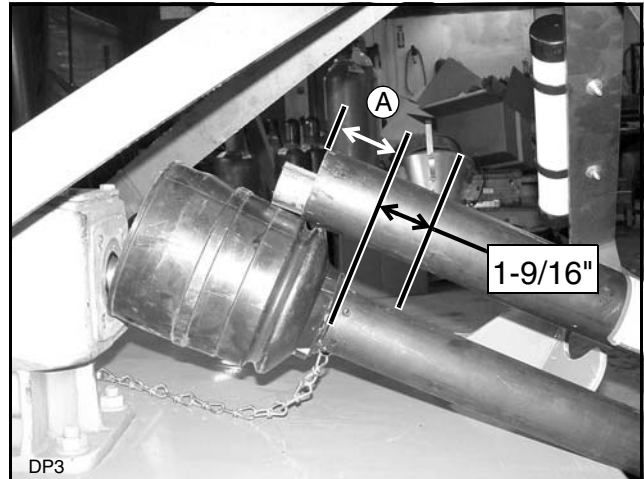


Figure 28. Determine Shield Length

- Cut the shield to the overall dimension. See Figure 29.

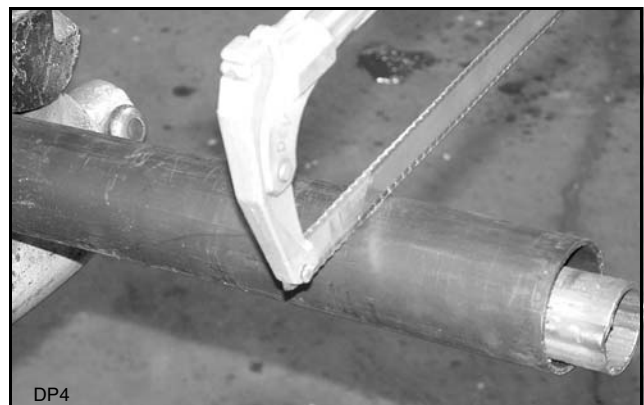


Figure 29. Cut Shield

- Place the cutoff portion of the shield against the end of the shaft and use it as a guide. Mark and cut the shaft. See Figure 30.



Figure 30. Cut Shaft to Length

9. Repeat step 8 for other half of drive.
10. File and clean cut ends of the both drive halves.

Fill Gearbox Oil

NOTICE

■ Gearbox is not filled at the factory. Prior to delivery to customer, make sure gearbox is filled only half-full with 80W or 90W API GL-4 or GL-5 gear lube. Use side plug to remove any excess oil.

1. Remove solid plug and discard.
2. Make sure vent plug hole is clear.
3. Fill gearbox until oil runs out the side plug on gearbox. Use a high quality gear oil with a viscosity index of 80W or 90W and an API service rating of GL-4 or GL-5.
4. Install vent plug supplied in manual tube during assembly.

Install Chain Shielding (Optional)

 **DANGER**

■ Full chain, rubber, or steel band 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, rubber, or steel band 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).

The optional chain shielding assemblies are ready for installation when you receive them.

1. Refer to Front & Rear Chain Shielding, page 47 and attach as shown by inserting the bolts from outside the cutter frame in through the shielding.
2. Use and install hardware as shown in the parts drawing.

DEALER CHECK LISTS

PRE-DELIVERY CHECK LIST (DEALER'S RESPONSIBILITY)

NOTICE

■ **Gearbox was not filled at the factory. It must be serviced before operating cutter. (See Gearbox Oil Fill, page 29.) Failure to service will result in damage to gearbox.**

Inspect cutter thoroughly after assembly to make sure it is set up properly before delivering it to the customer. The following check list is a reminder of points to inspect. Check off each item as it is found satisfactory, corrections are made, or services are performed.

- ___ Check all bolts to be sure they are properly torqued.
- ___ Check that all cotter pins are properly installed and secured.
- ___ Check that PTO shaft is properly installed.
- ___ Check that gearbox is properly serviced and seals are not leaking.
- ___ Check and grease all lubrication points as identified in Owner Service, Lubrication Information, page 16.
- ___ Check that blades have been properly installed.

DELIVERY CHECK LIST (DEALER'S RESPONSIBILITY)

- ___ Show customer how to make adjustments. Describe the options available for this cutter and explain their purpose.
- ___ Explain importance of lubrication to customer and point out lubrication points on cutter.
- ___ Point out all guards and shielding. Explain their importance and the safety hazards that exist when not kept in place and in good condition. For mounted units, add wheel weights, ballast in front tires, and/or front tractor weight to enhance front end stability. A minimum 20% of tractor and equipment gross weight must be on front tractor wheels. When adding weight to attain 20% 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!
- ___ 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.
- ___ Explain to customer that when equipment is transported on a road or highway, safety devices should be used to give adequate warning to operators of other vehicles.



ROTARY CUTTERS

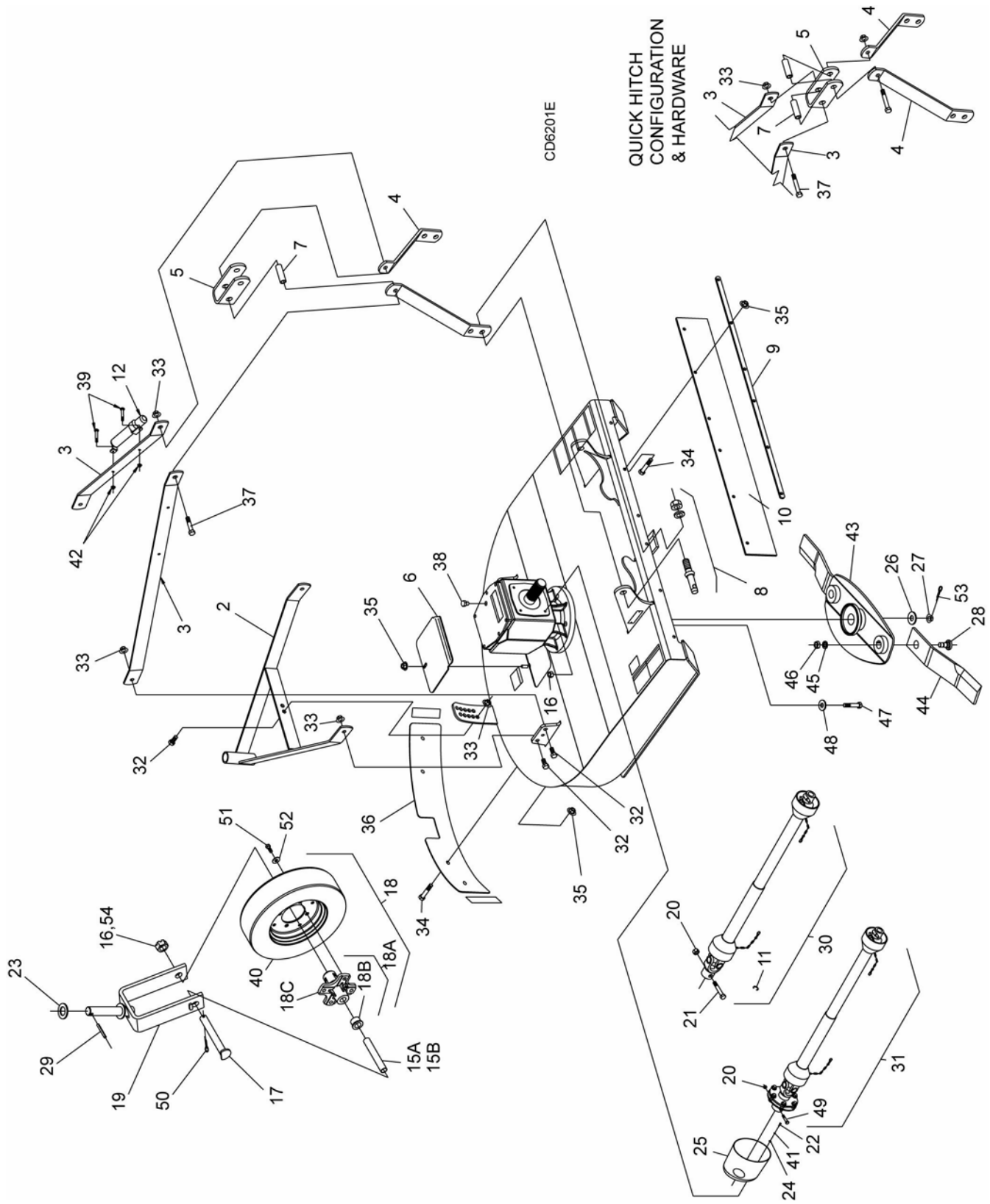
RCC42

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RCC42 ASSEMBLY

CD6201E

QUICK HITCH
CONFIGURATION
& HARDWARE



38 Parts

(Rev. 4/19/2011)
MAN0224 (Rev. 7/29/2005)

RCC42 PARTS LIST

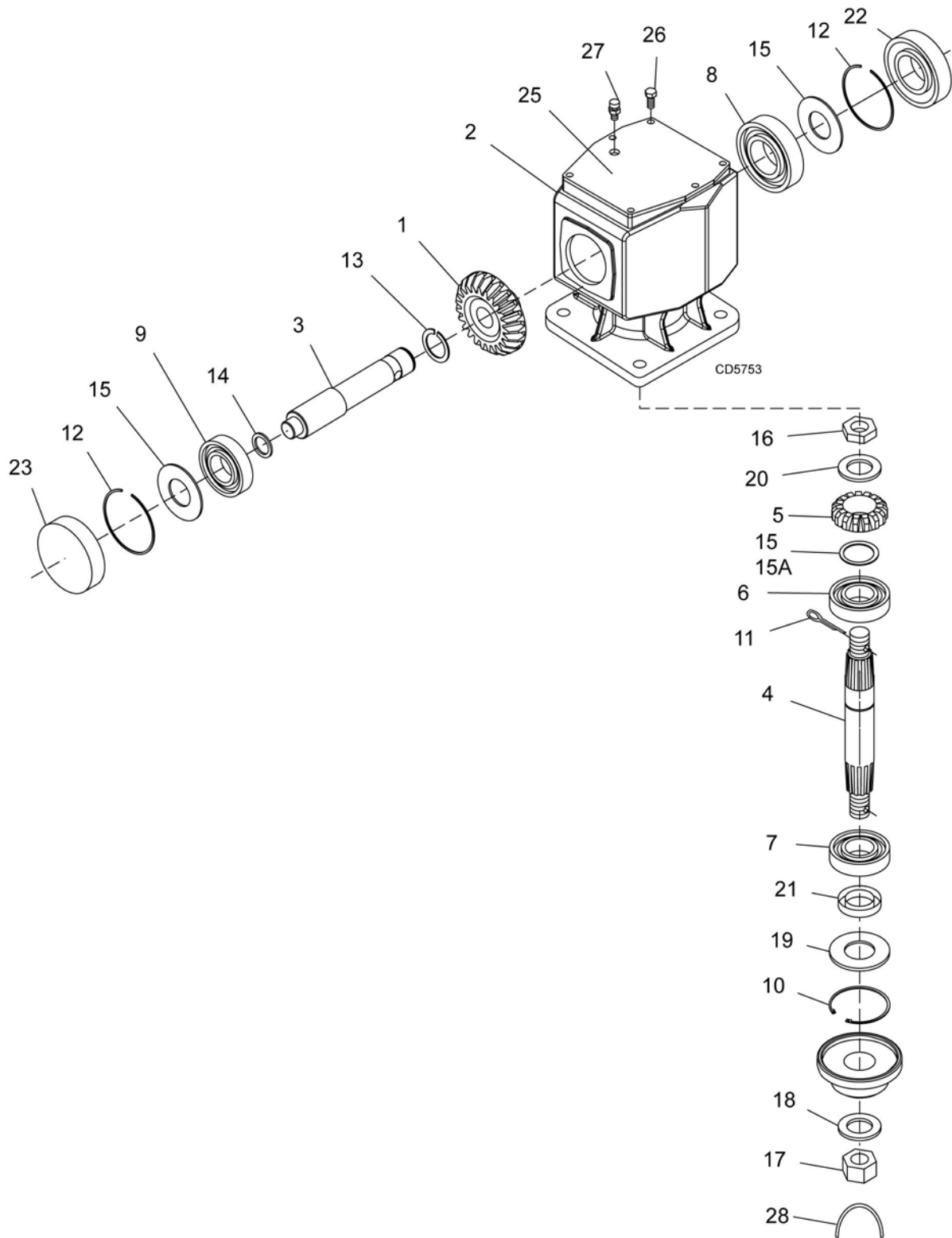
REF	PART	QTY	DESCRIPTION	REF	PART	QTY	DESCRIPTION
2	1007290	1	Tail Wheel weldment	29	40775 *	1	Spirol pin 10 mm x 65 mm (S/N 997813 & after)
3	1007267	2	Link, offset (Diagonal brace)	30	40554	1	Drive assembly complete (shear bolt)(Walterscheid)
4	1007268	2	Link, offset (A-frame bar)	30	1009509	1	Drive assembly complete (Comer)
5	19605	1	Link U, .375 x 2.5 x .7	31	1005782	1	Drive assembly complete (slip clutch - optional)(Walterscheid)
6	57050	1	Blade access cover	31	1020902	1	Drive assembly complete (Comer)
7	64814	1	Spacer 1/2 x 2-7/8	32	3379 *	5	1/2 NC x 1-1/2 Cap screw GR5
8	33661	2	Cat. 1 Mounting pin (with nut & lock washer)	33	11900 *	6	1/2 NC Flange lock nut
9	1013881	1	Plate, deflector	34	839 *	10	3/8 NC x 1 Cap screw
10	1007285	1	Rubber deflector, 40.75	35	14350 *	11	3/8 NC Flange lock nut
11	15345	1	Retaining ring, .05 x 1.38	36	1007286	1	Shield band (rear)
12	1026530	1	Manual Tube	37	23479 *	1	1/2 NC x 5 Cap screw GR5
15A	57182	1	Sleeve, .656 x .997 x 5.39 (S/N 997812 & prior / fabricated steel hub)	38	57076	1	1/2 Breather plug - S/N 1162805 & prior (Flat top gearbox)
15B	1013219	1	Sleeve, .656 x .985 x 5.24 (S/N 997812 & prior / cast iron hub)	38	1011780	1	Vent plug - S/N 1162806 & after (Cast/Crown top gearbox)
16	19025	5	5/8 NC Flange lock nut (Tail wheel - S/N 997812 & prior)	39	24409 *	2	5/16 NC x 1 ZP Carriage bolt
17	23638	1	5/8 NC x 7 Cap screw GR5 (S/N 997812 & prior)	40	4676	1	4 x 15 Notat tire & rim (S/N 997813 & after)
17	1013878	1	M24 x 2 x 192 Spindle bolt (S/N 997813 & after)	41	2472 *	4	5/16 Lock washer
18	15373	1	4 x 16 Solid core tire (S/N 997812 & prior)	42	14139 *	2	5/16 NC Flanged head lock nut ZP
18	1013222	1	4 x 15 Notat tire/wheel (S/N 997812 & prior) (includes 15B)	43	1007280	1	Crossbar assembly - S/N 1162805 & prior (Flat top gearbox)
18A	1009091	1	Wheel hub assembly (Notat tire only - S/N 997812 & prior)	43	1032591	1	Crossbar assembly - S/N 1162806 & after (Cast/Crown top gearbox)
18B	1009090	2	Bushing flanged 1.00 x 1.37 x 1.00 (Notat tire - Fabricated steel hub only)	44	30310KT	2	Blade 3/8 x 3 x 16 CCW
18B	1013880	2	Bushing flanged .984 x 1.378 x .98 (For cast iron hub only)	45	NSS		Washer (included in item 28)
18C	1013879	1	Cast iron wheel hub (S/N 997813 & after)	46	NSS		Hex nut (included in item 28)
19	15314	1	Tail wheel clevis (S/N 997812 & prior)	47	902 *	4	5/8 NC x 2 Cap screw GR5
19	1013220	1	Tail wheel clevis (S/N 997813 & after)	48	57817	4	5/8 Hardened flat washer
20	765 *	1	1/2 NC Lock nut	49	3489	1	1/2 NC x 3 Cap screw GR5
21	15349	1	1/2 NC x 3 Shear bolt	50	*	1	Cotter pin (S/N 997813 & after)
22	24801	4	M8 x 1.25P x 20 mm Cap screw	51	23029	4	M12-1.75P Cap screw (S/N 997813 & after)
23	*	1	Washer, 33 mm x 56 mm x 4 mm (S/N 997813 & after)	52	*	4	M12 Flat washer (S/N 997813 & after)
24	35155 *	4	5/16 Flat washer	53	64803	1	3/16 x 2 Cotter pin
25	1002048	1	Clutch shield, 100 & 143 mm BC	54	1032105	1	Nut, Slotted M24x2.0P (Tail wheel - S/N 997813 & after)
26	20893	1	Washer, 25 mm x 44 mm x 4 mm		NSS		Not sold separately
27	20892	1	Castle nut metric, M24 x 2		*		Standard hardware, obtain locally
28	15331	2	Blade pin (includes washer 45 & nut 46)	Notes: Units with Serial Number 997812 and prior include tail wheel with fabricated steel hub.			
29	13853 *	1	Spirol pin 3/8 x 1-3/4 (S/N 997812 & prior)	Units with Serial Number 997813 and after include tail wheel with cast iron hub.			
				Item 18 (4 x 15 Notat tire/wheel) include cast iron hub.			

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Parts 39

GEARBOX ASSEMBLY (FLAT TOP)



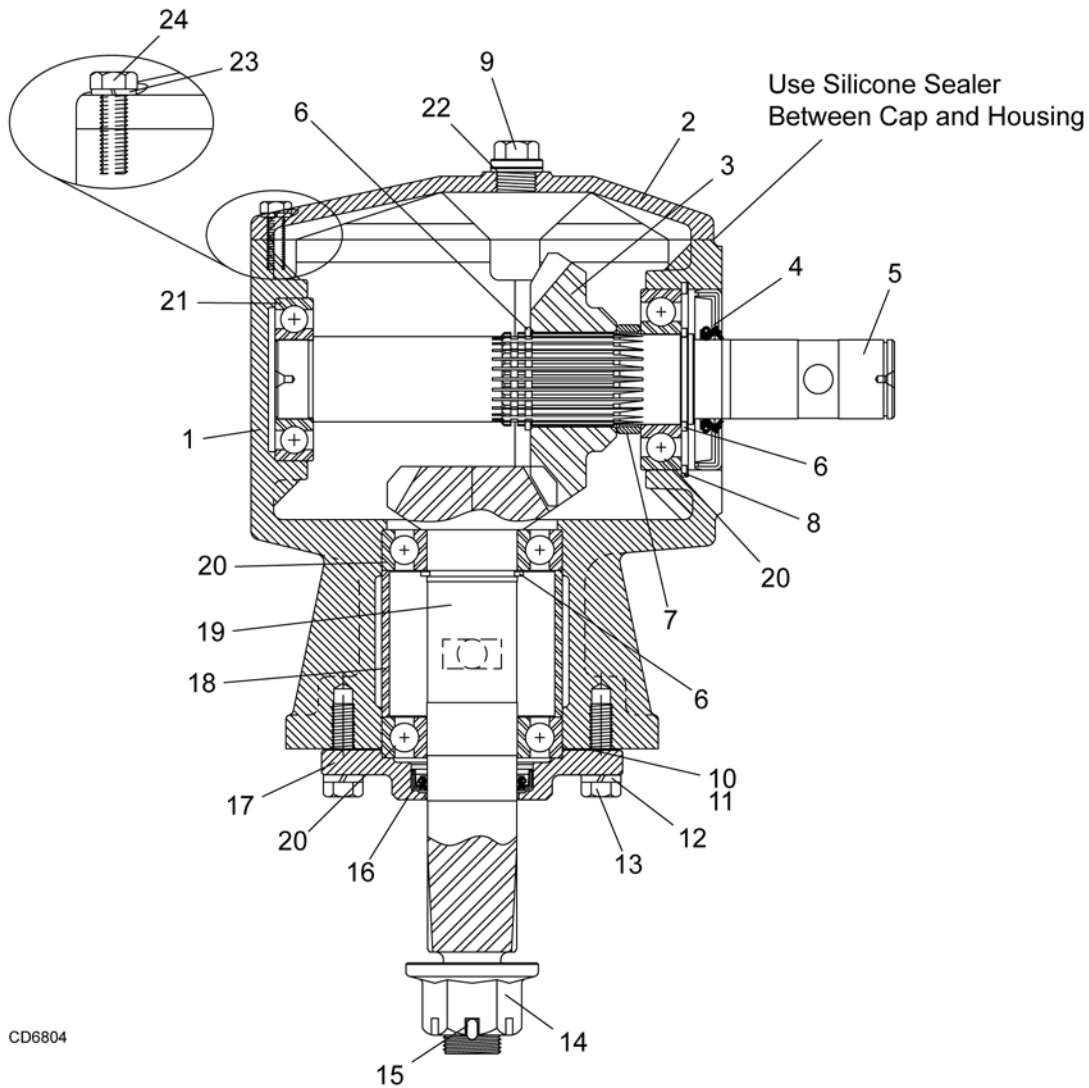
40 Parts

(Rev. 4/4/2011)
MAN0224 (Rev. 7/29/2005)

GEARBOX ASSEMBLY PARTS LIST (FLAT TOP)

REF	PART	QTY	DESCRIPTION	REF	PART	QTY	DESCRIPTION
A	58800	1	Gearbox repair asy - S/N 1162805 & prior	15	57328	2	Gearbox shim kit
B	1005510	1	Gearbox repair kit (includes items 6, 7, 8, 10, 11, 12, 13, 18, & 19)	16	57468	1	Castle nut
1	57458	1	Gear crown 25T M5.3	17	20892	1	Castle nut Metric M24 x 2
2	NS	1	Gearbox housing	18	20893	1	Washer 25 mm x 44 mm x 4 mm
3	57464	1	Input shaft 1-3/8 smooth shaft	19	20888	1	Protective washer
4	57489	1	Output shaft	20	57473	1	Flat washer 21 x 37 x 3
5	57491	1	Gear pinion 13T M5.3	21	20900	1	Seal, metric 40 x 80 x 12
6	57476	1	Bearing cup & cone	22	57463	1	Oil seal 35 x 72 x 10
7	57478	1	Bearing cup & cone	23	57374	1	Oil cap
8	57462	1	Bearing cup & cone	25	57375	1	Top cover
9	20890	1	Bearing-Ball	26	*	6	M8 x 16 Hex head cap screw CL8.8
10	20897	1	Ring retainer 81mm internal	27	57076	1	Vent plug 1/2 NPT
11	*	1	Cotter pin	28	64803	1	3/16 x 2 Cotter pin
12	57466	2	Snap ring		NS		Not Serviced
13	57467	1	Snap ring		*		Standard hardware; obtain locally
14	57373	1	Spacer 35.3 x 48 x 2.5				

GEARBOX ASSEMBLY (CAST/CROWN TOP)



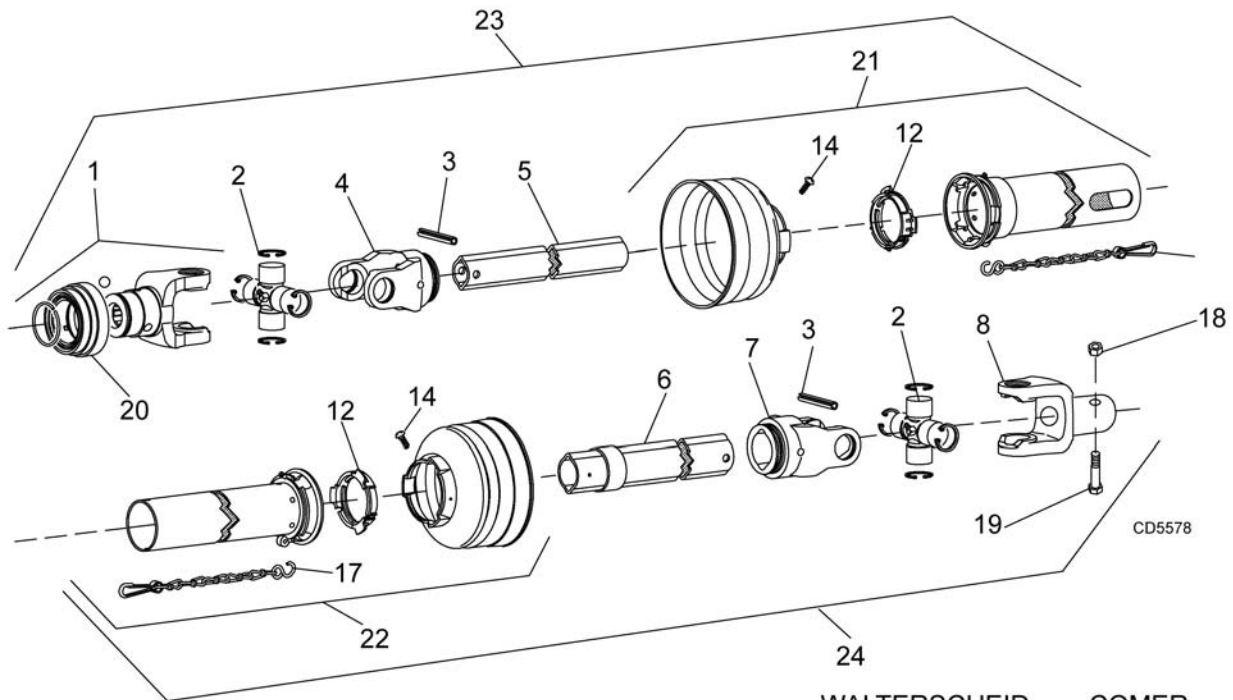
REF	PART	QTY	DESCRIPTION	REF	PART	QTY	DESCRIPTION
A	1032587	1	Gearbox repair assembly - S/N 1162806 & after	12	----	4	Lock washer
1	----	1	Housing	13	----	4	M10 x 1.5 x 25 Cap screw
2	1019632	1	Inspection cover	14	1018331	1	1" - 14 Slotted flange nut
3	----	1	22 Tooth gear	15	----	1	Cotter pin
4	1018327	1	Input seal	16	1018328	1	Output seal
5	----	1	Input shaft	17	----	1	Output cap
6	----	1	Retaining ring	18	----	1	Output bearing spacer
7	----	1	Gear spacer	19	----	1	15-Tooth output shaft and pinion
8	----	1	Retaining ring	20	1018326	3	Ball bearing
9	1011780	1	Vent plug and washer	21	1018325	1	Ball bearing
10	1018329	A/R	Output gasket (0.13)	22	----	2	Sealing washer w/plug
11	1018330	A/R	Output gasket (0.30)	23	----	6	Lock washer
				24	----	6	M8 x 1.5 x 25 Cap screw

42 Parts

(Rev. 4/4/2011)

MAN0224 (Rev. 7/29/2005)

RCC42 SHEAR BOLT DRIVELINE (TWO LOBE) (WALTERSCHEID)



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

WALTERSCHEID
PROFILE



PG 40

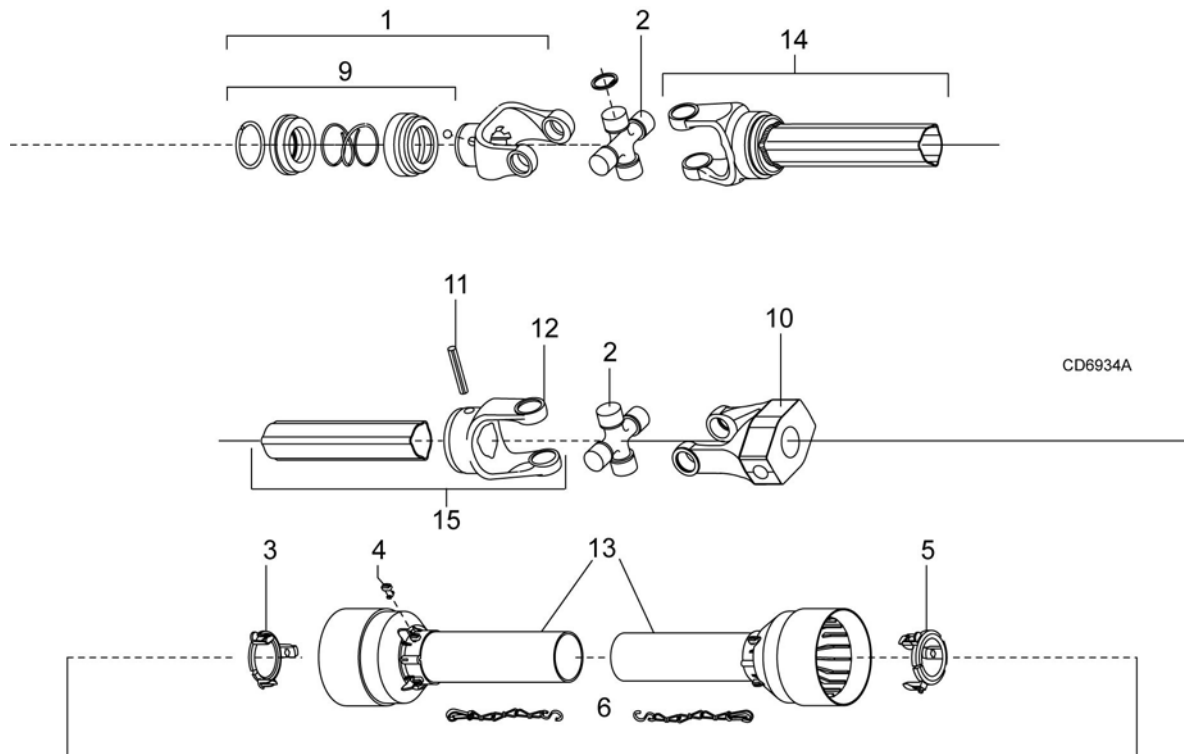
COMER
PROFILE



PG 41

REF	PART	QTY	DESCRIPTION	REF	PART	QTY	DESCRIPTION
A	40554	1	Complete 540 driveline assembly (shearbolt)	17	40777	2	Anti-rotation chain
1	40571	1	Yoke, 1-3/8-6 SP (complete with lock collar)	18	765	1	1/2 NC Lock nut
2	154	2	Cross and bearing kit	19	15349	1	1/2 NC x 3 Shear bolt
3	40775	2	Spring pin 10 mm x 65 mm (Pkg. of 10)	20	40589	2	Lock collar repair kit (without yoke)
4	40572	1	Inboard yoke (male drive tube)	21	40759	1	Guard, outer half, includes items 12, 13, and 14 (cut to length)
5	40583	1	Inner profile (cut to length)	22	40761	1	Guard, inner half includes items 12, 13, and 17
6	40592	1	Outer profile (cut to length)	23	40739	1	Shaft assembly, male half (complete with guard)
7	40573	1	Inboard yoke (female drive tube)	24	40740	1	Shaft assembly, female half, (complete with guard and shear bolt yoke)
8	40580	1	Yoke, shear bolt				
12	40776	2	Bearing ring (Pkg. of 2)				
14	40778	2	Screw (Pkg. of 2)				

RCC42 STANDARD DRIVELINE (COMER)



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

WALTERSCHEID
PROFILE



PG 40

COMER
PROFILE



PG 41

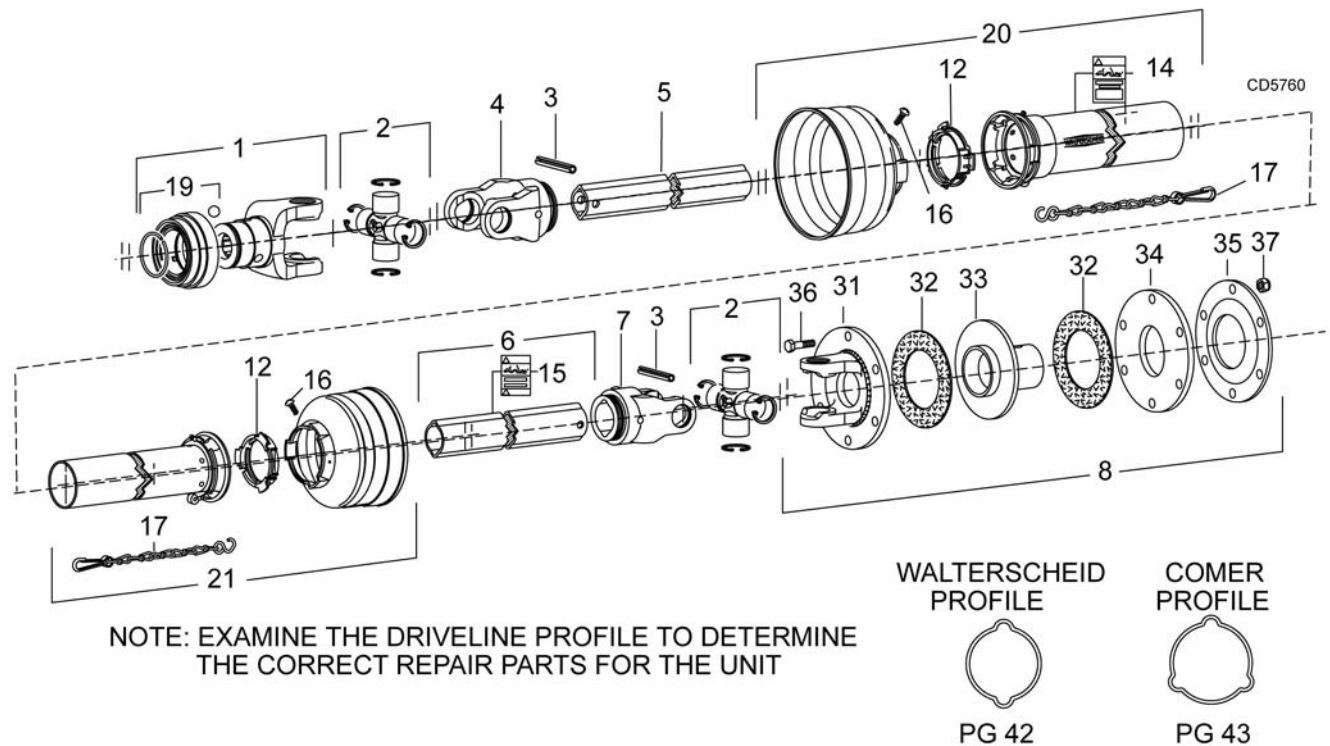
REF	PART	QTY	DESCRIPTION
A	1009509	1	Complete driveline assembly
1	1001300	2	Complete collar yoke C12 1-3/8 - 6
2	38478	2	Cross and bearing kit
3	1019442	1	Outer cone fix ring
4	30922	6	Protection fixing screw
5	1019444	1	Inner cone fix ring
6	30917	2	Chain shield tether
9	1001340	1	Lock collar repair kit
10	1019445	1	Special drive yoke
11	1001305	1	Flexible pin
12	1001306	1	Inner tube yoke
13	1021324	1	Shield, complete
14	30926	1	Outer yoke & tube (must be cut to length)
15	30932	1	Inner yoke & tube (must be cut to length)

44 Parts

(Rev. 9/7/2007)

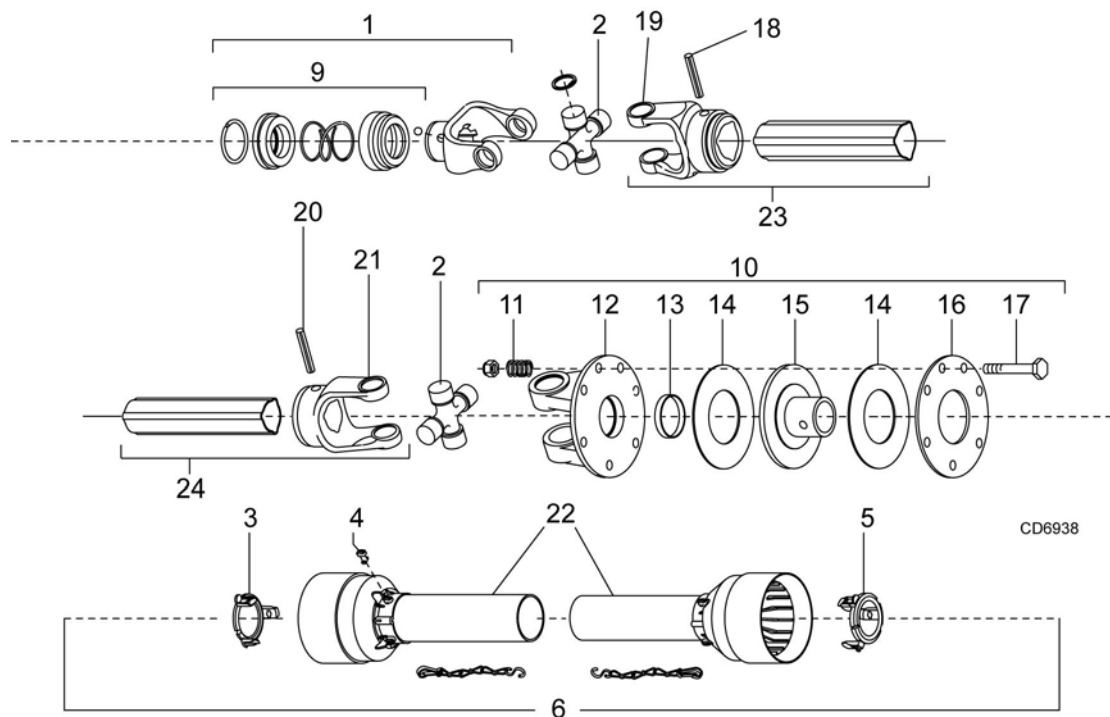
MAN0224 (Rev. 7/29/2005)

RCC42 SLIP CLUTCH DRIVELINE (OPTIONAL) (WALTERSCHEID)



REF	PART	QTY	DESCRIPTION	REF	PART	QTY	DESCRIPTION
	1005782	1	Complete 540 driveline assembly	17	40777	2	Anti-rotation chain
1	40571	1	Yoke 1-3/8 - 6 spline	19	40589	1	Slide collar kit
2	154	2	Cross & bearing kit	20	40759	1	Outer guard half
3	40775	2	Spring pin 10 x 65	21	40760	1	Inner guard half
4	40572	1	Inboard yoke	31	57431	1	Flange yoke
5	40583	1	Inner profile	32	57432	1	Friction disc (set of 2)
6	40592	1	Outer profile	33	57433	1	Hub, 1-3/8" round bore
7	40573	1	Inboard yoke	34	57434	1	Thrust plate
8	57402	1	Friction slip clutch	35	57435	1	Belleville spring plate
12	40776	2	Bearing ring SC15	36	57259	6	10 mm x 1.5P x 50 mm cap screw GR 8.8
14	18864	1	Decal, Danger rotating driveline	37	57260	6	10 mm x 1.5P Hex lock nut (w/nylon insert)
15	33347	1	Decal, Danger Guard missing				
16	40778	2	Screw, Included in items 9 & 13				

RCC42 SLIP CLUTCH DRIVELINE (OPTIONAL) (COMER)



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

WALTERSCHEID
PROFILE

COMER
PROFILE



PG 42



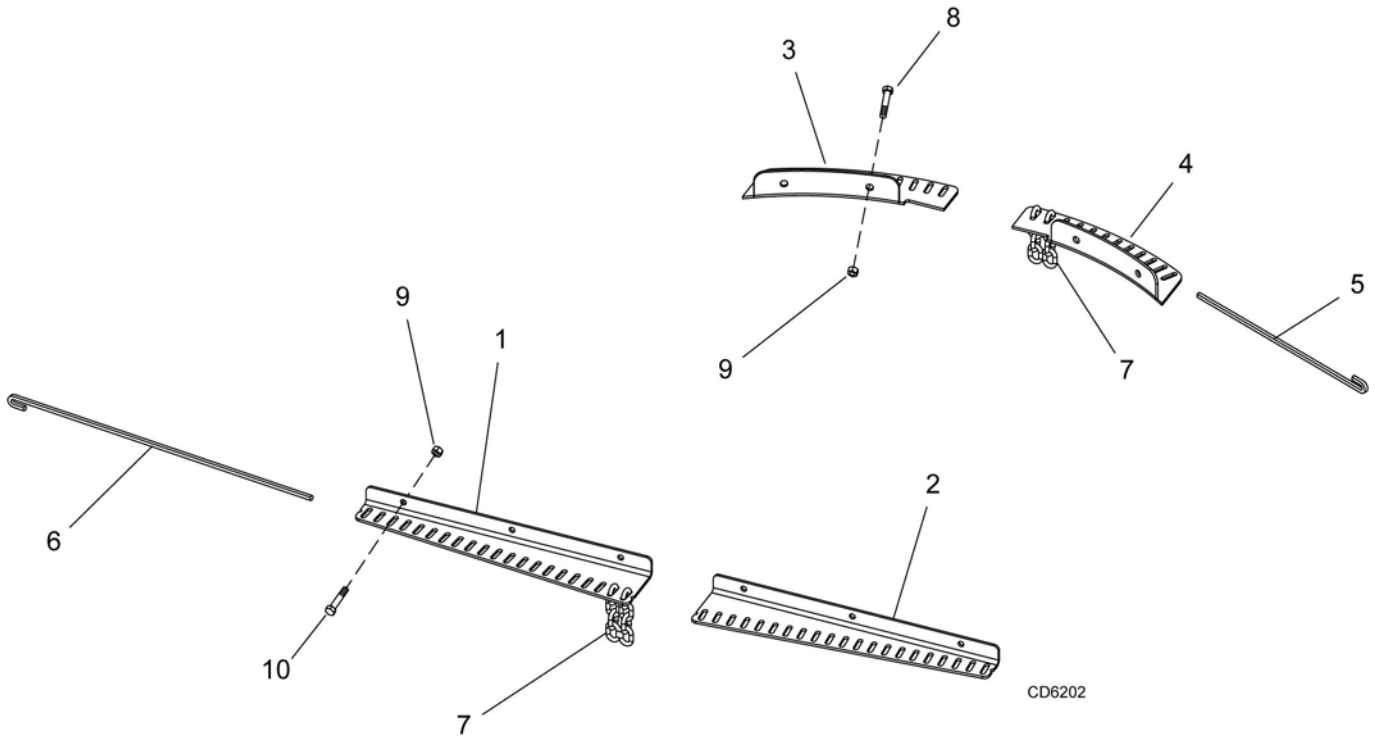
PG 43

REF	PART	QTY	DESCRIPTION	REF	PART	QTY	DESCRIPTION
A	1020902	1	Complete driveline assembly	14	1001314	2	Lining ring
1	1001300	2	Complete collar yoke C12 1-3/8 - 6	15	1019448	1	Special hub F10
2	38478	2	Cross and bearing kit	16	1001317	1	Pressure plate
3	1019442	1	Outer cone fix ring	17	1001318	8	Bolt and nut M10 x 80
4	30922	6	Protection fixing screw	18	1001302	1	Flexible pin
5	1019444	1	Inner cone fix ring	19	1001301	1	Outer yoke tube
6	30917	2	Chain shield tether	20	1001305	1	Flexible pin
9	1001340	1	Lock collar repair kit	21	1001306	1	Inner tube yoke
10	1019446	1	Special friction clutch	22	1021553	1	Complete shield
11	1001311	8	Spring	23	30926	1	Outer yoke & tube (must be cut to length)
12	1019447	1	Flanged yoke	24	30932	1	Inner yoke & tube (must be cut to length)
13	1001313	1	Bushing				

46 Parts

MAN0224 (Rev. 7/29/2005)

FRONT & REAR CHAIN SHIELDING (OPTIONAL)



REF	PART	QTY	DESCRIPTION
1	1007270	1	Right front chain plate 42"
2	1007271	1	Left front chain plate 42"
3	1007272	1	Right rear chain plate 42"
4	1007273	1	Left rear chain plate 42"
5	1003638	2	Pin, 10 to 12 chains
6	1003642	2	Pin, 16 to 18 chains
7	4765	66	1/4 -4 Link chain
8	24597	4	3/8 NC x 3/4 Carriage bolt
9	14350	10	3/8 NC Flange hex nut
10	20973	6	3/8 NC x 1-1/4 Carriage bolt GR5

* Standard hardware, obtain locally

BOLT TORQUE CHART

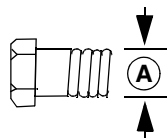
Always tighten hardware to these values unless a different torque value or tightening procedure is listed for a specific application.

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 & J1701M JUL96.



SAE SERIES TORQUE CHART



SAE Grade 2
(No Dashes)

SAE Bolt Head
Identification

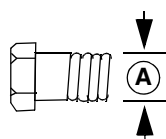


SAE Grade 5
(3 Radial Dashes)



SAE Grade 8
(6 Radial Dashes)

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
Grade 8.8

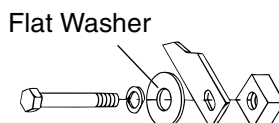
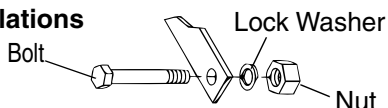
Metric Bolt Head
Identification



Metric
Grade 10.9

Diameter & Thread Pitch (Millimeters)	Wrench Size	COARSE THREAD				FINE THREAD				Diameter & Thread Pitch (Millimeters)
		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

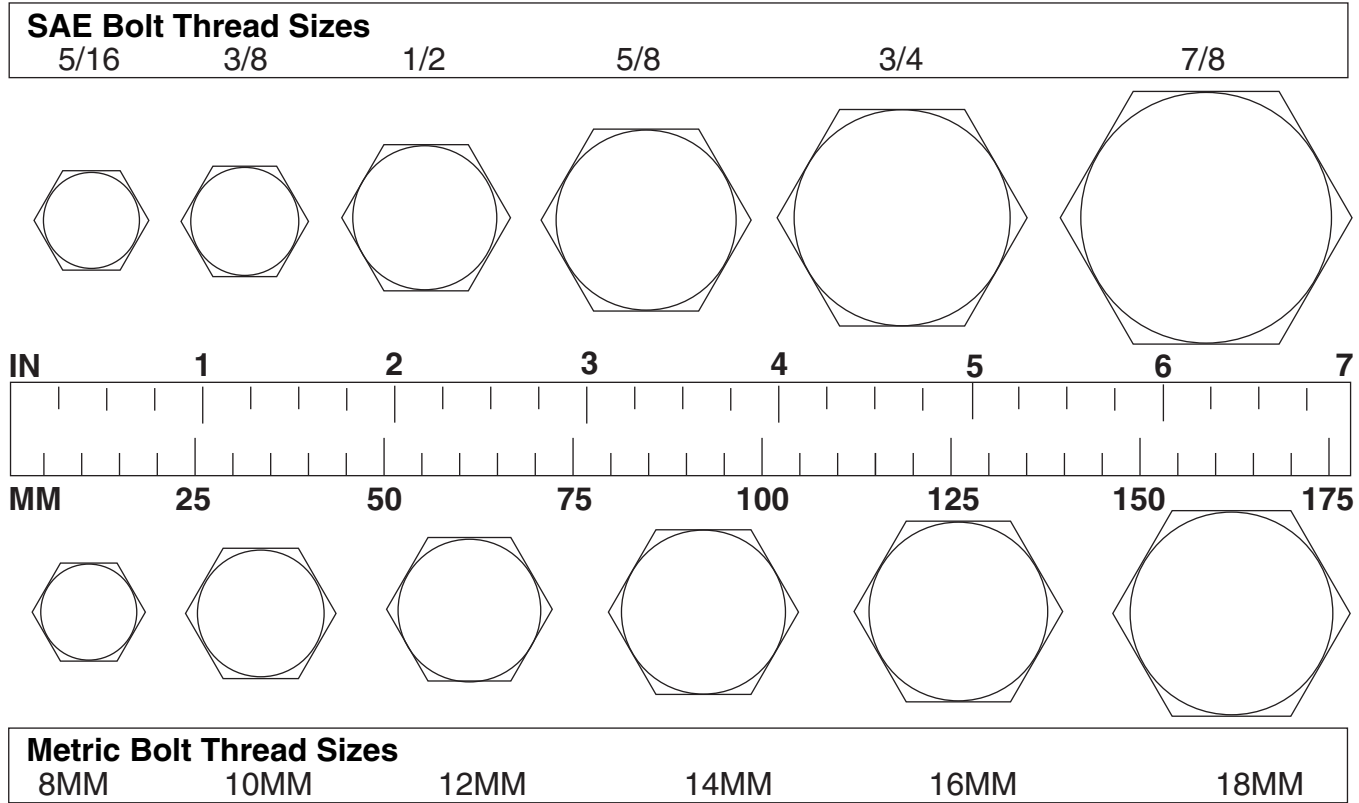
Typical Washer Installations



8/9/00

BOLT SIZE CHART

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



ABBREVIATIONS

AGAgriculture
 ATF Automatic Transmission Fluid
 BSPP British Standard Pipe Parallel
 BSPTM British Standard Pipe Tapered Male
 CV Constant Velocity
 CCW Counter-Clockwise
 CW Clockwise
 F Female
 GA Gauge
 GR (5, etc.) Grade (5, etc.)
 HHCS Hex Head Cap Screw
 HT Heat-Treated
 JIC Joint Industry Council 37° Degree Flare
 LH Left Hand
 LT Left
 m Meter
 mm Millimeter
 M Male
 MPa Mega Pascal
 N Newton

NC National Coarse
 NF National Fine
 NPSM National Pipe Straight Mechanical
 NPT National Pipe Tapered
 NPT SWF National Pipe Tapered Swivel Female
 ORBM O-Ring Boss - Male
 P Pitch
 PBY Power-Beyond
 psi Pounds per Square Inch
 PTO Power Take Off
 QD Quick Disconnect
 RH Right Hand
 ROPS Roll-Over Protective Structure
 RPM Revolutions Per Minute
 RT Right
 SAE Society of Automotive Engineers
 UNC Unified Coarse
 UNF Unified Fine
 UNS Unified Special

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WARRANTY

All Models Except Mow'n Machine™ 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 loaders and backhoes are warranted for two (2) years from the date of delivery to the original purchaser.

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)
Gearbox Seals	All units listed below	2 years
Gearbox components	BW1260, BW1620, BW1800, BW2400	8 years
	BW240HD, BW180HD, BW180HB, BW126HB	7 years
	BB48X, BB60X, BB72X, BB84X, BB600X, BB720X, BB840X, BB6000X, BB7200X, BB8400X, DS1260, DSO1260, DS1440, TS1680, BW126-3, BW180-3, BW240	6 years
	PHD25, PHD35, PHD65, PHD95, 2162, 3240, DS96, DS120, RCC42, RM550-2, RM660-2, RD990X, PRD6000, PRD7200, PRD8400, S15CD, S20CD, S22CD, S25CD, S27CD, BW180LH, TC/R74, TC/R68, TC/R60, TBW144, TBW180, TBW204	5 years
	RDC54, RD60, RD72, TBW150C, TS/R60, TS/R52, TS/R44	3 years (1 year if used in rental or commercial applications)
Blade spindles	RM550-2, RM660-2, RD990X, PRD6000, PRD7200, PRD8400, TBW144, TBW180, TBW204	3 years
Rust-through	BB600, BB720, BB840, BB6000, BB7200, BB8400, BW126-3, BW126HB, BW180-3, BW180HB, BW180HD, BW1260, BW1800, BW240, BW240HD, 2162, 3240, DS1260, DSO1260, DS1440, TS1680	10 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.**

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800-319-6637 tel
800-399-6637 fax
www.WoodsEquipment.com



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WARRANTY

(Replacement Parts For All Models Except Mow'n Machine™
Zero-Turn Mowers and Woods Boundary™ Utility Vehicles)

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.

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