



## SKID STEER MOUNTED ROTARY CUTTER

**MODEL: TC10-500-SM & TC10-600-SM**

OPERATOR'S MANUAL AND PARTS BOOK  
OPERATOR'S MANUAL PART # 19-6001



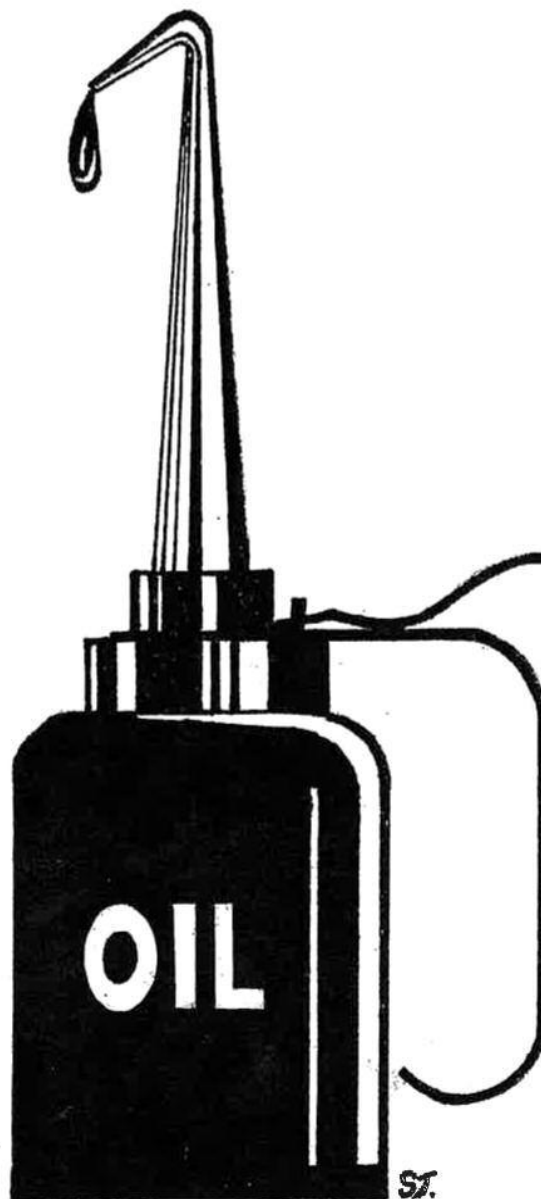
Tebben Enterprises - 10009 Highway 7 SE - Clara City, Minnesota 56222

# ATTENTION

GEARBOX DOES NOT CONTAIN OIL LUBRICANT !

FILL GEARBOX TO THE PROPER LEVEL WITH 80 TO 90 WEIGHT GEAR LUBRICANT OR EQUIVALENT FOR ALL OPERATING CONDITIONS; BEFORE USING ROTARY CUTTER.

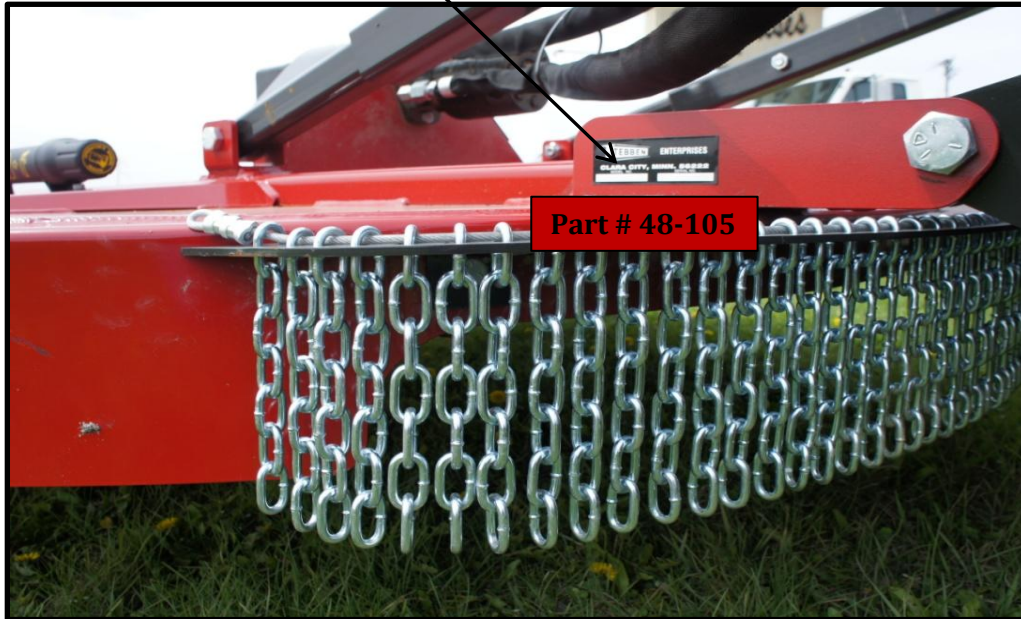
GEARBOX DOES NOT CONTAIN OIL LUBRICANT !



## SERIAL NUMBER LOCATION

Always give your dealer the serial number of your Tebben Rotary Cutter when ordering parts or requesting service or other information.

The serial number plate is located where indicated. Please mark the number in the space provided for easy reference.



Model Number \_\_\_\_\_  
Serial Number \_\_\_\_\_

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# INTRODUCTION

Congratulations on your choice of a Tebben Rotary Cutter to complement your mowing operation. This equipment has been designed and manufactured to meet the needs of a discriminating buyer for the efficient cutting of grass.

Safe, efficient and trouble free operation of your Rotary Cutter requires that you and anyone else who will be operating or maintaining the machine, read and understand the Safety, Operation, Maintenance and Trouble Shooting information contained within the Operator's Manual.



This manual covers the Tebben Rotary Cutter Models TC10-500-SM and TC10-600-SM. Differences are covered and explained where appropriate. Use the Table of Contents as a guide to locate required information.

Keep this manual handy for frequent reference and to pass on to new operator or owners. Call your Tebben dealer or distributor if you need assistance, information or additional copies of the manuals.

**OPERATOR ORIENTATION** - The directions left, right, front and rear, as mentioned throughout this manual, are as seen from the driver's seat and facing in the direction of travel.

# SAFETY

## SAFETY ALERT SYMBOL

This Safety Alert symbol means  
**ATTENTION! BECOME ALERT!**  
**YOUR SAFETY IS INVOLVED!**

The Safety Alert symbol identifies important safety messages on the Tebben Rotary Cutter and in the manual. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.



Why is **SAFETY** important to you?

### 3 BIG REASONS

**Accidents Disable and Kill**  
**Accidents Cost**  
**Accidents Can Be Avoided**

### SIGNAL WORDS:

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

**DANGER** - An immediate and specific hazard which WILL result in severe personal injury or death if the proper precautions are not taken.

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

**CAUTION** - Unsafe practices which COULD result in personal injury if proper practices are not taken, or as a reminder of good safety practices.

# SAFETY

**YOU** are responsible for the **SAFE** operation and maintenance of your Tebben Rotary Cutter. **YOU** must ensure that you and anyone else who is going to operate, maintain or work around the Cutter be familiar with the operating and maintenance procedures and related **SAFETY** information contained in this manual. This manual will take you step-by-step through your working day and alerts you to all good safety practices that should be followed while operating your Rotary Cutter.

Remember, **YOU** are the key to safety. Good safety practices not only protect you but also the people around you. Make these practices a working part of your safety program. Be certain that **EVERYONE** operating this equipment is familiar with the recommended operating and maintenance procedures and follows all the safety precautions. Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

- Rotary Cutter owners must give operating instructions to operators or employees before allowing them to operate the Cutter, and at least annually thereafter per OSHA (Occupational Safety and Health Administration) regulation 1928.57.
- The most important safety device on this equipment is a **SAFE** operator. It is the operator's responsibility to read and understand **ALL** Safety and Operating instructions in the manual and to follow these. All accidents can be avoided.
- In addition to the design and configuration of equipment, hazard control and accident prevention are dependant upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of equipment. Train all new personnel and review instructions frequently with existing workers. A person who has not read and understood all operating and safety instructions is not qualified to operate the machine. An untrained operator exposes himself and bystanders to possible serious injury or death.
- Do not modify the equipment in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the equipment.
- Think **SAFETY!** Work **SAFELY!**

# GENERAL SAFETY

1. Read and understand the Operator's Manual and all safety signs before operating, maintaining, adjusting or unplugging the Cutter. 
2. Have a first-aid kit available for use should the need arise and know how to use it. 
3. Have a fire extinguisher available for use should the need arise and know how to use it. 
4. Wear appropriate protective gear. This list includes but is not limited to:
  - A hard hat
  - Protective shoes with slip resistant soles
  - Protective goggles, glasses or face shield
  - Heavy gloves
  - Protective Clothing
5. Install and secure all guards before starting.
6. Do not allow riders. 
7. Wear Suitable ear protection for prolonged exposure to excessive noise.
8. Place all controls in neutral, stop tractor engine, set park brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.
9. Clear the area of people, especially small children, before starting the unit.
10. Review safety related items annually with all personnel who will be operating or maintaining the Cutter.

## OPERATING SAFETY

1. Read and understand the Operators Manual and all safety signs before operating, servicing, adjusting, repairing or unplugging.
2. **DO NOT** allow riders.
3. Install and secure all guards and shields before starting or operating.
4. Keep hands, feet, hair and clothing away from moving parts.
5. Place all controls in neutral, stop tractor engine, set park brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.
6. Place all tractor and machine controls in neutral before starting.
7. **NEVER** start operate machine unless sitting on tractor seat.
8. Clear the area of bystanders, especially small children, before starting.
9. Stay away from PTO shaft and machine when engaging PTO. Keep others away.
10. Clean reflectors, SMV and lights before transporting.
11. Use hazard flashers on tractor when transporting.
12. **DO NOT** put hands or feet under machine while tractor engine or machine is running.
13. **DO NOT** Operate Cutter in the raised position.
14. Objects can be thrown out from under machine with sufficient force to severely injure people. Stay away from machine when it is running. Keep others away.
15. Chain guard deflectors are recommended during operation.
16. Always know what you are cutting. Never operate Cutter in an area that has hidden obstacles. Remove sticks, stones, wire or other objects from working area before starting.
17. Review safety instructions with all operators annually.

## MAINTENANCE SAFETY

1. Follow **ALL** the operating, maintenance and safety information in the manual.
2. Support the machine with blocks or safety stands when working beneath it.
3. Follow good shop practices
  - Keep service area clean and dry.
  - Be sure electrical outlets and tools are properly grounded.
  - Use adequate light for the job at hand.
4. Use only tools, jacks and hoists of sufficient capacity for the job.
5. **NEVER** work on blades or under the machine unless the tractor engine is off and driveline is disconnected.
6. Wear heavy canvas or leather gloves when handling sharp blades.
7. Make sure all guards are in place and properly secured when maintenance work is completed.
8. **NEVER** wear ill-fitting, baggy or frayed clothing when working around or on and of the drive system components.
9. Keep hands, feet, hair and clothing away from moving or rotating parts.
10. Clear the area of bystanders, especially small children, when carrying out any maintenance and repairs or making any adjustments.





## TRANSPORT SAFETY

1. Make sure you are in compliance with all local regulations regarding transporting equipment on public roads and highways.
2. Make sure the SMV (Slow Moving Vehicle) emblem and all the lights and reflectors that are required by the local highway and transport authorities are in place, are clean and can be seen clearly by all overtaking and oncoming traffic.
3. **DO NOT** allow anyone to ride on the CUTTER or tractor during transport.
4. **DO NOT** exceed 20 mph (32 kph). Reduce speed on rough roads and surfaces.
5. Use retainers on the mounting pins when attaching.
6. **ALWAYS** use hazard flashers on the tractor when transporting unless prohibited by law.

## STORAGE SAFETY

1. Store the unit in an area away from human activity.
2. **DO NOT** permit children to play on or around the stored machine.
3. Store the unit in a dry, level area. Support the frame with planks if required.

## SAFETY DECALS

1. Keep safety decals and sign clean and legible at all times.
2. Replace safety decals and signs that are missing or have become illegible.
3. Replaced parts that displayed a safety sign should also display the current sign.
4. Safety decals or signs are available from your dealer parts department or the manufacturer.

### How to Install Safety Decals:

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

# SIGN-OFF FORM

**TEBBEN ENTERPRISES** follows the general Safety Standards specified by the American Society of Agricultural Engineers (ASAE) and the Occupational Safety and Health Administration (OSHA). Anyone who will be operating and/or maintaining the Cutter must read and clearly understand ALL Safety, Operating and Maintenance information presented in this manual.

**DO NOT** operate or allow anyone else to operate this equipment until such information has been reviewed. Annually review this information before the season start-up.

Make these periodic reviews of **SAFETY** and **OPERATION** a standard practice for all your equipment. We feel that an untrained operator is unqualified to operate this machine.

A sign-off sheet is provided for your record keeping to show that all personnel who will be working with the equipment have read and understand the information in the Operator's Manual and have been instructed in the operation of the equipment.

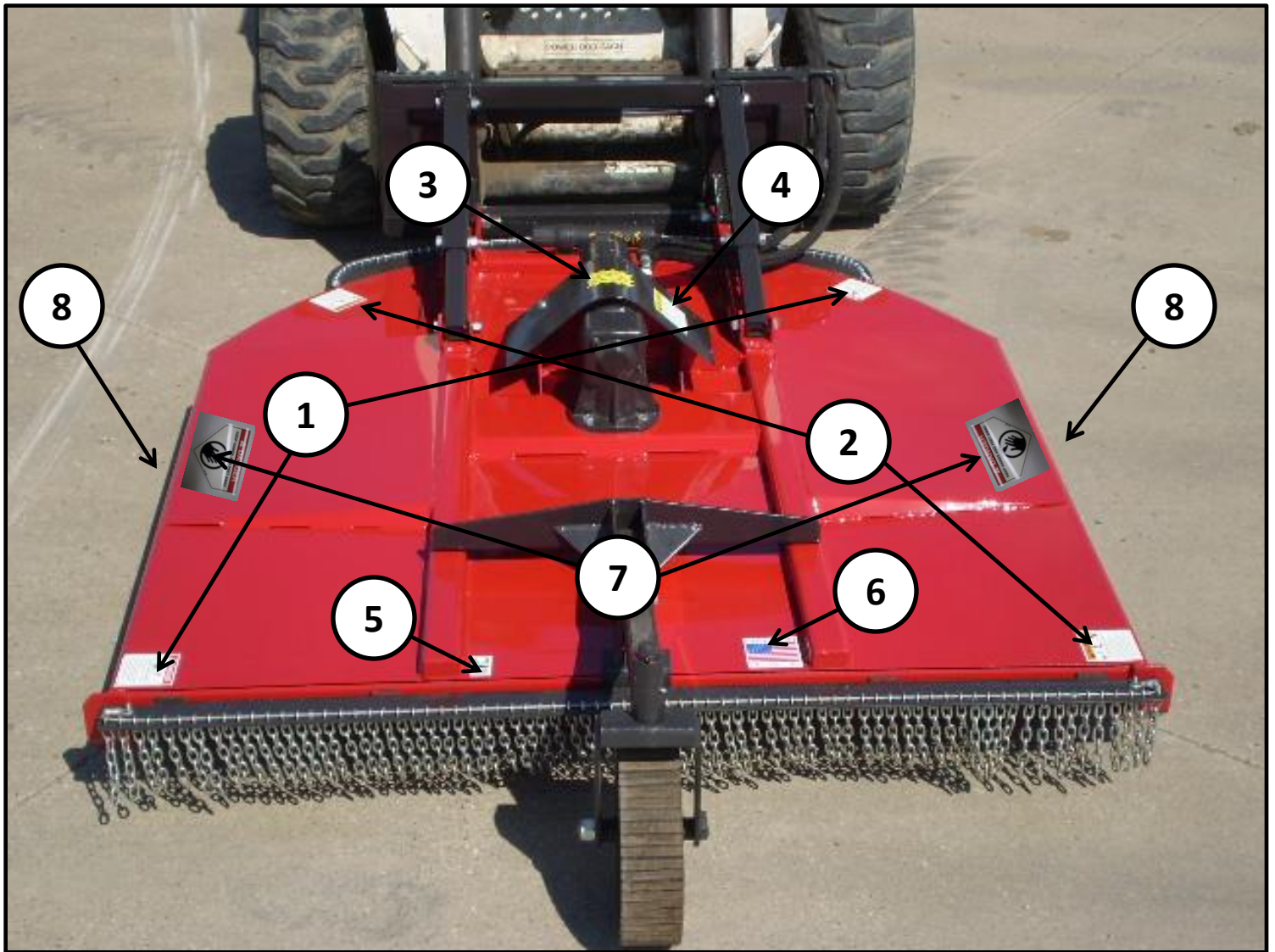
## SIGN-OFF FORM

DATE	EMPLOYEES SIGNATURE	EMPLOYERS SIGNATURE

# SAFETY DECAL LOCATIONS

The types of decals and locations on the equipment are shown in the Illustration below. Good safety requires that you familiarize yourself with The various Safety Decals, the type of warning and the area, or particular Function related to that area, that requires your SAFETY AWARENESS.

- Think SAFETY! Work SAFELY!



## How to Install Decals:

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

Item No. 1 Part # 60-98



Item No. 2 Part # 60-96



Item No. 3 Part # 19-6002



Item No. 4 Part # 60-99



Item No. 5 Part # 48-104



Item No. 6 Part # 19-1000



REMEMBER – If Safety Decals have been damaged, removed, become illegible or parts replaced Without decals, new decals must be applied. New decals are available from your authorized dealer.

Item No. 7 Part # 48-106



Item No. 8 Part # 60-1451



REMEMBER – If Safety Decals have been damaged, removed, become illegible or parts replaced Without decals, new decals must be applied. New decals are available from your authorized dealer

## FIELD OPERATION



### OPERATING SAFETY

1. Read and understand the Operator's Manual and all safety signs before operating, servicing, adjusting, repairing or unplugging.
2. Do not allow riders.
3. Install and secure all guards and shields before starting or operating.
4. Keep hands, feet, hair and clothing away from moving parts.
5. Place all controls in neutral, stop tractor engine, set park brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.
6. Place all loader and machine controls in neutral before starting.
7. Never start or operate machine unless sitting on loader seat.
8. Clear the area of bystanders, especially small children, before starting.
10. Clean reflectors, SMV and lights before transporting.
11. Use hazard flashers on loader when transporting.
12. Do not put hands or feet under machine while loader engine or machine is running.
13. Do not operate Cutter in the raised position.
14. Objects can be thrown out from under machine with sufficient force to severely injure people. Stay away from machine when it is running. Keep others away.
15. Operate only with chain guard deflectors installed.
16. Always know what you are cutting. Never operate cutter in an area that has hidden obstacles. Remove sticks, stones, wire or other objects from working area before starting.
17. Review safety instructions with all operators annually.

Rotary Cutters are designed with the inherent flexibility of operating well in almost any kind of grass and terrain conditions. However the operator has the responsibility of being familiar with all operating and safety procedures and following them.

In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of equipment. Each operator should review this section of the manual at the start of the season and as often as required to be familiar with

the machine. When using, follow this procedure:

1. Review and follow the Pre-Operation Checklist.
2. Attach the loader to the machine.
3. Before going to the cutting area review transporting.
4. Pull into the field and stop in a level area.
5. Lower into working position.

## MACHINE BREAK-IN

Although there are no operational restrictions on the Rotary Cutter when used for the first time, it is recommended that the following mechanical items be checked:

- A. After operating for 1/2 hour or after completing 2 acres:
  - 1. Check all nuts, bolts and other fasteners. Tighten to their specified torque levels.
  - 2. Tighten blade bolts to their specified torque levels.
  - 3. Check that the blades are in good condition and swing freely.
  - 4. Check the oil level in the gear box. Add as required.
  - 5. Lubricate all grease points.
  
- B. After operating for 5 hours and 10 hours:
  - 1. Repeat items 1 through 5 of section A.
  - 2. Then go to the regular service schedule.

## PRE-OPERATION CHECKLIST

Efficient and safe operation of the Tebben Rotary Cutter requires that each operator reads and understands the operating procedures and all related safety precautions outlined in this section. A pre-operation checklist is provided for the operator. It is important for both the personal safety and maintaining the good mechanical condition of the Rotary Cutter that this checklist is followed.

Before operating the machine and each time thereafter, the following areas should be checked off:

- 1. Lubricate the machine per the schedule outlined in Section 5 Service and Maintenance.
- 2. Use only an Agricultural loader of horsepower within the limits of the machine specified in Table 1.
- 3. Check that the machine is properly attached to the loader. Be sure loader pins are locked!
- 4. Check the oil level in the gear box. Add as required.
- 5. Check the blades. Be sure they are not damaged or broken and swing freely on their mount. Repair or replace as required.
- 6. Check the blade bolts. Tighten to their specified torque.
- 7. Check for entangled material in all rotating parts. Remove this material.
- 8. Install and secure all guards, doors and covers before starting.

## FIELD OPERATION



### OPERATING SAFETY

1. Read and understand the Operator's Manual and all safety signs before operating, servicing, adjusting, repairing or unplugging.
2. Do not allow riders.
3. Install and secure all guards and shields before starting or operating.
4. Keep hands, feet, hair and clothing away from moving parts.
5. Place all controls in neutral, stop loader engine, set park brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.
6. Place all loader and machine controls in neutral before starting.
7. Never start or operate machine unless sitting on loader seat.
8. Clear the area of bystanders, especially small children, before starting.
10. Clean reflectors, SMV and lights before transporting.
11. Use hazard flashers on loader when transporting.
12. Do not put hands or feet under machine while loader engine or machine is running.
13. Do not operate Cutter in the raised position.
14. Objects can be thrown out from under machine with sufficient force to severely injure people. Stay away from machine when it is running. Keep others away.
15. Operate only with chain guard deflectors installed.
16. Always know what you are cutting. Never operate cutter in an area that has hidden obstacles. Remove sticks, stones, wire or other objects from working area before starting.
17. Review safety instructions with all operators annually.

Rotary Cutters are designed with the inherent flexibility of operating well in almost any kind of grass and terrain conditions. However the operator has the responsibility of being familiar with all operating and safety procedures and following them.

In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of equipment. Each operator should review this section of the manual at the start of the season and as often as required to be familiar with

the machine. When using, follow this procedure:


1. Review and follow the Pre-Operation Checklist.
2. Attach the loader to the machine.
3. Before going to the cutting area review transporting.
4. Pull into the field and stop in a level area.
5. Lower into working position.



7. Align the unit with the working area.
8. Starting machine:
  - a. Run the engine at low idle.
  - b. Slowly bring the engine to the rated speed. Never exceed rated speed.
  - c. Lower the machine to the ground and proceed down the field.

9. Stopping machine:
  - a. Slowly decrease engine speed to low idle.

	<b>WARNING</b>
Never operate Cutter in the raised position.	

	<b>CAUTION</b>
Place all controls in neutral, lower machine, stop engine, set park brake, remove ignition key and wait for all moving parts to stop before dismounting.	

10. Ground speed:

Travel speed can vary between 3 and 8 mph (5 and 13 kph) depending on the grass and terrain conditions. It is the responsibility of the operator to note the condition of the job being done and set the speed to obtain a quality cutting job and maintain control of the machine.

The speed can be increased if a good job is being done.

Decrease speed if you are producing a ragged cut or leaving patches uncut.

11. Operating hints:

- a. Although it is best to cut when it is dry, the cutter works well in wet conditions as well. However, the operator will have to travel slower to do the same quality cutting. It will also be necessary to clean the machine more frequently to prevent caking and clogging of the blade area.
- b. The cutter should always be operated at the rated speed of 540 RPM. The cutting action is generated by the speed of the blade tip. When the speed drops below a certain rate (slowing of the input speed or RPM), the blades start to tear the material rather than cut it and will give a "ragged" looking cut.
- c. Forward travel speeds can range from 3 to 8 MPH, (5 to 13 km/h) or more depending on the type of terrain, grass or crop cover length, moisture level and power available. It is the operator's responsibility to determine and operate the machine at a safe speed at all times.
- d. If the crop or grass is tall, cut it twice to obtain the best results. This allows the unit to cut less material on each pass.
- e. When cutting a new area for the first time, always set the mower to cut high to clear unknown obstructions. If none are found, the cutter can be run lower for the second pass.
- f. Never cut grass shorter than recommended for your weather conditions. Short grass is less able to withstand hot and dry conditions. It is better for it to be cut more often at a longer length than to cut it.
- g. The blades will need sharpening when you see that the grass has not been cut evenly or it looks like the grass has been ripped off.


- h. The dished shape of the rotating plate under the deck acts as a "stump jumper". The concave shape allows the machine to go over stumps, rocks and other obstacles while operating.
- i. Always reduce ground speed when cutting around obstructions or in close quarters.
- j. The cutter should always be operated with its trailing wheel riding on the ground and not normally lifted for turns or corners unless the ground is very rough or rutted. If lifted, it should be dropped back on the ground as soon as the maneuvering or rough terrain is past.



- k. The cutter has two blades under its frame that are turning at a high rate of speed. With this speed, the blades can pick up objects on the ground and discharge them out from under the frame. It is extremely important that the operator be aware that objects can be discharged in this way and never point the discharge areas toward people, animals or property. These discharged objects are propelled at high rate of speed and are moving fast enough to cause serious injury to people, animals and damage to property. It is better to stop cutting when there are bystanders, especially children, than to take the chance of injury.



**ROTATING BLADE**

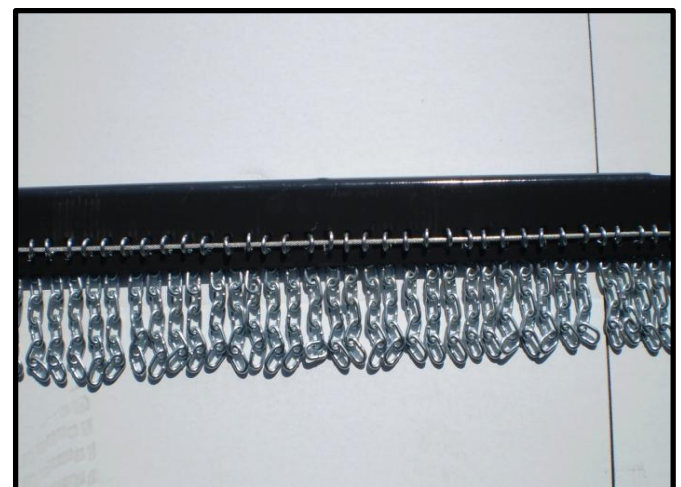


## WARNING

The rotating blades can pick up objects and expel them at a high rate of speed. These projectiles can be a hazard to people and property. Always keep deflectors in place. Never operate cutter when there are bystanders, especially children around. Use extra care when operating in populated or congested areas.

If people or children approach the working area, stop machine immediately. Do not restart until the working area is cleared.

- l. The manufacturer recommends only operating with chain guard deflectors. These deflectors will reduce the amount of debris or number of objects expelled from under the machine.



**CHAIN GUARD DEFLECTORS**

## TRANSPORTING



### TRANSPORT SAFETY

1. Make sure you are in compliance with all local regulations regarding transporting equipment on public roads and highways.
2. Make sure the SMV (Slow Moving Vehicle) emblem and all the lights and reflectors that are required by the local highway and transport authorities are in place, are clean and can be seen clearly by all overtaking and oncoming traffic.
3. Do not allow anyone to ride on the Cutter or skid loader during transport.
4. Do not exceed 20 mph (32 kph). Reduce speed on rough roads and surfaces.
5. Always use hazard flashers on the loader when transporting unless prohibited by law.

When transporting the machine, review and follow these instructions:

1. Be sure all bystanders are clear of the machine.
2. Be sure that the machine is securely attached to the loader and all pins are in locked position.
3. Clean the SMV sign, lights and reflectors and be sure they are working.
4. Be sure you are in compliance with all applicable lighting and marking regulations when transporting. Check with your local authorities.
5. Be sure your machine can clearly be seen by overtaking and oncoming traffic.
6. Keep to the right and yield the right-of-way to allow faster traffic to pass. Drive on the road shoulder if permitted by law.
7. Do not allow riders.

9. Always use the hazard flashers on the tractor unless prohibited by law.
10. Use pilot vehicles front and rear when transporting during times of limited visibility.

# STORAGE



## STORAGE SAFETY

1. Store unit in an area away from human activity.
2. Do not permit children to play on or around the stored machine.
3. Store the unit in a dry, level area. Support the frame with planks if required.

11. Store the machine in an area away from human activity.
12. Do not allow children to play on or around the stored machine.

After the season's use, the machine should be thoroughly inspected and prepared for storage. Repair or replace any worn or damaged components to prevent any unnecessary down time at the start of next season. To ensure a long, trouble free life, this procedure should be followed when preparing the unit for storage:

1. Clear the area of bystanders, especially small children.
2. Thoroughly wash the machine using a pressure washer to remove all dirt, mud, debris and residue.
3. Inspect the blades and rotor for damage or entangled material. Repair or replace damaged parts. Remove all entangled material.
4. Lubricate all grease fittings. Make sure that all grease cavities have been filled with grease to remove any water residue from the washing.
5. Touch up all paint nicks and scratches to prevent rusting.
6. Move to storage area.
7. Select an area that is dry, level and free of debris.
8. Unhook from loader.
9. If the machine cannot be placed inside, cover with waterproof tarpaulin and tie securely in place.

## SERVICE AND MAINTENANCE



### MAINTENANCE SAFETY

1. Follow ALL the operating, maintenance and safety information in the manual.
2. Support the machine with blocks or safety stands when working beneath it.
3. Follow good shop practices
  - Keep service area clean and dry.
  - Be sure electrical outlets and tools are properly grounded.
  - Use adequate light for the job at hand.
4. Use only tools, jacks and hoists of sufficient capacity for the job.
5. Never work on blades or under the machine unless the tractor engine is off and driveline is disconnected.
6. Wear heavy canvas or leather gloves when handling sharp blades.
7. Make sure all guards are in place and properly secured when maintenance work is completed.
8. Never wear ill-fitting, baggy or frayed clothing when working around or on any of the drive system components.
9. Keep hands, feet, hair and clothing away from moving or rotating parts.
10. Clear the area of bystanders, especially small children, when carrying out any maintenance and repairs or making any adjustments.

## FLUIDS AND LUBRICANTS

1. Grease:  
Use an SAE multi-purpose high temperature grease with extreme pressure (EP) performance. Also acceptable is an SAE multi-purpose lithium base grease.
2. **Gear Box Oil**  
**Use 80W-90 gear lube of equivalent for all operating conditions.**
3. Storing lubricants  
Your machine can operate at top efficiency only if clean lubricants are used. Use clean containers to handle all lubricants. Store them in an area protected from dust, moisture and other contaminants.

## GREASING

Use the Maintenance Checklist provided to keep a record of all scheduled maintenance.

1. Use a hand-held grease gun for all greasing.
2. Wipe grease fitting with a clean cloth before greasing, to avoid injecting dirt and grit.
3. Replace and repair broken fittings immediately.
4. If fittings will not take grease, remove and clean thoroughly. Also clean lubricant passageway. Replace any fitting if necessary.

# SERVICING INTERVALS

The period recommended is based on normal operating conditions. Severe or unusual conditions may require more frequent lubrication or oil changes.

## 8 Hours or Daily

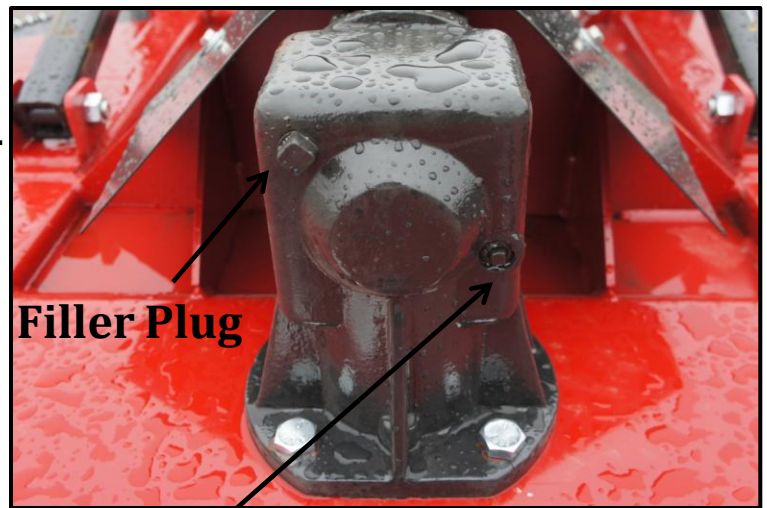
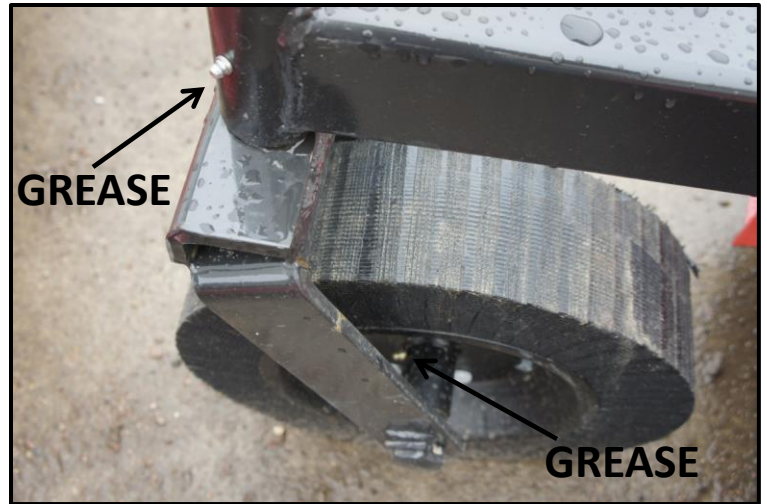
1. Lubricate castor shaft (1 location)
2. Lubricate castor wheel (1 Location)

## 40 Hours or Weekly

1. Check gearbox oil level. Add as required.
2. Check and clean if needed hydraulic quick coupler ends.
3. Check for hydraulic leaks and repair if leaking.

## Annually

1. Wash machine.
2. Inspect unit for any broken or damaged parts and replace if necessary.



**IMPORTANT:** When Oil Reaches This Point The Gearbox Is At The Correct Oil Level For Operating!

## SERVICE RECORD

ACTION CODE: X CHECK CL CLEAN L LUBRICATE

HOURS SERVICED BY												
<b>MAINTENANCE</b>												
<b>8 Hours or Daily</b>												
L Castor Shaft & Wheel												
<b>40 Hours or Weekly</b>												
X Gear Box Oil Level												
<b>Annually</b>												
CL Machine												

# GEARBOX MAINTENANCE

The gearbox used on the cutter will give many years of trouble-free service with minimal maintenance requirements. Maintain the gearbox by following this procedure.

1. Oil level:
  - a. Remove the level plug from the front of the gearbox.
  - b. The oil should just fill a few of the threads.
  - c. Add through the fill plug if required.

## IMPORTANT

Check the oil level only when the unit is cold and the machine is on the level.

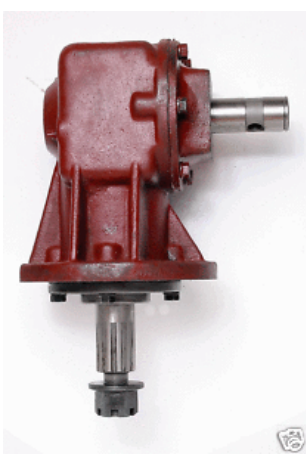
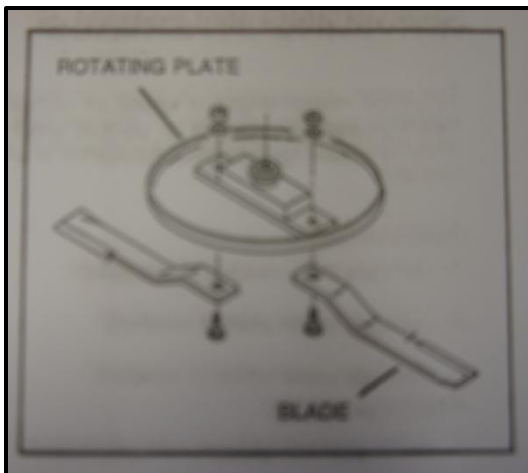


Figure 2



# BLADE REPLACEMENT

A blade may become bent, chipped or broken when using and have to be replaced.

When replacing a blade, follow this procedure:

1. Clear the area of bystanders, especially small children.
2. Raise the machine above the ground to provide access to the blades.
3. Stop engine, set park brake, remove ignition key and wait for all moving parts to stop before dismounting.
4. Support the machine with large blocks or safety stands.
5. Remove the nut through the access cover. See figure 1.



Figure 1

6. Push or tap the blade bolt (Figure 2) down.
7. Remove the old blade and replace with a new one.
8. Tap or drive the blade bolt back into position.
9. Tighten the mounting bolt to its specified torque.
10. The blades and stump jumper assembly are matched at the factory to minimize vibration. In most cases, both blades should be replaced if one requires changing to keep the assembly in balance. This is particularly true if the remaining blade is badly worn.
11. Repeat with other blade.
12. Swing the access cover back over the hole and tighten the nut.



## WARNING

Do not operate the machine with the access cover open!

13. Remove the blocks or safety stands from under frame.

# TROUBLE SHOOTING

The Tebben Rotary Cutter uses a pair of free-swinging blades on a rotor to cut grass and other types of weeds and brush. It is a simple and reliable system that requires minimal maintenance.

In the following section, we have listed many of the problems, causes, and solutions to the problems that you may encounter.

If you encounter a problem that is difficult to solve, even after having read through this trouble shooting guide, please call your local Tebben dealer or distributor. Before you call, please have this operator's manual from your machine and the model/serial number ready.

## PROBLEM

## CAUSE

## SOLUTION

Blade pan and blades don't turn.

Broken shear pin.

Replace shear pin.

---

Poor cutting job.

Traveling too fast.

Slow down.

Blades dull.

Sharpen blades.

Grooves in grass.

Bent blade, straighten or replace blade.

Machine not level, level machine.

Scalping of grass.

Machine too low, raise machine.

Grass being left.

Traveling too fast, slow down.  
Damaged blade, replace.

---

Gearbox seal leaking.

Oil overheating.  
(Improper oil)

Improper oil should be replaced with specified oil (Section 5.1.1)

Worn seal.

Replace seal.

Improper installation of seal.

Replace seal.

---

Noisy gearbox.

Poor gear mesh.

Remove input shaft and gear, replace worn parts. Reassemble and use shims to give a gear backlash.



# **PARTS LIST**

This manual contains a parts list for your machine. It is divided into major sections which correspond to the groups shown in the table of contents and the accompanying illustration.

The first page of each major section lists the contents of that section, each of which consists of exploded views and related tabular listings.

## **WHEN ORDERING PARTS**

Always give your dealer the Model and Serial Number of your machine to assist him in ordering and obtaining the correct parts. Use the exploded view and tabular listing of the area of interest to exactly identify the required part.

## **USING THE MANUAL**

Parts data consists of exploded view illustrations and associated parts list tables which are read as follows:

### **ITEM**

The item number is the identifier number from the illustration. For example, number 3 on an illustration points to a component which is item 3 on the accompanying table.

### **PART NUMBER**

The part number is the number by which the component may be identified and ordered from Tebben Enterprises and its network of dealers and distributors.

### **DESCRIPTION**

This column contains the name and description of the part.

# BOLT TORQUE

## CHECKING BOLT TORQUE

The tables shown below give correct torque values for various bolts and cap screws. Tighten all bolts to the torques specified in the chart unless otherwise noted. Check tightness of bolts periodically, using bolt torque chart as a guide. Make sure To replace worn out bolts and nuts with the same grade your machine came with.

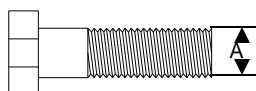
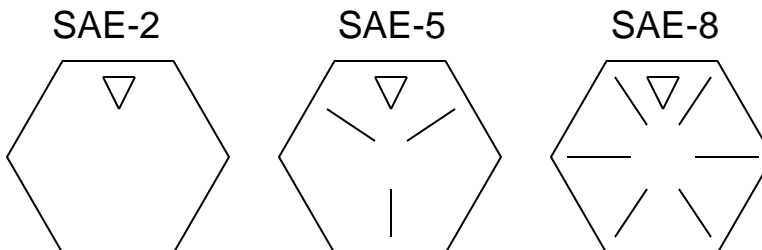
### ENGLISH TORQUE SPECIFICATIONS

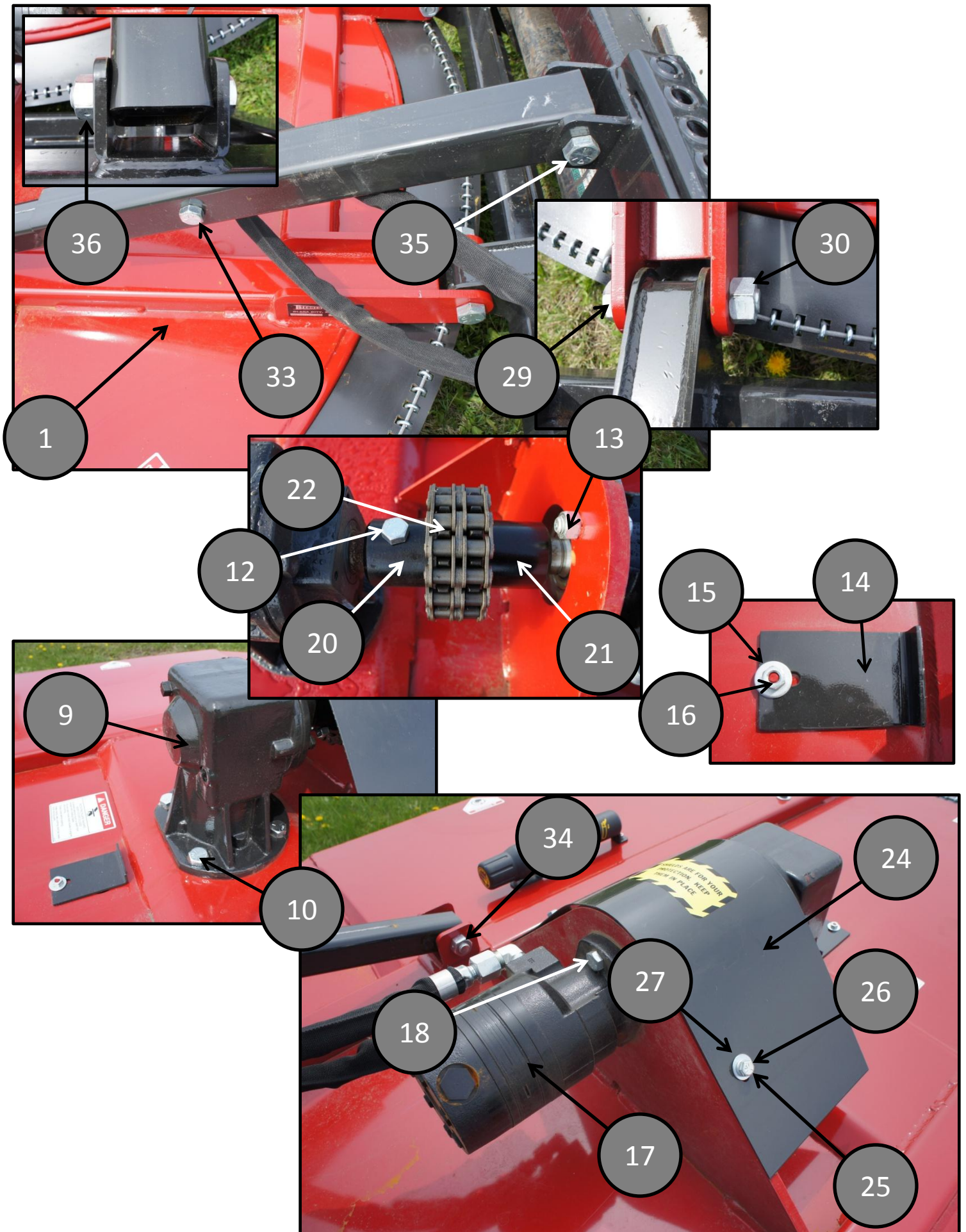
Bolt Diameter	Bolt Torque		
	SAE 2	SAE 5	SAE 8
"A"	N.m (lb-ft)	N.m (lb-ft)	N.m (lb-ft)
1/4"	8 (6)	12 (9)	17 (12)
5/16"	13 (10)	25 (19)	36 (27)
3/8"	27 (20)	45 (33)	63 (45)
7/16"	41 (30)	72 (53)	100 (75)
1/2"	61 (45)	110 (80)	155 (115)
9/16"	95 (70)	155 (115)	220 (165)
5/8"	128 (98)	215 (160)	305 (220)
3/4"	225 (165)	390 (290)	540 (400)
7/8"	230 (170)	570 (420)	880 (650)
1"	345 (225)	850 (630)	1320 (970)

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

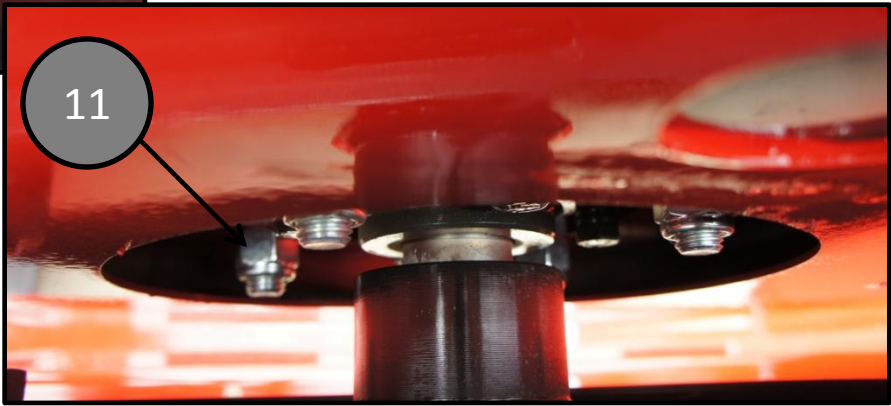
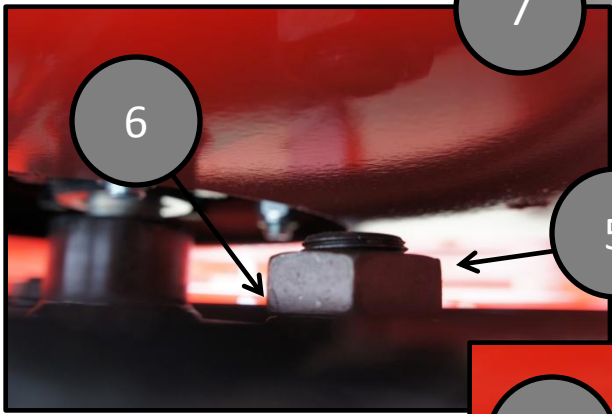
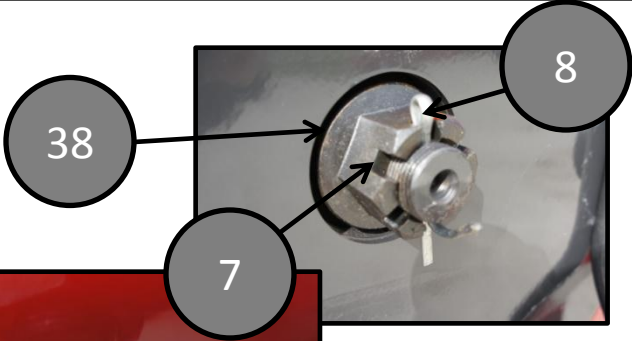
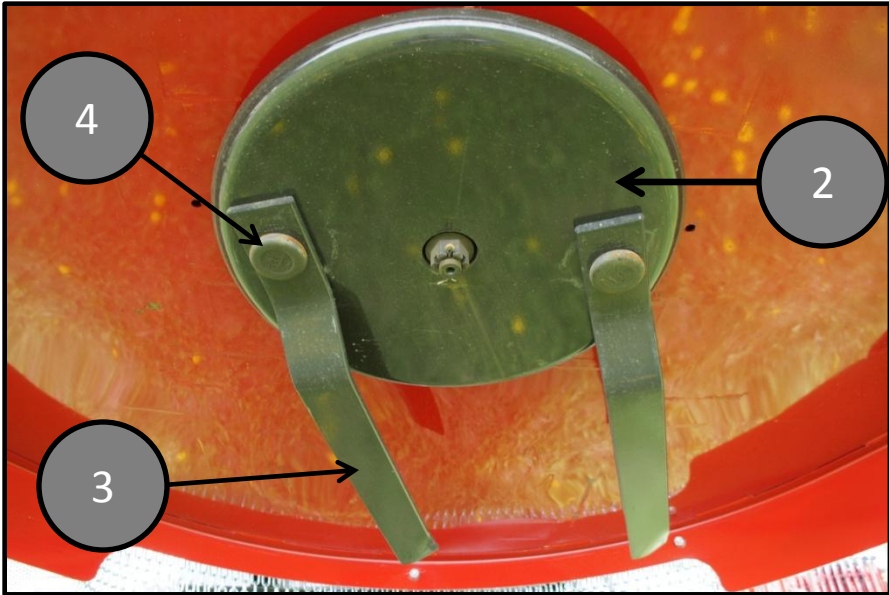
Torque values for bolts are identified by their head markings.

**IMPORTANT:** Locking nuts on cylinders and pivoting components should only be tightened to the point where the bolt no longer turns. Over tightening of these nuts can result in damaged parts.

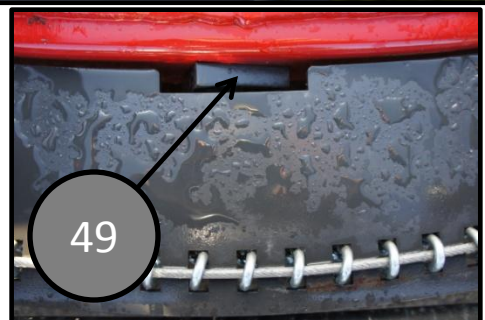
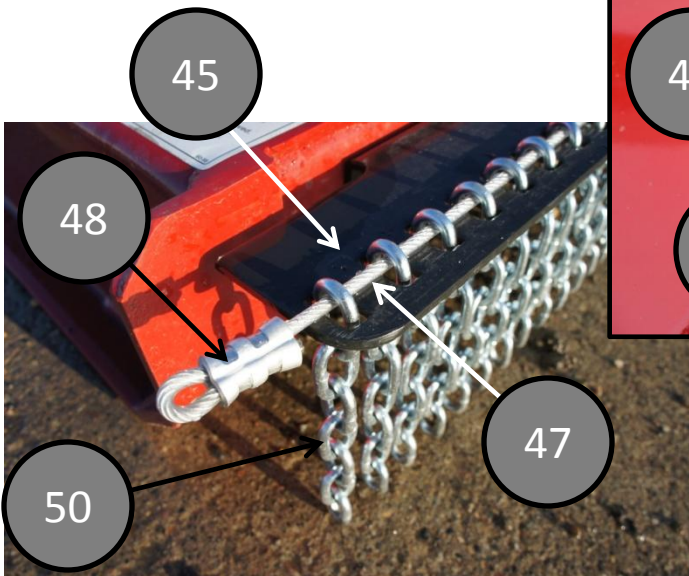
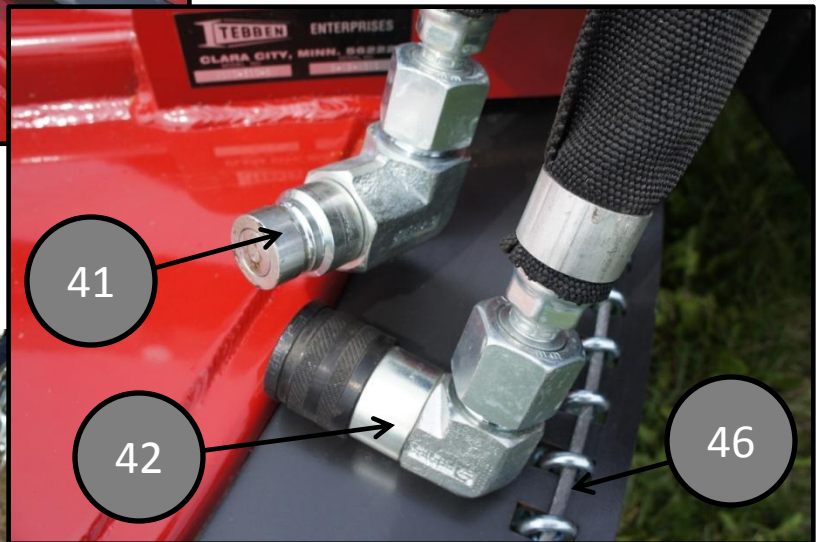
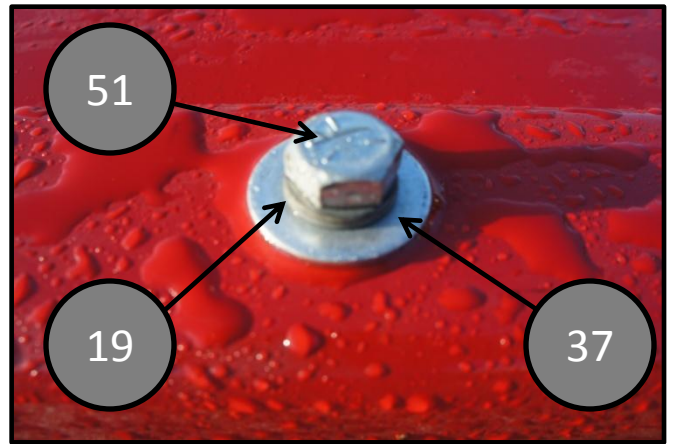
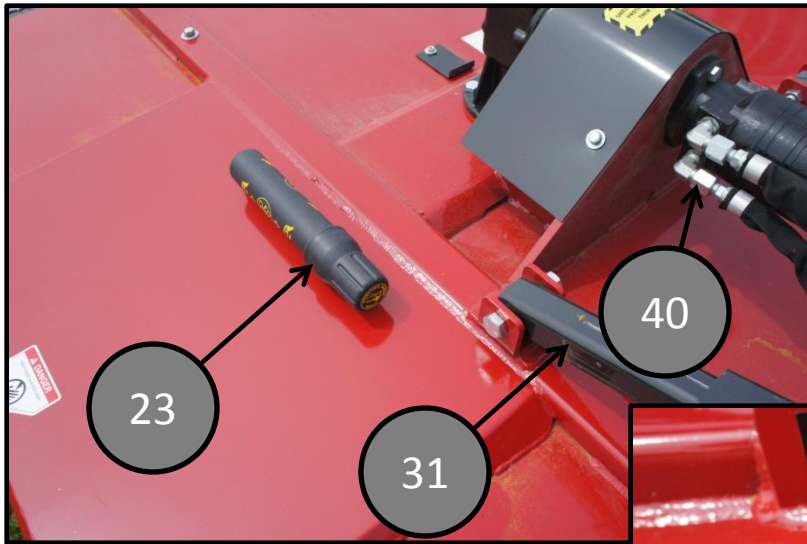
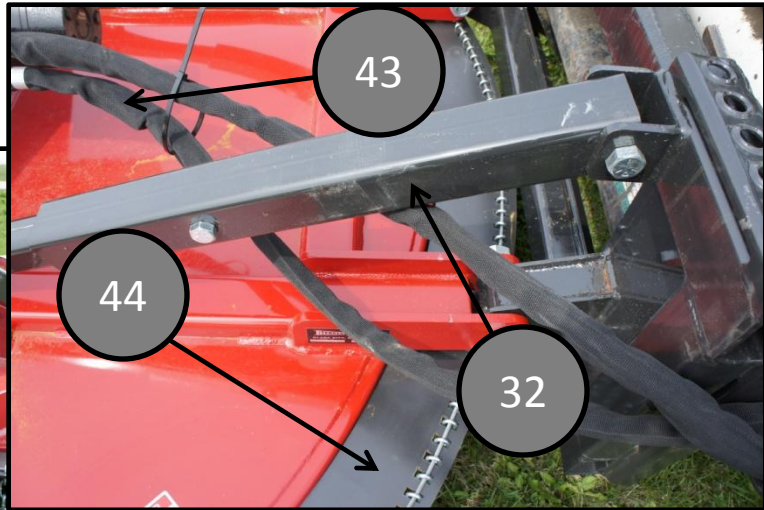
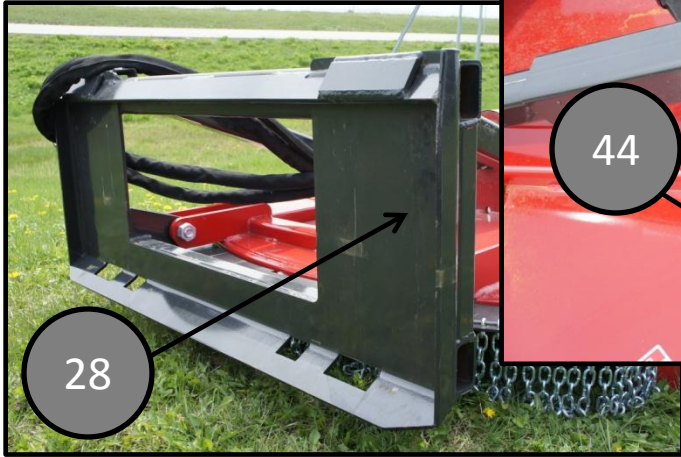




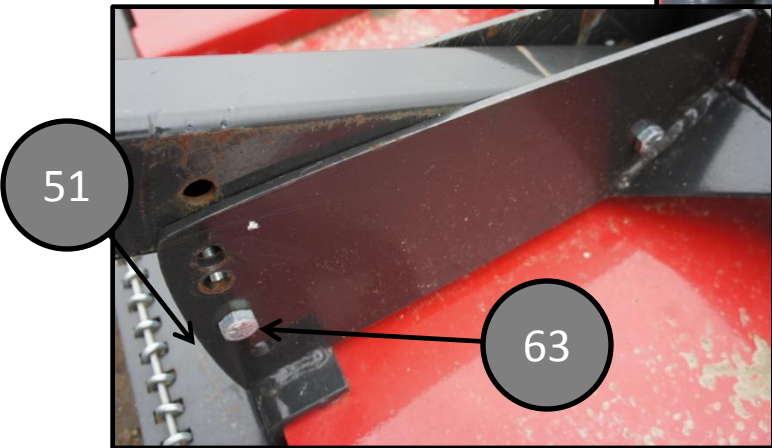
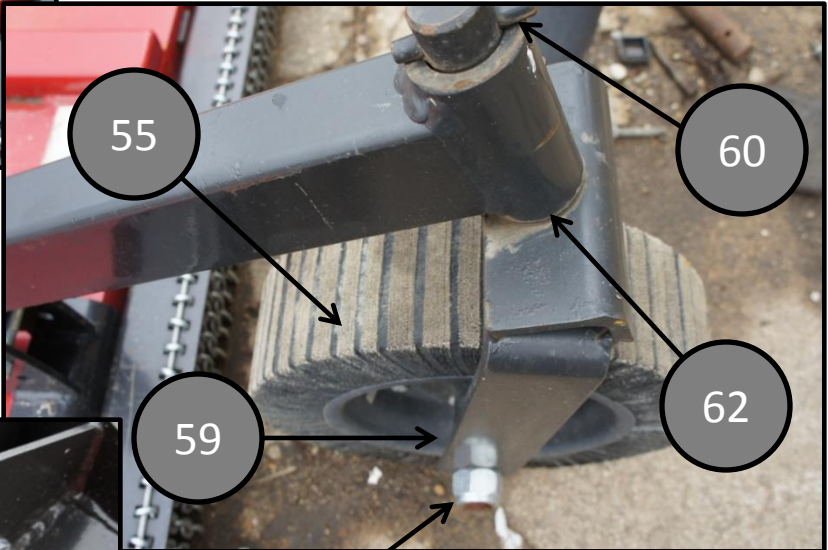
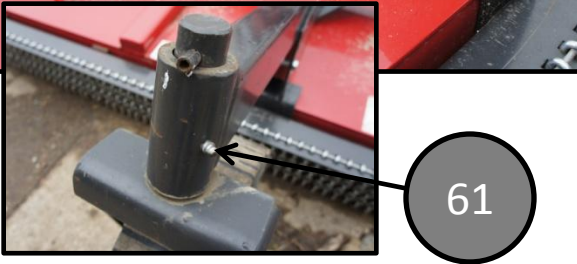
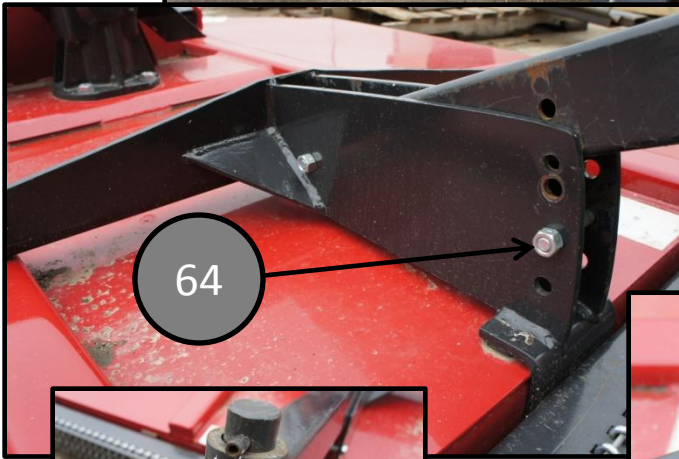
# BLADE PAN AND BLADE ASSEMBLY



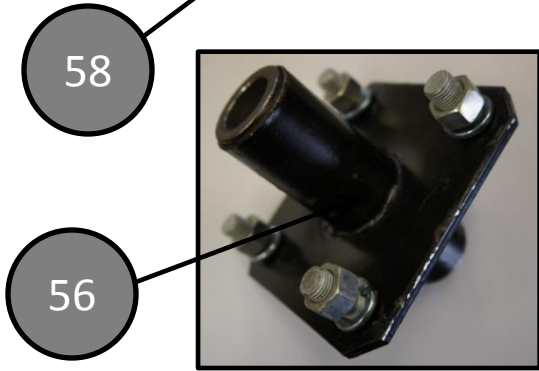
# SKID MOUNT ROTARY CUTTER PARTS



# OPTIONAL FRONT WHEEL ASSEMBLY



13 → Nut not seen in picture!



**SKID MOUNT CUTTER PARTS LIST**

MODEL TC10-500-SM

MODEL TC10-600-SM

<u>REF.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	19-5000	DECK, 60"	1
	19-6000	DECK, 72"	1
2	60-750	STUMP JUMPER PAN	1
3	60-915	60" CUTTER BLADE	2
	60-916	72" CUTTER BLADE	2
4	60-910	BLADE BOLT	2
5	60-912	HEX JAM NUT	2
6	60-913	BLADE BOLT LOCKWASHER	2
7	64-661	SLOTTED HEX NUT 1" NF	1
8	64-662	COTTER PIN, 3/16 X 2-1/4	1
9	60-960	GEARBOX, 60" & 72" DECK, 40HP	1
10	60-837	5/8-11X2 HX CAP 5NC	4
11	60-901	5/8-11 HX NUT NYLOC	4
12	19-5017	SHEAR BOLT, 1/2-13X2-3/4 HX CAP 2NC	1
13	60-903	1/2-13 HX NUT CENTERLOCK	3
14	60-875	ACCESS COVER	1
15	60-905	5/16 FLAT WASHER	1
16	60-904	5/16-18 HX NUT, CENTERLOCK	3
17	19-1055	HYDRAULIC MOTOR	1
18	19-5002	1/2-13 X 1-3/4 HX BLT	2
19	61-623	1/2 LOCKWASHER	4
20	19-5004	GEARBOX COUPLER	1
21	19-5005	HYDRAULIC MOTOR COUPLER	1
22	19-1048	COUPLER CHAIN	1
23	64-1010	MANUAL CONTAINER	1
24	19-5006	SHIELD	1
25	TZ75-00-141	3/8-16 X 1 HX BLT	2
26	19-5016	3/8 FLATWASHER	2
27	60-927	3/8 LOCKWASHER	2
28	19-5007	SKID MOUNT BRACKET	1
29	19-5008	1-8 X 5 HX BLT	2
30	19-5009	1-8 HX NUT, CENTERLOCK	2
31	19-5010	INNER SLIDE TUBE	2
32	19-5011	OUTER SLIDE TUBE	2
33	19-5012	5/8-11 X 3-1/4 HX BLT	2
34	60-838	5/8-11 HX NUT, CENTERLOCK	2
35	60-924	3/4-10 X 4 HX BLT	4
36	60-925	3/4-10 HX NUT, CENTERLOCK	4
37	61-613	1/2 FLATWASHERS	2
38	64-660	BLADE PAN SHIM WASHER	1
39	19-6001	OPERATORS MANUAL	1
40	19-5013	90 DEG HYDRAULIC ADAPTOR	2
41	19-5014	90 DEG MALE QUICK COUPLER	1
42	19-5015	90 DEG FEMALE QUICK COUPLER	1
43	19-5016	HYDRAULIC HOSE ASSY	2

**SKID MOUNT CUTTER PARTS LIST**

MODEL TC10-500-SM

MODEL TC10-600-SM

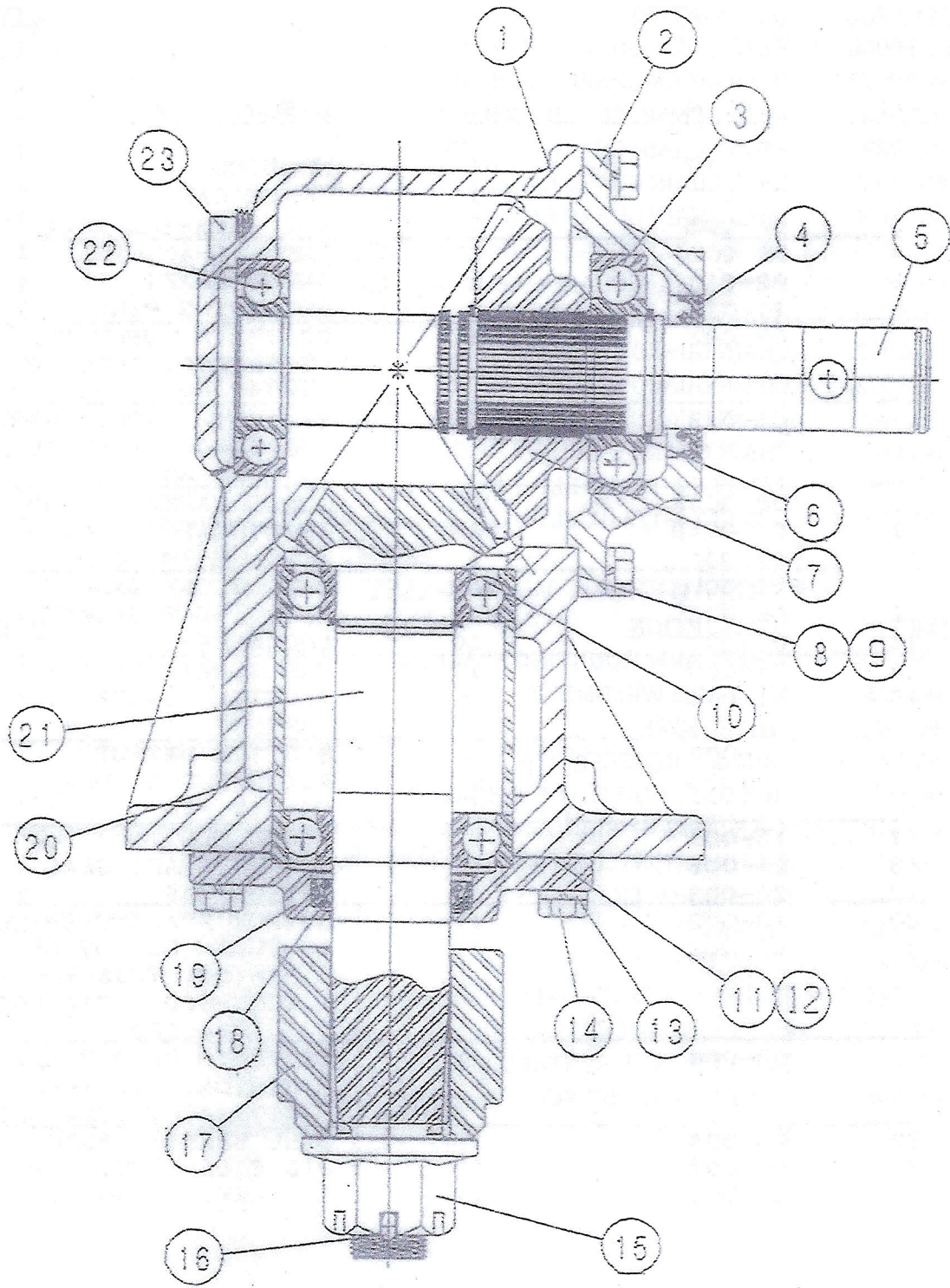
<u>REF.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>		<u>QTY</u>
44	64-80060	REAR CHAIN GUARD - 5' DECK		1
	64-80072	REAR CHAIN GUARD - 6' DECK		1
45	60-865	FRONT CHAIN GUARD - 5' DECK		1
	60-989	FRONT CHAIN GUARD - 6' DECK		1
46	60-5068	REAR CHAIN GUARD CABLE - 5' DECK		1
	60-6074	REAR CHAIN GUARD CABLE - 6' DECK		1
47	60-5072	FRONT CHAIN GUARD CABLE - 5' DECK		1
	60-6083	FRONT CHAIN GUARD CABLE - 6' DECK		1
48	64-1000	OVAL ROPE SLEEVE		4
49	19-6002	CHAIN GUARD SPACER - 5' DECK		2
	19-6002	CHAIN GUARD SPACER - 6' DECK		4
50	60-869	CHAIN GUARD CHAIN - 5' DECK		102
	60-869	CHAIN GUARD CHAIN - 6' DECK		127
51	60-906	1/2-13 X 1-1/2 HX BLT	TC10-500-SM	4
	60-906	1/2-13 X 1-1/2 HX BLT	TC10-600-SM	6

**OPTIONAL FRONT WHEEL ASSY**

<u>REF.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>		<u>QTY</u>
52	19-5018	WHEEL ARM MOUNTING BRACKET		1
53	60-725	REAR ARM WELDMENT		1
54	60-700	WHEEL FORK		1
55	60-746	RIM & TIRE SEGMENTED		1
56	60-746H	HUB ONLY W/ STEEL BUSHINGS		1
57	60-748	1-8 X 8-1/2 HX BLT		1
58	60-749	1-8 HX NUT, NYLOC		1
59	60-747	WHEEL SPACER		2
60	60-742	EXPAND PIN		1
61	60-741	GREASE FITTING		1
62	60-740	BUSHING WASHER, 1-1/4 NR		1
63	60-902	1/2-13 X 3 HX BLT		2
13	60-903	1/2-13 HX NUT, CENTERLOCK		3
51	60-906	1/2-13 X 1-1/2 HX BLT		1



GEAR BOX (40 HP.)



REF.	PART NO.	QTY.	DESCRIPTION
1	18-010	1	HOUSING
2	20-007	1	INPUT CAP
3	04-003	3	BALL BEARING 208K
4	05-002	1	INPUT SHAFT SEAL
5	02-010	1	INPUT SHAFT
6	21-012	3	RETAINING RING
7	03-001	1	22 TOOTH INPUT GEAR, TC96-500, TC96-600, TC94-500, TC94-600
	03-003	1	29 TOOTH INPUT GEAR, TC96-40, TC96-400, TC94-400
8	08-004A	VAR.	INPUT GASKET (0.30)
9	08-004B	VAR.	INPUT GASKET (0.13)
10	17-004	1	STEEL SHIM (0.20)
11	08-005A	VAR.	OUTPUT CAP GASKET (0.30)
12	08-005B	VAR.	OUTPUT CAP GASKET (0.13)
13	07-001	10	LOCKASHER, 3/8"
14	06-008	10	CAP SCREW, 3/8"-16X1"
15	11-008	1	SLOTTED FLANGE, HEXNUT, 1" - 14
	11-007	1	SLOTTED HEXNUT
	07-005	1	BLADE HUB WASHER
16	12-003	1	COTTER PIN
17	15-001	1	BLADE HUB
18	05-005	1	OUTPUT SHAFT SEAL
19	20-003	1	OUTPUT CAP
20	10-002	1	OUTPUT BEARING SPACER
21	03-002	1	15 TOOTH OUTPUT SFT & PINION, TC96-500, TC96-600, TC94-500 TC94-600
	03-004	1	15 TOOTH OUTPUT SFT & PINION, TC96-40, TC96-400, TC94-400
22	04-004	1	BALL BEARING 207K
23	09-002	1	OIL FILL PLUG, 1/2"
24	09-005	1	OIL LEVEL PLUG, 1/8"