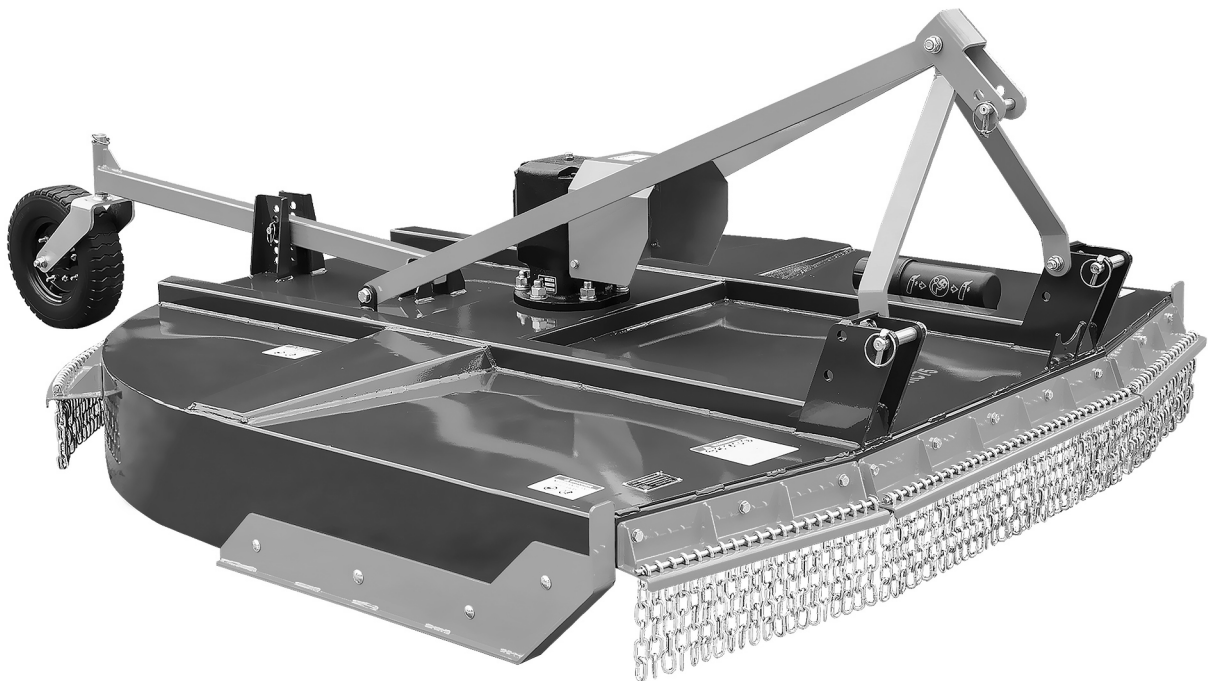
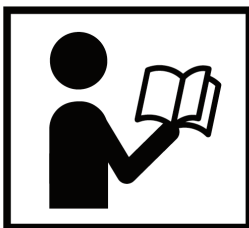


PRO SERIES 3-POINT HITCH ROTARY CUTTER



⚠ WARNING



- Please read and understand the product manual completely before assembly
- Check against the parts list to make sure all parts are received
- Wear proper safety goggles or other protective gears while in assembly
- Do not return the product to dealer. They are not equipped to handle your requests.

Missing parts or have questions on assembly?

Please call: 1-877-761-2819 or email: cs@tmgindustrial.com

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IMPORTANT SAFETY INFORMATION

Safety always

Thoroughly read and understand the instructions given in this manual before operation. Refer to the "Safety Decal", read all instructions noted on them.

Do not allow anyone to operate this equipment who has not fully read and comprehended this manual and who has not been properly trained in the safe operation of the equipment.

1. Operator should be familiar with all functions of the unit. Operate implement from the driver's seat only.
2. Make sure all guards and shields are in place and secured before operating the implement.
3. Do not leave tractor or implement unattended with engine running.
4. Dismounting from a moving tractor could cause serious injury or death.
5. Do not stand between tractor and implement during hitching.
6. Keep hands, feet, and clothing away from power-driven parts.
7. Wear snug fitting clothing to avoid entanglement with moving parts.
8. Watch out for wires, trees, etc., when raising implement. Make sure all persons are clear of working area.
9. Turning tractor too tight may cause implement to ride up on wheels. This could result in injury or equipment damage.

Look For the Safety Alert Symbol

The SAFETY ALERT SYMBOL indicates there is a potential hazard to personal safety involved and extra safety precaution must be taken. When you see this symbol, be alert and carefully read the message that follows it. In addition to 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.

Be aware of signal words

A signal word designates a degree or level of hazard seriousness. The signal words are:



DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations, typically for machine components that, for functional purpose, cannot be guarded.



WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.



CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

For your protection

Thoroughly read and understand the "safety label" section, read all instructions noted on them.

Shut down and storage

Lower machine to ground, put tractor in park, turn off engine, and remove the ignition key.

Detach and store implements in a area where children normally do not play. Secure implement by using blocks and supports.

Use safety lights and devices

Slow moving tractors, self-propelled equipment, and towed implements can create a hazard when driven on public roads. They are difficult to see, especially at night.

Flashing warning lights and turn signals are recommended whenever driving on public roads. Use lights and devices provided with implement.

Transport machinery safely

1. Comply with state and local laws.
2. Maximum transport speed for implement is 20 mph. Do not exceed. Never travel at a speed which does not allow adequate control of steering and stopping. Some rough terrain require a slower speed.
3. Sudden braking can cause a towed load to swerve and upset. Reduce speed if towed load is not equipped with brakes.
4. Use the following maximum speed - tow load weight ratios as a guideline:
5. 20 mph when weight is less than or equal to the weight of tractor.
6. 10 mph when weight is double the weight of tractor.
7. **IMPORTANT:** Do not tow a load that is more than double the weight of tractor.

Keep riders off machinery

1. Riders obstruct of operator's view, they could be struck by foreign objects or thrown from the machine.
2. Never allow children to operate equipment.

Practice safe maintenance

1. Understand procedure before doing work. Use proper tools and equipment. refer to Operator's Manual for additional information.
2. Work in a clean dry area.
3. Lower the implement to the ground, put tractor in park, turn off engine, and remove key before performing maintenance.
4. Allow implement to cool completely.
5. Do not grease or oil implement while it is operation.
6. Inspect all parts. Make sure parts are in good condition and installed properly.
7. Remove buildup of grease, oil or debris.
8. Remove all tools and unused parts from implement before operation.

Prepare for emergencies

1. Be prepared if a fire starts.
2. Keep a fist aid kit and fire extinguisher handy.
3. Keep emergency numbers for doctor, ambulance, hospital and fire department near phone.

Wear protective equipment

1. Protective clothing and equipment should be worn.
2. Wear clothing and equipment appropriate for the job. Avoid loose fitting clothing.
3. Prolonged exposure to loud noise can cause hearing impairment or hearing loss. Wear suitable hearing protection such as earmuffs or earplugs.
4. Operating equipment safely requires the full attention of the operator. Avoid wearing radio headphones while operating machinery.

Avoid high pressure fluids hazard

1. Escaping fluid under pressure can penetrate the skin causing serious injury.
2. Avoid the hazard by relieving pressure before disconnecting hydraulic lines.
3. Use a piece of paper or cardboard, not body parts, to check for suspected leaks. Wear protective gloves and safety glasses or goggles when working with hydraulic systems.
4. If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be treated within a few hours or gangrene may result.

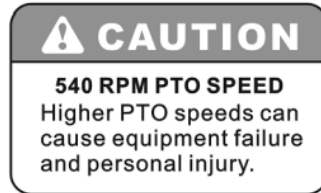
Safety Labels

Your Rotary Cutter comes equipped with all safety labels in place. They were designed to help you safely operate your implement. Read and follow their directions.

1. Keep all safety labels clean and legible.
2. Replace all damaged or missing labels. To order new labels go to your nearest TMG dealer or visit our dealer locator at TMG.com.

3. Some new equipment installed during repair requires safety labels to be affixed to the replaced component as specified by TMG. When ordering new components make sure the correct safety labels are included in the request.
4. Refer to this section for proper label placement. To install new labels:
 - a. Clean the area the label is to be placed.
 - b. Spray soapy water on the surface where the label is to be placed.
 - c. Peel backing from label. Press firmly onto the surface.
 - d. Squeeze out air bubbles with the edge of a credit card.

Safety labels



Introduction

TMG welcomes you to the growing family of new product owners. This implement has been designed with care and built by skilled workers using quality materials. Proper assembly, maintenance, and safe operating practices will help you get years of satisfactory use from the machine.

The Rotary cutters are designed for Category 1 - three point hitch or Quick-Hitch System mounting. These Fixed Bar Rotary Cutters are ideal for ripping, leveling, finish grading, and backfilling applications at feedlots, outdoor arenas, building sites, and maintenance operations on farm and ranch lanes or roadways.

Using This Manual

1. This Operator's Manual is designed to help familiarize you with safety, assembly, operation, adjustments, troubleshooting, and maintenance. Read this manual and follow the recommendations to help ensure safe and efficient operation.
2. The information contained within this manual was current at the time of printing. Some parts may change slightly to assure you of the best performance.
3. To order a new Operator's or Parts Manual contact your authorized dealer. Manuals can also be printed from the TMG Service & Support Center by your dealer.

Terminology

"Right" or "Left" as used in this manual is determined by facing the direction the machine will operate while in use unless otherwise stated.

Note: A special point of information that the operator must be aware of before continuing.

Important: A special point of information related to its preceding topic. The intention is that this information should be read and noted before continuing.

Owner Assistance

The Warranty Registration card should be filled out by the dealer at the time of purchase. This information is necessary to provide you with quality customer service. If customer service or repair parts are required contact a dealer. A dealer has trained personnel, repair parts and equipment needed to service the machine.

The parts on your machine have been specially designed and should only be replaced with genuine parts.

Serial Number Plate

For prompt service always use the serial number and model number when ordering parts from your dealer. Be sure to include your serial and model numbers in correspondence also.

Section 1: Assembly and Set-up

Tractor Requirements

Tractor horsepower should be within the range noted below. Tractors outside the horsepower range must not be used. Must be using a minimum of 65 hp when operating at maximum capability. The lower 3-Point arms must be stabilized to prevent side to side movement. Most tractors have sway blocks or adjustable chains for this purpose.

Required Horsepower Range 25 to 90 hp (min 65 PTO hp for max. capacity)

Power Take-off Maximum 540 rpm

Spline Shaft Requirement 1 3/8" - 6 & 1 3/4" - 20 Spline

Hitch Type 3-Point Cat 1 or Quick-hitch

Packing Description

Remove any loose parts or packaging from the crate. Check goods without damage and omission.

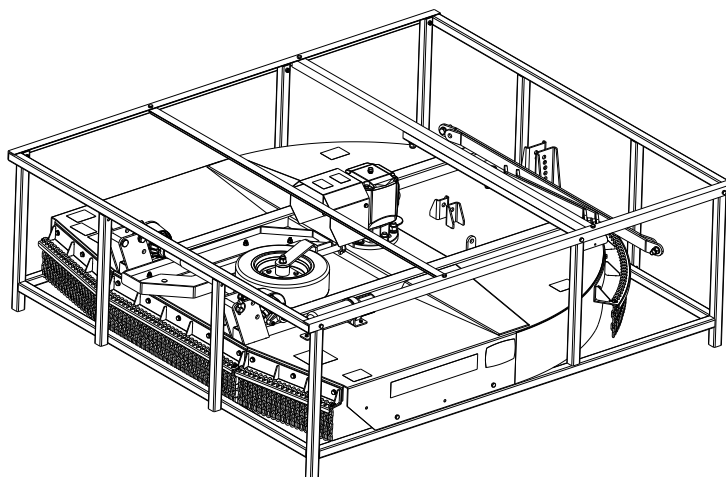


FIGURE 1: Your New Pro Rotary Cutter as It Is Shipped to You

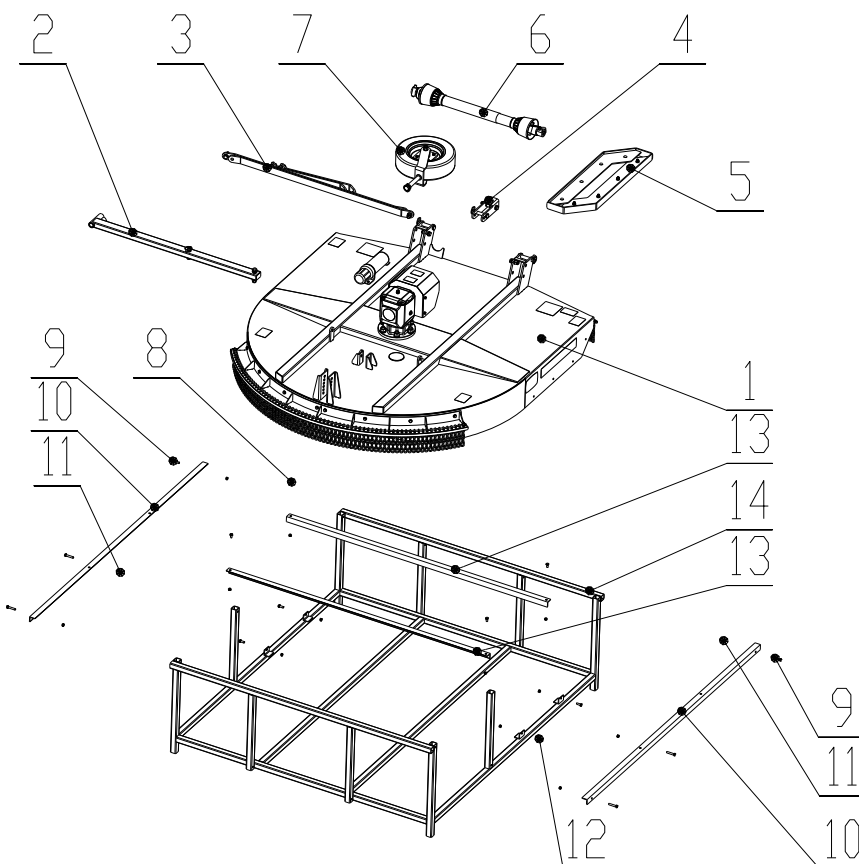


FIGURE 2: The Pro Rotary cutter and Accessory in Package

Packing List

The detailed packing list as the following table.

Item	Description	Qty.	Package Form
1	Main body of the Rotary Cutter	1	None
2	Wheel frame weldment and	1	Bubble film
3	Front & rear brace and fittings	1	Bubble film
4	Pivoting upper hitch-black and	1	Bubble film
5	R&L Skid weldment and fittings	1	Bubble film
6	Driveline shaft with clutch	1	Bubble film
7	Wheel tire assembly and fittings	1	Bubble film
8	Bolt M10x20	4	Crate attachment
9	Bolt M10x55	6	Crate attachment
10	Removable angle steel 1	2	Crate attachment
11	Locknut M10	14	Crate attachment
12	Bolt M10x25	4	Crate attachment
13	Removable angle steel 2	2	Crate attachment
14	Iron crate	1	None

The detailed description of front and rear braces

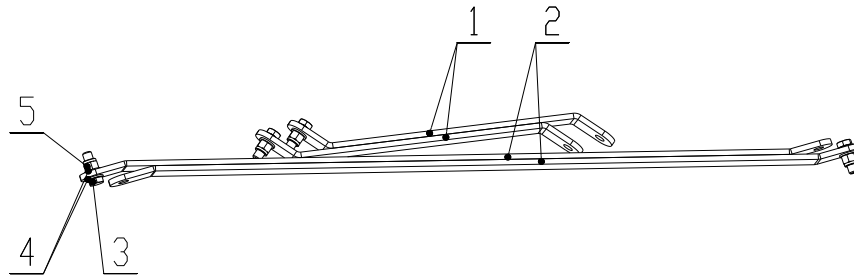


FIGURE 3: Front and Rear Braces

Item	Description	Qty.
1	Front brace	2
2	Rear brace	2
3	Bolt M16X50	4
4	Plain washer 16	8
5	Locknut M16	4

detailed description of wheel tire assembly and fittings

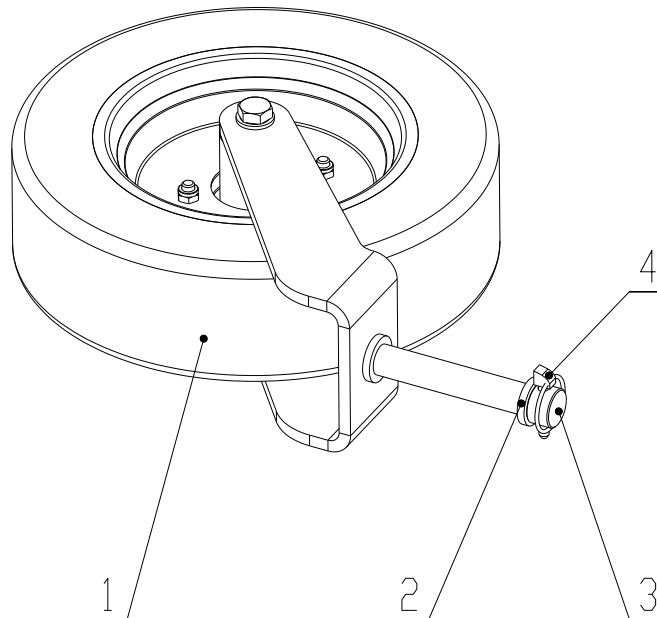


FIGURE 4: Wheel Tire Assembly and Fittings

Item	Description	Qty.
1	Rubber tire assembly	1
2	Spacer H=6	1
3	Cap shaft mount	1
4	Safety lock pin $\phi 8 \times 45$	1

The detailed description of pivoting upper hitch-black and fittings

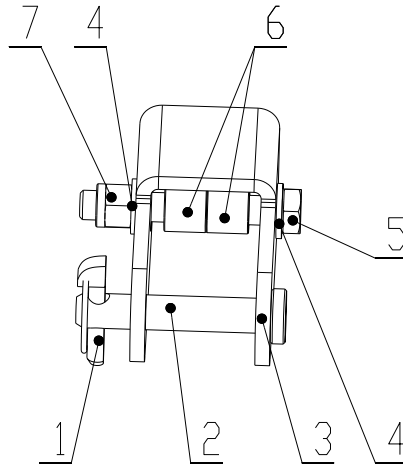


FIGURE 5: Pivoting Upper Hitch-Black and Fittings

Item	Description	Qty.
1	Safety lock pin $\varphi 11 \times 50$	1
2	Hitch pin - upper	1
3	Pivoting upper hitch-black	1
4	Plain washer 16	2
5	Bolt M16x110	1
6	Spacer	2
7	Locknut M16	1

The detailed description of Wheel Frame Weldment and Fittings

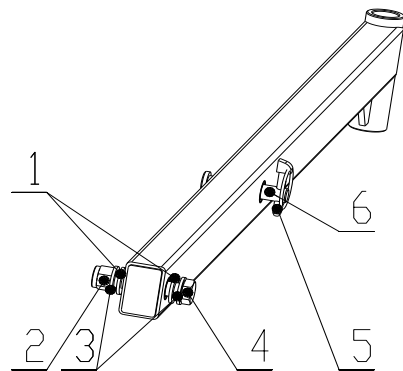


FIGURE 6: Wheel Frame Weldment and Fittings

Item	Description	Qty.
1	Safety lock pin $\varphi 11 \times 50$	1
2	Hitch pin - upper	1
3	Pivoting upper hitch-black	1
4	Plain washer 16	2
5	Bolt M16x110	1
6	Spacer	2
7	Locknut M16	1

The detailed description of R&L skid weldment and fittings

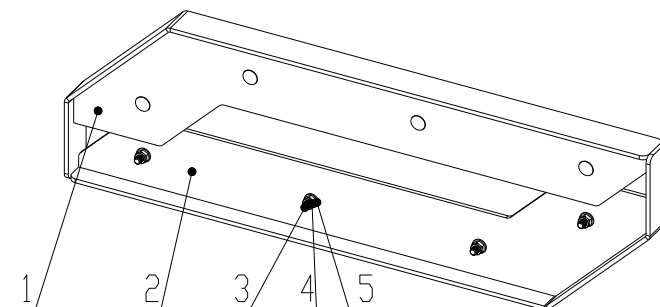


FIGURE 7: R&L skid weldment and fittings

Item	Description	Qty.
1	Skid weldment - R	1
2	Skid weldment - L	1
3	RHSNB M10x25 GR10.9	8
4	Plain washer 10	8
5	Locknut M10	8

Installation Wizard

The installation wizard will guide you to finish the final assembly of your new rotary cutter easily.

1. Tool Required

1/2" Ratchet Wrench with 17mm, and 24mm sleeves

17-19,22-24Spanner

Safety Goggles and Gloves Installation

2. Installation

Cut all zip ties and disassemble shipping crate.

Step1: Installing front & rear braces, pivoting upper hitch-black, tailwheel adjusting bracket and fittings

Remove the packaging of front & Rear braces, pivoting upper hitch-black, tailwheel adjusting bracket and fittings.

Installing front & rear braces, pivoting upper hitch-black, tailwheel adjusting bracket and fittings onto main body of the rotary cutter according to the figure 8.

Tighten item 2 completely. Tighten item8 but make sure item7 can rotate freely.

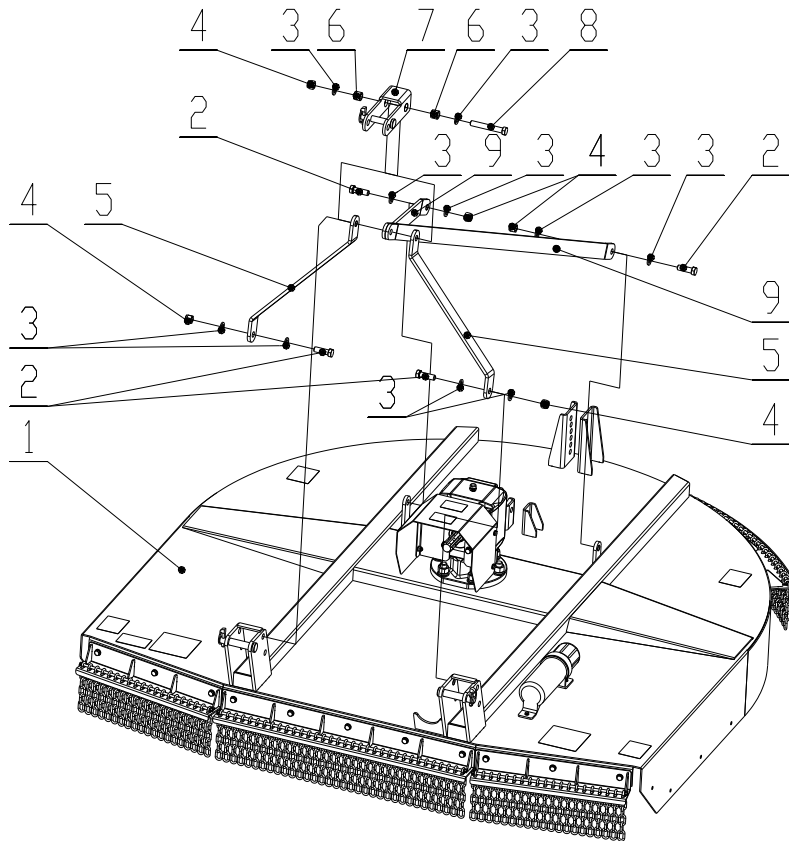


FIGURE 8: Installing Braces, Pivoting Upper Hitch-Black and Fittings

Item1 – Main body of the rotary cutter

Item2 – Bolt M16x50 (4pcs)

Item3 – Plain washer 16 (10pcs)

Item4 – Locknut M16 (5pcs)

Item5 – Front brace (2pcs)

Item6 – Spacer (2pcs)

Item7 –Pivoting upper hitch-black (1pcs)

Item8 – Bolt M16x110 (1pcs)

Item9 – Rear brace (2pcs)

Step2: Installing wheel frame weldment and fittings

Remove the packaging of wheel frame weldment and fittings.

Installing wheel frame weldment and fittings onto main body of the rotary cutter according to the figure9.

Tighten item8 but make sure item7 can rotate freely when the cutting height need to be adjusted.

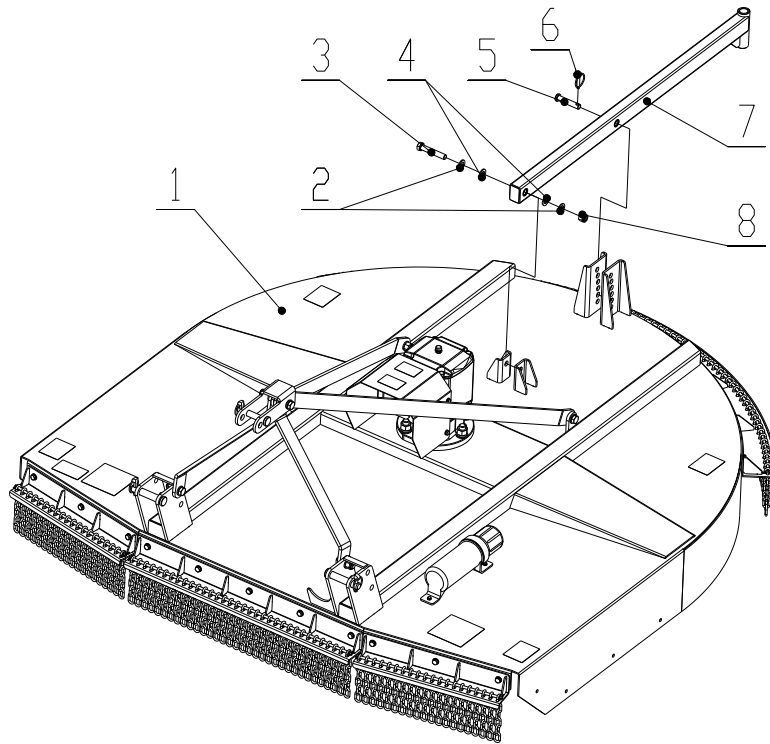


FIGURE 9: Installing Wheel Frame Weldment and Fittings

Item1 – Main body of the rotary cutter

Item2 – Plain washer 16 (2pcs)

Item3 – Bolt M16x90 (1pcs)

Item4 – Nylon washer 16 (2pcs)

Item5 – Wheel height adjusting pin (1pcs)

Item6 – Safety lock pin $\varnothing 8 \times 45$ (1pcs)

Item7 – Wheel frame weldment (1pcs)

Item8 – Locknut M16 (1pcs)

Step3: Installing R&L skid weldment and fittings

Remove the packaging of R&L skid weldment and fittings.

Align lower link arms of tractor to hitch lower hitch pins into lower ball swivels. Attach tractor top link arm to the pivoting upper hitch-black with hitch pin upper supplied. Secure with safety lock pin.

Raise rotary cutter from the ground. Install R&L skid weldment onto the rotary cutter.

Tighten locknuts completely.

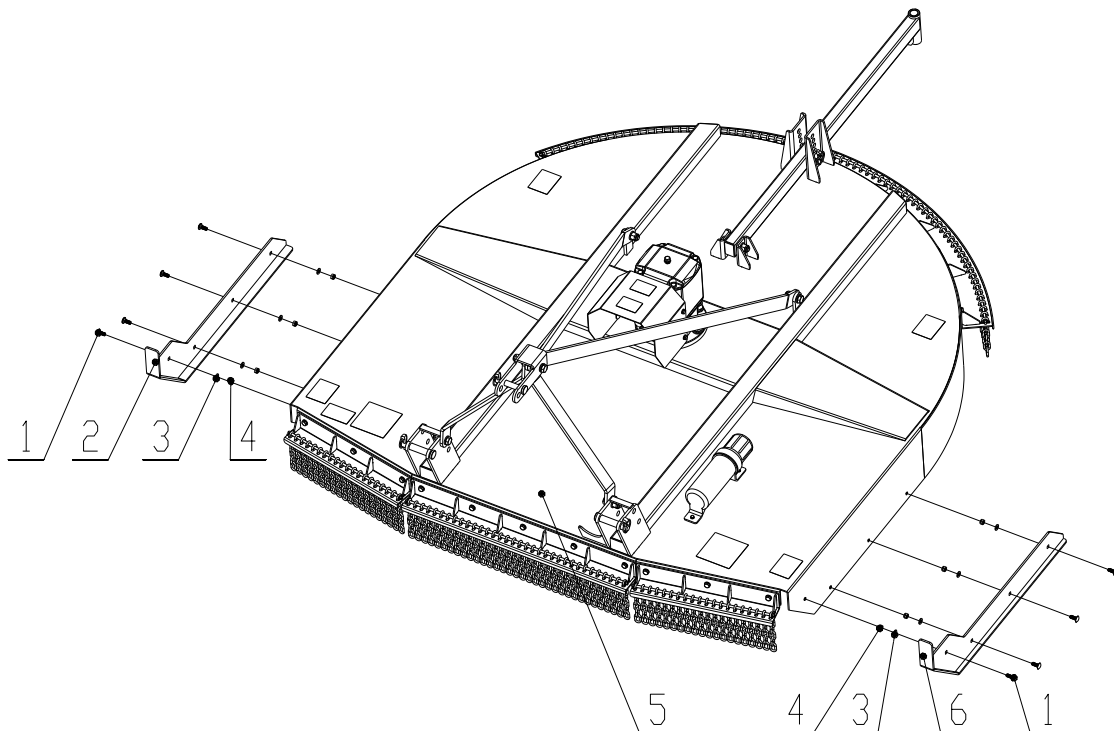


FIGURE 10: Installing R&L Skid Weldment and Fittings

Item1 – RHSNB M10x25 GR10.9 (8pcs)

Item2 – Skid weldment – L (1pcs)

Item3 – Plain washer 10 (8pcs)

Item4 – Locknut M10 (8pcs)

Item5 – Main body of the rotary cutter

Item6 – Skid weldment – R (1pcs)

Step4: Installing wheel tire assembly and fittings

Remove the packaging of wheel tire assembly and fittings.

Remove item3, item4 and one piece of item5 from wheel tire assembly. Insert the pivot shaft of wheel tire assembly into the bushing of the gauge wheel mainframe weldment and reinstall item4 to item5. Secure with item3.

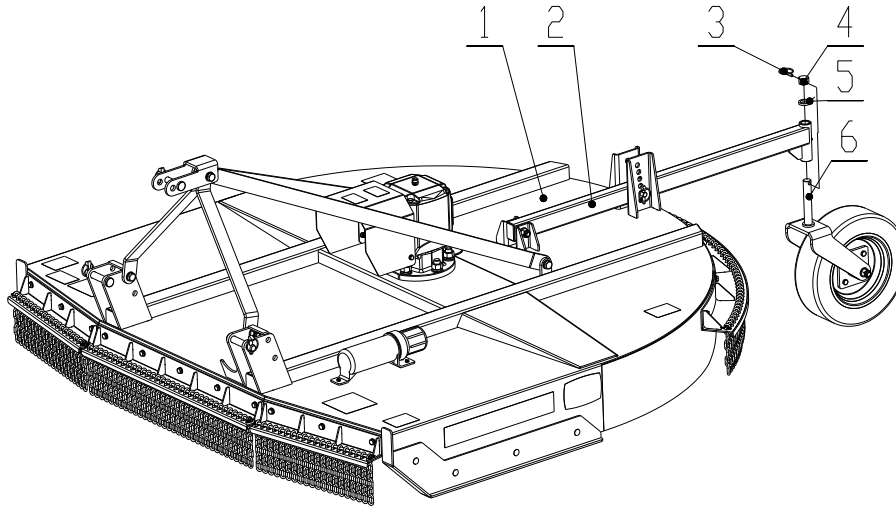


FIGURE 11: Installing Wheel Tire Assembly and Fittings

Item1 – Main body of the rotary cutter

Item2 – Wheel frame weldment

Item3 – Safety lock pin $\phi 8 \times 45$ (1 pcs)

Item4 – Cap shaft mount (1pcs)

Item5 – Spacer H=6 (1pcs)

Item6 – wheel tire assembly



WARNING

SAE EP 90W Gear oil must be filled before you finish final assembly and start your first use.

Overfilling or under filling gear oil may cause gearbox seizing or damage.

Step5: Gear oil filling

Check oil level in gearbox by removing the cap located on the side of the gearbox. Oil should be level with middle side of plug hole. Add oil necessary by removing top cap and side plug. Add oil until it flows from middle side plug hole.

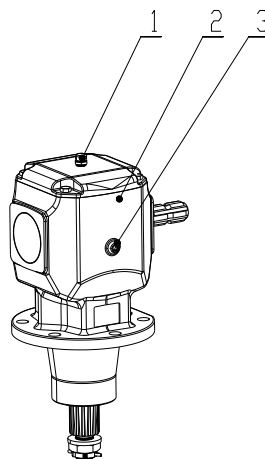


FIGURE 12: Gearbox construction

Item1 – Cap for inlet gearbox oil

Item2 – gearbox

Item3 – Plug for gearbox oil level

Tractor Hook-Up

1. Be certain that tractor draw bar will not interfere. Move draw bar ahead or remove if required. Draw bar should also be checked for clearance when unit is being raised for the first time.

2. Align lower link arms of tractor to hitch clevises on rotary cutter. Insert lower hitch pins into lower ball swivels and attach link pins.
3. Attach tractor top link to upper floating hitch on rotary cutter with pin supplied. Secure with lock pin.
4. Adjust tractor top link in or out to place upper hitch pin vertically above or slightly behind lower hitch pins to allow rotary cutter flotation. The rotary cutter should be run with the back 15 degrees lower than the front.

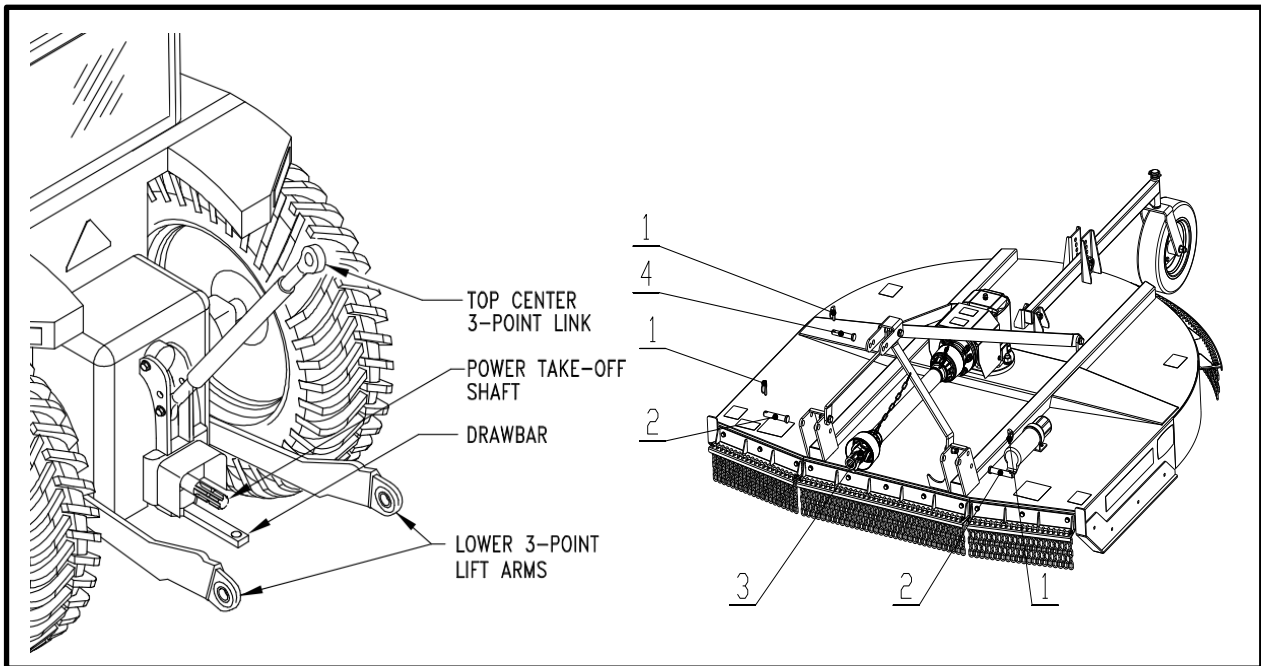


Figure 13: Tractor Hook-Up

Driveline Installation

1. Slide driveline end with extended safety cone over spline shaft of gearbox and secure with attaching device.
2. Slide driveline over tractor's spline PTO shaft and secure with locking device of driveline.
3. Driveline should now be moved back and forth to ensure that it is secure on the PTO shaft of the tractor and rotary cutter gearbox.
4. Attach chain from the driveline shield to one of the upper hitch braces to ensure that the shield does not rotate.
5. Should driveline require shortening:
 - a. Hold the half-shafts next to each other in the shortest working position and mark them.
 - b. Shorten inner and outer guard tubes equally.
 - c. Shorten inner and outer sliding profiles by the same length as the guard tubes.
 - d. Proper overlap is a minimum of one-half the length of each tube, with both tubes being of equal length.
 - e. Round off all sharp edges and remove burrs. Grease sliding profiles.



CAUTION

Tractor PTO shield and all rotary cutter guards must be always in place during operation!

Section 2: Operating Instructions

Transporting

NOTE: Always disengage PTO before raising rotary cutter to transport position.

1. When raising the rotary cutter to transport position, be sure that driveline does not contact tractor or rotary cutter. Adjust and set the tractor's 3-point hitch lift height so that the driveline does not contact rotary cutter deck in the fully raised position.

2. Be sure to reduce tractor ground speed when turning, leaving enough clearance so that the rotary cutter does not contact obstacles such as buildings, trees or fences.
3. Select a safe ground travel speed when transporting from one area to another. When traveling on roadways, transport in such a way that faster moving vehicles may pass safely.
4. When traveling over rough or hilly terrain, shift tractor to a lower gear.



CAUTION

When traveling on public roads, whether at night or during the day, use accessory lights and devices for adequate warning to operators of other vehicles. Comply with all Federal, State, and local laws.

Mowing Instructions

1. Clear area to be mowed of objects and debris that might be picked up and thrown by the rotary cutter blades.
2. Grass is best cut when it is dry. Mowing wet grass can cause plugging resulting in grass clumps behind the rotary cutter.
3. Grass should be mowed frequently as shorter clippings deteriorate faster.
4. If mowing extremely tall grass, it is best to raise cutting height and mow the area, then lower cutting height and mow a second time at the desired height.

Operating Instructions

Proper servicing and adjustments are the key to the long life of any machine. With careful and systematic inspection of the rotary cutter, costly maintenance, time and repair can be avoided.

Before beginning to mow, the following inspection should be performed:

1. Check oil level in gearbox.
2. Check that all plugs in gearbox have been replaced and tightened properly.
3. Be sure all rotary cutter knives, bolts and nuts are tight.
4. Be certain all guards and shields are in place and secure.
5. Grease driveline shaft and all other grease fittings.
6. Clear area to be mowed of rocks, branches and other foreign objects.
7. Lower rotary cutter to ground. Set tractor throttle at approximately 1/4 open. Engage PTO to start blades rotating.
8. Operate with 540 rpm PTO tractor.
9. At first begin mowing at a slow forward speed and shift up until the desired speed is achieved - maintaining 540 PTO rpm.
10. Rotary cutter knives will cut better at a faster blade speed than at reduced throttle.
11. After mowing the first 50 feet, stop and check to see that the rotary cutter is adjusted properly.
12. Do not make sharp turns or attempt to back up while rotary cutter is on the ground.
13. Do not engage PTO with rotary cutter in the fully raised position. Do not engage PTO at full throttle.

Section 3: Adjustments

Deck Leveling & Cutting Height

There are 4 primary adjustments that should be made prior to actual field operations:

1. Deck leveling Left to Right
2. Cutting Height Adjustment
3. Center 3-Point Link Adjustment
4. Tailwheel Height Adjustment

Proper adjustment of each of these items will provide for higher efficiency, improved cutting performance, and longer blade life. The following tools will be needed:

1. Pliable tape measure
2. Spirit or carpenters level

3. Open and or Hex end wrench or socket set
4. Protective gloves



WARNING

To avoid serious injury or death: Always disengage power take-off, put tractor in park or set park brake, shut tractor engine off, remove ignition key, and wait for blades to come to a complete stop before dismounting tractor.

Deck Leveling Left to Right

1. Locate tractor with Rotary Cutter on a flat, level surface.
2. Use tractor's hydraulic 3-point control lever to lower cutter until the tailwheel makes contact with the ground surface.
3. Place a level on the front of the cutter deck. Manually adjust either one or both of the tractor's lower 3-point arms to level the deck from left to right. Some tractors have only a single adjusting arm.

Cutting Height Adjustment



WARNING

To avoid serious injury or death:

Avoid direct contact with cutter blades by wearing a pair of gloves. Cutter blades have sharp edges and burrs that can cause injuries.

IMPORTANT:

The front blade tip should be lower than rear blade tip by approximately 1". The cutter is subject to continuous material flow under the deck if the rear blade is at the same height or lower than the front blade causing horsepower loss, grass clumps, blade wear, and frequent blade sharpening.

1. Using tractor's 3-point hydraulic control, raise or lower than the 3-point arms until the front of the deck is slightly lower than the rear of the deck.
2. The top center link typically is adjusted with the upper clevis pin vertically above lower than hitch pins. As show in Figure 2-1.
3. With gloves on, carefully rotate each blade tip to the position shown in figure 14.
4. Measure distance from cutting tip of blade to ground surface. This distance is the cutting height.
5. If desired cutting height cannot be obtained by adjusting the lower 3-point arms, then readjust tailwheel height. See "Tailwheel Height Adjustment" .
6. Repeat steps 1 to 5 until desired cutting height is achieved.
7. Set tractor's 3-point hydraulic control stop at this height.

Adjust tractor 3-point link until pin is vertically lower hitch pins

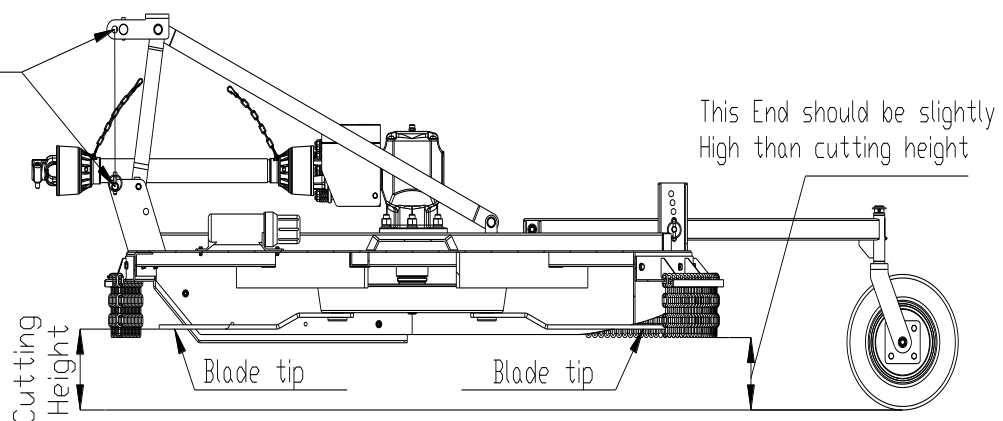


Figure 14: Cutting Height

Center 3-Point Link Adjustment

1. Lower cutter deck to the nominal cutting height.

Note: Customer may adjust center 3-point link to his or her preference. Lengthening center 3-point link allows more movement while going over raised surfaces. Shortening the link allows more movement while crossing over ditches. Also, shortening center link allows the cutter to be carried higher while traveling. Never length center link to where the cutter is carried too low.

2. Typically the center 3-point link is adjusted so that the upper 3-point clevis pin is straight above the lower 3-point hitch pins. This arrangement allows for optimum ground contour following performances.
3. Adjustment on center 3-point link can be made depending on customer's preference.

Tailwheel Height Adjustment

Refer to Figure 9:

The deck slope should be adjusted so that the cutting blades are slightly lower than at the front of the cutter than at the back. If they are not, the tailwheel must be adjusted up or down until the deck slope is correct.

1. Make sure instructions for setting the "Cutting Height Adjustment" have been followed before continuing with adjusting tailwheel height below.
2. Use tractor's 3-point hydraulic control to lift tailwheel off the ground.
3. Remove wheel height adjusting pin (#5), safety lock pin \varnothing 8x45 (#6) .
4. Adjustment tailwheel as follows:
To lower blade height at the rear, raise tailwheel.
To raise blade height at the rear, lower tailwheel.
5. With tailwheel adjusted to the correct position, reinstall wheel height adjusting pin (#5), safety lock pin \varnothing 8x45 (#6) .
6. Recheck deck cutting height. Refer to instructions for adjusting the "Cutting Height Adjustment" .

Section 4: Maintenance and Lubrication

Maintenance

Proper servicing and adjustment are the key to the long life of any farm implement. With careful and systematic inspection, you can avoid costly maintenance, time and repair.

Check all bolts after using the unit for several hours to be sure they are tight. Replace any worn, damaged, or illegible safety labels by obtaining new labels from your dealer.



WARNING

To avoid serious injury or death:

1. Do not alter implement or replace parts on the implement with other brands. Other brands may not fit properly or meet OEM (Original Equipment Manufacturer) specifications. They can weaken the integrity and impair the safety, function, performance, and life of the implement. Replace parts only with genuine OEM parts.
2. Buildup of debris around moving components and gearboxes is a fire hazard. Keep rotating parts and gearboxes free from debris to avoid serious injury and property damage.
3. Improper oil level can cause bearing failure and be a fire hazard. Maintain proper gearbox oil level to avoid serious injury and property damage.

Slip-Clutch Protected Driveline



WARNING

To avoid serious injury or death:

Always follow "Tractor Shutdown Procedure" provided in this manual before dismounting the tractor.

Cutter drive components are protected from shock loads by a two plate friction clutch.

Clutch Run-In

The clutch must be capable of slippage during operation to protect gearbox, driveline, and other drive train parts. Friction clutches should be "run-in" prior to initial operation and after long periods of inactivity. To prevent driveline and gearbox damage, repeat clutch "run-in" at the beginning of each season and when moisture and/or condensation seizes the inner friction plates.

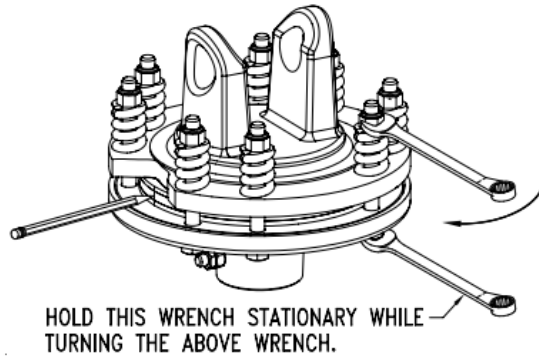


Figure 15:Clutch Run-In

1. Using a pencil or other marker scribe a line across the exposed edges of the clutch plates and friction disks.
2. Carefully loosen each of the 8 spring retainer nuts by exactly 2 revolutions. It will be necessary to hold the hex end of the retainer bolt in order to count the exact number of revolutions.
3. Start the tractor and engage the driveline drive for 2-3 seconds to permit slippage of the clutch surfaces. Disengage the driveline, then re-engage a second time for 2-3 seconds. Disengage driveline, shut off tractor, and remove key. Wait for all components to stop before dismounting from tractor.
4. Inspect the clutch and ensure that the scribed markings made on the clutch plates have changed position. Slippage has not occurred if any tow marks on the friction disk and plate are still aligned. A clutch that has not slipped must be disassembled to separate the friction disk plates. See "Clutch Disassembly" to disassemble clutch.
5. Tighten each of the 8 spring retainer nuts on the clutch housing exactly 2 revolutions to restore the clutch to the original setting pressure.
6. The clutch should be checked during the first hour of operation and periodically each week. An additional set of scribe marks can be added to check for slippage. See "Clutch Assembly" to adjust for proper spring length.

For safety reasons, each maintenance operation must be performed with tractor PTO disengaged, rotary cutter lowered completely to ground and tractor engine shut off with ignition key removed.

1. After using the rotary cutter for several hours, check all bolts to be sure they are tight and check drive belt tension.
2. Replace any worn, damaged or illegible safety decals by obtaining new decals from dealer.

Knife Replacement

IMPORTANT : Make sure that the knife is the same length as the others on the rotary cutter. This will keep the rotor rotation balanced.

1. Remove bolt and nut.
2. Remove old knife.
3. Install new knife and existing bolt.
4. Secure with nut.

Storage

At the end of the working season or when the rotary cutter will not be used for a long period, it is good practice to clean off any dirt or grease that may have accumulated on the rotary cutter and any of moving parts.

1. Clean as necessary.
2. Check knives for wear and replace if necessary.
3. Inspect rotary cutter for loose, damaged or worn parts and adjust or replace as needed.
4. Store unit inside if possible for longer life.
5. Repaint parts where paint is worn or scratched to prevent rust.
6. Replace all damaged or missing decals.

Lubrication

Driveline Shaft U-Joints



Type of Lubrication: Multi-purpose Grease

Roller Bearing (Both Ends)



Type of Lubrication: Multi-purpose Grease

Cutter Rotor Bearing (Both Ends)



Type of Lubrication: Multi-purpose Grease

Gearbox



Type of Lubrication: SAE 90W Gear Lube

Check oil level in gearbox by removing the plug located on the right-hand side. Oil should be level with bottom of plug hole. Add oil if necessary, by removing top fill plug and side plug. Add oil until it flows from side plug hole.

Do not overfill!

IMPORTANT: Rotary cutter should be level when checking oil in gearbox!

Driveline Profiles



Type of Lubrication: Multi-purpose Grease

Section 5: Specifications & Capacities

Model	TMG-TRC65	TMG-TRC75
Working Width	58" / 1473	68" / 1727
Overall With	65.5" / 1663.7	77.4" / 1966
Overall Length	100" / 2540	115" / 2921
Cutting Height	1.2"-12"	1.2"-12"
Net Weight	810lb / 370kg	935lb / 425kg
Cutting Capacity	2" Diameter	2" Diameter

Section 6: Troubleshooting

Problem	Cause	Solution
Oil seal leaking	Gearbox overfilled	Drain to side plug hole
	Seals damaged	Replace seals
	Grass or wire wrapped on shaft in seal area	Check seal areas daily
Driveline yoke or cross failing	Shock load	Avoid hitting solid objects
	Needs lubrication	Lubricate every 8 hours
Driveline clutch is slipping	Scalping the ground	Raise cutting height
	Cutting too fast	Reduce travel speed
	Power take-off being engaged too fast at high engine rpm	Slowly engage power take-off at low engine rpm
	Cutting over solid objects	Avoid solid objects
	Clutch spring not set correctly	Check dimension for spring setting on clutch
	Contacting frame	Reduce lift height in transport position
	Contacting drawbar	Reposition drawbar

Bent Driveline (NOTE: driveline should be repaired or replaced if bent)	Bottoming out	Shorten driveline
Driveline telescoping tube failing	Needs lubrication	Lubricate every 20 hours
	Shock load	Avoid hitting solid objects
Driveline telescoping tube wearing	Needs lubrication	Lubricate every 20 hours
Blades wearing excessively	Cutting on sandy ground	Raise cutting height
	Contacting ground frequently	Raise cutting height
Blade breaking	Hitting solid objects	Avoid hitting solid objects
Blades coming loose	Blade not tighten property	Tighten blade hardware (refer to "Cutting Blade Maintenance" .
	Not using new locknut when replacing blades	Use new locknuts.
Blade carrier become loose	Running loose in the past	Replace gearbox output shaft and blade carrier
	Blade carrier hardware not tight enough	Tighten to specified torque
Blade bolt holes worn	Blade hardware running loose	Replace blades, blade bolts, and locknut if worn
Blade carrier bent	Hitting solid objects	Avoid hitting solid objects and replace blade carrier
Excessive side skid wear	Cutting height not level	Adjust cutter height
	Soil abrasive	Adjust cutter height
	Cutting too low	Adjust cutter height
Tail wheel support failing	Lowering too fast	Adjust rate of drop
	Hitting objects when turning	Reduce speed on turns
Excessive vibration	Driveline bent	Replace driveline
	Blades loose	Tighten blade bolts
	Blade carrier bent	Replace blade carrier
	Blade broken	Replace blade
	Blade will not swing	Remove and inspect blade
	Blades have unequal weight	Replace both blades
	Dishpan bent	Replace dishpan

Section 7: Appendix

Warranty

TMG warrants to the original purchaser that this product will be free from defects in material and workmanship beginning on the date of purchase by the end user according to the following schedule when used as intended and under normal service and conditions for personal use.

Overall Unit and Driveline: One-year.

Blades and Belts: Considered wear items.

This warranty is limited to the replacement of any defective part by manufacturer and the installation by the dealer of any such replacement part, and does not cover common wear items such as blades, belts, tines, etc. TMG reserves the right to inspect any equipment or parts which are claimed to have been defective in material or workmanship.

This warranty does not apply to any part or product which in TMG's judgment shall have been misused or damaged by accident or lack of normal maintenance or care, or which has been repaired or altered in a way which adversely affects its performance or reliability, or which has been used for a purpose for which the product not designed. Misuse also specifically includes failure to properly maintain oil levels, grease points, and driveline shafts.

Claims under this warranty must be made to the dealer which originally sold the product and all warranty adjustments must be made through such dealer. TMG reserves the right to make changes in materials or design of the product at any time without notices.

This warranty shall not be interpreted to render TMG liable for damages of any kind, direct, consequential, or contingent to property. Furthermore, TMG shall not be liable for damages resulting from any cause beyond its reasonable control. This warranty does not extend to loss of crops, any expense or loss for labor, supplies, rental machinery or for any other reason.

No other warranty of any kind whatsoever, express or implied, is made with respect to this sale; and all implied warranties of merchantability and fitness for a particular purpose which exceed the obligations set forth in this written warranty are hereby disclaimed and excluded from this sale.

Bolt Torque

The tables shown below give correct torque values for various bolts and cap screws. Tighten all bolts to the torques specified unless otherwise noted. Check tightness of bolts periodically, using bolt torque chart as a guide. Replace hardware with the same strength bolt.

ENGLISH TORQUE SPECIFICATIONS

Bolt Diameter	Bolt Torque					
	SAE 2		SAE 5		SAE 8	
	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	60	155	115	200	165
5/8"	128	95	215	160	305	220
3/4"	225	165	390	290	540	400
7/8"	230	170	570	420	880	650

METRIC TORQUE SPECIFICATIONS

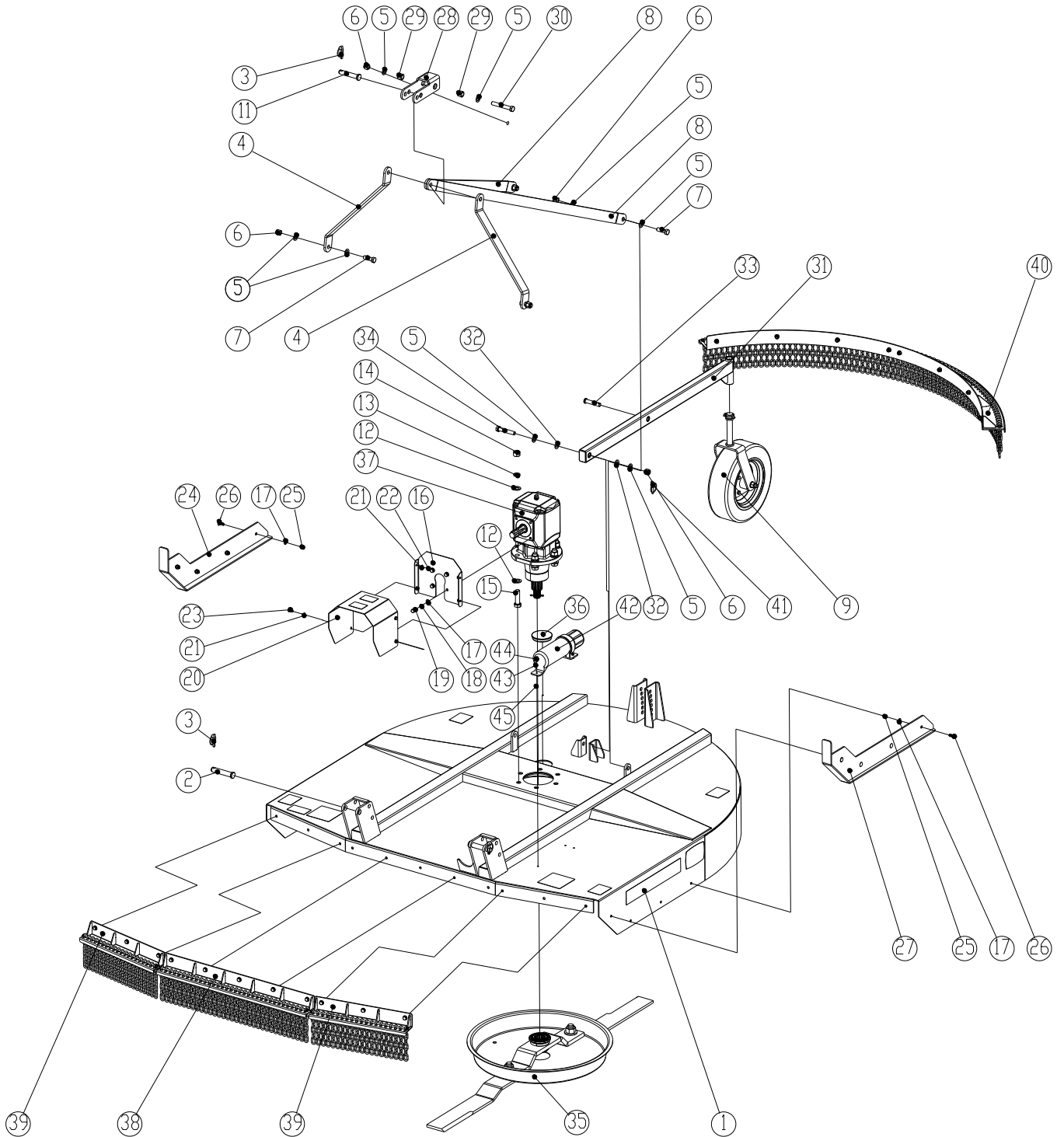
Bolt Diameter	Bolt Torque			
	8.8		10.9	
	N.m	lb-ft	N.m	lb-ft
M3	0.5	0.4	1.8	1.3
M4	3	2.2	4.5	3.3
M5	6	4	9	7
M6	10	7	15	11
M8	25	18	35	26
M10	50	37	70	52
M12	90	66	125	92
M14	140	103	200	148
M16	225	166	310	229
M20	435	321	610	450
M24	750	553	1050	744

M30	1495	1103	2100	1550
M36	2600	1917	3675	2710

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

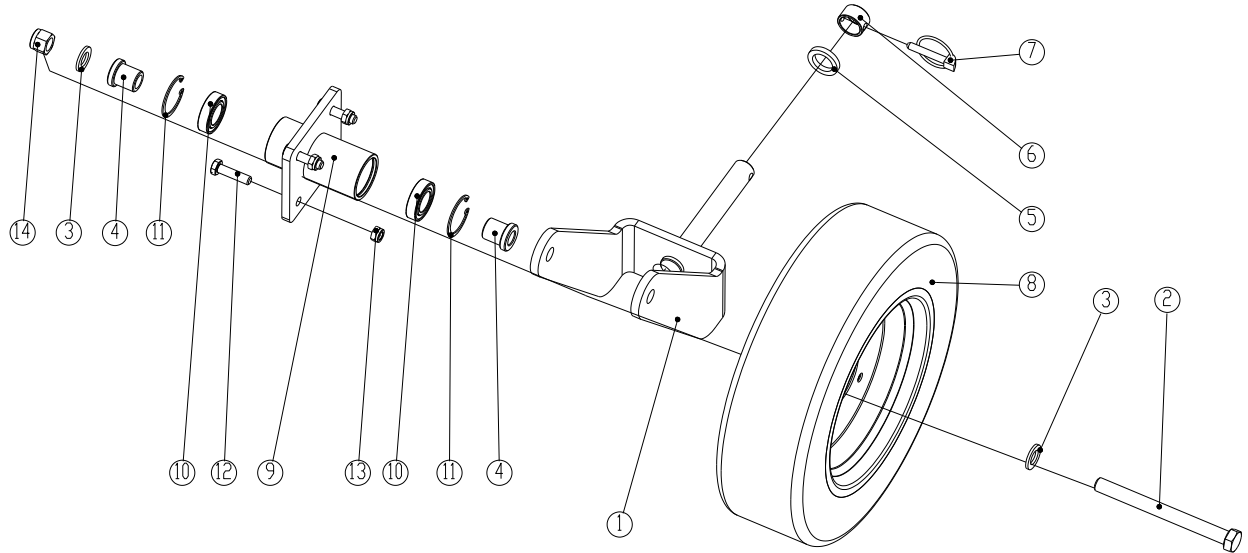
Part Breakdown List

TMG-TRC65/TMG-TRC75 Part Breakdown



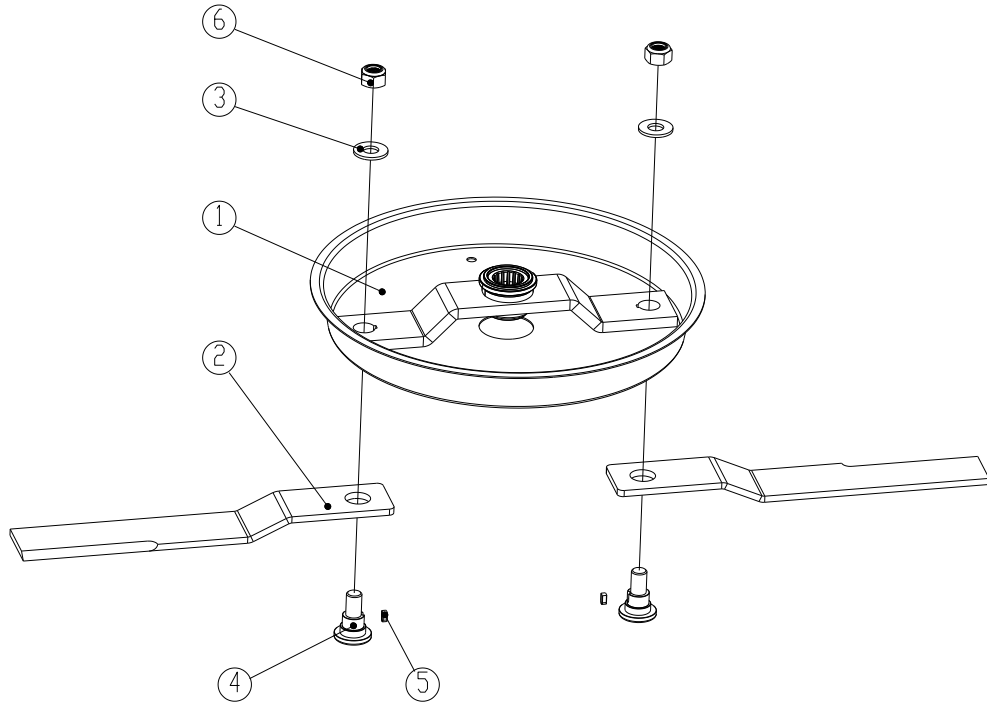
PART NO.	REF. NO.	PART DESCRIPTION	QTY.	REMARK
1	4030100295	Cutter Deck	1	TRC65
	4030100296		1	TRC75
2	4020000165	Hitch pin - Lower	2	
3	4300100004	Safety lock pin φ 11x50	3	
4	4010000159	Front brace	2	
5	7040100008	Plain washer 16x30x3	12	
6	7030500020	Locknut M16	6	
7	7010100034	Bolt M16x50	4	
8	4010000162	Rear brace	2	TRC65
	4010000161		2	TRC75
9	BC180.00.00.000-1	Wheel tire assembly	1	
10	4300400002	Pressure lubricator M8x1	1	
11	4020000017	Hitch pin - Upper	1	
12	7040100009	Plain washer 20x37x3	12	
13	7040400009	Spring washer 20	6	
14	7030100009	Hex. Nut M20	6	
15	7010100042	Bolt M20x70	6	
16	4010000183	PTO guard mount	1	
17	7040100005	Plain washer 10x20x2	12	
18	7040400005	Spring washer 10	4	
19	7010100012	Bolt M10x20	4	
20	4010000165	PTO guard	1	
21	7040100004	Plain washer 8x16x1.6	8	
22	7030500016	Locknut M8	4	
23	7010100006	Bolt M8x20	4	
24	4030100301	Skid weldment - R	1	TRC65
	4030100307		1	TRC75
25	7030500017	Locknut M10	8	
26	7010400004	RHSNB M10x25 GR10.9	8	
27	4030100302	Skid weldment - L	1	TRC65
	4030100308		1	TRC75
28	4010000144	Pivoting upper hitch - black	1	
29	4020000193	Spacer	2	
30	7010200010	Bolt M16x110	1	
31	4030100298	Wheel frame weldment	1	
32	7040500003	Nylon washer 16x30x3	2	
33	4020000167	Wheel height adjusting pin	1	
34	7010200018	Bolt M16x90	1	
35	BC150.00.00.000-1	Blade mount assembly	1	TRC65
	BC180.00.00.000-2		1	TRC75
36	4100200027	Access rubber cover φ 91.3	1	
37	4040100017	Gearbox 75HP	1	
38	BC180.00.00.000-3	Front chain guard assy - Mid	1	
39	BC150.00.00.000-2	Front chain guard assy - Sid	2	TRC65
	BC180.00.00.000-4		2	TRC75
40	BC150.00.00.000-3	Rear chain guard assy	1	TRC65
	BC180.00.00.000-5		1	TRC75
41	4300100003	Safety lock pin φ 8x45	1	
42	4100200001	Manual holder	1	
43	7040100003	Plain washer 6x12x1.6	3	
44	7010100001	Bolt M6x20	3	
45	7030500015	Locknut M6	3	

TMG-TRC65/TMG-TRC75 Wheel Tire Assembly Breakdown



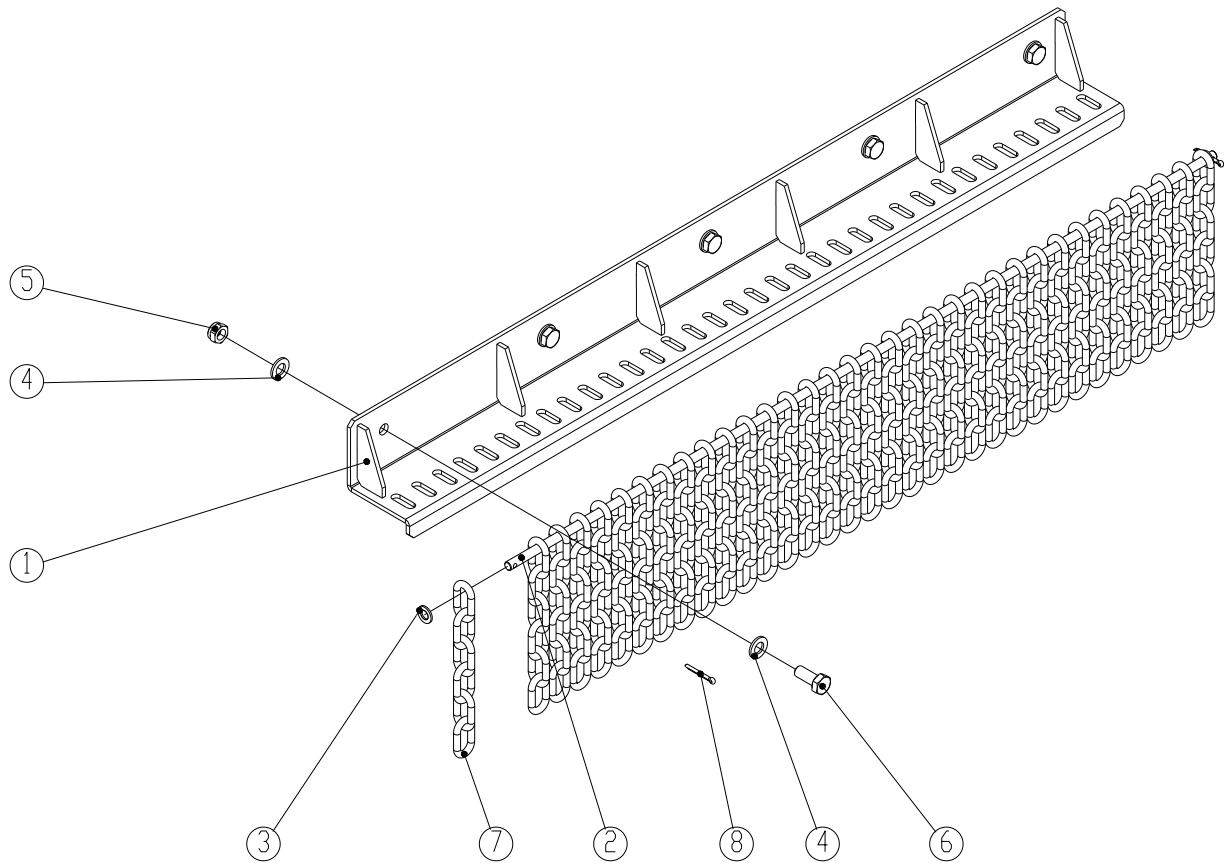
PART NO.	REF. NO.	PART DESCRIPTION	QTY.	REMARK
1A	4030100297	Tailwheel yoke	1	
2A	7010200031	Bolt M16x170	1	
3A	7040100008	Plain washer 16x30x3	2	
4A	4020000166	Bushing	2	
5A	4020000081	Spacer H=6	1	
6A	4020000086	Cap shaft mount	1	
7A	4300100003	Safety lock pin \varnothing 8x45	1	
8A	4100700003	Rubber tire 4.50-8	1	
9A	4030100309	Tail wheel hub	1	
10A	7060100006	Deep groove ball bearing 6005-2RZ	2	
11A	7090200011	Circlip for hole \varnothing 47	2	
12A	7010100028	Bolt M10x40	4	
13A	7030500017	Locknut M10	4	
14A	7030500020	Locknut M16	1	

TMG-TRC65/TMG-TRC75 Blade Mount Assembly Breakdown



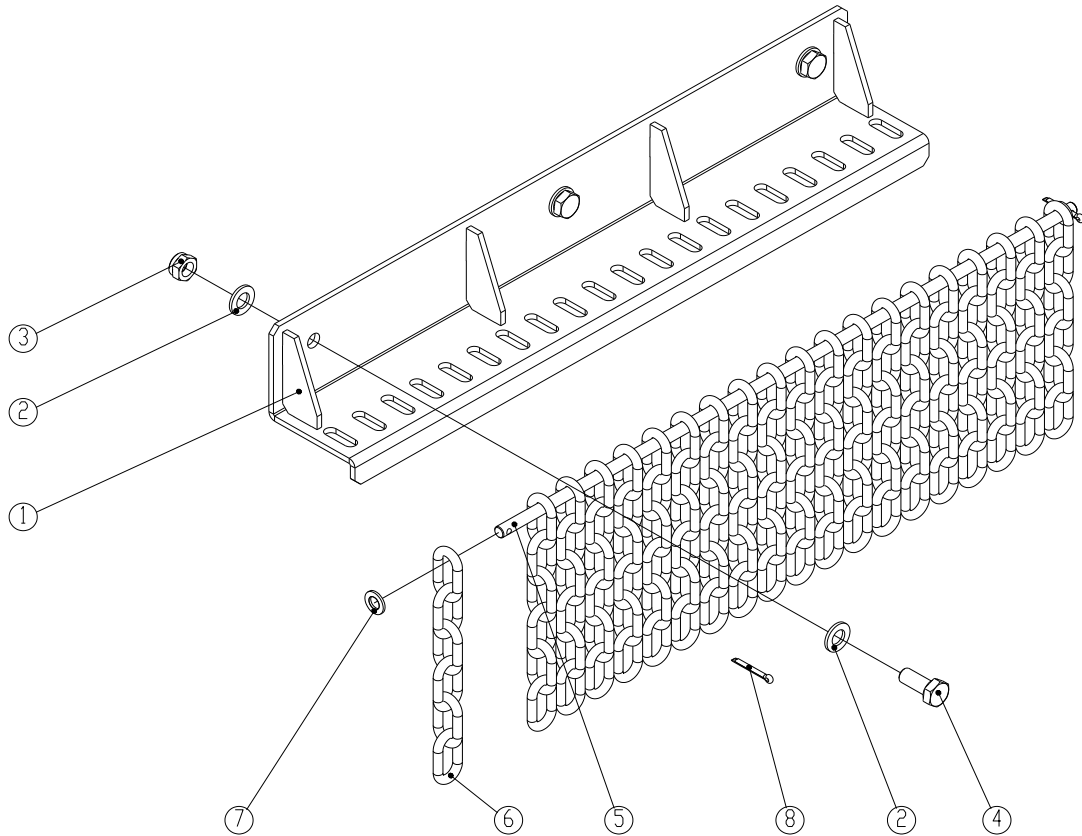
PART NO.	REF. NO.	PART DESCRIPTION	QTY.	REMARK
1B	4030100303	Jumper weldment	1	
2B	4290200014	Cutter blade	2	TRC65
	4290200013		2	TRC75
3B	4010000163	Blade plain washer	2	
4B	4020000171	Blade bolt	2	
5B	BC180.00.00.017	Flat key 10x8x19	2	
6B	7030500021	Locknut M27	2	

TMG-TRC65/TMG-TRC75 Front chain guard assy – Mid Part List



PART NO.	REF. NO.	PART DESCRIPTION	QTY.	REMARK
1C	4030100299	Front chain guard bracket-Mid	1	
2C	BC180.00.00.002	Front chain guard mount rod-Mid	1	
3C	7040100004	Plain washer 8x16x1.6	2	
4C	7040100005	Plain washer 10x20x2	10	
5C	7030500017	Locknut M10	5	
6C	7010100013	Bolt M10x25	5	
7C	4270100009	Chain guard - 6 hoops	34	
8C	7100100001	Cotter pin 3x25	2	

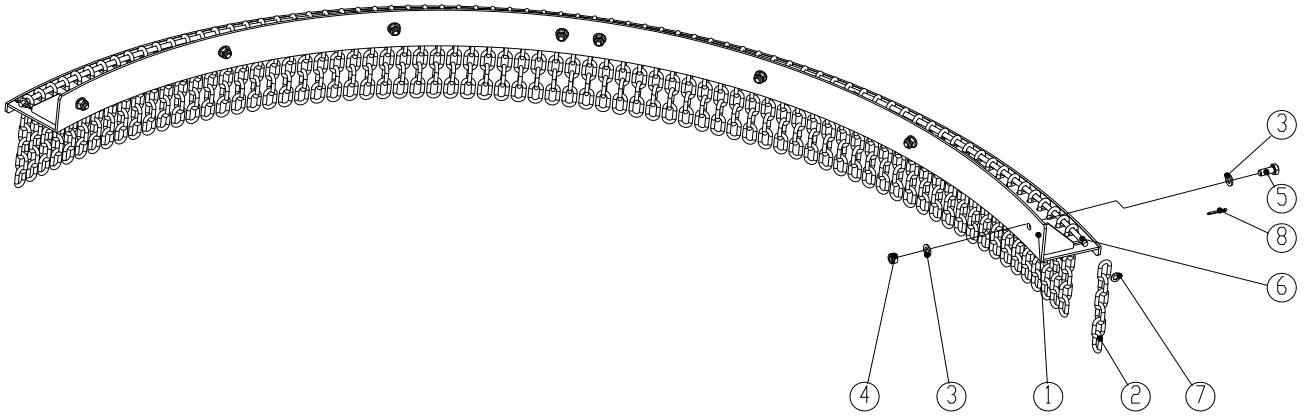
TMG-TRC65/TMG-TRC75 Front chain guard assy – Sid Part List



PART NO.	REF. NO.	PART DESCRIPTION	QTY.	REMARK
1D	4030100300	Front chain guard bracket - Sid	1	TRC65
	4030100305		1	TRC75
2D	7040100005	Plain washer 10x20x2	6	
3D	7030500017	Locknut M10	3	
4D	7010100013	Bolt M10x25	3	
5D	BC180.00.00.003	Front chain guard mount rod - Sid	1	TRC65
	BC150.00.00.001		1	TRC75
6D	4270100009	Chain guard – 6 hoops	20	TRC65
			14	TRC75
7D	7040100004	Plain washer 8x16x1.6	2	
8D	7100100001	Cotter pin 3x25	2	

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TMG-TRC65/TMG-TRC75 Rear chain guard assy Part List



PART NO.	REF. NO.	PART DESCRIPTION	QTY.	REMARK
1E	4030100304	Rear chain guard bracket	1	TRC65
	4030100306		1	TRC75
2E	4270100009	Chain guard – 6 hoops	74	TRC65
			68	TRC75
3E	7040100005	Plain washer 10x20x2	16	
4E	7030500017	Locknut M10	8	
5E	7010100013	Bolt M10x25	8	
6E	BC180.00.00.004	Rear Chain guard mount rod	1	TRC65
	BC150.00.00.002		1	TRC75
7E	7040100004	Plain washer 8x16x1.6	2	
8E	7100100001	Cotter pin 3x25	2	