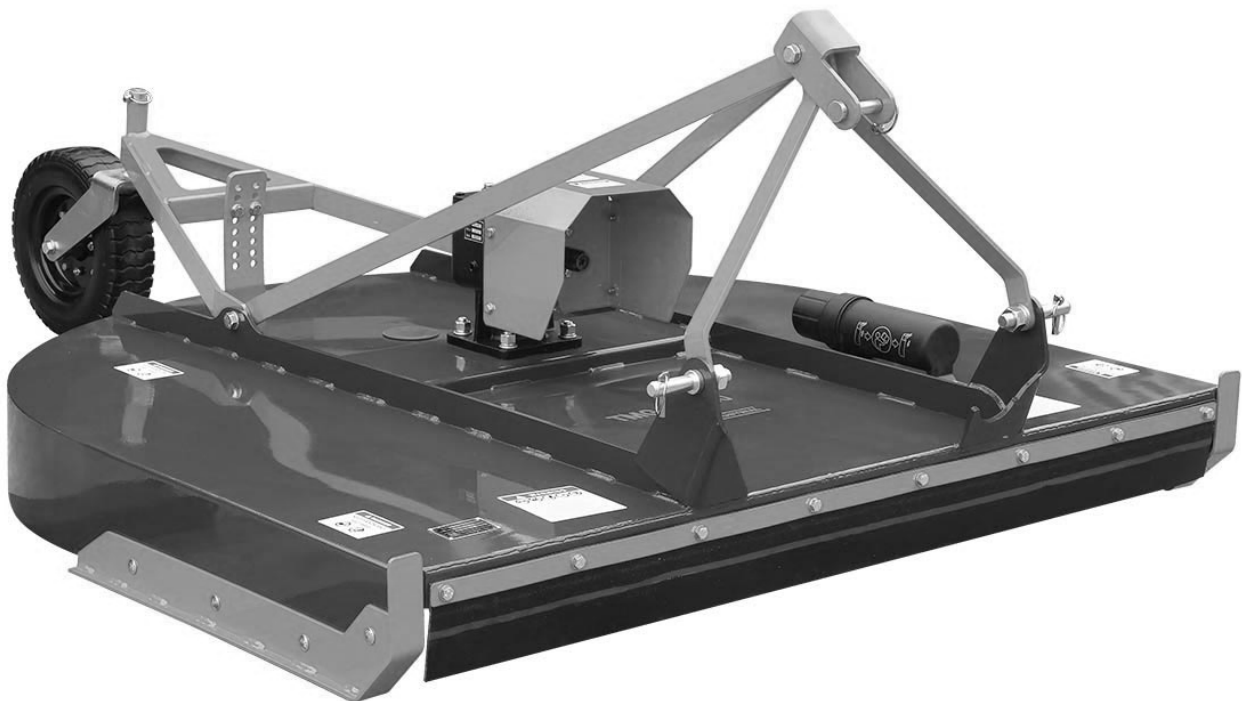


3-POINT HITCH ROTARY CUTTER



⚠ 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 you 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.

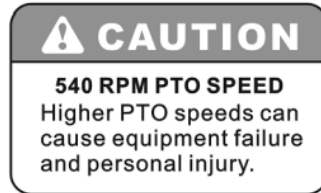
Safety Labels

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 40 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 20 to 60 hp (min 40 PTO hp for max. capacity)

Power Take-off Maximum 540 rpm

Spline Shaft Requirement 1 3/8" – 6 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.

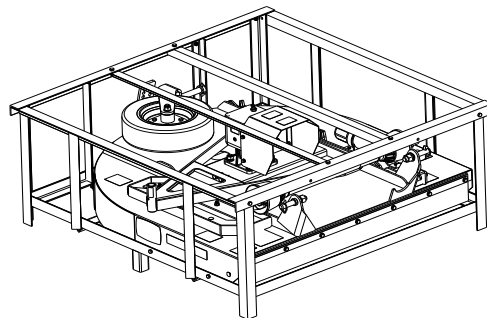


FIGURE 1: Your New Standard Rotary Cutter as It Is Shipped to You

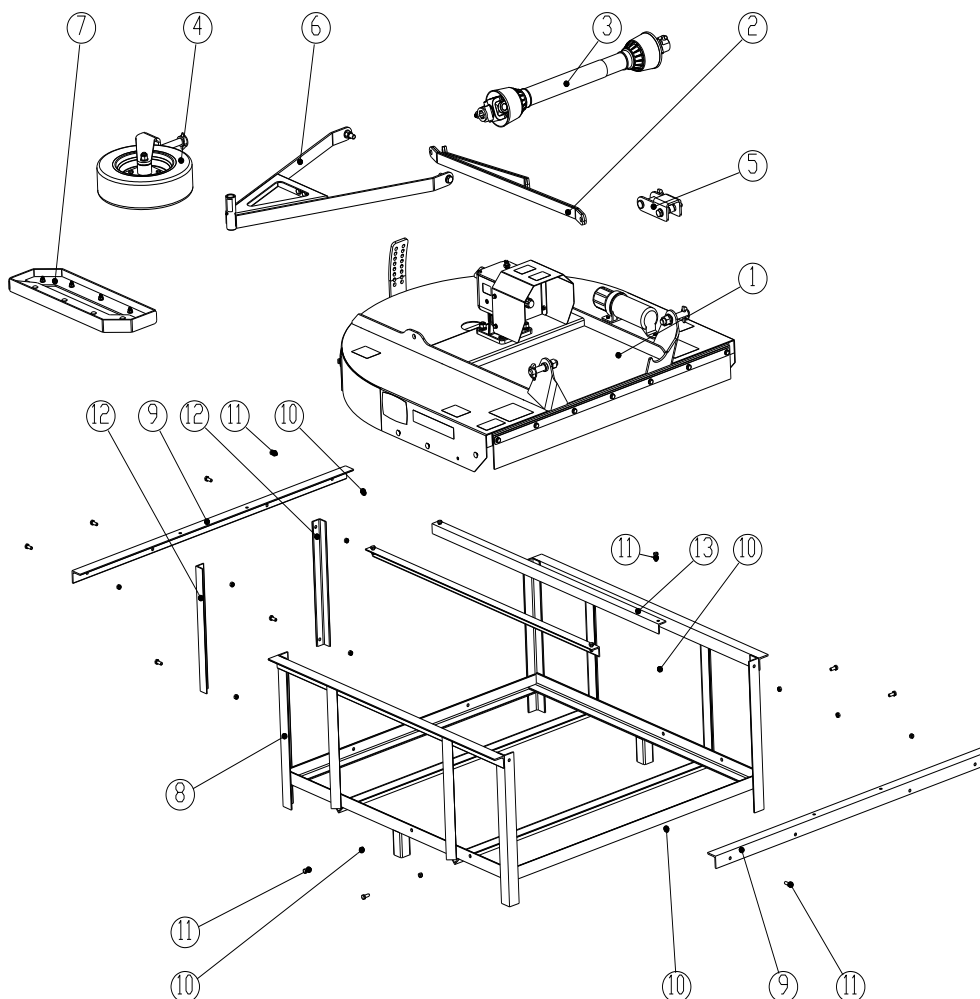


FIGURE 2: The Standard Rotary cutter and Accessory in Package

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	Front and rear braces	1	Bubble film
3	Driveline shaft with clutch	1	Bubble film
4	Wheel tire assembly and fittings	1	Bubble film
5	Pivoting upper hitch-black and	1	Bubble film
6	Tailwheel adjusting bracket and	1	Bubble film
7	R&L Skid weldment and fittings	1	Bubble film
8	Iron crate	1	None
9	Removable angle steel	2	Crate attachment
10	Locknut M10	16	Crate attachment
11	Bolt M10x25	16	Crate attachment
12	Removable angle steel support	2	Crate attachment
13	Top bracing	2	Crate attachment

The detailed description of front and rear braces

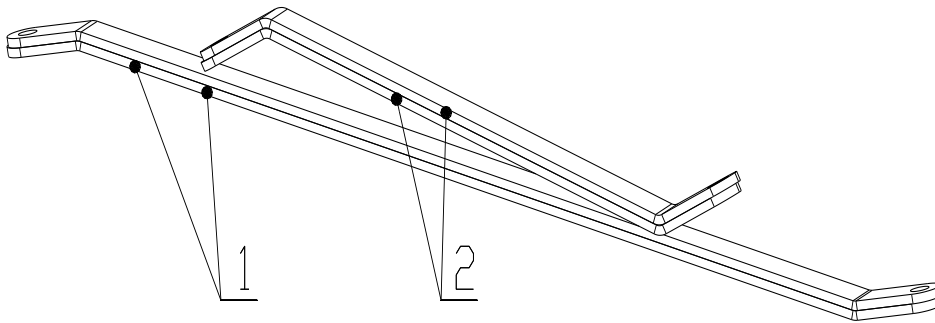


FIGURE 3: Front and Rear Braces

Item	Description	Qty.
1	Rear brace	2
2	Front brace	2

The detailed description of wheel tire assembly and fittings

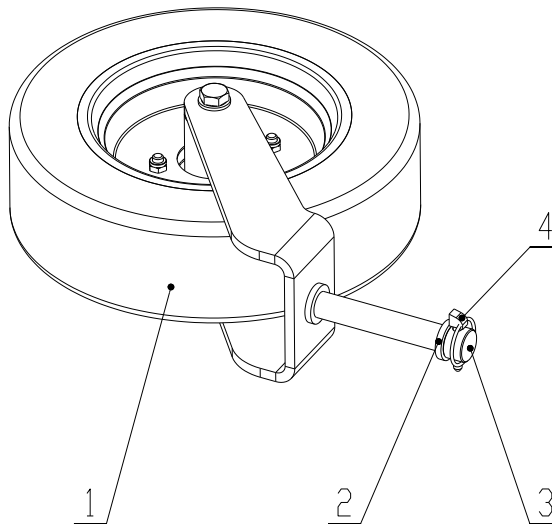


FIGURE 4: Wheel Tire Assembly and Fittings

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

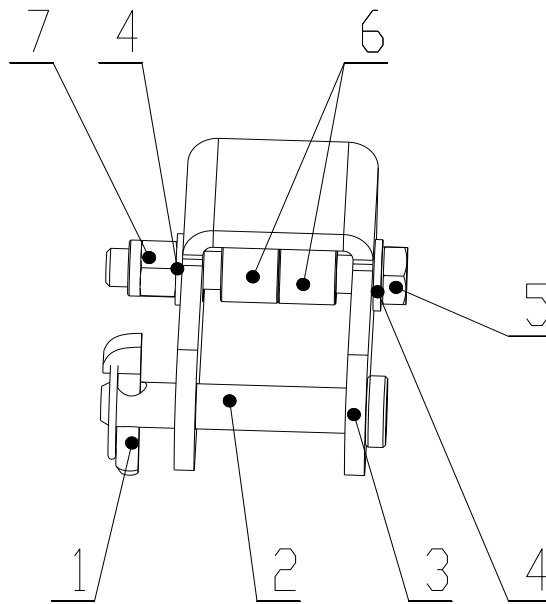


FIGURE 5: Pivoting Upper Hitch-Black and Fittings

Item	Description	Qty.
1	Safety lock pin $\varnothing 11 \times 50$	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 tailwheel adjusting bracket and fittings

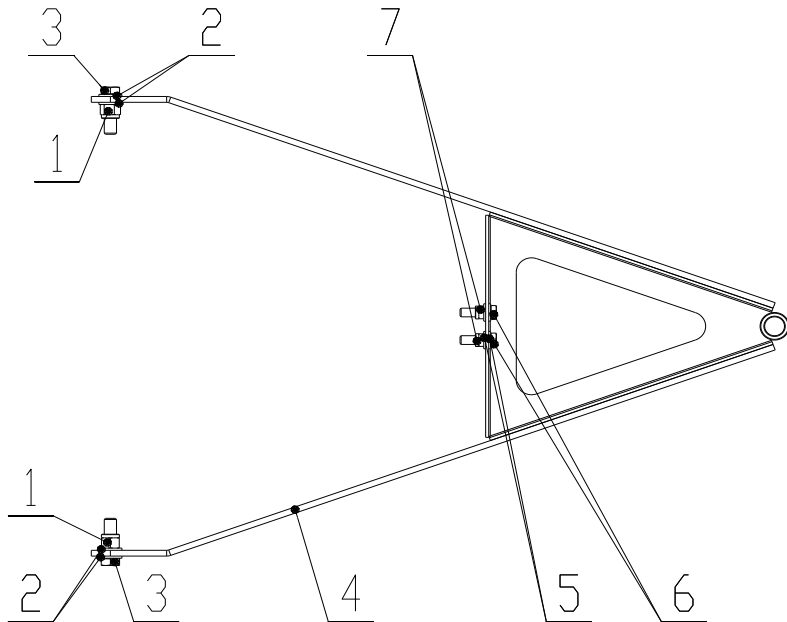


FIGURE 6: Tailwheel Adjusting Bracket and Fittings

Item	Description	Qty.
1	Locknut M16	2
2	Plain washer 16	4
3	Bolt M16x55	2
4	Gauge wheel mainframe weldment	1
5	Plain washer 12	4
6	Bolt M12x40	2
7	Locknut M12	2

The detailed description of R&L skid weldment and fittings

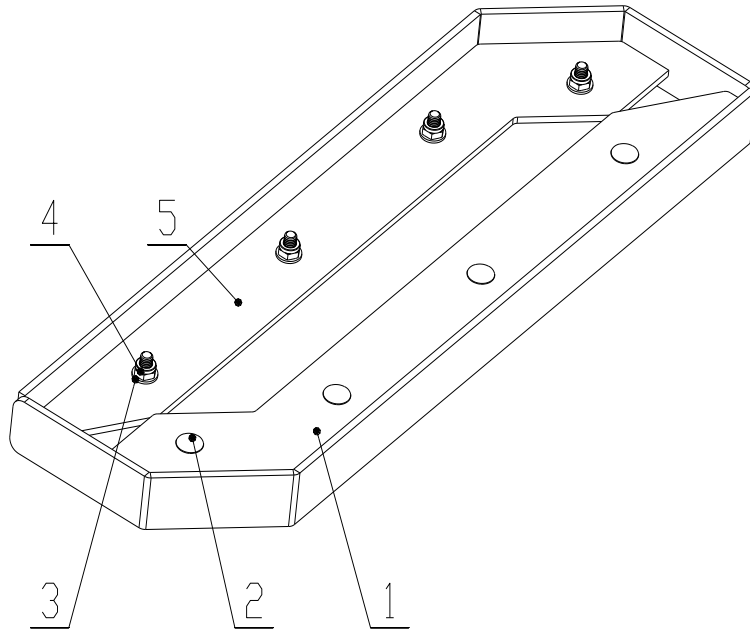


FIGURE 7: R&L skid weldment and fittings

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

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 13mm,16mm,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 7, item 17 completely. Tighten item10 but make sure item6 & item13 can rotate freely.

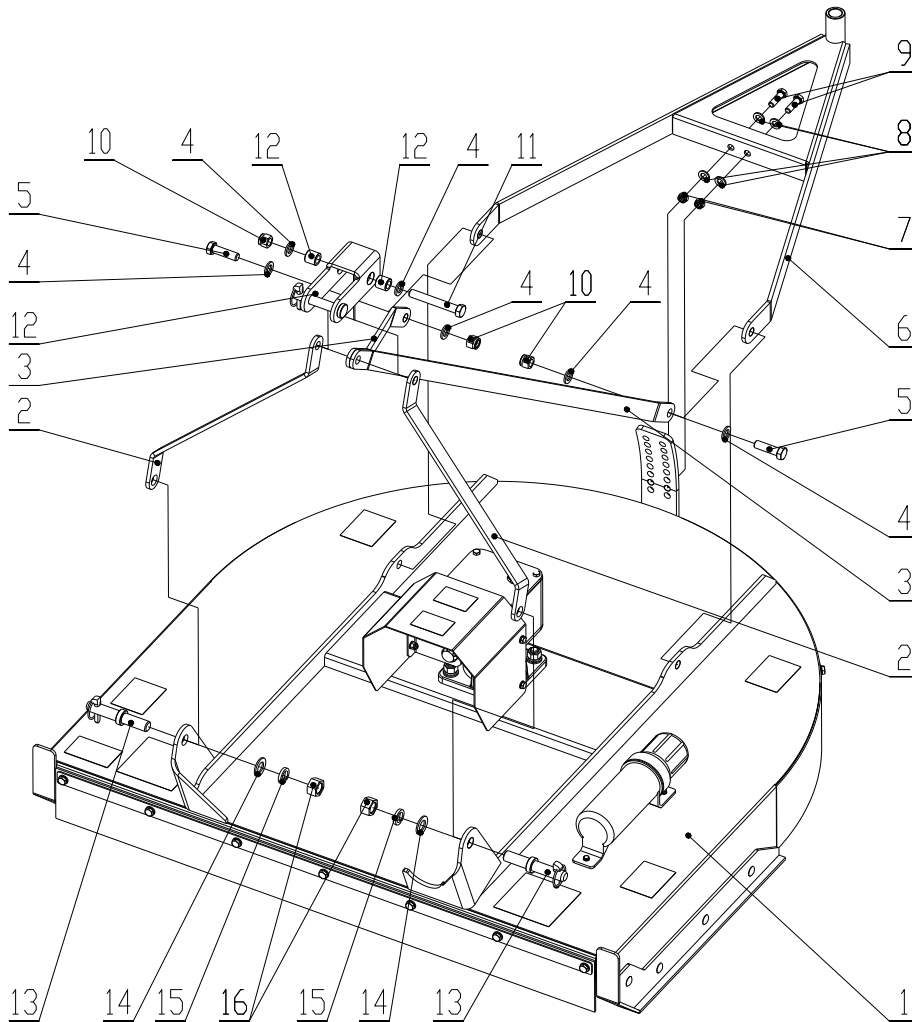


FIGURE 8: Installing Braces, Pivoting Upper Hitch-Black, Tailwheel Adjusting Bracket and Fittings

- | | |
|--|--|
| Item1 – Main body of the rotary cutter | Item2 – Front brace (2pcs) |
| Item3 – Rear brace (2pcs) | Item4 – Plain washer16 (6pcs) |
| Item5 – Bolt M16x55 (2pcs) | Item6 – Gauge wheel mainframe weldment (1 set) |
| Item7 – Locknut M12 (2pcs) | Item8 – Plain washer 12 (4pcs) |
| Item9 – Bolt M12x40 (2pcs) | Item10 – Locknut M16 (3pcs) |
| Item11 – Bolt M16x110 (1pcs) | Item12 – Spacer (2pcs) |
| Item13 – Pivoting upper hitch-black (1pcs) | Item14 – Hitch pin lower (2pcs) |
| Item15 – Plain washer 22 (2pcs) | Item16 – Spring washer 22 (2pcs) |
| Item17 – Hex. Nut M16 (2pcs) | |

Step2: 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 with safety lock pin.

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

Tighten locknuts completely.

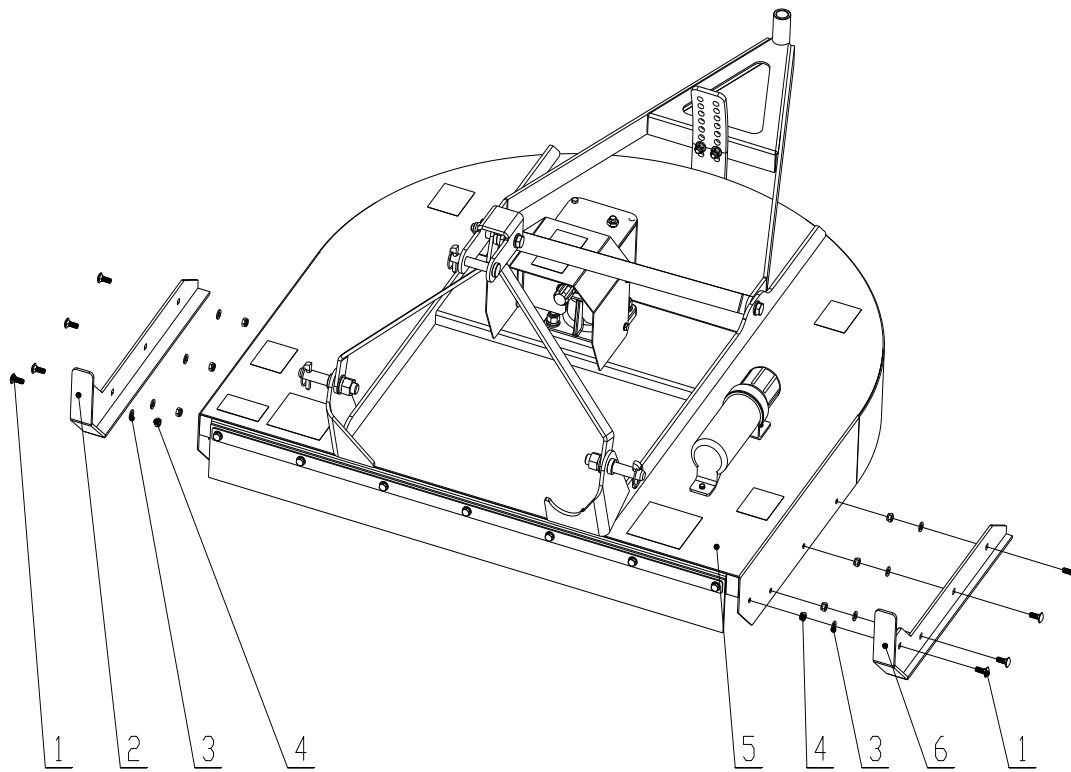


FIGURE 9: Installing R&L Skid Weldment and Fittings

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)

Step3: Installing wheel tire assembly and fittings

Remove the packaging of wheel tire assembly and fittings.

Remove item4, item5 and one piece of item3 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.

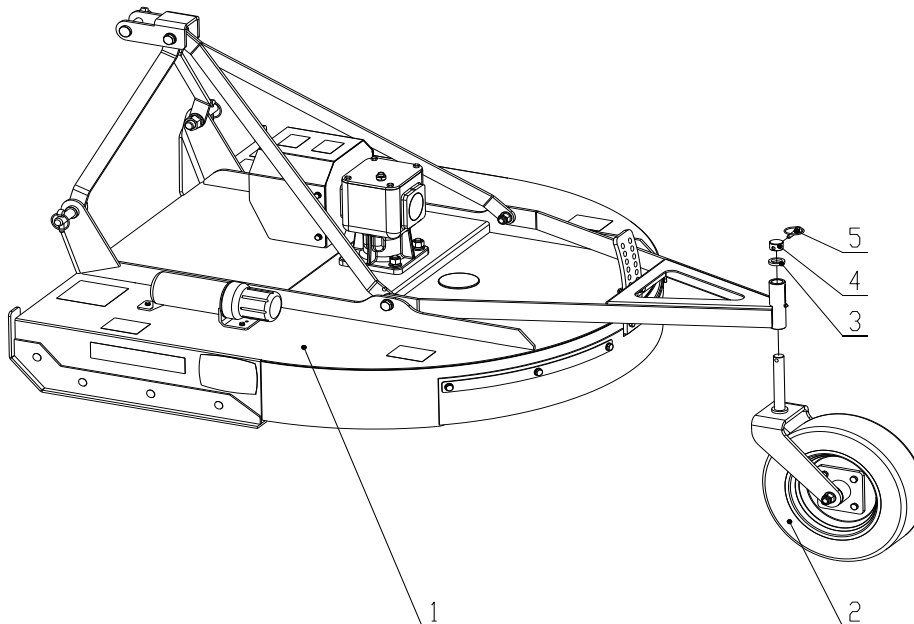


FIGURE 10: Installing Wheel Tire Assembly and Fittings

Item1 –Main body of the rotary cutter

Item2 – Wheel tire assembly – (1 set)

Item3 – Spacer H=6 (1pcs)

Item4 – Cap shaft mount (1pcs)

Item5 –Safety lock pin $\phi 8 \times 45$ (1 pcs)



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.

Step4: 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.

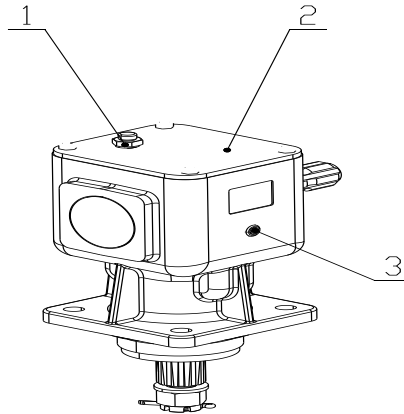


FIGURE 11: Gearbox construction

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.

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

Leveling the Rotary cutter

NOTE: Tractor and rotary cutter should be on level ground.

Leveling can be adjusted at the tractor's 3-point arms and center link.

Cutting Height Adjustment

The machines cutting height depends upon the position of the rear roller.

1. Remove the bolts that fix the roller on both sides.
2. Lift or lower both sides of roller in equal measurements.
3. Replace bolts and re-tighten.

3-Point Hitch Adjustments

The 3-point hitch system on this rotary cutter has been designed for front to back flotation when mowing on uneven terrain. Adjust tractor's top center link to place the upper hitch pin vertically above or slightly behind the lower hitch pins. The rotary cutter should be run with the back 15 degrees lower than the front.

The hitch can also be adjusted from side to side by turning the adjustment handle. Turn handle until you have achieved your desired location.



CAUTION

Engage parking brake, shut off tractor, remove key and disengage PTO before making any height adjustments!

Belt Tension



CAUTION

Belt drive system under spring tension; use care to avoid bodily harm!

The Belt tension should be checked after the first 20 hours of use. And then every 40 hours of use.

1. Tension on the belt can be adjusted with the belt tension bolt. Turn the bolt until desired tension is achieved. When the belt has the correct tension the gearbox should be adjusted so that the gearbox extension is running straight (parallel) with the Rotary Cutter. Loosen bolts at the bottom of the gearbox and move gearbox until gearbox extension is running straight.
2. Excessive tension on the belt may lead to premature failure of belt and drive components.



CAUTION

Excessive tension on the belt may lead to premature failure of belt and drive components. Excessive tension on the belt may also lead to a safety hazard to the operator or bystanders.

Section 4: Maintenance and Lubrication

Maintenance

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



CAUTION

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

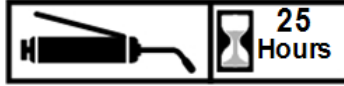
Driveline Shaft U-Joints

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-TRC48	TMG-TRC60
Working Width	48" / 1219	60" / 1524
Overall With	53" / 1347	65" / 1652
Overall Length	79.2" / 2012.5	91.2" / 2317.5
Cutting Height	1.5"-11"	1.5"-11"
Net Weight	440lb / 200kg	518lb / 235kg
Cutting Capacity	1" Diameter	1" 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
Bent Driveline (NOTE: driveline should be repaired or replaced if bent)	Contacting frame	Reduce lift height in transport position
	Contacting drawbar	Reposition drawbar
	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

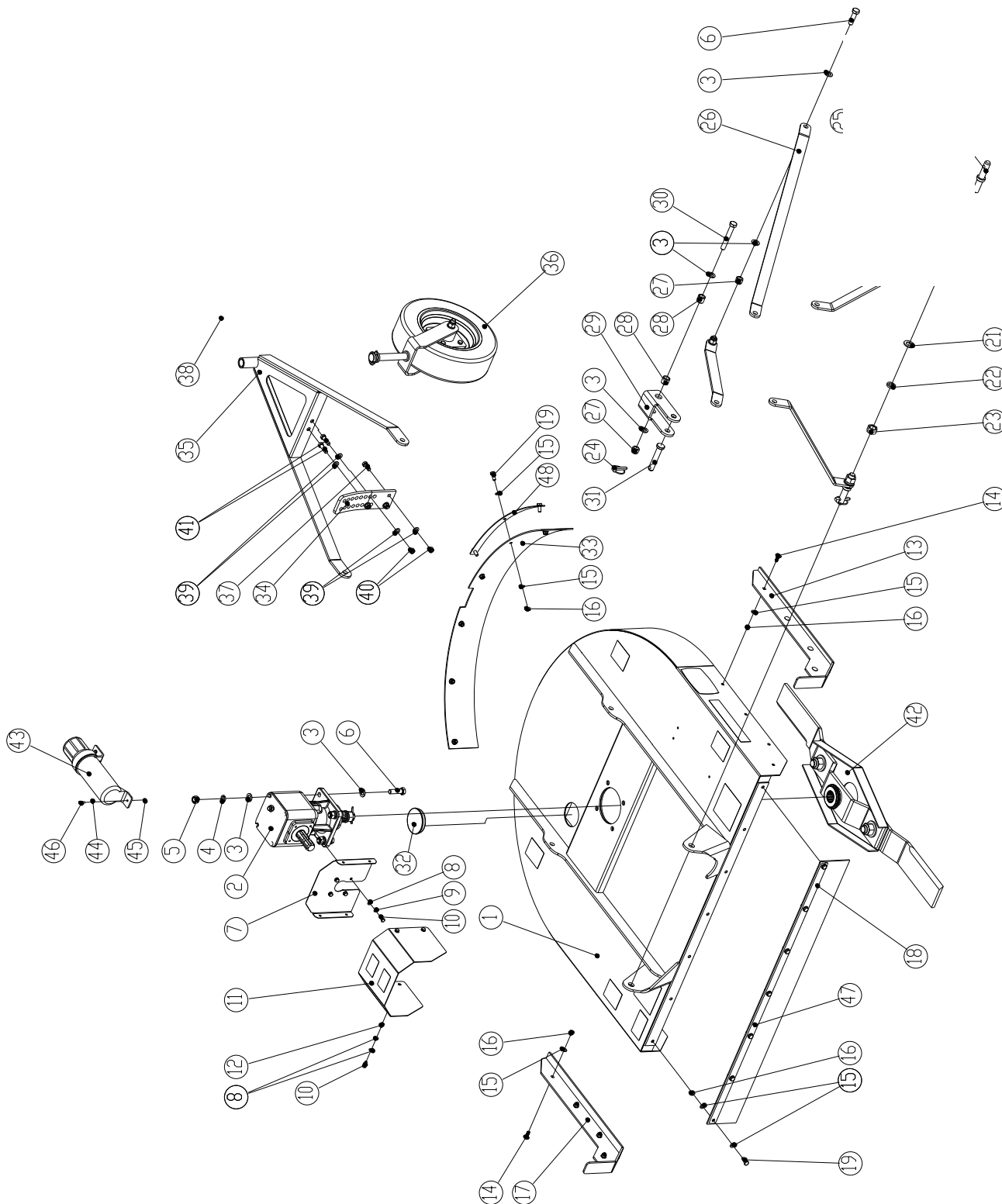
METRIC TORQUE SPECIFICATIONS

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

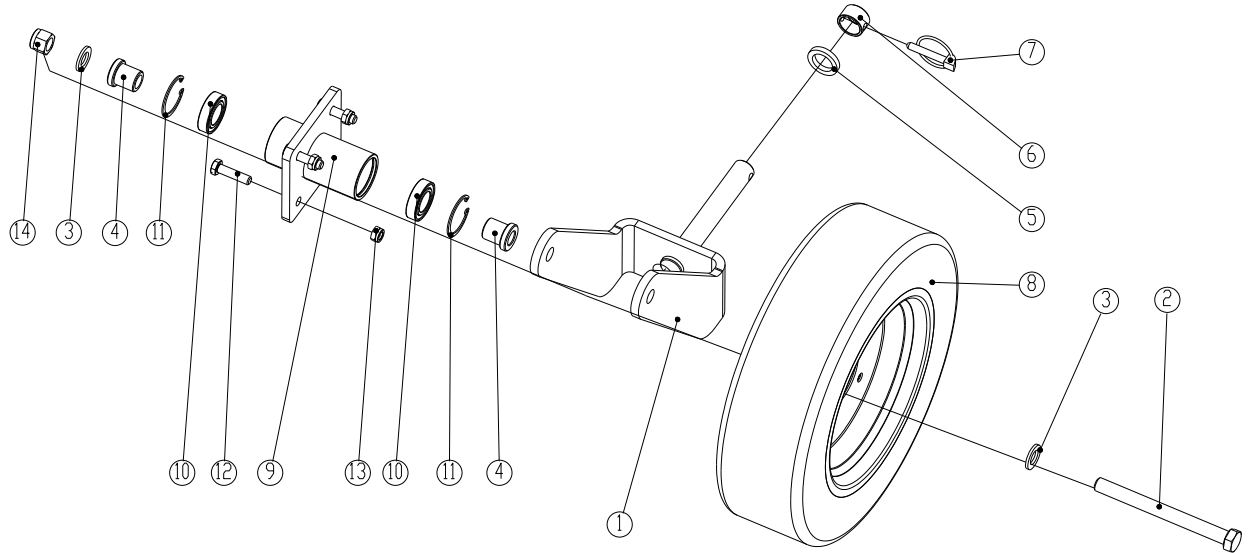
TMG-TRC48/TMG-TRC60 Part Breakdown



PART NO.	REF. NO.	PART DESCRIPTION	QTY.	REMARK
1	4030100344	Cutter Deck	1	TMG-TRC48
	4030100345		1	TMG-TRC60
2	4040100018	Gearbox 40HP	1	
3	7040100008	Plain washer 16x30x3	14	
4	7040400008	Spring washer	4	
5	7030100008	Hex. Nut M16	4	
6	7010100037	Bolt M16x55	6	

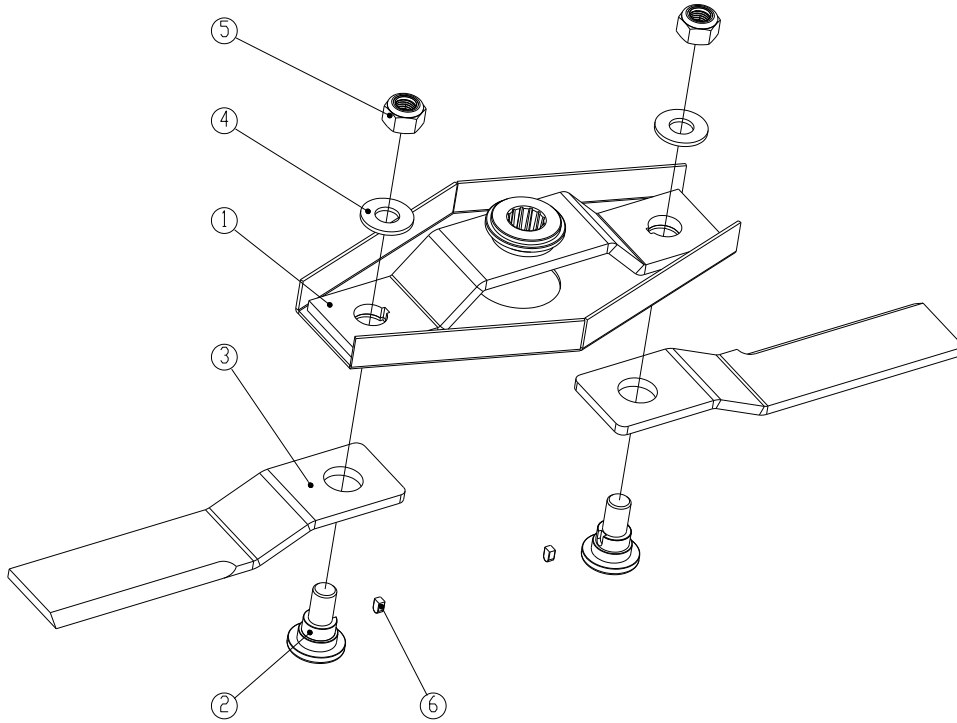
7	4010000183	PTO guard mount	1	
8	7040100004	Plain washer 8x16x1.6	12	
9	7040400004	Spring washer 8	4	
10	7010100006	Bolt M8x20	8	
11	4010000165	PTO guard	1	
12	7030500016	Locknut M8	4	
13	4030100347	Skid weldment - R	1	TMG-TRC48
	4030100351		1	TMG-TRC60
14	7010400004	RHSNB M10x25 GR10.9	8	
15	7040100005	Plain washer 10x20x2	34	TMG-TRC48
			36	TMG-TRC60
16	7030500017	Locknut M10	21	TMG-TRC48
			22	TMG-TRC60
17	4030100346	Skid weldment - L	1	TMG-TRC48
	4030100350		1	TMG-TRC60
18	BCL120.00.00.001	Front rubber guard	1	TMG-TRC48
	BCL150.00.00.001		1	TMG-TRC60
19	7010100013	Bolt M10x25	13	TMG-TRC48
			14	TMG-TRC60
20	4020000001	Hitch pin - Lower	2	
21	7040200010	Plain washer 22x39x3	2	
22	7040400010	Spring washer 22	2	
23	7030100010	Hex. Nut M22	2	
24	4300100004	Safety lock pin φ 11x50	3	
25	4010000184	Front brace	2	
26	4010000185	Rear brace	2	TMG-TRC48
	4010000188		2	TMG-TRC60
27	7030500020	Locknut M16	3	
28	4020000193	Spacer	2	
29	4010000144	Pivoting upper hitch - black	1	
30	7010200010	Bolt M16x110	1	
31	4020000017	Hitch pin - Upper	1	
32	4100200027	Access rubber cover φ 91.3	1	
33	BCL120.00.00.008	Rear rubber guard	1	TMG-TRC48
	BCL150.00.00.002		1	TMG-TRC60
34	4010000187	Tailwheel adjusting bracket	1	
35	4030100349	Gauge wheel mainframe weldment	1	
36	BC180.00.00.001-1	Wheel tire assembly	1	
37	7010100004	Bolt M12x30	2	
38	4300400002	Pressure lubricator M8x1	1	
39	7040100006	Plain washer 12x24x2.5	6	
40	7030500018	Locknut M12	2	
41	7010100008	Bolt M12x40	2	
42	BCL120.00.00.000-1	Blade mount assembly	1	TMG-TRC48
	BCL150.00.00.000-1		1	TMG-TRC60
43	4100200001	Manual holder	1	
44	7040100003	Plain washer 6x12x1.6	3	
45	7030500015	Locknut M6	3	
46	7010100001	Bolt M6x20	3	
47	4010000197	Front rubber mounting plate	1	TMG-TRC48
	4010000199		1	TMG-TRC60
48	4010000198	Rear rubber mounting plate	2	TMG-TRC48
	4010000200		2	TMG-TRC60

TMG-TRC48/TMG-TRC60 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-TRC48/TMG-TRC60 Blade Mount Assembly Breakdown



PART NO.	REF. NO.	PART DESCRIPTION	QTY.	REMARK
1B	4030100348	Blade mount weldment	1	TMG-TRC48
1B	4030100352		1	TMG-TRC60
2B	4020000194	Blade bolt	2	
3B	4290200015	Cutter blade	2	TMG-TRC48
	4290200013		2	TMG-TRC60
4B	4010000163	Blade plain washer	2	
5B	7030500021	Locknut M27	2	
6B	BCL120.00.00.007	Flat key 10x8x16.5	2	