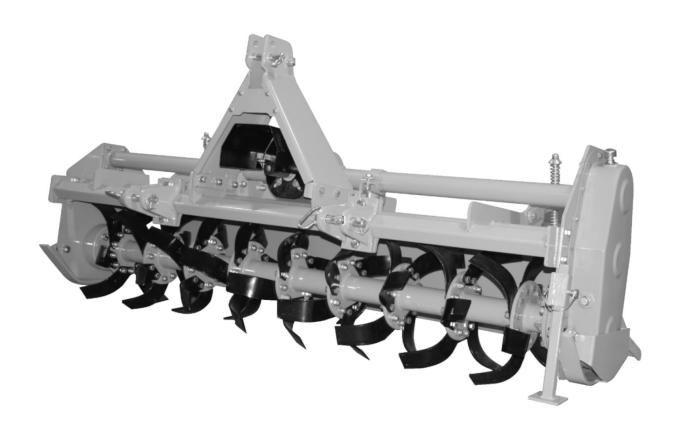


# Rotary Tiller CRT & MRT



# **Operator's Manual**



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#### **CONGRATULATIONS!**

You have invested in one of the best implements of its type in the market today.

The care you give your "CHEROKEE" implement will greatly determine your satisfaction with its performance and its service life. A careful study of this manual will give you a thorough understanding of your new implement before operating.

If your manual is lost or destroyed, "CHEROKEE" will be glad to provide you a newcopy. Visit your nearest dealership to get a copy. Most of our manuals can also be downloaded from our website at www.Cherokee.com.

As an authorized "CHEROKEE" dealer, we stock genuine "CHEROKEE" parts which are manufactured with the same precision and skill as our original equipment. Our trained service persons are well informed on methods required to service "CHEROKEE" equipment and are ready to help you.

Should you require additional information or assistance, please contact us,

YOUR AUTHORIZED CHEROKEE DEALER.

BECAUSE "CHEROKEE" MAINTAINS AN ONGOING PROGRAMME OF PRODUCT IMPROVEMENT, WE RESERVE THE RIGHT TO MAKEIM-PROVEMENTS IN DESIGN OR CHANGE IN SPECIFICATION WITHOUT INCURRING ANY OBLIGATION TO INSTALL THEM ON UNITS PREVIOUSLY SOLD. BECAUSE OF THE POSSIBILITY THATSOME PHOTOGRAPHS IN THIS MANUAL WERE TAKEN OF PROTOTYPE MODELS, PRODUCTION MODELS MAY VARY IN SOME DETAIL. IN ADDITION, SOME PHOTOGRAPHS MAY SHOW SHIELDS REMOVED FOR THE PURPOSE OF CLARITY. NEVER OPERATE THIS IMPLEMENT WITHOUTALL SHIELDS IN PLACE.



#### To The Purchaser

Read this manual carefully before operating your "CHEROKEE" Medium Series Rotary Tiller. This manual contains valuable information about your new "CHEROKEE" Medium Series Rotary Tiller. Keep this manual in a convenient place for easy, quick reference. It has been carefully prepared to give you helpful suggestions for operating, adjusting, servicing, and ordering of replacement parts. Require all operators to read this manual carefully and become acquainted with all the adjustment and operating procedures before attempting to operate. Replacement manuals can be obtained from your selling dealer.

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

Record you implement model and serial number in the space provided below. This information is vital for your dealer to provide you with prompt, efficient service.

**Customer Information** 

# Name \_\_\_\_\_\_ Purchased From \_\_\_\_\_\_ Date of Purchase \_\_\_\_\_\_ Model No. \_\_\_\_\_\_ Serial No. \_\_\_\_\_\_



#### Purchaser / Operator's Responsibility

- 1. Read and understand the information contained in this manual.
- 2. Operate, lubricate, assemble and maintain the equipment in accordance with all instructions and safety procedures in this manual.
- 3. Inspect the equipment and replace or repair any parts that are damaged or worn out which under continued operation would cause damage, wear to other parts, or cause a safety hazard.
- 4. Return the equipment or parts to the authorized "CHEROKEE" dealer, from where it was purchased, for service or replacement of defective parts that are covered by warranty. (The "CHEROKEE" Factory may inspect equipment or parts before warranty claims are honored.)
- 5. All costs incurred by the dealer for traveling to or transporting the equipment for warranty inspection and claims will be borne by the customer.



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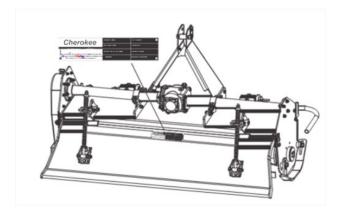
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#### 1. Introduction

#### 1.1. Tiller Identification

Each tiller has a plate for unique identification. Any request for assistance or information regarding the machine must be directed to the Manufacturer or Dealer always referring to the model and serial number as shown on the Serial Number Plate affixed to the machine.



#### 1.2. Intended Use

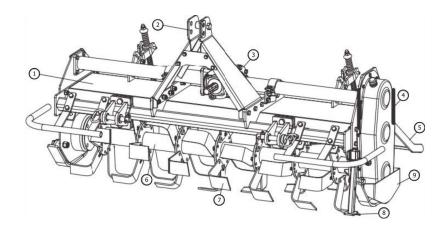
The CRT/MRT Series Rotary Tillers are designed to be used uniquely for horticultural, agricultural or commercial applications, to till soil for seedbed and planting preparation. They are designed to be mounted on tractors equipped with a hydraulic lift and universal three point hitch that can support the implement weight and driven by the power of the tractor through the PTO drive shaft.



#### DANGER

Any use of the machine other than the intended use is to be considered as unauthorized and dangerous. The manufacturer assumes no liability for damage resulting from non-intended use.

#### 1.3. Main Parts Description



- 1. Frame Assembly, 2. 3-Point linkage, 3. Gear box, 4. Side gear drive, 5. Plank board,
- 6. Rotor assembly, 7. Blade, 8. RT Parking stand, 9. Depth skid



#### 2. Safety



Careful operation is your best insurance against an accident. All operators, no matter how much experience they may have, should carefully read this manual and other related manuals before operating the tractor and this implement. It is the owner's obligation to instruct all operators in safe operation.

#### 2.1. General Safety Instruction

- Do not operate the equipment while under the influence of drugs or alcohol as they impair the ability to safely and properly operate the equipment.
- The operator should be familiar with all functions of the tractor and attached implement, and be able to handle emergencies quickly.
- Make sure all guards and shields are in place and secured before operating implement.
- Keep all bystanders away from equipment and work area.
- Start tractor from the driver's seat with hydraulic controls in neutral.
- Operate tractor and controls from the driver's seat only.
- Never dismount from a moving tractor or leave tractor unattended with engine running.
- Do not allow anyone to stand between tractor and implement while backing up to implement.
- Keep hands, feet, and clothing away from power-driven parts.
- While transporting and operating equipment, watch out for objects overhead and along side such as fences, trees, buildings, wires, etc.
- Do not turn tractor so tight as to cause hitched implement to ride up on the tractor's rear wheel.
- Store implement in an area where children normally do not play.

#### 2.2. Equipment Safety Guidelines



Failure to follow all safety instructions could result in serious injury or death! Safety of the operator and bystanders is one of the main concerns in designing and developing a tiller. However, every year accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment. You, the operator, can avoid many accidents by observing the following precautions and insist those working with you, or for you, follow them.

- Read safety instructions for both the tractor and this tiller before use.
- Never exceed the advised limits of the tractor or the tiller.
- This equipment is dangerous to children and those unfamiliar with its operation
- Use the tiller for its intended purpose only. Improper use can damage the tiller and cause serious injury to persons, animals, or death.
- Any unauthorized modification of the machine may cause problems in safety and relieves the manufacturer from any liability for damages or injuries that may result to operators, third parties and objects.
- Before using the machine, familiarize yourself with its controls and its working capacity.
- Do not leave the tiller unattended with tractor engine running. Shut off the power whenever going near the machine for repairing or lubrication purpose.
- Do not use the machine if the category of the connecting pins of the tiller does not match that of the tractor hitch system.



#### 2.3. Operating Safety Instructions

#### $\Lambda$

#### Failure to follow all safety instructions could result in serious injury or death!

- Never engage the tractor PTO in the presence of people close to the PTO Shaft. The body, hair or clothing of a person can get caught in rotating parts, causing serious injury or death.
- Before engaging the PTO and during all operations, make sure that no person or animal is in immediate area of action of the machine. Never use the tiller if people are in the working area.
- Before using the machine, be sure to have cleared the operating area from obstacles
- Before making changes in direction, turns or going in reverse, slightly lift the tiller from the ground after disengaging the power take-off, to avoid damage to the machine.
- The operator must operate tiller lifting/lowering only from the driving seat of the tractor. Do not perform lifting maneuvers on side or behind the tractor.
- Never leave the driver's seat when the tractor is turned on. Before leaving the tractor, lower the tiller to the ground, disengage the PTO, insert the parking brake, stop engine and remove the key from the control panel.
- Keep all Shields / Guards in place and in good condition to avoid risk of entanglement with serious injury or death. Replace all damaged/broken shields immediately.
- Prolonged use of the tiller can cause overheating of the gearbox. Do not touch the gearbox during use and immediately after, it could be extremely hot and cause severe burns.

#### 2.4. Operating Safety Instructions



#### Failure to follow all safety instructions could result in serious injury or death!

- Comply with state and local laws.
- Use towing vehicle and trailer of adequate size and capacity. Secure equipment towed on a trailer with tie downs and chains.
- Sudden braking can cause a towed trailer to swerve and loose control. Reduce speed if towed trailer is not equipped with brakes.
- Avoid contact with any over head utility lines or electrically charged conductors.
- Always drive with load on end of loader arms low to the ground.
- Always drive straight up and down steep inclines with heavy end of a tractor with loader attachment on the "uphill" side.
- Engage park brake when stopped on an incline.
- When driving on roads, the implement must be in transport position adequately raised from the road surface, with tractor lifting hydraulics locked so that the tiller cannot be lowered accidentally.
- The implement may be wider than the tractor. Pay attention during transporting to persons, animals or obstacles exposed.
- Always use tractor lighting system and auxiliary lighting system for an adequate warning to operators of other vehicles, especially when transporting at night or in conditions of reduced visibility.

#### 2.5. Maintenance Safety Instructions

All maintenance and repairing operations must be performed by qualified and trained operators, with the tractor
engine off, the PTO disengaged, the tiller lowered to the ground or on security stands, the ignition key off and the
parking brake set.



- Perform repairs and replacements necessary to the machine using only Genuine "CHEROKEE" replacement parts provided by the manufacturer or your dealer.
- Perform maintenance operations always using appropriate Personal Protective Equipment ("PPE" protective eye glasses, hard hat, hearing protection, safety shoes, overall and work gloves, filter mask).
- Wear protective clothing and equipment appropriate for the job such as safety shoes, safety glasses, hard hat, and ear plugs.

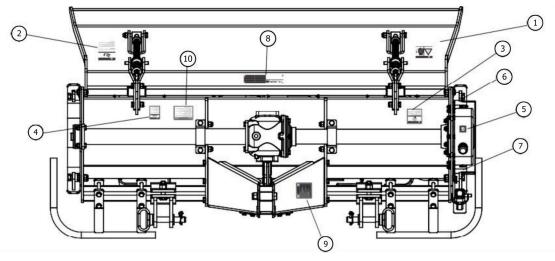
#### 2.6. Storage Safety Instructions

- Never leave the tractor unattended with the tiller in lifted position. Accidental operation of lifting lever or a hydraulic failure may cause sudden drop of unit with injury or death by crushing.
- Following operation, or before unhooking the tiller, stop the tractor, set the brakes, disengage the PTO, lower the attached tiller to the ground, shut off the engine, remove the ignition key and wait for all moving parts to stop.
- Make sure all parked machines are on a hard, level surface and engage all safety devices.
- Place support blocks under tiller as needed to prevent unit from tipping over onto a child and/or an adult. A tiller that tips over can result in injury or death.
- Store the unit in an area away from human activity.

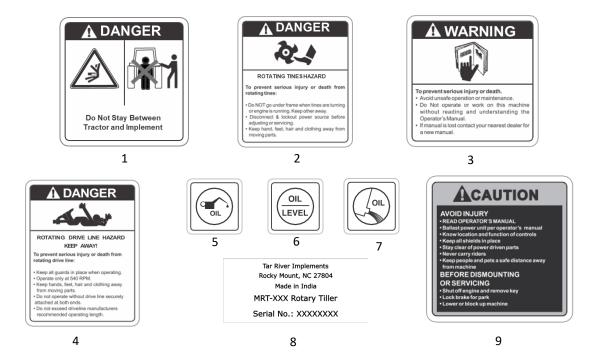
#### 2.7. Safety Labels

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

- Keep all safety labels clean and legible.
- Refer to this section for proper label placement. Replace all damaged or missing labels. Order new labels from your nearest "CHEROKEE" dealer.
- Some new equipment installed during repair requires safety labels to be affixed to the replaced component as specified by "CHEROKEE". When ordering new components make sure the correct safety labels are included in the request.
- Refer to this section for proper label placement. To install new labels:
  - a. Clean surface area where label is to be placed.
  - b. Spray soapy water onto the cleaned area.
  - c. Peel backing from label and press label firmly onto the surface.
  - d. Squeeze out air bubbles with edge of a credit card or with a similar type of straight edge.







#### 3. Assembly and Set Up

The Rotary Tiller is delivered fully assembled and equipped with a driveshaft with torque limiter (clutch discs) and related operating manual.

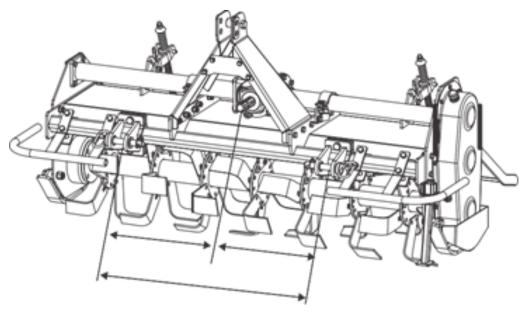
When the machine is delivered, check that there is no damage to the tiller or driveshaft. In case of damage or missing parts immediately notify the manufacturer or your dealer.

#### 3.1. Lower Hitches Positioning

The Medium Series Rotary Tillers are deigned to be mounted on tractors equipped with:

- 3- point hitch category cat-1 (IS:4468)
- Quick hitch category cat-1 (ASBE Standard)

The position of the lower hitches must be equal spaced from main drive shaft of the gearbox.





#### 3.2. Connecting to the tractor

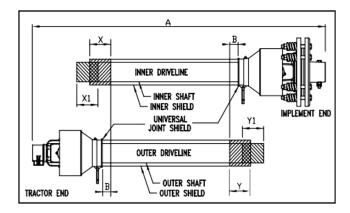
A Never stand between tractor and rotary tiller while backing up tractor to the hitch.

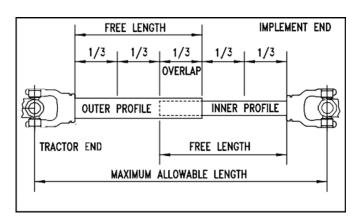
- Place tiller and tractor on level ground.
- Back tractor into position by lining up lift arms and hitch bracket of the tiller linkage pins.
- Attach top link arms to linkage pins and secure with lynch pins.
- Attach top link using upper linkage pin and lynch pin.
- Attach PTO shaft/drive shaft and secure anti-rotation chains.
- Once everything is securely attached, raise tiller off the ground and adjust the top link so the tiller sets level from front to back.
- Determine if the PTO shaft length suits tractor and tiller linkage.
- Make sure PTO shaft is properly installed and level before checking shaft collapsible length.

Important: A PTO shaft that is too long to fit between tractor and tiller will bottom out causing structural damage to the tractor and tiller. Always check PTO shaft collapsible length during initial setup, when connection to a different tractor and when alternating between using a quick hitch and a standard 3-point hitch. More than one PTO shaft may be required to fit all applications.

#### 3.3 Sizing the PTO shaft

- Un-hook shaft from tractor PTO shaft and pull outer and inner shaft apart.
- Reattach outer shaft to tractor PTO shaft. Pull on inner and outer shaft to be sure universal joints are properly secured.
- Hold inner and outer shaft parallel to each other:
  - Measure 1 inch ("B" dimension) back from outer shaft universal joint shield to make a mark at this location on the inner shaft shield.
  - Measure 1 inch ("B" dimension) back from the inner shaft universal joint shield and make a mark at this location on the outer shaft shield.
- Remove shaft from tractor and gearbox shaft.
- Measure from end of inner shield to scribed mark ("X" dimension). Cut off inner shield at the mark. Cut same amount off the inner shaft ("X1" dimension).
- Measure from end of outer shield to scribed mark ("Y" dimension). Cut off outer shield at the mark. Cut same amount off the outer shaft ("Y1" dimension).







The PTO shaft maximum allowable length must, when fully extended, have a minimum overlap of the profile tubes by not less than 1/3 the free length with both inner and outer profile tubes being of equal length.

For minimum PTO shaft length, measure 1 inch ("B" dimension) back from universal joint shield to end of outer PTO shaft shield.

#### 4. Operating

Before operating the tiller, make sure you have read and understood the operating manuals of the tiller, tractor and PTO shaft.



#### **A** Danger

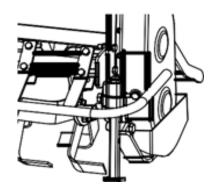
During operation, adjustment, maintenance, repairing or transportation of the machine, the operator must use appropriate Personal Protective Equipment (PPE).

Before starting work, ensure that all machine guards are in good condition and fully functional.

Note: Never attempt to adjust the rotary tiller while the tractor is running. Do not allow the tractor engine or rotary tiller to bog down or stall. This causes undue wear and tear on the tractor. If this continues to happen reduce ground speed and raise tilling depth of rotary tiller. Never attempt to remove objects from the rotor bar until the tractor has been shut down and the tiller tines have completely stopped.

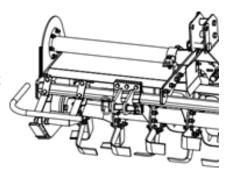
#### 4.1. Raising the parking stand

- Remove the spring locking pin.
- Slide parking stand up on the tiller bracket.
- Fasten with spring locking pin.



#### 4.2 Lower clevis adjustment

It is possible to adjust the lower hitch position by loosening the bolts and sliding the clevis. Tighten the bolts after making any adjustment required.



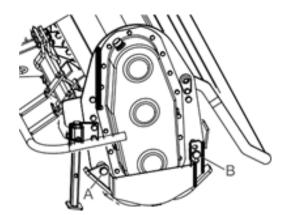


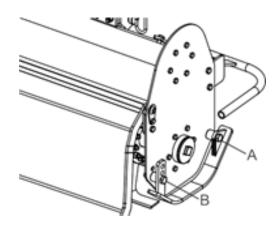
#### 4.3. Skids adjustment

The working depth of the tiller is determined by the position of the side skids. It may be increased by raising the skids, and decreased by lowering them. It's important that both skids are adjusted at the same height.

To adjust the working depth, perform the following steps:

- Lift the machine, put it safely on security stands, then switch the tractor engine off, disengage PTO, set parking brake and remove the ignition key.
- Loosen the bolt A in the front of the skid.
- Loosen the bolt B and remove the bolt on the rear of the skid.
- Adjust the height of the skid through the holes, as desired.
- Tighten bolts.





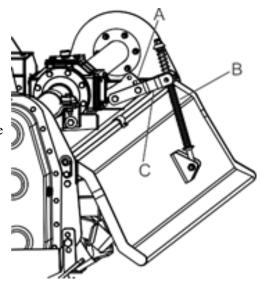
When finished, verify that both skids are at the same level, and check if the front of the tiller is leveled to the back, when lowered to the ground. Adjust with the 3-point top link if necessary.

#### 4.4. Rear board adjustment

The position of the plank board is adjustable by varying the hole position on shocker mounting plate (A). Lowering the hole will increase pressure of tension shocker assembly (B) on the plank board which result soil level compaction while upper hole position will reduce the pressure.

To adjust the plank board position, perform the following steps:

Loosen and remove the bolt and nut of shocker holding clamp (C). Adjust the clamp upper and lower against shocker mounting plate (A) as required.







#### Lubrication

#### Please read before first use of Rotary Tiller!

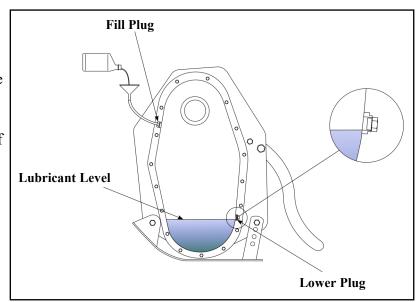
Check the oil in the gearboxes and grease fittings prior to use. Running the machine without lubricants voids the warranty.

- The gearbox for your Rotary Tiller requires 90 weight gear oil in the center gearbox. The side gearbox uses 140 wt or 00 liquid grease.
- Use Grade II tube grease for all grease fittings.
- It is important to NOT overfill the gearbox. Doing so could potentially damage the oil seals and the gearbox; both of which are not covered under warranty.

#### **Side Gearbox:**

- Run the tiller long enough to warm the lubricant.
- Level the tiller, shut off tractor and set the park brake. Remove the "Lower Plug". The warmed lubricant should reach the bottom of the "Lower Plug" hole as shown.
- If the lubricant level is below the bottom of the "Lower Plug" hole, add fluid through the "Fill Plug" hole or "Lower Plug" hole. Add fluid to bring the level to the normal operating range.
- Replace and tighten all plugs before operating the tiller.

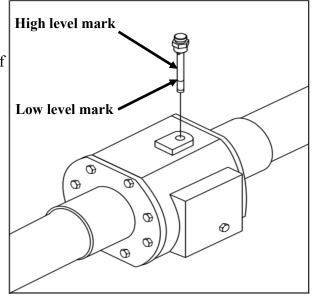




#### **Center Gear Box:**

- Unscrew and remove the dipstick and wipe clean.
- Screw in dipstick and hand tighten only.
- Once again, remove the dipstick and check the fluid level. If the fluid level is on or below the low level mark, add enough fluid to the gearbox to bring the fluid level up to normal operating range between the low mark and high mark.
- Screw in dipstick before operating the tiller.
- Do not overfill.

Note: Check after 16 hours of use.





#### 5. Transporting

#### To set the tiller for transportation, perform the following steps:

- Idle tractor engine, disengage tractor PTO, and wait for stopping of all rotating parts.
- Lift the tiller into the transport position, making sure the PTO shaft does not contact tractor or tiller. A minimum gap of 2 cm should be left between the tubes and tractor and tiller.
- Lock the tractor lifting hydraulics, turn off the engine, set the parking brake, remove ignition key and get off the tractor.
- Adjust the parking stand to the highest position, through the use of relative retaining pin, to prevent its possible damage during transport. When driving on public roads, follow strictly all local laws and regulations.

#### 6. Maintenance

#### 6.1 Service Lubrication



#### Caution

- The given frequencies are indicative and refer to normal conditions of use. They may therefore be subjected to variations in relation to the type of service, in more or less dusty environment, seasonal factors, etc.
- In the case of heavy-duty condition, the maintenance operation should be more frequent.
- Before injecting grease into the lubricators, the greasing points must be thoroughly cleaned to prevent mud, dust or foreign bodies from mixing with the lubricants, thus reducing or even annulling its lubricating effect.
- When topping up or changing the lubricant, always ensure that the oil is of the same type as that used previously.
- Always keep oil and grease well away from children's reach. Always thoroughly read the warnings and precautions indicated on the containers.
- Avoid contact with the skin.
- Always thoroughly and fully wash after use. The utilized oils should be treated in compliance with the current antipollution laws.

It is advisable to use SAE 140 EP Grade OIL or equivalent for the gear box unit and sidetransmission. It is advisable to use high quality grease for all greasing points.

#### **Every 8 Work Hours**

- Grease the PTO Shaft cross journals.
- Check that the bolts fixing the hoe blades are well tightened.

#### **Every 50 Work Hours**

- Check the level of the oil in the gearbox or in the reduction unit and top up to the level mark on the rod as necessary.
- Transmission lateral part chain: check the level of the oil in the side casing of thetransmission unit.
- Add oil through the fill plug if necessary. It should flow from the level plug.



#### **Every 200 Work Hours**

• Change the oil in the gearbox or in the reduction unit and transmission casing by completely draining of the old oil through the drain plug, under the reduction unit and through the transmission drain plug.

#### **6.2 Blades Replacement**

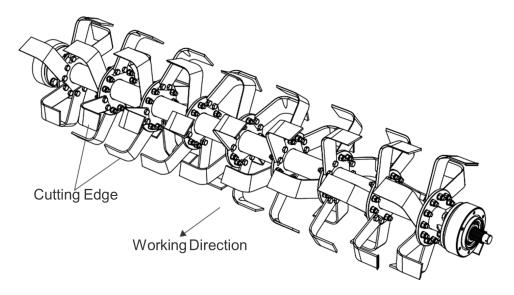
The Blades with which the rotary tiller is equipped can work soils of normal conformation. Check the degree of wear and condition of the Blades each day. If the blades should accidentally bend (or break) during work, they must be immediately replaced.

#### First - Identify blades:

Remember to mount the new Blade in exactly the same position as the old one. If several Blades must be replaced, it is advisable to remove and assemble one Blade at a time in order to prevent positioning errors. The tillers are normally equipped with 6 blades per flange.

#### Second - Install new blades:

- 1. Raise tiller with a safe lifting device.
- 2. Put safety stands or blocks under tiller.
- 3. Stand facing rear of tiller and study placement of Blades.
- 4. Remove bolts, lock washers, and nuts.



#### 7. Storage

It is advisable to proceed in the following way at the end of the season or if the machine is to remain inactive for a long period of time:

- 1. Wash the implement, particularly removing any fertilizer and/or chemical products, and then thoroughly dry it.
- 2. Carefully check for any damaged or worn parts and replace these if necessary.
- 3. Fully check screws or bolts, particularly those fixing the hoe blades.
- 4. Thoroughly lubricate the implement and lastly protect it with a plastic sheet. Store it in a dry place.



Note: Carefully adhering to the instructions contained in this manual will insure an implement that is fully serviced and in perfect working order. The "Cherokee" dealer is available for any assistance or replacement parts required to service or repair the unit.

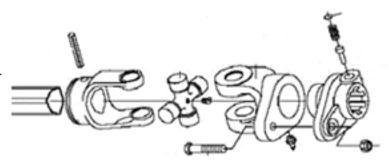
#### 8. Servicing Tips

 Problem -- P.T.O shaft is rotating but not the gear box.

Cause of problem -- Safety bolt might be broken.

**Solution** – Replace the safety bolt.

- a) Remove the P.T.O shaft from the R.T side.
- b) Remove, discard, and replace the safety bolt.



**2. Problem--** P.T.O shaft is making noise/vibration.

Cause of problem -- P.T.O cross is broken.

**Solution** – Change the P.T.O cross.

- a) Take the P.T.O shaft and check the cross of both side by rotating it.
- b) Remove the lock of the cross which is broken.
- c) Take out the cross by using hammer gently.
- d) Insert the new one properly then lock it.
- e) Rotate the yoke, it should rotate properly.
- f) Grease as necessary.
- **3. Problem--** Yoke is not fitting on the pinion shaft.

Cause of problem -- Yoke pin is broken.

**Solution** – Replace the yoke pin.

- a) Clear the head of the pin, push it with hammer and remove it.
- b) Replace it with a new one.
- c) Inspect, clean and grease.
- **4. Problem--** Rotary Tiller is not penetrating at proper depth.

Cause of problem -- Yoke pin is broken.

**Solution** – Replace the yoke pin.

- a) Loosen the side skid bolt.
- b) Shift the hole to the upper side.



**5. Problem**—One side is penetrating the ground deeper.

Cause of problem—Linkage is not properly adjusted.

Solution – Adjust linkage as needed.

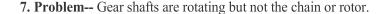
- a) Tractor linkage should be tight.
- b) The play should be no more than 1.5" (38MM).
- c) At the time of attaching the rotary tiller the R.T should be in proper leveled position.
- d) Both side skids should be in same bolt position.



Cause of problem –Play in bearing or teeth are broken.

**Solution**—Replace the bearing or bevel gear.

- a) Open the top cover to see if there's wear on the teeth.
- b) If any teeth are broken, replace the bevel set.
- c) Pull out the gear box and open the large flange.
- d) Then remove the back plate.
- e) Pull out the pinion shaft using a hammer or press.
- f) Replace the bearing, gear and seals.
- g) Use a new gasket when replacing back plate.
- h) The gear should rotate freely.
- i) Reassemble the gear box noting that the breather valve should be clean. Add the proper amount of oil.

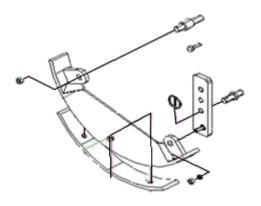


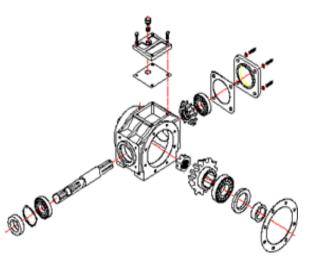
Cause of problem – Transmission shaft/chain/RD shaft is broken.

**Solution**—Open the chain cover and replace the broken parts.

- a) First remove the lock & loosen the check nut.
- b) Pull out the sprocket assembly with chain.
- c) If the transmission shaft is broken, follow the same process as above and replace the shaft then assemble the gear box with rotary tiller.
- d) If chain is broken then replace the chain and assemble the sprockets together with chain & then tighten the check nut For RD shaft the process will be different.
- e) First open the flange bolt of the rotor on both sides (RD shaft and Dead shaft) and remove the rotor.
- f) Loosen the check nut of RD shaft and hammer it till it comes out from the RD shaft hub & then replace the RD shaft and tighten the check nut. Inspect the sea. Replace if damaged in any way.

Follow the same procedure for replacing the dead shaft.





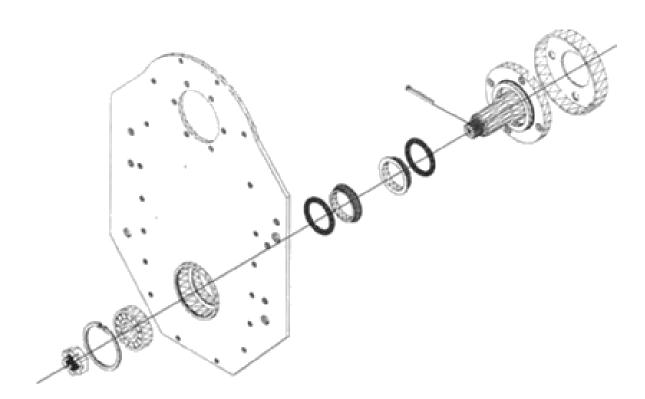


**8. Problem**— Oil leakage from the RD shaft hub or dead hub.

Cause of problem –Seal is wearing out and needs replacement.

**Solution**—Open the hub assembly as before.

- a) Remove the hub from the plate by loosing the bolts.
- b) Remove the lock and pull out the shaft.
- c) Pull out the seal from both the shaft and hub then replace it with a new one.
- d) Inspect the position of the bearing and hub if it is ok.
- f) Apply correct amount of grease as necessary when re-assembling.





Torque Specifications for Common Bolt Sizes																
	Bolt Head Identification						Bolt Head Identification									
Inches	<u>}</u>		$\supset$	$\leftarrow$	$\supset$	$\langle$	$\overline{\ }$		N O	יושוי	5.	.8	8.	8	(10	.9
		Gra	de 2	Gra	de 5	Gra	de 8				Clas	ss 5.8	Clas	s 8.8	Class	s 10.9
Bolt size (inches)	Thread pitch	N.m	ft-lb	N.m	ft-lb	N.m	ft-lb		Bolt size (metric)	Thread pitch	N.m	ft-lb	N.m	ft-lb	N.m	ft-lb
1/4"	20	7	5	11	8	16	12	ł	M5	0.08	4	3	6	4	9	7
1/4"	28	8	6	13	10	19	14	i	M6	1	6	4	10	7	15	11
5/16"	18	15	11	24	17	33	25	1	M8	1.25	16	12	25	18	36	27
5/16"	24	17	13	26	19	37	27	1	M8	1	17	13	26	19	38	28
3/8"	16	27	20	42	31	59	44	1	M 10	1.5	31	23	48	35	71	52
3/8"	24	31	23	47	35	67	49		M 10	1.25	33	24	51	38	75	55
7/16"	14	43	32	67	49	95	70		M 10	1	35	26	53	39	78	58
7/16"	20	48	36	75	55	106	78		M 12	1.75	54	40	84	62	123	91
1/2"	13	66	48	102	75	144	106		M 12	1.5	56	41	87	64	128	94
1/2"	20	75	55	115	85	163	120		M 12	1.25	59	44	90	66	133	98
9/16"	12	95	70	147	109	208	154		M 14	2	84	62	133	98	195	144
9/16"	18	106	79	164	121	232	171		M 14	1.5	94	69	142	105	209	154
5/8"	11	132	97	203	150	287	212		M 16	2	131	97	206	152	302	223
5/8"	18	149	110	230	170	325	240		M 16	1.5	141	104	218	161	320	236
3/4"	10	233	172	361	266	509	376		M 18	2.5	181	133	295	218	421	310
3/4"	16	261	192	403	297	569	420		M 18	2	196	145	311	229	443	327
7/8"	9	226	167 184	582	430 473	822	606		M 18	1.5	203	150 189	327	241 306	465	343
7/8" 1"	14	249	184 250	642	644	906 1232	668 909		M 20	2.5 1.5	256	212	415	306	592 646	437
1"	8 12	339 371	250	873 955	704	1232	909		M20 M22	2.5	288 344	254	454 567	418	807	476 595
1-1/8"	7	480	354	1077	704 794	1348	1288		M 22	1.5	381	281	613	452	873	595 644
1-1/8"	12	539	397	1208	891	1958	1445	1	M 24	3	381 444	327	714	526	1017	750
1-1/8	7	677	500	1519	1120	2463	1817	-	M 24 M 24	2	488	360	769	567	1017	808
1-1/4"	12	750	553	1682	1241	2728	2012		M27	3	656	484	1050	774	1496	1103
1-3/8"	6	888	655	1992	1469	3230	2382		M27	2	719	530	1119	825	1594	1176
1-3/8"	12	1011	746	2268	1673	3677	2712		M30	3.5	906	668	1420	1047	2033	1499
1-1/2"	6	1179	869	2643	1949	4286	3161		M30	2	1000	738	1600	1180	2250	1659
1-1/2"	12	1326	978	2974	2194	4823	3557		M36	4	1534	1131	2482	1830	3535	2607

#### **Notes:**

This chart is an approximate estimate of torque values.

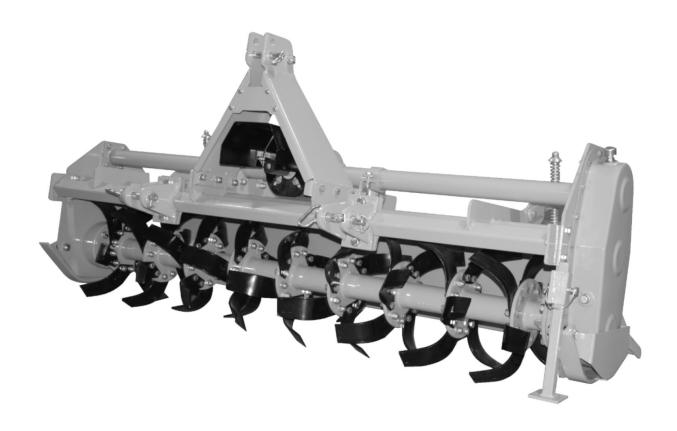
Always tighten hardware to these values unless a different torque value or tightening procedure is listed for a specific application.

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

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

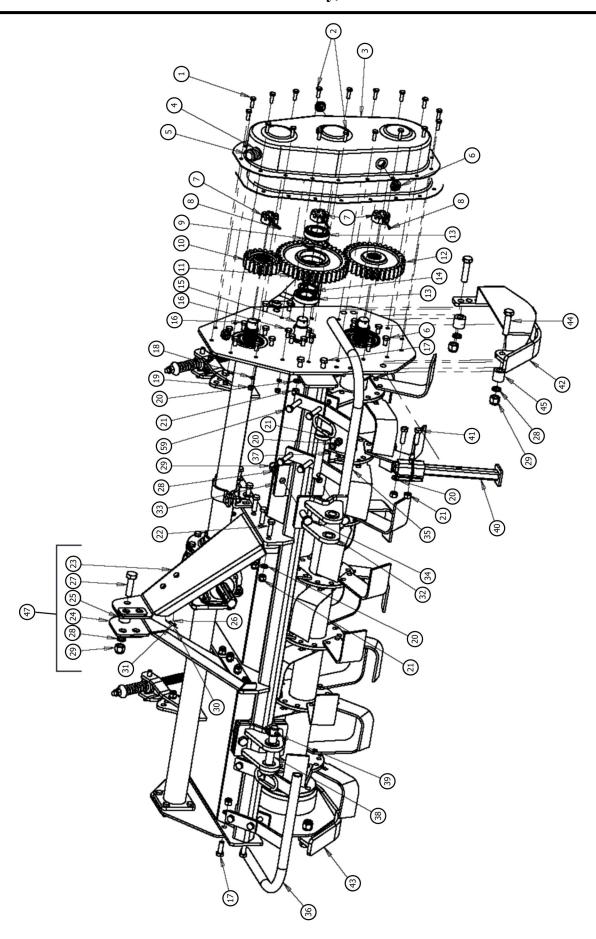


# Rotary Tiller CRT & MRT



# **Parts Manual**

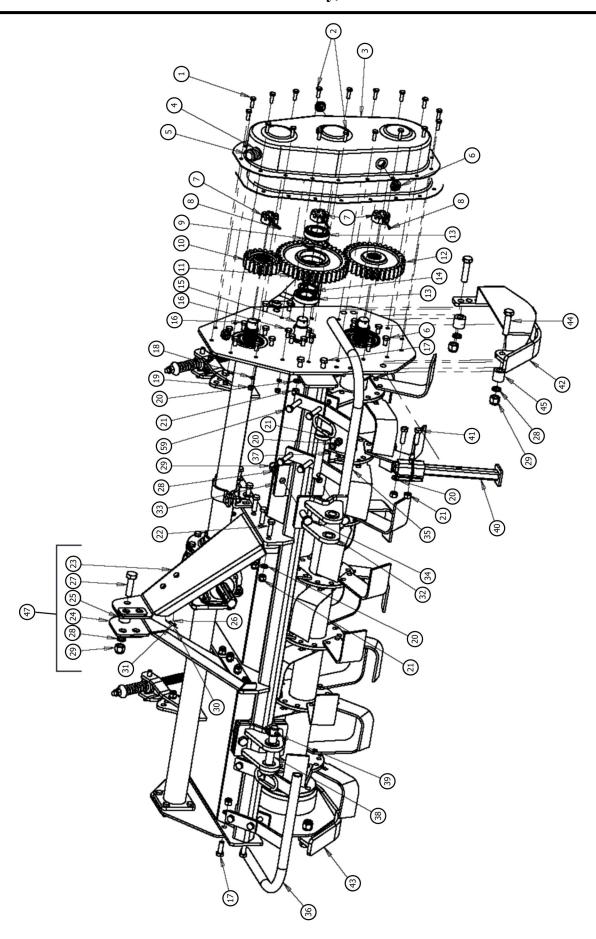






Item	Part #	Description	Qty.
1	BM0812530	Bolt hex head M8-1.25x30	2
2	BM0812525	Bolt hex head M8-1.25x25	16
3	CRT40148	Chain cover, CRT	1
4	CRT40002	Breather nut M22-1.5	1
5	CRT40003	Breather valve	1
6	CRT40004	Drain plug	1
7	CNM3015	Castle nut M30-1.5	2
8	CRT40005	Split pin 1/8x2.5	2
9	CRT40006	Internal circlip 72mm	1
10	CRT40007	Spur gear 20T-14S	1
11	CRT40008	Spur gear 40T	1
12	CRT40009	Spur gear 34T-14S	1
13	B30207	Bearing 30207	2
14	CRT40010	Spacer 50ODx40IDx5mm	1
15	CRT40011	Idler pin	1
16	BM101535	Bolt hex head M10-1.5x35	18
17	BM1217535	Bolt hex head M12-1.75x35	6
18	LW10	Washer lock M10	18
19	LNM1015	Nut nylock M10-1.5	18
20	LW12	Washer lock M12	12
21	LNM12175	Nut nylock M12-1.75	12
22	BM1217540	Bolt hex head M12-1.75x40	6
23	CRT40149	TPL plate RHS, CRT	1
24	CRT40150	TPL plate LHS, CRT	1
25	CRT40014	Top link bush	1
26	CRT40015	Middle support plate	1
27	BM162095	Bolt hex head M16-2.00x95	1
28	LW16	Washer lock M16	5
29	LNM1620	Nut lock M16-2.00	5
30	BM0812530	Bolt hex head M8-1.25x30	4
31	FW08	Washer flat M8	4
32	CRT40151	Front link bracket upper, CRT	2
33	CRT40017	Front link bracket lower	2
34	BM162065	Bolt hex head M16-2.00x65	4
35	CRT40018	Front safety guard RHS	1
36	CRT40019	Front safety guard LHS	1
37	CRT40020	Support flat	2
38	CRT40021	Tiller pin M22x145 cat-1	2
39	LYNPN10	Lynch pin M10	2

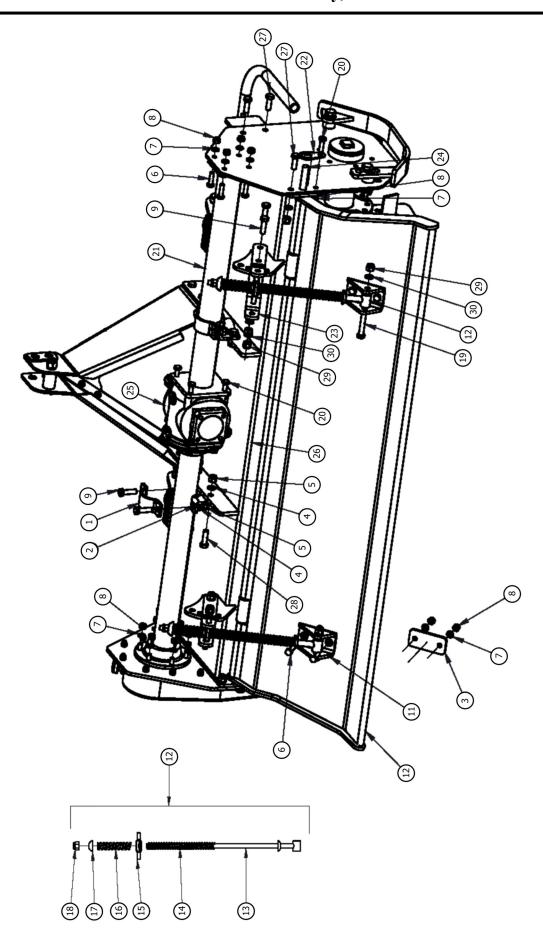






Item	Part #	Description	Qty.
40	CRT40022	RT stand	1
41	BM1217540	Bolt hex head M12-1.75x40	2
42	CRT40023	Depth skid assembly (RHS)	1
43	CRT40024	Depth skid assembly (LHS)	1
44	BM162065	Bolt hex head M16-2.00x65	4
45	CRT40025	Depth skid bush	4
46	CRT40154	Gasket gear cover, CRT	1
47	CRT40058	3-point linkage assembly complete	1



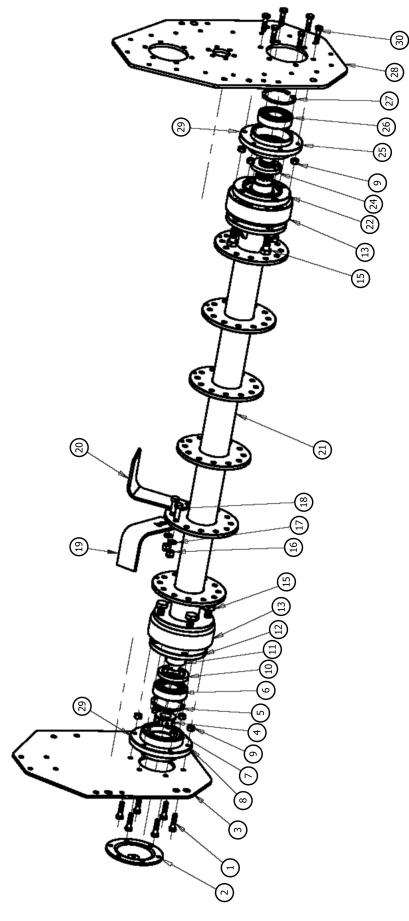




Item	Part #	Description	Qty.
1	CRT40026	Transmission pipe clamp lower mini RT	2
2	CRT40027	Transmission pipe clamp upper mini RT	2
3	CRT40028	Plank inner support flat	2
4	LW12	Washer lock M12	4
5	LNM12175	Nut nylock M12-1.75	4
6	BM101535	Bolt hex head M10-1.5x35	4
7	LW10	Washer lock M10	10
8	LNM1015	Nut nylock M10-1.5	10
9	BM1217550	Bolt hex head M12-1.75x50	8
10	CRT40029	Shocker plank attachment U clamp	2
11	CRT40152	Plank assembly 1.20 MTR., CRT	1
12	CRT40034	Shocker assembly	2
	CRT40153	Rear plank chain	1
13	CRT40035	Shocker rod with lower cup (mini)	1
14	CRT40036	Shocker big spring (mini)	1
15	CRT40037	Shocker rod bush (mini)	1
16	CRT40038	Shocker small spring (mini)	1
17	CRT40039	Shocker spring cup upper	1
18	LNM12175	Nut nylock M12-1.75	1
19	BM1217590	Bolt hex head M12-1.75x90	2
20	BM101535	Bolt hex head M10-1.5x35	4
21	CRT40040	Gearbox side support pipe assembly - 1.20 MTR.	1
22	CRT40044	Plank rod support plate	2
23	CRT40045	Frame shocker holding clamp	4
24	CRT40046	Plank rod 1.20 MTR.	1
25	CRT40050	Gearbox assembly 1.20 MTR.	1
26	CRT40054	Frame assembly complete 1.20 MTR.	1
27	BM1217535	Bolt hex head M12-1.75x35	6
28	BM1217540	Bolt hex head M12-1.75x40	6
29	LNM12175	Nut nylock M12-1.75	12
30	LW12	Washer lock M12	12



# **Side Plate & Rotor Assembly, CRT**



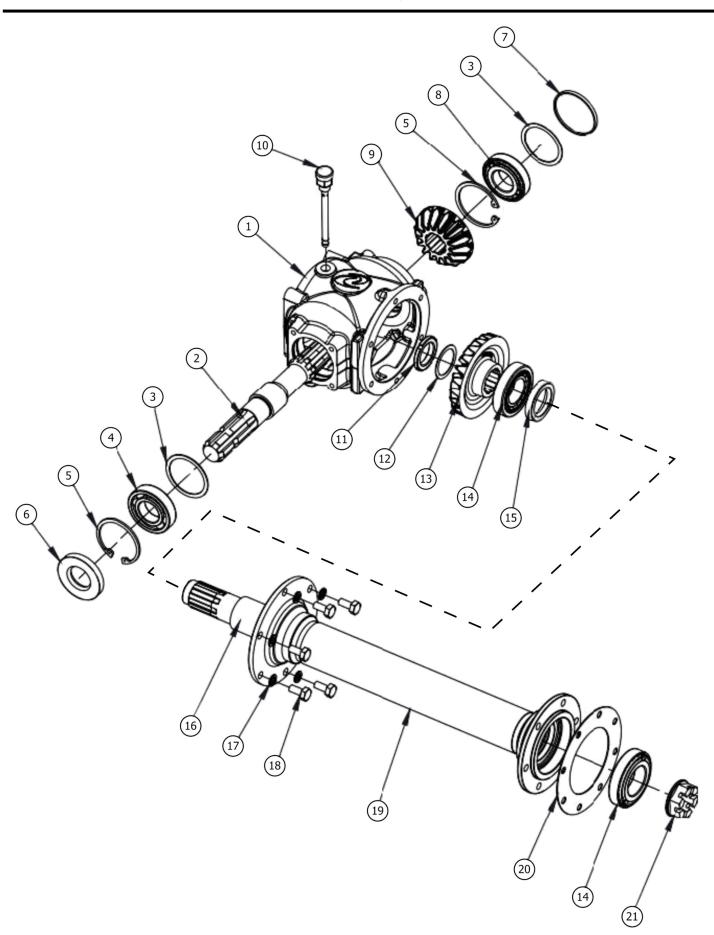


# **Side Plate & Rotor Assembly, CRT**

T.			
Item	Part #	Description	Qty.
1	BM101545	Bolt hex head M10-1.5x45	6
2	CRT40159	Dead hub cap	1
	GN08125	Grease fitting M08-1.25 (for dead hub cap - not shown)	1
3	CRT40060	RT side plate dead side 514x400x6mm	1
4	CNM3015	Nut castle M30x1.5	1
5	SRI80	Internal snap ring B80	1
6	B6307	Bearing 6307	1
7	CRT40061	Split pin 1/8"x2.5"	1
8	CRT40062	Dead hub	1
9	NM1015	Nut M10x1.5	6
10	OS507515	Oil seal 50x75x15	1
11	CRT40063	Dead shaft bush	1
12	CRT40064	Dead axle shaft	1
13	CRT40065	Rotor cover	2
14	LW16	Washer lock M16	8
15	BM161535	Bolt hex head M16-1.5x35	8
16	LNM12175	Nut nylock M12-1.75	48
17	LW12	Washer lock M12	48
18	BM1217535	Bolt hex head M12-1.75x35	48
19	CRT40066	Hoe LHS (L type)	12
	CRT40067	Hoe LHS (C type)	12
20	CRT40068	Hoe RHS (L type)	12
	CRT40069	Hoe RHS (C type)	12
21	CRT40156	Rotor assembly complete 1.20 MTR., CRT	1
22	CRT40074	RD shaft 14S	1
23	CRT40075	RD shaft bush	1
24	OS658516	Oil seal 65x85x16	1
25	CRT40076	RD hub	1
26	B6309	Bearing6309	1
27	SRI100	Circlip 100mm	1
28	CRT40157	RT side plate drive side 600x400x8mm	1
29	CRT40158	Gasket dead hub	1
30	BM101535	Bolt HH M10-1.5x35	6



# **Gearbox Assembly, CRT**

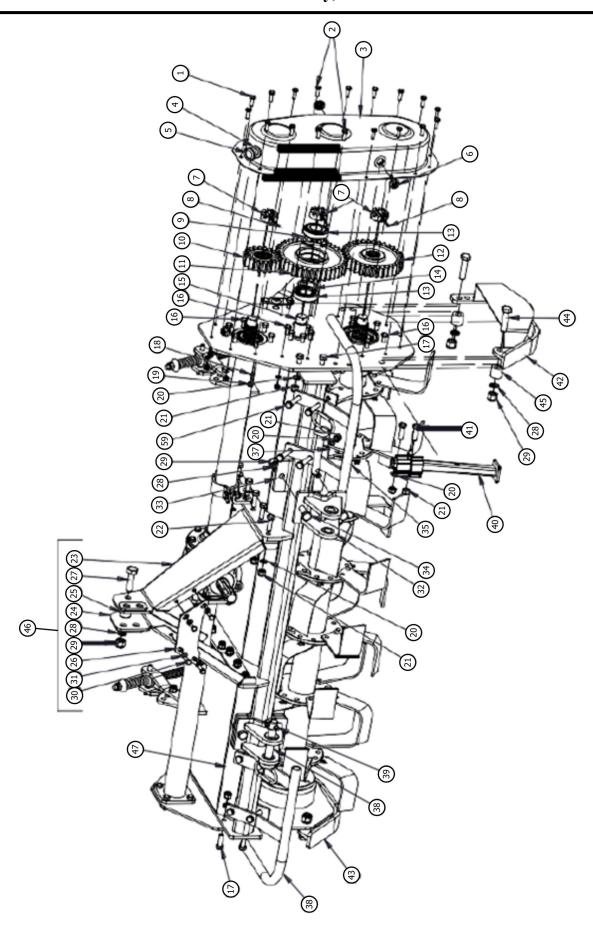




# **Gearbox Assembly, CRT**

Item	Part #	Description	Qty.
1	CRT40159	Gear box housing	1
2	CRT40079	Pinion shaft	1
3	CRT40080	Shim 71mm	2
4	B6207	Bearing 6207	1
5	SRI72	Circlip 72mm	2
6	OS357210	Oil seal 35x72x10	1
7	CRT40161	Cup seal 72x10	1
8	B30207	Bearing 30207	1
9	CRT40082	Pinion gear 15T	1
10	CRT40083	Dip stick	1
11	CRT40084	Ring nut M30x1.5	1
12	CRT40085	Shim 40mm	1
13	CRT40086	Bevel gear 22T	1
14	B30208	Bearing 30208	2
15	OS406210	Oil seal 40x62x10	1
16	CRT40087	Transmission shaft 1.20 MTR.	1
17	LW10	Spring washer 10mm	6
18	BM101520	Bolt hex head M10-1.50x20	6
19	CRT40091	Transmission pipe assembly 1.20 MTR.	1
20	CRT40160	Small flange transmission pipe, CRT	1
21	SLC102-80093	Nut castle M30-1.5	1

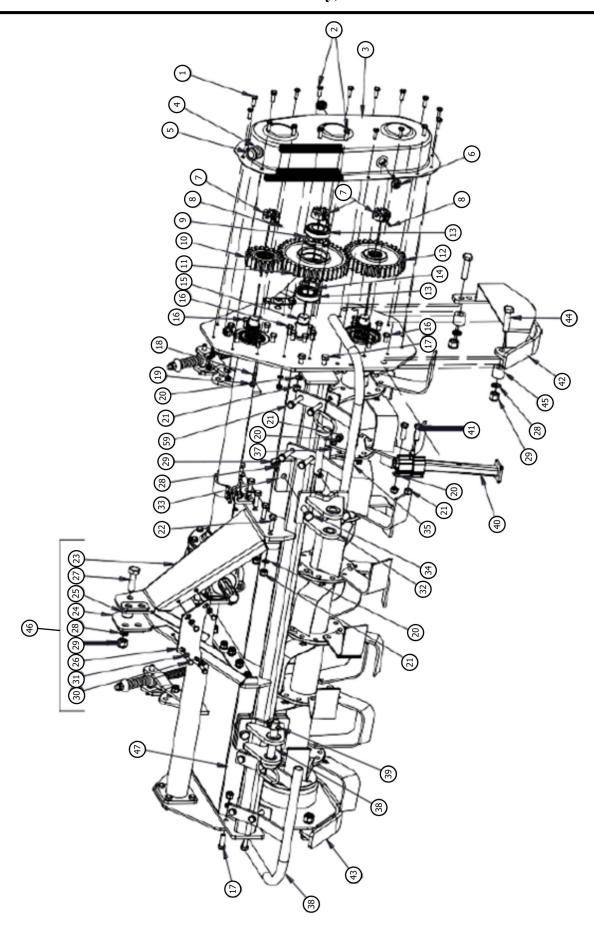






Item	Part #	Description	Qty.
1	BM0812530	Bolt hex head M8-1.25x30	2
2	BM0812525	Bolt hex head M8-1.25x25	16
3	CRT40001	Chain cover	1
4	CRT40002	Breather nut M22-1.5	1
5	CRT40003	Breather valve	1
6	CRT40004	Drain plug	1
7	CNM3015	Castle nut M30-1.5	2
8	CRT40005	Split pin 1/8x2.5	2
9	CRT40006	Internal circlip 72mm	1
10	CRT40007	Spur gear 20T-14S	1
11	CRT40008	Spur gear 40T	1
12	CRT40009	Spur gear 34T-14S	1
13	B30207	Bearing 30207	2
14	CRT40010	Spacer 50ODx40IDx5mm	1
15	CRT40011	Idler pin	1
16	BM101535	Bolt hex head M10-1.5x35	18
17	BM1217535	Bolt hex head M12-1.75x35	6
18	LW10	Washer lock M10	18
19	LNM1015	Nut nylock M10-1.5	18
20	LW12	Washer lock M12	12
21	LNM12175	Nut nylock M12-1.75	12
22	BM1217540	Bolt hex head M12-1.75x40	6
23	CRT40012	TPL plate LHS	1
24	CRT40013	TPL plate RHS	1
25	CRT40014	Top link bush	1
26	CRT40162	Middle support plate, MRT	1
27	BM162095	Bolt hex head M16-2.00x95	1
28	LW16	Washer lock M16	5
29	LNM1620	Nut lock M16-2.00	5
30	BM0812530	Bolt hex head M8-1.25x30	4
31	FW08	Washer flat M8	4
32	CRT40016	Front link bracket upper	2
33	CRT40017	Front link bracket lower	2
34	BM162065	Bolt hex head M16-2.00x65	4
35	CRT40018	Front safety guard RHS	1
36	CRT40019	Front safety guard LHS	1
37	CRT40020	Support flat	2
38	CRT40021	Tiller pin M22x145 cat-1	2
39	LYNPN10	Lynch pin M10	2



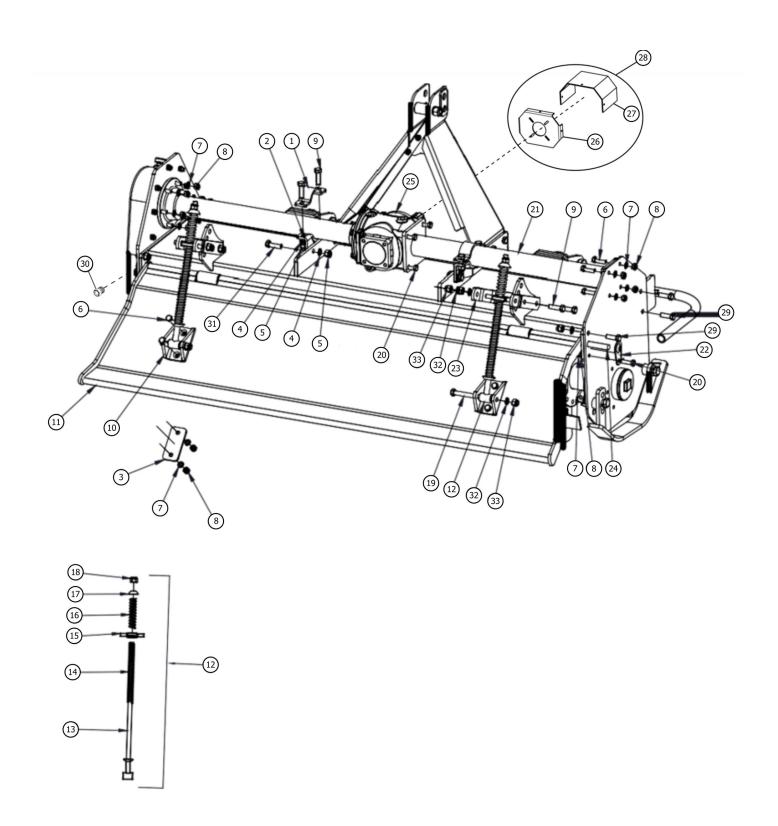




# Tiller Assembly, MRT

Item	Part #	Description	Qty.
40	CRT40022	RT stand	1
41	BM1217540	Bolt hex head M12-1.75x40	2
42	CRT40023	Depth skid assembly (RHS)	1
43	CRT40024	Depth skid assembly (LHS)	1
44	BM162065	Bolt hex head M16-2.00x65	4
45	CRT40025	Depth skid bush	4
46	CRT40058	3-point linkage assembly complete	1
47	CRT40054	Frame assembly complete 1.20 MTR.	1
	CRT40056	Frame assembly complete 1.60 MTR.	1
	CRT40057	Frame assembly complete 1.80 MTR.	1

# Tiller Assembly, MRT

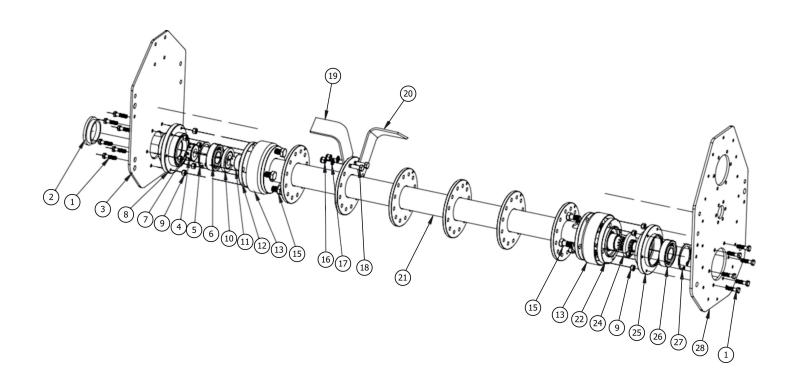




# Tiller Assembly, MRT

		• /	
Item	Part #	Description	Qty.
1	CRT40026	Transmission pipe clamp lower mini RT	2
2	CRT40027	Transmission pipe clamp upper mini RT	2
3	CRT40028	Plank inner support flat	2
4	LW12	Washer lock M12	4
5	LNM12175	Nut nylock M12-1.75	4
6	BM101535	Bolt hex head M10-1.5x35	4
7	LW10	Washer lock M10	10
8	LNM1015	Nut nylock M10-1.5	10
9	BM1217550	Bolt hex head M12-1.75x50	8
10	CRT40029	Shocker plank attachment U clamp	2
11	CRT40030	Plank assembly 1.20 MTR.	1
	CRT40032	Plank assembly 1.60 MTR.	1
	CRT40033	Plank assembly 1.80 MTR.	1
12	CRT40034	Shocker assembly	2
13	CRT40035	Shocker rod with lower cup (mini)	1
14	CRT40036	Shocker big spring (mini)	1
15	CRT40037	Shocker rod bush (mini)	1
16	CRT40038	Shocker small spring (mini)	1
17	CRT40039	Shocker spring cup upper	1
18	LNM12175	Nut nylock M12-1.75	1
19	BM1217590	Bolt hex head M12-1.75x90	2
20	BM101535	Bolt hex head M10-1.5x35	4
21	CRT40040	Gearbox side support pipe assembly - 1.20 MTR.	1
	CRT40042	Gearbox side support pipe assembly - 1.60 MTR.	1
	CRT40043	Gearbox side support pipe assembly - 1.80 MTR.	1
22	CRT40044	Plank rod support plate	2
23	CRT40045	Frame shocker holding clamp	4
24	CRT40046	Plank rod 1.20 MTR.	1
	CRT40048	Plank rod 1.60 MTR.	1
	CRT40049	Plank rod 1.80 MTR.	1
25	CRT40050	Gearbox w/transmission pipe/shaft 1.20 MTR.	1
	CRT40052	Gearbox w/transmission pipe/shaft 1.60 MTR.	1
	CRT40053	Gearbox w/transmission pipe/shaft 1.80 MTR.	1
26	CRT40146	PTO safety cover main plate	1
27	CRT40147	PTO safety cover top plate	1
28	CRT40178	PTO safety cover assembly	1
29	BM1217535	Bolt HH M12-1.75x35	6
30	CRT40144	Sight glass	1
31	BM1217540	Bolt HH M12-1.75x40	6
32	LW12	Washer lock M12	12
33	LNM12175	Nut nylock M12-1.75	12

# **Side Plate & Rotor Assembly, MRT**

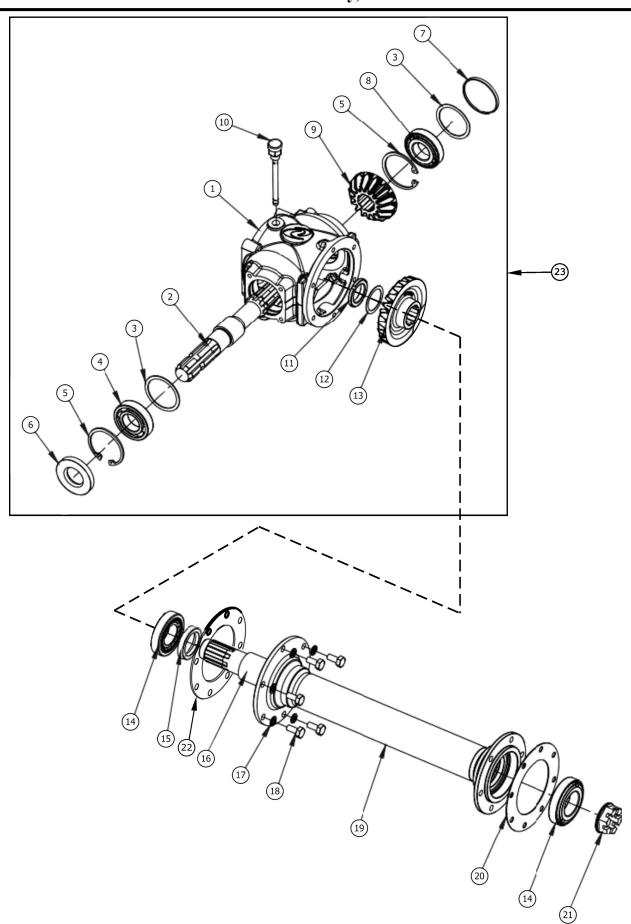




# **Side Plate & Rotor Assembly, MRT**

Item	Part #	Description	Qty.
1	BM101535	Bolt hex head M10-1.5x35	6
2	CRT40059	Dead hub cap	1
3	CRT40060	RT side plate dead side 514x400x6mm	1
4	CNM3015	Nut castle M30x1.5	1
5	SRI80	Internal snap ring B80	1
6	B6307	Bearing 6307	1
7	CRT40061	Split pin 1/8"x2.5"	1
8	CRT40062	Dead hub	1
9	NM1015	Nut M10x1.5	6
10	OS557515	Oil seal 55x75x15	1
11	CRT40063	Dead shaft bush	1
12	CRT40064	Dead axle shaft	1
13	CRT40065	Rotor cover	2
14	LW16	Washer lock M16	8
15	BM161535	Bolt hex head M16-1.5x35	8
16	LNM12175	Nut nylock M12-1.75	-
17	LW12	Washer lock M12	-
18	BM1217535	Bolt hex head M12-1.75x35	-
19	CRT40066	Hoe LHS (L type)	3 per flange
	CRT40067	Hoe LHS (C type)	3 per flange
20	CRT40068	Hoe RHS (L type)	3 per flange
	CRT40069	Hoe RHS (C type)	3 per flange
21	CRT40070	Rotor assembly complete 1.20 MTR.	1
	CRT40072	Rotor assembly complete 1.60 MTR.	1
	CRT40073	Rotor assembly complete 1.80 MTR.	1
22	CRT40074	RD shaft 14S	1
23	CRT40075	RD shaft bush	1
24	OS658518	Oil seal 65x85x18	1
25	CRT40076	RD hub	1
26	B6309	Bearing6309	1
27	SRI100	Circlip 100mm	1
28	CRT40077	RT side plate drive side 600x400x8mm	1

# Gear Box Assembly, MRT



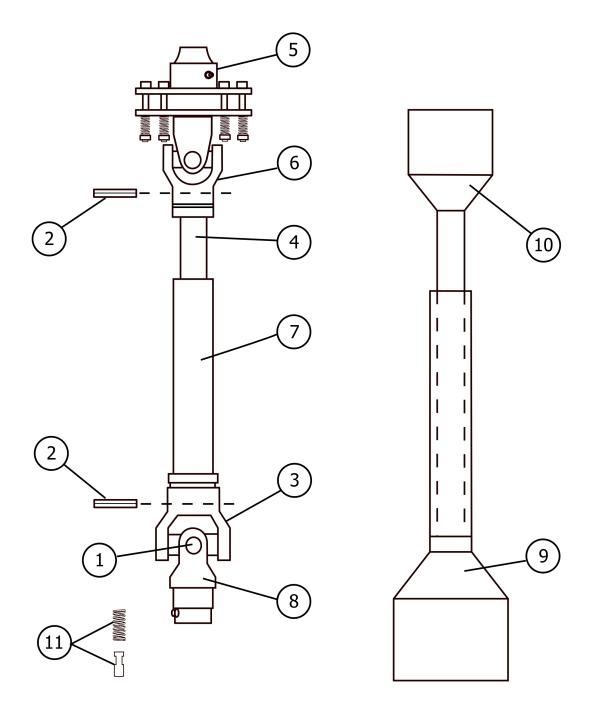


# Gear Box Assembly, MRT

Item	Part #	Description	Qty.
1	CRT40078	Gear box housing	1
2	CRT40079	Pinion shaft	1
3	CRT40080	Shim 71mm	2
4	B6207	Bearing 6207	1
5	SRI72	Circlip 72mm	2
6	OS357210	Oil seal 35x72x10	1
7	CRT40081	Housing rear cover	1
8	B30207	Bearing 30207	1
9	CRT40082	Pinion gear 15T	1
10	CRT40083	Dip stick	1
11	CRT40084	Ring nut M30x1.5	1
12	CRT40085	Shim 40mm	1
13	CRT40086	Bevel gear 22T	1
14	B30208	Bearing 30208	2
15	OS406210	Oil seal 40x62x10	1
16	CRT40087	Transmission shaft 1.20 MTR.	1
	CRT40089	Transmission shaft 1.60 MTR.	1
	CRT40090	Transmission shaft 1.80 MTR.	1
17	LW10	Spring washer 10mm	6
18	BM101520	Bolt hex head M10-1.50x20	6
19	CRT40091	Transmission pipe assembly 1.20 MTR.	1
	CRT40093	Transmission pipe assembly 1.60 MTR.	1
	CRT40094	Transmission pipe assembly 1.80 MTR.	1
20	CRT40095	Small flange transmission pipe gasket	1
21	SLC102-80093	Nut castle M30-1.5	1
22	CRT40163	Large flange transmission pipe gasket	1
23	CRT40164	Gearbox complete MRT (Items 1-13)	1



# **PTO Shaft Assembly - Slip Clutch Type**



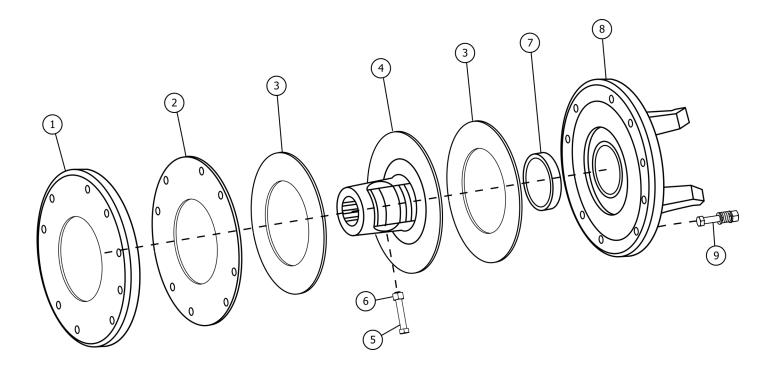


# **PTO Shaft Assembly - Slip Clutch Type**

Item	Part #	Description	Qty.
1	CRT40123	Cross journal set	2
2	CRT40124	Spring dowel pin set	2
3	CRT40125	Outer tube yoke	1
4	CRT40126	Inner tube (cut PTO)	1
5	CRT40127	Slip clutch assembly	1
6	CRT40128	Inner tube yoke	1
7	CRT40129	Outer tube (cut PTO)	1
8	CRT40130	Push pin yoke with pin (6 splines)	1
9	CRT40131	Half female guard assembly (cut)	1
10	CRT40132	Half male guard assembly (cut)	1
11	CRT40133	Push pin set	1
	CRT40412	PTO Shaft Assembly - Slip Clutch Type Complete	1



# **Slip Clutch Assembly**





# **Slip Clutch Assembly**

Item	Part #	Description	Qty.
1	CRT40134	Pressure plate	1
2	CRT40135	Internal disc	1
3	180-510-40	Friction lining	2
4	CRT40137	Hub	1
5	BM1217570	Bolt hub M12-1.75x70	2
6	LNM12175	Nut nylock M12-1.75	2
7	CRT40140	Bushing	1
8	CRT40141	Flanged spline	1
9	CRT40142	Complete bolt & spring	8
	CRT40127	Slip clutch assembly complete	1



#### **Decals**

# **AWARNING**

#### To prevent serious injury or death:

si no lee ingles, pida ayuda a alguien que si lo lea para que le traduzca las medidas de seguridad

- Read and understand Operator's Manual before using.
- Do not permit riders on the tractor including children.
- Do not allow children to operate unit.
- Operate only with guards installed and in good working condition
- Keep away from moving parts.
- Operate only with tractor equipped with ROPS and seatbelts.
- · Use extra care when operating on rough terrain or when rocks or debris are present.
- Do not operate in a raised postition
- · Stop engine, lower unit, set brake and wait for all moving parts to stop before dismounting.
- Support unit securely before working beneath it.
- · Transport with clean reflectors, SMV and working lights as required by Federal, State and local laws.
- Keep yourself, others and clothing away from rotating PTO.
- Operate only at a safe distance from bystanders.
- Do not stand between tractor and unit.
- · Be careful on uneven terrain. Decrease speed when turning.
- Locate underground utility lines before operating unit.
- Do not exceed a safe transport speed.

RT1004D

1

# A DANGER

#### **ROTATING DRIVELINE HAZARD KEEP AWAY**

To prevent serious injury or death from rotating

- · Keep all guards in place when operating.
- Operate only at 540 RPM.
- Keep hands, feet, clothing and hair away from moving parts.
- Do not operate without driveline securely attached at both ends.
- Do not operate without driveline shield that

turns freely on driveline.

RT1007

5





8

#### **AWARNING**

**Cancer and Reproductive Harm** www.P65 Warnings.ca.gov

2

## **AWARNING**



#### TO PREVENT SERIOUS INJURY OR DEATH

 Keep hands and body out of hitch area when attaching mower to tractor

3

 Keep body clear of crush point between tractor and mower.

# **ADANGER**



#### **ROTATING TINES HAZARD**

- Keep away from rotating tines.
- Rotating tines may cause serious injury or death.

RT1006

4

FAILING TO FOLLOW SAFETY MESSAGES AND OPERATING INSTRUCTIONS CAN CAUSE SERIOUS BODILY INJURY OR EVEN DEATH TO OPERATOR AND OTHERS IN THE AREA.







- 1. Read operator's manual carefully and pay attention to safety decals for tractor and tiller throughly to avoid misuse, abuse and accidents. Practice before operating
- 2. Operate only with ROPS and fastened seat belt to avoid injury and possible crushing death from overturning. Do not allow riders on tractor or tiller. Falling off can cause serious injury or death by being run over by tracto or tiller or by being cut by the rotating tiller blades. Do not allow children on or near tiller or tractor.
- To avoid injury from falling objects wear hard hat, safety glasses and shoes.
   Block up or support machine securely before putting hands or feet under, or working underneath lifted parts to avoid
- crushing injury or even death from sudden, inadvertent dropping. Make sure area is clear before lowering
- 5. Before transporting, put lift lever in Lift (Detent) position and follow all traffic codes. Slow down at night, in turns and on hillsides.
- 6. Make sure that SMV sign, warning lights and reflectors are clearly visible.
- 7. Never operate with tiller raised off ground to reduce possibility of injury from objects thrown under tiller structure.
- 8. Before dismounting, secure tiller in transport position or lower to ground, stop PTO, put tractor in park or set brake, stop engine and remove key. Never mount or dismount moving vehicle to prevent possible crushing









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**CRT-XXX** 

**MRT-XXX** 



# **Decals**

Item	Part #	Description	Qty.
1	RT1004E	Decal Warning "Serious Injury or Death"	1
2	D960	Decal Warning "Cancer & Reproductive Harm"	1
3	RT1005	Decal Warning "To Prevent Serious Injury"	1
4	RT1006	Decal Danger "Rotating Tines Hazard"	1
5	RT1007	Decal Danger "Rotating Driveline Hazard"	1
6	RT1008	Decal Danger "Failing to Follow Safety Messages"	1
7	100B	Decal Logo "Cherokee"	1
8	D1311	Decal "Gear Drive"	1
9	NA	Decal Model # "CRT-XXX"	1
10	NA	Decal Model # "MRT-XXX	1



#### **DELIVERY CHECKLIST**

#### **Dealer Pre-Delivery (Please Tick)**

#### 1. Dealer Pre-Delivery Checklist

- 1. The customer or person responsible has been given the operator's manual.
- 2. The customer undertakes to read the complete operator's manual and understands all aspects of the manual before operation of the machine.
- 3. All safety, operational and maintenance information have been explained and demonstrated.
- 4. All greasing and oil points, stickers, guarding and ID plate have been identified and physically pointed out.
- 5. The customer agrees that it is his responsibility to read and carry out the safety, maintenance and operation as perthis operator's manual.

#### **Dealer Pre-Delivery Checklist**

#### 2. Customer Delivery Checklist

- The customer or person responsible has been given the operator's manual.
- The customer undertakes to read the complete operator's manual and understands all aspects of the manual before operation of the machine.
- 3. All safety, operational and maintenance information have been explained and demonstrated.
- 4. All greasing and oil points, stickers, guarding and ID plate have been identified and physically pointed out.
- 5. The customer agrees that it is his responsibility to read and carry out the safety, maintenance and operation as perthis operator's manual.

### Please Complete all Dealer information Below

Dealer Information	
Dealer's Name	
Address	
StatePostcode	
Phone	
Email	
Service Person	
I confirm that the pre-delivery service was performed on this machin	ıe.
Signature	
Date	
Comments	

#### Please Complete all Customer Information Below

Customer Information
Customer's Name
Address
StatePostcode
Phone Fax
Email
Delivery Person
I confirm that all of the delivery checks were explained and performed.
Signature
Delivery Date
Comments





# Warranty Card Customer Copy

Customer Name Mr./Mrs.:		
Address:		
Phone No.:		
Email:		
Name of Implement:		
Model No.:		
Year of Mfg.:		
Serial No.:		
Registration No.:		
Date of Purchasing:		
Dealer Name		
Customer Signature:	 Date:	
Dealer Signature:	 Date:	

# Cher kee

#### WARRANTY

#### LIMITED WARRANTY

Belco Resources Equipment warrants to the original purchaser of any new piece of machinery from Belco Resources Equipment, purchased from an authorized Belco Resources Equipment dealer, that the equipment be free from defects in material and workmanship for a period of one (1) year for non-commercial, state, and municipalities' use, ninety (90) days for commercial use from date of retail sale. Warranty for rental purposes is thirty (30) days. The obligation of Belco Resources Equipment to the purchaser under this warranty is limited to the repair or replacement of defective parts.

A two (2) extended Gearbox Limited Warranty is provided models at the end of the standard one (1) year warranty period. This warranty is not provided for commercial or rental uses. The extended warranty provides for the replacement of parts only. Not covered are oil seals or any damages to the gearbox due to lack of lubrications.

Replacement or repair parts installed in the equipment covered by this limited warranty are warranted for ninety (90) days from the date of purchase of such part or to the expiration of the applicable new equipment warranty period, whichever occurs later. Warranted parts shall be provided at no cost to the user at an authorized Belco Resources Equipment dealer during regular working hours. Belco Resources Equipment reserves the right to inspect any equipment or parts, which are claimed to have been defective in material or workmanship.

This limited warranty does not apply to and excludes wear items such as shear pins, tires, tubes knives, blades or other wear items. Oil or grease is not covered by this warranty.

All obligations of Belco Resources Equipment under this limited warranty shall be terminated if:

Proper service is not performed on the machine.

The machine is modified or altered in any way.

The machine is being used or has been used for purposes other than those for which the machine was intended.

#### DISCLAIMER OF IMPLIED WARRANTIES & CONSEQUENTIAL DAMAGES

Belco Resources Equipment obligation under this limited warranty, to the extent allowed by law, is in lieu of all warranties, implied or expressed, including implied warranties of merchantability and fitness for a particular purpose and any liability for incidental and consequential damages with respect to the sale or use of the items warranted. Such incidental and consequential damages shall include but not be limited to: transportation charges other than normal freight charges; cost of installation other than cost approved by Belco Resources Equipment; duty; taxes; charges for normal service or adjustment; loss of crops or any other loss of income; rental of substitute equipment, expenses due to loss, damage, detention or delay in the delivery.

#### REGISTRATION

The online Warranty Registration must be completed in order to qualify for coverage on this Limited Warranty. Visit br-equipment.com, click on "Warranty Registration" and completely fill out the form to register the new piece of equipment.



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