

Operation Manual and Parts Book

RC 120 and RC 150 Rotary Cultivators



Product Code: L2059

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WELCOME TO YOUR NEW WESSEX PRODUCT

Thank you for purchasing a Wessex product. As a Wessex customer, you now number among the most important people of our business and we will endeavour to give you the best service available through our dealer network.

Please read this Manual carefully and familiarise yourself and other persons that will be using the machine with its contents, to ensure the optimum performance and working life of your machine. It is advisable that a copy of this Manual is kept in the workshop and one copy with the machine. Further copies are available through your dealer.

On delivery, your dealer should go through the workings of the machine with you, explaining the setting up procedures, all of which are contained in this manual for further reference. The Warranty Registration Form must also be completed and returned to us **within 7 days of delivery** in order to validate the Warranty.

**PLEASE READ THE FOLLOWING PAGES CAREFULLY BEFORE USING YOUR MACHINE
AND KEEP THIS MANUAL IN A SAFE PLACE.**



**THIS SAFETY SYMBOL IS TO ALERT OPERATORS OF A HAZARD
THAT MAY RESULT IN INJURY.
ALWAYS FOLLOW INSTRUCTIONS CAREFULLY**

SAFETY DECALS



Disengage the PTO, turn off the tractor engine, remove the key and ensure that all rotating parts have stopped before approaching the implement.

Read the operator's manual before performing any maintenance operation

Thrown or flying objects hazard.



Safety Wear



Crushing hazards and thrown or flying objects hazards



Operate only with 540 rpm PTO



Rotating Gears



Oil filling point



Lifting point

SAFETY DECALS



Grease filling point



Hand Hazard

IMPORTANT NOTICE

FITTING P.T.O. SHAFT TO MACHINE & TRACTOR

- All safety chains must be anchored tight enough to allow a small amount of movement, but not enough to wrap around the P.T.O. Shaft.
- Ensure that the shaft **and guard** is regularly greased to avoid overheating and to give lubrication.
- **Important:** Thoroughly read through the manufacturers instruction book before using the P.T.O. Shaft.

P.T.O.Shafts are not covered by the Wessex Warranty.

IMPORTANT SAFETY WARNINGS



Wessex machines are guarded for your protection, but you must always observe certain elementary precautions. Machines are potentially **dangerous** and should be used with the greatest respect and **ALL OPERATORS MUST** read this manual and be aware of all safety precautions.

1. **NEVER** attempt any adjustment whatsoever, unless the machine is **COMPLETELY** at a standstill and the P.T.O. drive and blades have stopped turning. **Stop Engine and remove Tractor Key.**
2. **NEVER** attempt to clear any obstructions around the mower unless the machine is **COMPLETELY** at a standstill and the P.T.O. drive and blades have been stopped. **Stop Engine and remove Tractor Key.**
3. **NEVER** remove belt guards unless the machine is **COMPLETELY** at a standstill. **Stop Engine and remove Tractor Key.**
4. **NEVER** remove safety guards which are provided for your protection.
5. **NEVER** operate the mower with people around, keep everybody (especially children and animals) at a safe distance, **minimum 20 metres.**
6. Stand well back from the machine when cutters are spinning.
7. Regularly inspect the **BLADES AND FIXING BOLTS** to ensure that they are in excellent condition. Replace blades **IMMEDIATELY** if any signs of fracture or excess wear becomes apparent. Serious damage, which is excluded from our warranty conditions, may result from using your mower with an unbalanced rotor. When replacing blades, always fit new mounting bolts and nuts to ensure that the rotor is balanced and running smoothly.

HEALTH AND SAFETY - Noise at Work Regulations

READING AT THE OPERATORS EAR

Wessex Rotary Cultivator: Approximately 95 D.B.A

Depending on conditions and material being cut, this reading may alter, it is therefore advisable for users to do their own assessment.



In compliance with the above regulations, Ear Protectors must be worn when operating machinery.

WARRANTY

Your Wessex product or equipment is warranted free from defect in workmanship or manufacture for one year from date of purchase. Any parts which appear to us to be defective, either in material or workmanship shall be replaced or repaired at no cost to the purchaser, subject to the following conditions:

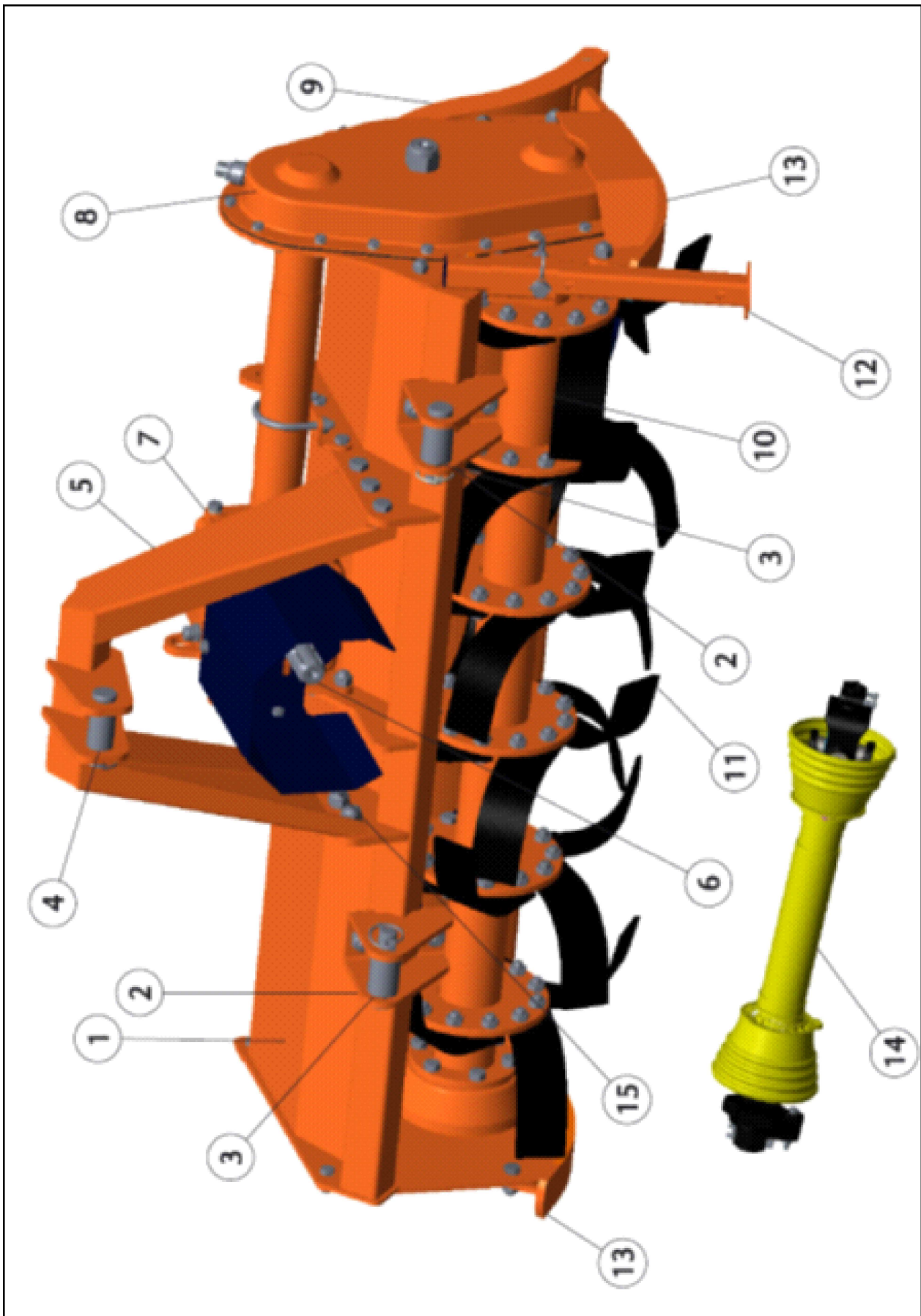
1. The registration card enclosed with this booklet must be returned to us within seven days of purchase. Alternatively if you prefer, you may register your product via our Website.
<http://www.wessexintl.com/warranty-registration>
2. Any failure in the machine should be reported in the first instance immediately to your dealer, who will act on your behalf to resolve the matter to your satisfaction.
3. The defective parts will be returned by your dealer to us, accompanied by a full statement describing the failure and the circumstances and conditions in which the failure occurred.
4. The following are specifically excluded from our terms of warranty:
 - a) Fair wear and tear, especially to belts, blades, bearings and bushes.
 - b) Damage caused through incorrect adjustment (see instructions).
 - c) Damage caused by neglect or lack of lubrication.
 - d) Damage caused by misuse or abuse, including impact damage to blades.
 - e) Damage caused whilst the machine is in transit.
 - f) **Damage caused to the frame of the machine by running the machine with unbalanced rotors, blades or blade bars.**
 - g) Damage caused to the machine by use with loose nuts, bolts, screws or any other type of fittings.
 - h) Please note that P.T.O. Shafts are not covered by the Wessex warranty.
 - i) Damage caused to the machine by impact or collision to the machine . Howsoever caused.
5. The warranty is for the benefit of the first user only.
6. Wessex International decisions will be final and binding.

Note:

It is recommended that every machine is inspected after one hour of operation to check that all nuts, bolts, screws or any other types of fixings are tight and any loose fixings or components should be rectified as appropriate.

Further inspections should be carried out at regular intervals thereafter.

MAIN PARTS DESCRIPTION



MAIN PARTS DESCRIPTION

1. Cultivator deck	9. Rear board
2. Clevis (lower hitch)	10. Rotor shaft
3. Lower hitch pin	11. Tine
4. Upper hitch pin	12. Parking stand
5. Top mast	13. Skid
6. PTO Connection	14. PTO driveshaft
7. Gearbox	15. PTO shield Flail Mower frame
8. Side transmission case	

NOTE

Unless otherwise indicated, images shown in this manual refer to the RC-150 Cultivator

SPECIFICATIONS

		CULTIVATOR MODEL	
		(RC-120)	(RC-150)
Overall Dimensions	mm	1340 x 805 600	1645 x 805 x 600
Tilling width	in	45.6"	58.2"
	cm	115.82	147.83
Recommended Tractor HP range	HP	20-35	25-40
3-point hitch type	-	Cat. I, Quick Hitch	Cat. I, Quick Hitch
Frame off-set	in	4"	-
Number of flanges on rotor	No.	6	7
Number of tines per flange	No.	36	42
PTO input speed	rpm	540	540
Rotor shaft speed	rpm @ 540	242	242
Standard tine construction	-	curved	curved
Transmission type	-	gear	gear
Max working depth	cm	16.51	16.51
Rotor tube diameter	mm	70	70
Rotor swing diameter	mm	375	375
Driveline safety device	-	slip clutch	slip clutch
Weight (driveline excluded)	lbs	397	441
	Kg.	181	200

SAFETY

Proper use of the equipment, a strict observance of the safety messages listed below and application of all reasonable practices to avoid any risks, prevents accidents or injury, allows the machine working better and longer, and minimise the failures.

The manufacturer assumes no liability for any damage resulting from not applying the behavioural rules indicated into the manual.

GENERAL SAFETY INSTRUCTION



DANGER

The machine must be used only by authorised and well trained operators. The operator must have read and understood the instructions of this manual, it must make adequate preparation for the proper use of the machine and must hold a driving license. In case of doubt about the use of the machine and/or the interpretation of this manual, the operator must contact the Manufacturer or the Dealer.



WARNING

The manual must always remain with the machine. In case of loss or damage, request a new copy from Wessex International or your Dealer.



WARNING

Follow strictly the rules prescribed by the safety pictograms applied to the machine.



WARNING

Be sure that all safety pictograms are legible. If pictograms are worn, they must be replaced with others obtained from the Manufacturer.



DANGER

Before using the machine, make sure that all safety devices are installed and in good working order. If guards are damaged, replace them immediately.



DANGER

Is absolutely forbidden to remove or alter safety devices.



DANGER

Before starting, and during operation of the Cultivator, make sure there are no people or animals in the operation area: the machine can throw material from the back, with risk of serious injury or death.



DANGER

Pay maximum attention to avoid any accidental contact with rotating parts of the machine.



DANGER

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



DANGER

Do not operate the implement while wearing loose fitting clothing that can be entangled in parts of the machine.

SAFETY



DANGER

Do not operate the implement when tired, not in good condition or under the influence of alcohol or drugs.



CAUTION

If the use of the machine is required at night or in conditions of reduced visibility, use the lighting system of the tractor and possibly an auxiliary lighting system.

EQUIPMENT SAFETY INSTRUCTION



WARNING

Use the Cultivator for its intended purpose only. Improper use can damage the Cultivator and cause serious injury to persons, animals, or death.



DANGER

The machine should be used by a single operator driving the tractor.



WARNING

Any unauthorised 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.



WARNING

Before using the machine, familiarise yourself with its controls and its working capacity.



WARNING

Do not leave the Cultivator unattended with the tractor engine running.



WARNING

Keep the machine clean from debris and foreign objects which may damage functioning or cause injury.



WARNING

Do not use the machine if the category of the connecting pins of the Cultivator does not match that of the tractor hitch system.



WARNING

Do not use the machine with missing bolts, screws, pins or safety pins, safety guards etc.



WARNING

Never use the machine to transport or lift people, animals or objects.



WARNING

Make certain, by adding front ballast, that at least 20% of the total weight (tractor, implement and implement) is on the front axle of the tractor, to ensure stability.



WARNING

SAFETY

Before engaging the tractor P.T.O., make sure the tractor P.T.O. speed is set as required for the machine (540 rpm). Do not over speed P.T.O. or machine breakage may result.



DANGER

Do not operate the machine if the driveshaft is damaged. The driveshaft could be subject to breakage during operation, causing serious injury or death. Remove the driveshaft and replace it with an undamaged one.



WARNING

With the machine disconnected from tractor, rest the driveline on the provided support.

OPERATING SAFETY INSTRUCTION



WARNING

Before using the machine, be sure to have cleared the operating area from obstacles (stones, branches, debris, etc...). Mark all the obstacles that cannot be eliminated (e.g. by means flags).



DANGER

Never engage the tractor P.T.O. in the presence of people close to the driveshaft. The body, hair or clothing of a person can get caught in rotating parts, causing serious injury or death.



DANGER

Before engaging the P.T.O. and during all operations, make sure that no person or animal is in immediate area of action of the machine. Never use the Cultivator if people are in the working area.



DANGER

It's absolutely forbidden to stand near the machine with moving parts.



WARNING

The operator must operate machine lifting/lowering only from the driving seat of the tractor. Do not perform lifting manoeuvres on side or behind the tractor.



WARNING

Before making changes in direction, turns or going in reverse, slightly lift the Cultivator from the ground after disengaging the power take-off, to avoid damage to the machine.



DANGER

In presence of steep slopes (greater than 15 degrees) the tilling action may cause instability of the tractor with risk of serious injury or death hazard. Consult the manual for the tractor to determine the maximum slope that the tractor is able to deal with.



DANGER

Always disengage the P.T.O. before raising the Cultivator, and never engage the P.T.O. with the Cultivator in the raised position. The machine might throw objects at high speed, causing serious injury or death.



WARNING

SAFETY

Never leave the driver's seat when the tractor is turned on. Before leaving the tractor, lower the Cultivator to the ground, disengage the P.T.O., insert the parking brake, stop engine and remove the key from the control panel.



DANGER

The P.T.O. guards retaining chains must be properly installed and in good condition, to avoid risk of entanglement with serious injury or death.



WARNING

Stop operating immediately if blades strike a foreign object. Repair all damage and make certain rotor and blades are in good condition before resuming operation.



WARNING

Always disengage the tractor P.T.O. when the driveshaft exceed an angle of 10 degrees up or down while operating. An excessive angle with driveshaft rotating can break the driveshaft and cause flying objects.



CAUTION

Prolonged use of the Cultivator can cause heating of the gearbox. Do not touch the gearbox during use and immediately after, it could be extremely hot and cause severe burns.



WARNING

All adjustment operations on the Cultivator must be performed by qualified and trained operators, with the tractor engine off, the P.T.O. disengaged, the Cultivator lowered to the ground or on security stands, the ignition key off and the parking brake on.

TRANSPORTING SAFETY INSTRUCTION



WARNING

Before transporting the machine, determine the stopping characteristics of the tractor and implement.



WARNING

Transport only at speeds where you can maintain control of the equipment.



WARNING

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 Cultivator cannot be lowered accidentally.



DANGER

The implement may be wider than the tractor. Pay attention during transporting to persons, animals or obstacles.



WARNING

When turning, use extreme care and reduce tractor speed.



WARNING

Do not operate the tractor with weak or faulty brakes or worn tires.

SAFETY



CAUTION

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.



DANGER

If the machine needs lifting, make sure that the lifting device chosen is suitable to perform the operation safely, and use only the lifting points prescribed on the machine.

MAINTENANCE SAFETY INSTRUCTION



WARNING

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



WARNING

Perform repairs and replacements necessary to the machine using only original spare parts provided by the manufacturer or your Dealer.



DANGER

Perform maintenance operations always using appropriate Personal Protective Equipment (protective eye glasses, hard hat, hearing protection, safety shoes, overall and work gloves, filter mask).



CAUTION

Before any maintenance operation, make sure that any parts which may become hot during use (gearbox) have cooled down.



WARNING

Do not perform repairs that you do not know. Always follow the manual instructions and in case of doubt contact the Manufacturer or your Dealer.



DANGER

Do not swallow fuels or lubricants. In case of accidental contact with eyes, rinse well with water and consult a doctor.

STORAGE SAFETY INSTRUCTIONS



WARNING

Never leave the tractor unattended with the Cultivator in a lifted position. Accidental operation of lifting lever or a hydraulic failure may cause a sudden drop of the unit with injury or death by crushing.



DANGER

Following operation, or before unhooking the Cultivator stop the tractor, set the brakes, disengage the P.T.O., lower the attached Cultivator to the ground, shut off the engine, remove the ignition key and wait for all moving parts to stop.



DANGER

Make sure all parked machines are on a hard, level surface and engage all safety devices.



CAUTION

Place support blocks under Cultivator as needed to prevent unit from tipping over onto a child and/or an adult. A Cultivator that tips over can result in injury or death.



CAUTION

Store the unit in an area away from human activity.

SAFETY LABELS

The safety labels applied on the machine give fundamental information for using the machine safely.

Make sure safety labels are in good conditions. If pictograms are worn, they must be replaced with others obtained from the manufacturer.

Make sure the safety labels are legible. If necessary, wipe them by a cloth, with soap and water.

SET UP

The Cultivator 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 Cultivator or driveshaft. In case of damage or missing parts immediately notify the manufacturer or your dealer.

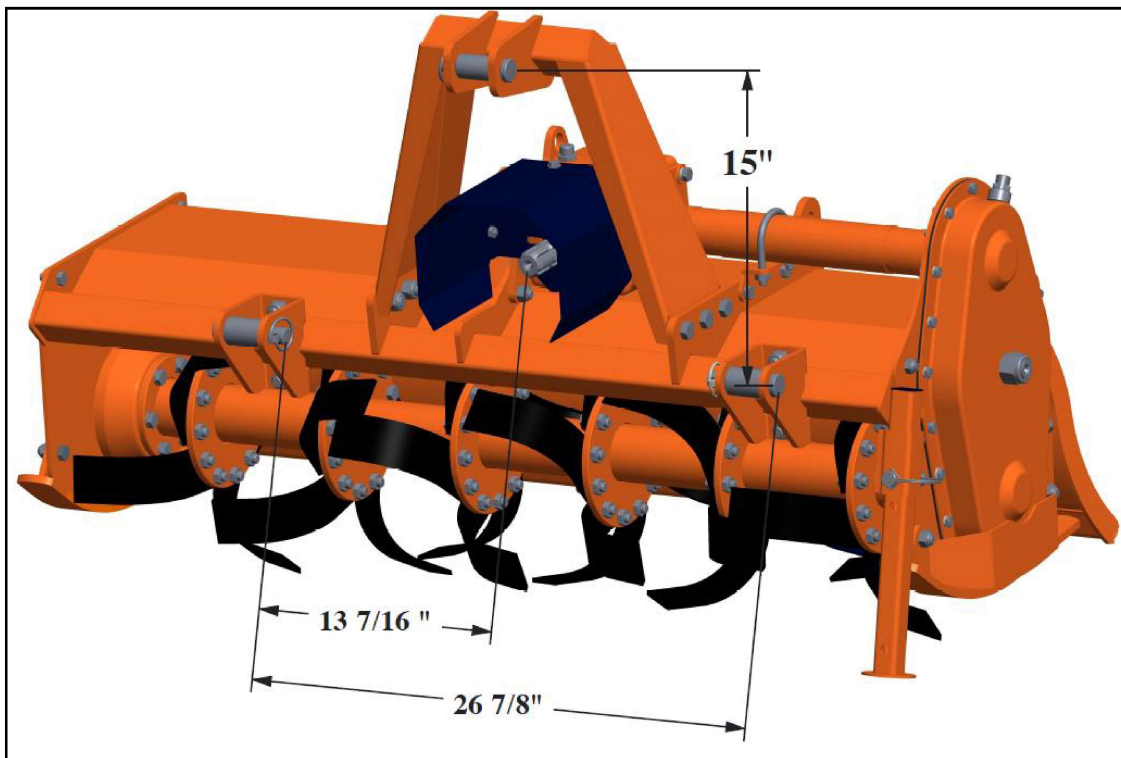
LOWER HITCHES POSITIONING

The RC Series Cultivators are designed to be mounted on tractors equipped with:-

- 3-point Hitch Category I (ISO 730 standard).
- Quick Hitch Category I (ASABE Standard).

The position of the lower hitches must be adjusted accordingly.

If the tractor is equipped with a Quick Hitch Category I (ASABE Standard), verify that the lower clevises show the pins oriented up (see figure), so that the distance between upper and the lower pins is 15" (381 mm), as required from the standard.



If adjustment is necessary, proceed as follows for each of the two clevises::

- Remove the U-bolt and the clevis from the square tube.
- Invert the clevis orientation and reposition it on the square tube at distance of 13 7/16" from the centre of Cultivator PTO. At the end of the operation the lower clevises should be positioned symmetrically respect to Cultivator PTO, at distance of 26 7/8" (683 mm).
- Re-tighten the U-bolt, referring to the tightening table of this manual.

If the tractor is equipped with a 3-point Hitch Category I (ISO 730 standard), verify that the lower clevises show the pins oriented down (opposite than figure above), so that the distance between upper and the lower pins is 18" (460 mm approx), as required from the standard.

If adjustment is necessary, proceed as follows for each of the two clevises:-

- Remove the U-bolt and the clevis from the square tube.
- Invert the clevis orientation and reposition it on the square tube at distance of 13 7/16" from the centre of Cultivator PTO. At the end of the operation the lower clevises should be positioned symmetrically respect to Cultivator PTO, at distance of 26 7/8" (683 mm).
- Re-tighten the U-bolt, referring to the tightening table of this manual.

SET UP

- Remove from upper and lower pins the bushings provided for coupling with Quick Hitch, through the extraction of linch pins. Replace the linch pins when finished. Store the bushings for possible future use.

CONNECTING TO THE TRACTOR

To connect the Cultivator to the tractor the operator must do the following:-

- Drive the tractor in reverse, up to align the rear lifting arms to lower hitches of the Cultivator in parking.
- Apply the tractor's parking brake, stop engine, remove the ignition key and get off the tractor.
- Connect the lifting arms of the tractor to the lower hitches of the tiller, through the use of the pins and the relative safety split pins.
- Raise the Cultivator until PTO's of tractor and machine are at the same height, then adjust the 3-point top link so that the front of the machine is levelled to the back (the axis of the Cultivator PTO must be parallel to the ground), in order to limit stress transmitted to the Cultivator through the cardan shaft.
- Make sure that left side of the Cultivator is levelled with the right, by adjusting the tractor lifting arms, then lock the arms to prevent swinging that could compromise the stability of tractor and machine.
- Finally adjust the parking stand, placing it at the highest point by means of the related linch pin.

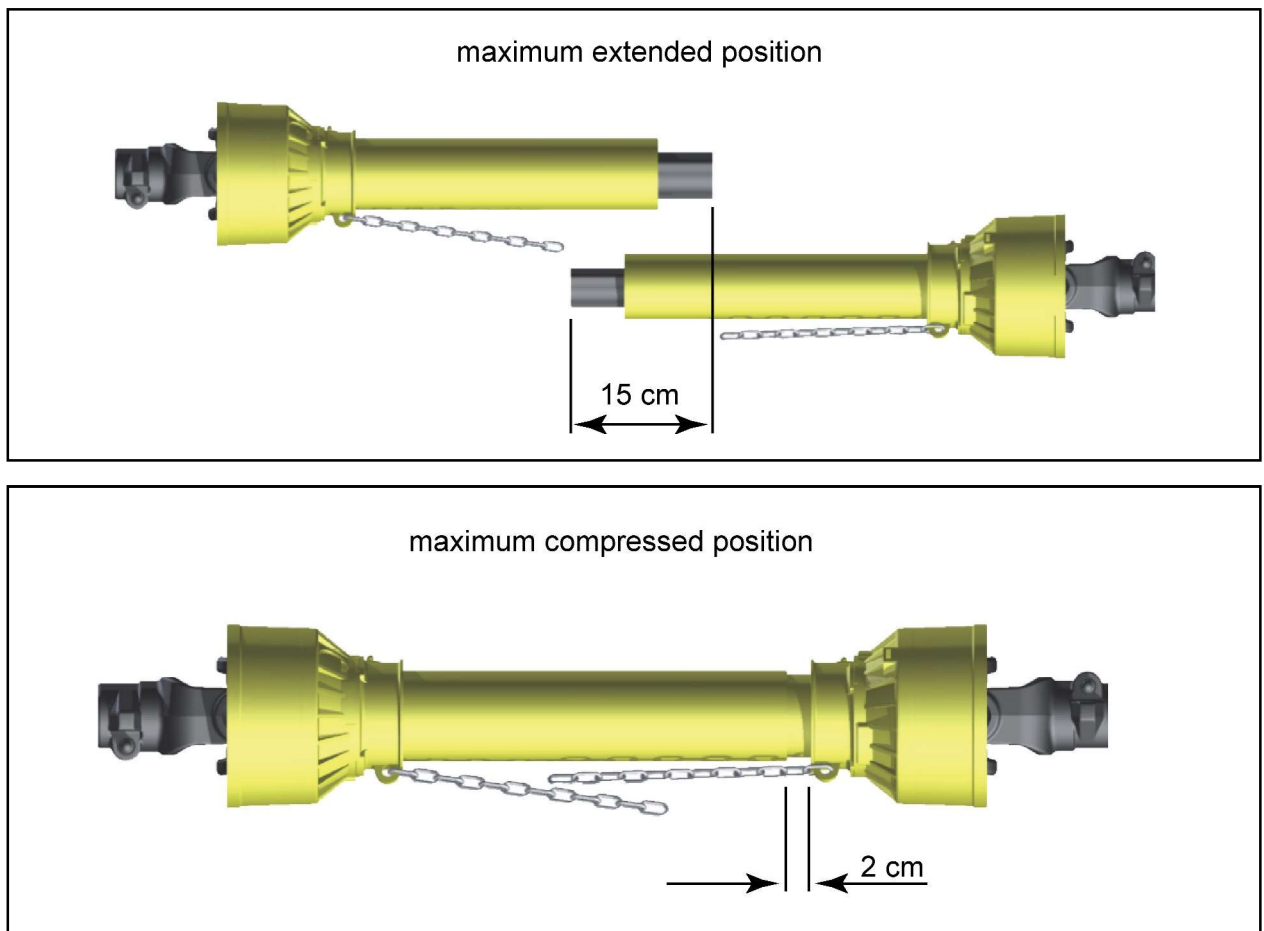
DRIVELINE INSTALLATION

Before installing the driveshaft, the operator must read the manuals of driveshaft and tractor, checking in particular that rpm and direction of rotation of the tractor PTO match those of the tiller. If the direction of rotation of the PTO tractor does not match that of the tiller, contact the manufacturer or your dealer.

To connect the driveshaft to the tractor and implement, the operator must:-

- Park tractor and Cultivator on a flat surface, with parking brake on, engine off, and ignition key removed.
- Check that safety devices of driveshaft, Cultivator and tractor are in good condition, otherwise provide for their replacement.
- Remove the PTO shield of the Cultivator through the fixing screws.
- Position the driveshaft with clutch turned towards the implement side.
- Insert the clutch hub on the Cultivator PTO, then ensure its tightening onto shaft through its fastener.
- Replace the PTO shield of the Cultivator through the fixing screws.
- Insert the driveshaft yoke on the tractor PTO, then ensure its tightening onto shaft through its fastener.
- Hook to the tractor and Cultivator the two retaining chains of the the driveline shielding, to prevent shielding rotation during functioning of the machine.

SET UP



DRIVELINE LENGTH CHECK

Before operating the tiller, ensure that the size of driveshaft is adequate. The driveshaft supplied with the machine has a standard length, therefore it may need an adaptation of the length, depending of the tractor which the Cultivator is attached.

The length of the driveshaft must be such to:-

- Avoid bottoming out of the PTO transmission tubes, when the driveshaft is in compressed position (when Cultivator is raised up off the ground).
- Ensure an overlapping of the transmission tubes enough to transmit the torque required, when the driveshaft is in max extension (when Cultivator is in its lowest position in the ground).

When the driveshaft is at its minimum length (max compressed position), there must be at least a 2 cm of distance between the ends of each transmission tube and the yokes side.

When the driveshaft is at its maximum operational extension, there must be an overlap between the tubes profiles of 15 cm at least.

A driveshaft that is too long may cause structural damages to the tractor and machine. If the driveshaft is too long, it may be adapted by removing it and shortening the tubes according to the instructions provided by the manufacturer in its use and maintenance manual.

A driveshaft that is too short can cause disengage of the tubes during operation, with severe hazard for the operator and structural damage to the tractor and machine. If the driveshaft is too short, it must be replaced with a longer one. In this case contact the manufacturer or your dealer.

IMPORTANT

- Before operating the Cultivator the first time, make sure that the driveshaft is lubricated in accordance with how indicated in the instruction booklet.

SET UP

- Before operating the Cultivator the first time, and after long periods of inactivity, make sure that the driveline clutch has run a short "run in" in accordance with what indicated in the instruction manual of the manufacturer, removing the possible oxidation of the components that may compromise the correct slipping during the usage (see also section "Maintenance").
- Always engage the tractor PTO at low rpm to minimise the effect of the peak torque on the driveline and the machine.

TRACTOR-CULTIVATOR STABILITY

The weight of the machine changes the stability of the tractor, resulting in loss of steering control and braking.

The front axle of the tractor should always be loaded with at least 20% of the overall weight of the combined unit.



CAUTION

Check the lifting capacity and stability of the tractor and, if necessary, adding front ballast. To determine the appropriate characteristics of the ballast, refer to the manual of the tractor.

OPERATING

Before operate the tiller, make sure you have read and understood the operating manuals of the tiller, tractor and PTO shaft, and followed what is described in the section "Set Up".



DANGER

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

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

During operation, the machine can throw material from the back. Prevent people and animals from approaching the operational area.

START UP

Before the start up and before each use, perform the following pre-operation inspections and service of the implement:

- Check that the Cultivator has not damaged functional parts and has all mechanical parts in good condition. Repair and / or replace the damaged parts.
- Check that the Cultivator has no missing parts (pins, safety pins, plugs oil ...). Replace the missing parts.
- Check that all guards and safety devices have no damages and are properly positioned. Repair and / or replace the damaged shieldings, restore the correct position.
- Verify that the PTO driveshaft is properly installed (see section: Connection of the drive shaft).
- Check that the driveshaft clutch is in good condition, and that its components are not subject to "sticking" (see section: Maintenance / Driveline).
- Check the presence of lubricant in all greasing points of the Cultivator (driveshaft, supports...) (see sect. Maintenance / Driveline and Maintenance / Support rotor).
- Check for oil leaks from the gearbox or the transmission side cover. Identify the reason of loss, then repair and / or replace the damaged components.
- Check the correct oil level in the gearbox and in transmission side box (see section maintenance).

SET UP

- Check that blades are not excessively worn and the relating hardware is correctly tightened (see sect. Maintenance).
- Check that all the Cultivator hardware is properly tightened. Refer to the tightening table in the manual for proper torque values.
- Check that all safety decals are correctly positioned, in good condition and legible. Replace any damaged decals.
- Check that there is no constraints that may prevent the movement of equipment. Remove any constraint.

Before the start up and before each use, make the following checks on the operating area identified for tillage:-

- Check that area is clear of foreign objects (rocks, branches or debris). Remove any obstacle and visibly highlight obstacles that cannot be eliminated (e.g. by means flags).
- Make sure there are no people or animals in the working area.
- Make sure the soil to be worked is not too grassy, muddy, sandy or rocky.



WARNING

Before conducting the above inspections and service, make sure the tractor engine is off, all rotation parts are completely stopped and the tractor is in park with the parking brake engaged, and the key removed. Make sure the Cultivator is resting on the ground or securely blocked up and the tractor lifting hydraulics locked.

Once all the checks above have been done, start tractor and the Cultivator as follows:-

- Start the tractor and engage the tractor PTO at low rpm, making sure that the Cultivator is NOT in the raised position but close to the ground, then increase speed engine to 540 rpm.
- Lower the Cultivator on the ground and simultaneously start driving the tractor at low speed. Subsequently increase the ground speed depending on ground conditions.
- If the environmental temperature is very cold , it's recommended to wait a few minutes with the PTO of the tractor at low rate before lowering the Cultivator completely on the ground.
- Drive for a while operating the tiller, then stop the tractor to check the quality of the work performed. If you need to get off the tractor, lift the Cultivator just out of the ground, reduce engine speed and disengage PTO, set the parking brake, stop engine and remove the ignition key.

If the working depth and/or soil texture are not as desired, correct them by adjusting the skids and/or the rear cover (see section Adjustments).

OPERATING INSTRUCTIONS

During operations:/ OPERATE ACCORDING TO FOLLOWING INTRUCTION

- Always keep the tractor engine at rpm rate ensuring to the Cultivator the right power required for the use.
- Always keep a tractor speed adequate to conditions of the soil to be worked (from 2 to 10 km / h approx.). Reduce speed in the case of hard or stony soils.
- Choose a driving pattern that provides the maximum pass length and minimizes turning.
- When working in the hills, if you can do "climbing" in the direction of the slope, in any case do not work along the hillsides, making the steps from top to bottom to reduce the terrace. Where possible always try to «work up» the slope. If this is not possible avoid hoeing along the contours of the hill and hoe up and down the slope to avoid a terracing effect.
- Always perform changes and reverse of direction with PTO disengaged and the Cultivator slightly lifted from the ground to avoid damage to the machine.
- Periodically check for foreign objects wrapped around the rotor shaft and remove them, after disengaging PTO, turning off tractor engine, and removing ignition key.
- If the blades strike a foreign object, or in case of prolonged intervention of the clutch due to an object wedged into the rotor, stop operating immediately, idle the engine speed and disengage

OPERATING

the PTO. Wait for all rotating parts to stop, then raise the implement and proceed to removing the object, after stopping the tractor, applying the parking brake, stop the engine and remove the ignition key. Repair any damages immediately, and make sure the rotor and blades are in good condition before restarting work.

- Avoid friction clutch overheating caused by too long or too frequent slipping of the clutch, since this can damage the friction plates and clutch parts.

Typical problems that may occur operating the Cultivator are described into Troubleshooting section, together with their solutions.

ADJUSTMENTS

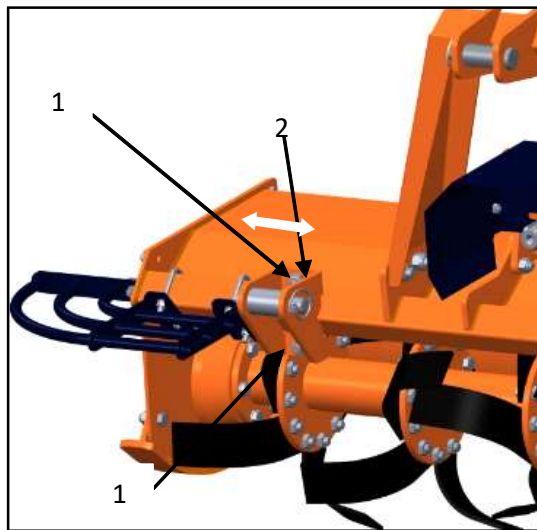


WARNING

All adjustment operations must be performed with the tractor engine off, the PTO disengaged, the Cultivator lowered to the ground or on security stands, the parking brake applied and the ignition key removed.

LOWER CLEAVES ADJUSTMENT

It is possible to adjust the lower hitch position by loosening the bolts 1 (see picture) and sliding the clevis 2. Tighten the bolts after making any adjustment required.

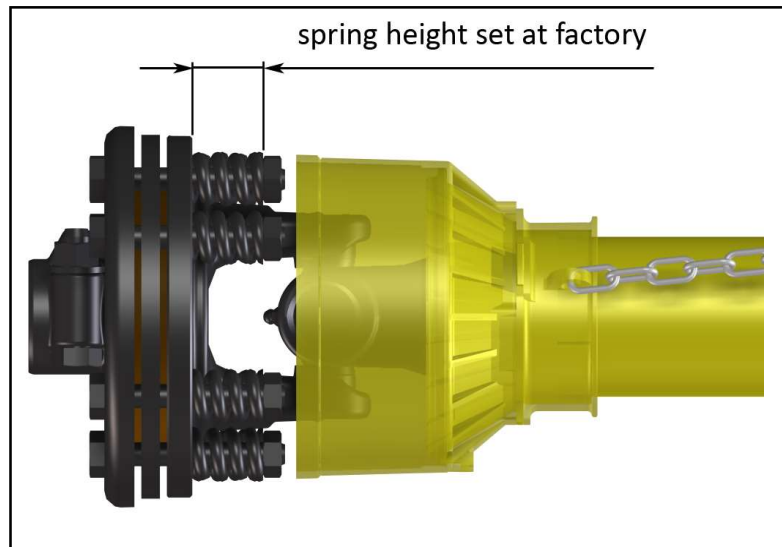


FRICITION CLUTCH ADJUSTMENT

The PTO driveshaft and friction clutch are designed to transmit adequate power to the tiller.

The clutch protects the machine from overloads, through the slipping of friction discs, and limits the maximum torque transmissible to a calibrated value set at the factory. It is recommended, therefore, to leave this value unchanged to avoid damage to the machine or to the driveshaft.

ADJUSTMENTS



An adjustment can be done, however, when the clutch slipping is too frequent, which means that the calibration is too low.

In this case, the tightening of nuts over the compressed springs will give an increase in torque transmissible.

On the contrary, a loosening of the nuts over the springs will give a decrease in torque transmissible.

IMPORTANT

For details about clutch adjustment, refer to the user manual of the manufacturer of the driveshaft installed.

The manufacturer is not liable for damages resulting from a wrong modification of the clutch calibration.

NOTE

Excessive tightening of the springs can prevent the clutch from slipping and protecting the machine from overload.

Make sure that the height of all the compressed springs is equal to prevent clutch malfunctioning.

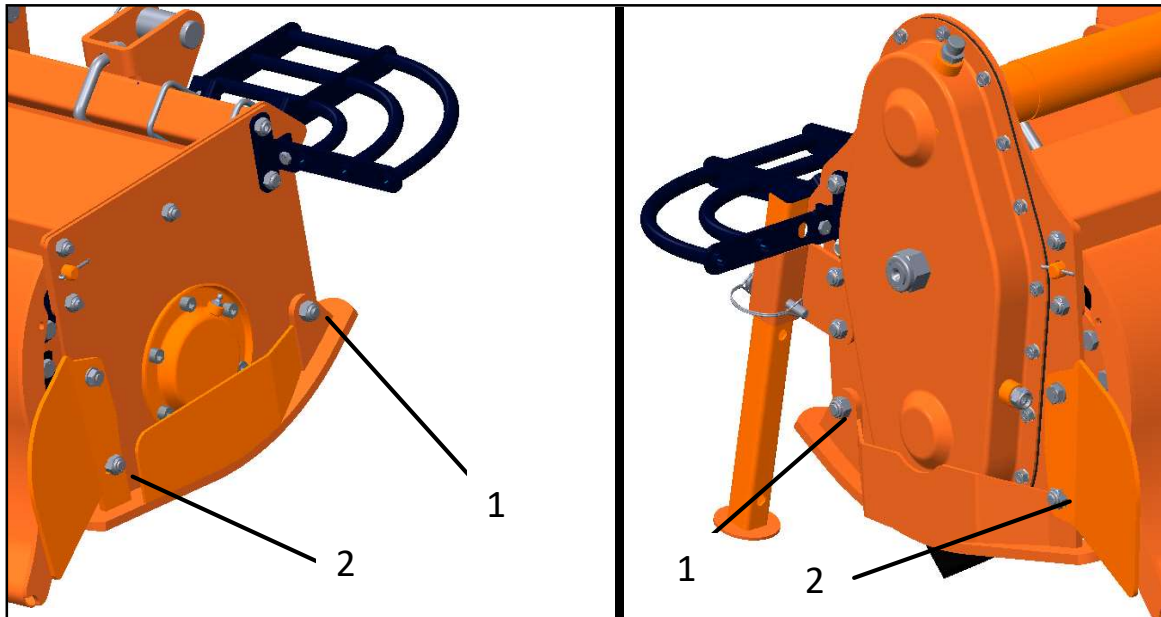
SKIDS ADJUSTMENT

The working depth of the Cultivator is determined by the position of the side skids: it may be increased by raising the skids, and decreased by lowered them. It's important that both skids are adjusted to 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 front skid (Bolt 1 - see picture on page 24).
- Unscrew and remove the bolt on the rear of the skid (Bolt 2 - see picture on page 24).
- Adjust the height of the skid through the holes, as desired.
- Reinstall the Bolt 2 (refer to the tightening table of this manual for proper torque values).
- Tighten Bolt 1 (refer to the tightening table of this manual for proper torque value).

ADJUSTMENTS

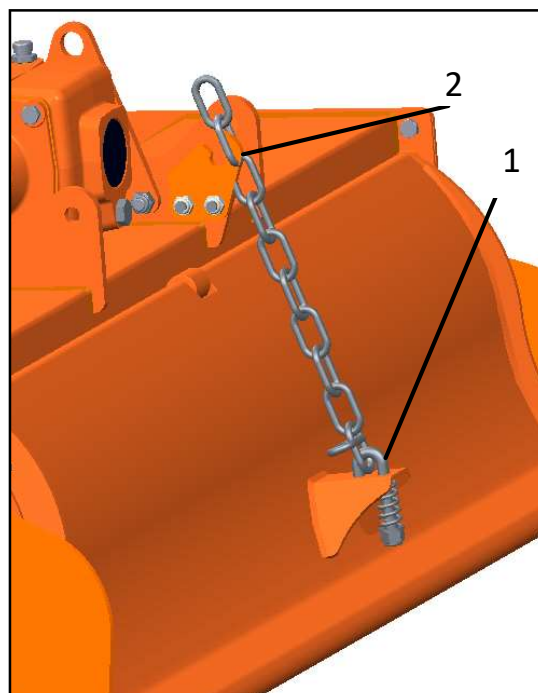


When finished, verify that both skids are at same level, and check if the front of the Cultivator is level to the back, when lowered to the ground. Adjust with the 3-point top link if necessary.

REAR BOARD ADJUSTMENT

The RC-Series tillers are equipped with a rear board with chain.

The position of the rear board is adjustable by varying the number of chain links included between distance XY, which remain tensioned under the weight of the board (i.e. links between the rear board U-bolt 1 and the slot of the frame 2).



ADJUSTMENTS

- To raise the rear board, reduce the number of chain links in tension. This operation, together with the increase of the tractor ground speed, allows to have a coarser soil texture.
- To lower the rear board, increase the number of chain links in tension. This operation, together with the reduction of the ground speed, allows to have a finer soil texture.



WARNING

To avoid the risk of crushing or cutting of fingers, raise or lower the rear board only from the lower edge, not from the sides.

STOPPING AND DISCONNECTION

To stop the Cultivator at the end of a working session:-

- Bring the tractor to a complete stop.
- Place the transmission in park or neutral.
- Reduce the engine speed, then disengage the PTO.
- Wait for stopping of all rotating parts.
- Lower the implement to the ground.
- Set the parking brake.
- Shut down the engine and remove the key before exiting the tractor.
- Do the cleaning and maintenance required to make the machine ready for later use (see Section Maintenance).



WARNING

Never leave the tractor unattended with the implement in the lifted position.

To disconnect the Cultivator from the tractor (e.g. to make a change of implement):-

- Adjust the skids to their lowest position (see Section Adjustments).
- Adjust the parking stand to the lowest position, through the use of relative retaining pin.
- Park the tractor on a dry and level surface.
- Reduce the engine speed, then disengage PTO.
- Wait for stopping of all rotating parts.
- Lower the implement to the ground.
- Set the parking brake.
- Shut down the engine and remove the key before exiting the tractor.
- Place safety blocks under Cultivator to prevent unit from tipping over onto a child and/or an adult. A Cultivator that tips over can result in injury or death.
- Disconnect the driveline from the tractor PTO and rest it on the provided support of the tiller.
- Disconnect the top link and rear lifting arms of the tractor from the Cultivator hitches.
- Check the Cultivator stability. If needed, place additional safety blocks.
- Get on the tractor, start the engine and move away from the Cultivator slowly.
- Make sure the Cultivator remains stored in a protected area, to prevent unauthorized personnel from access.

Before a long term storage (e.g. at seasonal end), do cleaning and maintenance operations as specified in Sections MAINTENANCE and STORAGE.

TRANSPORTING

To prepare the Cultivator for transportation, perform the following steps:

- Idle tractor engine, disengage tractor PTO, and wait for stopping of all rotating parts;

MAINTENANCE / BLADE REPLACEMENT

- Lift the Cultivator to the transport position, making sure the driveline transmission tubes does not contact tractor or tiller. A minimum gap of 2 cm should be left between the tubes and tractor and Cultivator (see also Section Driveline installation).
- 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 traffic regulations.



WARNING

When driving on public roads, reduce your speed, be aware of traffic around you and proceed in such a way that faster moving vehicles may pass you safely.

MAINTENANCE

Proper and regular maintenance ensures a long life of the equipment, avoids failures and saves time and repair costs.

Periodic inspections and maintenance operations described in this section must be performed by operator in the times and terms prescribed. Failure to comply with maintenance can compromise the functioning and lifespan of the machine, and consequently invalidate the warranty.

The frequency of maintenance indicated refers to normal conditions of use: it must be intensified in severe operating conditions (frequent stops and starts, prolonged winter season etc ...).

Repairs, maintenance and modifications other than those mentioned in this paragraph should NOT be performed without consulting the manufacturer or your dealer. The Manufacturer, may give the authorization to proceed with the repair together with all necessary instructions.

Wrong or inappropriate repairs or maintenance may generate abnormal operating conditions, equipment damage and generate risks for the operator.



WARNING

For safety reasons, all maintenance operations must be performed with tractor PTO disengaged, Cultivator stopped and completely lowered to the ground or onto support blocks, parking brake on, tractor engine shut off, and ignition key removed.

IMPORTANT

Respect the environment. Store or dispose of unused chemicals as specified by the chemical manufacturer.

BLADES REPLACEMENT

Frequently check the wear condition of blades through visual inspection. The wear of blades is very variable depending on the type of soil.

Replacement of the blades is necessary when the operator notices increase of power absorption during tilling, or when the blade dimension is significantly reduced compared to the original.

The use of the machine with blades in bad condition compromises the quality of work.

Before performing replacement of the blades:-

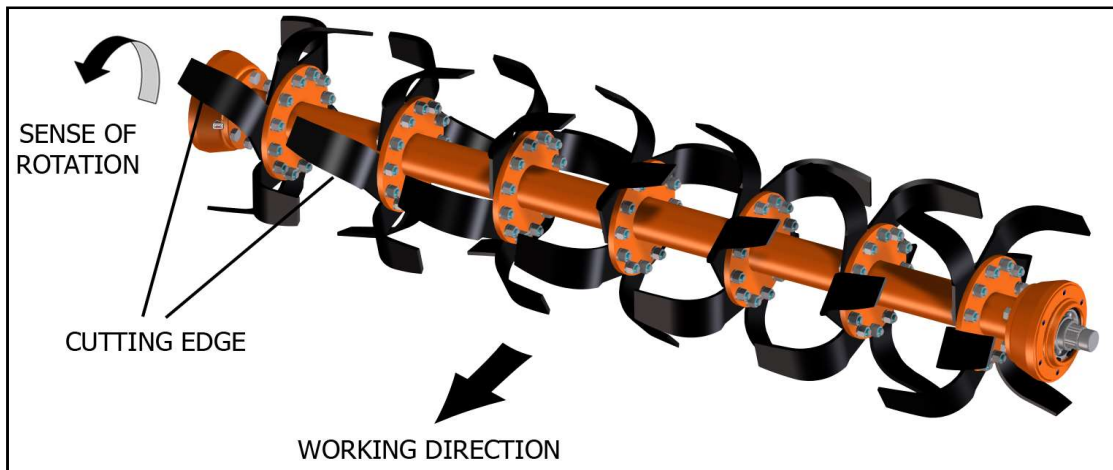
- Idle tractor engine, set the parking brake, disengage tractor PTO, and wait for all moving parts to come to a complete stop.
- Place the Cultivator slightly lifted from the ground on safety blocks or mechanical stands.
- Lock the control lever of the hydraulic lift of the tractor.
- Turn off the tractor and remove the key.

BLADE REPLACEMENT

To perform the replacement of blades:-

- Remove the two bolts and washers clamping the blade to the rotor flange, then remove the blade.
- Position the new blade exactly instead of the worn blade, then tighten the bolts, referring to the tightening table of this manual for proper torque values. Be sure to install the blade with cutting edge in front of the direction of rotation.
- Repeat the same procedure for all the other blades.

At the end of the replacement, make sure the blades have the right helical arrangement, as shown in the figure:



Periodically check the tightness of screws and nuts, and tighten if necessary.

IMPORTANT

Remove and install one blade at a time to ensure blades are correctly oriented when installed. Replace worn blades only with original parts.



CAUTION

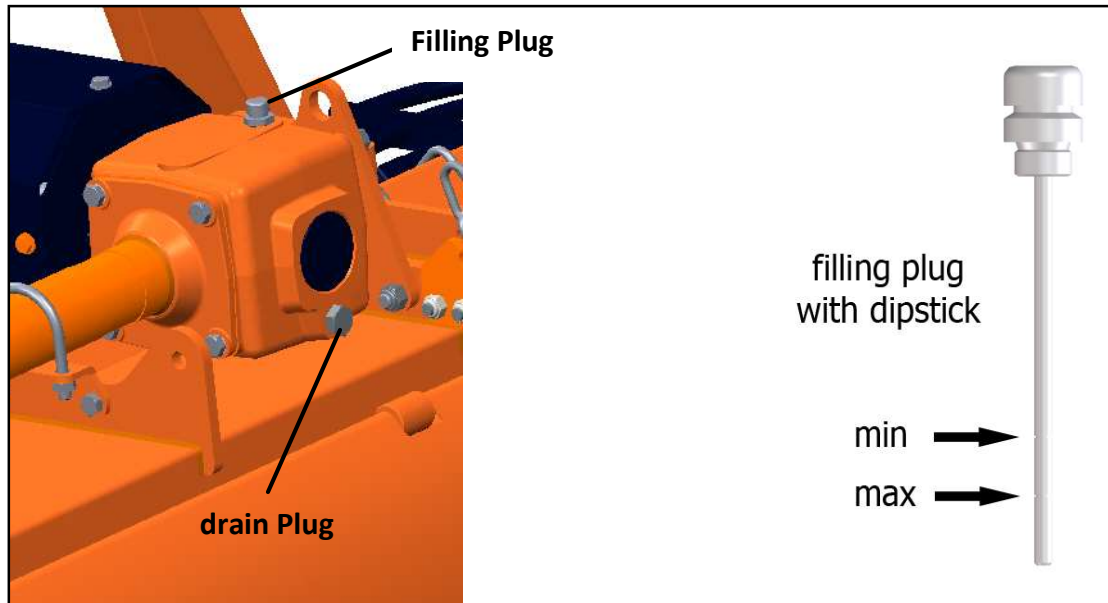
Worn tines may be very sharp!

LUBRICATION

GEARBOX LUBRICATION

Lubricant: SAE EP 80W90 gear oil

Check the oil level every 50 hours, making sure the oil mark left on the dipstick of the filling plug (top of gearbox) is located between the two reference marks (minimum and maximum).



If the level is below the minimum, fill up oil to the correct level.

The oil change must be performed:-

- After the first 50 working hours;
- Each 500 working hours.

To make the oil change:-

- Place a tank under the oil drain plug (bottom of gearbox).
- Unscrew the oil drain plug and drain oil completely into the tank.
- Retighten the drain plug.
- Unscrew the oil filling plug.
- Fill up oil to the correct level (between the two reference dipstick marks).
- Retighten the filling plug.
- Dispose the discharged oil into containers for used oil.



CAUTION

Before touching the gearbox wait until it has cooled sufficiently.

IMPORTANT

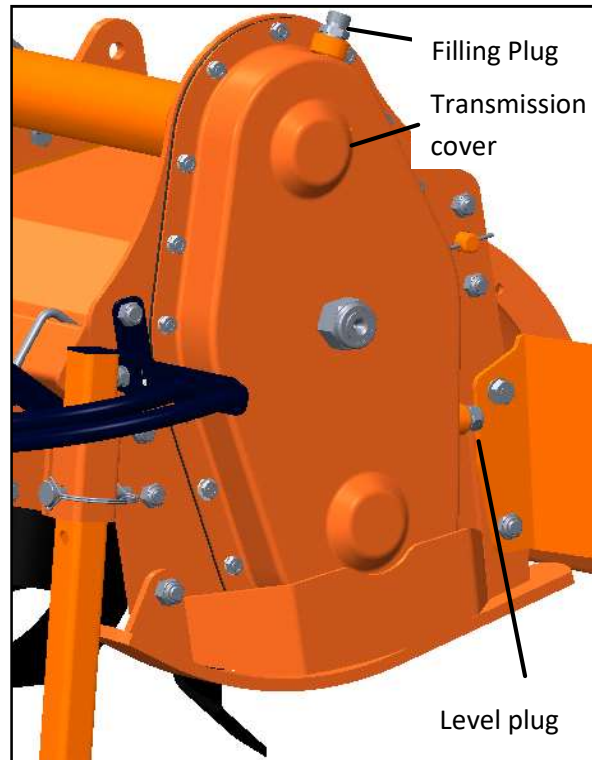
Frequently check possible oil leaks from Cultivator through visual inspection, and in case of leakage provide immediately proper maintenance.

Avoid oil leaks on the ground when restoring oil level or making oil change.

LUBRICATION

SIDE CASE LUBRICATION

Lubricant: SAE EP 80W90 gear oil



Check the oil level every 50 hours, making sure it reaches the level plug on the transmission cover. If the oil is below this level, top up with oil to restore the level.

The oil change must be performed every 500 working hours.

To make the oil change:-

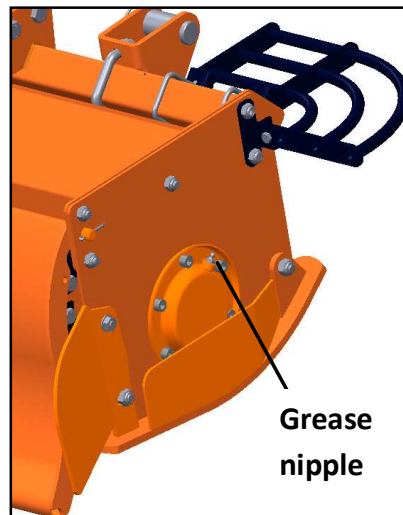
- Remove the skid from the transmission side.
- Place a tank under the oil level plug.
- Unscrew the oil level plug and drain completely the oil into the tank.
- Retighten the level plug.
- Unscrew the oil filling plug (top of transmission cover).
- Fill up oil till restoring the correct level (until level plug).
- Retighten the filling plug.
- Replace the side skid.
- Dispose the discharged oil into containers for used oil.

LUBRICATION / PTO MAINTENANCE

BEARING HOUSING LUBRICATION

Lubricant: SAE multi-purpose lithium-type grease

Grease the rotor hub support every 8 working, through a suitable grease gun.



IMPORTANT

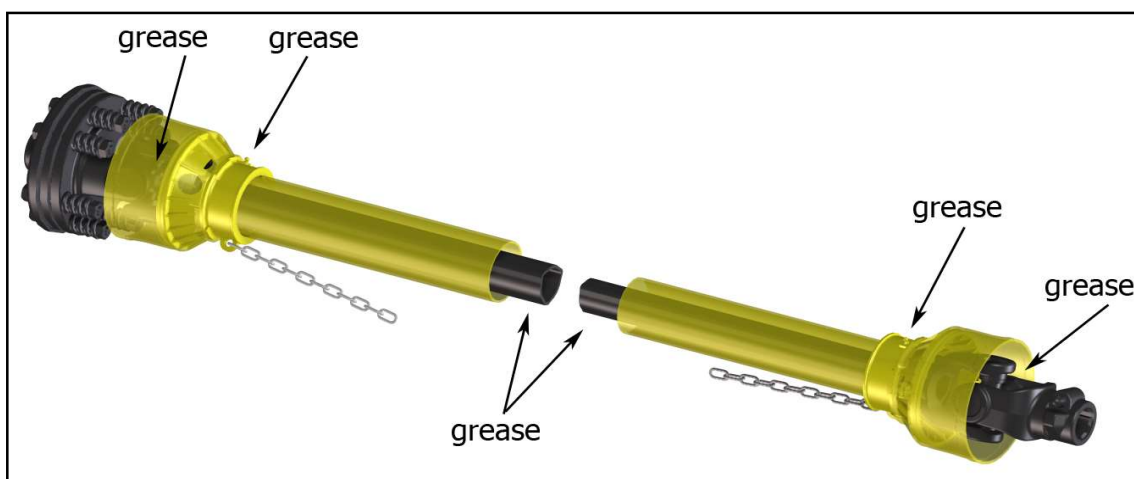
Make sure to clean the fitting nipple before using grease gun.

Do not let excess grease collect on or around parts, particularly when operating in sandy areas.

PTO MAINTENANCE

Lubricant: SAE multi-purpose lithium-type grease.

Grease crosses, sliding parts of protective shielding and driveshaft transmission tubes.



IMPORTANT

For details about maintenance and lubrication of the driveshaft, refer to the user manual of the driveshaft manufacturer.

Driveshaft clutch:-

PTO MAINTENANCE / STORAGE / SCRAPPING

Exposure to the elements of Cultivator and driveshaft, or a long period of inactivity, generally results in oxidation of some clutch components, and creates "sticking" effect on the clutch.

Consequently, the torque required to the slippage of the clutch increases considerably in respect to the value set at the factory, and this may cause the driveshaft breakage during operation, or damage to the tractor or implement.

To avoid it, before re-using the tiller, the operator must perform a short "run-in" of the clutch, as follows:

- Take note of the height of the compressed springs.
- Loosen the bolts that compress the springs.
- Connect the Cultivator to the tractor (see section Connecting to the tractor).
- Connect the driveshaft (see section Driveline installation).
- Start the tractor and engage PTO for few seconds, in order to cause slippage and separation of the parts "sticked" of the clutch.
- Turn off the tractor, remove key and wait for all components are stopped before dismounting from tractor.
- Retighten the bolts restoring the original springs position on the driveshaft.

NOTE

For replacement of the driveshaft service parts (e.g. friction discs), refer to the user manual of the driveshaft manufacturer.

STORAGE

Before leaving the Cultivator unused for a long time, it's necessary to perform following tasks to preserve the appearance and functionality of the machine, and to make easier the restart at later use:

- Park the Cultivator on a flat surface, in a place dry and protected from exposition to the elements, possibly with storage temperature between 0 and 50 ° C (see Section Stopping and disconnection).
- Thoroughly clean the machine, removing from the rotor all residues due to tillage, in order to avoid damage from grass and stagnant water.
- Inspect carefully the machine, checking for worn and/or damaged parts. Perform immediately all repairs and/or replacements needed, in order to make the machine ready for restarting.
- In case of abrasion of painted surfaces, repair the surface protection through touch-up paint to prevent rust.
- Make sure the safety decals are in their original positions, intact and legible. When required, replace the decals immediately.
- Lubricate properly all grease points, and restore the oil levels as indicated in the maintenance Section. Use protective oil to coat the exposed mechanical components and to protect them against rust.

If the Cultivator driveshaft is equipped with a friction clutch, it is suggested to take note of the height of the compressed springs and loosen the bolts that compress the springs, to prevent the discs from "sticking" effect due to moisture, that may cause the clutch failure at restart of the activities (see also Driveshaft maintenance).

Before restart the operations, restore the original height of the springs.

SCRAPPING

In case of scrapping, the machine must be disposed of in appropriate and authorized sites, according to local legislation.

Before scrapping, separate plastic parts from rubber parts, aluminum, steel, etc.

Recover and dispose of any exhausted oils to authorized centers for oil collecting.

TROUBLESHOOTING

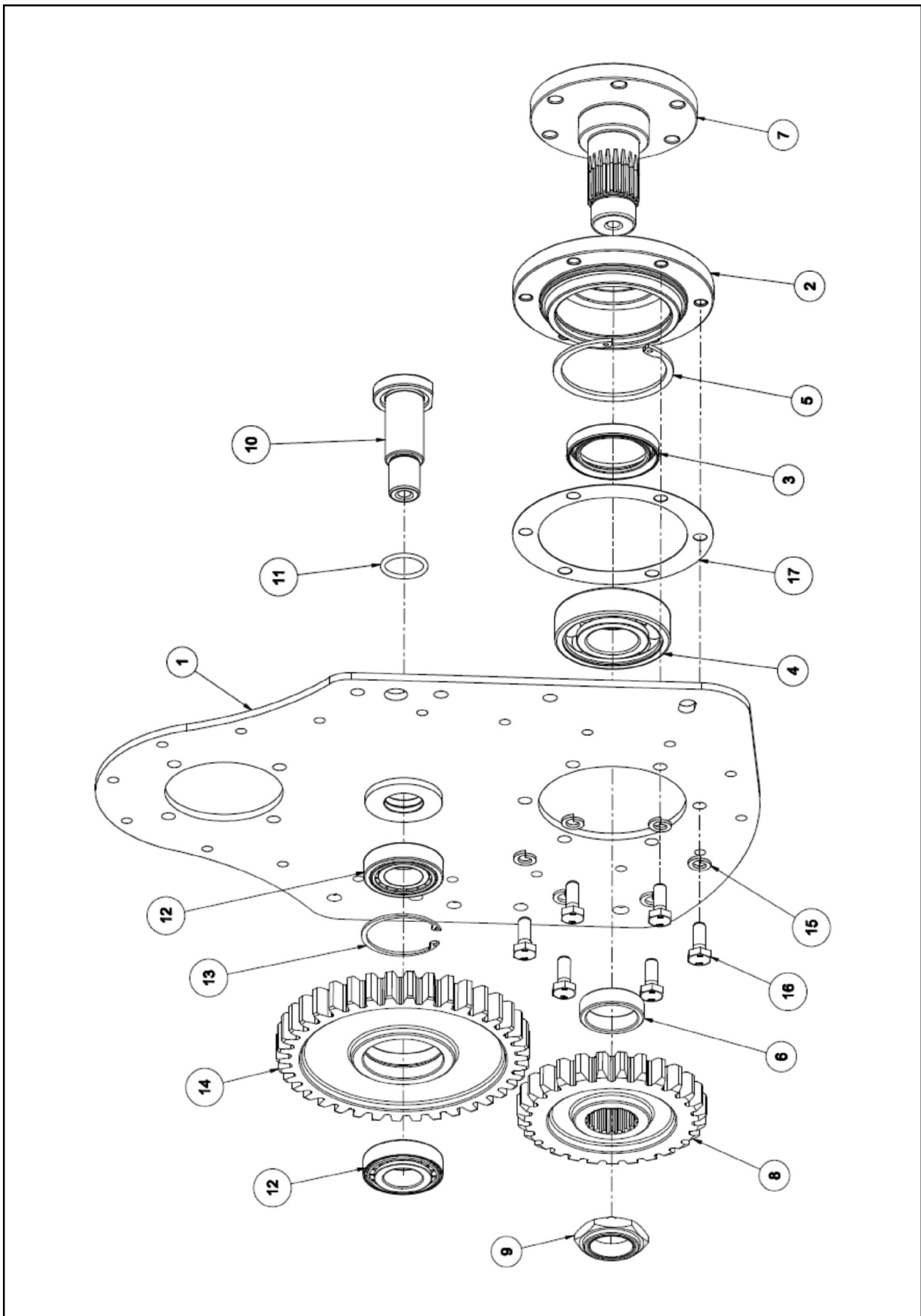
PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTION
Gearbox/transmission case noise noticeable and constant.	<ul style="list-style-type: none"> • Low oil level. • Worn gears. 	<ul style="list-style-type: none"> • Add oil to the gearbox/transmission case. • Replace gears.
Intermittent noise from Cultivator.	<ul style="list-style-type: none"> • Loose blades. • Gear tooth damaged 	<ul style="list-style-type: none"> • Tighten blades hardware. • Replace damaged gear.
Noise and/or vibration from Cultivator.	<ul style="list-style-type: none"> • Blades worn or damaged • Bearings damaged. • The front of the Cultivator is not levelled to the back. 	<ul style="list-style-type: none"> • Replace blades. • Replace bearings. • Adjust 3-point top link of tractor making Cultivator PTO parallel to the ground. • Repair/replace rotor.
Driveline vibration	<ul style="list-style-type: none"> • Worn driveshaft. • Machine lifted too high. • Debris wrapped on rotor. 	<ul style="list-style-type: none"> • Replace driveshaft. • Lower machine and readjust tractor lift stop. • Remove debris.
Rotor stops turning	<ul style="list-style-type: none"> • Slip clutch slipping. • Broken chain in chain box. 	<ul style="list-style-type: none"> • Reduce load to Cultivator or adjust slip clutch. • Repair broken link.
Machine skip or leaves crop residue	<ul style="list-style-type: none"> • Badly worn blades. • Slip clutch slipping. • Ground speed too fast for conditions. 	<ul style="list-style-type: none"> • Replace worn blades. • Adjust slip clutch or reduce load. • Reduce ground speed.
Smoke and/or hot smell from Cultivator	<ul style="list-style-type: none"> • Debris wrapped around in blades and/or rotor. • Low oil level in gearbox. • Slip clutch slipping. 	<ul style="list-style-type: none"> • Remove debris. • Add oil. • Reduce load to machine or adjust slip clutch.
Gearbox overheating	<ul style="list-style-type: none"> • Low oil level. • Hard soil. 	<ul style="list-style-type: none"> • Add oil. • Reduce ground speed.
Blades wear frequently.	<ul style="list-style-type: none"> • Muddy or sandy soil. 	<ul style="list-style-type: none"> • Reduce ground speed.
Blades break frequently.	<ul style="list-style-type: none"> • Stony soil. 	<ul style="list-style-type: none"> • Reduce ground speed.
Oil leaking from gearbox/transmission case.	<ul style="list-style-type: none"> • Gearbox/transmission case overfilled. • Loose filling/drain plug. • Damaged breather plug. • Damaged seals. 	<ul style="list-style-type: none"> • Drain to proper level. • Tighten filling/drain plug. • Replace breather plug. • Replace seals.
Tillage depth insufficient.	<ul style="list-style-type: none"> • Cultivator is carried by tractor. • Tractor has insufficient power. • Skids need adjusting. • Blades worn or bent. • Blades incorrectly installed. • Debris entangled in blades and/or rotor. 	<ul style="list-style-type: none"> • Lower tractor 3-point arms. • Increase PTO speed. • Adjust skids. • Replace blades. • Install tines correctly. • Clear rotor and/or blades.

TORQUE VALUES TABLE

PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTION
Soil texture too coarse.	<ul style="list-style-type: none"> • Rear board too high. • PTO speed too slow. • Ground speed too fast. 	<ul style="list-style-type: none"> • Lower rear board. • Increase PTO speed. • Reduce ground speed.
Soil texture too fine.	<ul style="list-style-type: none"> • Rear board too low. • Ground speed too slow. 	<ul style="list-style-type: none"> • Raise rear board. • Increase ground speed.
Cultivator choking up with soil.	<ul style="list-style-type: none"> • Blades worn or bent. • Blades incorrectly installed. • Rear board too low. • Soil too wet. 	<ul style="list-style-type: none"> • Replace blades. • Install tines correctly. • Raise rear board. • Wait until soil dries.
Cultivator skipping on ground or leaving crop residue.	<ul style="list-style-type: none"> • Blades incorrectly installed (wrong helical arrangement, cutting edge in wrong direction). • Debris entangled in blades and/or rotor. • Ground speed too fast. • Soil too hard. 	<ul style="list-style-type: none"> • Install blades correctly (replace right helical arrangement, position cutting edge in front of rotation direction). • Clear rotor and/or blades. • Reduce ground speed. • Reduce ground speed and make tilling in more steps.
Tillage not uniform.	<ul style="list-style-type: none"> • Blades worn or damaged. • Skids not aligned. • Cultivator left side not levelled with right side. 	<ul style="list-style-type: none"> • Replace blades. • Align skids. • Adjust tractor 3-point arms.
Tractor stalling	<ul style="list-style-type: none"> • Excessive working depth. • Excessive PTO speed. 	<ul style="list-style-type: none"> • Lower skids. • Reduce PTO speed.

	8.8 GRADE	10.9 GRADE
BOLT SIZE (METRIC)	Nm	Nm
M6	11	15
M8	26	36
M10	52	72
M12	91	125
M14	145	200
M16	225	315
M18	310	405
M20	440	610

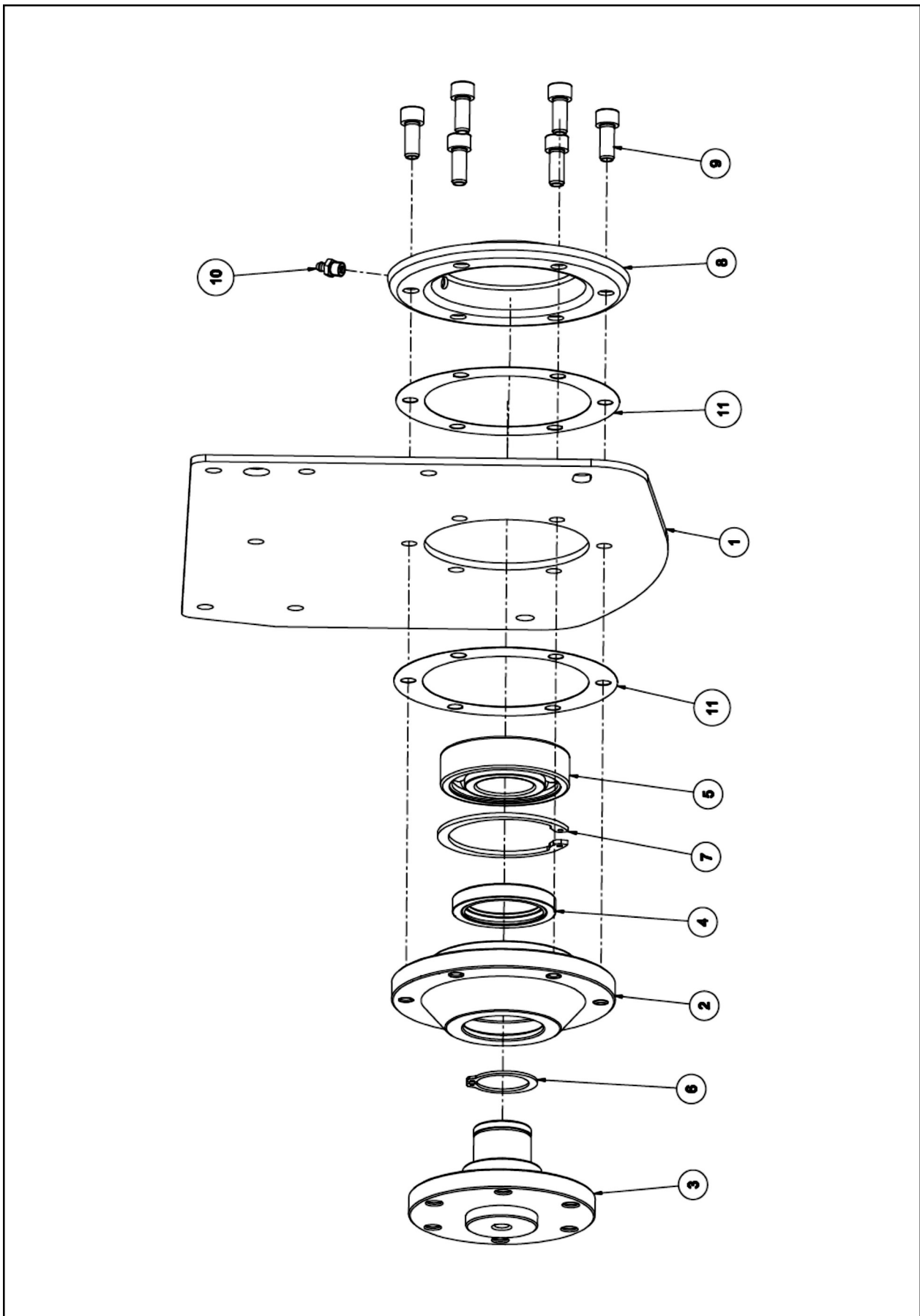
PARTS ILLUSTRATION - DRIVE ASSEMBLY



PARTS LIST - DRIVE ASSEMBLY

Item No.	Part No.	Description	Qty.
1	SS-14320	Rotor Drive Plate	1
2	SS-14019	Rotor Shaft Housing	1
3	SS-14051	Oil Seal	1
4	SS-8036	Bearing	1
5	SS-3027	Circlip Internal	1
6	SS-14028	Spacer	1
7	SS-14022	Rotor Drive Shaft	1
8	SS-14034	Gear - 27 Teeth	1
9	SS-1449	Nylock Nut	1
10	SS-14025	Intermediate Shaft	1
11	SS-14131	'O' Ring	1
12	SS-14055	Bearing	2
13	SS-8120	Circlip - Internal	1
14	SS-14033	Gear - 38 Teeth	1
15	SS-1304	Spring Washer	6
16	SS-17270	Hex Bolt	6
17	SS-14018	Drive Plate End Cover Gasket	1

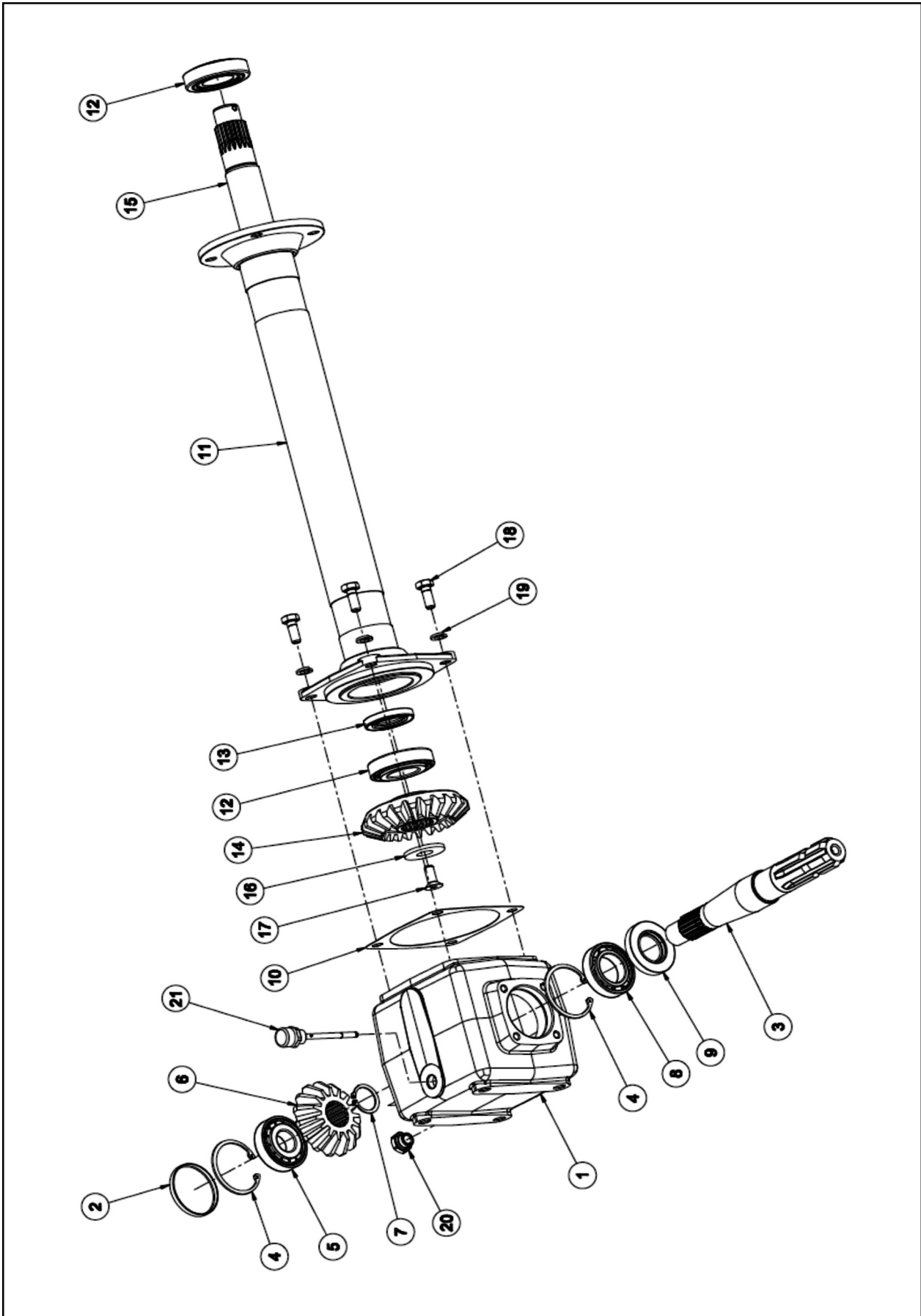
PARTS ILLUSTRATION - NON-DRIVE ASSEMBLY



PARTS LIST - NON-DRIVE ASSEMBLY

Item No.	Part No.	Description	Qty.
1	SS-14023	Rotor Plate (Non Drive End)	1
2	SS-14019	Rotor Shaft Housing	1
3	SS-14021	Stub Axle Shaft	1
4	SS-14051	Oil Seal	1
5	SS-8036	Bearing	1
6	SS-8027	Circlip External	1
7	SS-3027	Circlip Internal	1
8	SS-14256	Plate End Cover	1
9	SS-2833	Allen Bolt	6
10	SS-1253	Grease Nipple	1
11	SS-14018	Plate End Cover Gasket	2

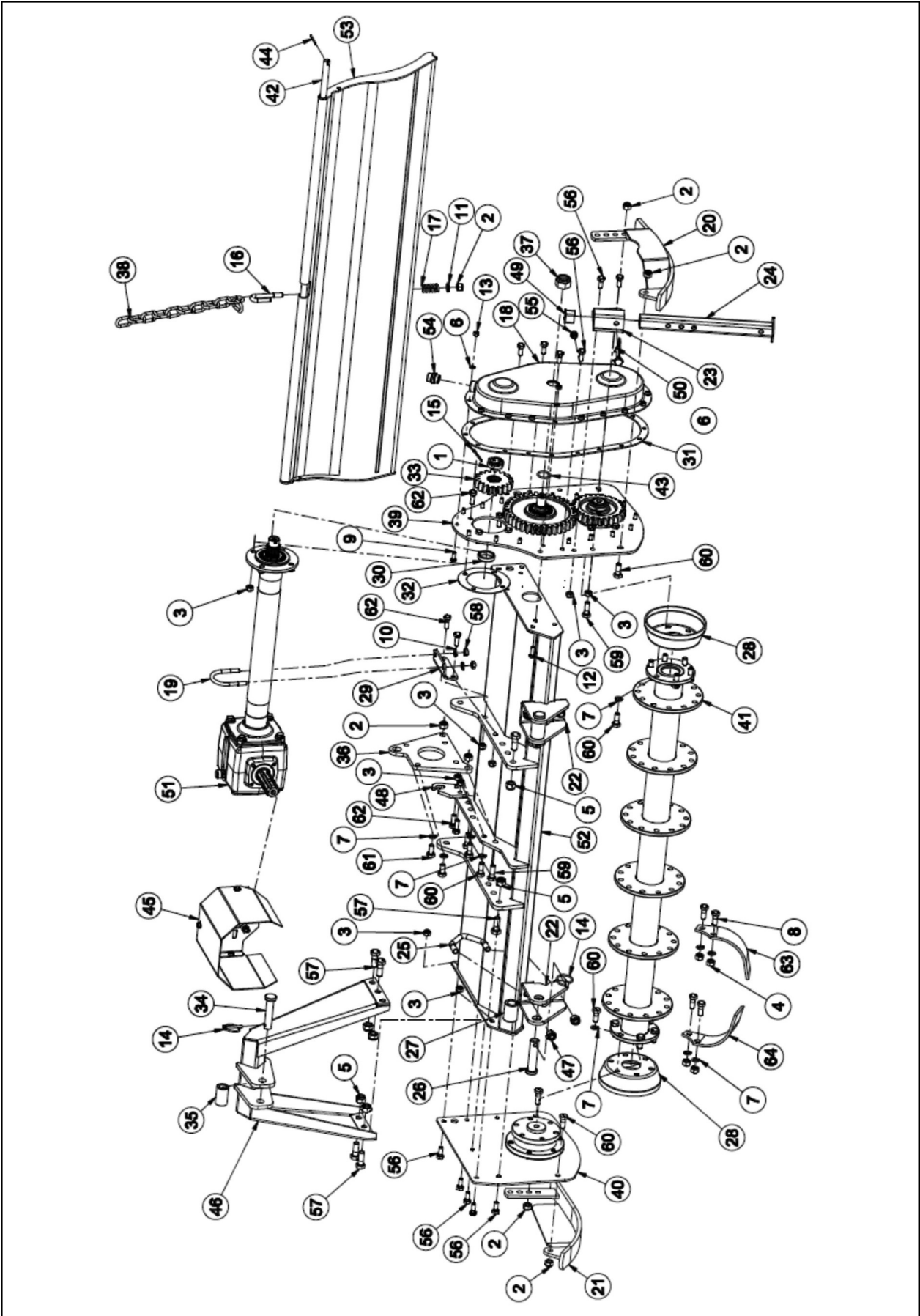
PARTS ILLUSTRATION - GEARBOX ASSEMBLY



PARTS LIST - GEARBOX ASSEMBLY

Item No.	Part No.	Description	Qty.
1	SS-14043	Gearbox 540 RPM	1
2	SS-14075	Oil Seal	1
3	SS-14046	Input Shaft	1
4	SS-8120	Circlip Internal	2
5	SS-14053	Bearing	1
6	SS-14047	Pinion - 15 Teeth	1
7	SS-11058	External Circlip	1
8	SS-14054	Bearing	1
9	SS-14057	Oil Seal	1
10	SS-14044	Cross Shaft Housing Gasket	1
11	SS-14006	Cross Shaft Housing Complete - RC-150	1
11	SS-10206	Cross Shaft Housing Complete - RC-120	1
12	SS-1003	Bearing	2
13	SS-14056	Oil Seal	1
14	SS-14048	Crown Wheel - 22 Teeth	1
15	SS-14045	Cross Shaft - 791mm - RC-150	1
15	SS-10301	Cross Shaft - 566mm - RC-120	1
16	SS-14049	Crown Wheel Washer	1
17	SS-14058	CSK Bolt	1
18	SS-17270	Hex Bolt	4
19	SS-1304	Spring Washer	4
20	SS-14312	Drain Plug	1
21	SS-14317	Dipstick	1

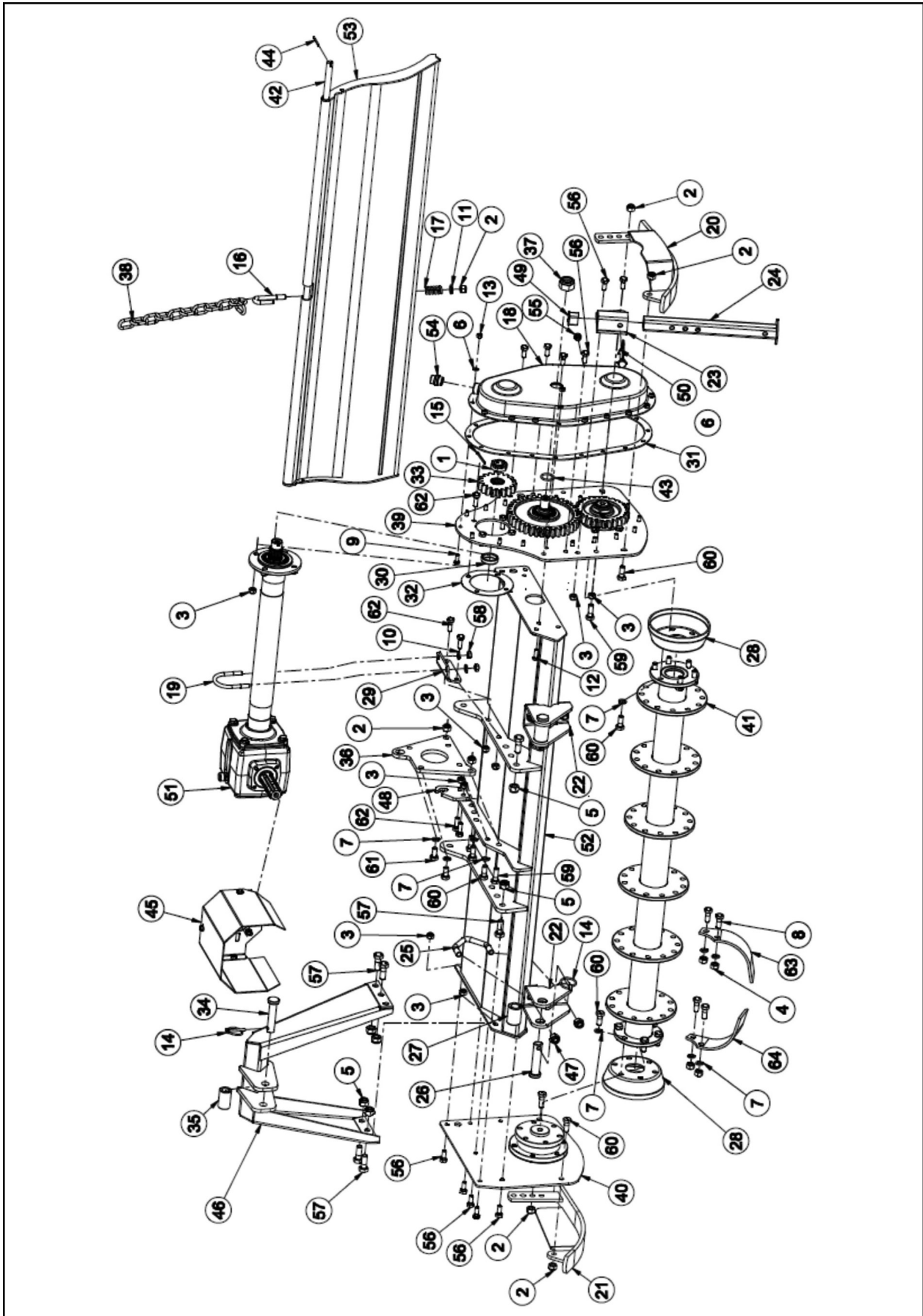
PARTS ILLUSTRATION - MAIN FRAME & ROTOR ASSEMBLY



PARTS LIST - MAIN FRAME & ROTOR ASSEMBLY

Item No.	Part No.	Description	Qty.
1	SS-8032	Castle Nut	1
2	SS-1209	Nylock Nut	7
3	SS-1298	Nylock Nut	19
4	SS-1301	Hex Nut - RC -120	72
4	SS-1301	Hex Nut - RC -150	84
5	SS-1302	Nylock Nut	6
6	SS-1303	Spring Washer	18
7	SS-1306	Spring Washer - RC 120	88
7	SS-1306	Spring Washer - RC 150	100
8	SS-10192	Hex Bolt - RC -120	72
8	SS-10192	Hex Bolt - RC -150	84
9	SS-8040	Hex Bolt	16
10	SS-8078	Plain Washer	2
11	SS-8126	Plain Washer	1
12	SS-8171	Hex Bolt	2
13	SS-8181	Hex Nut	18
14	SS-8204	Linch Pin Small	3
15	SS-14137	Cotter Pin	1
16	SS-14004	J-Bolt	1
17	SS-14005	U-Bolt Spring	1
18	SS-14007	Chain Cover	1
19	SS-14008	U-Bolt	1
20	SS-14009	Depth Skid Complete - Left Hand	1
21	SS-14010	Depth Skid Complete - Right Hand	1
22	SS-14011	M/C Hitching Bracket	2
23	SS-14012	M/C Mount Stand	1
24	SS-14013	M/C Stand Pipe	1
25	SS-14014	V-Bolt	2
26	SS-14015	Hitch Pin Bottom CAT.I	2
27	SS-14016	Bush	2
28	SS-14020	Dust Cover	2
29	SS-14027	Cross Shaft Housing Mount Plate	1
30	SS-14029	Spacer	1
31	SS-14030	Chain Cover Gasket	1
32	SS-14031	Cross Shaft Housing Gasket - RD	1
33	SS-14032	Gear 18 Teeth	1
34	SS-14037	Hinch Pin Top CAT-I	1
35	SS-14038	Bush	1
36	SS-14042	Gearbox Mount Plate	1
37	SS-14065	Nylock Nut	1
38	SS-14073	Lifting Chain	1

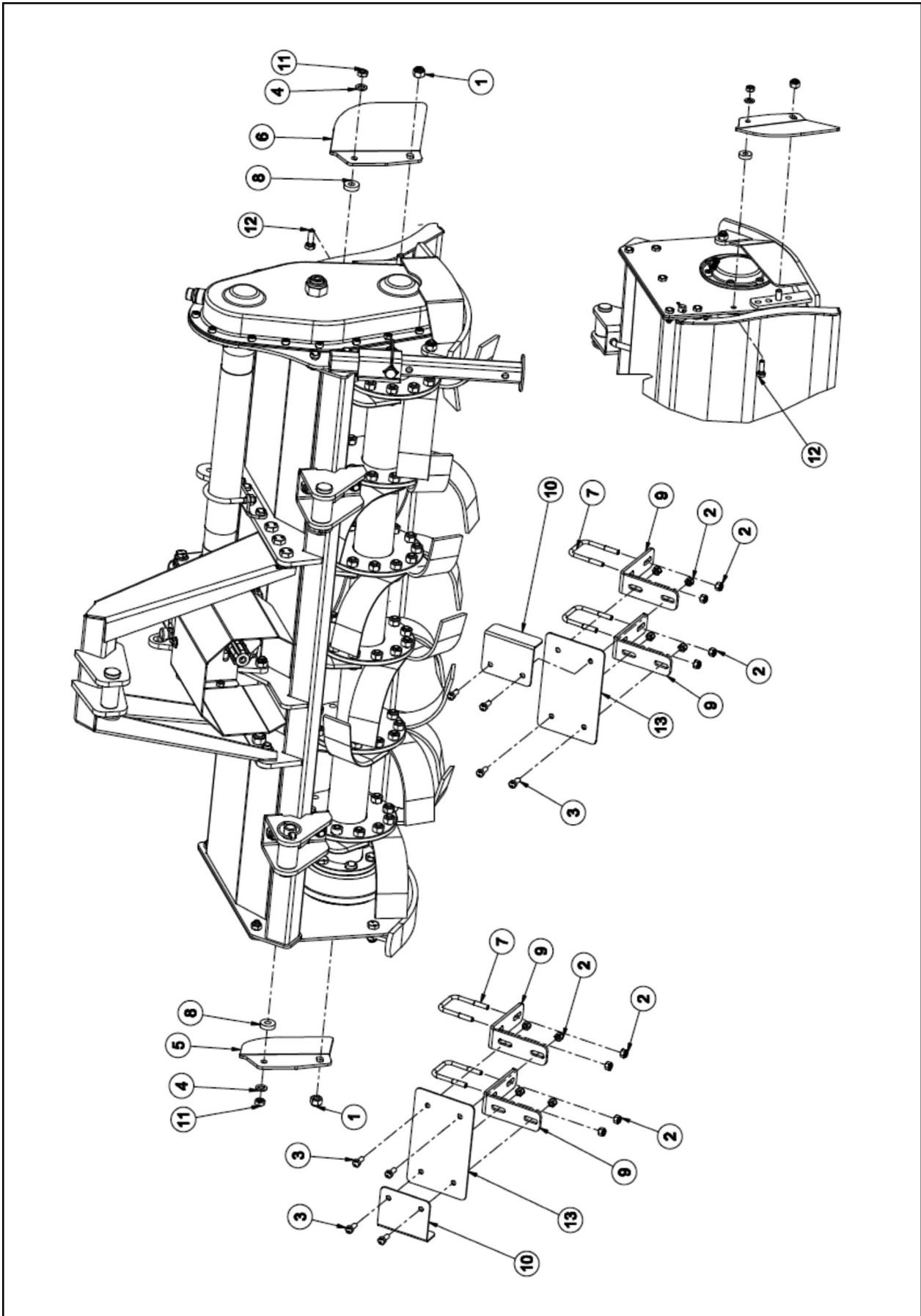
PARTS ILLUSTRATION - RC-150 MAIN FRAME & ROTOR ASSEMBLY



PARTS LIST - RC-150 MAIN FRAME & ROTOR ASSEMBLY

Item No.	Part No.	Description	Qty.
39	SS-14077	Drive Plate Assembly	1
40	SS-14078	Non-Drive Plate Assembly	1
41	SS-10209	Rotor SRT-1.2M C/L Type (U Series) (60 x 6) -RC 120	1
41	SS-14002	Rotor SRT-1.5M C/L Type (U Series) (60 x 6) - RC 150	1
42	SS-10210	Trailing Board Rod 1.2M (U Series) - RC120	1
42	SS-14050	Trailing Board Rod 1.5M (U Series) - RC150	1
43	SS-14131	'O' Ring	1
44	SS-19018	Cotter Pin	2
45	SS-14172	P.T.O. Shaft Guard	1
46	SS-14239	'A' Frame	1
47	SS-1574	Nylock Nut	4
48	SS-14258	Chain Lifting Hook	1
49	SS-14266	Plastic Cap	1
50	SS-14267	Linch Pin	1
51	SS-10211	Gearbox Assembly - 540 RPM - 1.2M - RC 120	1
51	SS-14079	Gearbox Assembly - 540 RPM - 1.5M - RC 150	1
52	SS-10207	Main Frame - 1.2M - RC 120	1
52	SS-14001	Main Frame - 1.5M - RC 150	1
53	SS-10208	Trailing Board Complete - 1.2M - RC 120	1
53	SS-14003	Trailing Board Complete - 1.5M - RC 150	1
54	SS-14310	Air Breather	1
55	SS-14313	Oil Level Guage	1
56	SS-17270	Hex Bolt	11
57	SS-17271	Hex Bolt	6
58	SS-17272	Hex Nut	2
59	SS-17274	Hex Bolt	4
60	SS-17275	Hex Bolt	15
61	SS-17474	Hex Bolt	2
62	SS-3340	Hex Bolt	8
63	SS-14041	Blade C-Type - Left Hand - RC 120	18
63	SS-14041	Blade C-Type - Left Hand - RC 150	21
64	SS-14040	Blade C-Type - Right Hand - RC 120	18
64	SS-14040	Blade C-Type - Right Hand - RC 150	21

PARTS ILLUSTRATION - CE GUARDS



PARTS LIST - CE GUARDS

Item No.	Part No.	Description	Qty.
1	SS-1209	Nylock Nut	2
2	SS-1297	Nylock Nut - RC 150	16
2	SS-1297	Nylock Nut - RC 120	12
3	SS-8040	Hex Bolt - RC 150	8
3	SS-8040	Hex Bolt - RC 120	6
4	SS-8078	Plain Washer	2
5	SS-14183	TB Plate - Left Hand	1
6	SS-14184	TB Plate - Right Hand	1
7	SS-14190	U-Bolt RC 150	4
7	SS-14190	U-Bolt - RC 120	3
8	SS-14194	Spacer	2
9	SS-4731	Bracket - Front Barrier - RC 120	3
9	SS-4731	Bracket - Front Barrier - RC 150	4
10	SS-4741	Plate, End - Front Barrier	2
11	SS-17272	Hex Nut	2
12	SS-3340	Hex Bolt	2
13	SS-4740	Plate - Front Barrier (L= 300) - RC 120	1
13	SS-4740	Plate - Front Barrier (L= 300) - RC 150	2
13	SS-4781	Plate - Front Barrier (L= 75) - RC 120	1

P.T.O. SHAFT OPERATION AND MAINTENANCE

IMPORTANT!

P.T.O. drive shafts must only be used for their intended purpose.

P.T.O. drive shafts are designed for specific machine types and power requirements.

They must not be replaced by other models.

Ensure that the P.T.O. drive shaft is securely connected.

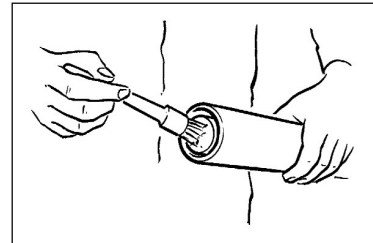
Only use a completely protected drive system:

P.T.O. drive shaft with complete guard and complementary guard on tractor and implement. A complete guard is essential in all working positions.

LUBRICATION

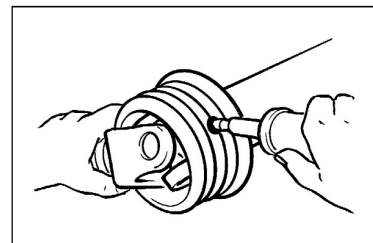
Lubricate with quality grease before starting work and every 40 operating hours.

Ensure the P.T.O. guard bearings are lubricated, the end ball shaped covers need retracting to expose all grease nipples.



Clean and grease the P.T.O. drive shaft before each prolonged period of non-use.

Grease the guard tubes in winter to prevent freezing.

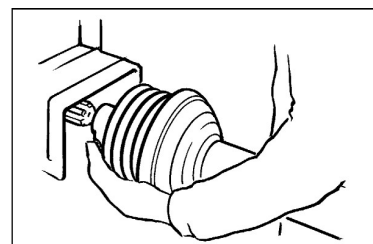


COUPLING THE P.T.O. SHAFT

Clean and grease the P.T.O. and PIN

Q.-d pin

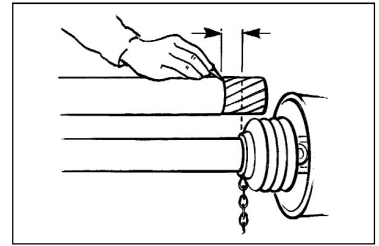
Press q.-d. pin and simultaneously push P.T.O. drive shaft onto P.T.O. until pin engages.



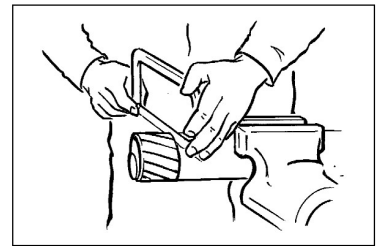
P.T.O. SHAFT OPERATION AND MAINTENANCE

LENGTH ADJUSTMENT

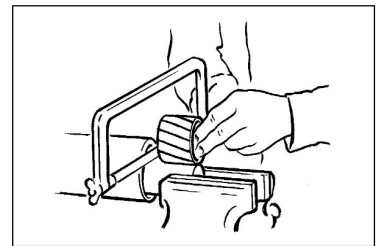
To adjust the length, hold the half-shafts next to each other in the shortest working position and mark them.



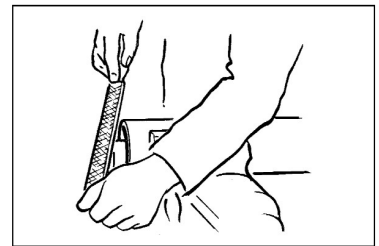
Shorten inner and outer guard tubes equally.



Shorten inner and outer sliding profiles by the same length as the guard tubes.



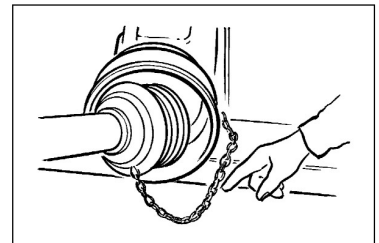
Round off all sharp edges and remove burrs.
Grease sliding profiles.



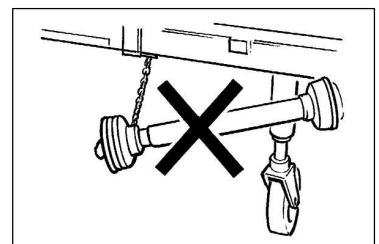
No other changes may be made to the P.T.O. drive shaft and guard.

CHAINS

Chains must be fitted so as to allow sufficient articulation of the shaft in all working positions.



Do not let the chains encircle the P.T.O. guard in use as this will shorten the life of the P.T.O. guard.



The P.T.O. drive shaft must not be suspended from the chains! Please use the P.T.O. Support Hook provided.

SAFETY TRAINING INDUCTION

The undersigned personnel have been trained in the safe use of this Wessex machine and have understood the contents of the Operator’s Manual.

Date	OPERATOR		INSTRUCTOR/TRAINER	
	Name	Signature	Name	Signature

DAILY INSPECTION RECORD

OPERATOR'S NAME	DATE OF INSPECTION	HOURS	Spindle Rotor, remove tangled objects	Inspect condition of Blades	All bolts and nuts, re-tighten if req'd.	Grease Rotor Bearings	Grease Roller Bearings	Check Gearbox Oil Level	Inspect Roller Scraper Wire	Inspect condition of Belts	Inspect tension of Belts



Certificate of CE Conformity

Machine Model:

RC 120, and RC 150,

Description:

Rotary Cultivator

*I hereby certify that the machine detailed hereon
conforms to:*

**European Directives 2008/42/EC
Supply of Machinery Regulations 2008
As amended 91/368EEC – 93/44EEC – 93/68EEC
HSE AIS 33**

Signed:

A handwritten signature in black ink, appearing to be 'RAW', is written over a dotted line.

Quality Manager

Date: FEBRUARY 2017

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