Operator Manual & Parts List

MAJOR
FLAIL CATCHER

MJ2000

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Major reserves the right to modify the machinery and the technical data contained within the manual without prior notice.

Further to this, Major assumes no liability for any damages which may result from the use of the information contained within this manual.

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EEC certificate of conformity for machines

(conforming to Directive 98/37/EEC)

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declares in sole responsibility that the product:

MJ2000 FLAIL COLLECTOR

When properly installed, maintained and used only for it's intended purpose, complies with all the essential Health & Safety requirements of:

- **THE SUPPLY OF MACHINERY (SAFETY) REGULATIONS 2008.**
- **S.I. No. 299 of 2007**, Safety, Health and Welfare at Work (General Application) Regulations 2007 **(Ireland).**
- **Health & Safety at Work, etc. Act 1974 (c.37) (UK).**
- **EN ISO 14121-1: 2007** 'Safety of machinery. Principles for risk assessment.
- **EN 745** - Agricultural Machinery - Rotary Mowers and Flail Mowers - Safety**.**
- **EN ISO 13857** - Safety of machinery: Safety distances to prevent hazard zones being reached by upper and lower limbs.
- EN ISO 13857:2008, EN ISO 4413:2010; EN ISO 4254-1:2015
- ISO 11684:2010; ISO 4254-13:2012

I certify on behalf of Major Equipment Int. Ltd., that this machine when properly installed and operated correctly, complies with all the essential Health & Safety requirements of all legislation referred to above.

Signature : _____ Date 11/05/2017

Managing Director

Introduction

Thank you
We appreciate having you as a customer and wish you many years of safe and satisfied use of your machine.

Using Your Operator's Manual
This manual is an important part of your machine and should remain with the machine when you buy it.

Reading your operator's manual will help you and others avoid personal injury or damage to the machine. Information given in this manual will provide the operator with the safest and most effective use of the machine.

Sections in your operator's manual are placed in a specific order to help you understand all the safety messages so you can operate this machine safely. You can also use this manual to answer any specific operating or servicing questions.

Safety Issues
Your manual contains special messages to bring attention to potential safety concerns, machine damage as well as helpful operating and servicing information. Please read all the information carefully to avoid injury and machine damage.

Product Identification

Machine Serial Numbers
If you need to contact MAJOR or your MAJOR dealer for information on servicing or spare parts, always provide the product model and serial numbers.

We suggest that you record your machine details below:

Model No: _____

Serial No: _____

Date of Purchase: _____

Dealer Name: _____

Dealer Telephone: _____

Product Specifications

Model	MJ2000
Overall Width	2.2m
Working Width	2m
Transport Width	2.3m
Power (HP)	50-75
PTO rpm	540
Blade Speed	2006m/min
Cutting Height	12 - 150mm
Weight	1400kg
Collector Capacity	3m³

Register Your Product and Warranty Online
To register your product through the Internet, simply go to the Support section on www.major-equipment.com. Completing the information, either online or with the product warranty card, will ensure the customer that their product receives all post sales service and important product information. The MAJOR MJ2000 is warranted for 12 months.

No warranty is given where the machine is being used as a hire machine. Warranty is against faulty workmanship or parts with the exception of blades, belts and any other consumable parts.

Safety

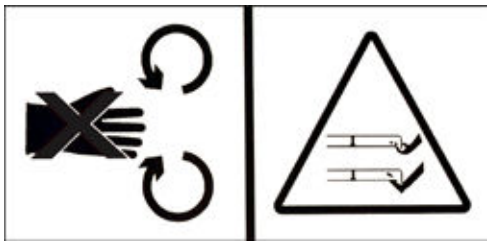
Machine Safety Labels

The machine safety labels shown in this section are placed in important areas on your machine to draw attention to potential safety hazards.

On your machine safety labels, the words DANGER, WARNING, and CAUTION are used with this safety-alert symbol. DANGER identifies the most serious hazards.

The operator's manual also explains any potential safety hazards whenever necessary in special safety messages that are identified with the word, CAUTION, and the safety-alert symbol.

To avoid injury, read the manual



Rotating blade hazard

Keep wheel nuts tight. Check tyre pressure

Fold the PTO stand down before removing the transport pin to avoid PTO shaft damage

High oil pressure hazard

PTO entanglement hazard - keep clear of PTO drives.

Speed Warning: max. towing speed for this machine

Keep transmission bolts tight

Max. PTO speed for this machine

Operating Safely

The MAJOR MJ2000 is designed to operate at 540 RPM. Ensure tractor PTO output is set at 540 RPM. The MAJOR MJ2000 must only be used for cutting grass. Moreover, it must only be used with a suitable tractor (see product specifications) and driven by an adequate drive-line by the tractor PTO. All other use is strictly prohibited.

Operator:
The machine's user must be an operator with a suitable technical background to enable him to understand the contents of this manual, including the diagrams found herein.

Mechanical Maintenance Staff:
This must be a qualified technician who is capable of working on all the mechanical parts.

Users should become thoroughly familiar with the contents of this manual before using, servicing and mounting the implement to the tractor and all other pertinent operations. Never wear jewellery, loose clothing such as ties, scarves, belts, unbuttoned jackets or dungarees with open zips which could become caught up in moving parts.

Always wear approved garments complying with accident prevention provisions such as non-slip shoes, ear muffs, goggles and gauntlets. Wear a jacket with reflecting stickers if the implement is used near public highways.

Consult your retailer, the Labour Health Service or your nearest equivalent authority for the information about the current safety provisions and specific regulations with in order to ensure personal safety.

ALWAYS DISENGAGE PTO, SWITCH OFF THE TRACTOR ENGINE AND ENGAGE THE PARKING BRAKE BEFORE MAKING ADJUSTMENT TO THE MACHINE.

NEVER PLACE LIMBS UNDER THE MACHINE WHILE ROTORS ARE TURNING. ROTORS CAN REMAIN TURNING FOR UP TO 1 MINUTE AFTER DISENGAGING PTO.

Noise:
Measurements of the noise issued by the machine indicate that the equivalent noise level is such as to maintain the daily level to which the operators are exposed within a value of less than 70 dBA. This measurement was made with a sound level meter set at a distance of about 1.6 m from the machine and at a height of 2 m, operated (no-load) at a PTO rotation rate of 450 rpm on grassy land. Please also note that the machine is normally used outdoors and that the position occupied by the operator is seated in the driving seat of the tractor. Also consult the prescriptions listed in the tractor use and maintenance manual.

Vibrations:
During normal operation, the machine will not transmit appreciable vibrations to the tractor or, thus, to the operator. These vibrations are less than 2.5 m/sec2. to the operator's upper limbs and less than 0.5m/sec•'. to the seated part of the operator's body. Consult the tractor manual for the vibrations transmitted by the tractor itself.

Disclaimer:
The mower has been built in compliance with the accident prevention instructions in force and therefore the manufacturer cannot be held responsible for damage resulting from:
- use of the machine with faulty or missing guards
- improper use of the machine
- use of the machine by untrained or unauthorised personnel
- incorrect assembly of the mower;
- use of the mower on the wrong tractor;
- lack of maintenance
- unauthorised modifications or work carried out on the machine
- use of non-original spare parts or those which are not specific to the machine
- failure to observe all or some of the instructions
- exceptional weather conditions.

Applicable laws and instructions: The machine complies with the relevant standards in force.

Residual Risks
- Risk of severing: The rotating blades may cause serious injury to limbs.
- Risk of ejection of solid objects: The rotating blades may eject solid objects capable of hitting people, animals or anything else in the vicinity.
- Risk of entanglement: Clothes or limbs may become entangled in the rotating universal shaft causing serious damage or harm to the person involved.

Workstation

The operator must remain seated while working the machine. When the wings need to be raised and lowered the operator must leave the tractor. Always ensure the PTO has been turned off and the parking brake applied before leaving the tractor cab. The operator must always apply the parking brake, and turn off the engine before leaving machine or carrying out maintenance.

NEVER OPERATE THE HYDRAULICS WITH THE TRACTOR SWITCHED OFF

Regulations for use of the transmission

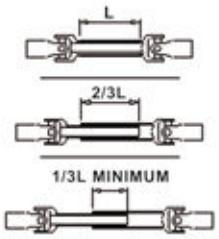
The transmission to the gearboxes is protected throughout the machine by both PTO shafts and bolt down covers. All guarding should be kept efficient and in good condition. If the condition is poor, the guarding should be renewed before the implement is used.

UNLESS IT IS CORRECTLY PROTECTED THE TRANSMISSION COULD CAUSE DEATH SINCE IT CAN CATCH ON PARTS OF THE BODY OR CLOTHING

Ensure retaining chains are correctly anchored on all PTO shafts, preventing them form turning. Ensure drive line can turn easily within the shield. Keep spline grooves clean and greased so that PTO shaft can connect easily. Besides being described in this manual, the method by which the PTO shaft is connected to the tractor must be checked out with the instructions in the tractor manufacturer's manual.

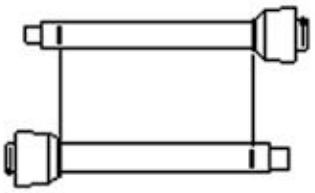
PTO Shaft Safety

MAX PTO INPUT 540 R.P.M. Contact your nearest dealer or a specialised retail outlet if the PTO must be replaced with a longer one, since this must belong to the same power category and possess the same characteristics. An unsuitable PTO could easily break.

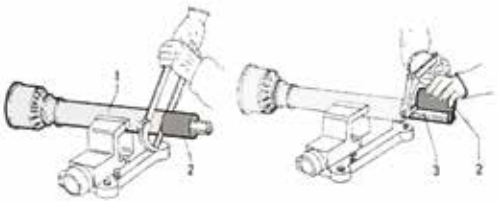


The tractor PTO shaft length may be altered to suit the individual tractor model. When the machine is in operation, the PTO shaft should have a minimum 1/3 engagement as shown in the diagrams. After the Rollermower has been hitched to the tractor, it should be checked in various positions that the drive line is the correct length. If the PTO is too short and tends to slip out of place, it must be replaced with a longer one.

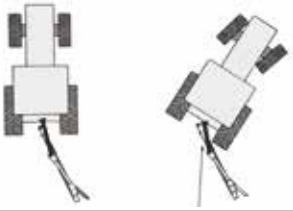
If the PTO shaft is too long, it should be shortened in the following way:



- Set the machine at a minimum distance from the tractor, then brake the tractor and switch off the engine.
- Separate the two halves of the PTO. Insert the female part into the tractor PTO and the male part into the Rollermower PTO, checking that the position is correct by means of the fixing pins.
- Line up the two halves of the PTO together, keeping them parallel.
- Using a felt tip pen, match mark the place where the two halves must be shortened as shown.
- First cut shield "1" and use part "2" as a reference to cut the splined shaft.
- Proceed in the same way for the second half.
- Trim and chamfer the two cut ends of the PTO and clean off all swarf and shavings.
- Grease the two profiles and join the two halves of the PTO together.
- Mount the PTO shaft and check that its length is correct as before.



The shaft must not reach the end of the tube or project from this. Ensure the PTO does not bottom when turning



Driving Safely on Public Roads

Check the local Highway Code regulations before driving the tractor on public highways with a towed implement. Check the reflectors, hazard flashers and/or projecting load indicators are installed when required and efficient. These indicators must be installed correctly and easily seen by the drivers of other vehicles.

Bystanders must not be allowed to lean against or climb onto the machine during transport or while working. Do not allow bystanders to ride on the machine.

MAXIMUM TRANSPORT SPEED MUST NOT EXCEED 30Km/Hr (22 MPH)

Operating the Machine

Inspections before Use

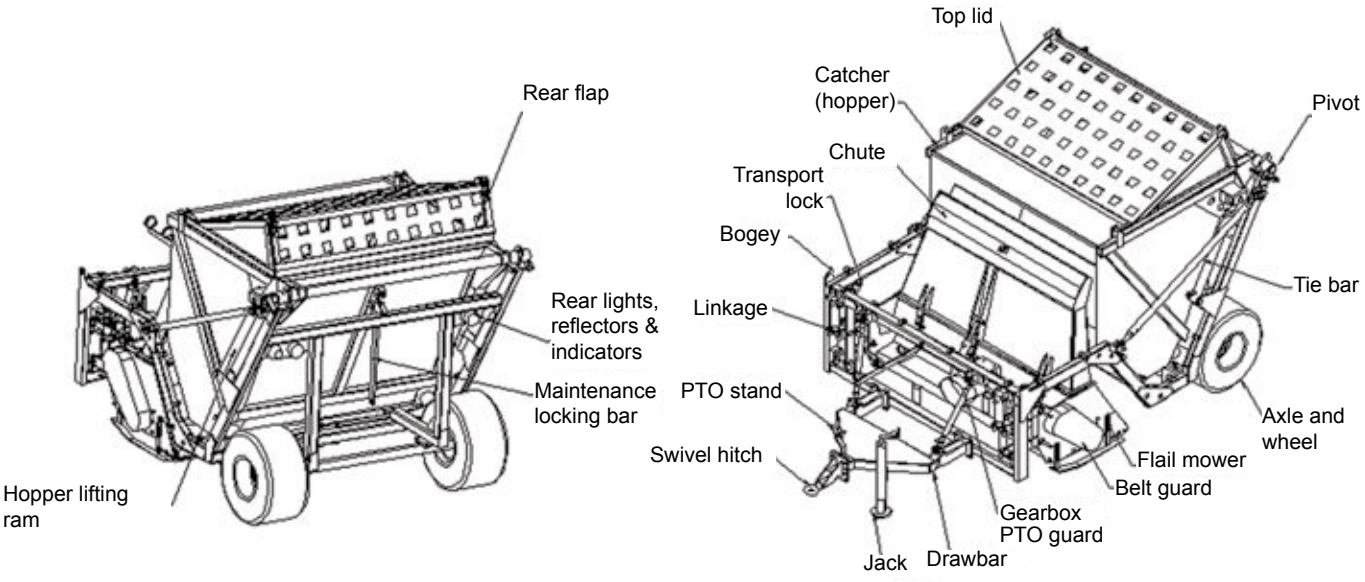
Always disengage PTO, Switch off tractor engine and engage the parking brake before making adjustment to the machine.

Check the machine to ensure that the serial number and all stickers have been affixed.
Check that all points are greased.
Check the oil level in the gearbox
Check the transmission belts to ensure that their tension is correct.
Check for oil leaks.
Check to see that all safety devices are installed and efficient.

General inspection during operation

Inspect the knives to ensure that they are free from foreign bodies. Check the implement for wear and damage. Particularly check that the knives, the drive belts and wheels are in a good condition. Check that all nuts and bolts are fully tightened, with particular reference to the knife bolts. Check that the oil and greases in the various points are at the correct level. Despite the previous inspections, lubricant may have partially spilt during transport and need topping up.

Key to Main Parts



Starting Regulations

Always check that any imminently dangerous conditions have been eliminated before using the machine. Ensure all guarding is present & the operator is fully aware of the operations of the machine

Always ensure the pins lock the PTO shaft yoke ends onto the spline shafts on both the tractor and the implement. An unlocked shaft could slip out of position, causing notable mechanical damage and serious injury to both operator and bystanders.

Hitching to the Tractor

ALWAYS OPERATE ON LEVEL GROUND WHEN HITCHING/UNHITCHING THE IMPLEMENT. THIS WILL PREVENT DANGEROUS MOVEMENT. NEVER ALLOW ANYONE TO STAND BETWEEN THE TRACTOR AND THE MACHINE.

- Always refer to the instruction manual supplied with the tractor.
- Reverse the tractor towards the mower, aligning the tractor lift links with the two side coupling pins.
- Turn off the tractor engine, remove the ignition key from the dashboard and insert the brake.
- After the mower has been hitched to the tractor, it should be checked in various positions that the driveline is the correct length.
- If the PTO is too short and tends to slip out of place, it must be replaced with a longer one.

Operating the Machine

Always be careful to check that the power rating of the tractor used to tow the implement does not exceed the maximum power rating for the model in your possession.

Check that the speed of the PTO complies with the speed required by the implement. Compare the values on the shield of the PTO shaft.

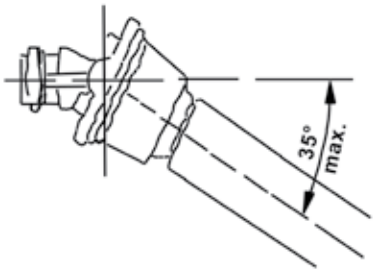
Always become familiar with mower use before working with the implement. Make sure that you know how to quickly stop the work operations.

1. Lower the machine until the four wheels are resting on the ground.
2. Adjust if necessary
3. Accelerate the tractor by depressing the accelerator pedal to about half its travel and then engage the PTO.
4. Advance with the tractor, setting the PTO to the required rpm rate (usually 540 or 1000 rpm).
5. The travelling speed of the tractor must be selected according to the grass to be cut, its quantity and the cutting finish required. Optimum work speeds will be between 3 and 8 Km/hour (2/5 mph).

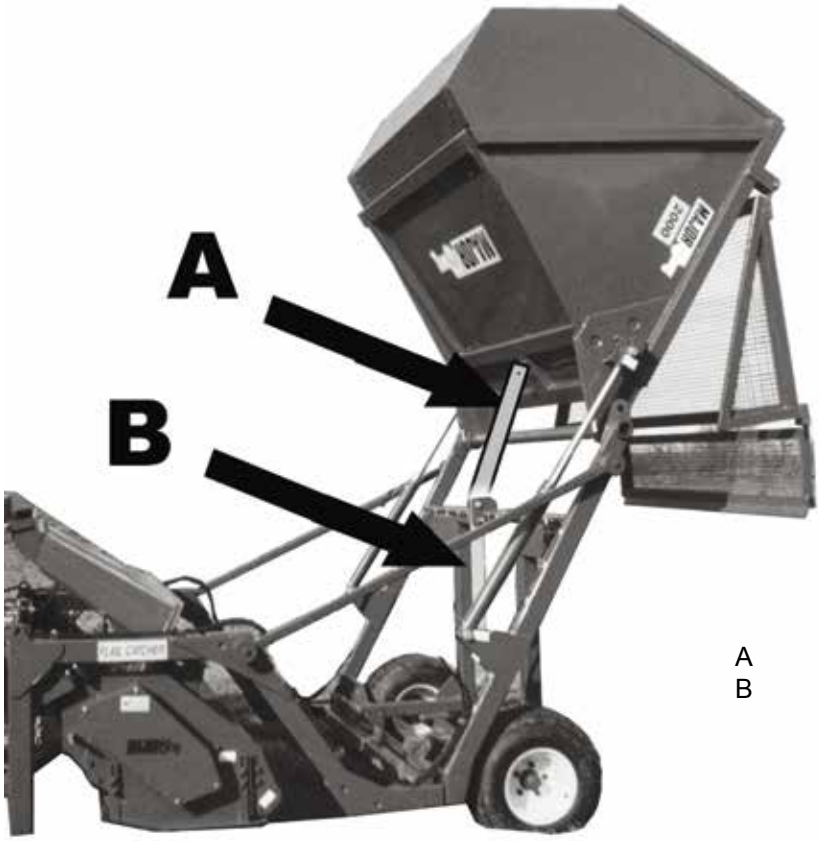
The cutting finish will be better if the tractor travels slowly while operating. Always raise the implement from the ground when during manoeuvres, round bends and when reversing. Check to make sure the finish is satesfactory. Make any adjustments as may be necessary and then continue with the job.

Never reverse with the implement unless this is strictly necessary.

In such cases, disengage the PTO and carefully check to see whether there are any obstructions at the rear.
Never lift the implement more than 250 mm from the ground with the PTO engaged or the driveline could break and risk injury to the operator. The maximum tilt the driveline can bear with the PTO engaged is 35°

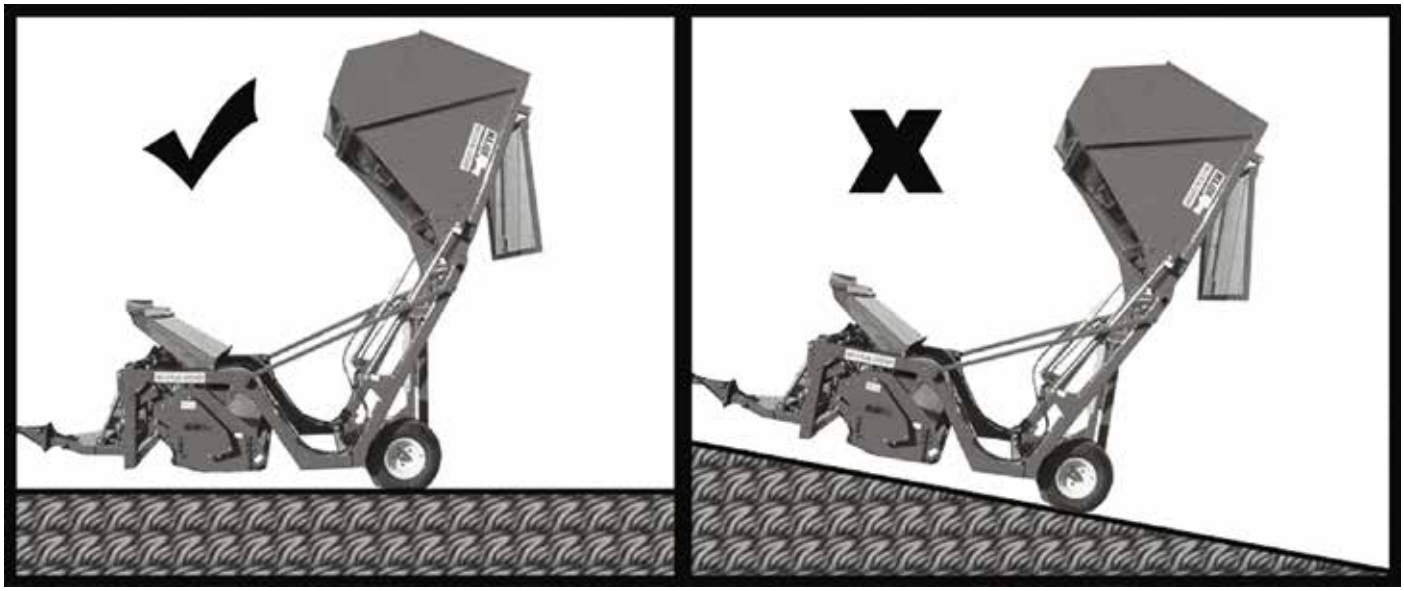


Catcher Locking Bar Positions



A Maintenance position (Retained by pin)
B Normal Operating position

Emptying the Catcher

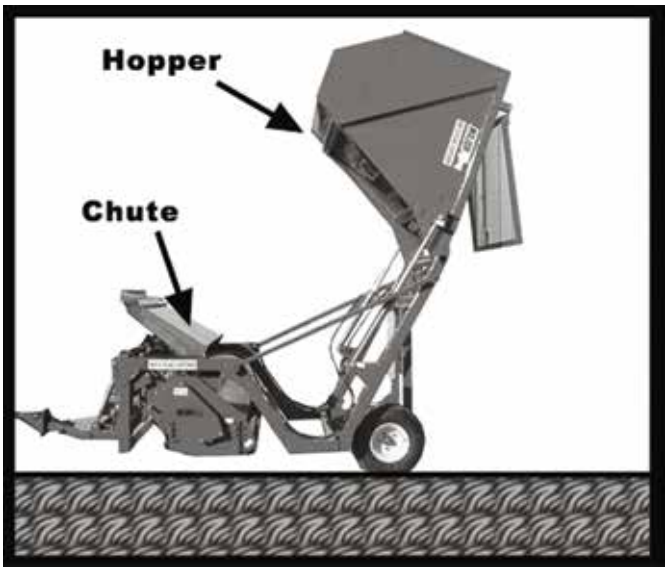


1. Ensure the tractor is on level ground
2. Do not tip the grass tank (hopper) while in inclined positions, front to rear as shown above or side to side.
3. Ensure there are no bystanders around the machine.
4. Power the appropriate hydraulic spool from the tractor cab to empty the catcher
5. The chute pulls forward first, then the grass catcher tips up over backwards emptying the contents.

NOTE: The Chute pulls forward as part of the tipping operation. Do not interfere with the hydraulic components as they are set in the factory

6. Reverse action on the hydraulic spools will lower the catcher; continue to hold the spool in position and the chute will fall back into operating position.

7. Do not try to force the discharge operation in case of machine malfunction. Please get in touch immediately with your dealer, should the tank remain jammed in high position.



Adjusting the Cutting Height

To alter the cutting height, adjust the side skids to the desired cutting height by:

1. Removing the four nuts on each skid
2. Relocating the skid in the desired location
3. Replace the four nuts & tighten.

Removing the machine from the tractor

1. Disengage the PTO. Set the implement on a flat surface.
2. Stop the tractor and engage the parking brake.
3. Rest the mower on the ground.
4. Switch off the tractor engine.
5. Remove the ignition key from the dashboard.
6. Remove the driveline.
7. Detach the hydraulic connections.
8. Block the mower's wheels with wedges or other suitable means
9. Remove the weight from the tractor hitch by use of the Parking Jack.
10. Detach the implement from the tractor by disconnecting the hitch

Maintenance

The machine must always be disconnected form the tractor before any cleaning, lubricating and servicing operations can be carried out.

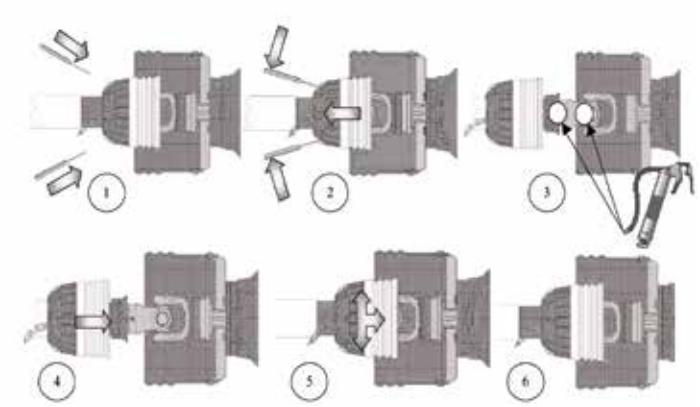
If emergency operations are required whilst the machine is connected to the tractor, switch off the engine, engage the parking brake and disengage the PTO.

Good, regular maintenance and correct use are if the machine is to remain safe and long lasting.

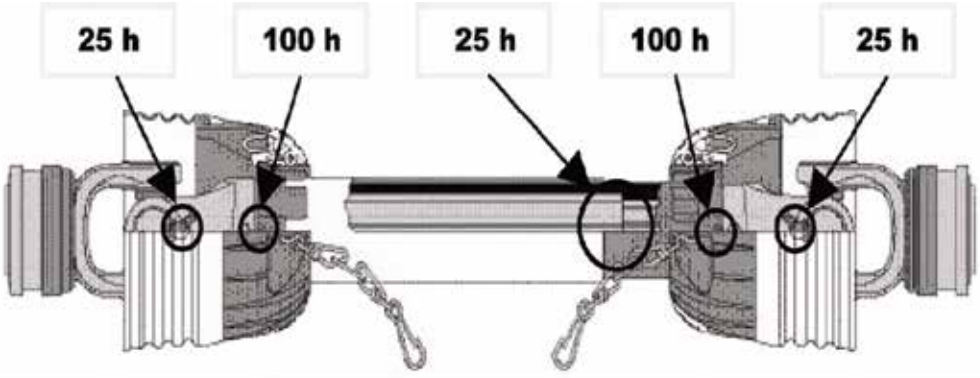
PTO Shaft Maintenance

Guard Removal and Yoke End Greasing

1. Prise back locking tabs
2. Pull back PTO Guard
3. Grease points as shown
4. Push Guard into position
5. Click into place
6. Tie check chain



PTO Guard Greasing Intervals



Maintenance Schedule

Check the following:

	Initially	8 Hours	50 Hours	250 Hours
Grease the rotary shaft supports	●	●		
Check the condition of the driveline and grease the journals	●	●		
Grease the wheel axles	●	●		
Grease the catcher pivots	●	●		
Check the belt tension	●		●	
Check the oil in the gearbox	●		●	
Check the knives for wear. Replace if necessary	●		●	
Demount and clean the driveline. Cover sliding parts with grease. Check all nuts and bolts are tightened.	●		●	
Change the oil in the gearbox	●			●

All nuts and bolts in the transmission including PTO Shafts, Gearboxes & wheel nuts should be checked for tightness after mowing at the following intervals:

1st 50 acres,
1st 100 acres,
1st 250 acres and every 250 acres thereafter.

Lubricate moveable mechanical joints when required

Changing the gearbox oil

The used oil is a pollutant and must be disposed of correctly. Pour it into a suitable container and take it to the special oil collection points

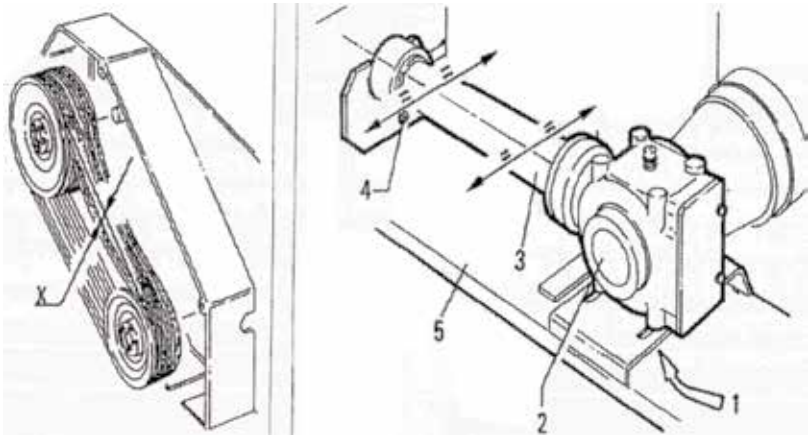
- Check the oil in the gearbox
- Check the level of the lubricant through the plug; the oil must reach the lower edge of the hole of level plug.
- Change the first oil fill after the first 50 hours service.
- Following this, the oil should be changed after every 250 hours service. View table below for recommended oil & grease types.

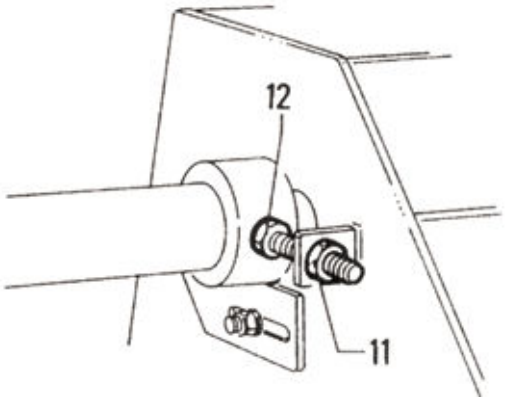
	AGIP	ESSO	IP	SHELL
Gearbox Oil	ROTRA MP85W/140 BLASIA 460	Gearoil EP320	Mellana Oil 460	Amala Oil 460
Grease	Grease 30	Beacom	Atnesia	Super Grease
	Grumu3	E.P.3	GR3	R3

Belt Tension Adjustment

Always switch off the tractor engine, engage the parking brake and disengage the PTO before working on the drive belts. When possible, such operations should only be carried out after the mower has been disconnected from the tractor

1. Demount the protective casing and check yielding “x” of each belt. Proceed in the following way if belt give exceeds these values:
2. Slacken bolts “1” that fix the gearbox and bolt “4” (option) that locks the chassis extension in place.
3. Release check nut “11” of the belt tensioning screw.
4. Work on screw “12” until obtaining the right belt tension, then tighten the check nut again.
5. Shift the gearbox in the same direction and to the same extent in order to re-align extension tube “3” with the chassis “5”.
6. Lock the bolts “1” fixing gearbox “2” to the chassis together with the bolt fixing extension “4”.





Make sure the belts are intact, that they are not cracked and do not have ragged edges. If this is not the case, replace them with new belts.

Checking and Replacing Blades

It is advisable to replace all the blades at the same time to prevent the machine vibrating. When mounting the new blades, make sure the cutting edges are positioned in the direction the rotor rotates in.

1. Place the machine at a comfortable height and lock it in position with sufficient support to guarantee the operator's safety. Prevent the blade rotating by locking the shaft with a key (the shaft is designed for this with two flat areas immediately above the blade).
2. Using the key, unscrew the nut 1 and remove the blade.
3. Check the state of wear of the pin and the nut and, if necessary, replace them.
4. Mount the new blade, screw in the nut "1" fully and with force, keeping the shaft locked at the same time as described above.

Storing the machine for long periods of time

1. Clean all dirt from the machine. Take particular care to remove any foreign bodies from the blades.
2. Park the mower on a flat surface, in a sheltered place inaccessible to either children or animals in a stable position to prevent it from moving (for this purpose it is advisable to stop the wheels with wedges or other suitable means), falling or being fitted over etc.
3. Check that the weight of the machine is not too heavy for the surface on which it rests

Disposing of the Machine

When scrapping the machine, the procedure to adopt is as follows: remember that it is almost completely made of ferrous material. The only potentially polluting components on the machine are the lubricants. To prevent them from polluting the environment, spread a waterproof tarpaulin on the ground, position the machine on this and then drain out the lubricants, which must be collected in suitable containers. Now dismantle the machine, separating the components in the following way:
Painted parts;
Ferrous parts;
Plastic parts;
Rubber parts.

Contact those companies that are legally authorised to dispose of such materials.

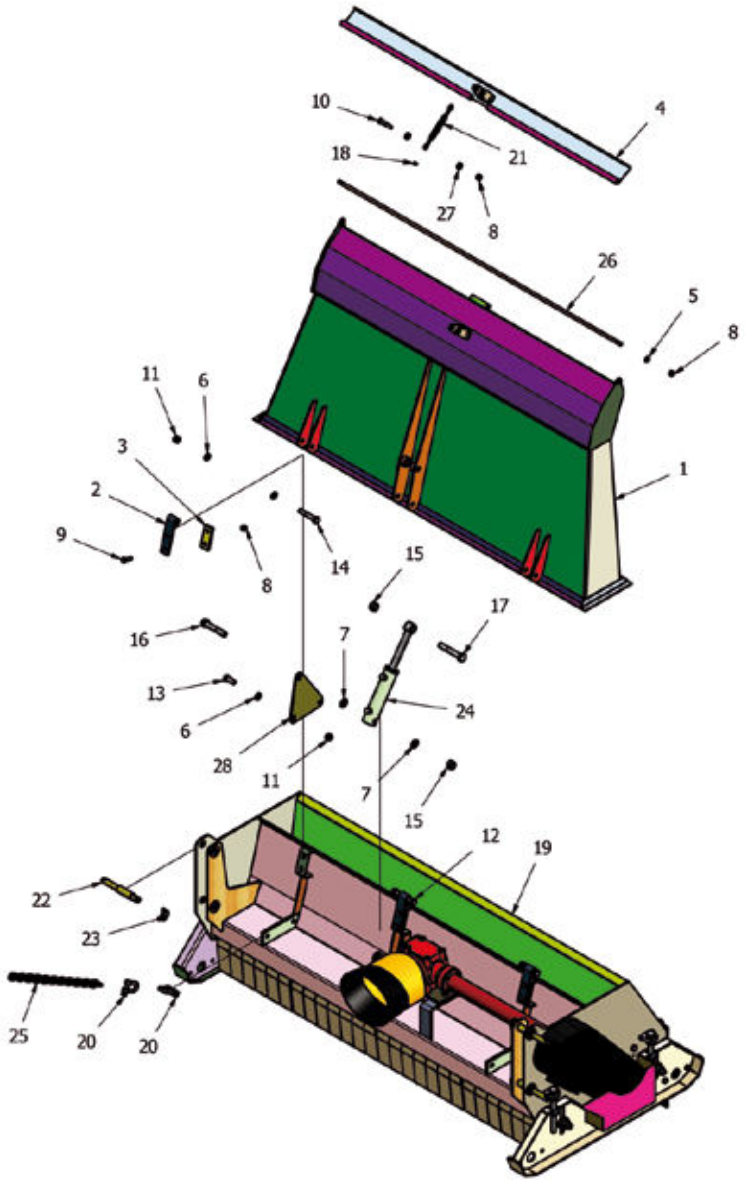
Trouble Shooting

Fault	Cause	Remedy
Leaves a streak of uncut or partially cut grass	Blades dull or bent	Replace blades
	Carrier RPM too low	Use correct PTO speed
	Field conditions are so wet that the tractor tire is pushing grass into mud	Too wet to mow. Stop operation and wait until it is drier
	Ground speed too fast	Reduce ground speed by shifting to a lower gear
	Grass is down from previous weather conditions	Mow in only one direction
	Possible build-up materials under mower	Clean mower
	Blades mounted incorrectly (cutting edge against direction rotation)	Change blades so that cutting edge is facing correct rotation.
Material discharges from mower unevenly; bunches of material along with swath	Material too high and too much material	Reduce ground speed but maintain 540rpm at tractor PTO or make two passes over material. Raise mower for the first pass and lower to desired height for the second and cut a 90 degree angle to first pass
	Grass wet	Allow grass to dry before mowing. Slow ground speed of tractor but keep engine running at full PTO rpm. Cutting lower will help

Fault	Cause	Remedy
Gearbox overheating	Low on lubricant	Fill to proper level
	Improper type lubricant	Replace with proper lubricant
	Excessive grass / debris build-up around gearbox	Remove grass, etc from machine
Blade is scalping ground	Mower too low	Raise mower-reset wheels
	Field is ridged	Cut field at a different angle
	Field is too wet	Stop and wait until it is dried
Mower will not cut.	Shear bolt sheared	Install new shear bolt
Blades wear too fast	Cutting in sandy conditions	Increase cutting height
	Cutting in rocky conditions	Increase cutting height
	Blades hitting the ground	Increase cutting height
Mower seems to require excessive power	Advancing into grass too rapidly	Reduce forward travel speed
	Hitting ground	Raise mower and reset wheels
	Worn or dull blades	Sharpen or replace blades
	Tractor not large enough	Use larger horsepower tractor
Excessive vibration	Check gearbox bolts	Tighten if loose
	Check for loose nuts on blades	Tighten if loose
	Blade broken	Replace blades, in set
	New blade or bolts matched with worn blade or bolts	Replace blades or bolts in sets
	Drivelines not phased correctly. Implement and tractor yokes must be in line	Phase the driveline. Replace if necessary
Noisy machine	Worn bearing	Replace bearings
	Low oil in gearbox	Check level and add oil
	Loose Parts	Check all bolts are fully tightened
	Wrong PTO rpm rate	Check PTO rate & adjust as necessary
	Rotors bent / broken	Replace bent or missing blades
	Bent PTO shaft	Check PTO shafts are aligned correctly
		Check output shaft on gearboxes are not bent
		Check driveline between gearboxes is aligned.
Gearbox leaking	Damaged oil seal	Replace seal
	Bent shaft	Replace oil seal and shaft
	Shaft rough in oil seal area	Replace or repair shaft
	Oil seal installed incorrectly	Replace seal
	Oil seal not sealing in the housing	Replace seal or use a sealant on outside diameter of seal
	Oil level too high	Drain oil to proper level
	Hole in gearbox	Replace the gearbox
	Gasket damaged	Replace gasket
	Bolts loose	Tighten bolts

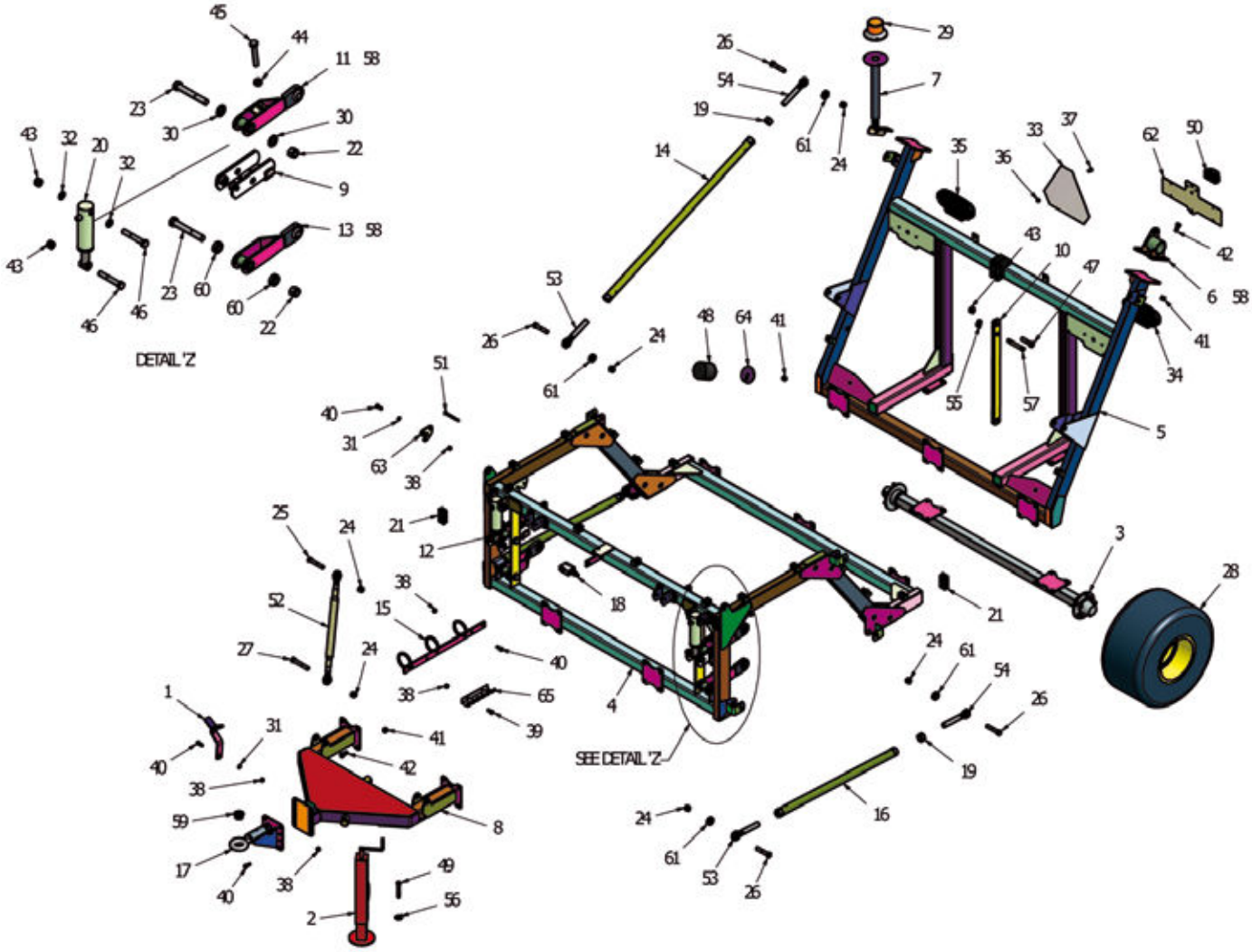
Spare Parts

Chute Assembly



Item	Part No	Description	Qty
1	19TC-CV1	OUTLET CHUTE	1
2	19TC-CV2	CHUTE HINGE DIA 16	3
3	19TC-CV3	HINGE SPACER	3
4	19TC-CV30	CHUTE TOP FLAP	1
5	FWM12	M12 FLAT WASHER	2
6	FWM16	M16 FLAT WASHER	8
7	FWM20	M20 FLAT WASHER	2
8	M12	M12 NYLOC NUT	10
9	M12x40BZP	M12x40 BOLT	6
10	M12x60BZP	M12x60 BOLT	2
11	M16	M16 NYLOC NUT	7
12	M16x110BZP	M16x110 BOLT	1
13	M16x40SZP	M16x40 SET BOLT	4
14	M16x90BZP	M16x90 BOLT	2
15	M20	M20 NYLOC NUT	2
16	M20x110BZP	M20x110 BOLT	1
17	M20x120BZP	M20x120 BOLT	1
18	M8	M8 NYLOC NUT	1
19	MT2000GA	MT2000 FLAIL ASSEMBLY	1
20	NT29A	1/2” “D” SHACKLE	4
21	S11074	TURNBUCKLE DIA 11xM8	1
22	S15707	CAT 1/2 LINK PIN	4
23	S3546	LINCH PIN DIA 9.5	4
24	SC75-RAM_B	SWEEPER RAM	1
25	SS-CHAIN	3/8” CHAIN STRAP	2
26	19TC-CV35	FLAP PIVOT SHAFT	1
27	8SM9-3	BLADE BACK SPACER	4
28	19TC-L10	RAM PIVOT MOUNT	2

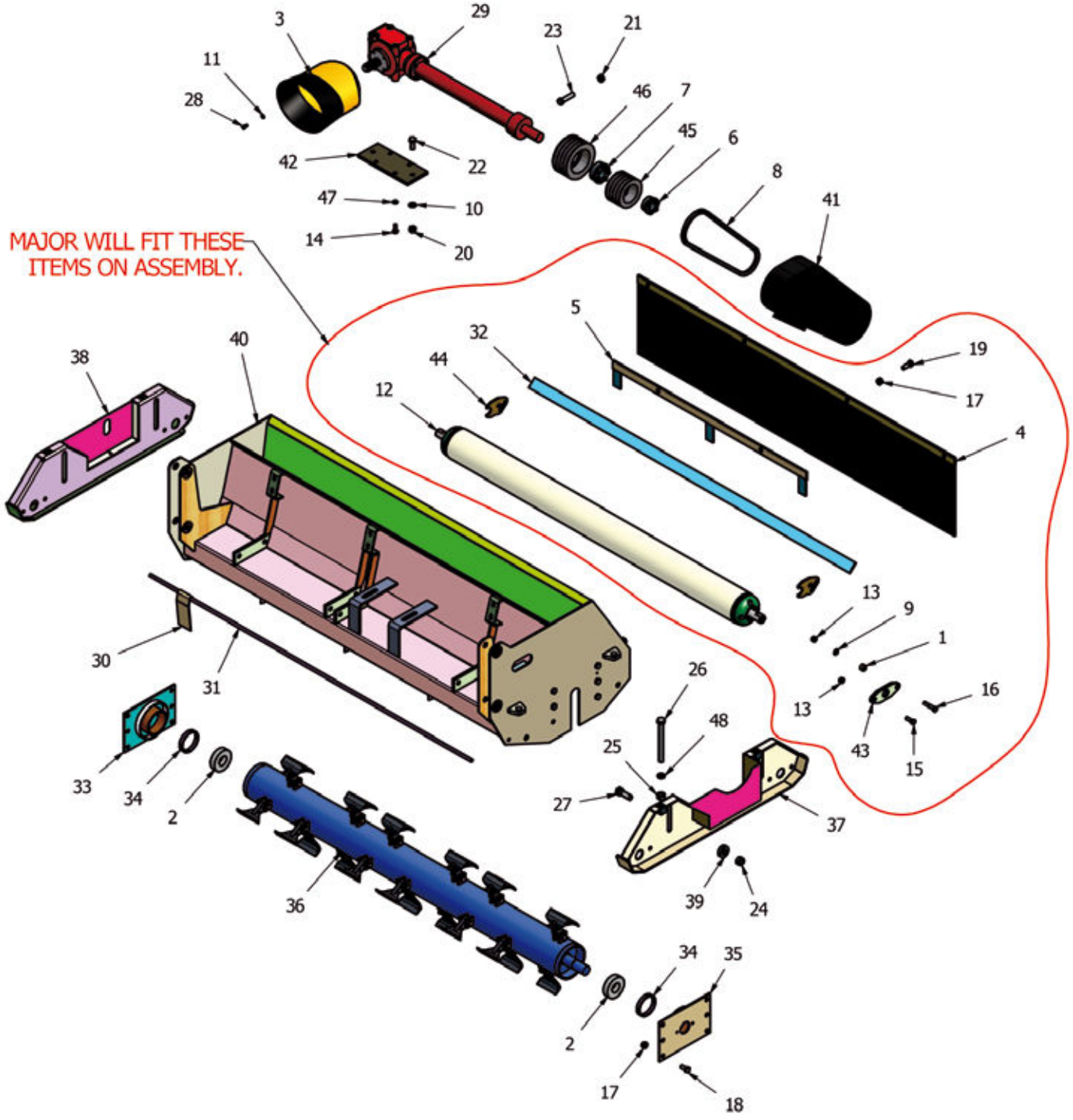
Bogey Assembly



Item	Part No	Description	Qty
1	12DB-030	PTO STAND	1
2	12GMJK-1	RM PARKING JACK	1
3	19TC-A02	CATCHER AXLE (1700)	1
4	19TC-B01	FLAIL BOGEY	1
5	19TC-B50	AXLE BOGEY	1
6	19TC-B80	PIVOT MOUNT	2
7	19TC-BCN01	CATCHER BEACON STAND	1
8	19TC-D01	FC2000 DRAWBAR	1
9	19TC-L20	FLAIL LIFT SHOE	2
10	19TC-L30	LOCK ARM LINK	1
11	19TC-L40	PARALLEL LINK (LH)	1
12	19TC-L40H	PARALLEL LINK (RH)	1
13	19TC-L45	PARALLEL LINK (LOWER)	2
14	19TC-L50	TIE BAR	2
15	2TKBC-2	CABLE LOCATION BAR	1
16	AGIMF040	TIE BAR	2
17	RTE-01	ROTARY HITCH EYE	1
18	002070000M518	PRESSURE RELIEF VALVE	1
19	118CHEX	1 1/8” UNC PLAIN NUT	4
20	12D-RAM_B	DRAWBAR RAM	2
21	199195	RECT 100x50 INSERT	4
22	1F	1” FINE NYLOC NUT	4
23	1x7FBZP	1”x7” FINE BOLT	4

Item	Part No	Description	Qty
24	34F	3/4” FINE NYLOC NUT	12
25	34x412FBZP	3/4”x4 1/2” FINE BOLT	2
26	34x4FBZP	3/4”x4” FINE BOLT	8
27	34x5FBZP	3/4”x5” FINE BOLT	2
28	3605512	DIA 695x345mm	2
29	DA49800101	LED BEACON	1
30	FW1	DIA 1” FLAT WASHER	4
31	FWM12	M12 FLAT WASHER	3
32	FWM20	M20 FLAT WASHER	4
33	Gras-128	SLOW MOVING VEHICLE	1
34	LED-837-LH	LIGHT KIT (LH) 88164	1
35	LED-837-RH	LIGHT KIT (RH) 88164	1
36	M10	M10 NYLOC NUT	4
37	M10x20SZP	M10x20 SET BOLT	4
38	M12	M12 NYLOC NUT	15
39	M12x30SZP	M12x30 SET BOLT	2
40	M12x35BZP	M12x35 BOLT	13
41	M16	M16 NYLOC NUT	38
42	M16x40SZP	M16x40 SET BOLT	36
43	M20	M20 NYLOC NUT	5
44	M20HEX	M20 PLAIN NUT	2
45	M20x120SZP	M20x120 SET BOLT	2
46	M20x130BZP	M20x130 BOLT	4
47	M20x80BZP	M20x80 BOLT	1
48	MOT10	DIA 105x100 BUFFER	2
49	S15501	CAT 0 PIN DIA 16x97mm	1
50	S2015	LIGHT-NUMBER PLATE	1
51	S272	SHAFT LOCK PIN DIA 11	2
52	S316-A	CAT 1-1 TOP LINK	2
53	S342	TOP LINK DIA 3/4”x1 1/8” (LH)	4
54	S343	TOP LINK DIA 3/4”x1 1/8” (RH)	4
55	S3546	LINCH PIN DIA 9.5	1
56	S37	LINCH PIN DIA 6	1
57	S74	CAT 1 PIN DIA 19x102mm	1
58	S820	GREASE NIPPLE 1/8” STR	6
59	S8561	TOW EYE BUSH	1
60	BSW-R1	SPACER RING	4
61	TA-FBB1	RAM MOUNT REINF”	8
62	19TC-B31	REG-PLATE MOUNT	1
63	19TC-L11	TRANSPORT LATCH	2
64	8T19	BUFFER SPACER	2
65	TA-HCM04	CABLE MOUNT	1

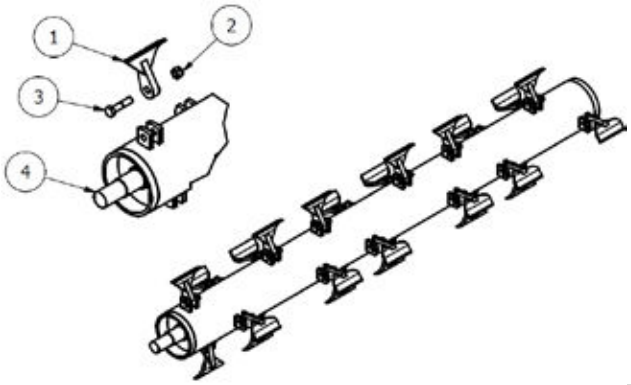
Flail Assembly



Item	Part No	Description	Qty
1	12T-BBS	BLADE BACK SPACER	2
2	1309	100x45x25 DOUBLE ROW BALL	2
3	190545	PTO GUARD (EXTENDED OVAL)	1
4	19TC-F10	CATCHER RUBBER FLAP	1
5	19TC-F20	FLAP SUPPORT	1
6	40-65-E15	CLAMPEAST LOCK 15 40/65	1
7	40-80-E15	CLAMPEAST LOCK 15 40/80	1
8	B17-50	B17 BELTx1315mm	4
9	FWM12	M12 FLAT WASHER	2
10	FWM16	M16 FLAT WASHER	2
11	FWM8	M8 FLAT WASHER	4
12	GM63-ROL	6300 ROLLER	1

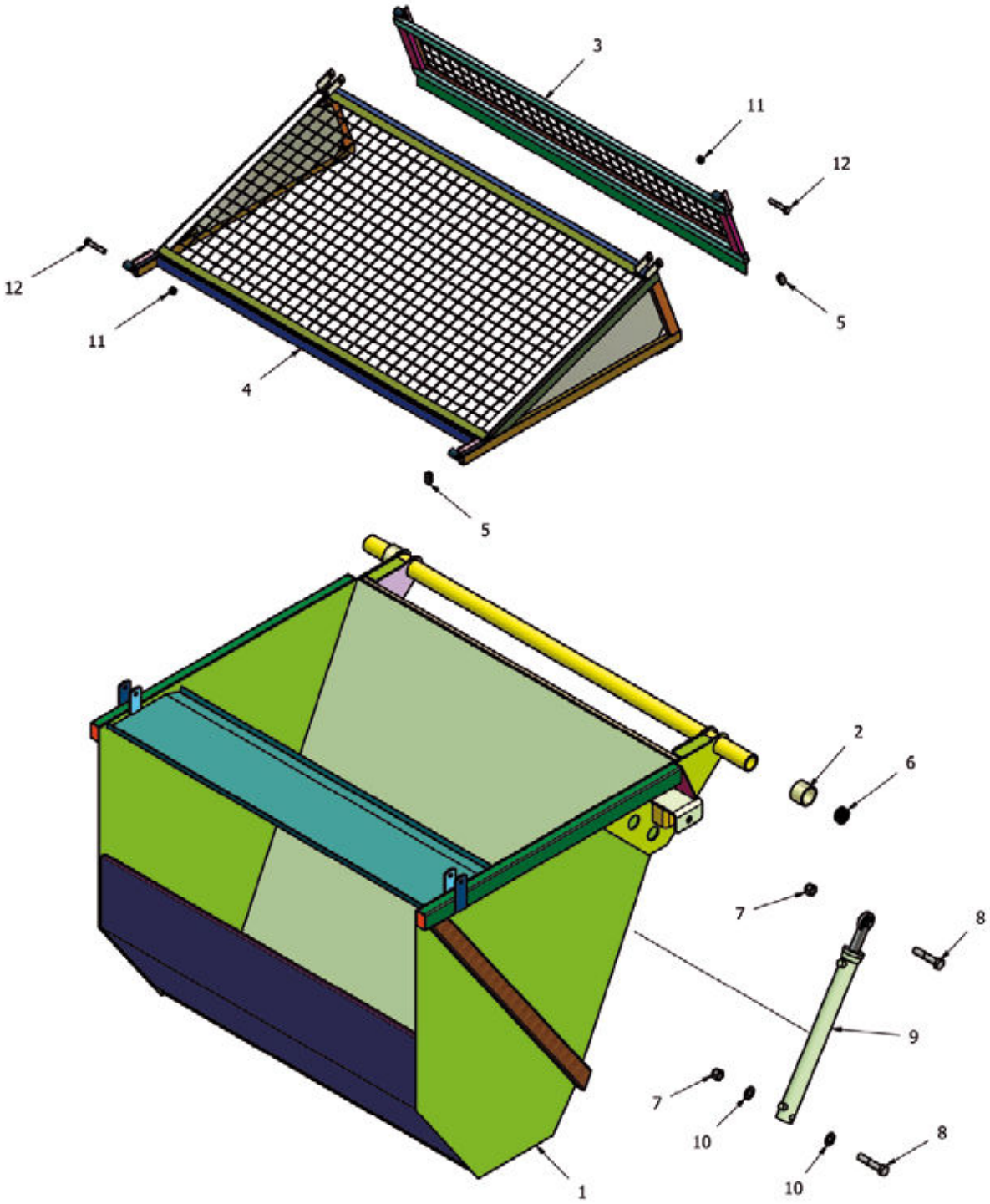
Item	Part No	Description	Qty
13	M12	M12 NYLOC NUT	4
14	M12x30SZP	M12x30 SET BOLT	4
15	M12x35BZP	M12x35 BOLT	2
16	M12x60BZP	M12x60 BOLT	2
17	M14	M14 NYLOC NUT	18
18	M14x30SZP	M14x30 SET BOLT	12
19	M14x40BZP	M14x40 BOLT	4
20	M16	M16 NYLOC NUT	2
21	M16HEX	M16 PLAIN NUT	1
22	M16x40SZP	M16x40 SET BOLT	2
23	M16x70SZP	M16x70 SET BOLT	1
24	M20	M20 NYLOC NUT	4
25	M20HEX	M20 PLAIN NUT	4
26	M20x200SZP	M20x200 SET BOLT	4
27	M20x60BZP	M20x60 BOLT	4
28	M8x16SZP	M8x16 SET BOLT	4
29	MT12-GBOX	“T” BOX RATIO 4.12	1
30	MT12GRD02	70mm FLAP GUARD	26
31	MT12GRD03	FLAP GUARD SHAFT	1
32	MT12ROL12	FC2000 SCRAPER	1
33	MT12RT10	BRG HOUSING (NON-DRIVE)	1
34	MT12RT15	BRG SPACER	2
35	MT12RT17	BRG HOUSING (DRIVE)	1
36	MT12RTGAF	FLAIL ROTOR ASSY	1
37	MT20-SKD20	CATCHER SKID (LH)	1
38	MT20-SKD21	CATCHER SKID (RH)	1
39	MT20-SKD30	SKID CLAMP WASHER	4
40	MT20B001	COLLECTOR FLAIL BODY	1
41	MT20B008	BELT GUARD	1
42	MT20B017	GBOX MOUNT	1
43	RM-RSN2	ROLLER MOUNT	2
44	RM-RSN4	SCRAPER MOUNT	2
45	68096900	SPB 125 QUAD PULLEY (SPB-125B)	1
46	68060500	SPB 160 QUAD PULLEY (SPB-160B)	1
47	SWM12	M12 SPRING WASHER	4
48	SWM20	M20 SPRING WASHER	4
49 (not pictured)	V601210CEC02RW6	V60 SHAFT WIDE ANGLE / SLIP CLUTCH	1

Rotor assembly (MT12RTGAF)



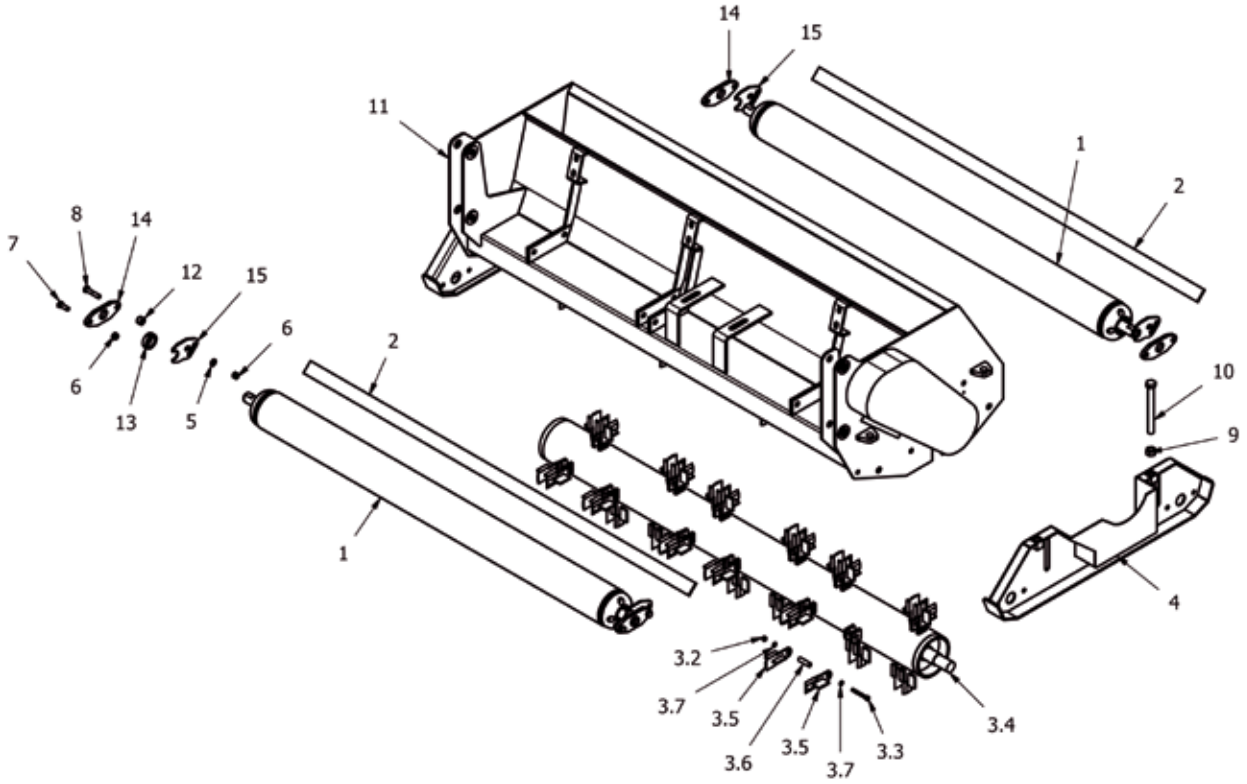
Item	Part No	Description	Qty
1	12014400	FLAIL HAMMER	24
2	M14	M14 NYLOC NUT	24
3	M14x60BZP	M14x60 BOLT	24
4	MT12RT05	FLAIL ROTOR	1

Catcher Assembly



Item	Part No	Description	Qty
1	19TC-C01	MJ2000 HOPPER	1
2	19TC-C23	SPACER TUBE	2
3	19TC-LD01	HOPPER REAR LID	1
4	19TC-LD10	HOPPER TOP LID	1
5	111347	RECT 50x25 INSERT (POL)	8
6	199269	DIA 57.5-61.5mm INSERT	2
7	1F	1” FINE NYLOC NUT	4
8	1x5FBZP	1”x5” FINE BOLT	4
9	AGI2RAM_B	RAM	2
10	FW1	DIA 1” FLAT WASHER	4
11	M16	M16 NYLOC NUT	4
12	M16x90BZP	M16x90 BOLT	4

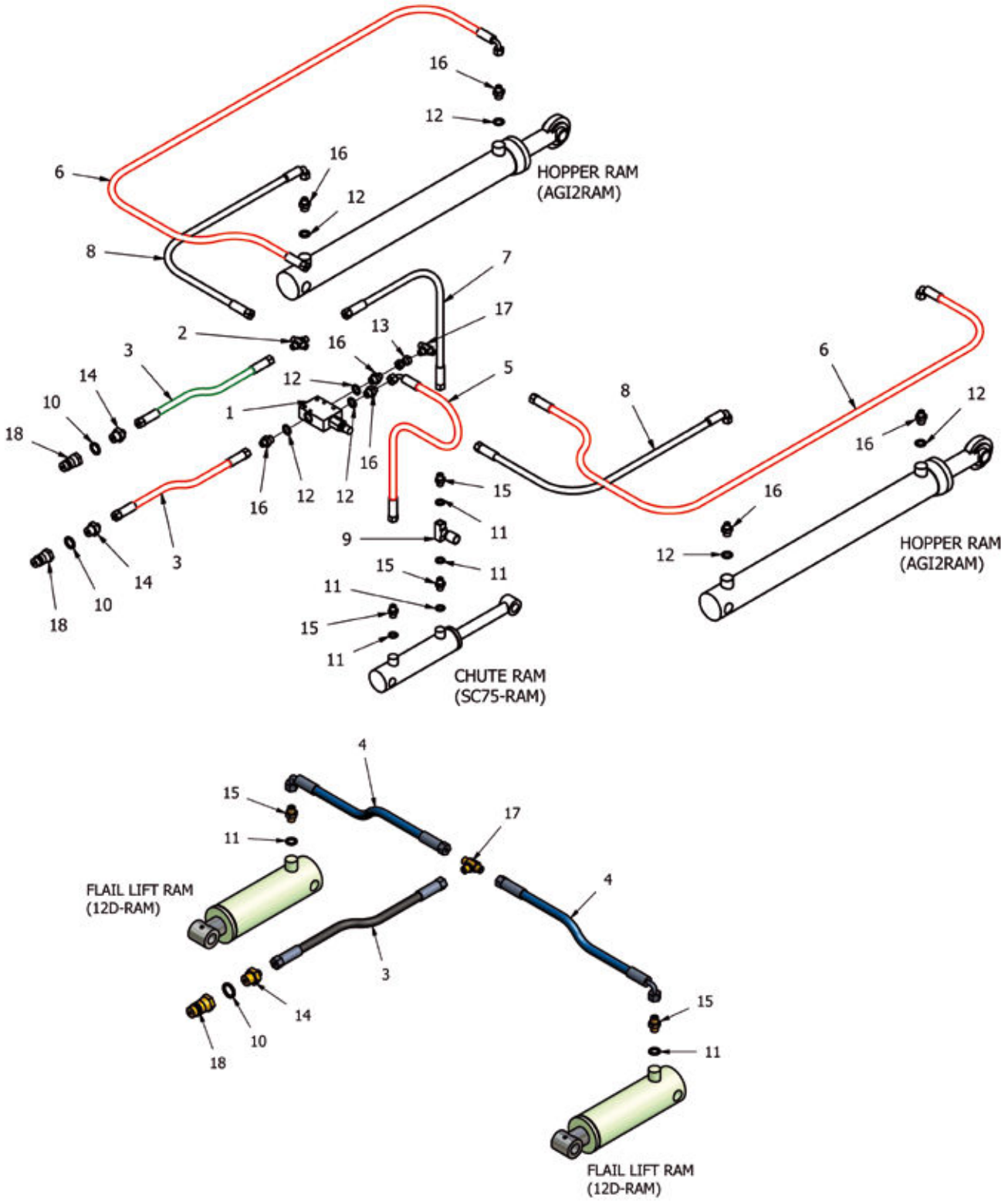
Scarifier Assembly



Item	Part No	Description	Qty
1	GM63-ROL	6300 ROLLER	2
2	MT12ROL12	FC2000 SCRAPER	2
3	MT12RTGAS	SCARIFIER ROTOR ASSY	1
3.2	M8	M8 NYLOC NUT	24
3.3	M8x70BZP	M8x70 BOLT	24
3.4	MT12RT05	FLAIL ROTOR	1
3.5	MT20SC01	FC2000 SCARIFIER BLADE	48
3.6	MT20SC02	SCARIFIER BLADE BUSH	24
3.7	FWM8	M8 FLAT WASHER	48
4	MT20-SKD20	CATCHER SKID (LH)	1
5	FWM12	M12 FLAT WASHER	4

Item	Part No	Description	Qty
6	M12	M12 NYLOC NUT	8
7	M12x35BZP	M12x35 BOLT	4
8	M12x60BZP	M12x60 BOLT	4
9	M20HEX	M20 PLAIN NUT	4
10	M20x200SZP	M20x200 SET BOLT	4
11	MT20B001	COLLECTOR FLAIL BODY	1
12	12T-BBS	BLADE BACK SPACER	4
13	RM-RSN3	SHAFT COLLAR DIA 35	4
14	RM-RSN2	ROLLER MOUNT	4
15	RM-RSN4	SCRAPER MOUNT	4

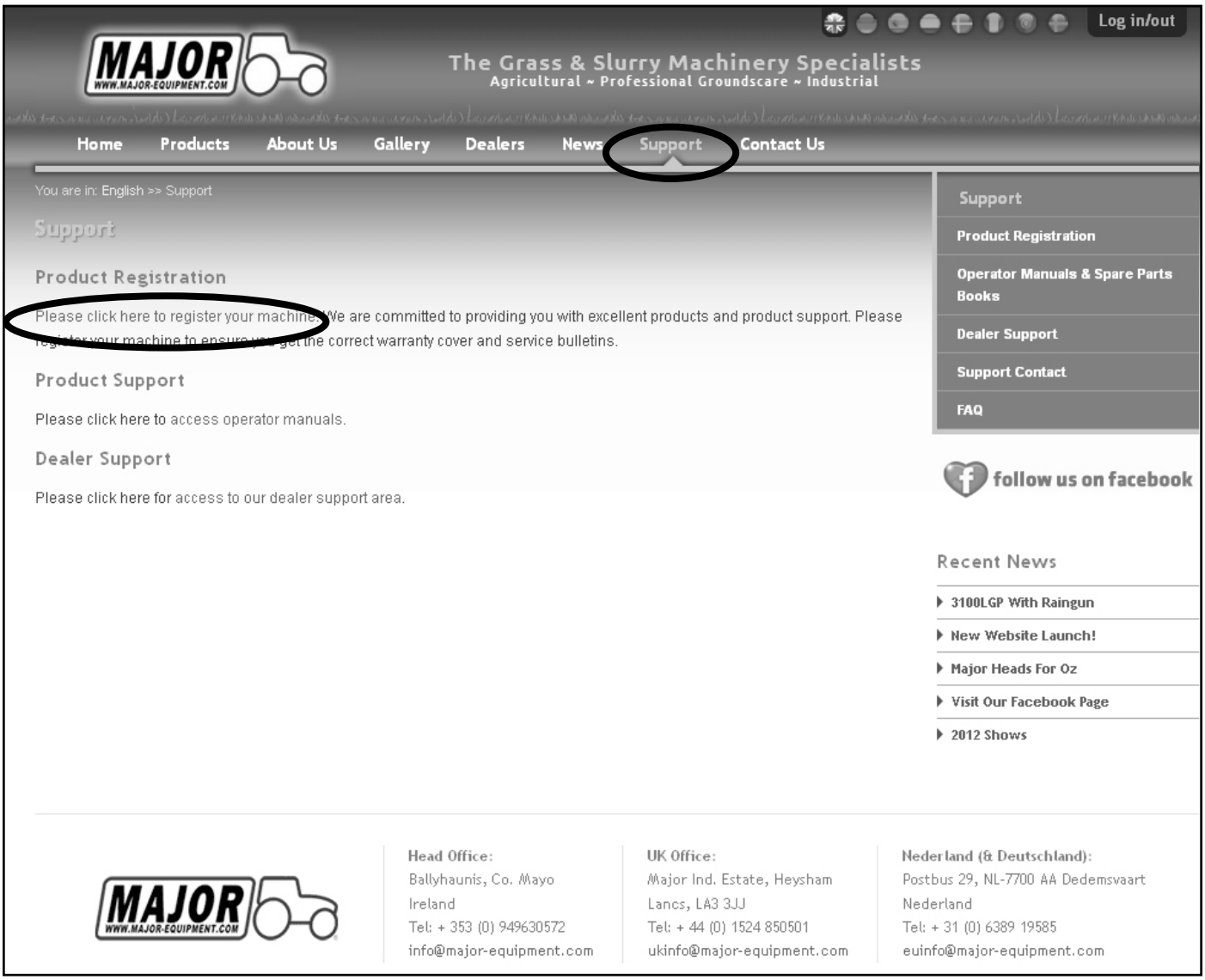
Hydraulics



Item	Part No	Description	Qty
1	002070000M518	PRESSURE RELIEF VALVE	1
2	14CROSS	1/4” M/M/M/M CONNECTOR	1
3	2000FC-HOSE-A	1/4”x2000mm Str to Str	3
4	2000FC-HOSE-B	1/4”x1300mm Str to Block 90	2
5	2000FC-HOSE-C	1/4”x900mm Str to Block 90	1
6	2000FC-HOSE-D	1/4”x4450mm Str to Block 90	2
7	2000FC-HOSE-E	1/4”x600mm Str to Str	1
8	2000FC-HOSE-F	1/4”x3800mm Str to Block 90	2
9	201011	1/4” 1251 NEEDLE VALVE (BLUE)	1

Item	Part No	Description	Qty
10	EDOW12	1/2” DOWTY WASHER	3
11	EDOW14	1/4” DOWTY WASHER	6
12	EDOW38	3/8” DOWTY WASHER	7
13	EFF14	1/4” F/F CONNECTOR	1
14	EMM1214	1/2-14” M/M CONNECTOR	3
15	EMM14	1/4” M/M CONNECTOR	5
16	EMM3814	3/8-1/4” M/M CONNECTOR	7
17	EMMMT14	1/4” M/M/M CONNECTOR	2
18	QRM12	1/2” QUICK RELEASE MALE	3

Warranty: This machine is guaranteed for 12 months. No warranty is given where the machine is being used as a hire machine. Warranty is against faulty workmanship or parts, with the exception of components not of MAJOR'S manufacture or design, i.e. hydraulic components, universally jointed shafts, chains and tyres, etc., which are subject to the original manufacturers conditions. To register your machine for warranty, please go to the support section of our website www.major-equipment.com and enter your details.



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