

Operator Manual & Parts List

MAJOR RANGE OF
GRASS TOPPERS

Models: 800SM, 900SM, 9FTGDX & 909HD



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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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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	9FTGDX	909 HD	800SM	900SM
Overall Width	2.74m (8' 9")	2.91m (9' 5")	4.4m (14' 4")	4.5m (14' 7")
Cut Width	2.7m (9')	2.7m (9')	2.4m (8')	2.7m (9')
Transport Width	2.91m (9' 5")	2.91m (9' 5")	2.22m (7' 3")	2.22m (7' 3")
No. of Blades	8	8	8	8
No. of Rotors	2	2	2	2
Power (HP)	40 - 90	50 - 110	35 - 80	50 - 90
PTO rpm	540	540	540	540
Blade Speed	111m/s	111m/s	100m/s	111m/s
Cutting Height	12-250mm	12-250mm	12-250mm	12-250mm
Weight	490kg (570kg with wheels)	560kg (640kg with wheels)	550kg	640kg
Gearbox Oil	EP 90	EP 90	EP 90	EP 90

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.

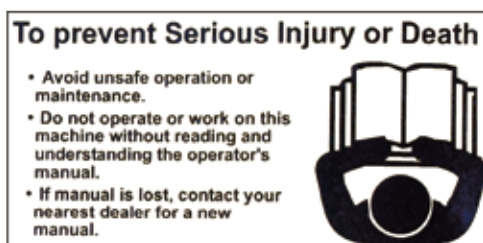
Safety

Machine Safety Labels

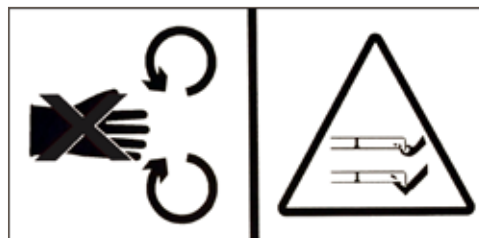
The machine safety labels shown in this section are placed in important areas on your machine to draw attention to potential safety hazards.

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.



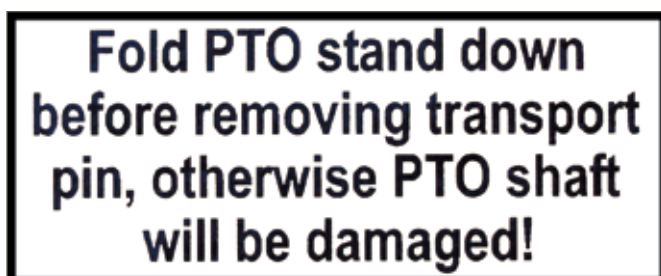
To avoid injury, read the manual



Rotating blade hazard



Moving parts hazard



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.

Operating Safely

The MAJOR Topper is designed to operate at 540 RPM. Ensure tractor PTO output is set at 540 RPM. The MAJOR Topper 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.

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.

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.



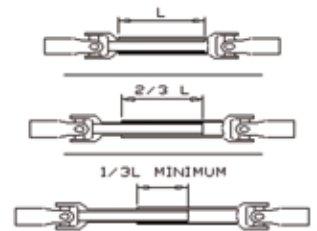
UNLESS IT IS CORRECTLY PROTECTED THE TRANSMISSION COULD CAUSE DEATH SINCE IT CAN CATCH ON PARTS OF THE BODY OR CLOTHING

Ensure retaining chains are correctly anchored on all PTO shafts, preventing them from 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

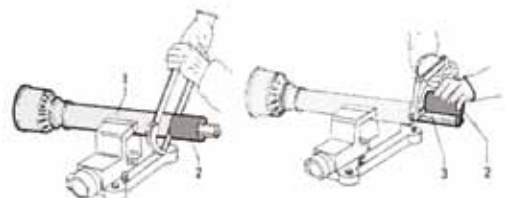
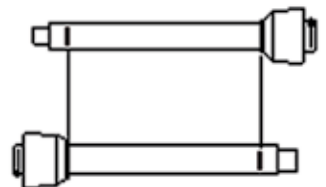
MAX PTO INPUT 540 R.P.M. Contact your nearest dealer or a specialised retail outlet if the PTO must be replaced with a longer one, since this must belong to the same power category and possess the same characteristics. An unsuitable PTO could easily break.

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 Topper 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 Topper 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

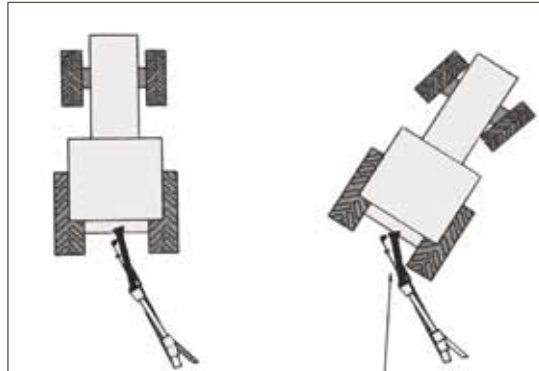


and shavings.

- 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 19Km/Hr (12 MPH)

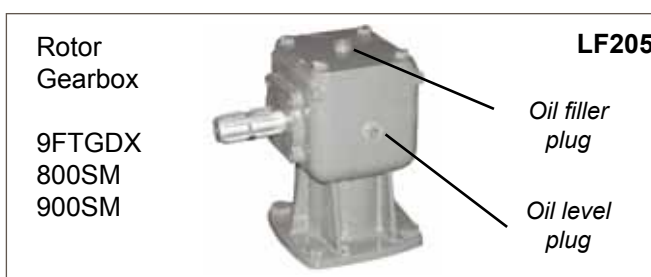
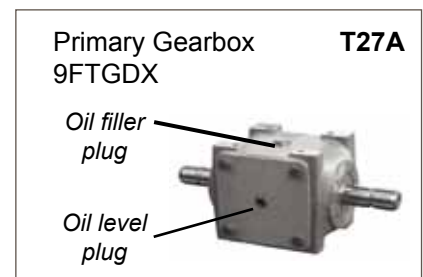
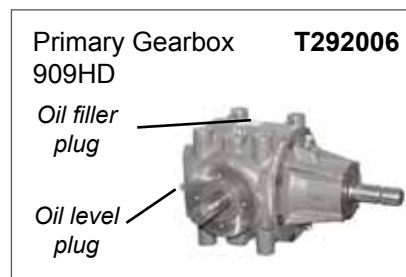
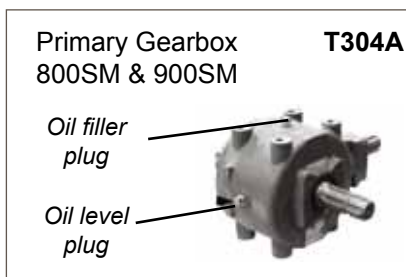
Operating the Machine



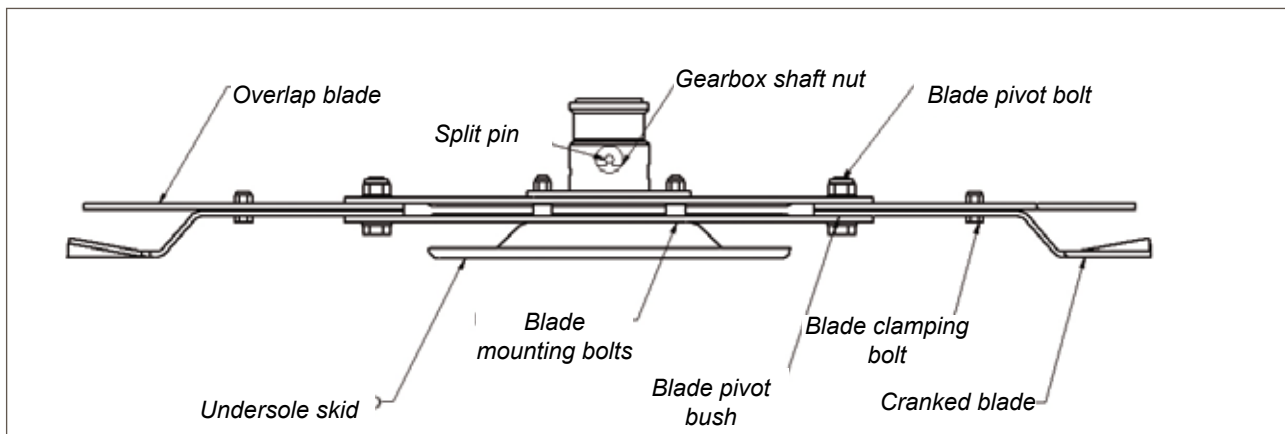
Inspections before Use

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

1. With the whole machine as level as possible, check the oil level in the Primary Gearbox, top up as required with



SAE EP90 gear oil through the oil filler plug indicated. The correct level is at the oil level plug indicated. Check the oil level in the Rotor Gearboxes and top up as required with SAE EP 90 gear oil through the oil filler plugs indicated. The correct level is at the oil level plug indicated



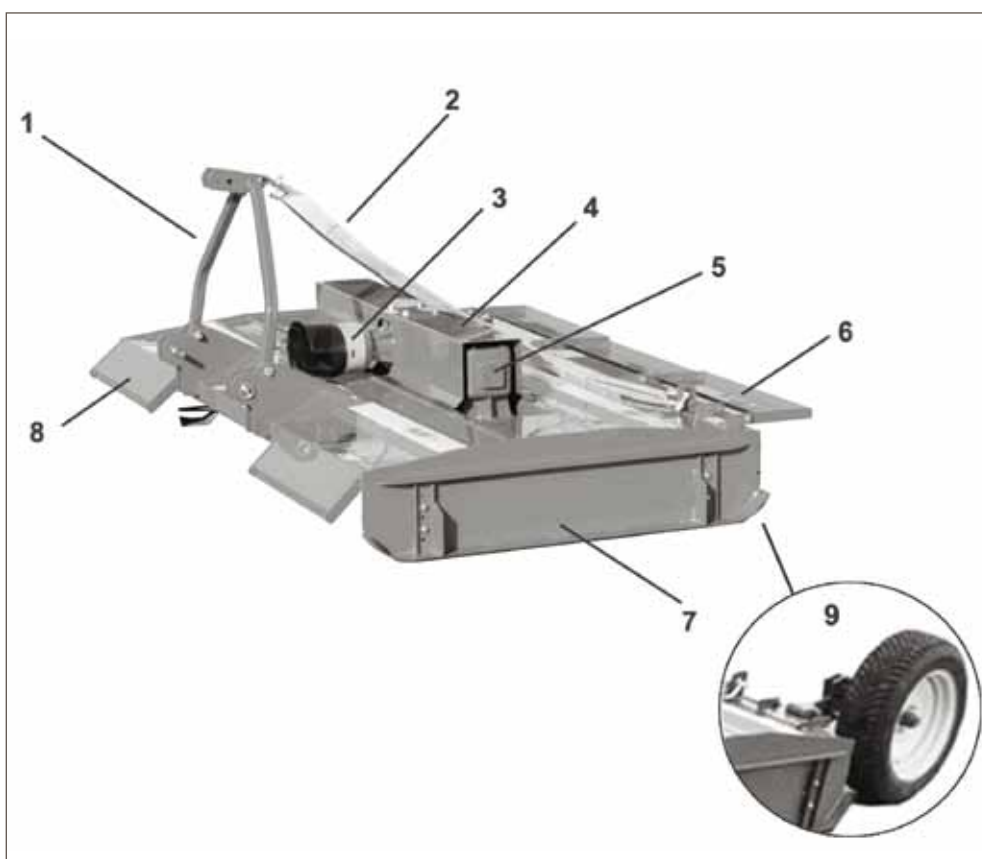
2. Grease the PTO shaft universal joints, drive shaft bearing and carrying arm pivots.
3. Re-sharpen old blades with a grindstone if necessary. Replace bent blades with new ones.
4. Check the blade mounting bolts are tight
5. Ensure the gearbox shaft nuts are tight and retained in place by split pin.
6. Check tightness of all nuts, bolts and retaining screws after the first and second hours of work.
7. Ensure safety guards and flaps are in place at all times where fitted.
8. Due to the corrosive nature of grass when cut, wash down the machine when finished mowing, especially when the machine is being stored for a long period of time.



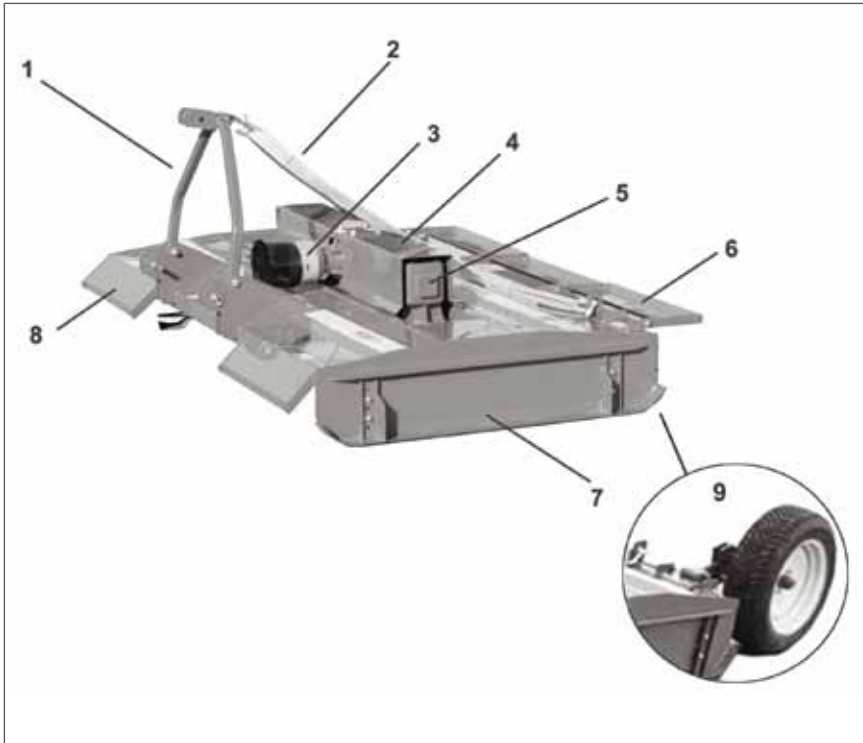
Always ensure the PTO shaft yoke ends are locked onto the splined shafts on both the tractor and the implement. An unlocked shaft could slip out of position, causing notable mechanical damage and serious injury to both operator and bystanders.

Key to Main Parts

9FTGDX and 909HD

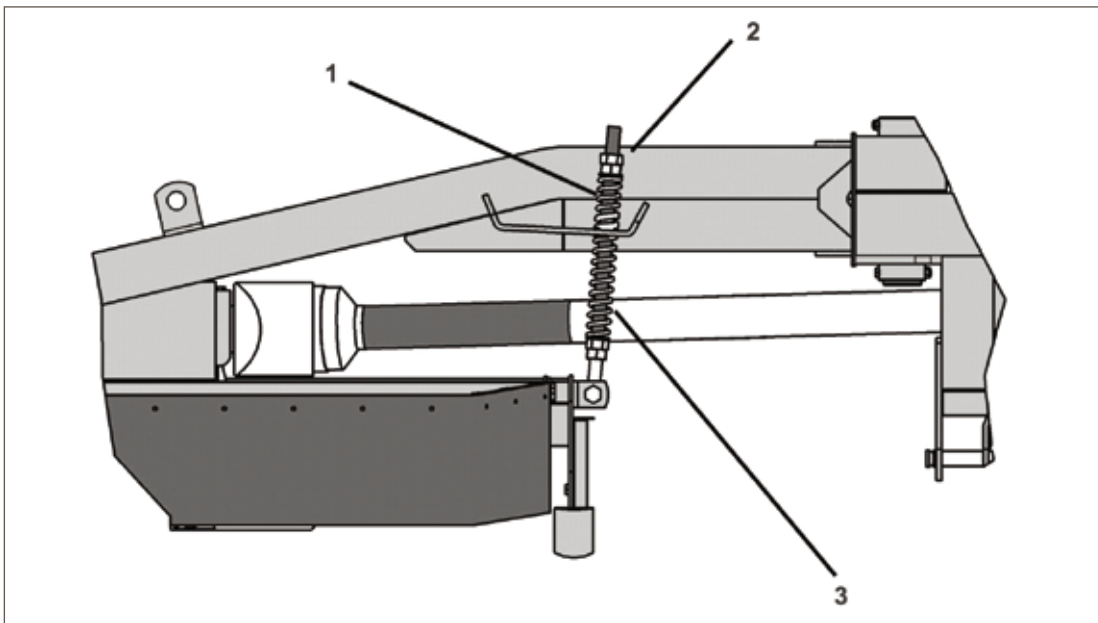


No	Name
1	A Frame
2	Strap
3	PTO guard
4	Gearbox cover
5	Rotor gearbox
6	Back guard
7	Skid
8	Front guard
9	Wheel option 909HD & 9FTGDX only (if ordering a wheel kit post sale, please contact MAJOR for fitting instructions)



No	Name
1	Hydraulic ram
2	Float
3	Headstock
4	Transport locking pin (in transport)
5	Carrying arm
6	Gearbox cover
7	Rotor gearbox
8	Front guard
9	Skid
10	Read guard
11	Secondary shaft
12	PTO guard
13	Transport locking pin (when mowing)
14	Hydraulic hoses
15	Skid
16	Long damper spring
17	Short damper spring

The Side Mount Topper is often supplied in kit form; please ensure that all components are fitted before using the machine. Ensure the damper system is correctly set up as shown below. Ensure primary PTO shaft is fitted correctly with the Shearbolt / Overrunning clutch fitted onto the primary gearbox of the machine and a standard yoke end on the tractor PTO drive.



No	Name
1	Short spring
2	Nyloc nut
3	Long spring

Starting Regulations

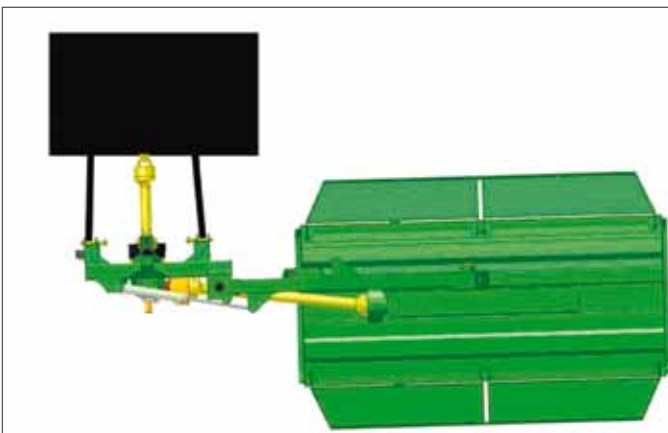
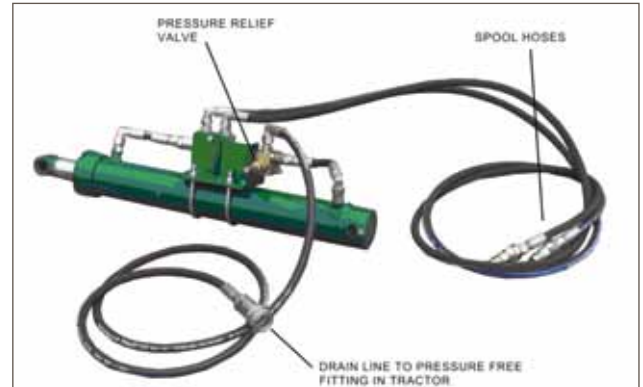
Always check that any imminently dangerous conditions have been eliminated before using the machine. Ensure all guarding is present & the operator is fully aware of the operations of the machine

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.

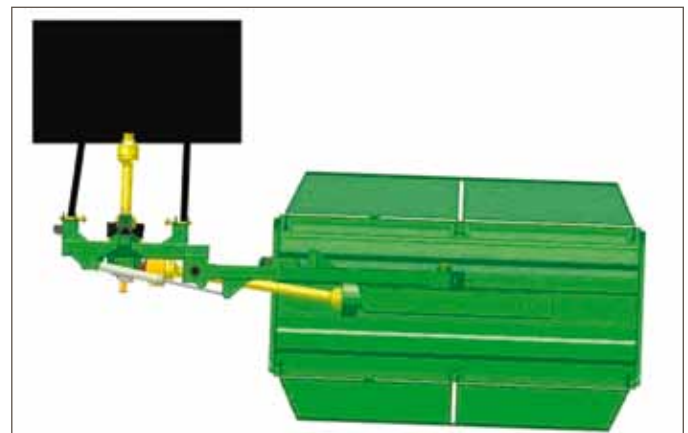
Machine Set up

Hydraulic Ram Set Up Instructions (Side Mounted toppers)

1. Fit hydraulic quick fits to Tractor Spool
2. Fit Drain Line to pressure free return on tractor
3. Lift machine & power hydraulics to move body into mowing position.
4. Place spool in neutral position.
5. Tighten lower link stabilizer bars to ensure machine is tight on linkage & ensure that linkage bars are positioned to have machine slightly forward when in mowing position.
6. When mowing, the machine should be perpendicular or slightly forward to the direction of travel. If the machine is lagging behind the tractor then excessive pressure is being exerted on the valve & will cause the machine to creep back.



Correctly set up with stabilizers tightened up



Incorrectly set up with loose stabilizers

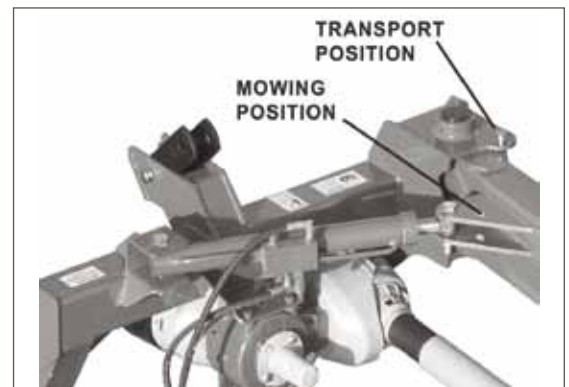
Proceed to mow grass after machine has been set up as shown above. **IMPORTANT!!** . Mowing speed should never exceed 7 Kph.



Mowing over rough ground can cause pressure on the relief valve with the consequence of the valve to operate. It is suggested to mow at lower speeds over these undulations

Transport Position - Side Mounted Topper

1. Check machine is hitched to the tractor as described. Ensure the tractor parking brake is applied
2. Lift the body clear from the ground with the tractor 3 point linkage
3. Transform the machine into transport position by hydraulic control.
4. Lock in position with the transport locking pin.

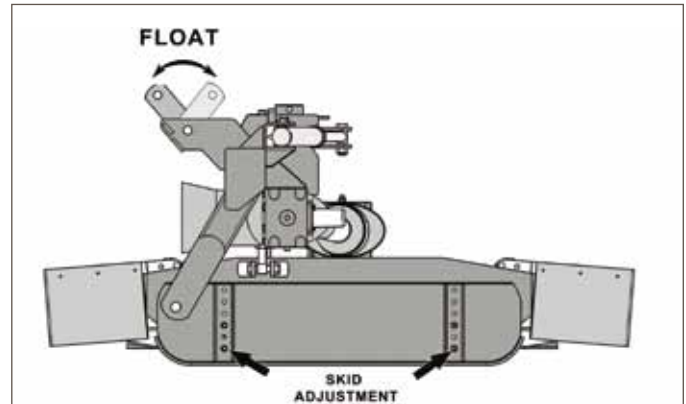


Hitching to the Tractor

ALL MACHINES:

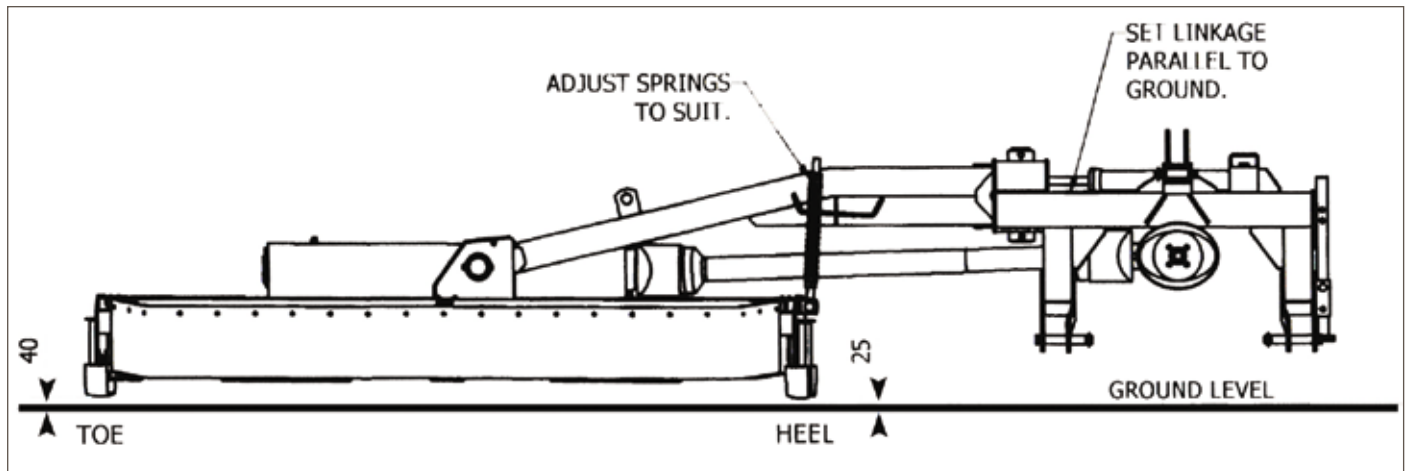
ALWAYS OPERATE ON LEVEL GROUND WHEN HITCHING/UNHITCHING THE IMPLEMENT. THIS WILL PREVENT DANGEROUS MOVEMENT. NEVER ALLOW ANYONE TO STAND BETWEEN THE TRACTOR AND THE TOPPER.

1. Reverse the tractor,
2. Ensure the tractor parking brake is applied.
3. Connect the machine to the tractor.
4. Before connecting the PTO shaft to the tractor, check for length as previously described in this manual.
5. Ensure shear-bolt safety device is fitted on the machine PTO shaft & not the tractor PTO, as shown on the PTO shaft guarding.
6. Ensure PTO check chains are anchored to prevent PTO guarding from rotating.
7. Connect the hydraulic hoses to the appropriate connection. (SIDE MOUNTED TOPPER ONLY)



SIDE MOUNTED TOPPERS

1. Connect tractor to linkage
2. With linkage set parallel to the ground raise the topper such that the topper "heel" is approx. 25mm from the ground. Adjust the springs such that the "toe" is slightly higher at approx. 40mm from the ground.
3. Adjust the tractor linkage stay bars such that the topper runs parallel to the tractor.
4. Flip back axle and drawbar ram stoppers.



Operating the Machine/Mowing

Mowing Position - Side Mounted Toppers

1. Check machine is hitched to the tractor as described. Ensure the tractor parking brake is applied
2. Ensure the body is clear from the ground raising the tractor's three point linkage.
3. Transform the machine into mowing position by hydraulic control.
4. Locate transport locking pin as shown previously



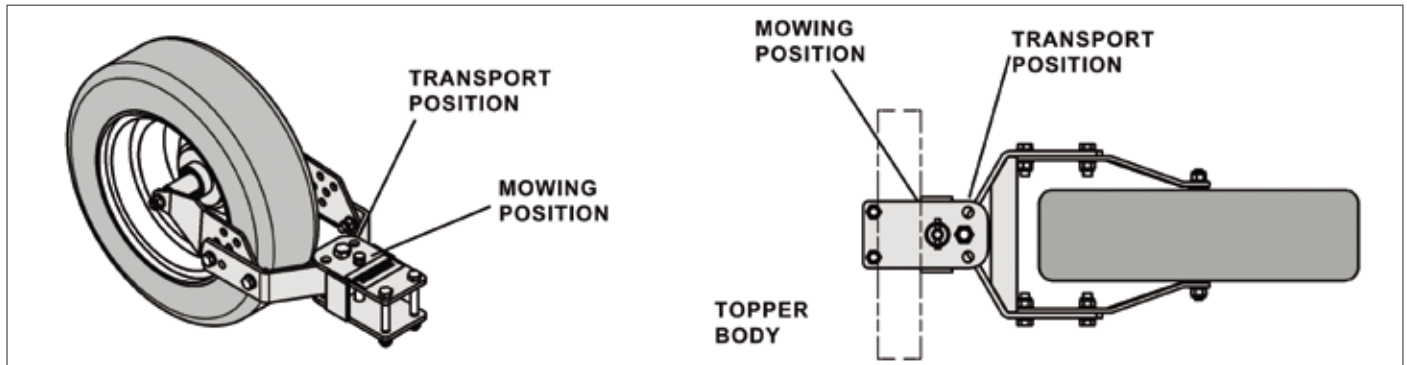
Never place limbs under the machine while rotors are turning. Rotors can remain turning for up to 1 minute after disengaging PTO

Mowing - All Models

1. The MAJOR Topper is designed to operate at a max 540 rpm. Always operate on level ground when connecting / disconnecting the implement. This will prevent dangerous movement.
2. Never allow anyone to stand between the tractor and the TOPPER. Ensure the machine is hitched correctly to the tractor as previously described.
3. Ensure cutting decks are lowered to the ground.
4. Start up the tractor PTO at a low RPM.
5. Build up to operating speed, select a suitable forward gear & proceed to cut grass.

9FTGDX – Wheel Assembly

The wheel assembly is not suitable for reversing. Place the pin in the appropriate location for either transport or mowing.



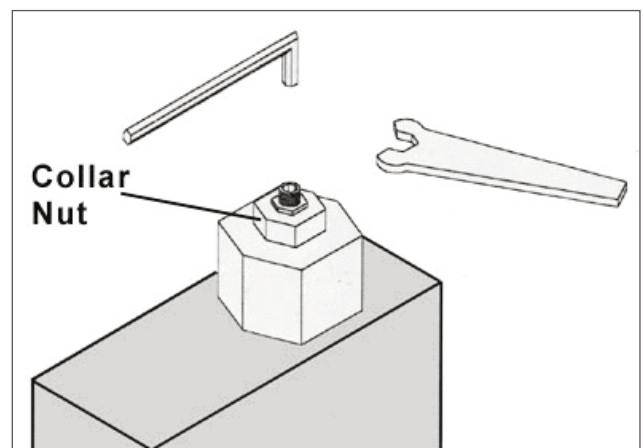
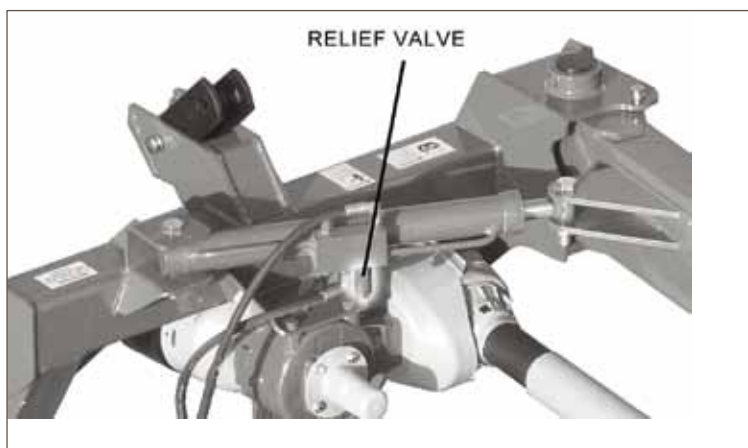
Adjusting the skids and cutting height

Adjust the skids by lifting the machine and removing the four skid retaining bolts & relocating the skid to the desired height.

Hydraulic Breakaway Adjustment

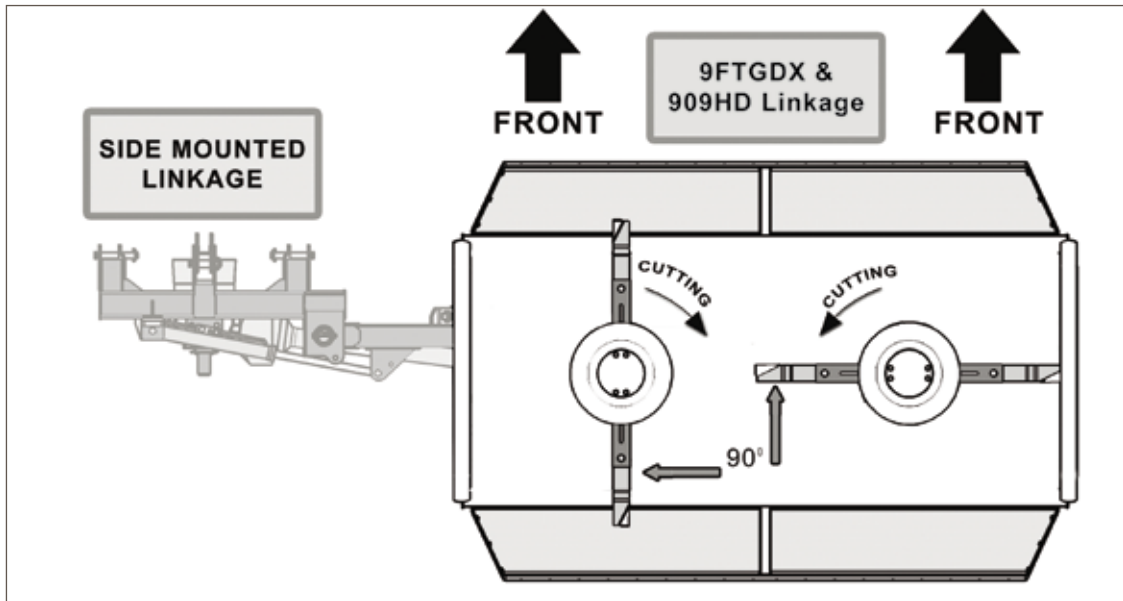
The relief valve is located as shown on the hydraulic ram.

1. Anchor the position of the Allen Screw using the Allen key
2. Slacken off the Collar Nut
3. Wind in the Allen Screw to increase the resistance (i.e. prevent the body from slipping back).
4. Lock the Allen Screw in the new position with the Collar Nut



Blade Rotations

Blades must always be timed at 90° to each other. Failure to do so can cause the blades to foul & in turn may damage the transmission.



Maintenance

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

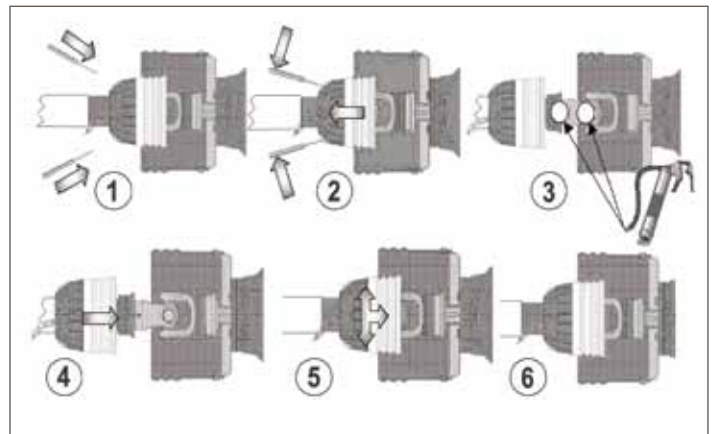
If emergency operations are required whilst the machine is connected to the tractor, switch off the engine, engage the parking brake and disengage the PTO.

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

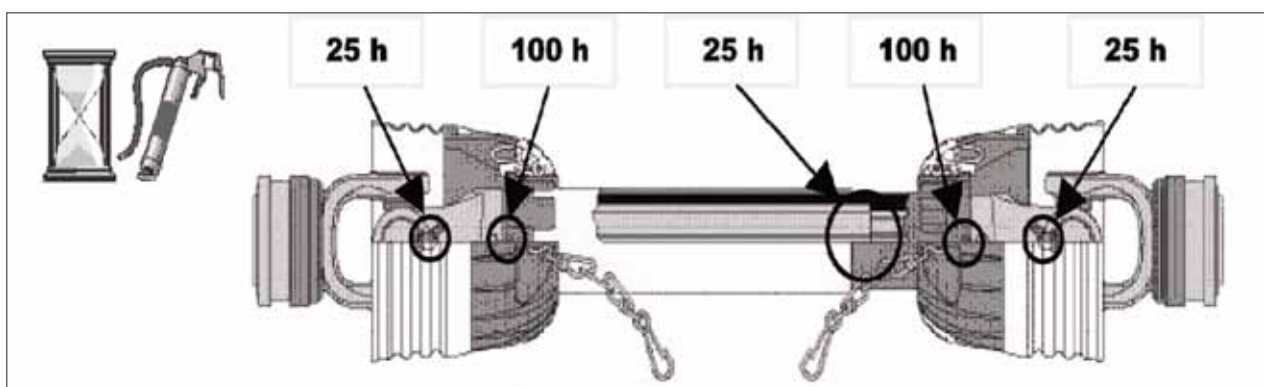
PTO Shaft Maintenance

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



Shearbolt Replacement

1. Slide yoke shield back.
2. Drive out sheared bolt with hammer and punch.
3. Align holes and install new shear bolt.
4. Slide yoke shield securely in place



IMPORTANT

Fit PTO shaft with the shearbolt end connected to the Topper as directed on the PTO guarding
Use only genuine MAJOR replacement shear bolts. M8X50 BZP -8.8

Maintenance Schedule

Grease the following:

	INITIALLY	8 HOURS
PTO shaft yoke ends	●	●
Carrying arm pivots	●	●

Lubricate moveable mechanical joints when required.

All nuts and bolts in the transmission including rubber couplings, star drives, PTO shafts and gearboxes should be checked for tightened after mowing at the following intervals.

1st 50 Acres

1st 100 Acres

1st 250 Acres

And every 250 acres thereafter.

NOTE: ENSURE BLADE ROTATION AND TIMING IS CORRECT AFTER SERVICING TRANSMISSION.

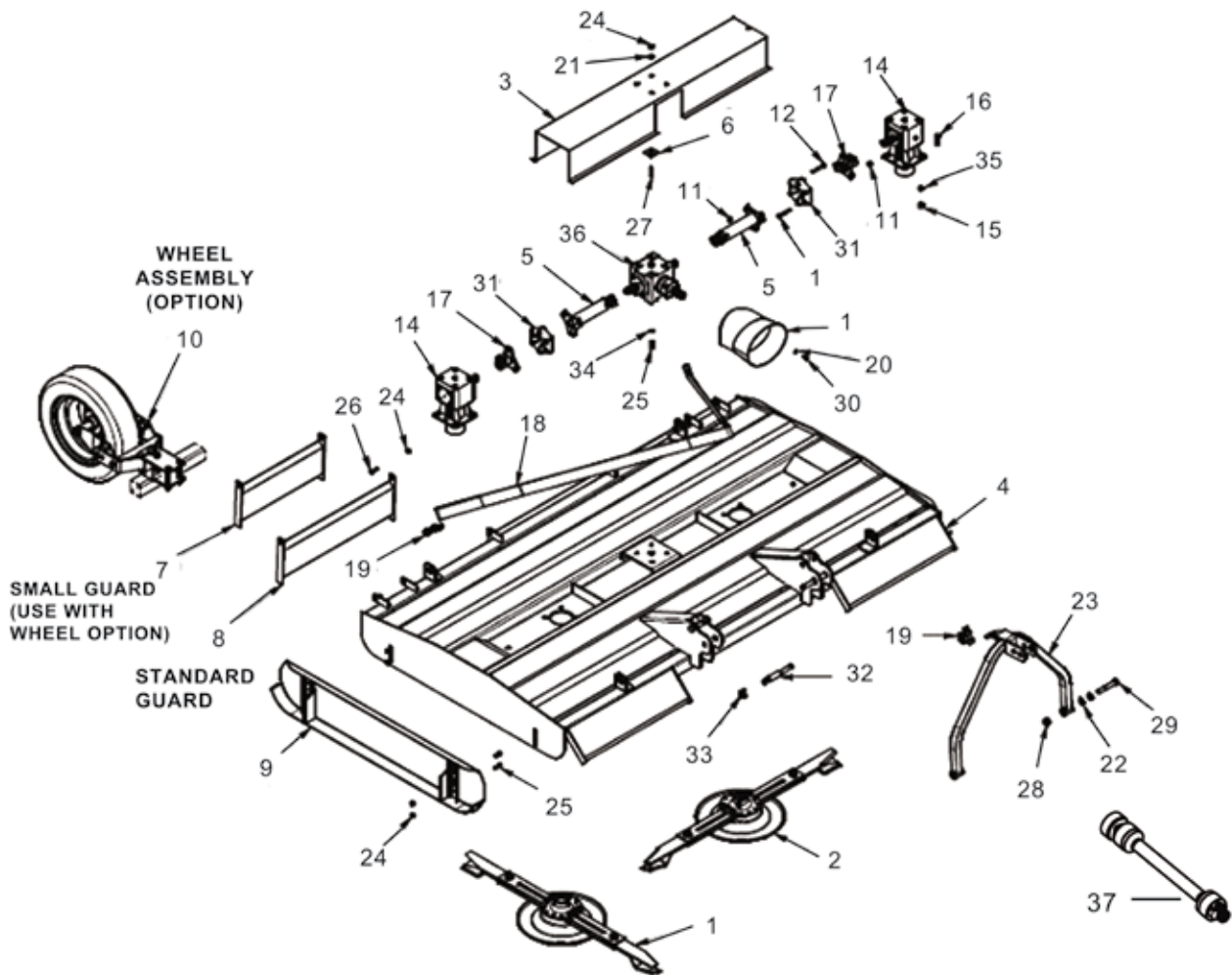
Trouble Shooting

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
Material discharges from mower unevenly; bunches of material along with swath	Blades mounted incorrectly (cutting edge against direction rotation)	Change blades so that cutting edge is facing correct rotation.
	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
Gearbox overheating	Grass wet	Allow grass to dry before mowing. Slow ground speed of tractor but keep engine running at full PTO rpm.
	Low on lubricant or improper type lubricant	Fill to proper level or replace with proper lubricant
Blade is scalping ground	Excessive grass / debris build-up around gearbox	Remove grass, etc from machine
	Mower too low	Raise mower
	Field is ridged	Cut field at a different angle
Mower will not cut.	Field is too wet	Stop and wait until it is dried
	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 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 skids
	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
	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 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
Cutting deck swings behind tractor while cutting.	Advancing into grass too rapidly	Reduce forward speed
	Very heavy crop	Reduce forward speed and / or change cutting height
	Pressure relief valve is set too low	Adjust relief valve until cutting deck stops falling back

Spare Parts

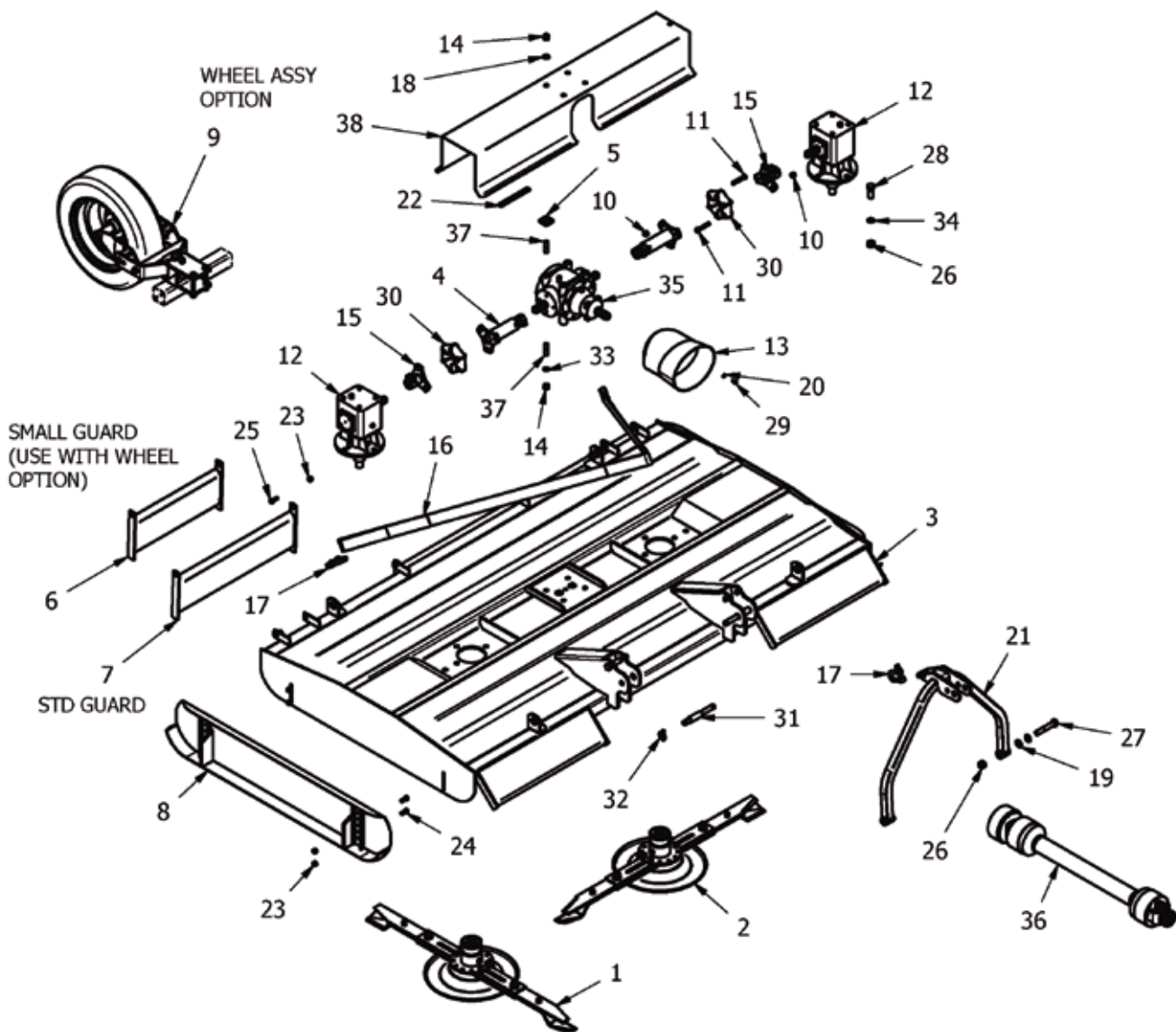
9FTGDX Overview



Item	Part No	Description	Qty
1	Blades	Blade (Anti Clockwise)	1
2	Blades	Blade (Clockwise)	1
3	9GT-COV	Gearbox Cover	1
4	9GTB-FAB	Body	1
5	9GTD	Drive Tube (302mm)	2
6	GM12/A	Guard Mount Buffer	4
7	SL45RG	Rear Guard (use with wheel option)	2
8	SL65RG	Rear Guard	3
9	SLH16	Skid	2
10	TWA-002	Topper Wheel Assy	2
11	1/2F	1/2" Nyloc Nut	12
12	12x3FBZP	1/2"x3" Bolt	12
13	190.000.545	PTO Guard (Extended)	1
14	LF205	LF205 GEARBOX 205.871	2
15	5/8F	5/8" FINE NYLOC NUT	4
16	58x2FBZP	5/8"x2" Bolt	8
17	8SM18	6 Spline Star Drive	2
18	9GTSTRP	Strap	1
19	EW29A	D Shackle	3

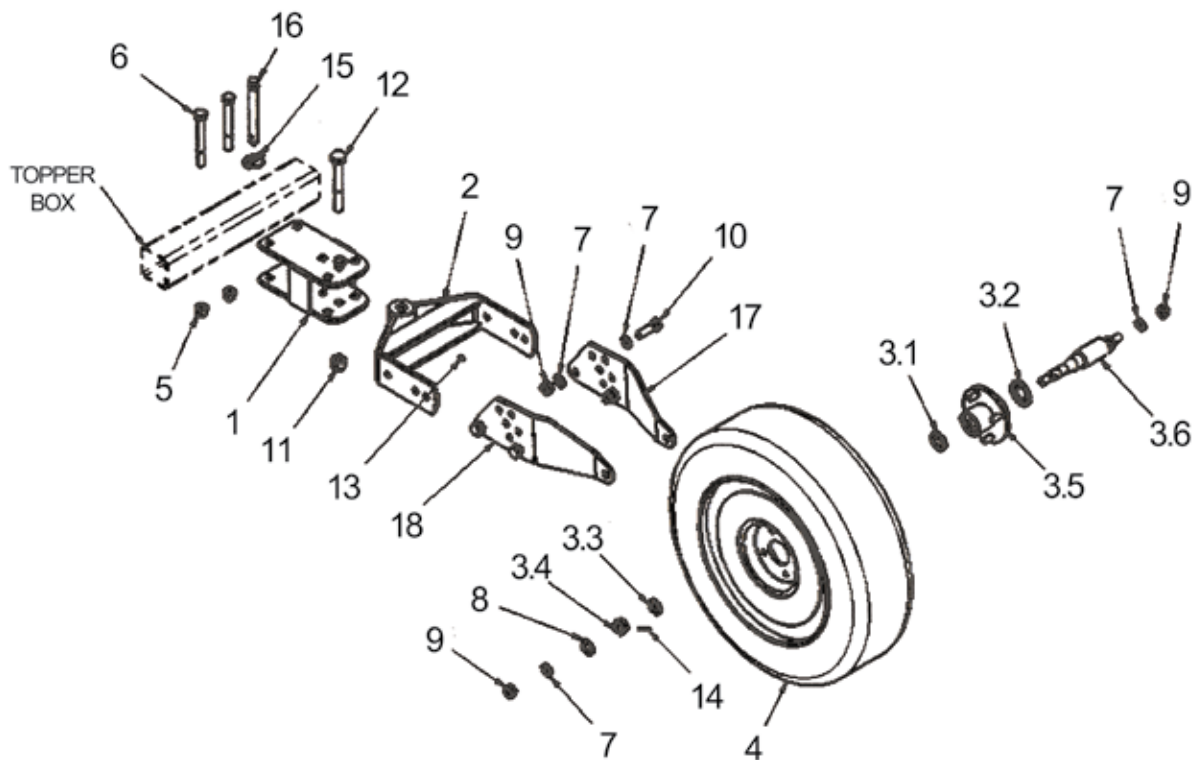
Item	Part No	Description	Qty
20	FWM8	M8 Flat Washer	4
21	FWM12	M12 Flat Washer	4
22	FWM20	M20 Flat Washer	4
23	GM2	A-Frame	1
24	M12	M12 Nyloc Nut	16
25	M12x30SZP	Bolt	12
26	M12x35BZP	Bolt	4
27	M12x50BZP	Bolt	4
28	M20	M20 NYLOC NUT	2
29	M20x120BZP	Bolt	2
30	M8x16	Bolt	4
31	NT55A	Rubber Coupling	2
32	S15707	Link Pin	2
33	3546	Linch Pin	2
34	SW12	1/2" Spring Washer	4
35	SW58	5/8" Spring Washer	8
36	T27A	6 Spline T Gearbox	1
37	T600810ENC12RW6	PTO Shaft	1

909HD Overview



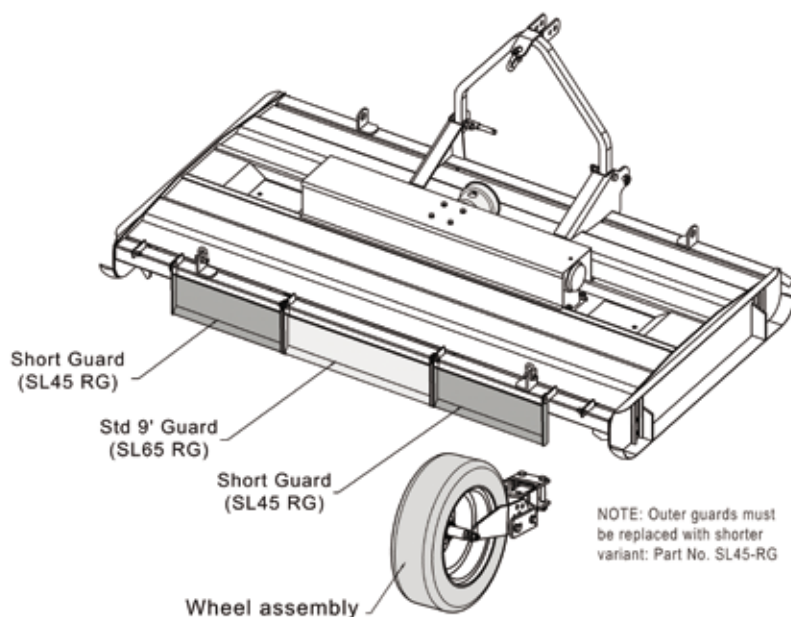
Item	Part No	Description	Qty
1	Blades	BLADE (Anti_Clk)	1
2	Blades	BLADE (Clk)	1
3	909GT-B01	909GT-BODY	1
4	909GT-DRV	DRIVE TUBE (242mm)	2
5	GM12-A	GUARD MOUNT BUFFER	4
6	SL45-RG	405 REAR GUARD	2
7	SL65-RG	REAR GUARD	3
8	SLH16	SKID (OFFSET)	2
9	TWA-002	TOPPER WHEEL ASSY	2
10	12F	1/2" FINE NYLOC NUT	12
11	12x3FBZP	1/2"x3" FINE BOLT	12
12	LF-140J	6 SPLINE "L" BOX Ratio 1.5	2
13	190545	PTO GUARD	1
14	58F	5/8" FINE NYLOC NUT	8
15	8SM-18	6 SPLINE STAR DRIVE	2
16	9GTSTRP	900M STRAP (3226mm)	1
17	EW29A	5/8" "D" SHACKLE	3
18	FWM16	M16 FLAT WASHER	4
19	FWM20	M20 FLAT WASHER	4
20	FWM8	M8 FLAT WASHER	4

9FTGDX and 909HD Wheel Assembly



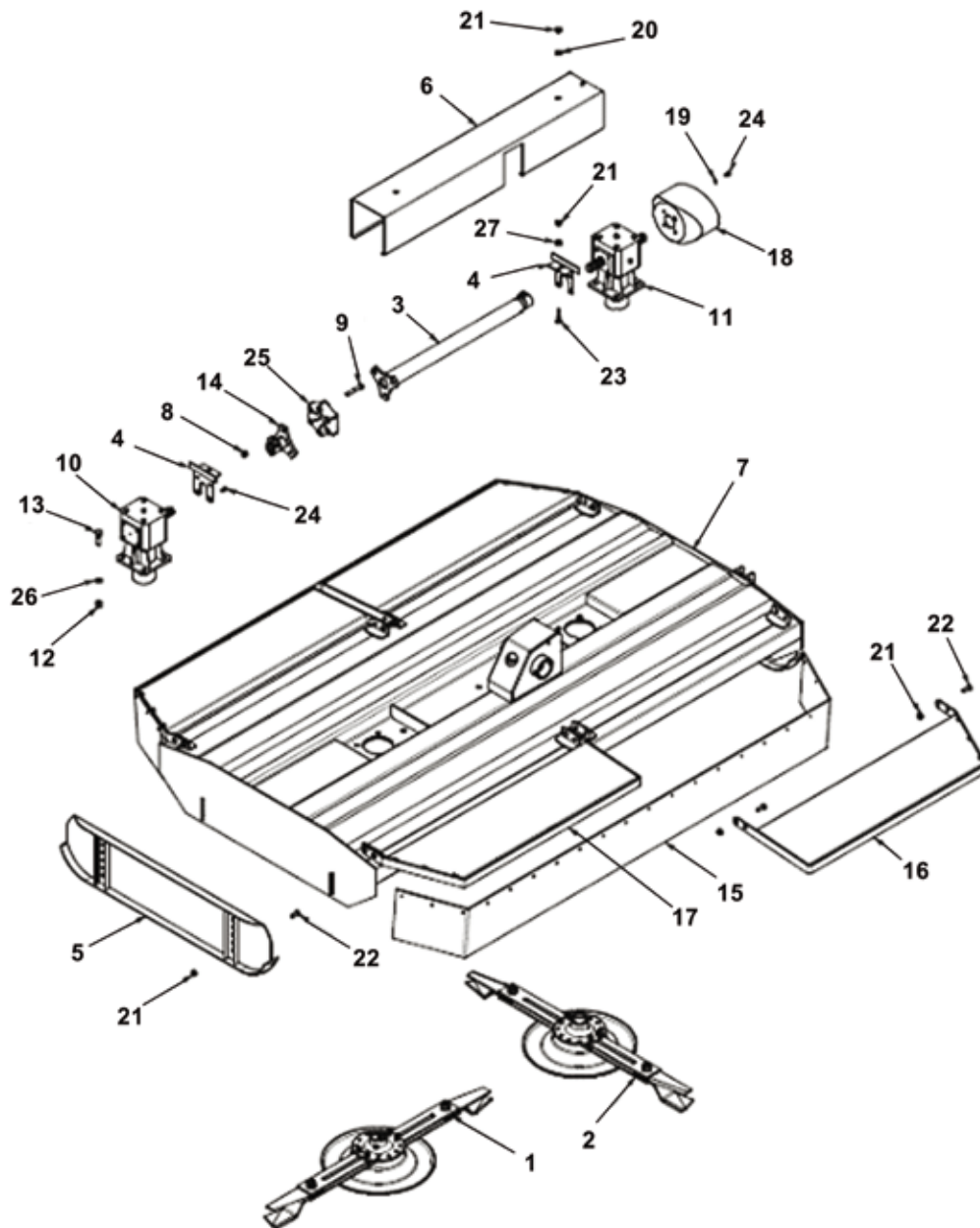
Item	Part No	Description	Qty
1	TWA-020	PIVOT MOUNT	1
2	TWA-030	PIVOT ARM	1
3.1	30204-AV	NILOS RING 47x20	1
3.2	30206AV	NILOS RING 62x30	1
3.3	FWM20	M20 FLAT WASHER	1
3.4	M20FCASTLET	CASTLE NUT (THIN)	1
3.5	TWA-052	TOPPER 4 STUD AXLE HUB	1
3.6	TWA-056	HUB SHAFT FOR 17570R14	1
4	17570R14	Wheel 'DIA 600x170mm	1
5	5/8F	5/8" FINE NYLOC NUT	4
6	58x5FBZP	5/8"x5" FINE BOLT	2
7	FWM16	M16 FLAT WASHER	10

Item	Part No	Description	Qty
8	FWM20	M20 FLAT WASHER	1
9	M16	Nyloc Nut	6
10	M16x50BZP	Bolt	4
11	M20	M20 NYLOC NUT	1
12	M20x130BZP	M20x130 BOLT	1
13	850	GREASE NIPPLE M8 STR	1
14	1500	SPLIT PIN 1/8"x1 1/2"	1
15	3546	LINCH PIN DIA 9.5	1
16	77	CAT 1 PIN DIA 19x127mm	1
17	TWA-045	AXLE PLATE (CAR)	1
18	TWA-045H	AXLE PLATE (CAR)	1



NOTE: Outer guards must be replaced with shorter variant. Part number SL45-RG.

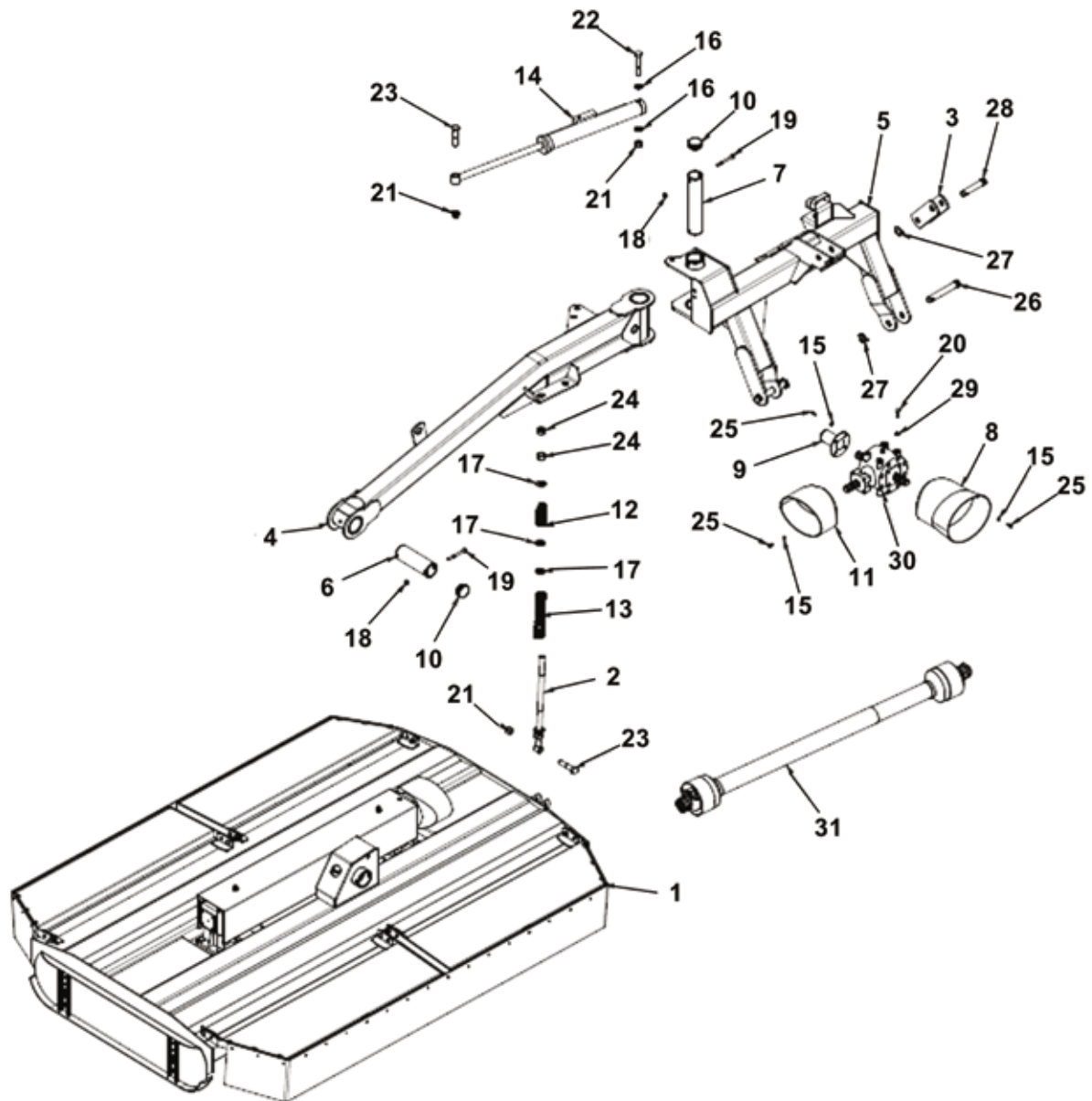
800SM and 900SM Body



Item	Part No	Description	Qty
1	Blades	Blade (Anti Clk) (800SM)	1
1	Blades	Blade (Anti Clk) (900SM)	1
2	Blades	Blade (Clk) (800SM)	1
2	Blades	Blade (Clk) (900SM)	1
3	8SM15	800SM Drive Tube	1
3	9TGT-DT	900SM Drive Tube	1
4	8SM-CVR	G/BOX Cover Bracket	2
5	8SM-SKD	Skid (NT11)	2
6	8SM19	Gearbox Cover (800SM)	1
6	9SM-GOO2	Gearbox Cover (900SM)	1
7	8SM2	Body - 800SM	1
7	9SM-B001	Body - 900SM	1
8	1/2F	1/2" Nyloc Nut	12
9	12x3FBZP	1/2"x3" Bolt	6
10	LF205	LF205 GEARBOX 205.871	1
11	LF205T	LF205 GEARBOX 205.873	1
12	5/8F	5/8" FINE NYLOC NUT	4
13	58x2FBZP	5/8"x2" Bolt	8

Item	Part No	Description	Qty
14	8SM18	6 SPLINE STAR DRIVE	1
15	8SM30	Safety Skirt - 800SM	2
15	9TSKF	Safety Skirt - 900SM	2
16	8SM-GRD	Guard - 800SM	2
16	9SMGRD1	Guard - 900SM	2
17	8SM-GRDH	Guard - 800SM	2
17	9SM-GRD1H	Guard - 900SM	2
18	190.000.545	PTO Guard (Oval)	1
19	FWM8	M8 Flat Washer	4
20	FWM12	M12 FLAT WASHER	2
21	M12	M12 Nyloc Nut	20
22	M12x30SZP	Bolt	16
23	M12x50BZP	Bolt	2
24	M8x16	Bolt	8
25	NT55A	Rubber Coupling	1
26	SW58	5/8" Spring Washer	8
27	8SM9/3	Spacer	8

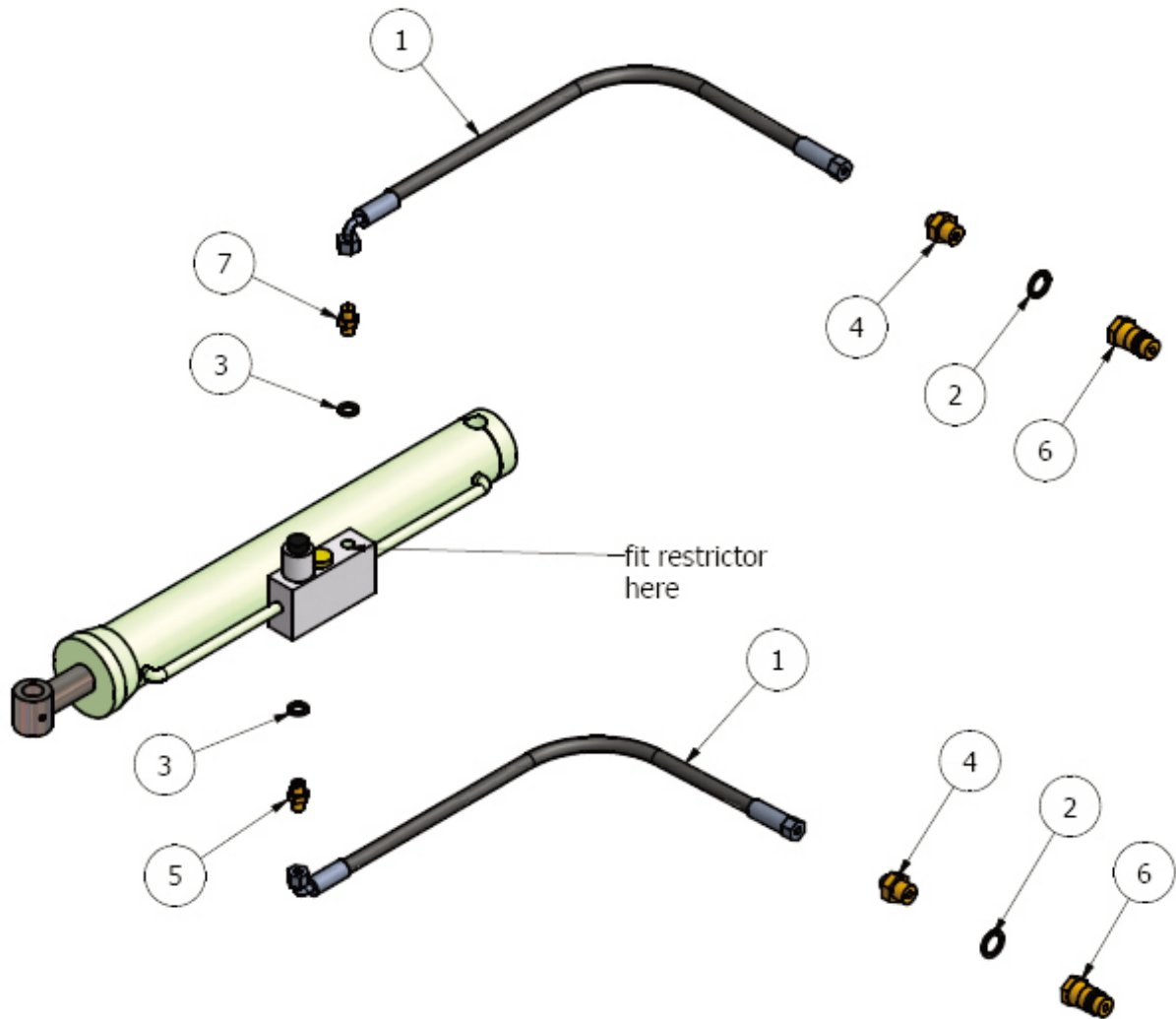
800SM and 900SM Linkage



Item	Part No	Description	Qty
1	8SM-BGA	800SM Body	1
2	8SM5	Damper Bar	1
3	8SM8	Top Link Float Hinge	1
4	9SM-CA01	900SM Carry Arm (8SM4)	1
5	9SM-L001	900SM Linake	1
6	9SM-PP04	Body Pin Tube	1
7	9SM-PP05	Linkage Pin Tube	1
8	190.000.545	PTO Guard (Oval)	1
9	190000592	PTO Guard	1
10	199269	2 1/2" X 14/18 BLK RD INSERT	2
11	8SM11/2	PTO Guard	1
12	8SM12	Damper Spring - Upper	1
13	8SM13	Damper Spring - Lower	1
14	9SM-CAR	9SM Ram	1
15	FWM8	M8 Flat Washer	10
16	FWM20	M20 Flat Washer	2

Item	Part No	Description	Qty
17	FWM24	M24 Flat Washer	3
18	M10	M10 Nyloc Nut	4
19	M10x100BZP	M10x100 Bolt	4
20	M12x30SZP	Bolt	4
21	M20	M20 NYLOC NUT	3
22	M20x110BZP	Bolt	1
23	M20x90BZP	M20x90 Bolt	2
24	M24HEX	M24 Plain Nut	2
25	M8x16	Bolt	10
26	112	CAT Pin	2
27	3546	Linch Pin	3
28	81	CAT Pin	1
29	SWM12	M12 Spring Washer	4
30	T304A	T304A GEARBOX 6 Spline T	1
31	T501160CEC12C12	PTO	1

800SM and 900SM Hydraulics



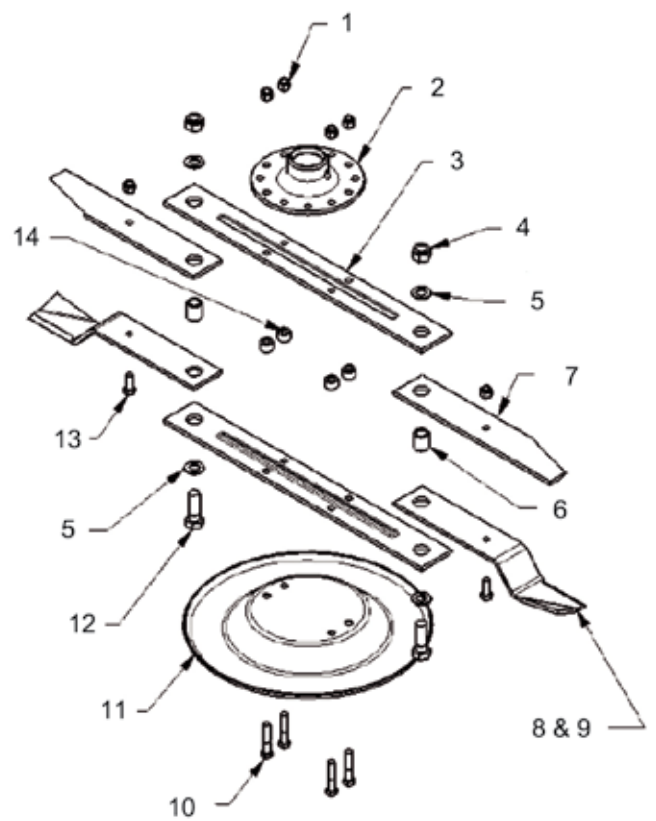
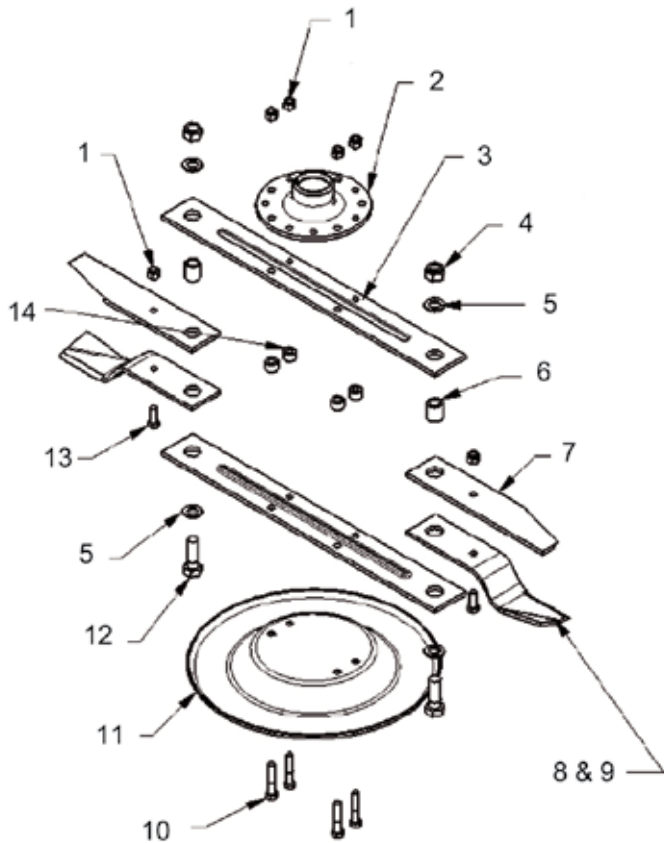
Item	Part No	Description	Qty
1	900SM_HOSE	1/4"Hydraulic Hose Str to Block 90	2
2	EDOW12	1/2" DOWTY WASHER	2
3	EDOW14	1/4 DOWTY SEAL	2
4	EMM1214	1/2-14" M/M CONNECTOR	2
5	EMM14	1/4" M/M CONNECTOR	2
6	QRM12	1/2" QUICK RELEASE MALE	2
7	EMM14RV	1/4" M/M RESTRICTOR (1mm)	1

Blades

PRO-CUT BLADE SYSTEMS - on all machines from April 2009

MACHINE MODEL: 800SM

MACHINE MODEL: 900SM, 9FTGDX and 909HD



Item	Part No	Description	Qty
1	1/2F	1/2" Nyloc Nut	6
2	DF-BMP	BLADE MOUNT	1
3	BLDB-623	BLADE BACK	2
4	M20	M20 NYLOC NUT	2
5	FWM20	M20 FLAT WASHER	4
6	12T-LBB	Overlap Blade Bushing	2
7	NTSB12C	Overlap Blade	2
8	9GTB/A	Blade anti clockwise	2
9	9GTB/C	Blade clockwise	2
10	12X212FBZP	1/2"x2 1/2" FINE BOLT	4
11	9GT-USS	Under sole skid	1
12	M20X60BZP	M20x60 BOLT	2
13	12x114FBZP	1/2"x1 1/4" FINE BOLT	2
14	12T-BBS	BLADE BACK SPACER	4

Item	Part No	Description	Qty
1	1/2F	1/2" Nyloc Nut	6
2	DF-BMP	BLADE MOUNT (9FTGDX & 900SM)	1
2	909GT-BM01	BLADE MOUNT (909HD)	1
3	BLDB-595	BLADE BACK	2
4	M20	M20 NYLOC NUT	2
5	FWM20	M20 FLAT WASHER	4
6	12T-LBB	Overlap Blade Bushing	2
7	BLD-OV375	Overlap Blade	2
8	NTSB10A1	Blade anti clockwise	2
9	NTSB10A2	Blade clockwise	2
10	12X212FBZP	1/2"x2 1/2" FINE BOLT	4
11	9GT-USS	Under sole skid	1
12	M20X60BZP	M20x60 BOLT	2
13	12x114FBZP	1/2"x1 1/4" FINE BOLT	2
14	12T-BBS	BLADE BACK SPACER	4

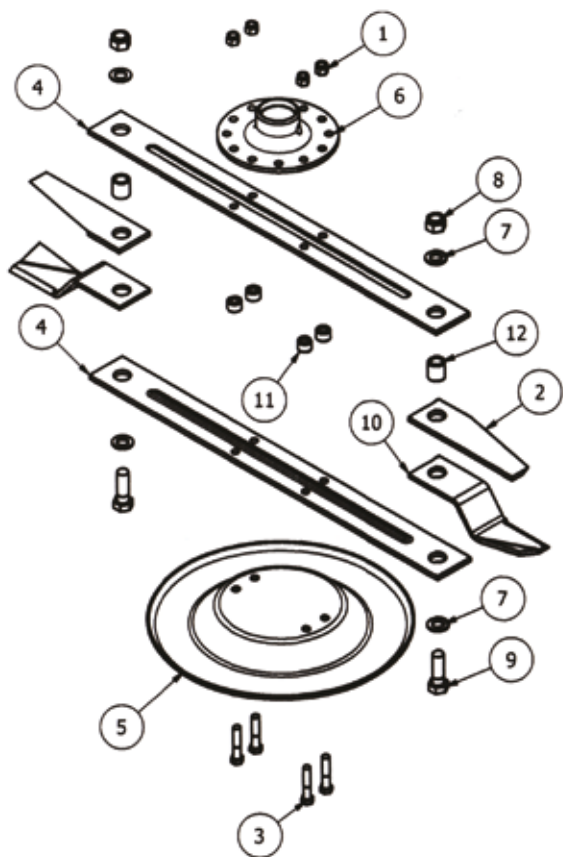
MACHINE	QTY
800SM	1 clockwise 1 anti clockwise

MACHINE	QTY
900SM	1 clockwise 1 anti clockwise
9FTGDX	1 clockwise 1 anti clockwise
909HD	1 clockwise 1 anti clockwise

NOTE: Please have the serial number of your machine to hand when ordering blades to ensure you get the correct parts.

OLDER BLADE SYSTEMS - on all Models prior to April 2009

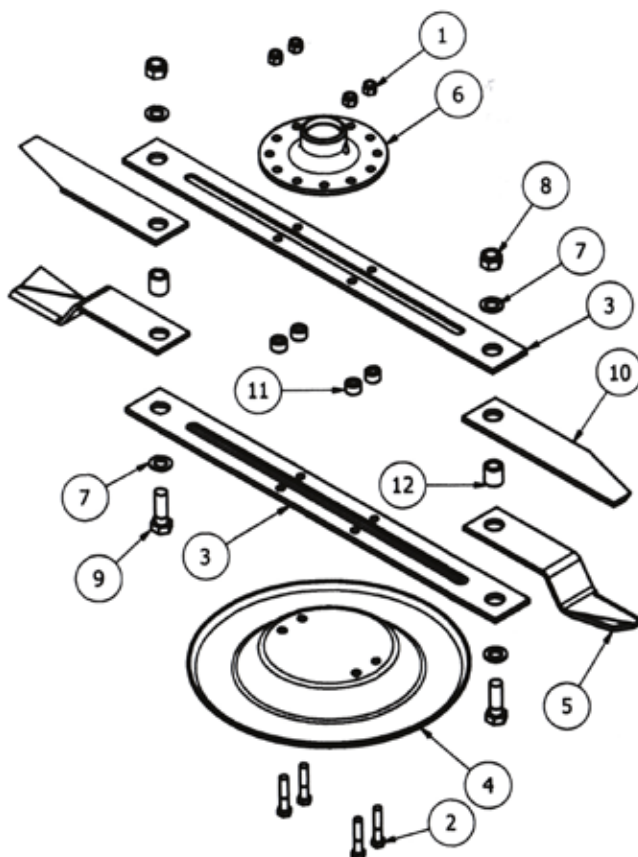
MACHINE MODEL: 800SM



Item	Part No	Description
1	1/2F	1/2" Nyloc Nut
2	12T-OLB	Overlap Blade
3	12X212FBZP	1/2"x2 1/2" FINE BOLT
4	8SM9/2	Blade Back
5	9GT-USS	Under sole skid
6	DF-BMP	BLADE MOUNT
7	FWM20	M20 Flat Washer
8	M20	M20 NYLOC NUT
9	M20X60BZP	M20x60 BOLT
10	NTSB10A	SWING BLADE (Anti-Clk)
10	8SM9/1	Swing Blade (Clockwise)
11	12T-BBS	BLADE BACK SPACER
12	12T-LBB	Overlap Blade Bushing

MACHINE	QTY
800SM	1 clockwise 1 anti clockwise

MACHINE MODEL: 900SM and 9FTGDx



Item	Part No	Description
1	1/2F	1/2" Nyloc Nut
2	12X212FBZP	1/2"x2 1/2" FINE BOLT
3	8SM9/2	Blade Back
4	9GT-USS	Under sole skid
5	9GTB/A	Swing Blade (Anti Clk)
5	9GTB/C	Swing Blade (Clockwise)
6	DF-BMP	BLADE MOUNT
7	FWM20	M20 Flat Washer
8	M20	M20 NYLOC NUT
9	M20X60BZP	M20x60 BOLT
10	NTSB12C	Overlap Blade
11	12T-BBS	BLADE BACK SPACER
12	12T-LBB	Overlap Blade Bushing

MACHINE	QTY
900SM	1 clockwise 1 anti clockwise
9FTGDx	1 clockwise 1 anti clockwise
909HD	1 clockwise 1 anti clockwise

NOTE: Please have the serial number of your machine to hand when ordering blades to ensure you get the correct parts.

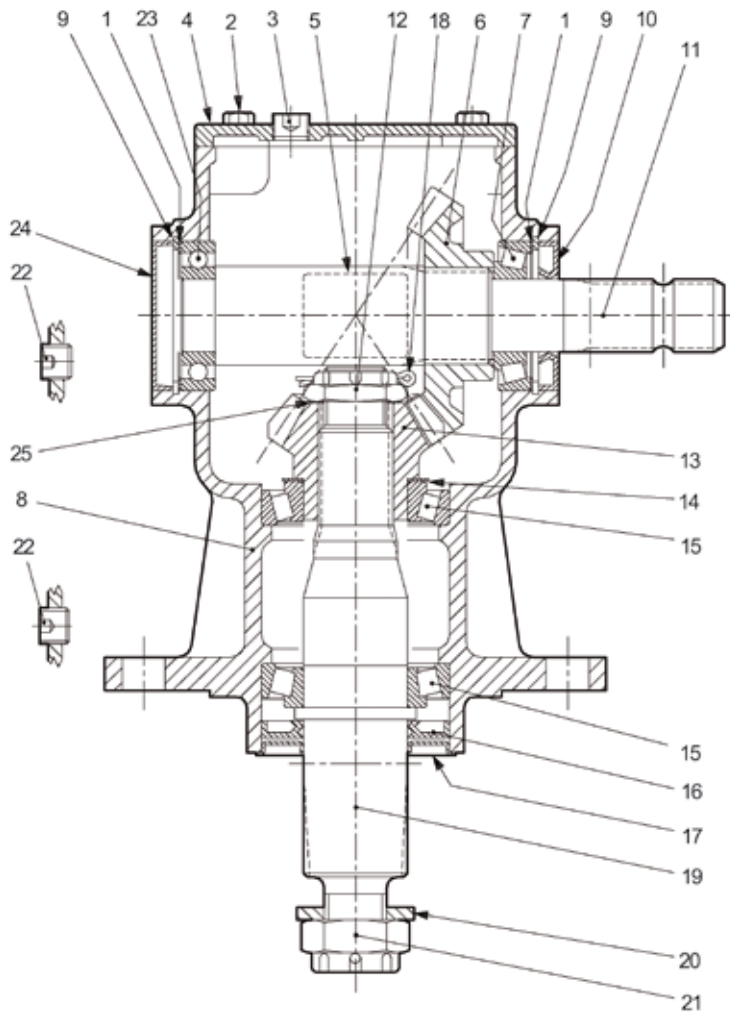
PTO Shafts

Machine	Primary	Secondary
800SM	T600610ENC12RB2 (T60BOOR-900)	T501160CEC12C12
	T60 SHAFT OVERRUN+SHEARBOLT	T50 SHAFT COLLAR
900SM	T600610ENC12RB2 (T60BOOR-900)	T501160CEC12C12
	T60 SHAFT OVERRUN+SHEARBOLT	T50 SHAFT COLLAR
9FTGDX	T600810ENC12RW6	
	T60 SHAFT SLIP CLUTCH	
9FTGDX (front mounted)	T601210ENC12RW6SX	
	T60 SHAFT OVERRUN+CLUTCH FRONT	
909HD	V600910ENC12RW6	
	V60 SHAFT SLIP CLUTCH	

Gearboxes

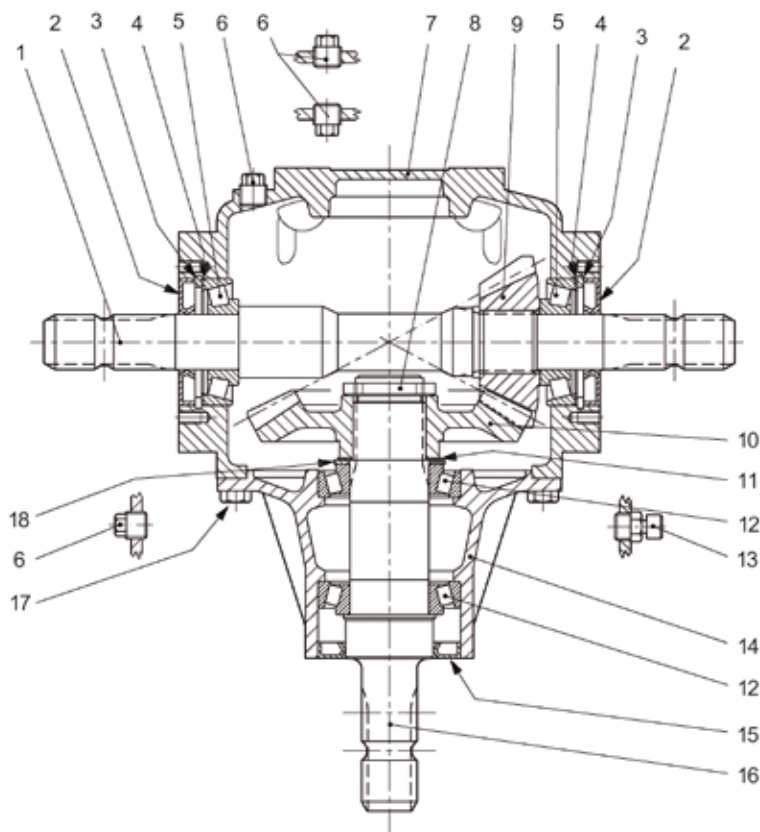
Machine	Gearbox
909HD	LF140J (9.140.811.00)
909HD	T292006
800SM, 900SM, 9FTGDX	LF205
800SM, 900SM	LF205T
9FTGDX (540 PTO input)	T27A
9FTGDX - front mounted	T27A1
800SM, 900SM	T304A

LF140J Gearbox Breakdown



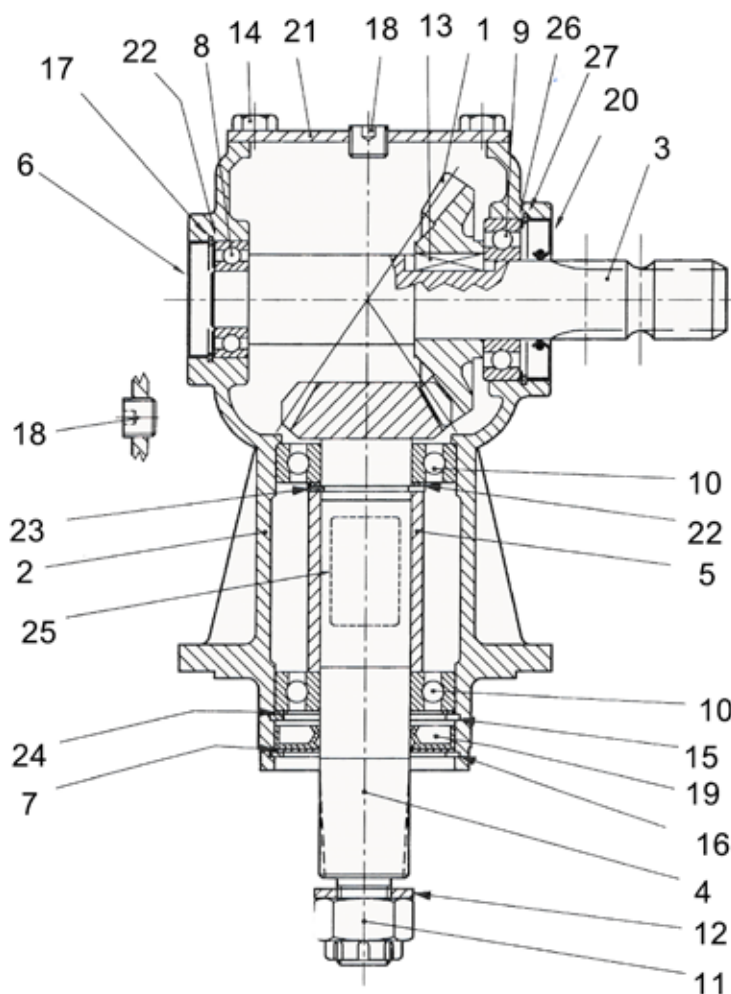
Item	Part No	Description	Qty
1	0.248.7500.00	Shim Kit (60.3x71.7)	2
2	8.1.1.00041	Bolt M8X22	4
3	8.6.6.00088	1/2" Plug	1
4	0.140.302.00	Cover	1
5	0.124.7135.00	Name Plate	1
6	0.132.6004.00	Crown	1
7	8.0.9.00026	Bearing 30207	1
8	0.140.0300.00	Casting & machining	1
9	8.5.2.00131	Snap Ring (72x75x2.5)	2
10	8.7.3.00055	Oil Seal 25x72x10	1
11	0.140.2000.00	Input Shaft	1
12	0.132.7106.00	Castle Nut M30	1
13	0.116.6204.00	Pinion	1
14	0.712.7500.00	Shim kit (50.3x70.3)	1
15	8.0.9.00469	BEARING 30210	2
16	8.7.1.01107	Oil Seal (50x90x10)	1
17	0.139.7100.00	Washer	1
18	8.4.7.01111	Cotter Pin	1
19	0.140.3002.00	Output Shaft	1
20	0.139.7101.00	Washer	1
21	0.140.7102.00	Castle Nut M30	1
22	8.6.6.00201	3/8" Oil plug	2
23	8.0.1.00870	Bearing 6207	1
24	8.7.0.00744	Oil cap	1
25	0.102.7510.00	Shim	1

T292006 Gearbox breakdown



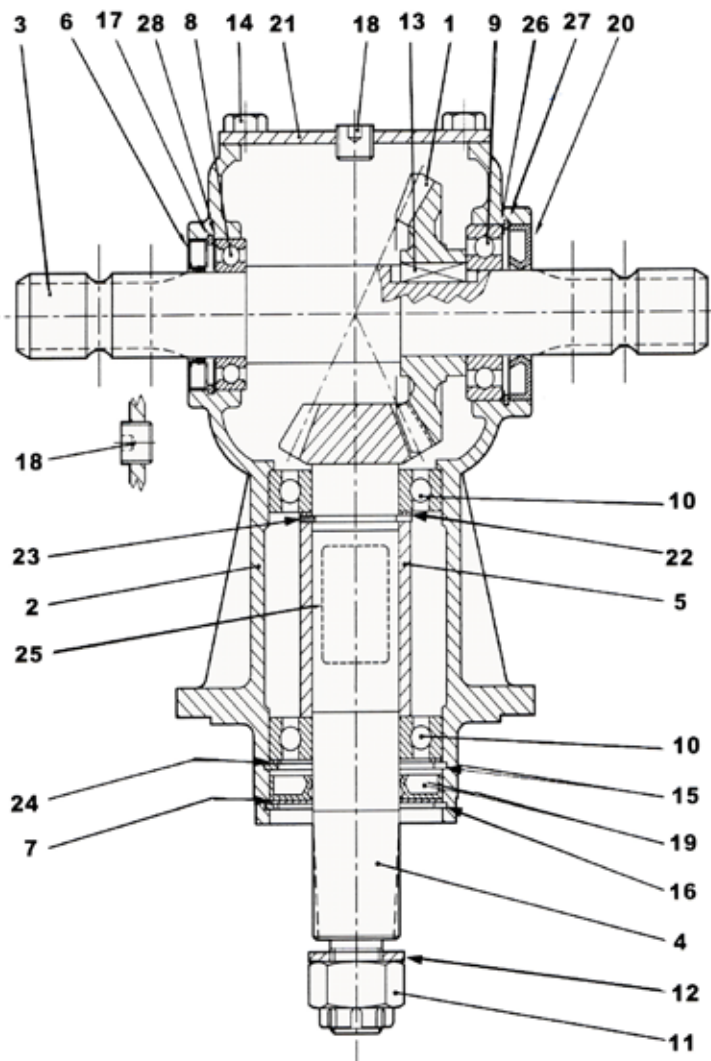
Item	Part No	Description	Qty
1	0.292.3000.00	SHAFT 1"3/8 Z6	1
2	8.7.3.00081	OIL SEAL 35X80X10	2
3	8.5.2.01370	SNAP RING 80 UNI7438	2
4	0.110.7500.00	SHIM 79,7	2
5	8.0.9.00129	BEARING 30307	2
6	8.6.5.00006	PLUG 3/8"GAS	4
7	0.292.0301.00	CASING	1
8	0.278.7103.00	NUT M40X1.5	1
9	0.272.6000.00	Pinion Z15 M6 3.5	1
10	0.272.5000.00	CROWN WHEEL Z28 M.6.35	1
11	0.350.7500.00	SHIM 65.3	1
12	8.0.9.00469	BEARING 30210	2
13	8.6.7.00161	OIL FILLER PLUG 3/8"GAS	1
14	0.292.1310.00	EXTENSION	1
15	8.7.3.01296	OIL SEAL 55X90X10	1
16	0.292.2001.00	SHAFT 1"3/8	1
17	8.1.1.00501	BOLT M10X22 8,8	8
18	0.712.7525.00	SHIM 50.3x2.5	1

LF205 Gearbox breakdown



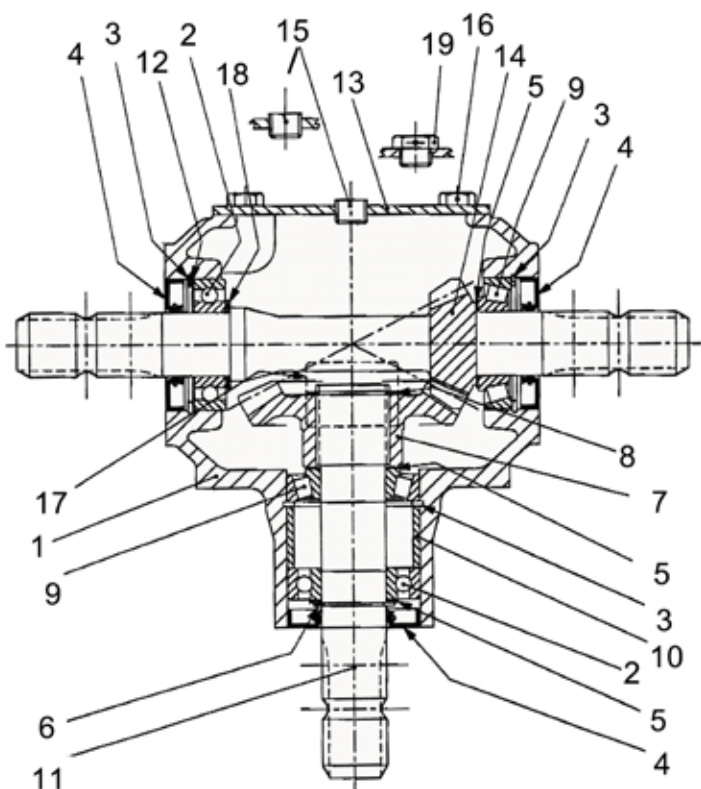
Item	Part No	Description	Qty
1	LF135/17	Crown Gear	1
2	LF135/12	Gearbox Casing	1
3	LF135/18	Input Shaft	1
4	LF135/11	Pinion Shaft	1
5	LF135/10	Spacer	1
6	52x7	Oil Cap (Cover)	1
7	LF135/4	Protective Washer	1
8	LF135/15	Bearing 6007 (35x62x14)	1
9	LF135/15	Bearing 6207	1
10	LF135/9	Bearing 6208	2
11	LF135/1	Castle Nut	1
12	LF135/2	Washer	1
13	LF135/19	Key	1
14	M10x20SZP	Bolt	1
15	LF135/6	Snap Ring	1
16	LF135/3	Snap Ring	1
17	85200648	Circlip	1
18	LF135/13	Plug	2
19	LF135/5	Double Lip Seal	1
20	LF135/14	Double Lip Seal	1
21	LF135/26	Cover	1
22	LF135/8	Shim	1
23	LF135/3	Snap Ring	1
24	0.6.775.000	Shim	1
25	N/A	Name Plate	1
26	0.248.7500.00	Shim	1
27	85200131	Circlip	1

LF205T Gearbox breakdown



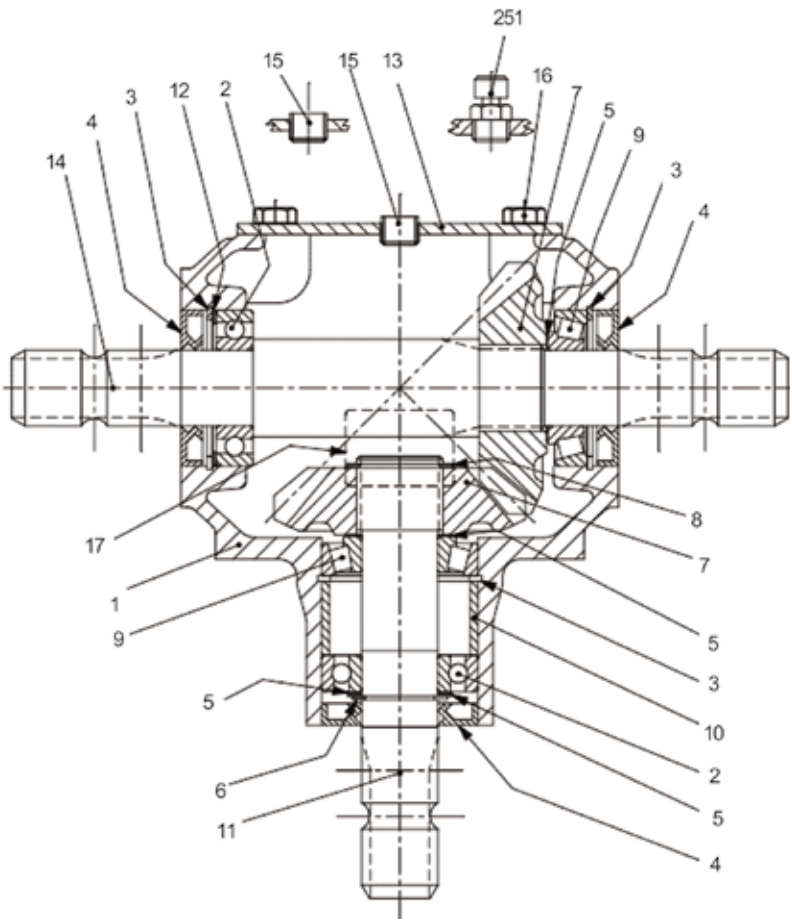
Item	Part No	Description	Qty
1	LF135/17	Gear Z22 teeth	1
2	LF135/12	Casing	1
3	LF135/25	Shaft	1
4	LF135/11	Pinion Shaft	1
5	LF135/10	Spacer	1
6	LF135/14	Double Lip Seal	1
7	LF135/4	Protective Washer	1
8	LF135/15	Bearing 6007 (35x62x14)	1
9	LF135/15	Bearing 6207	1
10	LF135/9	Bearing 6208	2
11	LF135/1	Castle Nut	1
12	LF135/2	Bolt Washer	1
13	LF135/19	Parallel Key	1
14	M10x20SZP	Bolts M10x20	4
15	LF135/6	Snap Ring	1
16	LF135/3	Snap Ring	1
17	8.5.200648	Circlip	1
18	LF135/13	Plug	1
19	LF135/5	Double Lip Seal	1
20	357210	Oil Seal 25x72x10	1
21	LF135/26	Cover	1
22	LF135/22	O-Ring	1
23	LF135/8	Shim	1
24	LF135/7	Snap Ring	1
25	N/A	Name Plate	1
26	0.248.7500.00	Shim	1
27	LF135/24	Snap Ring	1
28	LF135/16	Shim	1

T27A Gearbox breakdown



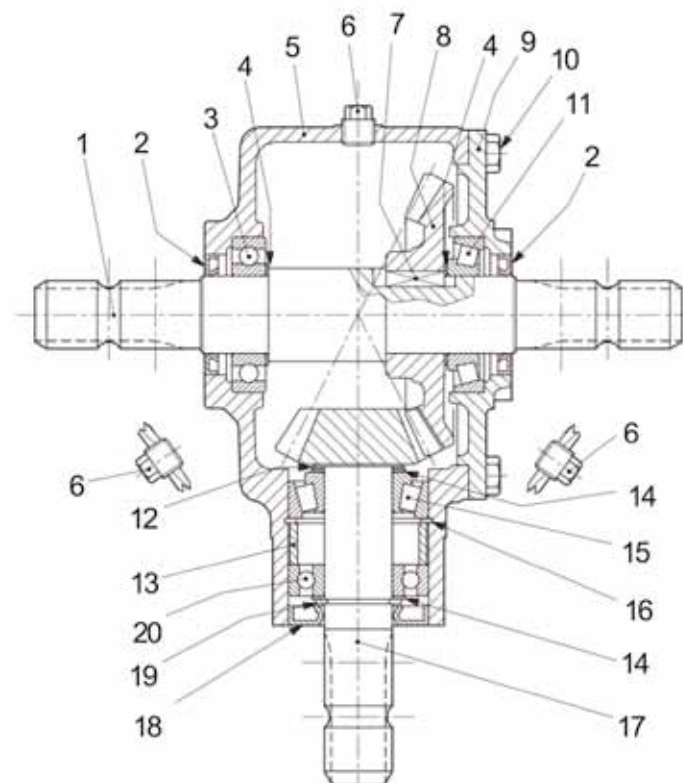
Item	Part No	Description	Qty
1	T27/12	Casing	1
2	T4A/6	Bearing 6207	1
3	T27/2	Snap Ring	1
4	T27/1	Double lip Oil Seal	1
5	T4A/4	SHIM 35.3x48.0	3
6	LF135/7	Snap Ring UNI7435	1
7	T27/9	Gear Z23	1
8	T4A/2	Snap Ring UNI7435	3
9	T27/8	Bearing 30207	2
10	T27/5	Spacer	1
11	T27/6	SHAFT 1 3/8" Z6	1
12	T4A/5	Shim Kit (60.3x71.7)	1
13	T27/13	Cover	1
14	T27/16	Pinion Z17 M5.4	1
15	T4A/10	PLUG 3/8"GAS	2
16	M10x20SZP	Bolts M10x20	
17	N/A	Name Plate	1
18	T4A/5	Shim Kit (60.3x71.7)	1
19	T27/17	Oil Filler Plug	1

T27A1 Gearbox breakdown



Item	Part No	Description	Qty
1	0.267.0300.00	CASING	1
2	LF135/15	Bearing 6207	2
3	8.5.2.00131	SNAP RING 72 UNI7437	3
4	8.7.1.00152	DOUBLE LIP SEAL 35X72 X10	3
5	T4A/4	SHIM 35.3x48.0	3
6	8.5.1.00005	SNAP RING 35 UNI7435	1
7	0.267.5007.00	GEAR 18 M6.15 C	2
8	8.5.1.00029	SNAP RING UNI7435	1
9	8.0.9.00026	BEARING 30207	2
10	T27/5	SPACER	1
11	T27/6	SHAFT 1 3/8" Z6	1
12	T4A/5	SHIM 71.7	1
13	0.267.1302.00	COVER	1
14	0.267.3005.00	SHAFT 1 3/8" Z6	1
15	LF135/13	PLUG 3/8"GAS	2
16	M10x20SZP	Bolts M10x20	4
17	0.124.7101.00	PLATE	1
251	8.6.7.00161	OIL FILLER PLUG 3/8"GAS	1

T304A Gearbox breakdown



Item	Part No	Description	Qty
1	T304A/15	Shaft	1
2	T4A/12	Oil Seal	2
3	T4A/13	Bearing 6208	1
4	LF135/8	Shim	2
5	T304A/11	Casing	1
6	LF135/13	Plug	3
7	T304A/16	Parallel Key	1
8	T4A/17	Gear Z29	1
9	T304A/20	Cover	1
10	T4A/21	Bolt M12x25B	6
11	T4A/18	Bearing 30208	1
12	T4A/4	SHIM 35.3x48.0	2
13	T304A/7	Spacer	1
14	T4A/5	Shim Kit (60.3x71.7)	1
15	T4A/8	Bearing 32207	1
16	T4A/3	Snap Ring	1
17	T304A/9	Pinion Shaft Z15 M5	1
18	T4A/1	Oil Seal 25x72x10	1
19	T4A/19	Gasket	1
20	T4A/6	Bearing 6207	1
21	T4A/2	Snap Ring UNI7435	1

NOTES:

CERTIFICATE OF CONFORMITY

This is to certify that the machine, when properly installed, maintained and used only for its intended purpose, complies with all the essential Health and Safety requirements of:

- The EC Directive on the supply of Machinery (Safety) Regulations (1992)
- The Health and Safety at Work Act (UK) 1974
- The Health and Safety at Work Order (Northern Ireland) 1978
- The Consumer Protection Act (UK) 1987
- The Health, Safety and Welfare at Work Act (1989)

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

Signature:

Date: January 1st 2009

To register your machine for warranty, please go to the Support section of our website www.major-equipment.com and fill in your details.

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How to Complete a Warranty Claim Form (download pdf)
Warranty Terms & Conditions (download pdf)

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