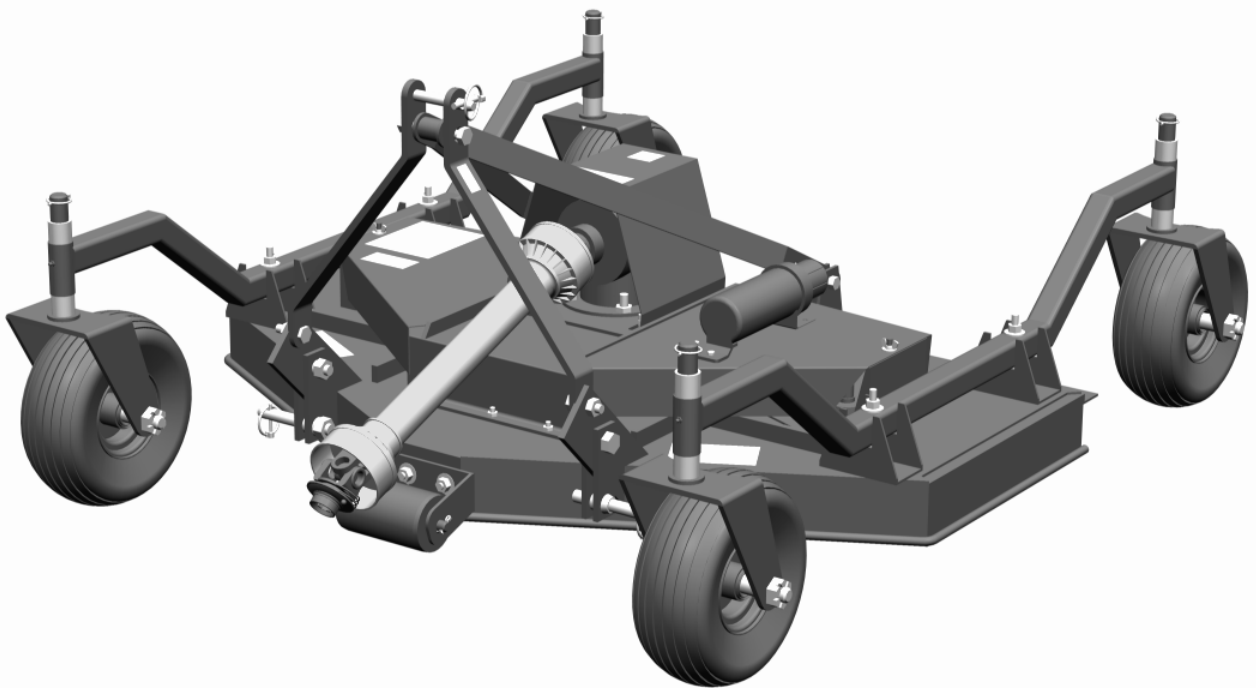


bühler



HEAVY DUTY FINISHING MOWER

Operator's and Parts Manual
FK369

2009

TABLE OF CONTENTS

DESCRIPTION	PAGE
WARRANTY	1
INTRODUCTION	2
SAFETY	3
Safety	3
General Safety	4
Start Up Safety	4
Operation Safety	4
Transport Safety	5
Service and Maintenance Safety	5
Storage Safety	5
Safety Signs	6
Safety Sign Installation	6
ASSEMBLY	8
Hitch Assembly Instructions	8
Chain Kit Assembly Instructions	8
START UP	9
Start-Up	9
OPERATION	10
Operating Instructions	10
Field Operation	11
Disconnecting from Tractor	11
Theory of Operation	12
MAINTENANCE	13
PTO Shaft Maintenance	13
Mower Deck Wheel Bearings	15
Gearbox Lubrication	16
Spindle Lubrication	16
Spindle Replacement Drawing & Parts List	17
Blade Replacement Drawing & Parts List	20
Service Notes	22
Bolt Torque	23

PARTS DRAWINGS	24
5', 6' & 7' Rear Discharge Drawing.....	24
5' 6' & 7' Rear Discharge Parts List.....	25
Gearbox Drawing.....	28
Gearbox Parts List.....	29
Spindle Assembly Drawing.....	30
Spindle Assembly Parts List.....	31
PTO Shaft Drawing.....	32
PTO Shaft parts List.....	33
Chain Kit Parts List.....	34
Chain Kit Drawing.....	35
Quick Hitch Kit Drawing & Parts List.....	36
Blade Height Adjustment Drawing & Parts List.....	37
Mower Deck Belt Adjustment Drawing.....	38
Mower Deck Belt Adjustment Parts List.....	39
SHIPPING KIT AND BUNDLE NUMBERS	40

WARRANTY POLICY

Buhler Manufacturing products are warranted for a period of twelve (12) months (90 days for commercial application) from original date of purchase, by original purchaser, to be free from defects in material and workmanship under correct, normal agricultural use and proper applications.

Buhler Manufacturing's obligations under this warranty shall be limited to the repair or exchange, at Buhler Manufacturing's option, of any Buhler Manufacturing product or part which proves to be defective as provided. Buhler Manufacturing reserves the right to either inspect the product at the buyer's location or have it returned to the factory for inspection.

The above warranty does not extend to goods damaged or subject to accident, abuse or misuse after shipment from Buhler Manufacturing's factory, nor to goods altered or repaired by anyone other than an authorized Buhler Manufacturing representative.

Buhler Manufacturing makes no Express Warranties other than those which are specifically described. Any description of goods, including any references and specifications in catalogues, circulars and other written material published, is for the sole purpose of identifying goods and shall conform to such descriptions. Any sample or model is for illustrative purposes only and does not create an Express Warranty that the goods conform to sample or model shown.

The purchaser is solely responsible for determining suitability of goods sold. This warranty is expressly in lieu of all other warranties expressed or implied. Buhler Manufacturing will in no event be liable for any incidental or consequential damages whatsoever. Nor for any sum in excess of the price received for the goods for which liability is claimed.

WARRANTY CLAIMS:

Warranty requests must be prepared on Buhler Manufacturing Warranty Claim Forms with all requested information properly completed. Warranty Claims must be submitted within a thirty (30) day period from date of failure repair.

WARRANTY LABOR:

Any labor subject to warranty **must** be authorized by Buhler Manufacturing. The labor rate for replacing defective parts, where applicable, will be credited at 100% of the dealer's posted shop rate. Defective parts will receive an extra 10% discount to assist with freight or other incidental costs.

GOVERNMENT LEGISLATION:

Warranty terms and conditions are subject to Provincial or State legislation.

IMPORTANT FACTS:

Buckets and Bucket Tines Carry No Warranty
Bent Spears Carry No Warranty
Snowblower Fan Shafts Carry No Warranty
Mower Blades Carry No Warranty
Portable Auger Parts Have Two (2) Year Warranty
Loader Parts Have Two (2) Year Warranty

IMPORTANT NOTE: This warranty does not apply to rentals

INTRODUCTION

Buhler has been building top quality finishing mowers for 15 years and has refined these mowers to be among the best in the industry. Manufactured with top quality material, the edge of the mower deck features solid reinforcing rods. The Heavy Duty Finishing Mowers are Buhler Quick Hitch compatible and are available in widths ranging from 60" to 84".

Each mower features three high-speed blades with one of the highest rated tip-speeds in the industry. This creates powerful suction that lifts the grass for a crisp cut. A blade overlap prevents stripping and ensures the lawn is mowed evenly.

Buhler Farm King Heavy Duty Finishing Mowers are built to be durable and long lasting. Each wheel yoke assembly includes a cutting height adjustment on the 1" wheel yoke shaft. Bushings in the wheel hubs ensure long-term reliability without needing frequent lubrication. A slide adjustment is located under the gearbox for easy belt tensioning. Keep this manual handy for frequent reference. All new operators or owners must review the manual before using the equipment and at least annually thereafter. Contact your Buhler Dealer if you need assistance, information, or additional copies of the manual. Visit our website at www.buhler.com for a complete list of dealers in your area. The directions left, right, front and rear, as mentioned throughout this manual, are as seen facing in the direction of travel of the implement.

SAFETY

Remember, YOU are the key to safety. Good safety practices not only protect you, but also the people around you. Make these practices a working part of your safety program. Be certain that everyone operating this equipment is familiar with the recommended operating and maintenance procedures and follows all the safety precautions. Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

The alert symbol is used throughout this manual. It indicates attention is required and identifies hazards. Follow the recommended precautions.



The safety alert symbol means...

ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

CAUTION

The caution symbol indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

WARNING

The Warning Symbol indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

DANGER

The Danger Symbol indicates an imminently hazardous situation that, if not avoided will result in death or serious injury. This signal word is to be limited to the most extreme situations, typically for machine components that, for functional purposes, cannot be guarded.

GENERAL SAFETY INSTRUCTIONS

Have a first-aid kit available for use and know how to use it.

Have a fire extinguisher available, stored in a highly visible location, and know how to use it.

Wear appropriate protective gear. This list may include but is not limited to:

- Hard hat
- Protective shoes with slip resistant soles
- Protective glasses or goggles
- Heavy gloves
- Wet weather gear
- Hearing protection
- Respirator or filter mask

Read and understand the Operator's Manual and all safety signs before operating, servicing, adjusting, repairing, or unplugging the equipment.

Do not attempt any unauthorized modifications to your Buhler product as this could affect function or safety, and could affect the life of the equipment.

Never start or operate the mower except from the operator's station on the power unit.

Inspect and clean the working area before operating.

Keep hands, feet, clothing, and hair away from moving parts.

Ensure bystanders are clear of the area before operating.

START-UP SAFETY

Do not let inexperienced operators or children run this equipment.

Place all tractor and machine controls in neutral before starting.

Operate only with ROPS and seatbelt equipped tractors.

Do not operate inside a building unless there is adequate ventilation.

Ensure all shields are in place and in good condition before operating.

Stay clear of PTO shaft and machine when engaging PTO.

OPERATION SAFETY

Do not permit riders.

Do not wear loose fitting clothing during operation.

Never operate over 540 PTO rpm speed.

Never operate the equipment in the raised position.

TRANSPORT SAFETY

Review Transport Safety instructions in tractor manual before moving.

Check with local authorities regarding transport on public roads. Obey all applicable laws and regulations.

Make sure the SMV (Slow Moving Vehicle) emblem and all the lights and reflectors that are required by the local highway and transport authorities are in place, are clean, and can be seen clearly by all overtaking and oncoming traffic.

Never have the equipment in operation during transport.

Always travel at a safe speed.

Inflate Tires to recommended pressure.

Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion, which may result in serious injury or death.

SERVICE AND MAINTENANCE SAFETY

Stop engine, set brake, remove ignition key, and wait for all moving parts to stop before servicing, adjusting, repairing, or unplugging.

Support the equipment with blocks or safety stands before working beneath it.

Follow good shop practices including

- Keep service area clean and dry
- Be sure electrical outlets and tools are properly grounded
- Use adequate light for the job

Use only tools, jacks, and hoists of sufficient capacity for the job.

Replace and secure all shields removed during servicing before operating.

Use heavy leather gloves to handle sharp objects.

STORAGE SAFETY

Store the unit in an area away from human activity.

Do not permit children to play on or around the stored machine.

Support the frame on stands and blocks to provide a secure base.

SAFETY SIGNS

The following illustration shows the approximate location and detail of safety signs.

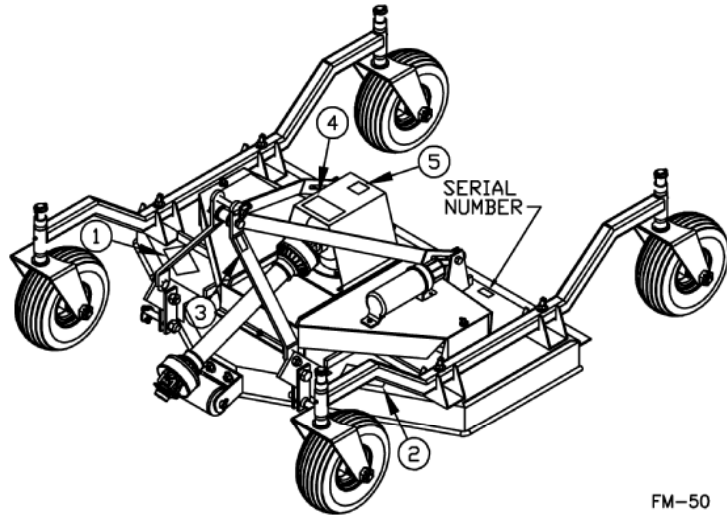
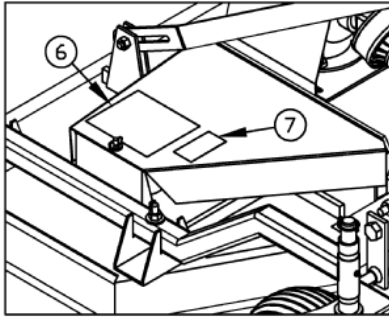
Keep all safety signs clean and legible and replace any that are damaged or missing.

When original parts are replaced, any safety signs affixed to those parts should be replaced as well. Replacement safety signs are available from your local dealer.

SAFETY SIGN INSTALLATION

To install safety signs, ensure the installation area is clean and dry. Decide on the exact position before you remove the backing paper. Remove the smallest portion of the split backing paper and align over the specified area. Carefully press in place. Slowly peel back the remaining paper and smooth the remaining portion in place. Small air pockets can be pierced with a pin and smoothed out.


HEAVY DUTY FINISHING MOWER SAFETY SIGNS




FM-50

 CAUTION
<ul style="list-style-type: none"> -READ OPERATOR'S MANUAL BEFORE USING. -ONLY TRAINED, COMPETENT PERSONS SHALL OPERATE THIS EQUIPMENT. -KEEP ALL SHIELDS IN PLACE. -KEEP HANDS, FEET, CLOTHING AND HAIR AWAY FROM MOVING PARTS. -STOP ENGINE, SET BRAKE, REMOVE KEY AND WAIT FOR ALL MOVING PARTS TO STOP BEFORE SERVICING, ADJUSTING, REPAIRING AND UNPLUGGING. -REMOVE BYSTANDERS, ESPECIALLY CHILDREN, BEFORE STARTING OR WHILE OPERATING. -BLOCK UP BEFORE WORKING BENEATH UNIT. -LOWER THE MOWER WHEN PARKING OR STORING. -REVIEW SAFETY INSTRUCTIONS ANNUALLY.
966703

#1

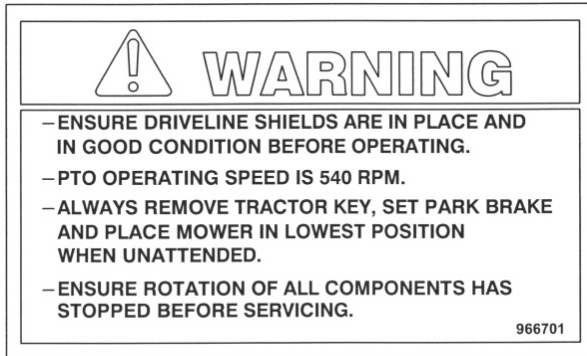
 WARNING
<p>YOU MUST NOT OPERATE THIS MACHINE UNLESS:</p> <ol style="list-style-type: none"> 1. YOU ARE TRAINED IN ITS SAFE OPERATION AND 2. YOU KNOW AND FOLLOW MANUFACTURER'S SAFETY AND OPERATING INSTRUCTIONS AS OUTLINED IN THE OPERATOR'S MANUAL. <p>AN UNTRAINED OPERATOR SUBJECTS HIMSELF AND OTHERS TO SERIOUS INJURY OR DEATH.</p>
966702

#2

 WARNING
<p>CHECK PTO SHAFT LENGTH BEFORE RAISING OR LOWERING IMPLEMENT. SHAFT MUST NOT BOTTOM OR SEPERATE (SEE MANUAL)</p>
108431

#3

SAFETY SIGNS – cont'd.



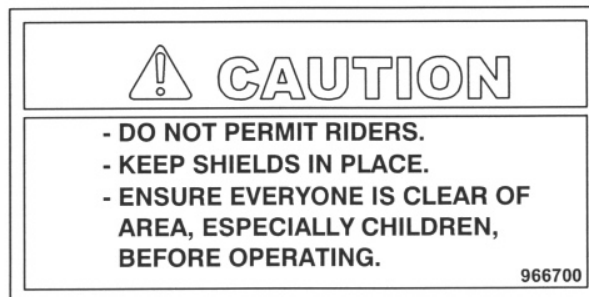
#4



#5



#6



#7

Replace safety sign immediately should it become damaged, torn or illegible. Obtain replacements from your authorized dealer using the part numbers shown.

HITCH ASSEMBLY INSTRUCTIONS

1. The hitch is assembled except for the two pivot bars (#69). Bolt one end of each pivot bar between the welded brackets at the back of the deck using the bolts assembled in the mower.
2. Remove the 3/4" bolt (#63) at the top of the hitch assembly. Using the same bolt, assemble with the pivot bars between the hitch weldment (#38)

CHAIN KIT ASSEMBLY

1. Drill 13/32" holes in the back lip of the deck weldment spaced as shown on the drawing. The hole spacing should be centered across the width of the back lip.
2. With the narrow lip of the chain guard plate (#2) turned up, push an end link of a 3-link chain up through the slot nearest the end of the guard plate. The chain rod (#3) slides through the chain link along the top surface of the chain guard plate. Slide through each chain in order along the entire guard plate. Slide a flat washer on each end of the rod. Hold the assembly in place with a 1/8" x 1" cotter pin (#8) at both ends of the rod.
3. A 5/8" long spacer (#6) fits between the guard plate and the rear lip on the deck. These spacers must be centered on the holes in the guard plate and the rear lip on the deck. With the spacers in place, position the chain guard assembly under the lip on the deck. Clamp on assembly to hold in place. Bolt guard plate assembly to the deck using 3/8" x 1 1/2" bolts, lock washers and hex nut.

QUICK HITCH KIT INSTRUCTIONS

1. Remove the two sets of lift brackets with the lower lift pins from the mower hitch arms (#4).
2. Bolt the adaptor plates (#13) to the outside of the hitch arms welded to the deck. Turn the plates as shown in drawing. Use the 3/4" x 2 1/2" bolts and bushings in the 1" holes. The 5/8" x 2" bolts holding on the A-frame weldment are removed and replaced with 2 1/2" bolts (#3) which also fit through the adaptor plates. The bushings already in the A-frame must remain in place.
3. Assemble the two quick hitch arms (#4) on the inside of the adaptor plates using the lift pins with the swivel bushings from step one at the bottom. The A-frame and quick hitch arms are connected at the top using an adaptor weldment (#11). With the welded bushings on the adaptor facing down, the A-frame is attached using the top link pin (#9). The hitch arms (#4) are bolted on using a 3/4" x 4 1/2" bolt (#1) which fits through a 2 3/8" spacer (#12).

START-UP


1. Park the unit on hard level ground with the mower slightly raised.
2. Adjust the sway blocks or chains on the tractor so the mower is centered between the rear wheels.
3. Adjust the three-point hitch arms to level the mower side to side.
4. Adjust the turnbuckle on the top of the three-point hitch arms to level the mower front and back.
5. Adjust the cutting height using the wheel spacers (#50 and #51) on the wheel yokes. The spacers should be set at the same height on all four wheels.
6. Check the oil level in the gearbox and add as required (see maintenance section).
7. Grease spindle assembly, wheel bearings, wheel pivots and the PTO shaft (see maintenance section).
8. Maintain proper air pressure in tires of 30 psi. (207 kPa) max.
9. Check tightness of belts, bolts and other hardware (see maintenance section).
10. Check blades to see if they are damaged. Sharpen or replace blades if necessary. Check that blade bolts are tight.
11. Clear the working area of foreign objects and check that all bystanders are standing clear before starting.
12. Start the tractor with the mower resting on the ground on all four wheels.
13. Slowly engage the PTO and bring the speed up to 540 PTO rpm for cutting.

OPERATING INSTRUCTIONS

The Heavy Duty Finishing Mower is designed to be used on a tractor with a standard category 1 three-point hitch. See the specification sheet for horsepower requirements. Using excessive power will shorten the life of the drive train components.

CONNECTING TO TRACTOR:

Park the mower and tractor on a level dry area free of debris and foreign objects.

1. Slowly back the tractor up to the machine.
2. Adjust the three-point arms to align with the mower lift pins.
3. Stop the tractor, set the parking brake and remove the ignition key before dismounting.
4. Slide the three-point arms on the lift pins and lock in place with the clips supplied.
5. With the tractor engine shut off, attach the PTO shaft. Both ends of the PTO have a standard 6-spline end with a spring-loaded locking collar. Turn the round collar at the ends of the PTO clockwise to slide onto the splined shafts. The spring-loaded pin in the PTO yoke must lock into the groove on the splined shaft on the gearbox and tractor. Always check to see that both ends of the PTO shaft are securely attached every time the mower is used. This should always be done with the tractor engine shut off. Attach the safety chains supplied with the PTO shaft, allowing sufficient slack for the driveline during turns and operation. Check booklet attached to the PTO for instructions.
 **NOTE:** At least one third of the telescoping length of the PTO should overlap when the mower is in operation.
6. Attach the top link on the tractor to the link pin assembled in the hitch weldment (#38). Adjust the turnbuckle on the tractor top link so that the hitch sits straight with both the tractor and mower on level ground.

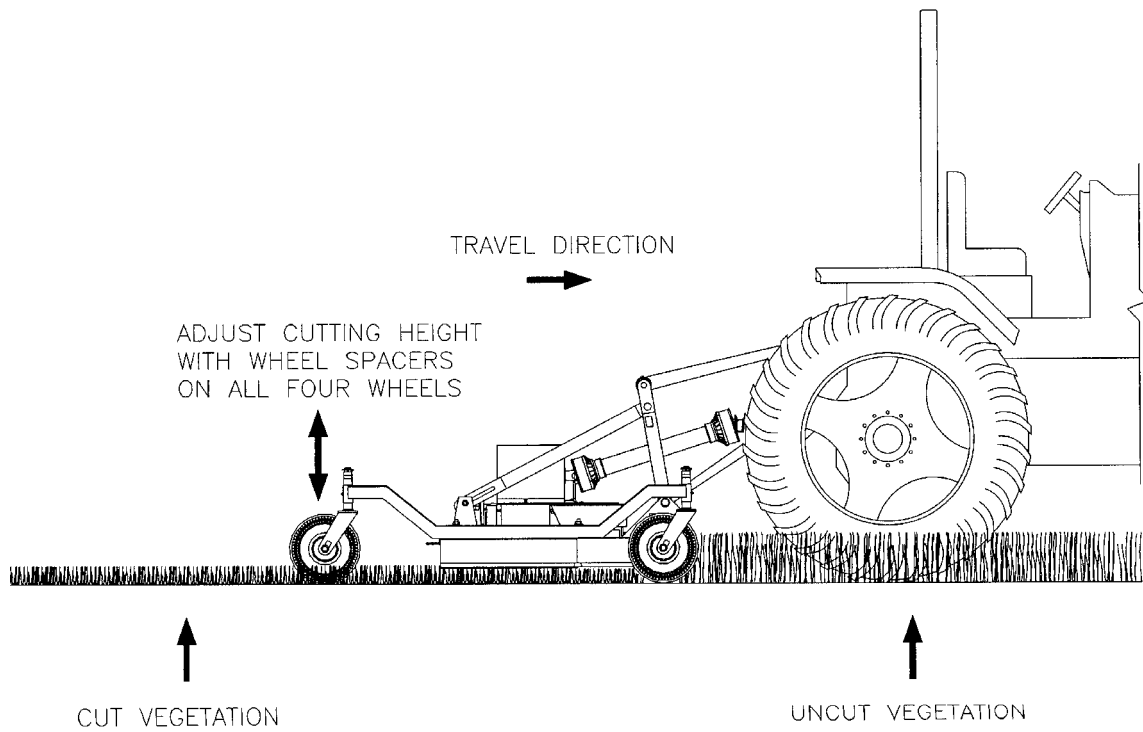
FIELD OPERATION

1. The mower works best on dry grass. Slower cutting speed and occasional cleaning may be required on damp or wet grass.
2. Operate mower at the full 540 PTO rpm for a good cut. Slower speeds or double cutting could be required for very high grass.
3. Use a higher blade setting for rough areas to prevent scalping of the surface.
4. Always cut counter-clockwise so grass clippings are thrown on the grass already cut. This saves power and wear on the blades.
5. Sharpen blades if grass tears instead of cutting cleanly.
6. Slow down when cutting corners. Turning too sharply on corners can leave a small strip of grass uncut.

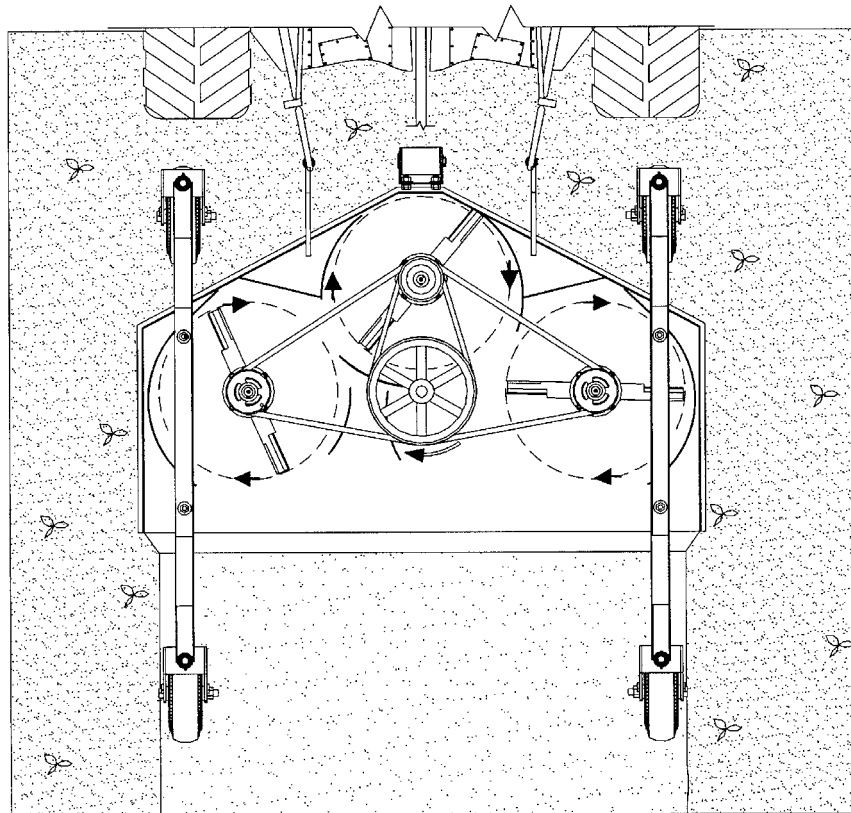
DISCONNECTING FROM TRACTOR

1. Park on a firm level area and clean the mower.
2. Lower the mower until the load is off the hitch arms.
3. Disconnect the hitch arms and the PTO shaft.
4. Cover the mower for storage to prevent rust.

THEORY OF OPERATION



FM-64



FM-65

MAINTENANCE

HEAVY DUTY FINISHING MOWER PTO SHAFTS

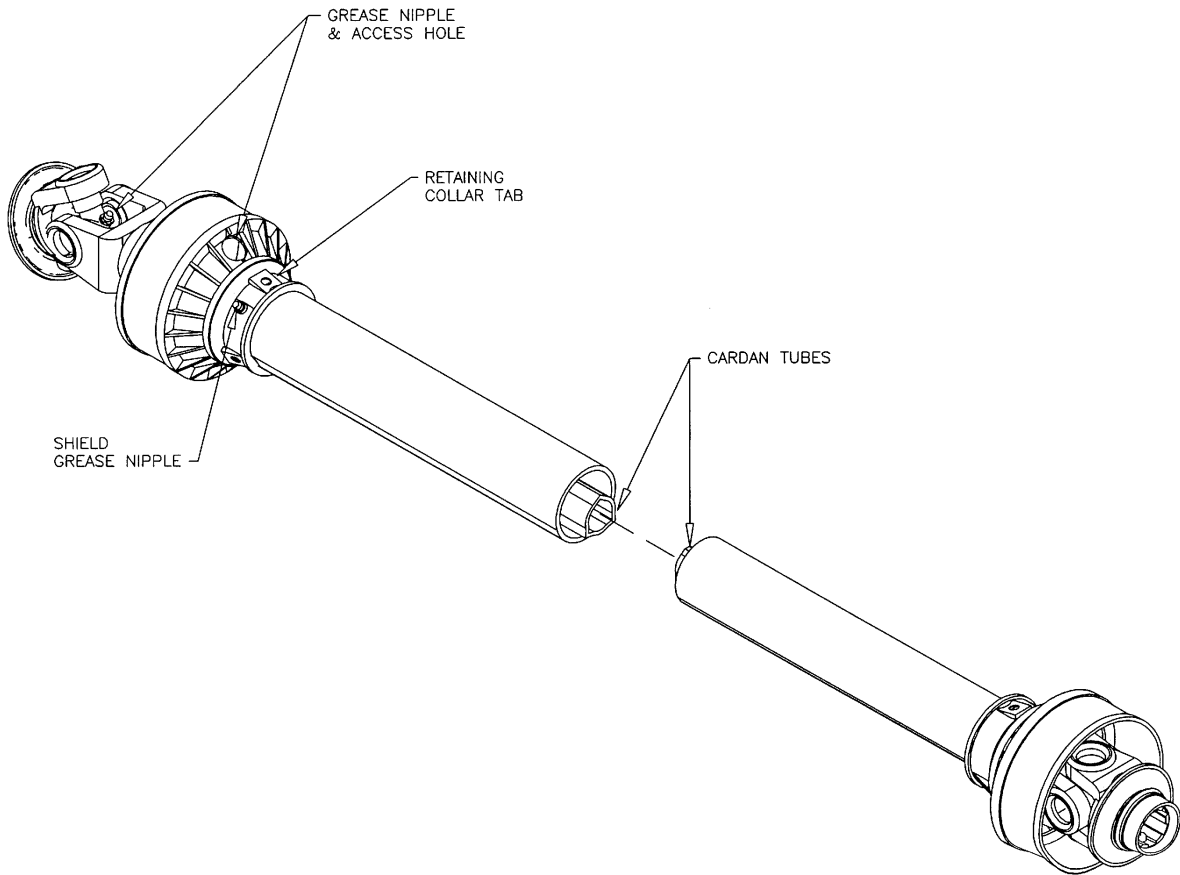
MAINTENANCE: The cross journals and the shield bearings at both ends of the shaft should be greased every 8 hours. Use 1 or 2 pumps of high temperature grease. The cones on the outer PTO shield must be turned until the access holes line up with the grease nipple in the cross journals. The grease nipple for the shield bearings is on the bottom edge of the cone. The PTO shaft must be pulled apart to grease the cardan tubes. Put about 4 pumps of grease into the female or larger outer tube. Slide the two halves back together. The quick release collars on the ends of the PTO shaft should also be kept lubricated. The cardan tubes and the release collars should be greased about every 20 hours. Clean all grease fittings before injecting grease and immediately replace any damaged or missing grease fittings.

SERVICE: The two major service areas on the mower PTO shafts are the shielding and the cross journals. The outer guards are held on by a nylon shield bearing. The three round white tabs at the bottom edge of the shield cones must all be pushed in to pull the shield off the cardan yoke and tube assembly. To replace the outer guards, first fit the nylon shield bearing into the groove machined into the yoke. Slide on the outer guard until it snaps in place. The tabs on the shield bearing must line up with grooves on the inside of the outer guard.

The cross journals must be removed using a press or a vise. Do not use a hammer. Cross journal replacement is done with the outer shield removed. Remove the snap rings at the ends of the cross journal before pressing out. The cups on the ends of the cross journal contain numerous needle bearings. If even one of these needle bearings falls over, you will not be able to assemble the cross journal. Check that the end yoke turns freely after replacing a cross journal. Adjust the spread on the end yoke if necessary to loosen up the turning.

The quick release collars on the ends of the PTO shaft are held on by a snap ring. A pin and spring are inside the collar. Repair immediately if the collar fails to hold the PTO shaft solidly in place.

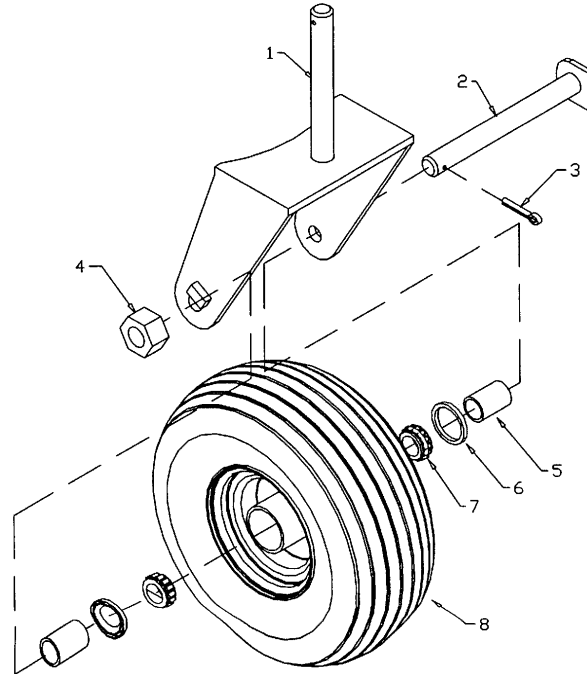
PTO SHAFT



FM-58

MOWER DECK WHEEL BEARINGS

The mower wheel bearings are packed in grease when they are shipped. They should be repacked in fresh grease once a year or every 200 hours of usage.



FM-53

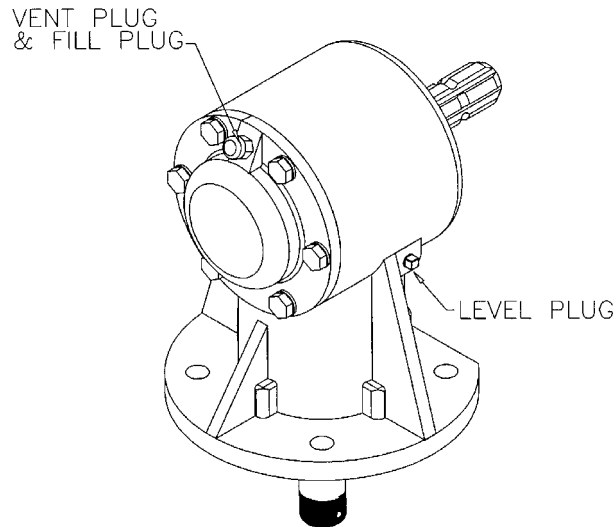
MOWER DECK WHEEL BEARINGS

ITEM	PART#	DESCRIPTION
1	902422	Wheel Yoke
2	902489	1" x 9 1/4" long Wheel Yoke Pin
3	812681	3/16" x 1 1/2" Cotter Pin (pl)
4	967498	1" Slotted Hex Nut (NF) 14 (pl)
5	902505	1 3/4" x 1 1/4" O.D. Wheel Spacer (pl)
6	967497	Oil Seal Se 10
7	966776	Bearing Cone (L44643)
8	966195	Tire & Rim (15 x 6 - 6)

MOWER GEARBOX LUBRICATION

The gearbox should be filled with SAE90 oil to the bottom of the level plug when shipped. Check the mower gearbox before using and at regular intervals (approximately every 40 hours). See that the oil level is maintained. On the mower gearbox the vent plug also acts as the fill plug.

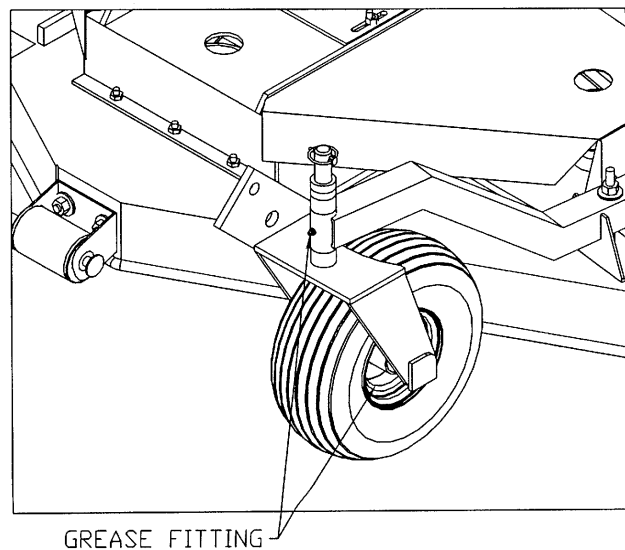
MOWER GEARBOX



FM-52

MOWER SPINDLE LUBRICATION

Use a high temperature grease for all applications. The mower deck wheel spindles have a grease nipple in the sleeve welded to the ends of the axle and in the wheel hub. These locations should receive 3 or 4 pumps of grease about every 8 hours.



FM-56

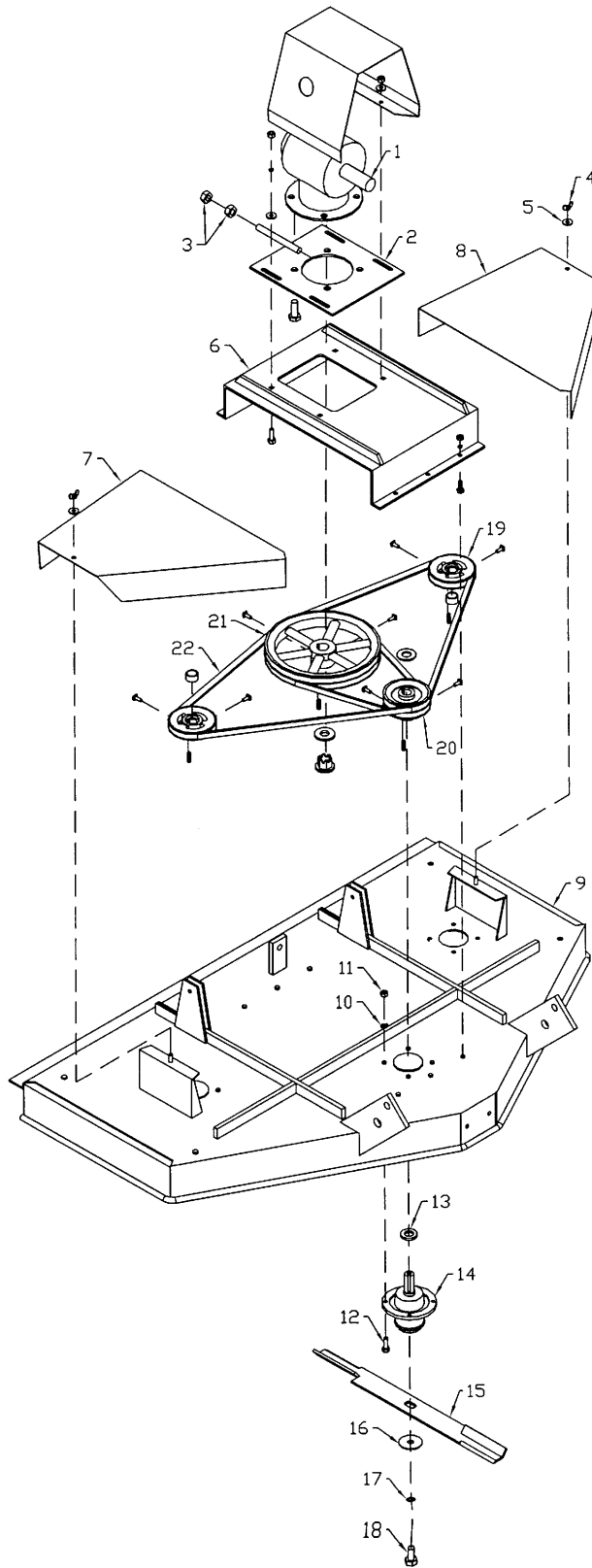
SPINDLE REPLACEMENT

OUTER SPINDLES: remove the belt guard on the side required (#7 & #8). Loosen the belts by first loosening the bolts holding the gearbox base plate (#2). Turn the 5/8" hex nut (#3) on the threaded rod on the base plate until there is enough slack in the belt to slip it off the spindle pulley. Remove the snap ring from the spindle shaft and pull off the pulley. Remove the blade from the spindle. The mower will have to be raised off the ground. Take off the four bolts holding on the spindle (#14). After replacing the spindle, be sure that the bolt holding the blade is tightened to 180 ft-lbs (244 N-m). Use a torque wrench. Re-tighten the belts so the center of the belt span will deflect about 1/2" with nominal pressure. Do not forget to tighten the bolts on the gearbox mounting plate.

CENTER SPINDLE: The procedure is the same as for the outer spindles as described above except for the following differences. Both belt guards (#7 & #8) must be removed. After slacking off the belt as described remove the gearbox mounting plate (#6) in one piece with the gearbox and large pulley. Remove the double pulley and replace the spindle. When you replace the belts make sure they are lined up as shown in the drawing. The upper grooves in the double pulleys go around the higher of the single pulleys. The lower grooves of the double pulley line up with the lower single pulley.

Drawing on next page.

HEAVY DUTY MAINTENANCE – SPINDLE REPLACEMENT



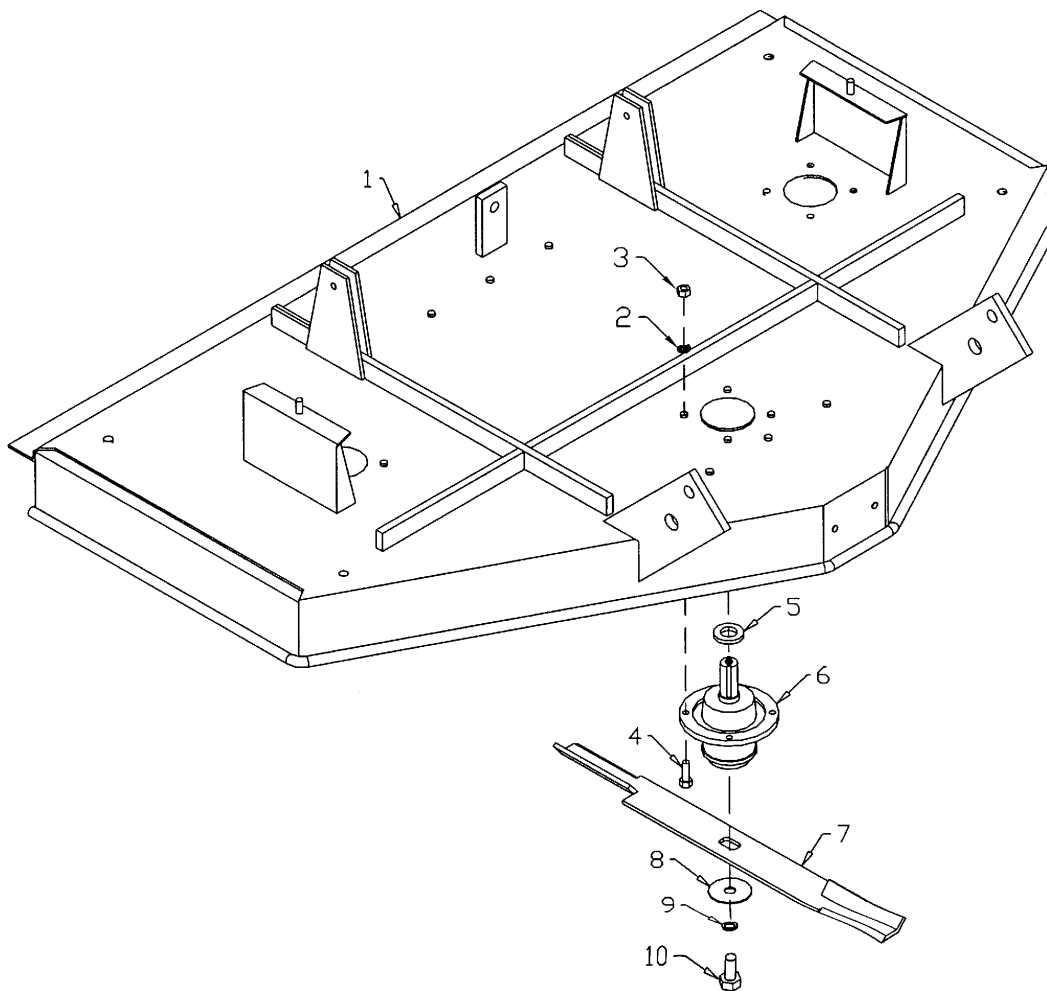
FM-55

SPINDLE REPLACEMENT

ITEM	PART#	DESCRIPTION
1	912300158	Gearbox Assembly
2	980004200	Gearbox Base Plate
3	81676	5/8" Hex Nut (pl)
4	84217	3/8" Wing Nut (pl)
5	84000	3/8" BS Flat Washer (pl)
6	906343	Gearbox Mount Plate
7	906353	5' R.H. Belt Guard
	906355	6' R.H. Belt Guard
	902269	7' R.H. Belt Guard
8	906354	5' L.H. Belt Guard
	906356	6' L.H. Belt Guard
	902268	7' L.H. Belt Guard
9	902667	5' Rear Discharge Deck
	902668	6' Rear Discharge Deck
	902669	7' Rear Discharge Deck
10	81593	3/8" Lock Washer (pl)
11	81592	3/8" Hex Nut (pl)
12	86171	3/8" x 1 1/4" Hex Bolt (pl)
13	912301558	Snap Ring
14	966860	Spindle Assembly c/w Hardware
15	966273	21 3/4" Blade (5')
	966274	25 3/4" Blade (6')
	966167	29 3/4" Blade (7')
16	966188	2 1/2" O.D. x 21/32" I.D. Washer (pl) (Supp w/ Spndl)
17	966190	5/8" Lock Washer Extra Heavy (pl) (Supp w/ Spndl)
18	966189	5/8" x 1 1/4" Gr. 8 Hex Bolt Lck (pl) (Supp w/ Spndl)
19	904245	4 1/2" Single Sheave (Machined End Up) (5' & 6')
	904247	5 1/4" Single Sheave (Machined End Up) (7')
20	904246	4 1/2" Double Sheave (5' & 6')
	904248	5 1/4" Double Sheave (7')
21	966722	12" Double Sheave (1.25" Bore)
22	904251	B-70 Belts (5')
	973506	B-78 Belts (6')
	973248	B-87 Belts (7')

BLADE REPLACEMENT

The mower deck must be securely blocked up or locked in place before doing a blade replacement. When replacing or grinding blades, all three blades must be replaced or reground at the same time to maintain the proper balance in the cutting unit. Use heavy leather gloves to handle the blades. It is easiest to remove the centre bolt if you anchor the blade solidly. There are devices sold at hardware stores for this purpose. Be sure to tighten the centre bolt and lock washer securely when replacing blades. Use a torque wrench to re-tighten spindle bolts to 180 ft.-lbs (244 N-m). The bolts have a patch of thread lock material pre-applied which will hold for up to five usages. If replacing the lock washer, use an extra heavy duty lock washer as supplied with the spindle.



FM-59

BLADE REPLACEMENT

ITEM	PART#	DESCRIPTION
1	902667	5' Rear Discharge Deck
	902668	6' Rear Discharge Deck
	902669	7' Rear Discharge Deck
2	81593	3/8" Lock Washer (pl)
3	81592	3/8" Hex Nut (pl)
4	86171	3/8" x 1 1/4" Hex Bolt (pl)
5	912301558	Snap Ring
6	966860	Spindle Assembly (c/w Hardware)
7	966273	21 3/4" Blade (5')
	966274	25 3/4" Blade (6')
	966167	29 3/4" Blade (7')
8	966188	2 1/2"O.D. x 21/32" I.D. Washer (pl) (Supp w/ Spndl)
9	966190	5/8" Lock Washer Extra Heavy (pl) (Supp w/ Spndl)
10	966189	5/8" x 1" Gr. 8 Hex Bolt Lock (pl) (Supp w/ Spndl)

SERVICE NOTES

To achieve optimal performance, proper and regular maintenance is required.

Use only original BUHLER parts.

Keep the machine in a functioning and efficient condition by completing the maintenance and lubrication work as listed in the maintenance checklist. If maintenance is due, no work is to be done with the machine. Discovered defects have to be repaired at once.

ATTENTION! The maintenance of the machine should be done by trained personnel. Naturally, the machine has to be secured prior to beginning any maintenance work.

Intervals of Maintenance: The intervals are based on average working conditions and strain. The various intervals of maintenance depend on the time elapsed or service hours completed, which ever is reached first. The intervals given here are based on the quality of material specified in this manual.

EVERY 8 HOURS OF USE

DATE

- grease PTO cross journals and shield bearings
- grease mower deck wheel spindles
- grease mower spindles

EVERY 20 HOURS OF USE

- grease PTO cardan tubes and release collars

EVERY 40 HOURS OF USE

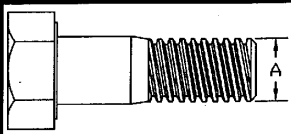
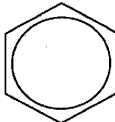


- check oil level of gearbox

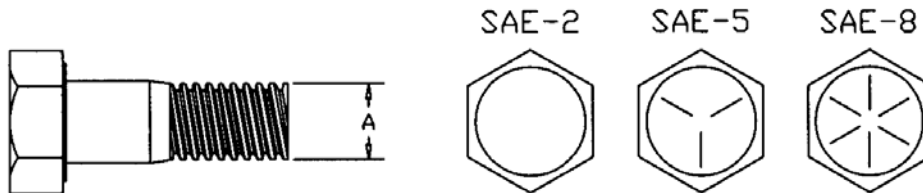
YEARLY OR EVERY 200 HOURS OF USE

- repack mower wheel bearings

CHECKING BOLT TORQUE

The tables shown below give correct torque values for various bolts and hex bolts. Tighten all bolts to the torques specified in chart unless otherwise noted. Check tightness of bolts periodically, using bolt torque chart as a guide. Replace hardware with the same strength bolt.

Bolt Torque						
						
Bolt Diameter	SAE2		SAE5		SAE8	
"A"	N.m	lb-ft	N.m	lb-ft	N.m	lb-ft
1/4"	8	6	12	9	17	12
5/16"	13	10	25	19	36	27
3/8"	27	20	45	33	63	45
7/16"	41	30	72	53	100	75
1/2"	61	45	110	80	155	115
9/16"	95	70	155	115	220	165
5/8"	128	95	215	160	305	220
3/4"	225	165	390	290	540	400
7/8"	230	170	570	420	880	650
1"	345	225	850	630	1320	970



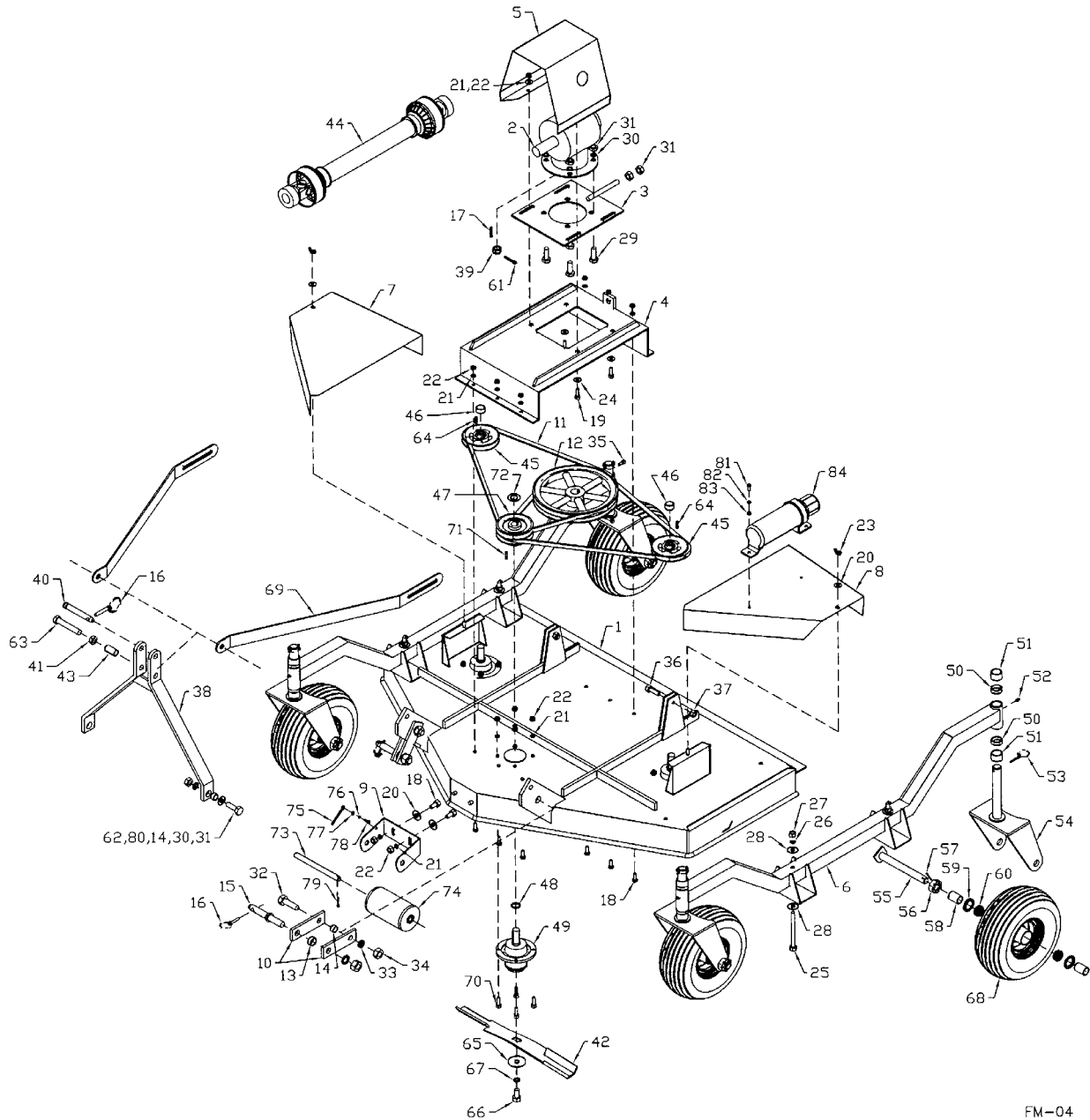
FM-62

NOTE: See page 16 for correct spindle torque. Do not use this chart for spindle bolt only.

Torque figures indicated above are valid for non-greased or non-oiled threads and heads unless otherwise specified. Therefore, do not grease or oil bolts or hex bolts unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

* Torque value for bolts and hex bolts are identified by their head markings.

5', 6' & 7' HEAVY DUTY REAR DISCHARGE FINISHING MOWER



FM-04

WHEN ORDERING PARTS

Always give your dealer the Model, Color and Serial Number of your machine to assist him in ordering and obtaining the correct parts. Use the exploded view and tabular listing of the area of interest to exactly identify the required part.

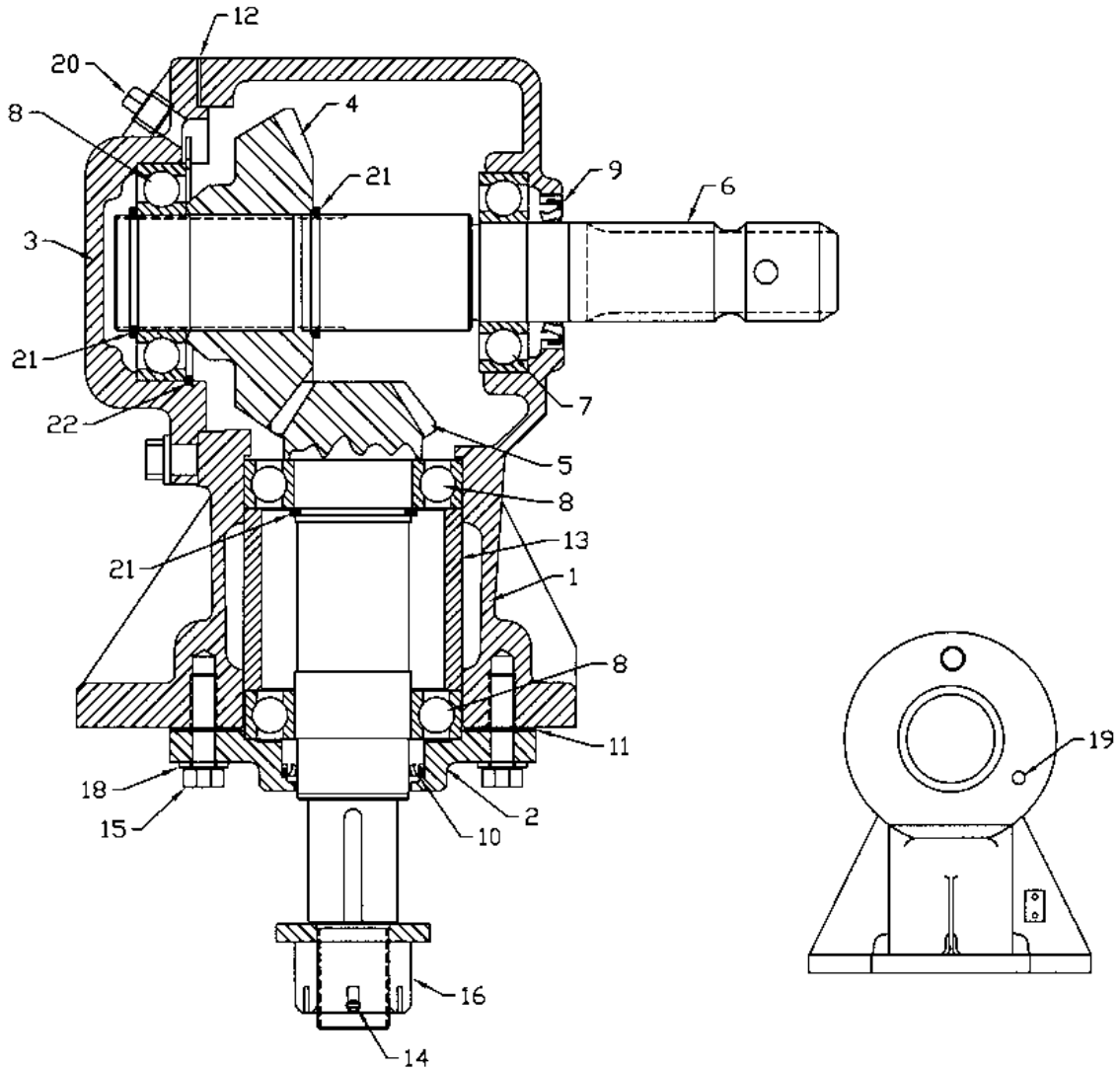
5', 6', & 7' HEAVY DUTY REAR DISCHARGE FINISHING MOWER

ITEM	PART #	DESCRIPTION
1	902667	Deck Weldment (5')
	902668	Deck Weldment (6')
	902669	Deck Weldment (7')
2	912300158	Gearbox (Without Oil)
3	980004200	Gearbox Base Plate
4	906343	Gearbox Mount Plate
5	966748	PTO Guard
6	908942	67 1/2" Axle Beam Weldment (5')
	908944	69 1/2" Axle Beam Weldment (6')
	908946	71 1/2" Axle Beam Weldment (7')
7	906353	Right Hand Pulley Guard (5')
	906355	Right Hand Pulley Guard (6')
	902269	Right Hand Pulley Guard (7')
8	906354	Left Hand Pulley Guard (5')
	906356	Left Hand Pulley Guard (6')
	902268	Left Hand Pulley Guard (7')
9	903488	Roller Holder 7ga x 4 5/32" x 18 1/4"
10	966723	Lift Bracket
11	904251	B-70 Belts (5')
	973506	B-78 Belts (6')
	973248	B-87 Belts (7')
12	966722	12" Double Sheave complete with Set Screws
13	966601	Lift Pin Bushing (1 1/4" O.D. x 9/16" long)
14	966727	Hitch Bushing (1" O.D. x 9/16" long)
15	966823	Lift Pin complete with Nut & Washer (XL) (Category 1)
16	965911	7/16" Linch Pin (1493)
17	900929	Pulley Key (1/4" square x 1 5/8" long)
18	86170	3/8" x 1" Hex Bolt (pl)
19	86182	3/8" x 1 1/4" Carriage Bolt (pl)
20	84000	3/8" B.S. Flat Washer (pl)
21	81593	3/8" Lock Washer (pl)
22	81592	3/8" Hex Nut (pl)
23	84217	3/8" Wing Nut (pl)
24	964001	1"O.D. x 7/16" I.D. x 10ga Flat Washer (pl)

25	811646	1/2" x 6" Hex Bolt (pl)
26	81637	1/2" Lock Washer (pl)
27	81636	1/2" Hex Nut (pl)
28	812769	1 1/2" O.D. x 9/16" I.D. x 10ga Washer (pl)
29	84270	5/8" x 1 3/4" Hex Bolt (pl)
30	81677	5/8" Lock Washer (pl)
31	81676	5/8" Hex Nut (pl)
32	84346	3/4" x 2 1/2" Hex Bolt (pl)
33	81701	3/4" Lock Washer (pl)
34	81700	3/4" Hex Nut (pl)
35	9812377	5/16" x 3/4" Square Head Set Screw (pl)
36	84277	1/2" x 1 1/2" Hex Bolt (pl)
37	812364	1/2" Lock Nut (pl)
38	966758	Hitch Weldment
39	905247	1" I.D. Washer & Slotted Hex Nut Weldment Inc. with Gearbox
40	965807	Top Link Pin (Category 1)
41	812365	3/4" Lock Nut (pl)
42	966273	21 3/4" Hard Surfaced Blade (5')
	966274	25 3/4" Hard Surfaced Blade (6')
	966167	29 3/4" Hard Surfaced Blade (7')
43	906791	Arm Spacer 1" O.D. x 4 1/4"
44	F0401	PTO Shaft (5' & 6')
	F0400	PTO Shaft (7')
45	904245	4 1/2" Single Sheave Assembly (machined end up) (5' & 6')
	904247	5 1/4" Single Sheave Assembly (machined end up) (7')
46	966811	Sheave Spacer 1 1/4" O.D. x 0.70" long
47	904246	4 1/2" Double Sheave complete with Set Screws (5' & 6')
	904248	5 1/4" Double Sheave complete with Set Screws (7')
48	912301558	1" Snap Ring
49	966860	Spindle with Hardware
50	902504	1/2" long x 1 5/8" O.D. Bushing (pl)
51	902503	1" long x 1 5/8" O.D. Bushing (pl)
52	967164	Pound-in Grease Nipple
53	966729	3/16" Linch Pin (pl)
54	902422	Wheel Yoke
55	902489	1" x 9 1/4" Wheel Yoke Pin (pl)
56	967498	1" Slotted Head Nut (pl)
57	9812433	3/16" x 1 1/2" Cotter Pin (pl)
58	902505	1 3/4" x 1 1/4" O.D. Wheel Spacer (pl)
59	967497	SE10 - Oil Seal
60	966776	Bearing Cone (L44643)
61	81207	3/16" x 2" Cotter Pin (br)
62	84299	5/8" x 2" Hex Bolt (pl)
63	811790	3/4" x 4 1/2" Hex Bolt (pl)
64	900931	1/4" Square x 1.11" Key

65	966188	2 1/2" O.D. x 21/32" I.D. Washer (Supplied with Spindle)
66	966189	5/8" x 1 1/4" Grade 8 Hex Bolt Lock (Supplied with Spindle)
67	966190	5/8" Lock Washer (pl) Extra Heavy (Supplied with Spindle)
68	966195	15/600 x 6" Tire with Wheel
69	966760	Pivot Bar 40" long (5')
	966761	Pivot Bar 46" long (6')
	966282	Pivot Bar 51" long (7')
70	811792	3/8" x 1 1/2" Hex Bolt (pl)
71	900930	1/4" x 1 1/2" Key
72	967140	1" x 10ga Narrow Rim Washer (pl)
73	903104	Roller Pin 3/4" dia. X 8 3/4" long
74	903113	Front Roller Assembly
75	9812436	1/4" x 2 1/2" Cotter Pin (pl)
76	81545	1/4" Lock Washer (pl)
77	81544	1/4" Hex Nut (pl)
78	81525	1/4" x 3/4" Hex Bolt (pl)
79	9812434	1/4" x 1 1/2" Cotter Pin (pl)
80	81678	5/8" BS Flat Washer Standard (pl)
81	81549	5/16" x 3/4" Hex Bolt (pl)
82	81569	5/16" Lock Washer (pl)
83	81568	5/16" Hex Nut (pl)
84	909277	Manual Holder

HEAVY DUTY FINISHING MOWER GEARBOX

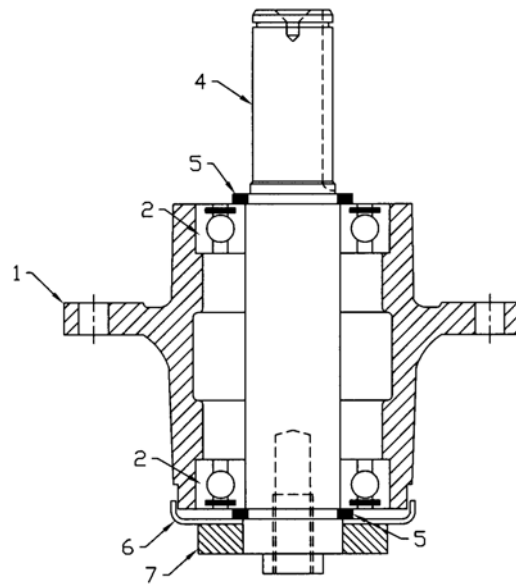
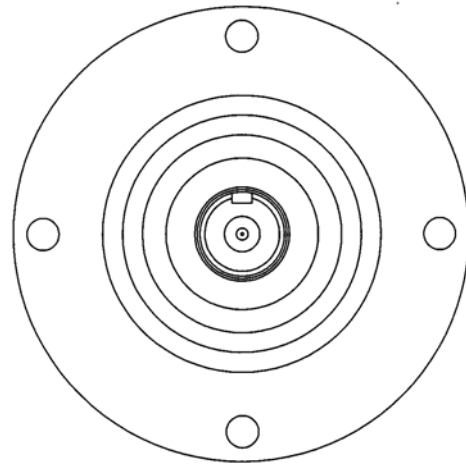


912300158

HEAVY DUTY FINISHING MOWER GEARBOX PARTS LIST

Item #	Part #	Description
	912300158	Gearbox Complete
1	966813	Housing
2	914015	Output Cap
3	966814	Blank Cap
4	966815	Input Gear, 29T
5	966816	Pinion Gear, 15T
6	966817	Input Shaft
7	966542	Ball Bearing, 6207
8	966555	Ball Bearing, 6208
9	966818	Input Seal
10	966819	Output Seal
11	914019	Output Gasket
12	914007	Input Gasket
13	914001	Spacer
14	966562	Cotter Pin
15	86171	3/8" x 1 1/4" Hex Bolt
16	905247	1" NF Hex Nut W/Washer
18	81593	3/8" Lock Washer
19	914016	1/8" Sq. Hd. Solid Plug
20	966193	1/4" Vented Plug
21	914008	Retaining Ring
22	914003	Retaining Ring

HEAVY DUTY FINISHING MOWER SPINDLE ASSEMBLY



FM-63

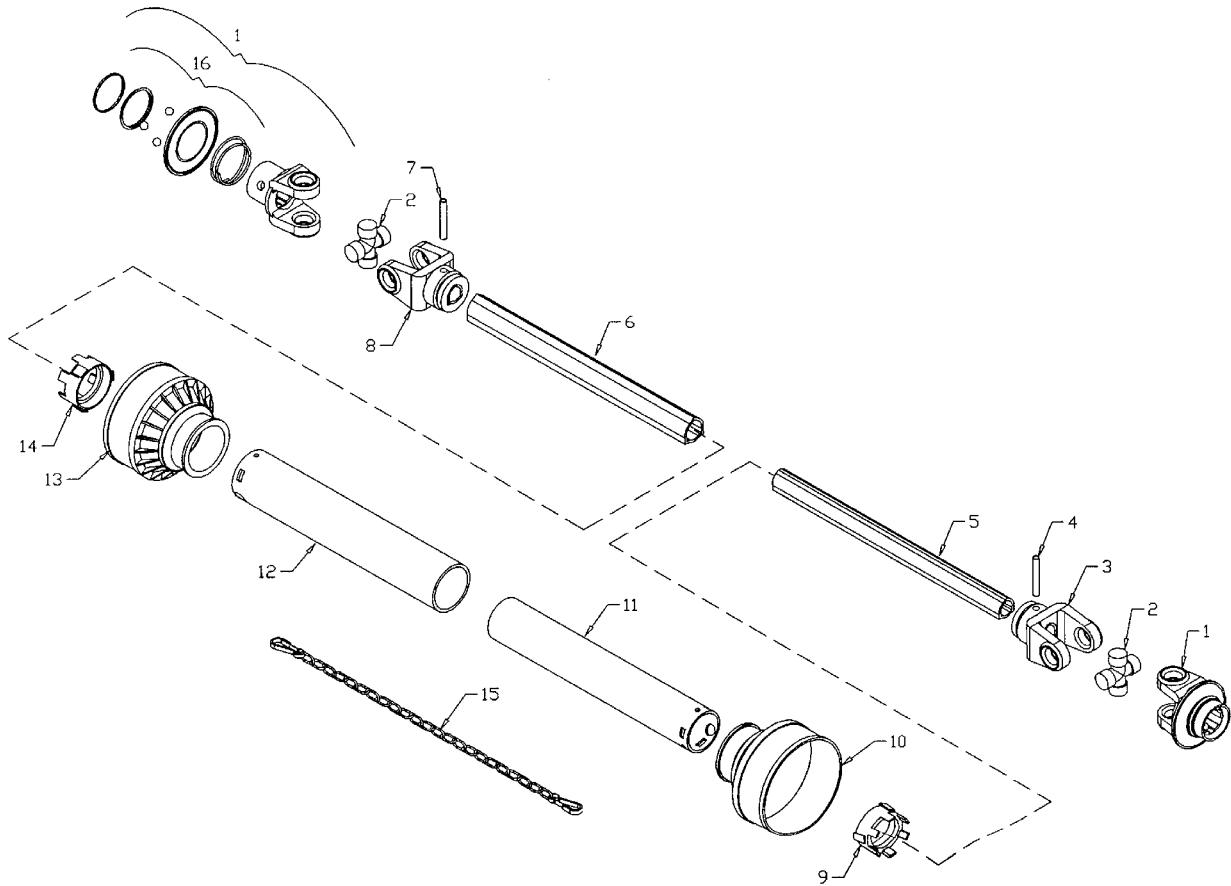
FINISHING MOWER SPINDLE PARTS LIST (4', 5' & 6' SIDE AND REAR)

Item #	Part #	Description
	906339	Spindle Assembly Complete (Includes Hardware)
1	966764	Spindle Housing
2	906399	Spindle Bearing, 6206-Z
3	912301558	Snap Ring
4	906394	Spindle Shaft
5	966769	Snap Ring
6	966820	Shield
7	966821	Blade Mount Base

**FINISHING MOWER SPINDLE PARTS LIST (7' REAR)
(ALL SIZE HEAVY DUTY & TRIPLEX)**

Item #	Part #	Description
	966860	Spindle Assembly Complete (Includes Hardware)
1	966862	Spindle Housing
2	966863	Spindle Bearing (63067)
3	912301558	Snap Ring
4	906394	Spindle Shaft
5	966769	Snap Ring
6	966865	Shield
7	966821	Blade Mount Base

HEAVY DUTY REAR DISCHARGE FINISHING MOWER PTO SHAFT



FM-48

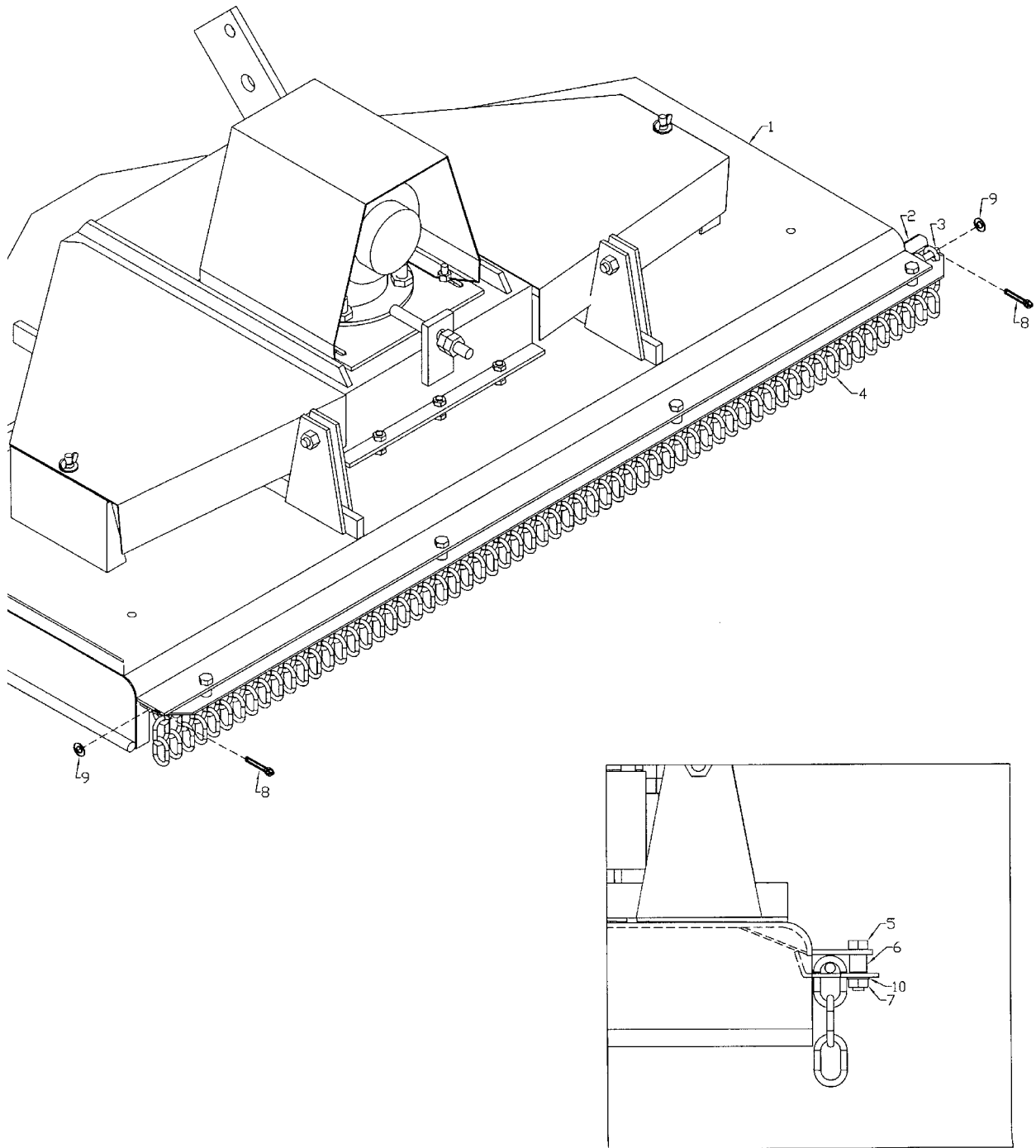
**HEAVY DUTY REAR DISCHARGE FINISHING MOWER
PTO SHAFT PARTS LIST**

Item #	Part #	Description
	F0401	Shaft Complete - 5' & 6'
	F0400	Shaft Complete - 7'
1	907290	Yoke
2	920-002	Repair Kit
3	920-004	Outer Tube Yoke
4	920-006	Flexible Pin
5	936404	Outer Cardan Tube - 5' & 6'
	936403	Outer Cardan Tube - 7'
6	936406	Inner Cardan Tube - 5' & 6'
	936405	Inner Cardan Tube - 7'
7	930-109	Flexible Pin
8	920-003	Inner Tube Yoke
9	920-013	Outer Bearing
10	936300	Outer Cone Set
11	936408	Outer Safety Tube - 5' & 6'
	936407	Outer Safety Tube - 7'
12	936410	Inner Safety Tube - 5' & 6'
	936409	Inner Safety Tube - 7'
13	936305	Inner Cone Set
14	920-015	Inner Shield Bearing
15	936402	Safety Chain
16	908244	Ball Collar Kit

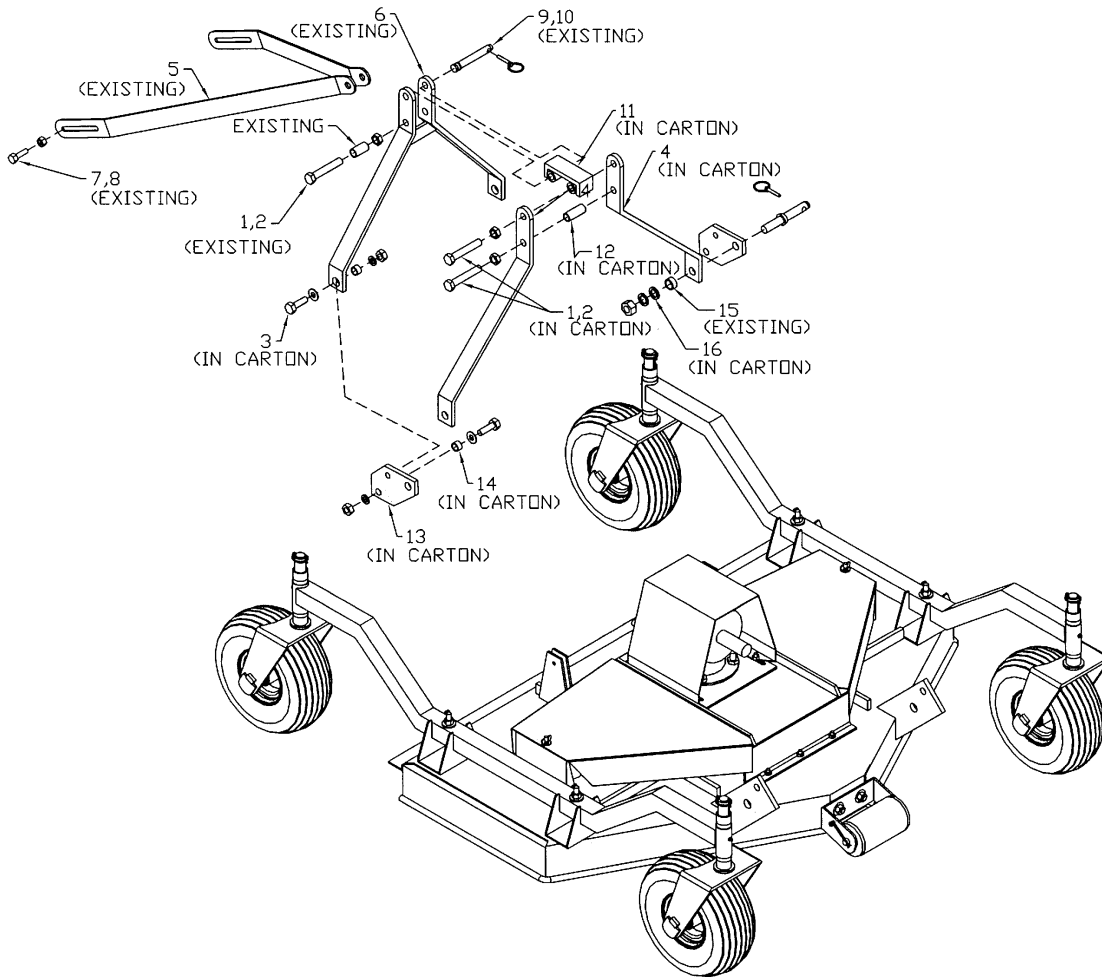
Heavy Duty Rear Discharge Finishing Mower Chain Kit

Item #	Part #	Description
1	902667	5' Deck Weldment
	902668	6' Deck Weldment
	902669	7' Deck Weldment
2	902820	62 1/4" Chain Guard Plate (5')
	902823	74 1/4" Chain Guard Plate (6')
	902825	86 1/4" Chain Guard Plate (7')
3	902827	62 3/8" Long Chain Kit Rod (5')
	902828	74 3/8" Long Chain Kit Rod (6')
	902829	86 3/8" Long Chain Kit Rod (7')
4	967907	1/4" X 3 Link Chain Pl
5	811792	3/8" X 1 1/2" Hex Bolt (pl)
6	902821	Spacer 5/8" O.D. X 12Ga X 5/8" Long
7	81592	3/8" Hex Nut (pl)
8	9812430	1/8" X 1" Cotter Pin (pl)
9	84039	3/8" SAE Washer (pl)
10	81593	3/8" Lock Washer (pl)

HEAVY DUTY REAR DISCHARGE CHAIN KIT



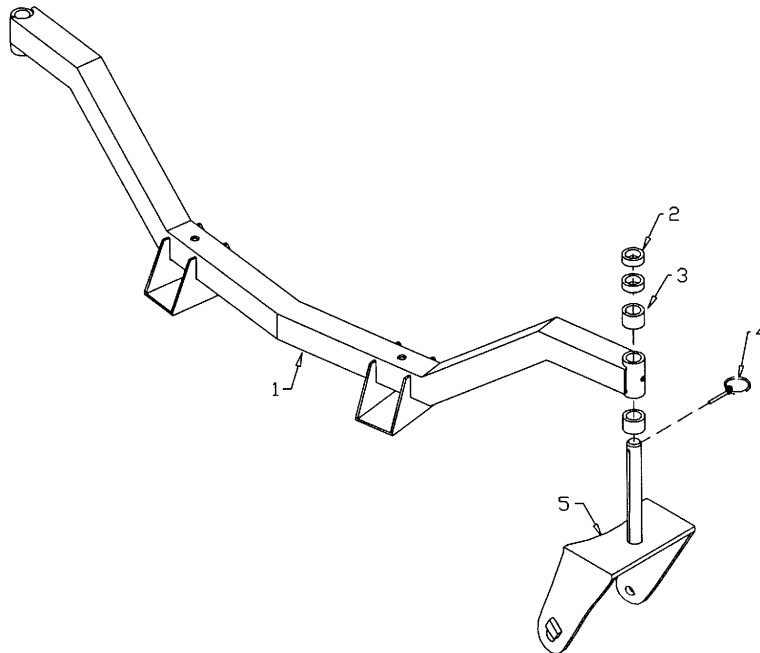
QUICK HITCH KIT



#	PART #	DESCRIPTION	QTY
1	811790	3/4" X 4 1/2" HEX BOLT (PL)	3
2	812365	3/4" LOCK NUT (PL)	3
3	81665	5/8" X 2 1/2" HEX BOLT (PL)	2
4	909242	HITCH ARM 1/2" X 2" X 28 1/2" LG	2
5	966759	PIVOT BAR 1/4" X 2" X 37" (4')	2
	966760	PIVOT BAR 1/4" X 2" X 40" (5')	2
	966761	PIVOT BAR 1/4" X 2" X 46" (6')	2
	966282	PIVOT BAR 3/8" X 2" X 51" (7')	2
6	966758	"A" FRAME WELDMENT	1
7	84277	1/2" X 1 1/2" HEX BOLT (PL)	2
8	812364	1/2" LOCK NUT (PL)	2
9	965807	TOP LINK PIN (CAT 1)	1
10	965911	7/16" LINCH PIN	3
11	909243	ADAPTOR WELDMENT	1
12	909239	1"Ø X 2 3/8" SPACER	1
13	909237	ADAPTOR PLATE 1/2" X 4 1/2" X 6 1/2"	2
14	909241	1"Ø X 7/16" SPACER	2
15	966601	1 1/4" X 9/16" SPACER	2
16	81972	7/8" FLAT WASHER (PL)	2

BLADE HEIGHT ADJUSTMENT

The mowers must be raised off the ground far enough to pull the wheel yoke (#5) out of the welded sleeves at the ends of the axles (#1). Be sure the tractor is turned off. Pull out the clip (#4) and remove the wheel yoke. There are 1/2" and 1" spacers to adjust the cutting height. The cutting height is 1 3/4" with no spacers under the sleeve at the end of the axles. This can be adjusted using the spacers by 1/2" increments up to 4 3/4". Check to see that the spacers are set at the same height on all the wheel yokes.

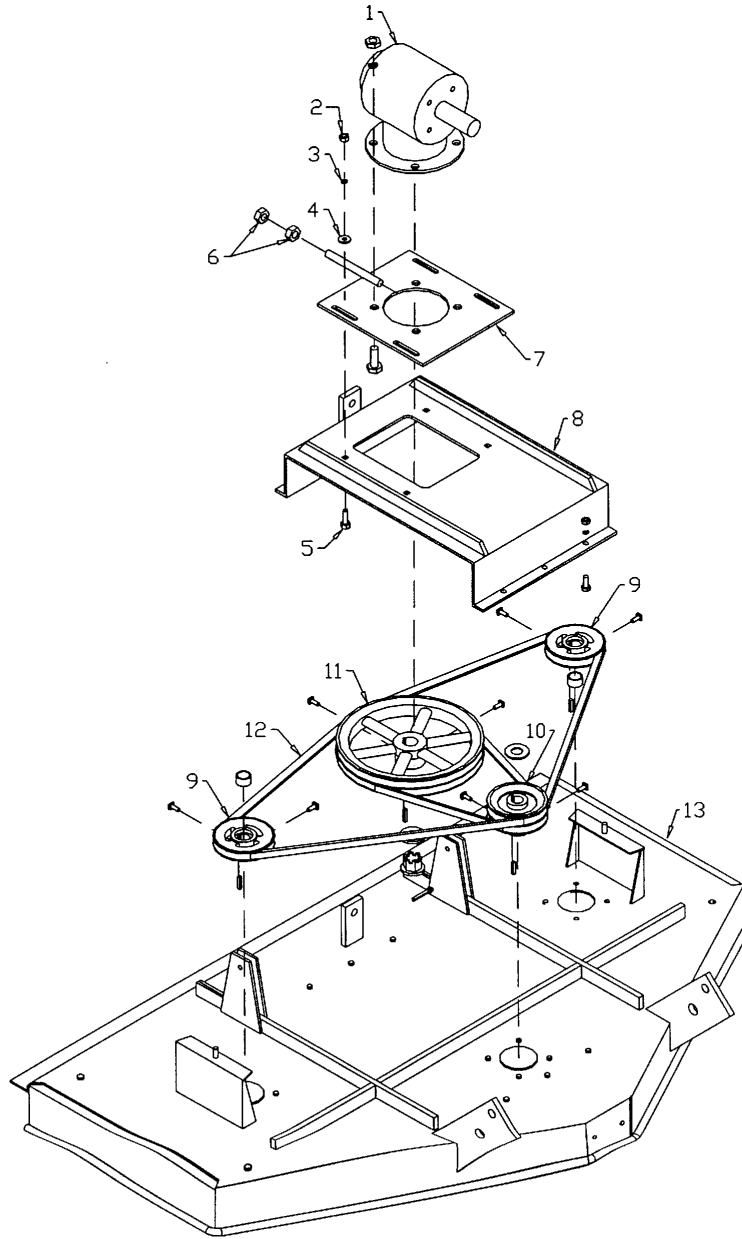


FM-54

BLADE HEIGHT ADJUSTMENT

ITEM	PART#	DESCRIPTION
1	908942	67 1/2" Axle Beam Weldment (5')
	908944	69 1/2" Axle Beam Weldment (6')
	908946	71 1/2" Right Axle Beam Weldment (7')
2	902504	1/2" Lg x 1 5/8" O.D. Bushing (pl)
3	902503	1" Lg x 1 5/8" O.D. Bushing (pl)
4	966729	3/16" Linch Pin (pl)
5	902422	Wheel Yoke

MOWER DECK BELT ADJUSTMENT



FM-57

MOWER DECK BELT ADJUSTMENT

Start by removing both belt guards on the mower deck. Loosen the bolts holding the gearbox base plate (#7). Turn the 5/8" hex nuts (#6) on the threaded rod on the base plate until there is enough slack in the belts to slip them off the spindle pulleys. If the belts can be pulled off by sliding them under the large double pulley, no further disassembly is required. If this is difficult, you can create more space by removing the bolts holding on the gearbox mounting plate (#8) in one piece with the gearbox and large pulley. Lift up the mounting plate assembly slightly and slide the belts underneath. When you replace the belts, make sure they are lined up as shown in the drawing. The upper groove in the double pulleys goes around the higher of the single pulleys. The lower grooves of the double pulleys line up with the lower single pulley. Re-tighten the belts so the center of the belt span will deflect about 1/2" with nominal pressure. Do not forget to tighten the bolts on the gearbox mounting plate.

MOWER DECK BELT ADJUSTMENT

ITEM	PART#	DESCRIPTION
1	912300158	Gearbox Assembly
2	81592	3/8" Hex Nut (pl)
3	81593	3/8" Lock Washer (pl)
4	964001	7/16" I.D. x 10 Ga Washer (pl)
5	86182	3/8" x 1 1/4" Carriage Bolt (pl)
6	81676	5/8" Hex Nut (pl)
7	980004200	Gearbox Base Plate
8	906343	Gearbox Mount Plate
9	904245	4 1/2" Single Sheave (Machined End Up) (5' & 6')
	904247	7" Single Sheave (Machined End Up) (7')
10	904246	4 1/2" Double Sheave (5' & 6')
	904248	5 1/4" Double Sheave (7')
11	966722	12" Double Pulley (1.25" Bore)
12	904251	B-70 Belts (5')
	973506	B-78 Belts (6')
	973248	B-87 Belts (7')
13	902667	5' Rear Discharge Deck
	902668	6' Rear Discharge Deck
	902669	7' Rear Discharge Deck

SHIPPING KIT AND BUNDLE NUMBERS

The following is a list of Kit Numbers for this product and the Bundle Numbers, Descriptions, and Quantities for each Kit.

QUANTITY	BUNDLE NO.	DESCRIPTION
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Y550RHD 60" HEAVY DUTY FINISHING MOWER

1	F0688	5' Mower
1	F0670	Tires
1	F6670	Chain Kit
1	F6673	Carton

Y650RHD 72" HEAVY DUTY FINISHING MOWER

1	F0689	6' Mower
1	F0670	Tires
1	F6671	Chain Kit
1	F6674	Carton

Y750RHD 84" HEAVY DUTY FINISHING MOWER

1	F0690	7' Mower
1	F0670	Tires
1	F6672	Chain Kit
1	F6675	Carton

OPTIONAL BUNDLE NUMBERS

The following is a list of options available for the Kits listed above.

F9459	UHMW High Density Poly Roller Assembly
Y730	Quick Hitch Adaptor

NOTES

NOTES

DIVISION LOCATIONS

Farm King Division
301 Mountain Street S.
Morden, MB R6M 1X7
Ph.: (204) 822-4467
Fax: (204) 822-6348

Allied/Inland Division
1260 Clarence Avenue
Winnipeg, MB R3T 1T2
Ph.: (204) 284-6100
Fax: (204) 477-2325

B.I.I. Division
1330 43rd Street N.W.
Fargo, ND 58102
Ph: (701) 282-7014
Fax: (701) 282-5865

U.S. WAREHOUSES

AR, West Memphis
(870) 732-3132

GA, Stone Mountain
(770) 908-9439

ID, Meridian
(208) 887-6006

IN, Clarksville
(812) 284-3376

KS, Wichita
(316) 265-9577

MN, Lakeville
(952) 469-5267

MT, Billings
(406) 248-7771

ND, Bismarck
(701) 223-1886

ND, Fargo
(701) 282-7003

NE, Blair
(402) 426-8211

OH, Youngstown
(330) 793-0862

OR, Beaverton
(503) 641-1865

SD, Huron
(605) 352-8616

TX, Houston
(713) 928-2632

UT, Salt Lake City
(801) 972-4321

WI, Portage
(608) 742-1370

CANADIAN WAREHOUSES

B.C., Abbotsford
(604) 864-2665

AB, Edmonton
(780) 962-6991

SK, Regina
(306) 781-2300

ON, Woodstock
(519) 539-0435

QC, Dorion
(450) 455-4840

OFFSHORE WAREHOUSES

Burando Hill
Katanning
W. Australia
011-618-98-214422

Chihuahua, Mexico
011-52-158-90306

John Kerr Equipment Ltd.
Wilcoxholm Farm
Linlithgow, W. Lothian
Scotland
011-441-506-842280

Skovde, Sweden
011-46-500-452651

Naestved, Denmark
011-45-557-29511

bühler

Buhler Manufacturing

**301 Mountain Street S.
Morden MB.
R6M 1X7
Ph.: (204) 822-4467
Fax: (204) 822-6348
www.buhler.com**