

ORIGINAL

JUN 3 1988

OPERATOR'S MANUAL

With Parts List

72" FLAIL MOWER For G-4x4 Tractor

Product No. 70592
Serial No. 1601 and Up

Includes Options:
71061 Pneumatic Caster Wheel
71062 NOTAT Caster Wheel

WARNING: *If incorrectly used this machine can cause severe injury. Those who use and maintain the machine should be trained in its proper use, warned of its dangers, and should read the entire manual before attempting to set up, operate, adjust or service the machine.*

JACOBSEN **TEXTRON**

Jacobsen Division of Textron Inc.

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SAFE PRACTICES FOR RIDING VEHICLES

CAUTION

1. Keep all shields in place.
2. Before leaving operator's position:
 - a. Shift transmission to neutral
 - b. Set parking brake
 - c. Disengage attachment PTO
 - d. Shut off engine
 - e. Remove ignition key
3. Wait for all movement to stop before servicing machine.
4. Keep people and pets a safe distance away from machine.

1. Know the controls and how to stop quickly. **READ THE OPERATOR'S MANUAL.**
2. Do not allow children to operate the vehicle. Do not allow adults to operate it without proper instruction.
3. Do not carry passengers. Keep children and pets a safe distance away.
4. Clear the work area of objects which might be picked up and thrown. Always check overhead clearance and high voltage cables, especially when transporting.
5. Disengage all attachment clutches and shift into neutral before attempting to start the engine (motor). Always start engine when sitting in operator's seat, never while standing beside unit.
6. Disengage power to attachment(s) and stop the engine (motor) before leaving the operator's position.
7. Disengage power to attachment(s) and stop the engine (motor) before making any repairs or adjustments. Never carry out repairs or tighten hydraulic hoses or fittings when system is under pressure or when engine is running.
8. Disengage power to attachment(s) when transporting or not in use.
9. Take all possible precautions when leaving the vehicle unattended, such as disengaging the power take-off, lowering the attachment(s), shifting into neutral, setting the parking brake, stopping the engine, and removing the key.
10. Do not stop or start suddenly when going uphill or downhill. Mow up and down the face of steep slopes, never across the face.
11. Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes. Keep tractor in gear when going down steep slopes.
12. Stay alert for holes in the terrain and other hidden hazards.
13. Use care when pulling loads or using heavy equipment.
 - a. Use only approved drawbar hitch points.
 - b. Limit loads to those you can safely control.
 - c. Do not turn sharply. Use care when backing.
 - d. Use counterweight(s) when suggested.
14. Watch out for traffic when crossing or near roadways.

15. When using any attachments, never allow anyone near the vehicle while in operation.
16. Handle fuel with care - it is highly flammable.
 - a. Use approved container.
 - b. Never remove the cap of the fuel tank, or add fuel to a running or hot engine, or fill the tank indoors. Wipe up spilled fuel.
 - c. Always provide adequate ventilation when running engine (motor) indoors. Exhaust fumes are dangerous.
 - d. Never use fuel as a cleaner.
 - e. Do not smoke when handling fuel.
17. Keep the vehicle and attachments in good operating condition and keep safety devices in place.
18. Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition.
19. Never store the equipment with fuel in the tank inside a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.
20. To reduce fire hazard, keep the engine free of grass, leaves or excessive grease.
21. The vehicle and attachments should be stopped and inspected for damage after striking a foreign object and the damage should be repaired before restarting and operating the equipment.
22. Do not change the engine governor setting or over-speed the engine.
23. When using the tractor with mower, proceed as follows:
 - a. Mow only in daylight or in good artificial light.
 - b. Never make a cutting height adjustment while the engine (motor) is running if the operator must dismount to do so.
 - c. Check the blade mounting bolts for proper tightness at frequent intervals.
24. Know what is behind you before backing up.
25. Always comply with all state and local lighting and marking requirements when operating on public roads.
26. Follow the manufacturer's maintenance recommendations implicitly. See "Maintenance".
27. It is recommended that your machine be thoroughly inspected at least once a year by a competent serviceman.
28. Keep the machine and supply of fuel in locked storage to prevent children or others from playing or tampering with them. Always remove the ignition key when machine is stored. When machine is to be stored for an extended time, disconnect battery cables or remove the battery.
29. Use fresh, clean fuel only. If machine is to be stored for an extended period, drain the tank and empty the fuel storage container, either discarding the fuel in a safe place, or using it in other powered equipment for which it may be suited.
30. Do not attempt to fill fuel tank from fuel container unless the container spout or funnel fits **INSIDE** the fuel tank filler neck. The use of too large a spout or funnel, or no funnel, may result in spilled fuel, creating highly flammable vapors. This could result in fire and/or explosion, causing severe bodily injury.
31. Wear the proper clothing. Always wear relatively tight fitting clothing to avoid entanglement in moving parts. Wear sturdy, rough soled work shoes and safety glasses.

FOREWORD

This manual contains operating, maintenance, adjustment instructions and parts list for your Jacobsen Flail. Before you operate the machine, you and each operator you employ should read this manual carefully in its entirety. By following the operating and maintenance instructions, you will prolong the life of your mower and maintain its maximum efficiency.

If additional information is needed or should you require trained mechanic service, contact your Jacobsen Turf Equipment Distributor.

All Jacobsen Turf Equipment Distributors are kept informed of the latest methods of servicing and are equipped to provide prompt and efficient service in the field or at their service stations. They carry ample stocks of Jacobsen service parts or can secure them promptly for you from the factory. Use of other than original Jacobsen parts or Jacobsen authorized parts will void the warranty.

When ordering parts, always give the serial number and model of your machine, as well as the quantity, part number and description of the parts needed.

The mower serial number plate is located on the upper right side of the frame. We suggest you record these numbers below for ready reference.

HOW TO ORDER REPAIR PARTS

To eliminate error and speed delivery:

1. Write your NAME and ADDRESS on your order plainly.
2. Explain WHERE and HOW to make shipment.
3. Give PRODUCT NUMBER, NAME, and SERIAL NUMBER that is stamped on the NAME PLATE or SERIAL PLATE of your product.
4. Order by QUANTITY DESIRED, the PART NUMBER, and the DESCRIPTION OF PART.
5. Send your order to or visit your nearest AUTHORIZED JACOBSEN DISTRIBUTOR.
6. INSPECT ALL SHIPMENTS ON RECEIPT. If any parts are damaged or missing, file a claim with the carrier before accepting.
7. Do not return material to your AUTHORIZED JACOBSEN DISTRIBUTOR without a letter of explanation. Make a list of all returned parts, show your name and address, and include it with the shipment. TRANSPORTATION CHARGES MUST BE PREPAID.

CONTENTS

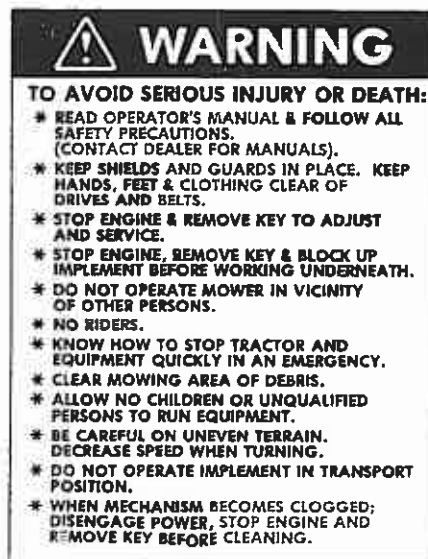
ADJUSTMENTS	7-8
CONTENTS	3
DECALS	4
FOREWORD	3
HOW TO ORDER REPAIR PARTS	3
LUBRICATION	9
MAINTENANCE	8-9
OPERATING INSTRUCTIONS	5-6
OPERATION	7
PARTS LISTS	12-14
SAFE PRACTICES FOR RIDING VEHICLES	2
SET-UP INSTRUCTIONS	5
SPECIFICATIONS	4
STORAGE	10
TROUBLE-SHOOTING	11

SPECIFICATIONS

Type Hitch	3-point Category I (Tractor front m. mt)	Width of Cut	72.73
Cutting Height	0" to 6" (infinitely variable)	Number of Blades	180 rock dodger type
Drive Train	ASAE Category II PTO, Right Angle 1:2 ratio Bevel Gearbox, Single "B" Section belt, springloaded idler	Weight	536 pounds
		Overall Length	32"
		Overall Width	84-7/8"
		Overall Height	32"
Rotor Shaft Speed at 740 (PTO Speed) . . .	2438 RPM (1779 RPM @ 540)	OPTIONS:	
Blade Tip Speed @ 740 (PTO Speed) . . .	8443 FPM (6161 FPM @ 540)	Pneumatic Caster	Product No. 71061
Rotor Rotation	Clockwise, viewed from left	Solid (NOTAT) Tires . . .	Product No. 71062
Height Control	Gauge wheels on front, 4 x 11.00 4-ply pneumatic tires or 4 x 12-1/2 NOTAT Carcass Tire, rear roller, and top link of 3 point hitch.	Thatching Blades	
Scalp Protection	Full width 4" O.D. ground roll with radius ends		

DECALS

DECALS ARE SHOWN AT 50% OF ORIGINAL SIZE



SET-UP INSTRUCTIONS

DEFINITION OF DIRECTIONS

Reference to "Right" and "Left" is from operator's position when seated in normal operating position. Reference to "Front" and "Back" is also from operator's position.

1. Remove mower, drive shaft and box of parts from crate; inspect all items for damage.

NUMBERS IN PARANTHESIS ARE ITEM NUMBERS AND REFER TO ILLUSTRATION 1.

2. Install 1/4" square by 1-5/8" long key (47) into input shaft on gearbox.
3. Slide PTO shaft (33) onto gearbox and secure with 3/8 x 2-1/2 hex head bolt (48), and 3/8 locknut (49) through hole in PTO yoke and gearbox input shaft.
4. Attach three-point hitch support arms (43) to gearbox mount using two 1/2 x 1-1/4 hex head bolts (50) with 1/2" lockwashers and 1/2" nuts.
5. Install PTO shield (40) between arms. Attach shield to arms with hex head bolts (44), lockwasher (45) and nuts (46).
6. Attach three-point hitch yoke arms to (42) main frame using two 1/2 x 1-1/4 hex head bolts (50), lockwashers (51), and nuts (52).

7. Attach support arms (43) to yoke arms (42) with one 1/2 x 3-1/2 hex head bolt (53), spacer (54), lockwasher and nut (51 & 52).

IMPORTANT

Before installing caster wheel arms (34) refer to adjustments section of this manual "Cutting Height Adjustment" and Figure 4.

8. Once cutting height has been determined, insert caster wheel arms (34) into mounting brackets and secure in desired position with bolt (37), lockwasher (38) and nut (39). Make certain both arms are secured at the same cutting height.

NOTE

The Flail was designed to be mounted on the front of the tractor.

9. Mount unit on front 3-point hitch of G-4x4 Tractor (See Maintenance Section). Attach top link and connect PTO.
10. Raise unit and install caster wheels (see options) using 1/2 inch spacers (55) to obtain the cutting height desired. Place remaining 1/2 inch spacers and 1/4 inch spacer (56) on top portion of spindle. Secure with lock pin (57).

OPERATING INSTRUCTIONS

The safe operation of this machine is the responsibility of the operator. The operator should be familiar with the mower and tractor and all safety practices before starting operation.

CAUTION

The controls will do only what they are intended to do. Study the instructions below and in your tractor Operator's Manual and learn to use them correctly. Keep hands and feet away from controls unless you intend to use them.

NUMBERS IN PARANTHESIS ARE REFERENCE NUMBERS TO FIGURE 1.

STANDARD HYDRAULIC LIFT LEVER (1)

The standard hydraulic lift lever is used to raise and lower front carrier frame. Push forward to lower and lock it in the float position. Pull backward to raise. The engine must be running to raise the carrier frame, but it can be lowered with engine off.

IMPORTANT

The carrier frame will not float when lift lever is in the neutral or mid position.

HAND THROTTLE (2)

The hand throttle should be used when a constant engine RPM and ground speed is desired. Pull lever backwards to increase engine speed, and push forward to decrease speed. When engaged, the hand throttle overrides the foot throttle to it's point of engagement.

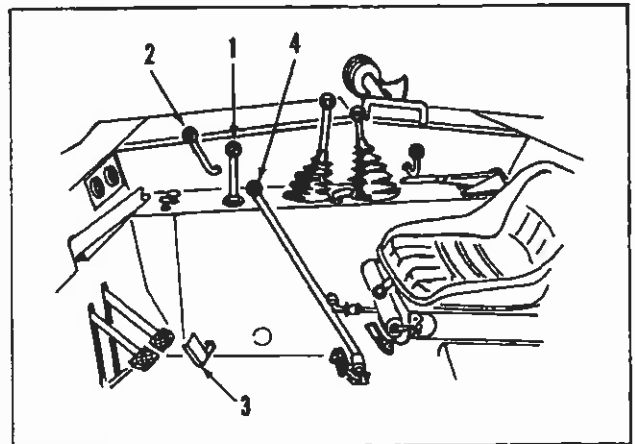


Figure 1

OPERATING INSTRUCTIONS

FOOT THROTTLE (3)

The foot throttle should be used when a variation in engine RPM and ground speed is desired. Depress pedal to increase engine speed. When foot throttle is used in conjunction with hand throttle, the foot throttle will not change engine speed unless it is depressed to the point that it exceeds the amount of engagement of the hand throttle. When foot throttle is released, the engine speed will decrease only to the point of engagement of the hand throttle.

POWER TAKE OFF (PTO) ENGAGEMENT LEVER (4)

The PTO engagement lever activates the PTO(s). Pull lever back until it rests in the notch or snaps overcenter to engage the PTO. To disengage, pull lever back and push out to clear the notch or push back overcenter and then return the lever to the forward position.



DANGER

To avoid possible serious bodily injury, make certain the implement is in the operating position and PTO drive line is securely attached before engaging the PTO lever. Always disengage the PTO lever when the implement mounted on the tractor is not being used.

BEFORE MOWING

Study the area to determine the best mowing procedure. Consider the height of the grass and the type of terrain (level, hilly, or rough), as well as the presence of rocks or trash.



WARNING

Pick up all rocks, stones, twigs and other debris you can find before mowing. Enter a new area cautiously. Cut grass higher than desired the first time so mower will clear unseen obstructions and will not cause scalping if ground is rough.

MOWING PATTERN

Plan the mowing pattern so you can mow straight forward as much as possible.

CUTTING HEIGHT

In most cases, the tractor speed and cutting height can be varied to provide a good finished cut. However, for extremely tall grass cut twice, first at a higher setting and then at the desired height. See Adjustment Section for cutting height adjustment.

OPERATING SPEED

The correct operating speed will depend on the height, density and type of grass to be cut, as well as the type of terrain. Slow down when turning, operating in tight areas, mowing on hillsides or over rough terrain, and when trimming with left side of mower deck.

IMPORTANT

Shift to low range for mowing or transporting up steep grades. Use high range for transporting only.



WARNING

If the mower should encounter an unseen obstruction or an emergency should arise, stop the tractor and place the PTO in the disengaged position immediately. To avoid possible serious bodily injury, before making any adjustments disengage PTO, lower the mower, stop engine, set parking brake and remove key from ignition switch.

HILLSIDE OPERATION AND HILL CLIMBING

1. Keep tires properly inflated. See Maintenance.
2. When driving up hills, shift into low range and maintain full engine speed.

IMPORTANT

Liquid Ballast can be added to tractor tires for added stability.



DANGER

In order to minimize the possibility of tipping, the least dangerous method of operating on hills and terraces is to travel up and down the slope (vertically) instead of along the side (horizontally). It is also advisable to avoid any unnecessary turns while operating on hills. Use extreme caution and travel at reduced speeds. Always lower implements to ground when descending slopes to reduce risk of tractor tipping.

Operators must use good judgement when operating on hillsides. They must consider the percent of slope and the condition of the turf (wet, firm, density, etc.). If tractor tends to slide while operating on an extreme hillside, change the angle of the tractor by turning slightly down hill until traction is regained.

When climbing an extreme grade and tires begin to "mark" the turf, grade is too steep for safe operation. Angle tractor into a less steep grade until tire marking stops. The percent of grade that the tractor will climb will vary with turf conditions.

OPERATION

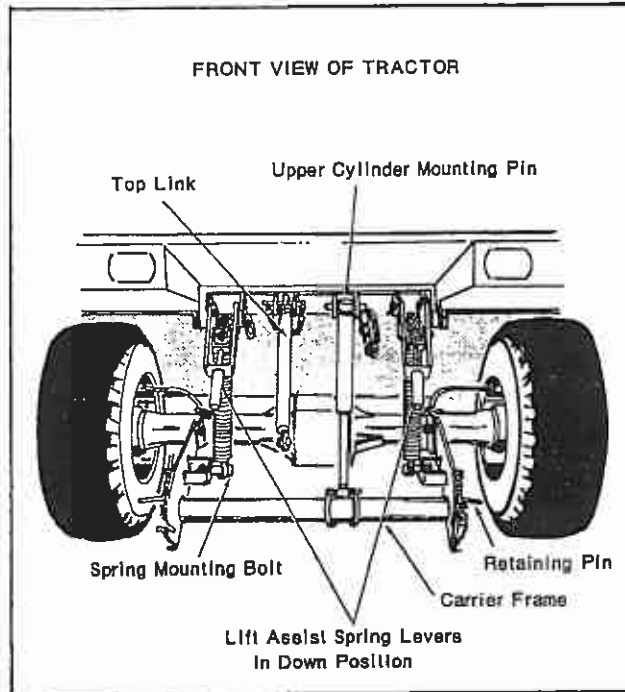


Figure 2

MOUNTING FRONT IMPLEMENTS (See Fig. 2)

1. Place front carrier frame in raised position, be sure lift assist spring levers are in down position.
2. Lock retaining pins in open position.
3. Lower front carrier frame.
4. Attach implement mounting pins to carrier frame hooks.
5. Secure implement to carrier by releasing retaining pins.
6. Assemble telescoping drive shaft on Flail Mower to front tractor PTO shaft. Depress quick release pin, align splines, and slide on yoke. Be sure quick release pin snaps into notch on PTO shaft.
7. Assemble and adjust top link.
8. Raise attachment to the full up position.
9. Adjust lift assist spring levers as instructed in Adjustments section.
10. To remove attachments, raise implement, disengage lift assist spring levers and then reverse Steps 1-8.

ADJUSTMENTS



WARNING

To avoid possible serious bodily injury, before making any adjustments and when removing foreign matter from mower disengage PTO, lower the mower, stop engine, set parking brake and remove key from ignition switch.

NOTE

For normal mowing, the Flail Mower does not rest on the rear roller. The roller is adjusted to be off the ground and used as an anti-scalp device. This results in better traction with less effort to push the flail mower.

CUTTING HEIGHT ADJUSTMENTS (See Figure 4)

IMPORTANT

Tire pressures must be kept the same on both sides of mower and tractor, or mower may cut unevenly. See Maintenance for proper tire pressure.

Use the lower set of holes if height of cut is to be from 4 inches to 6 inches; middle set if height of cut is to be 2 inches to 3.5 inches; and upper set if height of cut is to be 0 inches to 1.5 inches. (Pneumatic Tires)

The cutting height is adjusted from 0" to 6" (0 to 152mm) in 1/2" increments by repositioning the caster wheel arms and the spacers under the front caster wheel support hubs (See Figure 4). The top 3 point hitch link is adjusted to obtain heights of cut between the 1/2" increments.

The rear roller is used only to prevent scalping when cutting over uneven terrain. For example, when cutting at 2" (55mm), the roller may be bolted in roller bracket holes from 1 to 5 depending on the minimum height of cut desired.

DRIVE BELT TENSION (See Figure 3)

Periodically check that the idler pulley is keeping proper tension on the drive belt. To check tension, remove belt cover and measure the distance between the inside of spring hooks. The distance should be 6" (152mm). To adjust spring length, loosen bottom nut on adjustment stud and turn upper nut to obtain proper spring length. Then tighten bottom nut to lock stud in place and reassemble belt cover. Idler pulley stop bolt must be adjusted to within .12 to .18 of the idler arm.

ADJUSTMENTS

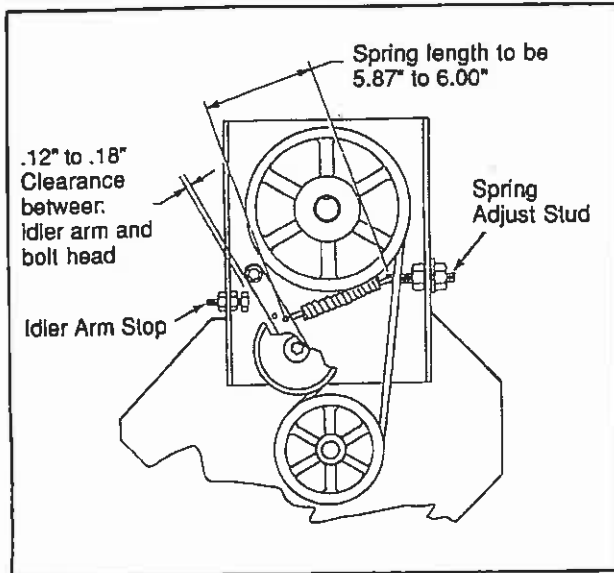


Figure 3

LIFT ASSIST SPRINGS

Adjust Lift Assist Springs to transfer as much of the mower weight as possible to the tractor to provide improved traction and reduce shock loads from rough terrain to the caster wheel arms. Properly adjusted lift springs will give a slow implement drop, smooth mowing operation and even cut over uneven terrain.

TOP LINK ADJUSTMENT

Adjust top link so that input shaft of gearbox is nearly parallel to the ground and parallel to the PTO output shaft on the tractor.

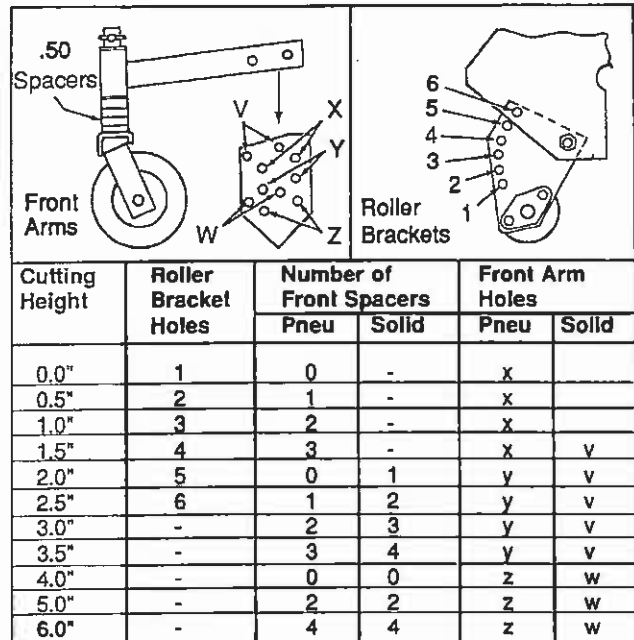


Figure 4

NOTE

The number in the chart under "front spacers" indicates the number of spacers to be located below the caster wheel hubs. The remaining spacers should be located above the hubs. There should always be a thin spacer washer on top of the hub.

MAINTENANCE



WARNING

To avoid possible serious bodily injury, before performing any maintenance disengage PTO lever, lower mower, stop engine, set parking brake and remove key from Ignition switch.

EXAMINING ROTOR SHACKLES AND FLAIL BLADES

Every 50 hours or whenever mower is removed from tractor turn it over and remove any debris that may be wound around the rotor. Also examine the shackles and flail blades to be sure they are in good operating condition. Running the flail with missing or damaged parts will cause severe vibration and damage to other components.

If the shackles or blades are worn, damaged or missing, replace as necessary. To replace blades or shackles, remove the mounting hardware and reassemble new parts as shown in Figure 5.

NOTE

Flail blades have two cutting edges and if only one side is used they may be reversed.

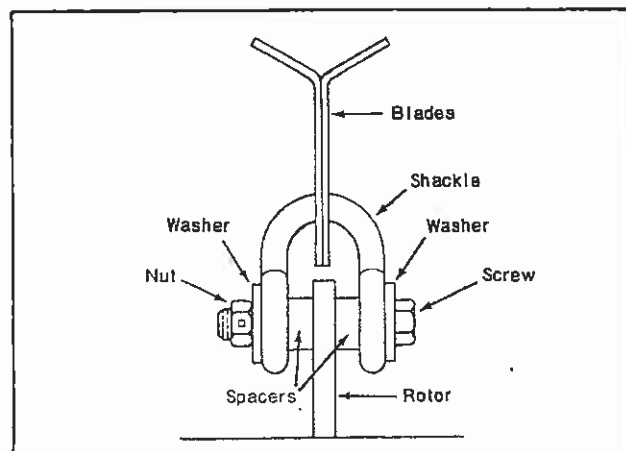


Figure 5

MAINTENANCE

REVERSIBLE ROTOR

If all the blades are worn on one side only the rotor can be removed, turned end for end and reassembled so new cutting edges can be used.

Use the Illustrations in the parts section as reference for the disassembly and assembly of parts. Always maintain relative position of parts when disassembling. Clean and lubricate individual parts and components as required.

TO REVERSE ROTOR

1. Remove mower from tractor and turn it over.
2. Remove belt cover, drive belt and rotor pulley from right side of housing.
3. Remove skid shoes and rotor bearing mounting bolts from both sides of housing. Remove bumper guard.
4. Slide rotor out of housing (bearings do not have to be removed), rotate rotor end for end and slide rotor back into housing.

IMPORTANT

Rotor must be centered in housing with bearing grease fitting on rotor pulley side facing bottom of housing and bearing grease fitting on opposite side facing top of housing.

5. Reassemble rotor and other parts by reversing Steps 1 thru 3.

BELT DRIVE REPLACEMENT

1. Remove belt cover (Item 23, Illust. 1)
2. Relieve idler spring tension by loosening nuts (18) holding stud (20) in place.
3. Remove belt.
4. Install new belt.
5. Adjust idler pulley belt tension as described in "Adjustments" section.
6. Replace belt cover.



DANGER

To avoid serious bodily injury and/or damage to tractor, be sure telescoping driveshaft is securely fastened to both tractor PTO shaft and mower gearbox before engaging tractor PTO.

TIRE MAINTENANCE

Attention to the following instructions and recommendations will help assure maximum use and service from your tires. Refer to the section in this manual headed "Storage" for recommendations on storing tires.

Keep all tires at the recommended pressure:
Tractor Tires 10 PSI (69 kPa)
Mower Caster Wheel Tires 22 PSI (154 kPa)

Check pressure once a month. Use an accurate, low pressure tire gauge with one pound per square inch graduations. It is particularly important that inflation pressures be kept the same on each side to prevent tilting of the tractor or mower which would result in uneven cut. Over inflation will cause loss of traction in soft soil or loose sand, and it may also result in hard riding qualities on uneven ground.

LUBRICATION

Lubricate the following points at the recommended intervals. Use semi-fluid chassis lubrication on all fittings Jacobsen Part No. 325889. Always clean the area around grease fittings before lubricating and wipe up excessive grease after lubricating.

1. Caster wheels, (2) grease fittings daily.
2. Caster wheel support arm hubs, (2) grease fittings, every 50 hours.
3. Lubricate idler pivot points with SAE 30 oil every 50 hours.
4. Jackshaft bearing, (1) grease fitting, every 200 hours.
5. Rotor bearings, (2) grease fittings, every 200 hours.
6. Roller bearings, (2) grease fittings, every 200 hours.

IMPORTANT

The rotor and roller bearings are self-aligning sealed bearings. Care should be taken not to over lubricate fittings as excessive grease pressure could break bearing seals.

7. Drive shafts, (3) grease fittings, every 50 hours.

GEARBOX

Position mower on a level surface and remove breather plug from top of gearbox and level plug from right side of gearbox. Fill through breather plug until lubricant is level with level plug and then replace plugs. Use 80/90 SAE gear lubricant.

STORAGE

WASHING THE MOWER

At the end of the mowing season, or if the mower is to be stored for any length of time, the following steps are recommended:

Wash off accumulated grass clippings and dust with spray from a garden hose. If necessary, a soft bristled scrub brush can be used to clean impacted areas.

A small stick can be used effectively to clean out corners under the hood.

Wipe the entire unit with a clean cloth to remove stains and oil spots. To prevent rusting, touch up spots where paint has been removed.

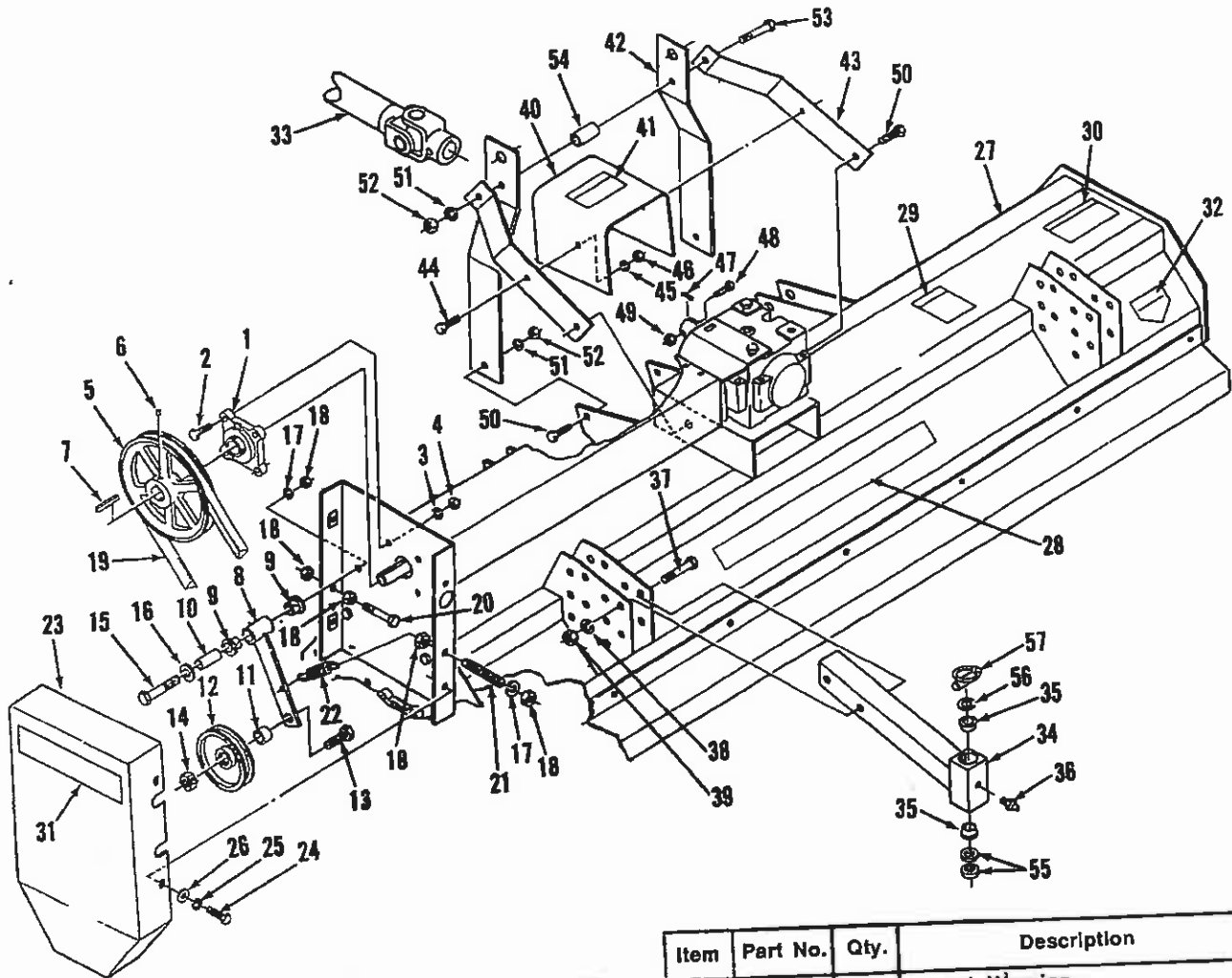
When the mower is completely dry, lubricate the mower as instructed under "Maintenance" section.

Before storing the mower, clean the tires thoroughly. Jack up the mower so that the load is off the tires if it is to be out of service over a long period of time. If it is not jacked up, check the tires at regular intervals and reinflate as necessary to keep them at the pressure recommended under "Tire Maintenance". Store the mower so that tires are protected from the sunlight.

TROUBLE-SHOOTING

PROBLEM	POSSIBLE CAUSE	POSSIBLE REMEDY	See Page
MACHINE VIBRATION (Vibration that is allowed to continue will destroy the mower in a short period of time).	Blades missing or not in proper location.	Replace missing blades. Check for proper location.	8
	Tractor top link not adjusted properly.	Readjust top link so that input shaft of gearbox is parallel with PTO shaft on tractor.	8
	Gearbox in need of maintenance.	Repair as required.	-
	PTO shaft in need of maintenance.	Repair as required.	-
	Loose hardware.	Tighten or replace as necessary.	-
	Bent rotor or bent end shafts.	Replace or straighten as required.	-
	Rotor bearings worn out.	Replace as required.	-
UNEVEN CUT	Blades dull or worn excessively.	Reverse rotor. Sharpen or replace blades.	8
	Tractor PTO speed not maintained.	Operate as 540 to 740 R.P.M.	-
	Too much lift spring tension.	Reduce spring tension.	8
	Ground speed too fast.	Reduce ground speed and increase rotor speed not to exceed 740 R.P.M. at the PTO.	-
	Tractor top link not adjusted properly.	Readjust top link so that input shaft of gearbox is parallel with PTO shaft on tractor.	8
	Extremely tall material.	Cut over area twice.	-
	Tractor PTO belts slipping. Flail drive belt slipping.	Adjust PTO belts to proper tension. Adjust spring tension on idler.	7
CUTTING HEIGHT TOO SHORT (SCALPING) OR TOO LONG	Gauge roller not adjusted properly.	Readjust gauge roller.	7
	Tractor top link not adjusted properly.	Readjust top link so that input shaft of gearbox is parallel with PTO shaft on tractor.	8
	Caster wheels not adjusted properly.	Readjust caster wheels.	8
EXCESSIVE NOISE	Blades making contact with housing.	Inspect for contact and fix as required.	-
	Wire or other foreign material wrapped around rotor.	Remove debris from rotor.	-
	Tractor top link not adjusted properly.	Readjust top link so that input shaft of gearbox is parallel with PTO shaft on tractor.	-
	Rotor bearings worn out.	Repair as necessary.	-
	Gearbox in need of maintenance.	Repair as necessary.	-
SLOW LIFT	Lift assist springs not adjusted properly.	Increase spring tension to provide maximum floatation.	-
	Tractor hydraulic problem.	Check tractor pump, valve, lines and cylinder.	-
MACHINE BOUNCES SEVERELY ON ROUGH TERRAIN.	Lift assist springs not adjusted properly.	Increase spring tension of lift springs to transfer more weight to the tractor.	8
	NOTAT caster wheel tires too hard for application.	Replace with Pneumatic.	-
	Gauge roller not adjusted properly.	Readjust gauge roller.	-
	Travel speed too fast.	Reduce travel speed.	-
	Loose hardware on mower or tractor 3 pt. hitch.	Tighten or replace as necessary.	-

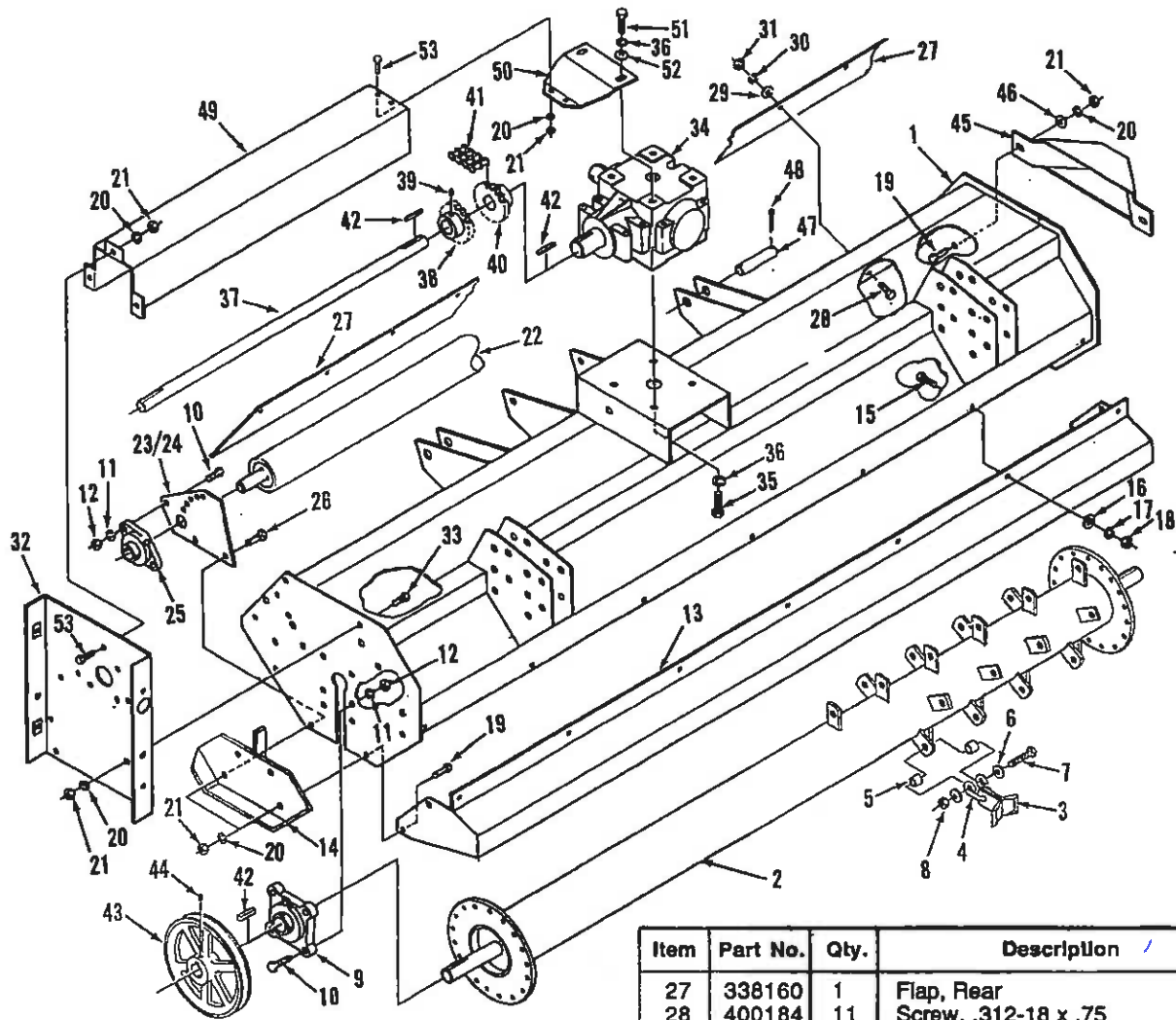
ILLUSTRATION 1



Item	Part No.	Qty.	Description
1	362229	1	Bearing
2	400336	4	Screw, .437-14 x 1.25 Hex Hd
3	446148	4	Lockwasher, .437 Hvy
4	443114	4	Nut, .437-14 Hex
5	163326	1	Pulley (Incl. Item 6)
6	438009	1	Set Screw
7	315307	1	Key .25 x .25 x 1.62
8	162882	1	Idler Arm Ass'y
9	375816	2	Bushing
10	362244	1	Spacer, Idler
11	453020	7	Washer, .625 Flat
12	338162	1	Idler Pulley
13	400618	1	Screw, .625-11 x 2.25 Hex Hd
14	444752	1	Nut, .625-11 Hex Loc
15	400418	1	Screw, .500-13 x 3.00 Hex Hd
16	453017	1	Washer, .500 Flat
17	446154	1	Lockwasher, .500 Hvy
18	443118	1	Nut, .500-13 Hex
19	338157	1	Belt, Drive
20	400412	1	Screw, .500-13 x 2.00 Hex Hd
21	362246	1	Stud - Spring Adj.
22	363597	1	Spring, Belt Tension
23	390649	1	Cover, Belt
24	400182	4	Screw, .312-18 x .62
25	446136	4	Lockwasher, .312 Hvy
26	453009	4	Washer, .312 Flat
27	338163	1	Decal, Height Adj.
28	366943	1	Decal, Jacobsen 24"

Item	Part No.	Qty.	Description
29	338139	1	Decal, Warning
30	338165	1	Decal, Danger
31	336939	1	Decal, Jacobsen 7"
32	339460	2	Decal, CPSC Warning
33	131740	1	PTO Shaft Ass'y
34	131725	2	Caster Wheel Arm Ass'y
35	363539	4	Bushing
36	471214	2	Grease Fitting
37	400626	4	Screw, .625-11 x 3.50 Hex Hd
38	446166	4	Lockwasher, .625 Hvy
39	443126	4	Nut, .625-11 Hex
40	131753	1	Shield, PTO Shaft
41	338164	1	Decal, Danger
42	363595	2	Bracket, 3 Point
43	363596	2	Plate
44	400260	2	Screw, .375-16 x .87 Hex Hd
45	446142	2	Lockwasher, .375 Hvy
46	443110	2	Nut, .375-16 Hex
47	315307	1	Key, .250 Sq x 1.62
48	400274	1	Screw, .375-16 x 2.50 Hex Hd
49	444762	1	Nut, .375-16 Hex Loc
50	400406	4	Screw, .500-13 x 1.25 Hex Hd
51	446154	5	Lockwasher, .500 Hvy
52	443118	5	Nut, .500-13 Hex
53	400422	1	Screw, .500-13 x 4.00 Hex Hd
54	363604	1	Spacer, Top Link
55	363537	8	Spacer, Height Adj
56	363538	2	Spacer, Caster Wheel
57	361391	2	Pin-Quirk Release

ILLUSTRATION 2



Item	Part No.	Qty.	Description
1	503156	1	Frame Ass'y
2	116687	1	Rotor Ass'y
3	337599	180	Blade
4	362226	90	Shackle
5	362227	180	Spacer
6	452006	180	Washer .312 Flat
7	400234	90	Screw .312-24 x 2.00 Hex Hd
8	444754	90	Nut .312-24 Hex Lock
9	362229	2	Bearing
10	400336	12	Screw .437-14 x 1.25 Hex Hd
11	446148	12	Lockwasher .437 Hvy
12	443114	12	Nut .437-14 Hex
13	131724	1	Shield Ass'y
14	131407	2	Skid Ass'y
15	400194	7	Screw .312-18 x 1.75 Hex Hd
16	363695	7	Washer, Flat
17	446136	7	Lockwasher .312 Hvy
18	443106	7	Nut .312-18 Hex
19	400262	10	Screw .375-16 x 1.00 Hex Hd
20	446142	23	Lockwasher .375 Hvy
21	443110	23	Nut .375-16 Hex
22	363590	1	Roller Tube
23	162888	1	Roller Plate Ass'y R.H.
24	162887	1	Roller Plate Ass'y L.H.
25	362230	2	Bearing
26	400260	4	Screw .375-16 x .87 Hex Hd

Item	Part No.	Qty.	Description
27	338160	1	Flap, Rear
28	400184	11	Screw .312-18 x .75
29	452006	11	Washer .312 Flat
30	446136	11	Lockwasher .312-
31	443106	11	Nut .312-18 Hex
32	163326	1	Drive Bearing Plate Ass'y
33	400258	4	Screw .375-16 x .75 Hex Hd
34	116688	1	Gear Box
35	400406	4	Screw .50-13 x 1.25 Hex Hd
36	446154	6	Lockwasher .50 Hvy
37	363601	1	Shaft Drive
38	363600	1	Sprocket (Incl. Item 39)
39	438009	2	Set Screw
40	363605	1	Sprocket (Incl. Item 39)
41	363602	1	Chain Coupler
42	315307	3	Key .25 x .25 x 1.62
43	163324	1	Pulley (Incl. Item 44)
44	438009	1	Set Screw
45	163328	1	Bumper Guard
46	453011	2	Washer .375 Flat
47	363592	2	Pin - Lift
48	460050	4	Cotter Pin .188 x 1.25
49	390652	1	Shield - Drive Shaft
50	363607	1	Bracket - Shield
51	400400	2	Screw .500-13 x .75 Hex Hd
52	453017	2	Washer .500 Flat
53	400258	5	Screw .375-16 x .75 Hex

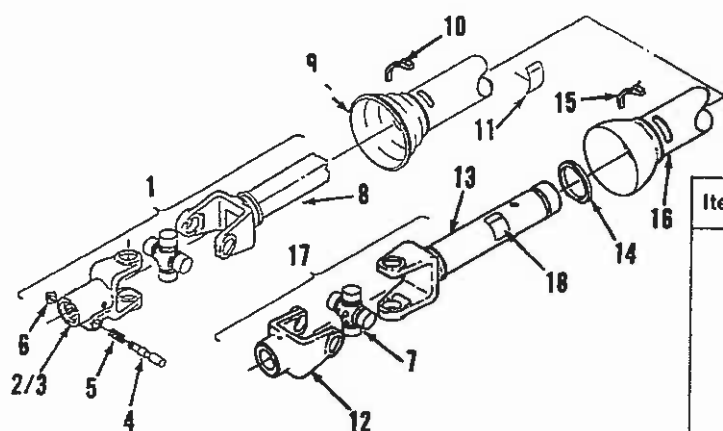
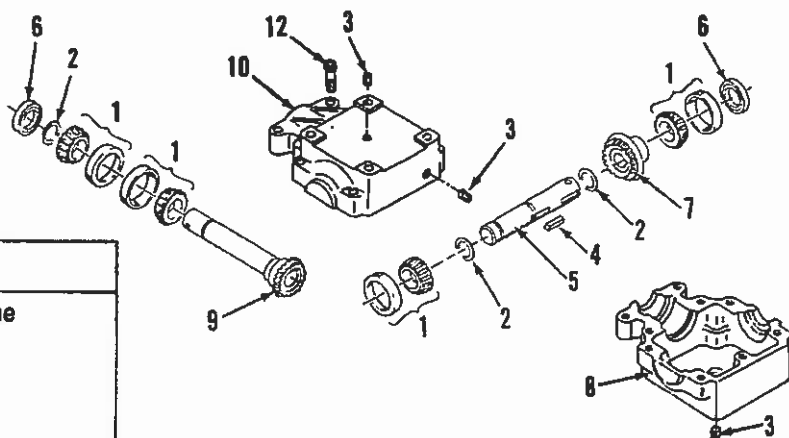


ILLUSTRATION 3

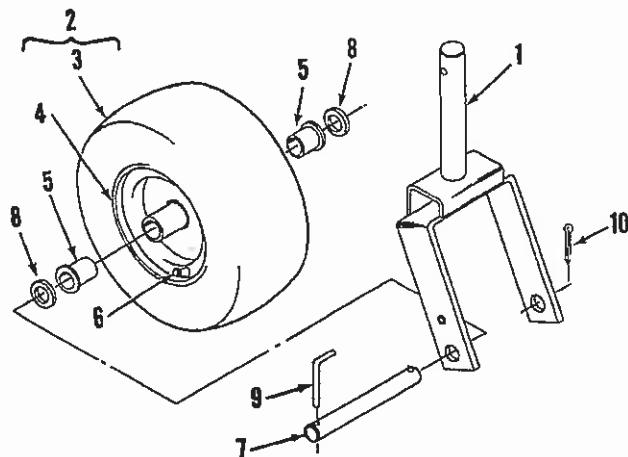
Item	Part No.	Qty.	Description
1	551745	1	PTO Tractor half Includes 2 thru 10
2	503119	1	Yoke, Tractor end, Complete Includes Items 3 thru 6
3	551741	1	Yoke Only
4	551742	1	Q.D. Pin
5	551743	1	Spring
6	551744	1	"X" Washer
7	503120	2	Journal Ass'y
8	503121	1	Yoke and Shaft
9	552823	1	Outer Shield
10	551751	3	Nylon Bearing
11	551758	1	Decal
12	551740	1	Yoke, Implement End
13	503122	1	Yoke, Tube and Sleeve
14	551750	1	Sleeve Bearing
15	551749	3	Nylon Bearing
16	551748	1	Inner Shield
17	551746	1	PTO, Implement half includes Items 7 & 12 thru 16
18	551757	1	Decal

ILLUSTRATION 4



Item	Part No.	Qty.	Description
1	503117	4	Bearing - Cup and Cone
2	551738	3	Retaining Ring, 1.25"
3	472309	2	Plug, .50 Hex
4	306968	1	Key, .25 x .94 to 1.20"
5	551737	1	Shaft, Cross
6	551736	2	Seal, 1.25"
7	551735	1	Gear, 30T, 2:1 Ratio
8	551734	1	Housing without Port
9	551733	1	Shaft w/gear pinion
10	551732	1	Housing with Port
11	551731	9	Bolt, .375-16 x 2.25 Socket Hd
12	551730	1	Plug, Vented

PNEUMATIC CASTER WHEEL
Product No. 71062



Item	Part No.	Qty.	Description
1	131717	1	Caster Wheel Spindle
2	122323	1	Wheel & Tire Ass'y incl. Items 3 thru 6
3	550346	1	Tire 11 x 4.00"
4	550347	1	Rim
5	549635	2	Bushing
6	341680	1	Air Stem
7	362241	1	Shaft, Caster Wheel
8	453022	2	Washer, 3/4", Flat
9	351494	1	Pin, Anti-Rotation
10	460050	1	Pin, Cotter, 3/16" x 1-1/4"

NOTAT CASTER WHEELS
Product No. 71062

Item	Part No.	Qty.	Description
1	131727	2	Caster Wheel Spindle
2	131726	2	Wheel and Tire Ass'y
3	549635	4	Bearing
4	362241	2	Shaft
5	453022	4	Washer, 3/4 Flat
6	351494	2	Pin, Anti-Rotation
7	460050	2	Pin, Cotter, 3/16 x 1-1/4

