



ROTARY MOWER

Models MD448, MD460, MD472

Starting Serial No. 1001

Owner/Operator's Manual & Illustrated Parts List



CAUTION

Avoid injuries. Read and understand Operator's manual
before operating tractor or equipment.
It contains instructions for safe operation.



CAUTION

- READ AND UNDERSTAND OPERATORS MANUAL BEFORE OPERATING OR SERVICING.
- OBEY ALL SAFETY INSTRUCTIONS. FAILURE TO DO SO MAY RESULT IN INJURY TO YOU OR OTHERS.
- BE SURE MACHINE IS IN SAFE OPERATING CONDITION BEFORE USE.
- INSPECT MACHINE DAILY. REPLACE ALL WORN OR DAMAGED PARTS.
- KEEP ALL GUARDS AND SHIELDS IN PLACE.
- CHECK OPERATION OF ALL SAFETY INTERLOCK SWITCHES DAILY.
- DO NOT OVERRIDE INTERLOCK SYSTEM, IT IS FOR YOUR PROTECTION.
- DO NOT ALLOW MINORS OR THE INEXPERIENCED TO OPERATE MACHINE.
- KEEP PEOPLE AND PETS A SAFE DISTANCE AWAY FROM MACHINE USING POWER DRIVEN ATTACHMENTS. INJURY COULD RESULT FROM FLYING DEBRIS.

Date of Purchase: Month _____ Day _____ Year _____

Dealer Name _____ Phone _____

Serial Number _____

Model Number _____

ALWAYS GIVE MODEL AND SERIAL NUMBER WHEN ORDERING SERVICE PARTS

STEINER
TEXTRON

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TABLE OF CONTENTS

INTRODUCTION	SECTION 1	page
Description		1-1
Specifications		1-1
SAFETY	SECTION 2	
General Safety		2-1
Operator Safety		2-1
INSTALLATION INSTRUCTIONS	SECTION 3	
Installation Instructions		3-1
OPERATION	SECTION 4	
Operating Precautions		4-1
Operating Instructions		4-1
SERVICE	SECTION 5	
Maintenance Schedule		5-1
Adjustments		5-1
Drive Belt.		5-2
PARTS	SECTION 6	
Parts List and Illustrations Index.		6-1
ASSEMBLY INSTRUCTIONS	SECTION 7	
Assembly Instructions		7-1
Warranty		last page

Description

A full-floating rotary mower deck is designed to fit all Steiner power units with the quick hitch front lift. Three sizes match the power unit to the application. These decks are easy to attach and detach allowing interchange with the many other front mounted attachments. The side discharge rotary mower provides even distribution of clippings while the full-floating deck follows the contours of the terrain for an even cut with cutting height controlled by the front caster wheels and full width rear roller. The deck can be safely serviced and cleaned while still attached to the tractor. Convenient handles enable the deck to be lifted vertically over 90 degrees so the blades are fully exposed. Exceptional visibility and maneuvering is possible with this front mounted design mower.



NOTE:
The flip-up deck feature was added beginning with the following Serial Numbers;

MD448 - (S/N 1494)
MD460 - (S/N 4728)
MD472 - (S/N 1970)

Specifications

	MD448	MD460	MD472
Overall Width with Discharge Chute	60-1/2"	73"	85"
Overall Height	19"	19"	19"
Overall Length	49-1/2"	48-3/4"	55"
Cutting Width	47"	59-3/8"	72"
Cutting Height	1" to 4-1/2"	1" to 4-1/2"	1" to 4"
Blades	3 - 16-1/4"blades	3 - 20-1/2"blades	3 - 24-3/4" blades
Weight	330 lbs.	360 lbs.	470 lbs.



BE ALERT!

ATTENTION:

This symbol identifies potential health and safety hazards. It marks safety precautions. Your safety and the safety of others is involved.

SIGNAL WORD DEFINITIONS



Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme cases.



Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury and/or property damage. It may also be used to alert against unsafe practices.

GENERAL SAFETY

Read and understand the owner's manual, before attempting to operate this machine.

Operate all controls from the operator's seat, (if so equipped). NO RIDERS.

Keep all shields in place and safety switches adjusted properly.

Do not leave equipment unattended. Park on a level surface, set parking brake, STOP the engine and remove the key.

Do not allow minors or the inexperienced to operate this machine.

Keep people and pets a safe distance away from machines using power driven attachments. Injury could result from flying debris.

Do not attempt to work on unit or any attachments with engine running!

Wear all the necessary protective clothing and personal safety devices to protect your head, eyes, ears, hands and feet. Operate the machine only in daylight or in good artificial light.

IMPORTANT

Safe Operation Practices for Mowers

WARNING

This cutting machine is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

I General operation

- Read, understand, and follow all instructions in the manual and on the machine before starting.
- Only allow responsible adults, who are familiar with the instructions, to operate the machine.
- Clear the area of objects such as rocks, toys, wire, etc., which could be picked up and thrown by the blade.
- Be sure the area is clear of other people before mowing. Stop the machine if anyone enters the area.
- Never carry passengers.
- Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backing.
- Be aware of the mower discharge direction and do not point it at anyone. Do not operate the mower without the discharge chute in place.
- Slow down before turning.
- Never leave a running machine unattended. Always turn off blades, set parking brake, stop engine, and remove keys before dismounting.
- Turn off blades when not mowing.
- Stop engine before unclogging discharge chute.
- Mow only in good light, keeping away from holes and hidden hazards.

- Do not operate the machine while under the influence of alcohol or drugs.
- Watch for traffic when operating near or crossing roadways.
- Use extra care when loading or unloading the machine into a trailer or truck.
- Always wear safety goggles or safety glasses with side shields when operating mower.

II Slope operation

WARNING

Slopes are a major factor related to loss-of-control and tip-over accidents, which can result in severe injury or death. All slopes require extra caution. If you feel uneasy on it, do not mow it.

DO:

- Mow up and down slopes, not across.
- Remove obstacles such as rocks, tree limbs, etc.
- Watch for holes, ruts, or bumps. Uneven terrain could overturn the machine. Tall grass can hide obstacles.
- Use slow speed on slopes.
- Follow the manufacturers recommendations for wheel weights or counterweights to improve stability.
- Use extra care with grass catchers or other attachments. These can change the stability of the machine.
- Keep all movement on the slope slow and gradual. Do not make sudden changes in speed or direction.
- Avoid stopping or starting on a slope. If tires lose traction, disengage the blades and proceed slowly straight down the slope.

DO NOT:

- Do not turn on slopes unless necessary, and then, turn slowly and gradually downhill, if possible.
- Do not mow drop-offs, ditches, or embankments. The mower could suddenly turn over if a wheel is over the edge of a cliff or ditch, or if an edge caves in.
- Do not mow on wet grass. Reduced traction could cause sliding.
- Do not try to stabilize the machine by putting your foot on the ground.
- Do not use grass catcher on steep slopes.

III Children

Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the machine and the mowing activity. Never assume that children will remain where you last saw them.

- Keep children out of the mowing area and under the watchful eye of another responsible adult.
- Be alert and turn machine off if children enter the area.
- Before and when backing, look behind and down for small children.
- Never carry children as passengers, even with the blades off. They may suddenly fall off and be seriously injured or interfere with safe machine operation.
- Never allow children to operate the machine.
- Use extra care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.

IV Service

- Use extra care in handling gasoline and other fuels. They are flammable and the vapors are explosive.
 - Use only an approved container.
 - Never remove gas cap or add fuel with engine running. Allow engine to cool before refueling.
 - Do not smoke.
 - Never add or drain fuel with machine indoors.
 - Never store the machine or fuel container inside where there is an open flame, such as in a water heater.
- Never run the machine in a closed area.
- Keep nuts and bolts, especially blade attachment bolts, tight and keep equipment in good condition.
- Never tamper with safety devices. Check their proper operation regularly.
- Keep machine free of grass, leaves, and other debris build-up. Clean up oil or fuel spillage. Allow machine to cool before storing.
- Stop and inspect the equipment if you strike an object. Repair, if necessary, before restarting.
- Never make adjustments or repairs with the engine running.
- Discharge chute components are subject to wear, damage, and deterioration, which could expose moving parts or allow objects to be thrown. Frequently check components and replace with manufacturer's recommended parts, when necessary.
- Mower blades are sharp and can cut. Wrap the blade(s) or wear gloves, and use extra caution when servicing them.
- Check brake operation frequently (if equipped). Adjust and service as required.

MOWER DECK SAFETY DECALS**Location:**

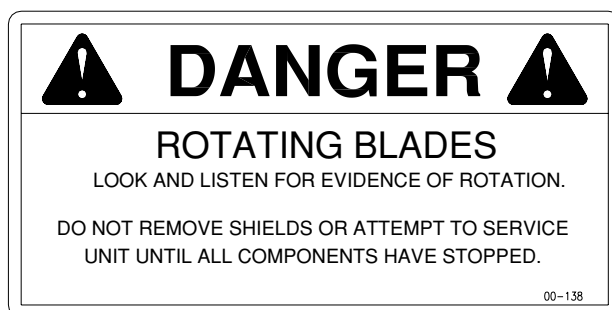
On mower deck, front center.

**Location:**

On mower deck and discharge chute.

**Location:**

On mower deck top front center and both sides.

**Location:**

On mower deck top shield.

ATTACHING MOWER TO TRACTOR:

- Operate latch control to open hitch latches.
- Drive tractor into position aligning the quick hitch.
- Be sure both latches engage fully and are placed in the locked position.
- **Stop engine!** Do not attempt to install drive belt with engine running.
- Release idler assembly to facilitate easy installation of the drive belt.
- Put belt over drive pulleys and engage or adjust idler assembly.
(See Power Unit Operator's Manual for PTO belt tension adjustments.)
- Set mower to desired cutting height.
- Start engine and engage PTO slowly to prevent shock load on mower components.
- Mow with front lift lever in "FLOAT" position only.

REAR WEIGHT REQUIREMENTS

The table of requirements for rear weights is based upon average mowing conditions and operator's weight of 150 lbs. The recommendations may vary with the weight of the operator, other accessories, and the mowing conditions. It is the operator's responsibility to determine the correct amount of weight needed to improve stability. All weights must be removed when the mower is removed. (See Caution in Power Unit Operator's manual.)

Power Unit Model	48" Deck	60" Deck	72" deck
220 / 230	0 weights	0 weights	2 weights
410	2 weights	4 weights	This deck is not recommended.
420/430	2 weights	4 weights	5 weights
425	2 weights	2 weights	4 weights
525	0 weights	0 weights	0 weights

Operating Precautions



Observe all safety decals.

Keep all shields in place. Do not operate mower with discharge chute removed.

Do not operate mower with other persons in the area. Irregularities in ground surface can permit foreign material to be propelled from beneath deck to cause serious injury or death.

Before leaving tractor, stop on a level surface, move Forward - Reverse control to neutral position, disengage PTO, set parking brake, lower mower deck and stop engine.

Remove key from ignition if maintenance procedures are to be performed or tractor is to be left unattended.

Operating Instructions

- Do not operate mower with discharge chute removed.
- Mow with front lift lever in "FLOAT" position only.
- Engage PTO slowly at low engine r.p.m.
- Mower is designed to operate at full throttle for mowing heavy turf, but 3/4 throttle is adequate for average conditions. Set mower blade speed with throttle and control ground speed with Forward - Reverse control.
- Use extreme caution when operating on hills. Mow up and down whenever possible.
- See Section 3 for weight recommendations.

Setting Mower Cutting Height

- Lift mower deck off the ground and shut off tractor engine.
- Remove clevis pin from height adjustment link. See photo 1.
- Raise or lower deck to desired height.
- Replace clevis into height adjustment link.

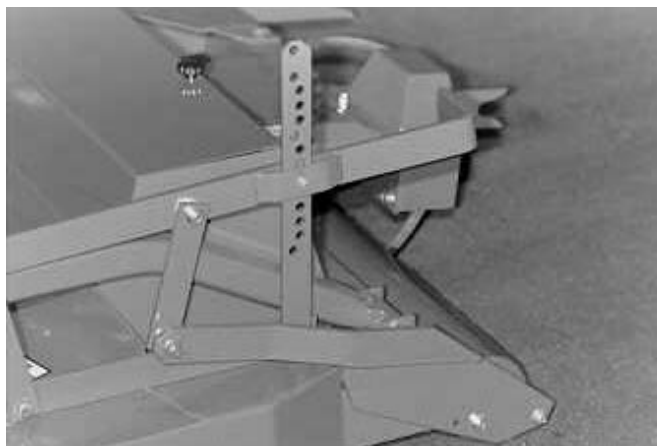


Photo 1

MAINTENANCE

Daily maintenance:

Visual inspection for loose parts and accumulation of grass and dirt.

Clean accumulation of grass clippings from beneath deck daily for better mowing performance.

Keep blades sharp. Check the tips of the blades for wear.

25 hour maintenance:

In addition to daily maintenance, grease roller and all bearings.

Spindle housings must be kept full of grease. Grease spindles until grease "shows" at the relief hole under the spindle drive pulley. *NOTE: The relief hole is under the spindle hub and is not visible. As grease enters the spindle housing you can hear the sound of escaping air at the relief hole. Stop greasing when the sound of escaping air ceases.*

Check drive belt tension. See Drive Belt Installation on page 5-2.

Check 1/4" cap screws on pulley bushings. Torque should be 95 inch pounds. Tighten these cap screws in alternating sequence 10-12 times to assure equal torque on all cap screws.

Check blade bolts. Torque should be 75-85 foot pounds.

Annual Maintenance:

In addition to daily and 25 hour maintenance, remove the drive belt and check for cracks or wear. Rotate each spindle to check for roughness which would indicate bearing wear. Remove and sharpen blades, clean and wash deck prior to storage. The acid in grass clippings causes premature corrosion and rusting of mower parts.

Grease all bearings after washing.

ADJUSTMENTS

Sharpening blades

Be careful while sharpening blades that the corners of the blade do not become rounded at the tips. This reduces the blades overlap and will cause skipping. While sharpening, it is essential to ensure the balance of the blades is maintained to prevent vibration. Blade bolt torque should be 75-85 foot pounds. Rotate blades after re-installing to check for bent or bowed blades and blade alignment.

Blade alignment

When installing sharpened blades or new blades be sure the mating surfaces are clean and the retaining washer is not bent. Check for bent blades by rotating blades until tips are near each other. (It is easier to do this with main drive belt idler spring unhooked.)

Leveling mower deck

The front to rear leveling adjustment is provided by two slots in the linkage which supports the front of the deck. This allows each side to be adjusted independently. Check the blade level with mower resting on a level floor and the cutting height set at about 2-1/2" setting. Measure to the tip of the left blade at the rear, then rotate the blade 180 degrees and measure again to the tip of the blade at the front. The cutting height should be equal or 1/16" lower at the front. Change adjustment in the left slot as required and measure again until proper setting is reached. Repeat procedure for blade at right end of the deck and adjust right slot.

CHANGING MAIN DRIVE BELT

To Remove Belt:

1. **Serial Numbers (MD448=1001-1493, MD460=1001-4727, MD472=1001-1969)**
Remove top shield and the bolts which fasten the hitch arms to the deck brackets. No further disassembly is necessary.
- Serial Numbers (MD448=1494 & Up, MD460=4728 & Up, MD472=1970 & Up)**
Remove the six $\frac{1}{4} \times \frac{3}{4}$ bolts from the flip-up braces and remove the pivot stop pin and the idler spring. Remove the braces.
2. With the idler spring released, move the idler toward the drive shaft.
3. Slip belt off the outer spindle pulleys.
4. Slip belt off the front center idler and spindle.
5. Remove belt.

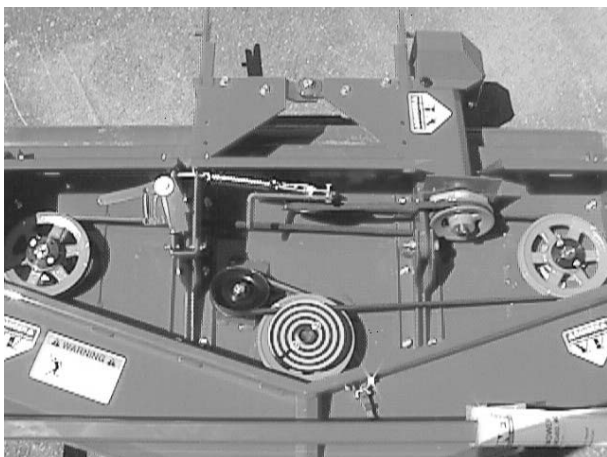


Photo 2

To Install Belt:

1. Form loop for drive pulley and idler pulley as shown. (Photos 2 & 3)
2. Slip loop over drive pulley on left hitch arm. (Photos 2 & 3)
3. Form a loop around the center spindle pulley and fixed idler pulley. (Photos 2 & 3)
4. Position belt on the outer spindle pulleys. (Photos 2 & 3)
5. **Serial Numbers (MD448=1001-1493, MD460=1001-4727, MD472=1001-1969)**
Re-install hitch arms and bushings in place .

Serial Numbers (MD448=1494 & Up, MD460=4728 & Up, MD472=1970 & Up)
Re-install hitch arms and pivot braces. Torque $\frac{1}{2}$ " attaching bolts to 85 foot pounds. (Photos 2 & 3)

6. Hook idler spring in place.
Serial Numbers (MD448=1001-1493, MD460=1001-4727, MD472=1001-1969)
Choose chain link that stretches spring to an overall length of 8-9 inches.

Serial Numbers (MD448=1494 & Up, MD460=4728 & Up, MD472=1970 & Up)
Choose chain link which stretches spring approximately one inch on MD460 or 1-1/2" on MD448 & MD472.

7. Re-install top shield.

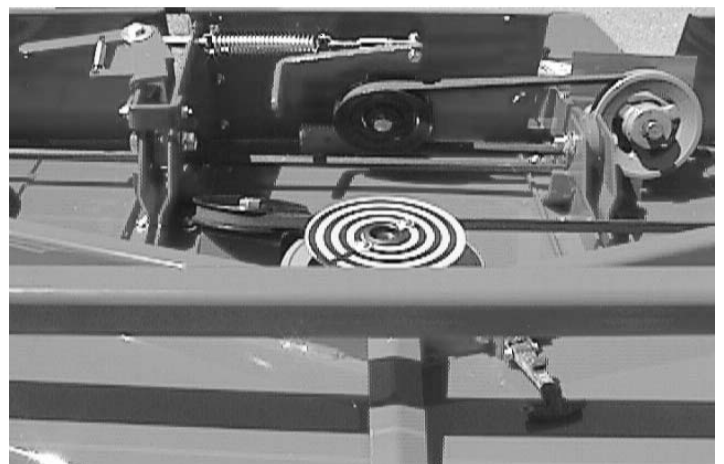


Photo 3

USING THE FLIP-UP OPTION ON THE MD448, MD460 AND MD472 ROTARY MOWERS

1. Stop on a level surface, set parking brake and shut off the tractor.
2. Lift the deck.
3. Remove the top deck shield and set aside.
4. Standing at the front of the deck, pull the handle on the idler arm so the belt comes loose.
5. Remove the belt from the drive pulley.
6. Remove the presto pin and slide pin from holes.
7. Grasp the handles and lift the deck up and back until you hear a click. This indicates that the latch has engaged.
8. Lower the deck until the roller touches the ground. This gives stability when working on the deck.
9. Complete your work under the deck.
10. Start the tractor and lift the deck again. Shut off the tractor.
11. Grasp the handles at the front of the deck. Push the deck back slightly and release the catch.
12. Pull the deck forward and down, keeping a firm grip on the handles.
13. Lower the deck to the ground.
14. Replace the pin and clip in the hole above the lift arm.
15. Grasp the idler arm handle again and pull to stretch the spring. Place the belt onto the drive pulley.
16. Make sure the belt is around all pulleys. Release the idler arm.
17. Replace the top shield and secure with the rubber latches.
18. Moving the power unit with the deck in the flipped up position is not recommended. Serious injury and or damage could result.

PARTS INDEX

GROUP	FIGURE	PAGE
Deck Parts		
Model MD448	Figure 1	6-2
Model MD460	Figure 1A.	6-4
Model MD472	Figure 1B.	6-6
Frame Parts		
Model MD448	Figure 2	6-8
Model MD460	Figure 2A.	6-10
Model MD472	Figure 2B.	6-12
Hitch and Drive Parts	Figure 3	6-14
Spindle Parts	Figure 4	6-16
Flip-Up Decks.	Figure 5	6-18
Warranty		last page

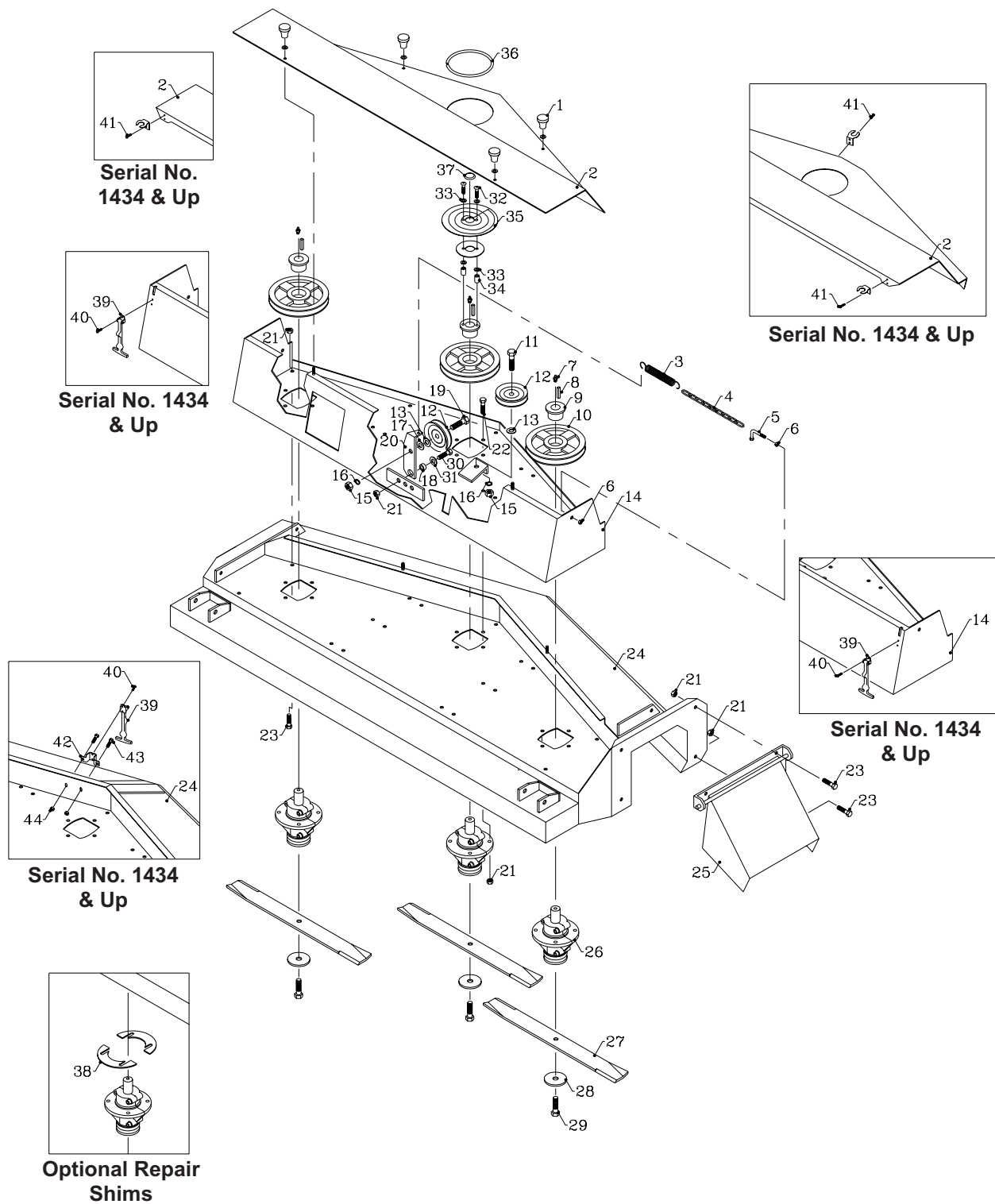
ALWAYS GIVE MODEL AND SERIAL NUMBER WHEN ORDERING SERVICE PARTS.

Model MD448 begins with Serial Number 1001

Model MD460 begins with Serial Number 1001

Model MD472 begins with Serial Number 1001

Deck Parts
Model MD448
Figure 1

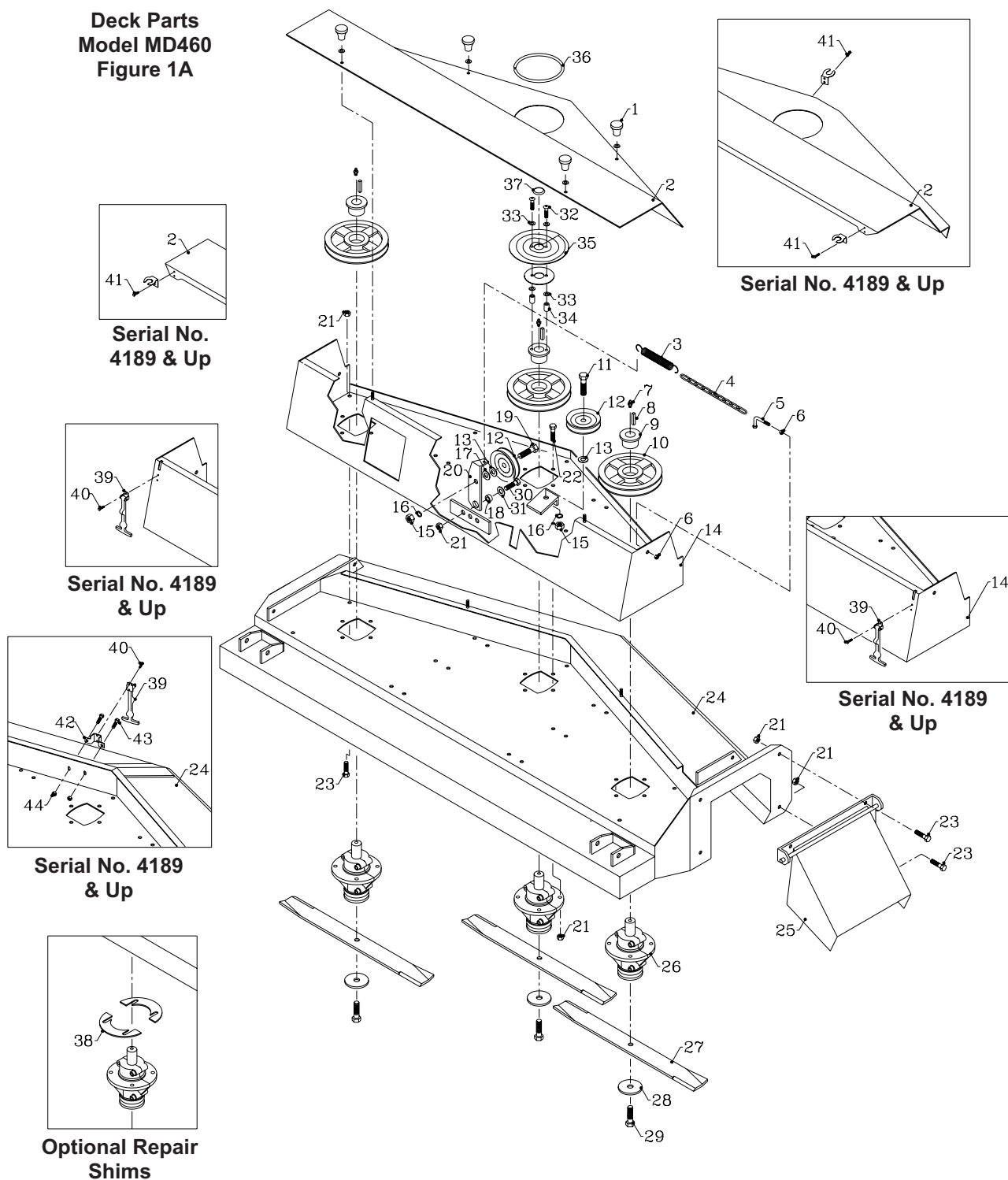


Parts List for Model MD448 - Figure 1

Ref.	Part No.	Description	Quantity
1	47-050	Knob, Ribbed W/ 1/4-20 Threads (Serial No. 1001 - 1433)	4
	99-G03	Shakeproof Washer, 5/16" (Serial No. 1001 - 1433)	4
2	60-535	Shield, Top (Serial No. 1001 - 1009)	1
	60-567	Shield, Top Deck (Serial No. 1010 - 1433)	1
	60-652.17	Shield, Top Deck (Serial No. 1434 -)	1
3	41-052	Spring, Ext. 0.875 X 6.750	1
4	56-055-11	Chain, Idler Tension (Serial No. 1001 - 1577)	1
5	64-534	Hook, Spring (Serial No. 1001 - 1577)	1
6	99-E20	Flange Nut, 1/4	2
7	29-010	Grease Fitting, 1/4 Short	3
8	85-K0408	Key, 1/4 X 1	3
9	83-H16SPL	Bushing, H X 1" Split Type	3
10	83-BK50H	Pulley, 5", H1 Bushing	3
11	90-0812	Bolt, 1/2 X 1-1/2	1
12	83-012	Idler, "V" 1/2" ID X 4-1/2" OD	2
13	99-B12	Washer, 1/4 X 17/32 X 1-1/8	2
14	62-723	Deck, Top (Serial No. 1001 - 1433)	1
	62-843	Deck, Top (Serial No. 1434 - 1577)	1
	62-872.17	Upper Deck Weldment MD448 (Serial No. 1578 -)	1
15	92-08	Nut, 1/2	2
16	96-08	Lock Washer, 1/2	2
17	95-08	Flat Washer, 1/2 SAE	1
18	85-B29	Bushing, .406 X .740 X .258 Thick	1
19	90-0814	Bolt, 1/2 X 1-3/4	1
20	40-290	Idler Arm (Serial No. 1001 - 1577)	1
	40-329	Idler Arm MD460 & MD448 (Serial No. 1578 -)	1
21	99-E13	Flange Nut, 3/8	21
22	99-K22	Bolt, Flange 3/8 X 1-1/4	12
23	99-K11	Bolt, Flange 3/8 X 3/4	8
24	62-716	Deck, Mower (Serial No. 1001 - 1433)	1
	62-844.17	Deck, Mower (Serial No. 1434 -)	1
25	60-534.17	Chute, Side Discharge	1
26	87-143	Spindle, Mower 1/2-20 RH Threads	3
27	79-062	Blade, 16-1/4" .700 Air Lift	3
	79-064	Blade, 16-1/4" 1-3/8 Air Lift (Optional)	3
28	99-B14	Washer, 1/4 X 1/2 ID X 3 OD	3
29	91-0810	Bolt, 1/2 X 1-1/4 NF	3
30	90-0608	Bolt, 3/8 X 1	1
31	64-799	Washer, 13/32 x 1-9/32	1
32	99-K38	Bolt, 1/4 X 1-1/4 Button Head (Serial No. 1010 -)	2
33	95-04	Flat Washer, 1/4 SAE (Serial No. 1010 -)	4 A/R
34	64-687	Spacer, Rotation Indicator (Serial No. 1010 -)	2
35	00-137	Decal, Spiral Indicator (Serial No. 1010 -)	1
	60-568	Support, Rotate Indicator (Serial No. 1010 -)	1
36	56-059-17	Trim-loc, Rubber 17" (Serial No. 1010 -)	1
37	06-010	Cap Plug, 1" (Serial No. 1010 -)	1
*	00-139	Decal, Warning-Discharge Chute (Serial No. 1010 -)	2
*	00-140	Decal, ANSI Certification (Serial No. 1010 -)	1
*	00-138	Decal, Danger-Rotating Blade (Serial No. 1010 -)	1
*	00-004	Decal, Steiner	1
*	00-092	Decal, Keep Hands & Feet	3
*	00-093	Decal, Warning-Read Owner's	1
*	00-129	Decal, Belt Installation	1
38	64-866	Shim, Spindle 22 Ga.(1 Pair) (Optional)	1
	64-867	Shim, Spindle 16 Ga.(1 Pair) (Optional)	1
	64-868	Shim, Spindle 12 Ga.(1 Pair) (Optional)	1
39	47-090	Latch, Rubber 3" Long (Serial No. 1434 -)	3
40	04-008	Pop Rivet, 1/8 X 1/4 SS. (Serial No. 1434 -)	6
41	04-007	Pop Rivet, 1/8 X 1/8 SS. (Serial No. 1434 -)	6
42	64-900	Bracket, Top Shield Latch (Serial No. 1434 -)	1
43	99-K31	Bolt, Flange 1/4 X 1/2 (Serial No. 1434 -)	2
44	99-E20	Flange Nut, 1/4 (Serial No. 1434 -)	2

* Not Illustrated

**Deck Parts
Model MD460
Figure 1A**



Parts List for Model MD460 - Figure 1A

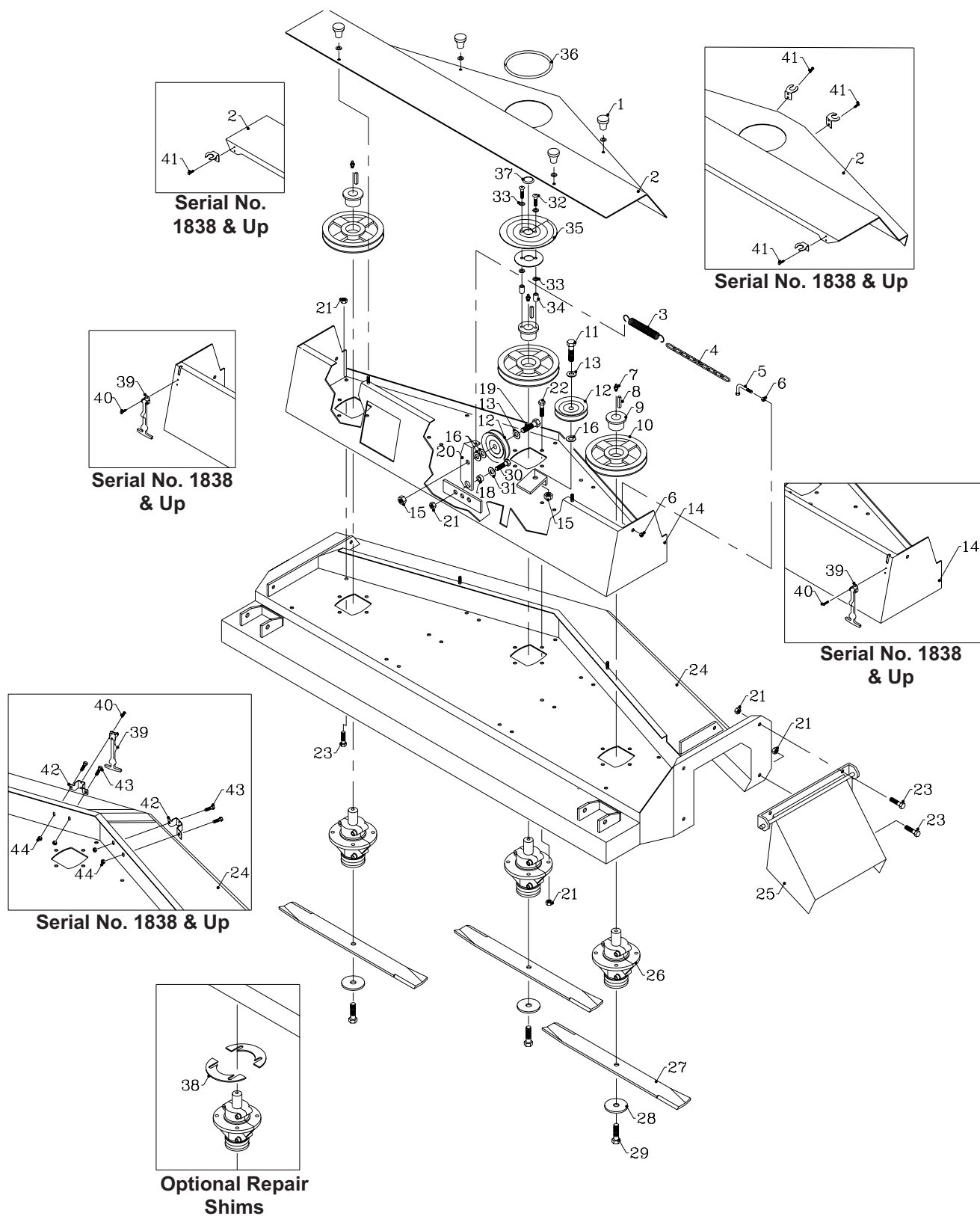
Ref	Part No.	Description	Quantity
1	47-050	Knob, Ribbed W/ 1/4-20 Threads (Serial No. 1001 - 4188)	4
	99-G03	Shakeproof Washer, 5/16" (Serial No. 1001 - 4188)	4
2	60-526	Shield, Top Deck (Serial No. 1001 - 1224)	1
	60-544	Shield, Top Deck (Serial No. 1225 - 4188)	1
	60-647.17	Shield, Top Deck (Serial No. 4189 -)	1

Parts List for Model MD460 - Figure 1A (Continued)

Ref.	Part No.	Description	Quantity
3	41-052	Spring, Ext 0.875 X 6.750 (Serial No. 1001 - 5456)	1
4	56-055-15	Chain, #2 Straight Link (Serial No. 1001 - 5456)	1
5	64-534	Hook, Spring (Serial No. 1001 - 5456)	1
6	99-E20	Flange Nut, 1/4	2
7	29-010	Grease Fitting, 1/4 Short	3
8	85-K0408	Key, 1/4 X 1	3
9	83-H16SPL	Bushing, H X 1" Split Type	3
10	83-BK72H	Sheave, BK72H	3
11	90-0812	Bolt, 1/2 X 1-1/2	1
12	83-012	Idler, "V" 1/2" ID X 4-1/2" OD	2
13	99-B12	Washer, 1/4 X 17/32 X 1-1/8	2
14	62-700	Deck, Top (Serial No. 1001 - 1194)	1
	62-729	Deck, Top (Serial No. 1195 - 4188)	1
	62-835	Deck, Top (Serial No 4189 - 5456)	1
	62-868.17	Upper Deck Weldment MD460 (Serial No. 5457 -)	1
15	92-08	Nut, 1/2	2
16	96-08	Lock Washer, 1/2	2
17	95-08	Flat Washer, 1/2 SAE	1
18	85-B29	Bushing, .406 X.740 X.258 Thick	1
19	90-0814	Bolt, 1/2 X 1-3/4	1
20	40-289	Idler Arm (Serial No. 1001 - 1194)	1
	40-290	Idler Arm (Serial No. 1195 - 5456)	1
	40-329	Idler Arm MD460 & MD448 (Serial No. 5457 -)	1
21	99-E13	Flange Nut, 3/8	21
22	99-K22	Bolt, Flange 3/8 X 1-1/4	12
23	99-K11	Bolt, Flange 3/8 X 3/4	8
24	62-694	Deck, Main (Serial No. 1001 - 1194)	1
	62-727	Deck, Main (Serial No. 1195 - 4188)	1
	62-834.17	Deck, Main (Serial No. 4189 -)	1
25	62-696.17	Chute, Side Discharge	1
26	87-143	Spindle, Mower 1/2-20 RH Threads	3
27	79-050	Blade, 20-1/2" .700 Air Lift	3
	79-053	Blade, 20-1/2" 1-3/8 Air Lift (Optional)	3
28	99-B14	Washer, 1/4 X 1/2 ID X 3 OD	3
29	91-0810	Bolt, 1/2 X 1-1/4 NF	3
30	90-0608	Bolt, 3/8 X 1	1
31	64-799	Washer, 13/32 x 1-9/32	1
32	99-K38	Bolt, 1/4 X 1-1/4 Button Head (Serial No. 1225 -)	2
33	95-04	Flat Washer, 1/4 SAE (Serial No. 1225 -)	4 A/R
34	64-687	Spacer, Rotation Indicator (Serial No. 1225 -)	2
35	00-137	Decal, Spiral Indicator (Serial No. 1225 -)	1
	60-568	Support, Rotate Indicator (Serial No. 1225 -)	1
36	56-059-17	Trim-loc, Rubber 17" (Serial No. 1225 -)	1
37	06-010	Cap Plug, 1" (Serial No. 1225 -)	1
*	00-139	Decal, Warning-Discharge Chute (Serial No. 1225 -)	2
*	00-140	Decal, ANSI Certification (Serial No. 1225 -)	1
*	00-138	Decal, Danger-Rotating Blade (Serial No. 1225 -)	1
*	00-004	Decal, Steiner	1
*	00-092	Decal, Keep Hands & Feet	3
*	00-093	Decal, Warning-Read Owner's	1
*	00-129	Decal, Belt Installation	1
38	64-866	Shim, Spindle 22 Ga.(1 Pair) (Optional)	1
	64-867	Shim, Spindle 16 Ga.(1 Pair) (Optional)	1
	64-868	Shim, Spindle 12 Ga.(1 Pair) (Optional)	1
39	47-090	Latch, Rubber 3" Long (Serial No. 4189 -)	3
40	04-008	Pop Rivet, 1/8 X 1/4 SS. (Serial No. 4189 -)	6
41	04-007	Pop Rivet, 1/8 X 1/8 SS. (Serial No. 4189 -)	6
42	64-900	Bracket, Top Shield Latch (Serial No. 4189 -)	1
43	99-K31	Bolt, Flange 1/4 X 1/2 (Serial No. 4189 -)	2
44	99-E20	Flange Nut, 1/4 (Serial No. 4189 -)	2

* Not Illustrated

Deck Parts
Model MD472
Figure 1B

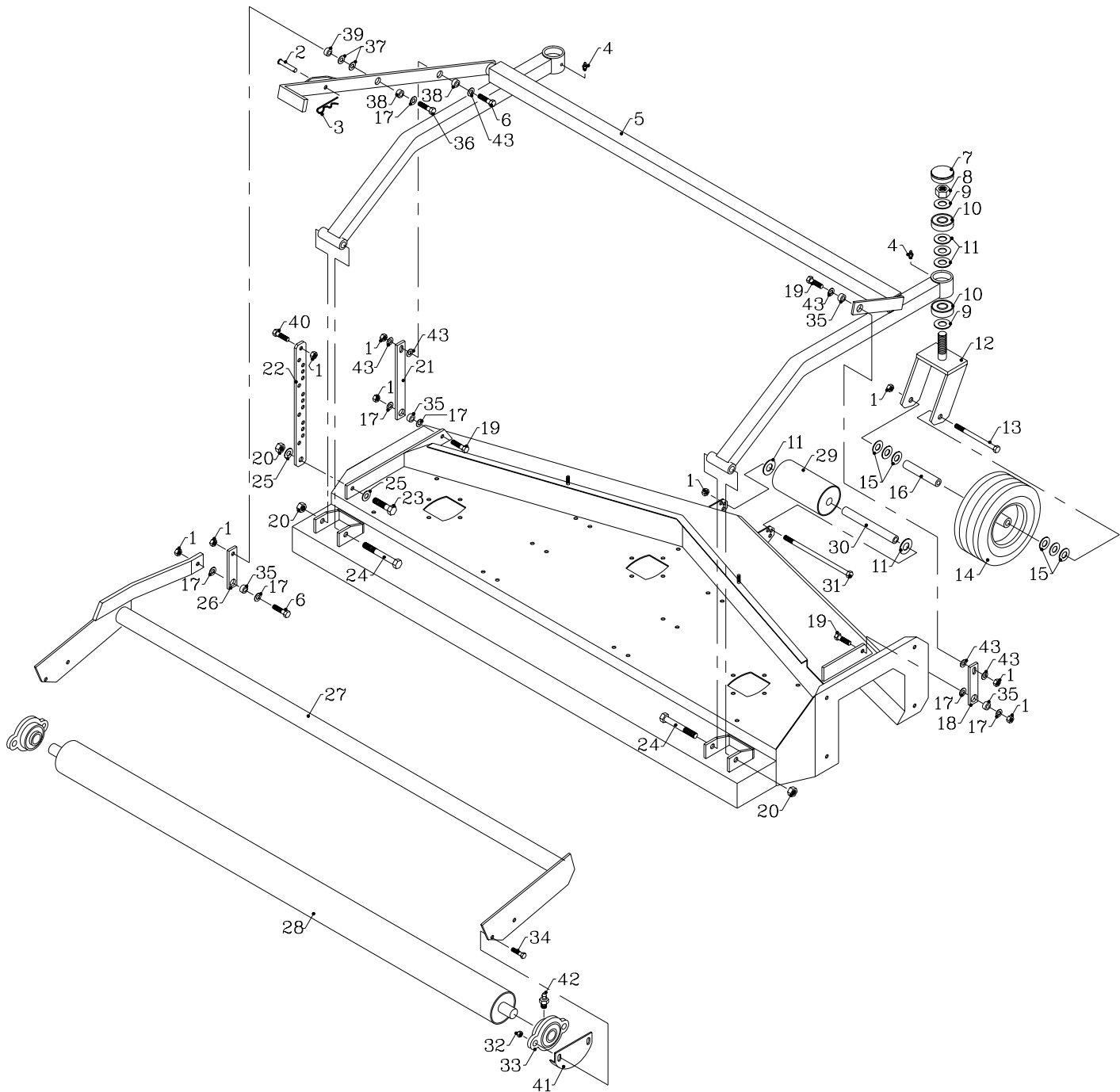


Parts List for Model MD472 - Figure 1B

Ref.	Part No.	Description	Quantity
1	47-050	Knob, Ribbed W/ 1/4 Threads (Serial No. 1001 - 1837)	4
	99-G03	Shakeproof Washer, 5/16" (Serial No. 1001 - 1837)	4
2	60-540	Shield, Top (Serial No. 1001 - 1016)	1
	60-545	Shield, Top (Serial No. 1017 - 1837)	1
	60-649.17	Top Shield W/Indicator Hole (Serial No. 1838 -)	1
3	41-051	Spring, Ext 1.0 X 6.750	1
4	56-055-22	Chain, Idler (Serial No. 1001 - 2301)	1
5	64-534	Hook, Spring (Serial No. 1001 - 2301)	1
6	99-E20	Flange Nut, 1/4	2
7	29-010	Grease Fitting, 1/4 Short	3
8	85-K0408	Key, 1/4 X 1	3
9	83-H16SPL	Bushing, H X 1" Split Type	3
10	83-BK80H	Pulley, BK80H	3
11	90-0612	Bolt, 3/8 X 1-1/2	1
12	83-034	Idler, "V" 3/8" ID X 5" OD	2
13	95-06	Flat Washer, 3/8 SAE	2
14	62-733	Deck, Top (Serial No. 1001 - 1837)	1
	62-840	Deck, Top (Serial No. 1838 - 2301)	1
	62-873.17	Upper Deck Weldment MD472 (Serial No. 2302 -)	1
15	99-E13	Flange Nut, 3/8	2
16	94-06	Flat Washer, 3/8 USS	3
18	85-B29	Bushing, .406 X.740 X.258 Thick	1
19	90-0614	Bolt, 3/8 X 1-3/4	1
20	40-292	Idler Arm (Serial No. 1001 - 2301)	1
	40-330	Idler Arm MD472 (Serial No. 2302 -)	1
21	99-E13	Flange Nut, 3/8	23
22	99-K22	Bolt, Flange 3/8 X 1-1/4	12
23	99-K11	Bolt, Flange 3/8 X 3/4	10
24	62-730	Deck, Mower (Serial No. 1001 - 1837)	1
	62-841.17	Deck, Mower (Serial No. 1838 -)	1
25	60-541.17	Chute, Side Discharge	1
26	87-143	Spindle, Mower 1/2-20 RH Threads	3
27	79-068	Blade, 24-3/4 .700 Air Lift	3
	79-069	Blade, 24-3/4" 1-3/8 Air Lift (Optional)	3
28	99-B14	Washer, 1/4 X 1/2 ID X 3 OD	3
29	91-0810	Bolt, 1/2 X 1-1/4 NF	3
30	90-0608	Bolt, 3/8 X 1	1
31	64-799	Washer, 13/32 x 1-9/32	1
32	99-K39	Bolt, 1/4 X 1-1/2 Button Head (Serial No. 1017 -)	2
33	95-04	Flat Washer, 1/4 SAE (Serial No. 1017 -)	4 A/R
34	64-688	Spacer, Rotation Indicator (Serial No. 1017 -)	2
35	00-137	Decal, Spiral Indicator (Serial No. 1017 -)	1
	60-568	Support, Rotate Indicator (Serial No. 1017 -)	1
36	56-059-17	Trim-loc, Rubber 17" (Serial No. 1017 -)	1
37	06-010	Cap Plug, 1" (Serial No. 1017 -)	1
*	00-139	Decal, Warning-Discharge Chute (Serial No. 1017 -)	2
*	00-140	Decal, ANSI Certification (Serial No. 1017 -)	1
*	00-138	Decal, Danger-Rotating Blade (Serial No. 1017 -)	1
*	00-004	Decal, Steiner	1
*	00-092	Decal, Keep Hands & Feet	3
*	00-093	Decal, Warning-Read Owner's	1
*	00-129	Decal, Belt Installation	1
38	64-866	Shim, Spindle 22 Ga.(1 Pair) (Optional)	1 A/R
	64-867	Shim, Spindle 16 Ga.(1 Pair) (Optional)	1 A/R
	64-868	Shim, Spindle 12 Ga.(1 Pair) (Optional)	1 A/R
39	47-090	Latch, Rubber 3" Long (Serial No. 1838 -)	4
40	04-008	Pop Rivet, 1/8 X 1/4 SS. (Serial No. 1838 -)	8
41	04-007	Pop Rivet, 1/8 X 1/8 SS. (Serial No. 1838 -)	8
42	64-900	Bracket, Top Shield Latch (Serial No. 1838 -)	2
43	99-K31	Bolt, Flange 1/4 X 1/2 (Serial No. 1838 -)	4
44	99-E20	Flange Nut, 1/4 (Serial No. 1838 -)	4

* Not Illustrated

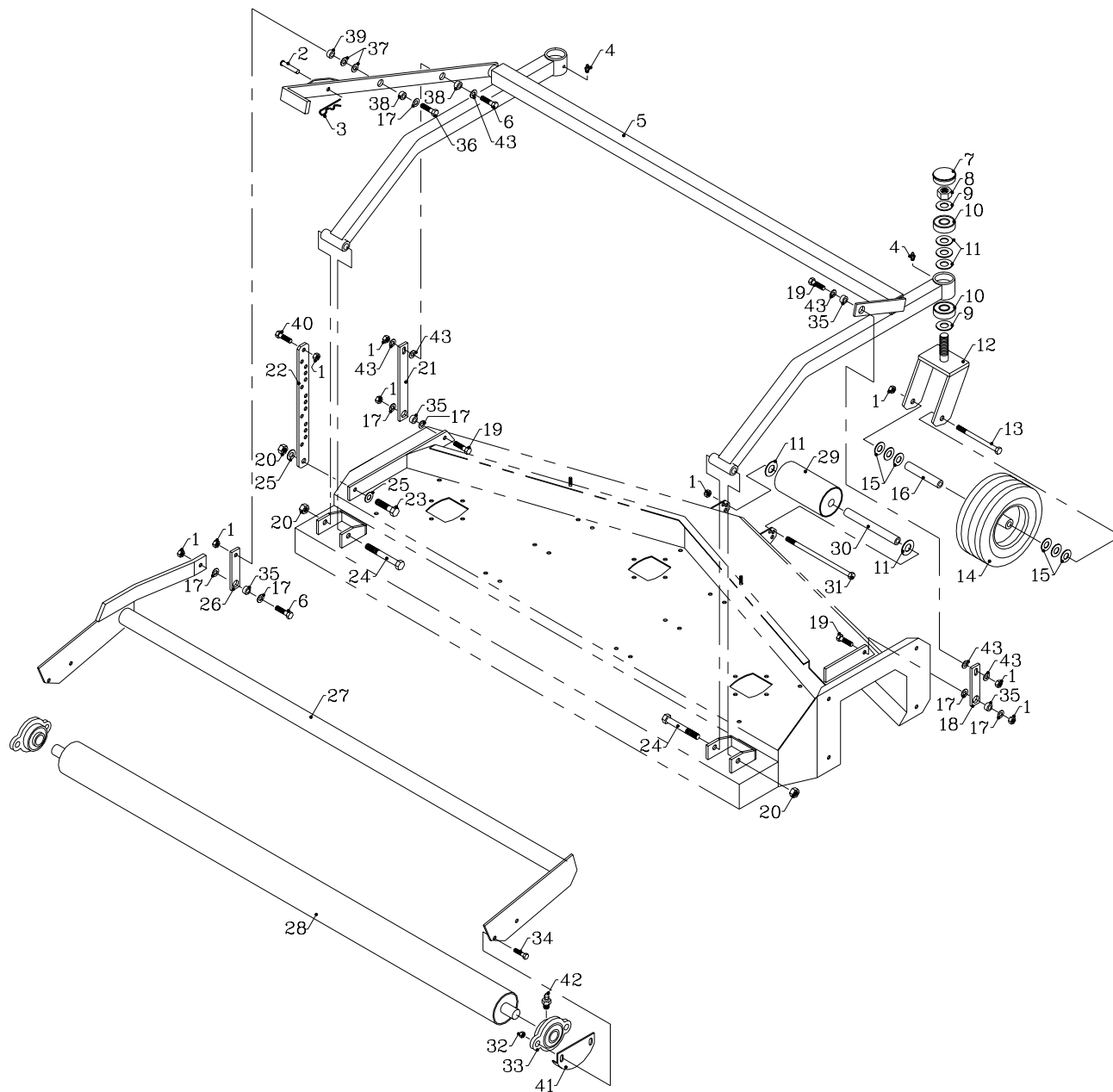
Frame Parts
Model MD448
Figure 2



Parts List for Model MD448 - Figure 2

Ref.	Part No.	Description	Quantity
1	99-E13	Flange Nut, 3/8	13
2	03-0610	Clevis Pin, 3/8 X 1-1/4	1
3	02-PP0318	Presto Pin, 3/32 X 2-5/16	1
4	29-010	Grease Fitting, 1/4 Short	2
5	62-725.17	Frame, Height Adjustment	1
6	90-0612	Bolt, 3/8 X 1-1/2	4
7	53-060	Hub Cap, For Mower	2
8	99-AC12NF	Locknut, Center 3/4 NF	2
9	95-12	Flat Washer, 3/4 SAE	4
10	55-Z9504AB	Ball Bearing, 3/4 ID	4
11	99-B20	Washer, Mach 3/4 ID 14 Ga.	6
12	50-049	Caster, Mower	2
13	90-0640	Bolt, 3/8 X 5	2
14	53-104	Wheel, 10.25 X 3.25 Caster (Serial No. 1001 - 1711)	2
	55-G527	Bearing, Ball F/53-104 Wheel	2
	55-107	Bearing, 5/8 ID x 1-3/8 OD (Optional, Heavy Duty)	2
	53-186	Wheel, 10.25 X 3.25 Caster (Serial No. 1712 -)	2
	55-112	Bearing, Roller 5/8 ID x 1-3/8	1
	53-187	Retainer, Flanged for 53-186	2
15	95-10	Flat Washer, 5/8 SAE	12
16	50-062	Axle Tube, Caster Wheel	2
17	94-06	Flat Washer, 3/8 USS	8 A/R
18	42-440.17	Link, Right Lift	1
19	90-0610	Bolt, 3/8 X 1-1/4	2
20	99-A08	Locknut, Stover 1/2	3
21	42-445	Link, Left Front	1
22	42-443.17	Link, Height Adjustment	1
23	90-0812	Bolt, 1/2 X 1-1/2	1
24	90-0830	Bolt, 1/2 X 3-3/4	2
25	95-08	Flat Washer, 1/2 SAE	2
26	42-442.17	Link, Lift Middle	1
27	62-724	Frame, Rear Roller (Serial No. 1001 - 1577)	1
	62-869.17	Frame, Rear Roller (Serial No. 1578 -)	1
28	50-078	Roller, Rear	1
29	50-105	Nylon Roller, Front (Serial No. 3332 -)	1
	50-007	Roller, Front (Serial No 1001 - 3331)	1
	85-B11	Bearing, 3/4" Wood RollerSerial No 1001 - 3331)	2
30	50-074	Axle, Anti-Scalp Roller	1
31	90-0648	Bolt, 3/8 X 6	1
32	99-E12	Flange Nut, 5/16	4
33	55-FB16016	Bearing, 160 Flange 1"	2
34	97-0508	Carriage Bolt, 5/16 X 1 (Serial No. 1001 - 1118)	4
	90-0510	Bolt, 5/16 x 1-1/4 (Serial No. 1119 - 1577)	4
	99-K62	Bolt, Flange 5/16 x 1-1/4 (Serial No. 1578 -)	4
35	64-663	Bushing, Adjuster Link Thin	4
36	90-0612	Bolt, 3/8 X 1-1/2	1
37	94-06	Flat Washer, 3/8 USS	3
38	64-662	Bushing, Adjuster Link Thick	2
40	99-K11	Bolt, Flange 3/8 X 3/4	1
41	64-807	Spacer (Serial No. 1001 - 1310)	2
	64-845	Shield, Bearing (Serial No. 1311 -)	2
42	29-045	Grease Fitting, 1/4 45-Deg	1
43	64-799	Washer, 13/32 x 1-9/32	6

Frame Parts
Model MD460
Figure 2A



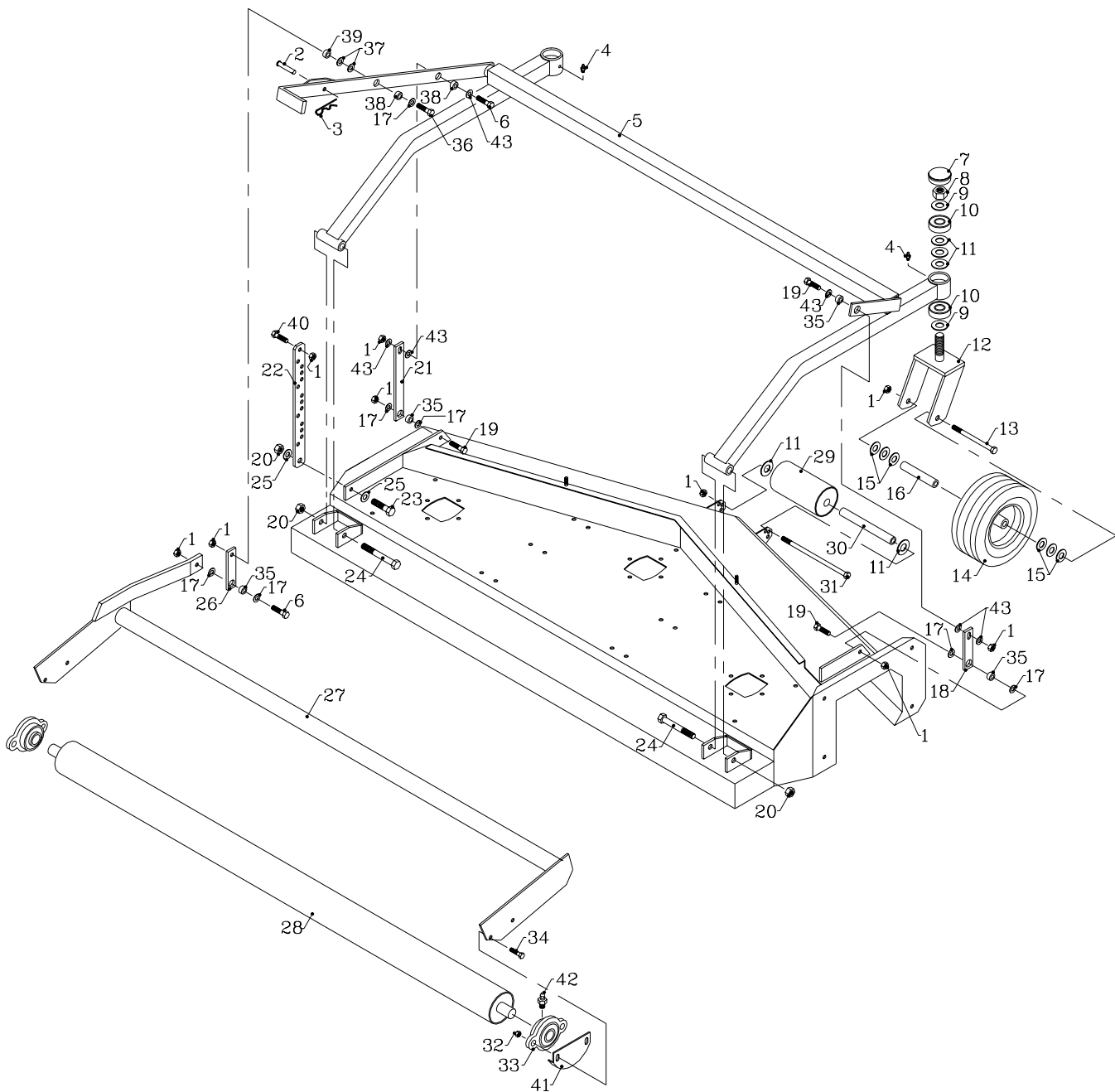
Parts List for Model MD460 - Figure 2A

Ref.	Part No.	Description	Quantity
1	99-E13	Flange Nut, 3/8	10
2	03-0610	Clevis Pin, 3/8 X 1-1/4	1
3	02-PP0318	Presto Pin, 3/32 X 2-5/16	1
4	29-010	Grease Fitting, 1/4 Short	2

Parts List for Model MD460 - Figure 2A (Continued)

Ref.	Part No.	Description	Quantity
5	62-695	Frame, Tube (Serial No. 1001 - 1194)	1
	62-726.17	Frame, Tube (Serial No. 1195 -)	1
6	90-0612	Bolt, 3/8 X 1-1/2	2
7	53-060	Hub Cap, For Mower	2
8	99-AC12NF	Locknut, Center 3/4	2
9	95-12	Flat Washer, 3/4 SAE	4
10	55-Z9504AB	Ball Bearing, 3/4 ID	4
11	99-B20	Washer, Mach 3/4 ID 14 GA.	8
12	50-049	Caster, Mower	2
13	90-0640	Bolt, 3/8 X 5	2
14	53-104	Wheel, 10.25 X 3.25 Caster (Serial No. 1001 - 6813)	2
	55-G527	Bearing, Ball F/53-104 Wheel	2
	55-107	Bearing, 5/8 ID x 1-3/8 OD (Optional, Heavy Duty)	2
	53-186	Wheel, 10.25 X 3.25 Caster (Serial No. 6814 -)	2
	55-112	Bearing, Roller 5/8 ID x 1-3/8	1
	53-187	Retainer, Flanged for 53-186	2
15	95-10	Flat Washer, 5/8 SAE	12
16	50-062	Axle Tube, Caster Wheel	2
17	94-06	Flat Washer, 3/8 USS	14 A/R
18	42-428.17	Link, Right (Serial No. 1001 - 1194)	1
	42-444	Link, Right (Serial No. 1195 -)	1
19	90-0610	Bolt, 3/8 X 1-1/4	3
20	99-A08	Locknut, Stover 1/2	3
21	42-427	Link, Front Left (Serial No. 1001 - 1194)	1
	42-445	Link, Front Left (Serial No. 1195 -)	1
22	42-430	Link, Height Adjust (Serial No. 1001 - 1194)	1
	42-447.17	Link, Height Adjust (Serial No. 1195 -)	1
23	90-0810	Bolt, 1/2 X 1-1/4	1
24	90-0832	Bolt, 1/2 X 4	2
25	95-08	Flat Washer, 1/2 SAE	2
26	42-429	Link, Height Adj. Middle Left (Serial No. 1001 - 1194)	1
	42-446.17	Link, Height Adjust Left Middle (Serial No. 1195 -)	1
27	62-697	Frame, Roller (Serial No. 1001 - 1194)	1
	62-728	Frame, Rear Roller (Serial No. 1195 - 5456)	1
	62-870.17	Frame, Rear Roller (Serial No. 5457 -)	1
28	50-067	Roller, Rear (Serial No. 1001 - 1194)	1
	50-079	Roller, Rear (Serial No. 1195 -)	1
29	50-105	Nylon Roller, Front (Serial No. 3332 -)	1
	50-007	Roller, Front (Serial No 1001 - 3331)	1
	85-B11	Bearing, 3/4" Wood RollerSerial No 1001 - 3331)	2
30	50-074	Axle, Anti-Scalp Roller	1
31	90-0648	Bolt, 3/8 X 6	1
32	99-E12	Flange Nut, 5/16	4
33	55-FB16016	Bearing, 160 Flange 1"	2
34	97-0508	Carriage Bolt, 5/16 X 1(Serial No. 1001 - 2010)	4
	90-0510	Bolt, 5/16 x 1-1/4 (Serial No. 2011 - 5456)	4
	99-K62	Bolt, Flange 5/16 x 1-1/4 (Serial No. 5457 -)	4
35	64-663	Bushing, Adjuster Link Thin (Serial No. 1195 -)	4
36	90-0614	Bolt, 3/8 X 1-3/4	1
37	94-06	Flat Washer, 3/8 USS (Serial No. 1195 -)	2
38	64-662	Bushing, Adjuster Link Thick (Serial No. 1195 -)	2
39	64-662	Bushing, Adjuster Link Thick (Serial No. 1195 -)	1
40	99-K11	Bolt, Flange 3/8 X 3/4	1
41	64-807	Spacer (Serial No. 1001 - 3246)	2
	64-845	Shield, Bearing (Serial No. 3247 -)	2
42	29-045	Grease Fitting, 1/4 45-Deg.	1
43	64-799	Washer, 13/32 x 1-9/32	6

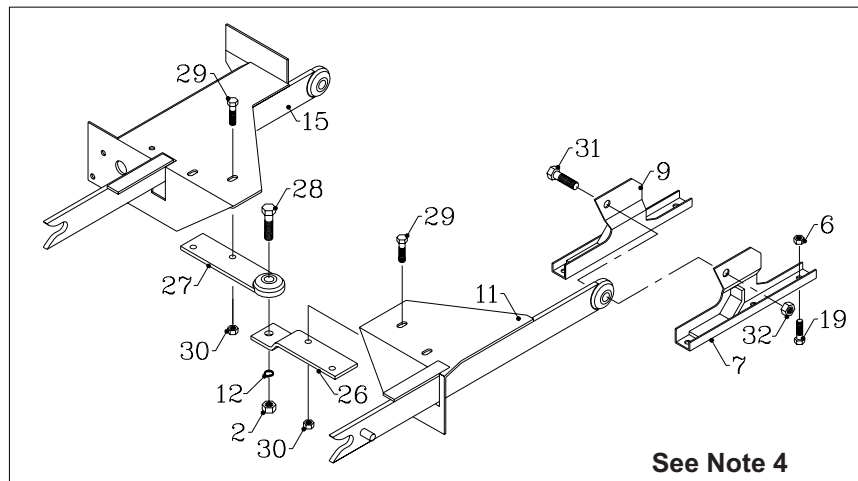
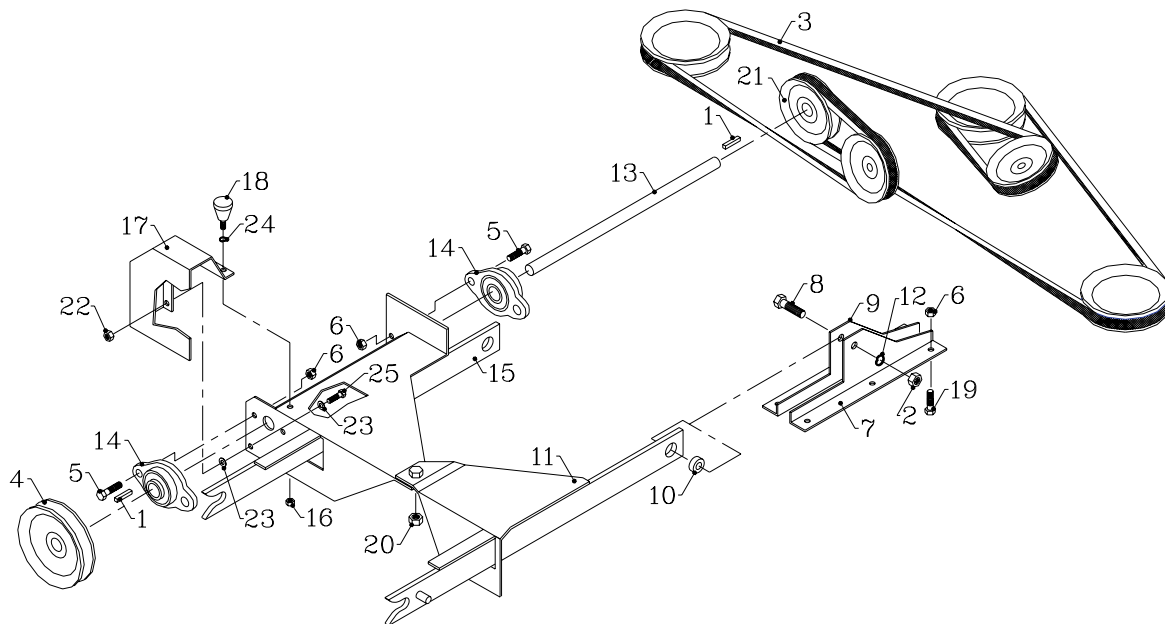
Frame Parts
Model MD472
Figure 2B



Parts List for Model MD472 - Figure 2B

Ref.	Part No.	Description	Quantity
1	99-E13	Flange Nut, 3/8	10
2	03-0610	Clevis Pin, 3/8 X 1-1/4	1
3	02-PP0318	Presto Pin, 3/32 X 2-5/16	1
4	29-010	Grease Fitting, 1/4 Short	2
5	62-731.17	Frame, Tube	1
6	90-0612	Bolt, 3/8 X 1-1/2	2
7	53-060	Hub Cap, For Mower	2
8	99-AC12NF	Locknut, Center 3/4	2
9	95-12	Flat Washer, 3/4 SAE	4
10	55-Z9504AB	Ball Bearing, 3/4 ID	4
11	99-B20	Washer, Mach 3/4 ID 14 GA.	8
12	50-049	Caster, Mower	2
13	90-0640	Bolt, 3/8 X 5	2
14	53-104	Wheel, 10.25 X 3.25 Caster (Serial No. 1001 - 2882)	2
	55-G527	Bearing, Ball F/53-104 Wheel	2
	55-107	Bearing, 5/8 ID x 1-3/8 OD (Optional, Heavy Duty)	2
	53-186	Wheel, 10.25 X 3.25 Caster (Serial No. 2883 -)	2
	55-112	Bearing, Roller 5/8 ID x 1-3/8	1
	53-187	Retainer, Flanged for 53-186	2
15	95-10	Flat Washer, 5/8 SAE	12 A/R
16	50-062	Axle Tube, Caster Wheel	2
17	94-06	Flat Washer, 3/8 USS	14 A/R
18	42-450.17	Link, Height Adj. Middle Right	1
19	90-0610	Bolt, 3/8 X 1-1/4	3
20	99-A08	Locknut, Stover 1/2	3
21	42-449.17	Link, Height Adj. Front Left	1
22	42-452.17	Link, Height Selector	1
23	90-0810	Bolt, 1/2 X 1-1/4	1
24	90-0832	Bolt, 1/2 X 4	2
25	95-08	Flat Washer, 1/2 SAE	2
26	42-451.17	Link, Height Adj. Middle Left	1
27	62-732	Frame, Roller (Serial No. 1001 - 2301)	1
	62-871.17	Frame, Roller (Serial No. 2302 -)	1
28	50-080	Roller, Rear	1
29	50-105	Nylon Roller, Front (Serial No. 3332 -)	1
	50-007	Roller, Front (Serial No 1001 - 3331)	1
	85-B11	Bearing, 3/4" Wood Roller Serial No 1001 - 3331)	2
30	50-074	Axle, Anti-Scalp Roller	1
31	90-0648	Bolt, 3/8 X 6	1
32	99-E12	Flange Nut, 5/16	4
33	55-FB16016	Bearing, 160 Flange 1"	2
34	97-0508	Carriage Bolt, 5/16 X 1 (Serial No. 1001 - 1285)	4
	90-0510	Bolt, 5/16 x 1-1/4 (Serial No. 1286 - 2301)	4
	99-K62	Bolt, Flange 5/16 x 1-1/4 (Serial No. 2302 -)	4
35	64-663	Bushing, Adjuster Link Thin	4
36	90-0614	Bolt, 3/8 X 1-3/4	1
37	94-06	Flat Washer, 3/8 USS	2
38	64-662	Bushing, Adjuster Link Thick	2
39	64-662	Bushing, Adjuster Link Thick	1
40	99-K11	Bolt, Flange 3/8 X 3/4	1
41	64-807	Spacer (Serial No. 1001 - 1561)	2
	64-845	Shield, Bearing (Serial No. 1562 -)	2
42	29-045	Grease Fitting, 1/4 45-Deg.	1
43	64-799	Washer, 13/32 x 1-9/32	6

Hitch and Drive Parts Figure 3



Parts List for Figure 3

Ref	Part No.	Description	Quantity
1	85-K0310	Key, Sq. 3/16 X 3/16 X 1-1/4	2
2	92-08	Nut, 1/2 (See Note 3)	2
	99-E37	Flange Nut, 1/2 (See Note 4)	2
3	81-A128	Belt (Model MD448)	1
	81-A158	Belt (Model MD460)	1
	81-B180	Belt (Model MD472)	1
4	83-BK5012	Pulley, 5", 3/4" Bore	1
5	99-K13	Bolt, Flange 3/8 X 1	4
6	99-E13	Flange Nut, 3/8	16 A/F

Parts List for Figure 3 (Continued)

Ref.	Part No.	Description	Quantity
7	64-660	Anchor, Lift Arm Right (See Note 3a)	2
	64-934	Anchor, Lift Arm Right (See Note 4a)	2
	64-646	Anchor, Lift Arm Right (See Note 3b)	2
	64-936	Anchor, Lift Arm Right (See Note 4b)	2
	64-668	Anchor, Lift Arm Right (See Note 3c)	2
	64-938	Anchor, Lift Arm Right (See Note 4c)	2
8	90-0810	Bolt, 1/2 X 1-1/4	2
9	64-661	Anchor, Lift Arm Left (See Note 3a)	2
	64-935	Anchor, Lift Arm Left (See Note 4a)	2
	64-645	Anchor, Lift Arm Left (See Note 3b)	2
	64-937	Anchor, Lift Arm Left (See Note 4b)	2
	64-669	Anchor, Lift Arm Left (See Note 3c)	2
	64-939	Anchor, Lift Arm Left (See Note 4c)	2
10	85-SC08	Set Collar, 1/2" (See Note 3)	2
11	62-698	Hitch Arm, Right (See Note 3)	1
	62-858.17	Hitch Arm, Right (See Note 4)	1
12	96-08	Lock Washer, 1/2 (See Note 3)	2
	96-08	Lock Washer, 1/2 (See Note 4)	1
13	80-237	Shaft, Mower Drive	1
14	55-FB23012	Bearing, 2-Bolt Flange 3/4	2
15	62-699	Hitch Arm, Left (See Note 3)	1
	62-857.17	Hitch Arm, Left (See Note 4)	1
16	99-E12	Flange Nut, 5/16 (See Note 1)	2
17	64-611	Shield, Drive Pulley	1
18	99-K19	Bolt, Flange 5/16 X 3/4 (See Note 1)	2
	47-077	Knob, Small Clamping W/Stud (See Note 2)	1
19	90-0606	Bolt, 3/8 X 3/4	12
20	99-A08	Locknut, Stover 1/2 (See Note 3)	1
21	83-BK4012	Pulley, 4", 3/4" Bore (Model MD448)	1
	83-BK5012	Pulley, 5", 3/4" Bore (Model MD460 & MD472)	1
22	99-A05	Locknut, Stover 5/16 (See Note 2)	1
23	95-05	Flatwasher, 5/16 SAE (See Note 2)	2
24	99-G06	Shakeproof Washer, 1/4 (See Note 2)	1
25	90-0506	Bolt, 5/16 X 3/4 (See Note 2)	1
*	81-A040	Belt, 220 & 230	1
*	81-A040	Belt, 410	1
*	81-A040	Belt, 420 & 430	1
*	81-B041	Belt, 425	1
*	81-B041	Belt, 525	1
26	64-933.17	Lift Arm Top Link (See Note 4)	1
27	64-932.17	Lift Arm Lower Link (See Note 4)	1
28	90-0816	Bolt, 1/2 x 2 (See Note 4)	1
29	99-K11	Flange Bolt, 3/8 x 3/4 (See Note 4)	4
30	99-E13	Flange Nut, 3/8 (See Note 4)	4
31	99-K82	Flange Bolt, 1/2 x 2 (See Note 4)	2
32	99-E37	Flange Nut, 1/2 (See Note 4)	2

* Not Illustrated

Note 1 - Used on the following units:

Model MD448 (Serial No. 1001 - 1310)
 Model MD460 (Serial No. 1001 - 3294)
 Model MD472 (Serial No. 1001 - 1585)

Note 2 - Used on the following units:

Model MD448 (Serial No. 1311 -)
 Model MD460 (Serial No. 3295 -)
 Model MD472 (Serial No. 1586 -)

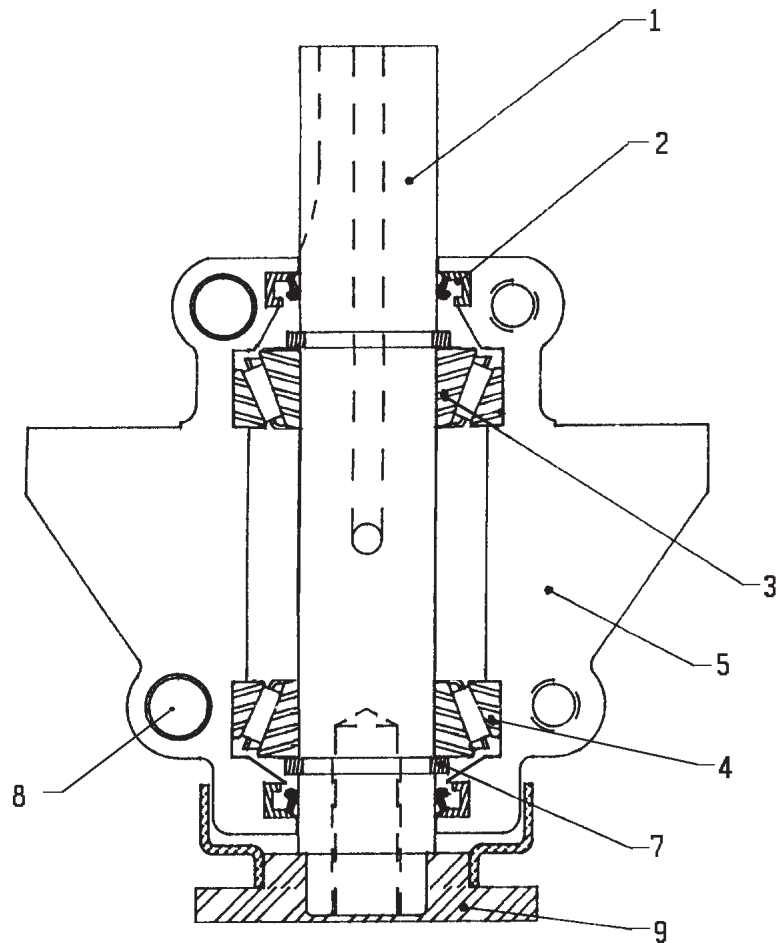
Note 3 - Used on the following units:

a) Model MD448 (Serial No. 1001 - 1493)
 b) Model MD460 (Serial No. 1001 - 4727)
 c) Model MD472 (Serial No. 1001 - 1969)

Note 4 - Used on the following units:

a) Model MD448 (Serial No. 1494 -)
 b) Model MD460 (Serial No. 4728 -)
 c) Model MD472 (Serial No. 1970 -)

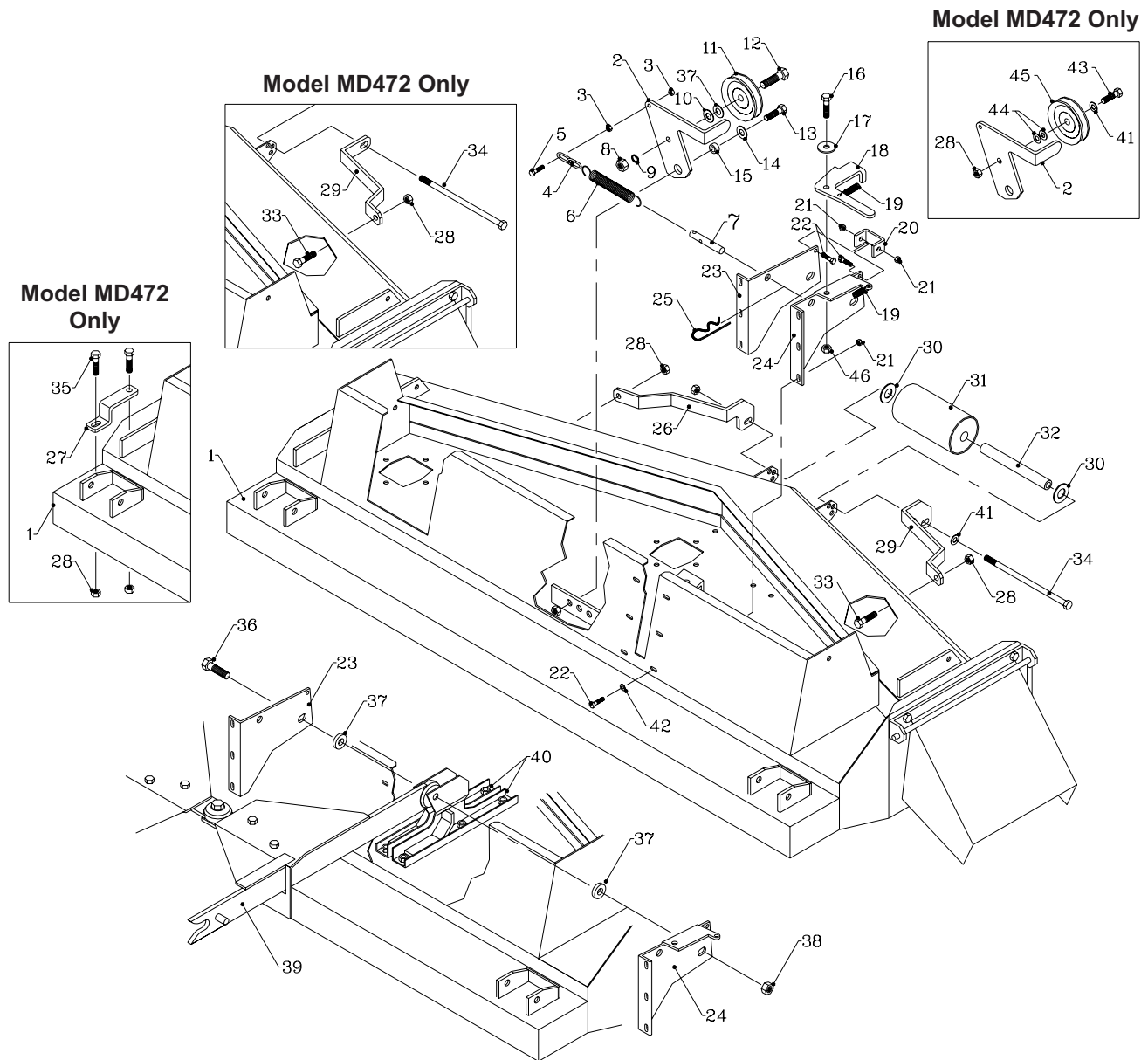
Spindle Parts
Figure 4



Parts List for Figure 4

Ref	Part No.	Description	Quantity
1	87-235	Shaft, Spindle	1
2	87-209843	Seal	2
3	87-244643	Bearing Cone	2
4	87-244610	Bearing Cup	2
5	87-240001-5	Casting, w/o breather hole	1
	87-240001-6	Casting, with breather hole	1
7	87-203293	Retaining Ring	2
8	87-203815	Bolt, 3/8 x 1-1/2 SHCS	4
9	87-240101-01	Blade Adapter with Cup	1

Flip-Up Decks
MD448 - Serial No. 1578 & Up
MD460 - Serial No. 5457 & Up
MD472 - Serial No. 2302 & Up
Figure 5



Parts List for Figure 5

Ref	Part No.	Description	Quantity
1	REF	Main Deck Weldment	1
2	40-329	Idler Arm (48"/ 60")	1
	40-330	Idler Arm (72")	1
3	99-E20	Flange Nut, 1/4	2
	F1002	Jam Nut, 1/4 (72" only)	1
4	56-055-02	Chain, #2 Straight Link 2" Long (48")	1
	56-055-04	Chain, #2 Straight Link 4" Long (60"/ 72")	1
5	90-0410	Bolt, 1/4 x 1-1/4	1
6	41-092	Spring, Ext. 1 OD x 4.5 Long (60")	1
	41-052 (REF)	Spring, Ext. .875 OD x 6.75 Long (48")(See Fig. 1, Ref. 3)	
	41-051 (REF)	Spring, Ext. .875 OD x 6.75 Long (72")(See Fig. 1B, Ref. 3)	
7	64-966	Pivot Stop Pin	1
8	92-08 (REF)	Nut, 1/2 (See Fig. 1, Ref. 15)	
9	96-08 (REF)	Lock Washer, 1/2 (See Fig. 1, Ref. 16)	
10	95-08 (REF)	Flat Washer, 1/2 SAE (See Fig. 1, Ref. 17)	
11	83-012 (REF)	Idler, "V" 1/2" ID x 4-1/2" OD (See Fig. 1, Ref. 12)	
12	90-0814 (REF)	Bolt, 1/2 x 1-3/4 (See Fig. 1, Ref. 19)	
13	90-0608 (REF)	Bolt, 3/8 x 1 (See Fig. 1, Ref. 30)	
14	64-799 (REF)	Washer, 13/32 ID x 1-9/32 OD (See Fig. 1, Ref. 31)	
15	85-B29 (REF)	Bushing, .406 x .740 x .258 Thick (See Fig. 1, Ref. 18)	
16	90-0608	Bolt, 3/8 x 1	1
17	64-799	Washer, 13/32 ID x 1-9/32 OD	1
18	64-967	Flip-Up Latch	1
19	41-013	Spring, Ext. 0.50 x 1.938	1
20	64-965	Front Lift Arm Stop	1
21	99-E20	Flange Nut, 1/4	8
22	99-K26	Bolt, Flange 1/4 x 3/4	8
23	64-968	Flip-Up Deck Brace, Left (60"/ 72")	1
	64-970	Flip-Up Deck Brace, Left (48")	1
24	64-969	Flip-Up Deck Brace, Right (60"/ 72")	1
	64-971	Flip-Up Deck Brace, Right (48")	1
25	02-PP0524	Presto Pin, 5/32 x 2-5/16	1
26	64-974	Bolt On Handle, LH (48")	1
	64-976	Bolt On Handle, LH (60")	1
	64-972	Bolt On Handle, LH (72")	1
27	64-998	Hold Down, Roller Frame (72")(Serial No. 2592 -)	1
28	99-E13	Flange Nut, 3/8 (48/60")	2
	99-E13	Flange Nut, 3/8 (72")(Serial No. 1001 - 2591)	3
	99-E13	Flange Nut, 3/8 (72")(Serial No. 2592 -)	5
29	64-973	Bolt On Handle, RH (48")	1
	64-975	Bolt On Handle, RH (60")	1
	64-972	Bolt On Handle, RH (72")	1
30	95-10 (REF)	Flat Washer, 5/8 SAE (See Fig. 2, Ref. 15)	
31	50-007 (REF)	Roller, Front (See Fig. 2, Ref. 29)	
32	50-062 (REF)	Axle Tube, Caster Wheel (See Fig. 2, Ref. 16)	
33	99-K58	Bolt, 3/8 x 3/4 Button Head	2
34	90-0652	Bolt, 3/8 x 6-1/2	1
35	99-K11	Bolt, Flange 3/8 x 3/4 (72")(Serial No. 2592 -)	2
36	99-K82	Bolt, Flange 1/2 x 2	1
37	99-B12	Washer, 1/4 x 17/32 x 1-1/8 (used to modify older models)	2
38	99-E37	Flange Nut, 1/2	1
39	62-858.17 (REF)	Arm, Right Hitch (See Fig. 3, Ref. 11)	
40	64-939 (REF)	Anchor, Lift Arm Left (See Fig. 3, Ref. 9)	
	64-938 (REF)	Anchor, Lift Arm Right (See Fig. 3, Ref. 7)	
41	95-06	Flat Washer, 3/8 SAE	1
42	94-04	Flat Washer, 1/4 USS	6
43	90-0614 (REF)	Bolt, 3/8 x 1-3/4 (See Fig. 1B, Ref. 19)	
44	94-06 (REF)	Flat Washer, 3/8 USS (See Fig. 1B, Ref. 16)	
45	83-034	Idler, "V" 3/8"ID x 5" OD	1
46	99-A06	Locknut, Stover 3/8	1

ASSEMBLY INSTRUCTIONS

1. Remove the mower from the shipping crate.
2. Remove top shield.
3. Install both left and right hitch arms as shown in Section 6, Figure 3 and photos in Section 5.
Torque the 1/2 inch attaching bolts to 85 ft. pounds.
Serial Numbers (MD448=1001-1493, MD460=1001-4727, MD472=1001-1969): Install the 1/2 inch locknut, which holds the two hitch arms together. Tighten and back off 1/2 turn. This allows some independent movement of the hitch arms.
Serial Numbers (MD448=1494 & Up, MD460=4728 & Up, MD472=1970 & Up): Install the 1/2 inch nut and the 1/2" lock washer, which holds the two hitch arms together. Torque to 85 ft. pounds.
4. Be sure that the mower main drive belt is installed correctly on all pulleys. Check spring-loaded idler arm position. Choose a mounting hole in the deck which allows the idler arm to lean toward the drive shaft, with the spring attached. Fasten spring to chain and idler arm as shown in Section 5 and Section 6.
Serial Numbers (MD448=1001-1493, MD460=1001-4727, MD472=1001-1969):
Choose a chain link that stretches spring to an overall length of 8-9 inches.
Serial Numbers (MD448=1494 & Up, MD460=4728 & Up, MD472=1970 & Up):
Choose a chain link that stretches spring approximately one inch on MD460 or 1-1/2" on MD448 & MD472.
5. Check bolts mounting spindles to the deck. Torque should be 35-40 foot pounds.
6. Check blade bolts. Torque should be 75 - 85 foot pounds.
7. Check 1/4" cap screws on pulley bushings (Figure 1, Ref. 9). Torque should be 95 inch pounds. Tighten these cap screws in alternating sequence 10-12 times to assure equal torque on all cap screws.
8. Reinstall the top shield.
9. Remove 1/2" locknut on height adjustment lever and position correctly as shown in Photo 1, Section 4. Replace locknut.
10. Remove the drive pulley shield and install the proper drive belt for the power unit. Replace shield.
11. Attach mower to power unit. See Section 3 for installation instructions. See Section 2 for safety instructions and Section 4 for operating instructions.

STATEMENT OF LIMITED WARRANTY

STEINER TURF EQUIPMENT INC. warrants its line of equipment to be free from defects in material and factory workmanship for a period of 12 months. This statement does not limit engine warranties in which the engine manufacturers carry extended time periods beyond the 12 months. Engine warranty claims will be subject to the engine manufacturer's approval.

Exception to this warranty period will be the Chipper/Shredder, Trencher and Generator, which carry a 90 day warranty. Homeowner warranties will be extended to a 24 month warranty on power units only.

Replacement Parts carry a 90 day replacement warranty and are reimbursed to the dealer, net of the prompt payment. All electrical and hydraulic parts are limited by this policy and will only be covered upon approval by the service department after the inspection of the part. The installation and removal of a part will automatically place that part under the replacement parts warranty.

This guarantee is limited exclusively to equipment manufactured or supplied by STEINER TURF and is subject to the inspection and analysis by the company to conclusively identify or confirm the nature and cause of failure.

PRODUCT REGISTRATION FORM must be completely filled out, signed by the customer, and returned to STEINER TURF before any warranty claims will be considered.

STEINER TURF reserves the right to incorporate improvements in material and design of its products without notice and is not obligated to make the same improvements to equipment previously manufactured.

STEINER TURF is not obligated under any warranty different from the warranty as published above.

STEINER TURF'S RESPONSIBILITIES

STEINER TURF'S obligation under the terms of this warranty is limited to the repair, replacement or credit, at its option, of the equipment, parts or supply items that conform to this warranty.

STEINER TURF will pay for the parts and the cost of surface transportation for the parts that conform to this warranty.

DEALER'S RESPONSIBILITIES

1. Only factory-trained service personnel will be permitted to perform warranty service on STEINER TURF equipment.
2. All major warranty claims such as overhauls - rebuilds must be authorized by STEINER TURF before work is performed.
3. All replacement parts used in warranty situations must be furnished by STEINER TURF or approved by STEINER TURF service personnel. The use of non-recommended oil or parts may void the warranty.

OWNER'S RESPONSIBILITIES

The owner is obligated to operate and maintain the equipment in accordance with the recommendations published by STEINER TURF in the owner/operator's manual for the unit. The owner is responsible for the costs associated with such maintenance and operating adjustments which may be required on a regularly scheduled basis. The owner is responsible for transportation to and from the dealership or service calls made by the dealer.

CONDITIONS WHICH VOID WARRANTY

This warranty shall not apply to equipment which:

1. Has had repairs or modifications not authorized by STEINER TURF.
2. Has been subject to abuse, improper maintenance, or improper application.

Attachments are intended for use only on tractors manufactured by Steiner Turf Equipment, Inc. Use in any other application may void the attachment warranty.

WARRANTY EXCEPTIONS

This warranty does not apply to the following items:

1. Wear items including blades, cutting edges, spark plugs, points and condensers, belts, filters, bearings, sprockets, chains, tires, light bulbs, lubricants and fluids.
2. Damages to engine/drive systems caused by a lack of/improper lubricants and/or fluids.
3. Damages to engine/drive systems caused by improper operation and/or maintenance.

FREIGHT CARRIER DAMAGE

Claims for equipment damaged in transit should be referred to the freight carrier. Visible damage should be reported immediately, and concealed damage as soon as possible, in accordance with freight carrier regulations.