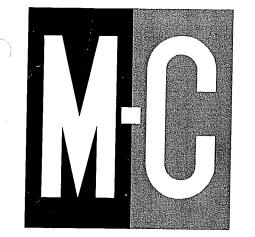
Andrea



INSTRUCTION and PARTS MANUAL

FLAIL MOWER

MODEL 72 AL ·72 AP MODEL 84 AL ·84 AP

MM 70

MATHEWS COMPANY . CRYSTAL LAKE, ILLINOIS, 60014 . U.S.A.

LUBRICATION

P.T.O.:

Lubricate universal joints daily when in use. A light coat of grease should be applied to the telescoping section inside the shield.

GEAR BOX:

Fill gear box with No. 140 gear lube until it runs out level plug hole.

DRIVE BEARINGS:

Lubricate rotor and output shaft bearings after every 50 hours of operation. DO NOT OVER GREASE.

CHAIN:

Oil chain with light engine oil. Under extreme conditions it may be advisable not to oil the chain.

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MAINTENANCE

CHAIN ADJUSTMENT:

The chain should have about 1/4'' of play in it at all times.

CAUTION:

CHAIN SHOULD NOT BE UNDER TENSION AT ANY TIME

SAFETY SHEAR PIN:

This pin is designed to protect the Gear Box and Drive Components against severe shock loads.

CAUTION:

DO NOT REPLACE SHEAR BOLTS WITH HARDENED BOLTS

KNIVES:

Inspect Rotor regularly for bent or broken knives.

CAUTION:

DO NOT RUN MACHINE WITH MISSING OR BROKEN KNIVES

To sharpen knives, grind at original angle of edge. Do not sharpen front edge of knife.

WINTER STORAGE:

Before storing your Mower, grease all of the Bearings to eliminate any cavities where condensation may occur. It is also advisable to paint the exposed surfaces of the inside of the machine with oil to prevent rusting and pitting during storage.

OPERATING INSTRUCTIONS

POWER TAKE-OFF SPEED:

Do not exceed 540 RPM's on tractor power take-off.

CUTTING HEIGHT:

LIFT MOWERS

The cutting height is adjusted by moving the tractor 3 point hitch and/or gauge roller.

PULL MOWERS

The cutting height is adjusted by moving the Ram Jack in or out until proper height is achieved.

GAUGE ROLLER:

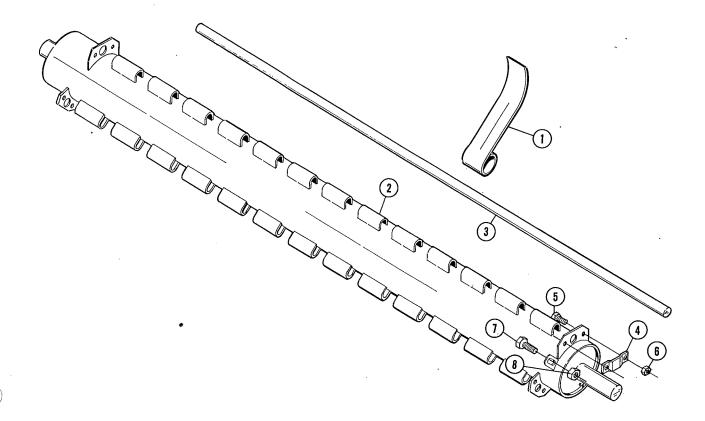
The gauge roller is designed to prevent scalping.

Adjust gauge roller to desired cutting height by moving brackets up or down.

LEVEL ADJUSTMENT:

To adjust level on a Lift Type Mower, adjust upper link on the tractor until skids run parallel to ground.

To adjust level of **Pull Type Mower**, set tractor draw bar to mower pole height. It may be necessary to move the pole to ¹ a different position on the pole plate. Skid should run parallel with ground. For finer adjustment move ram in or out.



ROTOR ASSEMBLY

6 - 1011017

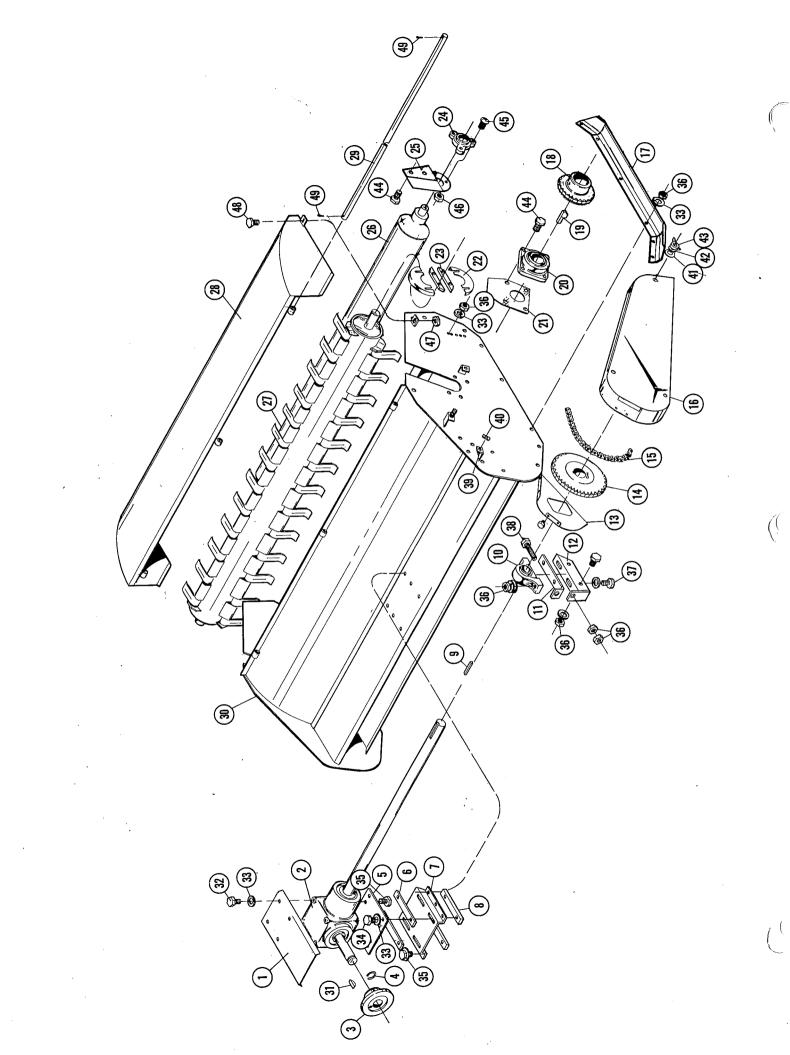
7 - 1011018

REF. NO.	PART NO.	DESCRIPTION
1.	0018999	Knife "G" Type
2.	1010041	6' Rotor Weldment
	1010049	7' Rotor Weldment
3.	1018998	6' Knife Hanger Rod
	1018997	7' Knife Hanger Rod
4.	0012000	End Locator Bracket
5.		3/8-16 x 1" HHCS
6.		3/8-16" Hex Nut
7.	1	3/8-16 x 1-1/2" HHCS
8.		3/8-16" Hex Nut

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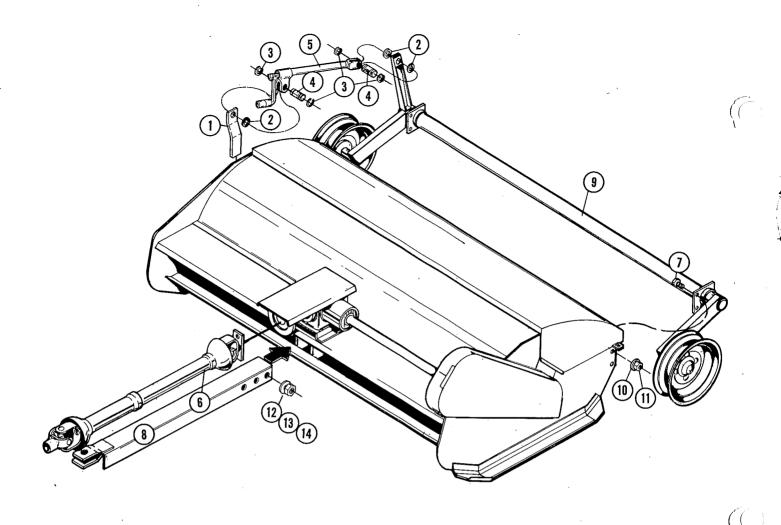
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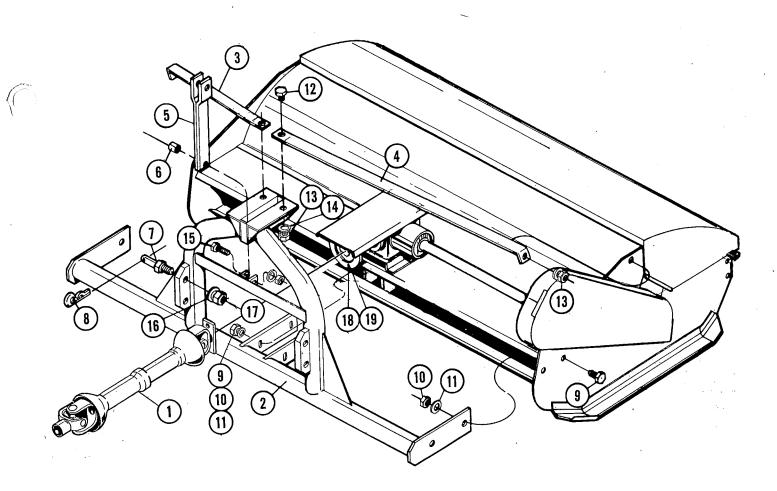
MAIN ASSEMBLY

Full Thd. Bolt 3/8 x 1-1/4" Woodruff Key 3/8-16 x 3/4" Carriage 1/2-13 x 3-1/2" HHCS 1/2-13 x 1-3/4" HHCS 1/2-13 x 1" HHCS $1/2-13 \times 1-1/2$ " HHCS 1/2-13 x 2-1/2" HHCS [/8 x 1" Cotter Pin Rear Cover Weld. 7' Rear Cover Weld. DESCRIPTION 1/2-13 x 3/4" HHCS Mower Cover Rod 6' 5/16" Flat Washer 5/16-18 x 1" HHCS 5/16" Lock Washer 5/16-18" Wing Nut Rotor Assembly Rotor Assembly 3/8-16 x 1" HHCS 1/2" Lock Washer 3/8" Lock Washer Mower Cover Rod Body Weldment 7' 30dy Weldment 6 1/2-13" Hex Nut 3/8-16" Hex Nut Tinnerman Nut -0 PART NO 1010061 0018998 1011018 1015178 1010064 1010065 1015179 101.0060 T011017 REF. 41. 42. 32 . 37. .96 40. 43. 46. 29. 31. 33. 34. 35. 36. 38. 44. 45. 47. 27. 28. 30. 48 3/8 x 3/8 x 1-1/4" Key 1-7/16" Pillow Block Bearing 3-Bolt Flange Bearing 1-1/4" Weld $/2 \times 1/2 \times 15/16^{\tilde{n}}$ Gib Key Gauge Roller Bearing Brkt 17T Rotor Drive Sprocket -15/16" Flange Bearing P.T.O. Snap Ring I-1/4" Outboard Bearing Brkt. Side Plate Slot Shield Joint Shield - High Gear Box All arry 2779 Low Chain Guard Weldment Gear Box Mount Plate DESCRIPTION 1-1/4" Shear Flänge Right Skid Weldment 31T Drive Sprocket Chain AG-60 Left Skid Weldment 1/2-13 Stud Anchor I Anti-Wrap Device Bearing Adj. Bar Gauge Roller Gauge Roller Gear Box Mount Gear Box Mount Sprocket Cover Spacer Bar Universal Nut Bar 000000 1014772 1010058 1010042 1010044 PART NO. 1016606 0017650 0018250 1013423 1015176 1010068 1010066 1010063 00100100 1014770 1034201 1015175 1013534 1014655 L016402 1016302 1010062 0.016402 0014652 0015175 0018987 0016011 101422 REF. 0.1 19. 20. 21. 22. 23.24. с, С 12. 'n 4 <u>л</u> 16. 17. 18. 25. 26. 2. 5.0 4 ιo δ



POLE & AXLE ASSEMBLY

REF. NO.	PART NO.	DESCRIPTION
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.	1013672 0008250 0008230 0001001 1016608 1010008 1011015 1011016	Ram Arm Bracket 1" Flat Washer Ram Pin Snap Ring 1" Ram Pin Ram Assembly P.T.O Pull Type 1/2-13 x 1-1/2" HHCS Mower Pole Weldment 6' Axle Assembly 7' Axle Assembly 1/2" Lock Washer 1/2-13" Hex Nut 5/8-11 x 1-3/4" HHCS
13. 14.	i.	5/8-11" Hex Nut 5/8" Lock Washer



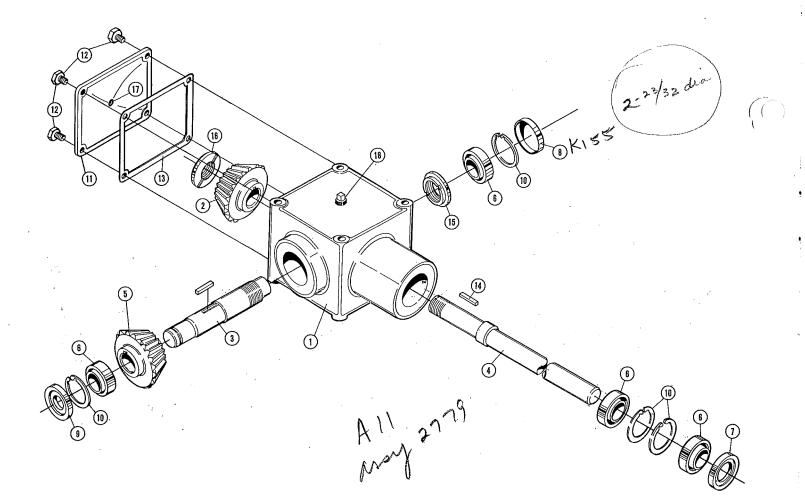
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THREE POINT HITCH ASSEMBLY

	REF. NO.	PART NO.	DESCRIPTION
	1.	1016607	P.T.O Lift Type
	2.	1010038 1010048	6' Three Point Hitch Frame 7' Three Point Hitch Frame
	3.	1013537 1013538	6' Right Tie Brace 7' Right Tie Brace
	. 4. 5.	1013536 1010020	6' Left Tie Brace
	6.	1015590	Floating Arm Weldment 3 Point Pivot Bushing
	7. 8.	1018255 1018254	7/8" Implement Pin Guest-Safety Linch Pin
	9. 10.		5/8-11 x 1-3/4" HHCS 5/8-11" Hex Nut
	11. 12.		5/8" Lock Washer 1/2-13 x 1-1/2" HHCS
	13.		1/2-13" Hex Nut
.;[15.		1/2" Lock Washer $1/2-13 \times 2-1/2$ " HHCS
	16. 17.		7/8" Lock Washer 7/8-14" Hex Nut
	18. 19.	0018130	3/8-16 x 1-3/4" Shear Pin 3/8-16" Lock Nut

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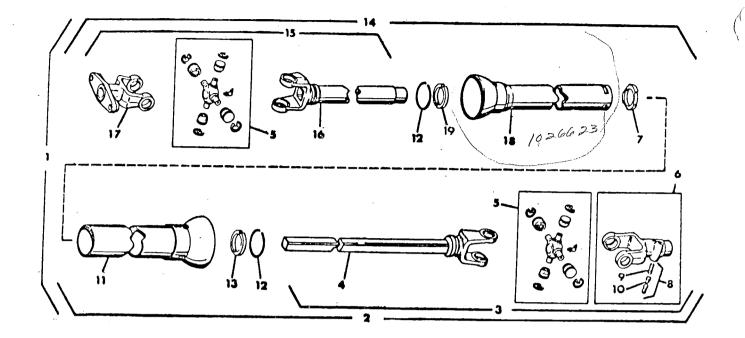


MOWER GEAR BOX 1016606

1. 1027653 Mower Gear Box Housing 2. 1026501 16T Output Bevel Gear 3. 1026624 Input Shaft 4. 1026625 Output Shaft 5. 1026502 24T Bevel Gear 6. 0026012 Inner Bearing 0026013 Bearing Cup 7. 0026667 Grease Seal 8. 0028601 Gear Box Cap Seal 9. 0028602 Seal	REF. NO.	PART NO.	DESCRIPTION
10. 0028258 Snap Ring 11. 1026626 Gear Box Cover 12. 5/16-18 x 5/8" HHCS 13. 0026600 Gasket - Gear Box 14. 0015130 3/8 x 3/8 x 1" Key 15. 1028259 Input Stake Nut 16. 0028260 Output Stake Nut 17. 0027500 Level Plug 18. 0026607 Plug - Vent - Gear Box	$\begin{array}{c} 2.\\ 3.\\ 4.\\ 5.\\ 6.\\ 7.\\ 8.\\ 9.\\ 10.\\ 11.\\ 12.\\ 13.\\ 14.\\ 15.\\ 16.\\ 17.\\ \end{array}$	$\begin{array}{c} 1026501 & - \\ 1026624 & - \\ 1026625 \\ 1026502 & - \\ 0026012 \\ 0026013 \\ 0026667 & - \\ 0028601 \\ 0028602 & - \\ 0028258 \\ 1026626 \\ 0026626 \\ 002559 \\ 0028259 \\ 0028260 \\ 0027500 \\ \end{array}$	<pre>16T Output Bevel Gear Input Shaft Output Shaft 24T Bevel Gear Inner Bearing Bearing Cup Grease Seal Gear Box Cap Seal Seal Snap Ring Gear Box Cover 5/16-18 x 5/8" HHCS Gasket - Gear Box 3/8 x 3/8 x 1" Key Input Stake Nut Output Stake Nut Level Plug</pre>

	© MECHA	NICAL RAM ASSEMBLY 001001		
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REF.	PART NO.	DESCRIPTION		

REF.	PART NO.	DESCRIPTION	1 Jan
1. 2. 3. 4. 5. 6. 7. 8. 9.	0018991 0016001 0018995 0016000 0018254 0018253 0018996 0018997 0018251	Wheel Seal Wheel Inner Bearing Wheel Hub Wheel Outer Bearing Spindle Washer Spindle Nut Wheel Hub Cap Wheel Rim Only Wheel Lug Bolt	



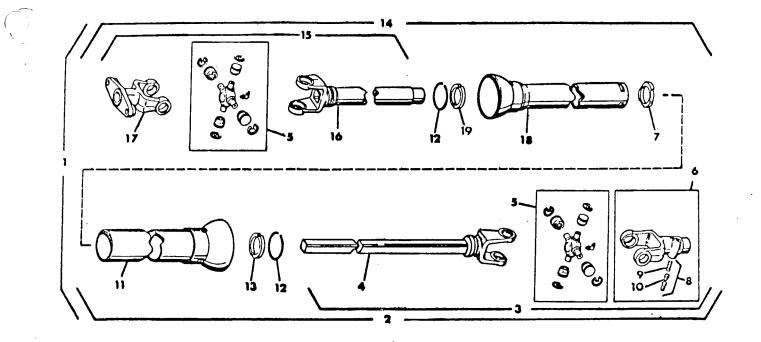
LIFT TYPE P.T.O.

1016607

REF. NO.	PART NO.	DESCRIPTION
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19.	1016607 1026616 1026617 1026618 0026628 $-1026610 oc$ 0026613 0026629 0026601 1026629 0028250 0026601 1026620 1026620 1026621 1026622 0026666 1026623 0026634	"DN35W" Universal Joint and Telescoping Shaft Assembly with Nylon QDFWG Joint and Shaft with QDFWG Joint and Shaft Assembly Yoke and Shaft Assembly Repair Kit 2265/ Q.D. Yoke Assembly (1-3/8 - 6B) Nylon Centralizer Safe*T*Pin and Spring Kit Lock Pin Spring Safe*T*Pin Female Guard Assembly Bearing Retainer Nylon Bearing Joint and Tube w/QDFWG Joint and Tube Assembly Yoke and Tube Assembly Yoke, Shear (1.255/1.252" Dia.) Male Guard Assembly Nylon Bearing

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PULL TYPE P.T.O.

1016608

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) 	REF. NO.	PART NO.	DESCRIPTION
	$ \begin{array}{c} 1.\\ 2.\\ 3.\\ 4.\\ 5.\\ 6.\\ 7.\\ 8.\\ 9.\\ 10.\\ 11.\\ 12.\\ 13.\\ 14.\\ 15.\\ 16.\\ 17.\\ 18.\\ \end{array} $	1016608 1026607 1026608 1026609 0026628 1026610 002 0026613 0026602 0026601 1026611 0028250 0026004 1026612 1026613 1026614 0026666 1026615	"DN35W" Universal Joint and Telescoping Shaft Assembly with Nylon QDFWG Joint and Shaft with QDFWG Joint and Shaft Assembly Yoke and Shaft Assembly Repair Kit 7657 Q.D. Yoke Assembly(1-3/8 - 6B) Nylon Centralizer Safe*T*Pin and Spring Kit Lock Pin Spring Safe*T*Pin Female Guard Assembly Bearing Retaimer Nylon Bearing Joint and Tube W/QDFWG Joint and Tube Assembly Yoke and Tube Assembly Yoke, Shear (1.255/1.252" Dia.) Male Guard Assembly

INSTRUCTIONS FOR ORDERING PARTS

To eliminate error and speed delivery:

- 1. Order your parts from your LOCAL M-C DEALER or DISTRIBUTOR.
- 2. Write your NAME and ADDRESS on your order PLAINLY.
- 3. Explain WHERE and HOW to make shipment.
- 4. GIVE MODEL NAME, NUMBER, and SERIAL NUMBER that is stamped on the NAME PLATE of your product.
- 5. Order from your PARTS LIST as this is the ONLY means we have of identifying the parts you need. Order by QUANTITY DESIRED, the PART NUMBER, and the description OF PART.
- 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 MATHEWS COMPANY 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.
- Note: The Mathews Company reserves the right to incorporate any changes in design without obligation to make these changes on units previously sold.

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