

Start w/SH 15930

M-C

**PARTS LIST
and
INSTRUCTION BOOK**

MODEL 60G

**M-C CHOPPER
& HAY
CONDITIONER**



CM69

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

INSTRUCTIONS FOR CHOPPING & LOADING

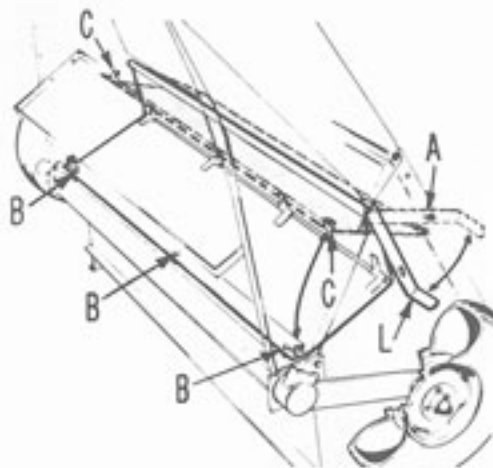


Figure 1.

Remove bolt (A) and drop handle (L) as shown. Fasten three bolts (B) in holes indicated. Changeover is complete. Connect PTO shaft directly to gear box. (lower position).

In chopping cornstalks, grass silage, green feed, etc., length of cut will be determined by ground speed and position of adjustable cutter bar. If green feeding with self feeding wagon, move cutter bar forward or remove to obtain long cut. This will help prevent excessive heating.

The super cutter bar is recommended for grass silage. When placed 1/4" from swinging knives, material chopped across wide surface of sharp serrated edges, gives a finer chop. These edges may be ground occasionally to retain original slicing action.

Replace broken knives immediately. This maintains rotor shaft balance and will result in years of satisfactory service.

Maintain regular PTO speed of 535 RPM.

Remove chain from two speed assembly except during hay conditioning season. This will prolong chain life by eliminating unnecessary wear. Machine operates on a vacuum principle. Do not lower machine so knives hit the ground.

INSTRUCTIONS FOR HAY CONDITIONING

1. Remove three bolts (B) and raise handle (L) so that it may be fastened by bolt (A). Raise deflector and fasten two bolts (B) thru tab and into hole (C). Replace third bolt (B) back into the center hole on the deflector to prevent loss.
2. Place power shaft on upper shaft of two speed attachment.
3. Operate tractor at 1/2 to 3/4 throttle with a ground speed of 4 to 5 mph.
4. Condition hay one swath behind the mower or within 20 minutes. Make sure rear deflector is set at sharp angle so hay falls as close as possible behind machine without building up on hitch.
5. In light hay, set cutter bar close to knives. In heavy material, move cutter bar away from knives or remove. While the machine is new and knives are razor sharp, you will notice a little more cutting effect than desired, however as the machine is broken in, this problem will disappear.
6. **IMPORTANT:** Height Adjustment - raise machine as high as possible without leaving any hay.

INSTRUCTIONS FOR MOWING, CHOPPING, SHREDDING (For Direct Ground Return)

Switch plate remains in same position as for Hay Conditioning.

1. Connect PTO shaft directly to gear box. Use one shear bolt only.
2. Inspect knives daily or before using machine each time. Broken or badly bent knives should be replaced before operating unit.
3. Remove chain from two speed assembly except during hay conditioning season. This will prolong chain life by eliminating unnecessary wear.

MAINTENANCE AND LUBRICATION INSTRUCTIONS

KNIVES Do not run machine with knives missing. Several knives off will cause vibration which will damage other parts of machine. Machine should run smoothly. Check locknuts on knife pins. Locknuts should be drawn up tight to prevent bushings from tumbling.

ROTOR All M-C Choppers are tested at the factory for smooth operation. If vibration shows up when all knives are on rotor, indicates the rotor is bent and must be replaced. The RPM of the tractor PTO should never exceed a top speed of 550 RPM at any time.

POWER TAKE OFF SHAFT Lubricate universal joints daily when in use. A light coat of grease should also be put on telescoping section inside shield.

DRIVE CHAINS In very dusty conditions of shredding cornstalks or stubble, do not oil drive chain. Under normal conditions, the drive chain should be oiled once a week. Let the oil soak between the chain links then wipe off all excess oil from chain and sprockets.

ROTOR SHAFT BEARINGS AND OUTBOARD BEARING Lubricate every 50 hours of operation. These are self-aligning, sealed, ball bearings. Too much will force the seal out allowing loss of grease and entry of dirt. Intact seals insure maximum output from even a small amount of grease.

GEAR BOX Fill gear box to oil level plug with No. 140 oil.

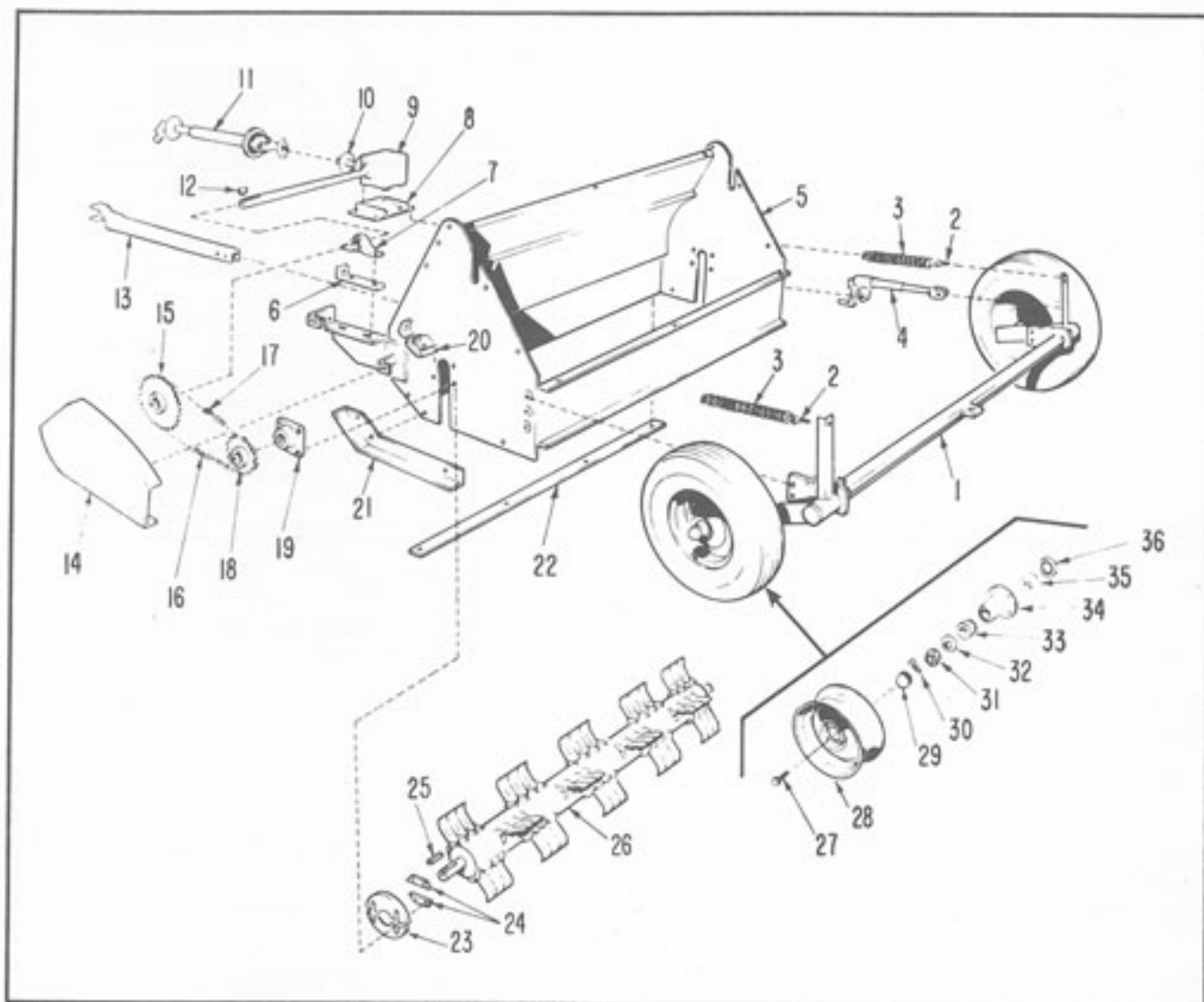


Figure 2. M-C CHOPPER MAJOR ASSEMBLIES

Ref. No.	Part No.	Qty.	Description
1	8038	1	Axle Weldment
2	7190	2	Turned Eye Bolts w/2 nuts
3	7165	2	Lift Spring
4	0001001	1	Ram Assembly
5	8000	1	Body Weldment
6	0013521	1	Bearing Mount Adjusting Bar
7	0016011	1	1 - 7/16 Pillow Block Bearing
8	8045	1	Gear Box Mount Weldment
9	7065	1	Gear Box
10	0017650	1	Shear Flange
11	0016600	1	Power Shaft "G" Machine
12	0018998	1	Woodruff Key
13	8055	1	Hitch Pole Weldment
14	8072	1	Chain Guard Weldment
15	7120	1	RC60 - 48T Sprocket
16	7130	1	RC60 - Drive Chain
17	0026300	1	RC60 - Connecting Link
18	7115	1	RC60 - 17T Sprocket

Ref. No.	Part No.	Qty.	Description
19	0016010	2	1-15/16 Flange Bearing
20	6459	1	Chain Tightener
21	6010	1	Left Skid
	6015	1	Right Skid
22	6325	1	Cutter Bar
23	0014652	4	Rotor Anti-Wrap Device
24	0015175	4	1/2-13 Stud Anchor Rotor Brg. Bolt
25	0015145	1	1/2 x 1-15/16" Lg Key
26	8120	1	(See page 6)
27	0018251	8	Wheel Lug Bolt
28	0018997	2	Wheel Rim Only
29	0018996	2	Wheel Hub Cap
30	0018252	2	Spindle Cotter Pin
31	0018253	2	Spindle Nut
32	0018254	2	Spindle Washers
33	0016000	2	Wheel Outer Bearing
34	0018995	2	Wheel Hub w/Bearings Pressed In
35	0016001	2	Wheel Inner Bearing
36	0018991	2	Wheel Seal

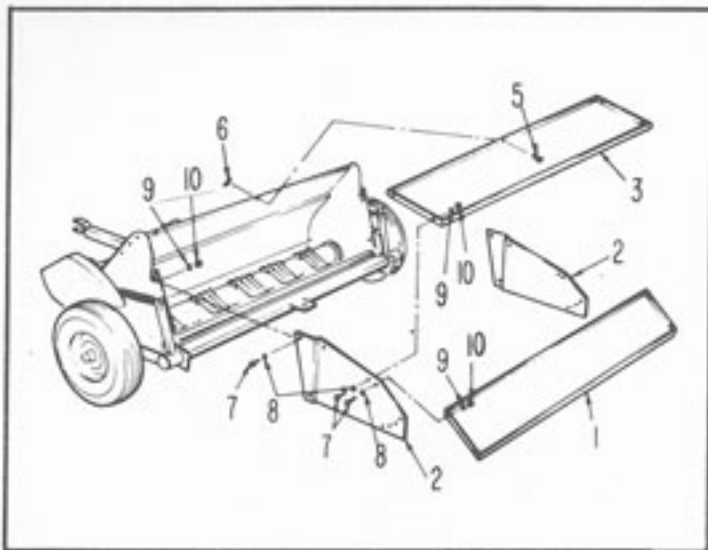


Figure 3. 8118 - REAR DEFLECTOR ASSEMBLY

REF. NO.	PART NO.	QTY.	DESCRIPTION
1	8110	1	Adjustable Deflector Weldment
2	6057	1	Rear Deflector Side Plate RH
3	6102	1	Rear Deflector Pan
4	6056	1	Rear Deflector Side Plate LH
5		3	5/16 x 3/4" HHCS.
6		3	5/16" Locknuts
7		12	3/8 x 1" HHCS
8		12	3/8" Flat washer
9		12	3/8" Lock washer

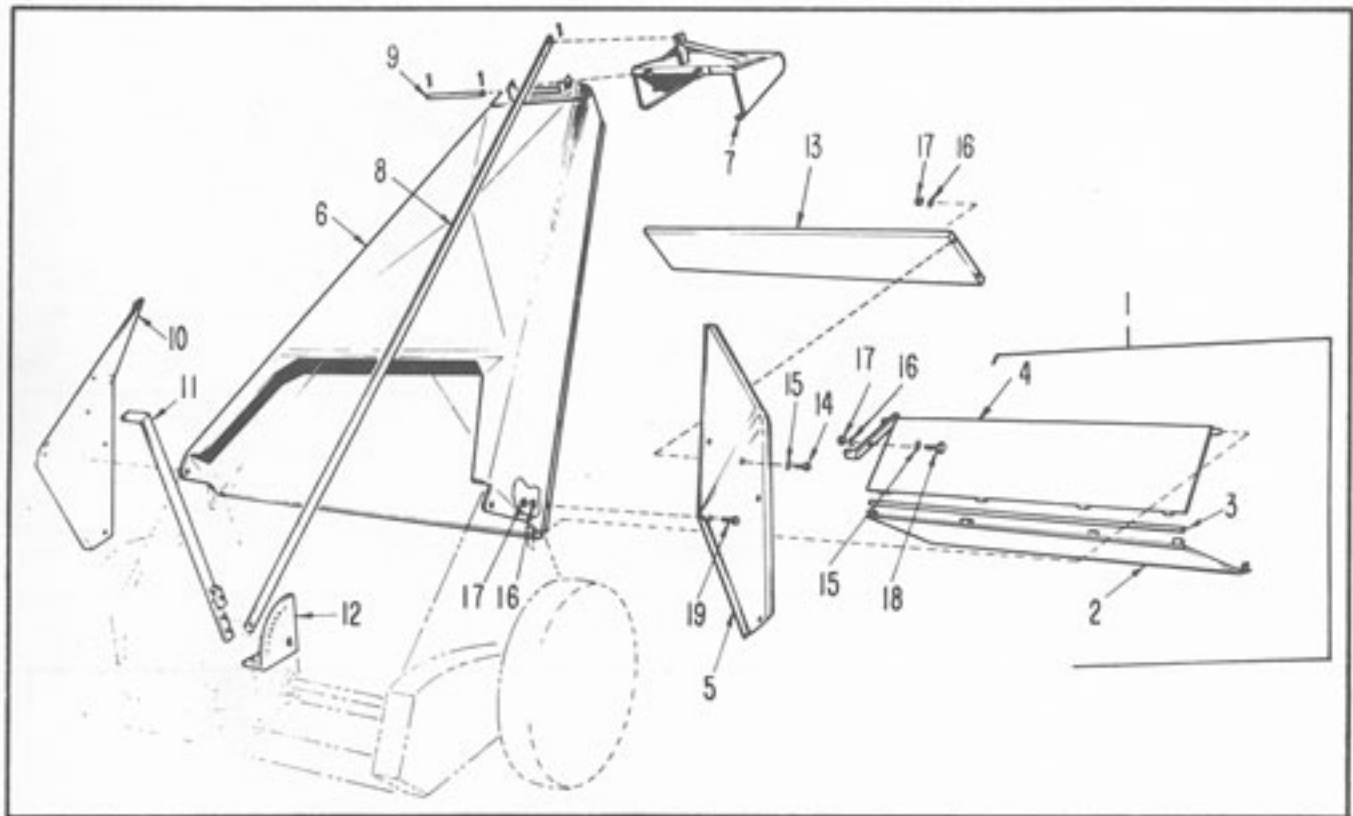


Figure 4. 8032 - LOADING CHUTE ASSEMBLY KIT

Ref. No.	Part No.	Qty.	Description
1	8117	1	Switch Plate and Closing Cover Assy.
2	8040	1	Closing Cover Weldment
3	6495	1	Hinge Rod w/2 Cotter Pins
4	8060	1	Switch Plate Weldment
5	8049	1	Left Chute Brace Weldment
6	8030	1	Chute Weldment
7	8020	1	Spout Weldment
8	7010	1	Spout Link
9	6485	1	Spout Hinge Pin
10	8048	1	Right Chute Brace Weldment

Ref. No.	Part No.	Qty.	Description
11	8500	1	Lever Assembly
12	6375	1	Quadrant
13	8110	1	Adjustable Deflector Weldment
14		8	3/8 - 16 x 1" HHCS
15		4	3/8" Flat washers
16		13	3/8" Lock washers
17		13	3/8-16 Hex Nut
18		1	3/8-16 x 1 1/2" HHCS
19		4	3/8-16 x 1 1/4" HHCS

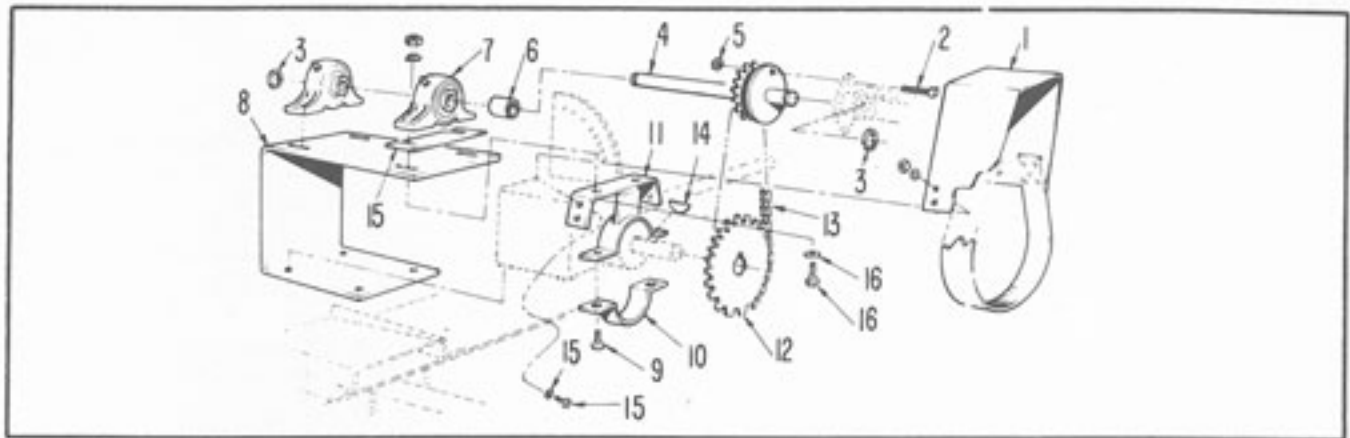


Figure 5. 8086 - 2-SPEED ATTACHMENT KIT

Ref. No.	Part No.	Qty.	Description
1	8074	1	Two Speed Guard Weldment
2	0018130	1	Square Head Bolt 3/8-16 x 1 1/4" Lg.
3	0018250	2	Snap Ring 1-1/4
4	8075	1	Two Speed Shaft w/Sprocket & Flange
5	0018149	1	Locknut 3/8-16
6	6525	1	Spacer
7	0006006	2	Bearing 1-1/4"
8	6380	1	Gear Box Mount

Ref. No.	Part No.	Qty.	Description
9		2	1/2-13 x 1-1/4" Lg HHCS w/LW, Nut
10	6250	1	Two Speed Chain Guard Clamp
11	8085	1	Chain Guard Bracket
12	7110	1	32T Sprocket RC60
13	7125	1	Chain, RC60 x 34-1/2" Lg.
14	0018998	1	Woodruff Key 3/8 x 1-1/2"
15		4	5/16-18 x 1" Lg. HHC w/LW, FW, Nut
16		4	1/2-13 x 2-1/2" Lg HHCS w/LW, FW, Nut

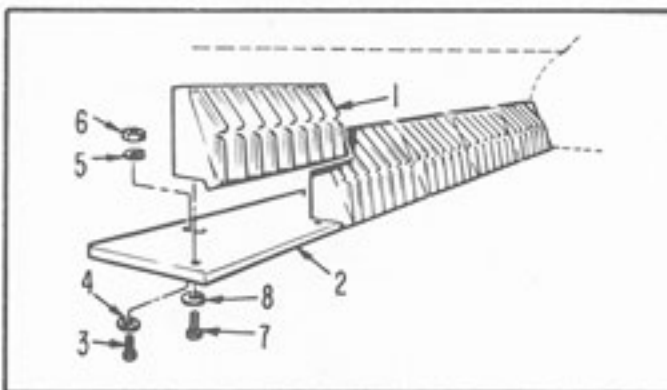


Figure 6. 8116 - SUPER CUTTER BAR ASSEMBLY

Ref. No.	Part No.	Qty.	Description
1	6539	5	Super Cutter Bar Castings
2	6326	1	Super Cutter Bar
3		4	1/2-13 x 1-1/4" Lg HHCS
4		4	1/2" Flat washers
5		4	1/2" Lock washers
6		4	1/2-13 Hex Nut
7		10	3/8-16 x 1" HHCS
8		10	3/8" Lock washer

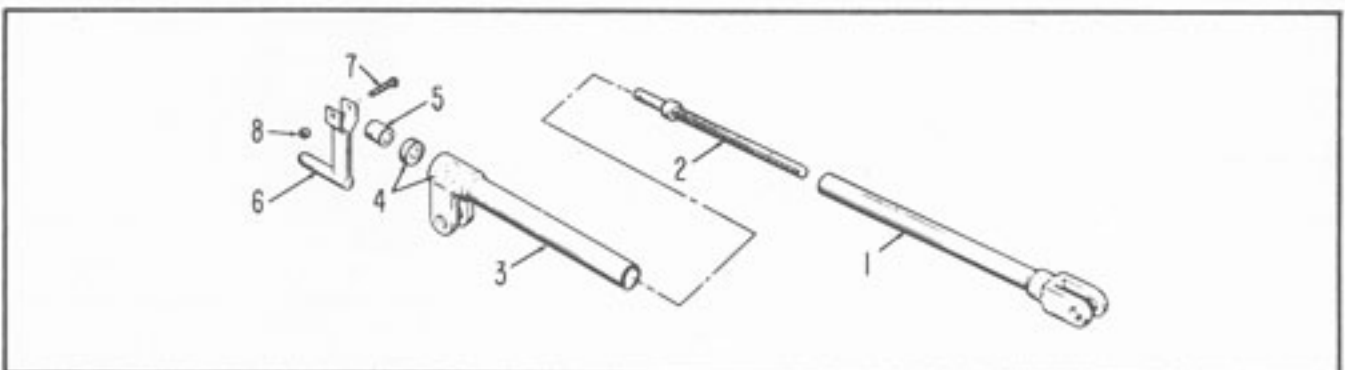


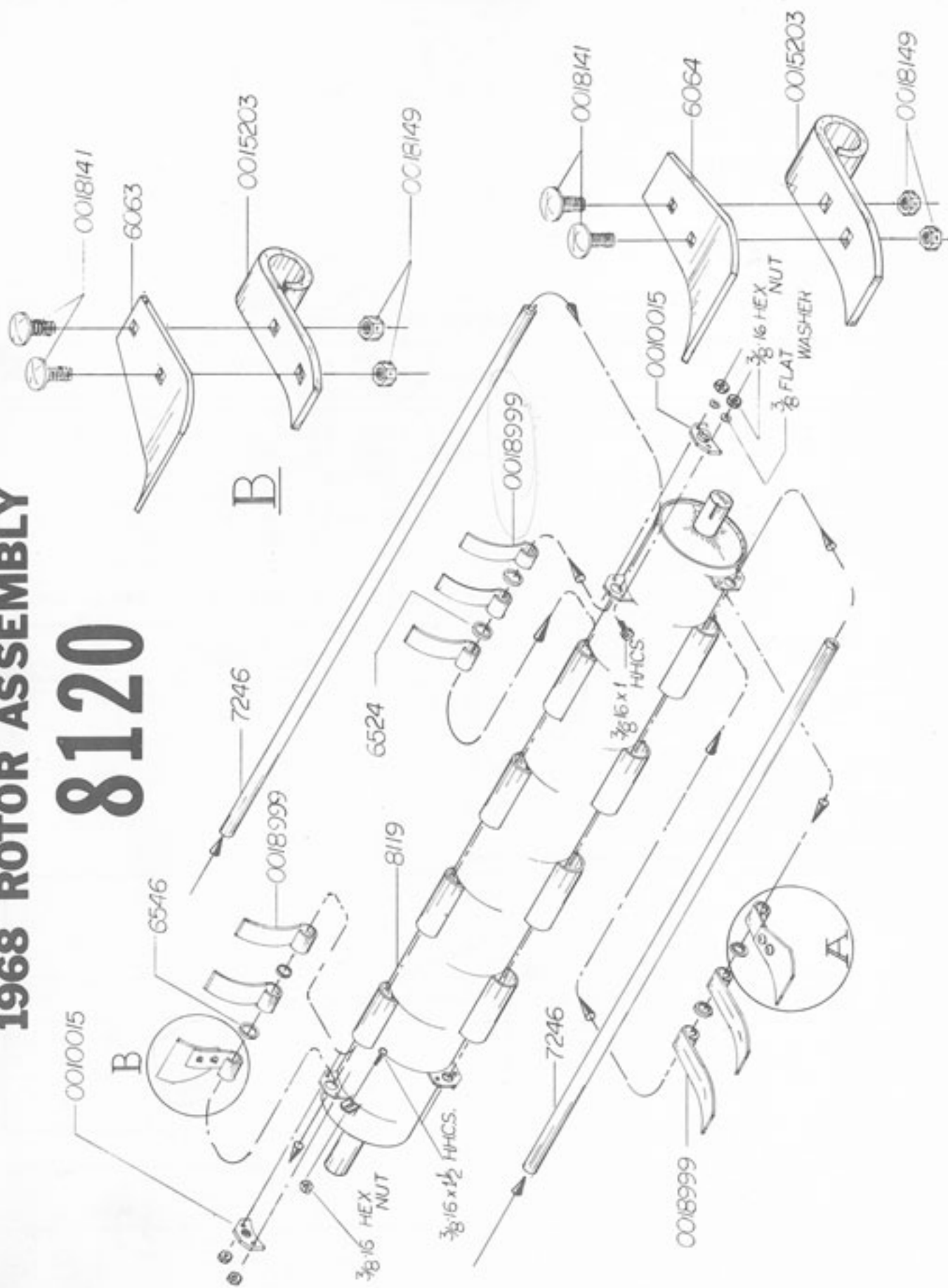
Figure 7. 0001001 - MECHANICAL RAM

Ref. No.	Part No.	Description
1	0000001	Ram Floating End Weldment
2	0000002	Ram Screw Weldment
3	0000003	Ram Fixed End Weldment w/Bearing Inside
4	0006000	Ram Thrust Bearing

Ref. No.	Part No.	Description
5	0005600	Retainer Sleeve
6	0000004	Handle Weldment
7		3/8-16 x 2" Lg. Bolt
8	0018149	3/8-16 Lock Nut

1968 ROTOR ASSEMBLY

8120



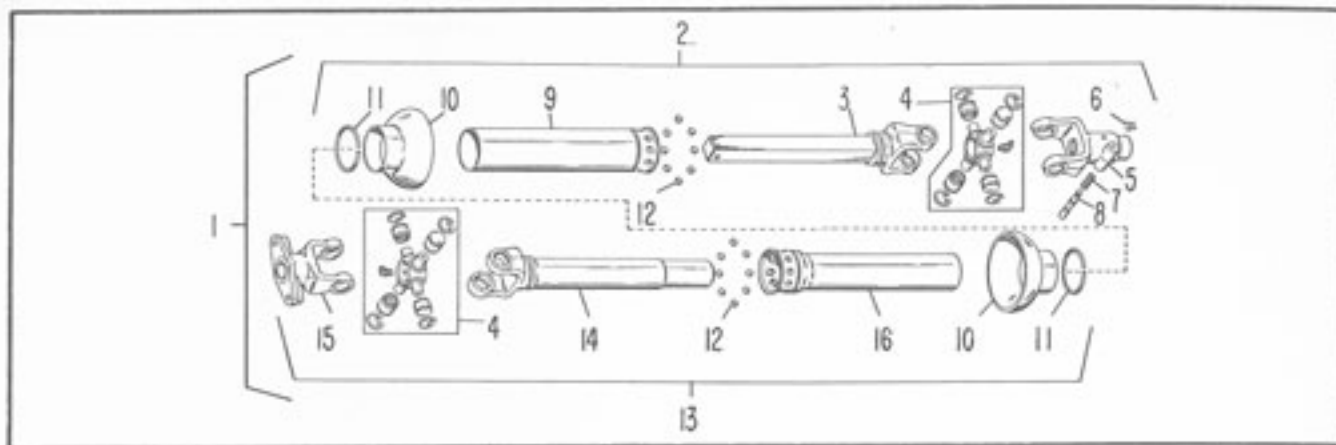


Figure 10. 0016600 - PTO SHAFT

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	0016600	Power Shaft	9	0026624	Female Guard Tube
2	0026620	Tractor Half Assembly Complete w/Q.D. Yoke	10	0026626	Bell Shield
3	0026627	Male Shaft & Yoke Weldment	11	0026625	External Snap Ring, Retaining Ring 2-3/4 Shaft
4	0026628	Universal Joint Center	12	0026606	3/8" Diameter Balls
5	0027651	Quick Detachable Yoke (Only)	13	0026621	Machine Half of PTO Complete w/Shear Flange
6	0026603	"X" Washer, Locking Pin	14	0026622	Female Shaft & Yoke Weldment
7	0026602	Spring, Locking Pin	15	0027652	Flange Yoke
8	0026601	Locking Pin, Q.D. Yoke	16	0026623	Male Guard Tube

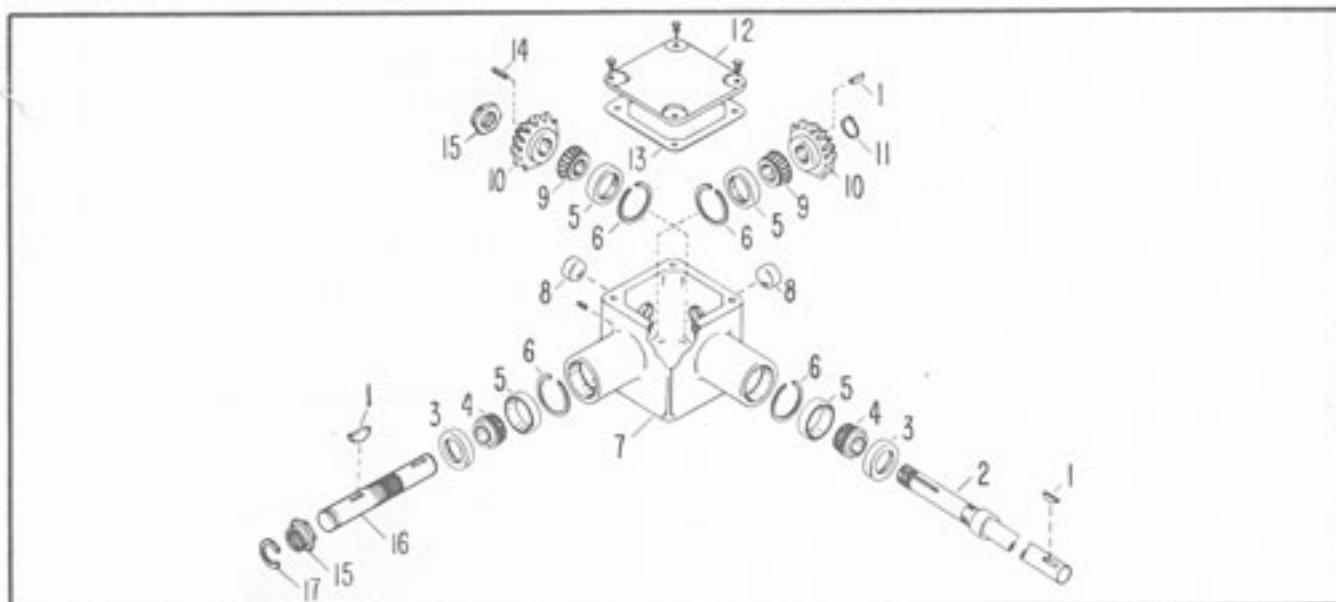


Figure 11. 7065 - GEAR BOX

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
1	0018998	3	Woodruff Key	10	7535	2	Bevel Gear
2	7537	1	Output Shaft	11	7534	1	Input Shaft Snap Ring
3	7531	2	Grease Seal (Input & Output Shaft)	12	7539	1	Cover (Less Quadrant) Gear Box
4	7532	2	Outer Bearing (Input & Output Shaft)	13	7569	1	Gasket - Gear Case Cover
5	7544	4	Bearing Cup	14	0015136	1	Key 3/8 x 2-1/2
6	7536	4	Snap Ring	15	7609	2	Stake Nut 1-1/4"
7	7568	1	Case-Gear Box	16	7527	1	Input Shaft
8	7567	2	Gear Case Plug	17	0018250	1	PTO Snap Ring 1-1/4"
9	7533	2	Inner Bearing				

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.