

STOCK NO. 

MODEL NO. 1054B

**ASSEMBLY — OPERATION
AND MAINTENANCE
INSTRUCTIONS**

NOTICE

**MACHINE NOT WARRANTED.
UNLESS REGISTRATION CARD
IS FILLED OUT AND RETURNED
TO:**

**MATHEWS COMPANY
CRYSTAL LAKE, ILL.**



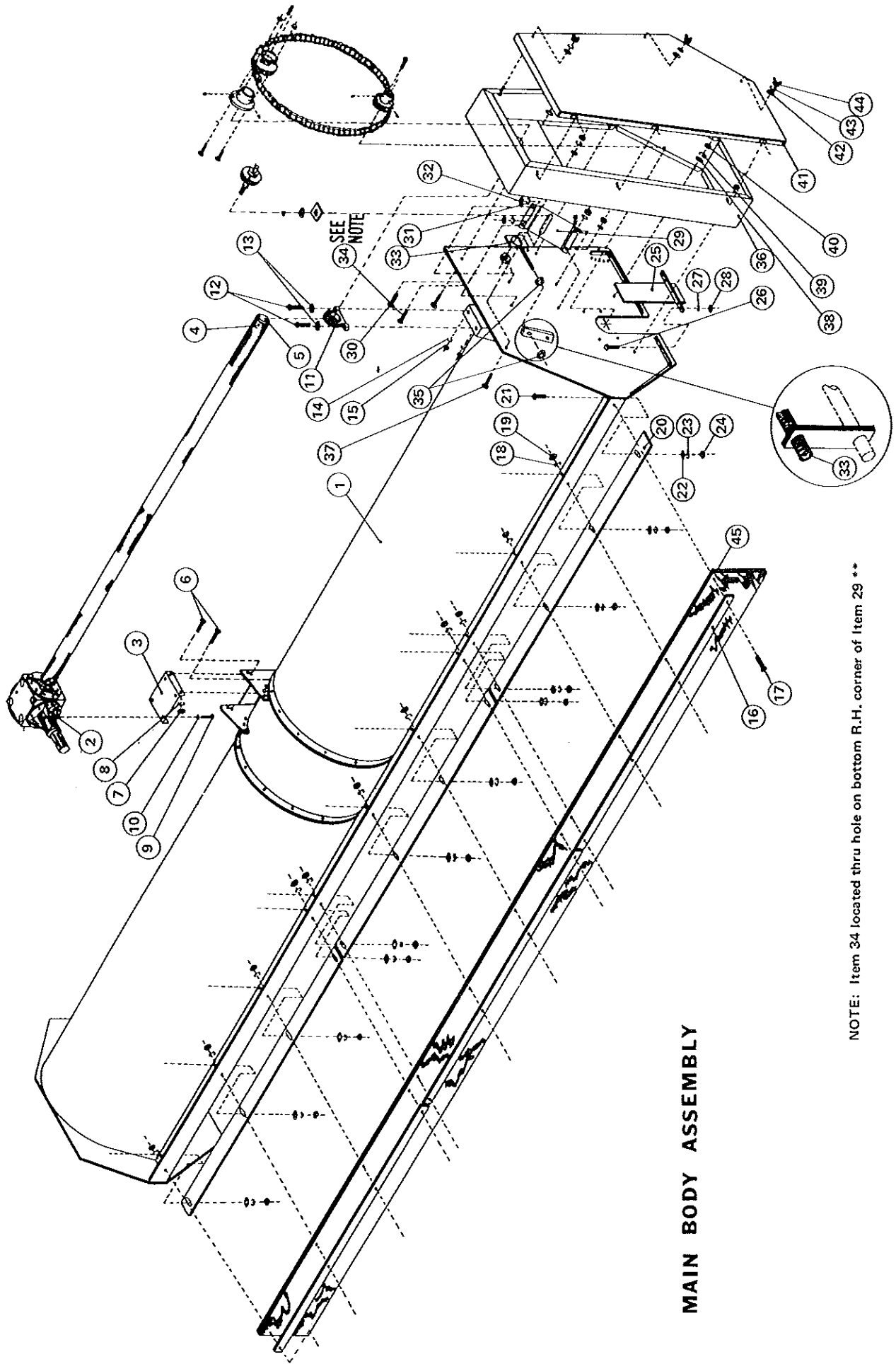
DANGER!

1. KEEP ALL SHIELDS IN PLACE.
2. DISCONNECT POWER SOURCE TO ADJUST OR SERVICE.
3. MAKE CERTAIN EVERYONE IS CLEAR OF EQUIPMENT BEFORE APPLYING POWER
4. KEEP HANDS, FEET, AND CLOTHING AWAY FROM MOVING PARTS.

**FAILURE TO HEED MAY RESULT
IN PERSONAL INJURY**

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MAIN BODY ASSEMBLY

NOTE: Item 34 located thru hole on bottom R.H. corner of Item 29 **

BILL OF MATERIALS

QTY	DESCRIPTION	ITEM QTY	DESCRIPTION	ITEM QTY	DESCRIPTION	ITEM
1	BODY WELDMENT P/N 1110054	1	CUTTER BAR P/N 1113479	20	5/16 MED LOCK WASHER	39
1	GEAR BOX P/N 0916608	2	CAP SCREW REG. HEX. HD. SEMI-FIN. 3/8 16x1 1/4	21	5/16 NUT REG. HEX. SEMI-FIN. 5/16-18	40
1	GEAR BOX MOUNT P/N 113546	3	3/8 FLAT WASHER	22	BELT GUARD COVER P/N 1110091	41
1	GEAR BOX SHAFT GUARD P/N 1115704	4	3/8 MED. LOCK WASHER	23	5/16 STANDARD CUT WASHER	42
1	GEAR BOX SHAFT P/N 1115177	5	NUT REG. HEX. SEMI-FIN. 3/8-16	24	5/16 MED. LOCK WASHER	43
4	CAP SCREW REG. HEX. HD. SEMI-FIN. 5/8-11x1 1/2	6	END PANEL FILLER WELDMENT P/N 1110079	25	5/16 WING NUT	44
4	NUT REG. HEX. SEMI-FIN. 5/8-11	7	CAP SCREW REG. HEX. HD. SEMI-FIN. 3/8-16x1	26	RUBBER FLAP P/N 1118993	45
4	5/8 LOCK WASHER	8	3/8 MED LOCK WASHER	27		
4	CAP SCREW REG. HEX. HD. SEMI-FIN. 5/8-11x1 1/4	9	NUT REG. HEX. SEMI-FIN. 3/8-16	28		
4	5/8 LOCK WASHER	10	IDLER BRKT P/N 1113448	29		
1	PILLOW BLOCK BEARING P/N 1116001	11	CAP SCREW REG. HEX. HD. SEMI-FIN. 1/2-13x1 1/4	30		
2	CAP SCREW REG. HEX. HD. SEMI-FIN. 1/2-13x1 3/4	12	1/2 MED LOCK WASHER	31		
2	1/2 S.A.E. FLAT WASHER	13	NUT REG. HEX. SEMI-FIN. 1/2-13	32		
2	1/2 MED LOCK WASHER	14	IDLER ADJ. P/N 1110080	33		
2	NUT REG. HEX. SEMI-FIN. 1/2-13	15	ROUND HD. SQUARE NECK CARRIAGE BOLT 1/2-13x1 1/4	34		
2	RETAINING STRIP P/N 1114207	16	NUT REG. HEX. SEMI-FIN. 1/2-13	35	OPTIONAL ITEMS FOR OFFSET MACHINE	
10	CAP SCREW REG. HEX. HD. SEMI-FIN. 3/8-16x1	17	BELT GUARD P/N 1110076	36	BODY WELDMENT P/N 1110054 OFFSET	1
10	3/8 MED LOCK WASHER	18	CAP SCREW REG. HEX. HD. SEMI-FIN. 5/16-18x 7/8	37	GEAR BOX SHAFT GUARD P/N 1115705	4
10	NUT REG. HEX. SEMI-FIN. 3/8-16	19	5/16 FLAT WASHER	38	GEAR BOX SHAFT P/N 1115178	5

Place the Shredder Body Assembly on blocking so that it sets approximately 6" to 10" above the ground. Mount the tires and wheels to the Wheel Mount Weldment (Figure). Determine the desired wheel spacing for the crop to be cut and place the Wheel Mount Weldment against the axle of the machine. Proper alignment with the axle may be obtained by use of the rear Mechanical Ram. Place the Wheel Mount Clamping Bracket in position and bolt securely using the ½-13 X 2¼" H.H.C.S., nuts and washers provided. Follow the same bolting procedure for the remaining three wheel mounts. Tighten bolts evenly into Place.

Bolt the Hitch Assembly to machine using the 5/8-11 X 1¼ H.H.C.S. provided as shown in figure .

Locate the Drive Line thru the pillow block bearing located on the Hitch Assembly, then bolt opposite end of drive line to Gear Box using the 5/8-11 X 2 3/4" H.H.C.S. provided.

Assemble Drive Line Guard to Gear Box and Hitch Assembly as shown using the two guard brackets and the 3/8-16 X 1 H.H.C.S. Provided.

Now the PTO Shaft may be positioned on the Drive Line as shown.

LUBRICATION

Check oil level in gear box. Use No. 140 oil. Oil level should be up to oil level plug at side of gear box. All points should be lubricated once a day if machine is getting constant use. A hard grease gun is best because there will be less tendency to break the seals in the bearings by forcing too much grease into them. Use grease sparingly and just give it enough to do the job. When you put the machine away at the of the season, fill the bearings with grease to eliminate any cavities where condensation may occur.

CUTTING HEIGHT ADJUSTMENT

Cutting Height Adjustment is made by cranking the mechanical rams furnished on the machine, or by using a hydraulic cylinder in place of the rear mechanical ram, such as used on a plow. A hydraulic cylinder is desirable in rocky fields, especially if you see a rock you can raise the machine up and over. It is best, however, to stop and pick up the rocks.

TRACTOR GROUND SPEED AND POWER TAKE OFF SPEED

Operating with a Power Take-Off speed of 540 RPM's. and with a ground speed of from three to six miles per hour, you may shred heavy crops provided you have power available. Horsepower requirements vary with the weight of crop and the type of shredding. Horsepower is reduced by traveling at a slower forward speed. The right combination of power take-off speed and ground speed will produce the best results. For 1000 RMP's power take-off tractors operation's will be the same.

BREAKING IN PERIOD

It takes approximately 10 to 15 acres of shredding to get the inside of the machine and the blades polished to get the best performance. As the machine works in, performance will get better. After the Machine has been operated a few hours, check all nuts and bolts to make sure they are tight. Open front cover and check knife bolts to be sure they are tight.

MAINTENANCE OF SHREDDER BLADES

The machine is designed for easy inspection of shredder blades and rotor. The shredder blades will last a long time with only occasional sharpening. It is important to check the blades occasionally to get good shredding action. The blades are eccentrically pivoted to the rotor shaft so that when they cut into the stalk, they swing back slightly causing an extended arc of cutting, thereby giving a smoother cut. It is important that the knives swing freely. When replacing blades to the hangers, be sure the whole blade assembly swings free. Be sure to tighten all bolts. NOTE: When sharpening blades, try to maintain original angle of cutting edge as close as possible.

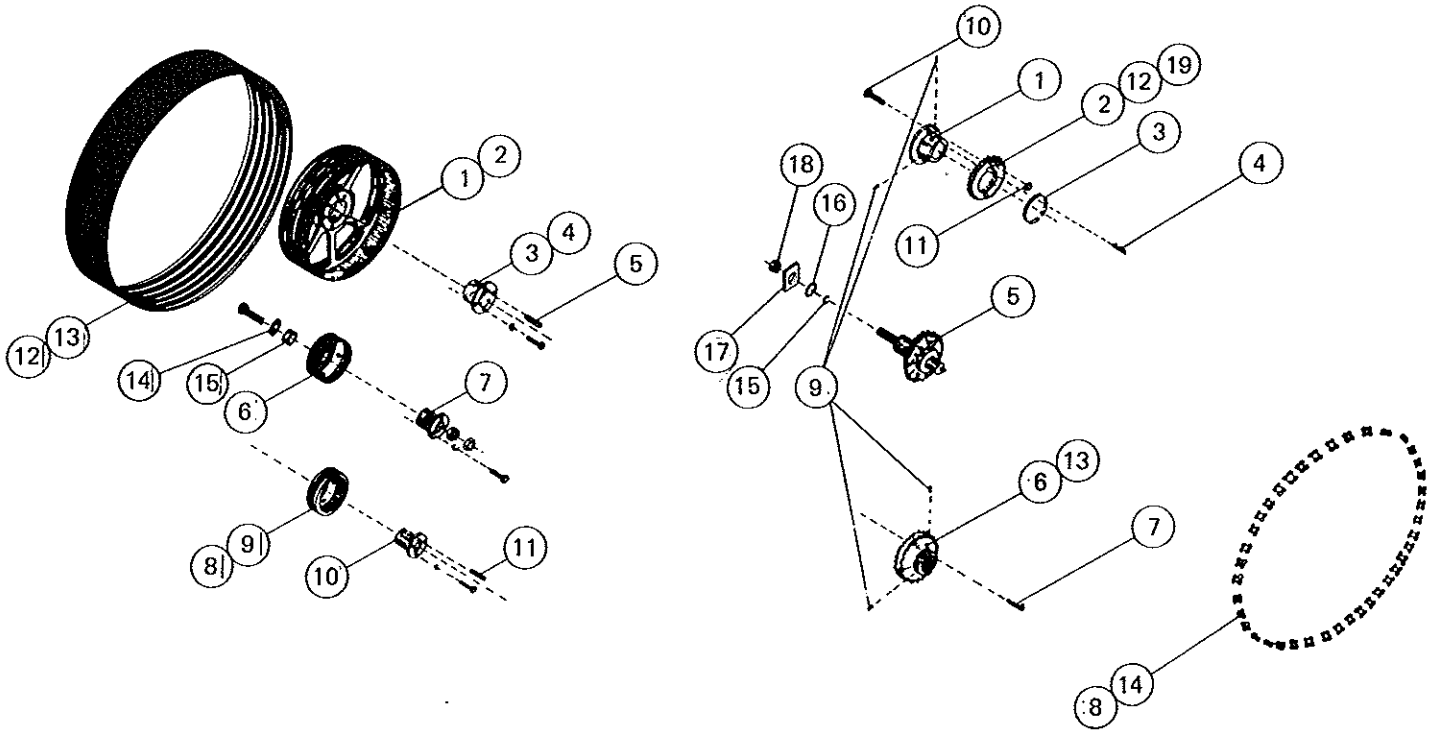
MAINTENANCE OF CHAIN DRIVE AND SPROCKETS

The sprockets must be lined up so that the chain runs perfectly straight on the sprockets. If chain runs extremely hot, this means the sprockets are not in line and the chain is dragging on the side of one of the sprockets. When your chain becomes excessively worn, it will then cause excessive wear on the sprockets. Be sure the sprockets are in line and set screws are tight. This assures you best service.

SAFETY SHEAR PIN DEVICE

All M-C Shredders are equipped with safety shear bolts which fasten the drive sprocket to a flange on the gearbox output shaft. They will snap if the tractor clutch is let out too fast, or if the machine is submitted to severe impact from an unseen object in the line of travel. DO NOT USE HARDENED BOLTS FOR SHEAR PINS.

CHAIN AND BELT DRIVE



BELT DRIVE

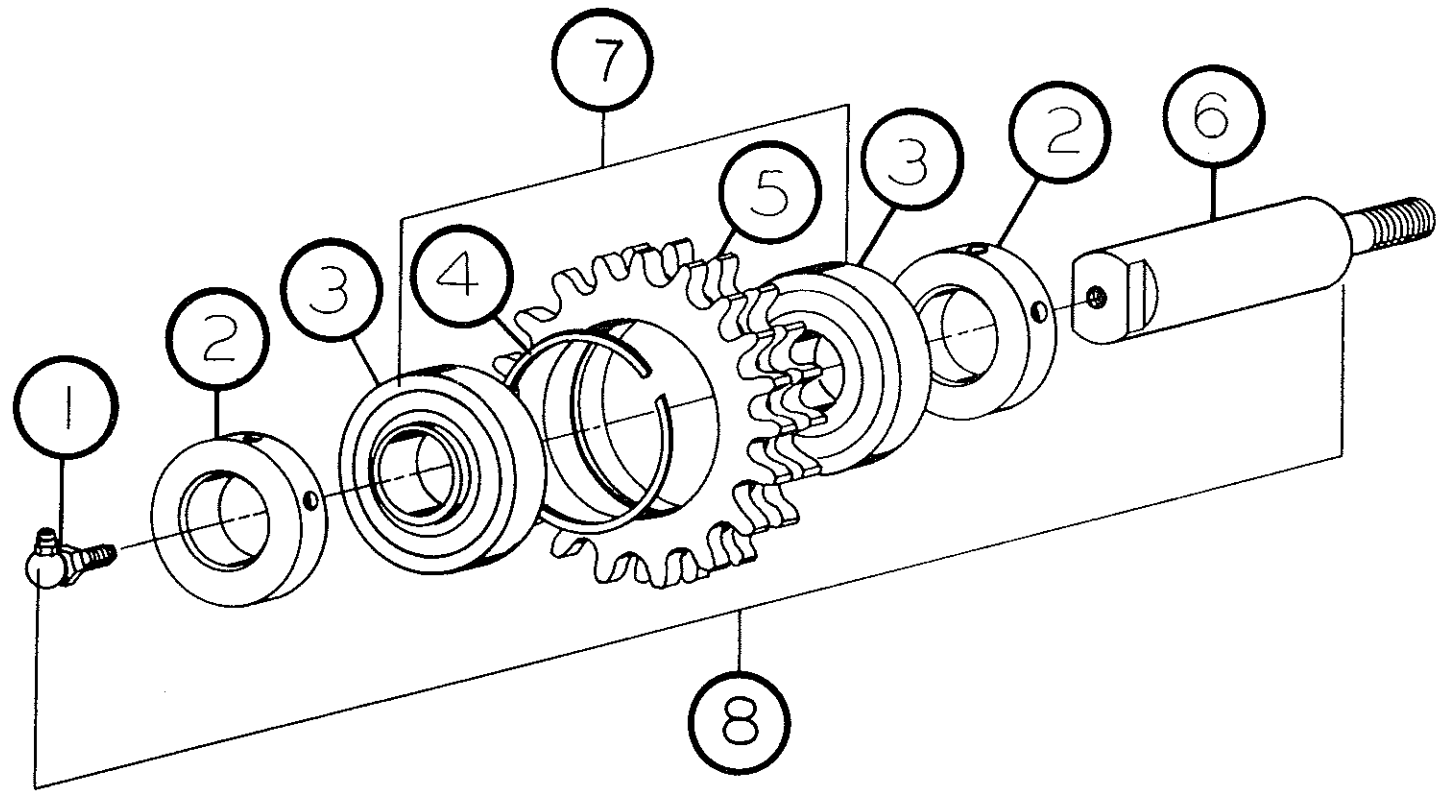
CHAIN DRIVE

1	SPACER P/N 1115441	15
1	3/4 FLAT WASHER	14
2	BELT 3/5V 750 (1000 ONLY) P/N 1116100	13
2	BELT 3/5V 800 (540 ONLY) P/N 1116101	12
1	KEY 1/2 x 1/2 x 2 3/8 P/N 1115145	11
1	BUSHING E 1 15/16 BORE (540 & 1000) P/N 1116209	10
1	PULLEY 5V 10.3-6 (1000 ONLY) P/N 1116208	9
1	PULLEY 5V 8.5-6 (540 ONLY) P/N 1116207	8
1	BUSHING EBB (540 & 1000) P/N 1116206	7
1	PULLEY 5V 8.0-6 (540 & 1000) P/N 1116210	6
1	KEY 3/8 x 3/8 x 3 1/2 P/N 0015131	5
1	BUSHING E 1 3/4 BORE (1000 ONLY) P/N 1116205	4
1	BUSHING F 1 3/4 BORE (540 ONLY) P/N 1116204	3
1	PULLEY 5V-10.9-6 E HUB (1000 ONLY) P/N 1116202	2
1	PULLEY 5V-16.0-6 F HUB (540 ONLY) P/N 1116203	1
QTY.	DESCRIPTION	ITEM

1	SPROCKET (OPTIONAL FOR BRUSH) P/N 1116404	19
1	IDLER NUT (CHAIN ONLY) P/N 1118103	18
1	SQUARE WASHER (CHAIN ONLY) P/N 1113374	17
1	3/4 MED. FLAT WASHER	16
1	3/4 LOCK WASHER	15
1	CHAIN P/N 1116303 (1000 ONLY)	14
1	SPROCKET P/N 0036400 (1000 ONLY)	13
1	SPROCKET P/N 0016401 (1000 ONLY)	12
2	LOCK NUT REG. HEX. SEMI-FIN. 3/8-16	11
2	CAP SCREW REG. HEX. HD. SEMI-FIN. 3/8 16 x 2 1/2	10
4	ALLEN SET SCREW 3/8-16 x 1/2	9
1	CHAIN P/N 1116304 (540 ONLY)	8
1	GIB KEY 1/2 x 1/2 x 2 (540 & 1000) P/N 0018987	7
1	SPROCKET P/N 1116401 (540 ONLY)	6
1	IDLER ASSEMBLY P/N 0911051 (540 & 1000)	5
1	KEY 3/8 x 3/8 x 2 1/2 (540 & 1000) P/N 0015136	4
1	SNAP RING P/N 0018100 (540 & 1000)	3
1	SPROCKET P/N 1116402 (540 ONLY) *	2
1	SPROCKET SHEAR FLANGE P/N 0017651 (540 & 1000)	1
QTY.	DESCRIPTION	ITEM

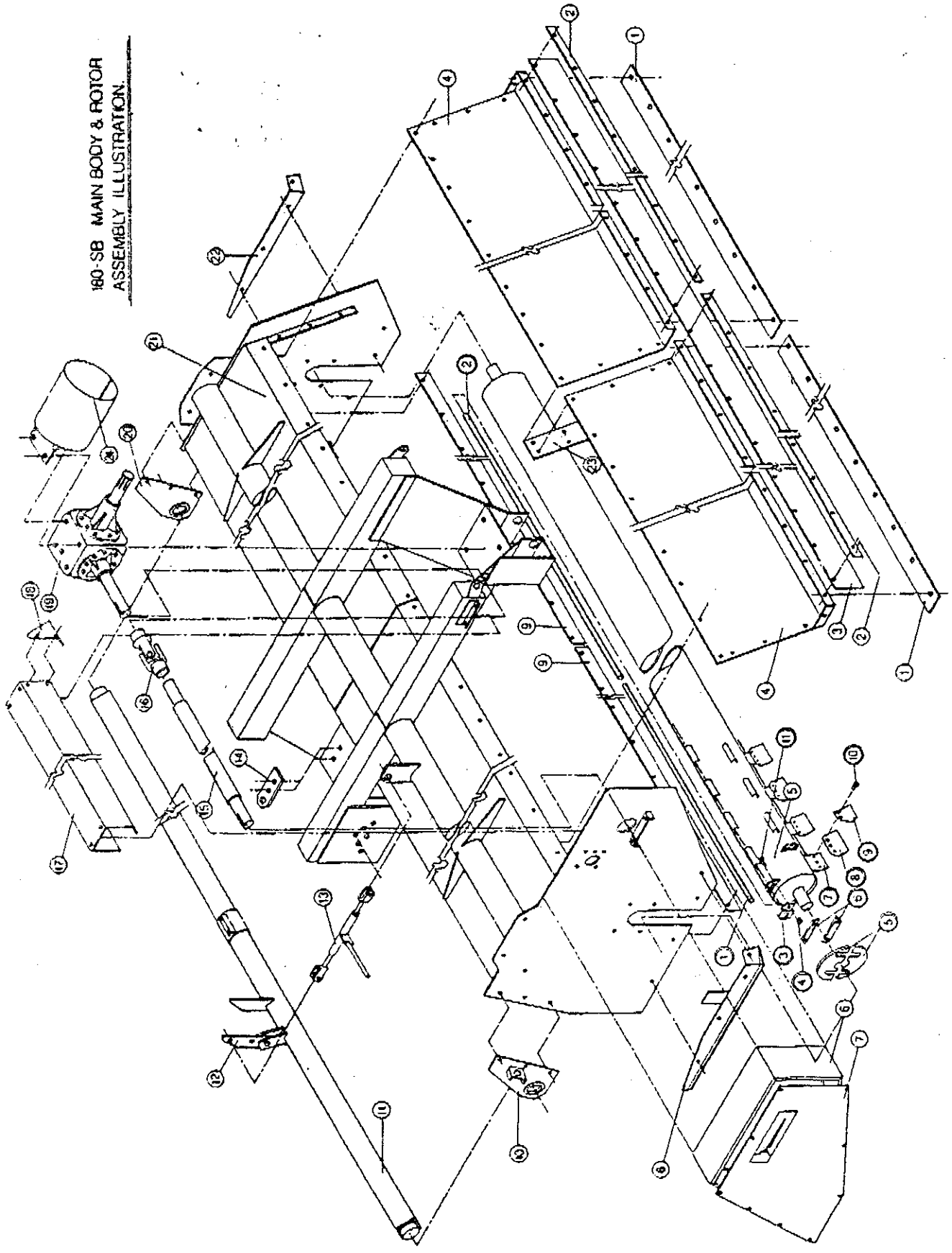
* RPM

IDLER ASSEMBLY



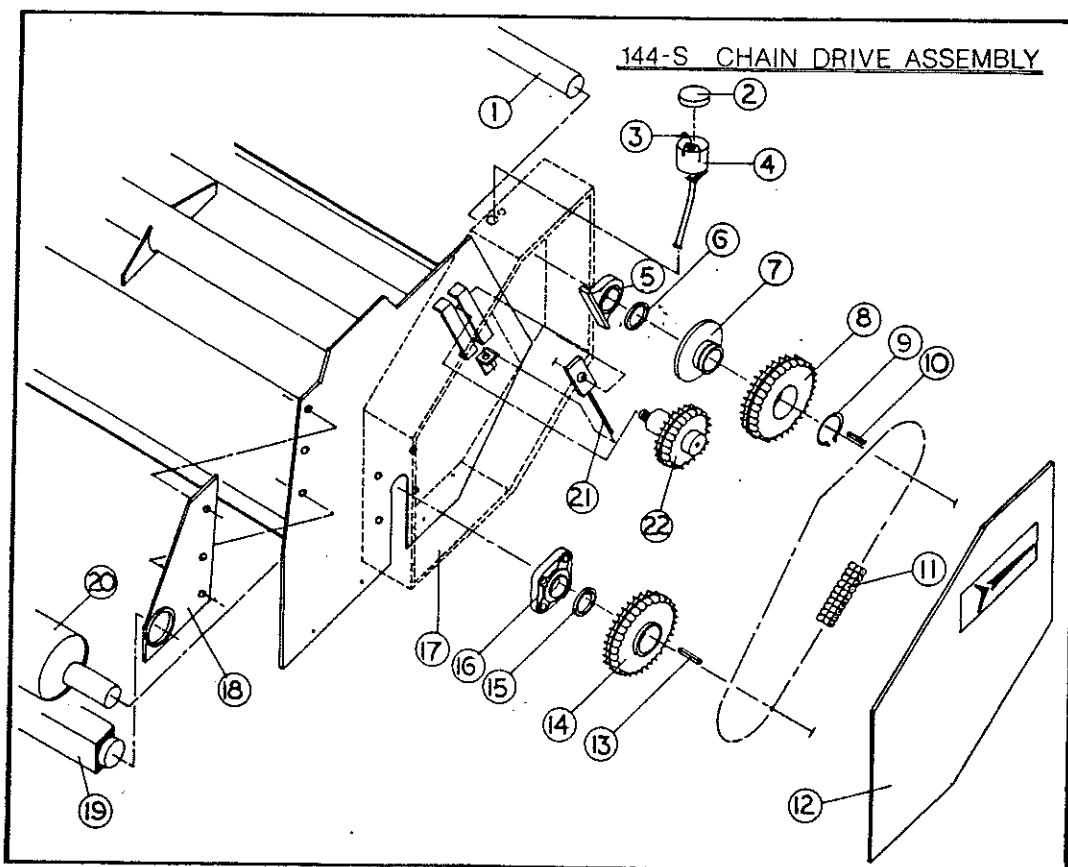
1	IDLER ASS'Y (REF 1-6) $\frac{1}{2}$ " N 0911051	8
1	SPROCKET ASS'Y (REF 3-5) $\frac{1}{2}$ " N 0011002	7
1	IDLER SHAFT $\frac{1}{2}$ " N 0915043	6
1	IDLER SPROCKET $\frac{1}{2}$ " N 0016403	5
1	SNAP RING $\frac{1}{2}$ " N 0016602	4
2	IDLER BEARING $\times 1\frac{1}{4}$ BORE $\frac{1}{2}$ " N 0016017	3
2	BEARING LOCK COLLAR $\frac{1}{2}$ " N 0016002	2
1	90° ZERK GREASE FITTING $\frac{1}{2}$ " N 0016604	1
QTY.	DESCRIPTION	ITEM

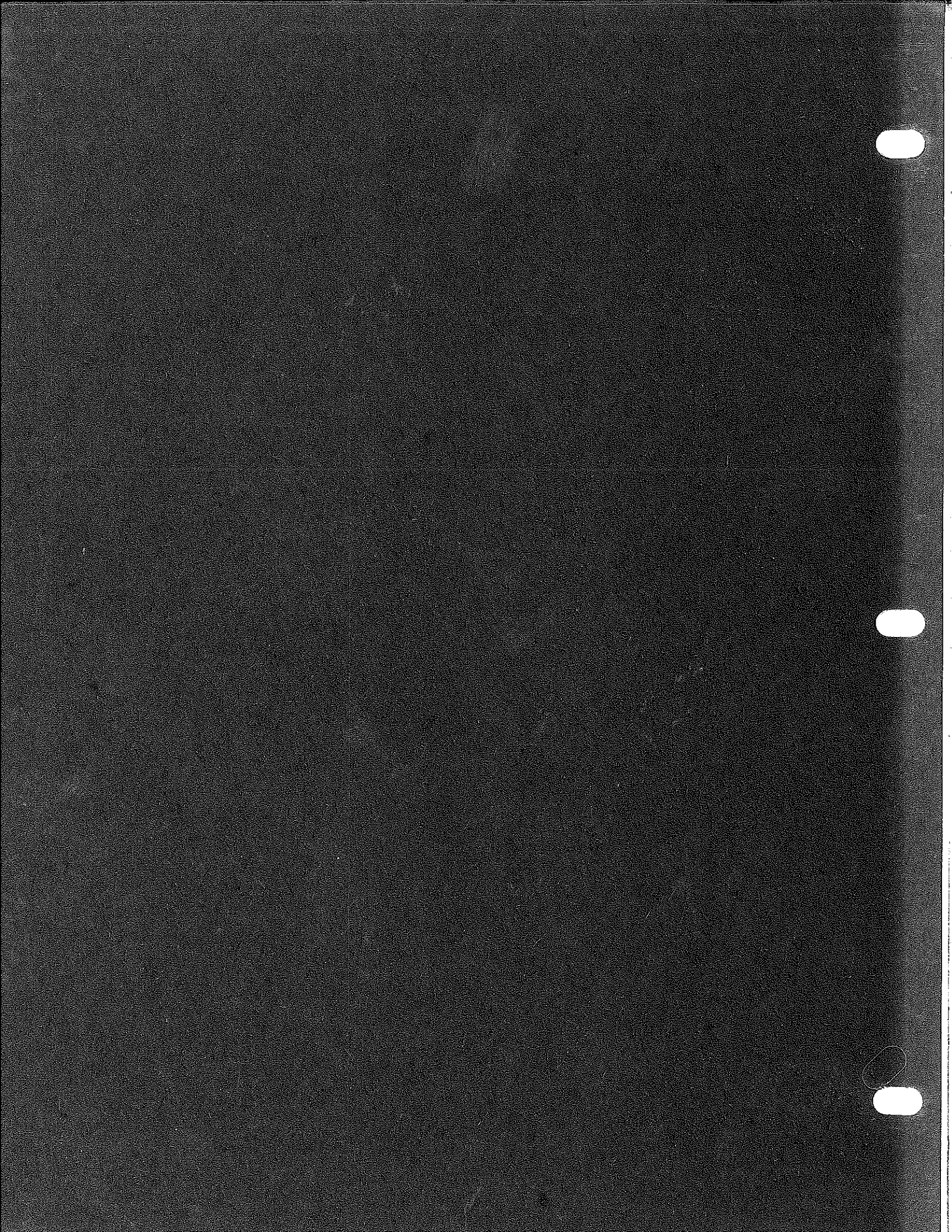
180-SB MAIN BODY & ROTOR
ASSEMBLY ILLUSTRATION



144-S DRIVE ASSEMBLY

<u>REF NO.</u>	<u>PART NO.</u>	<u>QTY</u>	<u>DESCRIPTION</u>
1	REF ONLY		OUTBOARD SHAFT
2	0017982	1	OILER CAP
3	0018984		FELT WICK
4		1	OILER WELDMENT
5	0916001	1	PILLOW BLOCK BEARING
6	REF ONLY	1	LOCK COLLER (PROVIDED W/BEARING)
7	0017651	1	SPROCKET SHEAR FLANGE
8	0016401	1	SPROCKET (1000 RPM)
9	0018100	1	SNAP RING
10	0015136	1	KEY 3/8 X 3/8 X 2½
11	1116303	1	CHAIN
12		1	GUARDBOX COVER
13	0018987	1	GIB KEY 1/2 X 1/2 X 2"
14	0036400	1	SPROCKET (1000 RPM)
15	REF ONLY		LOCK COLLER (PROVIDED W/BEARING)
16	1116003	2	2 3/16-4 BOLT FLANGE BEARING
17			GUARD BOX WELDMENT
18	REF ONLY		AXLE MOUNT WELDMENT
19	REF ONLY		144-S AXLE WELDMENT
20	REF ONLY		ROTOR WELDMENT
21	0910209	1	IDLER ADJUSTMENT WELDMENT
			IDLER ASSEMBLY (REFER TO IDLER ASS'Y ILLUSTRATION)





180-SB MAIN BODY & ROTOR
ASSEMBLY ILLUSTRATION.

