

1977 to 1981
Models

ROTO GRIND

OPERATOR AND PARTS MANUAL TUB GRINDER



BURROWS ENTERPRISES, INC.
2024 East 8th Street
Greeley, Colorado 80631
(303) 353-3769 * FAX (303) 353-0839
970 970

LIMITED WARRANTY

The **Burrows Enterprises Incorporated** warrants products sold by it to be free from defects in material and workmanship for a period of one (1) year for agricultural applications and for a period of ninety (90) days for industrial applications after the date of delivery to the first purchaser subject to the following conditions:

1. **Burrows Enterprises Incorporated's** obligation and liability under this warranty is to repair or replace at the company's option, any parts which upon manufacture were defective in material or workmanship.

2. All parts and repairs under this warranty shall be supplied at an authorized **Burrows Enterprises Incorporated** dealer or at the factory at the option of **Burrows Enterprises Incorporated**.

3. **Burrows Enterprises Incorporated's** warranty does not extend to parts and elements not manufactured by **Burrows Enterprises Incorporated** and which carry the warranty of the other manufacturer.

4. Transportation or shipping to an authorized dealer for necessary repairs is at the expense of the purchaser.

5. **Burrows Enterprises Incorporated** MAKES NO OTHER WARRANTY EXPRESS OR IMPLIED AND MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE BEYOND THAT EXPRESSLY STATED IN THIS WARRANTY. **Burrows Enterprises Incorporated's** LIABILITY IS LIMITED TO THE TERMS SET FORTH IN THIS WARRANTY AND DOES NOT INCLUDE ANY LIABILITY FOR DIRECT, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR EXPENSE OF DELAY AND THE COMPANY'S LIABILITY IS LIMITED TO REPAIR OR REPLACEMENT OF DEFECTIVE PARTS AS SET FORTH HEREIN IN THE WARRANTY.

6. Any improper use, including operation after discovery of defective or worn parts, operation beyond rated capacity, substitution of parts not approved by **Burrows Enterprises Incorporated**, or any alteration or repair by other than an authorized **Burrows Enterprises Incorporated** dealer which affects the product materially and adversely, shall void this warranty.

7. No dealer, employee, or representative is authorized to change this warranty in any way or grant any other warranty unless such change is made in writing and signed by an officer of **Burrows Enterprises Incorporated** at its home office.

8. Some states do not allow limitations on how long an implied warranty lasts or exclusions of or limitations on relief such as incidental or consequential damages so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may have other rights which vary from state to state.

INFORMATION FOR ORDERING PARTS

OWNERS NAME _____

ADDRESS _____

DEALERS NAME _____

ADDRESS _____

SERIAL NUMBER _____

(FOR LOCATION SEE PAGE 6)

DATE PURCHASED _____

Burrows Enterprises Incorporated reserves the right to make changes or add improvements to its products at any time without incurring any obligation to make such changes to products manufactured previously. **Burrows Enterprises Incorporated**, or its dealers, accept no responsibility for variations which may be evident in the actual specifications of its products and the statements and descriptions contained in this publication.

TO THE OWNER

This **Burrows** unit is the finest equipment made and the purpose of this manual is to assist you in realizing the benefits you anticipated when you purchased this unit. Many people have contributed to the production of this product. They all have an interest in its successful performance and we are providing this manual to give you the benefit of the experience we have gained thorough the years of building and testing this equipment. The way you operate and the care you give this unit will have much to do with the successful performance of this unit. This operators manual has been carefully prepared and illustrated to make it as easy as possible for you in the operation of your unit. It will pay you to read the entire manual carefully and familiarize yourself with all operations **"before operating"** the unit. Keep this manual handy for reference. We will be glad to answer any questions you may have. For further information call or write:

BURROWS ENTERPRISES INCORPORATED

2024 East 8th Street

970 Greeley, Colorado 80631

(303) 353-3769 *FAX (303) 353-0839

(970)

WORK SAFELY -- FOLLOW THESE RULES

This safety alert symbol identifies important safety messages in this manual. It means -- ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED! When you see this symbol, be alert to the possibility of personal injury and read the message that follows

A CAREFUL OPERATOR IS THE BEST INSURANCE AGAINST AN ACCIDENT.

BEFORE OPERATING:

- Review this entire manual.
- Do not wear loose-fitting clothing which may catch in moving parts.
- Use extreme care when making adjustments. Shut off machine before making adjustments. Shut off tractor and put key in pocket.
- After servicing, be sure all tools, parts, or servicing equipment are removed from the machine.
- Keep all safety shields in place.
- Make sure that there is no one near the machine before operating.
- Be sure that the correct power take-off parts are used and that they are properly secured.
- Be sure the tractor power take-off is disengaged before starting the tractor engine.

- Review all safety decals.

- Securely block unit before working on it.

- When working with flammable materials, be sure you do not smoke.

DURING OPERATION:

- No one other than the operator should ride on the tractor.
- Do not attempt to remove any obstructions while operating the machine. First shut off the tractor and put key in pocket.
- Always disengage the P.T.O. before transporting. Do not open any covers and expose the rotor or belts while they are rotating.
- Shut off the tractor engine and be sure to wait until all moving parts have come to a complete stop before adjusting, cleaning, or lubricating.
- Keep hands, feet, clothing and objects away from moving parts.

- Use extreme care when transporting over uneven or rough terrain.
- Keep all shields in place and in good condition.
- Keep children away from machine in operation.
- Have your fire extinguisher checked at regular intervals and place it in a position on the unit where it is readily accessible without reaching over or around moving parts.
- Crop materials often have an extremely high rate of flammability which increases the possibility of fires. A decrease in the risk can be attained by stopping the machine, shutting the tractor off, and removing the key from the ignition and placing it in your pocket. Then proceed to remove accumulations of material from the tractor, and the machine. Now check for any parts that may be over heating.

ON - HIGHWAY OPERATION - TRANSPORTING:

- Check clearance carefully before towing the machine over bridges and into buildings.
- Always place the machine in the transport position.
- For daytime and nighttime, accessory light and devices should be used for adequate warning to operators of other vehicles.
- Comply with your state and local laws governing highway safety, and with regulations when moving machinery on a highway.
- Drive at a reasonable speed to maintain complete control of the machine at all times.
- When transporting on the highway, always use a safety chain between the towing vehicle and the machine.

SPECIAL PRECAUTIONS

1. Do not climb on, or stand on the unit when it is turned by the P.T.O. of the tractor. All moving parts are guarded for your protection but foreign objects such as rocks and pieces of iron can be thrown out of the tub as it runs empty of material.
2. Leave all shields and guards on the machine while operating. They are for your protection and removal of them will hinder the operation of the machine. Warranty is void if the machine is operated with any of the shields missing.
3. The **Roto Grind** is designed to be turned at 1000 R.P.M. with tractor power take off. Do not, under any circumstances, turn the mill over 1150 R.P.M. or serious damage could result to the machine.
4. The **Roto Grind** is designed to grind roughage materials either loose or baled. The machines are equipped with twine guards and will keep almost all of the sisal twine from wrapping on the rotor shaft if they are adjusted properly, however the shaft should be checked periodically for twine build up and removed if any has accumulated.

Plastic twine should not be ground because it is not only non-digestible, it is more likely to wrap on the rotor shaft. Any plastic twine build up will create heat and melt into a solid lug that can only be removed by burning it off.

5. In loose material, the **Roto Grind** will operate with more capacity if the size of the bites of material being loaded are small enough to fit into the tub. Do not allow material to hang over the side of the tub. This will cause a bridging effect and will slow up grinding.

SAFETY DECALS

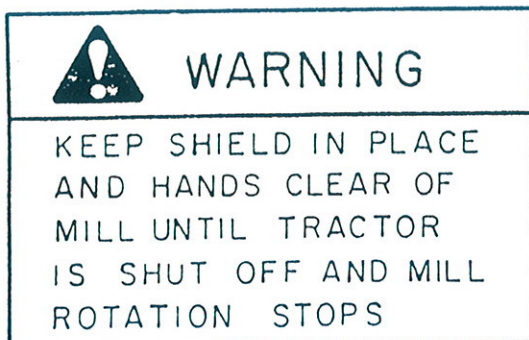
Located at strategic points on this machine are safety decals. These decals warn you of potential danger if the warnings on the decals are not followed.



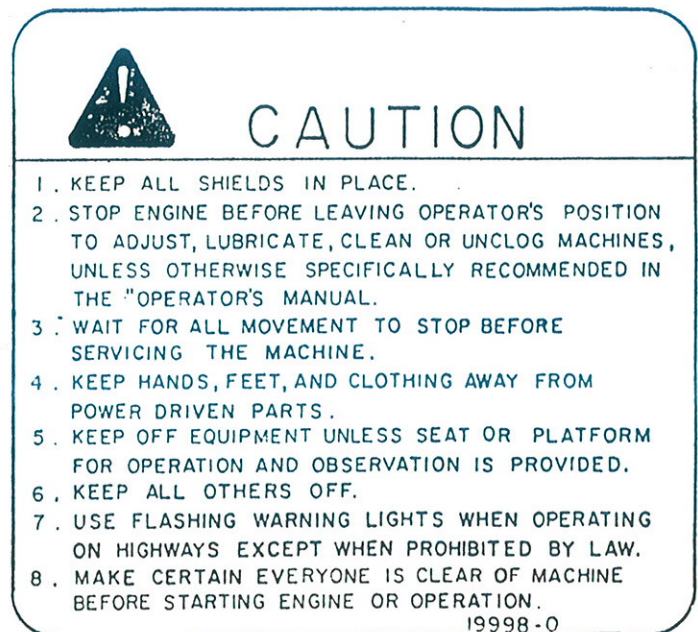
NO. 1 - "WARNING" - NOT A STEP
Part No. E224-114



NO. 2 - "CAUTION" - DO NOT OPERATE
MILL ABOVE 1150 RPM - Part
No. E224-113



NO. 4 - "WARNING" - KEEP SHIELD IN
PLACE AND HANDS CLEAR OF MILL -
Part No. E224-117



NO. 3 - "CAUTION" - KEEP ALL SHIELDS
IN PLACE; STOP ENGINE BEFORE
LEAVING OPERATOR'S POSITION -
PART NO. 19998-0 LISTS 8
BASIC RULES TO BE OBSERVED
AT ALL TIMES.

NO. 5 - "SLOW MOVING VEHICLE" -
BRACKET FOR SMV SIGN IS
PERMANENTLY AFFIXED TO REAR
FRAME. DISPLAY SIGN AS
REQUIRED BY LAW.

NOTE: KEEP ALL DECALS CLEAN AND FREE
OF DIRT FOR MAXIMUM VISIBILITY.
REPLACE ANY AND ALL DECALS THAT
ARE NO LONGER LEGIBLE.



DANGER

Stay off machine when it is running.
Shut off tractor engine and remove
ignition key for safety while working
in or around machine.

NO. 6 - "DANGER" - STAY OFF MACHINE
WHEN IT IS RUNNING - PART NO.
11777-0.

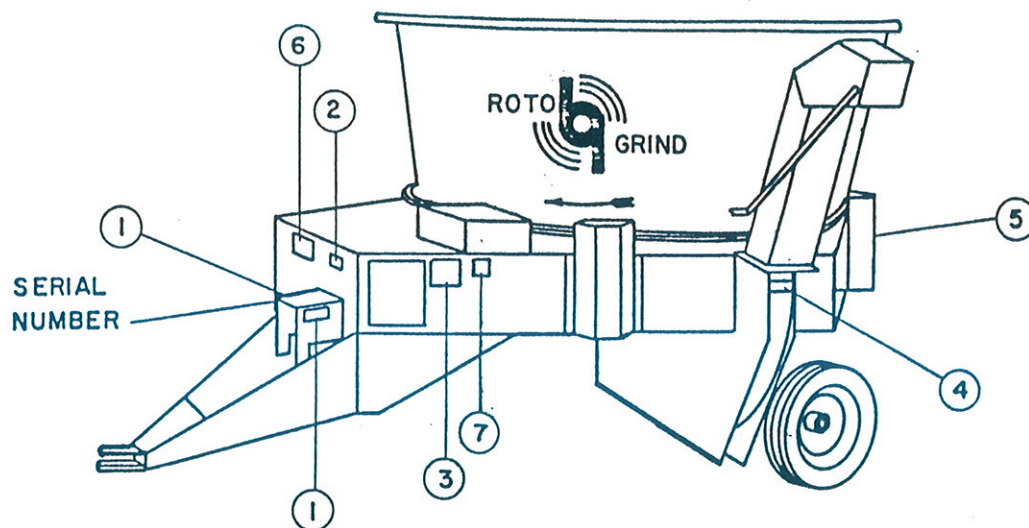


CAUTION

~~Read the Operator's Manual.~~
~~Learn to operate this machine SAFELY.~~
~~Be alert. Observe ALL Safety Practices.~~
~~Machines can be hazardous in the hands of an~~
~~UNFAMILIAR, UNTRAINED or COMPEACENT~~
~~operator.~~
~~Don't risk INJURY or DEATH.~~

NO. 7 - "CAUTION" - READ THE OPERATOR'S
MANUAL - PART NO. 11543-0.

SAFETY DECAL LOCATIONS



The terms front, rear, right side and left side are
defined as standing behind the machine and facing in
the direction of forward travel.

Delivery service form in the front of the book must
be completed and returned to the factory in order to
establish proper warranty.

GENERAL OPERATION



IMPORTANT: BEFORE USING, WITH PTO DISENGAGED AND TRACTOR ENGINE STOPPED (KEY IN POCKET), INSPECT THE MACHINE AND REMOVE ANY FOREIGN OBJECTS WHICH MAY HAVE FALLEN INTO THE MACHINE DURING TRANSIT.

WHEN CORRESPONDING WITH THE COMPANY, DISTRIBUTOR, OR DEALER REGARDING THIS MACHINE, PLEASE SPECIFY BOTH MODEL NUMBER AND SERIAL NUMBER.



CAUTION: Never put your hands inside of the machine during operation, or perform any kind of an adjustment, lubrication, or repair to the machine without shutting off the tractor ignition and placing key in pocket. Keep children away from machine in operation.

1. Shear plates (Items 1 & 2, Page 13) control the fineness of grind of the material. They are individually adjustable and for a very fine grind it is recommended that all of the shear plates be positioned as close to the end of the hammers as possible. When coarser grinds are required, move the top plates out first.

EXAMPLE: Top plate all the way out, the next plate, three quarters of the way out; the next one, half way out and the fourth one down from the top, one quarter of the way out. Moving the top plates out before the bottom ones make the unit pull easier with less shock loads.

2. FEED CONTROL RISERS. There are two heights of risers (Items 7 & 8, Page 13) that control the amount of "bite" the hammers take out of the material every time the tub is rotated. The high riser is (Item 8, Page 13) is designed for round bales, square bales, extremely wet, loose material or limited horse power. The medium riser (Item 7, Page 13) is designed for coarse, loose material that is reasonably dry and for larger horse power tractors where high capacity is desired.

3. HYDRAULICS. Tractor hydraulics are used to turn the tub. There is a dial (Item 12, Page 11) mounted on the left front of the machine that is a pressure compensated flow divider to control the rotation speed of the tub. This is to be used in conjunction with height of risers to match the grinding speed to the tractor horse power. Try to avoid constant, very slow turning of the tub as this means that most of the oil is going through the pressure side of the flow divider and tends to heat the oil. If the tub must be turned very slowly, check the hydraulics periodically for heat. (Temperature should be kept below 150 degrees F.)

There is an electronic governor (Item 2, Page 11) and solenoid valve (Item 11, Page 11) in the hydraulic circuit to stop the tub rotation if the tractor RPM drops - this governor works in the "clockwise rotation" of the tub "only". The tub can not be rotated in the proper clockwise rotation unless the governor is connected to a 12 volt electrical circuit and the RPM of the PTO reaches 1,000 to 1,050 RPM. (This is adjustable by loosening the hold down bolt in the case of the governor and rotating the outer case.) We recommend that the governor be set to stop the tub when the speed of the PTO slows down to 1000 RPM.

4. POWER TAKE OFF. The drive line is at a slight angle to the machine. Before starting the grinder, move the front of the tractor to the right to straighten PTO. If it is not straight at the tractor joint it will cause vibration and serious damage to the PTO could result.

Always start the machine and check for operation of all parts prior to each day of operation and after transporting. Materials and dirt can pack into the mill while transporting or over a few days when it is windy. To prevent this from "locking" the mill you should step into the tub and roll the mill backwards before you connect the machine to the tractor. Then, after the machine has been properly connected to the tractor, set the tractor at low R.P.M. and slowly engage the P.T.O. clutch. If the mill is still "locked", disengage P.T.O., shut off the tractor, remove key and place in pocket, or in absence of key, (older model tractors), disconnect the P.T.O. shaft from the tractor. Now step inside of tub and clean out mill.

After you have finished grinding and want to shut the machine down, reduce the tractor RPM slowly to an idle and wait for the mill to slow down before disengaging the PTO. Some tractors have a brake on the PTO when disengaged and if disengaged at high RPM the weight of the rotor may damage the PTO in your tractor.

DO NOT MOVE THE MACHINE WHILE THE PTO IS IN MOTION. SHORT TURNS WHILE THE ROTOR IS TURNING MAY DAMAGE THE PTO.

5. DISCHARGE CONTROL (Item 10, Page 13). The ROTO GRIND is equipped with a discharge control to limit the volume of air discharged with the ground material. You may want the air flow limited when grinding dry material in a stock pile outside, however for wet material or grinding into self-feeders or storage buildings you will probably want the discharge control "open" to move the material farther. Select the setting for your situation.

6. DISCHARGE SPOUT (Item 12, Page 13). The discharge spout can be mounted to discharge ground material to the side of the machine or to the back of the machine. The standard spout will have 7' clearance to the ground and will allow you to build a pile about 10' high. There are 2' spout extensions (Item 13, Page 13) available and a maximum of two can be added to the standard spout. Longer spout requires fairly dry material and may plug if hay is too wet.

7. EAR CORN HOOD (Item 17, Page 12). This attachment is designed for ear corn to be loaded with a front end loader. It shields the mill to stop the material from being thrown out of the tub. If the grind is too fine when the hood is installed, move the bottom adjustable shear plates in the mill out. DO NOT try to reposition the hood.

Caution should be used in loading ear corn. Do not load the machine faster than it can grind. Ear corn turns very hard in the tub and you should keep the material under two feet deep in the tub. Overloading will cause excessive hydraulic pressure and tend to heat the hydraulic oil.



8. GRAIN HOOD (Item 6, Page 12). The grain hood is designed for loading with an auger. Remove the feed control riser and the round stabilizer hood and bolt the grain hood in place. This hood is equipped with extra adjustable gate to control the amount of grain entering the grinding area. Adjust this gate to the horse power of the tractor. "IMPORTANT"! Be sure to disconnect the hydraulic hoses that turn the tub. Tub rotation is not required with this attachment and serious damage could result if it was accidentally turned with the grain hood installed.

MAINTENANCE



CAUTION: Never put your hands inside of the machine during operation, or perform any kind of an adjustment, lubrication, or repair to the machine without shutting off the tractor ignition and placing key in pocket. Keep children away from machine in operation.

BOLT AND NUT TORQUE SPECIFICATIONS

RECOMMENDED TORQUE IN FOOT POUNDS COARSE AND FINE THREADS		
	 Grade 2	 Grade 5
BOLT	NO RADIAL DASHED	THREE RADIAL DASHES
1/4	6	9
5/16	11	18
3/8	19	31
7/16	30	50
1/2	45	75
9/16	66	110
5/8	93	150
3/4	150	250
7/8	202	378
1	300	583

1. LUBRICATION. The three bearings on the drive line and the PTO should be greased every eight to ten hours of operation. Be careful not to over grease as this pushes out the seals and allows dirt to enter the bearing shortening the bearing life. The tub roller bearings should be greased once a season or every one hundred hours; whichever occurs first.

a) Check the bearings on the drive line every time the unit is greased. If one of these bearings go out and the machine is operated, it may cause the drive line to break, causing serious damage to the machine.

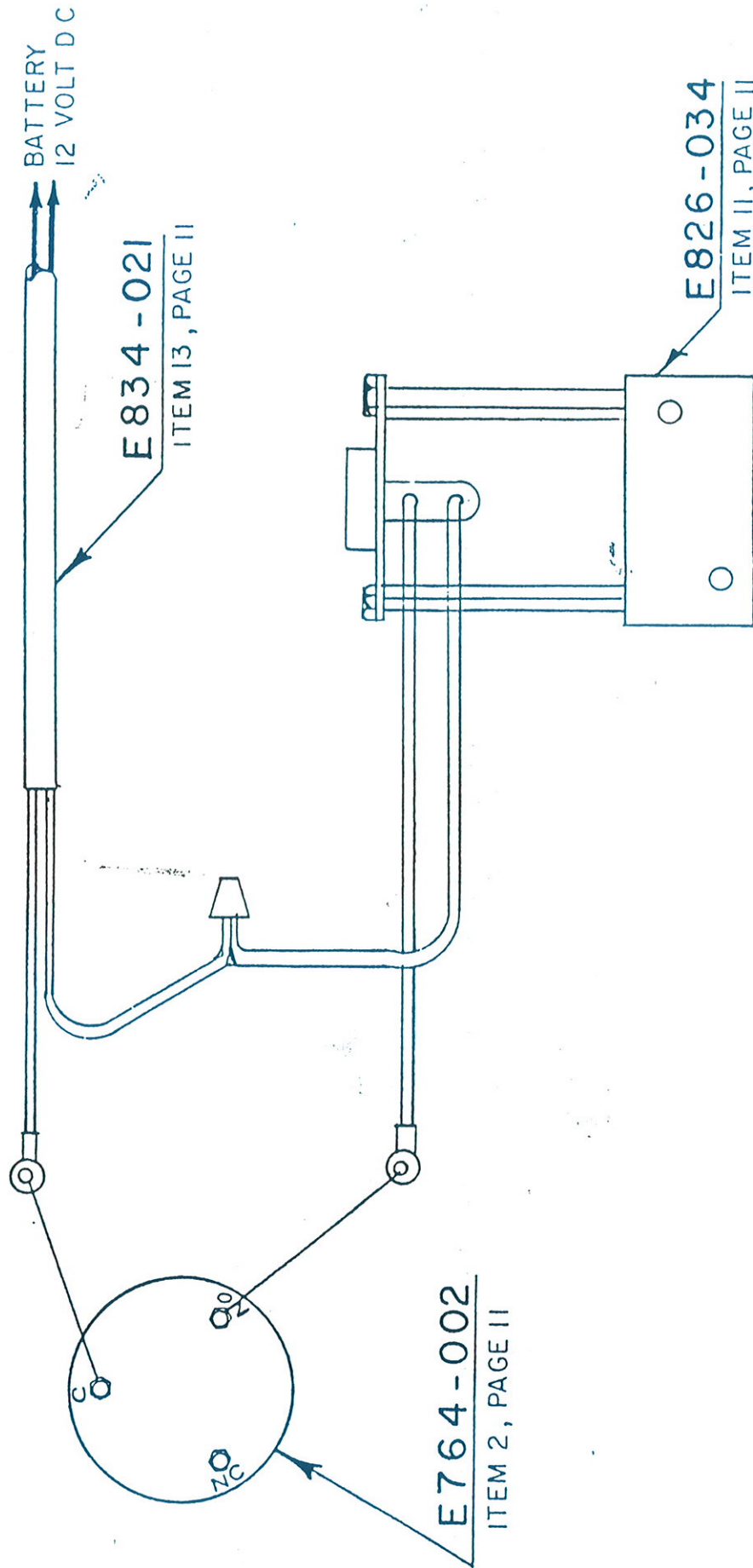
2. HAMMER REPLACEMENT. The hammer pins have a roll pin on either side of the mill. When turning the hammers, remove one roll pin. Drive the pin out of the mill through the holes provided in the mill housing. When the hammers have been turned, replace the roll pin.

3. If for any reason the mill ever needs to be removed, it is attached to the drive line by a 1/2" shear bolt. Remove the shear bolt and apply rust remover. Loosen the lock collar on the back bearing and unbolt the front two bearings. Lock the drive line with the PTO, apply the forward pressure on the drive line and turn the mill on the shaft. It is a slip fit and should come off without too much difficulty.

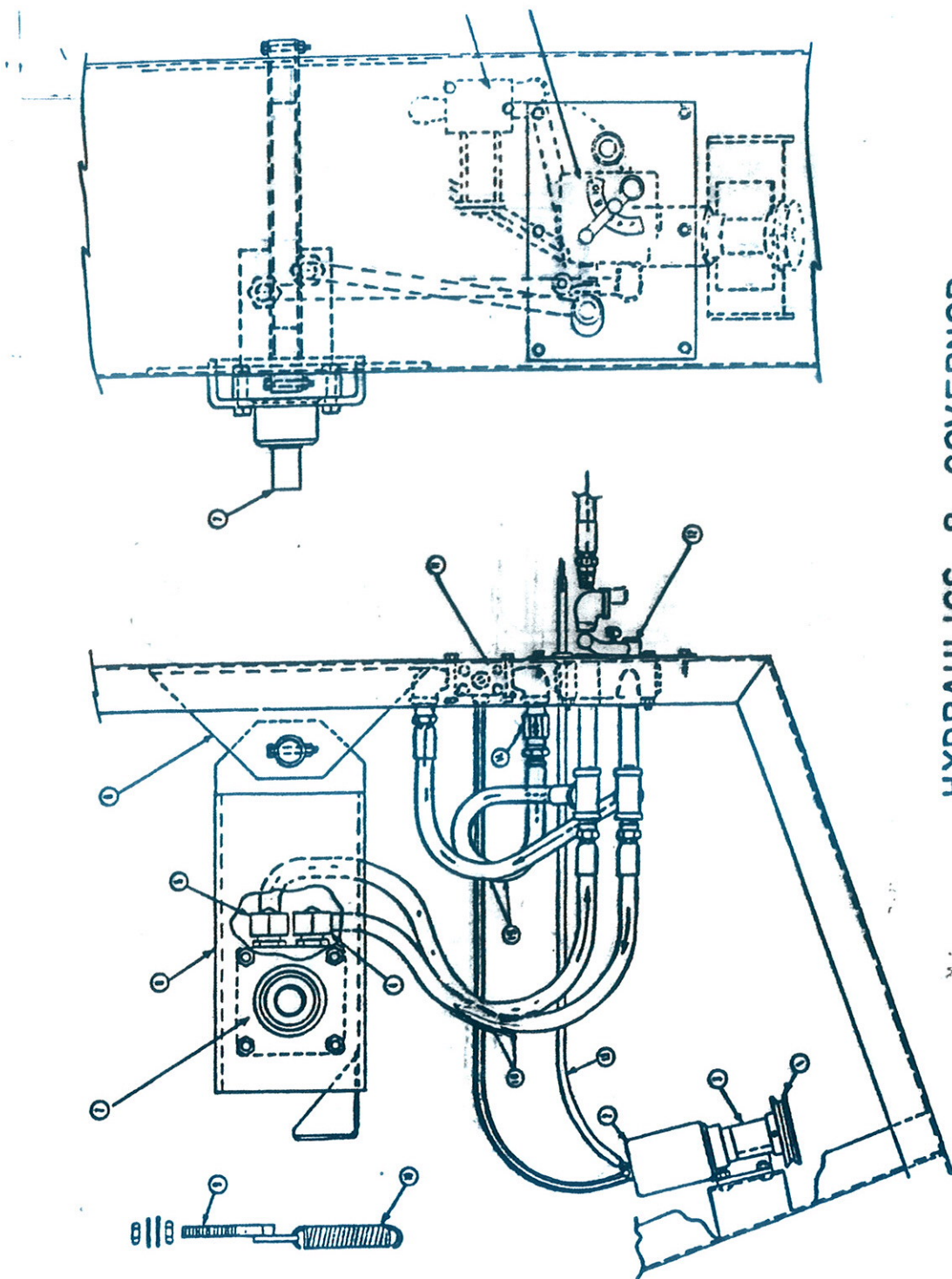
4. The alignment of the sprocket to the drive chain should be checked periodically. If mis-alignment occurs, remove the tub roller shields and adjust the tub rollers for proper height. Mis-alignment will cause excessive wear on the sprocket and chain.

SHEAR PLATES & ACCESSORIES

(FRONT SIDE LOOKING TO THE REAR)



GOVERNOR WIRING DIAGRAM



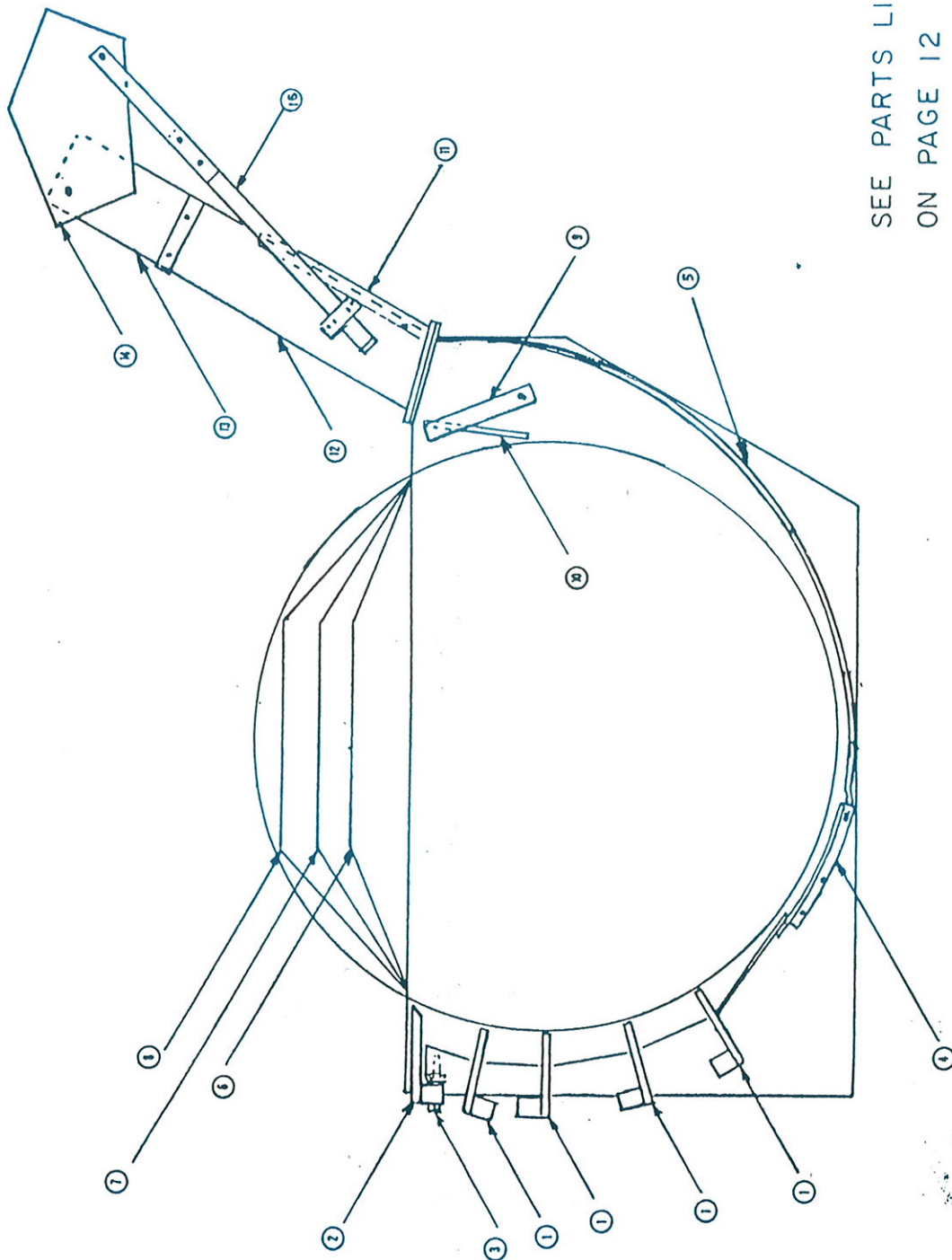
HYDRAULICS & GOVERNOR

SEE PARTS LIST ON PAGE 12

KEY	PART NO.	DESCRIPTION
1	E706-076	PULLEY, GOVERNOR
2	E764-002	GOVERNOR
	E764-003	SWITCH, GOVERNOR
3	E104-383	BRACKET, GOVERNOR MOUNT
4	E276-127	UNION, 90° COUPLING
5	E276-136	UNION, STRAIGHT COUPLING
6	E104-384	BRACKET, MOTOR MOUNT
7	E540-033	MOTOR, HYDRAULIC
8	E544-025	MOTOR MOUNT ASSEMBLY
9	E790-013	BOLT, TIGHTENER
10	E738-038	SPRING, TIGHTENER
11	E826-034	VALVE, SOLENOID
	E183-001	COIL, SOLENOID VALVE
12	E826-033	FLOW DIVIDER
13	E834-021	WIRE, GOVERNOR
14	E826-035	VALVE, CHECK
	E740-268	SPROCKET, TUB DRIVE
15	E356-081	HOSE, 1/2 x 16"
16	E356-082	HOSE, 1/2 x 30"

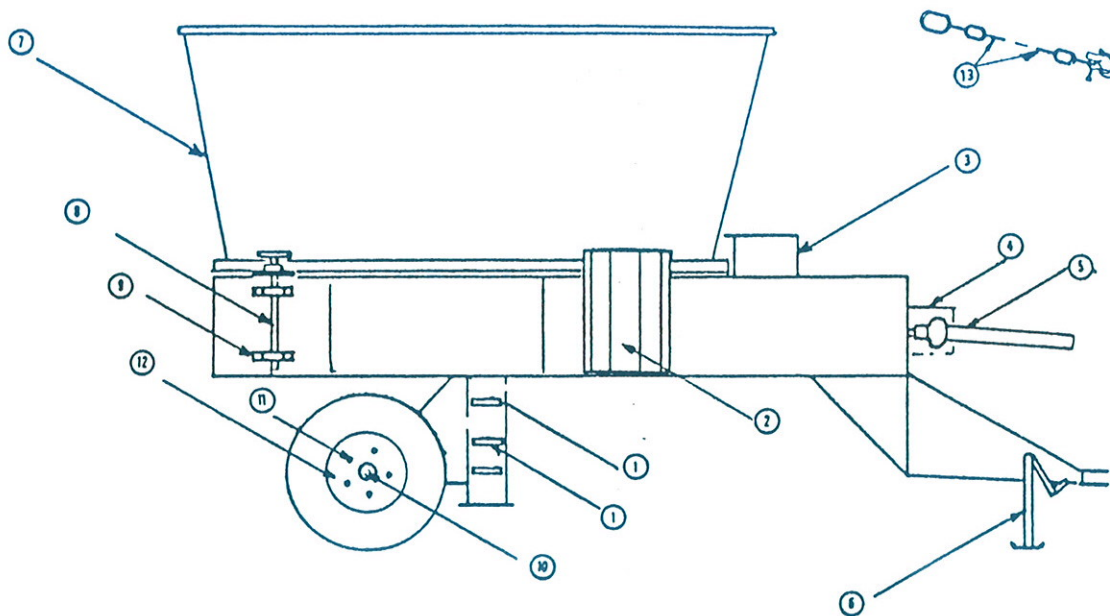
SHEAR PLATES & ACCESSORIES (PAGE 13)

KEY	PART NO.	DESCRIPTION
1	E590-091	STANDARD SHEAR PLATE ASSY.
	E590-071	STANDARD SHEAR PLATE
	E096-121	BOLT, SHEAR PLATE
	E552-119	NUT ASSEMBLY
2	E590-092	MAIN SHEAR PLATE ASSY.
	E590-072	MAIN SHEAR PLATE
	E096-121	BOLT, SHEAR PLATE
	E552-119	NUT ASSEMBLY
3	E096-121	BOLT, SHEAR PLATE
4	E234-003	DOOR WELDMENT
5	E234-007	DOOR, ADJUSTMENT DISCHARGE
6	E348-019	GRAIN HOOD (NOT SHOWN)
7	E348-017	MEDIUM RISER
8	E348-016	HIGH RISER
9	E036-213	ARM WELDMENT
10	E234-008	DOOR, DAMPER
11	E210-076	COVER, CHUTE
12	E734-002	DISCHARGE SPOUT, COMPLETE
13	E257-019	DISCHARGE EXTENSION ASSY. 2 FT.
14	E348-013	DEFLECTOR, SPOUT
15	E348-018	STATIONARY HOOD (NOT SHOWN)
16	E330-009	HANDLE
17	E312-017	EAR CORN HOOD (NOT SHOWN)
18	E014-002	BIG ROUND BALE ASSIST (NOT SHOWN)
19	E230-002	DIFFUSER (NOT SHOWN)
20	E322-006	TWINE GUARD (NOT SHOWN)

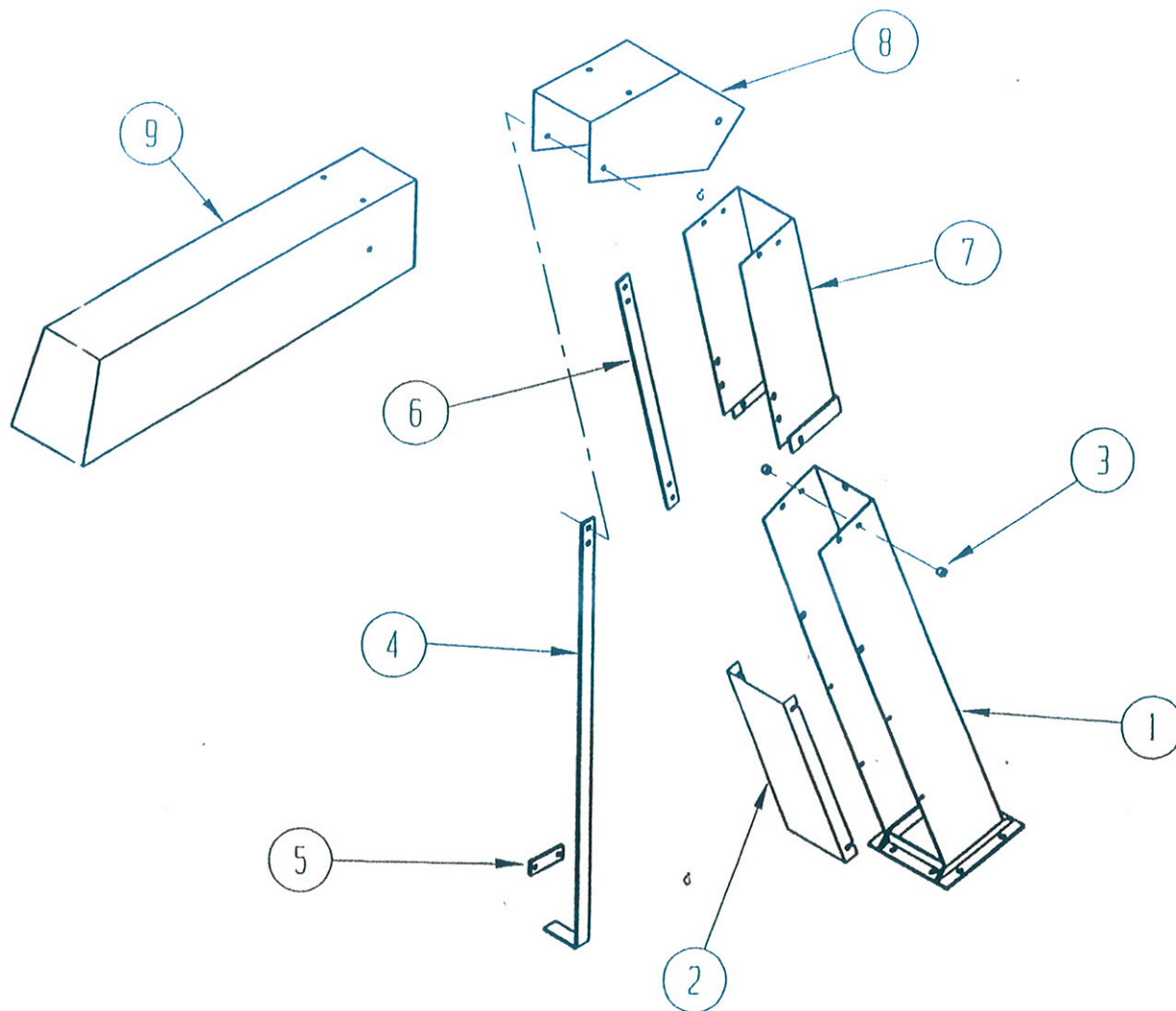


SEE PARTS LIST
ON PAGE 12

TUB & SHIELDS

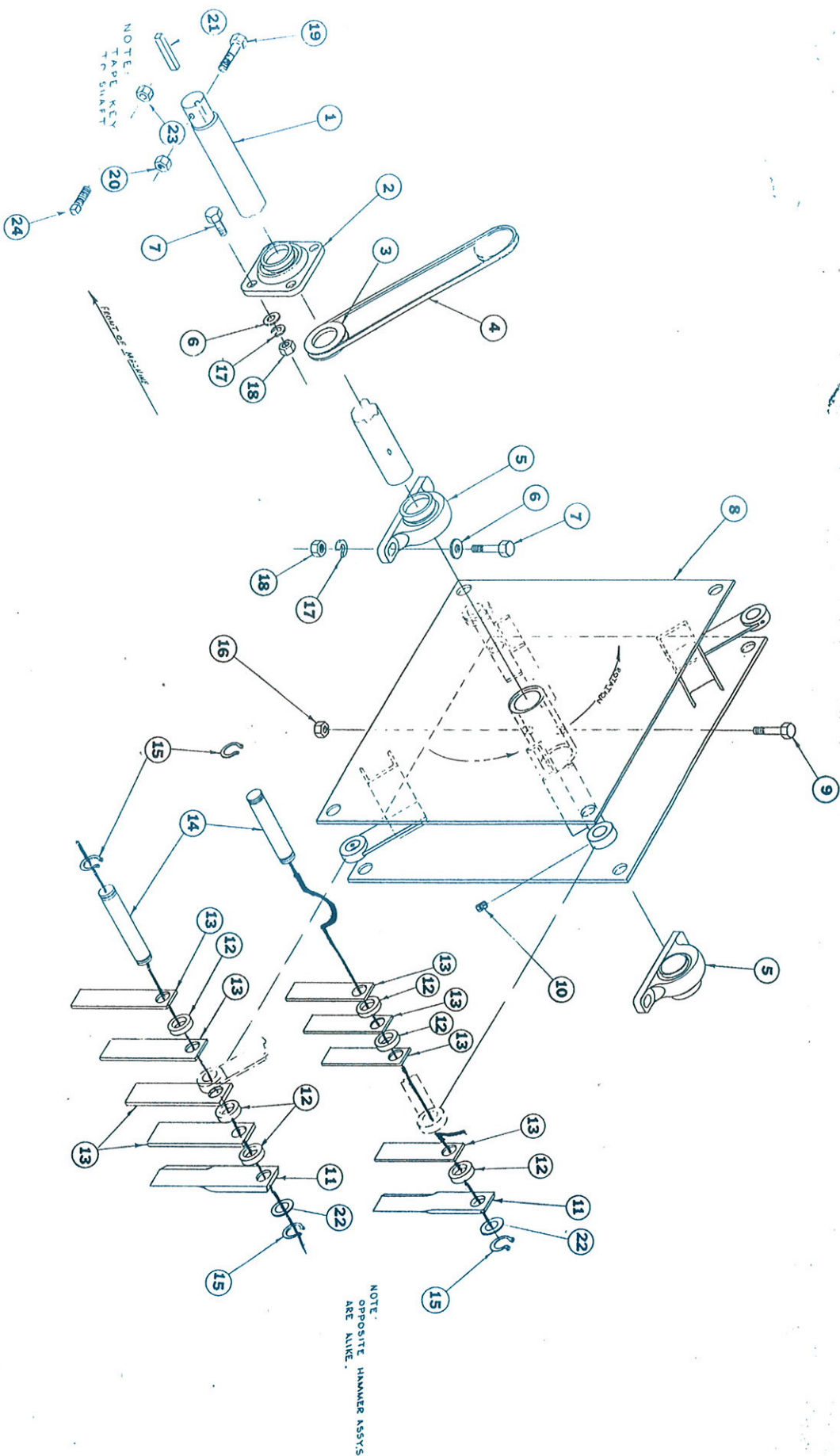


KEY	PART NO.	QTY REQ	DESCRIPTION
1	E590-155		PLATE, STD. SHEAR
2	E694-363		SHIELD, ROLLER (RIGHT FRONT & LEFT REAR)
	E694-364		SHIELD, ROLLER (LEFT FRONT & RIGHT REAR)
3	E694-361		SHIELD, HYDRAULIC MOTOR
4	E694-380		SHIELD, PTO
5	E604-039		PTO 55NW (SEE BREAKDOWN)
6	E748-011		JACK, HITCH (COMPLETE)
7	E815-002		TUB ASSEMBLY
8	E682-654		ROLLER ASSY
	E184-042		COLLAR, LOCK
9	E072-458		BEARING, 1-3/16 PILLOW BLOCK
10	R64433		HUB, 5 BOLT W/CUPS
	01263-0		CONE, OUTER BEARING
	04437-0		CONE, INNER BEARING
	03542-0		CAP, HUB
	12983-0		NUT, 7/8-14 HEX SLOTTED
	R64435		SEAL, OIL
	E728-025		SPINDLE, WHEEL
11	02073-0		NUT, 1/2-20 LUG
12	01268-0		RIM, 15 x 6
13	17653-02		CHAIN, SAFETY



OLD SPOUT ASSEMBLY

<u>KEY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	734-001	SPOUT, WLD
2	210-02	COVER, CHUTE
3	126-021	BUSHING
4	330-009	HANDLE
5	174-007	CLAMP
6	330-014	HANDLE, EXTENSION
7	257-019	EXTENSION, 2' DISCHARGE
8	348-013	DEFLECTOR, SPOUT
9	230-002	DIFFUSER



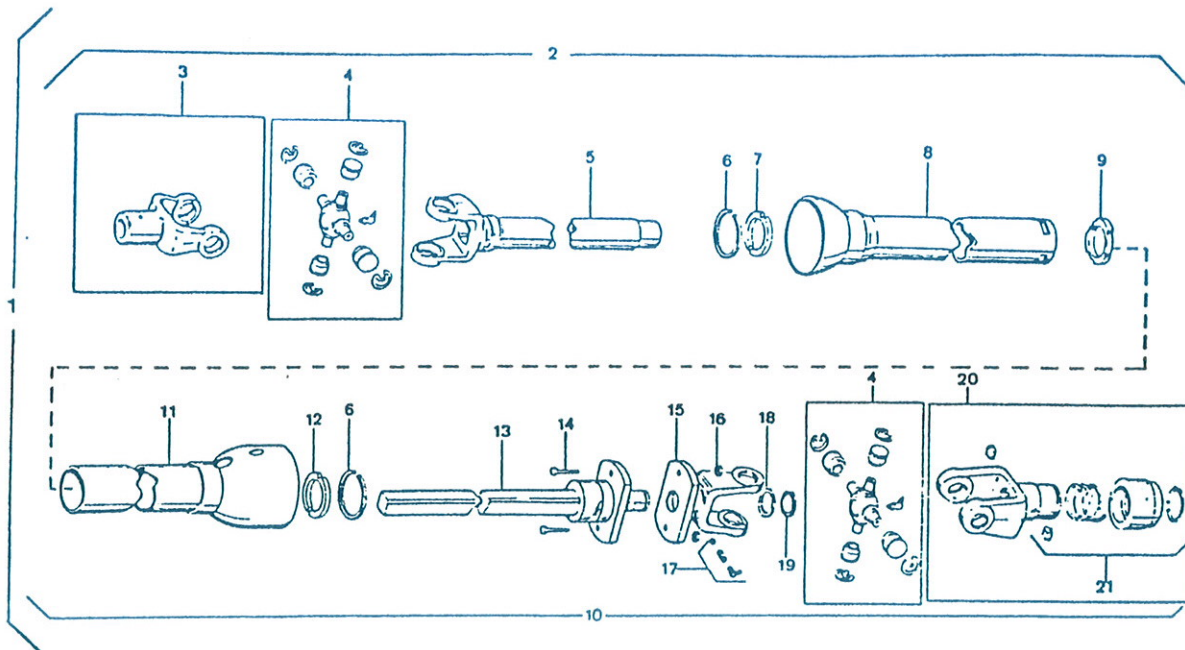
PART NUMBERS FOR 1978 ROTO GRIND - AUGUST 1, 1978 1977 to 1981 Models

1	682-642	Drive Shaft
2	072-445	2" Flange Bearing (FAFNIR RAJ2" or VCJ2")
3	706-078	Drive Shaft Sheave
4	080-048	V-Belt (Gates A-35)
5	072-358	2" Pillow Block Bearing (FAFNIR RAS 2")
6		Flat Washer
7	656-050	5/8" Bolt
8	672-345	Mill Assembly, Less Hammers
9		1/2" Shear Bolt, Grade 5
10		Set Screw
11	328-003	Lead Hammer
12	724-214	Thick Hammer Spacer

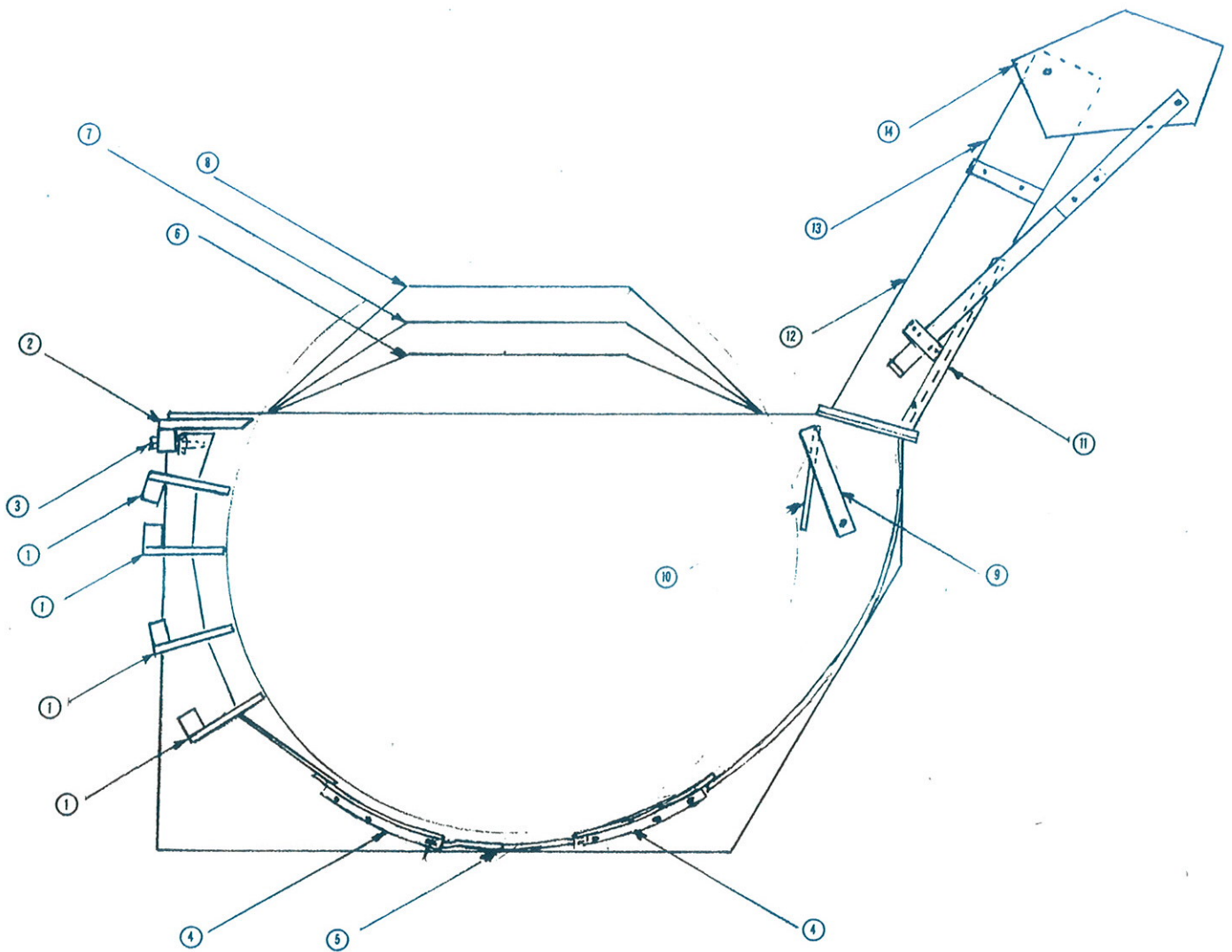
13	328-001	Standard Hammer
14	580-119	Hammer Pin
15	642-055	Snap Ring - Hammer Pin
16		1/2" Nut
17		5/8" Lock Washer
18	5/8" Nut	
19		3/8" Bolt
20	388-028	3/8" Nut
21	126-058	Key, PTO
22		Thin Hammer Spacer
23		3/8" Nut
24		3/8" Set Screw

328-003 H. Duty 3/4" Thick.

P.T.O. (WEASLER 55 NW)
1000 R.P.M.



KEY	PART NO.	DESCRIPTION
1	E604-039	P.T.O., COMPLETE 48.25 OACL
2	19948-0	IMPLEMENT HALF
3	E830-157	YOKE, END
4	16806-0	KIT, CROSS & BEARING
5	E830-184	YOKE & TUBE
6	17028-0	RETAINER, BEARING
7	17027-0	BEARING, NYLON
8	E694-385	SHIELD, INNER
9	17041-0	CENTRALIZER, NYLON
10	19949-0	TRACTOR HALF
11	E694-382	SHIELD, OUTER
12	19950-0	BEARING, NYLON
13	19951-0	SHAFT W/SHEAR FLANGE
14	02576-0	BOLT, 5/16 x 1-1/2 GR 5
15	E830-178	YOKE, SHEAR W/ILK
16	02567-0	NUT, 5/16 HEX LOCK.
17	19954-0	KIT, INSTAMATIC LUBE
18	19955-0	WASHER
19	19956-0	RING, RETAINING
20	R63693	LOCK YOKE ASSY
21	R60412	KIT, LOCK REPAIR



1977 to 1980 models

1981 to 1983 had Adjustable Housing.

- | | |
|--------------------|------------------------------------|
| 1 — 590-071 | Standard Shear Plate |
| 2 — 590-072 | Main Shear Plate |
| 3 — 096-121 | Shear Plate Bolt (Acme Thread) |
| 4 — 234-003 | Replaceable Bottom Section |
| 5 — 234-002 | Access Door |
| 6 — 348-015 | Low Riser |
| 7 — 348-017 | Medium Riser |
| 8 — 348-016 | High Riser |
| 9 — 036-156 | Air Control Arm |
| 10 — 234-006 | Air Control Plate |
| 11 — 210-076 | Shield for Discharge Spout |
| 12 — 734-002 | Discharge Spout Complete |
| 13 — 257-019 | Discharge Spout Extension Assemble |
| 14 — 348-013 | Discharge Spout Deflector |