

WARRANTY REGISTRATION AND POLICY

Buhler Manufacturing products are warranted for a period of twelve (12) months from original date of purchase, by original purchaser, to be free from defects in material and workmanship under correct, normal agricultural use and proper applications.

Buhler Manufacturing's obligations under this warranty shall be limited to the repair or exchange, at Buhler Manufacturing's option, of any Buhler Manufacturing product or part which proves to be defective as provided. Buhler Manufacturing reserves the right to either inspect the product at the buyer's location or have it returned to the factory for inspection.

The above warranty does not extend to goods damaged or subject to accident, abuse or misuse after shipment from Buhler Manufacturing's factory, nor to goods altered or repaired by anyone other than an authorized Buhler Manufacturing representative.

Buhler Manufacturing makes no Express Warranties other than those, which are specifically described. Any description of goods, including any references and specifications in catalogues, circulars and other written material published, is for the sole purpose of identifying goods and shall conform to such descriptions. Any sample or model is for illustrative purposes only and does not create an Express Warranty that the goods conform to sample or model shown.

The purchaser is solely responsible for determining suitability of goods sold. This warranty is expressly in lieu of all other warranties expressed or implied. Buhler Manufacturing will in no event be liable for any incidental or consequential damages whatsoever. Nor for any sum in excess of the price received for the goods for which liability is claimed.

WARRANTY CLAIMS:

Warranty requests must be prepared on Buhler Manufacturing Warranty Claim Forms with all requested information properly completed. Warranty Claims must be submitted within a thirty (30) day period from date of failure repair.

WARRANTY LABOR:

Any labor subject to warranty **must** be authorized by Buhler Manufacturing. The labor rate for replacing defective parts, where applicable, will be credited at a rate determined by the Company, Buhler Manufacturing.

IMPORTANT FACTS:

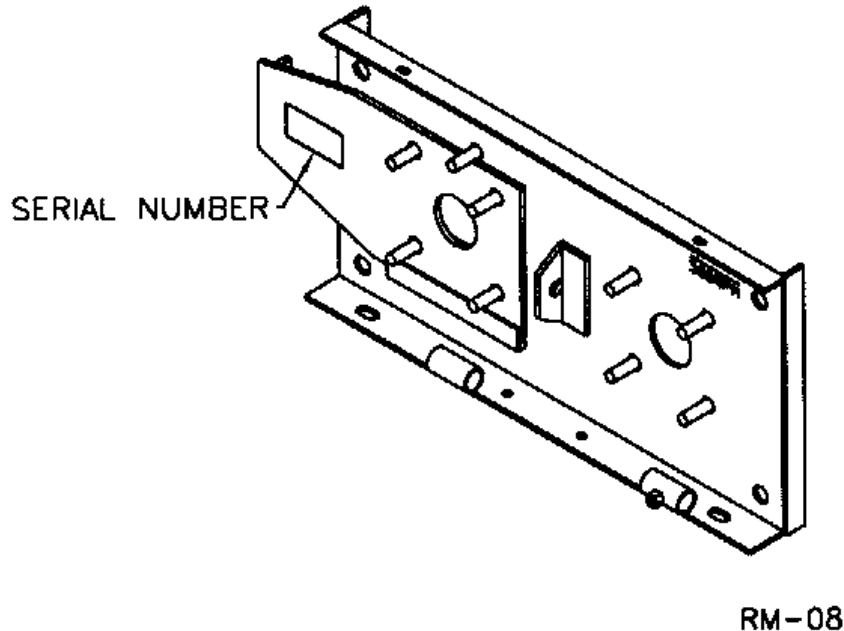
Buckets and Bucket Tines Carry No Warranty

Bent Spears Carry No Warranty

Snowblower Fan Shafts Carry No Warranty

Mower Blades Carry No Warranty

Portable Auger Parts Have Two (2) Year Warranty



ASSEMBLY INSTRUCTIONS


1. The basic Rollermill is completely assembled except for the hopper (#63). Mount the hopper on the top of the rollermill with the grain brackets to the rear of the mill as shown in drawing. Use the bolts supplied with the hopper.
 2. PTO drive is standard on the #180 rollermill. With the engine on the tractor shut off, attach the PTO shaft. The tractor end has a standard 6-spline end with a spring loaded locking pin. The Rollermill end has a clamp-style yoke with a 3/8" keyway. Slide the yoke onto the roller shaft with the 3/8" key supplied, lock the yoke in place with the 1/2" x 2 3/4" fine thread bolt and lock nut fitted through the groove in the roller shaft. After tightening the bolt, insert and tighten the 3/8" socket set screw supplied.
- ⚠ CAUTION:** Always check to see that both ends of the PTO shaft are securely attached every time the rollermill is used. This should always be done with the tractor engine off.
3. An optional stand (#71) is available for the #180 rollermill. The stand consists of two pieces which bolt underneath the rollermill using 1/2" x 1 1/4" hex bolts, lock washers and hex nuts.
 4. A magnet for the intake hopper is available as an option for all rollermills. This will keep small metal objects out of the rolled feed and also prevent damage to the roller grooves.

ASSEMBLY INSTRUCTIONS – cont'd.

5. If you intend to mount the rollermill on a transport, the stands described in step number three must also be purchased. First mount wheels and tires on the transport hubs. The bottom edge of the stand bolts to the top of the transport using $\frac{1}{2}$ " x $1 \frac{1}{4}$ " hex bolts, lock washers and hex nuts. Bolt the PTO holder (#77) to the front of the transport and the unloading auger support bracket (#78) at the rear of the transport. This bracket is required only if the optional 7" unloading auger is also used.
6. The optional unloading auger includes a discharge hopper (#83) and a cross auger (#102). The discharge hopper fits between the top edge of the stands and the bottom of the rollermill and fastens with the same bolts as the stands. Use $\frac{3}{8}$ " x $1 \frac{1}{4}$ " hex bolts, lock washers and hex nuts where the hopper bolts to the rollermill at the back edge.
7. Slide the hydraulic unloading auger (#103) onto the sleeve extending from the discharge hopper. The unloading auger is held in place by running the chain provided (#84) through the welded bracket on the auger and hooking the ends of the chain to the corner brackets on the hopper. Two hooks (#107) hold on the discharge auger by hooking onto a welded ring on the hopper sleeve. Bolt on using $\frac{5}{16}$ " x 1" hex bolts, lock washers and hex nuts. Bolt the spout (#105) to the top end of the unloading auger using $\frac{5}{16}$ " hex nuts.
8. Mount a $4 \frac{1}{2}$ " pulley (#66) with the 1" bore on the cross auger stub shaft at the front of the rollermill using a $\frac{1}{4}$ " x 2" key. The 6" pulley with the $1 \frac{1}{2}$ " bore is mounted on the same roller shaft end as the PTO shaft. There is both a $\frac{1}{4}$ " and a $\frac{3}{8}$ " keyway at the end of the shaft. The $\frac{1}{4}$ " is for the 6" pulley and the $\frac{3}{8}$ " is for the PTO shaft. Mount a 5L-400 V-belt (#70) and tighten using the idler pulley (#28) provided. The idler pulley bolts to the welded bracket on the front rollermill side. Bolt the guard (#101) across the pulley assembly using $1 \frac{7}{16}$ " x $1 \frac{1}{4}$ " bolt on the welded bracket on the side and one of the roller bearing bolts. Connect the PTO shaft after the guard is bolted on. The PTO shaft sits in the cradle bolted to the transport when the Rollermill is being moved.
9. Mount the two 90° street elbows (#112) in the hydraulic motor. The hydraulic hoses (#111) run under the hopper to the front of the transport. Make sure the unloading auger is running before you start the rollermill to prevent plugging. The unloading auger has a clean-out lid (#106) near the bottom should the corner ever become plugged.

OPERATION

Before using the rollermill, check the clearance on the rollers. Place a piece of newspaper between the rollers and adjust the set screws on either side of the rollermill till you can feel a slight tension on the paper. The rollers, however, should not touch each other. It is very important that the rollers are evenly adjusted. To ensure good rolling results, check roller adjustment regularly and reset if necessary. Close the gate control (#20) before starting the rollermill. The intake hopper should be partially full before opening the gate control. Keep the hopper partially filled at all times while the rollermill is running. This will allow the grain to be rolled evenly across the full width of the roller and will result in more uniformly rolled feed. It also helps prevent the rollers from wearing unevenly. Before stopping the rollermill, close the gate control while there is still grain in the hopper. When the grain remaining in the machine has all been crushed, shut off the machine immediately. The gate control is left closed until the machine is started again. The roller bearings should be greased approximately every 80 hours or once a season if used less.

 **NOTE:** When replacing bearings or tightening a loose bearing collar, always tighten collar in the direction of shaft rotation using a center punch or a similar tool.

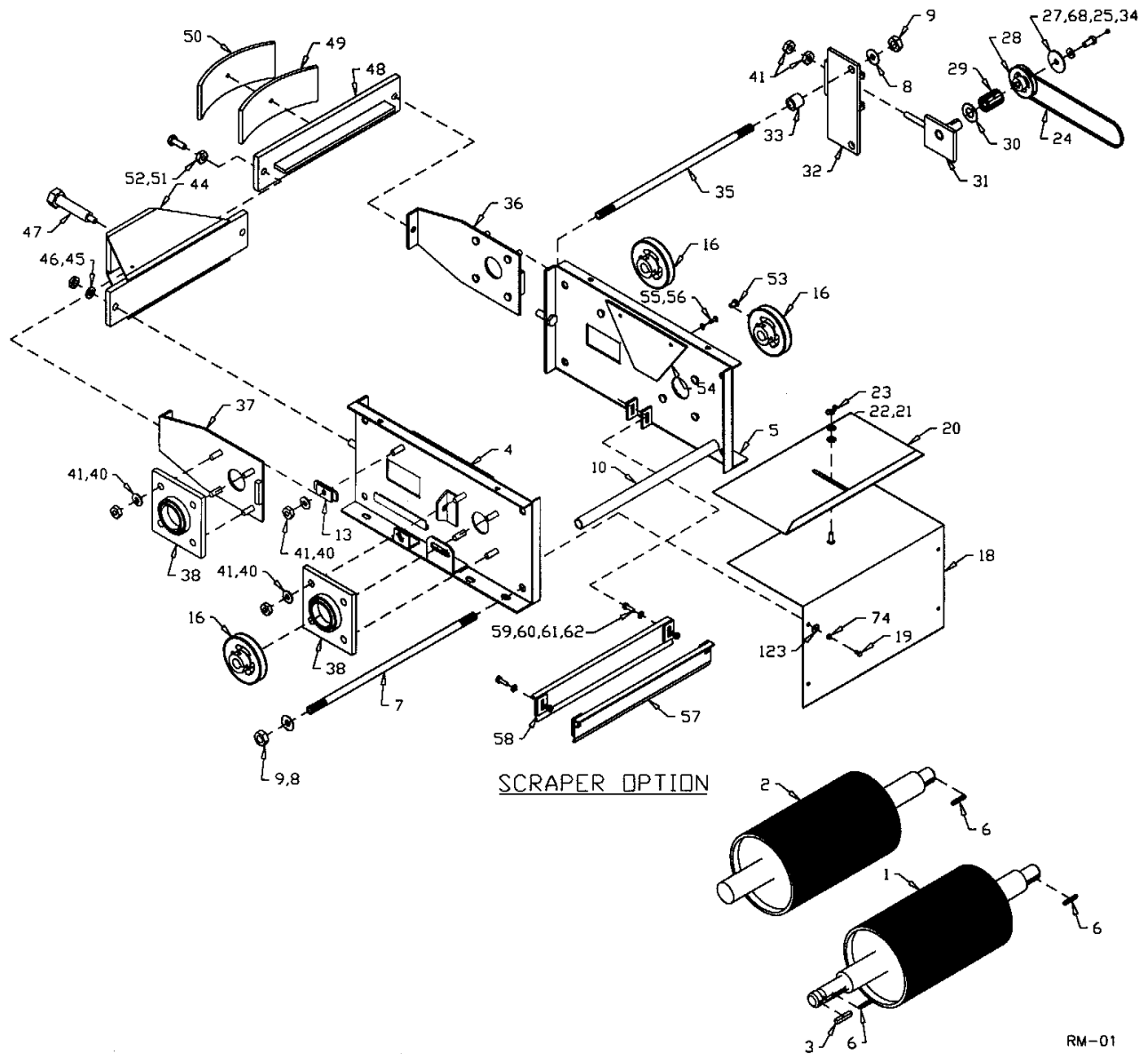
#180 ROLLERMILL

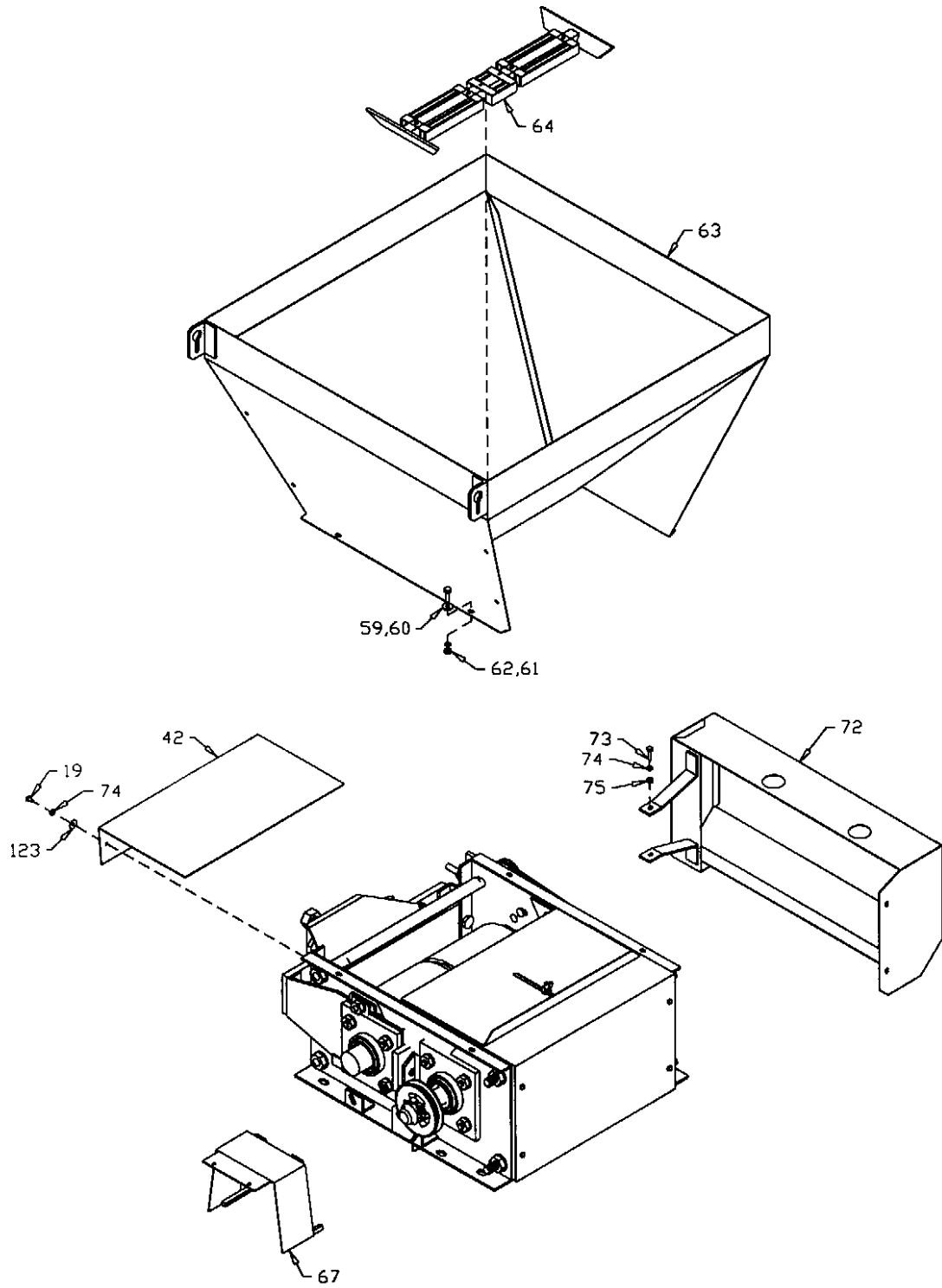
To regulate the type of rolled feed one wants, adjust the adjusting screw (#47). Increased pressure will result in finer and flatter feeds. Decreasing the tension will give you a coarser feed.

The unloading auger has a clean-out cover at the bottom of the discharge auger should it ever become plugged. The top section of the unloading auger swivels to allow unloading from any direction.

SAFETY INSTRUCTIONS

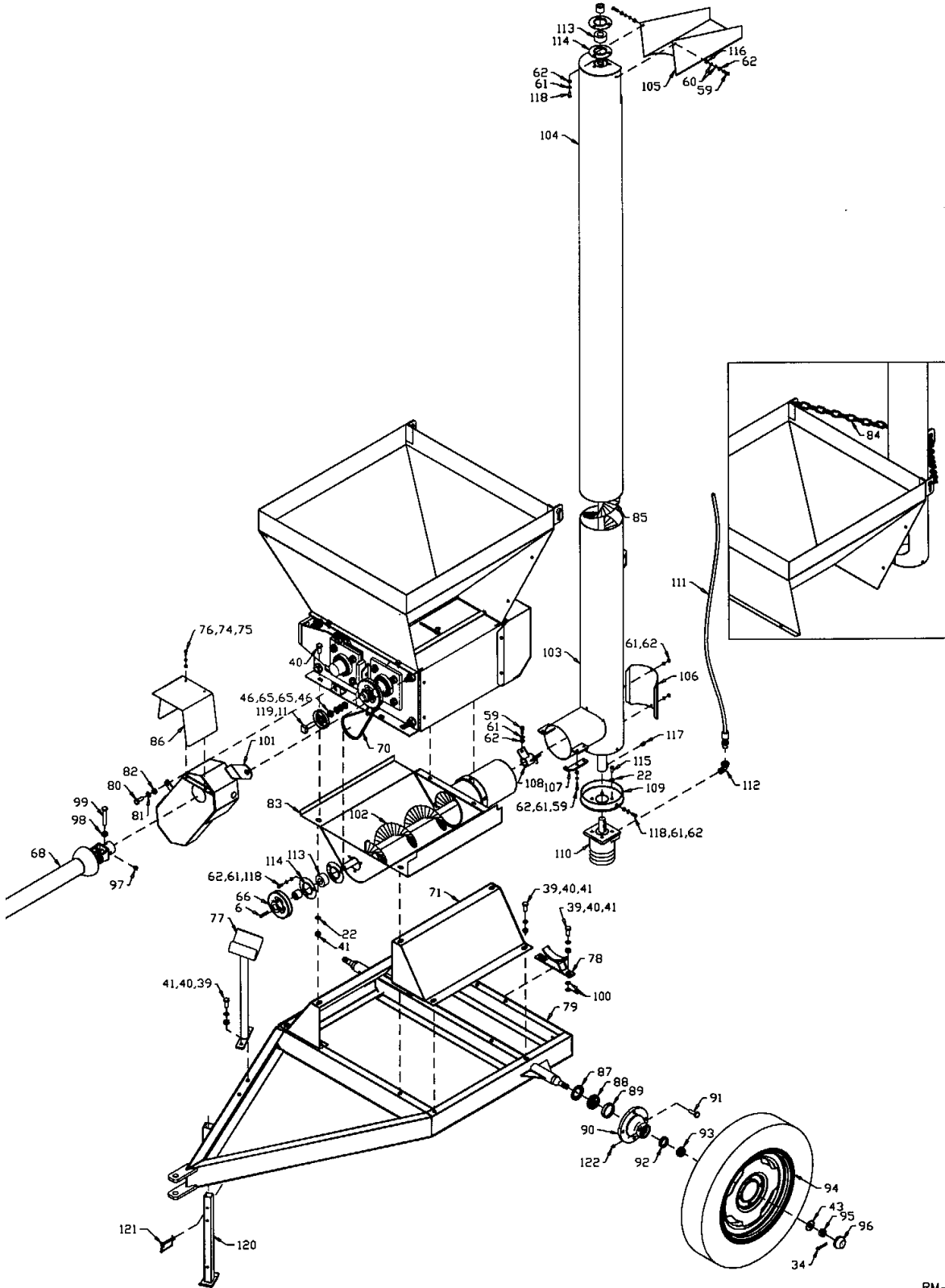
1. Keep hands out of intake hopper when machine is in operation.
2. Keep hands, feet and clothing away from moving parts
3. Shut off power to adjust, service or clean.
4. Keep everyone away when machine is in operation. Belts and PTO joints require a particular amount of caution.
5. Keep all guards in place when machine is in operation.
6. Transport is for low speed towing only.
7. Power take-off drive is designed for tractors with 540 rpm power take-off only.





RM-02

#180 ROLLERMILL DISCHARGE HOPPER ASSEMBLY – optional



RM-03

WHEN ORDERING PARTS

Always give your dealer the Model and Serial Number of your machine to assist him in ordering and obtaining the correct parts. Use the exploded view and tabular listing of the area of interest to exactly identify the required part.

#180 ROLLERMILL

Item #	Part #	Description
1	968922	Std. 18" x 10" Rear Roll (8 Groove)
	968923	Chrome 18" x 10" Rear Roll (8 Groove)
	901546	Chrome 18" x 10" Rear Roll (6 Groove)
2	968896	Std. 18" x 10" Front Roll (8 Groove)
	968920	Chrome 18" x 10" Front Roll (8 Groove)
	901545	Chrome 18" x 10" Front Roll (6 Groove)

NEW ROLLS (PER SET)

	Y8107	Std. Rolls For #180 (8 Groove)
	Y8110	Chrome Rolls For #180 (8 Groove)
	Y8119	Chrome Rolls For #180 (6 Groove)
3	968807	3/8" x 3/8" x 2" Key
4	968895	Left Side Plate
5	968908	Right Side Plate
6	901550	1/4" x 1/4" x 1 3/4" Key
7	968809	Frame Bolt (2 Used) 3/4" x 2 1/2"
8	81701	3/4" Lock Washer (pl)
9	81700	3/4" Hex Nut (pl)
10	968808	Frame Bolt (4 Used) 1.05" x 18 5/8"
11	981664	5/8" x 2 1/4" Hex Bolt (Idler)
12	84126	5/8" Jam Nut (pl)
13	968803	Slide Bracket (2 Used)
14	86171	3/8" x 1 1/4" Hex Bolt (pl)
15	81592	3/8" Hex Nut (pl)
16	968816	6" Sheave, B-Groove, 1 1/2" Bore
18	968810	Rear Cover Plate
19	81523	1/4" x 1/2" Hex Bolt (pl)
20	968815	Gate Control
21	84000	7/16" Flat Washer STD HS (pl)
22	81593	3/8" Lock Washer (pl)
23	84217	3/8" Wing Nut (pl)
24	968818	Drive Belt - BB51
25	110339	Grease Zerk Bolt

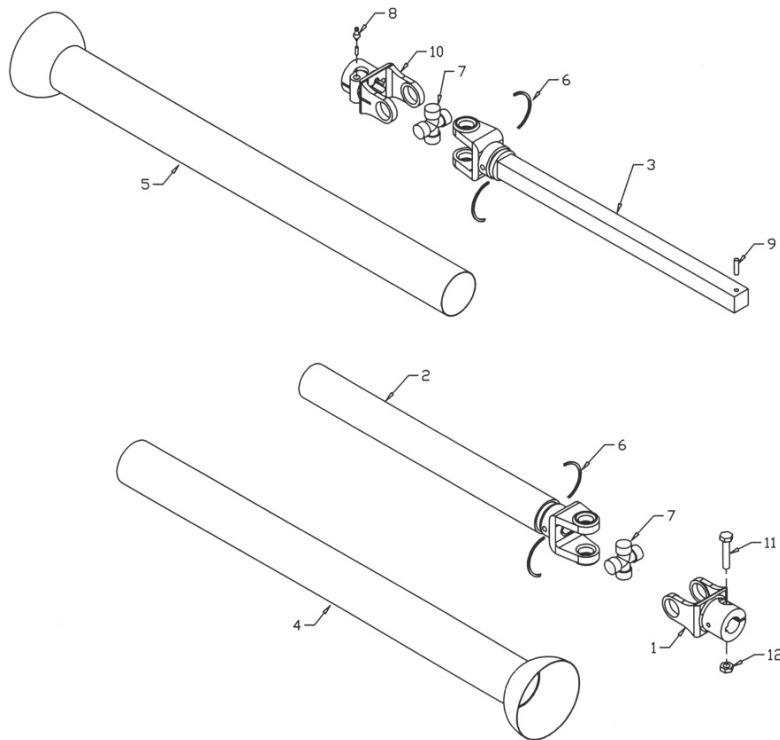
27	901504	2 1/4" O.D. Flat Washer
28	968822	4" Sheave, Belt Tightener
29	968827	Roller Bearing
30	84522	1" SAE Flat Washer (pl)
31	901500	Tightener Weldt
32	901503	Bracket Weldt
33	901495	Spacer 1 1/4" O.D. x 1 1/8" Long
34	967436	1/8" x 1 1/4" Cotter Pin
35	968830	Frame Bolt (1 Used) 3/4" x 22 1/2"
36	968911	Adjustable Bearing Holder - R
37	968894	Adjustable Bearing Holder - L
38	968910	2" Bearing Flange & Insert
	968909	2" Bearing Only
39	81620	1/2" x 1 1/4" Hex Bolt (pl)
40	81637	1/2" Lock Washer (pl)
41	81636	1/2" Lock Nut (pl)
42	968831	Front Cover
43	84050	3/4" SAE Flat Washer (pl)
44	968836	Spring Support
45	81677	5/8" Lock Washer (pl)
46	81676	5/8" Hex Nut (pl)
47	968832	Adjusting Screw
48	968835	Spring Plate
49	968834	.36" x 4" x 15" Spring
50	968833	.36" x 4" x 14" Spring
51	812364	1/2" Lock Nut (pl)
52	967166	1/2" x 1 1/2" Flat Hd Socket Bolt
53	985639	3/8" X 1/2" Socket Set Screw (br)
54	968812	Belting Seal
55	9812399	1/4" x 3/4" Flat Hd Stove Bolts
56		1/4" Sq Nuts (Incl. With Bolts)
57	968893	Roll Scraper - 18 1/2"
58	901586	Scraper Mounting Bracket
59	812026	5/16" x 1" Hex Bolt (pl)
60	81570	5/16" BS Flat Washer (pl)
61	81569	5/16" Lock Washer (pl)
62	81568	5/16" Hex Nut (pl)
63	968861	Hopper For #180 Rollermill
64	F7610	Magnet For #180 Rollermill
65	81678	5/8" B.S. Flat Washer
66	968912	4 1/2" O.D. Pulley, 1" Bore
67	968821	PTO Guard Adaptor W/O Discharge Hopper
68	F7431	PTO Shaft Complete
70	968913	Belt 5L400

71	901664	Stand Weldment
72	968819	19 1/2" x 27 3/4" Guard
73	81527	1/4" x 1" Hex Bolt (pl)
74	81545	1/4" Lock Washer (pl)
75	81544	1/4" Hex Nut (pl)
76	81525	1/4" x 3/4" Hex Bolt (pl)
77	968880	PTO Holder
78	968881	Unloading Auger Support
79	905062	Transport Frame
80	81598	7/16" x 1 1/4" Hex Bolt (pl)
81	81615	7/16" Lock Washer (pl)
82	81614	7/16" Hex Nut (pl)
83	968635	Discharge Hopper (Hyd.)
84	968860	1/4" x 8' Chain
85	968640	Discharge Auger Flighting 7" x 12'
86	968820	PTO Guard 7" x 21"
87	961891	Seal CTD (SE11)
88	967712	Inner Bearing Cone (LM67048)
89	967711	Inner Bearing Cup (LM67010)
90	105173	Hub C/W Cups (4 Bolt) - H411
91	968404	1/2" Wheel Bolt
92	968405	Outer Bearing Cup (LM11910)
93	968406	Outer Bearing Cone (LM11949)
94	F7110	4 1/2" x 15" x 4 Bolt Wheel
95	968407	3/4" Crown Nut
96	968409	Dust Cap (DC12)
97	812490	3/8" x 3/8" Socket Set Screw (pl)
98	967105	1/2" Lock Nut NF (pl)
99	967179	1/2" x 3" Hex Bolt NF (pl)
100	84048	1/2" B.S. Flat Washer (pl) (As Required)
101	968882	Belt Cover W/ Disch. Hopper
102	968636	Cross Auger (Hyd.)
103	968637	7" x 12' Hyd. Una. Auger Tube
104	968638	Top Swivel Tube (Hyd.)
105	968639	Discharge Spout (Hyd.)
106	968641	Clean Out Lid (7 3/4" Sq)
107	968642	Hook Clamp
108	968643	Bushing Holder
109	968644	7" End Cap
110	971517	Hydraulic Motor (101-1002)
111	960466	1/2" x 112" Hyd. Hose (Both Ends 1/2" NPT)
112	964650	1/2" Street Elbow
113	961627	1" Bearing W/ Collar
114	973511	1" Bearing Flange

115	84027	3/8" x 3/4" Hex Bolt (pl)
116	812362	5/16" Lock Nut (STL) (pl)
117	985639	3/8" x 1 1/2" Socket Set Screw (br)
118	81549	5/16" x 3/4" Hex Bolt (pl)
119	968892	3" Sheave, Belt Tightener
120	905060	Stand Weldment
121	912301660	Wire Lock Pin
122	84583	Grease Fitting 1/8" NPT Str
123	81546	1/4" Flat Washer (pl)
124	912301660	Pin Wire Lock
126	905060	Stand Weldment

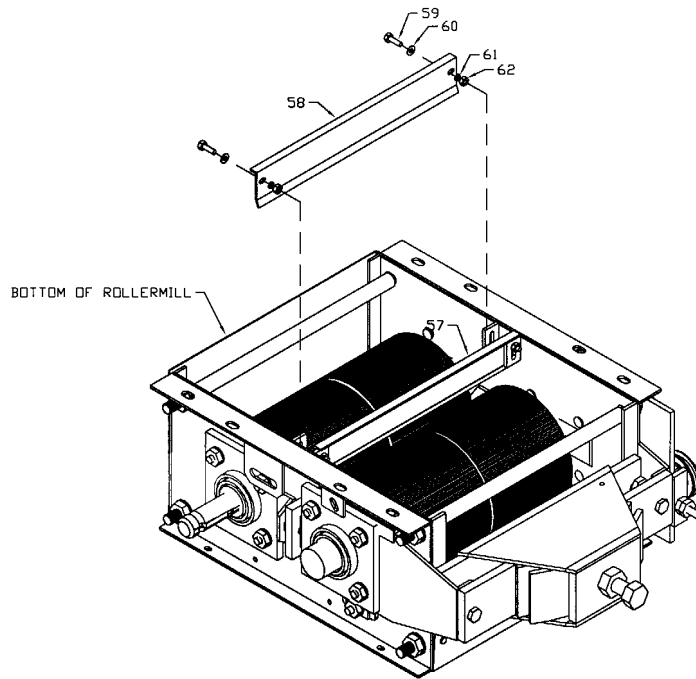
Rollermill PTO Shaft

Item #	Part #	Description
	F7431	Shaft Complete
1	936266	Clamp Yoke
2	936051	Yoke & Tube Assembly
3	936052	Yoke & Shaft Assembly
4	936214	Inner Shield
5	936215	Outer Shield
6	936111	Shield Bearing Kit
7	936025	Repair Kit
8	936016	Quick Disconnect Kit
9		Spring Pin
10	936028	6 Spline End Yoke
	936026	21 Spline End Yoke
11	967179	1/2" x 3" Fine Thread Bolt
12	967105	1/2" Fine Thread Lock Nut



RM-08

#180 ROLLERMILL ROLL SCRAPER MOUNTING INSTRUCTIONS



RM-04

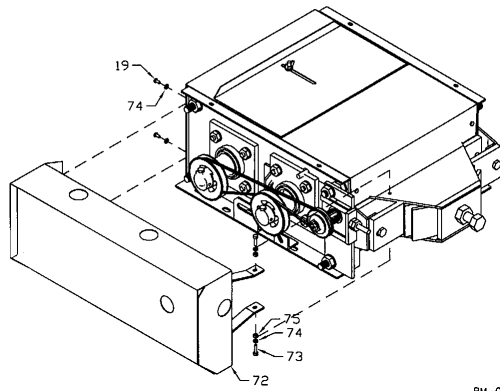
- Turn rollermill upside down as shown.

- Four $\frac{1}{4}$ " x $1 \frac{1}{4}$ " x 2" flat iron brackets with slotted holes are positioned as shown in drawing and welded to the sides. Measure $10 \frac{1}{2}$ " from the end of the rollermill to the inside of the first bracket and space $1 \frac{3}{4}$ " apart. The brackets are flush with the bottom of the roller mill. **NOTE:** Weld on the inside edge only.

- Bolt the $18 \frac{1}{2}$ " long scrapers to the outside of the welded brackets using $\frac{5}{16}$ " x 1" cap screws, flat washers, lock washers and hex nuts. The bottom lip on the scraper is turned to the center of the rollermill.

- Adjust the scraper height so the scrapers are just short of touching the rolls.

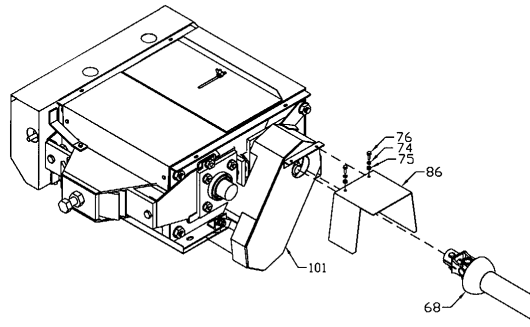
#180 ROLLERMILL GUARDS



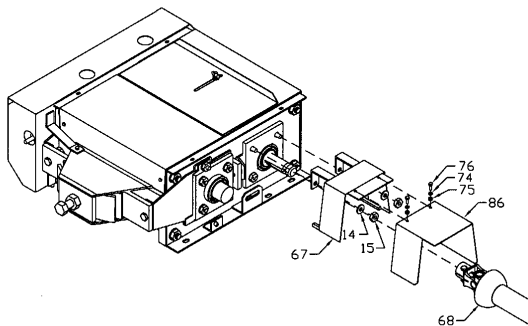
RM-05

Belt Drive Guard:
- used on all Rollermills

PTO Drive Guard:
- used on Rollermills with
discharged hopper



RM-06



RM-07

PTO Drive Guard:
- used on Rollermills without
discharge hopper


#180 ROLLERMILL GUARDS

DRIVE PULLEY GUARD:

All rollermills are supplied with a drive pulley guard (#72). One end of the guard is bolted to the two holes punched in the spring holder using $\frac{1}{4}$ " x $\frac{3}{4}$ " cap screws, lock washers and hex nuts. The other end is bolted on using the same bolts that hold on the rear cover plate.

PTO DRIVE GUARD:

All #180 rollermills with a discharge hopper are supplied with a PTO guard (#86). This guard bolts to the angle iron on the belt guard using $\frac{1}{4}$ " x $\frac{3}{4}$ " cap screws, lock washers and hex nuts. This belt guard is supplied only with rollermills using a discharge hopper and auger. If the rollermill is being used without a discharge hopper, an adaptor (#67) must be used as shown in drawing. This adaptor bolts on using the top two bolts on the bearing flange. The guard (#86) then bolts onto the adaptor.

 **ALERT:** Never use the rollermill without all the appropriate guards in place. Always turn off the machine before removing any guard or when servicing.

MODEL #180 ROLLERMILL - BUNDLE NUMBERS Y180

QUANTITY REQUIRED	BUNDLE NUMBER	DESCRIPTION
1	F7431	PTO shaft
1	F7600	18" x 10" rollermill
1	F7601	Hopper
1	F7654	PTO guard w/adaptor

OPTIONS AVAILABLE:

1. With chromed rolls Y180C

1	F7431	PTO shaft
1	F7601	Hopper
1	F7603	Rollermill – chromed rolls
1	F7654	PTO guard/adaptor

2. 6" x 8' discharge auger w/hopper Y181

1	F7642	8' unloading auger
1	F7651	cross auger and hopper
1	F7653	carton of parts

3. 6" x 12' discharge auger w/hopper Y182

1	F7643	12' unloading auger
1	F7651	cross auger and hopper
1	F7653	carton of parts

4. Transport w/rims (stand required w/transport) Y183

2	F7110	15" x 4.5" x 4 bolt wheel
1	F7647	transport l/rims

5. Magnet F7610

6. Stand F7620