

Hydraulic Sickle Bar Mower



OPERATION and SERVICE MANUAL

DEALER'S COPY

Sold to Ralph McNeil RRT Rio, Ill

REPAIR PARTS LIST

SICKLE GROUP and DRIVE GROUP

#10101

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GENERAL INFORMATION

This sickle mower unit is easy to operate and as safe as possible. It is designed to handle those hard to cut jobs such as ditches, fence lines and rough ground. We suggest that you carefully read all instructions before you use this mower.

CAUTION

- Keep safety shield in place over cutter bar and knife at all times when mower is not running.
- Never ride anyone other than operator on tractor while using this equipment.
- Keep hands and feet away from cutter bar at all times.
- Do not raise cutter bar from horizontal to vertical position while unit is running.
- Never try to adjust or lubricate while unit is running.
- Keep hands out of cutting blades when installing or removing sickle bar from tractor.
- Never try to mount unit on tractor while tractor is running.
- Never dismount from the tractor while sickle bar is running.
- Disengage power take off and turn off engine before doing any inspecting or adjusting.
- Never allow anyone to walk alongside of, in front of, or behind sickle bar while it is in motion, or running.

LUBRICATION

This Sickle Bar is lubricated through grease fittings located as follows:

1. Break Back Pivot
2. Main Bar Housing
3. Drive Arm

Refer to photo No. 1 for the location of the grease fittings. Lubricate these fittings after every 3 hours of operation, with a standard grease gun using a general purpose automotive type grease; wipe each fitting with a rag to remove dirt and grit. Avoid forcing dirt into the bearings with the clean grease.

Apply oil to the wear plates, hold down clips, hinge bars, spring ends, and lift lever assembly every two or three hours of operation.

Hydraulic system uses (1) one gallon of API classification MS 10w-30, 10w-40 motor oil, or type A or type A suffix A automatic transmission fluid. Utmost caution should be taken to prevent hydraulic system from becoming contaminated by dirt or other foreign substances. For best results, oil in the hydraulic system should be changed every 50 hours. Oil level should be kept no lower than from 1/4 to 1/2 inch below top of tank.

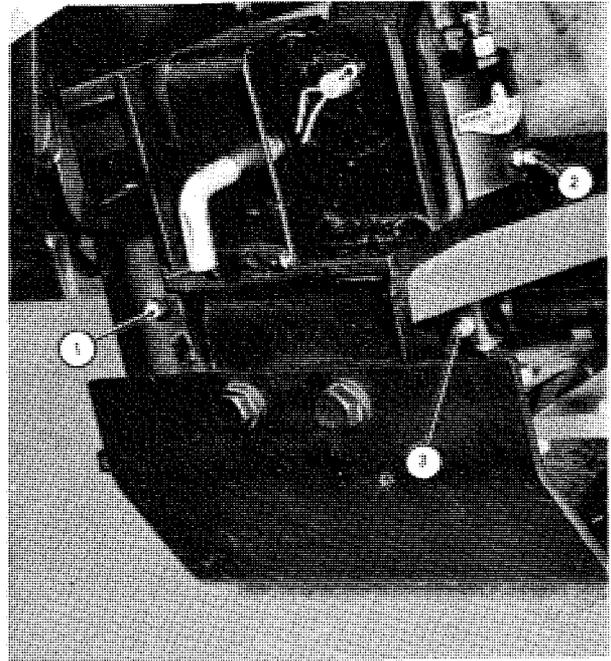


PHOTO NO. 1

OPERATION

(Before starting to cut, make sure all nuts are tight, belt tension is sufficient, and Sickle Bar has been lubricated.)

This unit has been found to cut effectively and last longer when the cutting speed is between full and three-quarters throttle. The ground speed can be determined by the gear the tractor is running in. (Use good judgement to decide which ground speed will be safest for the particular terrain.)

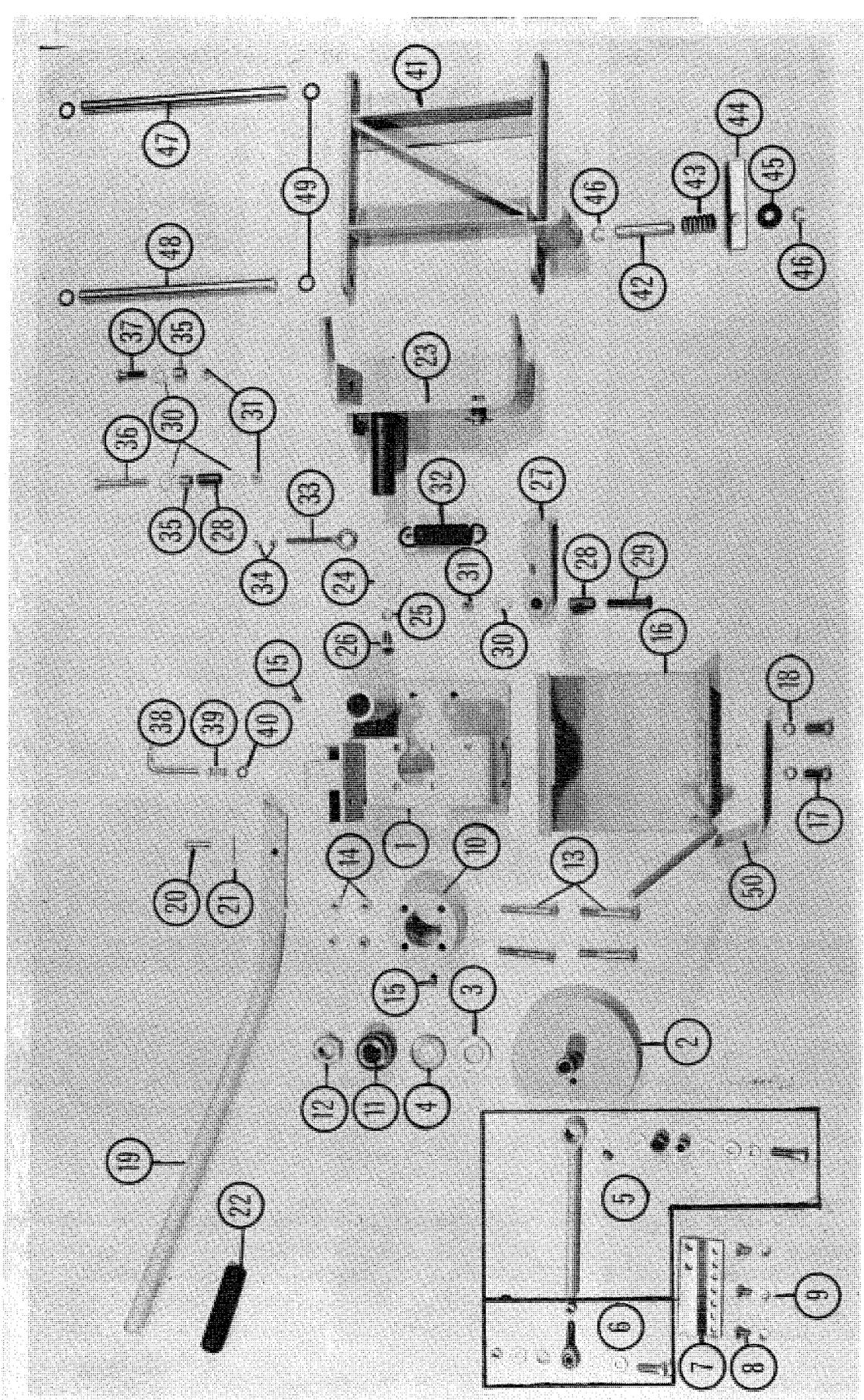
This unit is equipped with a lift lever and a breakback mechanism to help avoid damaging it or the tractor when hitting an obstruction. We advise the area to be cut be inspected prior to cutting and any wire or other foreign objects be removed. Also before cutting, for example: if grass and weeds are laying – cut opposite the direction it is laying.

As mentioned in the preceding paragraph, the mower is equipped with a breakback mechanism which allows the main bar to swing back when a solid obstacle is struck. To put bar back in cutting position, simply back tractor up. If this does not work, disengage P.T.O., shut off engine and manually pull sickle bar forward till it latches into position.

Note: To adjust tension on breakback mechanism to suit, tighten or loosen the two nuts on eye bolt next to hinge assembly.

This unit is also equipped with a transit lock which enables the sickle bar to be locked in the 90° position while enroute or cutting hedges. While the unit is in this position, special care must be taken to make sure the operators hands and feet stay away from the cutting blades.

It is also important that blades be in motion before tractor has begun moving forward.



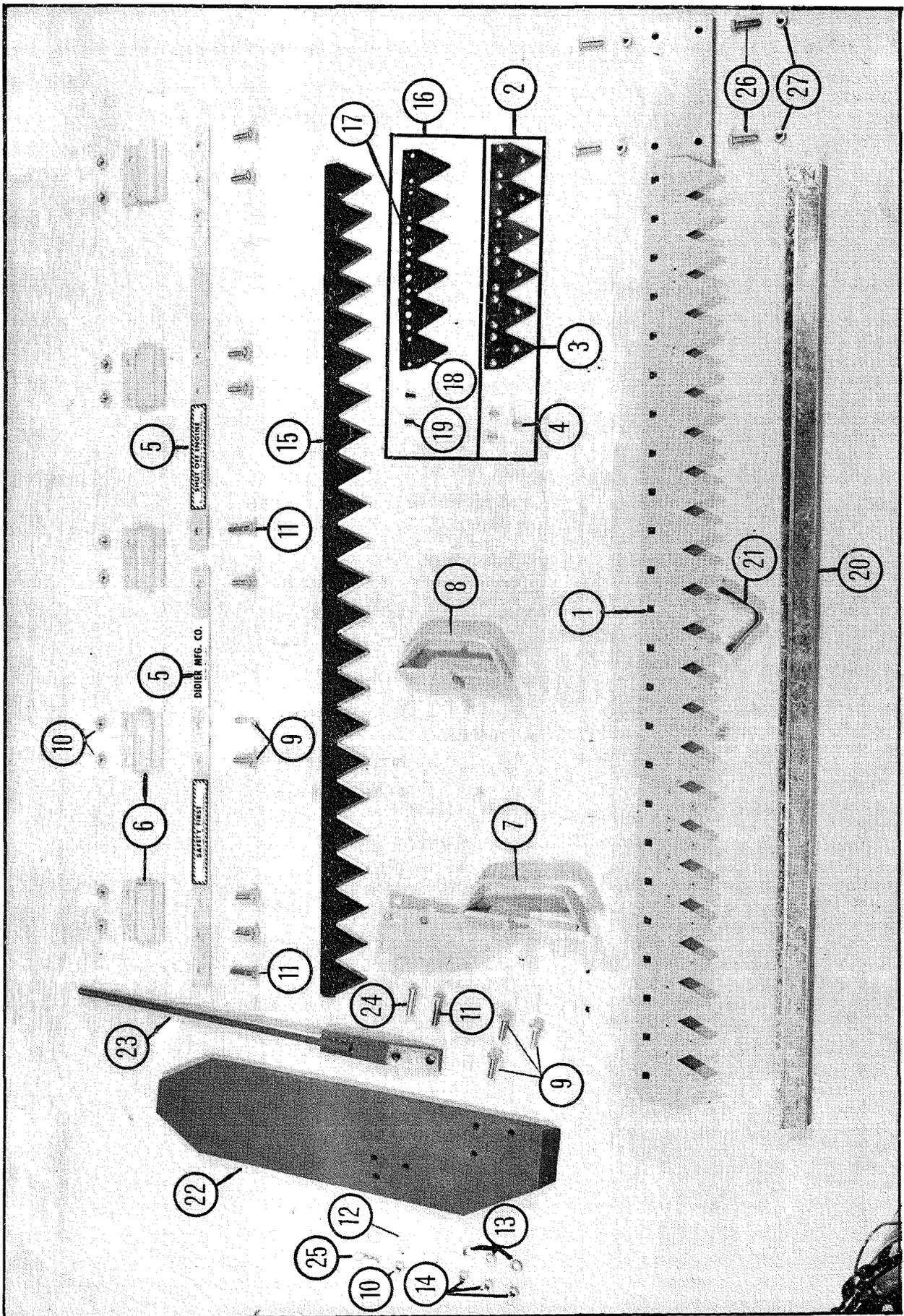
DRIVE GROUP

Service Parts List

Order by Part Number and Description

NOTE* Specify sickle bar mower Model No., Code and Serial Number when purchasing service parts.

Reference Number	Part No.	Description	Number Required	
			58"	46"
1	100020	Assy.-Mounting Plate	1	1
2	100028	Assy.-Flywheel	1	1
3	100031	Washer-Flat (Thrust)	1	1
4	100032	Ring-Nylos	1	1
5	100611	Pitman Arm Replacement Kit	1	1
		Consisting of:		
	100034	Assy.-Pitman Arm	1	1
	100037	Bearing-Needle	1	1
	GM-9417901	Fitting-Grease ¼-28 STR	1	1
	100039	Ring-Bearing	1	1
	100040	Washer-Flat (Hardened)	2	2
	GM-446363	Washer-Flat (3/8 x 7/8 x .083)	1	1
	GM-120382	Washer-Split Lock 3/8	1	1
	GM-180126	Bolt-Hex. Hd. 3/8 - 16 x 1½	1	1
6	100612	Rod End Replacement Kit		
		Consisting of:		
	100038	Rod End (3/8 - 24 Male)	1	1
	GM-124925	Nut-Hex Jam 3/8 - 24	1	1
	100040	Washer-Flat (Hardened)	2	2
	GM-446363	Washer-Flat (3/8 x 7/8 x .083)	2	2
	100332	Bolt-Hex. Hd. 3/8 - 16 x 1½ (Special)	1	1
	GM-9413534	Nut-Hex. Lock 3/8 - 16	1	1
7	100041	Knife Head	1	1
8	GM-181591	Bolt-Hex. Hd. 5/16 - 24 x ½	3	3
9	GM-120214	Washer-Split Lock 5/16	3	3
10	100043	Housing-Motor	1	1
11	100044	Bearing-Timken (Complete)	1	1
12	100049	Nut-Hex. Lock Jam (1" - 14)	1	1
13	GM-101541	Bolt-Plow 3/8 - 16 x 3"	4	4
14	GM-120377	Nut-Fin. Hex. 3/8 - 16	4	4
15	GM-9417901	Fitting-Grease ¼ - 28 STR.	2	2
16	100050	Assy.-Inner Shoe	1	1
17	GM-180147	Bolt-Hex. Hd. 7/16 - 14 x 1¼	4	4
18	GM-120383	Washer-Split Lock 7/16	4	4
19	100607	Assy.-Lift Handle (46")		1
19A	100608	Assy.-Lift Handle (58")	1	
20	100057	Pin-Clevis	1	1
21	GM-120123	Pin-Cotter (1/8 x 1¼)	1	1
22	100074	Grip-Handle (Plastic)	1	1
23	100060	Assy.-Swivel Frame	1	1
24	100066	Washer-Flat (7/16 x 1½ x .109)	1	1
25	GM-120382	Washer-Split Lock 3/8	1	1
26	GM-180120	Bolt-Hex. Hd. (3/8 - 16 x 3/4)	1	1
27	100067	Assy.-Latch Bar	1	1
28	100070	Spacer-1¼ Long	2	1
29	GM-180128	Bolt-Hex. Hd. (3/8 - 16 x 1 3/4)	1	1
30	GM-446363	Washer-Flat (3/8 x 7/8 x .083)	3	2
31	GM-9413534	Nut-Hex. Lock (3/8 - 16)	2	2
32	100072	Spring-Extension	1	1
33	100136	Eyebolt	1	1
34	GM-120376	Nut-Fin. Hex. (5/16 - 18)	2	2
35	100015	Spacer - 5/8 Long	1	1
36	GM-180138	Bolt-Hex. Hd. (3/8 - 16 x 3")	1	
37	GM-180126	Bolt-Hex. Hd. (3/8 - 16 x 1½)	1	1
38	100593	Pin-Handle	1	1
39	100495	Spring-Compression	1	1
40	100606	Push-On Retainer (3/8)	1	1
41	100083	Assy.-"H" Frame	1	1
42	100087	Pin-Latch	1	1
43	100088	Spring-Compression	1	1
44	100089	Handle Angle	1	1
45	GM-120389	Washer-Flat (½ x 1¼ x .083)	1	1
46	100090	Ring-Snap	2	2
47	100092	Pin-Frame Mtg. (Long)	2	2
49	100553	Push-On Retainer (5/8)	4	4
50	100362	Strap-Cutting Shield	1	1



SICKLE GROUP

Service Parts List

Order by Part Number and Description

NOTE* Specify sickle bar mower Model No., Code and Serial No. when ordering service parts.

Reference Number	Part No.	Description	Number Required	
			58"	46"
1	100700	Main Bar with Ledger Plates (46")		1
1A	100678	Main Bar with Ledger Plates (58")	1	
2	100701	Ledger Plate Replacement Kit (46")		1
2A	100696	Ledger Plate Replacement Kit (58") Consisting of:	1	
3	100680	Ledger Plate (smooth)	30	24
4	100614	Screw-Tapping	90	72
5	100005	Strap-Wear	2	2
5A	100293	Strap-Wear (Short) (Not Shown)	1	
6	100006	Clip-Hold Down	6	5
7	100007	Assy-Outer shoe	1	1
8	100011	Assy-Center shoe	1	1
9	GM-126402	Bolt-Carriage (3/8-16 x 1 1/4)	10	12
10	GM-9413534	Nut-Hex. Lock (3/8 - 16)	15	12
11	GM-180126	Bolt-Hex. Hd. (3/8 - 16 x 1 1/2)	3	3
12	GM-446363	Washer-Flat (3/8 x 7/8 x .083)	7	2
13	GM-120382	Washer-Split lock 3/8	3	3
14	GM-120377	Nut-Fin. Hex. (3/8 - 16)	3	3
15	100702	Assy-Knife 46"		1
15A	100697	Assy-Knife 58"	1	
16	100703	Knife Section Replacement Kit (46")		1
16A	100698	Knife Section Replacement Kit (58") Consisting of:	1	
17	100683	Knife Section (3) Hole	3	3
18	100681	Knife Section (2) Hole	26	20
19	100699	Rivet - #6 x 7/16 Round Hd.	58	46
20	100075	Shield-Knife 46"		1
20A	100296	Shield-Knife 58"	1	
21	100076	Rubber Band (Knife Shield)	1	1
22	100142	Swath Board	1	1
23	100077	Assy-Divider Rod	1	1
24	100057	Pin-Clevis (3/8 x 1 3/8)	1	1
25	100134	Pin-Hair Cotter	1	1
26	GM-180147	Bolt-Hex. Hd. (7/16 - 14 x 1 1/4)		4
26	GM-180149	Bolt-Hex Hd. (7/16-14 x 1 1/2) (Front)	2	
26	GM-180157	Bolt-Hex Hd. (7/16-14 x 2 1/2) (Rear)	2	
27	GM-9414073	Nut-Hex Lock (7/16 - 14)	4	
28	GM-120389	Washer-Flat (1/2 x 1 1/4 x .109) (rear bolts)	2	
29	100600	Tube-Reinforcing		
30	GM-180132	Bolt-Hex Hd. (3/8-16 x 2 1/4) (Reinforcing Tube)	5	

TROUBLE SHOOTING

<u>Problems</u>	<u>Causes</u>
1) Hydraulic System Making gurgling Sound. This is called Cavitation.	A) Air Leaks in Connections or Hoses. B) Fluid Level in reservoir is low.
2) Pump or motor housing is leaking.	A) Fittings too tight. B) Bolts Loose. C) Cracked Housing.
3) Leakage around fittings or hoses.	A) Fittings or Clamps loose.
4) Sickle Bar doesn't run or runs erratic when P.T.O. is engaged.	A) Drive Belt came off pulley or is excessively loose. B) Fluid level in reservoir is low. C) No Key, or key sheared off in pump or motor. D) Knife locked out.
5) Fluid in reservoir is foaming.	A) Not using an anti-foam type fluid. Change to anti-foam automatic transmission oil.
6) Main bar breaks back to easy.	A) Latch spring too loose, adjust on eyebolt.
7) Jagged or uneven cutting.	A) Excessive forward speed. B) Dull cutting knives. C) Broken or loose knife sections.
8) Plugging knife assembly.	A) Excessive forward speed. B) Dull cutting knives. C) Improperly installed hold down clips.

PREVENTIVE MAINTENANCE

- Make certain all fluid connections (fittings and clamps) are tight to prevent leaks or entry of air into the system.
- Check reservoir fluid level to assure an adequate supply at the pump intake. Fluid level should be no more than ¼ to ½" from top of reservoir. When adding fluid, pour it through a filter or screen, being careful not to get contaminants in the fluid.
- Check for fluid contamination periodically; if it is contaminated, drain the system and thoroughly clean the reservoir. Refill the reservoir with clean fluid.

Note: Pump and motor do not require any periodic adjustments. All lubrication in the pump and motor is provided by the system fluid flow.

- Follow lubrication instructions - Keep all points shown well lubricated. Too much lubrication does not hurt anything, but not enough lubrication can cause serious problems.
- Check P.T.O. drive periodically, adjust if necessary.
- Check all hardware (bolts & nuts) periodically to be sure they are tightened securely.
- Check all parts periodically; replace any badly worn or damaged parts.

GUARANTEE

Didier Mfg. Co., guarantees this sickle bar mower attachment against any defects in material or workmanship for one year from date of original retail purchase. Products used commercially are guaranteed for 90 days.

Parts manufactured by Didier Mfg. Co., will be replaced free if found to be defective while in normal service during the one year period following the original date of purchase.

V-belts and hydraulic hoses and fittings are guaranteed for 90 days.

Hydraulic Pumps, Motors, Valves and Lift Cylinders are subject to the guarantee terms of their manufacturer.

Authorization and shipping instructions must be obtained in writing prior to the return of any merchandise. Normal wearing parts are not subject to guarantee unless material or workmanship are at fault.

This guarantee is not in effect if the machine has been subject to misuse, negligence or accident.

If the purchaser shall use or allow to be used parts that are not supplied by the company in the machine, this guarantee becomes void.

Transportation costs and dealer service call charges are the responsibility of the owner.

WHEEL HORSE 10751 FRAME GROUP

Repair Parts List

Order by Part Number and Description

Reference Number	Part No.	Description	No. Required
1	100424	Assy. - Main Frame (Welded)	1
2	GM-180122	Bolt - 3/8-16 x 1" Hx. Hd.	6
3	GM-120388	Washer - Flat (7/16 x 1" x .083)	12
4	GM-9413534	Nut - Hex. Lock 3/8-16	7
5	100092	Pin - Mounting (Long)	1
6	100397	Torsion Spring (R.H.)	1
7	100398	Torsion Spring (L.H.)	1
8	GM-120123	Pin - Cotter (1/8 x 1 1/4)	2
9	100109	Tank - Reservoir (1-Gallon)	1
10	GM-126705	Bolt - 3/8-16 x 3" Carr.	1
11	GM-120377	Nut - Lt. Hex. 3/8-16	13
12	GM-180134	Bolt - 3/8-16 x 2 1/2 Hx. Hd.	2
13	100135	Spring - Extension	1
14	100136	Eyebolt	1
15	GM-120376	Nut - Lt. Hex. 5/16-18	2
16	100057	Pin - Clevis (3/8 x 1 3/8)	1
17	GM-446363	Washer - Flat (3/8 x 7/8 x .083)	2
18	100134	Pin - Hair Cotter (Small)	3
19	90030	Pin - Hair Cotter (Large)	2
20	100304	Pin - Clevis (1/2 x 1 1/2)	2
21	100434	Assy. - Rear Mtg. Brk't. (Welded) (L.H.)	1
22	100437	Assy. - Rear Mtg. Brk't. (Welded) (R.H.)	1
23	GM-180124	Bolt - 3/8-16 x 1 1/4 Hx. Hd.	4
24	100438	Rod - Idler Pulley	1
25	100439	Angle - Pulley Mtg.	1
26	80070	Assy. - Idler Pulley (2-3/4 O.D. Flat x 3/8 Bore)	1
27	GM-180126	Bolt - 3/8-16 x 1 1/2 Hex. Hd.	1
28	100132	Handle - Adjusting	1
29	100149	Pump - Hyd. 22YB-L.H.	1
30	100116	Pulley (4 1/2 O.D. - "A" Section)	1
31	GM-115321	Screw - Set 5/16-18 x 5/16 Sk't. Hd. - Cup Pt.	2
32	100117	Key - #5 Woodruff	2
33	100422	Fitting - 45° Male Elbow (3/8 NPT x 3/4-16 JIC)	1
34	100211	Hose - Suction (5/8 x 18" Lg.)	1
35	100119	Clamp - Hose	3
36	100244	Hose - Return (5/8 x 48" Lg.)	1
37	100122	Fitting - 90° Street Elbow (1/2 NPT)	1
38	100180	Hose - Pressure (3/8 x 50" Lg.)	1
39	100126	Fitting - 90° Street Elbow (3/8 NPT)	1
40	100176	Fitting - 90° Male Elbow (3/8 NPT x 9/16-18 JIC)	1
41	100123	Motor - Hyd. (73YB - L.H.)	1
42	100305	V-Belt (XDV-48-990)	1

OPERATION

After mounting unit to tractor, you are ready to check the drive operation.

The first thing to do is to check and be sure that the fluid reservoir is full. Next recheck V-belt for proper tension. Drop main bar to horizontal cutting position on ground and remove sheet metal knife shield and rubber band holding it in place. Put them some place where you can easily find them later. Note: This shield should be kept on unit at all times when mower is not in use.

Start tractor engine; be certain P.T.O. is disengaged. After engine is warmed up, and with throttle set in idle position, engage tractor P.T.O. The sickle blade will start to run slowly within a second or two, as soon as fluid from the reservoir fills the hydraulic pumps and hoses. Let unit run like this for 2 to 3 minutes for initial break in. Disengage P.T.O. and shut tractor engine off.

Check hoses, fittings and pumps for leaks. Tighten any loose fittings or clamps.

Check reservoir and add fluid if level is below 1/4 to 1/2 inch from top of tank.

The sickle bar mower is now ready for operation. Tractor throttle should be set at from 3/4 to full throttle during operation. This setting will give you the best cutting speed and allow for maximum ground speed on almost all applications.

IMPORTANT: Always be sure that fluid level in reservoir is maintained. Fluid level should not be below 1/4 to 1/2 inch from top of tank.