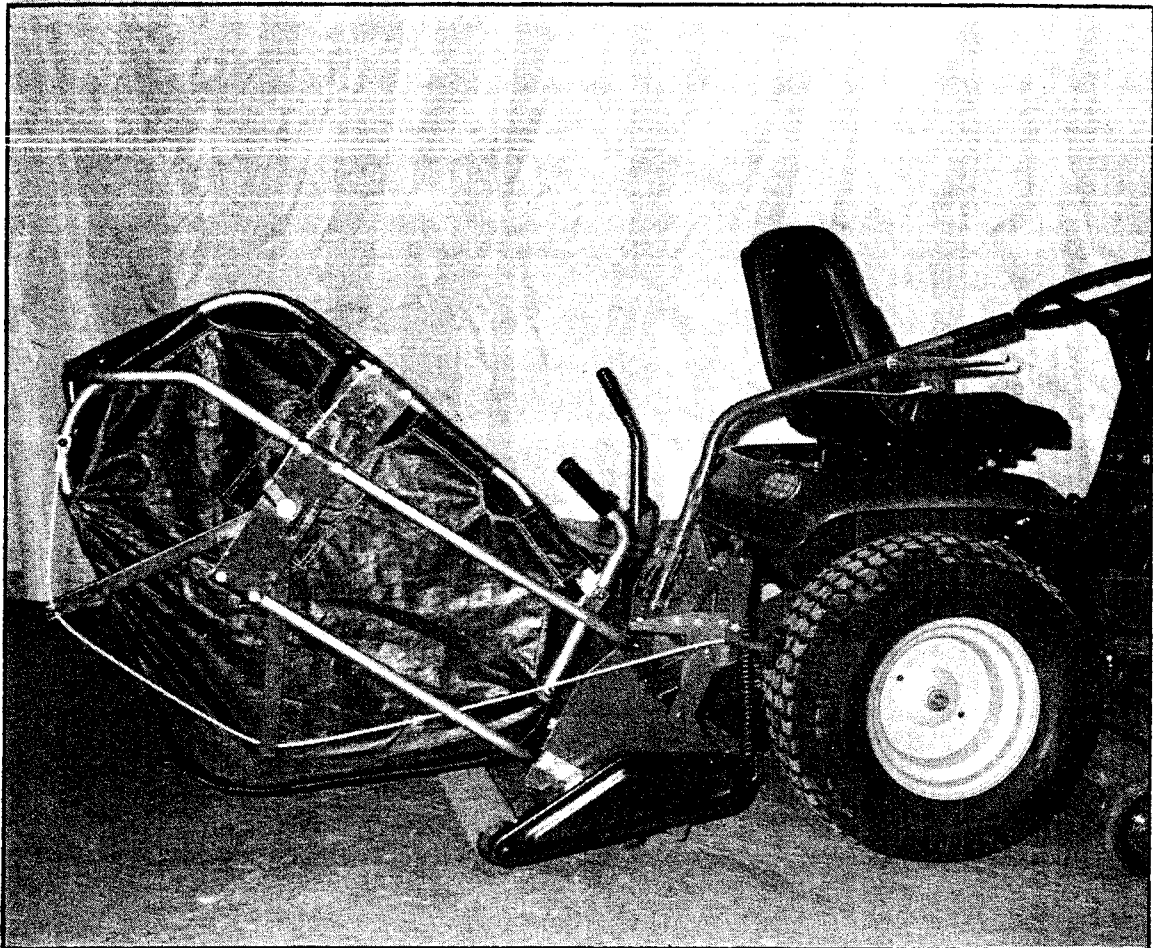


OWNERS MANUAL





POWERED GRASS COLLECTOR (PGC)

PGC modification kit	6001	WH.	210-4/212-5	116144
PGC modification kit	6001	WH.	220-4/222-5	116142
PGC modification kit	6001	WH.	227-5	116143

- ASSEMBLY
- OPERATING
- PARTS LISTING
- MAINTAINENCE

CONTENTS

ASSEMBLY	3-6
OPERATING	7
PARTS LISTING	8-11
MAINTAINENCE	12

 CAUTION  <p>This symbol marks important instructions relating to your personal safety. To avoid the possibility of injury, read and follow such instructions carefully.</p> <p>When the manual refers to the left or right side of the vehicle, it means your left and right when sitting in the driver's seat.</p>
--

General Safety Suggestions

- 1.) Never perform any work on sweeper when attached to tractor and motor is running.
- 2.) Keep hands, feet, hair, and loose clothing away from all moving parts when sweeper is in operation.
- 3.) Do not use sweeper as a trailer for hauling tools, children, boxes, or other equipment.
- 4.) Clear area to be cleaned of all large objects such as toys, tools, large rocks, and tree branches.
- 5.) Always use sound judgement when using any power equipment.
- 6.) Always operate sweeper at safe recommended speed.
- 7.) Do not operate sweeper too close to fences, trees, buildings, or other obstructions.
- 8.) Read all printed literature completely before operating sweeper.
- 9.) Understand all decals located on sweeper.

ASSEMBLY

UNPACKING INSTRUCTIONS

This power sweeper and all necessary parts and hardware are packed in one carton. Open the top of the carton, and remove all small parts. Carefully cut the length of each corner of carton and fold sides down. This provides a clean surface to assemble the sweeper.

STEP 1

Open both part bags and identify contents as listed below.

KEY NO.	PART NUMBER	QTY.	DESCRIPTION
32	1-B2681	1	Clutch Rod (Assembly)
40	1-B2683	1	Clutch Rod Spring
41	1-A2682	1	Spring Adjusting Collar
128	X-A1613	1	Sq. Head Set Screw
38	1-B2633	2	Lift Assist Springs
39	1-B2631	1	Clutch Return Spring
46	1-A2670	1	Clutch Handle Spring
47	1-A2675	1	Clutch Handle Sleeve
50	1-A-2729	1	Spacer .289
54	L-307	4	5/16-18 x 5/8 H.H.C.S.
55	X-1494	1	3/8-16 x 3 H.H.C.S.
57	X-1070	1	3/8 Split Lock Washer
59	X-1199	1	3/8-16 Hex Lock Nut
66	X-1025	6	5/16 Split Lock Washer
67	L-60	4	5/16-18 Std. Hex Nut
69	L-99	14	5/16 Flat Washer
74	X-B1602	1	Cup Spring Washer
75	X-1614	2	.438 I.D. x 1 O.D. Washer
77	X-A1609	1	3/8-16 x 1 1/4 Carriage Bolt
82	X-1099	1	1/4 Flat Washer
83	L-212	1	1/16 x 3/4 Cotter Pin
86	X-1536	2	#10-24 x 3/8 Self Tapping Screw
92	X-1414	16	5/16-18 Acorn Nut
93	L-81	2	5/16-18 x 1 1/4 H.H.C.S.
95	L-203	16	5/16 Ext. Tooth Lock Washer
97	L-127	8	5/16-18 x 1 1/2 H.H.C.S.
116	1-A2658	2	Hamper Stop
117	1A-B2739	1	Dump Cable Assembly
125	1-A2735	1	Spacer 3/16 Lg.

* These parts are preassembled.

NOTE: Terms right and left as used in this manual refer to right and left when seated on the tractor facing forward.

STEP 2 (Figure 1)

Attach left and right hamper support tube assemblies to sweeper main frame as follows:

A.) Remove four existing bolts (96) and nuts (61) from sweeper assembly and rear stiffener. (This hardware to be reused.)

B.) Insert top hamper support tube (100) between hamper pivot support brackets (102 and 103). Secure with one bolt (97), one lockwasher (95), and one acorn nut (92) in forward hole as shown.

C.) Position left hamper support tube assembly on the main unit, making sure the upper arm (100) is inside of the main frame.

D.) Align holes in upper support tube (100) with holes in main frame and assemble two bolts (93) with two lockwashers (66) finger tight only.

E.) Align holes in lower support tube (101) with holes in main frame and rear stiffener (7). Attach with hardware removed in operation A above and tighten all bolts securely at this time.

F.) Repeat operations B through E above for right hamper support tube assembly.

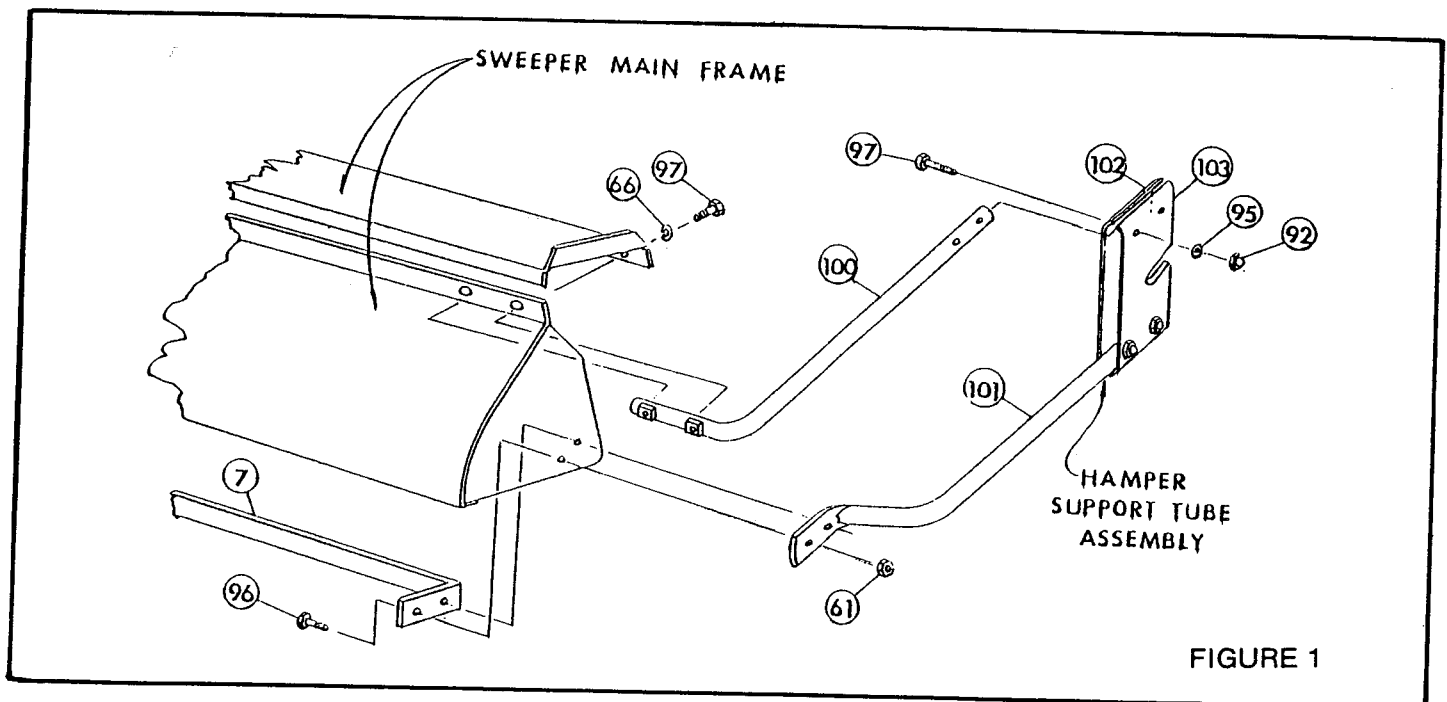


FIGURE 1

ASSEMBLY

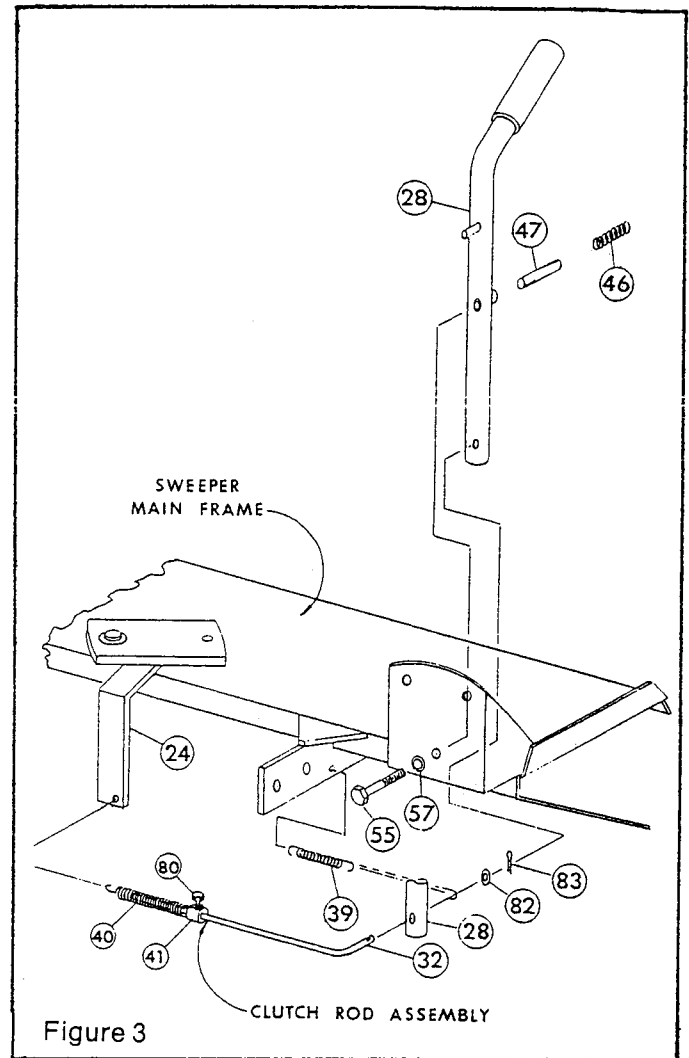
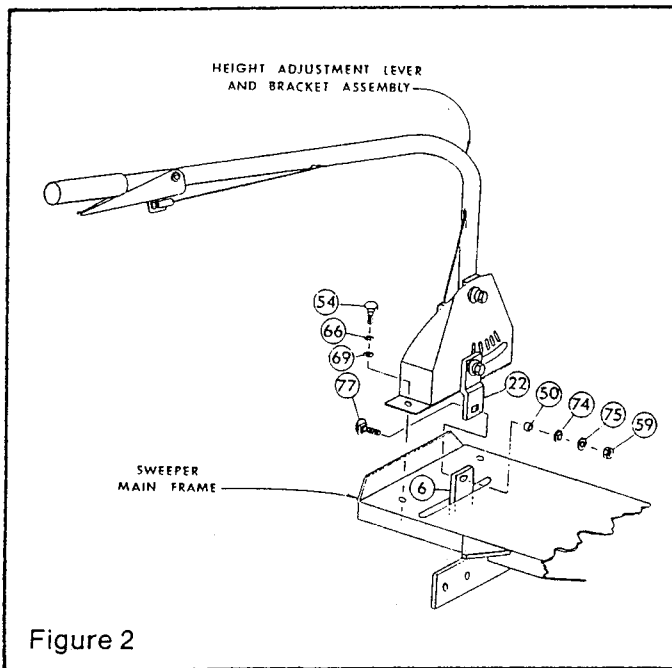
STEP 3

Attach height adjustment lever and bracket assembly to sweeper main frame as illustrated in Figure 2.

A.) Place carriage bolt (77) through Link (22) and torsion arm (6). Then slide bushing (50) over carriage bolt (77) and into torsion arm (6).

B.) Install spring washer (74), flat washer (75) and secure with lock nut (59).

C.) Raise or lower lever to align holes in bracket with holes in sweeper main frame, secure with two bolts (54), two lock washers (66), and two flat washers (69).



STEP 5

Assemble debris hamper and wind apron on unit as follows and as shown in Figure 4.

A) Place debris hamper (120) on flat surface and unroll.

B) Assemble two top hamper tubes (108) to two middle hamper tubes (106) and secure with two self tapping screws (86).

C) Holding right side panel of hamper up, from the back insert one of the tube assemblies through the top two loops only. Position right hamper pivot bracket assembly (105) with pivot pin (115) away from hamper side. Slide tube on through bracket and front two loops of hamper. Rotate tubes so that middle hamper tube (106) is on the inside of hamper.

D) Align holes in top tube (108) with holes in pivot bracket assembly (105). Assemble one bolt (93) with one lock washer (95) and one acorn nut (92) in top hole, finger tight only. See Figure 5.

E) Assemble one bottom hamper tube (107) onto end of middle hamper tube (106), and push into corner of hamper.

F) Repeat operations C through E for left side panel using left hamper pivot bracket assembly (104) instead.

STEP 4

Attach clutch handle and linkage assemblies to sweeper as shown in Figure 3.

A.) Assemble sleeve (47) into clutch handle (28), and spring (46). Compress spring with fingers and insert this assembly into clutch bracket on sweeper's main frame. Align holes and secure with one bolt (55) and one lock washer (57).

NOTE: Clutch rod (32) and spring (40) are preassembled with collar (41) and set screw (128). This assembly is pre-set by manufacturer for proper belt tension.

B.) Take clutch rod assembly and hook free end of spring (40) to clutch arm (24). Then insert end of clutch rod (32) through end of clutch lever (28) and secure with flat washer (82) and cotter pin (83).

C.) Hook one end of spring (39) in small hole of left hitch bracket. Hook opposite end over clutch rod (32) between lever (28) and washer (82).

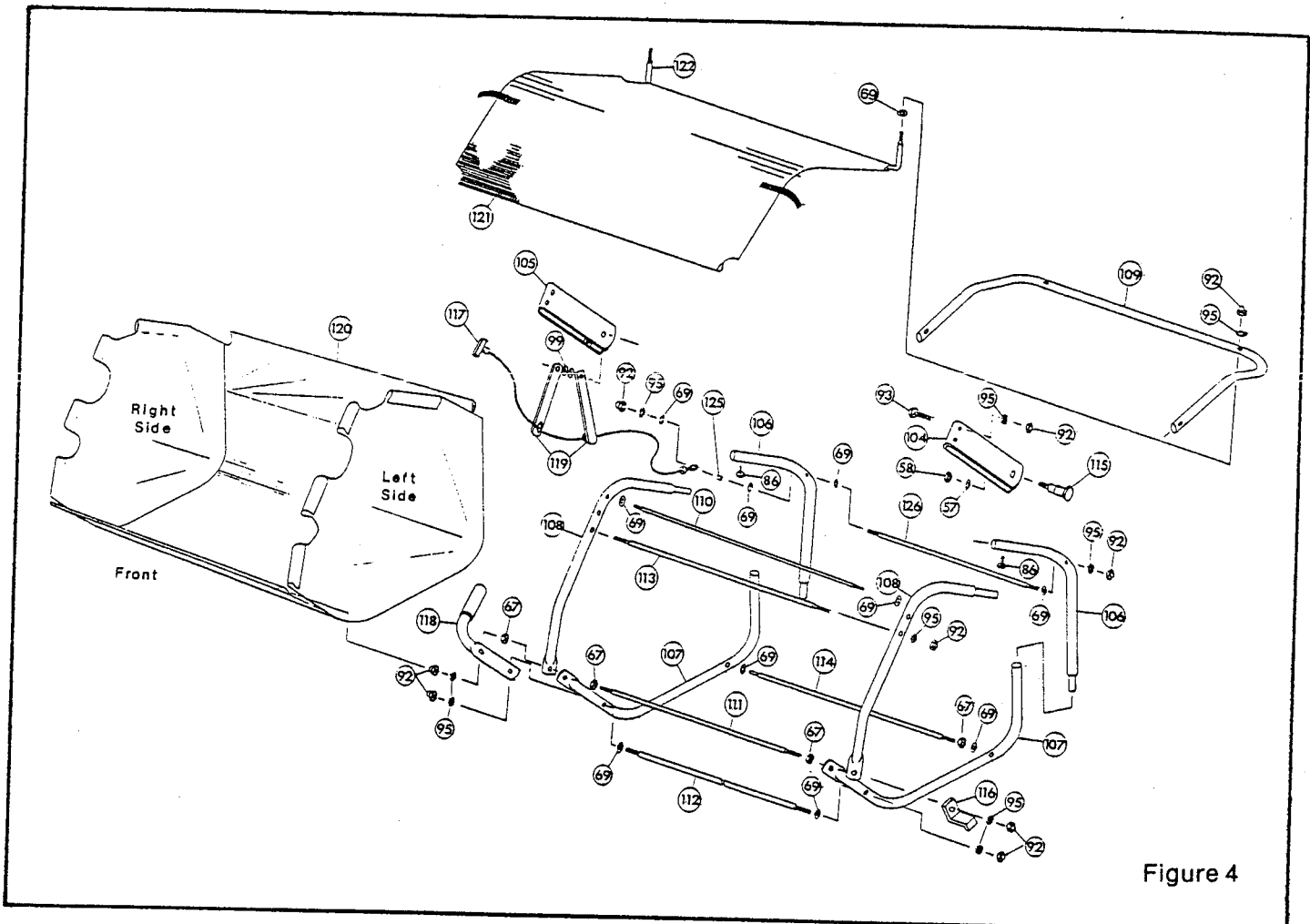


Figure 4

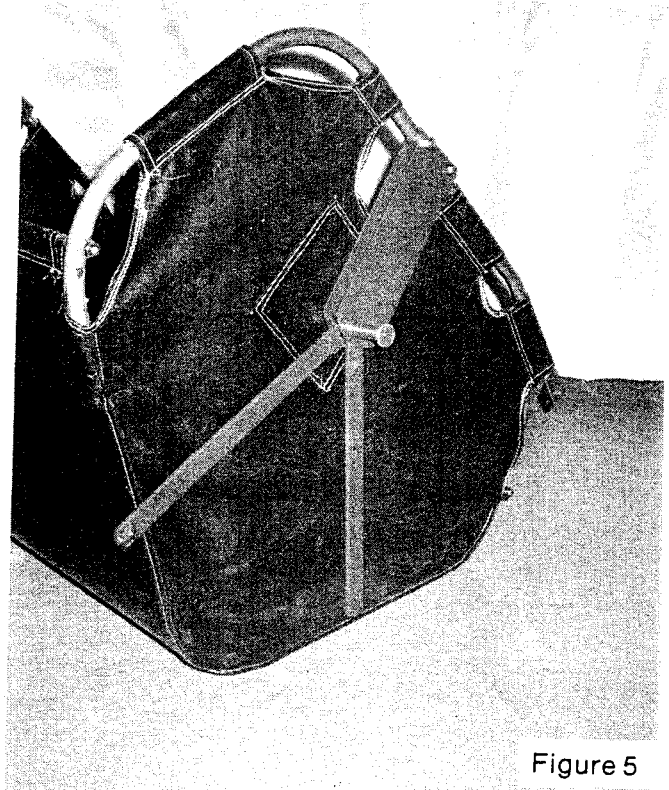


Figure 5

TIE ROD IDENTIFICATION CHART	
KEY NO.	IDENTIFYING MARKS
110	No threads on either end
111	Right end of rod painted yellow
112	Right end of rod painted white
113	One end of rod painted green
114	No threads on one end
126	Right end of rod painted black

- G) Install rear-top tie rod (126) through lip on back of hamper (120), with black threads to the right. Place a flat washer (69) on each end, and insert rod into hole in tubes (106). Assemble one lock washer (95) and one acorn nut (92) to left end only at this time.
- H) Take rear-bottom tie rod (114), place a nut (67) on threaded end and a flat washer (69) on each end. Insert threaded end first into back hole of one tube (107) then other end of rod in opposite tube (107).
- I) Install front-bottom tie rod (112) through lip on front of hamper (120) with white threads to the right. Place a flat washer (69) on each end, and insert rod into center hole on tubes (107). Assemble one lock washer (95) and one acorn nut (92) to left end only at this time.

ASSEMBLY

J) Take pivot bracket tie rod (113) and insert ends through front hole of pivot brackets (104 & 105) and upper hamper tubes (108). Assemble two lock washers (95) and two acorn nuts (92) loosely. Insert wind apron support rod (110) with two flat washers (69) into back hole of tubes (108).

K) Unroll wind apron (121) with U-rod (122) to the back and Velcro tapes on top, lay apron over hamper. Insert front-top tie rod (111) through lip on front of wind apron (121) with yellow threads to the right, install two nuts (67) and tighten to bottom of threads. Insert right end through hole in flat of tube (107) then through hole in flat of tube (108), repeat for opposite end.

L) Assemble one hamper stop (116) with one lock washer (95) and one acorn nut (92) to left end of the rod (111) finger tight only. On opposite end place one nut (67) and tighten it securely.

M) Position the auxiliary dump handle (118) on the right hand ends of tie rods (111 & 112). Assemble one hamper stop (116) with one lock washer (95) and one acorn nut (92) to the top rod (111). Assemble one lock washer (95) and one acorn nut (92) to bottom rod (112).

N) Place hamper assembly in hamper support pivot brackets (102 & 103) with hamper stop (116) on top of support tubes (100). Insert eyelet on dump cable assembly (117) through bracket assembly (23) under pulley and through two dump levers (119). Attach end to right side of rear top tie rod (126) with two flat washers (69), one spacer (125), one lock washer (95), and one acorn nut (92). Securely tighten all acorn nuts in hamper assembly at this time.

O) Insert ends of U-rod (109) into top support tubes (100) and align holes. Attach with two bolts (97), two lock washers (95), and two acorn nuts (92).

P) Rotate hamper to full dump position holding wind apron back over U-tube (109). Place two flat washers (69) on end of wind apron Urod. (122) and insert up through U-tube (109). Secure with two lock washers (95) and two acorn nuts (92). Slowly rotate hamper back to operating position and fasten Velcro tabs through openings in side panels.

STEP 6

Attach two lift assist springs (38) to front of unit as illustrated in figure. 6.

A.) Set height adjustment lever in lowest setting. Insert long end of spring (38) into hole in bumper assembly (13).

B.) With caution, pull opposite end of springs up and attach to lift assist spring arms (23 and 29) as shown.

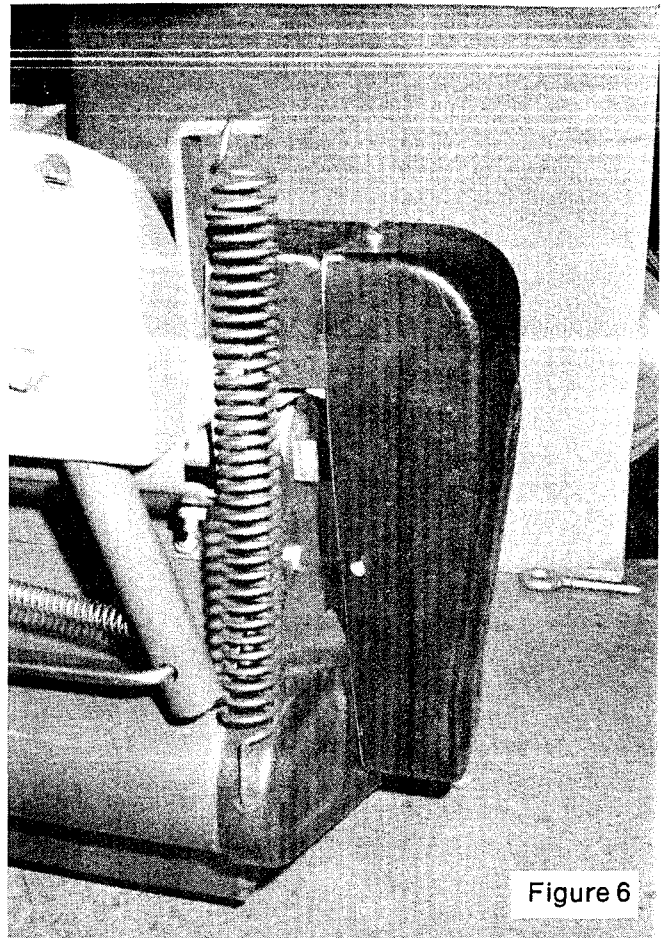


Figure 6

OPERATION

OPERATION

1. **BRUSH ADJUSTMENT:** Brush can be adjusted from operator's position on tractor. Simply squeeze handle to operator's right to release height setting lock. Push handle down to lower brush or lift handle up to raise brush. Release squeeze lever in desired setting.

Five brush settings give operator a setting for every condition. For best lawn sweeping action, brush ends should just "flick" tops of grass. Pavement, or other hard surfaces, brush ends should just touch surface. See Figure 7.

WARNING: Setting brush too low will cause premature wear of brush strips. When transporting sweeper from work area to another, brush should be raised and power disengaged.

2. **CLUTCHING:** Sweeper can be engaged or disengaged from operator's position on tractor. Grasp clutch handle to left of operator, push to rear of sweeper and move handle to right to engage brush or left to disengage. See Figures 8 and 9.

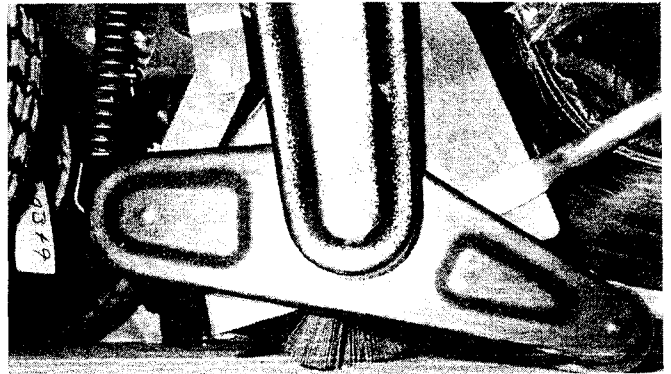


Figure 7

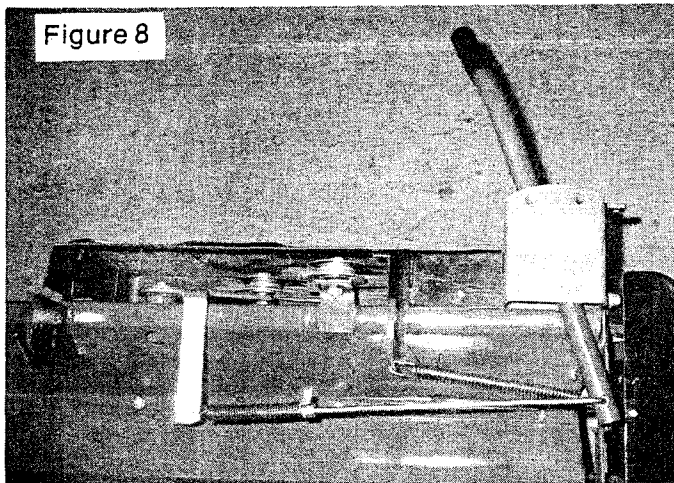


Figure 8

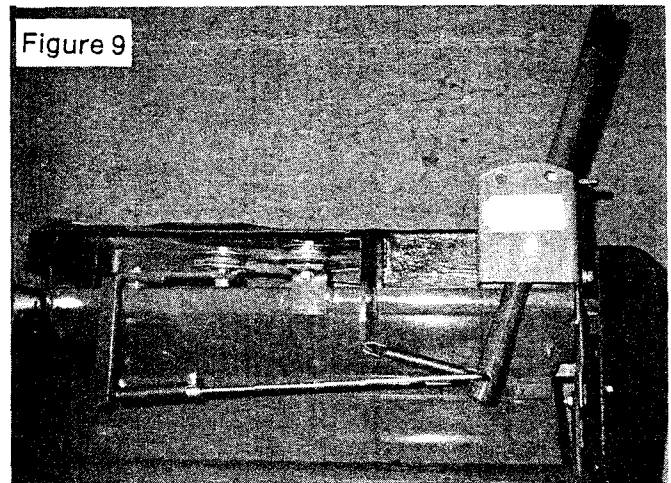


Figure 9

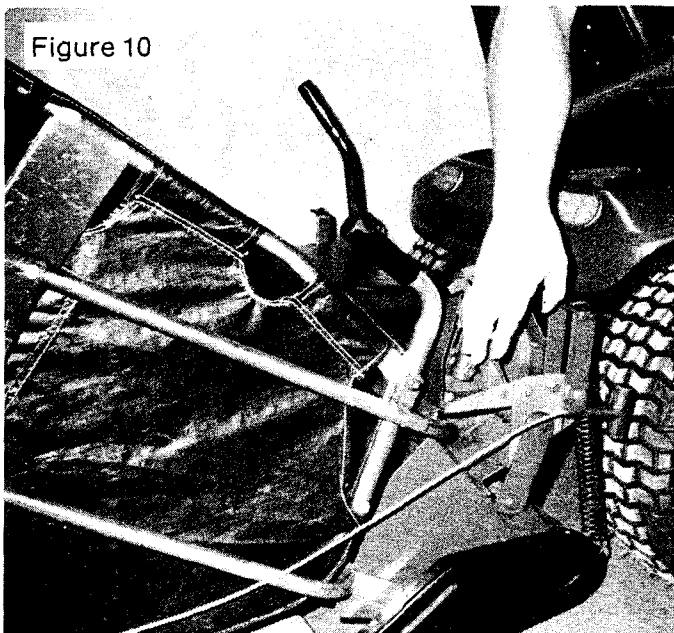


Figure 10

3. **DUMPING.** Normal dumping can be accomplished from operator's position on tractor. Raise hamper latch, then grasp "T" handle on dump cable and pull to front of tractor. Debris hamper will rotate to rear and dump away from sweeper. Some extreme conditions may cause this dumping method to be uncomfortable. An auxiliary dump handle is provided for these situations. See Figure 10.

4. **SWEEPING SPEED.** Ground speed of tractor is important for a "clean sweep" of work area. To attain best sweeping results and minimize excessive wear to brushes, it is recommended ground speed should be 3 to 5 MPH.

5. **CAUTION:** The debris hamper and brushes are constructed of high quality plastic materials. They are mildew and rot resistant but are not fireproof. They will burn. Do not operate sweeper close to open fires.

6. Do not always sweep area using same pattern. Sweep diagonally, right to left, left to right, short length and long length over area. This will improve appearance and condition of lawn.

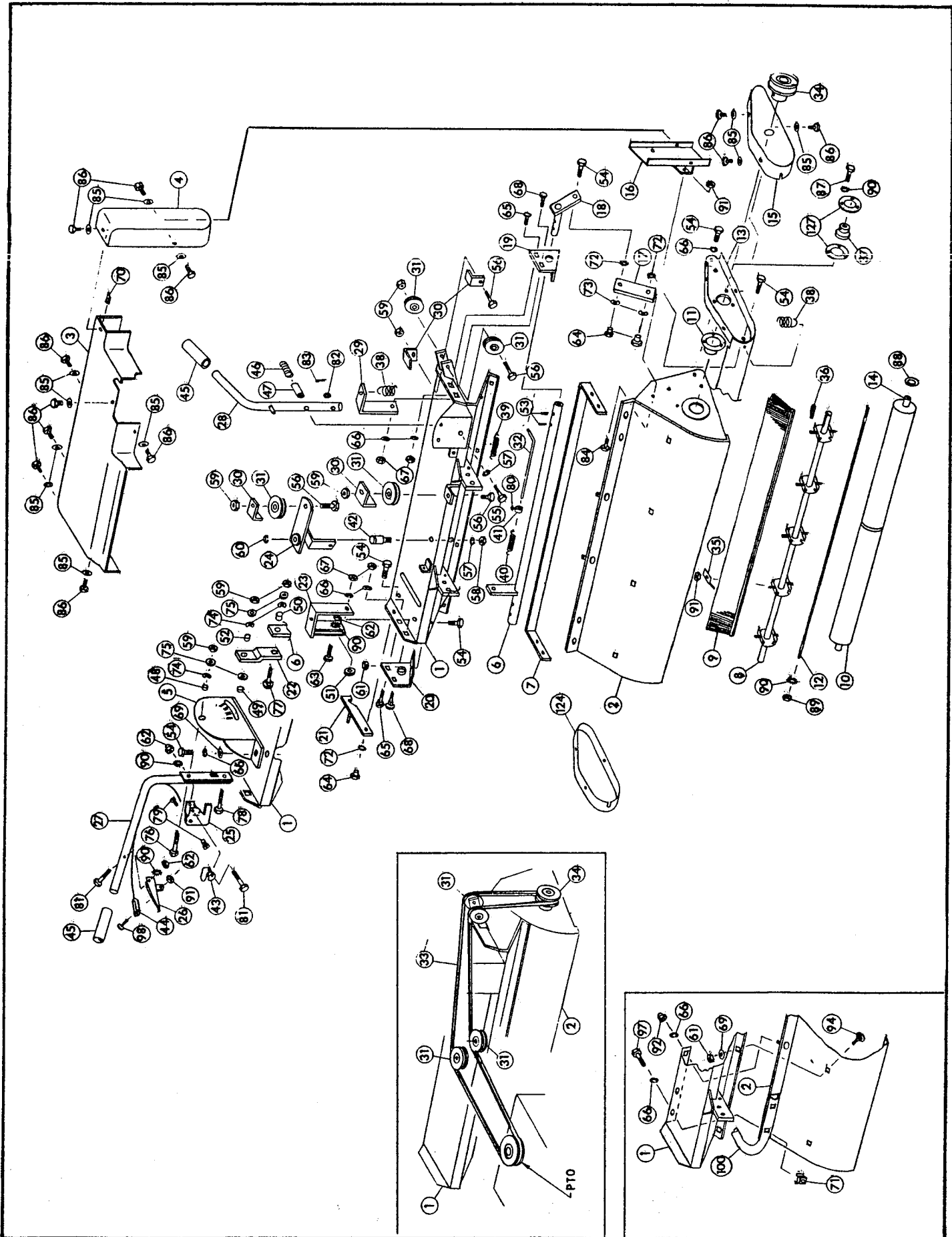
7. Periodically check and clean roller shaft (14), rollers (10) should always turn freely.

PARTS LIST

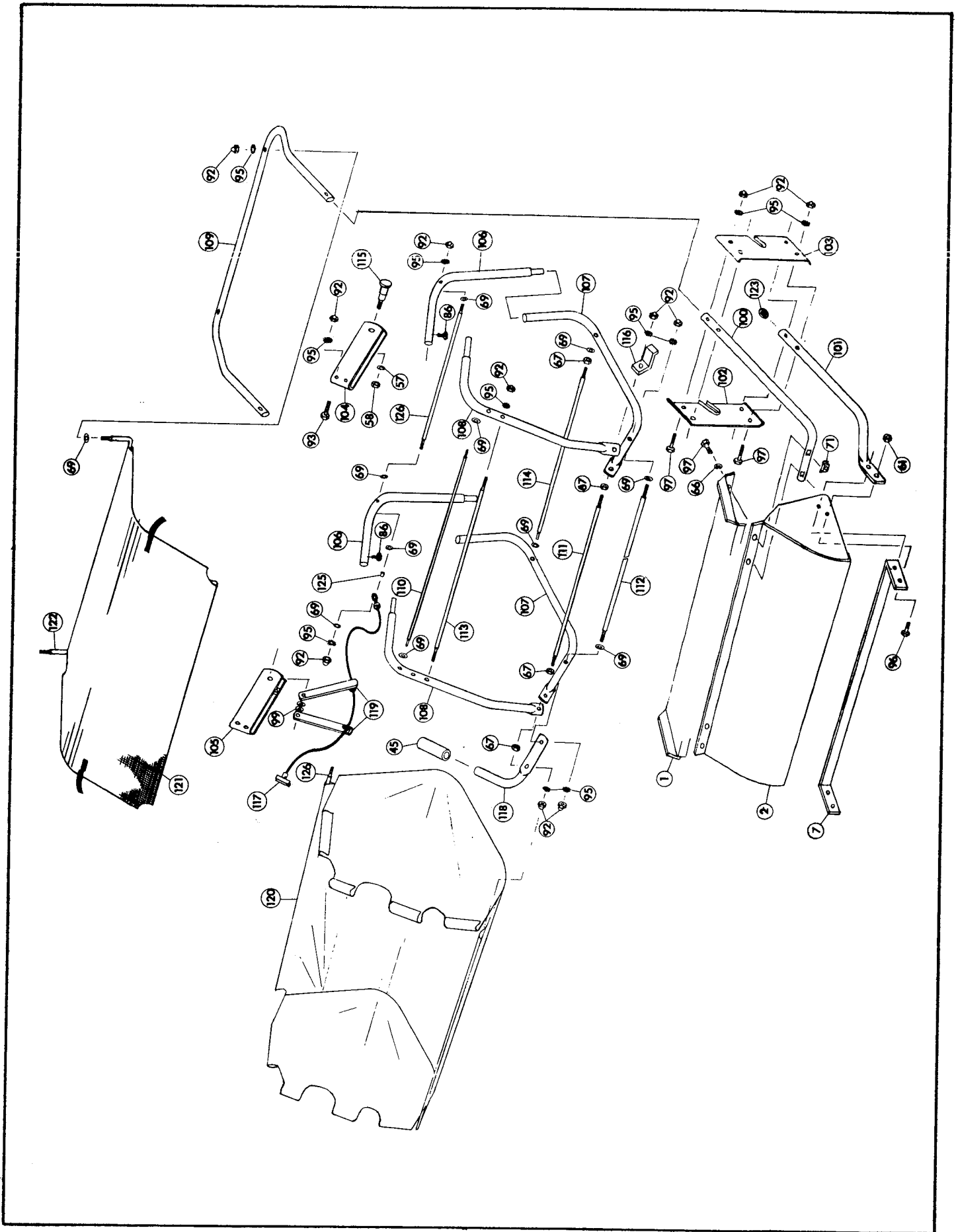
KEY NO.	PART NUMBER	DESCRIPTION
1	1A-D2669	Mounting Plate
2	1A-D2692	Chassis
3	1-D2654	Top Guard
4	1-C2653	Side Belt Guard
5	1A-C2731	Height Adjustment Bracket
6	1A-C2662	Torsion Tube
7	1-C1770	Rear Stiffener
8	1A-C2610	Brush Axle
9	1-C2632	Brush Strip 4 L1-2632
10	1-B2618	Roller
11	1A-A2734	Bearing Cup
12	1-B2634	Roller Cable
13	1A-D2606	Bumper
14	1-A2623	Roller Shaft
15	1-D2629	Left Side Guard
16	1A-B2690	Side Guard Mounting Bracket
17	1-B2679	Lower Link
18	1A-C2661	Torsion End Link
19	1-C2622L	Torsion Tube Left End Bracket
20	1-C2621R	Torsion Tube Right End Bracket
21	1A-B2652	Hamper Latch
22	1-B2678	Upper Link
23	1A-B2666	Right Lift Assist Spring Arm
24	1A-C2643	Clutch Arm
25	1A-B2617	Bellcrank
26	1A-B2695	Height Adjustment Lever
27	1A-C2677	Height Adjustment Handle
28	1A-C2674	Clutch Handle
29	1-B2647L	Left Lift Assist Spring Arm
30	1-A2639	Belt Guide
31	9-A1380	Idler Pulley = 12-5220
32	1-B2681	Clutch Rod
33	1-A2680	V-Belt
34	1-B2601	V-Pulley
35	1-B2611	Brush Clamp = L1-2776
36	X-1397	Key = 937 089
37	1-A2624	Bearing = L1-2624
38	1-B2633	Lift Assist Spring
39	1-B2631	Clutch Return Spring
40	1-A2683	Clutch Rod Spring = WH 9170
41	1-A2682	Spring Adjusting Collar
42	1-B2659	Clutch Pivot Stud
43	1-D2628	Bellcrank Spring
44	1-A2696	Height Adjustment Cable
45	16-A3080B	Hand Grip, Black
46	1-A2670	Clutch Handle Spring
47	1-A2675	Clutch Handle Sleeve
48	1-A2685	Spacer .170
49	1-A2684	Spacer .125
50	1-A2729	Spacer .316
51	1-B2646	Cable Pulley
52	1-A2686	Spacer .253
53	X-1605	Roll Pin
54	L-307	5/16-18 x 5/8 H.H.C.S.
55	X-1494	3/8-16 x 3 H.H.C.S.
56	X-1026	3/8-16 x 1 1/2 H.H.C.S.
57	X-1070	3/8 Split Lock Washer
58	X-1126	3/8-24 Hex Nut
59	X-1199	3/8-16 Hex Lock Nut
60	L-262	5/8 Retaining Ring
61	X-1107	5/16-18 Hex Lock Nut
62	X-1608	1/4-20 Hex Acorn Nut
63	X-2020	1/4-20 x 1 H.H.C.S.
64	L-5552	5/16-18 Hex Pilot Nut
65	X-1042	5/16-18 x 5/8 Carriage Bolt
66	X-1025	5/16 Split Lock Washer

KEY NO.	PART NUMBER	DESCRIPTION
67	L-60	5/16-18 Hex Nut
68	X-1302	5/16-18 x 1 Carriage Bolt
69	L-99	5/16 Flat Washer
70	X-1576	#10-24 Tinnerman Nut
71	X-1603	5/16-18 Cage Nut
72	L-198	5/16 Int. Tooth Lock Washer
73	L-260A	3/8 Spring Bow Washer
74	X-1602	5/8 Cup Spring Washer
75	X-1614	7/16 Flat Washer
76	L-149	3/8-16 x 2 H.H.C.S.
77	X-1609	3/8-16 x 1 1/4 Carriage Bolt
78	X-1240	3/8-16 x 2 1/4 H.H.C.S.
79	X-1604	Cable Clamp
80	X-1613	1/4-28 x 1/2 Set Screw
81	L-276	1/4-20 x 1 1/2 H.H.C.S.
82	X-1099	1/4 Flat Washer
83	L-212	1/16 x 3/4 Cotter Pin
84	X-1114	#10-24 x 5/16 H.H.C.S. Slotted
85	X-1464	#10 Flat Washer
86	X-1536	#10-24 x 3/8 H.H.C.S. Self Tapping
87	X-1001	1/4-20 x 1/2 H.H.C.S.
88	X-1048	3/4 Flat Washer
89	L-304	1/4-20 Hex Nut
90	X-1132	1/4 Ext. Tooth Lock Washer
91	L-242B	#10-24 Hex "Kep" Nut
92	X-1414	5/16-18 Hex Acorn Nut
94	X-1606	5/16-18 x 1/2 Carriage Bolt
97	L-127	5/16-18 x 1 1/2 H.H.C.S.
98	X-1242	#10-24 x 1/2 H.H.C.S. Slotted
100	1-C2697	Top Hamper Support Tube
124	1-D2626	Right Side Guard
127	1-B2625	Bearing Flange

PARTS LIST



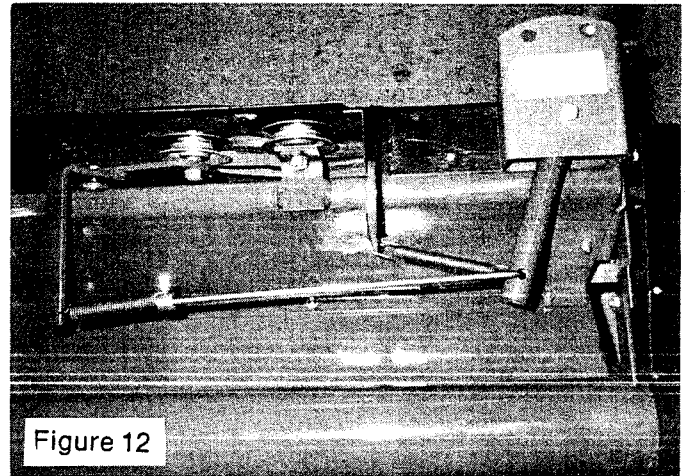
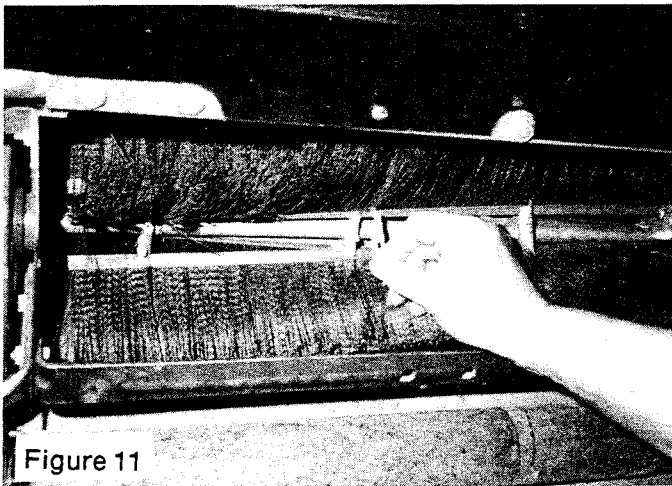
PARTS LIST



MAINTENANCE

MAINTENANCE

1. **BEARINGS:** All bearings are sealed and require no lubrication. However, a few drops of SAE #20 oil on idler pulleys at beginning of season or more often as conditions dictate will repel moisture.
2. **PIVOT POINTS:** All linkage connections should also be lubricated as above to prevent rust and wear.
3. **GENERAL:** All parts are plated or painted for long life. However, due to usage, these coatings will wear. A light lubrication to these areas will prolong life of sweeper and insure trouble-free operation. Sweeper should be cleaned after each usage. Do not allow debris to lay in debris hamper for long periods of time.
4. **BRUSH REPLACEMENT:** Remove lock nuts from brush clamps. Remove clamps and old brush strips. Install two adjacent brush strips into slots in brush discs. Make certain brushes are in center of chassis, same clearance at each end to side plates of chassis. Replace five brush clamps and secure with five lock nuts. Repeat these steps for next two brush strips. See Figure 11.



5. **BELT ADJUSTMENT:** Belt tension is preset by manufacturer. However, due to usage, belt may elongate. To change belt tension, make certain clutch handle is in disengaged position. Loosen bolt in spring retainer and slide on clutch rod toward clutch handle. Normally a movement of one cm. will compensate for stretch. Start tractor, engage sweeper clutch to make certain adjustment is sufficient.

CAUTION: Do not over tension belt. This will cause premature failure of belt. See Figure 12.

6. Periodically check all bolts, fasteners, and screws for tightness to be sure sweeper is in safe operating condition.