



SC12 & SX120 Sweeper Collector

OWNER'S MANUAL



Manufacturers and European Distributors of Quality Equipment

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Certificate of CE Conformity

Machine Model: SC 12, SX120

Description: Collector

*I hereby certify that the machine detailed hereon
conforms to:*

European Directives 89/392EEC

as amended 91/368EEC - 93/44EEC - 93/68EEC

Signed:

Date: 6th June 2008

Quality Manager



Broadwood International

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**PLEASE READ THE FOLLOWING PAGES
CAREFULLY BEFORE USING YOUR MACHINE
AND KEEP THIS MANUAL IN A SAFE PLACE**

WARRANTY

Your Wessex PTO driven Sweeper-Collector is warranted free from defect in workmanship or manufacture for one year from date of purchase. Any parts which appear to us to be defective either in material or workmanship shall be replaced or repaired at no cost to the purchaser, subject to the following conditions:

1. The registration card enclosed with this booklet must be returned to us within seven days of purchase.
2. Any failure in the machine should be reported in the first instance to your dealer who will act on your behalf to resolve the matter to your satisfaction.
3. The defective parts will be returned by your dealer to us accompanied by a full statement describing the failure, and the circumstances and conditions in which the failure occurred, within 5 working days of failure.
4. The following are specifically excluded from the terms of warranty:
 - (a) Fair wear and tear, especially to belts and brushes.
 - (b) Damage to brushes caused through incorrect positioning of the rotor (See instructions).
 - (c) Damage caused by neglect or lack of lubrication.
 - (d) Damage caused by misuse or abuse.
 - (e) Damage caused while the machine is in transit.
 - (f) Damage caused to the frame of the machine by running the machine with an unbalanced rotor.
5. The warranty is for the benefit of the first user only.
6. Wessex Machinery decisions will be final and binding.

SETTING UP YOUR WESSEX PTO SWEEPER-COLLECTOR

Your Wessex Sweeper-Collector has been designed to work in a wide variety of conditions and is a very simple machine to use. There are one or two adjustments which ensure optimum performance in all conditions.

The Sweeper-Collector is three point linkage mounted, and should be coupled to your tractor as follows:

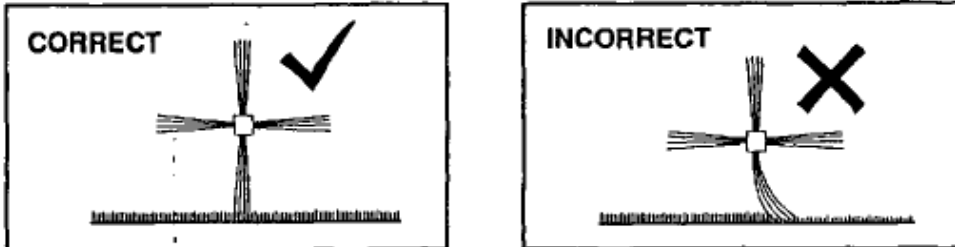
(a) Reverse your tractor up to the Sweeper, and connect the lower links, left hand link first, securing with lynch pins. Make sure that the Sweeper linkage frame is level, adjusting the right hand tractor lift arm if necessary. Connect the top link, and adjust so that the linkage frame of your Sweeper is vertical.

(b) Connect the PTO shaft, taking particular care that the shaft is not too long for the tractor. When the Sweeper is fully raised on the tractor hydraulics, the PTO shaft must not be fully compressed. To check this, ensure that it is possible to compress the shaft further in order to remove it. If necessary, the shaft, which is of tubular section, may be easily cut with a hacksaw, ensuring that an equal amount is cut from both male and female sections.

ADJUSTING THE ROTOR HEIGHT

When in work the Sweeper's weight is entirely on the four wheels. The front castor wheels are on adjustable mounting bars so that the brush can be raised or lowered in increments of 6mm according to conditions.

The bristles should be in gentle contact with the ground for maximum pick up action (see diagram). If there is a drumming sound as the brush rotates, the brushes are set too low and should be raised immediately to avoid damage to the brushes.



The brushes alone are not designed for scarifying or thatch removal, and damage to the brushes will quickly occur if it is used for this purpose.

When using the Sweeper it is a good idea to start off with the rotor fully raised, and lower it if necessary until a satisfactory result is achieved. If the leaves are blown away from the rotor by excessive turbulence, lower the adjustable front brush strip fully (see next section) and only then lower the rotor.

ADJUSTING THE FRONT BAFFLE PLATE

At the front of the Sweeper, there is an adjustable brush strip bolted to the frame through a series of adjustment holes.

When sweeping grass clippings, or autumn leaves on turf areas, the brush strip should normally be in the lowest position. For a heavy fall of leaves, the strip can be raised to prevent a build-up in front of the machine.

When sweeping on hard surfaces it is usually necessary to lower the strip to reduce air turbulence at the front of the Sweeper. Because there is less resistance on hard surfaces to air turbulence, it is often advantageous to reduce the rotor speed by throttling back the engine.

Conditions will vary on the same site from day to day, dependent on weather conditions. There are sufficient adjustments of the brush strip and of the rotor position to ensure that your Sweeper does a good job in all conditions. By experimenting with different adjustments you will quickly find the optimum setting to suit your conditions.

COMPENSATING FOR BRUSH WEAR

The bristles on your Sweeper rotor will wear in due course, and it will be necessary to raise the front wheels to take account of this.

The Sweeper has been designed to work effectively until the bristles are approximately half their original length. When the bristles wear beyond this point there is insufficient momentum to throw the leaves and debris into the hopper, and it will be necessary to replace the brushes on your machine.

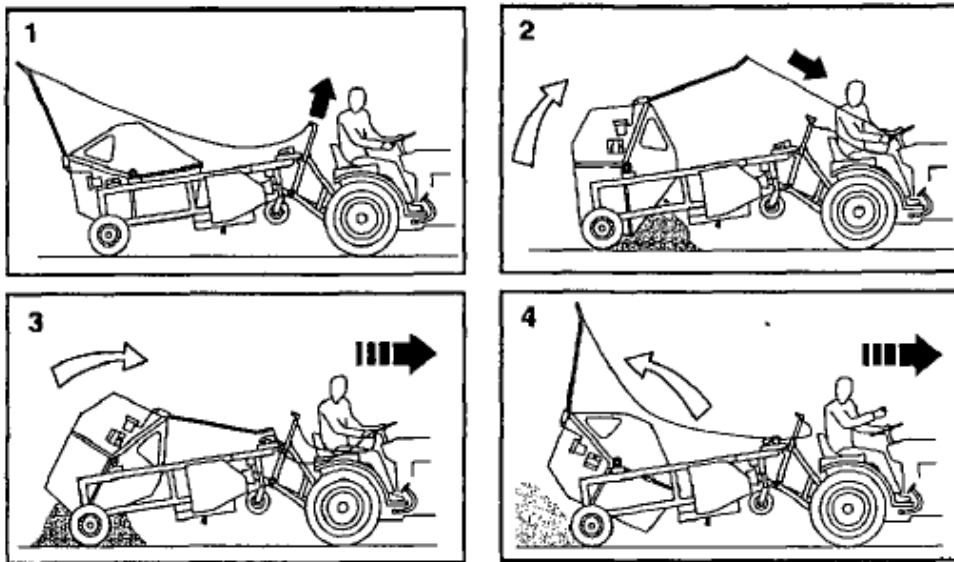
EMPTYING THE HOPPER - S C VERSION

The hopper of the Wessex Sweeper tips forwards towards the tractor. Lifting the front of the Sweeper gives sufficient clearance for the bin to rotate fully

As your Sweeper is fitted with a dust cover, it will be necessary to release this before emptying the hopper.

Position the Sweeper where you want to dump the load, and raise the tractor's linkage fully Pull on the release cord, which automatically activates the trip mechanism. As the hopper begins to tip, ease the tractor forward gradually and lower the machine gently to assist the rotation of the hopper. When the hopper has fully rotated, release the cord and continue to creep forward with the tractor. As the hopper clears itself, it will automatically return to the normal position and lock the trip mechanism.

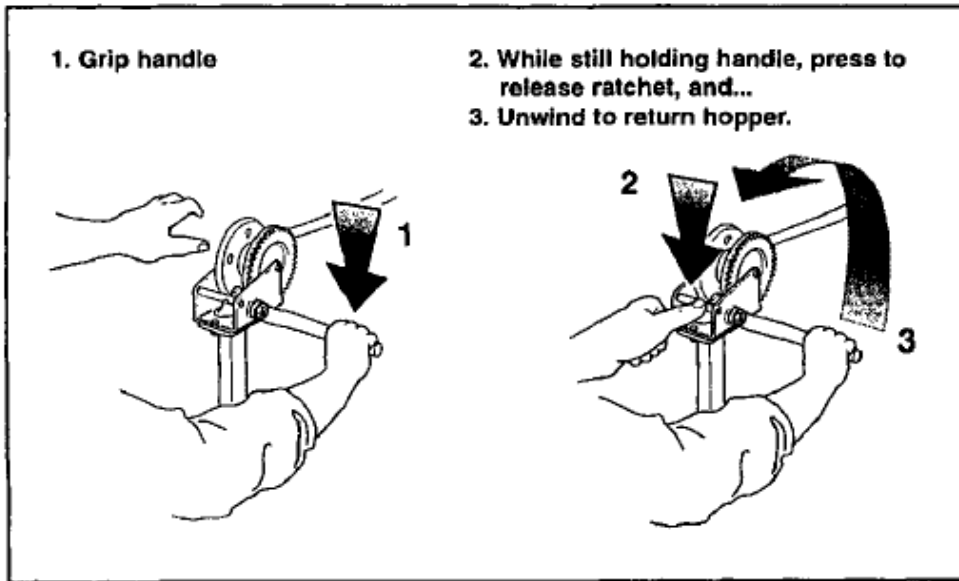
TAKE SPECIAL CARE TO RELEASE THE CORD BEFORE THE HOPPER RETURNS TO ITS NORMAL POSITION, OTHERWISE YOUR HANDS MAY BE BADLY BURNED.



If possible the tip should be located so that the Sweeper can be driven right through, dumping the refuse on top of the previous load in order to consolidate it. Alternatively, the Sweeper can be reversed back onto the tip for the same effect.

EMPTYING THE HOPPER - SX VERSION

The hopper of the Wessex Sweeper tips forwards towards the vehicle using the hand winch. **REMEMBER; RETAIN HOLD OF HANDLE WHEN CLOSING HOPPER.**



OPTIONAL GULLY BRUSH

The speed of the Gully Brush can be governed by the revs of the tractor, which will be the correct operating speed when using a four foot Sweeper-Collector on a compact tractor.

In dry road conditions, when brushing silt etc. from the gutter, it will be noticed that a small line of dark damp silt will work off the end of the main sweeper rotor behind the gully brush. This is unavoidable without vacuum facilities, which we have not at present found necessary, and will soon dry and disperse.

OPTIONAL SCARIFYING ROTOR

This attachment is only supplied for four foot models and is very useful as a light thatching and collecting facility.

On very undulating ground the tines should be set to penetrate the build up of dead grass etc. but not into the soil, as when hitting undulations, the tines will come under undue strain.

ROUTINE MAINTENANCE

PTO Shaft & Cross Shaft

Universal Joint - Grease every day

Rotor bearings & Cross

Shaft End Bearings - Grease every 150 hours

Gearbox

- Check level regularly and top-up with EP90 gear oil

Wheel adjustment Bars

- Grease periodically to avoid corrosion

Hopper Bearing

- Grease twice a year

Before putting the Sweeper away at the end of the season, we recommend that the inside of the rotor shroud is thoroughly cleaned, preferably with a power washer.

The rotor bearings are protected against ingress of dirt and grass but the rotor should be checked regularly and if string or other foreign objects get wound around the shaft, these should be removed immediately

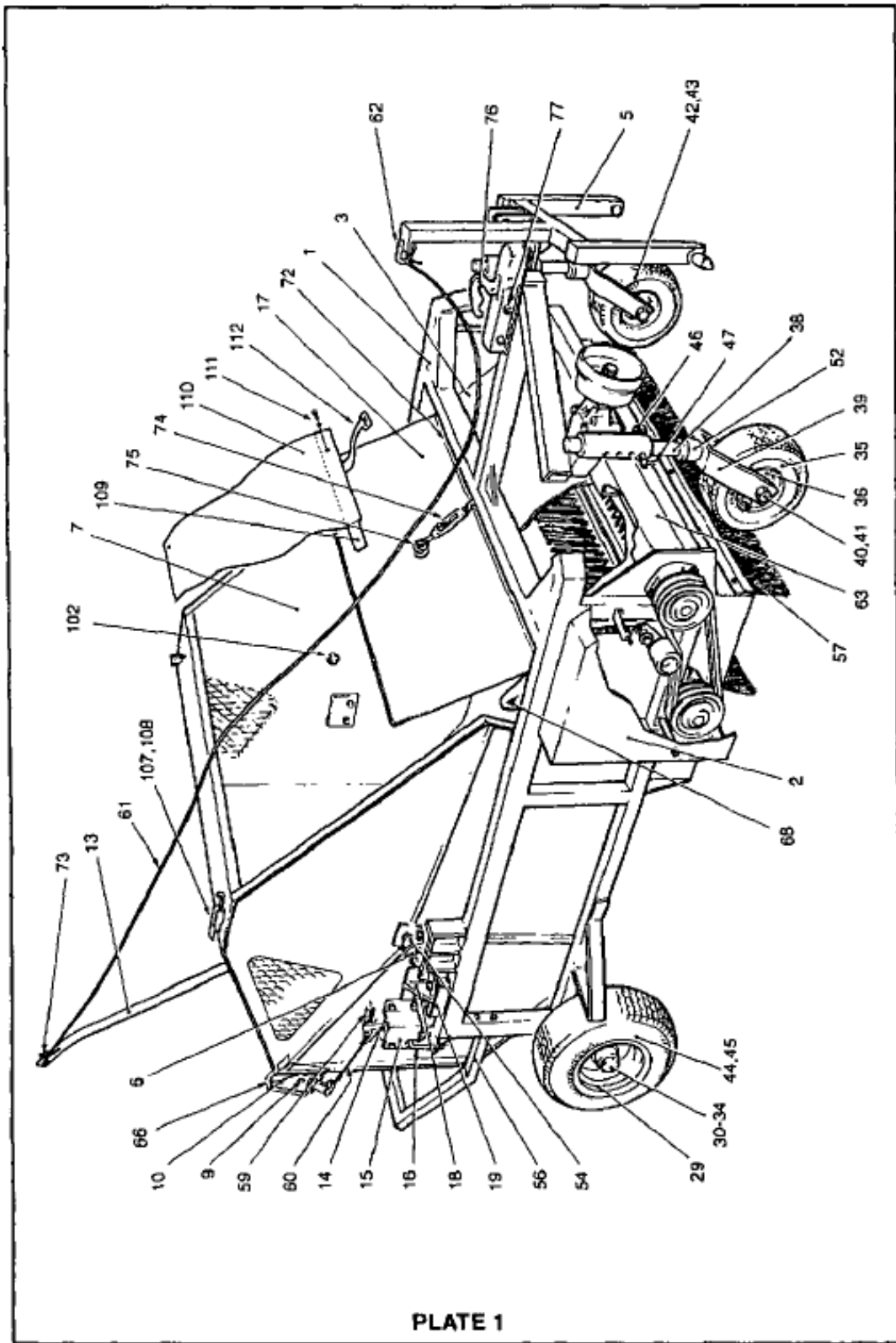




PLATE 1

PLATE 1 PARTS LIST

Pos.	SC12	SX120	Description
1	B1779	B1779	Mainframe
2	B5277	B5277	Belt Cover
3	B0276	B0276	Brush Shroud
5	B3080	B3080A	'A' Frame
6	B2666	B2666	Hopper Trunnion
7	B1879	B1879	Hopper
8	B2266	B2266	Rotor Shaft
9	B0856	B13156	Tipping Shaft
10	B1056	B1056	Tipping Lever R.H
11 NS	B1156	B1156	Tipping Lever L.H
12 NS	B0422	B0422	Tipping Shaft Pin
13	B3180	-	Tipping Handle
14	B0656	B0656	Pawl-Latch
15	B0756	B0756	Pawl Bracket
16	B0739	B0739	Catchbolt
17	B0176	B0176	Deflector Flap
18	B3280	B3280	Buffer Bracket
19	B3380	B3380	Rubber Buffer
20	B2566	B2566	Jockey Pivot
21	B2870	B7570	Brush Strips
22	B2457	82457	Gearbox Assembly
23	B5177	B5177	Cone Guard
24	B258 	B258 	Drive Coupling Assembly
25	1-41	1-41	Cross Journal
26 NS	B3781	B3781	PTO Shaft Complete
27	B1062	B1062	Pulley
28	B1134	B1134	Drive Belts
29	B1352	B1352	Rear Wheel Complete
30	B5051	B5051	Rear Stub Axle (Weld - On)
31	B1538	B1538	Wheel Bearing Inner
32	B1638	B1638	Wheel Bearing Outer
33	B0645	B0645	Wheel Seal
34	B4951	B4951	Hub Cap
35	B2152	B2152	Front Wheel
36	B1338	B1338	Front Wheel Bearing
37	B2557	B2557	Gearbox Filter Elbow
38	B4751	B4751	Height Adjustment Bar
39	B4651	B10451	Wheel Fork
40	B4451	B4451	Front Axle
41	B4551	B4551	Front Wheel Spacer
42	B3151	B3151	Front Tyre
43	B3251	B3251	Front Tube
44	B5351	B5351	Rear Tyre
45	B5551	B5551	Rear Tube
46	B0628	B0628	Height Adjustment Pins
47	B0121	B0121	'R' Clip
48	B2366	B2366	Drive Shaft
49	B2466	B2466	Jockey Bracket
50	B1862	B1862	Jockey Pulley
51	B1438	B1438	Jockey Bearings
52	B0246	B0246	Grease Nipple

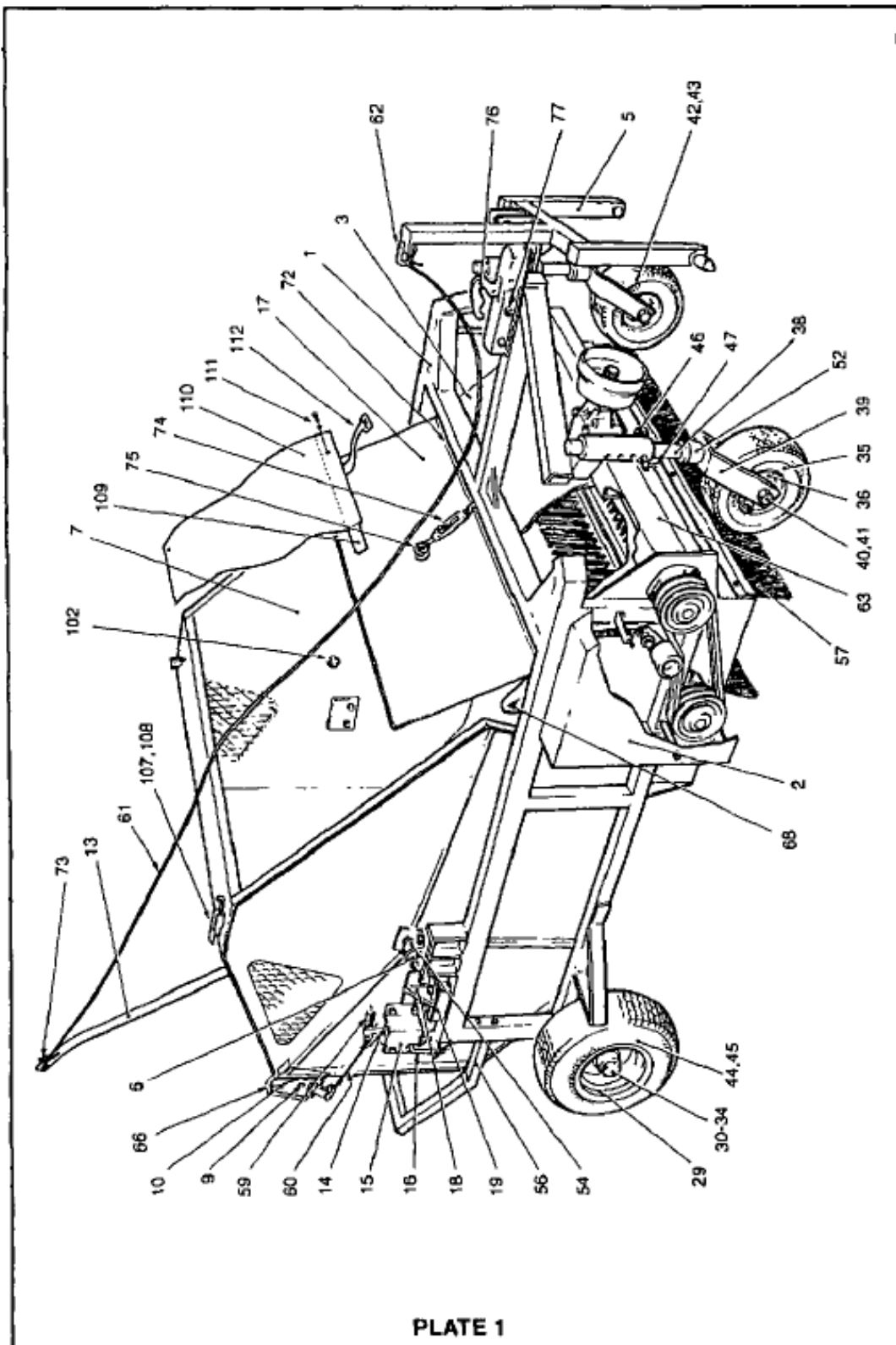
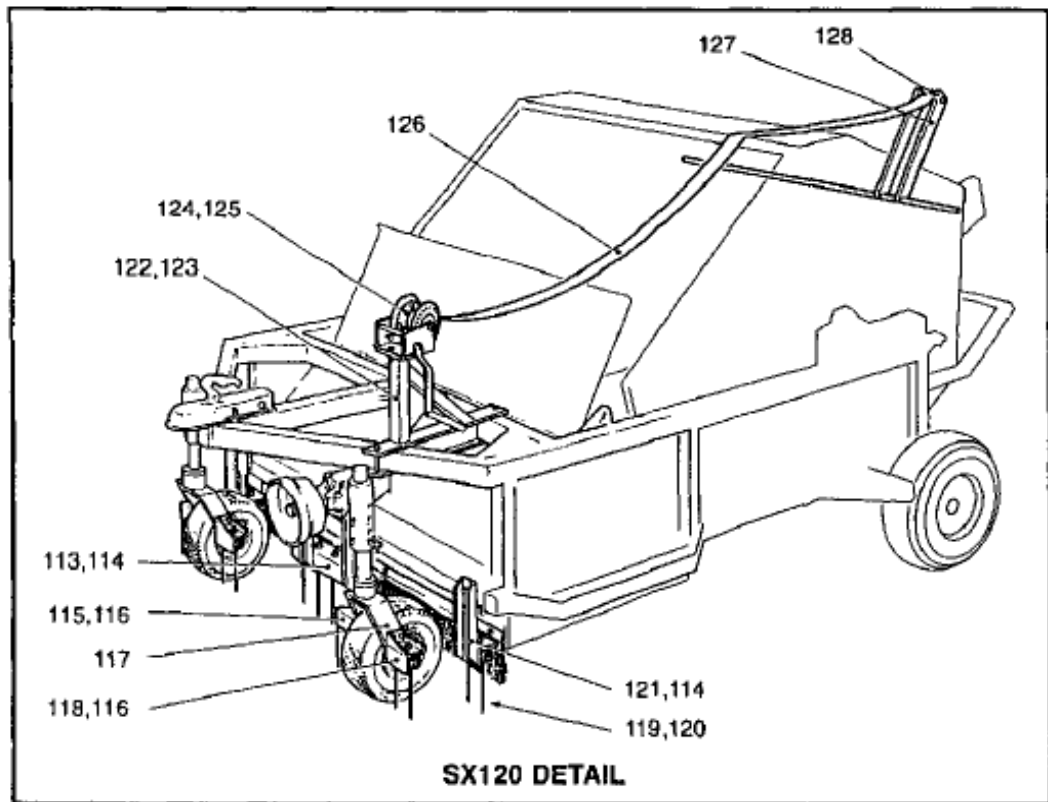
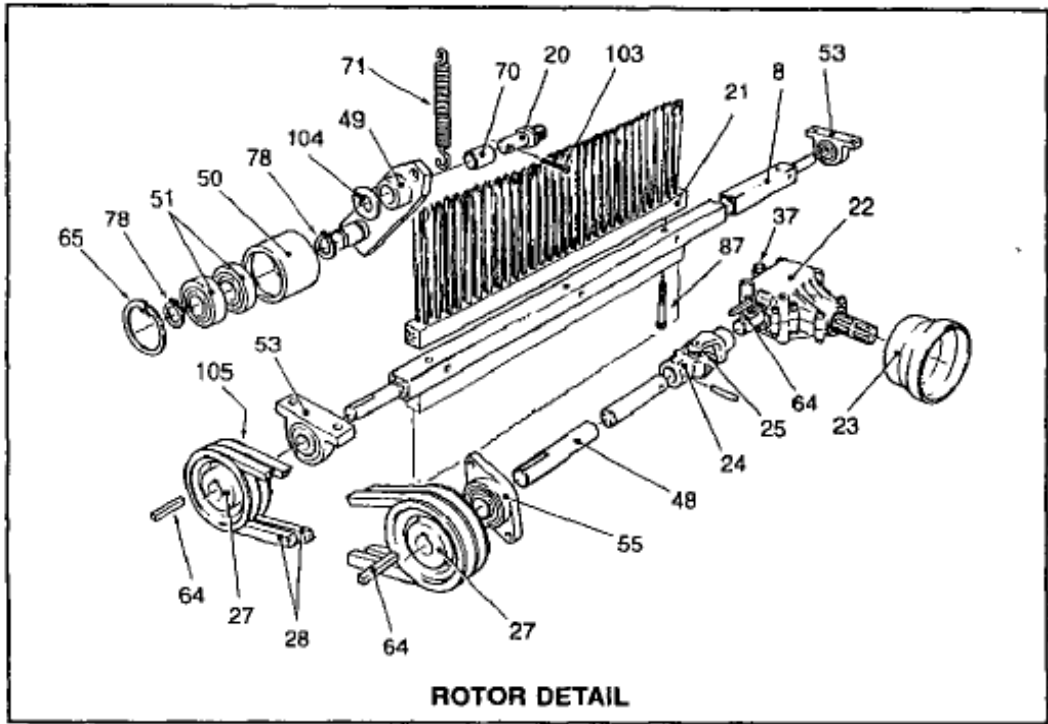


PLATE 1

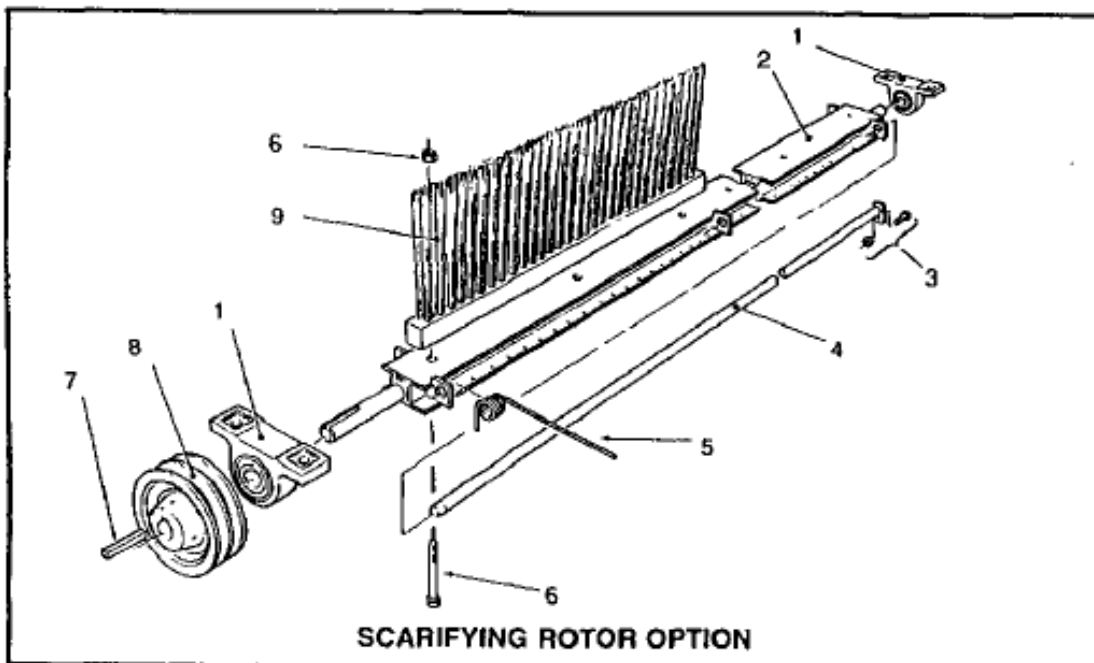
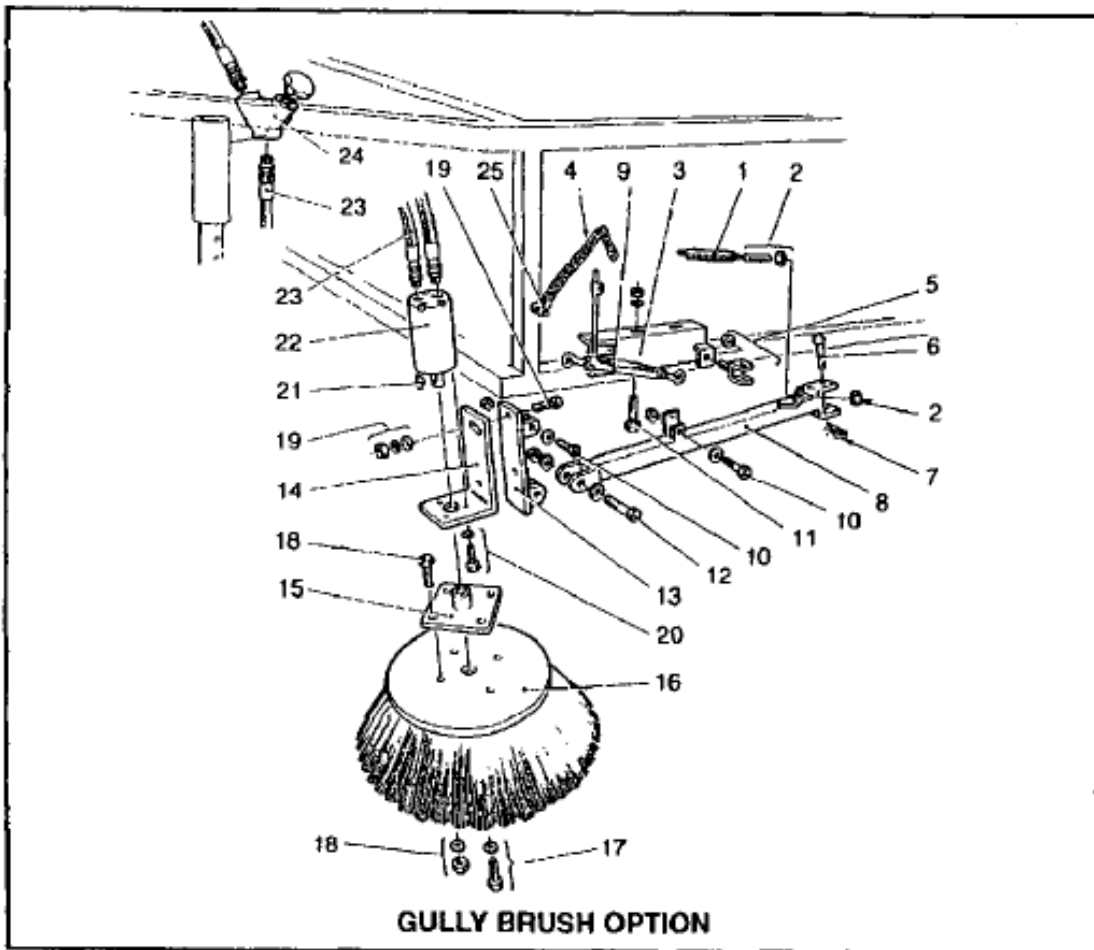
PLATE 1 PARTS LIST Cont.

Pos.	SC12	SX120	Description
53	B0341	B0341	Rotor Bearing Assembly
54	B0441	B0441	Hopper Bearing Assembly
55	B0541	B0541	Drive Shaft Bearing
56	B3580	B3580	Rear Tie Bar
57	B1676	B1676	Front Brush
59	B0325	B0325	Catch Spring
60	B1330	B1330	Catch Cable Assembly
61	B1430	-	Tipping Rope
62	B0229	-	Shackle
63	B5677	B5677	Drive Shaft Cover
64	B0147	B0147	Key
65	B0722	B0722	Circlip
66	B5877	B5877	Finger Guard R.H
67 NS	B5977	B5977	Finger Guard L.H
68	B0576	B0576	Side Deflector R.H
69 NS	B0676	B0676	Side Deflector L.H
70	B1738	B1738	Jockey Bracket Brush
71	B0425	B0425	Jockey Spring
72	B0376	B0376	Hinge
73	B0329	-	Shackle
74	B0429	B0429	Deflector Adjuster
75	B0639	B0639	Eye Bolt
76	B2356	82356	Ball Hitch
77	B9501	B9501	Fastening Set Ball Hitch
78	B0622	B0622	Circlip
79 NS	B5101	B5101	F/Set Drive Cover
80 NS	B5201	B5201	F/Set Brush Shroud
81 NS	B5401	B5401	F/Set Hitch Link
82 NS	B5501	B5501	F/Set Pawl
83 NS	B5601	B5601	F/Set Pawl Bracket
84 NS	B5701	B5701	F/Set Deflector Flap
85 NS	B5901	B5901	F/Set Rubber Buffer
86 NS	B6001	B6001	F/Set Buffer Brushes
87	B5001	B5001	F/Set Pair Brushes
88 NS	B6101	B6101	F/Set Gearbox
89 NS	B6201	B6201	F/Set Fork
90 NS	B3201	B3201	F/Set Front Axle
91 NS	B6301	B6301	F/Set Rotor Bearing
92 NS	B6401	B6401	F/Set Hopper Bearing
93 NS	B6501	B6501	F/Set Drive Shaft Bearing
95 NS	B9601	B9601	F/Set Front Brush
96 NS	B9801	B9801	F/Set Rear Tie Bar
97 NS	B7001	B7001	F/Set Catch Spring
98 NS	B7101	B7101	F/Set Drive Shaft Cover
99 NS	B7201	B7201	F/Set Finger Guards
100 NS	B7301	B7301	F/Set Side Deflector
101 NS	B7401	B7401	F/Set Hinge Deflector
102	B0514	B0514	Trunnion Nut
103	B0122	B0122	Split Pin
104	B0715	B0715	Washer



PARTS LIST – Cont.

Pos.	SC12	SX120	Description
105	B0102	B0102	Pulley Grub Screw
106	B1266	B1266	Pulley Spacer
107	B1176	B1176	Latch
108	B8601	B8601	F/Set Latch
109	B1276	B1276	Cover Clamp Bar
110	B1076	B1076	Dust Cover
111	B8701	B8701	F/Set Dust Cover
112	B1876	B1876	Strap
113	-	BX3658	Centre Bracket
114	-	BX20901	F/Set Bracket
115	-	BX3458	Wheel Bracket L.H
116	-	BX21001	F/Set Wheel Bracket
117	-	BX10451	Wheel Fork
118	-	BX3558	Wheel Bracket R.H
119	-	BX3125	Spring Tine
120	-	BX20801	F/Set Spring Tine
121	-	BX3358	Side Bracket
122	-	BX5930	Winch Bracket
123	-	BX15003	F/Set
124	-	BX3430	Winch
125	-	BX15103	F/Set
126	-	BX5830	Winch Strap
127	-	BX13156	Tipping Shaft
128	-	BX15203	F/Set

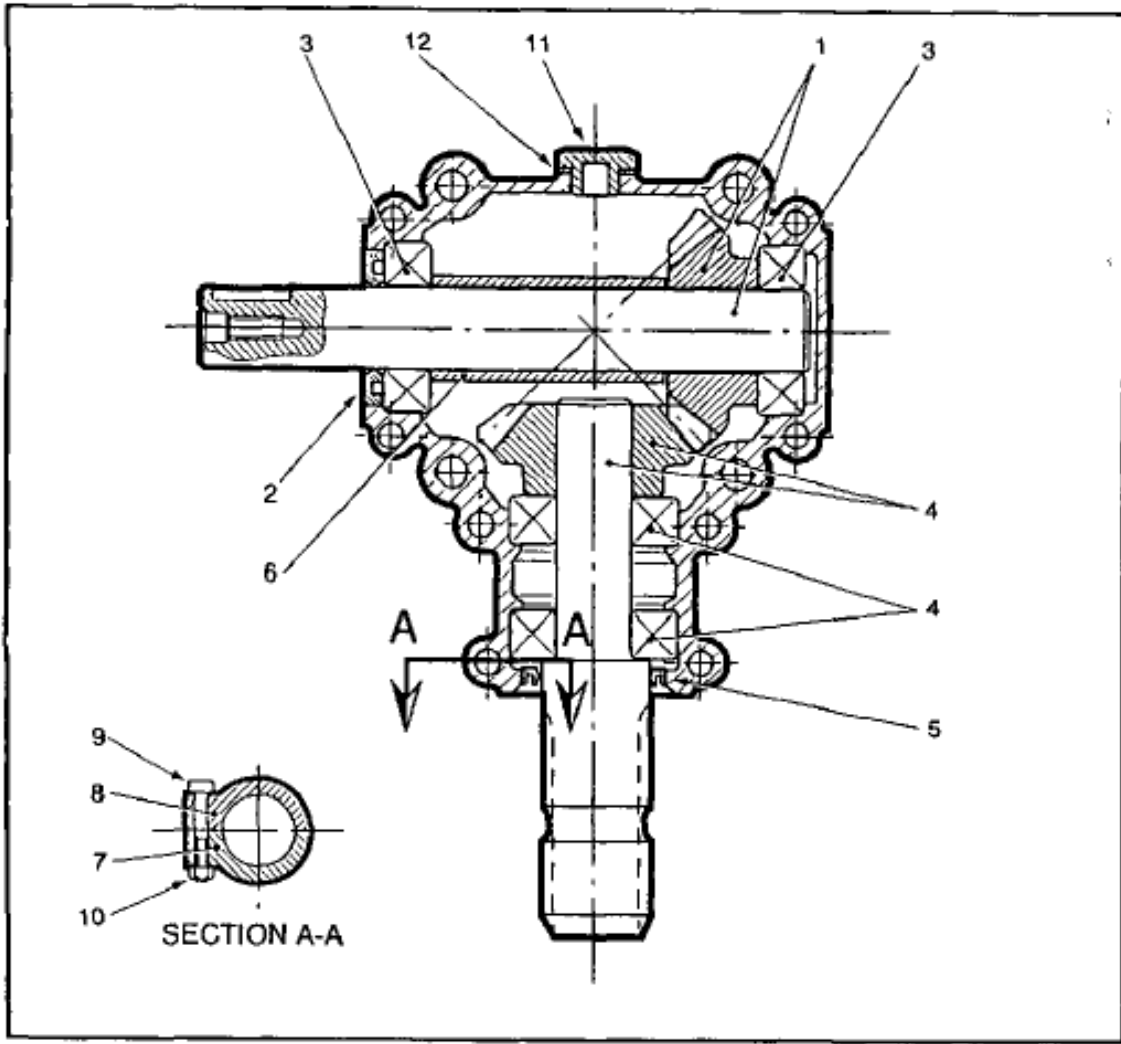


PARTS LIST- GULLY BRUSH OPTION

Pos.	SC12	SX120	Description
1	B0425	B0425	Spring
2	B0339	B0339	Spring Adjuster
3	B2857	B2857	Mounting Bracket
4	B1730	B1730	Chain
5	B0358	B0358	Fork and Nut
6	B0628	60628	Fixing Pin
7	B0321	B0321	'R' Clip
8	B0258	B0258	Arm Assembly
9	B0529	B0529	Adjuster
10	B8901	B8901	F/Set
11	B6301	B6301	F/Set
12	B9001	B9001	F/Set
13	B0458	B0458	Backplate
14	B0158	B0158	Motor Bracket
15	B3766	B3766	Motor Boss
16	B3070	B3070	Gully Brush
17	B9101	B9101	F/Set
18	B9201	B9201	F/Set
19	B9301	B9301	F/Set
20	B9401	B9401	F/Set
21	B0547	B0547	Key
22	B2556	B2556	Motor
23	B2656	B2656	Hose Kit
24	-	-	Flow Control Valve
25	B0229	B0229	Shackle

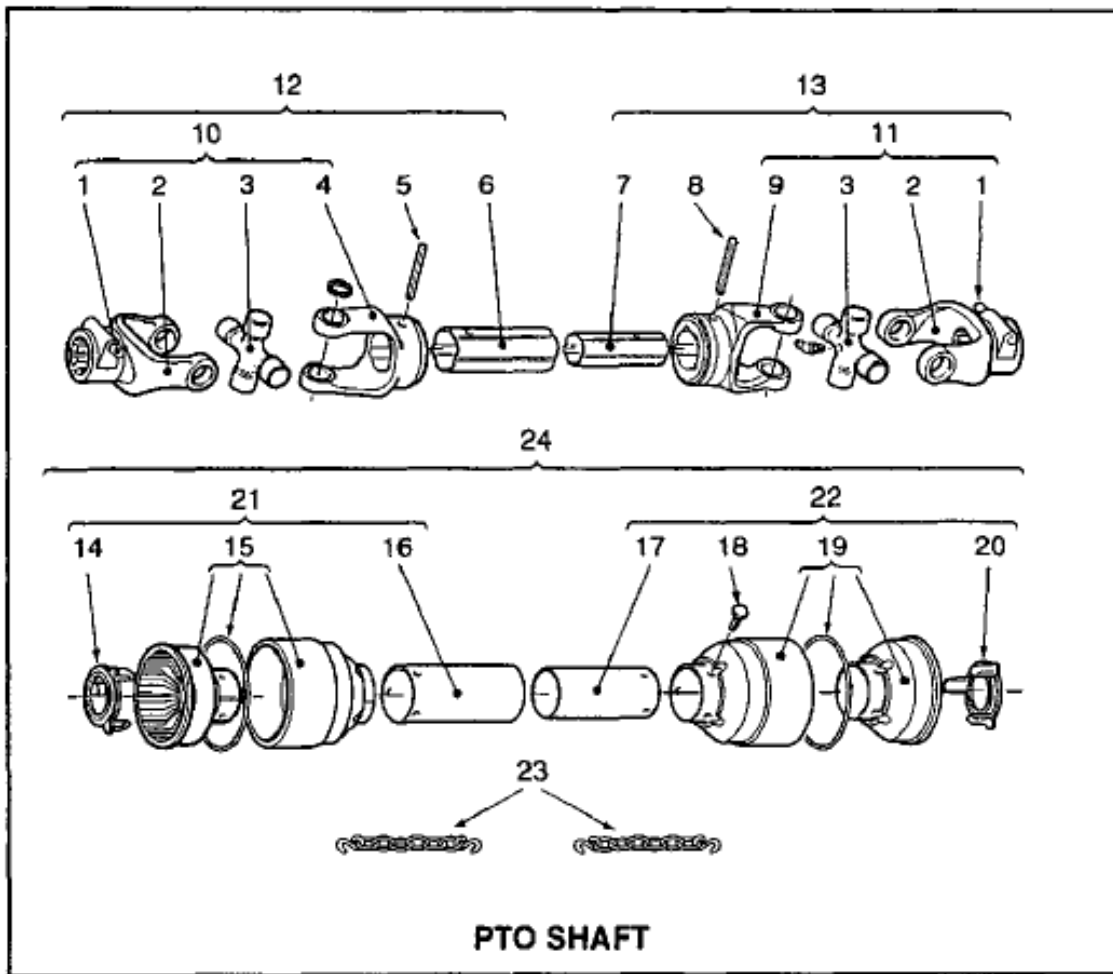
PARTS LIST- SCARIFYING ROTOR OPTION

Pos.	SC12	SX120	Description
1	B0341	-	Rotor Bearing
2	B5066	-	Scarifying Rotor
3	B11901	-	F/Set
4	B5866	-	Tine Shaft
5	B1025	-	Scarifying Tine
6	B5001	-	F/Set
7	B0147	-	Key
8	B1062	-	Pulley
9	B2870	-	Brush Strip
IO NS	B2376	-	Jockey Pulley Strip



PARTS LIST- GEARBOX - COMPLETE PART No. B2457

<i>Pos.</i>	<i>SC12</i>	<i>SX120</i>	<i>Description</i>
1	2-124-6015	1	Shaft and Gear Assembly
2	8-7-3-00257	1	Oil Seal
3	8-0-1-00598	2	Bearing
4	2-124-5002-00	1	Shaft and Gear c/w Bearings
5	8-7-3-00043	1	Oil Seal
6	0-124-7115-00	1	Spacer
7	1-124-0300-00	1	Casing
8	1-124-0301-00	1	Casing
9	8-1-2-00248	8	Bolt
10	8-2-1-00382	8	Nut
11	0-124-7102-00	1	Plug
12	8-7-6-00191	1	'O' Ring



PARTS LIST - PTO SHAFT

SCI 2 & SX120 COMPLETE SHAFT • B3781.

Pos.	Part	No.	Qty.	Description	Pos.	Part	No.	
1	166.026.004	2		Push Pin Set	13	123.210.319.10	1	Half Male Shaft
2	141.021.001	2		Push Pin Yoke	14	180.011.008F	1	Collar
3	180.011.130	2		Cross Journal Set	15	180.012.013F	1	Cone
4	151.011.003	1		Outer Yoke	16	156.111.110F	1	Outer Shield
5	190.000.011	1		Pin – Outer Tube	17	157.111.210F	1	Inner Shield
6	152.110.210	1		Outer Tube	18	190.000.019F	6	Bolt
7	153.110.110	1		Inner Tube	19	180.012.012F	1	Cone
8	190.000.010	1		Pin – Inner Tube	20	180.011.007F	1	Collar
9	151.011.002	1		Inner Yoke	21	142.211.123F	1	Half Female Shield
10	121.021.501.10	1		U Joint - Outer	22	142.211.218F	1	Half Male Shield
11	121.021.500.10	1		U Joint - Inner	23	180.016.025F	2	Safety Chain
12	123.210.626.10	1		Half Female Shaft	24	142.210.21	1	Complete Shield

PTO SHAFT - OPERATION AND MAINTENANCE

PTO drive shafts must only be used for their intended purpose.

PTO drive shafts are designed for specific machine types and power requirements.

They must not be replaced by other models.

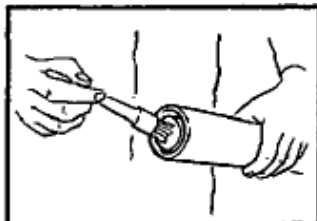
Ensure that the PTO drive shaft is securely connected.

Only use a completely protected drive system:

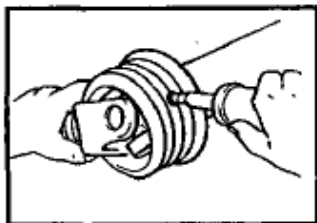
PTO drive shaft with complete guard and complementary guard on tractor and implement. A complete guard is essential in all working positions.

LUBRICATION

Lubricate with quality grease before starting work and every 8 operating hours.



Clean and grease the PTO drive shaft before each prolonged period of non-use.



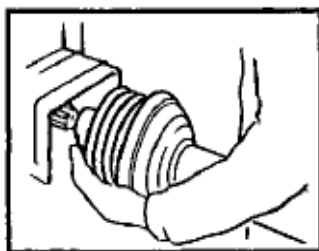
Grease the guard tubes in winter to prevent freezing.

COUPLING THE PTO SHAFT

Clean and grease the PTO and PIC

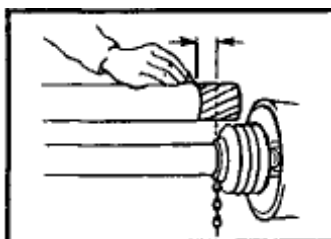
Q.-d pin

Press q.-d. pin and simultaneously push PTO drive shaft onto PTO until pin engages.



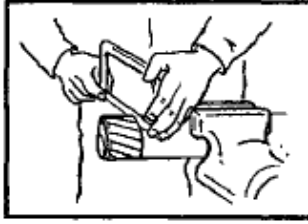
LENGTH ADJUSTMENT

To adjust the length, hold the half-shafts next to each other in the shortest working position and mark them.

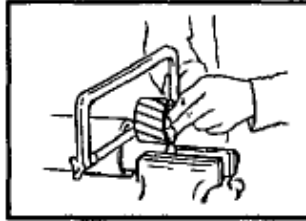


LENGTH ADJUSTMENT (Cont.)

Shorten inner and outer guard tubes equally.

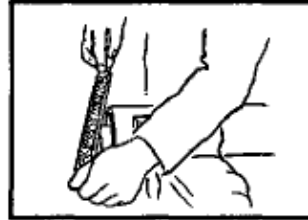


Shorten inner and outer sliding profiles by the same length as the guard tubes.



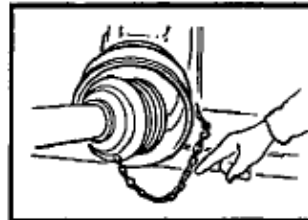
Round off all sharp edges and remove burrs.
Grease sliding profiles.

No other changes may be made to the PTO drive shaft and guard.

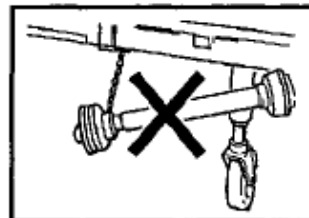


CHAINS

Chains must be fitted so as to allow sufficient articulation of the shaft in all working positions.



The PTO drive shaft must not be suspended from the chains!

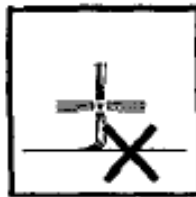




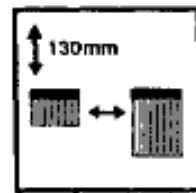
ATTENTION DESCRIPTION OF PICTOGRAMS
ATTENTION DESCRIPTION DES PICTOGRAMES
VORSICHT BESCHREIBUNG DER PIKTOGRAMMEN



GB Read Operating manual before use.
F Lisez Manual D'Opération avant l'utilisation.
D Vor der Benutzung, Betriebshandbuch lesen.



GB Damage to brushes will occur if set too low.
F Desbrosses souffriront les dommages si on les règle à un niveau trop bas.
D Schäden an den Bürsten werden verursacht, wenn man sie zu niedrig einstellt.



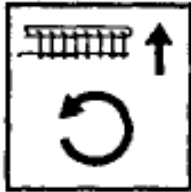
GB Replace brushes when worn to 130mm of bristle.
F Remplacer les brosses quand elles sont usées jusqu'à 130mm de poils.
D Bürsten ersetzen, wenn sie bis zu 130mm von borsten abgenutzt werden.



GB Always stop rotor before emptying hopper.
F Toujours arrêtez le rotor avant de vider la trémie.
D Rotor immer abstellen, bevor man den Einfülltrichter entleert.



GB Never remove guards or attempt adjustment until rotor has stopped.
F Ne pas enlever ni les dispositifs de sûreté ni essayer le réglage avant que le rotor s'arrête.
D Schutzrichtung niemals abnehmen oder einstellung versuchen, bevor der rotor abstellt.



- GB When scarifying, lift rotor before turning.
F Quand on scarifie, levez le rotor avant de le tourner.
D Beim skarifizierung, muß man den rotor, bevor man er umdreht.



- GB Bystanders must be at least 20 metres from machine range of action
F Des spectateurs doivent s'écarter au moins 20 mètres du rayon d'action de la machine.
D Umstehenden müssen sich mindestens 20 meter vom maschinenbetriebsraum entfernen.



- GB Beware of overhanging tipping handle.
F Prenez garde du bras de renversement en surplomb.
D Vorsicht vor dem vorstehenden kippschwengel.



- GB Keep clear of unpropped body.
F S'écartez du corps si non-étayé.
D Aus dem wege des ungestützten körpers zurückbleiben.



- GB Do not use without p.t.o. shaft guard.
F Ne pas utiliser sans le dispositif de sûreté de l'arbre p.t.o. (arbre d'entraînement).
D Nicht benutzen ohne p.t.o. (antriebswelle) schutzvorrichtung.



- GB Ear defenders must be worn
F Des serre-têtes doivent être portés.
D Ohrenschützer müssen getragen werden.