



Parts and Operators Manual

STM Super Reel 30" Hydraulic Cylinder Mower

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STARTING PROCEDURE

BEFORE STARTING MOTOR:

- 1] Ensure CUTTER DIRECTION switch is in NEUTRAL
- 2] Check cutter engagement is OUT
- 3] Motor switch: OFF.

4] Start motor by following procedure in SWZ handbook.

5] Engage cutter switch

6] Select FORWARD cutter rotation.

ROLLER HEIGHT SETTING

Support unit on jockey wheel.

Loosen [do not remove] nuts [34 - 4 off] inside main cover.

Roller assembly can now be adjusted as required.

Re-tighten four inside nuts [34].

CUTTER: BOTTOM BLADE SETTING

Loosen [do not remove] bolts at each end.[64 and 65]

This allows the bottom blade assembly to swivel about bolt 64, and adjustment is made using jackscrew [A], shown in illustration 1:

Set position and re-tighten bolts 64 and 65.

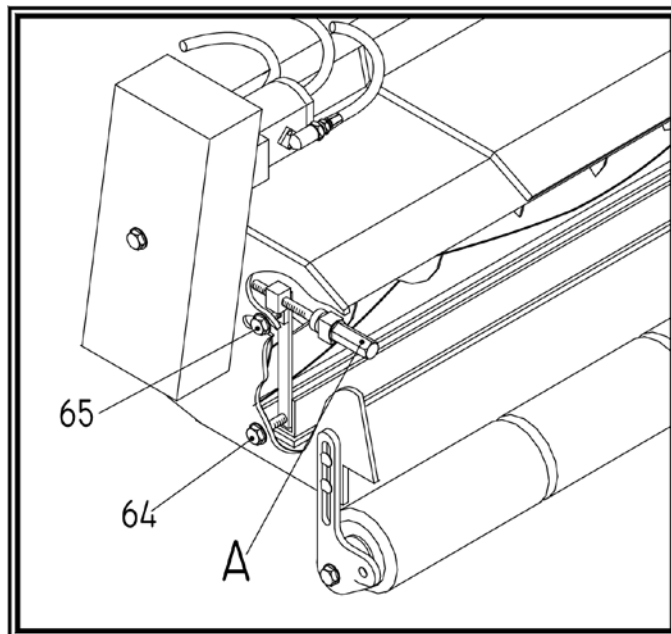


Illustration 1

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REMOVAL AND STOWAGE OF JOCKEY WHEEL ASSEMBLY

With unit resting on skids, unfasten retaining clip on linchpin and remove.

Withdraw wheel from bracket and either refit at 90 degrees in same bracket or stow at operator end in bracket provided.

GENERAL USE:

When changing cutter direction from forward to reverse [or back again] leave the switch in neutral for five seconds. There is a switch lock in place to prevent movement by accident.

Moving directly from one cutter direction to the other without a pause can damage the hydraulic system or break the cutter drive belt.

BELT ADJUSTMENTS

ENGINE DRIVEN BELT

Slacken off the four bolts [40] visible around the pump - see illustration 2.

The plate is moved using two jackscrews mounted under the front plate - see illustration 3.

Do not over-tension belt!

Re-tighten four bolts.

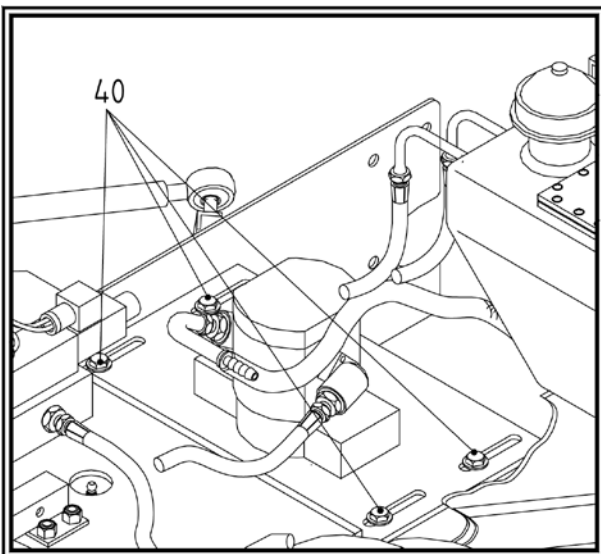


Illustration 2

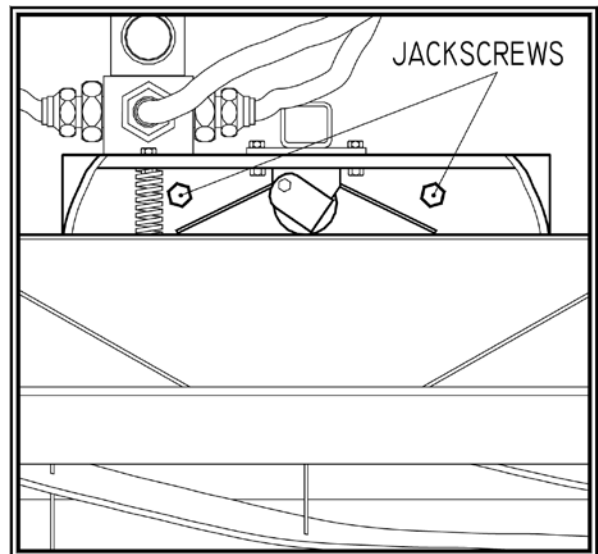


Illustration 3

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CUTTER DRIVE BELT

Remove bolt and washer [51 and 52], and remove guard [47].

Slacken off [do not remove] bracket pivot pin [46 / 46a].

Adjustment is made by loosening nut 38a and turning jackscrew 38. See illustration 4.

Do not over-tension belt!

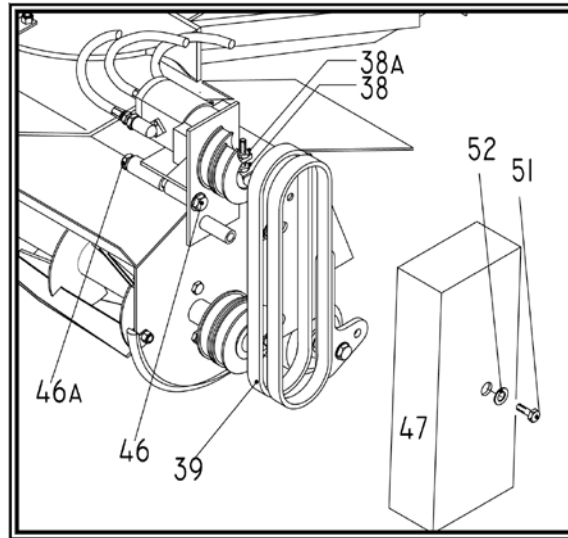


Illustration 4

Lock up jackscrew with nut 38a and re-tighten pivot pin [46 / 46a].

Replace guard and lock in place with bolt and washer. [51 and 52].

BELT REPLACEMENT

ENGINE DRIVEN BELT

Slacken off four bolts [40] situated around pump. - see illustration 2.

Using the jackscrews - see illustration 3 - move the plate to the extreme end of the slots and unhook the belt from either pulley.

Fit new belt and use the jackscrews to take up the slack.

Do not over-tension belt!

CUTTER DRIVE BELT

Remove bolt and washer [51 and 52], and remove guard [47]. See illustration 4

Slacken off [do not remove] bracket pivot pin [46 / 46a].

Loosen jackscrew [38] until there is sufficient slack to remove the belt.

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Cutter drive belt replacement - **continued**

Install new belt.

Take up slack using jackscrew [38] and lock in place with nut [38a].

Do not over-tighten belt!

Lock bracket in place by tightening pivot pin and nut [46 / 46a].

Replace guard and lock in place with bolt and washer [51 and 52]

LUBRICATION / MAINTENANCE

CYLINDER BEARINGS [grease nipples on bearing housings]

Give 2 or 3 shots with a hand-held grease gun every 500 hours.

DO NOT OVER-GREASE

CUTTER ASSEMBLY PIVOT [Grease nipple]

[See illustration 5]

Give 2 or 3 shots with hand held grease gun every 40 hours

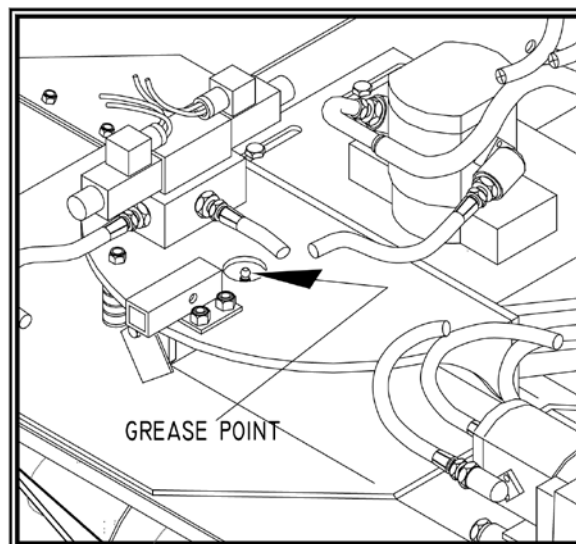


Illustration 5

TIE-ROD ENDS [17]

Lubricate ball swivels with oil or grease every 40 hours.

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HYDRAULIC SYSTEM Maintenance

FILTER CLEANING

*The filter [36] is re-usable, requiring cleaning every 500 hours.
To remove filter, take off plate [13] and remove gasket [14].
The filter is situated at the base of the tank, and is removed by unscrewing.
Clean by soaking in paraffin, and ensure it is clean and dry before re-fitting.*

Do not over-tighten!

*Re-fit gasket, applying smear of gasket paste to ensure ideal fit.
Re-fit all screws.*

OIL CHANGE

*This should be done every 500 hours.
Empty tank by way of drain tap under the tank.
Re-fill using **32 GRADE** only.*

CYLINDER

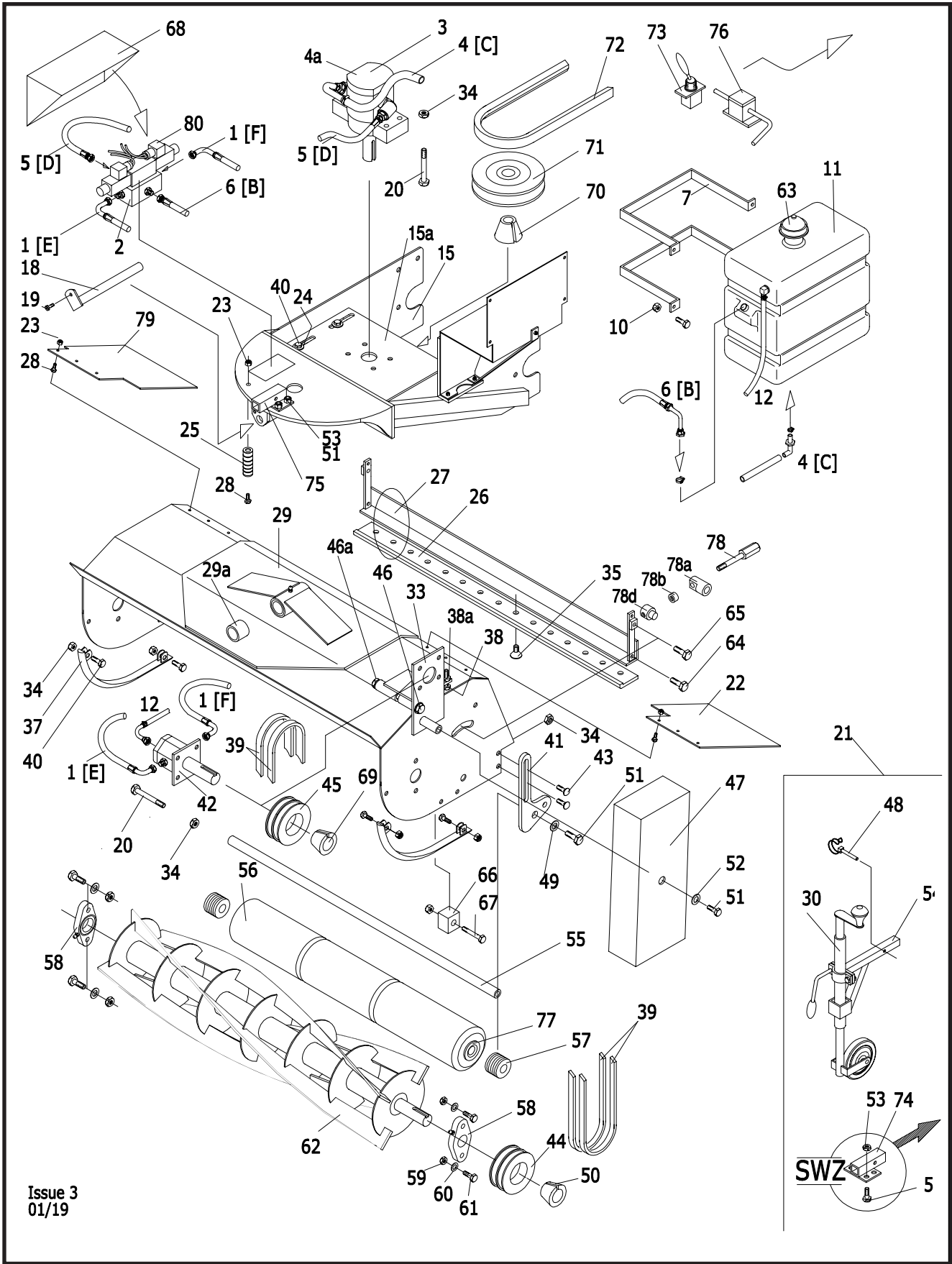
To backlap cylinder:

*Apply grinding paste to cylinder blades.
Tighten bottom blade to cylinder.
Operate switch at the handles to reverse the cylinder.
Run cylinder for 2 - 3 minutes.
Repeat this process three or four times.
When finished, clean off grinding paste.
Reset bottom blade to cylinder.*

NOTE!!

**BOTTOM BLADE MUST NOT TOUCH THE CYLINDER
AT ANY TIME DURING NORMAL OPERATION**

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Drawing ref	Part No.	Description
1	10128	Hydraulic pipe with connectors - ref E/F
2	10251	Hydraulics manifold
3	10248	Hydraulic pump body
4	10589	Oil feed pipe - ref C
4a	10215	Oil feed pipe elbow
5	10132	Hydraulic pipe with connectors - length D
6	10133	Hydraulic pipe with connectors - length B
7	421288	Tank fixing strap - short
8	10135	Tank fixing strap - long
9	PL	Bolt - M2 x 25 cup head
10	PL	Nut - M6
11	48711	Oil tank
12	10591	Drain - with connectors
13	10590	Bracket for tank mounting
14		
15	10139	Chassis
15a	10254	Pump mounting plate
16		
17		
18	10141	Main pin
19	PL	Main pin fixing screw M16 x 15
20	PL	Bolt - M8 x 100
21	10174	Jockey wheel assembly
22	10231	Cover
23	PL	Nut - M6
24	PL	Washer - 8mm
25	48807	Support spring
26	10143-A	Bottom cutting blade
27	10144 (Assembly)	Bottom cutting blade assembly
28	PL	Bolt - M6 x 16 cuphead
29	10145	Main cover
29a		Sleeve bearing
30	10175	Jockey wheel
31		
32		
33	10255	Motor fixing bracket

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Drawing ref	Part No.	Description
34	PL	Nut - M8
35	10149	Bottom cutting plate fixing
36		
37	10233	Skid (pair)
38	PL	Bolt - M8 x 60 setscrew
38a	PL	Nut - M8
39	10556	Belt - 2 off
40	PL	Bolt - M8 x 25
41	10153	Roller bracket
42	10155	Motor
43	PL	Bolt - M8 square shoulder cup-head
44	10552	Double pulley
45	10553	Double pulley
46	PL	Bolt - 1/2" x 5-1/2" UNF
46a	PL	Nut - 1/2" UNF
47	10157	Drive cover
48	10158	Shaft pin
49	PL	Washer
50	10117	Taper hub fixing 25mm i/d
51	PL	Bolt - M10 x 25
52	PL	Washer
53	PL	Nut - M10
54	10160	Wheel support
55	10236	Roller shaft assembly
56	10235	Roller with bearings
57	PL	Spacers
58	10003	Bearing
59	PL	Bolt - M8 x 35
60	PL	Washer
61	PL	Nut - M8
62	10230	Cylinder
63	481164	Oil tank cap
64	10163	Bolt - bottom blade assembly
65	10164	Bolt - bottom blade assembly
66		
67		
68	10166	Guard
69	10554	Taper hub - 1210 x 16
70	48141	Taper hub - 22mm i/d
71	48924	Pulley

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Drawing ref	Part No.	Description
72	10167	Belt
73	10168	Reverse switch assembly
74	10169	Jockey wheel fixing bracket - SWZ mounted
75	10170	Jockey wheel fixing bracket - front mounted
76	10171	Switch lock
77	48100-01	Bush
78	10254	Adjuster mechanism: bolt
78a	10246	Adjuster mechanism: bush
78b	10185	Adjuster mechanism: threaded bush
78c		
78d	10247	Adjuster mechanism: swivel
79	10232	Cover
80	10250	Solenoid assembly
81		
82	10217	Main pin bush
83	10200	3/8 - 3/8 union
84	10201	3/8 Dowty seal
85	10202	3/4 - 1/2 union
86	10203	1/2 Dowty seal
87	10181	Pump and Motor drive gear
88	10204	3/8 - 3/4 union
89	10205	3/4 Dowty seal
90	10256	Flange kit (3/4 elbow)
91	10257	Flange kit (1/2 elbow)
92	10206	3/8 - 1/2 union
93	10207	3/8 - 3/8 (long) union
94	10208	3/8 locknut
95	10209	1/4 - 1/4 (long) union
96	10210	1/4 Dowty seal
97	10211	1/4 locknut
98	10212	3/4 - 3/4 (long) union
99	10213	3/4 locknut
100	10214	1/4 - 1/4 union

PL - Purchase Locally