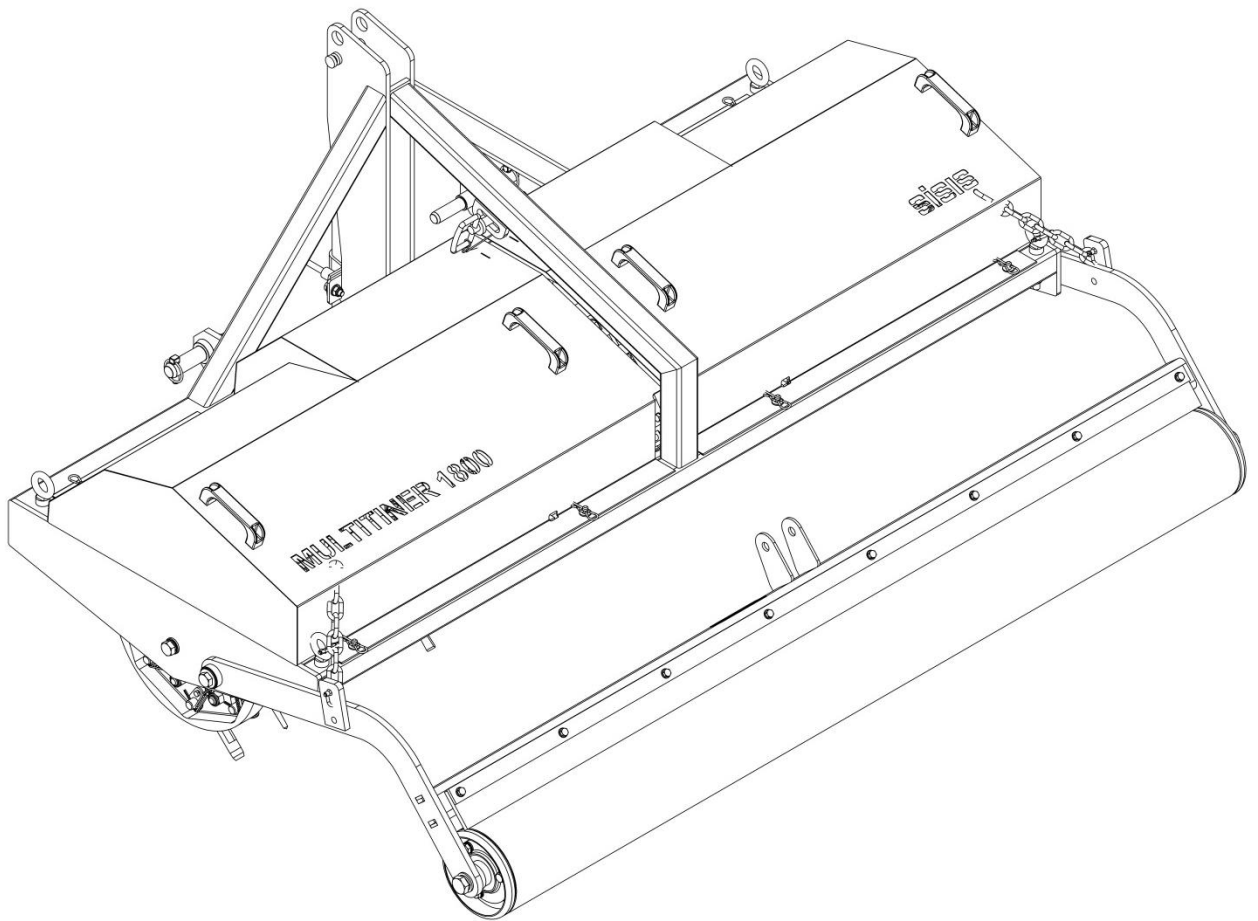


sisis®

MULTITINER 1.8

INSTRUCTION MANUAL



MULTITINER 1.8 CN Code: 84322910

Manufacturer:- Howardson Ltd, Howardson Works, Kirk Langley, Derby, DE6 4NJ. UK

Owner of Technical Document:- Mr I.D. Howard, Howardson Ltd, Howardson Works Kirk Langley, Derby, DE6 4NJ, UK

I the under signed Declare that these machines:-

Tested at:- Howardson Works test site September 2011

Complies with the applicable requirements of:-
- Machine Directive 2006/42/EC

Managing Director



Ian Howard

SERIAL NUMBERS



NOTE:-

MAKE A NOTE OF THE SERIAL NUMBER OF YOUR MACHINE AND ALWAYS QUOTE IT IN ANY COMMUNICATION WITH PERSONNEL AT DENNIS.

MACHINE SERIAL NUMBER

INTRODUCTION

The reliability and quality of performance of the **MULTITINER 1.8** depends upon some simple care maintenance carried out regularly. This manual has been prepared to allow the user to carry out all such work.

It is advisable to read the instructions carefully. Proper care and attention will enable the machine to give a continuous, satisfactory, and reliable service. Failure to carry out regular lubrication and maintenance as outlined in this manual may render any guarantee or warranty invalid.

In the case of any difficulty, or if further information or advice is required, our Service Department is always at your call. In the interests of speed and accuracy of information please quote the serial numbers of the machine and engine when making enquiries.

For the machine, this is to be found on a plate attached to the side frame. The engine number is stamped on either the crank case or the gear casing facing towards the front of the machine. We suggest you write the numbers on the front page of this book.

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TECHNICAL DATA

MODEL	MULTITINER 1.8
WIDTH (mm)	1904
LENGTH (mm)	1325
HEIGHT (mm)	895
WEIGHT (Kg)	340
WORKING WIDTH (mm)	1775
NUMBER OF TINES	120
RECOMMENDED TRACTOR	35hp

IMPORTANT SAFETY INTRODUCTIONS



CAUTION:-

READ THE INSTRUCTIONS. We want you to obtain the best performances from this machine. If you have any difficulty in carrying out the following instructions please contact your local SISIS dealer.

NEVER

- Carry out adjustments whilst the machine is running.
- Allow any unauthorised person to handle machines in any way at any time.

ALWAYS

- Read the operating instructions carefully and understand the controls before commencing work.
- Before starting work always visually check machine for damage or wear to parts.
- Look behind before starting to reverse and watch out for children or pedestrians.
- Switch off the power before making adjustments or repairs and never lift or carry a machine whilst any parts are moving.

PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY BEFORE USING THIS IMPLEMENT

We want you to obtain the best performance from this machine. If you have any difficulties after reading these operating instructions, please contact us or your local SISIS Territory Manager or SISIS Dealer.

Design Features

The SISIS Multitiner consists of three drums which rotate independently on steel ball bearings. The drum side plates are made from cast iron while the tine bars and main shaft are of steel. Each sprung tine bar rotates on nylon bearings and the tines exit the ground at the correct angle, giving minimum surface disturbance.

The guard is easily removed by 4 quick release R clips, to give access for tine replacement.

Tines are easily fitted by means of quick release pins and clips.

Safety

Always:

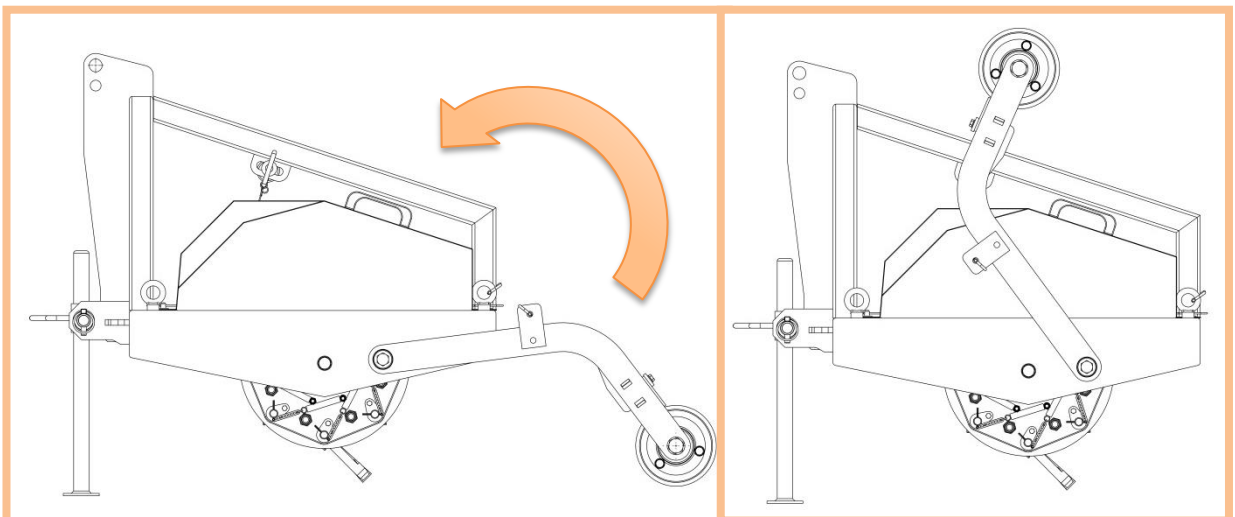
- Read the operating instructions carefully and understand the controls before commencing work.
- Before starting work visually check machines for damage or wear to working parts such as blades or tines.
- Use safety guards and make sure they are correctly in position. They are supplied for your protection.
- Watch out for children or pedestrians. Always look behind before starting to reverse.
- Switch off power before making adjustments or repairs and never lift or carry a machine whilst any parts are moving.

Do not – Allow any unauthorised person to handle machine in any way at any time.

Rear Roller

The rear roller may be left in the down position to give a striped finish or, if ground conditions are hard, it may be raised and locked in the raised position to add extra weight to penetration.

If the Multitiner is fitted with hollow coring tines, the roller must be in the raised position. Lift with two people only.



Tractor Requirements

Ensure that the tractor has sufficient lift capabilities. Front weights may need to be fitted to some tractors.

Operating

If possible do a trial run on an adjoining grass area such as a fairway, to get a polish on the tines and to ensure the top link setting is correct for optimum results and to avoid damage to the tines. Use the low speed on the tractor gearbox and lower the implement to the surface. Adjust the forward speed to obtain the desired results.

Assembly

Your SISIS Multitiner will be supplied **WITHOUT** tines fitted. Remove the guard, by removing the 4 'R' clips and washers on either side of the guard frame. The drilled ends of the tines should be inserted in the large holes in the tine bars and secured with the pins and clips provided. It is essential that the coring tines are fitted with the open side towards the rear of the implement for correct operation and clean ejection of the cores. When using coring tines, rear pressure rollers must be removed. This is done by removing the 4 bolts and nuts securing the rollers to the frame.

Tines

Coring Tines – Autumn

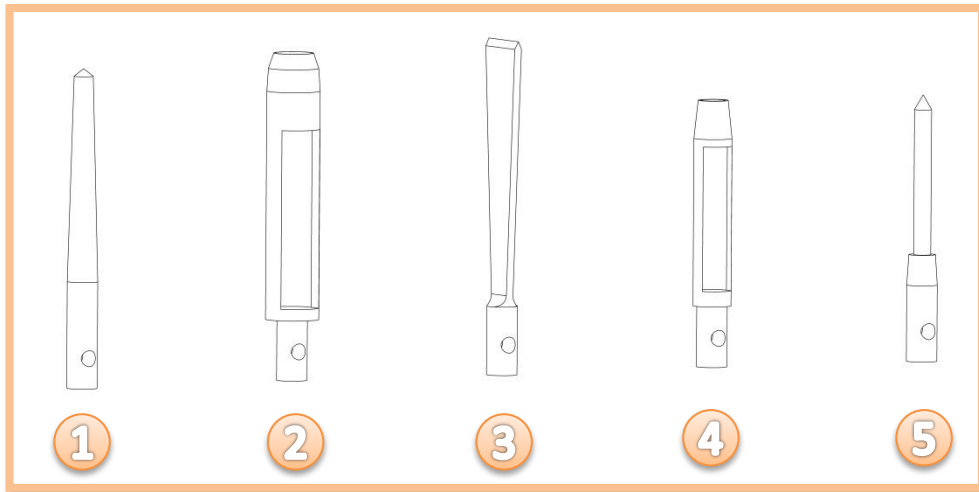
Remove cores of soil to relieve compaction caused by play and rolling or to make soil exchange

Slitting Tines – Autumn & Spring

Encourages new root growth and permits the entry of fertilisers and dressings.

Round Pointed Tines - Summer

Help moisture and air to get to the grass roots during the growing season, particularly useful for hard conditions.



Tine types:

- 1.) 100mm Solid tine
- 2.) 115mm Jumbo hollow tine
- 3.) 100mm Chisel tine
- 4.) 76mm Hollow tine
- 5.) 76mm Pencil tine

- Set ordering code: SETX120-D6728
 Set ordering code: SETX120-F35967
 Set ordering code: SETX120-D2109
 Set ordering code: SETX120-D2048
 Set ordering code: SETX120-D2047

Important

Clean and oil all tines after use, making sure that hollow tines are cleaned inside. Lubricate the tine bar pivot bushes periodically with a few drops of oil at each end of the square section of each bar.

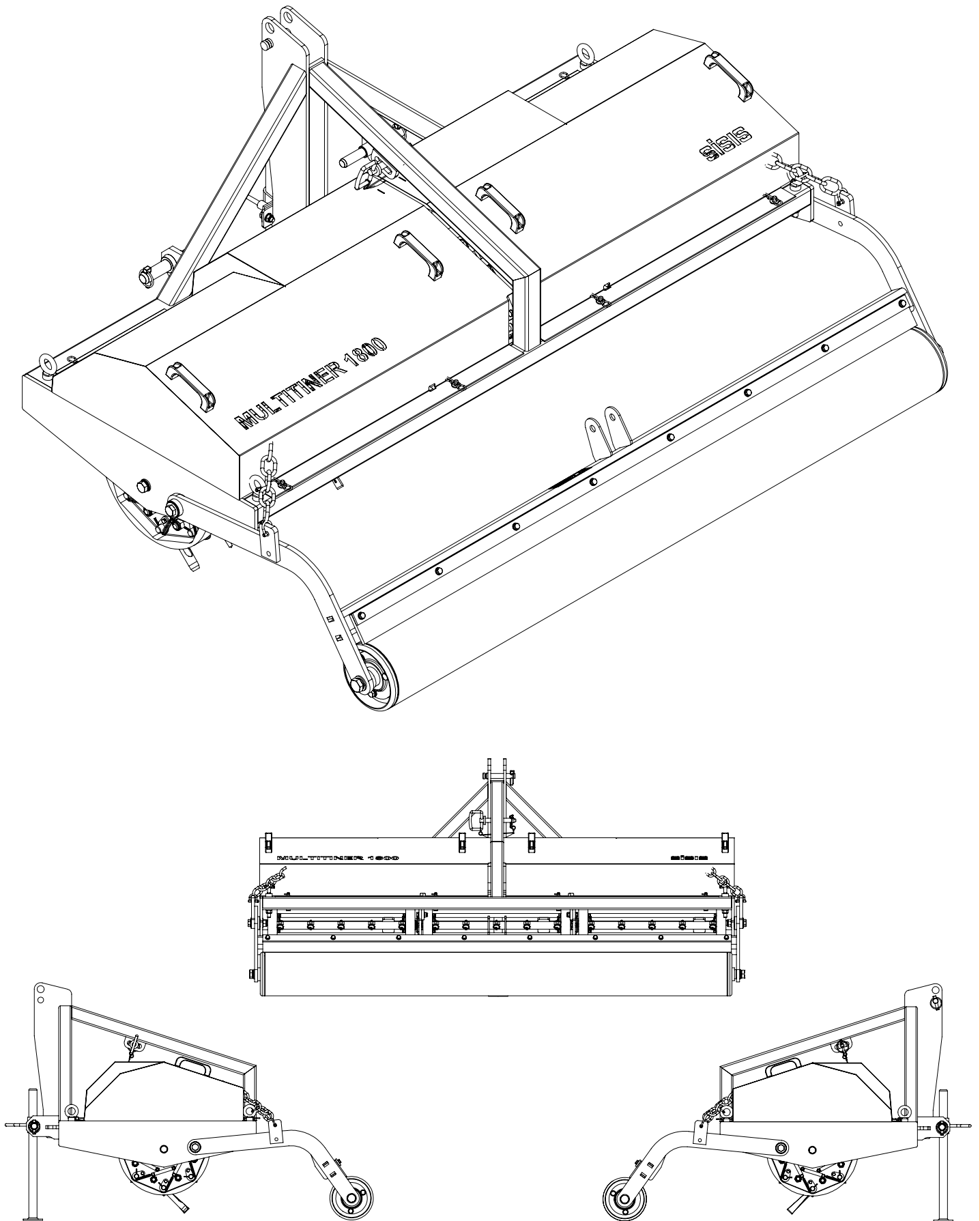
Connection to the Tractor

Mount the machine on the tractor 3 point linkage. Make sure stabilisers are fitted. Adjust the top link so that the implement frame is parallel to the ground. Raise the implement and retract the drop leg stand behind the implement. Make sure that the frame is horizontal to the ground so that an even depth is maintained across the tines width. Make sure that the implement can be lifted high enough to clear the ground in transport, particularly in undulating conditions.

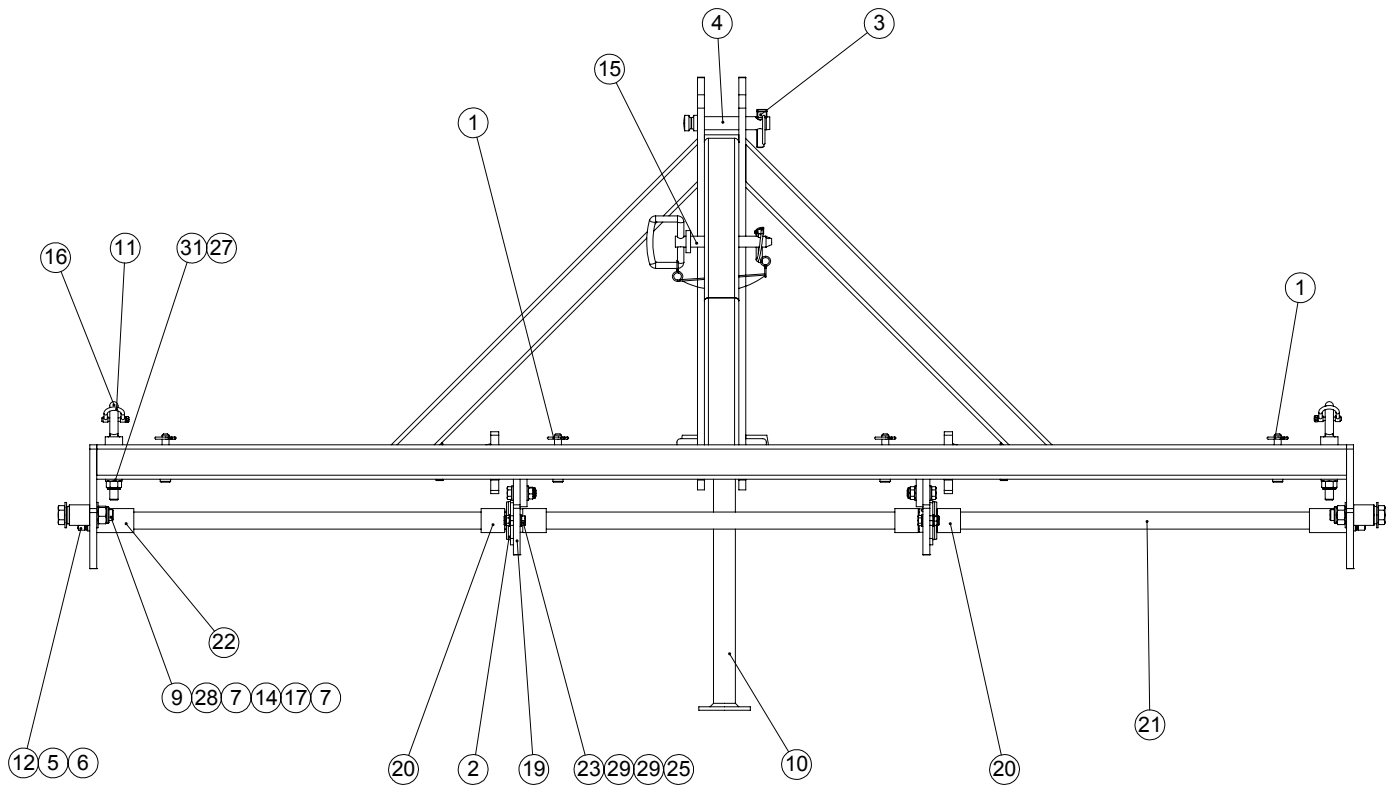
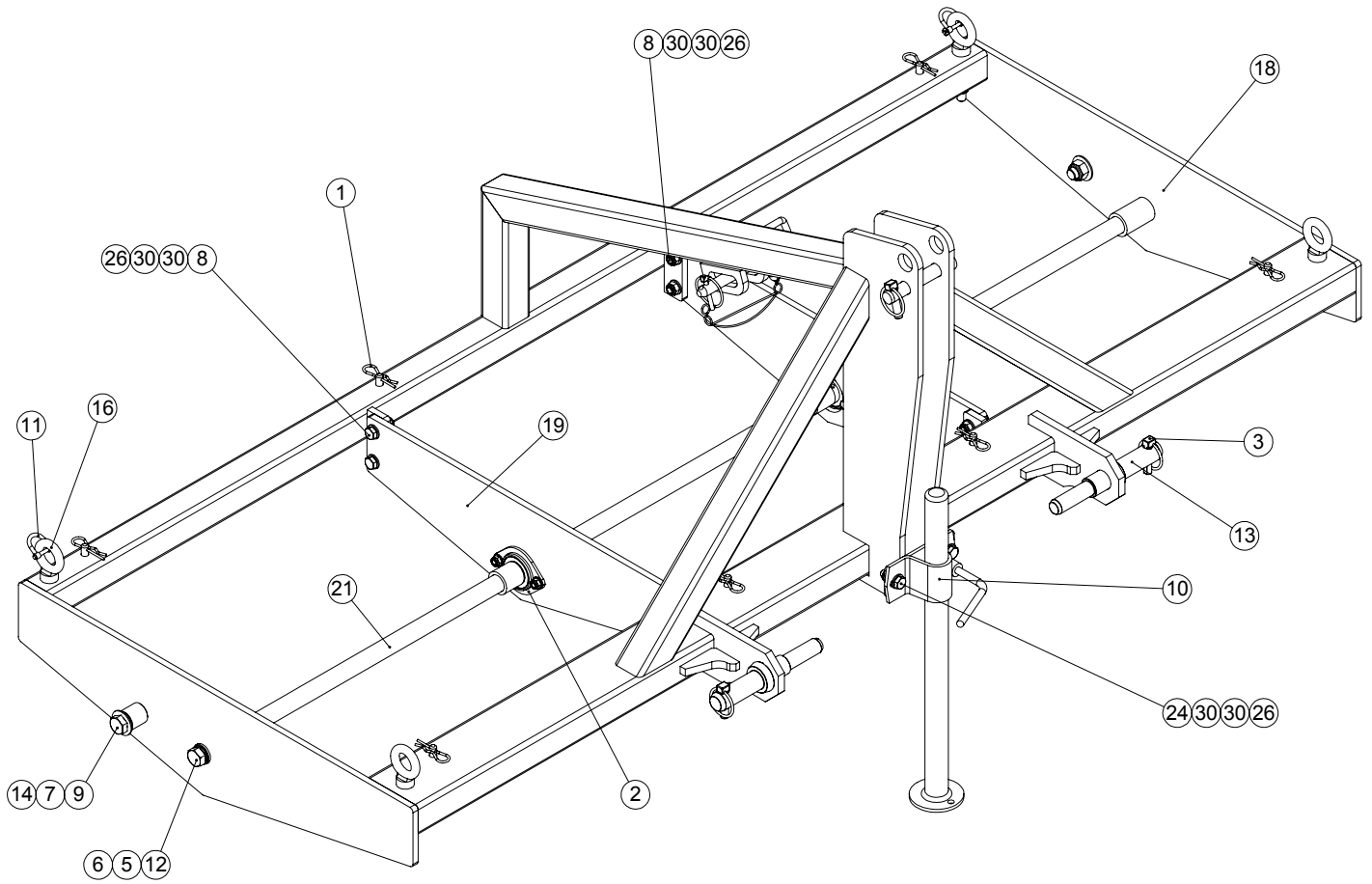
Transporting

Never roll the implement on a solid surface such as concrete. This will cause damage to the tines. Always ensure that you have enough ground clearance before driving up ramps or low loaders.

MULTITINER 1.8 - PARTS BOOK



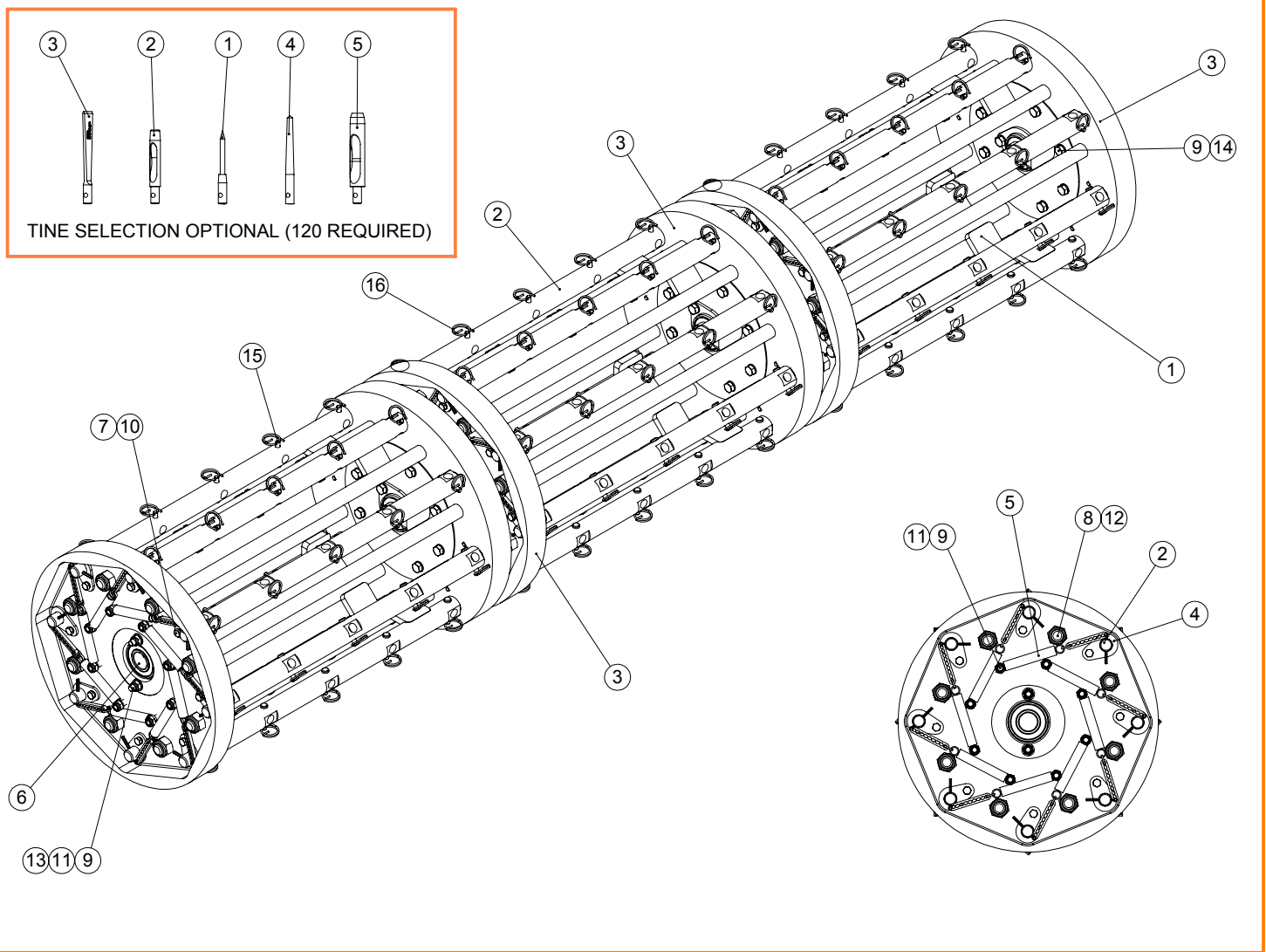
CHASSIS



CHASSIS

ITEM NO.	PART NUMBER	DESCRIPTION	CHASSIS/QTY.
1	D1900_REV0	CLIP R (SPAREX REF S9)	8
2	D8032_REV0	BEARING BPFL5-25	2
3	D8326_REV1	PIN LINCH 7/16"	3
4	D8617_REV1	TOP LINK PIN 3/4"	1
5	E1-1066_REV0	WASHER SPRING M16	2
6	E1-1080_REV0	WASHER M16 FORM A	2
7	E1-1081_REV0	WASHER M20 FORM B	4
8	E1-1119_REV0	HEX SET SCREW M10 X 35	8
9	E1-1578_REV0	HEX BOLT M16 X 70	2
10	F20723_REV1	DROP LEG ASSEMBLY 20"	1
11	F20995_REV1	D SHACKLE	2
12	F21017_REV1	HEX SET SCREW M16 X 35	2
13	F21034_REV1	LOWER LINK DUAL PIN	2
14	F21041_REV0	BUSH AM2530 - 30	2
15	F21746_REV0	HITCH PIN 16DIA	1
16	F34408_REV1	EYEBOLT M12 x 80 LONG	4
17	F37352_REV1	PIVOT SPACER	2
18	F37878_REV2	MULTITINER 1800 CHASSIS	1
19	F37879_REV2	CARRY PLATE	2
20	F37881_REV1	SPACER	4
21	F37882_REV1	SHAFT	1
22	F37963_REV1	SPACER	2
23	SP01045_REV0	HEX SET SCREW M8 X 25	4
24	SP01105_REV0	HEX SET SCREW M10 X 30	2
25	SP02006_REV0	NUT M8 NYLOC (T)	4
26	SP02008_REV0	NUT M10 NYLOC (T)	10
27	SP02010_REV0	NUT M12 NYLOC (T)	4
28	SP02028_REV0	NUT M16 NYLOC (T)	2
29	SP03008_REV0	WASHER M8 FORM A	8
30	SP03011_REV0	WASHER M10 FORM A	20
31	SP03012_REV0	WASHER M12 FORM A	4

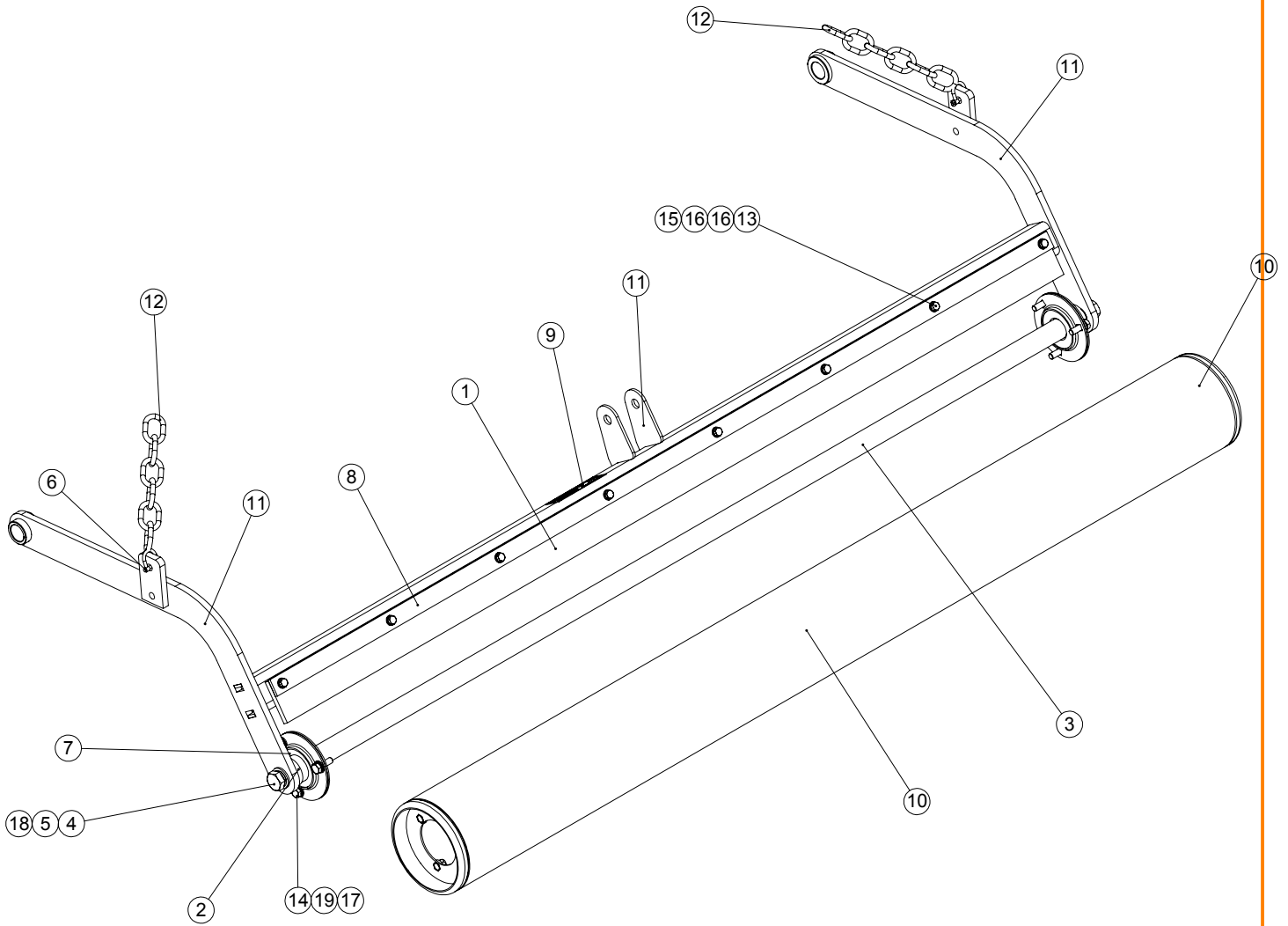
TINE DRUMS



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	401795_REV0	TINE BAR PLATE	24
2	401797_REV0	TINE BAR (MULTI TINER 1800)	24
3	C052_REV2	SIDE PLATE	6
4	D1511_REV3	TINE BAR BEARING	48
5	D7086_REV1	SPRING & CHAIN ASSY	48
6	D8032_REV0	BEARING BPFL5-25	6
7	E1-1061_REV0	WASHER M6 SPRING	48
8	F33584_REV1	STAY BAR	24
9	SP01005_REV0	HEX SET SCREW M8 X 30	60
10	SP01008_REV0	HEX SET SCREW M6 X 16	48
11	SP02006_REV0	NUT M8 NYLOC (T)	60
12	SP02028_REV0	NUT M16 NYLOC (T)	48
13	SP03008_REV0	WASHER M8 FORM A	12
14	SP03029_REV0	WASHER M8 SPRING LOCK	60
15	SP05015_REV0	CLEVIS PIN 1/4" X 1 1/2"	120
16	SP05016_REV0	COTTER RING 23 X 2	120

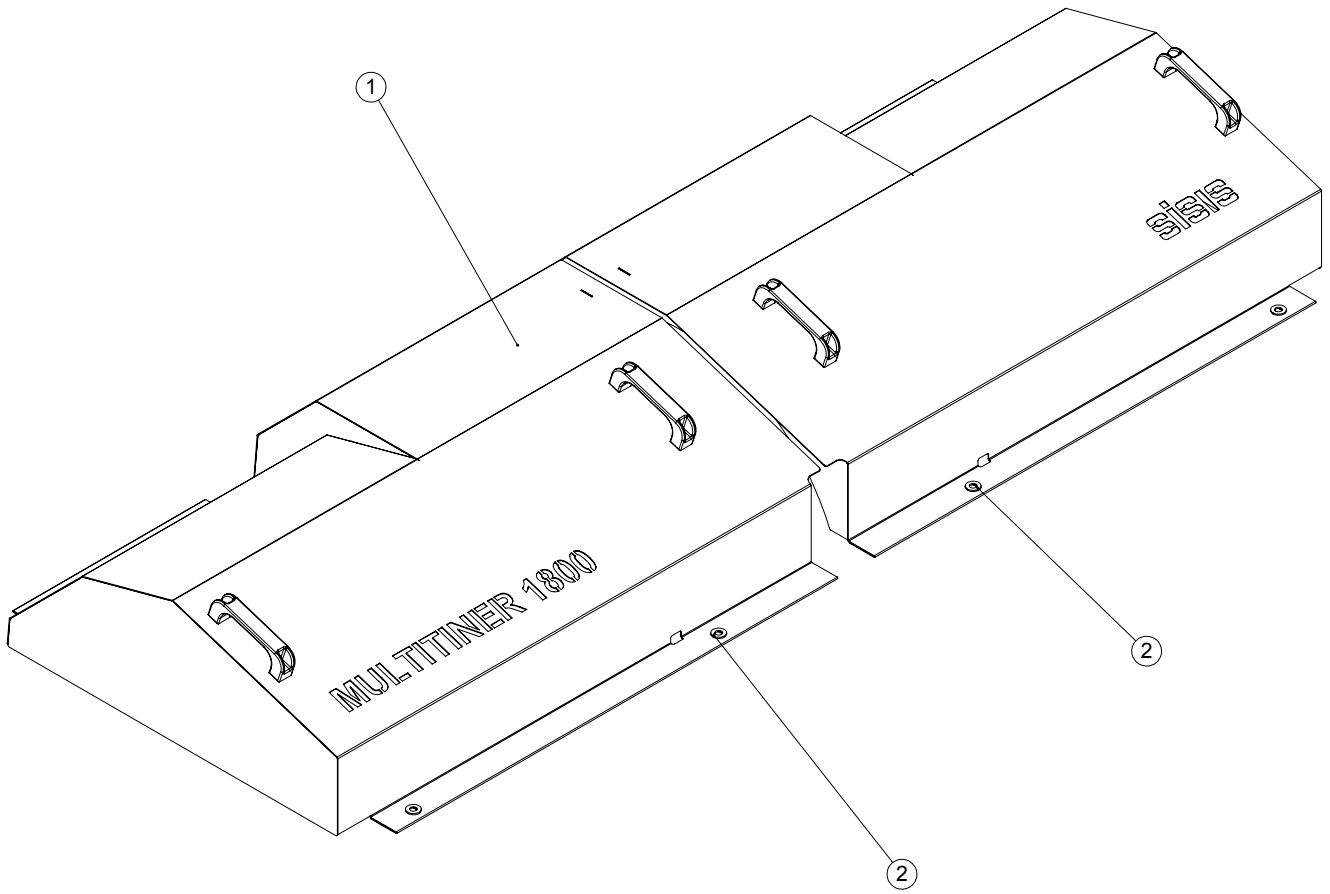
ITEM NO.	PART NUMBER	DESCRIPTION	TINES/QTY.
1	D2047_REV2	SL. TINE	1
2	D2048_REV1	HOLLOW TINE	1
3	D2109_REV1	CHISEL TINE	1
4	D6728_REV1	SOLID TINE	1
5	F35967_REV1	JUMBO HOLLOW TINE	1

REAR ROLLER



ITEM NO.	PART NUMBER	DESCRIPTION	REAR ROLLER/QTY.
1	D3856_REV1	RUBBER SCRAPER	1
2	D6428_REV1	SPACER	2
3	D6544_REV1	ROLLER SHAFT	1
4	E1-1633_REV0	HEX SET SCREW M20 X 40	2
5	E1-1635_REV0	M20 SPRING WASHER	2
6	F20995_REV1	D SHACKLE	2
7	F21768_REV0	BEARING BPF7-35	2
8	F31002_REV1	SCRAPER CLAMP	1
9	F36000_REV2	SERIAL NO PLATE (SISIS)	1
10	F36129_REV1	ROLLER 6'	1
11	F37884_REV4	ROLLER FRAME	1
12	F37920_REV3	CHAIN	2
13	SP01036_REV0	HEX SET SCREW M8 X 35	8
14	SP01105_REV0	HEX SET SCREW M10 X 30	6
15	SP02006_REV0	NUT M8 NYLOC (T)	8
16	SP03008_REV0	WASHER M8 FORM A	16
17	SP03011_REV0	WASHER M10 FORM A	6
18	SP03022_REV0	WASHER M20 FORM A	2
19	SP03034_REV0	WASHER M10 SPRING LOCK	6

GUARD



ITEM NO.	PART NUMBER	DESCRIPTION	GUARD/QTY.
1	F37924_REV1	GUARD MULTITINER 1800 ASSY	1
2	SP03011_REV0	WASHER M10 FORM A	8



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