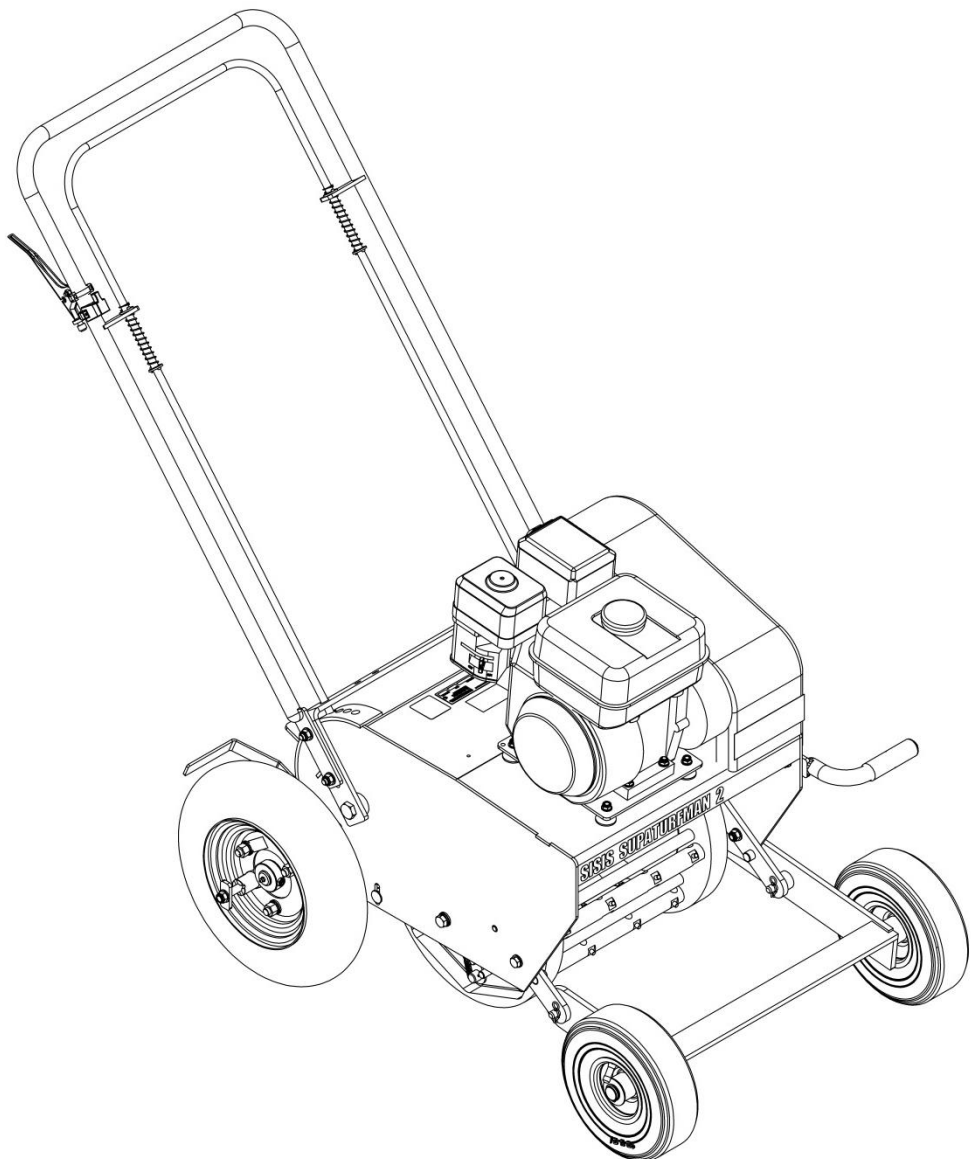


sisis®

SUPATURFMAN INSTRUCTION MANUAL



CERTIFICATE OF CONFORMITY

SUPATURFMAN CN Code: 84322990

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:-

Model: SUPATURFMAN

Measured Sound Power Level: 79dB Lwa

Guaranteed Sound Power Level:
98dB Lwa

Tested at:- Howardson Works test site AUGUST 2013

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

ENGINE SERIAL NUMBER

INTRODUCTION

The reliability and quality of performance of the **SISIS SUPATURFMAN** 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	SUPATURFMAN
WIDTH (mm)	843
LENGTH (mm)	1520
HEIGHT (mm)	1256
ENGINE	GX160
WEIGHT (Kg)	158
WORKING WIDTH (mm)	406
Hand Arm Vibration (m/sec^2)	<2.5
Measured Sound Power Level (dB(A))	79
Guaranteed Sound Power Level (dB(A))	98

IMPORTANT SAFETY INSTRUCTIONS



CAUTION:-

READ THE INSTRUCTIONS. We want you to obtain the best performance 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.
- Be extra careful to avoid spillage, when using petrol or diesel fuel. DANGER no smoking or naked flames.
- Use safety guards and make sure they are correctly in position. They are supplied for your protection.
- 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.
- Respect powered machines. Always keep hands and feet clear of moving parts and remember that tine cylinders or drums can continue to rotate even after the power unit is switched off.
- Switch off the power before making adjustments or repairs and never lift or carry a machine whilst any parts are moving.

EYE PROTECTION

In dry, dust or windy conditions it may be necessary to wear eye protection to protect your eyes from flying debris.

FIRE HAZARD

Always clean the machine. Remove all debris from around the engine. Blocked engine cooling fins can cause the engine to over heat.

in order to operate the machine safely please follow these health and safety guidelines.

TRAINING



CAUTION - *Read the instructions contained in this manual with care. If you are in any doubts ask your employer or contact us direct at SISIS.*

- Be familiar with the controls and the proper use of the equipment.
- Never allow children or people unfamiliar with these instructions to use the machine. Local regulations or insurance may restrict the age of the operator.
- Never operate while people, especially children, or pets are nearby.
- Keep in mind that the operator or the user is responsible for accidents or hazards occurring to other people on their property.

PREPERATION

- While operating always wear substantial footwear and long trousers. Do not operate the machine in bare foot or in open sandals.
- Thoroughly inspect where the equipment is to be used and remove all stones, sticks, wire, bones and other foreign objects



WARNING - *petrol is highly flammable and will damage grass if spilt.*

- A. Store fuel in containers specifically designed for this purpose
 - B. Refuel outdoors and do not refuel whilst smoking.
 - C. Add fuel before starting the engine. Never remove the cap of the fuel tank or add petrol while the engine is running or when the engine is hot.
 - D. If petrol is spilled do not attempt to start the engine but move the machine away from the area of spill and avoid creating any sources of ignition until the vapours have dissipated.
- Replace damaged or faulty silencers
 - Before using the machine always inspect the safety devices including the cut off switch and the blades for excessive wear or damage. Replace if necessary.

OPERATION

- Operate only in daylight or good artificial light.
- Always be sure of your footing on slopes.
- Walk. Never run.
- Exercise extreme care on slopes when changing direction.
- Do not operate on excessively steep slopes.
- Use extreme caution when reversing or pulling the machine towards you.
- Stop the tines when transporting the machine.
- Never operate the machine with defective guards or shields or without the safety devices, for example without the deflector plate or grass box in place.
- Do not change the engine governor settings or over speed the engine.
- Disengage all blades and drive clutches before starting.
- Start the engine carefully following the instructions with feet well away from the blades.
- Do not tilt the machine when starting the engine.
- Do not put hands or feet near or under moving parts.
- Never pick up or carry the machine while the engine is running.



CAUTION – Please read these operating instructions carefully before commencing work.

We want you to obtain the best performance from this machine. If you have any difficulties in carrying out the following instructions please contact SISIS direct or your local SISIS territory manager or SISIS dealer.

OPERATING PRINCIPLE

The SUPATURFMAN is based on the highly popular AUTO TURFMAN, redesigned and made wider so the working area can be covered in a quicker period of time.

Design Features – the SISIS SUPATURFMAN consists of a drum which rotates on roller bearings. The drum side plates are made from cast iron whilst the tine shafts are made of steel. Each spring tine bar rotates on nylon bearings and the tines exit the ground at the correct angle, giving minimum surface disturbance. The engine powers a pulley to a layshaft driven by V belts. This, in turn, drives a chain directly to the tine drum and a chain to the transport wheels, which are engaged by a sprung plunger on each wheel. A transport trolley may be fitted.

Assembly – Your SISIS SUPATURFMAN will be supplied without tines fitted. When fitting tines, place the drilled ends of the tine into the large holes in the tine bar and secure with pins and clips provided. It is essential that the hollow coring tines are fitted with the open side facing the centre of the drum. These should be set to just clear the wheels and should not be in contact with them.

Tine Bars – Check the tension of the springs from time to time ensuring that the tine bars click back to their stop under tension. When operating on very soft ground, soil may build up on the tine bar stops. This must be removed otherwise the tines cannot enter the soil at the correct angle and damage can be caused to the turf.

Tines

Round Pointed Tines (Summer) – Help moisture and air to get to the grass roots during the growing season, particularly useful for very hard conditions.

Coring Tines (Autumn) – removes cores of soil to relieve compaction caused by play and rolling or to make soil exchange. We recommend the use of 75mm coring tines.

Jumbo Tines – This larger bore tine provides two functions in combating some of the problems associated with fine turf. Firstly the larger hole produced allows more effective use of top dressings. Secondly when used at a controlled shallow depth they remove a good size 'plug' of thatch.

Slitting Tines (Autumn/Spring) – Encourage new root growth and permit the entry of fertilisers and dressings.

Important – Clean and oil all the 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 of the square sections of each bar.

Drum Drive/Wheel Drive Adjustment

Looking from the rear/handle end of the machine, the wheel drive chain tensioner is located in the slot on the right hand side plate. Loosen nut on the chain tensioner and push it upwards until there is approximately 6mm of play in the chain.

NOTE – over tensioning chains may cause damage and premature wear to this assembly.

Engine Vee Belt/Drive Clutch Adjustment

To adjust tension on v belt drive to engine. Loosen the 4 bolts securing the engine to the baseplate and move the engine in the slots until the desired tension is achieved.

To adjust the V belt clutch cable, remove top guard. This will reveal the cable end. Adjust the cable to the desired tension by loosening the nuts on the threaded portion of the cable end and adjust the cable to the desired tension. Always ensure that the securing nuts are retightened and the guard is replaced.

Operation

Adjust the handle to obtain the most comfortable operating height. To do this, lift up the handle plunger and move the handle up or down the quadrant as required. Release the handle plunger and allow the pins to engage the holes nearest to the selected position. (It is worth testing your Supaturfman on spare ground before using it on fine turf).

The ratchet pawls on the both wheels must be disengaged when operating the aerator. If they are engaged, the transport wheels, which are geared at a higher rate than the aerator drum, will skid and tear the turf. First check the oil level in the engine stump and top up if necessary. Start the engine, having positioned the machine at the start of a swath, with the drum clear of the ground pull the clutch lever to operate the tine drum to the ground. This will assist the drive and will prevent tearing of the turf whilst drive is taking place. The aerator will then be pulled across the turf by the tines.

It is only necessary to guide the machine with the handle but the handle may be lifted to apply extra weight on its tines for deeper penetration on hard ground. At the end of the swath depress the handle and lift the tines clear of the ground and manoeuvre into position ready for another run.



1.) Pencil Tine – F35079

Has all the benefits of the solid tine, but is more acceptable on greens because of the smaller surface hole. These tines are not as strong as the tapered tine so care must be taken on outfield turf or where stoney ground is prevalent.

2.) Chisel Tine – F35078

These encourage new root growth and permit the entry of fertilisers and dressings.

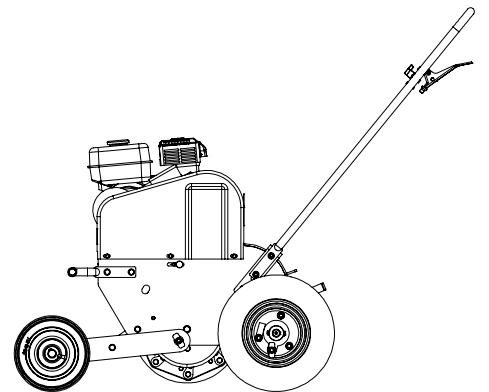
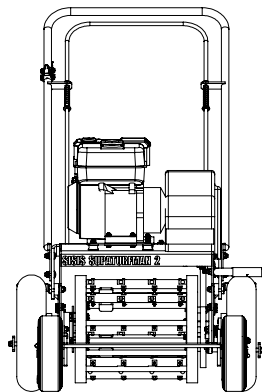
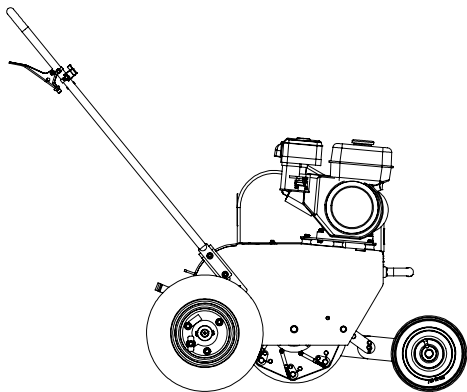
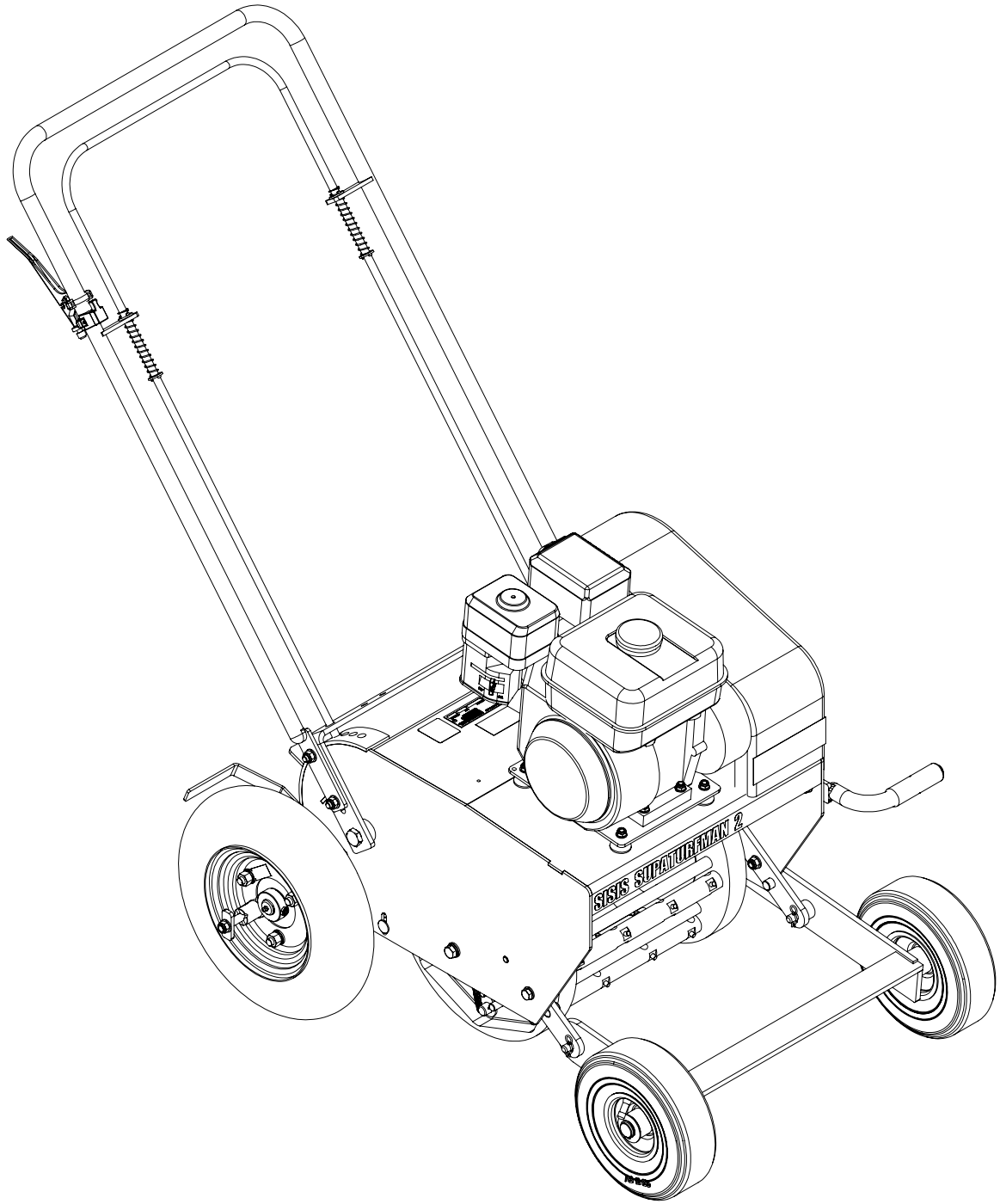
3.) Round Pointed Solid Tines – F34682

Used to assist moisture and air getting to the grass roots during the growing season.

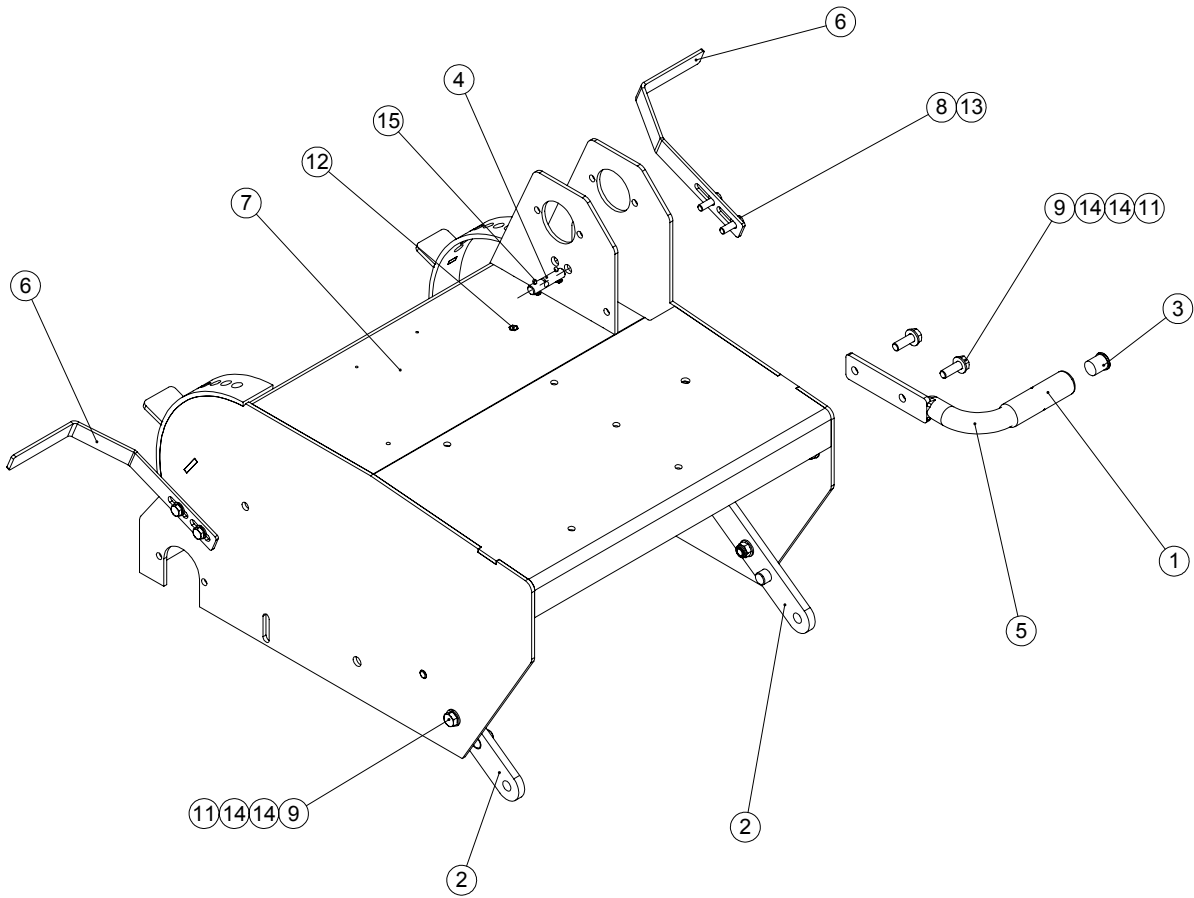
4.) Hollow Tine – F35078

These remove cores of soil to relieve compaction caused by play and rolling and to exchange soil. In areas where compaction is severe use round solid tine treatment say 4-6 weeks before hollow tining to allow moisture to penetrate the compacted layer.



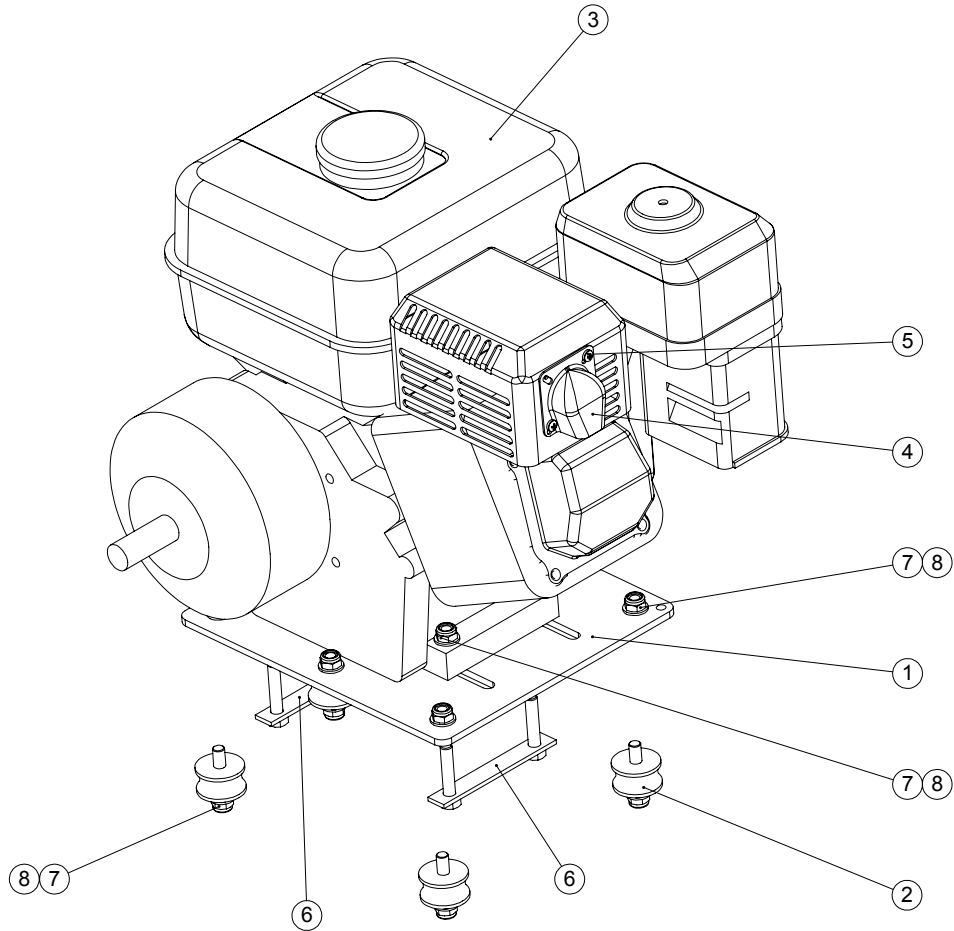


CHASSIS



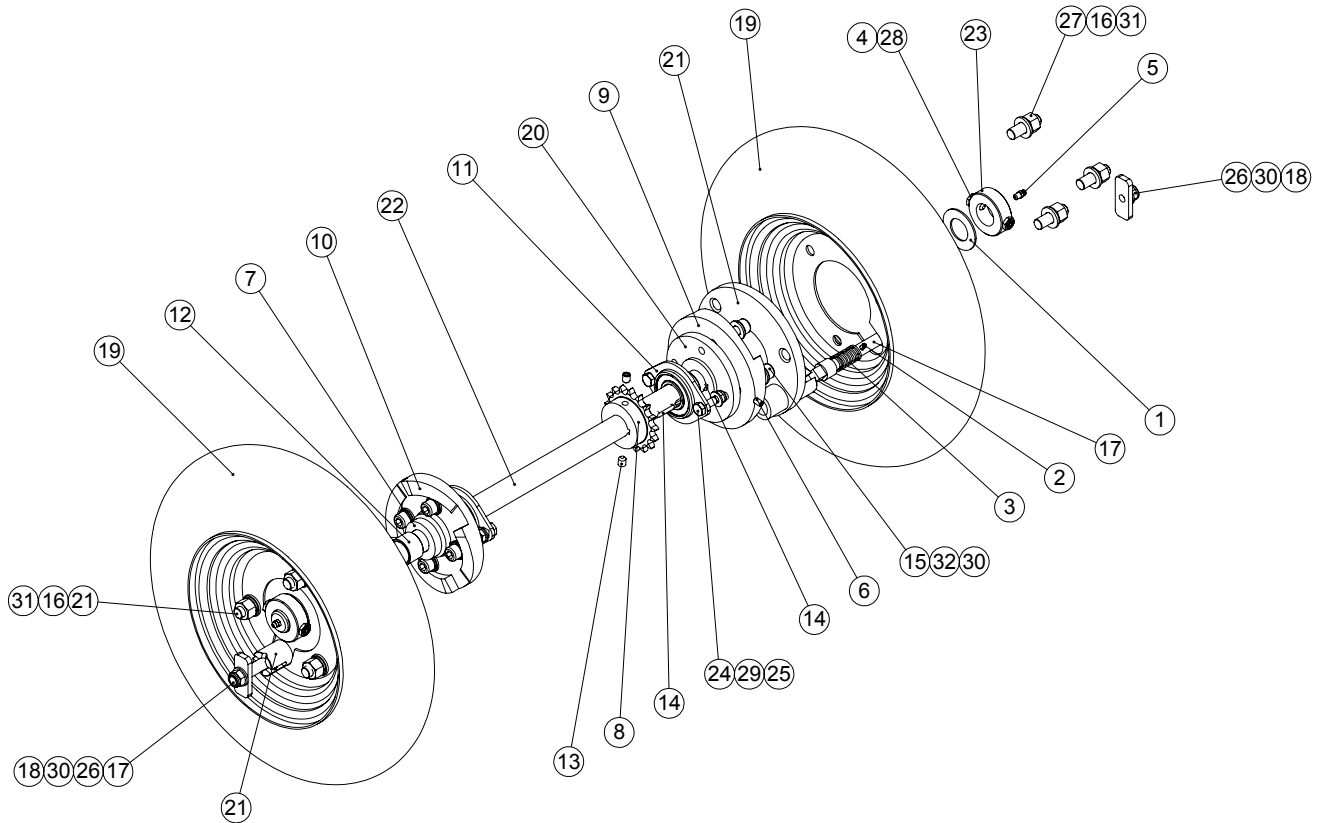
ITEM NO.	PART NUMBER	DESCRIPTION	CHASSIS/QTY.
1	D8256_REV1	FOAM HANDLE GRIP	1
2	E1-4416_REV1	IMPLEMENT BRACKET	2
3	F21717_REV1	TUBE INSERT 22MM RND	1
4	F30527_REV1	CABLE SUPPORT	1
5	F30583_REV1	HANDLE	1
6	F32096_REV1	WHEEL SCRAPER	2
7	F33312_REV4	CHASSIS ASSY (SUPER TURFMAN)	1
8	SP01045_REV0	HEX SET SCREW M8 X 25	4
9	SP01105_REV0	HEX SET SCREW M10 X 30	4
10	SP02006_REV0	NUT M8 NYLOC (T)	4
11	SP02008_REV0	NUT M10 NYLOC (T)	4
12	SP02043_REV0	RIVNUT HEX M6 (4.0-6.0) [NO HEAD]	4
13	SP03008_REV0	WASHER M8 FORM A	8
14	SP03011_REV0	WASHER M10 FORM A	8
15	SP05010_REV0	SPLIT PIN 1/8" X 1"	2

ENGINE



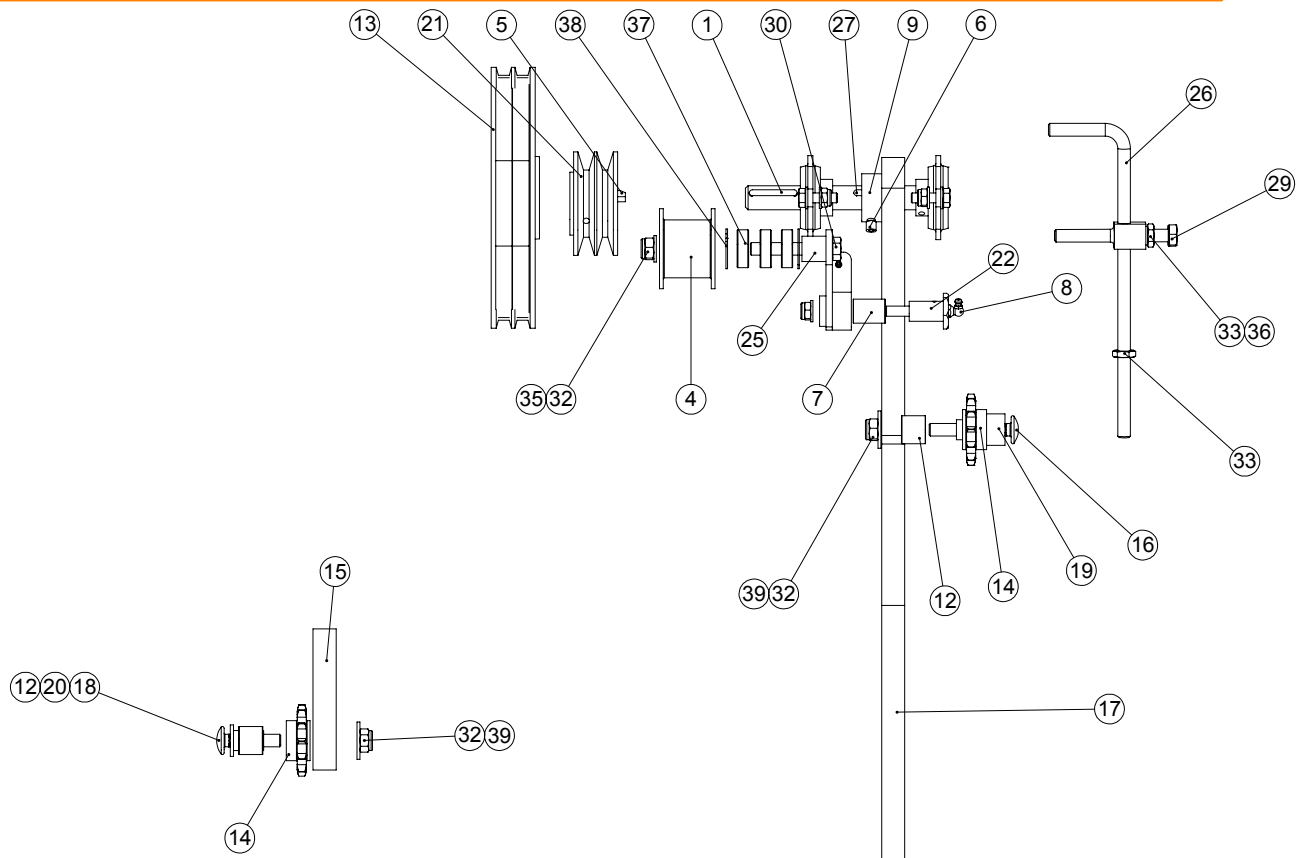
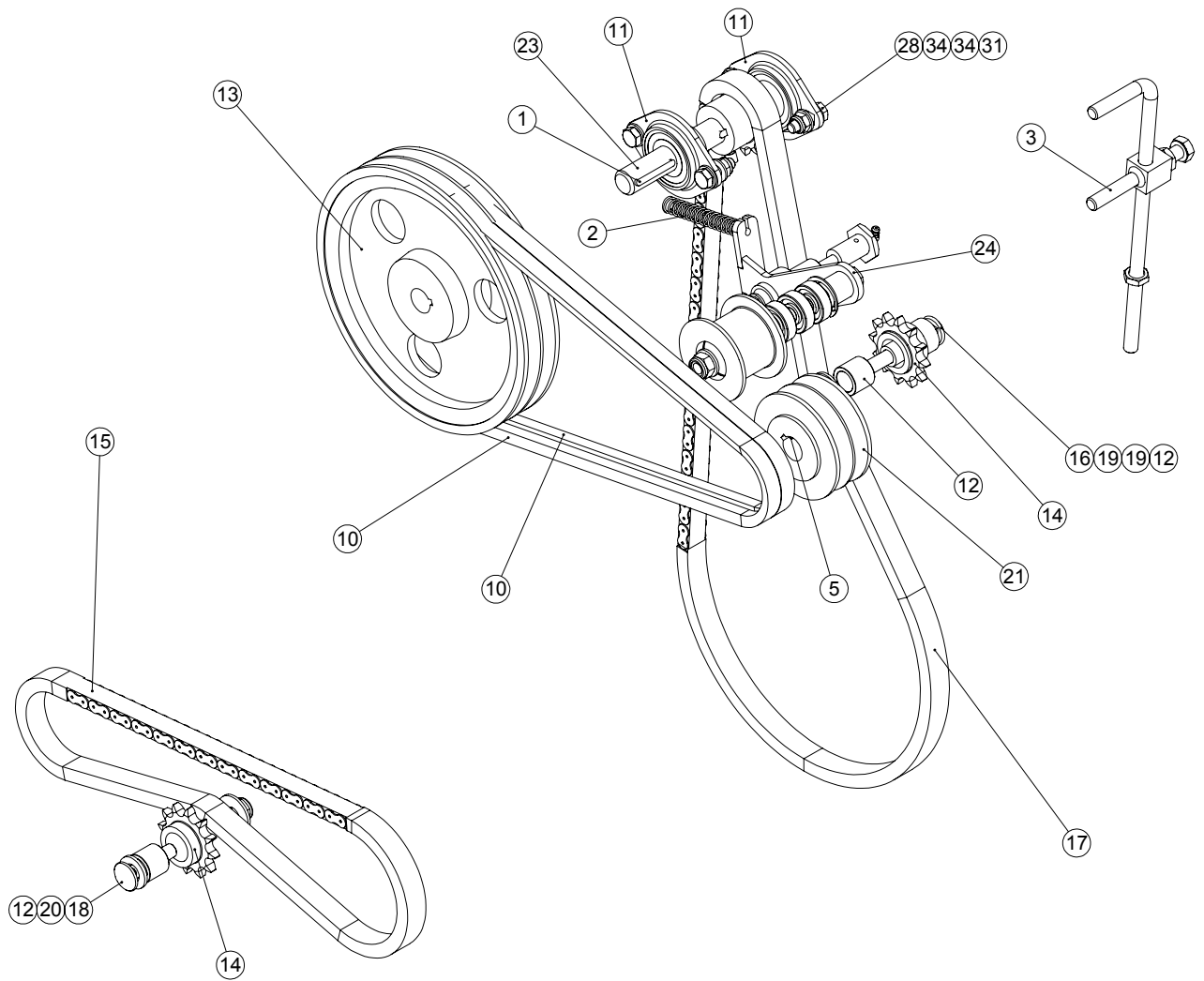
ITEM NO.	PART NUMBER	DESCRIPTION	ENGINE/QTY.
1	400914_REV0	ENGINE PLATE	1
2	D4534_REV1	RUBBER MOUNTING	5
3	F21734_REV1	ENGINE HONDA GX160 HX4-OH	1
4	J20367_REV0	EXHAUST DEFLECTOR	1
5	J20368_REV0	SCREW M4 EXHAUST DEFLECTOR	2
6	J209050_REV1	FIXING PLATE ASSY	2
7	SP02006_REV0	NUT M8 NYLOC (T)	14
8	SP03008_REV0	WASHER M8 FORM A	14

REAR WHEELS



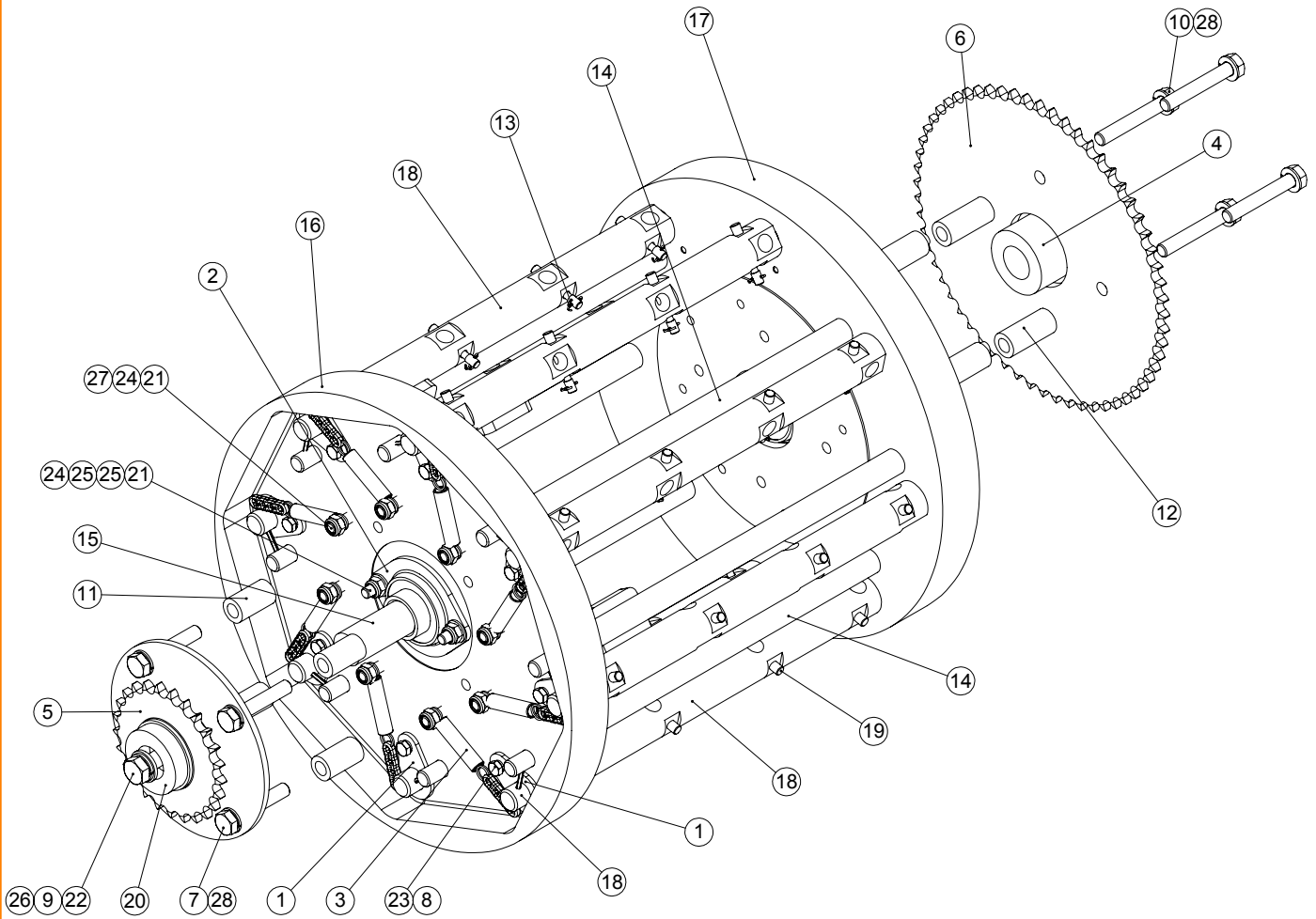
ITEM NO.	PART NUMBER	DESCRIPTION	REAR WHEELS/QTY.
1	D1083_REV0	WASHER 1" LIGHT	2
2	D1398_REV0	SEL-LOC PIN 3/16" X 1"	2
3	D1800_REV0	SPRING 3/4" OD X 1 1/2" LONG	2
4	D1938_REV1	GRUB SCREW M8 X 10	4
5	D1947_REV1	GREASE NIPPLE M6	2
6	D1989_REV0	GRUB SCREW M6 X 10	2
7	D2907_REV1	WHEEL SPACER	2
8	D6771_REV1	SPROCKET 08B1 17T	1
9	D7044_REV1	RATCHET LEFT HAND	1
10	D7045_REV1	RATCHET RIGHT HAND	1
11	D8032_REV0	BEARING BPFL5-25	2
12	D8129_REV0	BUSH AM2530 - 20	4
13	D8153_REV1	GRUB SCREW M8 X 10	2
14	D8165_REV0	KEY PARALLEL 6 X 6 X 25	3
15	D8757_REV0	CAP HEAD M10 X 25	8
16	E1-1065_REV0	SPRING WASHER M12 SQUARE SECTION	6
17	E1-5222_REV0	DRIVE PIN	2
18	E1-5223_REV1	DRIVE PIN LEVER	2
19	F30519_REV1	WHEEL 16 X 4-4	2
20	F30521_REV1	RATCHET MOUNT	2
21	F30522_REV1	WHEEL HUB	2
22	F33324_REV1	AXLE	1
23	F33719_REV1	LOCKING COLLAR Z/P	2
24	SP01009_REV0	HEX SET SCREW M8 X 20	4
25	SP02006_REV0	NUT M8 NYLOC (T)	4
26	SP02008_REV0	NUT M10 NYLOC (T)	2
27	SP02009_REV0	NUT M12 STD	6
28	SP02012_REV0	NUT M8 LOCK (THIN)	4
29	SP03008_REV0	WASHER M8 FORM A	4
30	SP03011_REV0	WASHER M10 FORM A	10
31	SP03012_REV0	WASHER M12 FORM A	6
32	SP03034_REV0	WASHER M10 SPRING LOCK	8

DRIVE SYSTEM



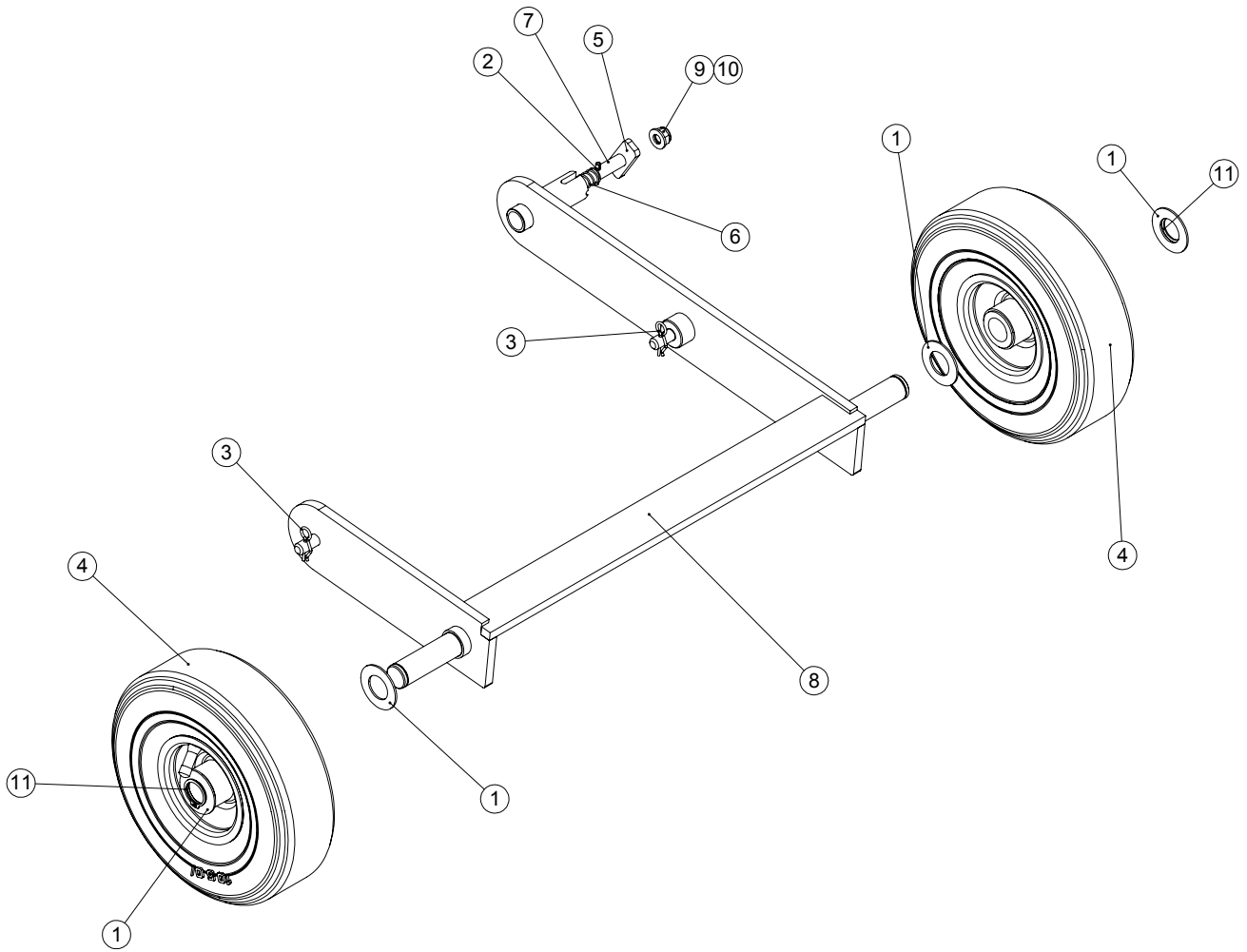
DRIVE SYSTEM

ITEM NO.	PART NUMBER	DESCRIPTION	DRIVE/QTY.
1	073445_REV0	KEY 3/16" X 3/16" X 2 1/4" RD END	1
2	229421_REV1	CABLE RETURN SPRING (NOT CYLINDER)	1
3	400915_REV0	BELT SUPPORT	1
4	401870_REV0	PULLEY BODY 38MM	1
5	D1004_REV1	KEY GIB HEAD 3/16" x 3/16"	1
6	D1306_REV1	GRUB SCREW 5/16" BSF X 5/16"	1
7	D1727_REV1	BUSH AI1012 - 1"	1
8	D1948_REV0	GREASE NIPPLE 6MM 90 DEG	1
9	D2908_REV1	SPROCKET 08B1 13T	1
10	D2934_REV1a	BELT V A 40 1/2 arimid, cotton wrapped*	2
11	D2991_REV1	BEARING BPFL4-12	2
12	D2992_REV1	BUSH AI1014 3/4"	2
13	D3821_REV1	PULLEY V SPA2 8inchesinches PCD	1
14	D6686_REV1	SPROCKET 08B-1 12	2
15	D8007_REV1 (2)	CHAIN 69P X 1/2 PITCH INC CON	1
16	D8224_REV1	COACH BOLT M10 X 65	1
17	F20121_REV1	CHAIN 102 PITCH	1
18	F20254_REV1	COACH BOLT M10 X 45	1
19	F30528_REV1	CHAIN TENSIONER BUSH	1
20	F30529_REV1	CHAIN TENSIONER BUSH	1
21	F30686_REV1	PULLEY V SPA2 3INCHESINCHES PCD	1
22	F32972_REV1	CHAIN TENSION SHAFT	1
23	F33451_REV1	COUNTER SHAFT	1
24	F33750_REV1	PULLEY ARM ASSY	1
25	F34171_REV1	SPACER	1
26	F35589_REV3	BELT ARM	1
27	J20457_REV1	KEY 3/16" X 3/16" X 1" RD END	1
28	SP01045_REV0	HEX SET SCREW M8 X 25	4
29	SP01105_REV0	HEX SET SCREW M10 X 30	1
30	SP01145_REV0	HEX SET SCREW M10 X 65	1
31	SP02006_REV0	NUT M8 NYLOC (T)	5
32	SP02008_REV0	NUT M10 NYLOC (T)	3
33	SP02013_REV0	NUT M10 LOCK (THIN)	2
34	SP03008_REV0	WASHER M8 FORM A	9
35	SP03011_REV0	WASHER M10 FORM A	1
36	SP03029_REV0	WASHER M8 SPRING LOCK	1
37	SP06012_REV0	BEARING 6200-2RS	3
38	SP07012_REV0	CIRCLIP D1300 - 030	2
39	SP03018_REV1	WASHER M10 FORM G	2



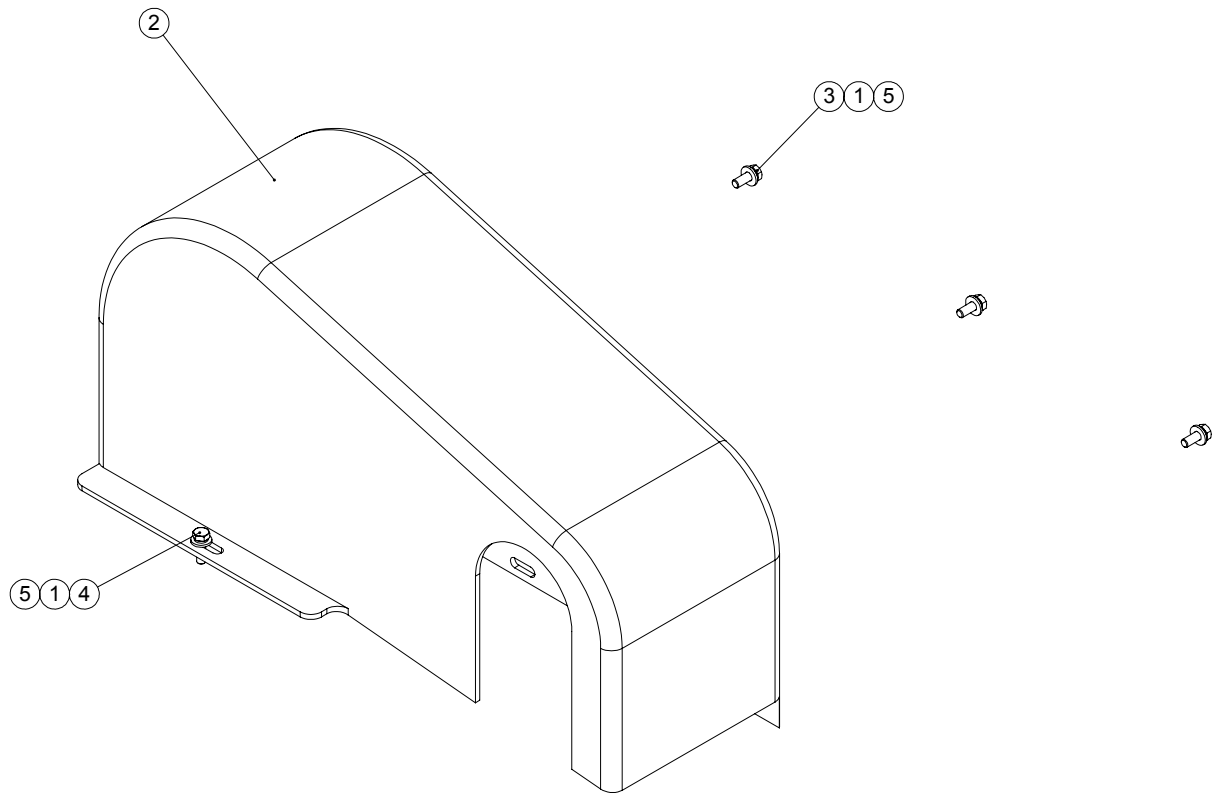
ITEM NO.	PART NUMBER	DESCRIPTION	REEL/QTY.
1	D1511_REV3	TINE BAR BEARING	16
2	D1588_REV0	BEARING BPFL5-16	2
3	D2896_REV1	SPRING & CHAIN ASSY	8
4	D2897_REV1	SPACER	1
5	D2909_REVA	SPROCKET 08-B1 25	1
6	D2910_REVA	SPROCKET 08-B1 60	1
7	D8229_REV0	HEX SET SCREW M10 X 55	4
8	E1-1061_REV0	WASHER M6 SPRING	16
9	E1-1065_REV0	SPRING WASHER M12 SQUARE SECTION	2
10	E1-1130_REV0	HEX BOLT M10 X 65	4
11	E1-2898_REV1	SPACER	4
12	E1-2899_REV1	SPACER	4
13	F21597_REV1	SPLIT PIN S/S 1.96 X 20	32
14	F33314_REV1	STAY BAR	8
15	F33319_REV1	PIERCING UNIT SHAFT	1
16	F33325_REV2	SIDE PLATE R.H.	1
17	F33326_REV2	SIDE PLATE L.H.	1
18	F34680_REV1	TINE BAR ASSY (TURFMAN)	8
19	F35664_REV1	PIN TAPER	32
20	F37938_REV2	SPACER	1
21	SP01005_REV0	HEX SET SCREW M8 X 30	12
22	SP01059_REV0	HEX SET SCREW M12 X 25	2
23	SP01088_REV1	HEX SET SCREW M6 X 12	16
24	SP02006_REV0	NUT M8 NYLOC (T)	12
25	SP03008_REV0	WASHER M8 FORM A	8
26	SP03012_REV0	WASHER M12 FORM A	2
27	SP03029_REV0	WASHER M8 SPRING LOCK	8
28	SP03034_REV0	WASHER M10 SPRING LOCK	8

FRONT WHEELS



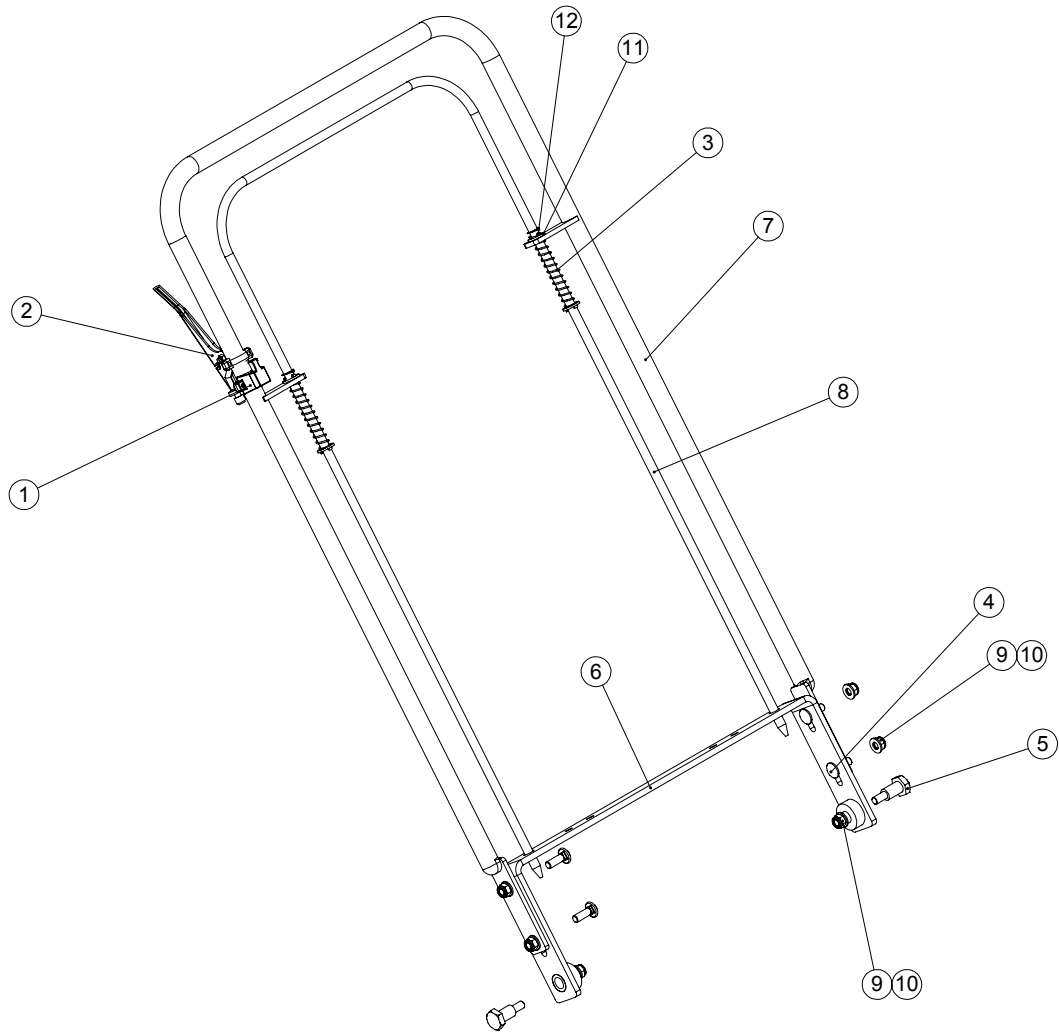
ITEM NO.	PART NUMBER	DESCRIPTION	FRONT WHEELS/QTY.
1	D1083_REV0	WASHER 1" LIGHT	4
2	D1398_REV0	SEL-LOC PIN 3/16" X 1"	1
3	D1899_REV1	R-CLIP (REF S490009)	2
4	D8733_REV0	WHEEL	2
5	E1-5223_REV1	DRIVE PIN LEVER	1
6	F21172_REV1	SPRING COMPRESSION	1
7	F30534_REV1	DRIVE PIN	1
8	F33321_REV6	WHEEL BRACKET	1
9	SP02008_REV0	NUT M10 NYLOC (T)	1
10	SP03011_REV0	WASHER M10 FORM A	1
11	SP07011_REV0	CIRCLIP D1400-25	2

GUARD



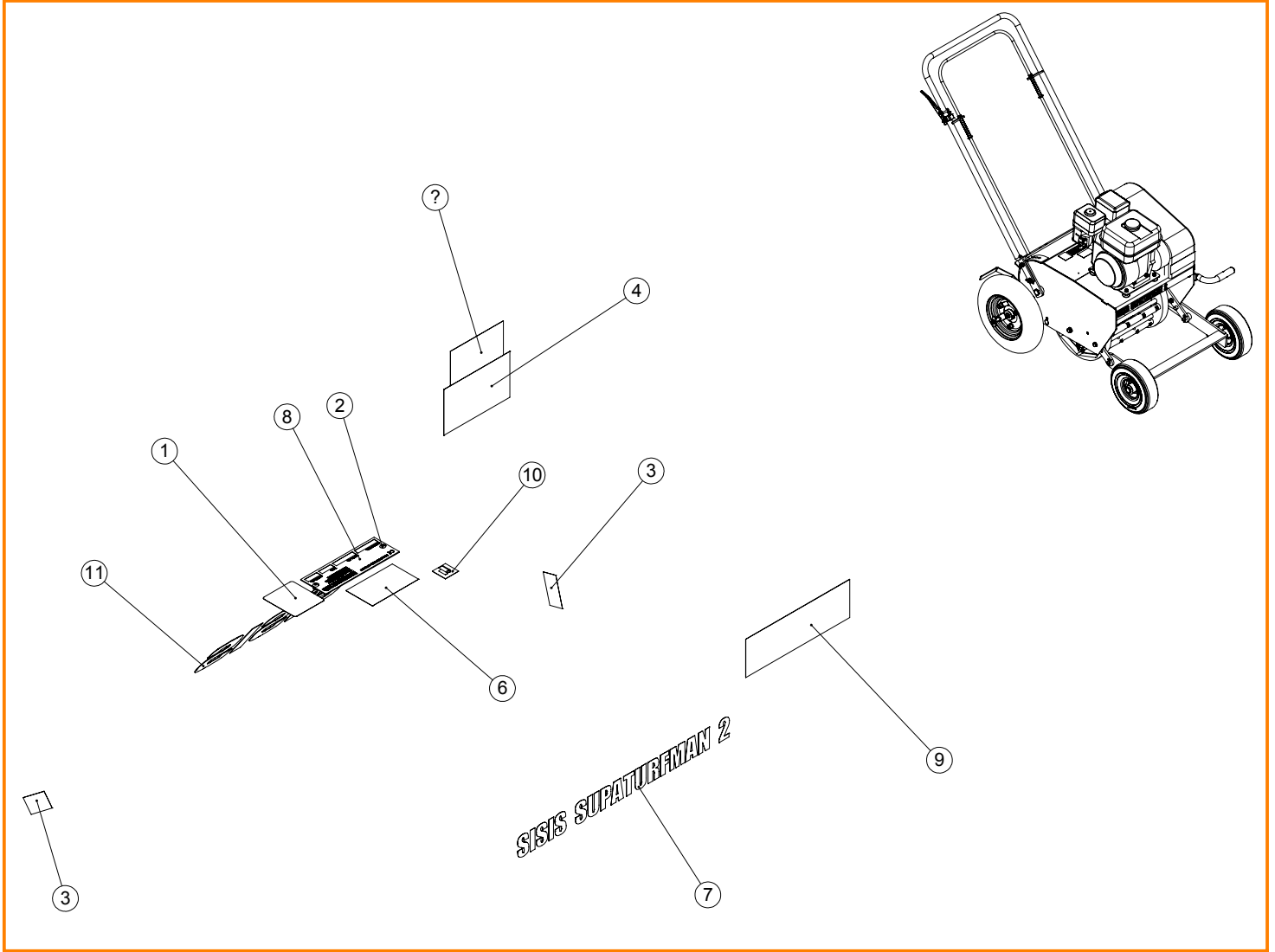
ITEM NO.	PART NUMBER	DESCRIPTION	GUARD/QTY.
1	E1-1061_REV0	WASHER M6 SPRING	4
2	F33452_REV1	DRIVE GUARD - SUPATURFMAN	1
3	SP01008_REV0	HEX SET SCREW M6 X 16	3
4	SP01028_REV0	HEX SET SCREW M6 X 20	1
5	SP03014_REV0	WASHER M6 FORM C	4

HANDLES



ITEM NO.	PART NUMBER	DESCRIPTION	HANDLES/QTY.
1	D1394_REV1	ON/OFF SWITCH	1
2	D1442_REV1	BRAKE BAND LEVER	1
3	D2097_REV1	PLUNGER SPRING	2
4	E1-1208_REV0	COACH BOLT M10 X 30	4
5	F30526_REV1	PIVOT PIN	2
6	F33320_REV1	HANDLE FRAME W.A.	1
7	F33322_REV1	HANDLE ASSY	1
8	F33323_REV1	HANDLE PLUNDGER	1
9	SP02008_REV0	NUT M10 NYLOC (T)	6
10	SP03011_REV0	WASHER M10 FORM A	6
11	SP03012_REV0	WASHER M12 FORM A	4
12	SP05010_REV0	SPLIT PIN 1/8" X 1"	4

DECALS



ITEM NO.	PART NUMBER	DESCRIPTION	DECALS/QTY.
1	229605_REV0	98 Db DECAL	1
2	D1871_REV1	RIVET 3.2 X 6	2
3	D2572_REV1	TRANSFER	2
4	F32426_REV1	TRANSFER	1
5	F33384_REV1	TRANSFER	1
6	F34001_REV1	TRANSFER	1
7	F35250_REV1	SUPA-TURFMAN 2 TANSFER	1
8	F36000_REV2	SERIAL NO PLATE (SISIS)	1
9	F37860_REV1	LABEL SISIS UNION JACK	1
10	HUEO-004-81_REV1	STICKY CABLECLIP SMALL	1
11	SP18007_REV0	DECAL SISIS BLACK	1

ELECTRICAL PARTS - NOT SHOWN FOR CLARITY

ITEM NO.	PART NUMBER	DESCRIPTION	ELECTRICAL/QTY.
1	D1406_REV1	CABLE STANDARD CLUTCH	1
2	SP12015_REV0	ELECTRICAL CONNECTOR FEMALE BULLET (RED)	1
3	SP12017_REV0	ELECTRICAL CONNECTOR 5MM RING (RED)	1
4	SP12056_REV1	ELECTRIC CABLE TWIN	1





sisis®

SISIS, Ashbourne Road, Kirk Langley, Derbyshire, DE6 4NJ, England

**Tel: +44 (0) 1332 824 777
Fax: +44 (0) 1332 824 525**

Email: info@sisis.com

www.sisis.com