



Australian Turf Machinery Pty Ltd

The **ATM HYDRO MOWER** is not just a new dimension in simplicity with far fewer working parts, but a **Bowling Green Mower** which the operator can cut

at the **speed required**, for the conditions of the cutting day. With **infinitely variable speed control** to the rear roller which is provided by the **Hydrostatic Transmission** giving **total operator control**.

The **ATM** is compatible in most of It's spare parts with the **30" QUEEN**, as far as the Cutting cylinder, front roller, sole plate, bottom blades and most of the adjustment parts.



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MANUAL

AUSTRALIAN TURF MACHINERY

“HYDROSTATIC MOWER”

OPERATING INSTRUCTIONS

AND

MAINTENANCE GUIDE



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LUBRICATION

Pre-lubricated, sealed ball races are fitted to the cutter, drum shaft, countershaft and front roller. No further lubrication is necessary. The can clutch beatings in the rear roller should be serviced every 12 months. The service the roller, pull out drum from mower, loosen lock collar pull drum shaft out from drums, clean cam bearings in kero and repack with water resistant grease, when refitting shaft to drums make sure the spacer washer are replaced in between the roller drums.

CLEANING

This mower is constructed of first-class materials, and will give longer and more efficient service if kept clean.

After cutting and before putting machine away, spray cutting cylinder with CRC; occasionally check nuts and bolts for tightness.

WARNING

Never run mower unless all guards are fitted.

State Electricity Authority regulations provide that it is necessary to disconnect power supply before effecting any adjustments to the mower.

ELECTIC MOTOR

1.5kw 2hp Three Phase.

1.5jw 2hp Single Phase.



SETTING GAUGE

This illustrates the method of setting the gauge to the height of cut. Where in this instance height of cut is a twenty-cent piece and a five-cent coin. The distance between the setting gauge bar and the underside of the adjustable screw head represents the height of cut. Lock the screw in the desired position with the wing nut.

To use the setting gauge, rest it against the underside of the front and rear rollers. As illustrated, and by adjusting the front roller, the desired height of cut will be obtained when the underside of the screw head lightly touches the top cutting edge of the bottom blade across its full width.

When using the setting gauge. Take care not to force the head of the adjusting screw onto the bottom blade, as this could distort the blade and effect the set.





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TO CHECK THE MOWER FOR ALIGNMENT

LAY THE MOWER BACK ON THE HANDLE OR IN THE AUSTRALIAN TURF MACHINERY WORK STATION.

CHALK THE THIN FRONT EDGE OF THE BOTTOM BLADE ABOUT 6" OF ITS LENGTH AT BOTH ENDS.

WITH THE FRONT ROLLER REMAINING IN APPROXIMATELY ITS NORMAL HEIGHT SETTING, "SIGHT" THE BOTTOM OF THE FRONT ROLLER RELATIVE TO THE CHALKED CUTTING EDGE OF THE BLADE.

ADJUST THE FRONT ROLLER INTO EXACT ALIGNMENT WITH THE CUTTING EDGE, CONTINUALLY SIGHTING WHILE ADJUSTMENT PROCEEDS.

LOCK THE ROLLER AND RECHECK.

NOW USE YOUR HEIGHT SETTING BAR AS AN ALIGNING TOOL BY PLACING THE BAR AGAINST THE FRONT ROLLER AND THE REAR ROLLER ON THE EXTREME **LEFT HAND SIDE**.

ADJUST THE SETTING BAR SCREW SO THAT IT JUST CONTACTS THE BOTTOM BLADE CUTTING EDGE.

TEST THE RIGHT HAND SIDE OF THE ROLLERS WITH THE SAME SETTING, AND ADJUST THE REAR ROLLER UP OR DOWN UNTIL THE SAME SCREW CONTACT IS ACHIEVED ON THE BLADE.

AS THE MOVEMENT OF THE REAR DRUM COULD EFFECT THE ORIGINAL L.H.S. SETTING SLIGHTLY, RESET THE SCREW AT THE L.H.S. AND RECHECK THE R.H.S.

ALL ELEMENTS OF YOUR MACHINE WILL NOW BE IN PERFECT ALIGNMENT.

AFTER TIGHTENING ALL ADJUSTMENTS, A FINAL CHECK SHOULD BE MADE.

THE REQUIRED HEIGHT OF CUT CAN NOW BE CHECKED AND SET IN THE NORMAL MANNER. REFER SECTION ON 'SETTING GAUGE'.

WHILE THE PROCEDURE MAY SEEM COMPLICATED IT IS IN FACT VERY SIMPLE TO PERFORM AND CAN BE CARRIED OUT IN LESS THAN 15 MINUTES. THE SIGHTING IS EASY AND ACCURATE BECAUSE IT IS DONE FROM THE FRONT ROLLER, WHICH IS NEAREST TO THE OPERATOR. A MACHINE THAT IS 'TRUE' WILL PAY DIVIDENDS BY PRECISION CUTTING OF YOUR GREEN.



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POWER SUPPLY

A socket is supplied with the AUSTRALIAN TURF MACHINERY MOWER

(A) 3 phase 415-volt socket or 240-plug socket.

IMPORTANT

(It is a MUST TO HAVE A FULLY LICENSED ELECTRICIAN TO WIRE THE SOCKET TO THE LEAD) and 3 phase mower to be checked for the correct direction of rotation.



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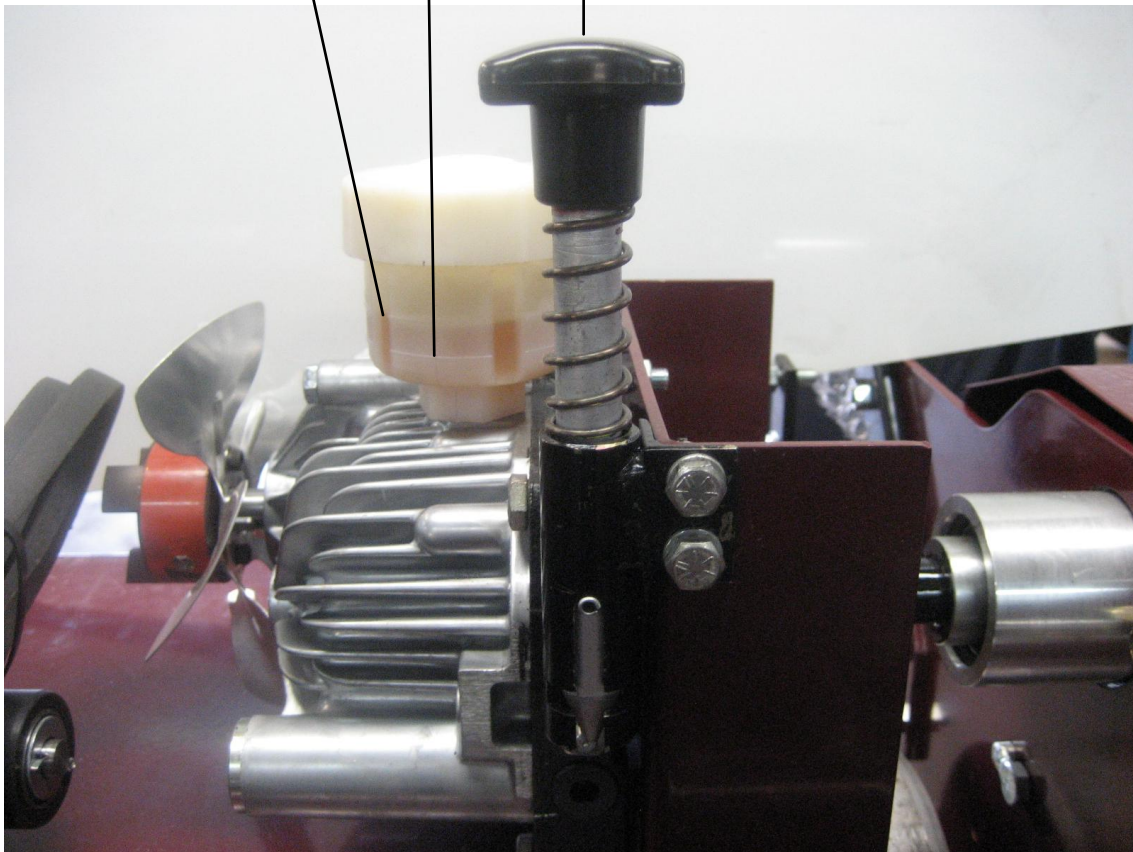
The oil used in the **Hydrostatic Drive** is **MOBIL ONE**. The **oil level** is **marked** on the **oil reservoir**. When the unit is **cold** the oil level should be on the **lower oil level mark**, when the unit is **hot** oil level should be on the **upper oil level mark**. The **temperature range** of the unit is **98c** for **maximum performance**.

Hydrostatic drive dump valve when depressed the unit is disengaged, this enables the mower to be moved around without having power to unit. To mow make sure the dump valve is in the upper position. **(The dump valve must be in the upper position to remove motor cover).**

UPPER LEVEL MARK

↑ LOW MARK

↑ DUMP VALVE



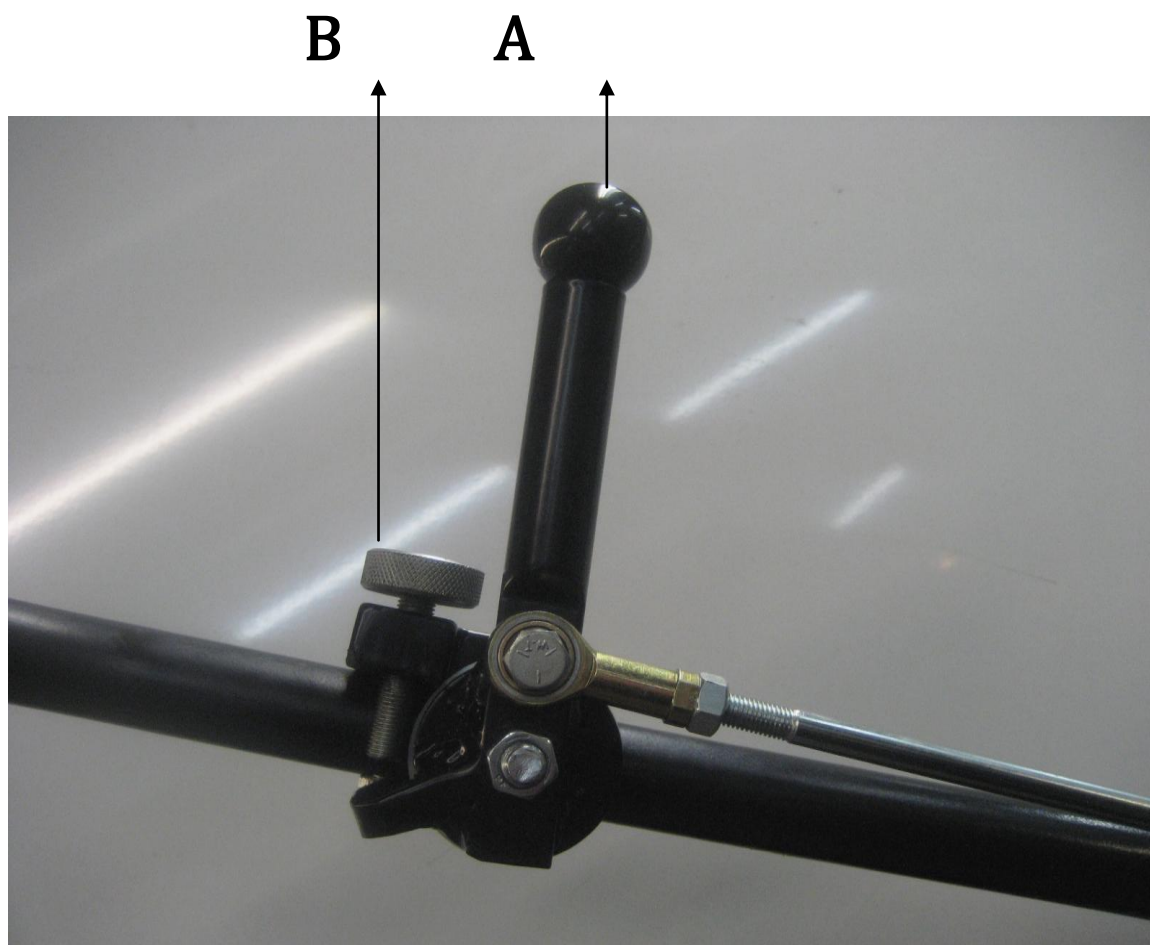


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CONTROL LEVER

(A) To operate, push lever fully forward, (it is not necessary to apply too much pressure) to come to a stop, pull lever back. It is necessary to back pressure off lever when adjusting speed control, for correct speed control.

(B) You can adjust knob to set speed just turn knob up or down to set stop then you will be able to have the same speed on the day required

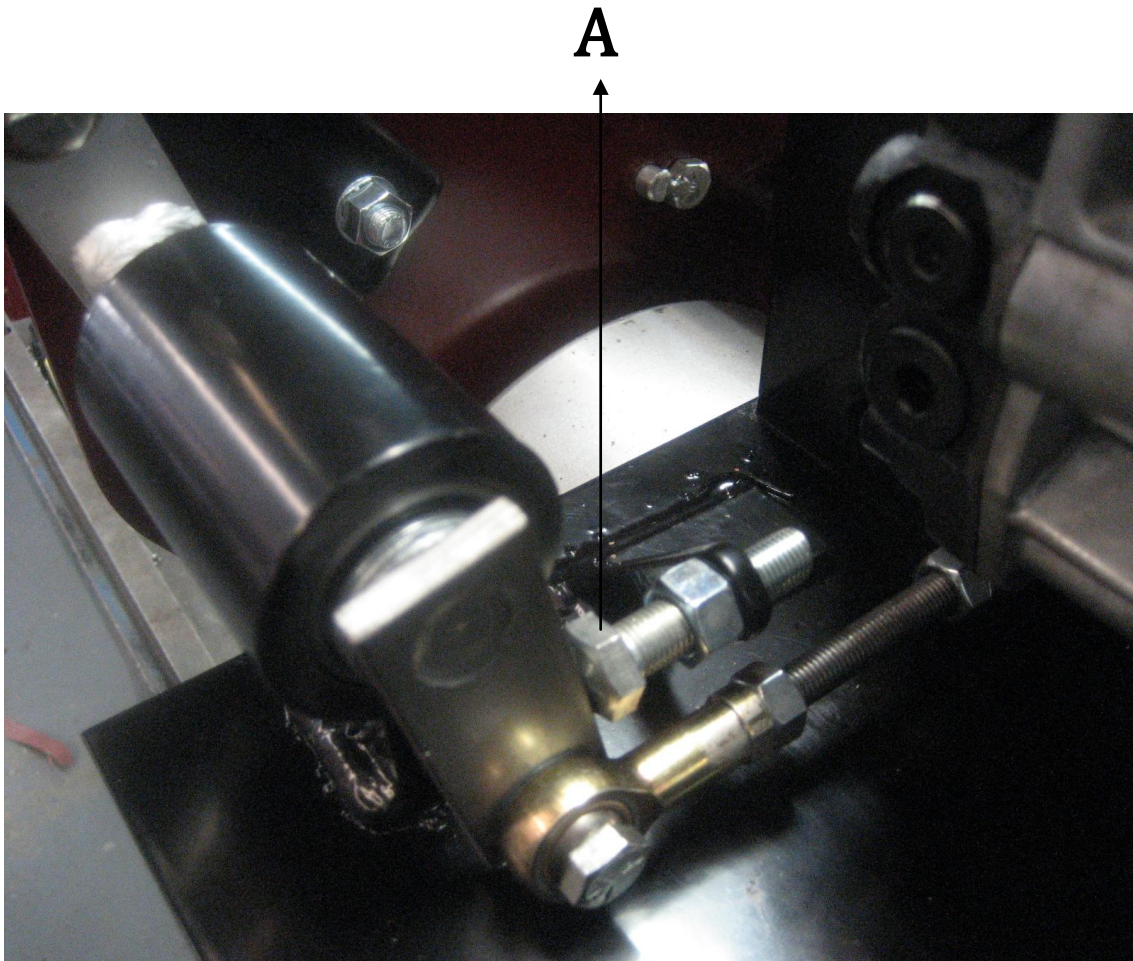




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(A) ADJUST STOP TO ALLOW REVERSE ON COUNTER SHAFT TO REAR DRUMS THEN LOCK ADJUST.

THIS WILL ALLOW THE MOWER TO BE PULLED BACK WHEN THE LEVEL IS IN NEUTRAL.

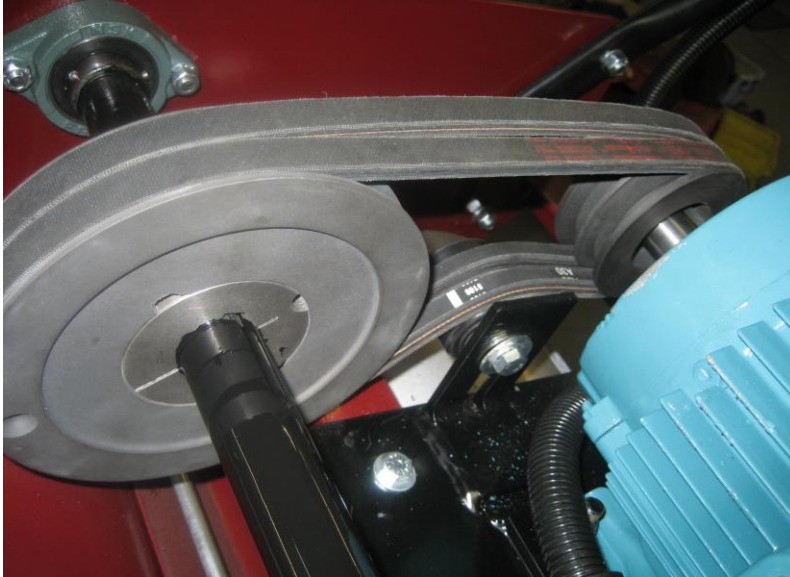




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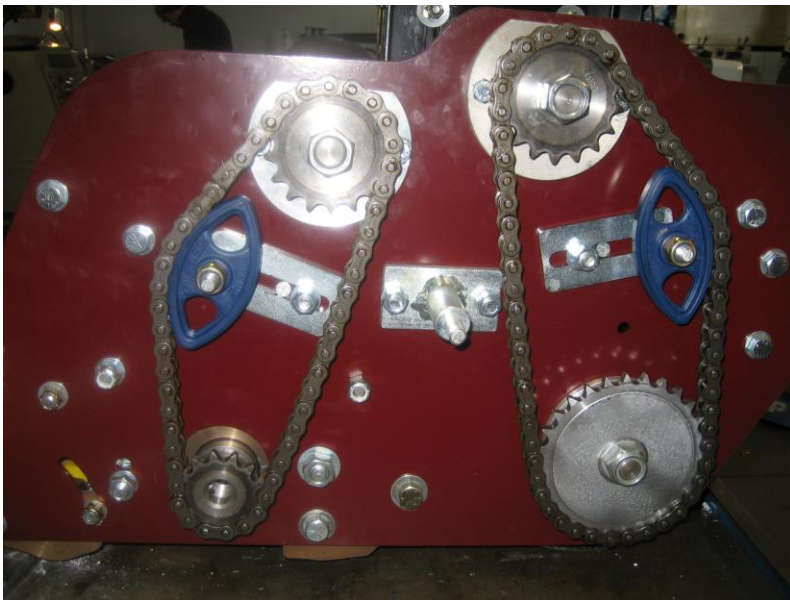
THE FOUR BELTS, COUNTER SHAFT TO CYLINDER.

(2) FIG 2 COUNTER SHAFT TO MOTOR



(1) FIG 1

COUNTER SHAFT TO CYLINDER & HYDROSTATIC DRIVE TO DRUM.



**THE CHAINS SHOULD NEVER BE ADJUSTED TIGHTLY.
IT IS ADVISABLE TO LEAVE SLIGHTLY MORE SLACKNESS ON THE
CUTTER CHAINS TO ALLOW FOR CUTTER ADJUSTMENT.**



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WARRANTY CONDITIONS

AUSTRALIAN TURF MACHINERY PTY LTD WARRANT THAT THIS MACHINE IS FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP. THIS WARRANTY IS LIMITED TO MAKING GOOD OR REPLACING ANY PART WHICH APPEARS UPON INSPECTION BY THE MANUFACTURER OR HIS AGENT TO BE DEFECTIVE IN MATERIAL OR WORKMANSHIP.

THIS WARRANTY SHALL APPLY FOR A PERIOD OF TWELVE (12) MONTHS, FROM DATE OF PURCHASE. THIS WARRANTY DOES NOT OBLIGATE THE MANUFACTURER, THEIR AGENTS OR DEALERS TO BEAR THE TRANSPORT COSTS INCURRED IN THE REPAIR OR REPLACEMENT OF ANY DEFECTIVE PART.

THIS WARRANTY EXCLUDES FAIR WEAR AND TEAR, OR ANY DAMAGE CAUSED BY MISUSE OR ABUSE.

THIS WARRANTY IS VOID IF PARTS OTHER THAN GENUINE HAVE BEEN USED OR IF REPAIRS OR ALTERATIONS HAVE BEEN MADE WITHOUT THE MANUFACTURERS WRITTEN AUTHORITY.

THE ABOVE WARRANTY DOES NOT EXCLUDE ANY CONDITION OR WARRANTY IMPLIED BY THE TRADE PRACTICES ACT 1974 OR ANY OTHER RELEVANT LEGISLATION WHICH IMPLIES ANY CONDITION OR WARRANTY WHICH CANNOT BE EXCLUDED.

Australian Turf Machinery Pty Ltd

Unit3/7 Millenium Place
Tingalpa, QLD, 4173

Phone: +61 7 3348-4415
Fax: +61 7 3348-4495

austturfmach@bigond.com



Australian Turf Machinery Pty Ltd

AUSTRALIAN TURF MACHINERY MOWER

PARTS LISTING



Australian Turf Machinery Pty Ltd

Purchasers Details:

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Purchased From:

Date Of Purchase:

Type of Machine:

Model No:

Serial No:

Engine No:

MANUFACTURED BY: ***Australian Turf Machinery Pty Ltd***

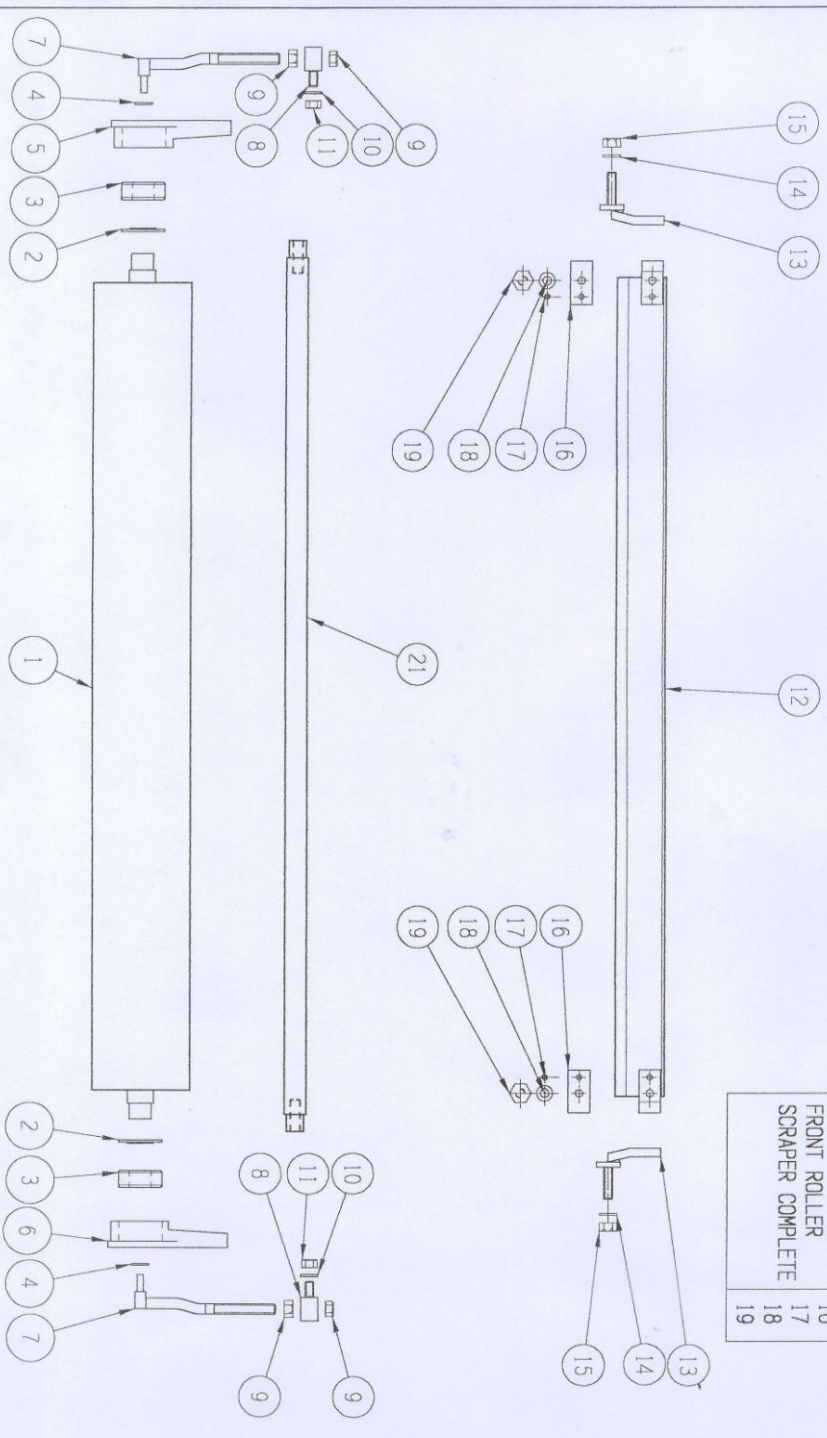
Unit 3, 7 Millennium Place
TINGALPA QLD 4173

Phone: (07) 3348-4415

Fax: (07) 3348-4495

Email: austturfmach@bigpond.com

**PLEASE COMPLETE AND RETURN THIS WARRANTY CARD TO THE ABOVE POSTAL
ADDRESS WITHIN 14 DAYS OF PURCHASE.**



20	
FRONT ROLLER	12
SCRAPER COMPLETE	16
	17
	18
	19



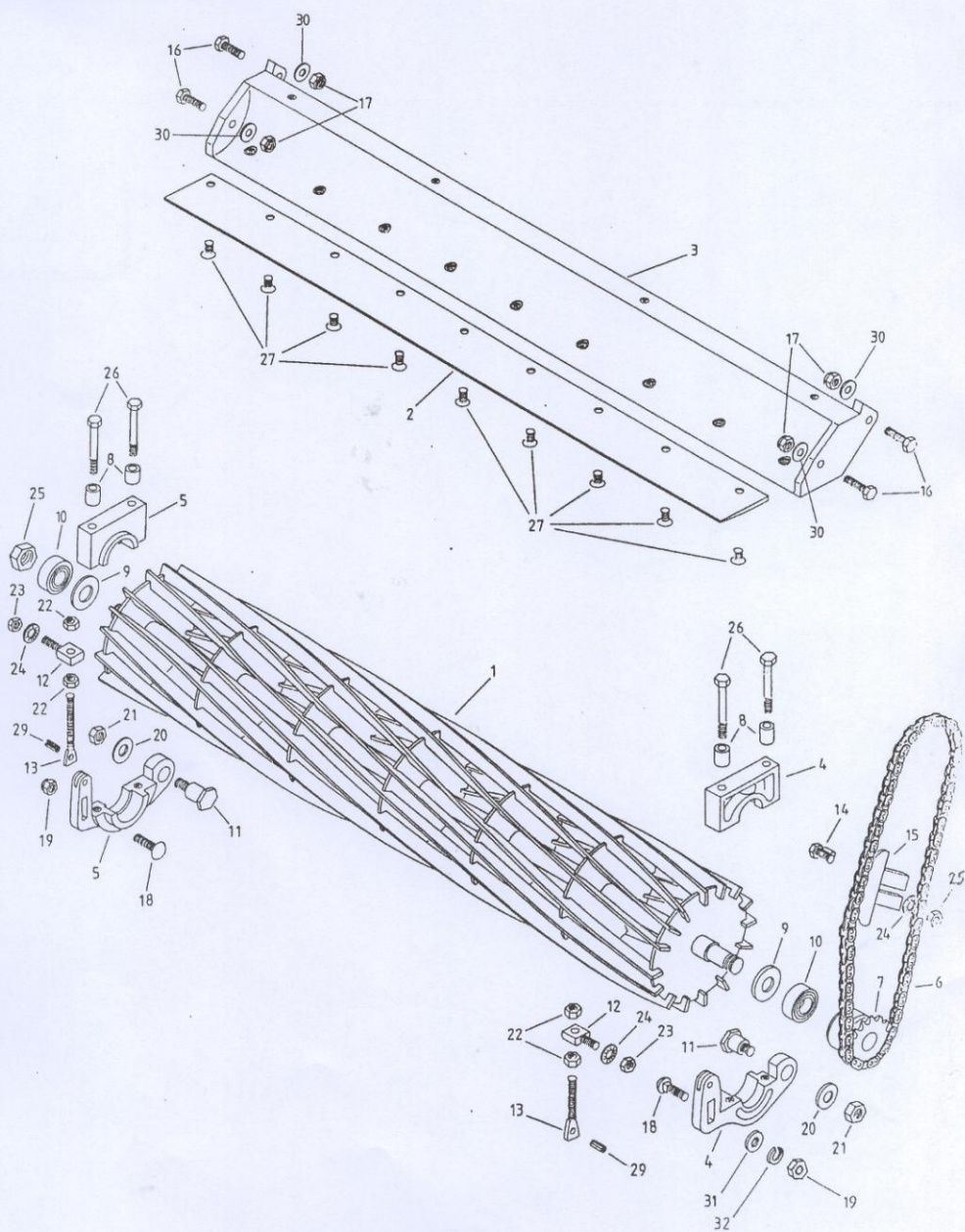
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SPARE PART LIST

ILLUS. Nº	PART Nº	DESCRIPTION
1	GM400	Front Roller
2	GM4001	Bearing Spacer Washer
3	GM4002	Front roller Bearings
4	GM4003	Starlock
5	GM4004	Front Roller Bracket R/H
6	GM4005	Front Roller Bracket l/H
7	GM4006	Front Roller Adjuster Rod
8	GM4007	Purchase Block
9	GM4008	Nut 3/8" UNF
10	GM4009	Washer S/Proof 5/16"
11	GM4010	Nut 5/16" UNF
12	GM4011	Front Roller Scraper
13	GM4012	Scraper Bolt Assembly
14	GM4013	Washer S/Proof 3/8"
15	GM4014	Nut 3/8" WW
16	GM4015	Scraper Plate Clamp
17	GM4016	Roll Pin
18	GM4017	Washer Flat 5/16" x 5/8 "
19	GM4018	Set Screw 5/16 x 3/4" UNF
20	GM4019	Front roller Scraper Complete
	NOT ILLUSTRATED	
21	GM425	V-Tray
22	GM426	Deflector



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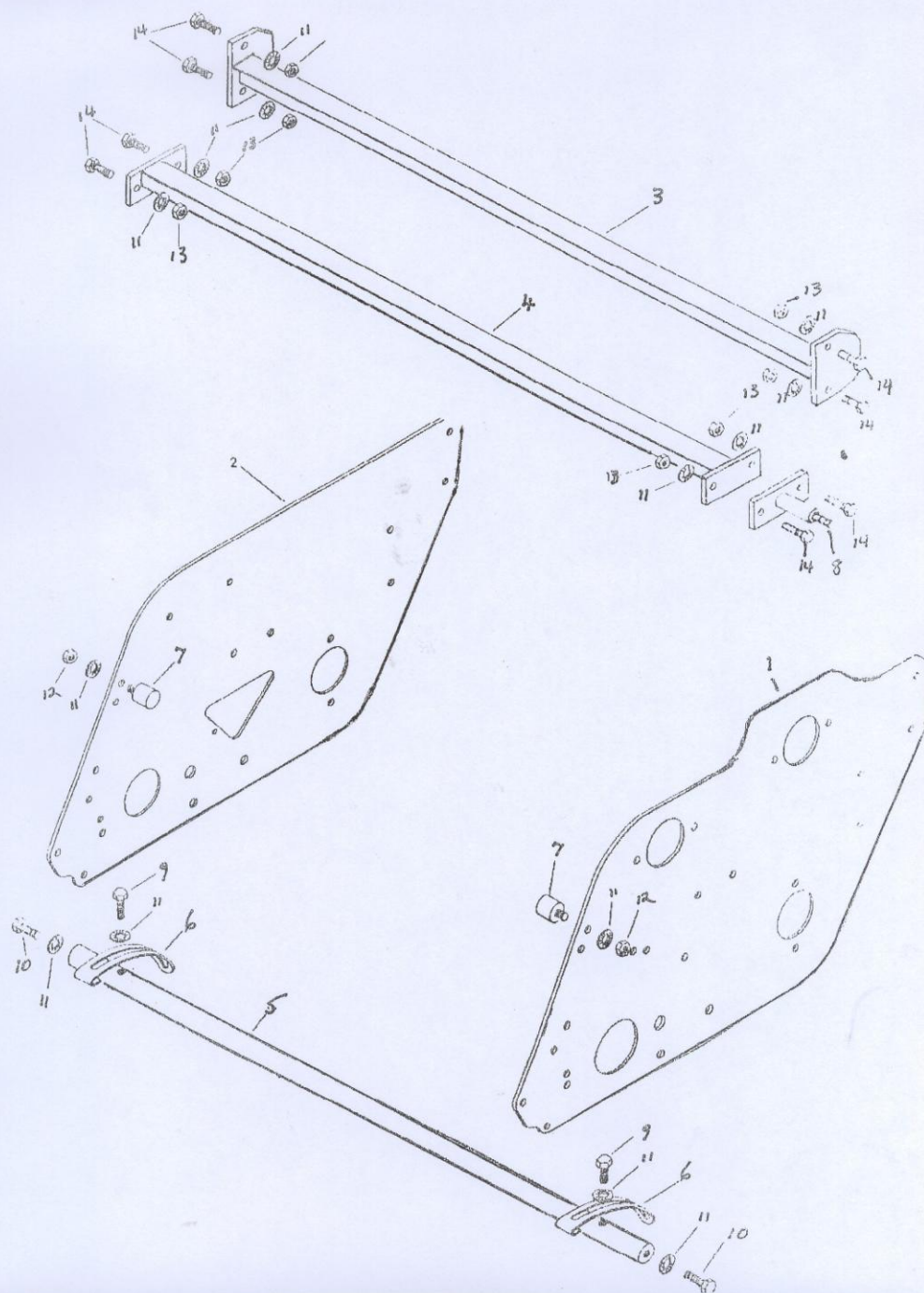


SPARE PARTS LIST

ITEM	PART Nº	DESCRIPTION
1	GM1600	Blade cutter assembly- 16 blades
2	BB.ATM	Bottom blade- low cut
3	GM1602	Sole plate
4	GM1603	Cutter bearing housing assembly- LH
5	GM1604	Cutter bearing housing assembly- RH
6	GM1652	Chain-countersharft to cutter
7	GM1651	Cutter sprocket
8	GM1607	Hanger cap bolt spacer
9	GM1608	Bearing cover washer
10	GM1609	Cutter bearing
11	GM1610	Bearing housing pivot bolt
12	GM1611	Cutter adj.screw purchahse block
13	GM1612	Cutter adjustement screw
14	GM1613	Chain adjuster bolt assembly
15	GM1650	Chain adjuster
16	GM1615	Bolt-7/16" x 1-1/4" unf.HT
17	GM1616	Nyloc nut 7/16" unf.
18	GM1617	Bolt-3/8 x 1-1/4" unc.cuphead
19	GM1618	Nut- 3/8 unc.Hex
20	GM1619	Washer- 1/2" x 1" x 16g.flat
21	GM1620	Nut- 1/2" unf.hex.
22	GM410	Nut-5/16" unf.hex
23	GM408	Nut-3/8" unf.hex
24	GM413	Washer-3/8" shakeproof
25	GM1624	Locknut- 3/4" unf.left hand
26	GM1605	Bolt- 5/16 x 3" unc.
27	BBS	Screw- 5/169 x 1/2" csk.M/T
28	GM408	Nut-3/8" unf.hex
29	GM1605	Roll pin- 3/16 x 1/2"
30		Washer- 7/16" x 7/8" x 16g.flat
31		Washer- 3/8" x 3/4" x 16g.flat
32		Washer- 3/8 sprring

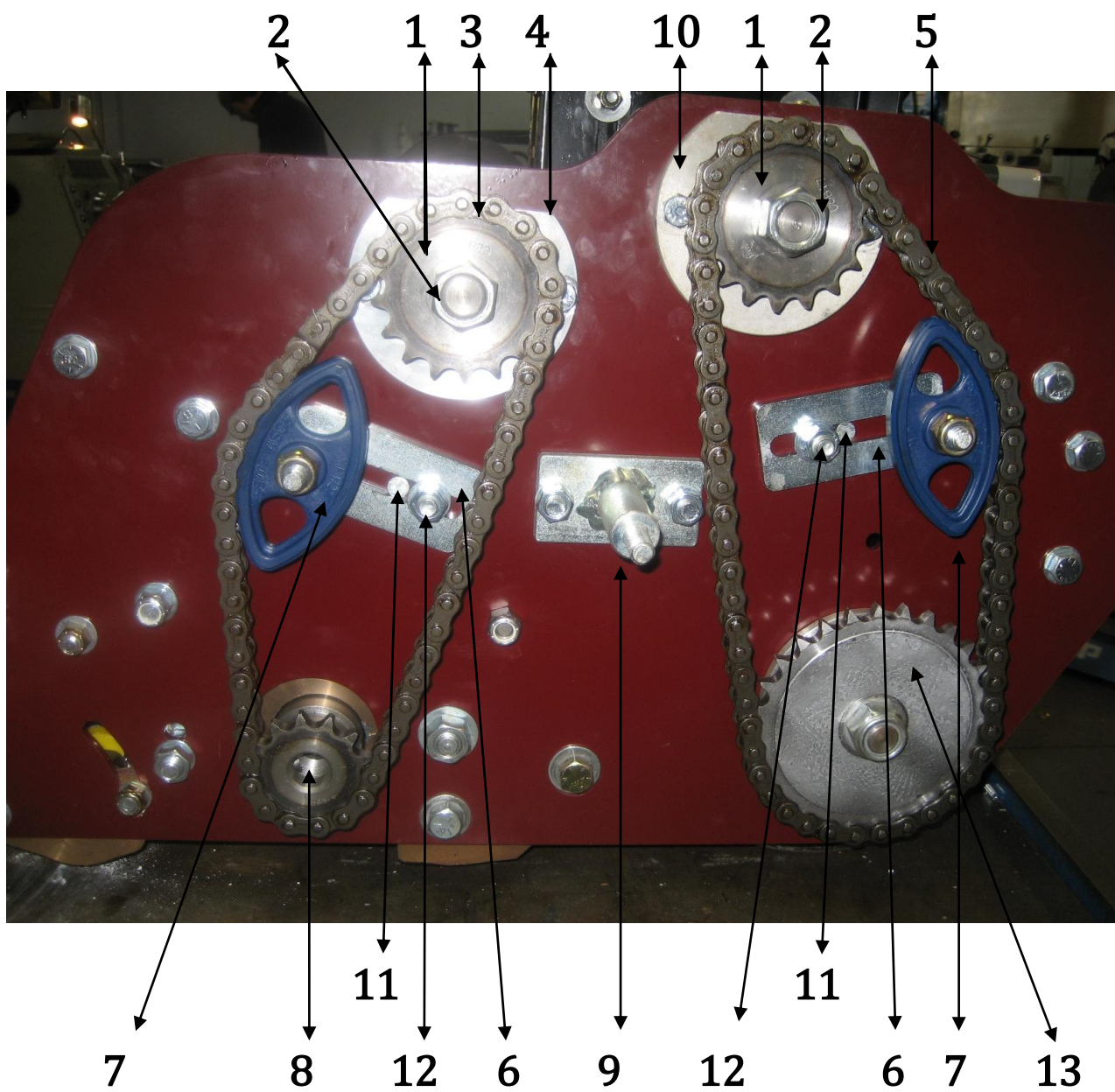


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SPARE PARTS LIST

ILLUS. No.	DESCRIPTION	PART No.	QUANTITY
1	L/H Side Frame	GM601G	1
2	R/H Side Frame	GM602G	1
3	Rear Main Stay Bar	GM603	1
4	Front Main Stay Bar	GM604	1
5	Top Spacer Bar	GM605	1
6	Deflector Adjusters	GM606	2
7	Grassbox Pivot Stud	GM607	2
8	Cover Case Mount Stud	GM608	1
9	Set Screw 3/4" x 3/8" UNF	GM609	2
10	Bolt 3/8" x 1" UNF	GM610	2
11	Washer 3/8" INT S/Proof	GM413	12
12	Nut 5/16" UNF	GM410	2
13	Nut 3/8" UNF	GM408	10
14	Bolt 3/8" x 1-1/4" UNF	GM614	8



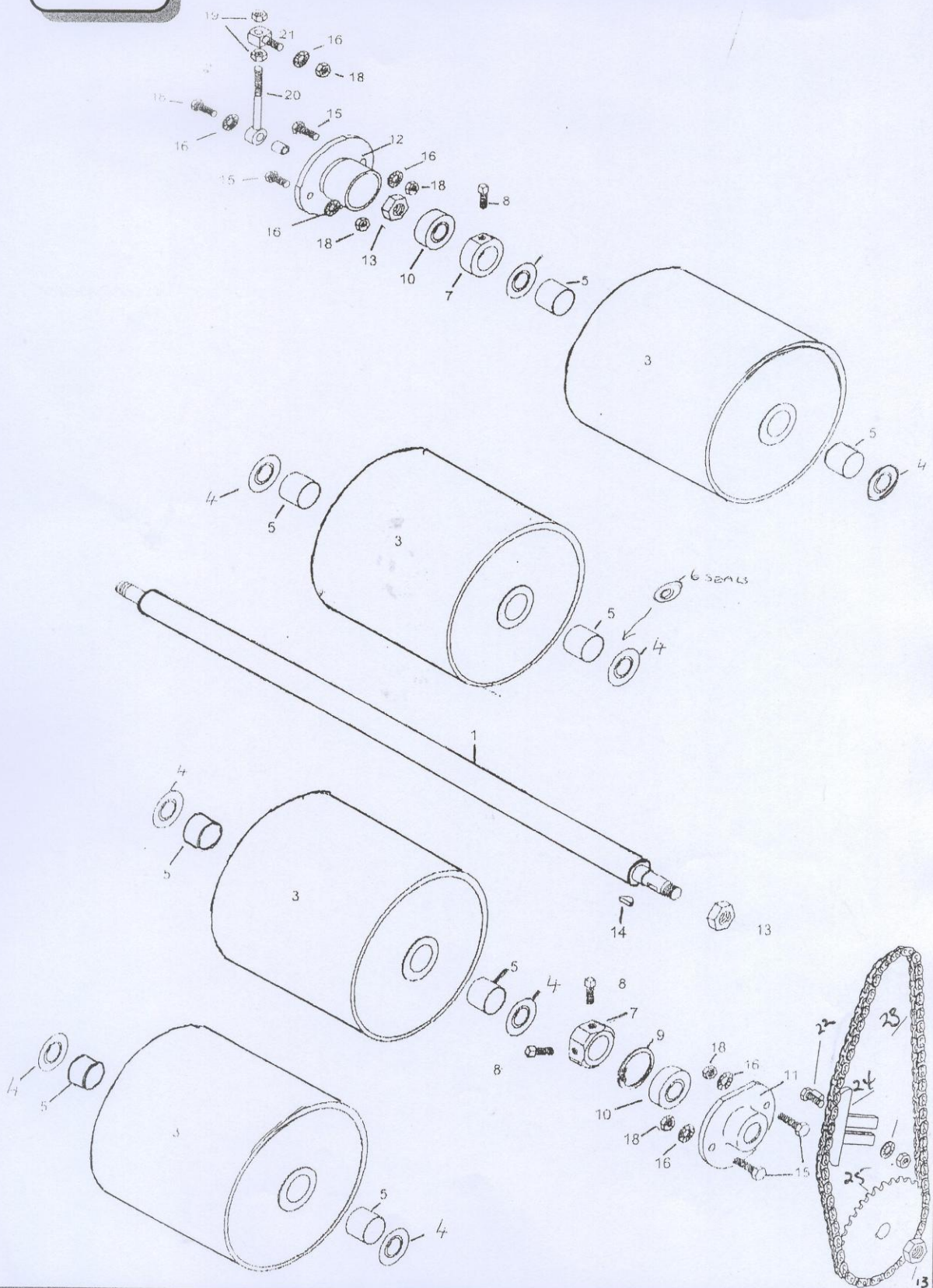
SPARE PARTS LIST

ILLUS. No.	DESCRIPTION	PART No.	QUANTITY
1	Counter shaft Sprocket	GM1656	2
2	Lock Nut 5/8" UNF	GM102	3
3	Cutter chain	GM1652	1
4	Drum Bearing housing	GM1640	1
5	Drum Chain	GM1653	1
6	Nylon Chain Adjuster complete	GM1650A	2
7	Nylon Chain Adjuster	GM1650	2
8	Cutter Sprocket	GM 1651	1
9	Cover Case Mount STUD	GM608	1
10	Housing Drive coupling	GM215	1
11	Pulley Bolt Assy	GM1613	2

12	3/8 UNF Nut	GM408	1
13	Rear Drum Sprocket	GM1655	1

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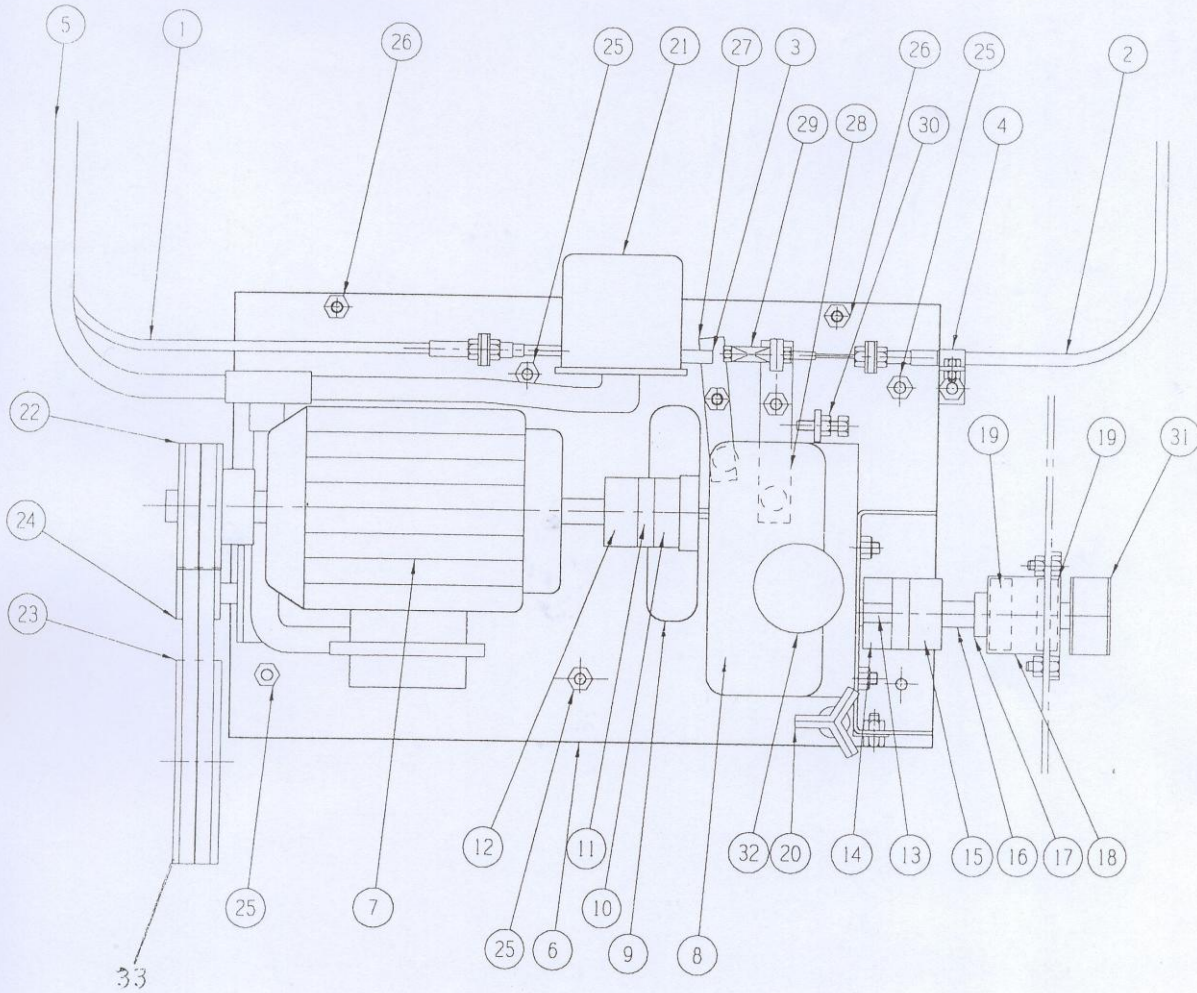


SPARE PART LIST

ILLUS. Nº	PART Nº	QUANTITY	DESCRIPTION
1	GM1630	1	Drum Shaft
2	GM1631	2	Outer Drum
3	GM1632	2	Inner Drum
4	GM1633	6	Washer
5	GM1634	8	Cam Bearing
6	GM1635	8	Seals
7	GM1636	2	Lock Collar
8	GM1637	2	CPCH Screws
9	GM706A	1	Circlip
10	GM1639	2	Drum Bearing
11	GM1640	1	L/Hand Bearing Housing
12	GM1641	1	R/Hand Bearing Housing
13	GM1642	2	Drum Lock Nut
14	GM1643	1	Woodruff Key
15	GM1644	4	5/16" x 1 UNF Bolt
16	GM1645	4	5/16" Lock Washer
18	GM410	4	5/16" UNF Nut
19	GM408	2	3/8" UNF Nut
20	GM1647	1	Drum Adjuster Screw Assembly
21	GM1648	1	Purchase Block
22	GM1613	1	Cahain ADS Bolt Assembly
23	GM1653	1	Drum Chain
24	GM1654	1	Chain Adjustor
25	GM1655	1	Drum Spocket

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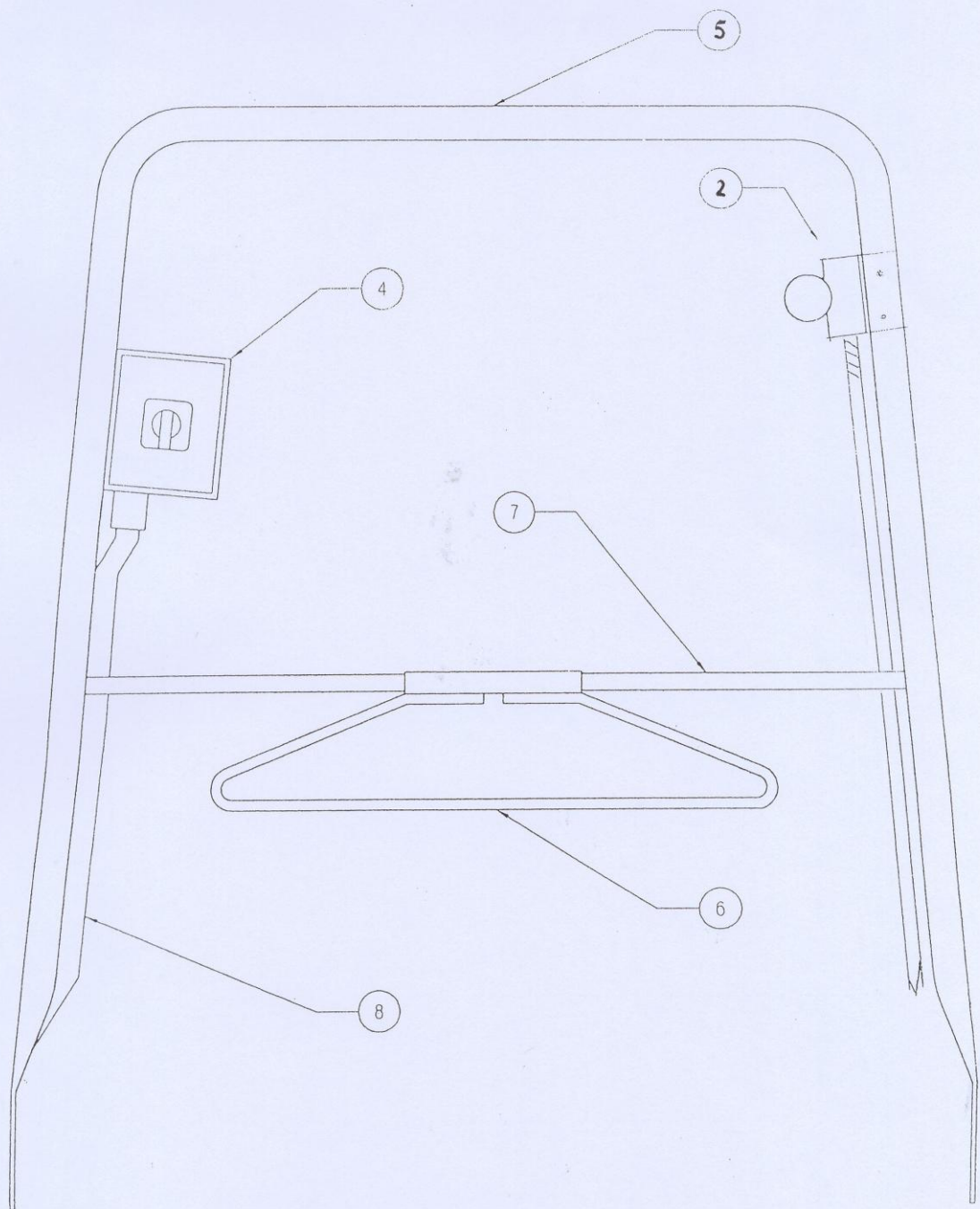


SPARE PART LIST

ILLUS. Nº	PART Nº	DESCRIPTION
1	GM098	Speed control
2	GM100	Control Cable
3	GM201	Fork End
4	GM301	Cable Clamp Bracket
5	GM093	Electric Conduit
6	GM203	Motor Plate
7	GM204	Motor Plate
8	GR003	Hydrostat
9	GM206	Fan
10	GM207	Hydrostat Coupling
11	GR011	Element
12	GM209	Lovejoy Coupling 24mm
13	GR037	Spline
14	GM211	Coupling 1/2
15	GM212	Coupling 1/2 19mm
16	GM213	Hydrostat Shaft
17	GM214	Lock Collar
18	GM215	Housing Drive Coupling
19	GM216	Bearing
20	GM217	Dump Valve
21	GM218	Plug Box
22	GM219	Motor Pulley
23	GM220	Motor Belt
24	GM221	Belt Tensioner
25	GM610	Bolt 3/8" x 1" UNF
26	GM223	Motor Cover Studs
27	GM224	Speed Control Stop
28	GM225	Hydroastat Control level Assembly 1/2
29	GM222	Spring
30	GM226	Reverse Control Stop Bolt
31	GM104	Timing Pulley
32	GR004	Hydrostat Bowl
33	GM227	Rod End
34	GM700	Counter Shaft
35	GR021	Conunter Shaft Bearing
36	GR020	Counter Shaft Bearing Housing



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SPARE PART LIST

ILLUS. No.	DESCRIPTION	PART No.	QUANTITY
2	Control Lever	GM099	1
4	Switch 3 Phase	GM441	1
5	Handle	GM442	1
6	Cord Carrier	GM443	1
7	Cord Carrier Bar	GM444	1
8	Conduit	GM093	1

NOT ILLUSTRATED

Cable Clamp Bracket	GM44	1
Bolts M6 x 15 (Switch)	5	2
Bolts M6 x 40		2
Nuts M6		4
Bolts 3/8" x 1" UNF (Handle)	GM610	4
Nut 3/8" UNF	GM408	4
Bolts 3/8" x 3/4" UNF (Cord Carrier Bar)	GM421	2