



14) SPARE PARTS

The tables at point 14.1 list the main spare parts and their code numbers.

IMPORTANT

When ordering spare parts please state:

TYPE OF SAWING MACHINE.....

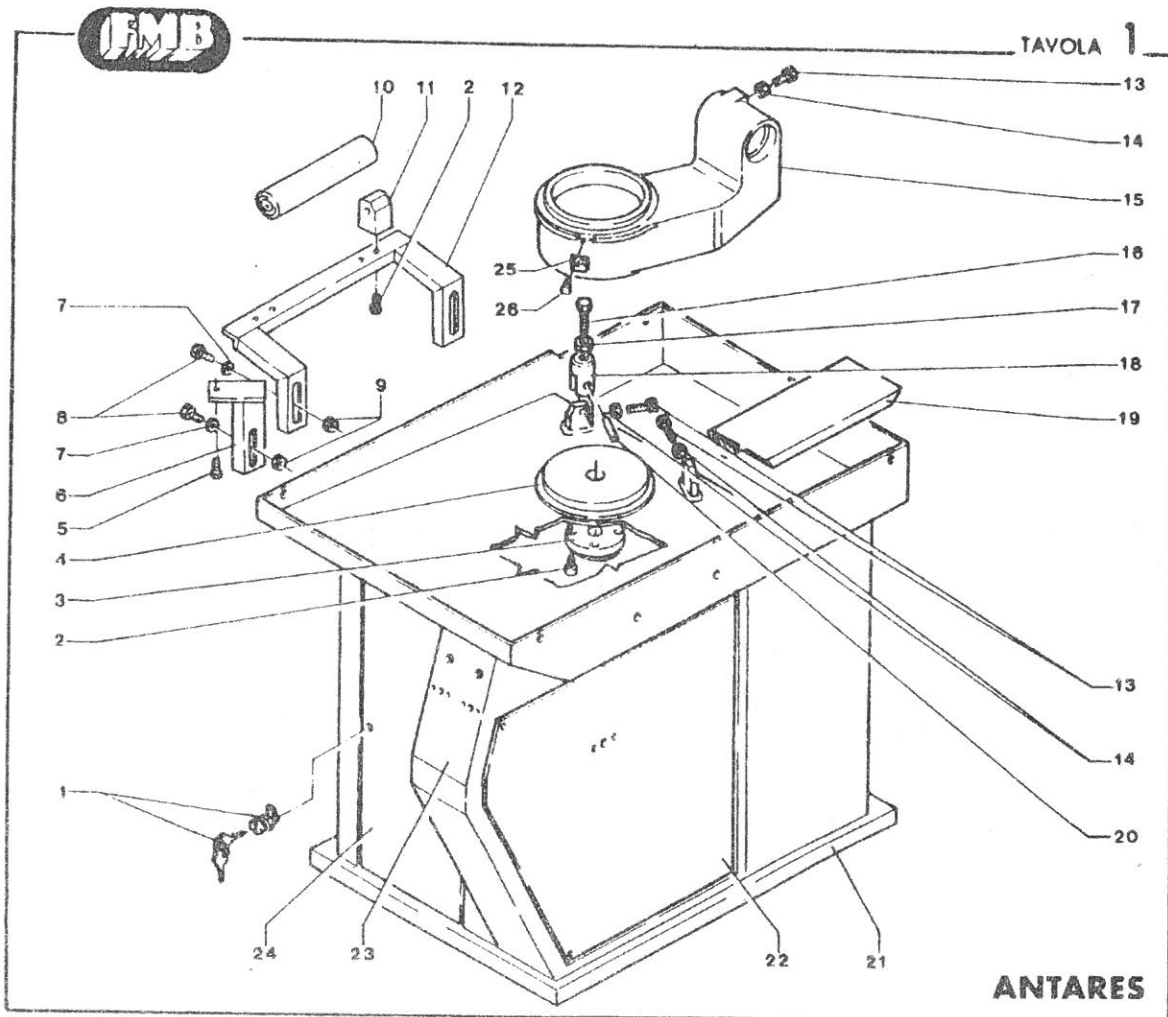
SERIAL No.

PART ON TABLE No. POS. No. CODE No.

QUANTITY REQUIRED

N.B. FILL IN ALL PARTS OF THE FORM.

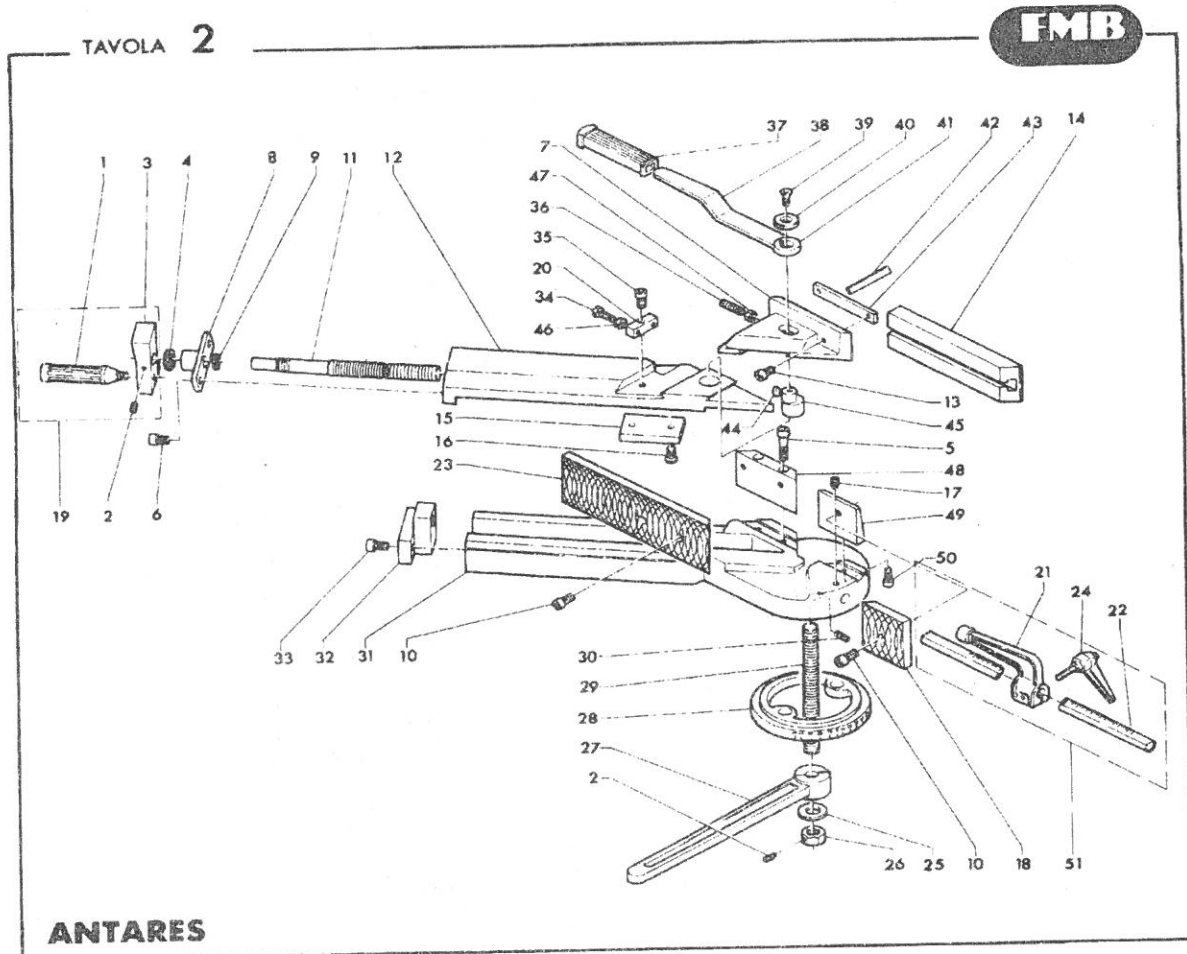
14.1 LIST OF SPARE PARTS



POS.	CODE	DESCRIPTION
1	412150	LOCK
2	212306	SCREW
3	512115	FLANGE
4	513428	FLANGE
5	212304	SCREW
6	513437	SUPPORT
7	212705	WASHER
8	212314	SCREW
9	212601	NUT
10	412162	ROLLER
11	513436	BLOCK
12	513438	SUPPORT
13	212205	SCREW

POS.	CODE	DESCRIPTION
14	212601	NUT
15	513401	SUPPORT
16	212208	SCREW
17	212608	NUT
18	513470	STOP
19	513410	GUARD
20	212977	PIN
21	612250	MACHINE BED
22	612304	DOOR
23	612305	CASE
24	612233	DOOR
25	512349	RATING PLATE
26	212190	SMALL NAIL

14.1 LIST OF SPARE PARTS



POS.	CODE	DESCRIPTION
1	112104	HANDGRIP
2	212501	SCREW
3	612242	WHEEL
4	212850	RINGNUT
5	212342	SCREW
6	212339	SCREW
7	510110	CARRIAGE
8	512116	FLANGE
9	212731	WASHER
10	212302	SCREW
11	510301	VICE SCREW
12	510106	SLIDE
13	212204	SCREW

POS.	CODE	DESCRIPTION
14	512355	JAW
15	512360	INSERT
16	212305	SCREW
17	212502	SCREW
18	512353	JAW
19	612148	HANDWHEEL
20	510330	BLOCK
21	513429	STOP
22	612104	MEASUR STICK
23	512351	JAW
24	112101	HANDGRIP
25	212710	WASHER
28	212605	NUT

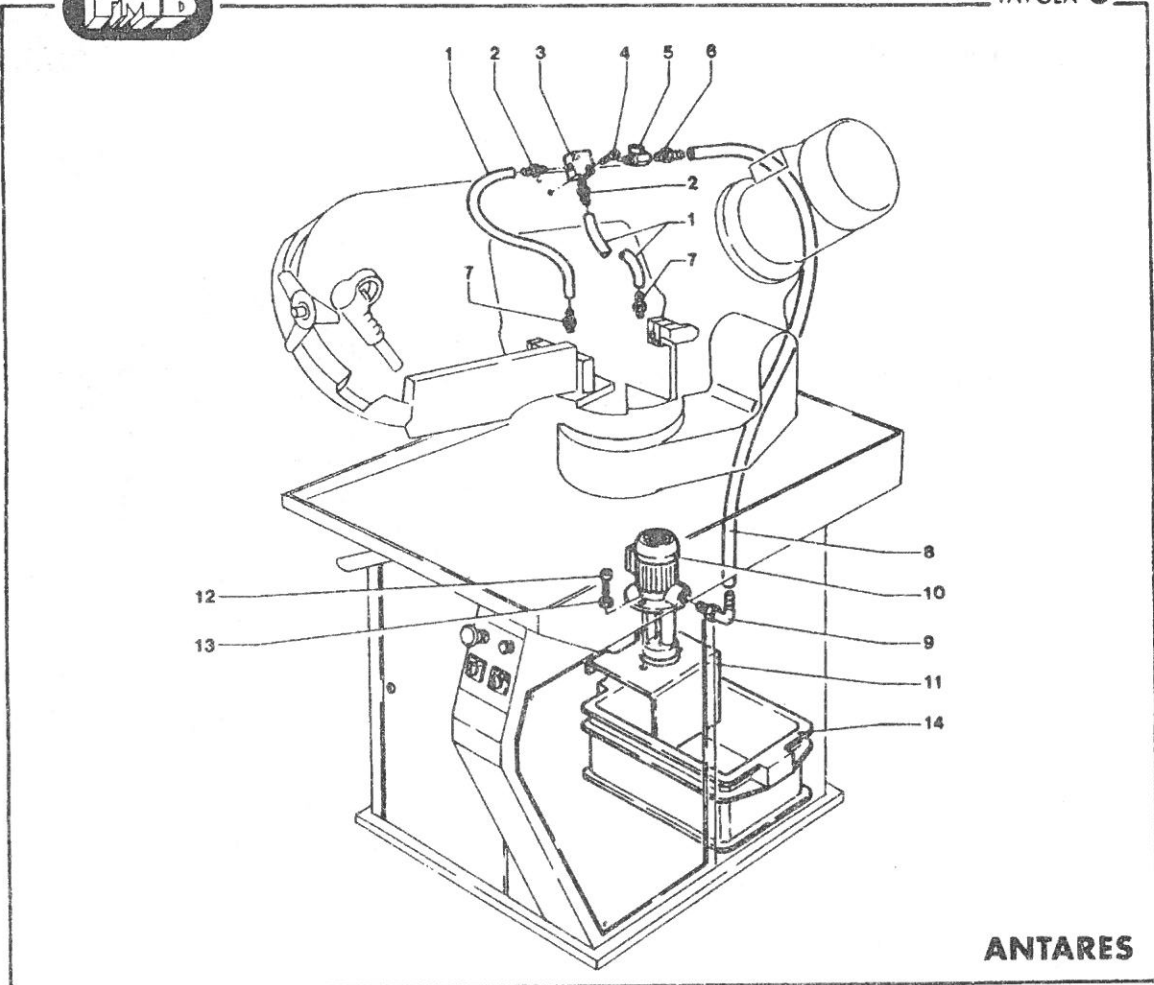
POS.	CODE	DESCRIPTION
27	512114	LEVER
28	512113	WHEEL
29	212801	SCREW
30	212507	SCREW
31	510105	VICE
32	512334	SCROLL NUT
33	212330	SCREW
34	212203	SCREW
35	212306	SCREW
36	212505	SCREW
37	112105	HANDGRIP
38	510346	LEVER
39	212402	SCREW

POS.	CODE	DESCRIPTION
40	512364	WASHER
41	512339	SPACER
42	512365	GIB
43	512356	INSERT
44	312206	KEY
45	510349	PIN
46	212604	NUT
47	212602	NUT
48	510348	SUPPORT
49	510350	SUPPORT
50	212321	SCREW
51	712183	ROD

14.1 LIST OF SPARE PARTS

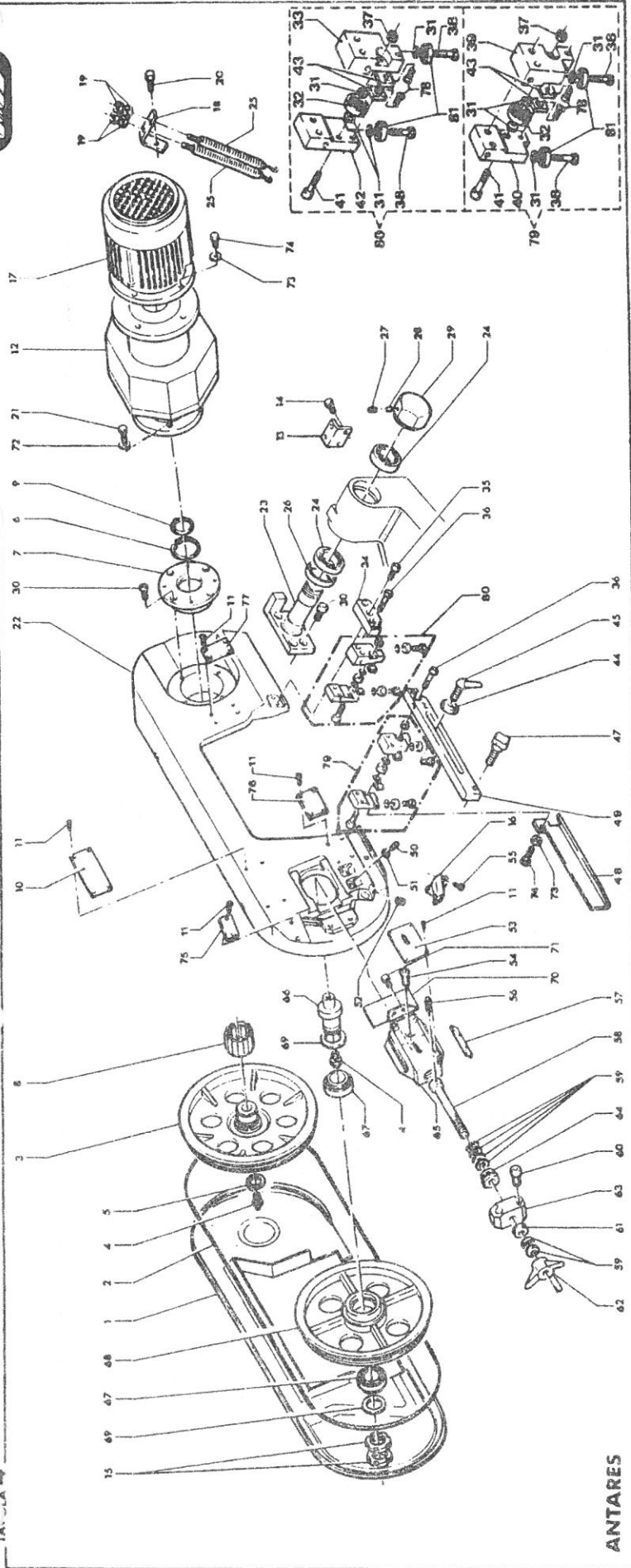


TAVOLA 3



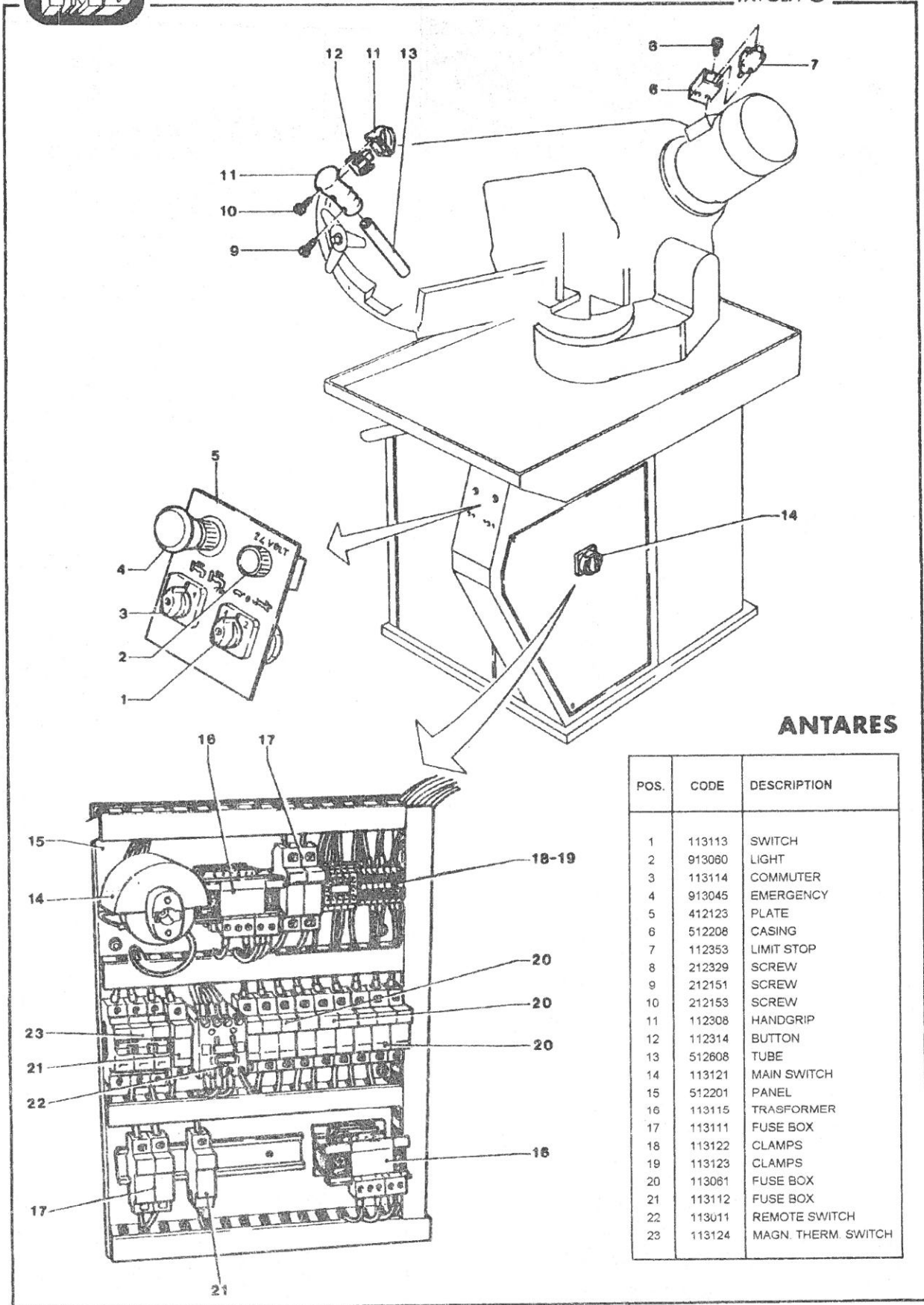
ANTARES

POS.	CODE	DESCRIPTION
1	412166	TUBE
2	412165	RUBBER CARRIER
3	412184	FITTING
4	212401	SCREW
5	412163	TAP
6	412164	RUBBER CARRIER
7	412165	RUBBER CARRIER
8	412167	TUBE
9	112303	FITTING
10	113109	ELECTRIC PUMP
11	512562	SUPPORT
12	212301	SCREW
13	212701	WASHER
14	412160	TANK



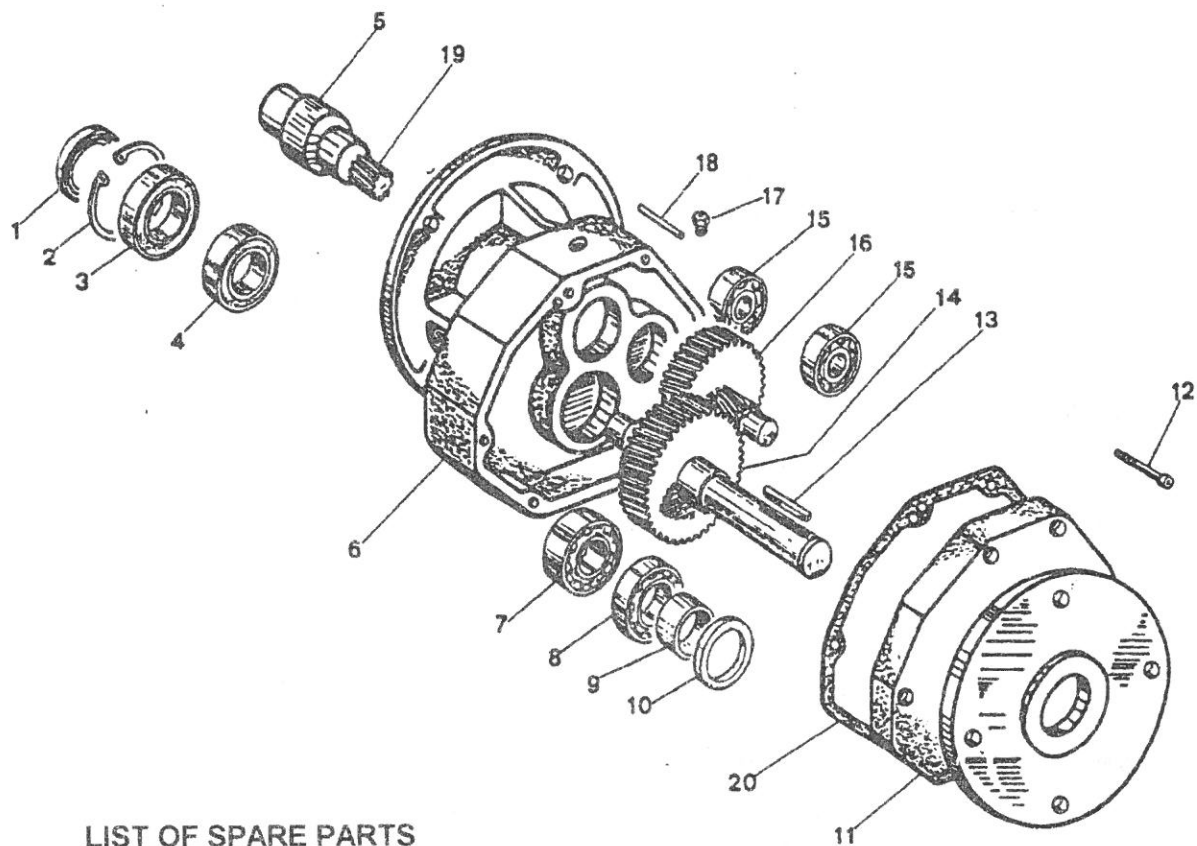
ANTARES

POS.	CODE	DESCRIPTION
1	513409	CASE
2	112215	RING
3	512134	FLYWHEEL
4	412109	LUBRICATOR
5	312165	SNAP RING
6	312158	SNAP RING
7	513417	FLANGE
8	312314	BEARING
9	312159	SNAP RING
10	412103	PLATE
11	212190	SMALL NAIL
12	112325	REDUCTION GEAR
13	513422	CONNECTION
14	212306	SCREW
15	212853	RING NUT
16	412151	HINGE
17	112305	MOTOR
18	512514	SPRING SOCKET
19	212602	NUT
20	212206	SCREW
21	212205	SCREW
22	513400	BOW
23	520314	PIN
24	312301	BEARING
25	212723	SPRING
26	520311	GUARD
27	212509	SCREW
28	512561	PLUG-NUT
29	520309	RING NUT
30	212314	SCREW
31	212722	SPRING
32	312325	BEARING
33	512325	SLIDE
34	520326	SLIDE HOLDER
35	212303	SCREW
36	212311	SCREW
37	212507	NUT
38	512321	SCREW
39	512324	SLIDE
40	512322	SLIDE
41	212313	SCREW
42	512323	SLIDE
43	412104	TUNGSTEN CARB.
44	512328	WASHER
45	112111	HANDGRIP
46	212323	SCREW
47	112113	HANDWHEEL
48	513431	CASING
49	520327	SLIDE HOLDER
50	212506	SCREW
51	212604	NUT
52	212518	SCREW
53	520210	PLATE
54	212403	SCREW
55	212151	SCREW
56	520346	SCREW
57	520371	SMALL GIB
58	520343	STEM
59	212721	SPRING
60	212310	SCREW
61	312313	BEARING
62	112110	HANDWHEEL
63	520345	BLOCK
64	520344	RING NUT
65	520340	CARRIAGE
66	512544	PIN
67	312301	BEARING
68	512545	FLYWHEEL
69	520311	GUARD
70	512142	GUARD
71	212151	SCREW
72	212705	WASHER
73	212703	WASHER
74	212212	SCREW
75	412101	PLATE
76	412116	PLATE
77	412122	PLATE
78	212404	SCREW
79	612109	MOB. SLID.BL. UNIT
80	612110	FIX. SLID. BL. UNIT
81	312306	BEARING


ANTARES

POS.	CODE	DESCRIPTION
1	113113	SWITCH
2	913060	LIGHT
3	113114	COMMUTER
4	913045	EMERGENCY
5	412123	PLATE
6	512208	CASING
7	112353	LIMIT STOP
8	212329	SCREW
9	212151	SCREW
10	212153	SCREW
11	112308	HANDGRIP
12	112314	BUTTON
13	512608	TUBE
14	113121	MAIN SWITCH
15	512201	PANEL
16	113115	TRASFORMER
17	113111	FUSE BOX
18	113122	CLAMPS
19	113123	CLAMPS
20	113061	FUSE BOX
21	113112	FUSE BOX
22	113011	REMOTE SWITCH
23	113124	MAGN. THERM. SWITCH

REDUCTION GEAR



LIST OF SPARE PARTS

1	SEAL RING 35x62x7
2	SNAP RING I=62 UNI 7437
3	BEARING 6007
4	BEARING 6205
5	MOTOR SHAFT
6	REDUCTION GEAR BOX
7	BEARING 6204
8	BEARING 6005 C3
9	SPACER
10	SEAL RING B1KL 31,5x40x7
11	REDUCTION GEAR COVER
12	SCREW M6x25
13	TANG A8x7x40 UNI 6604-69
14	2nd COUPLE WHEEL WITH OUTPUT SHAFT
15	BEARING 6202
16	2nd COUPLE WHEEL WITH PIGNON
17	ESCAPE VALVE
18	CYLINDRICAL PIN 6x18 UNI 1707
19	PIGNON
20	SEAL

15) LUBRICANT CHART

- Grease for the speed-reducing gear:

* IP ATINA "0"

* TOTAL CALIDRIS "0"

* ESSO FIBERGREASE 370

15.1 COOLANT

Recommended oils for preparing coolant mix:

* IP FLUSOR OIL BHS/1

* AGIP U LE X 250/EP

* BP ELMUT EP

* ESSO SOLUBLE EP 589

* FINA VULSOL IT 4/061

* MOBIL MET 150-170

* SHELL LUTEM D

* TOTAL LACTUCA EP

* ELF SARELF EP



16) USER DECLARATION

MACHINE TYPE:

SERIAL No.:

DATE OF MANUFACTURE:

The undersigned

Position in the firm

in the name and on behalf of

declares that:

- he has received instruction and operation manuals;
- he has read the contents of the aforesaid manuals properly and carefully ;
- he has understood and grasped all safety matters connected with the machine and is therefore able to use it responsibly as regards his own safety and that of any persons who may happen to be near the machine.

STAMP AND SIGNATURE

N.B. - PLEASE RETURN FILLED IN TO

F.M.B. S.r.l. - VIA LODI 7, I - 24044 DALMINE (BERGAMO)



17) IDENTIFICATION PLATE

 FABBRICA MACCHINE BERGAMO	MODELLO _____
	N° DI SERIE _____
	ANNO FABBRICAZIONE _____
	VOLT 400 Hz 50 KW Kg
FMB s.r.l. Via Lodi, 7 24044 DALMINE - BG - ITALY	

KEY:

MODELLO

=

MODEL

N° DI SERIE

=

SERIAL NO.

ANNO DI FABBRICAZIONE =

YEAR OF MANUFACTURE

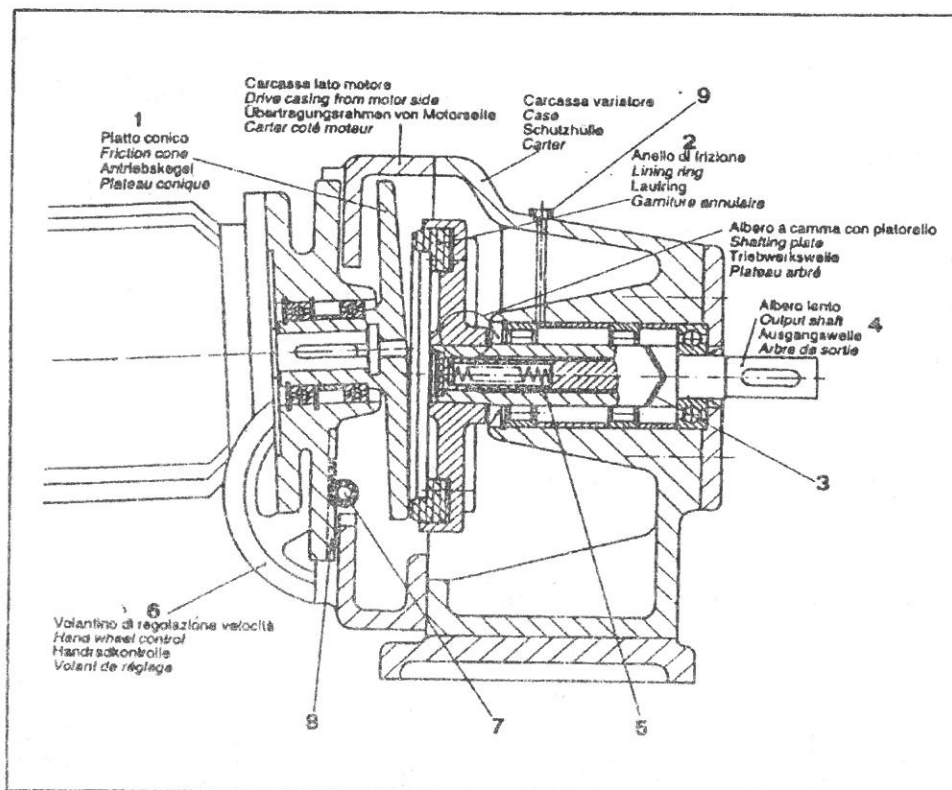
18) OPTIONAL EXTRAS

18.1) "V" TYPE SPEED VARIATOR

To provide the customer with a wider range of sawblade (28) cutting speeds this model can be fitted with a 20 to 100 m/min speed variator :

figure 1

VARIATOR CROSS SECTION



- 1) FRICTION CONE
- 2) FRICTION RING
- 3) CAM COUPLING
- 4) OUTPUT SHAFT
- 5) THRUST SPRING
- 6) CONTROL WHEEL
- 7) ADJUSTMENT PINION
- 8) RACK
- 9) BLIND PLUG



HOW IT WORKS

VARMEC variators are built on the principle of the transmission of force by dry friction between a friction cone (1) and a friction ring (2) on a shaft with two moving parts along the axis (fig. 1).

The force of pressure between the friction cone and the ring is generated by the thrust given by a dovetail coupling (3) depending on the couple drawn on the output shaft (4). A spring (5) between the friction ring and the output shaft maintains a slight contact pressure between the two elements when the machine is used unladen, hence the possibility to adjust the speed from standstill.

The speed is regulated gradually and continuously thanks to the control wheel (6) which moves the friction cone along the radius of the friction ring by means of the pinion coupling (7) and rack (8).

The usual speed variation range is 1:5; this can be increased using twin-polarity motors.

The adjustment pinion (7) can be moved using the handwheel (as shown) or an electrical servo control.

CRITERIA FOR BLADE SPEED SELECTION USING VARIATOR

m/1	UNI	BS	AFNOR	DIN	UNE	AISI	
80-100	Fe 37-42 C10-15 CF 10S Pb20	40/43 045M10 230 Mo7Pb	E24 E26XC10 S 260 Pb	St 37-42 C10-15 10S Pb20	F1120	A36-70a 1010 11L37	
80-75	Fe 50-60 C35-45	50 080M35	A50 XC35	St 50-60 C35-45	F1150	A306-64 1035	
40-65	16 Mn Cr5 20NiCrMo2 18NiCrMo12 18CrMo4	80S A15 S15 M17	18CD4 20MC5 14NC11 20NCD2	16MnCr5 21NiCrMo2 40Mn4 42CrMo4 36NiCr 50CrV4 56NiCrMoV7	F 1516 F 1522 F 1252 F 128 F520-B	8815 8920 4320	
40-60	100Cr6 100CrMo7 UCB8Ku UC25KU	534A96 8X2	100C6 100CD7 Y100 Y85	100Cr6 100CrMo7 C80W1 C125W1	F5230 F131 F514	52100 W1-0,8C W1-1C	
25-45	H56-5-2 H818-0-1 X205 Cr12KU	8M2 8T1 8D2 8D3	1E-34-01 Z90WCV Z200C12	S6-5-2 S18-0-1 X165CrV12 X210Cr12	F1150 F554 F521	M2 T1 D2 D3	
25-40	X5CrNi18 10	304S15	Z6CN18-09	X5CrNi18 9 X10CrNiMoTi1810	F314 F321	304	
30-50	G30 GS500/7 GMB40	GRADO 300 500/7 W410/4	FT30 FGS 500/7 MB40-10	GG30 GTW40 GGG 50	F114	GRADO 45 80-55-06 40010	
90-120	Al-Cu-Pb					NON FERROUS METALS	



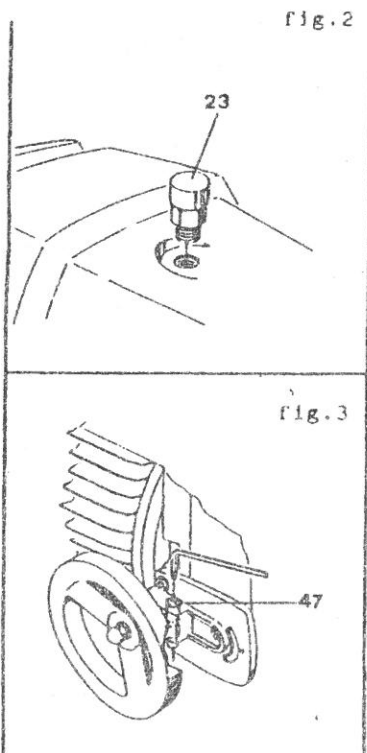
INSTRUCTIONS FOR USE AND MAINTENANCE

- 1) When installing, check that the mains voltage corresponds to that shown on the rating plate on the motor. We recommend using a remote overload cut-out.
- 2) The motor variator must be mounted in the specific position for which it has been ordered: call the supplier for advice if this is not the case.
- 3) If the motor variator is intended for use in dusty or humid conditions, you will need to fit a protection cover.
- 4) The variators are supplied complete with lubricant and have already had a short running-in period. However, we recommend that you do not use the variator with maximum loads during the first 20/30 hours of operation.
- 5) If using solvents, make sure that these do not come into contact with the lips of the oil seal. All output shafts have a threaded hole on the top, for use in fitting the drive elements.

Do not key on the drive pulleys, frictions, pinions and so on by hammering as this is likely to affect the variator output shaft, so damaging the bearings and graphite ring in variators.../0.

Loosely mount all the components on the shaft, applying only enough manual pressure to mount them or by tightening a washer screw at the top of the output shaft.

6) If the variator keeps slipping, these are the possible causes:



a) check that the friction ring is not worn down to its metal support. If so, replace it;

b) check that the graphite ring and the friction cone are not greasy. If so, clean them with a clean cloth, slightly soaked in trichlorethylene;

c) momentary overloading from a possible blockage in the driven machine can cause knocking from spalling or partial dipping of the friction wheel. Small grooves may disappear by themselves. If noise continues, the friction ring should be replaced (before doing this, check with our technical department).

7) If the number of output revolutions happens to vary by itself, i.e. without your giving a specific command, you will need to tighten the screw, pos. 47 (fig. 3), which adjusts the correct friction of the control wheel.

8) The motor variator can function with either clockwise or anti-clockwise rotation, and you can even adjust the speed when at standstill.

LUBRICATION

VAR. TYPE	Q.TY (kg)	LUBRICANT
5/1	0,10	<u>SYNTHETIC GREASE</u> - IP TELESIA COMPOUND A - ESSO 5420 - SHELL TIVELA COMPOUND A
5/2	0,20	
5/3	0,45	
10/1	0,40	
10/2	0,50	
10/3	0,90	
20/1	0,40	
20/2	0,60	
20/3	1,40	
30/1	0,40	
30/2	0,60	
30/3	2,40	
RP 999	0,50	

The reduction gear section of the VARMEC variator and the RP 999 reduction gear comes with permanent lubricating grease for the gears.

The quantity of oil (litres) for VAR 55/1 depends on where they have been mounted.

VAR. TYPE	MOUNTING POSITION						LUBRICANT
	B3/B5	B6	B7	B8	V1/V5	V3/V6	
55/1	0,7	0,9	0,9	1,2	1,1	0,6	<u>SYNTHETIC OIL</u> - IP TELESIA OIL 220 - MOBIL GLYCYCLE 30 - SHELL TIVELA OIL WB
55/2	1,8	2,4	2,2	2,4	2,3	2,2	

These quantities of lubricant must be checked at least once every 1000 working hours.

To check the level of synthetic grease (fig. 2) in a variator, use the hole in the upper part of the reduction gear housing, having first unscrewed the vent valve (pos. 23). With the machine in motion, check the quantity of the remaining grease thrown against the insides by the action of the gears.

To add any extra lubricant, use either a grease nipple or a syringe in the hole to add 1/4 the amount of the grease shown in grease table above.

For VAR 55/1, use the oil level cap to check the oil level. The position of this cap can vary depending on the assembly.

The variator part (fig. 1) is supplied with permanent lubrication (grease: IP BIMOL GR 481, MOBIL GREAS SPECIAL, SHELL RETINAX AM).

If repairs are needed, remove all the grease and subsequently add the amount of grease given in the table below via the plug (pos. 9).

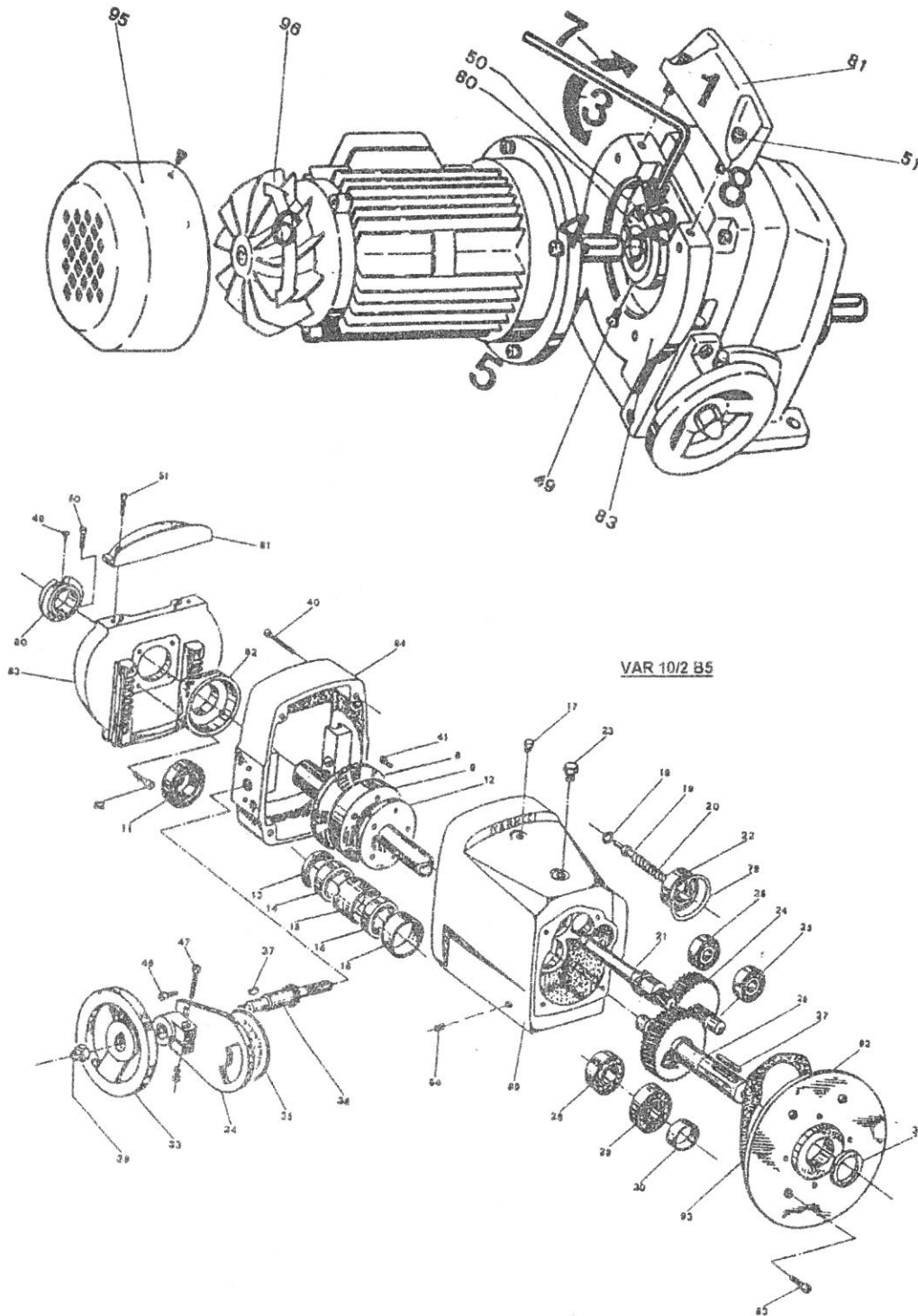
VAR. TYPE	QUANTITY (kg)	LUBRICANT
5/0	0,02	<u>SYNTHETIC GREASE</u>
10/0	0,06	- IP BIMOL GR 481
20/0	0,06	- MOBIL GREAS SPECIAL
30/0	0,06	- SHELL RETINAX AM
55/0	0,19	
75/0	0,22	



INSTRUCTIONS FOR ASSEMBLY OF THE MOTOR IN VARMEC VARIATORS

- 1) Remove the cover, pos. 81 (2 screws, pos. 51).
- 2) Turn the clamping ring, pos. 80, to the position indicated (fig. 4).
- 3) Use a hexagonal wrench to loosen, but do not remove, the screw, pos. 50, in the clamping ring (the clamping ring is held by another screw, pos. 49).
- 4) Introduce the motor shaft into the friction cone hub without forcing it (**do not grease the motor shaft for any reason**).
- 5) Tighten the four motor assembly screws.
- 6) Make the motor turn in both directions about 20 times, either by giving it voltage for a short period or by turning the fan, pos. 96, manually once you have removed the fan cover, pos. 95. This is important to avoid excessive internal axial forces.
- 7) Tighten the screw, pos. 50.
- 8) Replace and tighten the cover, pos. 81.
Move the rack, pos. 83, using the control wheel or device, to allow the wrench easier access.

(figure 4)



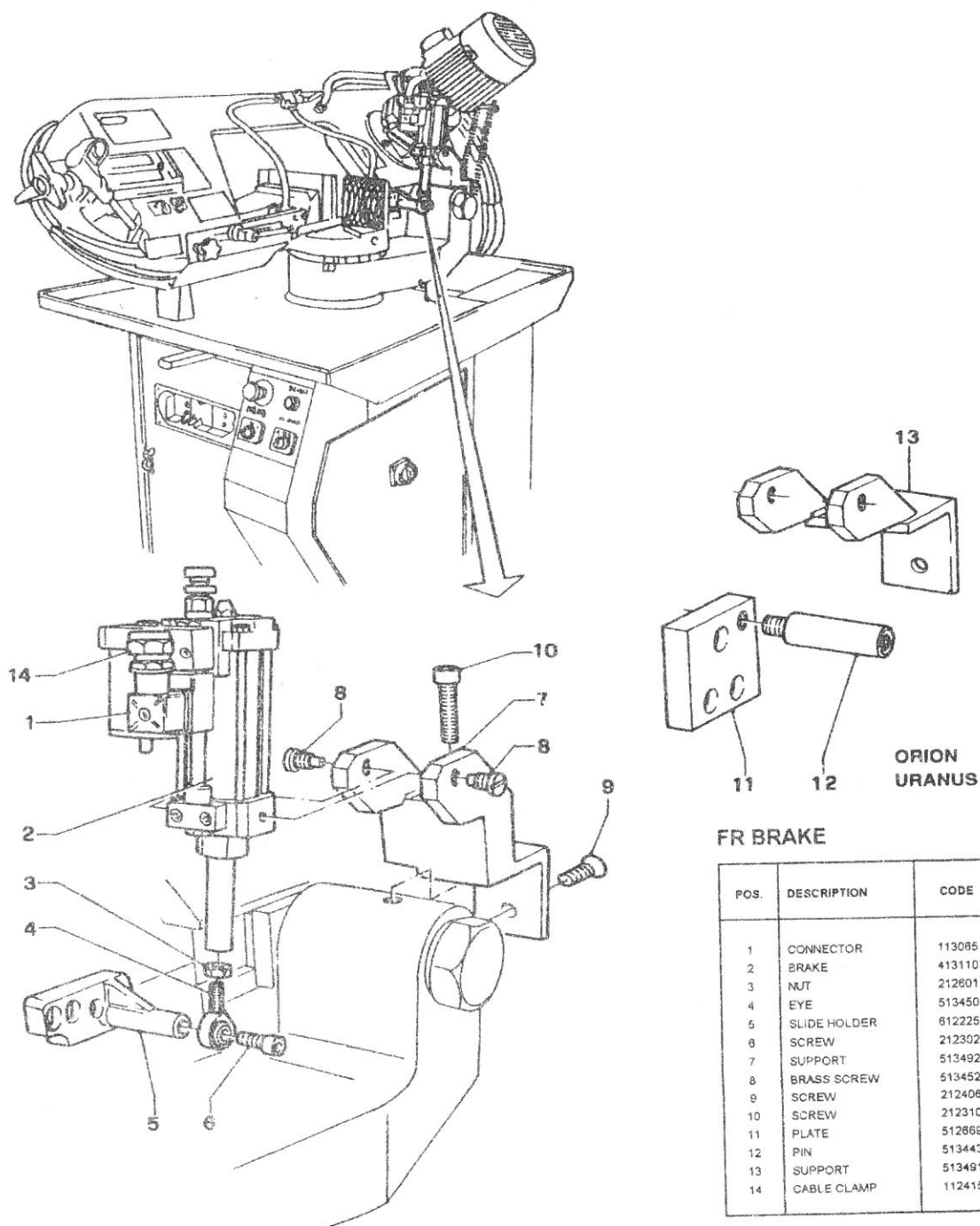


SPARE PARTS LIST

8	CONE PLATE	35	POSITION INDICATOR
9	FULL FRICTION RING	36	CONTROL PIGNON
11	BEARING 6008 2Z C3	37	TANG 5x6,5 UNI 6606
12	CAM FLANGE	38	BLIND NUT M10
13	SEAL RING 26x47x7	40	SCREW M6x35
14	BEARING NU 204	41	SCREW M6x12
15	SPACER WITH NOTCHES	46	SCREW M6x16
16	SPACER	47	SCREW M6x35
17	ESCAPE VALVE	49	SCREW M5x12
18	SNAP RING I=11 UNI 7437	50	SCREW M6x25
19	THRUST POINT	51	SCREW M6x16
20	THRUST SPRING	52	SCREW M6x12
21	PIGNON WITH CAM	53	SCREW M8x25
22	BEARING 6205 RS1 C3	54	CONE CAP G 1/4"
23	ESCAPE VALVE	79	SNAP RING I=52 UNI 7437
24	2nd COUPLE WHEEL WITH PIGNON	80	FIXING RING
25	BEARING 6202	81	LID
26	2nd COUPLE WHEEL WITH OUTPUT SHAFT	82	CONE PLAT SUPPORT
27	TANG A 8x7x40 UNI 6604-69	83	MOVING PISTON WITH FLANGE
28	BEARING 6204	84	VARIATOR SLIDER
29	BEARING 6005 C3	89	VARIATOR BODY
30	SPACER	92	OUTPUT FLANGE
31	SEAL RING B1KL 31,5x40x7	93	SEAL
33	CONTROL HANDWHEEL		
34	INDICATOR SUPPORT		

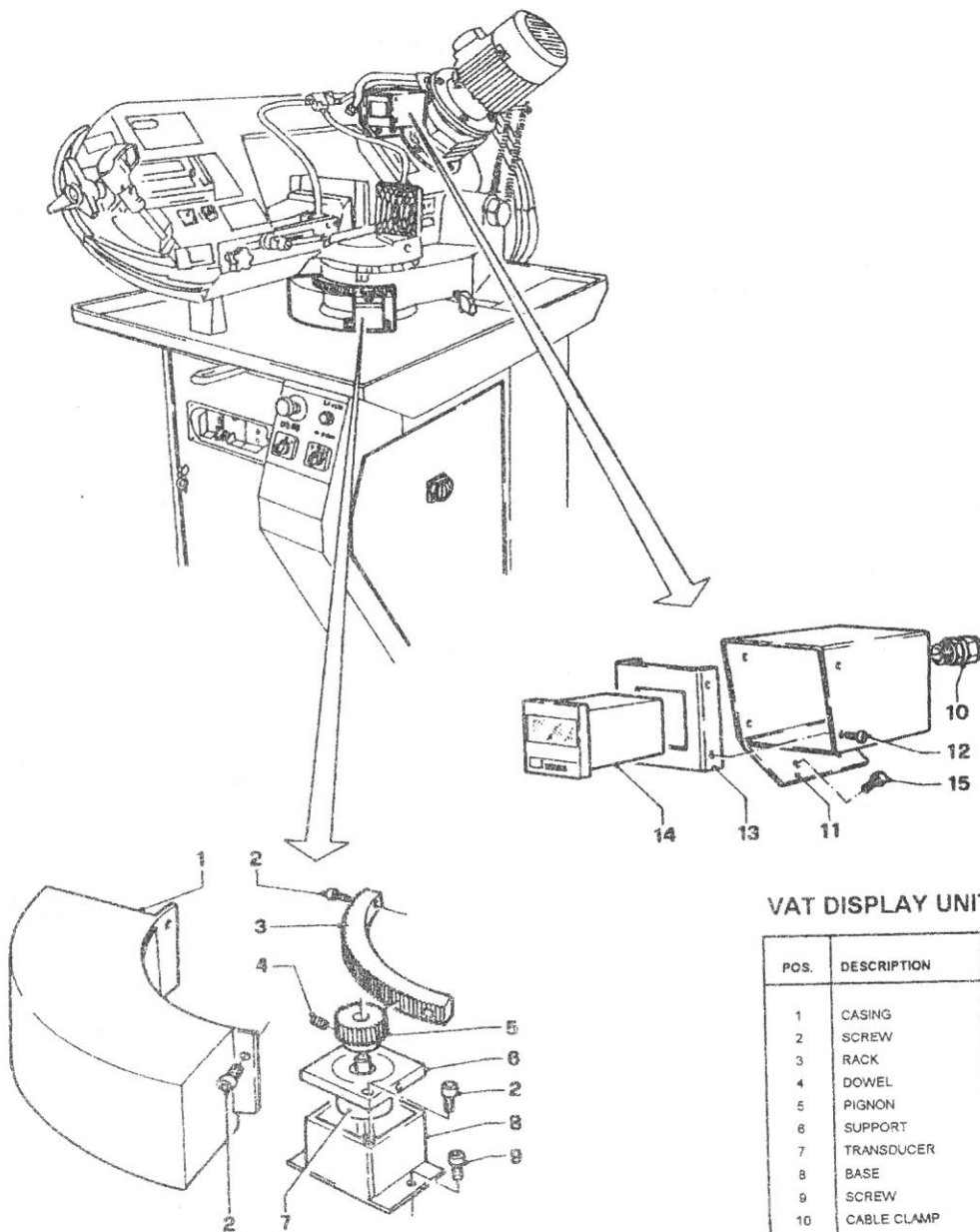
18.2) "FR" TYPE HYDRAULIC BRAKE

This accessory is recommended to prevent a too fast sawband bow (17) descent and consequently too fast cutting.



18.3) "VAT" TYPE CUT ANGLE DISPLAY UNIT

This accessory is recommended for a more accurate reading and immediate identification of the cut angle.



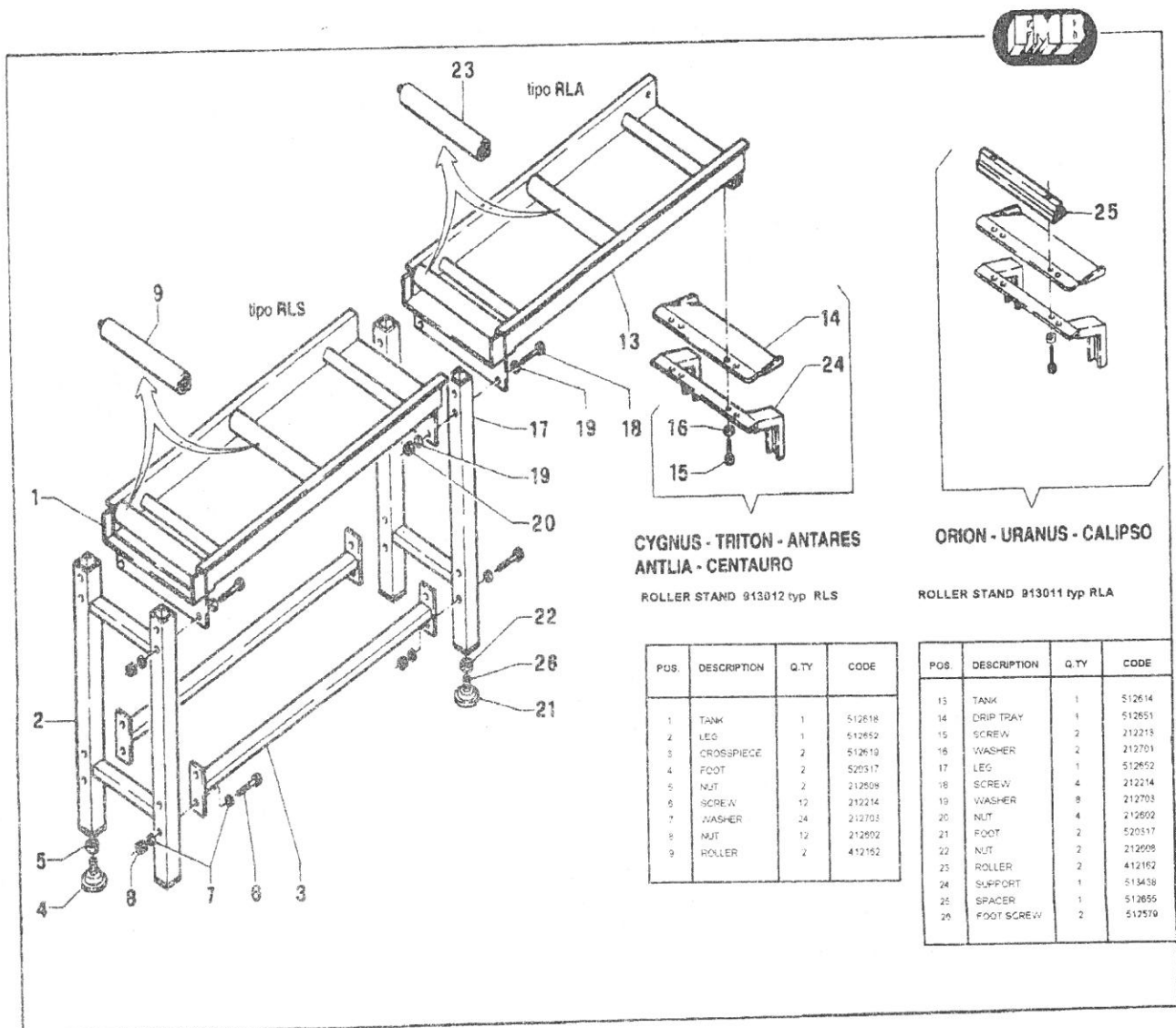
VAT DISPLAY UNIT

POS.	DESCRIPTION	CODE
1	CASING	512656
2	SCREW	212301
3	RACK	512662
4	DOWEL	212509
5	PIGNON	513827
6	SUPPORT	512858
7	TRANSDUCER	113717
8	BASE	512859
9	SCREW	212453
10	CABLE CLAMP	112415
11	BOX	512880
12	SCREW	212326
13	COVER	512861
14	INSTRUMENT	113708
15	SCREW	212203

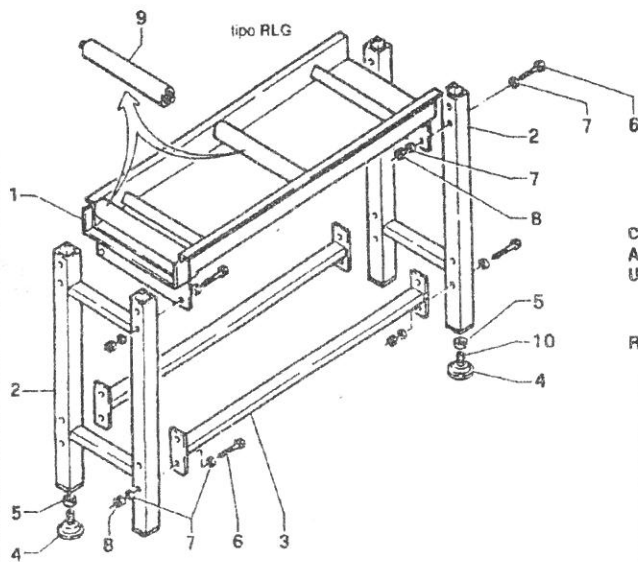
18.4) "RLA" - "RLS" - "RLG" - "C" TYPE ROLLER STANDS

The machine can be equipped and completed with roller stands of various types to support the workpiece(s) and make the cutting process easier:

"RLA" and "RLS" TYPE ROLLER STAND



"RLG" TYPE ROLLER STAND

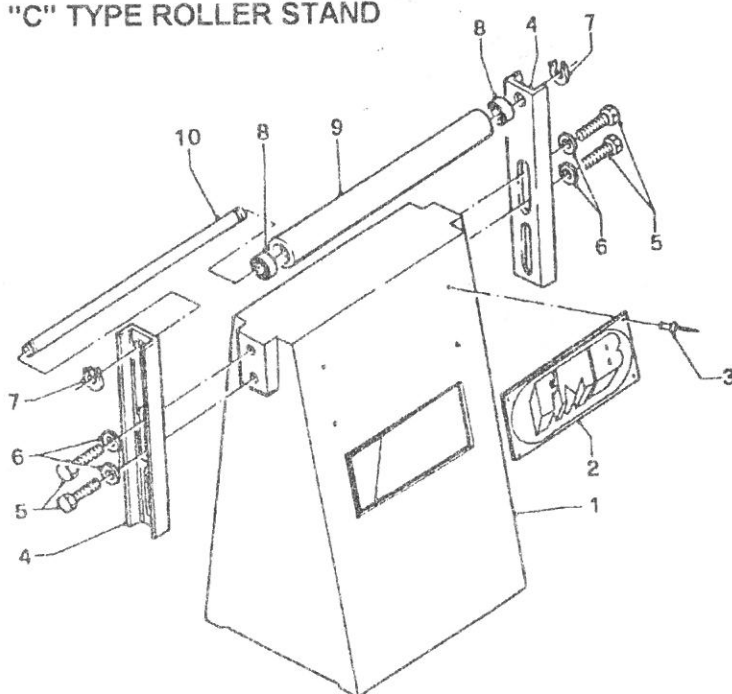


CYGNUS - TRITON - ANTARES
ANTLIA - CENTAURO - ORION
URANUS - CALIPSO

RULLIERA cod. 913013 lipo RLG

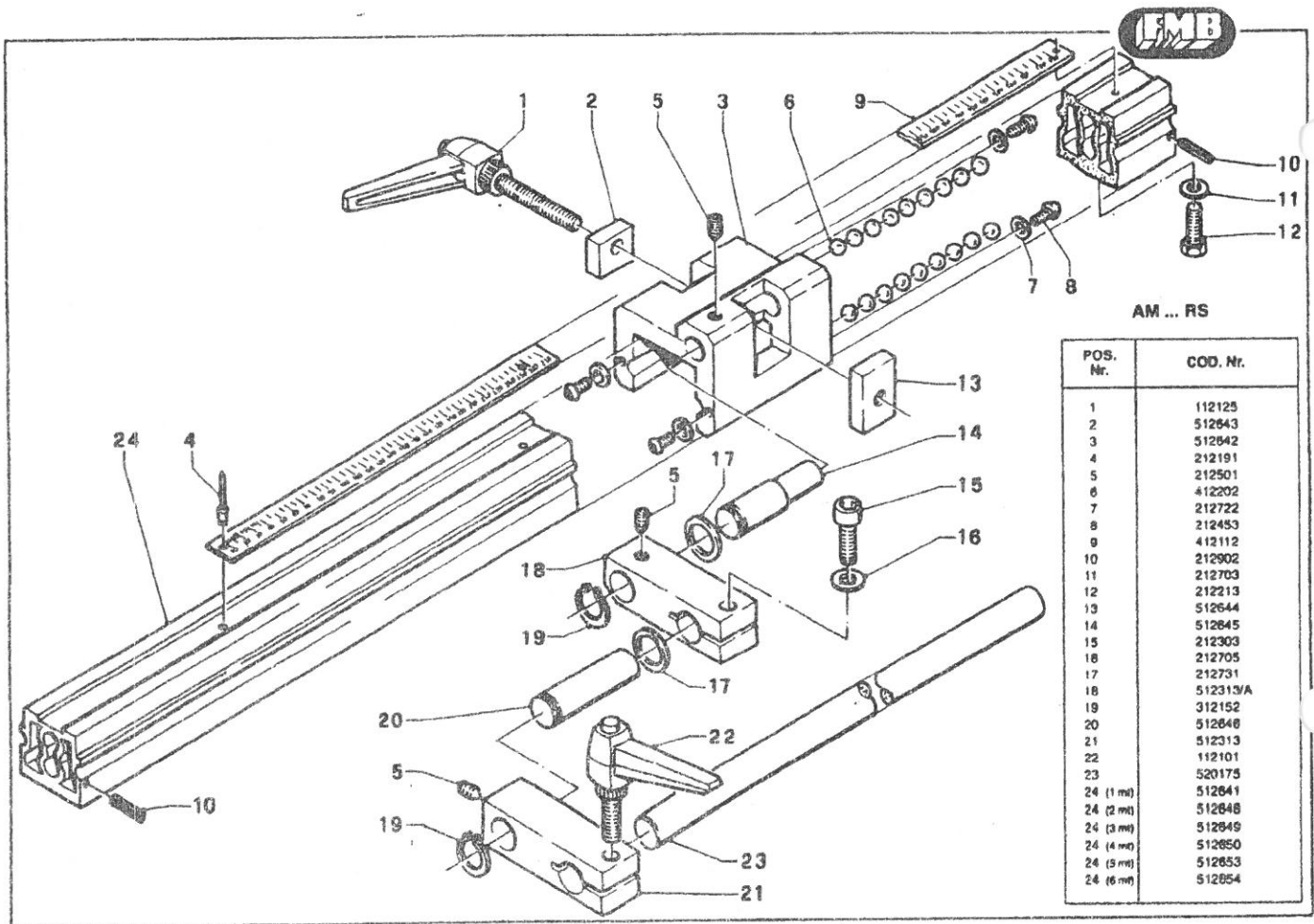
POS.	DESCRIPTION	Q.TY	CODE
1	TANK	1	512618
2	LEG	2	512652
3	CROSSPIECE	2	512619
4	FOOT	4	520317
5	NUT	4	212806
6	SCREW	16	212214
7	WASHER	32	212703
8	NUT	16	212602
10	FOOT SCREW	4	512579

"C" TYPE ROLLER STAND



POS.	DESCRIPTION	CODE
1	STAND	512529
2	PLATE	512348
3	RIVET	212191
4	SUPPORT	512346
5	SCREW	212202
6	WASHER	212708
7	SNAP RING	312152
8	BEARING	312308
9	ROLLER	512318
10	PIN	512617

MEASURING SHAFT AM ... RS



19) CERTIFICATE OF COMPLIANCE

We, F.M.B. s.r.l. - via Lodi 7 - 24044 Sabbio-Dalmine (Bergamo) ITALY
DECLARE ON OUR OWN RESPONSIBILITY THAT THE PRODUCT

F.M.B. metal band sawing machine, model "ANTARES" Series no.

TO WHICH THIS CERTIFICATE REFERS CONFORMS WITH THE FOLLOWING PROVISIONS:

- * EEC DIRECTIVE 89/392 AND AMENDMENTS (machine directive)
- * EEC DIRECTIVE 98/37 AND AMENDMENTS
- * EEC DIRECTIVE 89/336 AND AMENDMENTS (electromagnetic compatibility)
- * EEC DIRECTIVE 86/188 AND AMENDMENTS (noise levels)
- * EEC DIRECTIVE 73/23 AND AMENDMENTS (electrical materials for use within certain voltage limits)

The following norms and technical specifications have been used:

- **Presidential Decree no. 547** dated 27.04.55 Health and Safety at Work regulations
- **Presidential Decree no. 459/96** Standardisation of EU member states legislation regarding machines and the "Machine Directive".
- **EN 292/1** Machinery safety - Fundamental concepts, general design principles - Basic terminology and methodology.
- **EN 292/2** Machine safety - Fundamental concepts, general design principles - Technical specifications and principles.
- **EN 60204-1** Machine safety - Machine wiring - General requirements.
- **EN 55022** Limits and methods of measurement of interference characteristics of information technology equipment.
- **EN 50081** Electromagnetic compatibility - General emission regulations - Residential, commercial and light industrial areas.
- **EN 50081-2** Electromagnetic compatibility - General immunity regulations - Residential, commercial and light industrial areas (industrial area).
- **ISO 7000** Graphic symbols
- **EN ISO 3746** Acoustic - Determination of the acoustic power of noise sources
- **IN-HOUSE CONSTRUCTION SPECIFICATIONS**

Dalmine,

SOLE DIRECTOR
BONASCHI p.i. FRANCO

Name, address and identifying number of notifying party:
I.C.E.P.I. s.r.l. - Istituto Certificazione Europea Prodotti Industriali s.r.l.
via Emilia Parmense, 11/a, I - 29010 PONTENURE (Piacenza)

CE certification number : **18.03/95** of **24.03.1995**

**ATTESTATO DI PROVE SECONDO DIRETTIVA 89/336 CEE
(COMPATIBILITA' ELETTROMAGNETICA)**TEST REPORT EC DIRECTIVE 89/336
(ELECTRO MAGNETIC COMPATIBILITY)

Relazione di prova n°: Examination number	EMC 066/96	Richiesta del: Date of submission for examination	10.05.94
		Data prove: Test date	08.03.96

Fabbricante (o mandatario): Manufacturer (or authorized representative) F.M.B. Srl Via Lodi 7 24044 DALMINE (BG)	Detentore dell'attestato: Certificate holder F.M.B. Srl Via Lodi 7 24044 DALMINE (BG)
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DESCRIZIONE MACCHINA Machine description		DATI TECNICI (motore/i) Technical data (motor/s)	
Genere Category	SEGATRICE MANUALE A NASTRO	Genere Category	ELETTRICO
Marca Trade mark	F.M.B.	Potenza Power	[kW] 1.1
Denominazione Trade name	TRITON	Potenza installata Nominal Power	[kW] 1.1
Matricola no. Identification nr.	60098	Tensione Voltage	[V] 400
Dimensioni [mm] Sizes	800x1400x1500	Frequenza Frequency	[Hz] 50
e le versioni aggiunte con le seguenti denominazioni: ANILIA, ANTARES, ORION, URANUS, TITAN		Stesse caratteristiche elettriche del modello principale	

NORME APPLICATE Standards	EN 50082-1
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STRUMENTAZIONE Test equipment	"MACE" - SEAWARD
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Note: Notes	- Prove effettuate presso officina della Ditta costruttrice - Il presente certificato annulla e sostituisce il precedente EMC 015/96
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RISULTATO DELLE PROVE: Testing Results	RISPONDENTE
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Validità dell'attestato: Certificate validity	
luogo: place	Pontenure
data: date	02.05.96

IL TECNICO INCARICATO


20) DE-COMMISSIONING AND SCRAPPING OF THE SAW

The saw must only be de-commissioned and scrapped by authorised personnel having the required experience and training.

N.B.: Before de-commissioning, shut the machine down completely by disconnecting all energy supplies.

Open the various guards and start disconnecting the wiring, having first made sure that the mains cable has been unplugged. The ground wire must be the last to be removed.

Thoroughly clean the machine and remove the chip tray. Then drain the machine of all cooling lubricant.

Drain the oil in the hydraulic gearcase and loosen the hydraulic piping connections carefully (these may still be under pressure).

Avoid coming into direct contact with the hydraulic oil and cooling lubricant.

Take care not to spill or disperse the hydraulic oil, lubricant and any other substances in the environment.

Follow the steps described in the relevant chapters when it comes to lifting and handling the machine. Before starting to dismantle the machine components, consult F.M.B. s.r.l. for full details.

N.B. All components, substances and oils in the machine must be scrapped in full compliance with the current local legislation to this effect.

