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TO THE KIND ATT. DR. ROSS WAGNER
 FROM IMET SPA - MARZO

MATRICOLA MACCHINA N°: MACHINE SERIAL NO.: MATRICULE DE LA MACHINE:	
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Velox TF 350

ISTRUZIONI PER L'USO — MANUTENZIONE — RICAMBI

INSTRUCTIONS FOR USE — MAINTENANCE — SPARE PARTS

MODE D'EMPLOI — ENTRETIEN — PIECES DETACHEES

BEST REGARDS!
 M. G. P.

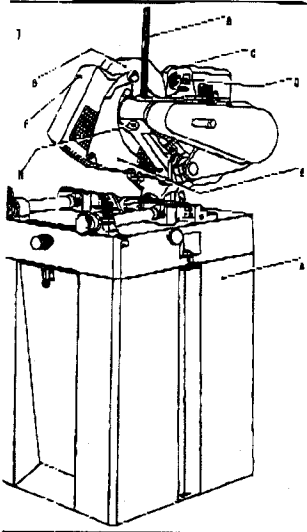


Fig. 2

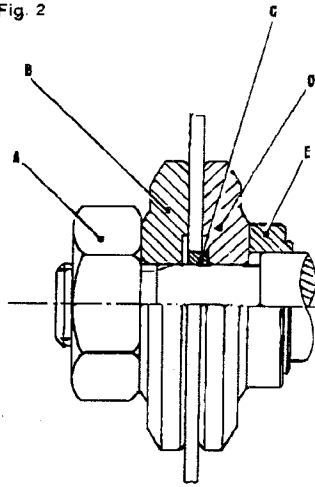
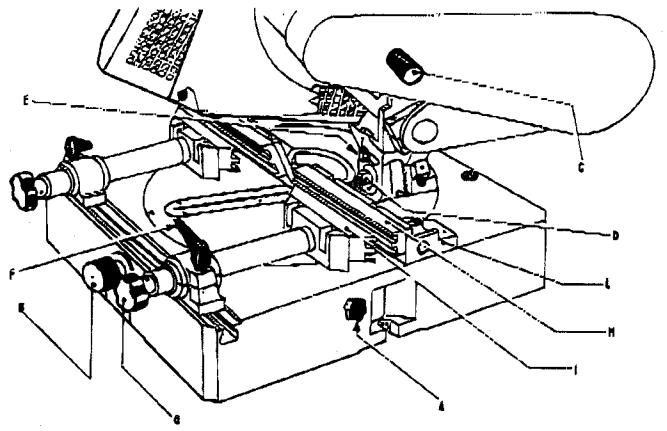


Fig. 3



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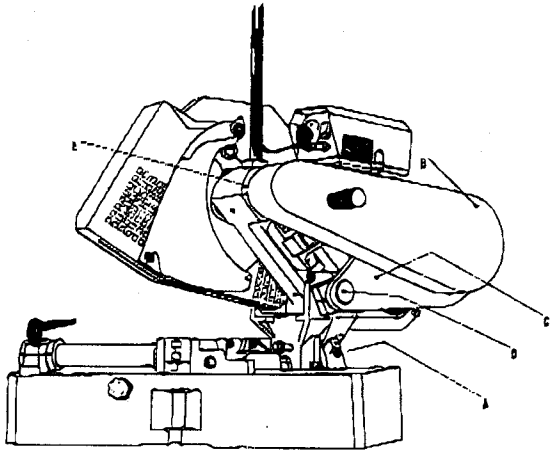
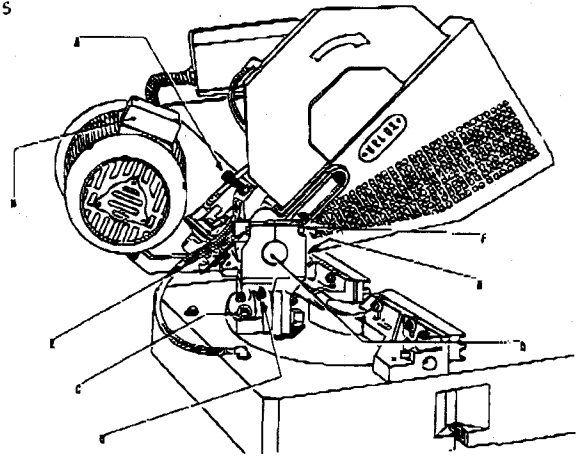


Fig. 5



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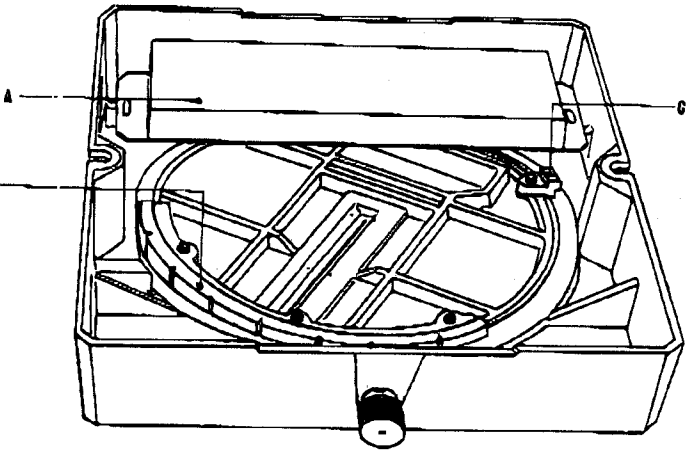


Fig. 7

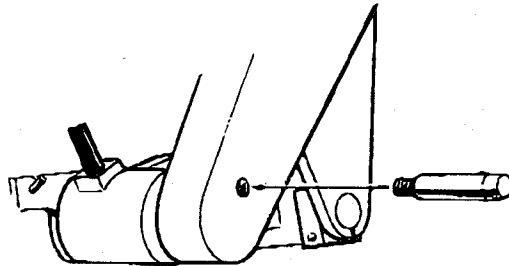
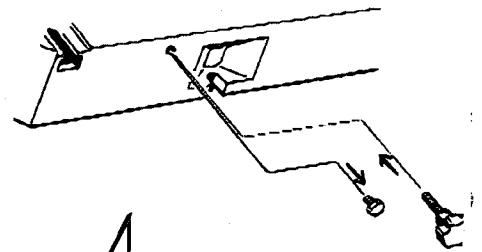


Fig. 8

TF 350-6

Instructions for use

The VELOX TF 350 cutting off machine is delivered packed in a metal crate complete with a set of operating keys, control handles and adjustable work stop for constant dimension cutting.

Optional equipment such as free standing work support, metric measuring scale, pneumatic vice, floor stand and H.S.S. or carbide tipped blades for aluminium are available as options and can be fitted to this machine.

Setting up

The machine can be fitted direct to a suitable work bench or preferably on to a floor stand available as an option, see (Fig. 1a). The machine is secured to the floor base with the two slots either side of the base, utilising the two screws that hold the machine in its crate.

Remove the transit bar from the pivoting head and replace it with the operating lever supplied, see (Fig. 1b), attach small handle to right hand belt guard (Fig. 8). Remove transit screw from right side of base and replace with locking handwheel (Fig. 7) Check motor plate supply voltage and phase and connect to the appropriate supply ensuring that earthing connections are adequate.

For machines fitted with 24v safety controls connect plug of operating lever microswitch to socket on control box, (Fig. 1c). Switch on machine and check that spindle turns clockwise. If not, interchange two of the cables at the supply connections. In the case of machines fitted with 24v safety controls the switch, (Fig. 1d), must be in the «on» position and the spindle started by depressing the microswitch on the operating handle.

Blade Mounting

Lower pivoting head and lift door, (Fig. 1e), on the right of the guard, (Fig. 1f), at the same time lift the head and remove upper guard, (Fig. 1g), by releasing the two side securing screws. Insert the 6mm key in to the hole under the spindle head, (Fig. 1h) rotate spindle until it locks, unscrew left hand threaded locking nut (Fig. 2a) with spanner supplied.

Remove locking flange (Fig. 2b). Ensure that both friction faces are clean and free from swarf, locate blade noting direction of rotation as indicated on guard, replace locking flange and nut and tighten. **Do not overtighten.** Remove the 6mm key and ensure spindle rotates freely. Replace upper guard and secure, lower head to re-engage lower guard.

Blade Choice

The maximum diameter blade to be used is 350 mm with a bore of 32 mm diameter. We recommend that H.S.S. blades be used at 1800 rpm and carbide tipped blades used at 3600 rpm.

Lubrication of Blade

A diaphragm type coolant pump is fitted to the rear of the head and is operated by the pivoting action of the spindle head. An emulsifying cutting oil diluted 1 part oil to 10 parts water can be poured in to the tank through the hose protruding from the base. Capacity is approximately 3 litres.

Pivoting Head Stop

After mounting a suitable blade and prior to starting the machine the lower head stop (Fig. 5a), must be adjusted to prevent the blade cutting into the turntable.

Head Rotation & Inclination for Angle Cutting

The spindle head can be rotated on a turntable through 45° right and left with the blade vertical. The head can be inclined up to 45° to the left when the turntable is at the 0° position. To rotate the head release handwheel (Fig. 3a). Pull out location plunger (Fig. 3b), and rotate head to desired position by pulling on handle fitted hand side of guard (Fig. 3c). The plunger (Fig. 3b) allows positive setting of 15, 30 & 45 degree angles.

To lock head for intermediate angle positions, release the locking handwheel (Fig. 3a), pull out and turn plunger (Fig. 3b) through 90° to lock out. Turn head to desired position and lock with handwheel (Fig. 3a).

To incline head up to 45° to the left set turntable to 0°, release locking nuts (Fig. 3d) and (Fig. 3e), tilt head to desired position and re-tighten both locking nuts.

Vices

The vices are positioned by releasing lever (Fig. 3f) and sliding the cylinder to the desired cutting position. The cylinder should be positioned some 4-5 mm from the workpiece and locked with lever (Fig. 3f) and final tightening carried out by rotating handwheel (Fig. 3g) until component is secure. The vice jaws (Fig. 3h) and (Fig. 3i) are adjustable and can be reversed to give support to small workpieces close to the blade and can be removed completely to give increased cutting capacity.

Maintenance

Running In

After the first fifty working hours check that all screws and bolts subject to vibration are secure. Check driving belt tension and adjust if required. All bearings are sealed for life and require no lubrication. Oil all other moving parts periodically.

Belt Adjustment

Release four screws securing belt guard (Fig. 4b) and remove. Ensure that each belt has approximately 10 mm of free play by pressing lightly on each belt in the centre. Adjust this play by releasing motor plate (Fig. 4c) by the locking screw on the pivot pin (Fig. 4d), adjust position of motor plate and tighten securing screw.

Replace any belt that shows signs of wear by above method.

Pivot Pin Adjustment

If after considerable use the head has excessive play, the pivot (Fig. 5d) can be adjusted. Release one of the two locking nuts (Fig. 5e) on the rear of the hinge, adjust the screw (Fig. 5f) to give the correct play and re-tighten lock nuts, repeat on other side of head.

Vice Adjustment

The locking lever (Fig. 3f) can be adjusted to a more suitable position by lifting the lever handle and turning to the required position whilst holding the central screw. When positioned push lever down to secure, locating in nearest spline position.

Tilt Stop Adjustment

Adjustment of the tilt angle 0° & 45° setting can be made by screw (Fig. 4a) for 0 degree setting and by screw (Fig. 5g) for 45° setting. After adjustment tighten locking nuts.

Motor Removal

Before removing motor it is necessary to isolate machine from mains supply before disconnecting the electrical connections to the motor by removing the cover (Fig. 5h) and disconnecting the cables from the terminal strip.

Remove belt guard (Fig. 4b), remove screw securing motor plate and remove belts. Secure the motor plate so that access to the four screws securing the motor to the motor plate is possible.

Release these screws whilst supporting the motor.

Main Spindle Bearing Replacement

Remove upper blade guard and blade, remove blade guide ring (Fig. 2c) and rear flange (Fig. 2d) together with spacer (Fig. 2e). Remove upper guard support, belt guard and belts, lock motor plate, insert 6 mm key into hole under spindle and turn spindle until locked. Remove belt pulley by removing key and bearing from its housing together with the shaft. Remove

bearing from shaft. Remove left hand bearing by inserting threaded end of shaft into bearing and drifting out.

Lubrication of Turntable Rollers

Remove blade, remove the two securing screws from the rear of the head support casting (Fig. 5c), remove the entire upper unit after disconnecting the coolant connections. Remove screws securing the rear vice assembly (Fig. 3i) and remove.

Remove the two front vice assemblies.

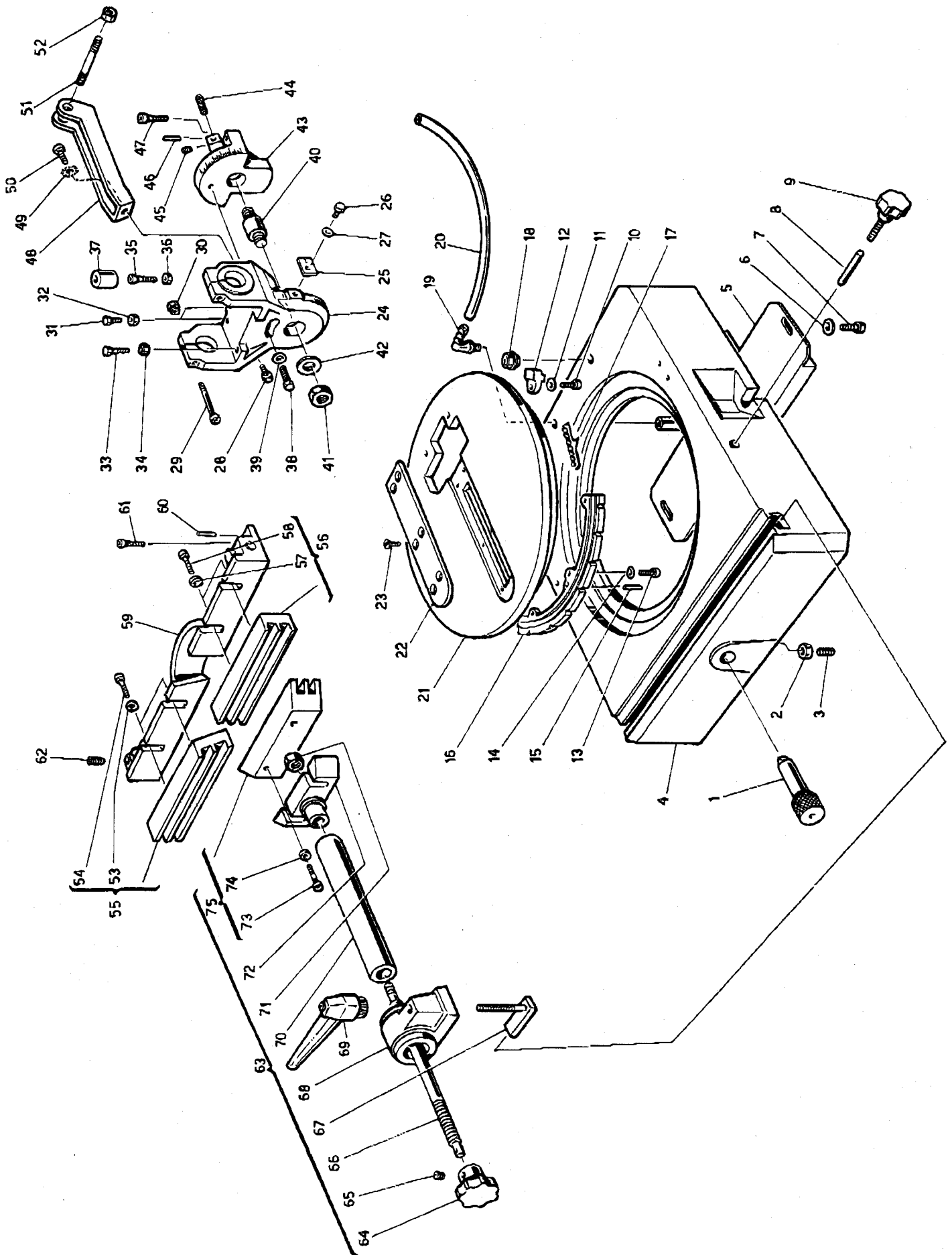
Invert the base and support it on the turntable. Coolant will empty from the tank and should be collected. Remove tank. Remove location plunger (Fig. 3b) and unlock handwheel (Fig. 3a).

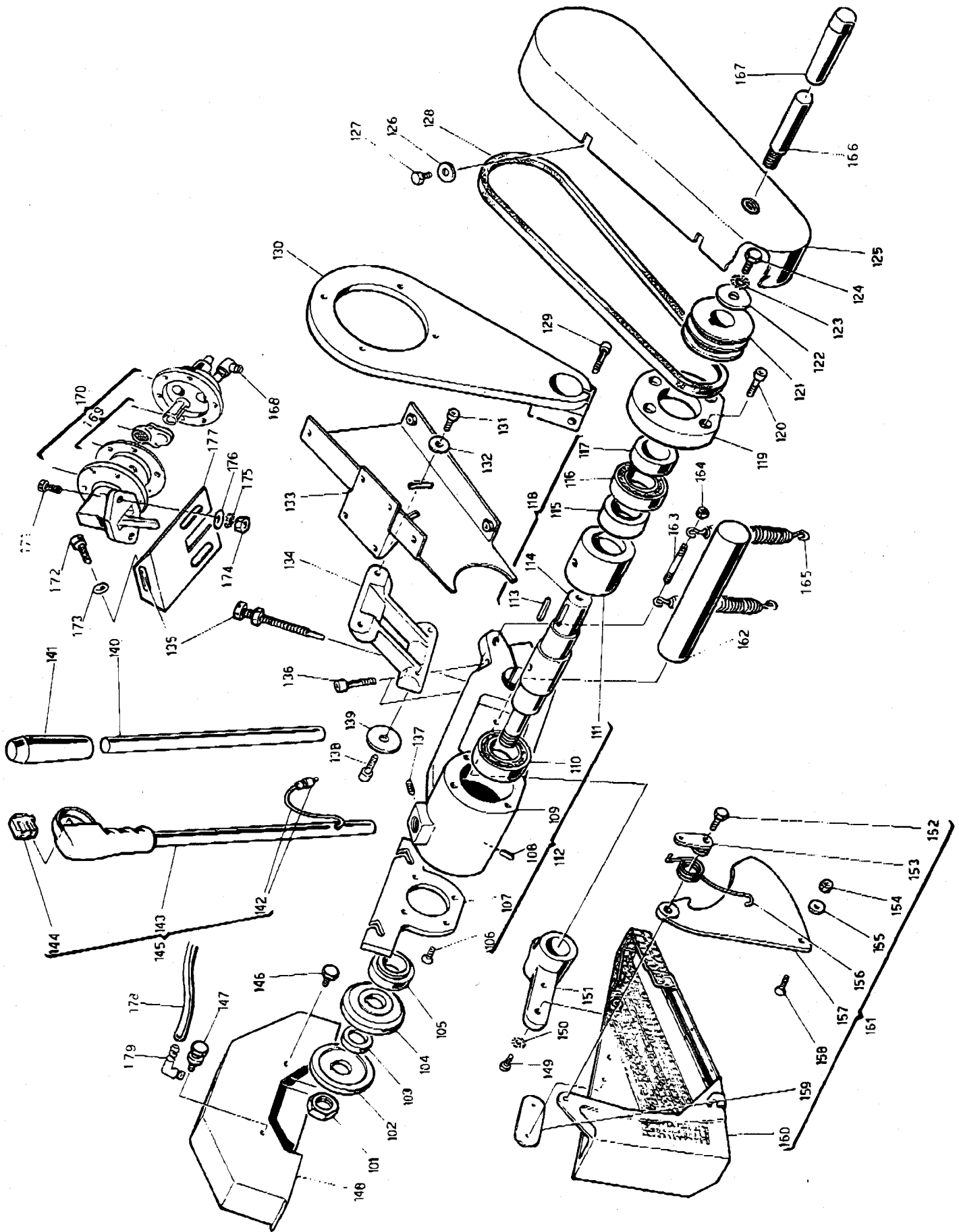
Remove location ring (Fig. 6b) and the two rear limit stops (Fig. 6c).

Lift off base from turntable ensuring bearing dia is not damaged collect and retain balls.

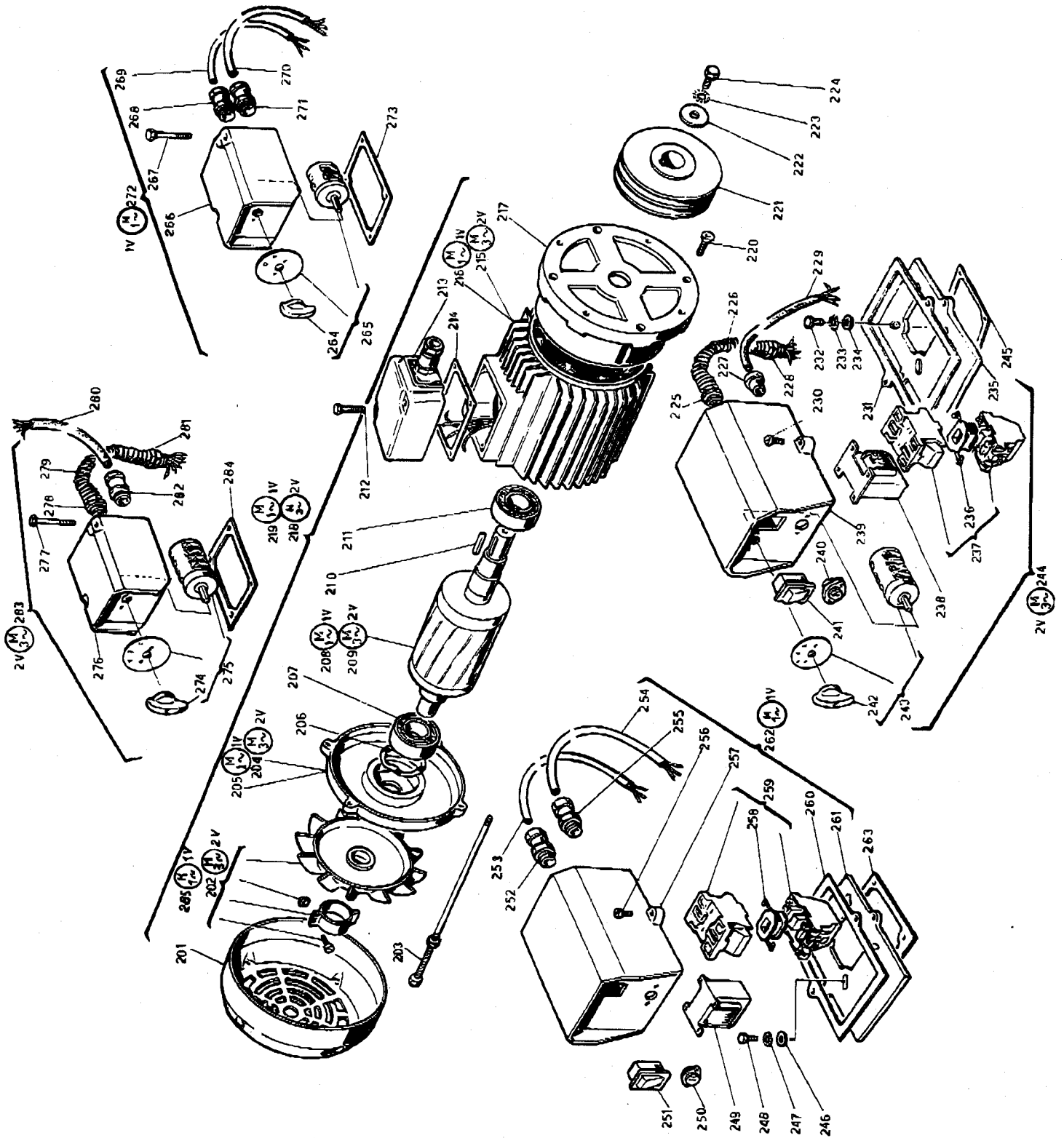
Assembly is the reverse of the above procedure after firstly positioning the balls on the perimeter of the turntable, thoroughly grease these for lubrication.

TF 350 - 10





TF 350 - 12



RICAMBI - SPARE PARTS - PIÈCES DETACHÉES VELOX TF 350

2V 3F 380-50
1 V MO 220-50

PAG. 10

PAG. 11

PAG. 12

N.	ART.	N.	ART.	N.	ART.	N.	ART.
1	613394	101	206870	151	853500	201	272070
2	307720	102	347245	152	168600	202	947095
3	945545	103	123270	153	728898	203	929531
4	144540	104	347245	154	308495	204	262803
5	774313	105	325545	155	116200	205	262907
6	744020	106	968795	156	547500	206	594445
7	978095	107	854100	157	775200	207	291445
8	130836	108	788985	158	966020	208	101920
9	962308	109	170000	159	917645	209	102345
10	979645	110	290670	160	190938	210	217820
11	748470	111	182000	161	191600	211	280670
12	150287	112	171720	162	649600	212	992820
13	979645	113	217820	163	646500	213	267516
14	748470	114	113500	164	307720	214	508445
15	789770	115	323220	165	546745	215	811470
16	775584	116	290670	166	697545	216	807595
17	777700	117	323500	167	513095	217	338750
18	665720	118	113385	168	721570	218	568150
19	500695	119	352000	169	727050	219	564250
20	936245	120	978065	170	691345	220	968795
21	318108	121	703900	171	995145	221	706100
22	668433	122	741720	172	978095	222	741720
23	989020	123	751795	173	744820	223	751795
24	861737	124	895920	174	307720	224	995920
25	911026	125	193403	175	751795	225	718600
26	594270	126	748470	176	749470	226	507416
27	747920	127	995000	177	673936	227	631670
28	995920	128	225570	178	946245	228	720914
29	936335	129	974985	179	500695	229	205085
30	300745	130	648200	180	978095	230	969860
31	995145	131	978065	181	748200	231	509995
32	307720	132	748200	182	193900	232	991603
33	995920	133	193900	183	862900	233	991603
34	307720	134	862900	184	981100	234	751020
35	979645	135	981100	185	982745	235	746895
36	307720	136	982745	186	942445	236	920746
37	114976	137	942445	187	981195	237	161855
38	988170	138	981195	188	741720	238	261400
39	747145	139	741720	189	134120	239	932300
40	645837	140	134120	190	513995	240	766854
41	302567	141	513995	191	204704	241	698504
42	745109	142	204704	192	132203	242	520504
43	856814	143	132203	193	520821	243	540220
44	943220	144	520821	194	132595	244	258120
45	943995	145	132595	195	961500	245	239540
46	789770	146	961500	196	960800	246	508445
47	974220	147	960800	197	198600	247	746695
48	354220	148	198600	198	978095	248	751020
49	751795	149	978095	199	751795	249	991603
50	978870	150	751795			250	932250
							698504

Importante

Per la richiesta dei particolari di ricambio indicare:
 1 - Numero di matricola della macchina (riportato sulla targhetta dati elettrici del motore).
 2 - Numero di codice di ciascun pezzo.
 3 - Tipo di macchina e suo voltaggio.

Important

When requiring spare parts please always state:
 1 - Serial number (See plate with electrical data).
 2 - Code number of each piece.
 3 - Type of machine and voltage.

Importante

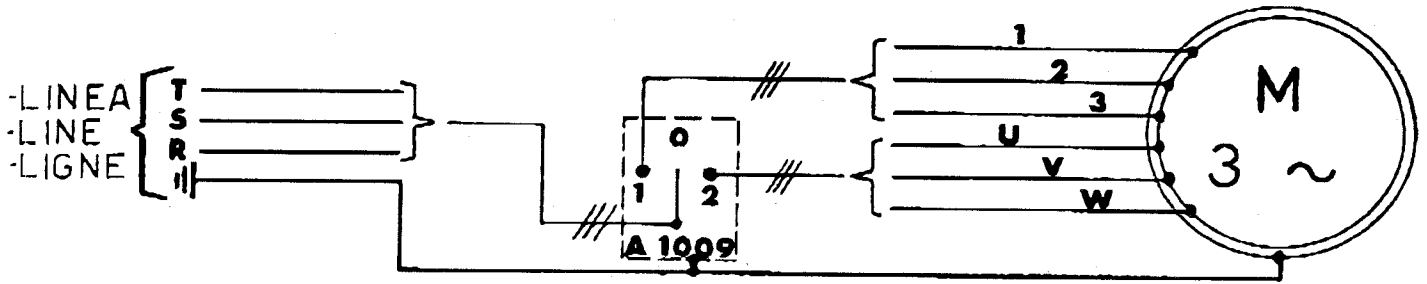
Pour toute demande de pièces de réchange il faut indiquer:
 1 - Numero de matricule de la machine (voir plaque et données techniques).
 2 - Numero de code de chaque pièce.
 3 - Le type de machine et son voltage.

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Schema elettrico

Electric diagram

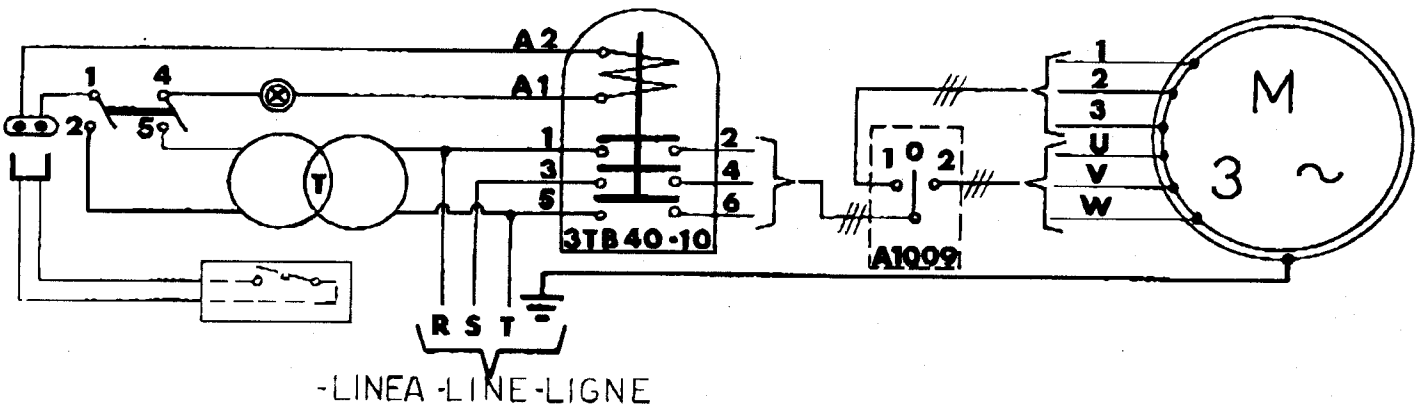
Schema électrique



2 velocità trifase standard

2 speed 3 phase std.

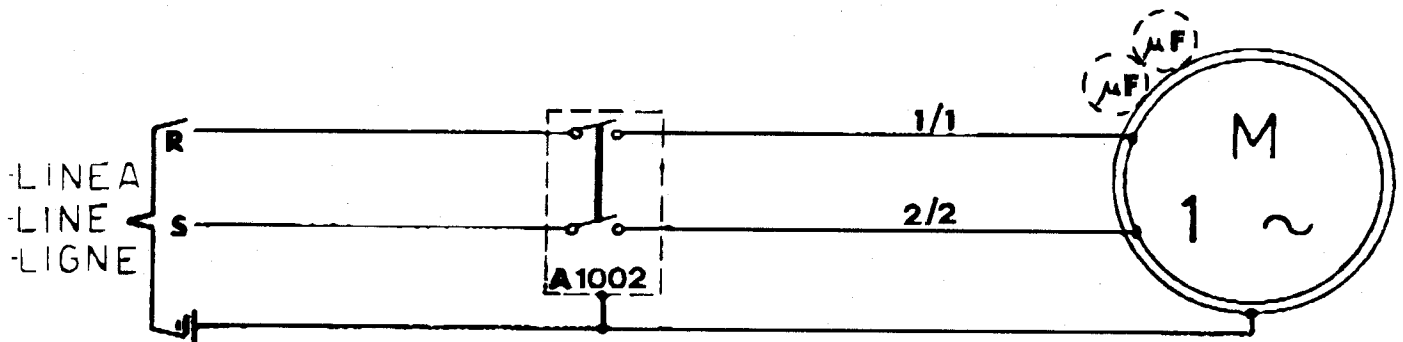
2 vitesses triphasé standard



2 velocità trifase con dispositivo di sicurezza a bassa tensione

2 Speed 3 phase with low voltage safety electric drive

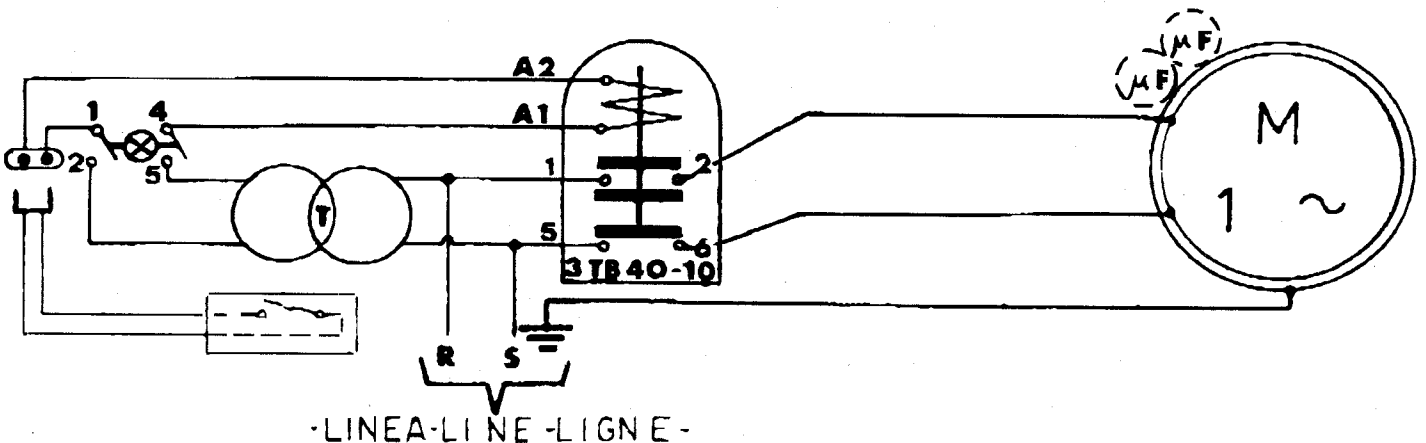
2 vitesses triphasé avec sécurité



1 velocità monofase standard

1 speed 1 phase std.

1 vitesse monophasé standard



1 velocità monofase con dispositivo di sicurezza a bassa tensione

1 speed 1 phase with low voltage safety electric drive

1 vitesse monophasé avec sécurité