

**HiFi ENGINE®**

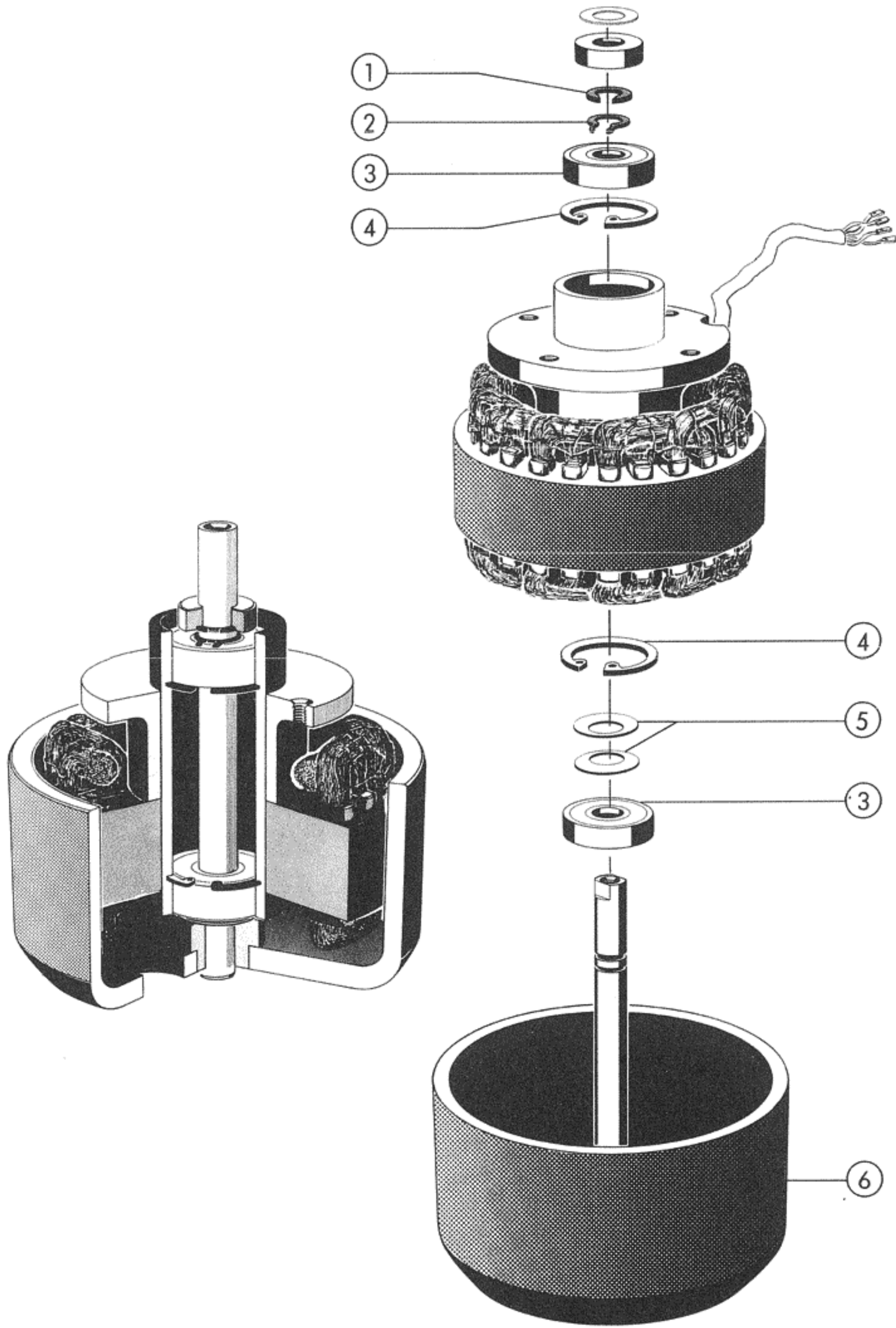
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**KAPITEL 8**  
**Ersatzteilliste****SECTION 8**  
**Parts list****CHAPITRE 8**  
**Liste des pièces  
détachées**

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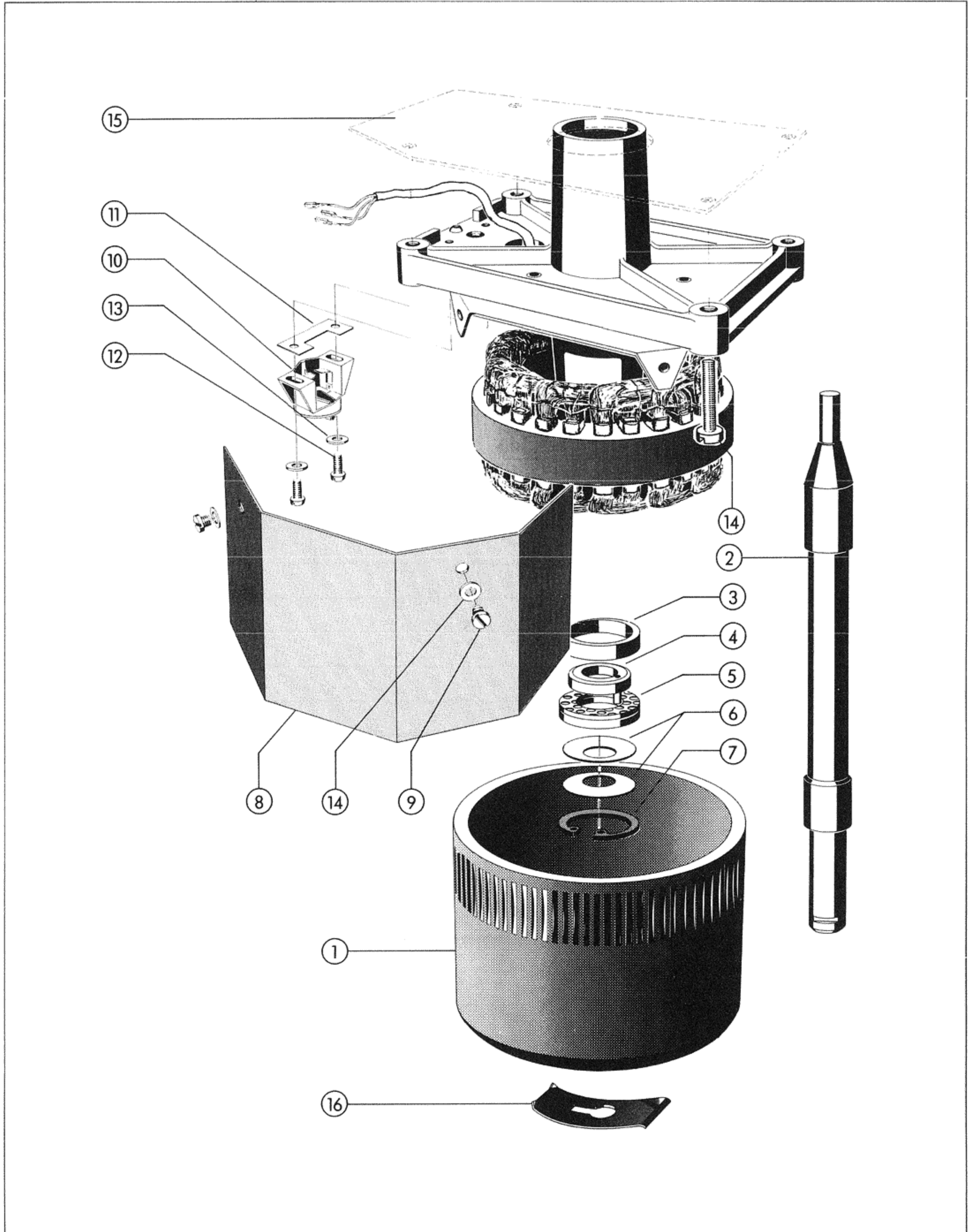
Wickelmotor	Spooling motor	Moteur de bobinage	8/2
Tonmotor	Capstan motor	Moteur de cabestan	8/4
Laufwerk	Tape drive	Mécanisme du transport	8/6
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SPOOLING MOTOR



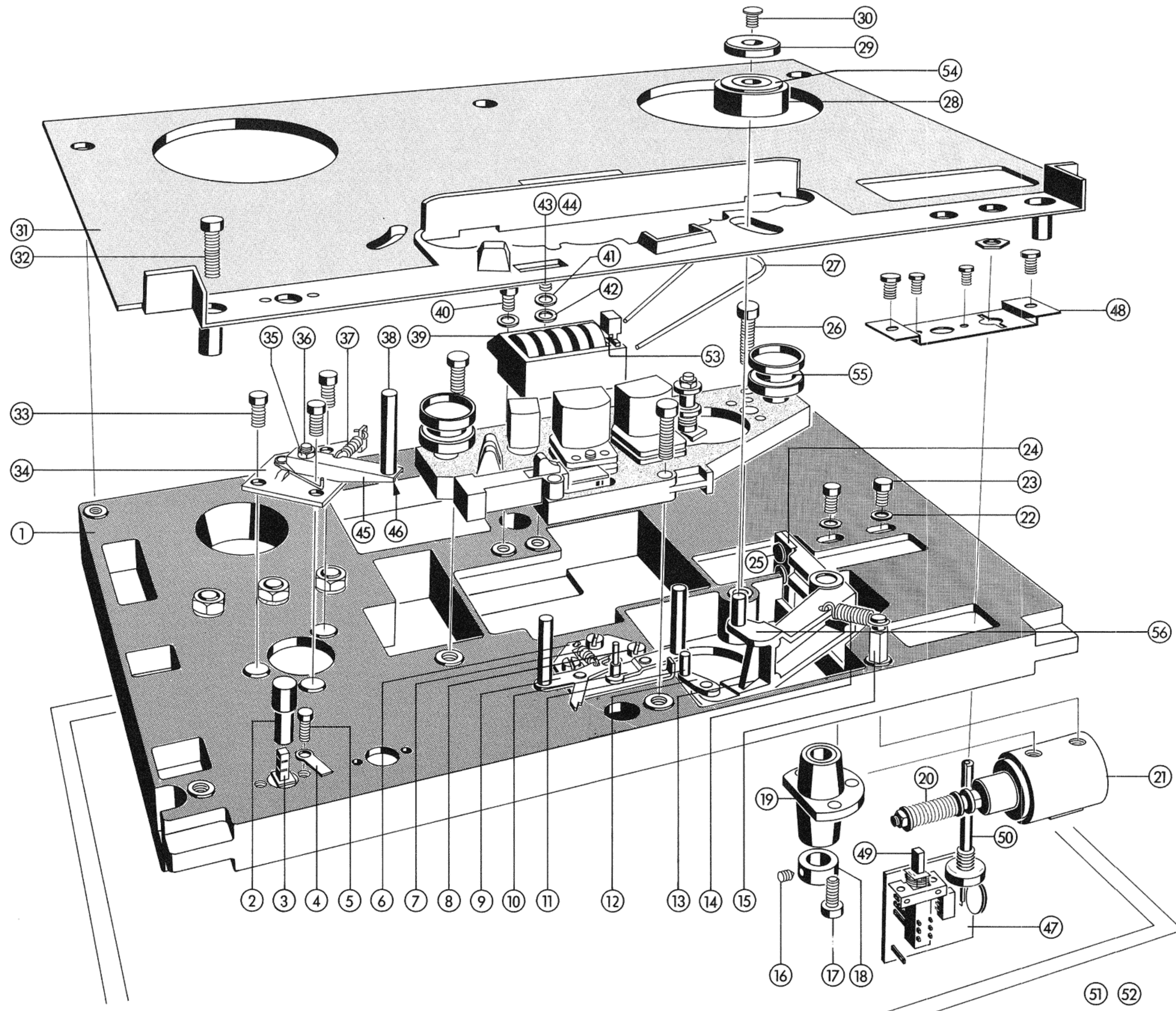


CAPSTAN MOTOR





TAPE DRIVE



## TAPE DRIVE

INDEX	QTY		ORDER NUMBER	PART NAME
01	1		1.177.100.01	Tape drive chassis
02	1		1.177.100.09	Push button
03	1		1.177.100.07	Push button switch
04	1		29.26.1022	Solder lug
05	2		20.21.7154	Self-tapping screw
06	1		1.177.131.00	Base plate, compl. MKI
	1		1.177.813.00	Base plate, compl. MKII
07	1		1.010.024.37	Tension spring
08	3		21.26.0354	Screw M3x6
09	1		1.177.132.00	Lever left, riveted MKI
	1		1.177.812.00	Lever left, riveted MKII
10	1		1.177.133.00	Lever right, riveted MKI
	1		1.177.811.00	Lever right, riveted MKII
11	1		1.177.120.01	Dog pin
12	1		21.26.2354	Screw M3x6
13	1		1.177.123.00	Pich roller arm with shaft
14	1		1.010.025.37	Tension spring
15	1		1.067.100.06	Anchor pin
16	1		21.59.5452	Set screw M4
17	3		21.26.0356	Screw M3x10
18	1		1.080.112.06	Adjusting ring
19	1		1.177.125.00	Pich roller arm bearing
20	1		1.177.126.00	Plunger compl.
21	1		1.014.710.00	Pich roller solenoid compl. without plunger
22	2		23.01.3043	Washer
23	2		21.26.0454	Screw M4x6
24	1		1.177.120.02	Lever
25	2		21.26.0455	Screw M4x8
26	3		21.26.0459	Screw M4x18
27	1		31.99.0106	Rubber ring
28	1		1.167.178.82	Pinch roller compl.
29	1		1.177.100.25	Pinch roller cover
30	1		21.27.2355	Screw M3x8
31	1	MKI:	1.177.421.00	Tape transport cover (DOLBY)

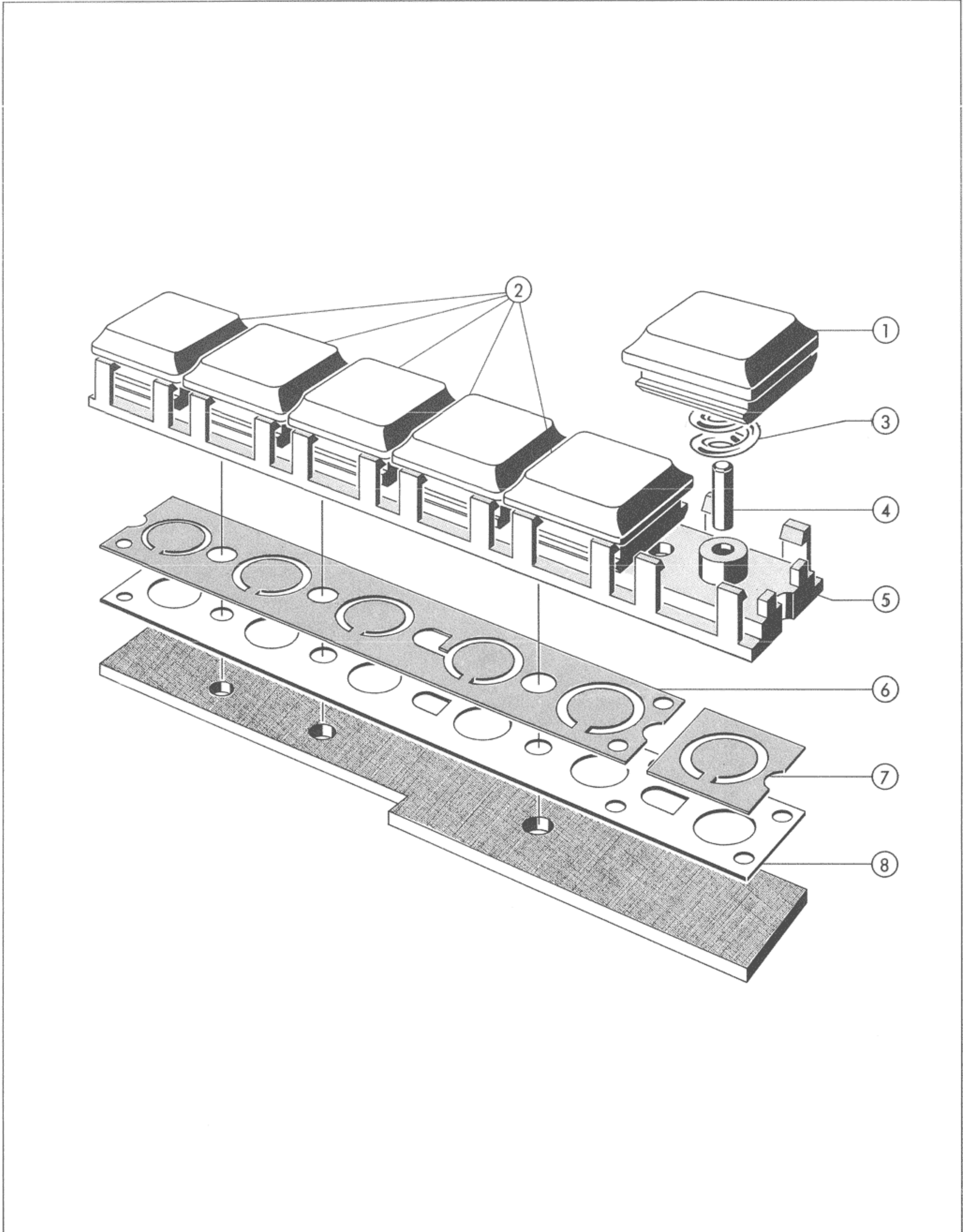


## TAPE DRIVE

INDEX	QTY		ORDER NUMBER	PART NAME
	1	MKI :	1.177.419.00	Tape transport cover (AUTO START)
		MKI :	1.177.414.00	Tape transport cover (DIA PILOT)
		MKI :	1.177.412.00	Tape transport cover (SIMDA)
		MKI :	1.177.417.00	Tape transport cover (SYNC)
		MKII :	1.177.494.00	Tape transport cover (SYNC)
		MKII :	1.177.491.00	Tape transport cover (STANDARD)
32	5		21.27.0462	Screw M4x25
33	3		21.26.0354	Screw M3x6
	1		1.177.140.00	Tape guide pin compl.
34	1		1.177.142.00	Base plate
35	1		22.13.8040	Hexagonal nut M4
36	1		1.177.140.03	Shaft
37	1		1.010.025.37	Tension spring
38	1		1.177.140.02	Guide pin
39	1		1.077.100.09	Counter
40	1		21.01.0355	Screw M3x8
41	2		24.99.0107	Spring washer
42	2		23.01.2032	Washer
43	1		1.077.100.19	Threaded spacer
44	1		1.077.100.20	Rubber cap
45	1		1.177.140.01	Lever
46	1		21.26.0354	Screw M3x6
47	1		1.177.330.00	Print
48	1		1.177.330.01	Mounting bracket
49	1		1.177.330.02	Switch
50	1		1.177.330.03	Potmeter
51	1		1.177.470.00	19"-rack version metal-cage housing
52	1		1.177.450.00	Standard version molded plastic housing
to above	4		20.20.3310	Screw
	4		1.010.007.23	Washer
	1		1.177.450.02	Handle

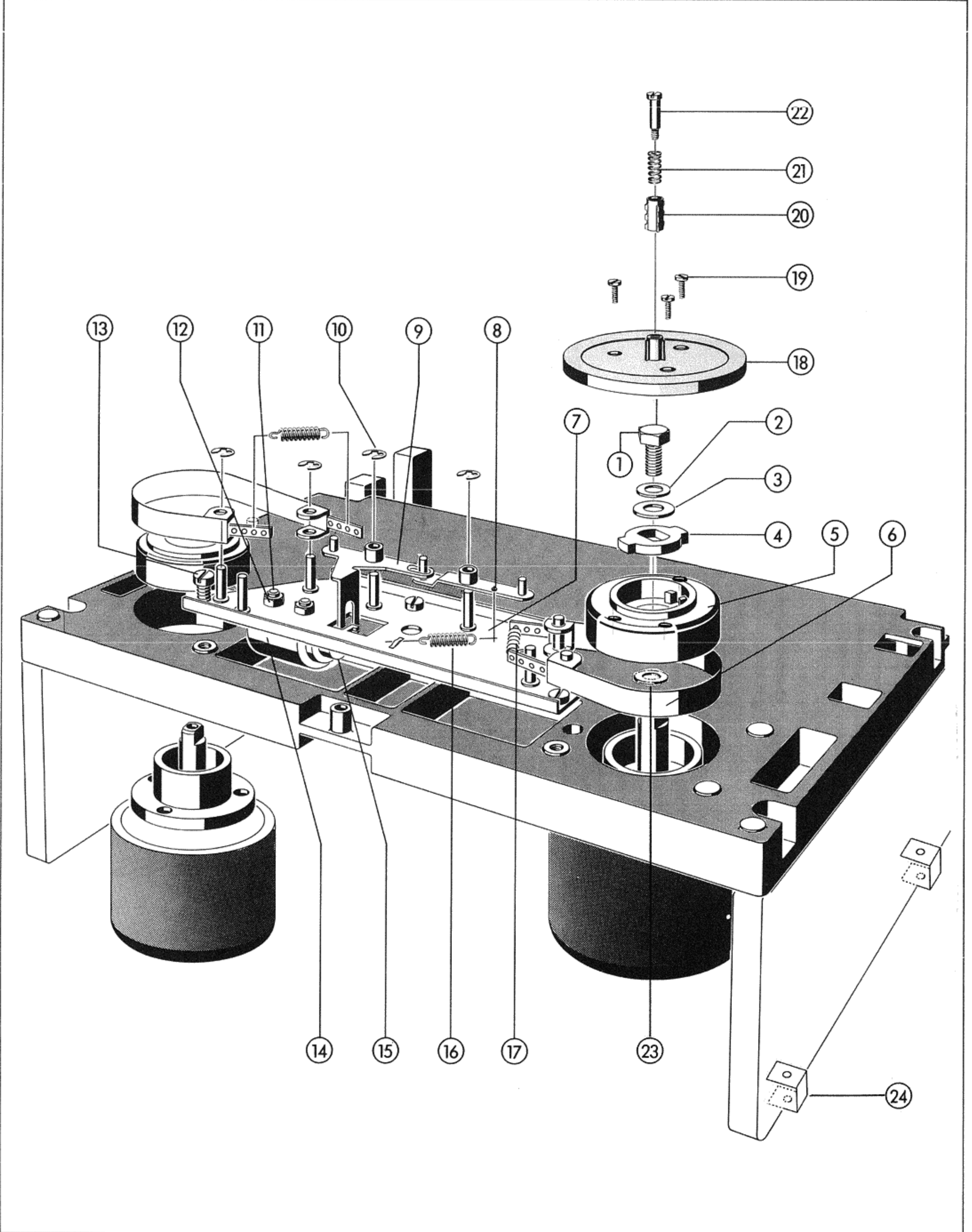


PUSH BUTTON UNIT



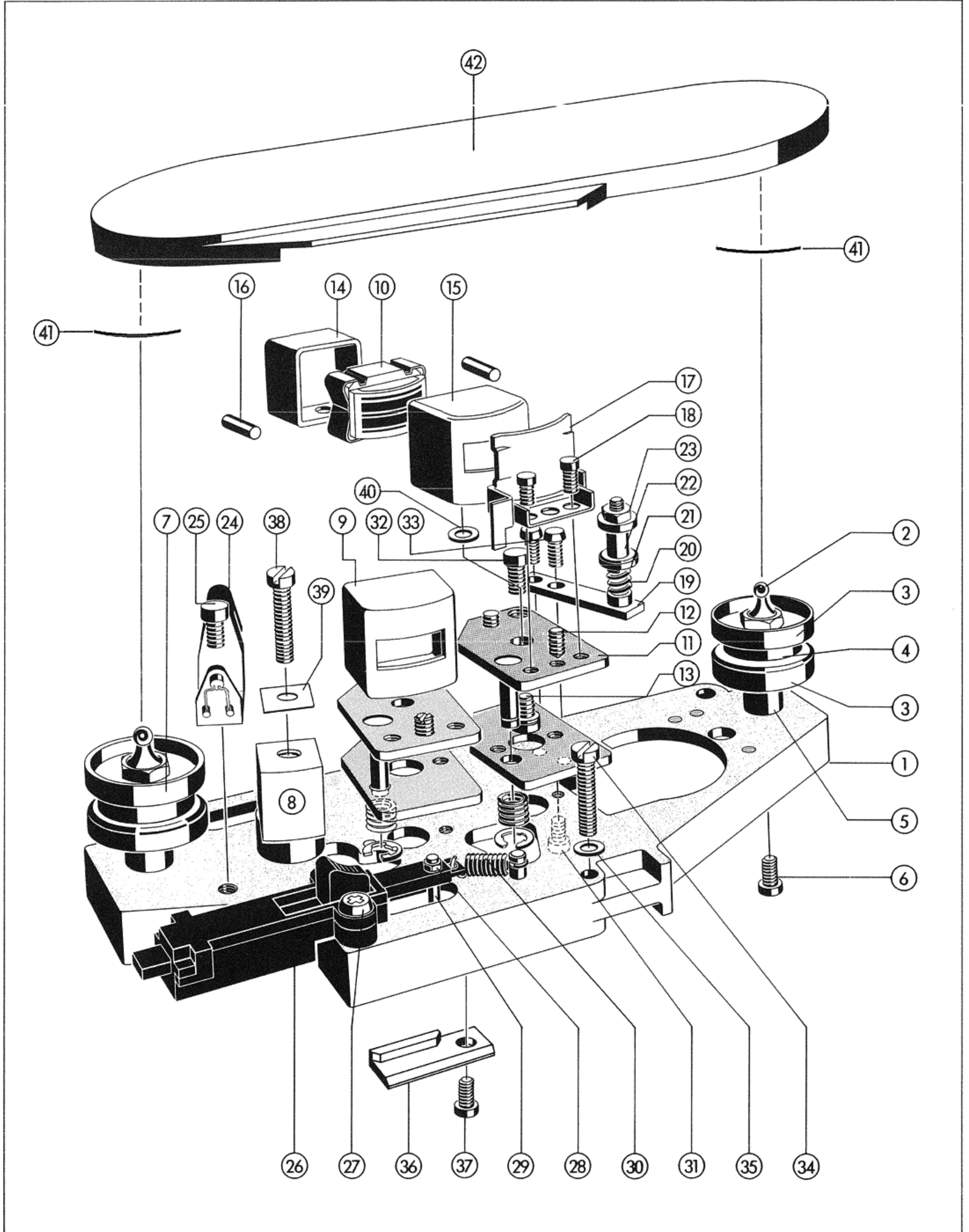


BRAKE SYSTEM





TAPE HEAD ASSEMBLY

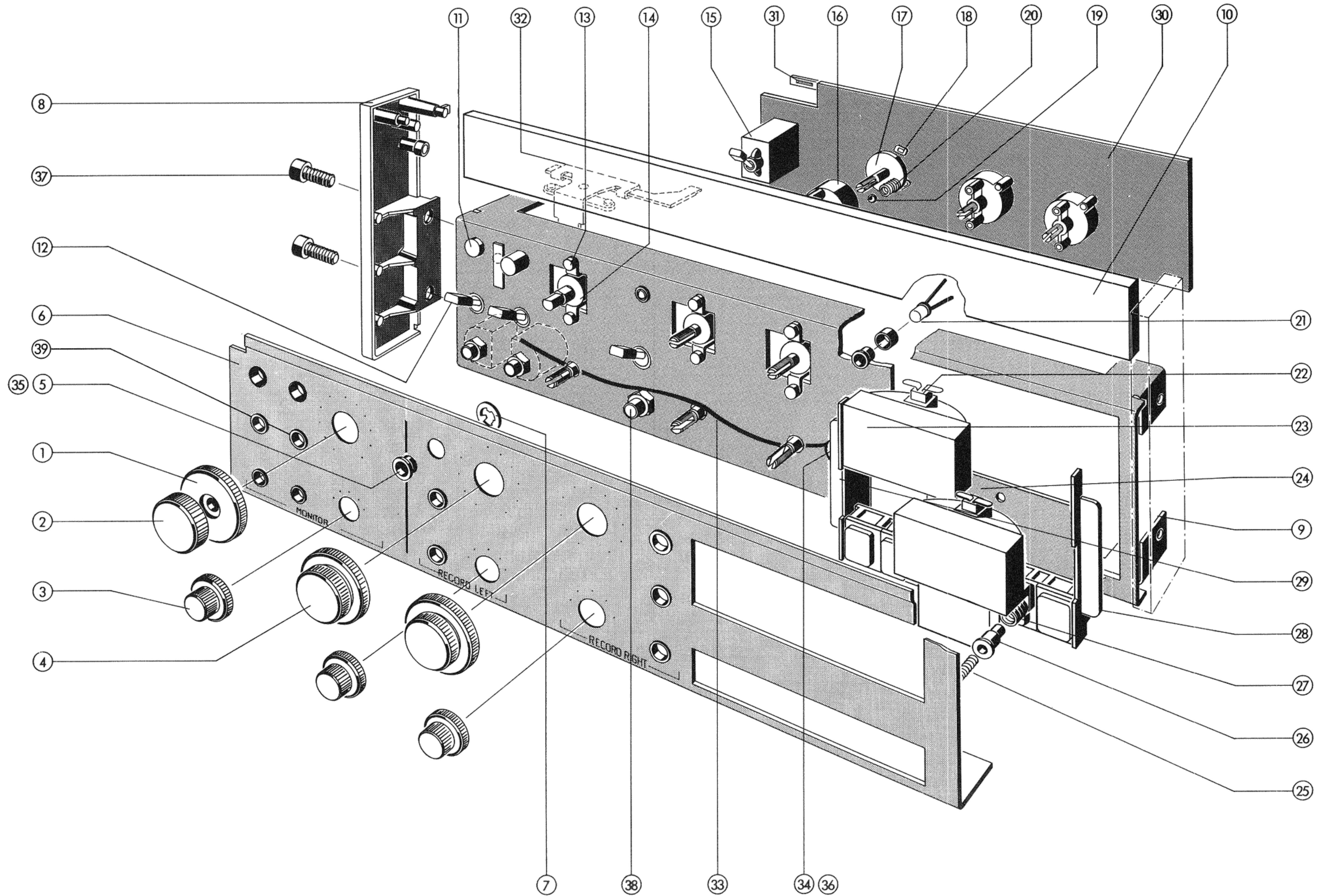


TAPE HEAD ASSEMBLY

INDEX	QTY		ORDER NUMBER	PART NAME	INDEX	QTY		ORDER NUMBER	PART NAME
			1.020.300.00	Tape head assembly compl. 1/4",2-track	27	2		21.26.2357	Screw M3x12
			1.020.301.00	Tape head assembly compl. 1/4",4-track	28	1		22.01.8020	Nut M2
01	1		1.020.300.01	Tape head chassis	29	1		1.020.318.04	Pin
02	2		1.020.300.06	Centering screw	30	1		1.020.820.17	Tension spring
03	4		1.077.121.02	Tape guide cup	31	4		21.26.0354	Screw M3x6
04	1		1.077.121.04	Spacer	32	2		21.26.0355	Screw M3x8
05	2		1.020.300.04	Threaded support	33	2		21.26.0354	Screw M3x6
06	2		21.26.0455	Screw M4x8	34	3		21.26.0459	Screw M4x18
07	1		41.99.0102	Ball bearing	35	3		23.01.1043	Washer
08	1		1.116.098.01	Erase head 1/4",2-track	36	1		1.020.300.07	Guide
from	57329		1.116.098.04	Erase head 1/4",2-track	37	1		21.26.0354	Screw M3x6
	1		1.116.099.01	Erase head 1/4",4-track	38	1		1.077.130.02	Mounting screw
from	60977		1.116.099.04	Erase head 1/4",4-track	from	57329		1.116.099.02	Mounting screw
09	1		1.116.022.00	Record head 1/4",2-track	39	1		1.116.098.03	Head spacer (just to No. 57328)
	1		1.116.042.00	Record head 1/4",4-track	40	1		1.010.017.23	Washer
10	1		1.116.027.00	Reproduce head 1/4",2-track	41	2		1.177.425.02	Spring
	1		1.116.047.00	Reproduce head 1/4",4-track	42	1		1.177.426.03	Headblock cover "STUDER"
11	2		1.020.801.00	Head mounting plate compl.					
12	4		21.18.6354	Set screw					
13	2		21.99.0118	Screw M3x7					
14	2		1.077.155.05	Head housing, internal					
15	2		1.077.155.06	Head housing, outer					
16	4		1.077.155.07	Plastic pin					
17	1		1.020.311.00	Shielding lid compl.					
18	2		21.01.0202	Screw M2x4					
19	1		1.020.310.00	Clamp, riveted					
20	1		1.020.820.12	Pressure spring					
21	2		1.077.145.01	Guide disk					
22	1		1.077.145.02	Spacer sleeve					
23	1		22.01.8030	Nut M3					
24	1		1.020.320.00	Light gate compl.					
to above	1		23.01.3032	Washer					
25	1		21.26.0354	Screw M3x6					
26	1		1.020.318.00	Edit switch compl.					



OPERATING SECTION



## OPERATING SECTION

INDEX	QTY	ORDER NUMBER	PART NAME
01	1	1.177.100.12	Knob, disk type
02	1	1.177.100.11	Knob
03	3	1.177.100.10	Knob
04	2	1.068.700.23	Knob
05	2	1.166.450.03	Lens red
06	1	1.177.400.00	Operating panel compl. (STANDARD)
		1.177.401.00	Operating panel compl. (HS)
		1.177.402.00	Operating panel compl. (DOLBY)
		1.177.403.00	Operating panel compl. (LS)
		1.177.404.00	Operating panel compl. (SLS)
07	2	22.16.6004	Lock washer
08	1	1.177.100.05	Side part left
09	1	1.177.100.06	Side part right
10	1	1.177.430.00	Flap compl. (Spring 1.010.026.37)
11	2	1.177.190.03	Button
12	1	1.011.102.00	Mains switch, single pole
13	2	21.26.0354	Screw M3x6
14	1	1.177.200.02	Twin potmeter
15	3	1.011.120.00	Toggle switch
16	3	1.011.301.01	Housing
17	3	1.011.301.00	Rotary switch
18	9	1.010.001.55	Contact spring
19	3	41.01.0240	Steel ball
20	3	1.010.040.37	Pressure spring
21	2	50.04.2114	LED compl.
22	2	51.02.0142	Lampe type W2D, 24V, 1W
23	2	1.177.205.01	VU-meter
from	58252	1.177.205.05	VU-meter
24	1	1.177.205.02	Mounting bracket
25	4	21.26.0372	Screw M3x16
26	4	1.067.435.02	Sleeve
27	4	1.067.435.01	Pressure spring
28	1	1.177.205.04	Bracket, right
29	1	1.177.205.03	Bracket, left



**KAPITEL 9****Spezial Versionen****SECTION 9****Special Versions****CHAPITRE 9****Versions spéciales****Seite/page**

B77 mit Diasteuerung

B77 with slide synchronizing  
electronicsB77 avec synchronisateur de  
diapositives

9/1

B77 "HS" (High Speed)

B77 "HS" (High Speed)

B77 "HS" (High Speed)

9/1

<b>9. Spezialversionen</b> <b>9.1. B77 mit Diasteuerung</b> <b>9.1.1. Allgemeines</b>	<b>9. Special Versions</b> <b>9.1. B77 with slide synchronizing electronics</b> <b>9.1.1. General</b>	<b>9. Versions spéciales</b> <b>9.1. B77 avec synchronisateur de diapositives</b> <b>9.1.1. Généralités</b>																																																						
<p>Die B77 mit Diasteuerung ist mit einem Spezial-Tonkopf für die Steuerimpuls-Aufnahme und -Wiedergabe ausgerüstet. Die Steuerimpulse werden zwischen zwei Spuren gespeichert, dadurch ist es nicht nötig, eine Tonspur für die Steuerimpulse zu verbrauchen.</p> <p>Zugehörige Schemata 7-35/7-37</p>	<p>For slide presentations with synchronous sound accompaniment, the B77 recorder must be equipped with a special magnetic head to record and to reproduce the sync impulses. These impulses are recorded on the "land" between the two audio tracks, which means that both tracks are available for stereophonic sound reproduction.</p> <p>Relating circuit diagrams 7-35/7-37</p>	<p>Le magnétophone B77 avec synchronisateur de diapositives est équipé d'une tête magnétique spéciale supplémentaire pour l'enregistrement et la lecture des impulsions de commande. Ces impulsions sont enregistrées entre les deux pistes, laissant ces dernières absolument libres.</p> <p>Schéma correspondant 7-35/7-37</p>																																																						
<b>9.2. Tonbandmaschine B77 HS (High Speed)</b> <b>9.2.1. Allgemeines</b>	<b>9.2. Tape recorder B77 "HS" (High Speed)</b> <b>9.2.1. General</b>	<b>9.2. Magnétophone B77 "HS" (High Speed)</b> <b>9.2.1. Généralités</b>																																																						
<p>Bei der Tonbandmaschine B77 HS mussten einige Baugruppen abgeändert werden.</p> <p>Die zu Kapitel 5.1. nicht identischen Baugruppen sind:</p> <table border="0"> <tr><td>Aufnahmeverstärker</td><td></td></tr> <tr><td>Entzerrung CCIR</td><td>1.177.233</td></tr> <tr><td>Entzerrung NAB</td><td>1.177.232</td></tr> <tr><td>Wiedergabeverstärker</td><td></td></tr> <tr><td>Entzerrung CCIR</td><td>1.177.253</td></tr> <tr><td>Entzerrung NAB</td><td>1.177.252</td></tr> <tr><td>Capstanmotor 19/38</td><td>1.021.302.00</td></tr> </table> <p>Zugehörige Schemata</p> <table border="0"> <tr><td>1.177.232/233</td><td>7-23a/7-23b</td></tr> <tr><td>1.177.252/253</td><td>7-27a/7-27b</td></tr> </table>	Aufnahmeverstärker		Entzerrung CCIR	1.177.233	Entzerrung NAB	1.177.232	Wiedergabeverstärker		Entzerrung CCIR	1.177.253	Entzerrung NAB	1.177.252	Capstanmotor 19/38	1.021.302.00	1.177.232/233	7-23a/7-23b	1.177.252/253	7-27a/7-27b	<p>In the HS version of the B77 tape recorder, several subassemblies had to be changed.</p> <p>The following assemblies are not identical with those described in chapter 5.1.:</p> <table border="0"> <tr><td>Recording amplifier</td><td></td></tr> <tr><td>CCIR equalization</td><td>1.177.233</td></tr> <tr><td>NAB equalization</td><td>1.177.232</td></tr> <tr><td>Replay amplifier</td><td></td></tr> <tr><td>CCIR equalization</td><td>1.177.253</td></tr> <tr><td>NAB equalization</td><td>1.177.252</td></tr> <tr><td>Capstan motor 19/38</td><td>1.021.302.00</td></tr> </table> <p>Relating circuit diagrams</p> <table border="0"> <tr><td>1.177.232/233</td><td>7-23a/7-23b</td></tr> <tr><td>1.177.252/253</td><td>7-27a/7-27b</td></tr> </table>	Recording amplifier		CCIR equalization	1.177.233	NAB equalization	1.177.232	Replay amplifier		CCIR equalization	1.177.253	NAB equalization	1.177.252	Capstan motor 19/38	1.021.302.00	1.177.232/233	7-23a/7-23b	1.177.252/253	7-27a/7-27b	<p>Dans cette version un certain nombre de modules sont modifiés.</p> <p>Les modules différents du chapitre 5.1. sont:</p> <table border="0"> <tr><td>Amplificateur d'enregistrement</td><td></td></tr> <tr><td>Norme CCIR</td><td>1.177.233</td></tr> <tr><td>Norme NAB</td><td>1.177.232</td></tr> <tr><td>Amplificateur de lecture</td><td></td></tr> <tr><td>Norme CCIR</td><td>1.177.253</td></tr> <tr><td>Norme NAB</td><td>1.177.252</td></tr> <tr><td>Moteur de cabestan 19/38</td><td>1.021.302.00</td></tr> </table> <p>Schémas correspondants</p> <table border="0"> <tr><td>1.177.232/233</td><td>7-23a/7-23b</td></tr> <tr><td>1.177.252/253</td><td>7-27a/7-27b</td></tr> </table>	Amplificateur d'enregistrement		Norme CCIR	1.177.233	Norme NAB	1.177.232	Amplificateur de lecture		Norme CCIR	1.177.253	Norme NAB	1.177.252	Moteur de cabestan 19/38	1.021.302.00	1.177.232/233	7-23a/7-23b	1.177.252/253	7-27a/7-27b
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<b>9.2.2. Daten</b>	<b>9.2.2. Performance data</b>	<b>9.2.2. Caractéristiques</b>																																																						
<p>Der Einfachheit halber sind nur die von der Normalversion abweichenden Daten aufgeführt.</p> <p><b>Tonhöenschwankungen:</b> (nach DIN 45507) <b>bei 19 cm/s</b> besser als 0,08 % <b>bei 38 cm/s</b> besser als 0,06 %</p> <p><b>Frequenzgang:</b> (über Band gemessen bei -20 VU) <b>bei 19 cm/s</b> 30 Hz ... 20 kHz + 2 -3 dB 50 Hz ... 15 kHz ± 1,5 dB <b>bei 38 cm/s</b> 30 Hz ... 22 kHz + 2 -3 dB 50 Hz ... 18 kHz ± 1,5 dB</p>	<p>For the sake of simplicity, only the data differing from the standard version are listed.</p> <p><b>Wow and flutter:</b> (per DIN 45507) <b>at 7.5 ips</b> less than 0.08 % <b>at 15 ips</b> less than 0.06 %</p> <p><b>Frequency response:</b> (measured via tape, at -20 VU) <b>at 7.5 ips</b> 30 Hz ... 20 kHz + 2 -3 dB 50 Hz ... 15 kHz ± 1.5 dB <b>at 15 ips</b> 30 Hz ... 22 kHz + 2 -3 dB 50 Hz ... 18 kHz ± 1.5 dB</p>	<p>Afin de simplifier, seules les caractéristiques de la version standard sont données.</p> <p><b>Pleurage:</b> (d'après DIN 45507) <b>à 19 cm/s</b> meilleur que 0,08 % <b>à 38 cm/s</b> meilleur que 0,06 %</p> <p><b>Réponse en fréquence:</b> (enregistrement-lecture, mesuré à -20 VU) <b>à 19 cm/s</b> 30 Hz ... 20 kHz + 2 dB -3 dB 50 Hz ... 15 kHz ± 1,5 dB <b>à 38 cm/s</b> 30 Hz ... 22 kHz + 2 dB -3 dB 50 Hz ... 18 kHz ± 1,5 dB</p>																																																						

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**Geräuschspannungsabstand:**  
(nach ASA-A 2-Spur)  
bezogen auf Vollaussteuerung (514 nWb/m)  
**19 cm/s**                      **38 cm/s**  
> 66 dB                      > 65 dB

**Signal to noise ratio:**  
(weighted as per ASA-A, measured via tape)  
half track  
**at 7.5 ips**                      **at 15 ips**  
> 66 dB                      > 65 dB

**Rapport signal/bruit:**  
(d'après ASA-A, enregistrement-lecture)  
2 pistes  
**à 19 cm/s**                      **à 38 cm/s**  
> 66 dB                      > 65 dB

**BIAS-Einstellung:**

	$\Delta$ U-19 cm/s	$\Delta$ U-38 cm/s
REVOX 601	4 dB	2 dB
REVOX 621	4 dB	2,5 dB
REVOX 631	6 dB	4 dB

**BIAS adjustment:**

	$\Delta$ U-7.5 ips	$\Delta$ U-15 ips
REVOX 601	4 dB	2 dB
REVOX 621	4 dB	2.5 dB
REVOX 631	6 dB	4 dB

**Ajustement du courant de prémagnétisation:**

	$\Delta$ U-19 cm/s	$\Delta$ U-38 cm/s
REVOX 601	4 dB	2 dB
REVOX 621	4 dB	2,5 dB
REVOX 631	6 dB	4 dB