





10 1/2''' - 11 1/2'''





ETA 555...2

IDENTIFICATION
TECHNIQUE

TECHNISCHE
IDENTIFIZIERUNG

TECHNICAL
IDENTIFICATION











	<p>10 1/2''' Ø 23,30 mm</p>	
<p>HAUTEUR HÖHE mm HEIGHT</p>	<p>2,75 3,25</p>	
	 <p>555.412</p>	 <p>555.422</p>

	<p>11 1/2''' Ø 25,60 mm</p>	
<p>HAUTEUR HÖHE mm HEIGHT</p>	<p>2,75 3,25</p>	
	 <p>555.112</p>	 <p>555.122</p>

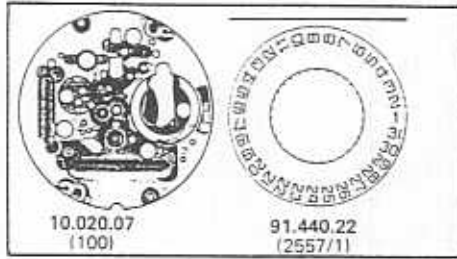


ETA
Groupe de Fabriques d'Ebauches
Marketing - Ventes
CH-2074 Marn

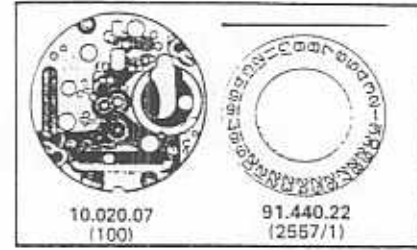
555.122
555.422

									
10.062 (462)	31.046 (255)	33.028 (2555)	53.081 (2577)	53.201 (2567)	53.204 (2569)	63.032 (2573)	83.171 (2780)	53.201.01 (52567)	63.032.01 (52573)

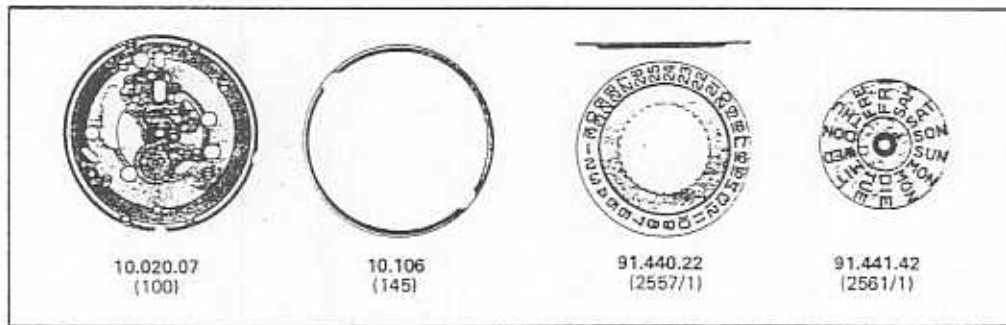
555.112



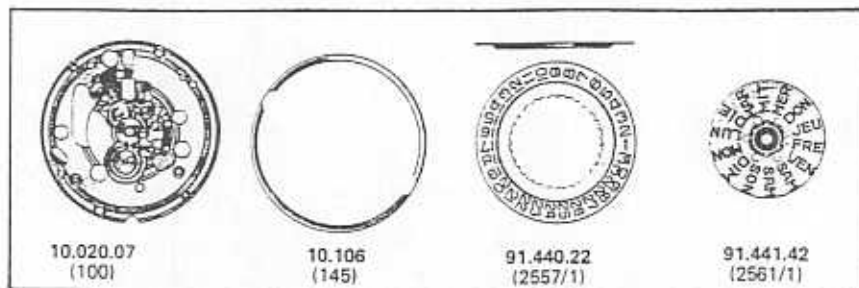
555.412



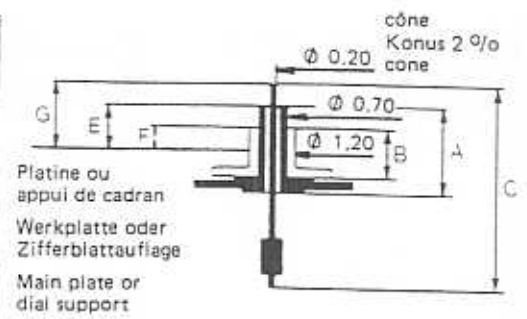
555.122






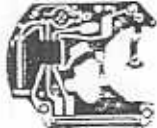








































555.422



Aiguillage Zeigerwerk Hands-fitting		Longueur Länge Length mm				Dépassement platine Höhe ab Werkplatte Überstepping main plate mm		
Cal. Kal. Cal.	No Nr No	A	B	C	Tube de centre Zentrumrohr Centre tube	E	F	G
555.112 555.412	réduit niedrig reduced	1,66	0,89	3,63	1,70	0,90	0,65	1,25
	1 normal	1,88	1,06	3,88	1,70	1,10	0,80	1,50
555.112 555.412	réduit niedrig reduced	1,66	0,89	3,03	1,70	0,90	0,65	—
	1 normal	1,88	1,06	3,03	1,70	1,10	0,80	—
555.122 555.422	3 normal	2,38	1,56	4,38	1,70	1,10	0,80	1,50



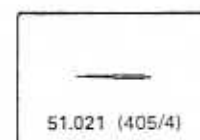
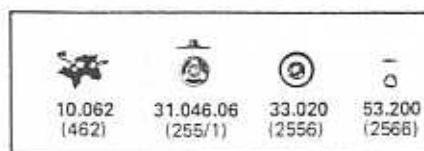
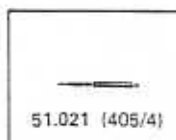
555.112 - 555.122 - 555.412 - 555.422

										
10.048.07 (110)	10.280 (147)	10.300 (144)	10.513 (4000)	10.601 (4412)	13.111 (2595)	20.570.18 (4929)	20.570 (4929)	20.580 (4211)	10.020.01 (5101)	10.020.02 (5102)
										
20.582 (4021)	20.584 (4038)	20.651 (4046)	20.764 (4407)	30.012 (203)	30.025 (210)	30.027 (227)	31.041 (260)	10.062.01 (5462)	13.111.01 (52595)	
										
31.083 (242)	31.100 (450)	31.121 (407)	33.011 (2543)	51.020.21 (405)	51.050 (435)	51.080.06 (443/1)	51.090 (445)	53.026 (2570)	53.080 (2576)	10.513.01 (54000)
										
56.071 (560)	80.102 (4022)	80.400 (161)	81.185 (549)	80.246 (4233)						10.513.02 (54000) 20.764.01 (54407)

555.112
555.122

555.112
555.412

555.412
555.422



10 1/2" - 11 1/2"

ETA 555 2



Caractéristiques

1. Indication des heures, des minutes et des secondes.
2. Changement de la date et du jour instantané (bilingue).
3. Correcteur rapide par rotation de la tige en position intermédiaire.
4. Dispositif stop-seconde avec interruption du courant pour le moteur.
5. Seconde au centre sautante.
6. Quartz diapason fréquence 32'768 Hz.
7. Moteur pas à pas ETA (180°/seconde).
8. 7 rubis.
9. Ajustement de fréquence par trimmer.
10. Pile 1,55 V, ϕ 9,50 mm, H 2,10 mm (ϕ 9,50 mm, H 2,60 mm exécution avec hauteur spéciale).
11. Autonomie de marche avec pile H 2,10 mm: 28 mois, avec pile H 2,60 mm: 40 mois.
12. Précision de marche \pm 3 minutes par an.
13. Circuit électronique C-MOS avec impulsion de sortie bipolaire de 0,5 Hz (1 impulsion par seconde) et d'une durée de 7,8 ms.
14. Le blindage contre les champs magnétiques \geq 1600 A/m (20 Oe) est intégré dans les dimensions du mouvement.
15. Résistance aux chocs, selon norme NIHS 91-10.
16. Température de fonctionnement de 0° à 50°C.
17. Module électronique indépendant.
18. Fixateur de cadran ETA.
19. Composants identiques des exécutions 10½" et 11½".
20. Un grand nombre des composants est identique aux cal. ETA 956...1, 956...2, 955...1, 955...2, 555...1, 555...2 et 556...2.

Technische Merkmale

1. Anzeige der Stunden, Minuten und Sekunden.
2. Augenblicklicher Wechsel vom Datum und Wochentag (zweisprachig).
3. Schnellkorrektur durch Drehen der Welle in Mittelstellung.
4. Sekunden-Stopp mit Unterbrechung der Motorspeisung.
5. Springende Zentrumsekunde.
6. Stimmgabelquarz mit der Frequenz von 32'768 Hz.
7. ETA-Schrittmotor (180°/Sekunde).
8. 7 Steine.
9. Frequenzregulierung mittels Trimmer.
10. Batterie 1,55 V, ϕ 9,50 mm, H 2,10 mm (ϕ 9,50 mm, H 2,60 mm für Ausführung mit Zusatzhöhe.)
11. Gangdauer mit Batterie H 2,10 mm: 28 Monate, mit Batterie H 2,60 mm: 40 Monate.
12. Ganggenauigkeit \pm 3 Minuten pro Jahr.
13. Elektronischer C-MOS-Schaltkreis mit bipolarem Ausgangsimpuls von 0,5 Hz (1 Impuls pro Sekunde) und 7,8 ms Dauer.
14. Die Magnetfeldabschirmung \geq 1600 A/m (20 Oe) ist in die Werkabmessungen integriert.
15. Stossicherheit gemäss Norm NIHS 91-10.
16. Funktionstemperatur von 0° bis 50°C.
17. Unabhängiges elektronisches Modul.
18. Zifferblattriegel ETA.
19. Ausführung 10½" und 11½" mit einheitlichen Bestandteilen.
20. Ein grosser Teil der Bestandteile ist identisch mit den Kal. ETA 956...1, 956...2, 955...1, 955...2, 555...1, 555...2 und 556...2.

Characteristics

1. Indication of hours, minutes and seconds.
2. Instantaneous changing of date and day indication (bilingual).
3. Rapid correction by rotation of the stem when it has been set to the intermediate position.
4. Stop-second device with interruption of current for the motor.
5. Jumping center second.
6. Tuning-fork quartz crystal, frequency 32'768 Hz.
7. ETA stepping motor (steps of 180°/second).
8. 7 jewels.
9. Regulation of frequency by means of a trimmer.
10. 1.55 V battery, dia. 9.50 mm, height 2.10 mm. (ϕ 9.50 mm, H 2.60 mm, execution with special height).
11. Self-contained operation of executions with battery H 2.10 mm: 28 months, executions with battery H 2.60 mm: 40 months.
12. Precision of rate \pm 3 minutes per year.
13. C-MOS electronic circuit with bipolar output of 0.5 Hz (1 impulse every second) and with a duration of 7.8 ms.
14. The antimagnetic screening \geq 1600 A/m (20 Oe) is integrated in the dimensions of the movement.
15. Resistance to shocks according to NIHS standards 91-10.
16. Working temperature from 0° to 50°C.
17. Independent electronic module.
18. ETA dial bolt.
19. Identical components for 10½" and 11½" executions.
20. Many components are identical with those of cal. ETA 956...1, 956...2, 955...1, 955...2, 555...1, 555...2 and 556...2.

Características

1. Indicación de las horas, de los minutos y de los segundos.
2. Cambio instantáneo de la fecha y día (bilingüe).
3. Corrector rápido por rotación de la tija en su posición intermedia.
4. Dispositivo de paro segundero con interrupción de la alimentación del motor.
5. Segundero central saltante.
6. Cuarzo en forma de diapason, frecuencia 32'768 Hz.
7. Motor paso a paso ETA (180°/segundo).
8. 7 rubies.
9. Corrección de la frecuencia por «trimmer».
10. Pila de 1,55 V, ϕ 9,50 mm, alt. 2,10 mm (ϕ 9,50 mm, H 2,60 mm ejecución altura especial).
11. Autonomía de marcha de las ejecuciones con pila de alt. 2,10 mm: 28 meses, ejecuciones con pila de alt. 2,60 mm: 40 meses.
12. Precisión de marcha \pm 3 minutos por año.
13. Circuito electrónico C-MOS con impulso de salida bipolar de 0,5 Hz (1 impulso por segundo) y una duración de 7,8 ms.
14. La protección contra los campos magnéticos \geq 1600 A/m (20 Oe) está incluida en las dimensiones de la máquina.
15. Resistencia a los choques según norma NIHS 91-10.
16. Temperatura de funcionamiento de 0° a 50°C.
17. Módulo electrónico independiente.
18. Fijador de esfera ETA.
19. Componentes idénticos como las ejecuciones 10½" y 11½".
20. Muchos componentes son idénticos a los del cal. ETA 956...1, 956...2, 955...1, 955...2, 555...1, 555...2 y 556...2.

NOUL 28.1000



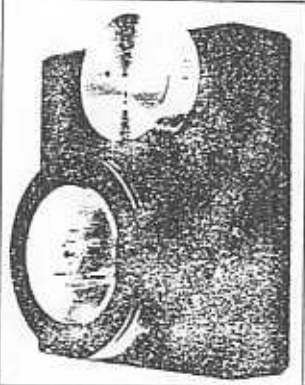
ETA
Groupe de Fabriques d'Ebauches
Marketing - Ventas

NORPMALINE

Sequence of operations and tool list

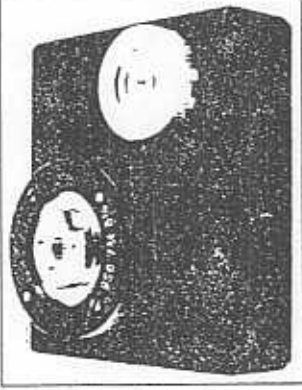
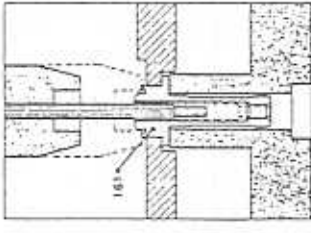

10 1/2''' - 11 1/2'''

ETA 555. . . 2

Op. No	old No	ETA No	Designation	Tools	Time h ^o /oo
			<u>Handsetting and date mechanism</u>		
	4021	8619.014.20	Stator		upper part 4080.35.775 lower part 4080.35.779 Ref. 4080.35.779 Frs. 800.- Tool for riveting the stator
	4233	1990.449.03	Stator rivet. } rivet with tool		
	161	1413.030.01	Rivet centre tube with tool:		
			lower part 4080.35.851		
			upper part 4080.35.853		
			support 4080.35.845		

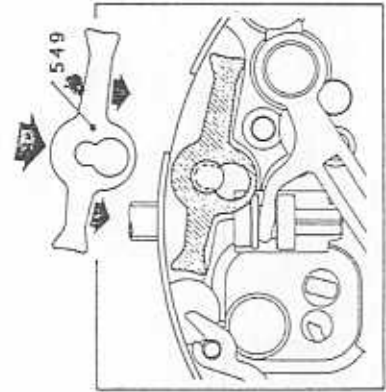
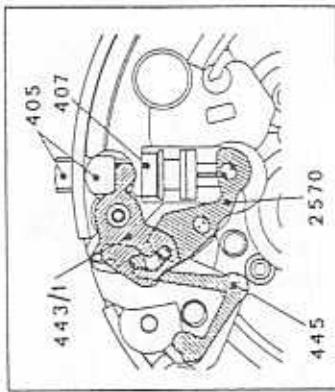


ETA
 Groupe de Fabricques d'Ebauches
 Marketing - Verres
 CH-2074, Marn
 Tel. 038 35 41 41
 Telex: EIGH 33 502
 Telefax 038 33 6039

Op. No	old No	ETA No	Designation	Tools	Time h ^o /oo
				<p>upper part Ref. 4080.35.845</p>  <p>lower part Ref. 4080.35.851 support 4080.35.853</p>  <p>Price: SFr. 800.- Tool for riveting the centre tube</p> <p>*Tool for fitting the spring-clip Ref. 4080.35.886 Price: SFr. 400.-</p> 	
	407	1502.039.03	Sliding pinion		
	405	1500.070.10	Handsetting stem		
	2570	1669.009.03	Corrector lever		
	445	1522.057.02	Setting lever jumper		
	443/1	1520.052.02	Setting lever		
	549	1527.001.00	Setting lever spring-clip (movement side) * tool: 4080.35.886		

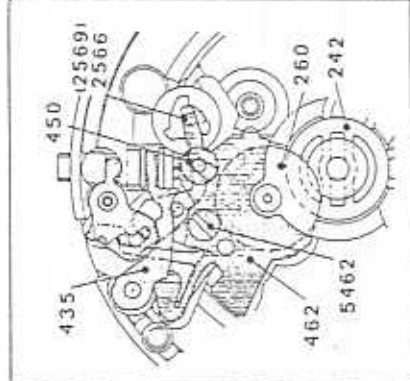
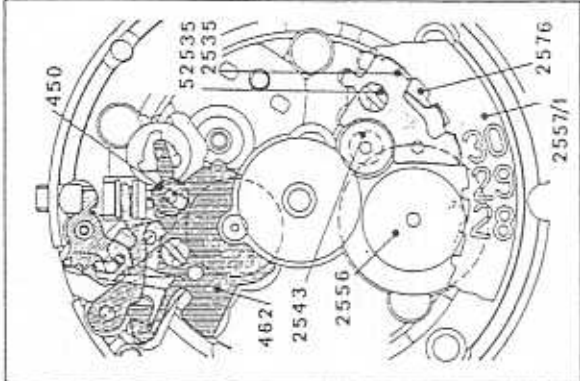


ETA
 Grupa de Fabricaies d'Ebauches
 Marketing - Ventes
 CH-2074 Marin
 Tel. 039.35.21.41
 Telex: EIAOIJ36502
 Telex: 070.33.6039

P. No	old No	ETA No	Designation	Tools	Time h / o / oo
				 	

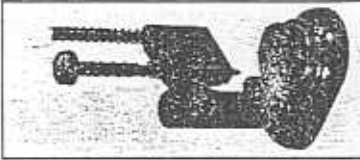




ETA
 Groupe de Fabrications d'Ebauches
 Marketing - Ventes
 CH - 2074 Marin
 Tel. 038 35 21 41
 Telex ETA CH 25 502
 TMMAX 038 31 60 39

Op. No	old No	ETA No	Designation	Tools	Time h o /oo
	435	1521.043.05	Yoke		
	242	1410.058.00	Cannon pinion with driving wheel		
	260	1414.042.10	Minute wheel		
	450	1510.047.01	Setting wheel		
	2566	1667.015.01	Date corrector		
	462	1266.044.03	Minute train bridge		
	5462	1813.181.01	Screw for minute train bridge		

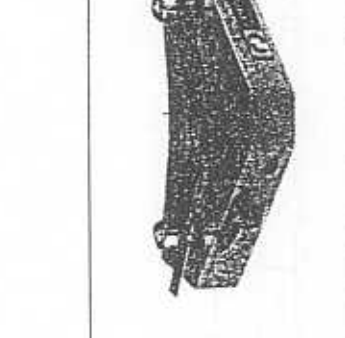
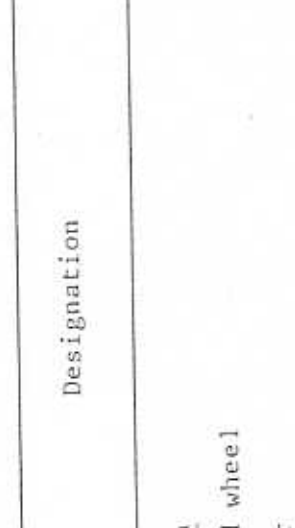
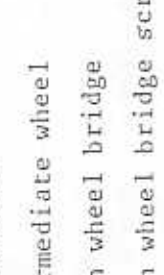


ETA
 Groupe de Fabriques d'Ebauches
 Marketing - Vevins
 CH-2024 Marnin
 Tel: 091 35 21 41
 Tele: FAX 01 35 502
 10/84 • 0 30 73 00 39


No.	old No	ETA No	Designation	Tools	Time h ⁰ /oo
	2557/1	1674.034.02	Date indicator		Press for fitting the hands, with 2 force-compensated broaches SFrs. 340.-
	2556	1661.056.00	Date indicator driving wheel		
	2543	1660.014.00	Intermediate date wheel		
	2576	1665.111.01	Date jumper		
	2595	1283.034.00	Date jumper maintaining plate		
	52595	1813.181.01	Screw for minute train bridge		
	255/1	1411.037.00	Hour wheel		
			Cannon pinion clip		
			Working hand		
			NOTE		
			For fitting the hands, use a press tool with force compensated broaches (press-in force: max 3 kp) and a movement holder with central support and having a hole for the second wheel pivot.		Press for fitting the 3 hands with 3 force-compensated broaches SFrs. 576.-



ETA
 Groupe de Fabricques d'Ebauches
 Marketing - Veniss
 CH-2074 Môtin
 Tel 030 35 21 41
 Télex E TACH 35 502
 166 line 030 33 60 39

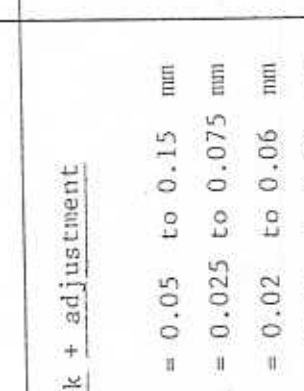
Op. No.	old No	ETA No	Designation	Tools	Time h ⁰ /oo
			<u>Train</u>		
	210	1402.057.02	Third wheel	 <p>Tool for wheel assembly (ETA or Hormec)</p>  	
	4211	8609.007.02	Rotor		
	227	1404.059.00	Second wheel		
	203	1401.052.01	Intermediate wheel		
	110	1237.600.00	Train wheel bridge		
	5110	1803.449.00	Train wheel bridge screw		
	4407	8541.012.01	Earth connector		
	54407	1803.529.00	Screw for earth connector		
	560	8520.006.02	Stop lever and switch		
	4046	8721.008.03	Battery insulator		
	4022	8570.011.00	Electronic module distance piece		
	4000	8239.054.03	Electronic module		
	4038	8709.016.01	Magnetic screen, upper		
	54000	1803.450.00	Screw for electronic module, long		
	54000 ¹	1803.492.00	Screw for electronic module, short		
	4929	8320.009.00	Battery		
			54407 } id. screw		
			54000 ¹		
	4412	8546.003.00	Battery limiting spring	4412 * To be fitted when the clearance between the movement and the case back is too great.	



Op. No	old No	ETA No	Designation	Tools	Time h 0/00
			<p><u>Oiling the train (main plate and bridge)</u> (Oil Moebius 9030) Rotor Third wheel Second wheel, only bridge * Intermediate wheel</p> <p><u>Oiling the handsetting mechanism</u> All components to be bulk oiled Moebius 8200 V</p> <p>Exceptions: Centre tube Minute wheel stud } D5 Cannon pinion, hour wheel seat</p> <p>Cannon pinion friction = Jismaa 124</p>	<p>Oiler or automatic oiler or Hormec oiling apparatus</p> <p>Technica oiling machine Toluol bath 10% Moebius 8200</p>  <p>* Oil before fitting (A)</p>	



ETA
 Groupe de Fabriques d'Ebauches
 Marketing - Veniss
 CH-2030 Marin
 Tel: 026 35 21 41
 Telex: E TACH 35 502
 Telefax: 026 33 60 39

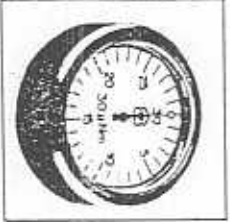

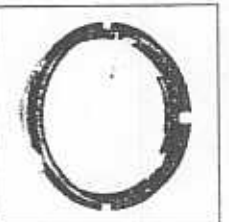
Op. No	Old No	ETA No	Designation	Tools	Time h ^o /oo
			<p><u>Checking wheel work + adjustment</u></p> <p>Endshake :</p> <p>Rotor = 0.05 to 0.15 mm</p> <p>Intermediate wheel = 0.025 to 0.075 mm</p> <p>Second wheel = 0.02 to 0.06 mm</p> <p>Third wheel = 0.02 to 0.06 mm</p> <p><u>Double calendar (date and day indications)</u></p> <p>Double corrector</p> <p>Minute train bridge</p> <p>Screw for minute train bridge</p> <p>Date indicator (10½" 555.422 : 1674.040.02)</p> <p>Calendar driving wheel</p> <p>Intermediate date wheel</p> <p>Date jumper</p> <p>Date jumper maintaining plate</p> <p>Screw for date jumper maintaining plate</p> <p>Day corrector</p> <p>Screw for day corrector</p>	 <p>10½" Ref. 4080.35.918</p> <p>11½" Ref. 4080.35.932</p> <p>Frs. 400.-</p> <p>Tool for opening and closing the dial fasteners. (not suitable for reopening after the dial has been fitted).</p>	
	2569	1667.107.20	Double corrector		
	462	1266.041.03	Minute train bridge		
	5462	1813.181.01	Screw for minute train bridge		
	2557/1	1674.036.02	Date indicator (10½" 555.422 : 1674.040.02)		
	2555	1661.056.00	Calendar driving wheel		
	2543	1660.014.00	Intermediate date wheel		
	2576	1665.029.10	Date jumper		
	2595	1283.024.00	Date jumper maintaining plate		
	52595	1813.181.01	Screw for date jumper maintaining plate		
	2567	1667.108.20	Day corrector		
	52567	1852.238.01	Screw for day corrector		



Op. No	old No	ETA No	Designation	Tools	Time h ^o /oo
	255	1411.055.00	Hour wheel		
	2577	1665.111.01	Day jumper		
	2573	1666.109.01	Date jumper spring		
	52573	1813.181.01	Screw for date jumper spring		
	2561/1	1675.013.12	Day corrector 555.122 (11½")		
	2561/1	1675.014.12	Day corrector 555.422 (10½")		
	2780	1672.004.01	Day indicator spring-clip		
	145	1269.037.02	Dial support. 555.422 (10½")		
	145	1269.029.11	Dial support 555.122 (11½")		
			Lubrication the functional surfaces with thick viscous oil Moebius D5 or 8141.		
			<u>Checking the calendar functions</u>		



ETA
 Groupe de Fabrication d'Ebauches
 Marketing - Ventes
 CH-2074 Marin
 Tél. 038 35 21 41
 Télex ETA CH 25 502
 Téléc. 038 33 60 39

Op. No	old No	ETA No	Designation	Tools	Time h o/oo
4929	4929	8320.009.00	<p><u>Battery fitting</u></p> <p>Battery (9.50 x 2.10 mm)</p> <p>Battery (9.50 x 2.60 mm only on demand)</p> <p><u>Torque measurement</u></p> <p>Useful torque (measured on second hand)</p> <p>U = 1.55 V, T = 25°C Min. 4 µNm</p>	 <p>Dynamometer fixed on the ERMANO movement holder ref. 4170.024.80 (30 µNm) Price: Sfrs. 200.-</p>	
				 <p>"Press-tirette" 10½" 4080.35.079 11½" 4080.35.081 Movement holder for extracting the hand-setting stem Price: Sfrs. ~55.-</p>	
				 <p>10½" 4081.35.013 11½" 4081.35.011 Plastic movement holder for both-dial and movement sides; serves also as support for the dynamometer Price: Sfrs. 16.-</p>	



Op. No	old No	ETA No	Designation	Tools	Time h ⁰ /oo
			<p><u>Checking the performances</u> Current consumption: U = 1.55 V, T = 25°C, max. 1.5 µA</p> <p>Functional voltage: U = 1.35 V to 1.70 V, T = 25°C</p> <p>Instantaneous rate: U = 1.55 V, T = 25°C, - 0.3 to + 0,5 s/d</p> <p><u>Final check</u></p>	<p>Apparatus for checking rate and current consumption-having a universal holding device or a holding device adapted to the caliber.</p>	



ETA
 Groupe de Fabricas d'Ebauches
 Marketing - Venes
 CH-2074 Menn
 Tel. 038 352141
 Telex ETRC 31502
 Belfex 033 33 8039