


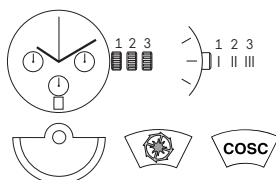


Omega 3313,3313A Movement Parts (1)

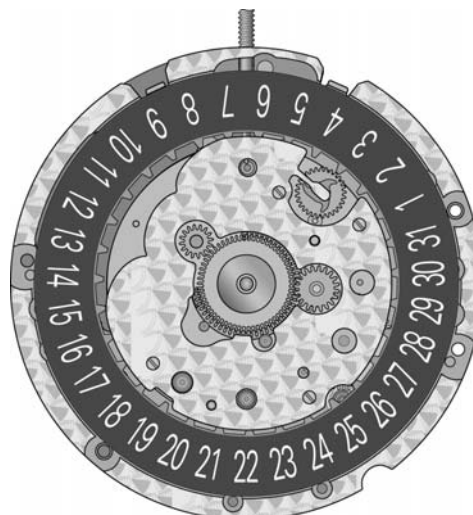
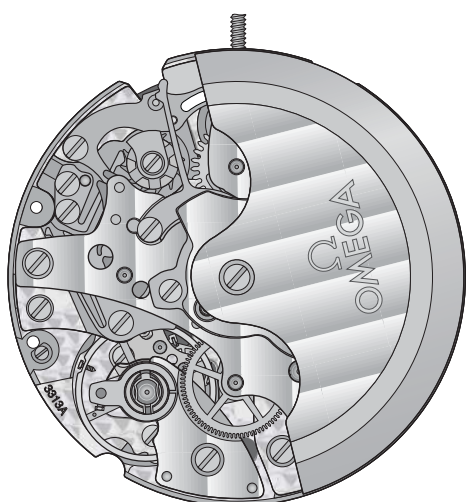
Compiled by EmmyWatch - <https://www.emmywatch.com>

	Technical Guide		TG-19-C-017-E	C
	Made by: rendav	Date: 27.08.2008	3	Modifications: see last page

CALIBRE 3313

	Version A	Version B
<p>12''' Ø 27 mm</p>		
Height on movement	6.85 mm	
Power reserve	52 h	
Number of jewels	37	
Frequency	4 Hz (28'800 A/h)	

EMMYWATCH
VINTAGE RESTORATIONS



Automatic movement, exclusive Omega chronograph, date, COSC certified, Co-Axial escapement. Chronograph system with column-wheel. 30-min. minute counter and 12-h hour counter + small second hand at 9 o'clock. Omega balance system without index.

	Page
Calibre 3313	1
General information for Calibre 3313	3-7
Exchange / Key points / Lubricants / Mandatory tools	3
Tightening and untightening torques according to screw thread size	3
Technical modifications on version «A» and «B»	4-5
Lubrication of crow wheel and the three driving wheels for ratchet wheel	6-7
Differences between the versions for Calibre 3313	8
Differences between the versions	8
Exploded views for Calibre 3313	9-13
Dial side	9
Movement side	10
Movement side	11
Movement side	12
Dial side	13
Spare parts list & illustrations for Calibre 3313	14-18
Spare parts & illustrations	14
Spare parts & illustrations	15
Spare parts & illustrations	16
Spare parts & illustrations	17
Spare parts & illustrations	18
Specific information for Calibre 3313	19-23
Chronograph wheel function / Description of chronograph system	19
Escapement and Balance bridge installation	20
Chronograph setting	21
Runners for hand setting and hand setting force / Epilame coating	22
Instantaneous rate	23
Modifications of Technical Guide versions for Calibre 3303	24

General information for Calibre 3313

Balance bridge and chronograph bridge

The bridges with serial numbers are not available (see CS-Info Calibre No 33). For exchange, see table:

Exchanges		with serial no
Version A	Chronograph bridge (ref. 7223313A1504018)	For exchanges always sent to Omega. Engravings at Omega within 4 weeks.

Exchanges		with serial no
Version A + B	Balance bridge (ref. 7223313A1005818) (ref. 7223313B1005818)	For exchanges always sent to Omega. Engravings at Omega within 4 weeks.

Key points

The three intermediate driving wheels for ratchet wheel (32.083) must be correctly lubricated with Moebius SYNT-HP-1300 Sans Colorant. Insufficient lubrication could lead to the formation of burrs or chips and hinder the correct winding of the barrel. Cleaning would not be sufficient to remove all this. (see page 6 and 7).

Due to the movement construction, there are various screw lengths. To avoid problems at assembly, group identical screws together for cleaning.

Co-axial Escapement lubrication

See Working Instruction No 40.

Tightening and untightening torques according to screw thread size

Screw Ø	Tightening torque target cNm	Untightening torque mini cNm
Ø threads ≤ S 0.50 mm	1.0	0.7
Ø threads S 0.6 mm	1.4	0.8
Ø threads S 0.7 mm	1.8	0.9
Ø threads S 0.8 mm	2.2	1.1
Ø threads S 0.9 mm	2.6	1.3
Ø threads S 1.0 mm	3.0	1.6
Ø threads S 1.2 mm	3.5	2.0
Ø threads S 1.4 and >	4.0	2.5

Mandatory tools:

To fit the hands, the movement must be placed in a suitable, well-adjusted movement holder.

Hand fitting

Movement holder for hand fitting
Hand fitting tool kit

Reference

507 0001
507 0011

Movement

Mainspring winder
Timing key
Movement holder
Tool for checking the escapement functions

Reference

502 150 0009
502 200 0501
506 0001
506 0004

Lubricants

Moebius SYNT-A-LUBE 9010 (2ml)
Moebius SYNT HP-1300 Sans Colorant
Moebius 9504
Moebius SYNT HP-500
Kluber P125

Reference


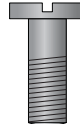
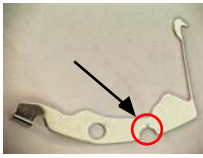


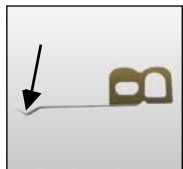



504 200 0001
504 5013
504 5014
504 5012
504 100 0071

General information for Calibre 3313



Date correction

Date correction should not be performed between 10 pm and 2 am.



Technical modifications on version «A»

Screw for hammer-lever banking bridge				
Old version	Risk	New version	Improvements	Notes
72233036033	Broken screw head. Old screw length 1.90 mm with guide. Consequence: start/stop function no longer works. The head or the bridge can block the movement.	72233036034	New screw length 1.95 mm without guide, threaded to the end, stronger. New version since week 35/2004.	The new version must be fitted during a maintenance service. If the screw thread cannot be removed from the limitation bridge, the full barrel bridge must be replaced (ref. 722330310041).
				
Column wheel operating lever				
Old version	Risk	New version	Improvements	Notes
722330355040	The column wheel control can bend at the weakest place (see arrow). Consequence: start/stop function does not work.	722330355040	Stronger. New version since week 32/2003.	The new version must be fitted during a maintenance service. The circled part must under no circumstances be bent or modified!
				
Minute counter jumper				
Old version	Risk	New version	Improvements	Notes
722330355143	The jumper breaks at the place where it is bent. Consequence: the minute counter can no longer be reset to zero.	722330355143	Stronger. New version since week 32/2003.	The new version must be fitted during a maintenance service.
				
Hammer operating lever				
Old version	Risk	New version	Improvements	Notes
722330355047	The first execution can bend. The second execution with reset to zero too strong. In both cases, the chronograph hand is not reset correctly to zero.	7223303A55048	The new shape ensures correct resetting to zero and that the hand is held firmly. New version since week 32/2003.	The new version must be fitted during a maintenance service.
 				

Technical modifications on version «A» and «B»

Rocking bar				
Old version	Risk	New version	Improvements	Notes
722330351052	The setting lever might bend due pressure on stem. Consequence: Malfunction of time setting function.	722330351052	The finger on rocking bar is decreasing this risk. New version available since 27/2008	The new version must automatically be assembled if this case happens.
				

Technical modifications on version «B»

Intermediate escape wheel				
Old version	Risk	New version	Improvements	Notes
7223313B30039	Black residues within the engagement can cause low amplitude or a stop of the watch. The old version is yellow.	7223313B30039	Improvement of surface and material. The new version is grey. Available since 33/2008	The new version must automatically be assembled if black residues within the engagement are visible.
				

EMMYWATCH
VINTAGE RESTORATIONS

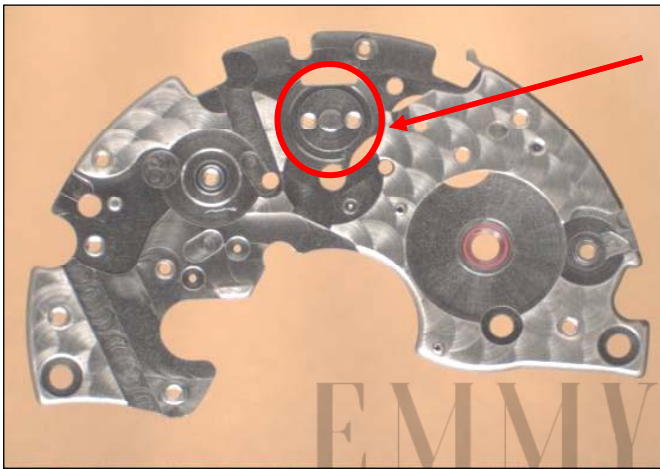
Customer Service lubrication of stud for crown wheel (31.023) and the 3 intermediate driving wheels for ratchet wheel (32.083):

With the aim of constantly improving the performances and reliability of Omega products, the lubrication in Customer Service has been updated.

Amount of lubricant to be applied :

- On the crown wheel stud and the stud for the three ratchets intermediate driving wheels during a service.

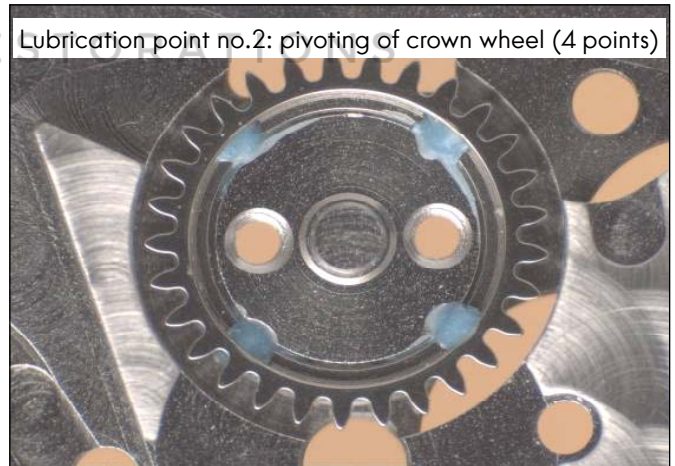
Lubrication of stud for crown wheel (Moebius 9504)



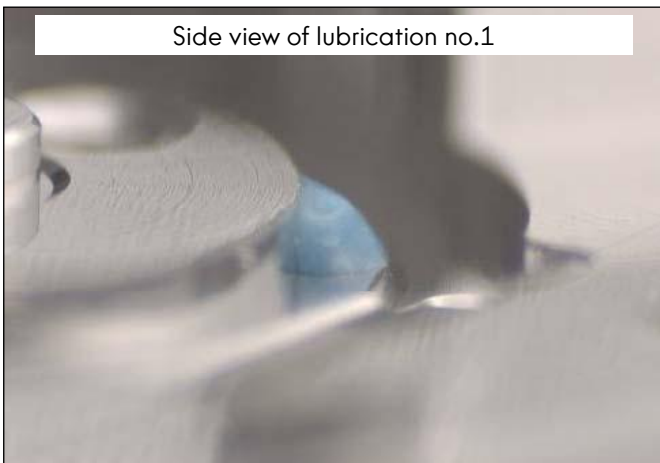
Stud for crown wheel



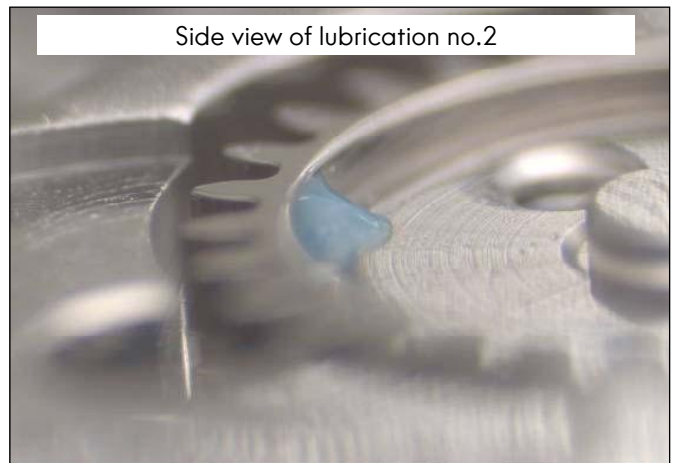
Lubrication point no.1: crown wheel support (4 points)



Lubrication point no.2: pivoting of crown wheel (4 points)



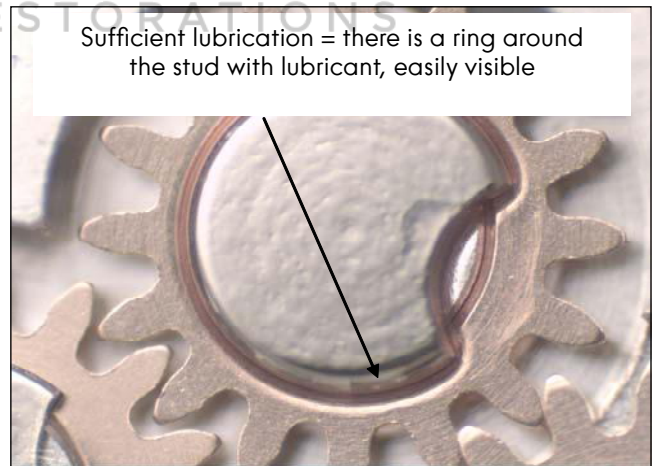
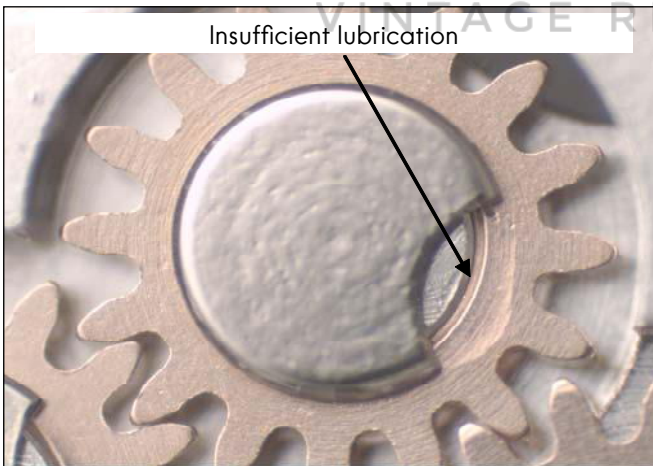
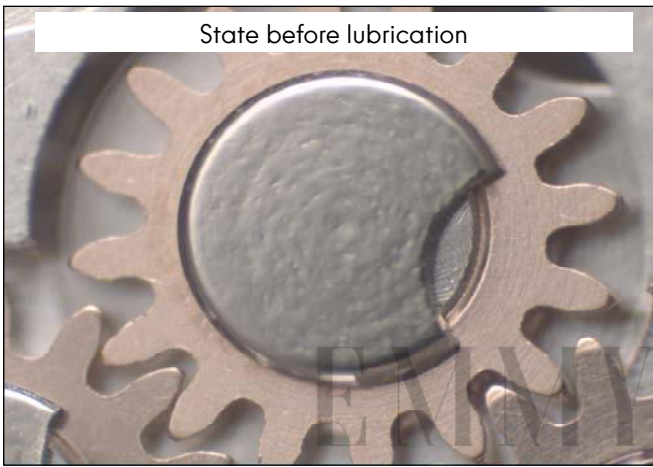
Side view of lubrication no.1



Side view of lubrication no.2

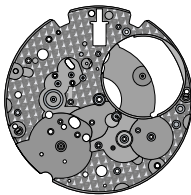
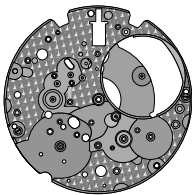

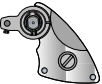


















Lubrication of the 3 intermediate driving wheels for ratchet wheel (HP 1300 Sans Colorant)



EMMY WATCH
VINTAGE RESTORATIONS

Differences between Calibre 3313A and 3313B

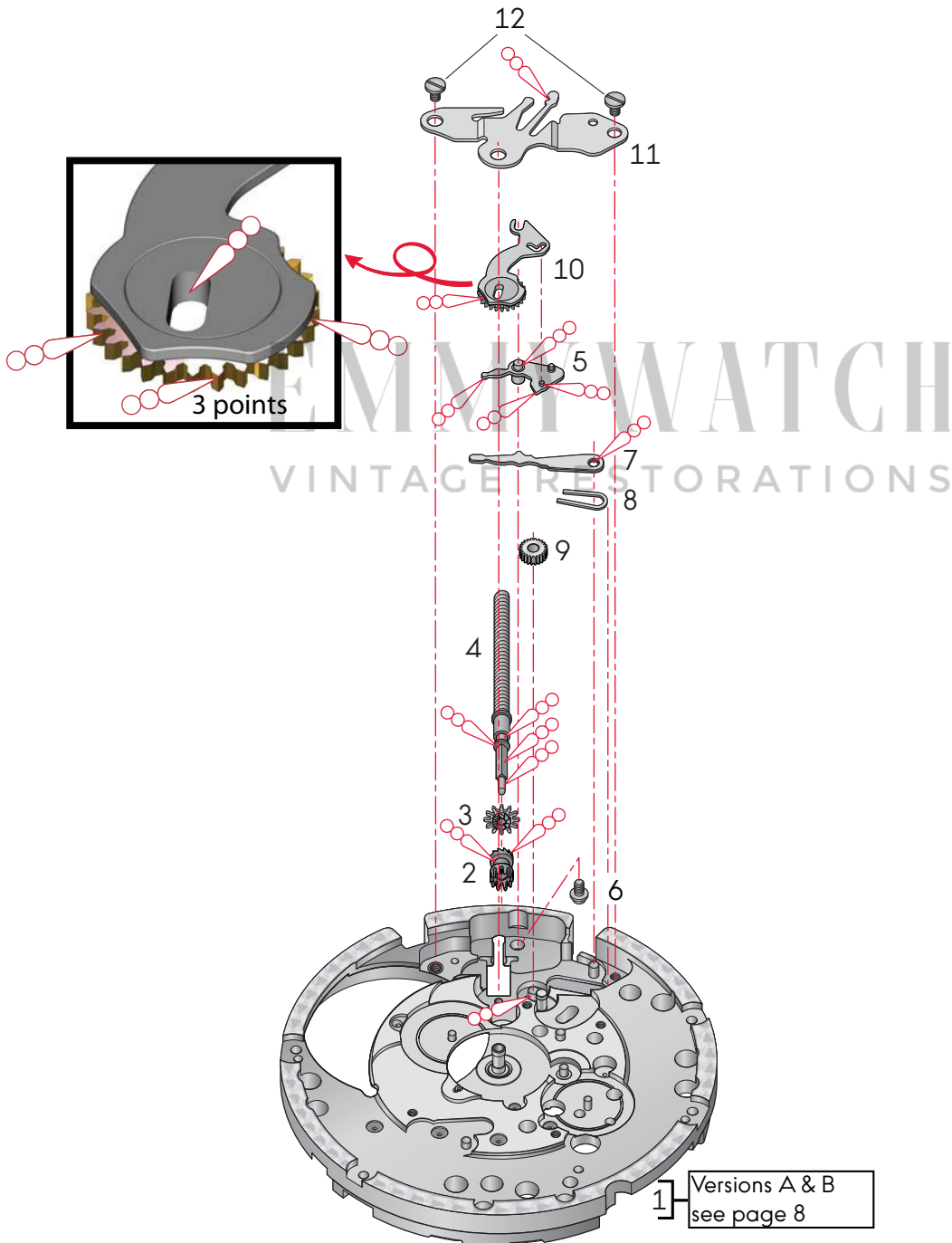
	3313A (4 Hz)	3313B (4 Hz)
Main plate	 Ref. 722331310020 Ø Hole for dial fastener: 0.80 mm	 Ref. 7223313B10020 Ø Hole for dial fastener: 1.00 mm
Balance bridge, complete	 Ref. 7223313A1005818	 Ref. 7223313B1005818
Intermediate escape wheel	 Ref. 7223313A30039	 Ref. 7223313B30039
Co-Axial wheel	 Ref. 7222500B30040	 Ref. 7222500C30040
Pallet fork	 Ref. 7222500B40010	 Ref. 7222500C40010
Balance, complete	 Ref. 722331340055 Cylindrical pivots Ø 0.08 mm	 Ref. 7223313B40055 Conical pivots Ø 0.07 mm
Schock-absorber, upper	 Ref. 722330332025 Jewel hole Ø 0.09 mm Nickel-plated	 Ref. 7223313B32027 Jewel hole Ø 0.08 mm Gold-plated
Schock-absorber, lower	 Ref. 7223313A70531 Jewel hole Ø 0.09 mm Nickel-plated	 Ref. 7223313B32068 Jewel hole Ø 0.08 mm Gold-plated
In settings, upper	 Ref. 7223303A32127 Jewel hole Ø 0.09 mm	 Ref. 7223313B32127 Jewel hole Ø 0.08 mm
In settings, lower	 Ref. 7223303A32167 Jewel hole Ø 0.09 mm	 Ref. 7223313B32167 Jewel hole Ø 0.08 mm



Parts listed in order of assembly





1 = 10020	7 = 51050
2 = 31121	8 = 61100
3 = 31120	9 = 33082
4 = 51010	10 = 51052
5 = 51083	11 = 51090
6 = 6407 (1x)	12 = 7035 (2x)

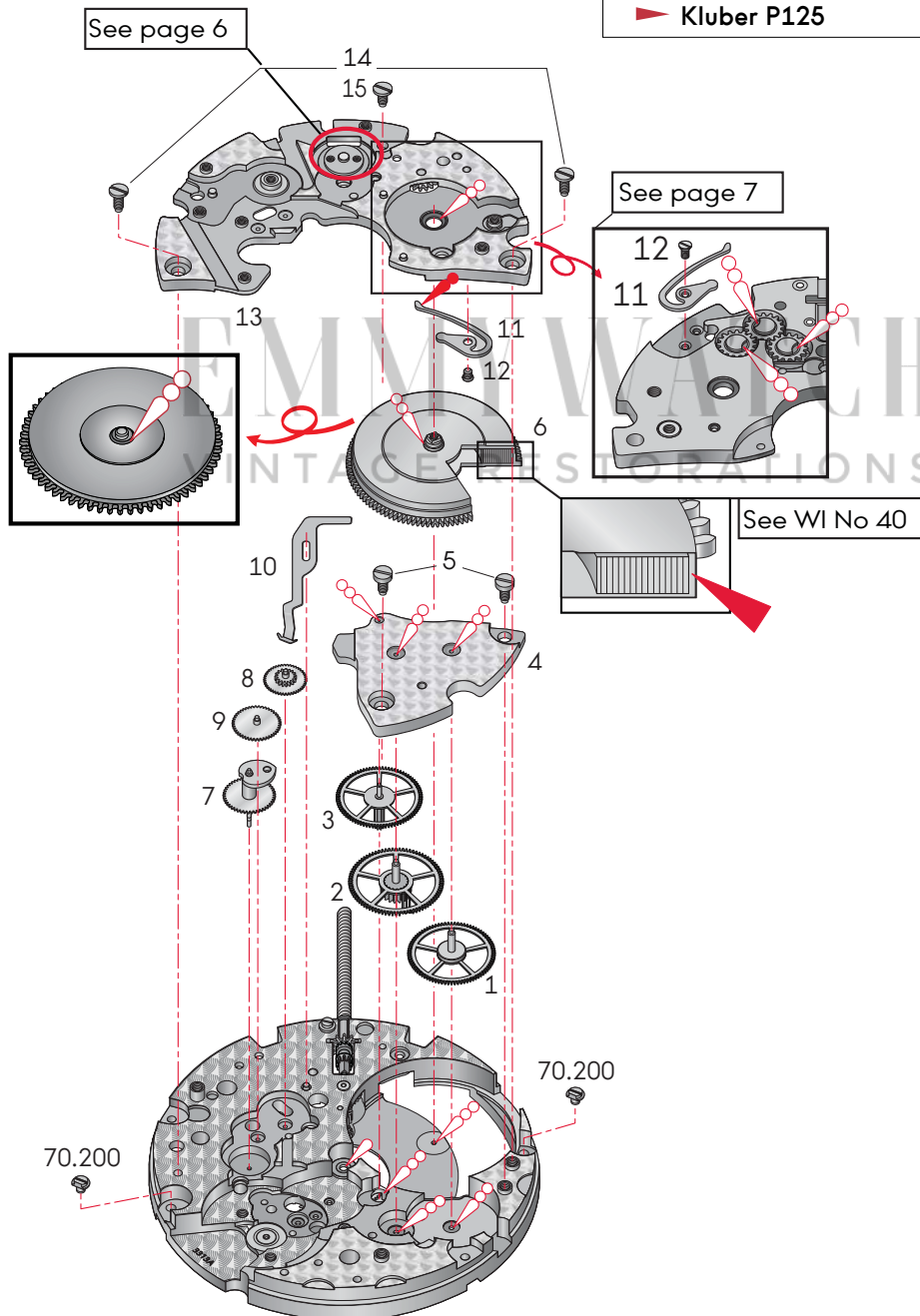
 Moebius SYNT HP-1300 Sans Colorant



Parts listed in order of assembly

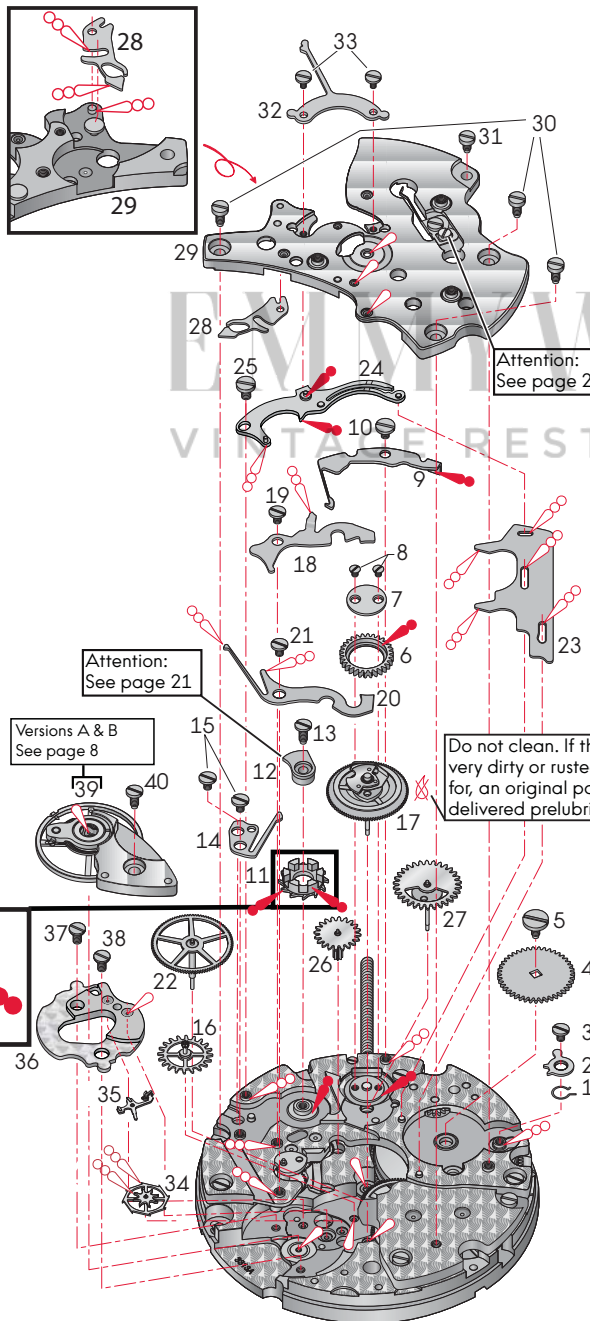
1 = 30012	9 = 35033
2 = 30014	10 = 56070
3 = 30025	11 = 65040
4 = 10048	12 = 6204 (1x)
5 = 7031 (2x)	13 = 10041
6 = 20010	14 = 7031 (2x)
7 = 35030	15 = 6011 (1x)
8 = 35032	




-  Moebius SYNT HP-1300 Sans Colorant
-  Moebius SYNT-A-LUBE 9010
-  Moebius 9504
-  Kluber P125



Parts listed in order of assembly

1 = 61080	21 = 6004 (1x)
2 = 51120	22 = 30027
3 = 7008 (1x)	23 = 55240
4 = 31022	24 = 55048
5 = 6019 (1x)	25 = 6004 (1x)
6 = 31023	26 = 35031
7 = 81136	27 = 35012
8 = 6204 (2x)	28 = 55248
9 = 55040	29 = 15040
10 = 6022 (1x)	30 = 7031 (3x)
11 = 55180	31 = 7033 (1x)
12 = 10615	32 = 65047
13 = 6034 (1x)	33 = 6012 (2x)
14 = 55130	34 = 30040
15 = 6004 (2x)	35 = 40010
16 = 30039	36 = 10056
17 = 35010	37 = 8204 (1x)
18 = 55100	38 = 8204 (1x)
19 = 6004 (1x)	39 = 10058/40055
20 = 55090	40 = 7031 (1x)

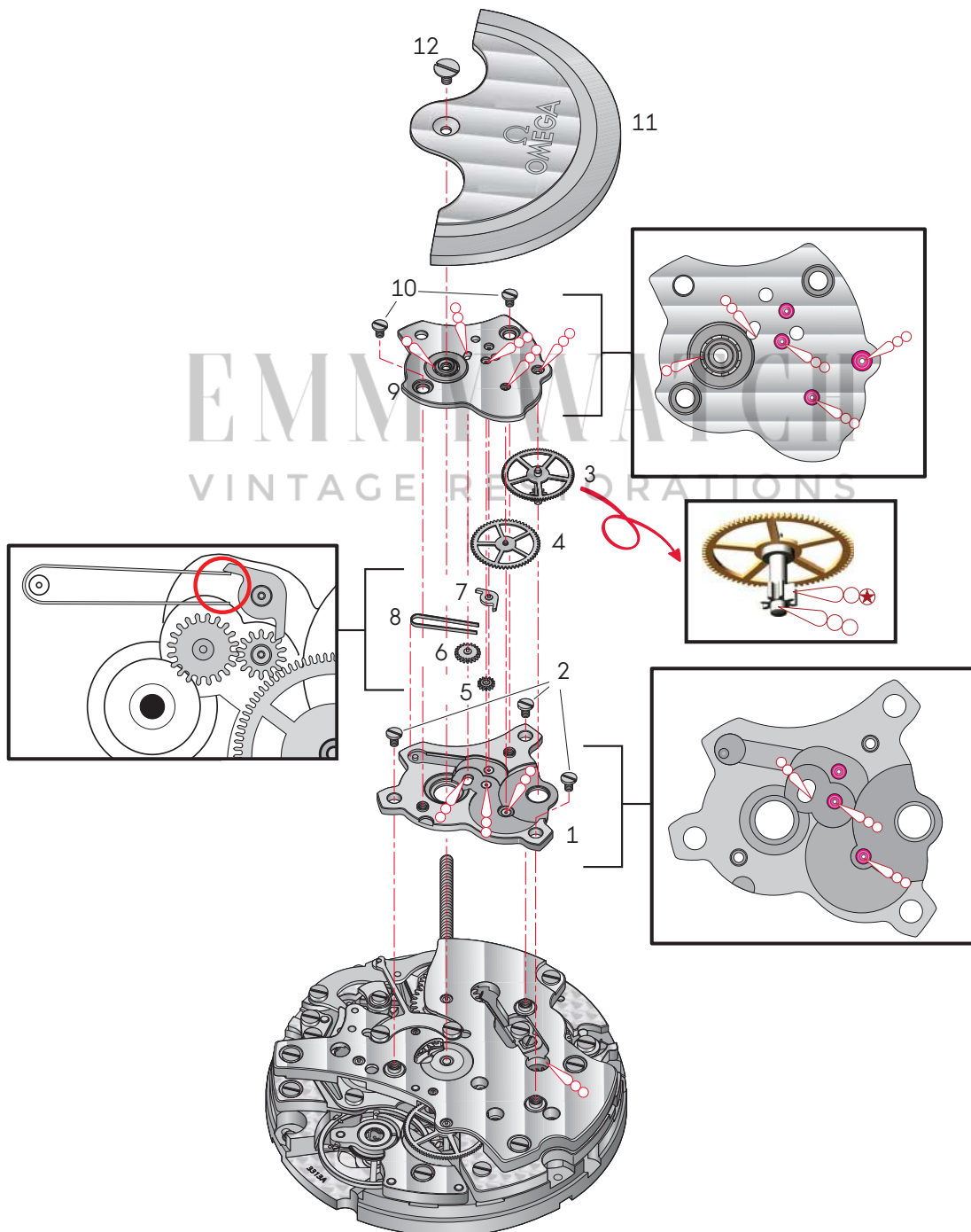


 Moebius SYNT HP-1300 Sans Colorant
 Moebius SYNT-A-LUBE 9010
 Moebius 9504

Parts listed in order of assembly




1 = 12030	7 = 52053
2 = 7033 (3x)	8 = 62101
3 = 3203301	9 = 12050
4 = 32031S2	10 = 6003 (2x)
5 = 32105	11 = 22019
6 = 32104	12 = 8200B (1x)

 **Moebius SYNT HP-500**
 **Moebius SYNT HP-1300 Sans Colorant**



Parts listed in order of assembly

1 = 31102	8 = 53080
2 = 33083	9 = 91440
3 = 53200	10 = 63030
4 = 31080	11 = 13105
5 = 31041S2	12 = 6210 (4x)
6 = 33020	13 = 31046
7 = 33011	14 = 66220

-  Moebius SYNT-A-LUBE 9010
-  Moebius 9504
-  Moebius SYNT HP-1300 Sans Colorant

