

User manual



GF-139-443 MH/L33

ANITA B s.r.o.

Průmyslová 2453/7

680 01 Boskovice

Czech Republic

tel: +420 516 454 774

+420 516 453 496

fax: +420 516 452 751

e-mail: info@anita.cz

VERSION	CREATED ON	APPROVED BY
MP02900EN_181023	23. 10. 2018	Jakub Lžičař

www.garudan.cz

All rights reserved.

Property of Anita B s.r.o. and protected by copyright. The use of this content without written consent of Anita B s.r.o. is prohibited.

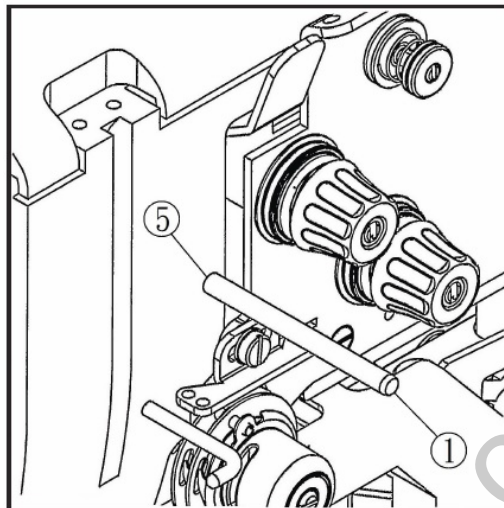
Copyright © Anita B s.r.o. (2018)

Content

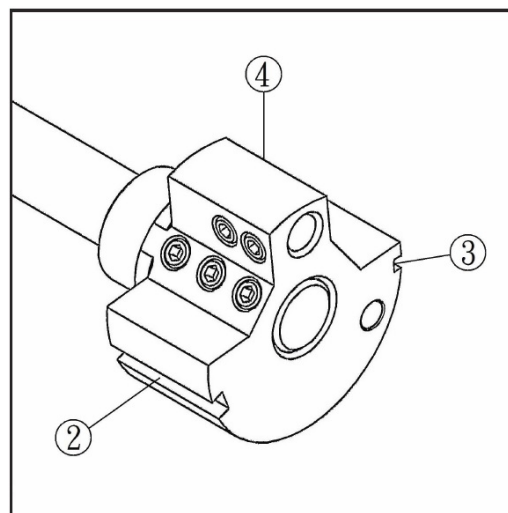
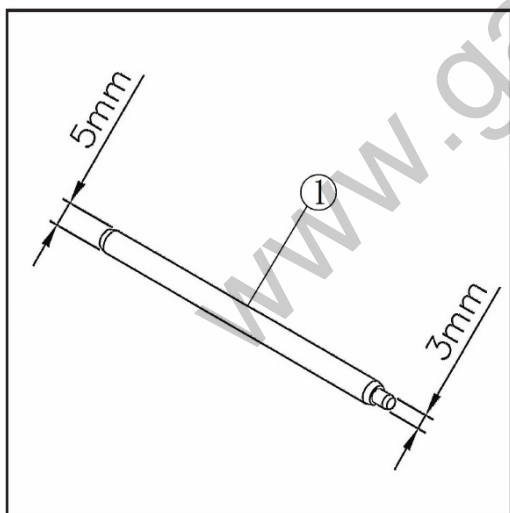
1. Main Shaft & Hand Wheel Position.....	4
2. Position Hand Wheel.....	5
3. Feed System Position	6
4. Set The Backtracking Overlap.....	6
5. Adjust The Position of Feed Dog in the Needle Plate Groove	7
6. The Adjustment of Feed	8
7. Feed Dog Adjust	9
8. The Adjustment of Balance Iron.....	9
9. The Adjustment of Needle Pole Frame	10
10. The Needle is in the Centrer of Feed Dog	10
11. Forward and Back Position of Sewing Needle.....	11
12. The Adjustment of the Looper Time	11
13. The Needle Location.....	12
14. The Adjustment Between Large Hook and Needle	12
15. The Adjustment of Needle Guard	13
16. The Hook Mechanism.....	13
17. The Adjustment of the Middle Presser and Presser Foot.....	14
18. The Adjustment of Presser Foot.....	14
19. Check the Pressure of Presser Foot	15
20. Presser Drive Adjust	15
21. Thread Guide Adjustment	15
22. Adjust the Tension of Raise Thread and Stroke	16
23. Using the Upper Knife	16
24. Adjusting the Upper Knife	17

1. MAIN SHAFT & HAND WHEEL POSITION

1. Put the stick ① in the accessory to the hole ⑤ of the machine, the angle of the shaft position.

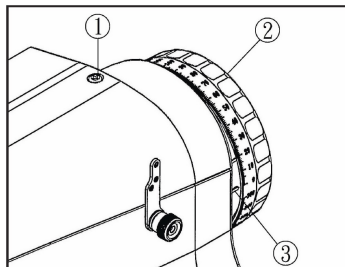


2. The stick ① on its one side is 3mm, another side is 5 mm. In 3 mm, insert the groove ③ on the cam ④, the needle is at the dead of the top. In 5mm, insert the groove ② on the cam ④, the needle is the looper time to the hook.

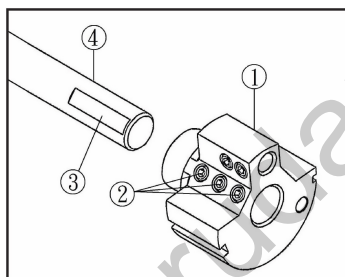


2. POSITION HAND WHEEL

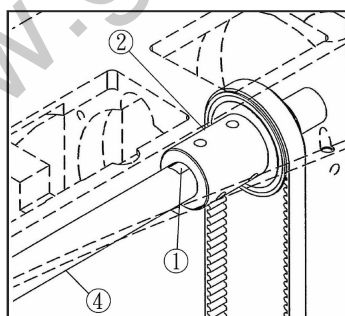
1. Use one side position shaft of the stick, loose hand wheel ②, tighten the screw ①, turn the hand wheel ② and make the "0" dial on the hand wheel ② aim at the mark ③, tighten the hand wheel ②, then fasten the screw ①.



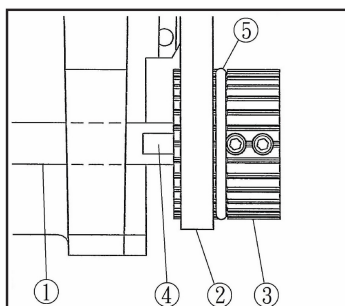
2. Be assure that the three screws ② on the hand wheel ① are fastened on the plane ④ of the shaft before positioning the main shaft.



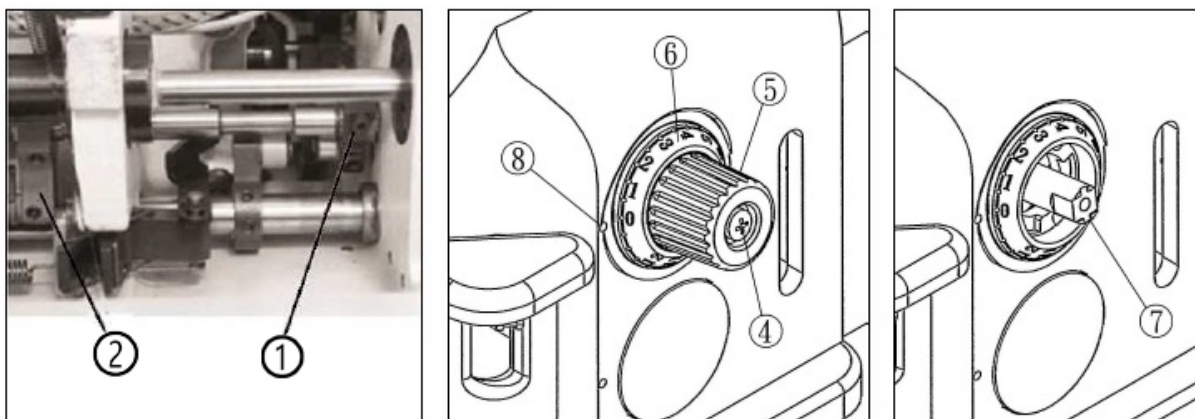
3. The hand wheel ② on the main shaft to make sure the screws are fastened on the plane ④ of the main shaft ④.



4. The hand wheel ③ of lower shaft also is fastened on the plane ④ of the lower shaft ①. Be also cautious about the relationship between the hand wheel ② and check ring ⑤ while fastening.



3. FEED SYSTEM POSITION

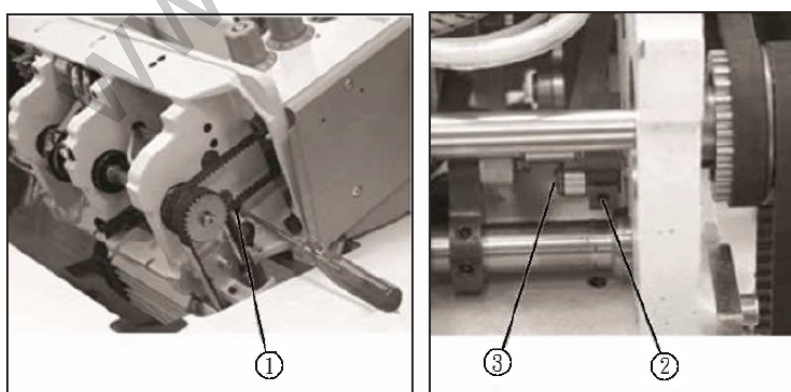


Turn the hand wheel (5) and make the number "0" on the dial (6) aim at the mark (8), at this time the feed system is in the state of stillness. It can adjust through the following ways if it has some error.

1. Loosen the screw (1) (4), take off the hand knob (5), turn the top pole to the bottom with tools.
2. Adjust the angles of the feed transfer to make it stillness.

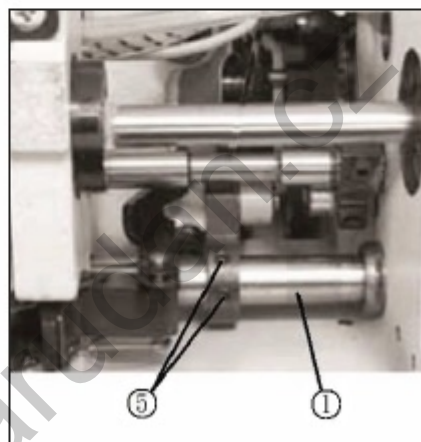
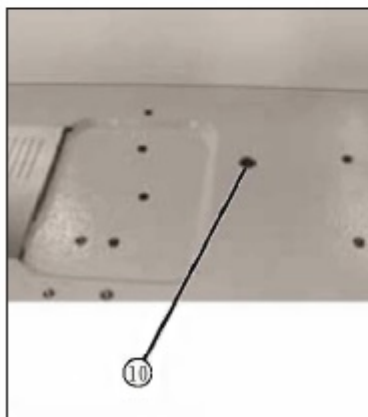
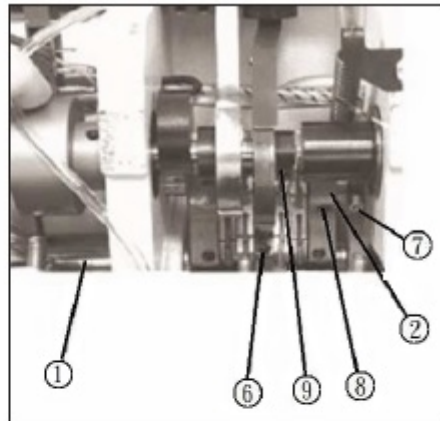
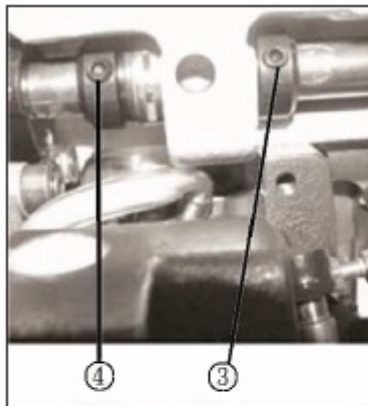
Notice: Before finishing the above movement, first turn the hand knob to make the number "0" on the dial aim at the mark and assure the screw is fastened on the plane of shaft.

4. SET THE BACKTRACKING OVERLAP



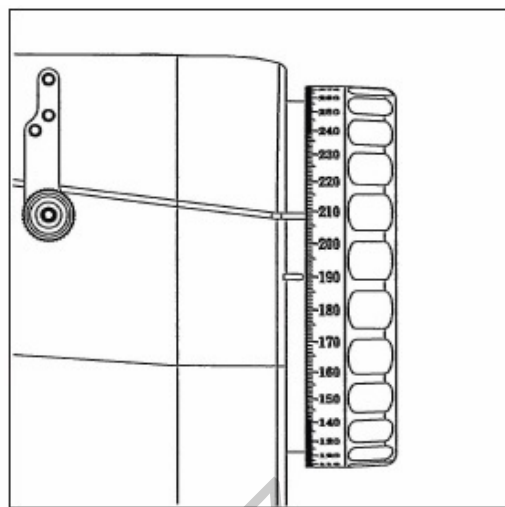
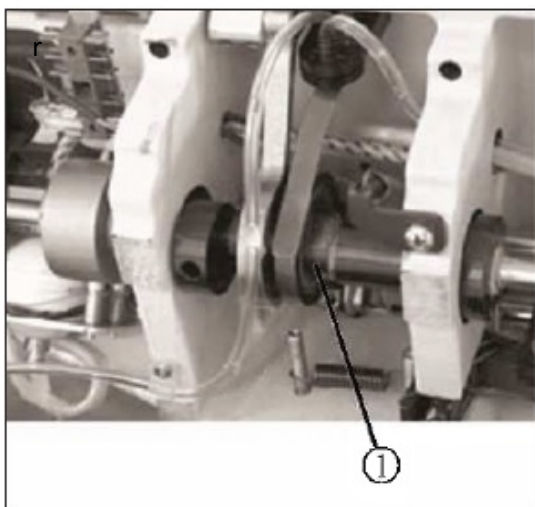
When the backtracking overlap has the minim error, please loosen screw (2), turn the angle of pin (3) with tools through the hole (1) to repair the error of backtracking overlap.

5. ADJUST THE POSITION OF FEED DOG IN THE NEEDLE PLATE GROOVE



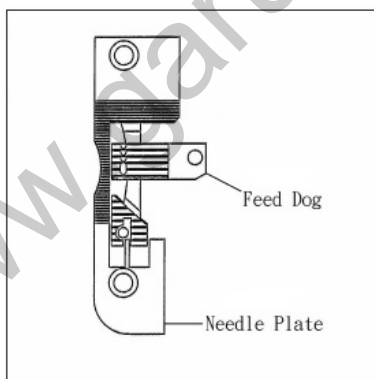
1. Loosen the screw ③ ④ ⑤ ⑥ move the shaft ① of feed left and right to keep the feed dog in the center of needle plate groove (add the picture of needle plate and the feed dog), then tighten the screw ③ ④ ⑤ ⑥.
2. Adjust the position of feed transfer ② to the feed shaft ①, loosen screw ⑥ ⑦ ⑧ ⑨ ⑩, to keep feed transfer locate in the center of feed shaft o1 groove, then tighten the screws ⑥ ⑦ ⑧ ⑨ ⑩.

6. THE ADJUSTMENT OF FEED



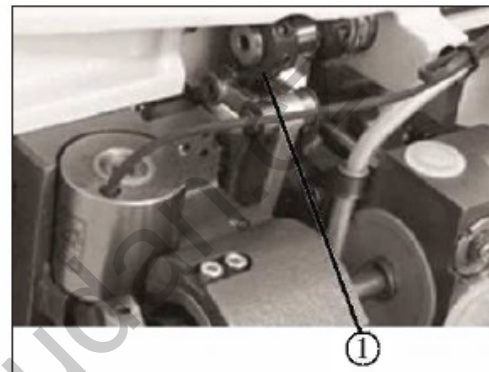
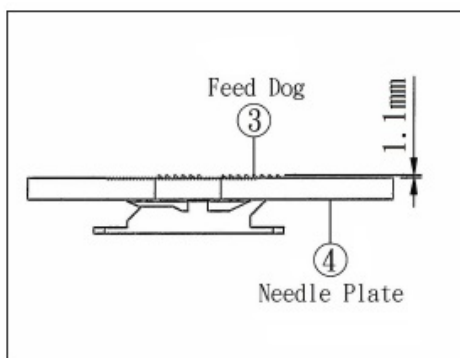
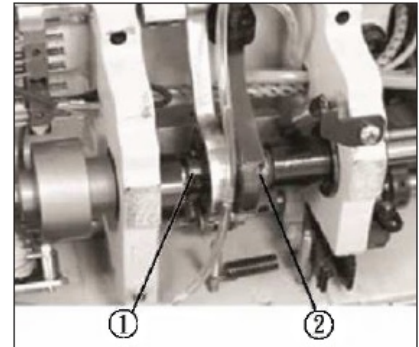
1. Turn the hand wheel to 190°, press the hand knob of backtracking, no movement of feed shaft, if it moves, loosen the screw ①, change the angles till no movement, then tighten screw ①.
2. Turn Needle Gauge Adjust

Adjust the position of feed in the needle plate. Keep the front and back clearance between the feed and plate.



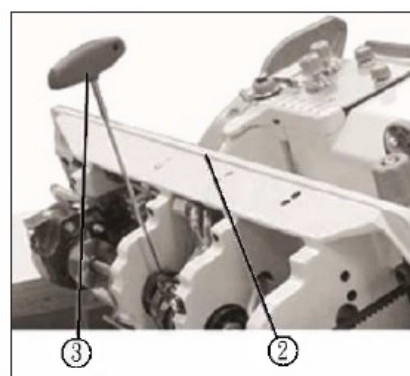
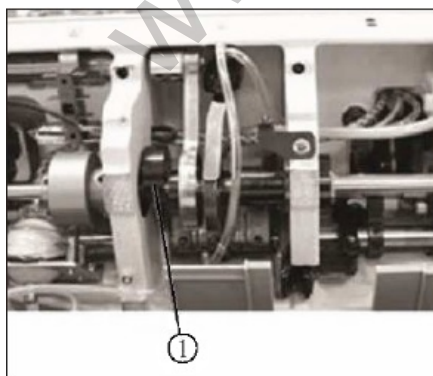
7. FEED DOG ADJUST

1. Adjust the feed up and down right, loosen screw ①, on the line with the feed pin ②, then tighten screw ①.



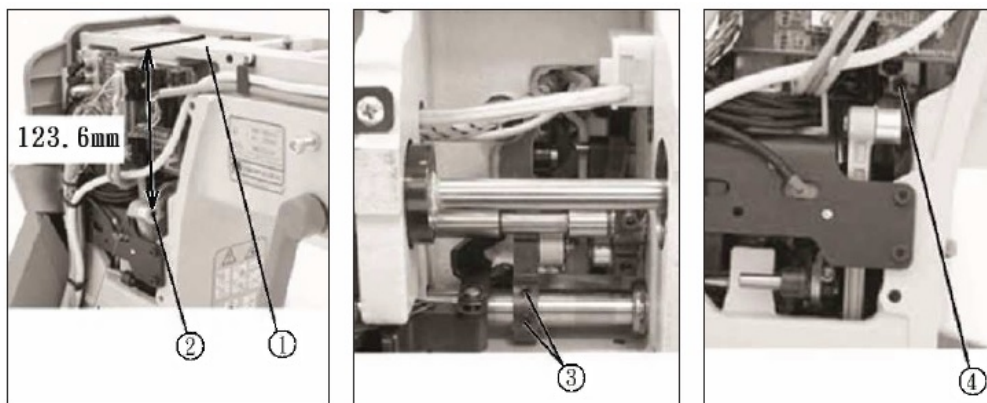
2. The adjustment of feed dog ③ height to the needle plate ④. Turn the main shaft to 190°, loosen the screw ①, adjust the feed dog ③ to be 0.5mm higher than the needle plate ④, tighten the screw ①.

8. THE ADJUSTMENT OF BALANCE IRON



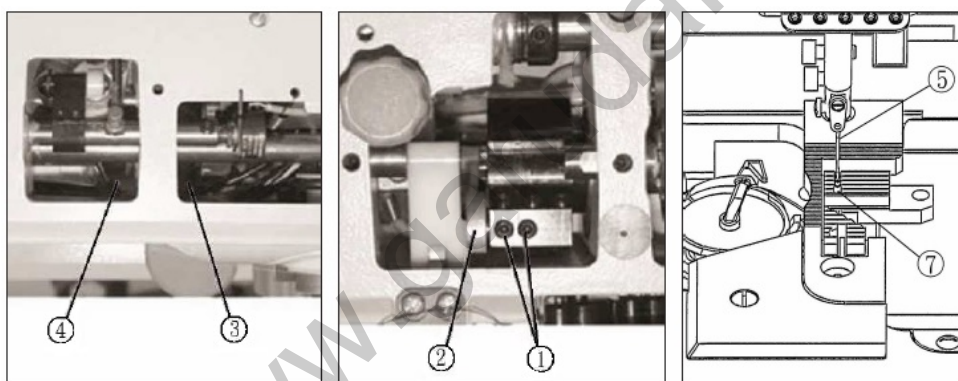
Loosen the balance iron ①, turn the hand wheel to 210°, parallel to the flat of the table ② with the wrench. (Refer the picture), tighten the screw.

9. THE ADJUSTMENT OF NEEDLE POLE FRAME



The distance between the hole center in the bar of the needle pole frame and the face of the machine is 123.6mm, loosen the screw ③ ④.

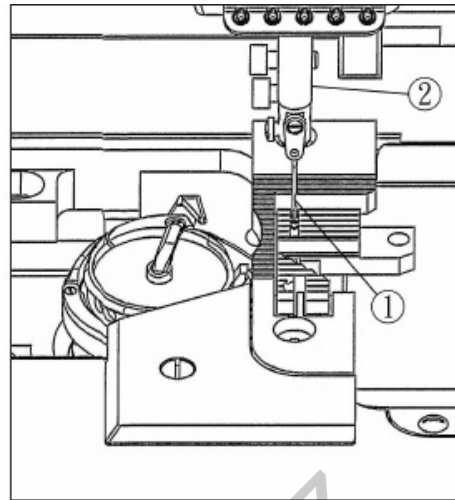
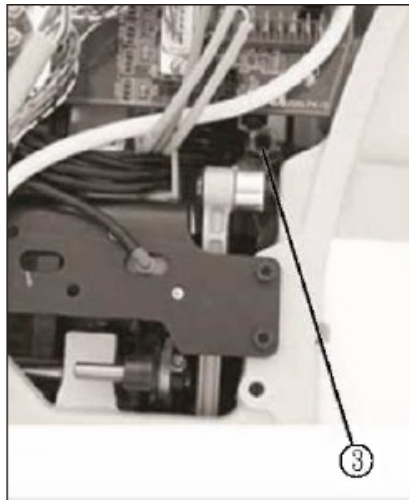
10. THE NEEDLE IS IN THE CENTRE OF FEED DOG



Loosen the screws ③ ④ to make the needle aim at the center of feed dog and then tighten the screws ③ ④.

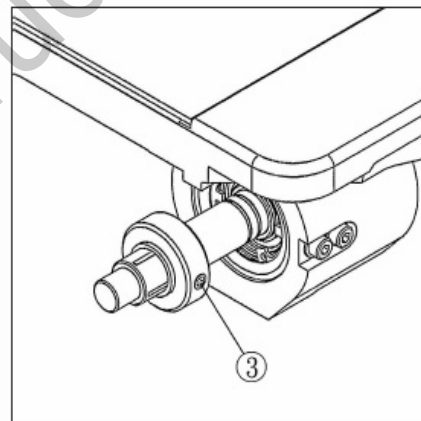
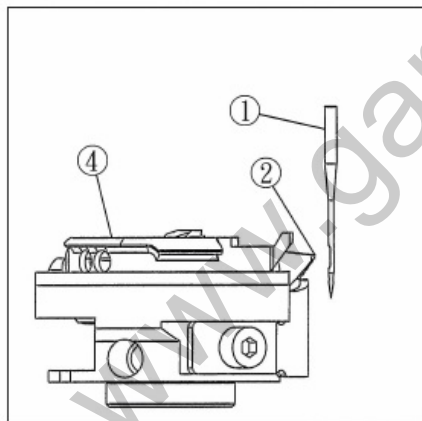
Loosen the screw ① to keep the crank rod in the proper position, then fasten the screw ①.

11. FORWARD AND BACK POSITION OF SEWING NEEDLE



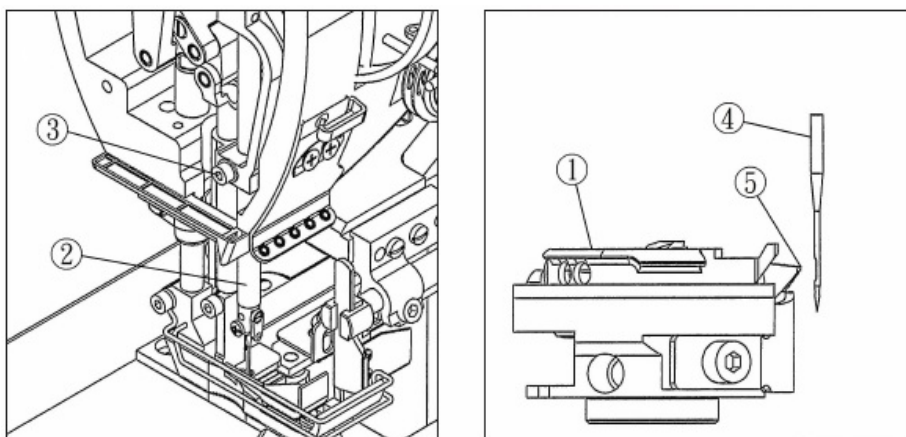
The needle ① is in the front and back position of feed dog, Loosen the screw ③, move the needle bar ② to keep the needle in the center of feed dog, then tighten the screw ③.

12. THE ADJUSTMENT OF THE LOOPER TIME



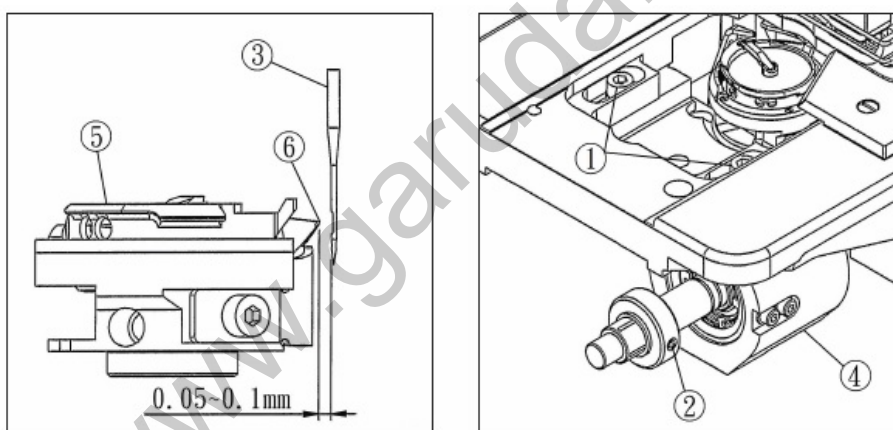
1. Keep the button of feed dog in the "0" dial,
2. Move the hand wheel to 203
3. Turn the large hook ④ to make its top part in the center of needle, then tighten the screw ③.

13. THE NEEDLE LOCATION



Loosen the screw (3), move the needle bar (2) to keep the space between the top side of needle (4) hole and the tine of large hook at 1.5~2 mm.

14. THE ADJUSTMENT BETWEEN LARGE HOOK AND NEEDLE

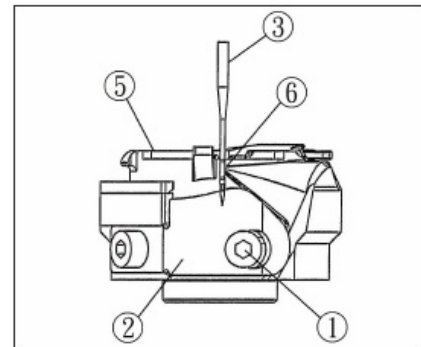


Loosen the screw (1) (2) move the hook frame (4) to keep the distance between the tine of large hook (5) and the flat of concave needle at 0.05~0.1mm, then tighten the screw (1) (2).

Notice: make sure the hand wheel at 203° (the tine of large hook) in the center of needle when tighten the screw (2).

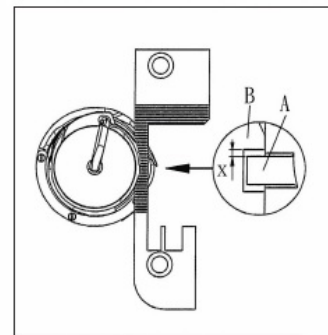
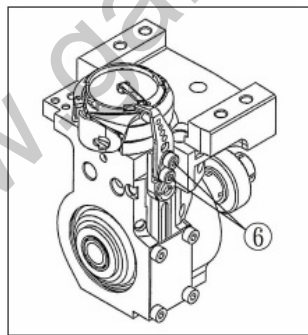
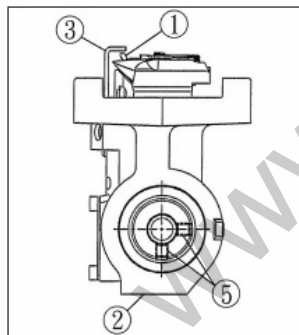
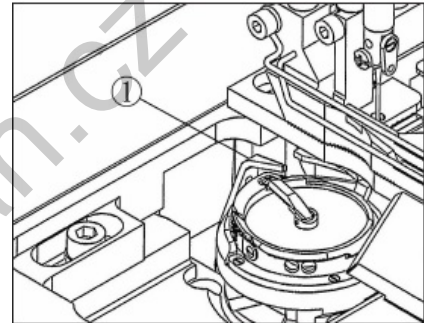
15. THE ADJUSTMENT OF NEEDLE GUARD

Make sure that there is clearance between needle guard (2) and needle (3), then adjust the gap between the concave of needle (3) and the tine (6) of big hook (5) which is 0.05~0.1mm, make the needle guard (2) approach the needle through the screw (1).



16. THE HOOK MECHANISM

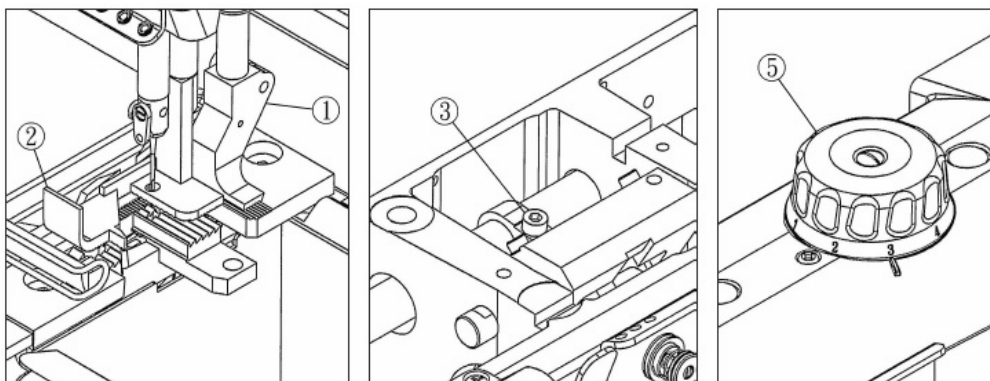
1. The efficiency of the unsealing inner hook (1) can supply a smooth wire tunnel, otherwise it will cause noise and be easy to break thread.



2. The Adjustment of Unsealing Inner Hook.

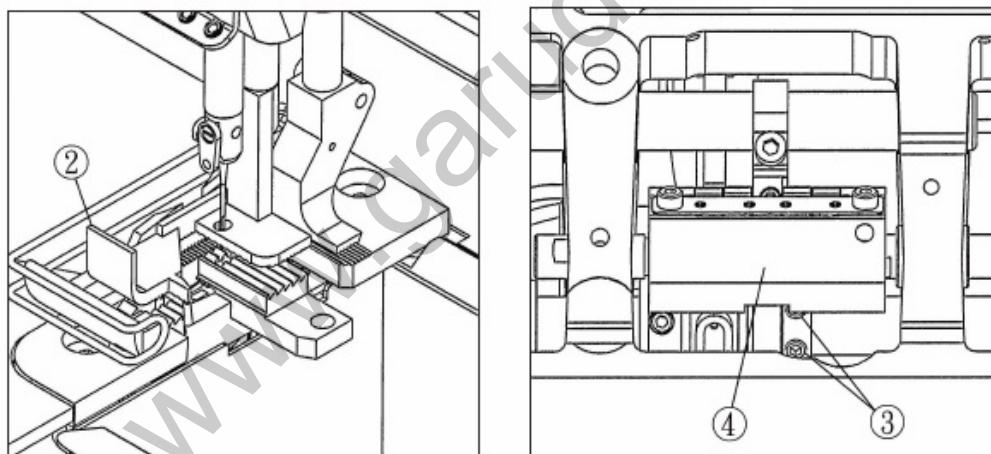
- a) Turn the hand wheel to 305°, tighten the screw (5) with wrench 4 plumbing the bottom side (2).
- b) Loosen the screw (6), adjust the unsealing in the inner hook to the proper position, check position. When the main shaft is in 280°, the clearance between the hook A and hook B is enough for the thread dimension through. When it comes to 330°, the space between unsealing inner hook (3) and bulge (1) is enough for thread through.

17. THE ADJUSTMENT OF THE MIDDLE PRESSER AND PRESSER FOOT



Loosen screw (3), the hand wheel is 95°, keep the middle presser and presser foot all of a lump, then tighten screw (3). Check again, the number "3" on the hand knob (5) aims at the mark, turn the hand wheel and check whether the presser exchange is equivalent, if it has, loosen screw (3) to adjust little.

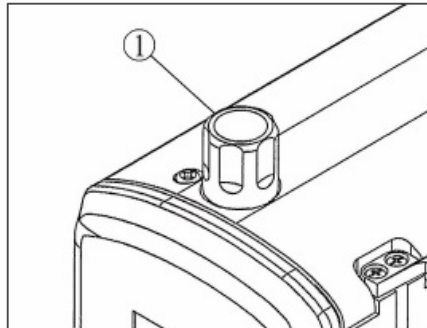
18. THE ADJUSTMENT OF PRESSER FOOT



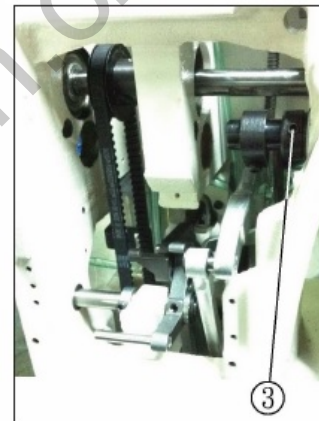
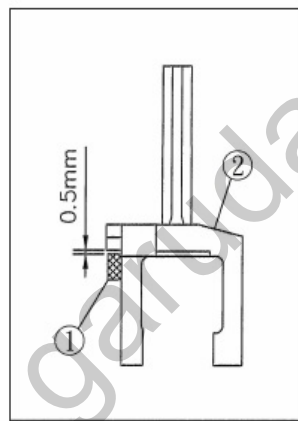
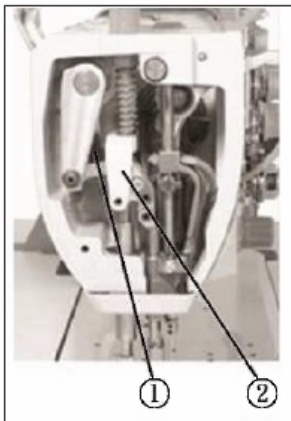
The hand wheel is 95°, turn the transfer o4 back and forth, the presser o2 is in the state of stillness, then fasten screw (3).

19. CHECK THE PRESSURE OF PRESSER FOOT

Turn the hand wheel ① counterclockwise, decrease the pressure or increase the pressure.



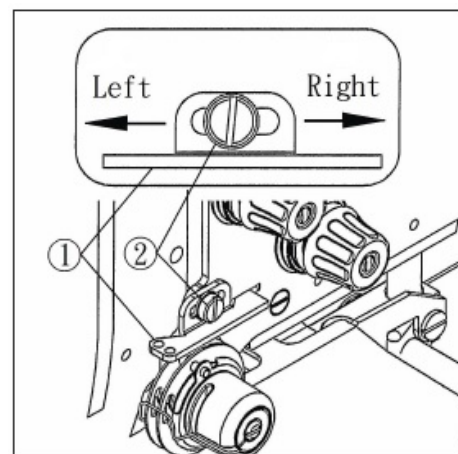
20. PRESSER DRIVE ADJUST



Loosen the screw ③, keep the clearance between driver ① and presser bracket ② at 0.5 mm, then tighten screw ③.

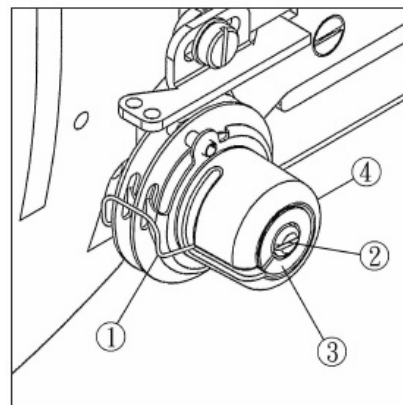
21. THREAD GUIDE ADJUSTMENT

Loosen screw ②, move the thread guide ① to the left, the thread increase, move to the right, the thread decrease. Operate according to the sewing track and get the proper thread track, then tighten screw ②.



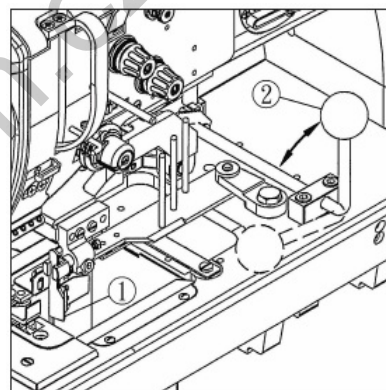
22. ADJUST THE TENSION OF RAISE THREAD AND STROKE

Loosen screw (2), turn the uphold frame 04 clockwise, the stroke of raise thread (1) becomes short, the opposite is long. The raise thread (1) becomes tight when turn the bushing (3) counterclockwise, it becomes incompact when turn the bushing clockwise.



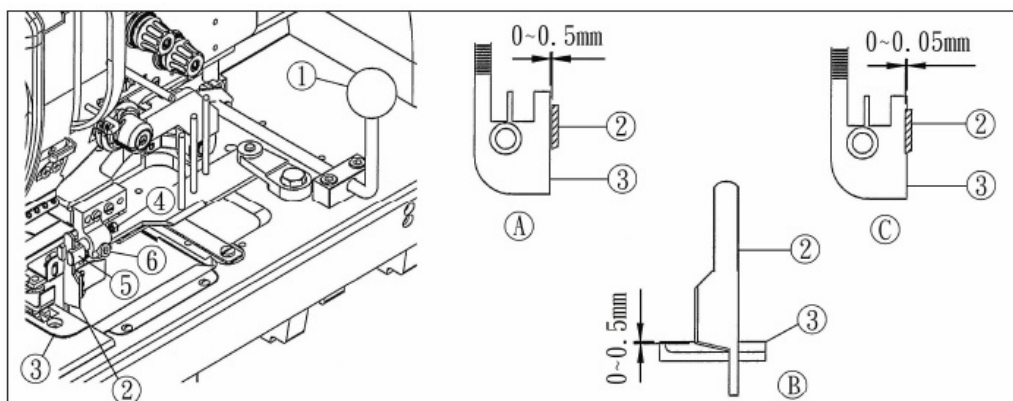
23. USING THE UPPER KNIFE

1. To operate the upper knife (1), towards the left upper knife set lever (2). The upper knife (1) will now operate simultaneously with the operation of the machine.
2. To stop the upper knife (1), towards the right upper knife set lever (2).



Notice: Operate the upper knife set lever (2) only after stopping the machine.

24. ADJUSTING THE UPPER KNIFE



1. Lower the upper knife set lever (1), and turn the machine pulley to completely lower the upper knife (2).
2. Loosen the screws 04 for the knife rod guide (2).
3. Move the upper knife (2) to adjust so that the relative positions of the upper knife (2) and needle plate (3) are as shown in diagrams (A) and (B), and then tighten the two bolts (4).
4. Turn the machine pulley to raise the upper knife (2) to its highest position.
5. Loosen the screw (6) of the knife holder (5).
6. Move the knife holder (5) toward the needle plate (3) until the relative positions of the upper knife (2) and the needle plate (3) are as shown in diagram (C), and then tighten the screw (6).

Notice: If the upper knife (2) is pressed too tightly against needle plate (3), the upper knife (2) may not be able to rise properly. After adjustment, press the release lever and make sure the upper knife (2) rises smoothly.

Spare Parts List



GF-139-443 MH/L33

ANITA B s.r.o.

Průmyslová 2453/7

680 01 Boskovice

Czech Republic

tel: +420 516 454 774

+420 516 453 496

fax: +420 516 452 751

e-mail: info@anita.cz

VERSION	CREATED ON	APPROVED BY
MP02900EN_180606	06. 06. 2018	Jakub Lžičař

www.garudan.cz

All rights reserved.

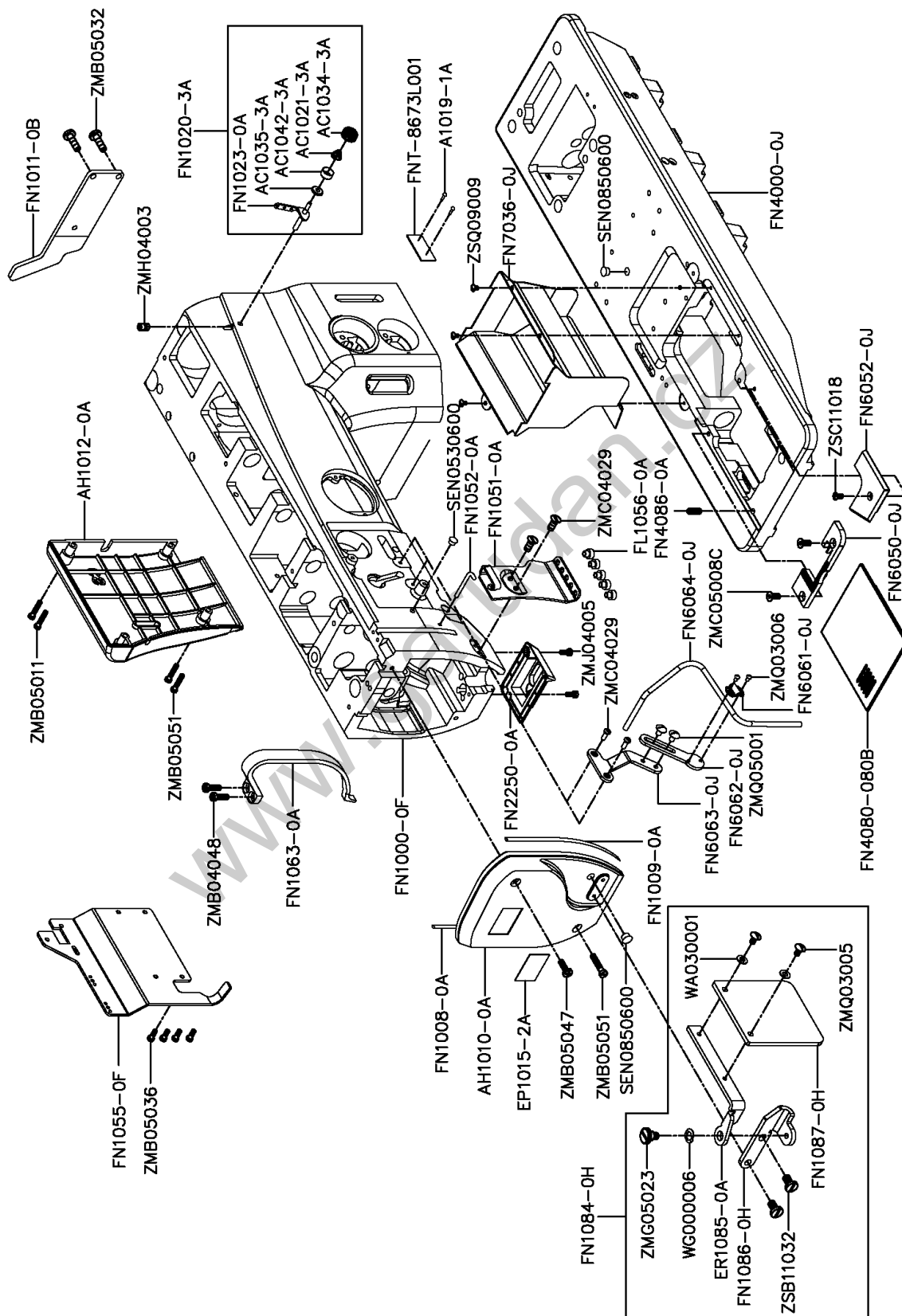
Property of Anita B s.r.o. and protected by copyright. The use of this content without written consent of Anita B s.r.o. is prohibited.

Copyright © Anita B s.r.o. (2018)

Obsah

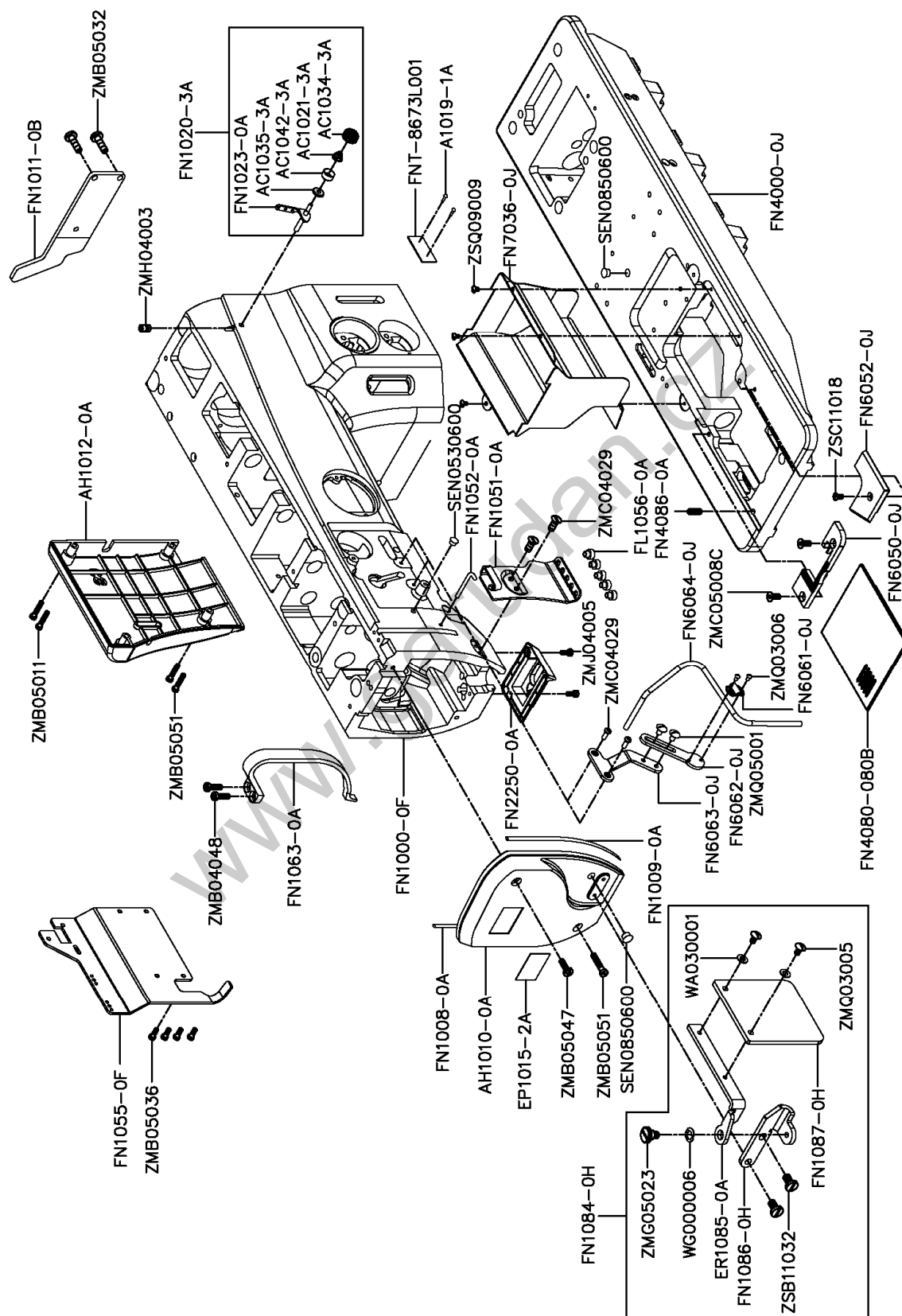
A. Arm Bed and its Accessories 1 (1/2)	4
A. Arm Bed and its Accessories 1 (2/2)	6
A. Arm Bed and its Accessories 2	8
B. Upper Shaft & Lower Shaft Mechanism.....	10
C. Needle Bar & Take-up Lever Mechanism.....	12
D. Upper Thread Tension Regulator Mechanism	14
E. Presser Foot Bar Mechanism 1 (1/2).....	16
E. Presser Foot Bar Mechanism 1 (2/2).....	18
E. Presser Foot Bar Mechanism 2.....	20
F. Bobbin Covers Mechanism	22
G. Stitch Length Regulating Mechanism	24
H. Plane Feed Mechanism	26
I. Upper & Lower feed Mechanism	28
J. Hook Post Mechanism (Left) (1/2)	30
J. Hook Post Mechanism (Left) (2/2)	32
K. Folder Mechanism (1/2)	34
K. Folder Mechanism (2/2)	36
L. Lubricating Mechanism	38
M. Accessories 1	40
M. Accessories 2	42

A. ARM BED AND ITS ACCESSORIES 1 (1/2)



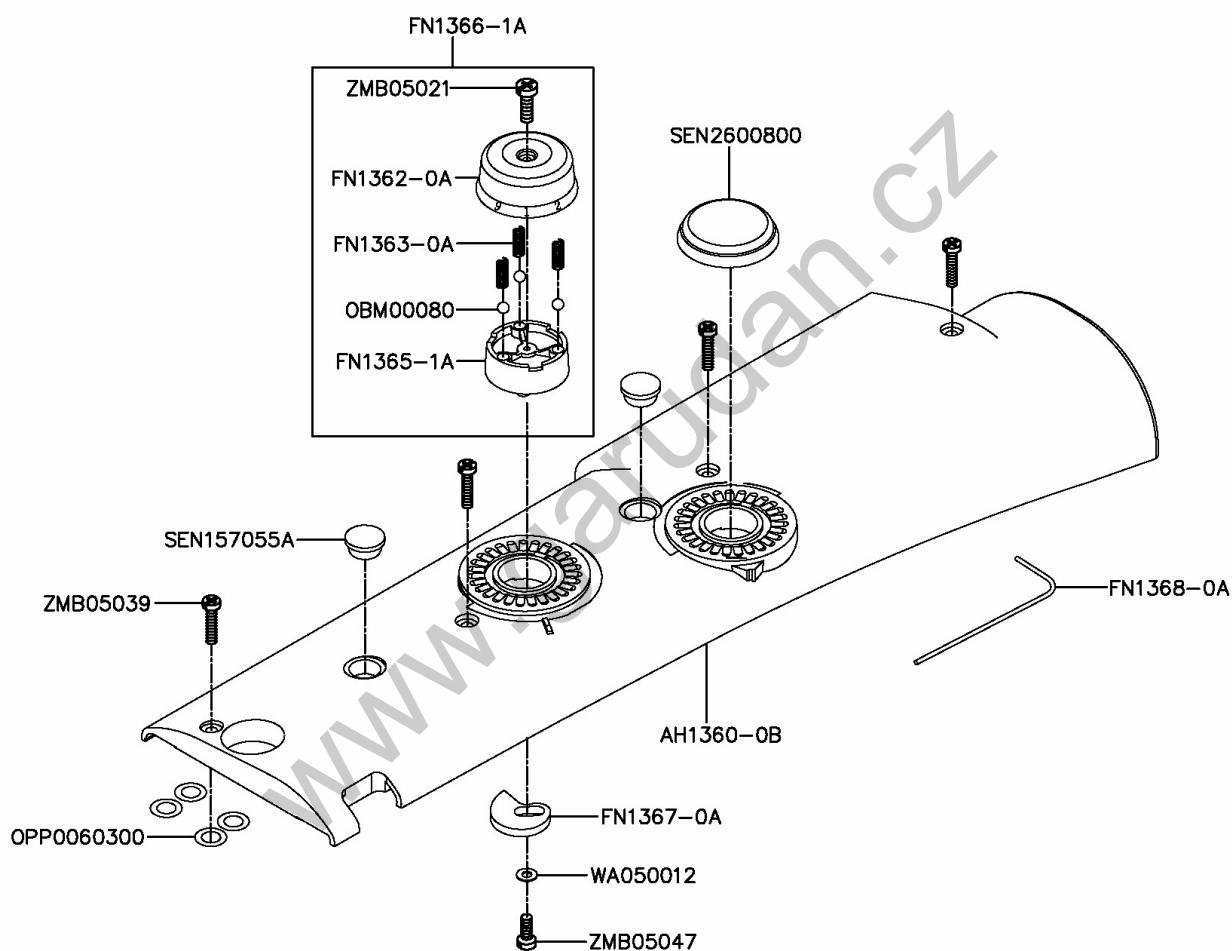
A. ARM BED AND ITS ACCESSORIES 1 (1/2)					
Ref.No	Parts No.	Name of parts	Description	Qty	Note
1	A1019-0A	Rivet		2	
2	AC1021-3A	Tension Spring		1	
3	AC1034-3A	Adjusting Nut		1	
4	AC1035-3A	Thread Guide Disk		1	
5	AC1042-3A	Spacer Partition Ring		1	
6	AH1010-0A	Upside Lid		1	
7	AH1012-2A	Transverse Lid		1	
8	EP1015-2A	Sign		1	
9	ER1085-0A	Support Plate A		1	
10	FL1056-0A	Pottery Thread Guide		5	
11	FN1000-0F	Machine		1	
12	FN1008-0A	Rubber Mat		1	
13	FN1009-0A	Rubber Mat		1	
14	FN1011-0B	Board		1	
15	FN1020-3A	Thread Tension Regulator Asm.		1	
16	FN1023-0A	Thread Tension Asm.		1	
17	FN1051-0A	Thread Tension		1	
18	FN1052-0A	Thread Tension		1	
19	FN1055-0F	Holder		1	
20	FN1063-0A	Thread Take-up Lever Lid		1	
21	FN1084-0H	Goggles Asm.		1	
22	FN1086-0H	Support Plate B		1	
23	FN1087-0H	Goggles		1	
24	FN2250-0A	Prevent Grease Seat		1	
25	FN4000-0J	Base		1	
26	FN4080-080B	Corner Board		1	
27	FN4086-0A	Screw		1	
28	FN6050-0J	Needle Plate		1	
29	FN6052-0J	Cover		1	
30	FN6061-0J	Support Plate		1	
31	FN6062-0J	Arm Support Plate		1	
32	FN6063-0J	Holder		1	
33	FN6064-0J	Tube Hose		1	
34	FN7036-0J	Trough Asm.		1	
35	FNT-8673L001	Nameplate		1	
36	SEN0530600	Rubber Plug		1	
37	SEN0850600	Rubber Plug		2	
38	WA030001	Washer		2	
39	WG000006	Spring Washer		1	
40	ZMB04048	Screw (M4-0.7x9.5)		2	

A. ARM BED AND ITS ACCESSORIES 1 (2/2)



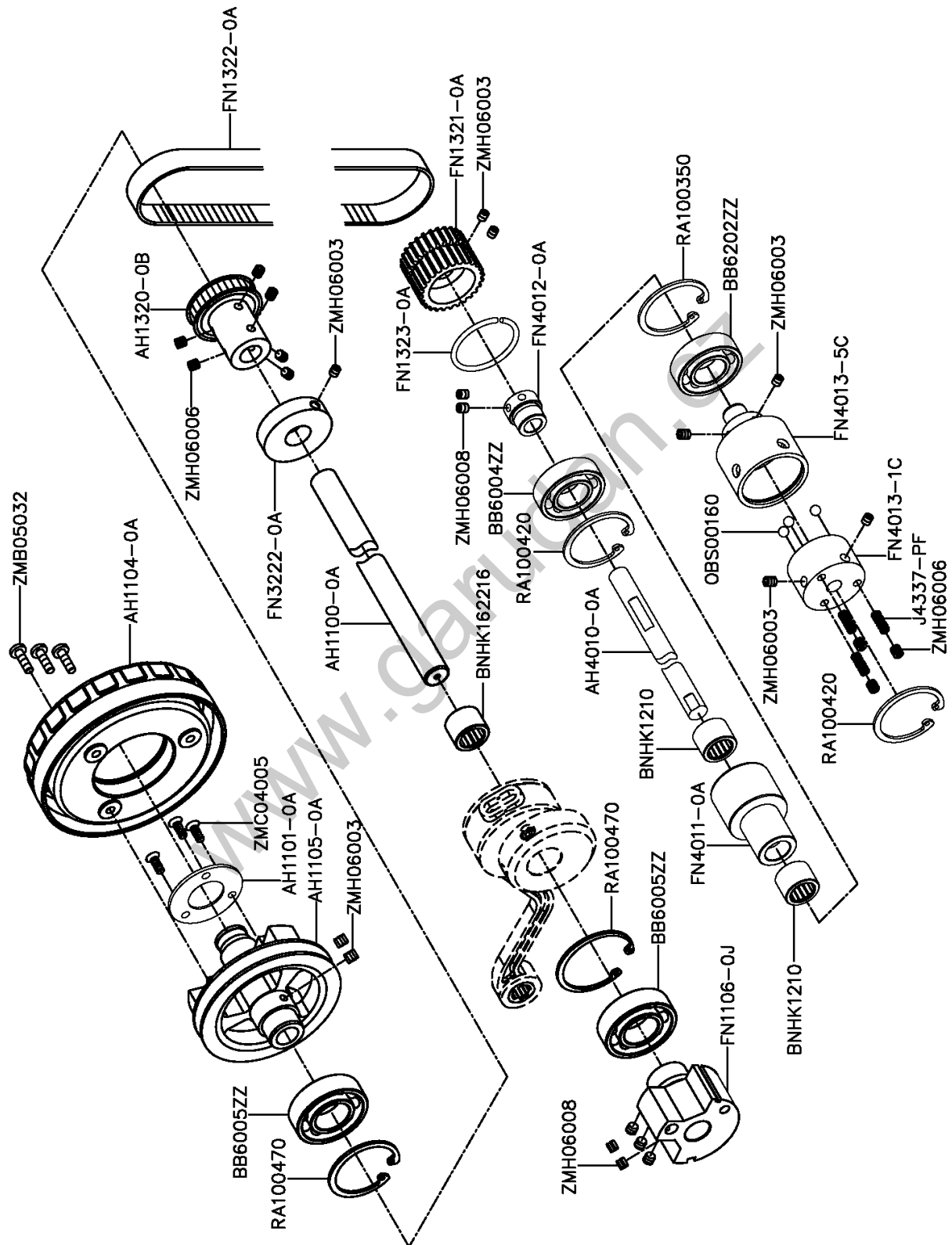
A. ARM BED AND ITS ACCESSORIES 1 (2/2)					
Ref.No	Parts No.	Name of parts	Description	Qty	Note
41	ZMB05011	Screw (M5-0.8x40)		4	
42	ZMB05032	Screw (M5-0.8x12)		2	
43	ZMB05036	Screw (M5-0.8x8)		4	
44	ZMB05047	Screw (M5-0.8x16)		1	
45	ZMB05051	Screw (M5-0.8x25)		5	
46	ZMC04029	Screw (M4-0.7x8)		4	
47	ZMC05008C	Screw (M5-0.8x12)		2	
48	ZMG05023	Screw (M5-0.8x6.3)		1	
49	ZMH04003	Screw (M4-0.7x5)		1	
50	ZMJ04005	Screw (M4-0.7x8)		2	
51	ZMQ03005	Screw (M3-0.5x6)		2	
52	ZMQ03006	Screw (M3-0.5x6)		2	
53	ZMQ05001	Screw (M5-0.8x8)		2	
54	ZSB11032	Screw (11/64-40x7.8)		2	
55	ZSC11018	Screw (11/64-40x7)		1	
56	ZSQ09009	Screw (9/64-40x5.5)		3	

A. ARM BED AND ITS ACCESSORIES 2



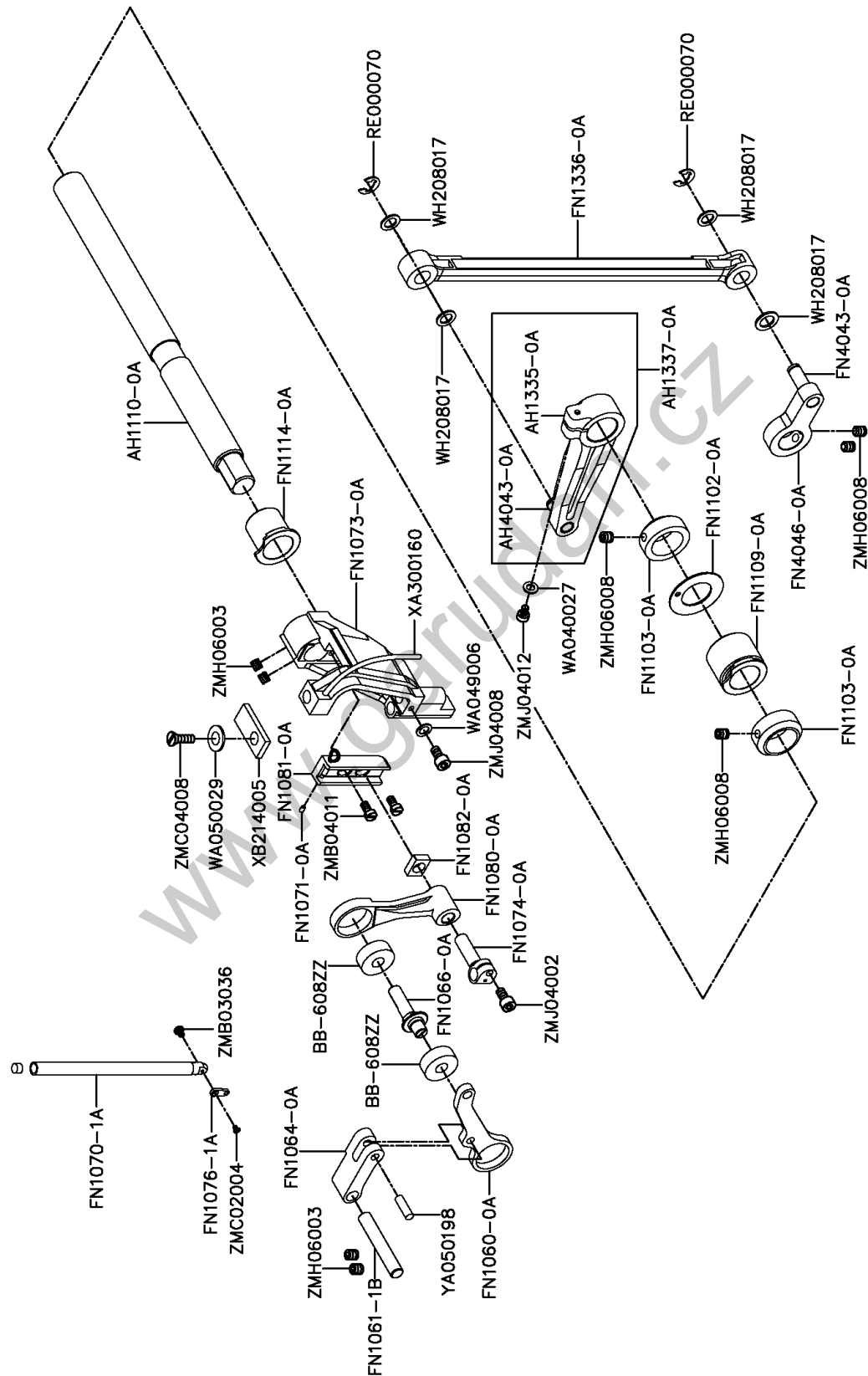
A. ARM BED AND ITS ACCESSORIES 2					
Ref.No	Parts No.	Name of parts	Description	Qty	Note
1	AH1360-0B	Upper Lid Asm.		1	
2	FN1362-0A	Rotate Spanner		1	
3	FN1363-0A	Spring		3	
4	FN1365-1A	Cam Seat		1	
5	FN1366-1A	Dial Asm.		1	
6	FN1367-0A	Drive Cam		1	
7	FN1368-0A	Shockproof Mat		1	
8	OBM00080	Steel Ball		3	
9	OPP0060300	O-ring		4	
10	SEN157055A	Rubber Plug		2	
11	SEN2600800	Rubber Plug		1	
12	WA050012	Washer		1	
13	ZMB05021	Screw (M5-0.8x12)		1	
14	ZMB05039	Screw (M5-0.8x18)		4	
15	ZMB05047	Screw (M5-0.8x16)		1	

B. UPPER SHAFT & LOWER SHAFT MECHANISM



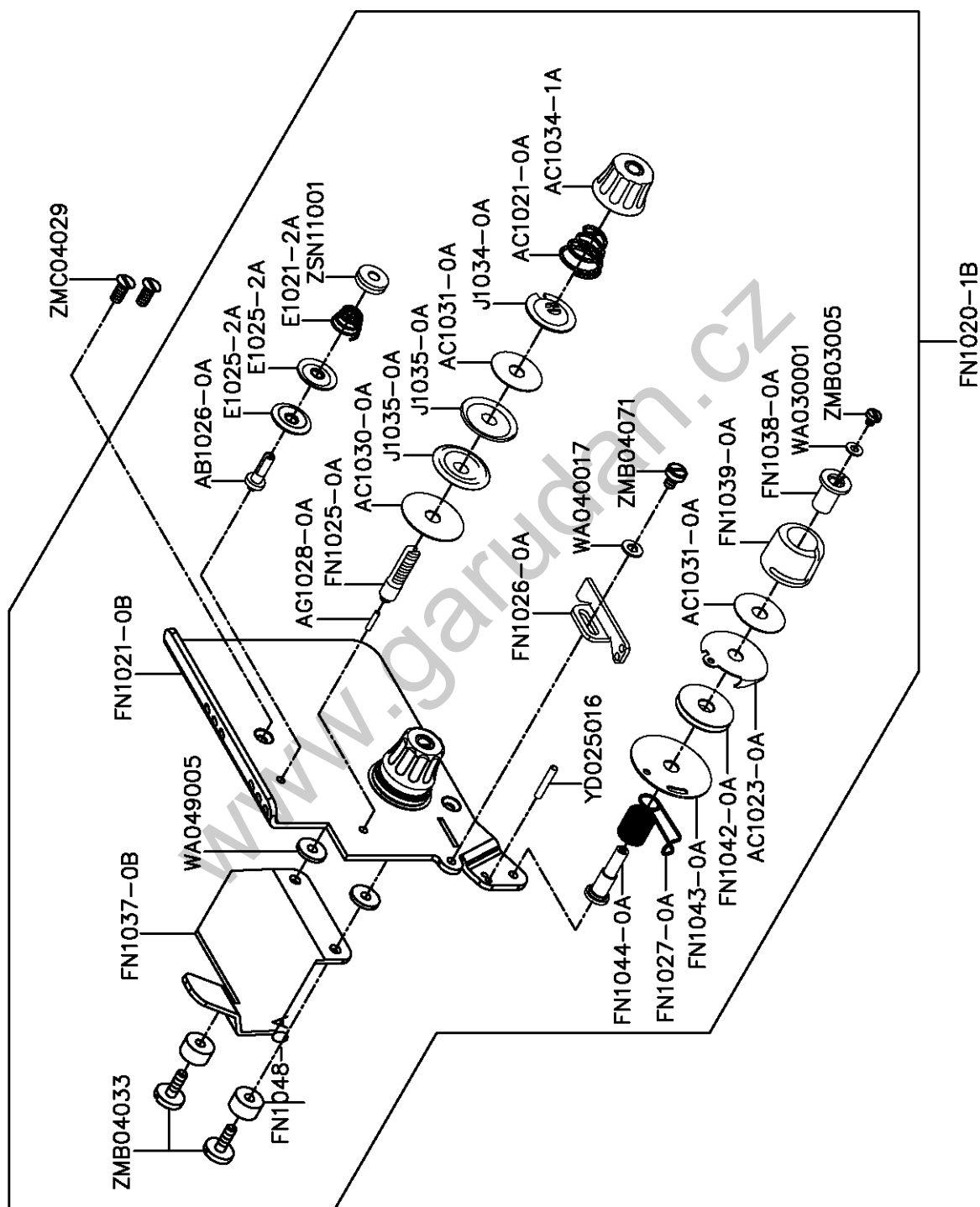
B. UPPER SHAFT & LOWER SHAFT MECHANISM					
Ref.No	Parts No.	Name of parts	Description	Qty	Note
1	AH1100-0A	Upper Shaft		1	
2	AH1101-0A	Cover Plate		1	
3	AH1104-0A	Hand Wheel		1	
4	AH1105-0A	Strap Tray		1	
5	AH1320-0B	Strap Wheel (Upper)		1	
6	FN1322-0A	Strap		1	
7	AH4010-0A	Lower Shaft		1	
8	BB6004ZZ	Bearing		1	
9	BB6005ZZ	Bearing		2	
10	BB6202ZZ	Bearing		1	
11	BNHK1210	Bearing		2	
12	BNHK162216	Bearing		1	
13	FN1106-0A	Cam		1	
14	FN1321-0A	Strap Wheel (Lower)		1	
15	FN1323-0A	Strap Wheel border Ring		1	
16	FN3222-0A	Driving Wheel		1	
17	FN4011-0A	Lower Bushing		1	
18	FN4012-0A	Bushing		1	
19	FN4013-1C	Clutch (Left)		1	
20	FN4013-5C	Clutch (Right)		1	
21	J4337-PF	Spring		3	
22	OBS00160	Steel Ball		3	
23	RA100350	C-ring		1	
24	RA100420	C-ring		2	
25	RA100470	C-ring		1	
26	ZMB05032	Screw (M5-0.8x12)		3	
27	ZMC04005	Screw (M4-0.7x6.5)		3	
28	ZMH06003	Screw (M6-1.0x8)		9	
29	ZMH06006	Screw (M6-1.0x6)		9	
30	ZMH06008	Screw (M6-1.0x6)		7	

C. NEEDLE BAR & TAKE-UP LEVER MECHANISM



C. NEEDLE BAR & TAKE-UP LEVER MECHANISM					
Ref.No	Parts No.	Name of parts	Description	Qty	Note
1	AH1110-0A	Shaft		1	
2	AH1335-0A	Needle Bar Agitate Arm		1	
3	AH1337-0A	Needle Bar Agitate Arm Asm.		1	
4	AH4043-0A	Pin		1	
5	BB-608ZZ	Bearing		2	
6	FN1060-0A	Thread Take-up Lever		1	
7	FN1061-0B	Thread Take-up Lever Pin		1	
8	FN1064-0A	Thread Take-up Lever Connecting		1	
9	FN1066-0A	Needle Bar Connecting Rod		1	
10	FN1070-1A	Needle Bar		1	
11	FN1071-0A	Fastener		1	
12	FN1073-0A	Needle Pole Dais		1	
13	FN1074-0A	Needle Bar Clamp		1	
14	FN1076-1A	Thread Guide		1	
15	FN1080-0A	Needle Bar Connecting Rod Asm.		1	
16	FN1081-0A	Slide Dollop Seat		1	
17	FN1082-0A	Guide Seat		1	
18	FN1102-0A	Washer		1	
19	FN1103-0A	Regulator Ring		2	
20	FN1109-0A	Bushing		1	
21	FN1114-0A	Bushing		1	
22	FN1336-0A	Needle Bar Agitate Rod Asm.		1	
23	FN4043-0A	Pin		1	
24	FN4046-0A	Shaft Connecting Rod		1	
25	RE000070	E-ring		2	
26	WA040027	Washer		1	
27	WA049006	Washer		1	
28	WA050029	Washer		1	
29	WH208017	Washer		4	
30	XA300160	Oil Wick		1	
31	XB214005	Oil Felt		1	
32	YA050198	Pin		1	
33	ZMB03036	Screw (M3-0.5x4)		1	
34	ZMB04011	Screw (M4-0.7x8)		2	
35	ZMC02004	Screw (M2-0.4x4)		1	
36	ZMC04008	Screw (M4-0.7x5)		1	
37	ZMH06003	Screw (M6-1.0x8)		4	
38	ZMH06008	Screw (M6-1.0x10)		4	
39	ZMJ04002	Screw (M4-0.7x10)		1	
40	ZMJ04008	Screw (M4-0.7x6)		1	
41	ZMJ04012	Screw (M4-0.7x16)		1	

D. UPPER THREAD TENSION REGULATOR MECHANISM



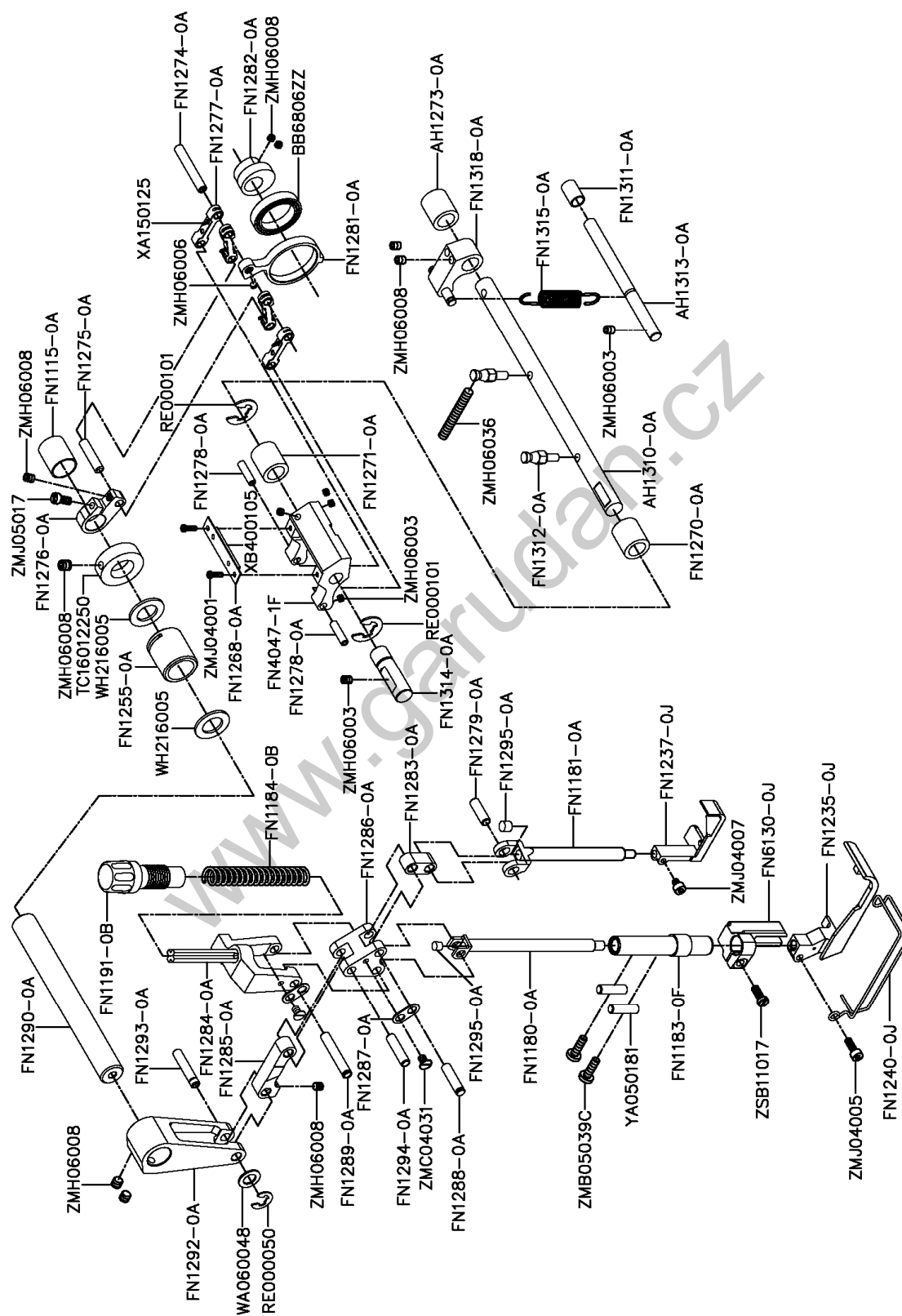
D. UPPER THREAD TENSION REGULATOR MECHANISM					
Ref.No	Parts No.	Name of parts	Description	Qty	Note
1	AB1026-0A	Shaft		1	
2	AC1021-0A	Thread Guide Spring		2	
3	AC1023-0A	Thread Eyelet Tray		1	
4	AC1030-0A	Thread Guide Disk Washer		2	
5	AC1031-0A	Thread Guide Disk Washer		3	
6	AC1034-1A	Adjusting Nut		2	
7	AG1028-0A	Pin		2	
8	E1021-2A	Adjusting Spring		1	
9	E1025-2A	Thread Guide Disk		2	
10	FN1020-1B	Thread Asm.		1	
11	FN1021-0B	Regulator Plate		1	
12	FN1025-0A	Thread Guide Disk Shaft		2	
13	FN1026-0A	Thread Guide		1	
14	FN1027-0A	Wring Spring		1	
15	FN1037-0B	Loose Thread Drive		1	
16	FN1038-0A	Bushing		1	
17	FN1039-0A	Raise Thread Cover		1	
18	FN1042-0A	Guide Thread Disk		1	
19	FN1043-0A	Guide Thread Disk Plate		1	
20	FN1044-0A	Shaft		1	
21	FN1048-0A	Spring Washer		2	
22	J1034-0A	Converse Direction Disk		2	
23	J1035-0A	Thread Guide Disk		4	
24	WA030001	Washer		1	
25	WA040017	Washer		1	
26	WA049005	Washer		2	
27	YD025016	Pin		1	
28	ZMB03005	Screw (M3-0.5x4)		1	
29	ZMB04033	Screw (M4-0.7x12)		2	
30	ZMB04071	Screw (M4-0.7x6)		1	
31	ZMC04029	Screw (M4-0.7x8)		2	
32	ZSN11001	Nut		1	

MP02900EN_180606



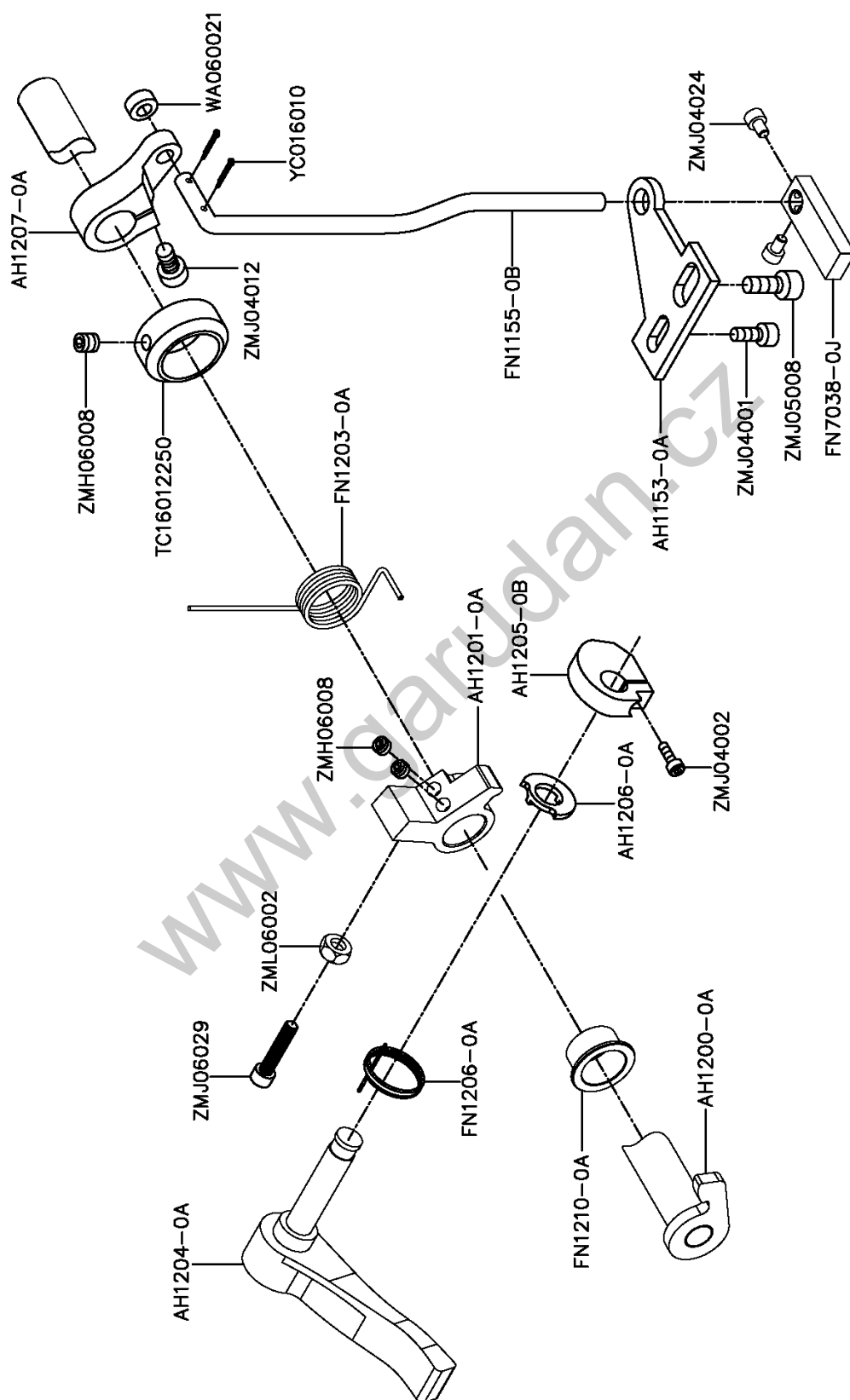
E. PRESSER FOOT BAR MECHANISM 1 (1/2)					
Ref.No	Parts No.	Name of parts	Description	Qty	Note
1	AH1273-0A	Bushing		1	
2	AH1310-0A	Shaft		1	
3	AH1313-0A	Shaft		1	
4	BB6806ZZ	Bearing		1	
5	FN1115-0A	Bushing		1	
6	FN1180-0A	Connecting Rod		1	
7	FN1181-0A	Presser Bar		1	
8	FN1183-0F	Presser Bar Bushing Asm.		1	
9	FN1184-0B	Spring		1	
10	FN1191-0B	Adjust Screw		1	
11	FN1235-0J	Outer Presser Foot		1	
12	FN1237-0J	Inner Presser Foot		1	
13	FN1240-0J	Finger Guard		1	
14	FN1255-0A	Bushing		1	
15	FN1268-0A	Oil Wick Fix Board		1	
16	FN1270-0A	Bushing		1	
17	FN1271-0A	Bushing		1	
18	FN1274-0A	Pin		1	
19	FN1275-0A	Pin		1	
20	FN1276-0A	Crank		1	
21	FN1277-0A	Connecting Rod		4	
22	FN1278-0A	Pin		2	
23	FN1279-0A	Pin		1	
24	FN1281-0A	Crank		1	
25	FN1282-0A	Deflection Center		1	
26	FN1283-0A	Connect Organ		1	
27	FN1284-0A	Presser Bar Connecting Rod		1	
28	FN1285-0A	Connecting Rod		1	
29	FN1286-0A	Ascend Connecting Rod		1	
30	FN1287-0A	Washer		2	
31	FN1288-0A	Pin		1	
32	FN1289-0A	Pin		1	
33	FN1290-0A	Shaft		1	
34	FN1292-0A	Connecting Rod Asm.		1	
35	FN1293-0A	Pin		1	
36	FN1294-0A	Pin		1	
37	FN1295-0A	Rubber Stopper		2	
38	FN1311-0A	Bushing		1	
39	FN1312-0A	Connecting Pin		2	
40	FN1314-0A	Connect Pin		1	

E. PRESSER FOOT BAR MECHANISM 1 (2/2)



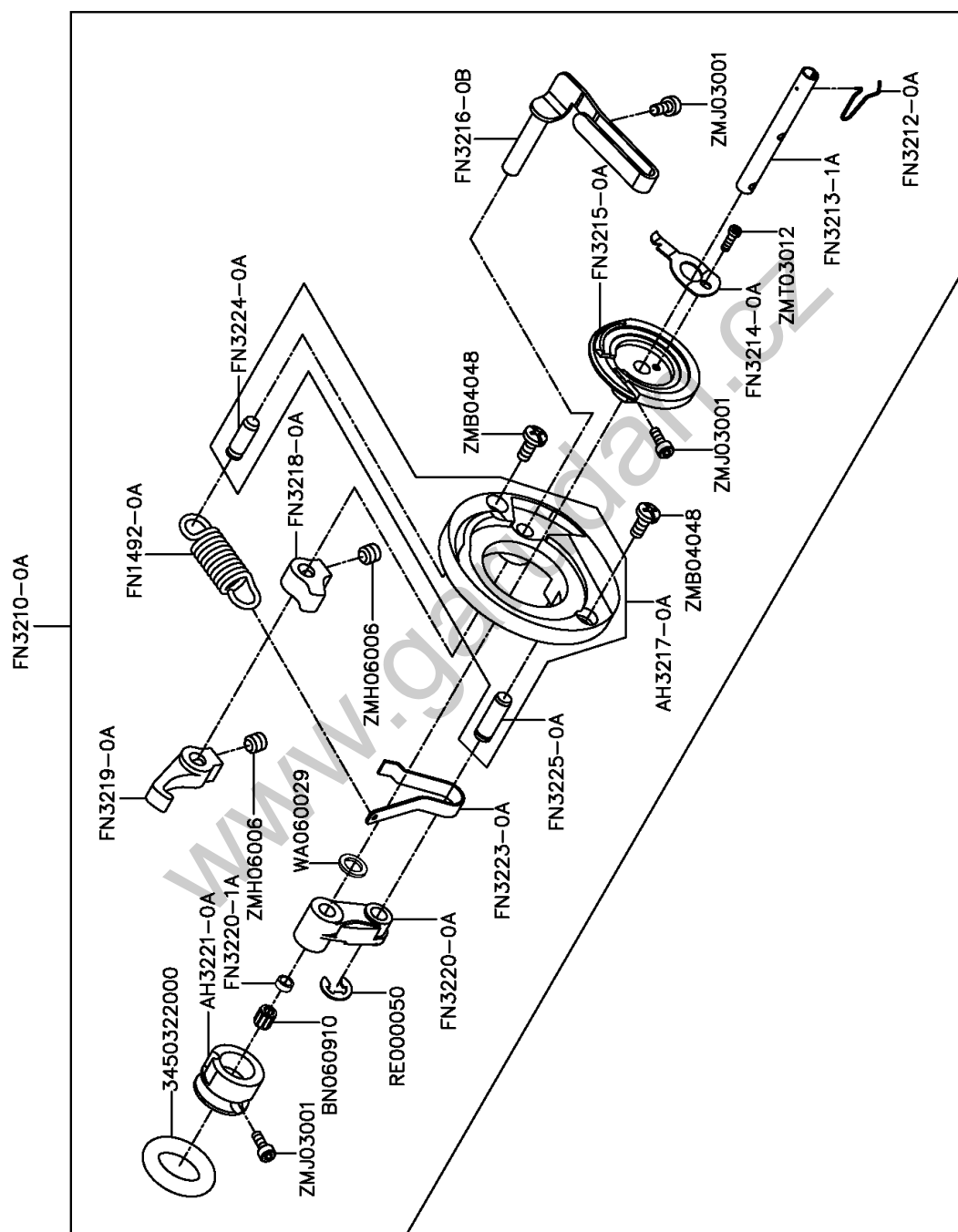
E. PRESSER FOOT BAR MECHANISM 1 (2/2)					
Ref.No	Parts No.	Name of parts	Description	Qty	Note
41	FN1315-0A	Spring		1	
42	FN1318-0A	Gas Jar Connect Asm.		1	
43	FN4047-1F	Reverse Block		1	
44	FN6130-0J	Holder		1	
45	RE000050	E-ring		1	
46	RE000101	E-ring		2	
47	TC16012250	Collar		1	
48	WA060048	Washer		1	
49	WH216005	Washer		2	
50	XA150125	Oil Wick		4	
51	XB400105	Oil Felt		1	
52	YA050181	Pin		2	
53	ZMB05039C	Screw (M5-0.8x18)		2	
54	ZMC04031	Screw (M4-0.7x5.7)		2	
55	ZMH06003	Screw (M6-1.0x8)		6	
56	ZMH06006	Screw (M6-1.0x6)		1	
57	ZMH06008	Screw (M6-1.0x6)		9	
58	ZMH06036	Screw (M6-1.0x45)		1	
59	ZMJ04001	Screw (M4-0.7x8)		2	
60	ZMJ04005	Screw (M4-0.7x12)		1	
61	ZMJ04007	Screw (M4-0.7x5)		1	
62	ZMJ05017	Screw (M5-0.8x25)		1	
63	ZSB11017	Screw (11/64-40x12)		1	

E. PRESSER FOOT BAR MECHANISM 2



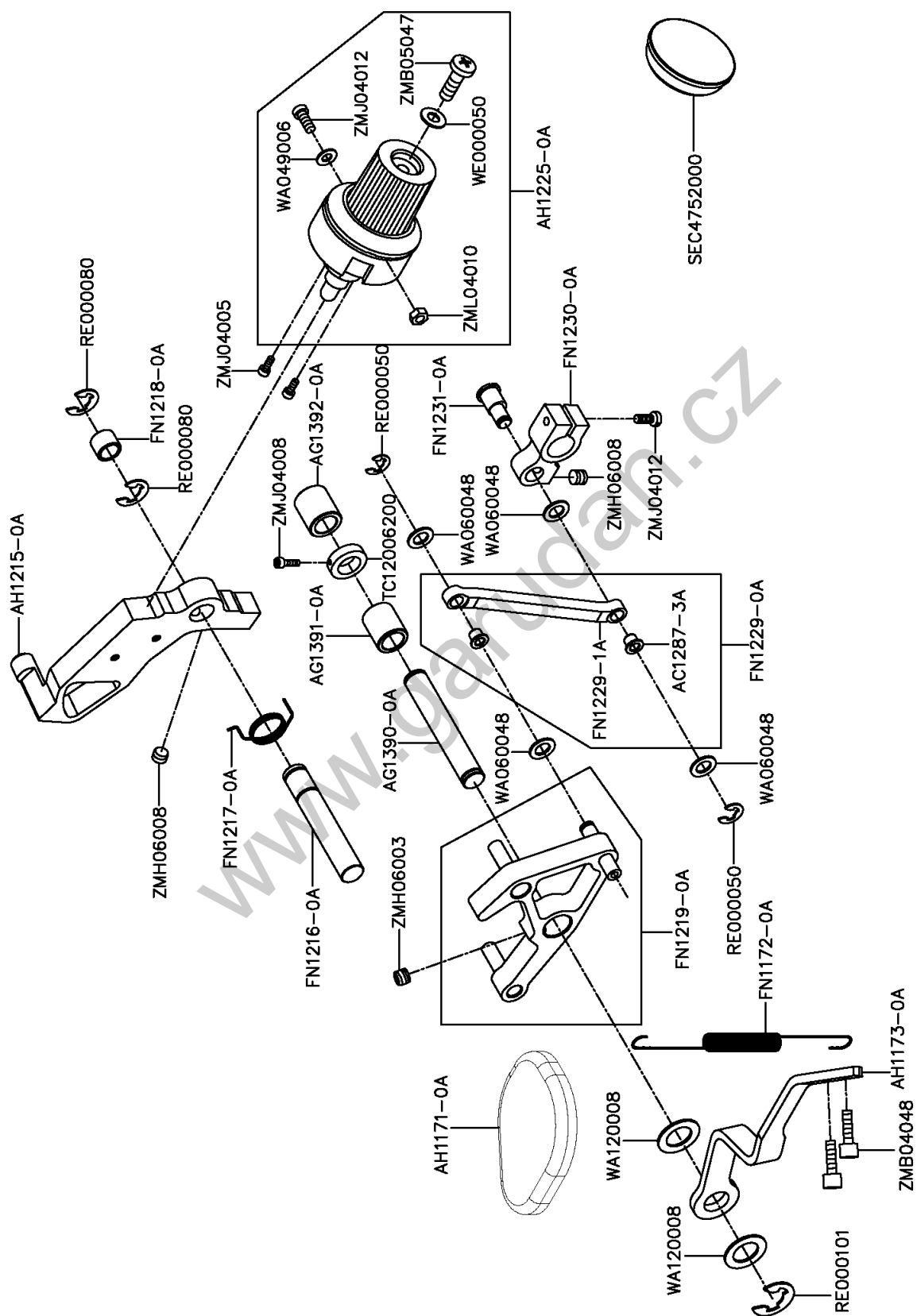
E. PRESSER FOOT BAR MECHANISM 2					
Ref.No	Parts No.	Name of parts	Description	Qty	Note
1	AH1153-0A	Holder		1	
2	AH1200-0A	Presser Guide Shaft Asm.		1	
3	AH1201-0A	Presser Guide Block		1	
4	AH1204-0A	Hand Lifter Lever		1	
5	AH1205-0B	Hand Lifter Cam		1	
6	AH1206-0A	Restrict Block		1	
7	AH1207-0A	Presser Guide Crank Asm.		1	
8	FN1155-0B	Connecting Rod		1	
9	FN1203-0A	Spring		1	
10	FN1206-0A	Spring		1	
11	FN1210-0A	Bushing		1	
12	FN7038-0J	Plate		1	
13	TC16012250	Collar		1	
14	WA060021	Washer		1	
15	YC016010	Pin		2	
16	ZMH06008	Screw (M6-1.0x6)		3	
17	ZMJ03024	Screw (M3-0.5x4.5)		2	
18	ZMJ04001	Screw (M4-0.7x8)		1	
19	ZMJ04002	Screw (M4-0.7x10)		1	
20	ZMJ04012	Screw (M4-0.7x16)		1	
21	ZMJ05008	Screw (M5-0.8x10)		1	
22	ZMJ06029	Screw (M6-1.0x30)		1	
23	ZML06002	Nut		1	

F. BOBBIN COVERS MECHANISM



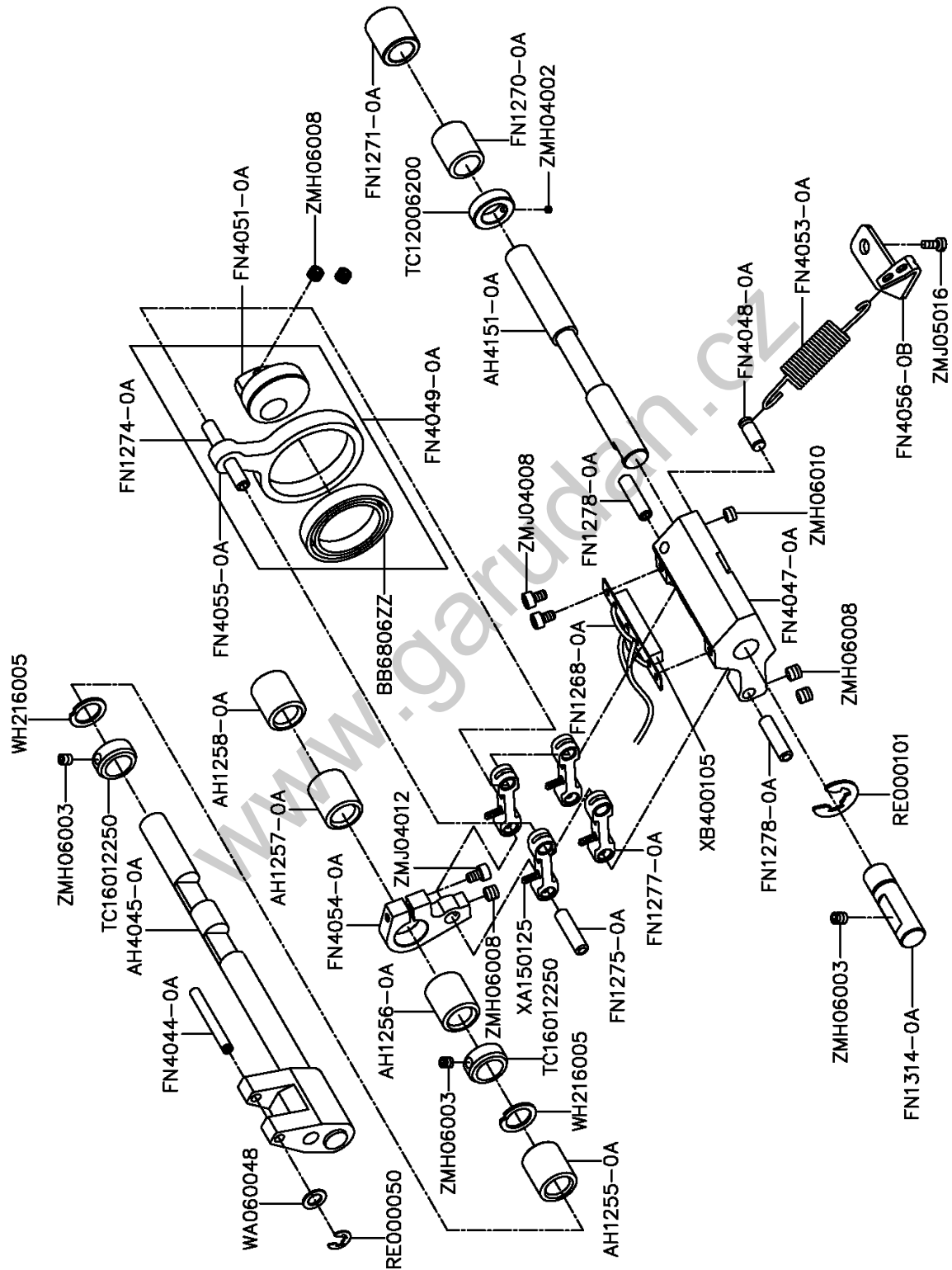
F. BOBBIN COVERS MECHANISM					
Ref.No	Parts No.	Name of parts	Description	Qty	Note
1	3450322000	Friction Wheel		1	
2	AH3217-0A	Bobbin Winder Seat		1	
3	AH3221-0A	Winder Driving Wheel		1	
4	BN060910	Bearing		1	
5	FN1492-0A	Spring		1	
6	FN3210-0A	Winder Driving Asm.		1	
7	FN3212-0A	Spring		1	
8	FN3213-1A	Winder Driving Shaft		1	
9	FN3214-0A	Bobbin Winder Secant Sword		1	
10	FN3215-0A	Winder Driving Support		1	
11	FN3216-0B	Feel Valve		1	
12	FN3218-0A	Dollop		1	
13	FN3219-0A	Hook		1	
14	FN3220-0A	Winder Driving Support		1	
15	FN3220-1A	Bushing		1	
16	FN3223-0A	Bobbin Winder Drive		1	
17	FN3224-0A	Pin		1	
18	FN3225-0A	Pin		1	
19	RE000050	E-ring		1	
20	WA060029	Washer		1	
21	ZMB04048	Screw (M4-0.7x9.5)		2	
22	ZMH06006	Screw (M6-1.0x6)		2	
23	ZMJ03001	Screw (M3-0.5x10)		3	
24	ZMT03012	Wood Screw		1	

G. STITCH LENGTH REGULATING MECHANISM



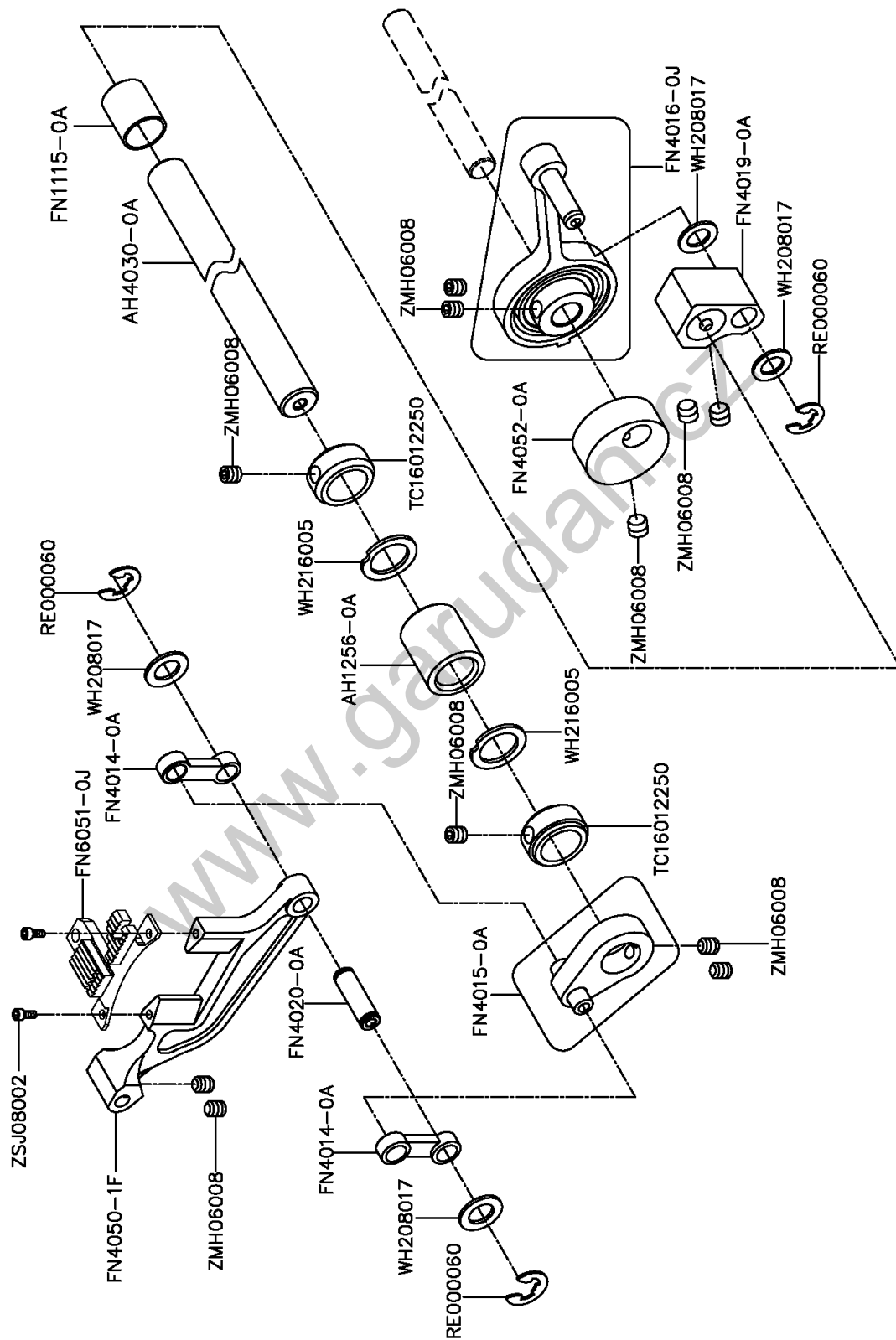
G. STITCH LENGTH REGULATING MECHANISM					
Ref.No	Parts No.	Name of parts	Description	Qty	Note
1	AC1287-3A	Bushing		2	
2	AG1390-0A	Shaft		1	
3	AG1391-0A	Bushing		1	
4	AG1392-0A	Bushing		1	
5	AH1171-0A	Reverse Stitching Handle		1	
6	AH1173-0A	Reverse Stitching Pole		1	
7	AH1215-0A	Feed Regulator		1	
8	AH1225-0A	Dial Asm.		1	
9	FN1172-0A	Spring		1	
10	FN1216-0A	Shaft		1	
11	FN1217-0A	Spring		1	
12	FN1218-0A	Bushing		1	
13	FN1219-0A	Regulating Arm Asm.		1	
14	FN1229-0A	Connecting Rod Asm.		1	
15	FN1229-1A	Connecting Rod		1	
16	FN1230-0A	Crank		1	
17	FN1231-0A	Eccentric Pin		1	
18	RE000050	E-ring		2	
19	RE000080	E-ring		2	
20	RE000101	E-ring		1	
21	SEC4752000	Rubber Mat		1	
22	TC12006200	Collar		1	
23	WA049006	Washer		1	
24	WA060048	Washer		4	
25	WA120008	Washer		2	
26	WE000050	Washer		1	
27	ZMB04048	Screw (M4-0.7x9.5)		2	
28	ZMB05047	Screw (M5-0.8x16)		1	
29	ZMH06003	Screw (M6-1.0x8)		1	
30	ZMH06008	Screw (M6-1.0x6)		2	
31	ZMJ04005	Screw (M4-0.7x12)		2	
32	ZMJ04008	Screw (M4-0.7x6)		1	
33	ZMJ04012	Screw (M4-0.7x12)		2	
34	ZML04010	Nut		1	

H. PLANE FEED MECHANISM



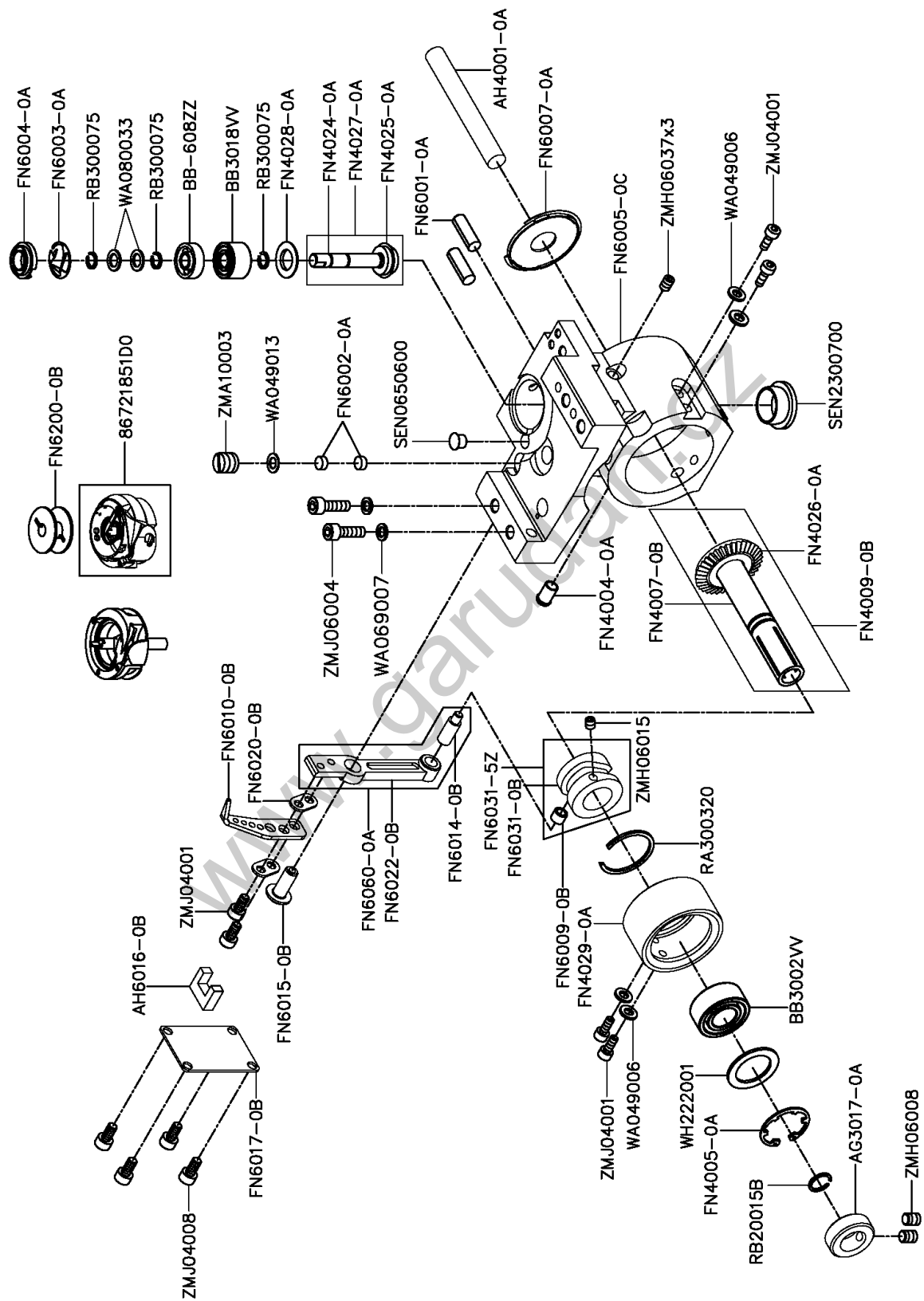
H. PLANE FEED MECHANISM					
Ref.No	Parts No.	Name of parts	Description	Qty	Note
1	AH1255-0A	Bushing		1	
2	AH1256-0A	Bushing		1	
3	AH1257-0A	Bushing		1	
4	AH1258-0A	Bushing		1	
5	AH4045-0A	Lower Feed Driving Asm.		1	
6	AH4151-0A	Shaft		1	
7	BB6806ZZ	Bearing		1	
8	FN1268-0A	Oil Wick Fix Board		1	
9	FN1270-0A	Bushing		1	
10	FN1271-0A	Bushing		1	
11	FN1274-0A	Pin		1	
12	FN1275-0A	Pin		1	
13	FN1277-0A	Connect Dollop		4	
14	FN1278-0A	Pin		2	
15	FN1314-0A	Connect Pin		1	
16	FN4044-0A	Pin		1	
17	FN4047-0A	Reverse Block		1	
18	FN4048-0A	Pin		1	
19	FN4049-0A	Lower Feed Driving Deflection Center		1	
20	FN4051-0A	Deflection Center		1	
21	FN4053-0A	Spring		1	
22	FN4054-0A	Connecting Rod		1	
23	FN4055-0A	Crank		1	
24	FN4056-0B	Spring Fix Board		1	
25	RE000050	E-ring		1	
26	RE000101	E-ring		1	
27	TC12006200	Collar		1	
28	TC16012250	Collar		2	
29	WA060048	Washer		1	
30	WH216005	Washer		2	
31	XA150125	Oil Wick		4	
32	XB400105	Oil Felt		1	
33	ZMH04002	Screw (M4-0.7x3)		1	
34	ZMH06003	Screw (M6-1.0x8)		3	
35	ZMH06008	Screw (M6-1.0x6)		5	
36	ZMH06010	Screw (M6-1.0x10)		1	
37	ZMJ04008	Screw (M4-0.7x6)		2	
38	ZMJ04012	Screw (M4-0.7x16)		1	
39	ZMJ05016	Screw (M5-0.8x12)		1	

I. UPPER & LOWER FEED MECHANISM



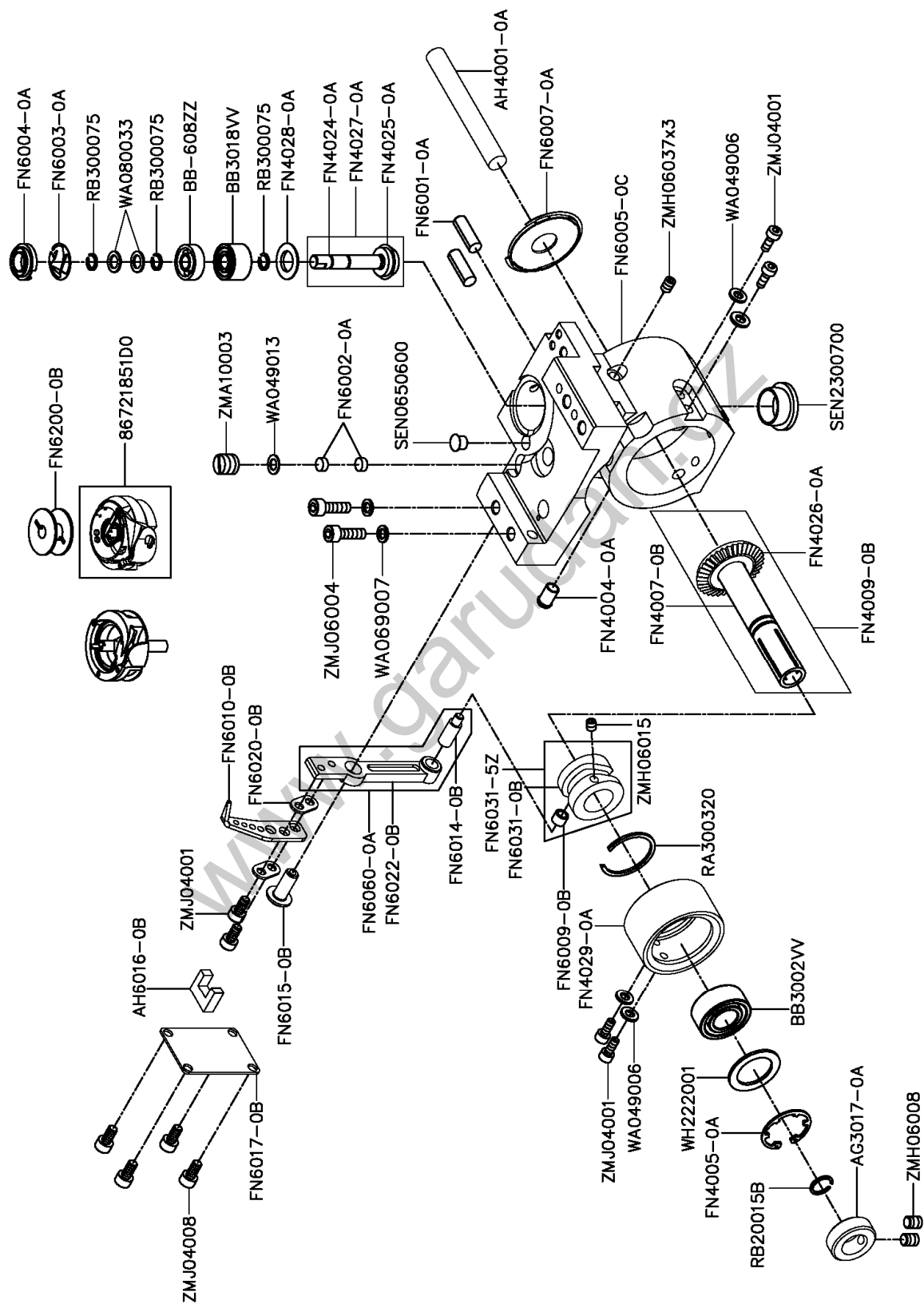
I. UPPER & LOWER FEED MECHANISM					
Ref.No	Parts No.	Name of parts	Description	Qty	Note
1	AH1256-0A	Bushing		1	
2	AH4030-0A	Shaft		1	
3	FN1115-0A	Bushing		1	
4	FN4014-0A	Feed Platform Connecting Rod		2	
5	FN4015-0A	Agitate Crank Asm.		1	
6	FN4016-0J	Upper Lower Feed Deflection Center Asm.		1	
7	FN4019-0A	Crank		1	
8	FN4020-0A	Pin		1	
9	FN4050-1F	Feed Platform		1	
10	FN4052-0A	Deflection Center Wheel		1	
11	FN6051-0J	Feed Gear		1	
12	RE000060	E-ring		3	
13	TC16012250	Collar		2	
14	WH208017	Washer		4	
15	WH216005	Washer		2	
16	ZMH06008	Screw (M6-1.0x9.5)		11	
17	ZSJ08002	Screw (1/8-40x6.5)		2	

J. HOOK POST MECHANISM (LEFT) (1/2)



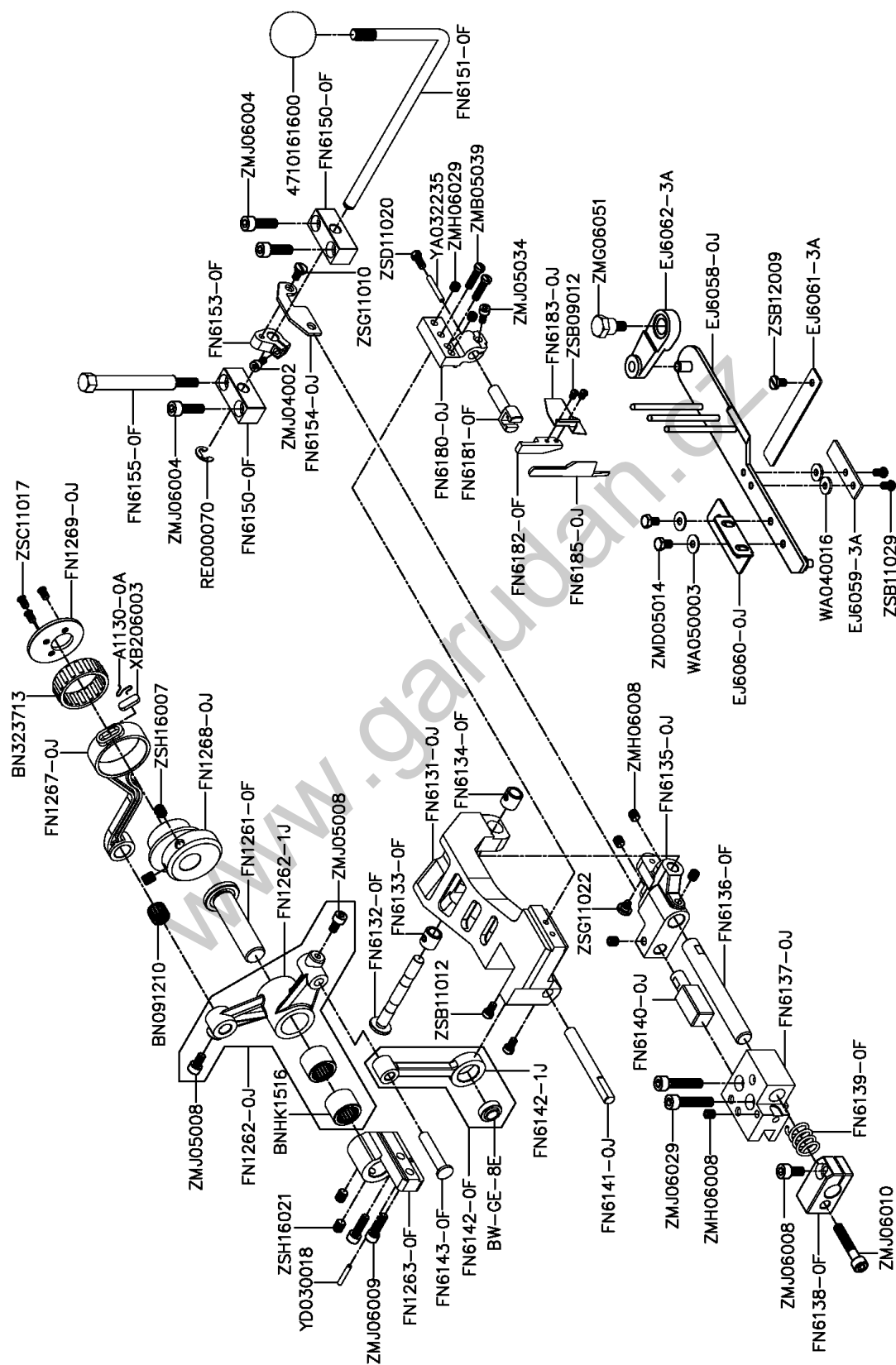
J. HOOK POST MECHANISM (LEFT) (1/2)					
Ref.No	Parts No.	Name of parts	Description	Qty	Note
1	86721851D0	Hook Asm.		1	
2	AG3017-0A	Collar		1	
3	AH4001-0A	Shaft		1	
4	AH6016-0B	Rubber		1	
5	BB3002VV	Bearing		1	
6	BB3018VV	Bearing		1	
7	BB-608ZZ	Bearing		1	
8	FN4004-0A	Bushing		1	
9	FN4005-0A	Retaining Ring		1	
10	FN4007-0B	Shaft		1	
11	FN4009-0B	Gear Asm.(Big)		1	
12	FN4024-0A	Shaft		1	
13	FN4025-0A	Gear (Big)		1	
14	FN4026-0A	Gear (Little)		1	
15	FN4027-0A	Gear Asm.(Little)		1	
16	FN4028-0A	Washer		1	
17	FN4029-0A	Feed Platform Shaft		1	
18	FN6001-0A	Pin		2	
19	FN6002-0A	Rubber Stopper		2	
20	FN6003-0A	Cushion		1	
21	FN6004-0A	Airproof Ring		1	
22	FN6005-0C	Hook Post		1	
23	FN6007-0A	Cover		1	
24	FN6009-0B	Roller		1	
25	FN6010-0B	Cattle Horn		1	
26	FN6014-0B	Pin		1	
27	FN6015-0B	Pin		1	
28	FN6017-0B	Cover Plate		1	
29	FN6020-0B	Washer		2	
30	FN6022-0B	Agitate Arm		1	
31	FN6031-0B	Cam (Left)		1	
32	FN6031-5Z	Cam Arm (Left)		1	
33	FN6060-0A	Agitate Arm Asm.		1	
34	FN6200-0B	Bobbin		1	
35	RA300320	C-ring		1	
36	RB20015B	C-ring		1	
37	RB300075	C-ring		3	
38	SEN0650600	Rubber Stopper		1	
39	SEN2300700	Rubber Stopper		1	
40	WA049006	Washer		2	

J. HOOK POST MECHANISM (LEFT) (2/2)



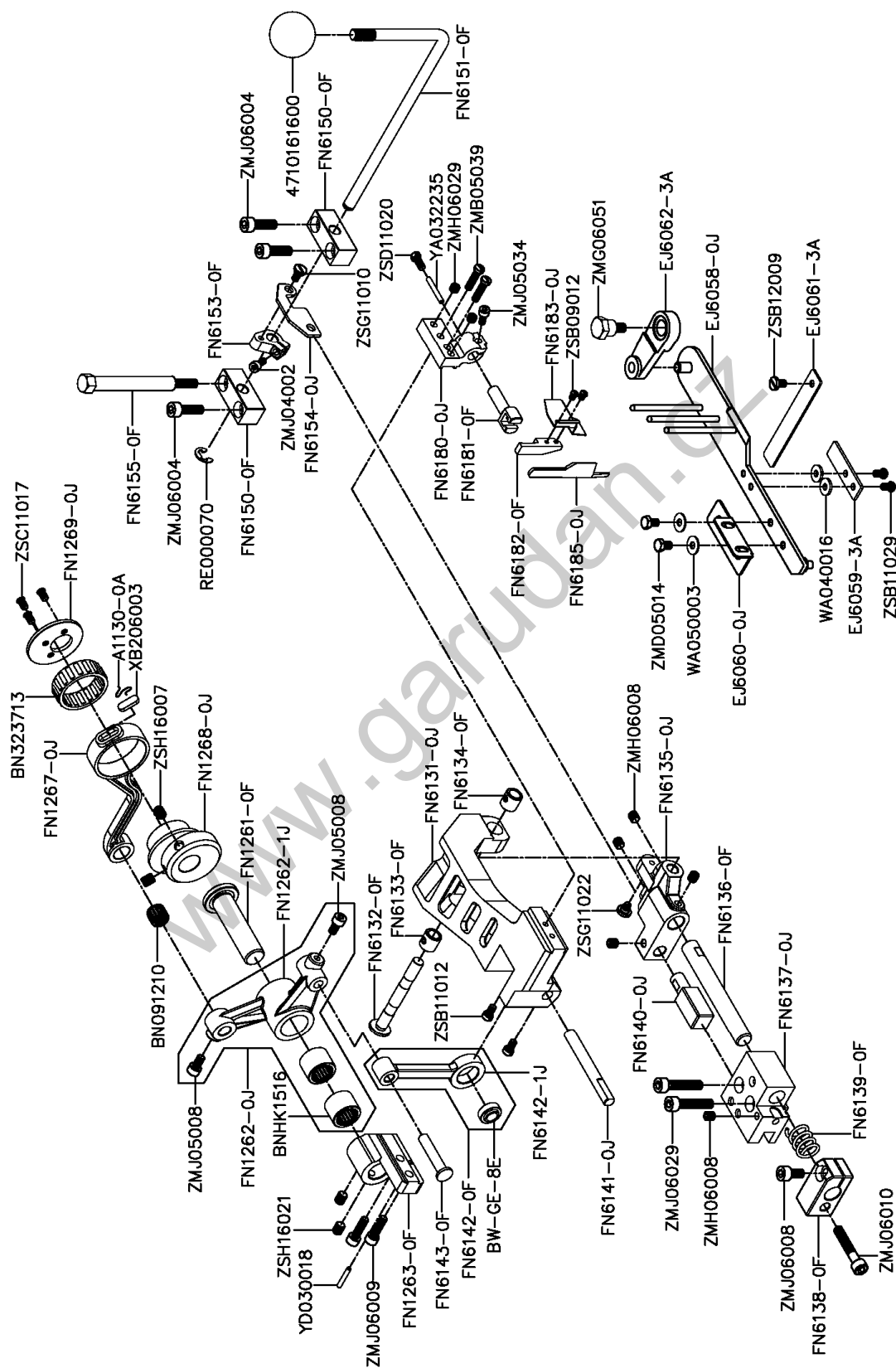
J. HOOK POST MECHANISM (LEFT) (2/2)					
Ref.No	Parts No.	Name of parts	Description	Qty	Note
41	WA049013	Washer		1	
42	WA069007	Washer		2	
43	WA080033	Washer		2	
44	WH222001	Washer		1	
45	ZMA10003	Screw (M10-1.0x9)		1	
46	ZMH06008	Screw (M6-1.0x6)		2	
47	ZMH06015	Screw (M6-1.0x5)		1	
48	ZMH06037	Screw (M6-1.0x10)		3	
49	ZMJ04001	Screw (M4-0.7x8)		4	
50	ZMJ04008	Screw (M4-0.7x6)		4	
51	ZMJ06004	Screw (M6-1.0x20)		2	

K. FOLDER MECHANISM (1/2)



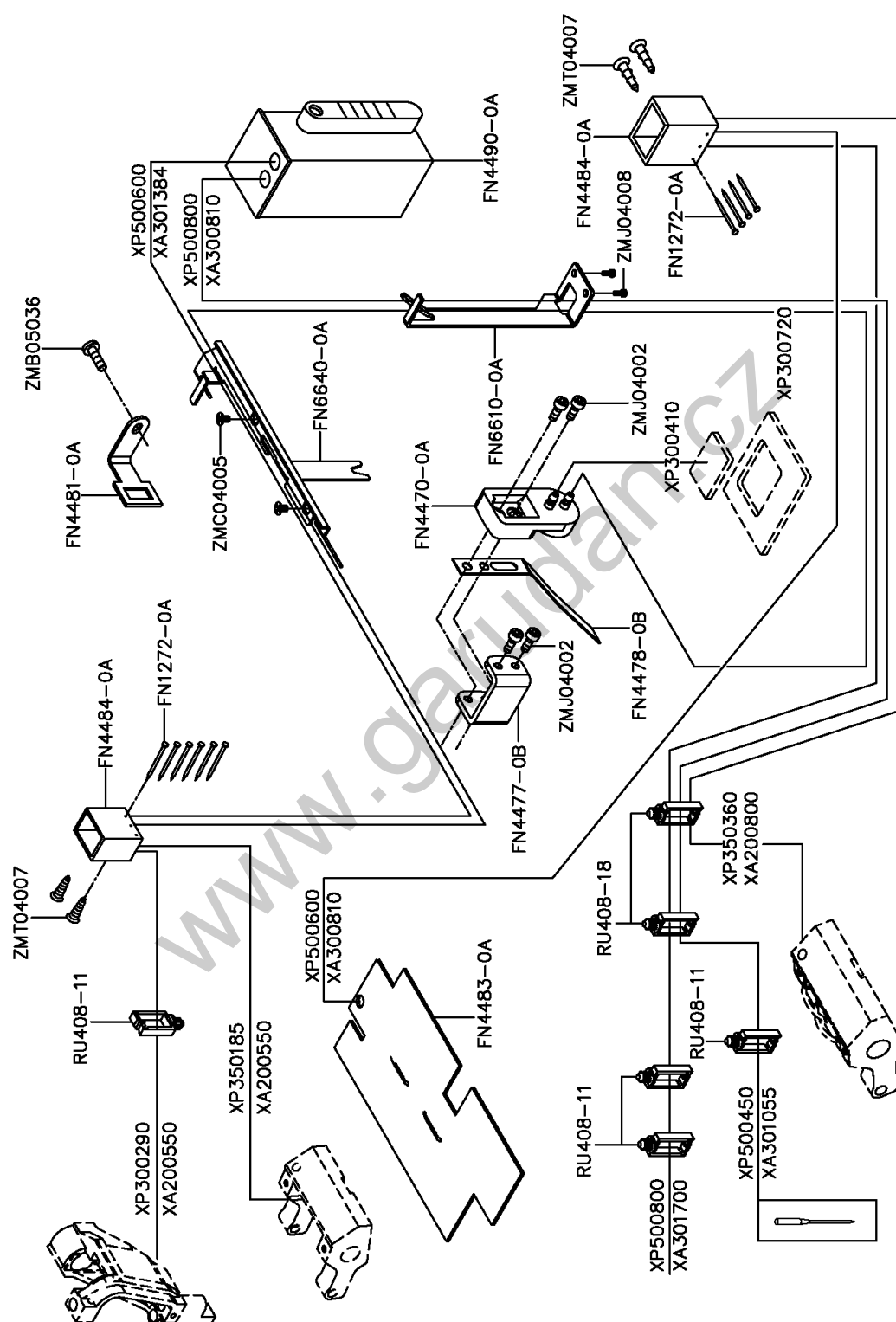
K. FOLDER MECHANISM (1/2)					
Ref.No	Parts No.	Name of parts	Description	Qty	Note
1	4710161600	Handle		1	
2	A1130-0A	Spring		1	
3	BN091210	Bearing		1	
4	BN323713	Bearing		1	
5	BNHK1516	Bearing		2	
6	BW-GE-8E	Bearing		1	
7	EJ6058-0J	Folder Rocking		1	
8	EJ6059-3A	Plate		1	
9	EJ6060-0J	Folder Support		1	
10	EJ6061-3A	Plate		1	
11	EJ6062-3A	Folder Arm		1	
12	FN1261-0F	Shaft		1	
13	FN1262-0J	Crank Asm.		1	
14	FN1262-1J	Crank		1	
15	FN1263-0F	Support		1	
16	FN1267-0J	Driving Rod		1	
17	FN1268-0J	Eccentric Wheel		1	
18	FN1269-0J	Cover		1	
19	FN6131-0J	Driving Arm		1	
20	FN6132-0F	Shaft		1	
21	FN6133-0F	Bushing		1	
22	FN6134-0F	Bushing		1	
23	FN6135-0J	Support		1	
24	FN6136-0F	Shaft		1	
25	FN6137-0J	Seat		1	
26	FN6138-0F	Adjusting Lump		1	
27	FN6139-0F	Spring		1	
28	FN6140-0J	Shaft		1	
29	FN6141-0J	Pin		1	
30	FN6142-0F	Connecting Rod Asm.		1	
31	FN6142-1J	Connecting Rod		1	
32	FN6143-0F	Shaft		1	
33	FN6150-0F	Holder Seat		2	
34	FN6151-0F	Handle		1	
35	FN6153-0F	Connecting Rod		1	
36	FN6154-0J	Driving Plate		1	
37	FN6155-0F	Support		1	
38	FN6180-0J	Moving Knife Seat		1	
39	FN6181-0F	Cord Holder		1	
40	FN6182-0F	Adjusting Plate		1	

K. FOLDER MECHANISM (2/2)



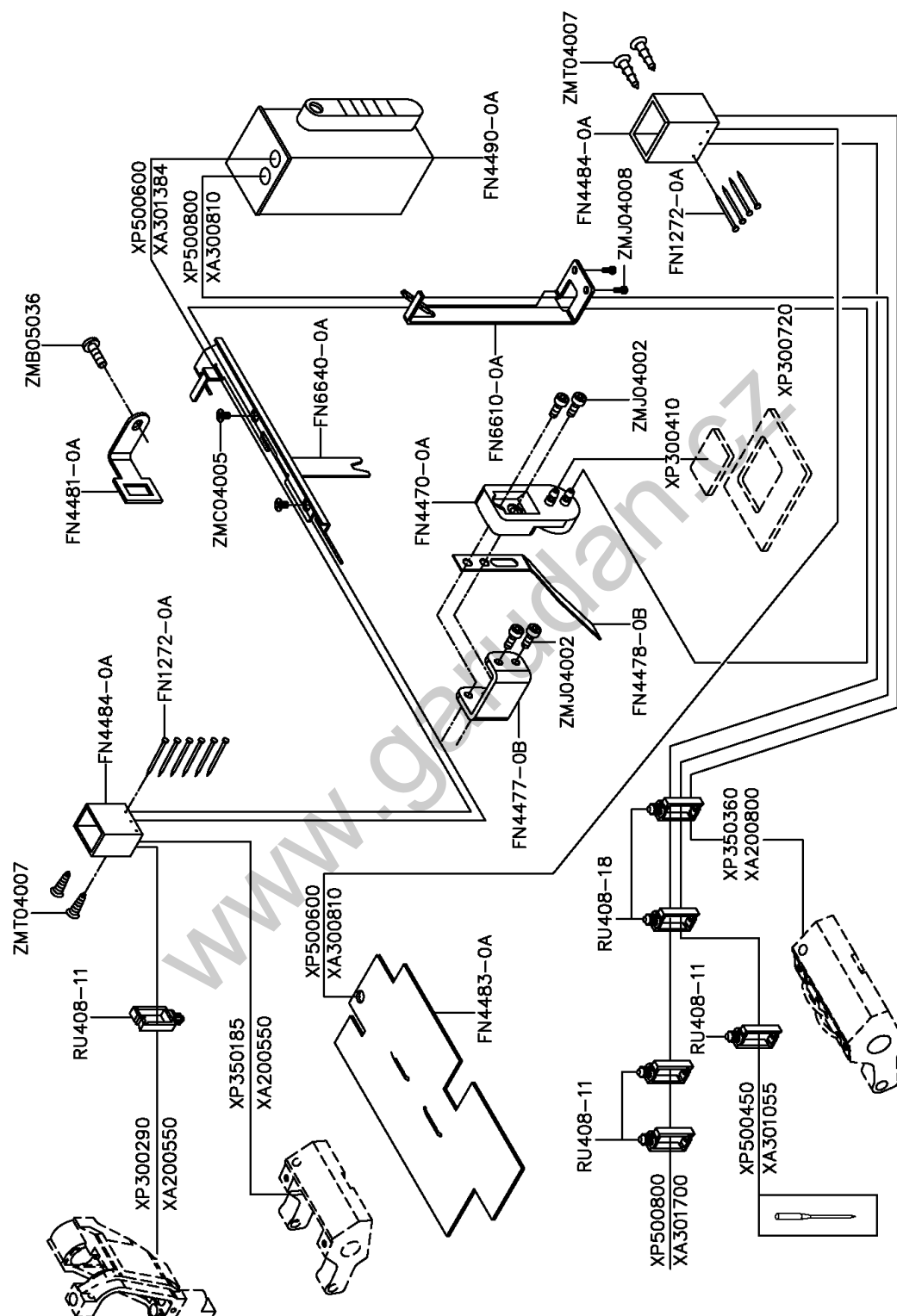
K. FOLDER MECHANISM (2/2)					
Ref.No	Parts No.	Name of parts	Description	Qty	Note
41	FN6183-0J	Moving Knife Cover		1	
42	FN6185-0J	Moving Knife		1	
43	RE000070	E-ring		1	
44	WA040016	Washer		2	
45	WA050003	Washer		2	
46	XB206003	Oil Felt		1	
47	YA032235	Pin		1	
48	YD030018	Spring Pin		1	
49	ZMB05039	Screw (M5-0.8x18)		2	
50	ZMD05014	Screw (M5-0.8x8)		2	
51	ZMG06051	Screw (M6-1.0x10)		1	
52	ZMH06008	Screw (M6-1.0x6)		5	
53	ZMH06029	Screw (M6-1.0x6)		2	
54	ZMJ04002	Screw (M4-0.7x10)		1	
55	ZMJ05008	Screw (M5-0.8x10)		2	
56	ZMJ05034	Screw (M5-0.8x10)		1	
57	ZMJ06004	Screw (M6-1.0x20)		3	
58	ZMJ06008	Screw (M6-1.0x12)		1	
59	ZMJ06009	Screw (M6-1.0x18)		2	
60	ZMJ06010	Screw (M6-1.0x35)		1	
61	ZMJ06029	Screw (M6-1.0x30)		2	
62	ZSB09012	Screw (9/64-40x4.5)		2	
63	ZSB11012	Screw (11/64-40x8)		2	
64	ZSB11029	Screw (11/64-40x7)		2	
65	ZSB12009	Screw (3/16-28x8)		1	
66	ZSC11017	Screw (11/64-40x8)		3	
67	ZSD11020	Screw (11/64-40x10)		1	
68	ZSG11010	Screw (11/64-40x6.6)		1	
69	ZSG11022	Screw (11/64-40x3.7)		1	
70	ZSH16007	Screw (1/4-40x8)		2	
71	ZSH16021	Screw (1/4-40x7.5)		2	

L. LUBRICATING MECHANISM



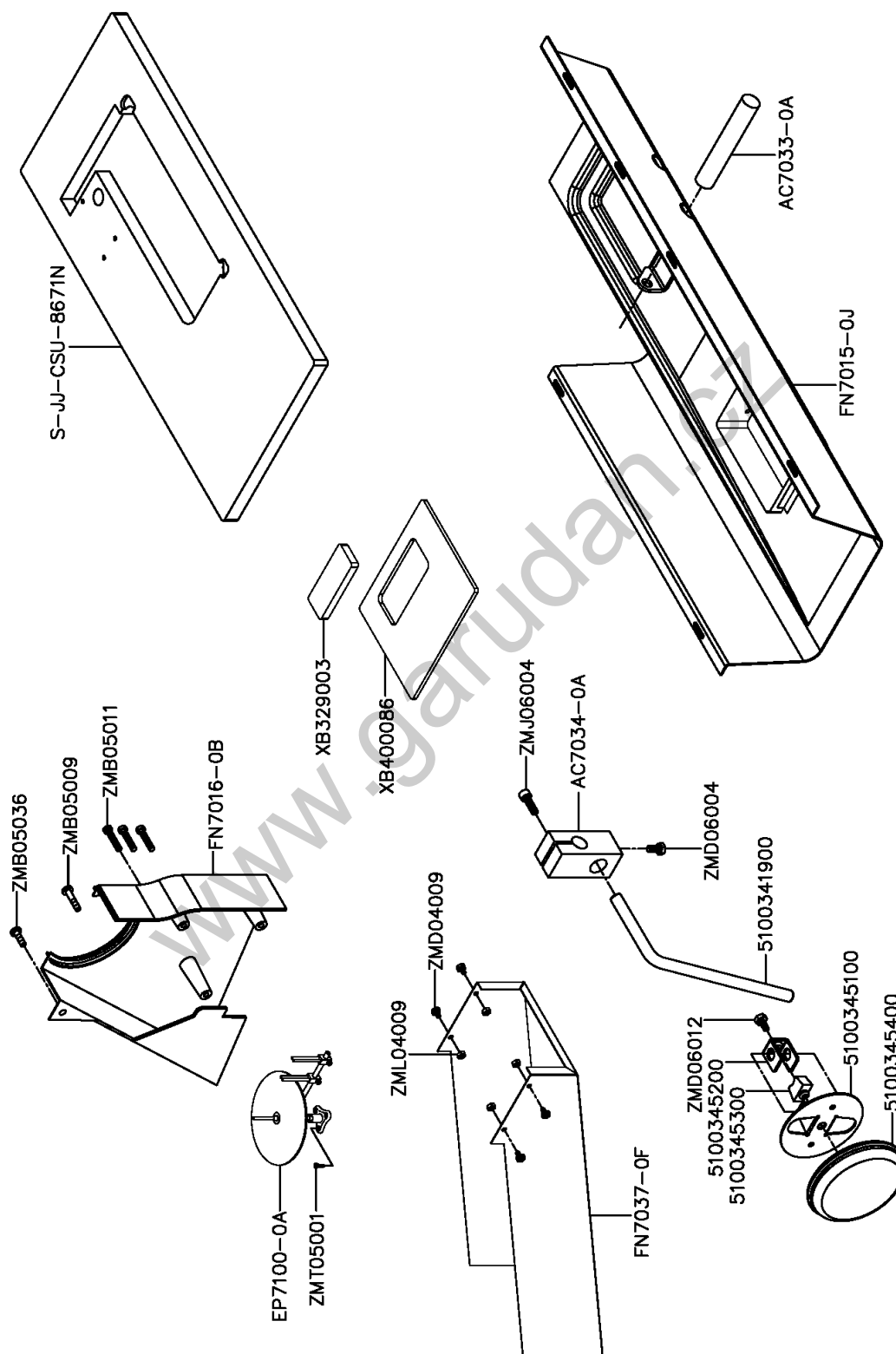
L. LUBRICATING MECHANISM					
Ref.No	Parts No.	Name of parts	Description	Qty	Note
1	FN1272-0A	Nail		9	
2	FN4470-0A	Pump Asm.		1	
3	FN4477-0B	Plate		1	
4	FN4478-0B	Spring		1	
5	FN4481-0A	Plate		1	
6	FN4483-0A	Oil Felt		1	
7	FN4484-0A	Oil Fence Plate		2	
8	FN4490-0A	Oil Fence Plate		1	
9	FN6610-0A	Plate		1	
10	FN6640-0A	Plate		1	
11	RU408-11	Wiring Button		4	
12	RU408-18	Wiring Button		2	
13	XA200550	Oil Wick		2	
14	XA200800	Oil Wick		1	
15	XA300810	Oil Wick		2	
16	XA301055	Oil Wick		1	
17	XA301384	Oil Wick		1	
18	XA301700	Oil Wick		1	
19	XP300290	Oil Pipe		1	
20	XP300410	Oil Pipe		1	
21	XP300720	Oil Pipe		1	
22	XP350185	Oil Pipe		1	
23	XP350360	Oil Pipe		1	
24	XP500450	Oil Pipe		1	
25	XP500600	Oil Pipe		2	
26	XP500800	Oil Pipe		2	
27	ZMB05036	Screw (M5-0.8x8)		1	
28	ZMC04005	Screw (M4-0.7x6.5)		2	
29	ZMJ04002	Screw (M4-0.7x10)		4	
30	ZMJ04008	Screw (M4-0.7x6)		2	
31	ZMT04007	Wood Screw		4	

M. ACCESSORIES 1



M. ACCESSORIES 1					
Ref.No	Parts No.	Name of parts	Description	Qty	Note
1	8370910900	Vinyl Cover		1	
2	A7010-0A	Screw Driver (Small)		1	
3	A7010-0Z	Screw Driver Asm.		1	
4	A7010-1A	Screw Driver (Middle)		1	
5	A7010-2A	Screw Driver (Large)		1	
6	A7012-2A	Oilier		1	
7	FN6200-0B	Bobbin		4	
8	FN7010-0A	Cross Driver		1	
9	FN7021-0A	Back Button		2	
10	FN7022-0A	Back Button Seat		2	
11	FN7026-0A	Shockproof Rubber		2	
12	FN7130-0A	Lock Pin		1	
13	G7014-0A	Forceps		1	
14	INDPx17#21	Needle		4	
15	J7050-0A-A	Thread Stand		1	
16	RU010200	Tighten Belt		5	
17	TLA020	Hexagonal Wrench 2.0mm		1	
18	TLA040	Hexagonal Wrench 4.0mm		1	
19	TLA050	Hexagonal Wrench 5.0mm		1	
20	TLC015	Straight Hexagonal Driver		1	
21	TLL025	Hexagonal Wrench 2.5mm		1	
22	TLL030	Hexagonal Wrench 3.0mm		1	
23	TRB07x08	Open-End Wrench		1	
24	ZMC06012	Screw (M6-1.0x10)		4	
25	ZMT05007	Wood Screw		4	

M. ACCESSORIES 2



M. ACCESSORIES 2					
Ref.No	Parts No.	Name of parts	Description	Qty	Note
1	5100341900	Knee Lever Rod		1	
2	5100345100	Knee Lifter Plate Stopper		1	
3	5100345200	Retainer		1	
4	5100345300	Rubber		1	
5	5100345400	Knee Lifter Plate		1	
6	AC7033-0A	Knee Lifter Shaft		1	
7	AC7034-0A	Knee Lifter Joint		1	
8	EP7100-0A	Knitted Tap Stand , Compete Set		1	
9	FN7015-0J	Oil Pan		1	
10	FN7016-0B	Belt Cover		1	
11	FN7037-0F	Drain Bits Asm.		1	
12	S-JJ-CSU-8671N	Plate		1	
13	XB329003	Oil Felt		1	
14	XB400086	Oil Felt		1	
15	ZMB05009	Screw (M5-0.8x30)		1	
16	ZMB05011	Screw (M5-0.8x40)		3	
17	ZMB05036	Screw (M5-0.8x8)		1	
18	ZMD04009	Screw (M4-0.7x6)		4	
19	ZMD06004	Screw (M6-1.0x12)		1	
20	ZMD06012	Screw (M6-1.0x11.6)		1	
21	ZMJ06004	Screw (M6-1.0x20)		1	
22	ZML04009	Nut		4	
23	ZMT05001	Wood Screw		3	