

# User manual



**GOV-1004-24**

**GOV-1005-34**

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](mailto:info@anita.cz)

<b>VERSION</b>	<b>CREATE ON</b>	<b>APPROVED BY</b>
MP04000EN_190301	01. 03. 2019	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. (2019)

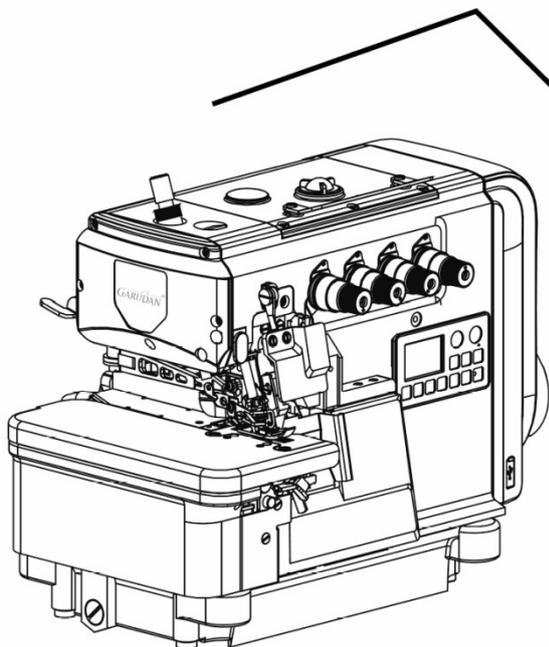
## Content

1. Installation.....	4
2. Before Operation.....	5
3. Machine Settings.....	6
4. Repairing and Maintenance .....	12

[www.garudan.cz](http://www.garudan.cz)

## 1. INSTALLATION

### 1. Machine head installation:

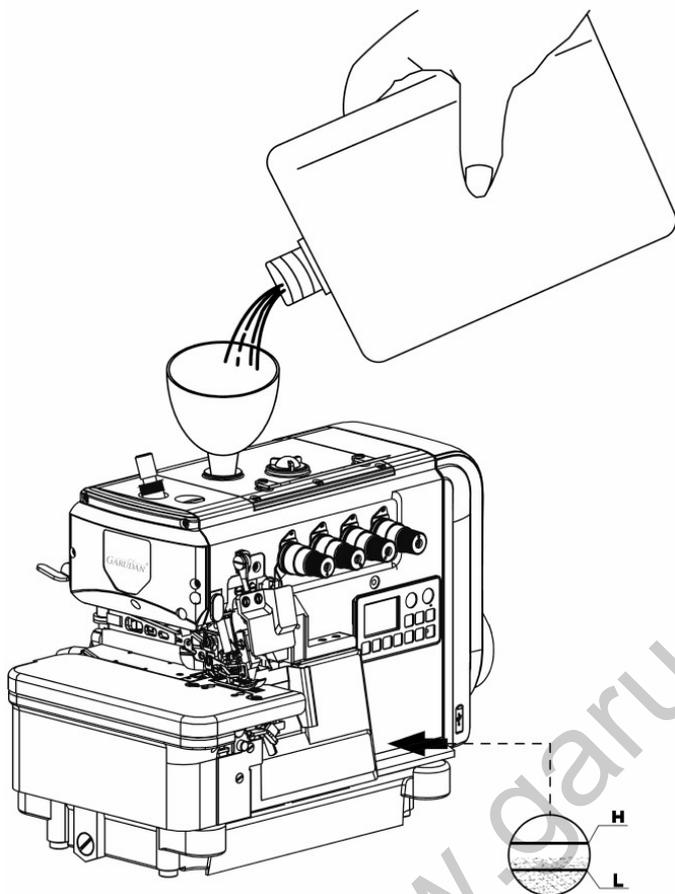


Please make sure there have enough room between sewing machine and the table around it after installation. Table can't interference with the sewing machine.

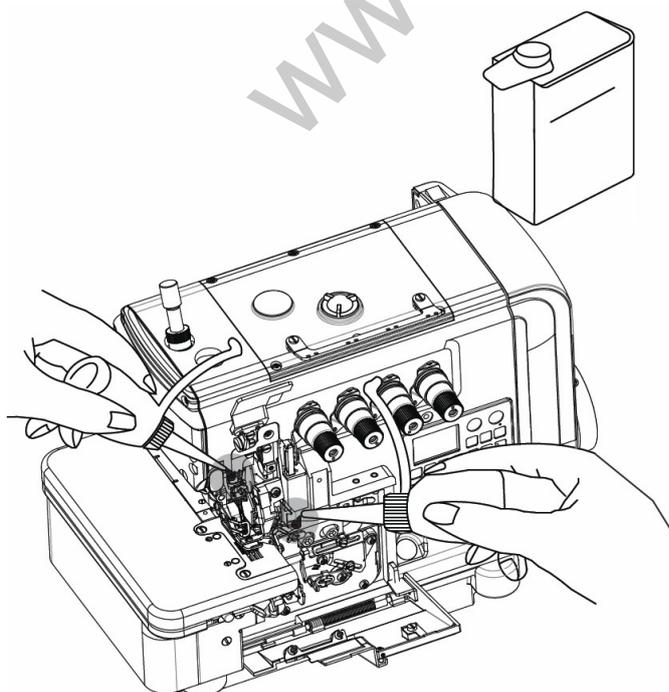
www.garudan.cz

## 2. BEFORE OPERATION

### 1. Adding lubrication oil:



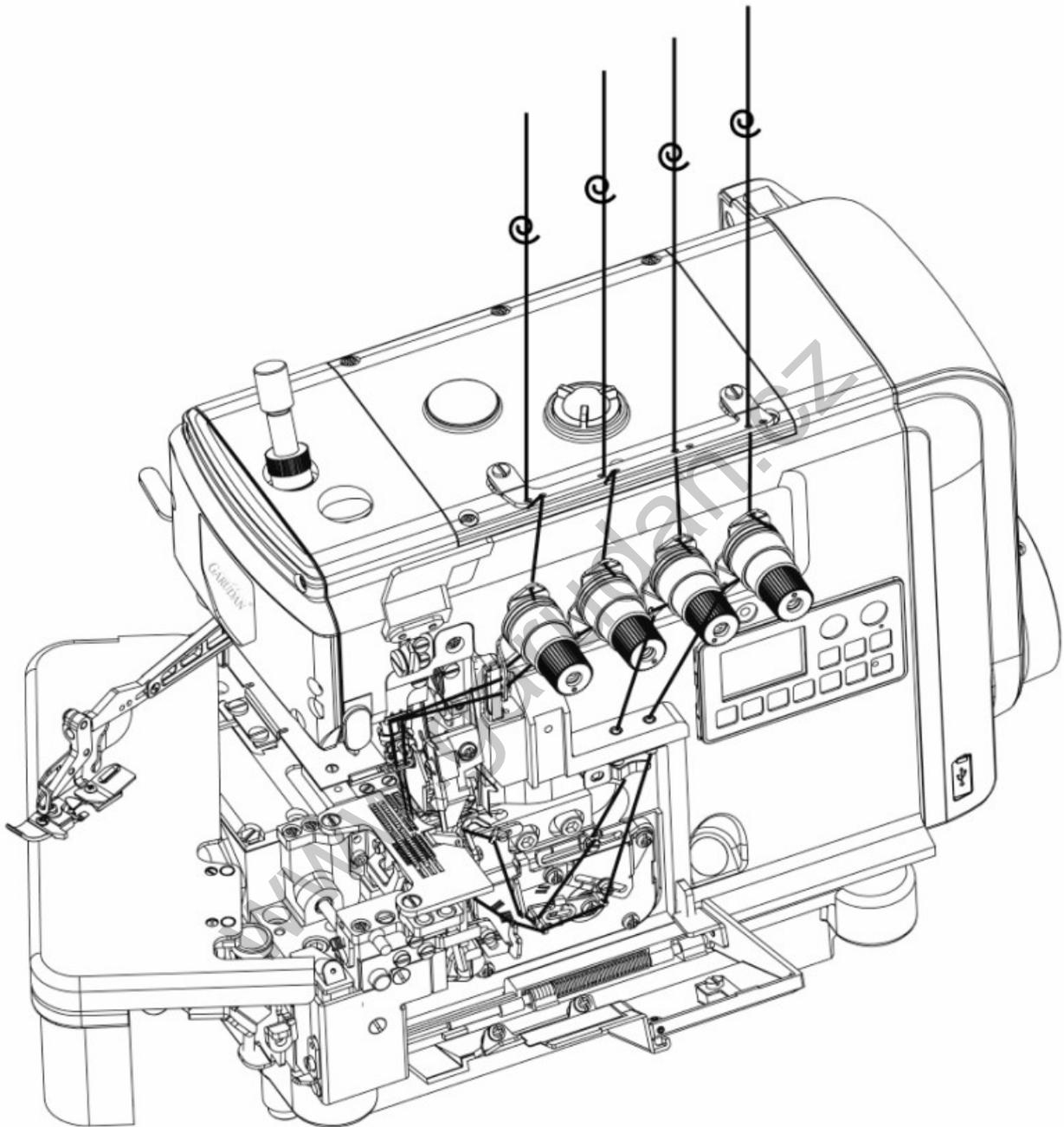
During adding process, please make sure the lubrication oil can't over the upper limit of oil gauge.



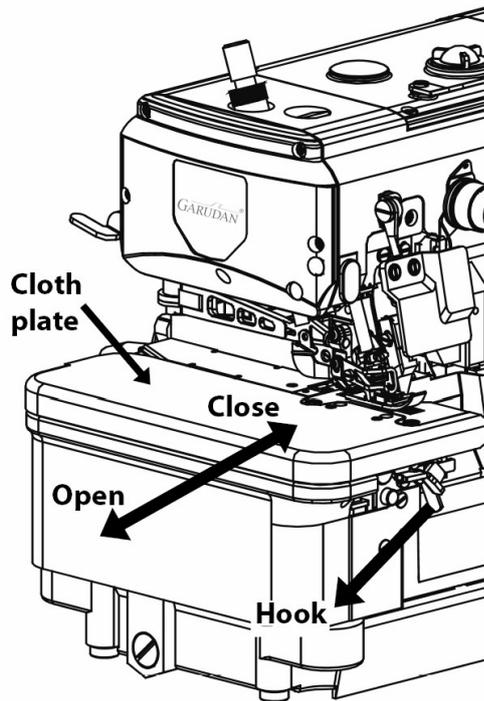
Please add proper silicon oil into silicon oil reservoirs in order to prevent thread breakage.

### 3. MACHINE SETTINGS

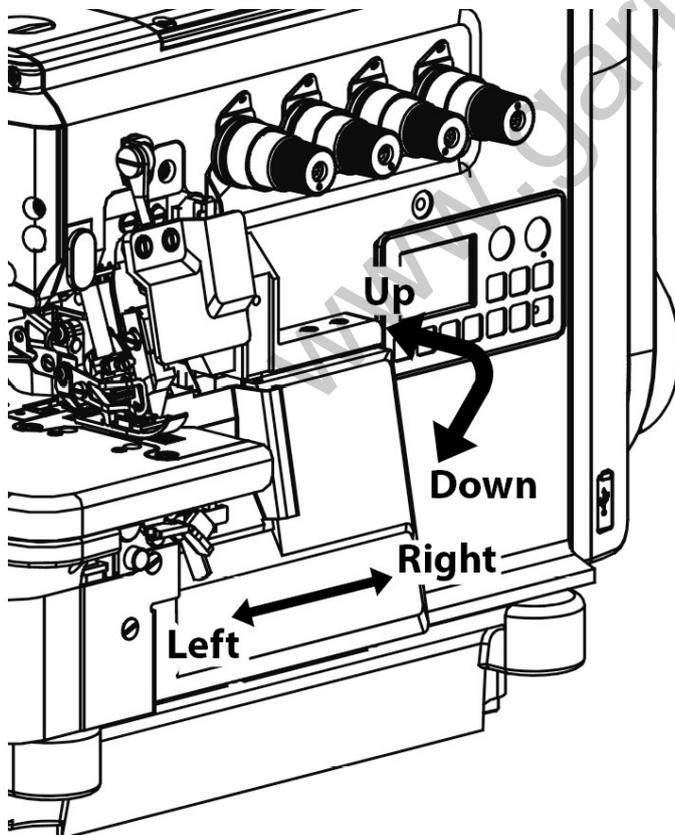
#### 1. Threading map



2. Open and close the cloth plate and front cover

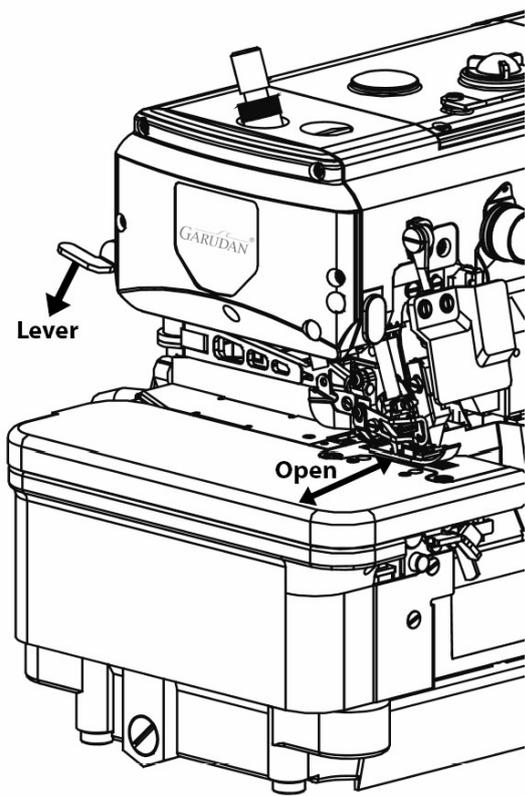


Press down hook and push to left in order to open cloth plate, pushing right to its hook set position, the cloth plate will be close.

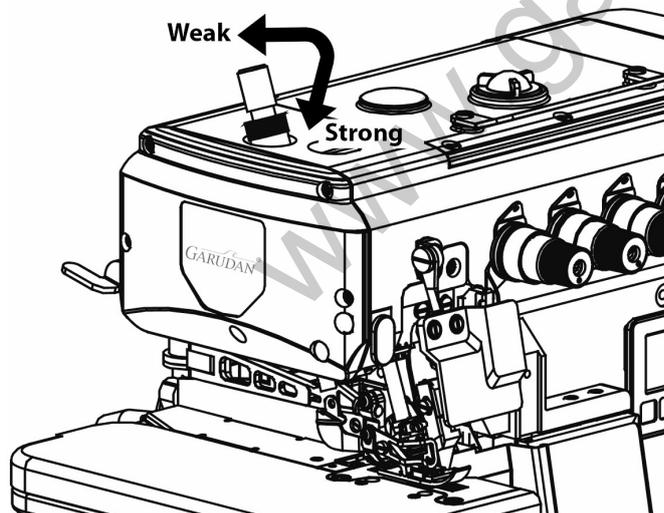


Open and close front cover:  
Pushing front cover to right se position and pull down to open it and on the other hand, pull up to its set position and to left in order to close front cover, please make sure there is no interference between front cover and other parts.

3. Open and close the presser foot arm and adjusting pressure.



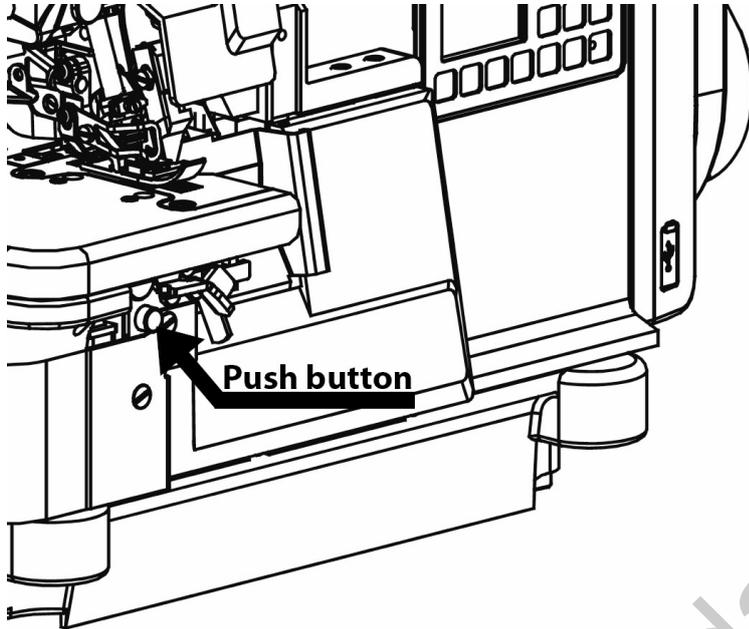
Push the lever down and then pull out the foot of the hanger. To return to its original position, push the lever downwards and retract the shoulder arm. Make sure the foot is in the correct position.



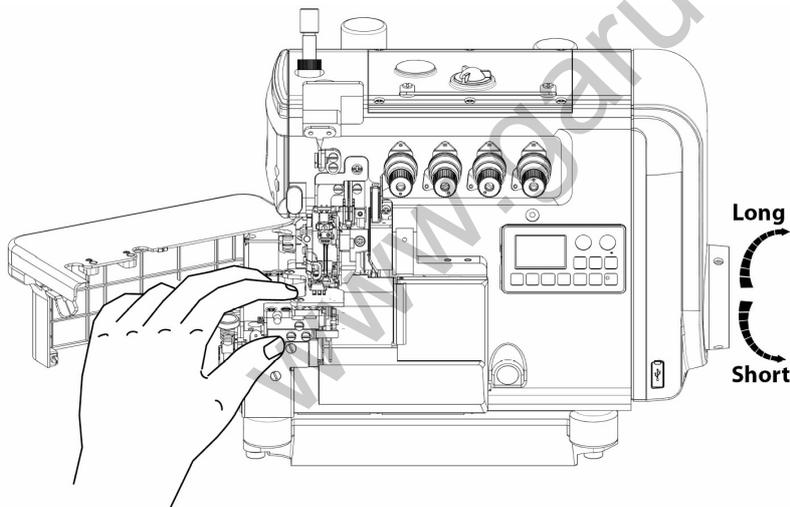
Adjusting pressure:  
Turning adjusting screw clockwise in order to increase pressure.  
Turning adjusting screw counterclockwise order to decrease pressure.

#### 4. Adjusting stitch length and differential ratio

Adjusting stitch length:

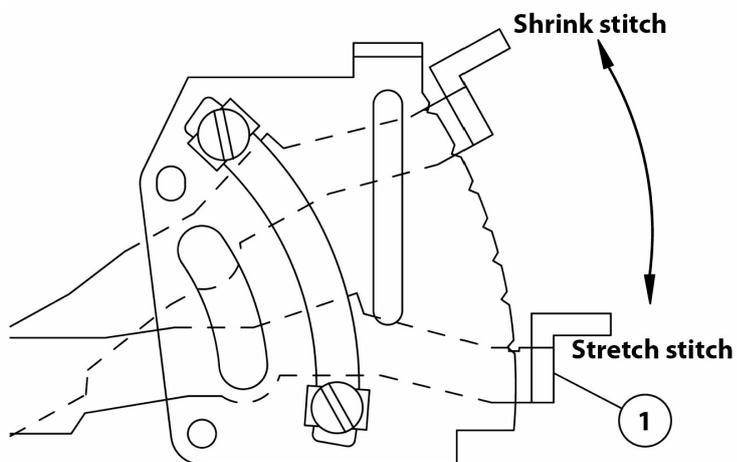


Pushing the push button lightly first and turning pulley to set position then pushing down the push button into its set position and adjust the length of stitch.

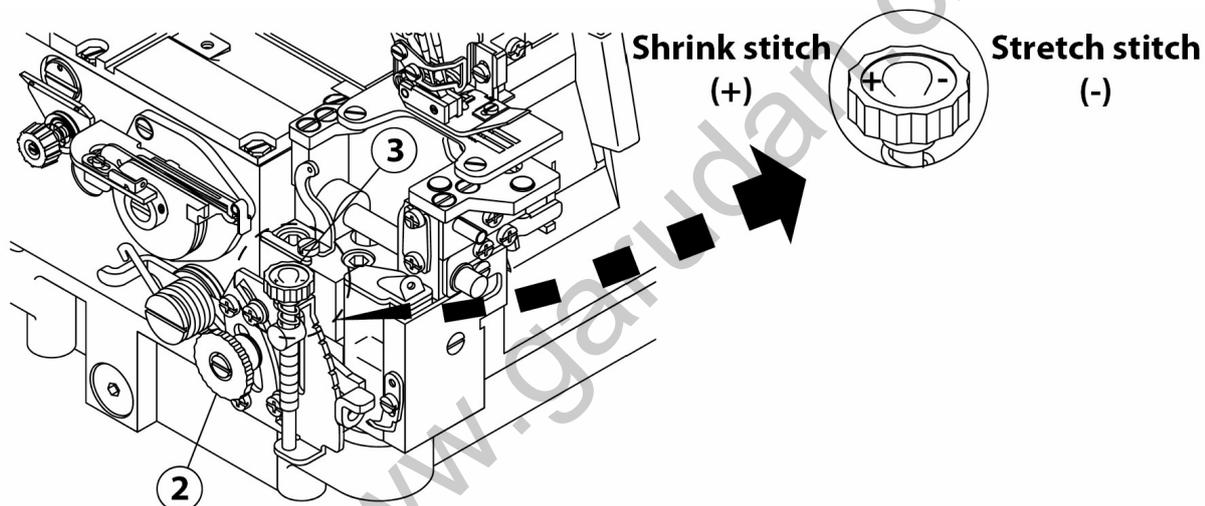


Remark: the distance mark on the pulley only represent approx length of stitch and actual stitch length needed should get from test sewing.

Adjusting differential ratio:

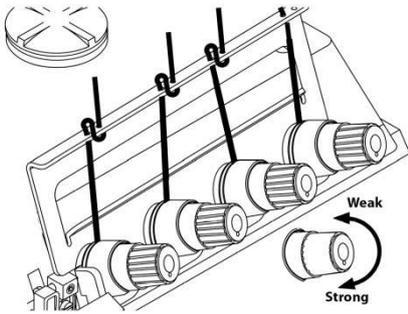


Differential ration was set at 1:1 when machines were out of factory. Adjust differential ratio as needed. Open up cloth plate, loosen nut (2) move level (1) upward or down warn to the position needed. Then tighten nut (2). For micro-adjustment please turn adjusting screw (3).



### 5. Adjusting thread tension and thread tension amount

Adjusting thread tension:

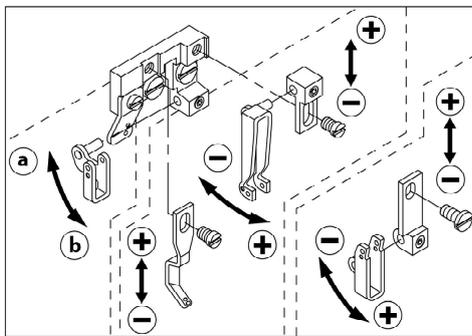


Thread tension correlate with thread tension amount. Please refer to this item and next item to adjust thread tension amount in order to get best result.

Turning clockwise in order to get strong thread tension.

Turning counterclockwise in order to get weak thread tension.

Needle thread tension amount:



A: for GOV-1004-24

Toward (+) direction get bigger thread tension amount

Toward (-) direction get smaller thread tension amount

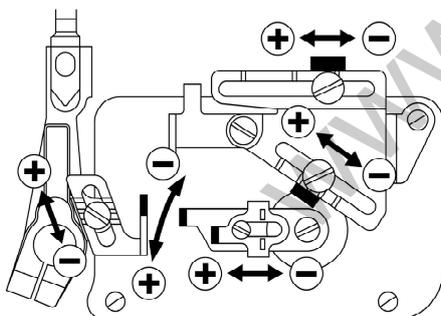
B: for GOV-1005-34

Toward (+) direction in order to get bigger thread tension amount

Toward (-) direction in order to get smaller thread tension amount

C: if chain stitch needle thread loop formed too early, please adjust thread guide to "a" direction

Upper/lower looper thread tension amount:

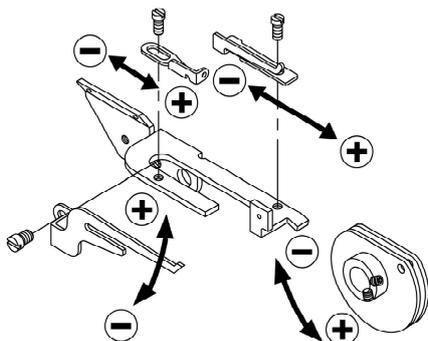


Please adjust tension amount according to arrow direction

(+) increase looper thread tension amount

(-) decrease looper thread tension amount

Chain stitch looper thread tension amount:



When adjusting chain stitch looper thread, if thread loop collapse, unstable or can't form thread loop, please adjust thread tension amount.

According to arrow direction:

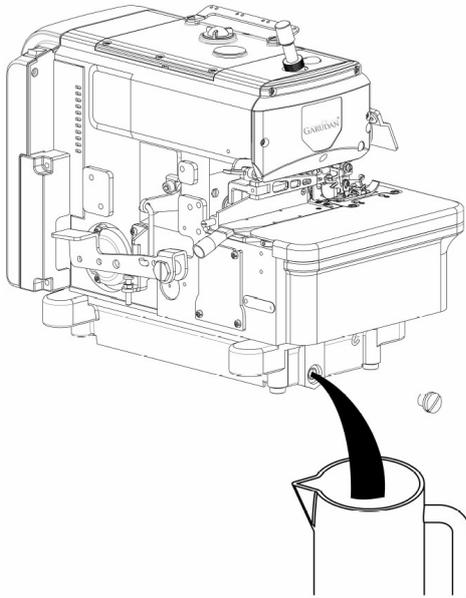
(+) increase

(-) decrease

## 4. REPAIRING AND MAINTENANCE

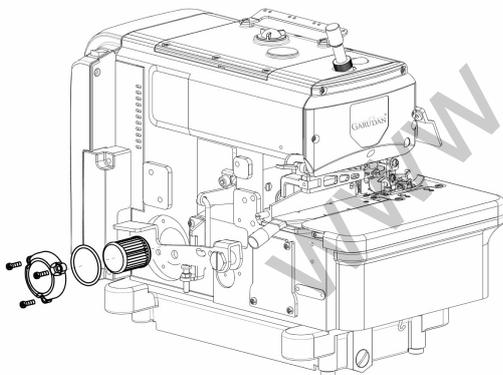
### 1. Changing lubrication oil, oil filter and needles

#### Change lubrication oil:



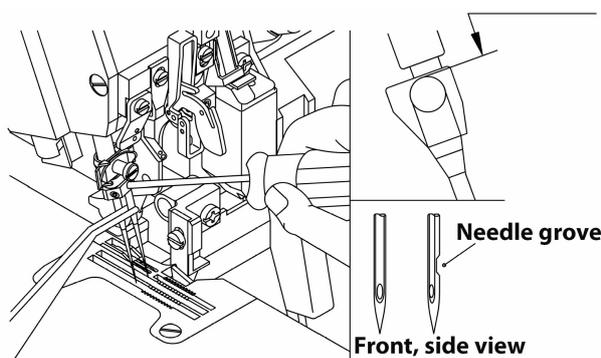
After operating sewing machine for 160-200 hours (approx one month) and please change lubrication oil and change lubrication oil every 6 months thereafter. If stop using sewing machine for a long time, please change lubrication oil before operate again. Change lubrication oil by take-off plug.

#### Change oil filter



Please change oil filter after approx 6 months usage or found out oil circulation was not normal from oil sight window.

#### Change needles:

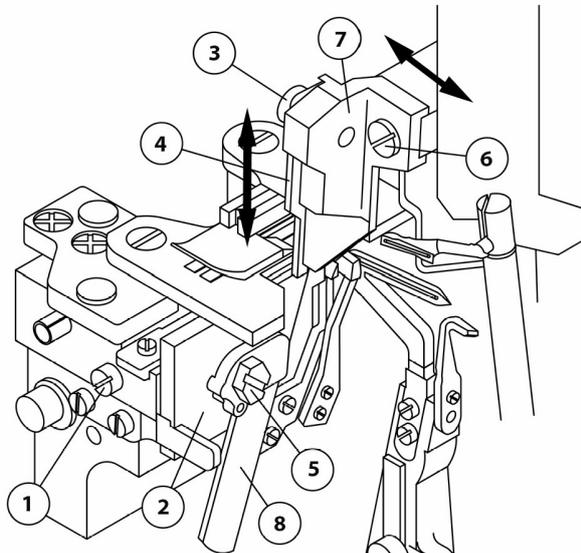


Make sure to insert needles all the way to the bottom of needles holes.

When changing needles, please make sure needle groove is in its correct position and also make sure needles be inserted all the way to the bottom of needle holes.

## 2. Changing upper knife and lower knife

### Changing upper knife:



Loosen screw (1), push lower knife holder (2) to left and then tighten screw (1) lightly.

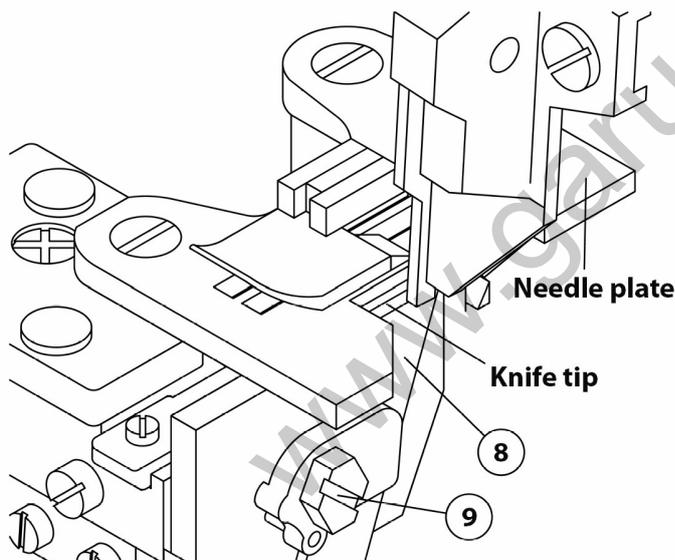
Take off screw (3) change new upper knife (4). Then, tighten screw (3) lightly.

Loosen screw (1) make sure lower knife (8) touch upper knife closely.

Turning hand wheel till upper knife clamp reach its lowest position. Then, adjusting the position of upper knife and lower knife overlap by 0.5 mm

Tighten screw (3), (1).

### Changing lower knife:

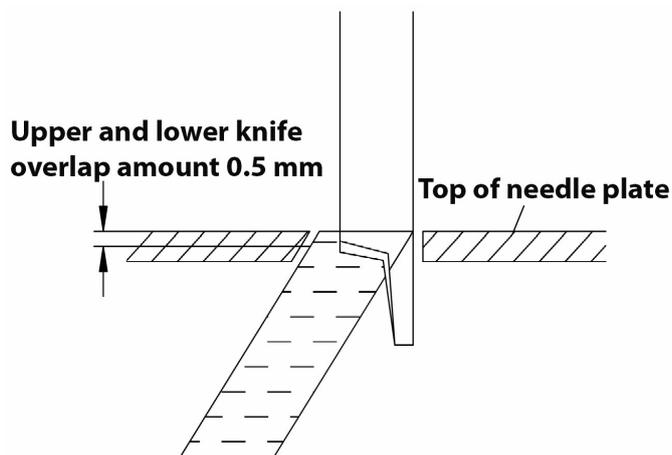


Loosen screw (1), push lower knife holder (2) to left and then tighten screw (1) lightly.

Loosen screw (9) take off old lower knife (8) and change new lower knife.

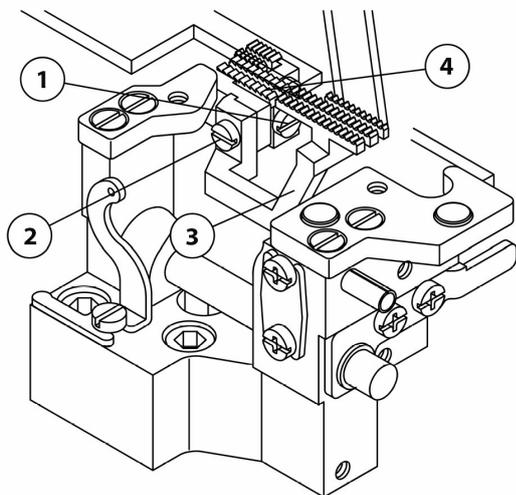
Make sure the tip of lower knife line even with the top of needle plate. Then, tighten screw (9).

Loosen screw (1) make sure lower knife touch upper knife (4) closely. Then, tighten screw (1)



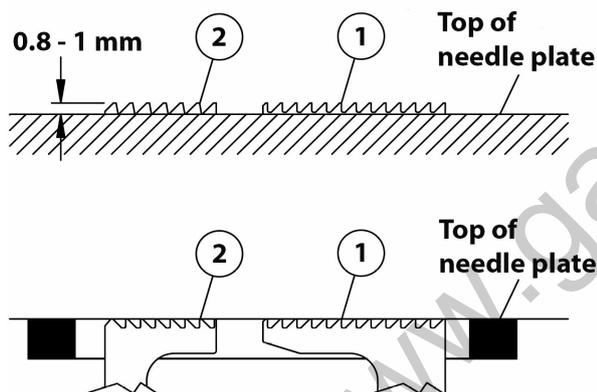
### 3. Changing and adjusting feed dogs

#### Changing feed dogs:



Loosen screw (1) can change main feed dog (4).  
Loosen screw (2) can change differential feed dog (3).  
After changed feed dogs, tighten screw lightly. Please refer to following items in order to set up correct position of feed dogs. Then, tighten set screw.

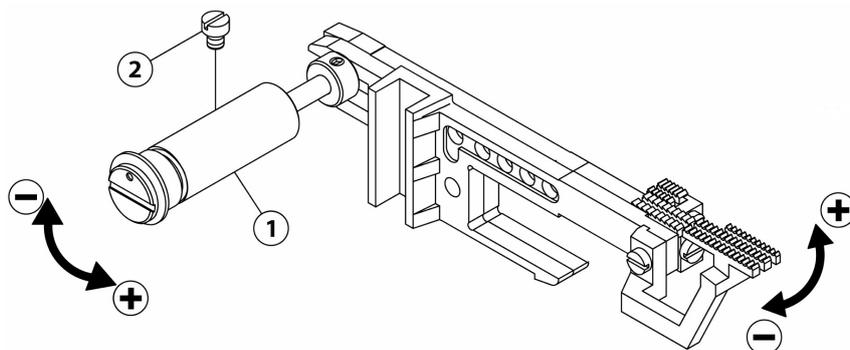
#### Adjusting feed dogs after changed:



After change feed dogs, must adjust feed dogs to its correct position. Turning belt pulley, make sure main feed dog (2) to its highest position, make sure the tip of feed dog teeth higher than top of needle plate by 0.8 - 1 mm (standard setting value). Then, turning belt pulley, lowering main feed dog, make sure the tip of teeth line even with top of needle plate, then, adjusting the tip of teeth of differential feed dogs line ever with top of needle plate. After set up, tighten screw (1), (2) and make sure feed dogs are at its correct position again. After adjusting, please tighten screw (1), (2) and in the same time, please make sure:

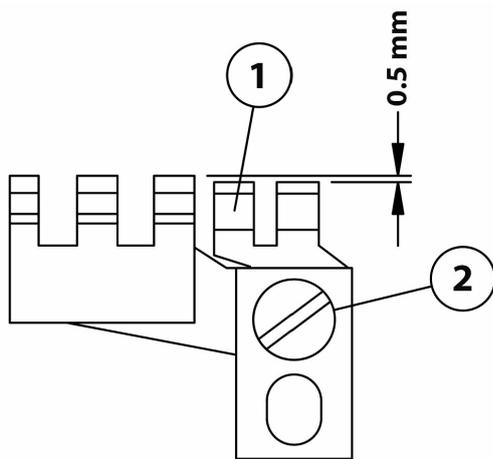
- If feed dogs will raise 0.8 - 1 mm. Above the top of needle plate by turning belt pulley and moving feed dog up.
- If feed dogs will hide underneath the needle plate by keep turning belt pulley.

#### Adjusting feed dogs level (tilt amount):



During feed dogs movement, the teeth of feed dogs must be level off always. Adjusting its level or during some special requirements, feed dog teeth must tilt to front or rear.

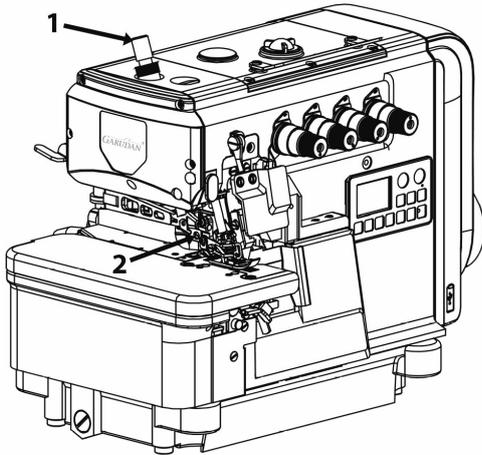
- Loosen screw (2)
- Turning shaft (1) in order to adjust level of feed dogs



The height of auxiliary feed dog should be 0.5 mm lower than main feed dog (standard setting value) and adjustment can be made by loosen screw (2).

www.garudan.cz

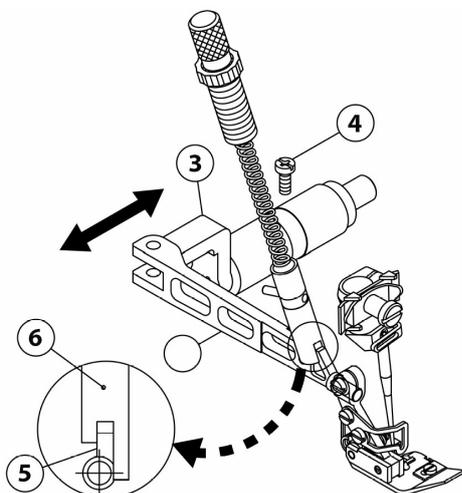
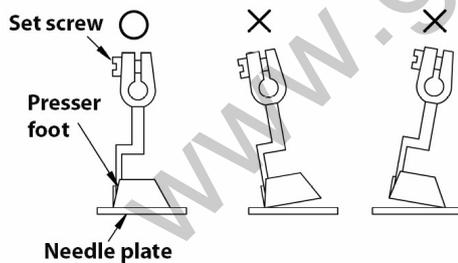
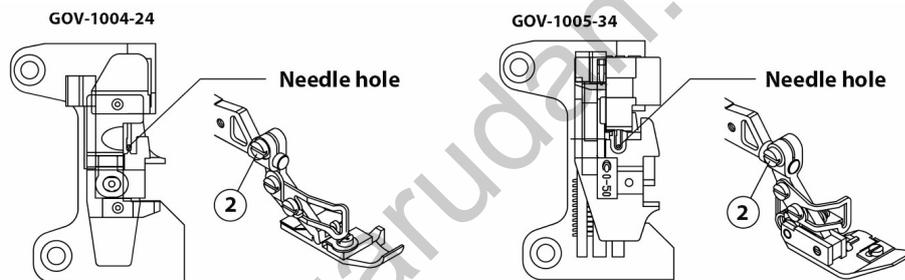
4. Changing and adjusting presser foot set



Turning adjusting screw (1) counterclockwise in order to loose pressure spring. Loosen screw (2) can take-off presser foot set.

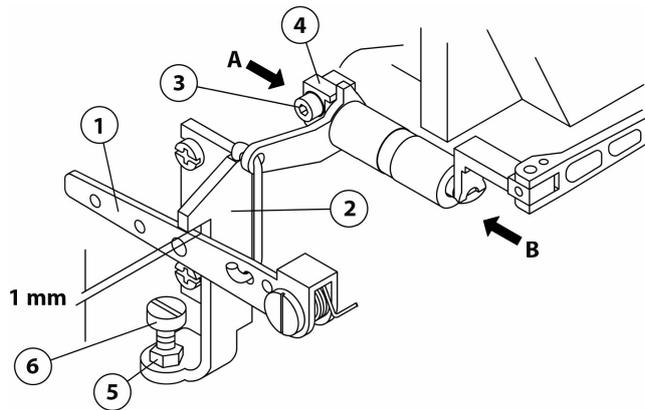
Adjusting:

Presser foot must be installed correctly in order to obtain best sewing effects.



1. Turning hand wheel in order to lower the needle bar to its lowest set position and needle can be moved into needle hole.
2. Make sure the needle hole of presser foot in line with the needle hole of needle plane and sewing needle is in the center of needle hole. In the meantime, the bottom of presser foot should lay flat on the top of needle plate (Left diagram)
3. Tighten screw (2)
4. The bottom of presser bar should hold presser arm properly. So, presser arm can be held and release easily whole adjusting, loosen screw (4) move shaft (3) to right or left in order to set up correct position.

5. Adjusting the lifting height of presser foot



Setting tolerance up:

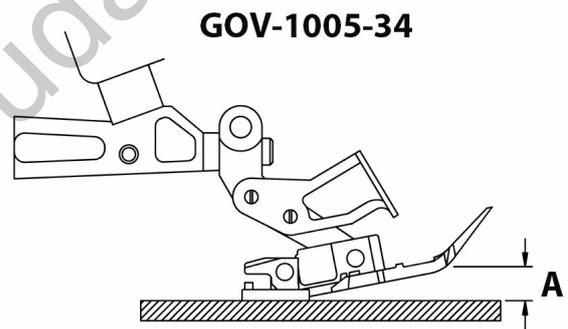
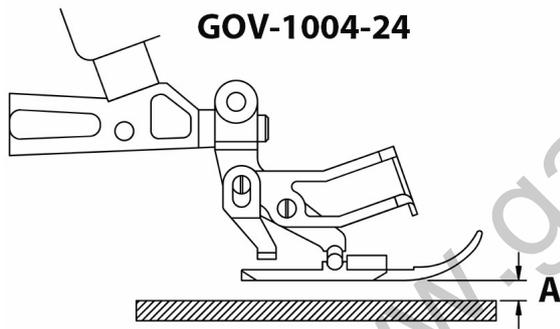
The tolerance between lever (1) and screw (2) should be 1 mm.

1. Lower feed dogs under needle plate by turning hand wheel.
2. Loosen screw (3) lightly (can't loosen screw completely).
3. Holding bushing from A and B sides turning collar (4) in order to set up 1 mm tolerance between level (1) and screw (2).
4. Tighten screw (3)

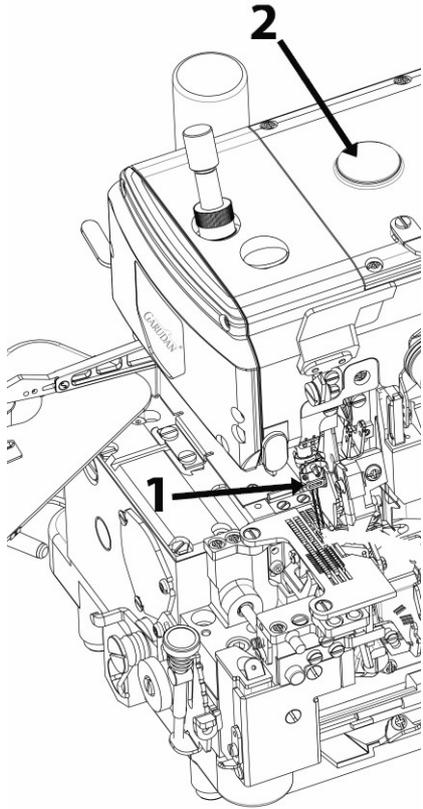
Setting up presser foot lifting amount:

Max. presser foot lifting amount "A" is 7 mm.

When adjusting, loosen nut (5) and adjust the tolerance to desired position between screw (6) and lever (1).



## 6. Adjusting the height of needle

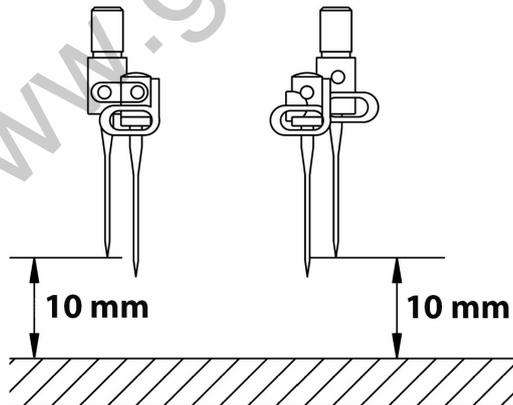


The distance between needle tip to top of needle plate should be 10 mm (standard setting).

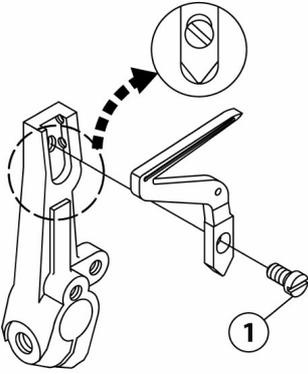
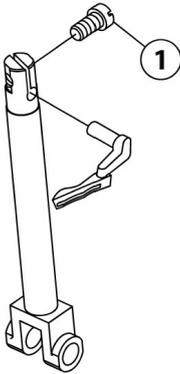
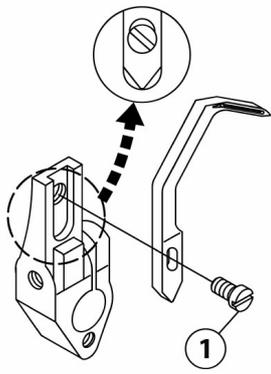
1. Turning belt pulley in order to raise needle bar to its highest position.
2. Open up plug (2) and loosen screw.
3. Adjust the height of needle bar.
4. After adjustment please make sure tighten screw (1)

GOV-1004-24

GOV-1005-34

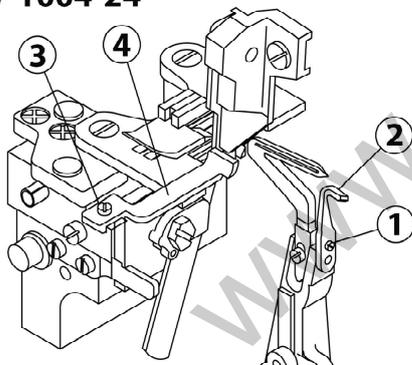


7. Changing loopers

Changing lower looper	Changing upper looper	Changing chain stitch looper
		
<p>Changing lower looper by take-off screw (1). When installing, please make sure the crank of lower looper must attach to the bottom of groove of lower looper arm closely.</p>	<p>Changing upper looper by take-off screw (1).</p>	<p>Changing the chain looper by loosen screw (1). When installing, please make sure the crank of chain looper must attach to the bottom of groove of chain looper arm closely.</p>

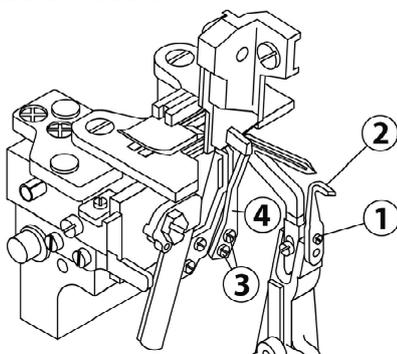
8. Changing needle guard

**GOV-1004-24**

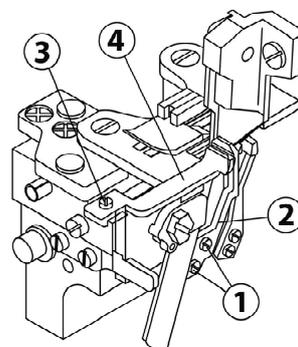


Can take off rear needle guard (2) by loosen screw (1). Loosen screw (3) can take off front needle guard (4).

**GOV-1005-34**



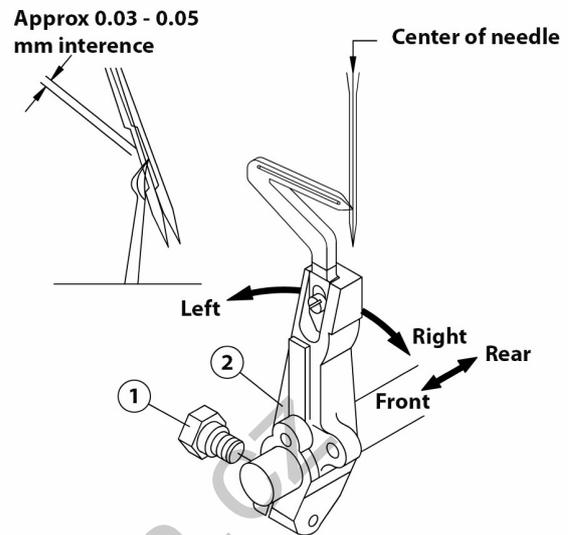
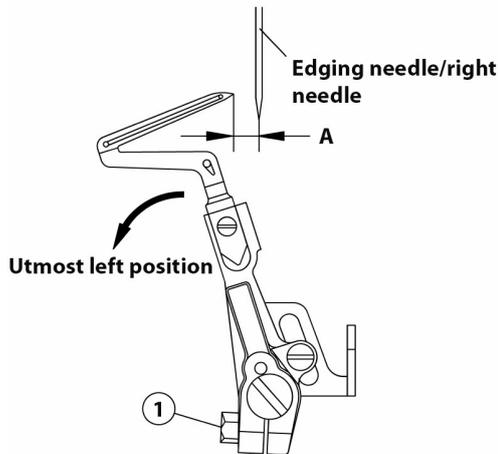
Please take off rear needle guard (2) by loosen set screw (1). Loosen set screw (3) can take off front needle guard (4).



Loosen set screw (1) can take off rear chain stitch needle guard (2). Loosen set screw (3) can take off front chain stitch needle guard (4).

### 9. Setting up looper and needle guard

Setting up lower looper:

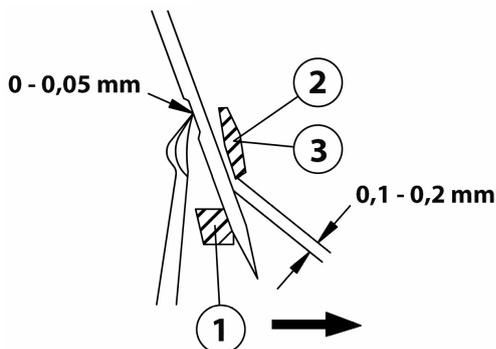
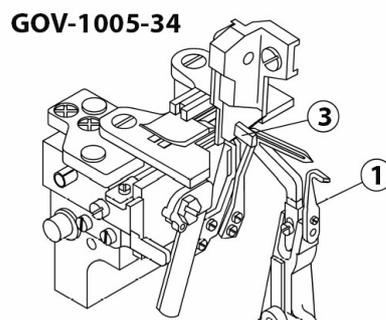
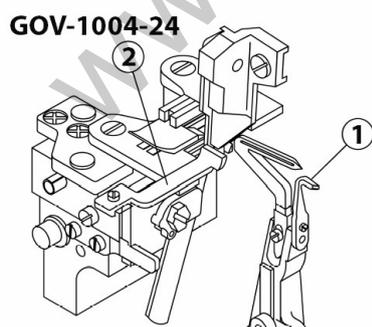


Model	The distance a between tip of looper and the center of needle
GOV-1004-24	3.6 – 3.8 mm
GOV-1005-34	3.8 – 4 mm

When lower looper moves to its utmost left position, please refer to the chart above for the distance a between the tip of lower looper and the center of edging needle

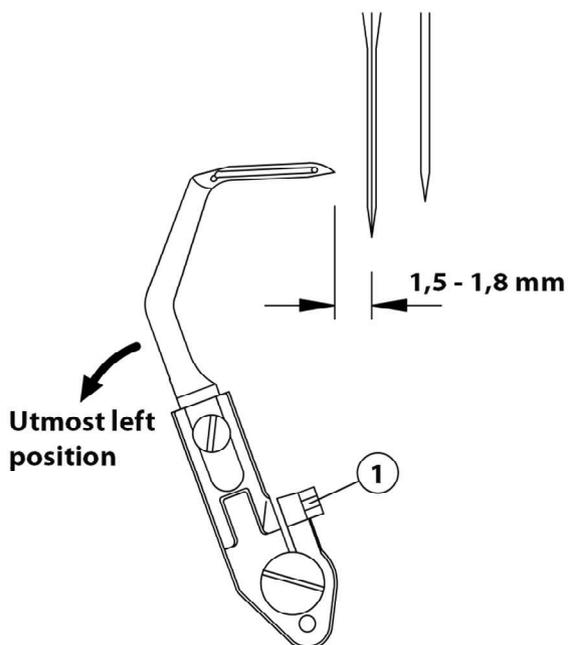
When lower Looper moves from right to left and the tip of looper moves to edging needle/right needle, there will have a interference approx 0.03 – 0.05 mm. Loosen screw (1) and adjustment can be made by moving looper arm (2) forward or backward.

Setting up needle guard of edging needle:

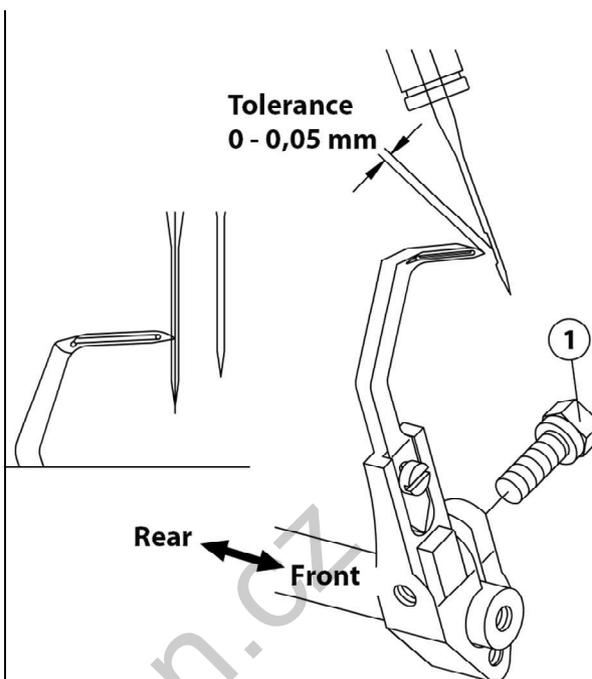


1. As mentioned above, when lower looper moves to the center of edging needle, there will have approx 0.03 – 0.05 mm interference.
2. In the same time, adjusting rear needle guard (1) in order to push needle forward and create a tolerance of 0 - 0.05 mm between needle and the tip of lower looper.
3. In the same time, also adjusting front needle guard (2=GOV-1004-24, 3=GOV-1005-34) to create a tolerance of 0.1 - 0.2 mm between front needle guard and needle.

Setting up chain stitch looper:



When chain stitch looper moves to its utmost left position, the distance between tip of chain stitch looper and the center of chain stitch needle should be 1,5 mm. Adjustment can be made by loosen screw (1).



When tip of looper moves to the center of chain stitch needle, the tolerance between looper tip and needle groove should be 0 - 0,05 mm. Adjustment can be made by loosen screw (1).

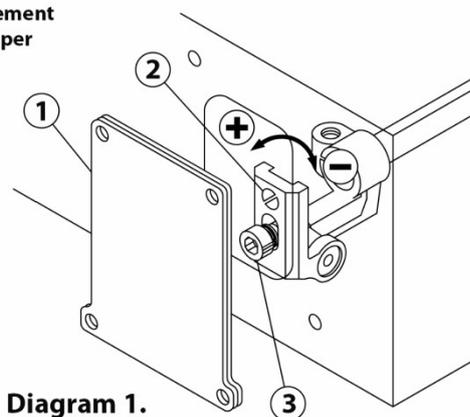
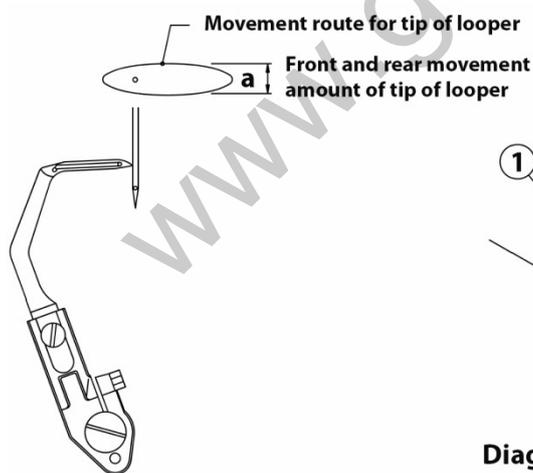
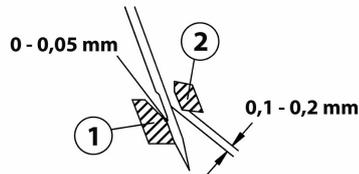
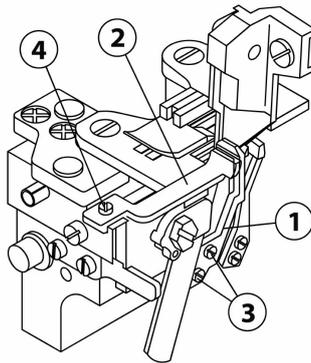


Diagram 1.

When changing the size of needle or when adjusting the front and rear movement amount of tip of looper. Please refer to Diagram 1.

1. Please open up back cover (1) of sewing machine.
2. Loosen screw (3) a little bit (Please do not loosen screw (3) completely).
3. Turning adjusting screw (2).
4. Turning toward (+) direction in order to obtain bigger movement. Turning toward (-) direction in order to obtain smaller movement.
5. After adjustment, please make sure tighten screw (3) and back cover (1).

Setting up needle guard of chain stitch looper:

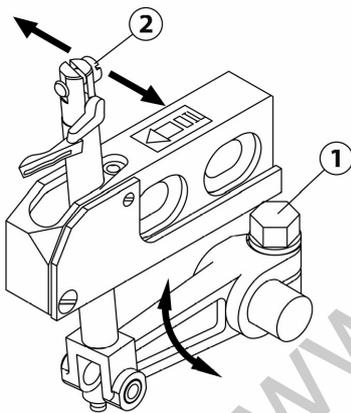


When chain stitch needle reached lowest point of its stroke, the tolerance between rear needle guard and needle is 0-0,05 mm and the tolerance between front needle guard and needle is 0,1 – 0,2 mm.

Adjustment can be made by loosen screw (3), (4).  
After adjustment, must make sure tighten screws.

Setting up upper looper:

Diagram 1.

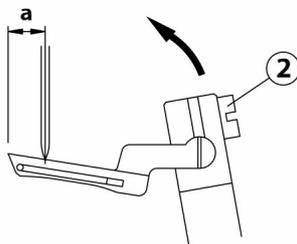


1. When upper looper moves to its highest position, the distance between tip of looper and center of needle should be as specification chart listed below and also please refer to diagram 2.

2. When upper looper passing through the back of lower looper. Please refer to diagram 3, for correct tolerance between upper looper and lower looper.

3. When setting, please loosen screw (1), (2) as per diagram 1 and set up the tolerances between upper looper and needle, upper looper and lower looper as per specification chart then, tighten screw (1), (2).

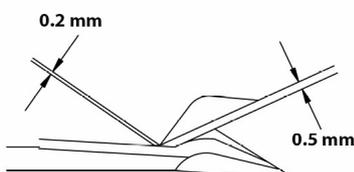
Diagram 2.

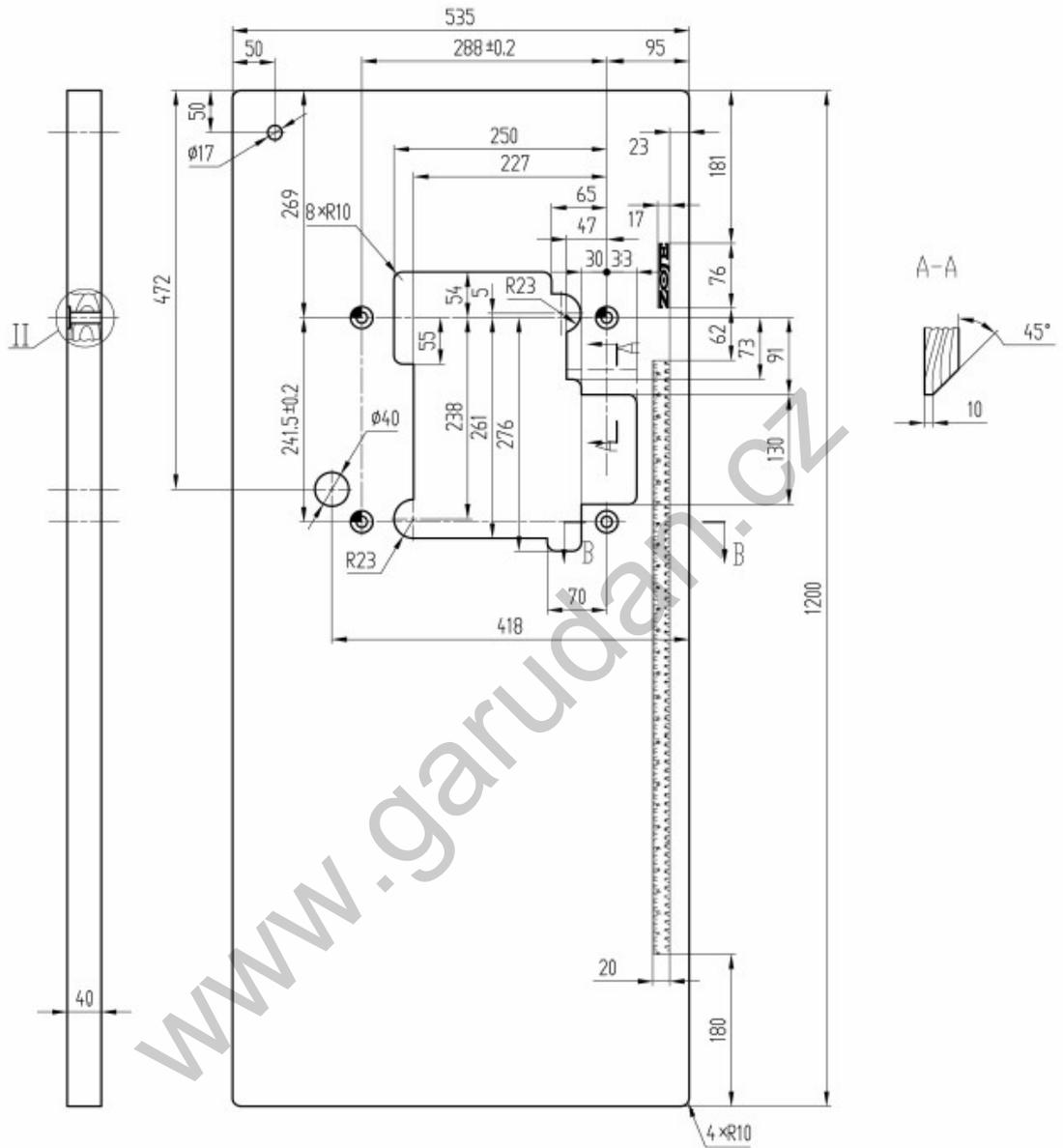


Model	a
GOV-1004-24	4,5 – 5,0
GOV-1005-34	4,3 – 4,8

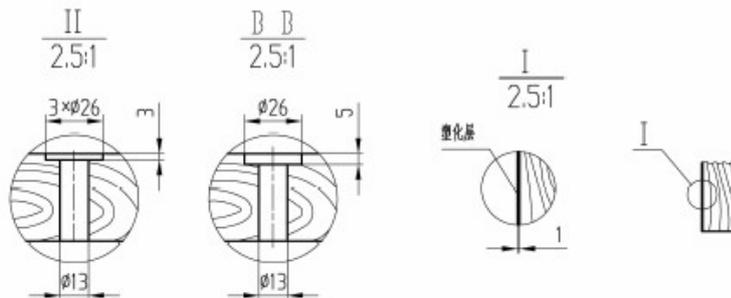


Diagram 3.



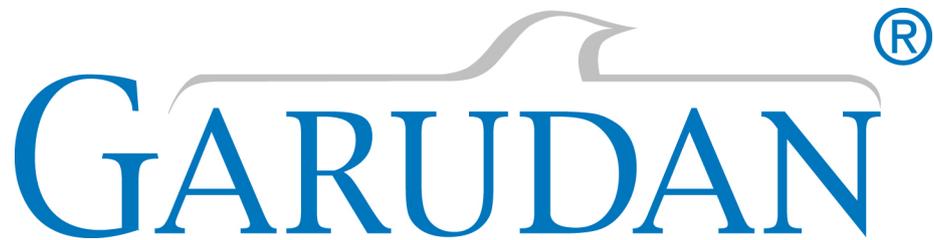


Standard dimension





Display

GARUDAN®

**GOV-1004-24**

**GOV-1005-34**

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](mailto:info@anita.cz)

<b>VERSION</b>	<b>CREATE ON</b>	<b>APPROVED BY</b>
MP04000EN_190301	01. 03. 2019	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. (2019)

## Content

1. Key Function .....	4
2. Operating Instruction .....	4
3. User Parameter and Technician Parameter .....	5
4. Error Code List .....	6

[www.garudan.cz](http://www.garudan.cz)

## 1. KEY FUNCTION

Entering the Parameter Mode	<b>P</b>	Press key P to enter into user parameter setting mode.
Setting Parameter Check and Save	<b>S</b>	After setting the function code, press this key to check the preset parameter and parameter accordingly; When the parameter is fixed, press key to save the setting and quit.
On the Adjustment Key		1. Choose the region parameter items of incrementing key 2. Parameter setting value incrementing key
Under the Adjustment Key		1. Choose the region parameter items of diminishing key 2. Parameter setting value decrementing key
LED Brightness Adjustment Shortcut Key		Press this key to adjust LED brightness.
Slow Play Seam Selection Shortcut / Select the Shortcut Needle Position		1. Slow play seam selection shortcuts. 2. Select the shortcut needle position.

## 2. OPERATING INSTRUCTION

1. Reset the system:

Under the shutdown state, hold on the “up” key and “down” key to boot, then double-click the S key to confirm it, shutdown restart.

2. Enter the user argument and save changes:

Under normal mode, press key P enter to (use parameter Area) 2. Press S key enter to parameter content value, changed the value through “up” “down” key

3. Enter technician mode and save changes:

- a) In the shutdown state, hold on key P to turn on machine and enter (technical parameter area)
- b) Press S key enter to parameter content value, changed the value through “up” “down” key, and then press S key to save the value.

### 3. USER PARAMETER AND TECHNICIAN PARAMETER

#### 1. User parameter:

Parameters	Parameter Function	Range	Default	Description
P01	Maximum speed			Set the max sewing speed Range 200 -5000
P02	Needle stop position selection	0–2	0	0: Needle up, 1: Needle down, 2: OFF
P03	Soft start switch	0–1	0	0: OFF 1: ON
P04	Soft start sewing speed	200–1500	400	
P05	Stitches number of soft start	1–15	1	
P06	Minimum speed	200–500	200	Set the minimum speed

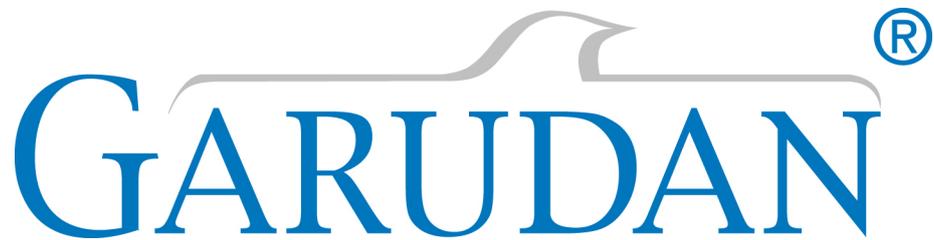
#### 2. Technician parameter:

Parameters	Parameter Function	Range	Default	Description
Press the “P” button while turning the machine on				
P07	Up position adjustment	0–24		
P08	Down position adjustment	0–24		
P09	Needle goes up automatically as power turned on	0–1	1	0: No function 1: Power turned on, needle goes up position automatically
P11	Speed curve adjustment (%)	1–100	32	The larger the value, the faster to increase speed
P16	Machine head lamp brightness	0–4	4	0: OFF 1 – 4: the brightness grade, the more value the more brightness
P21	Motor rotate direction	0–1	0	0: clockwise, 1: counterclockwise
P22	Auto running direction	200–6000	3500	Auto running speed setting
P23	Auto running time	1–250	20	
P24	Auto running stop time	1–250	20	
P25	Item A test	0–1		Continue running with constant speed
P26	Item B Test	0–1		Carry out the set loop running

#### 4. ERROR CODE LIST

Error code	Problem description	Measure
E01	Over-voltage	Turn off the machine, check the power supply voltage.(Or whether exceed the rated voltage of use). If there are still errors, please replace the control box and call for customer service.
E02	Low-voltage	Turn off the machine, check the power supply voltage.(Or whether under the rated voltage of use). If there are still errors, please replace the control box and call for customer service.
E05	Pedal connection error	Turn off the machine, please check if the pedal in bad connection or is too loose. To get it right and turn on. If there are still errors, please replace the control box and call for customer service.
E07	Motor locked-rotor error	Turn the machine hand wheel, check if it is stuck. If it is stuck, you have to rule out the mechanical failure. If turn normal, check if the encoder and motor in bad connection or is too loose. If yes, please correct. If connection well, check if the power supply voltage is abnormal or sewing speed is too high. If yes, please adjust. If there are still errors, please replace the control box and call for customer service.
E09 E11	Positioning signal error	Turn off the machine, please check if the encoder in bad connection or is too loose. To get it right and turn on. If there are still errors, please replace the control box and call for customer service.
E14	Encoder error	Turn off the machine, please check if the encoder in bad connection or is too loose. To get it right and turn on. If there are still errors, please replace the control box and call for customer service.
E15	Power supply module abnormal over-current	Turn off the machine, then turn on again. If there are still errors, please replace the control box and call for customer service.
E17	Machine protection switch is not in the correct position	Turn off the machine, check if the machine is turn over, or the Mercury Switch is shifted or damaged.

# Spare Parts List



**GOV-1004-24**

**GOV-1005-34**

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](mailto:info@anita.cz)

<b>VERSION</b>	<b>CREATED ON</b>	<b>APPROVED BY</b>
MP04000EN_181213	13. 12. 2018	Jakub Lžičař

www.garudan.cz

All rights reserved.

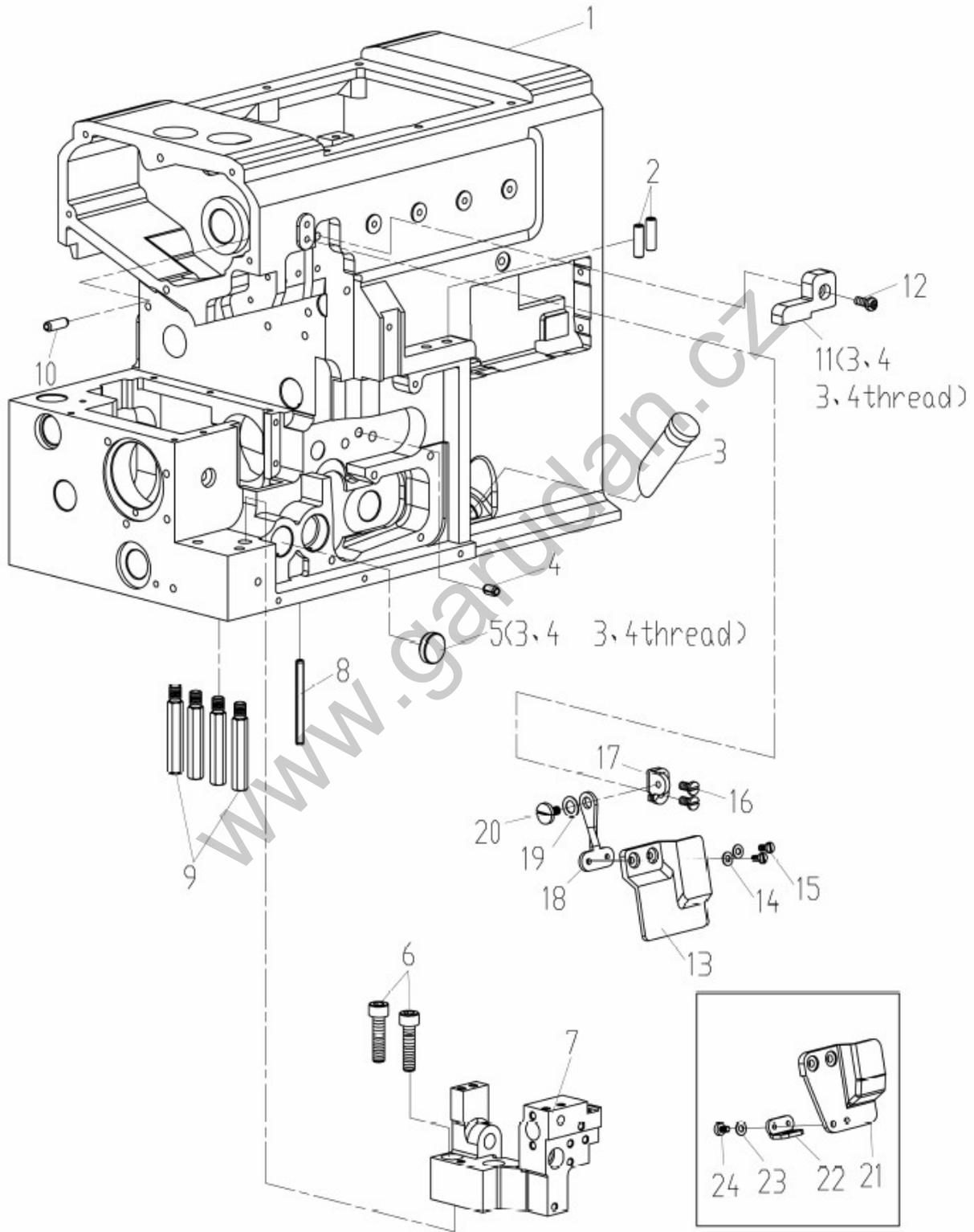
Property of Anita B s.r.o. and protected by copyright. The use of this content without written consent of Anita B s.r.o. is prohibited.

Copyright © Anita B s.r.o. (2018)

## Content

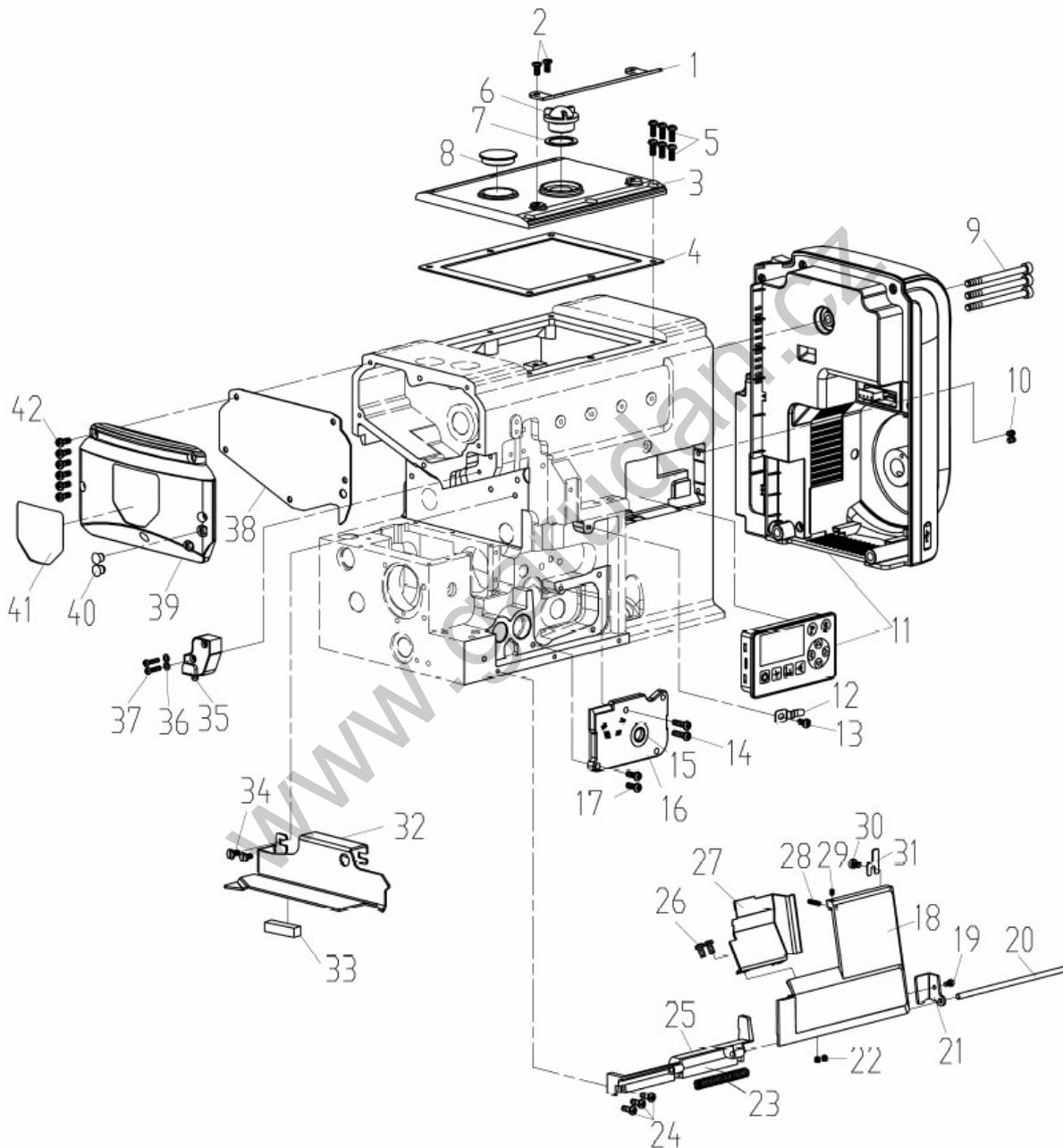
1. Housing Frame.....	4
2. Out Cover Frame (1/2) .....	6
2. Out Cover Frame (2/2) .....	8
3. Out Cover Frame 2 .....	10
4. Three Automatic Frame .....	12
5. Main Shaft Mechanism .....	14
6. Thread Tension Mechanism .....	16
7. Needle Drive Mechanism (1/2) .....	18
7. Needle Drive Mechanism (2/2) .....	20
8. Needle Drive Mechanism 2 .....	22
9. Upper Looper Drive Mechanism .....	24
10. Lower Looper Mechanism.....	26
11. Chain Stitch Looper Mechanism.....	28
12. Cam Assembly .....	30
13. Differential Feed Assembly (1/2) .....	32
13. Differential Feed Assembly (2/2) .....	34
14. Differential Feed Assembly 2 .....	36
15. Knife Drive Assembly.....	38
16. Presser Foot Assembly .....	40
17. Thread Take-up and Threading Frame.....	42
18. Lubrication Assembly .....	44
19. HR Device .....	46
20. Oil Tank Bracket.....	48

# 1. HOUSING FRAME



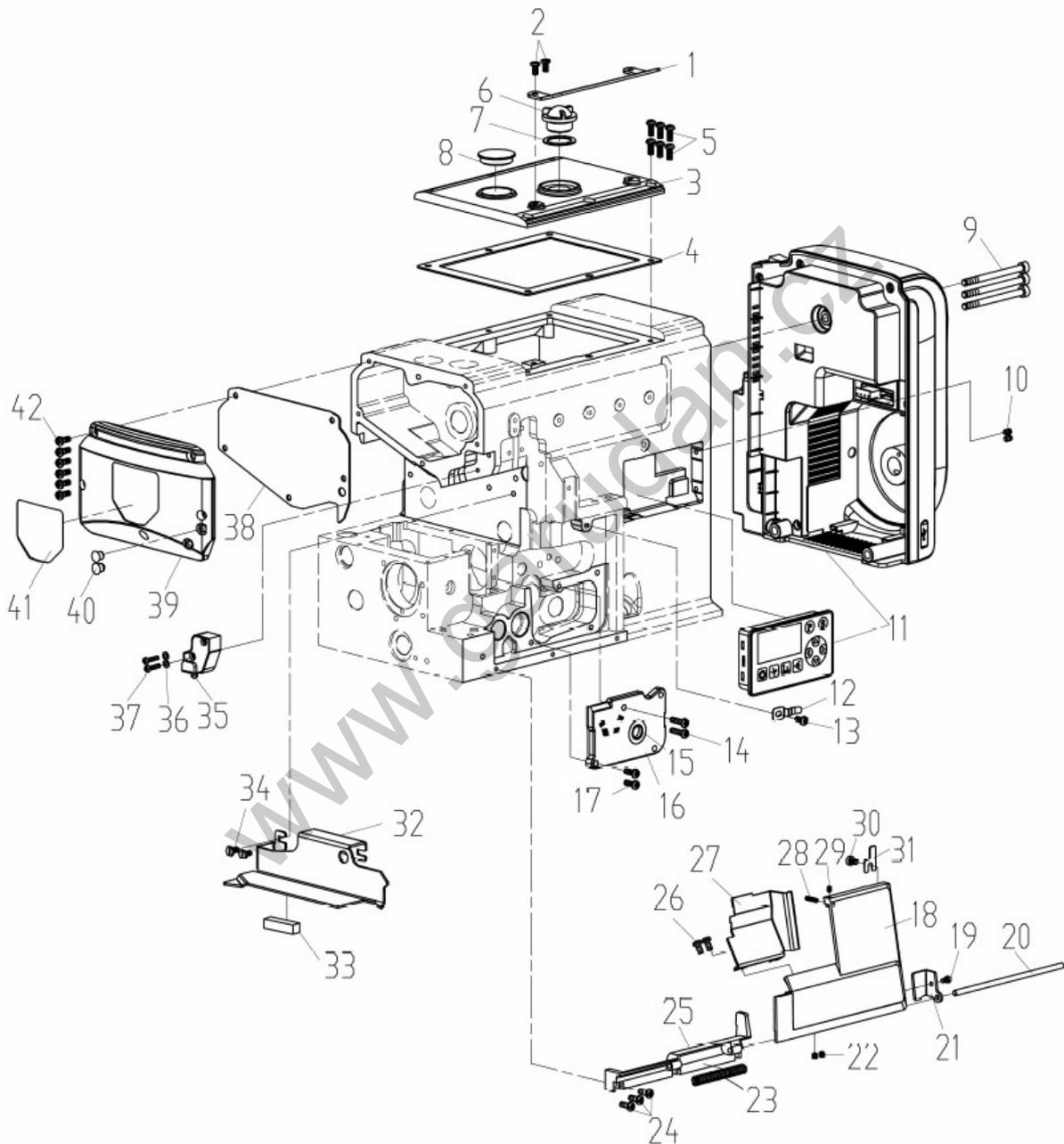
1. HOUSING FRAME					
Ref. No	Parts No.	Name of parts	Description	Qty	Note
1	20021433	Housing		1	
2	10054228	Threading pipe for upper and lower loopers		2	
3	10026763	Oil window		1	
4	10002836	Pin		1	
5	10008961	Rubber plug		1	
6	10009171	Screw		2	
7	10009050	Lower knife bed		1	
8	10002830	Pin		1	
9	10011847	Support for houring		4	
10	10002833	Pin		1	
11	20022626	Decorative sheet		1	
12	10009104	Screw		1	
13	10009640	Safety cover		1	
14	10009599	Washer		2	
15	10009600	Screw		2	
16	10010594	Screw		2	
17	10057759	Safety cover plate		1	
18	10057479	Safety cover frame		1	
19	10010596	Washer		2	
20	10009044	Screw		1	
21	10054229	Safety cover		1	
22	10053183	Rubber guide plate		1	
23	10009599	Washer		2	
24	10009600	Screw		2	

## 2. OUT COVER FRAME (1/2)



2. OUT COVER FRAME (1/2)					
Ref. No	Parts No.	Name of parts	Description	Qty	Note
1	10057453	A wire frame		1	
2	10010594	Screw		2	
3	20021992	Upper cover		1	
4	10057511	Seal cushion for upper cover		1	
5	10009104	Screw		6	
6	10008939	Oil window		1	
7	10009156	Oil window rubber ring		1	
8	10045754	Rubber plug		1	
9	10053560	Screw		3	
10	10003150	Screw		2	
11		Simple electronic control		1	
12	10033682	Spring plate		1	
13	10004171	Screw		1	
14	10008965	Screw		2	
15	10009399	Oil seal		1	
16	10008917	Cover for upper looper stand		1	
17	10011044	Screw		2	
18	20021991	Right part of the front cover		1	
19	10009597	Screw		1	
20	10034619	Pin		1	
21	10008911	Guiding plate		1	
22	10023463	Screw		2	
23	10009509	Spring		1	
24	10009037	Screw		3	
25	10008880	Supporting part		1	
26	10010554	Screw		2	
27	10008881	Middle part of the front cover		1	
28	10009550	Screw		1	
29	10013019	Screw		1	
30	10059247	Fender for right part of front cover			
31	10004171	Screw		1	
32	10008920	The cover plate		1	
33	10008912	Foam rubber gasket		1	
34	10009157	Screw		2	
35	10059231	Head lamp		1	
36	10002998	Washer		2	
37	10001368	Screw		2	
38	10057514	Side gasket		1	
39	20022627	Side cover		1	

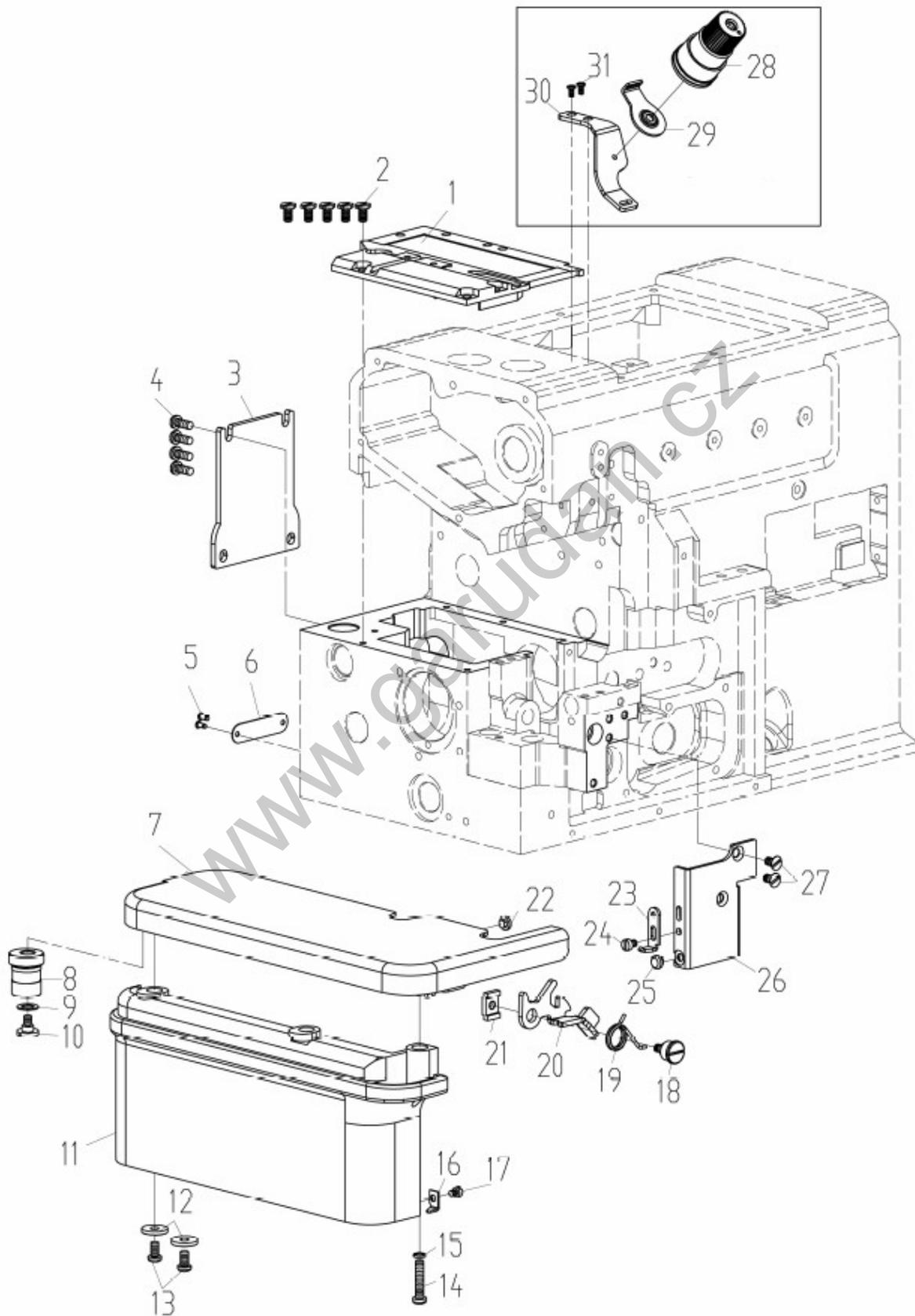
## 2. OUT COVER FRAME (2/2)



2. OUT COVER FRAME (2/2)					
Ref. No	Parts No.	Name of parts	Description	Qty	Note
40	10014266	Rubber plug		2	
41	10058070	Decorative plate		1	
42	10009104	Screw		6	

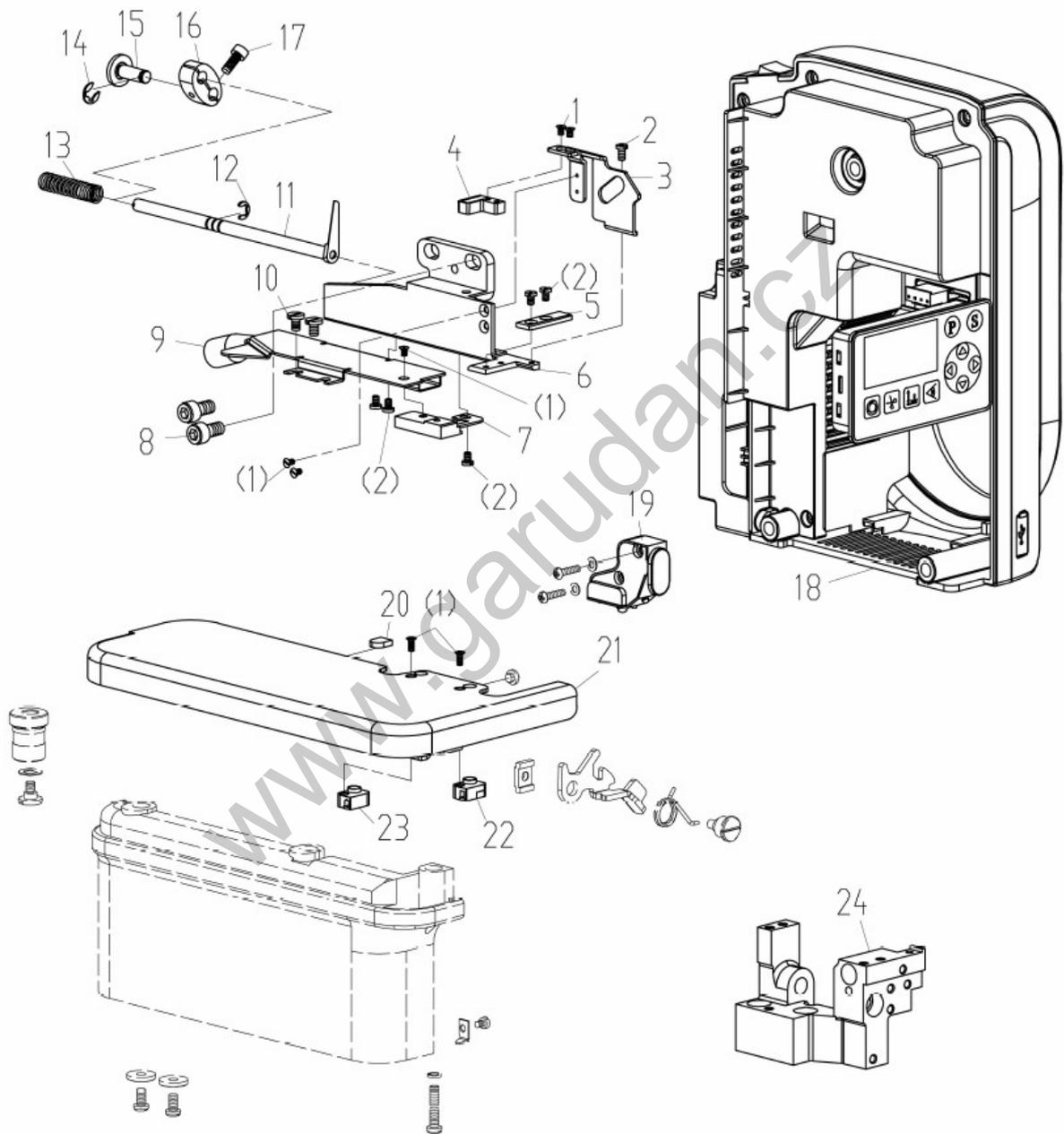
www.garudan.cz

### 3. OUT COVER FRAME 2



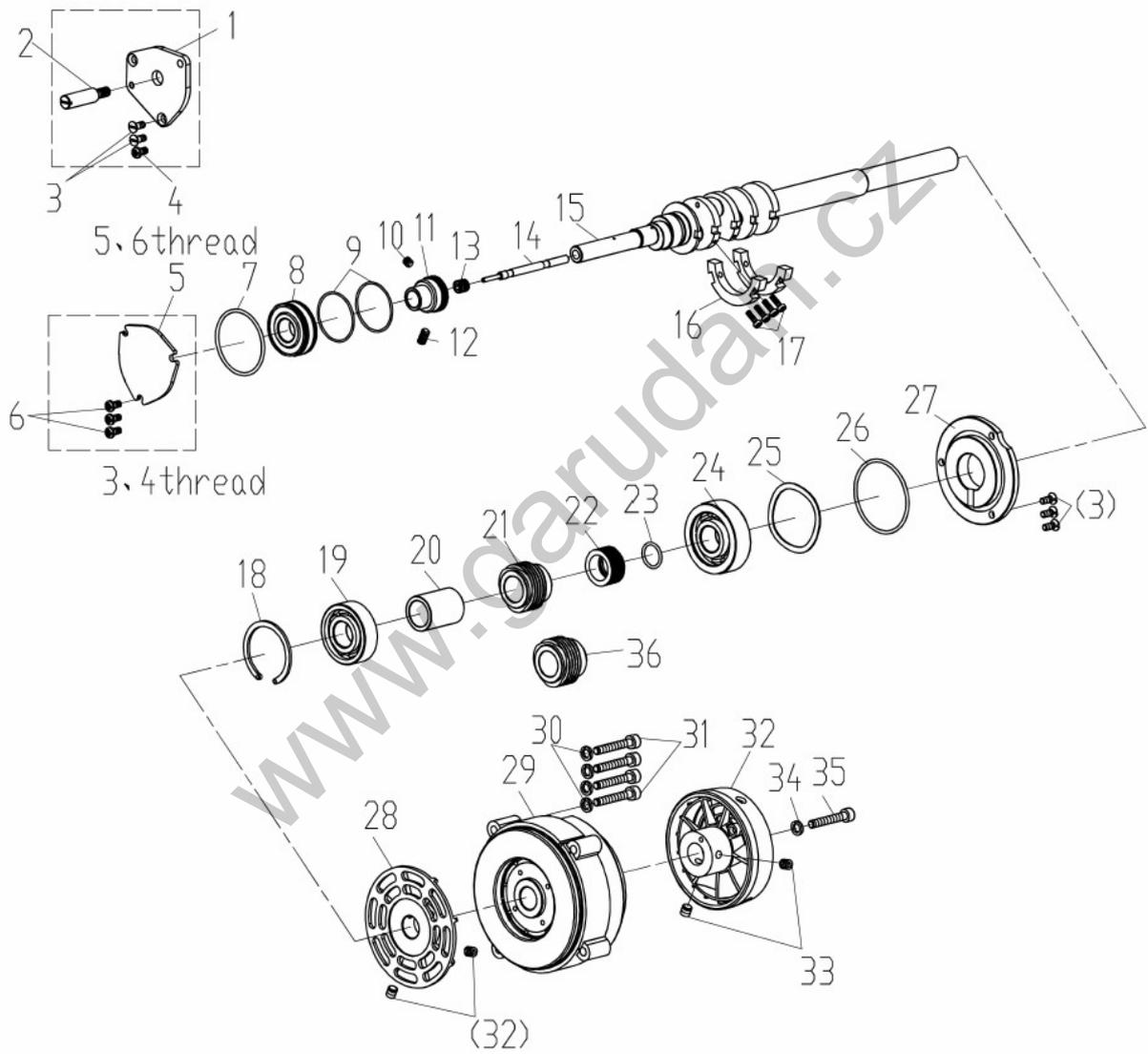
3. OUT COVER FRAME 2					
Ref. No	Parts No.	Name of parts	Description	Qty	Note
1	10058546	Left upper cover		1	
2	10009157	Screw		5	
3	10033690	Comp on ent of back cover		1	
4	10009104	Screw		4	
5	10002840	Rivet		2	
6	10007845	Date of the card		1	
7	10008967	Component of surface cover		1	
8	10009547	Brass bush for surface cover		1	
9	10010596	Washer		1	
10	10009044	Screw		1	
11	10009450	Lower left side cover		1	
12	10009537	Washer		2	
13	10010595	Screw		2	
14	10009291	Screw		1	
15	10008144	Washer		1	
16	10033700	Position limiting plate		1	
17	10009529	Screw		1	
18	10009546	Screw		1	
19	10009536	Spring		1	
20	10052570	Grip part for surface cover		1	
21	10009548	Locking plate		1	
22	10009582	Quake-proof rubber cushion		1	
23	10033689	Baffle		1	
24	10009514	Screw		1	
25	10009582	Quake-proof rubber cushion		1	
26	10008882	Left part of front cover		1	
27	10009514	Screw		2	
28	10060684	Thread tension aggregate for looper		1	
29	10059442	Thread guide stand		1	
30	10053182	Bash of thread tension device		1	
31	10010595	Screw		2	

#### 4. THREE AUTOMATIC FRAME



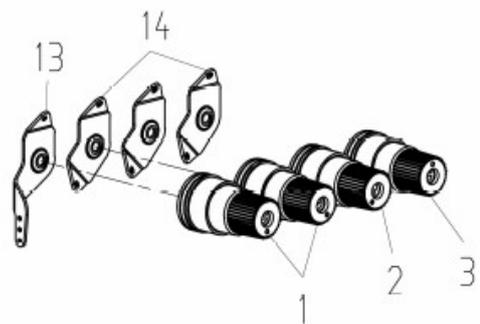
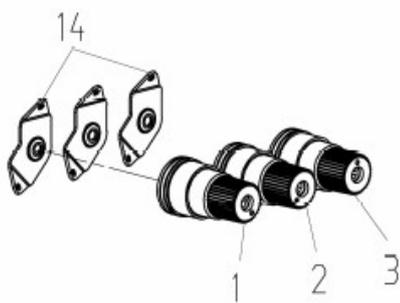
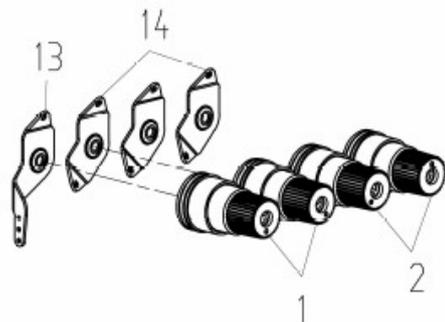
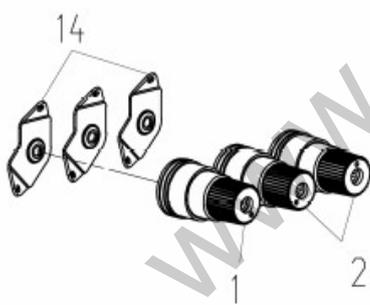
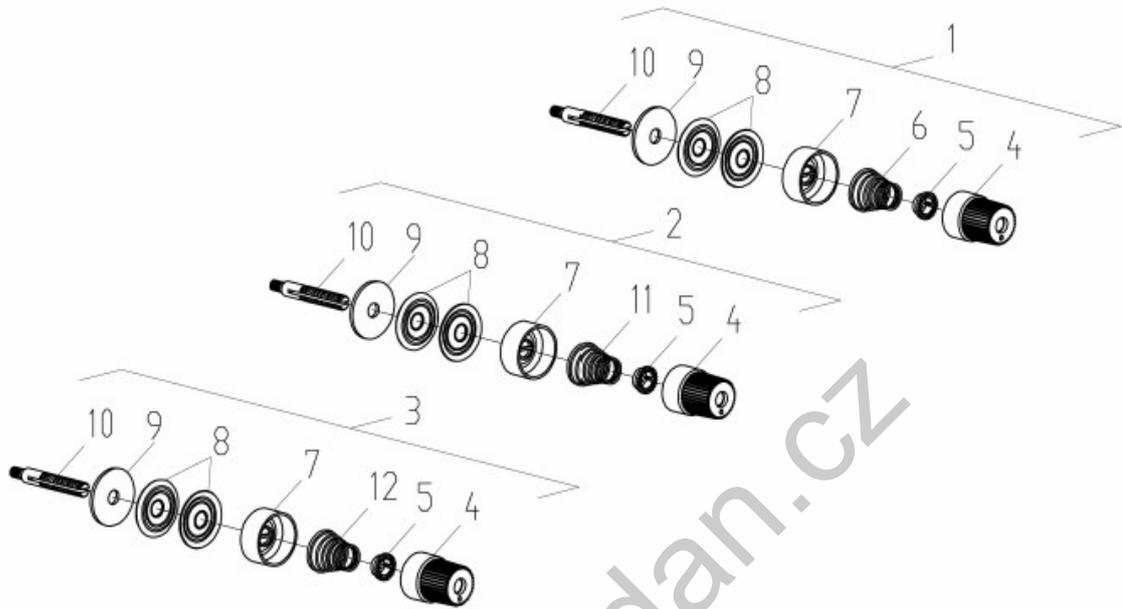
4. THREE AUTOMATIC FRAME					
Ref. No	Parts No.	Name of parts	Description	Qty	Note
1	10009379	Screw		7	
2	10038921	Screw		6	
3	10058568	Guiding plate for safety switch presser foot		1	
4	10059012	Safety switch component of the presser foot		1	
5	10037797	Stationary knife		1	
6	10037460	Mount of cutter		1	
7	10059003	Sensor component of receive ring the back cut		1	
8	10003169	Screw		2	
9	10037456	The cover plate		1	
	10037457	Component of aspiration		1	
10	10014441	Screw		2	
11	10038985	Moving cutter		1	
12	10025649	Split washer		1	
13	10025648	Spring		1	
14	10013038	Split washer		1	
15	10037477	Pin for connecting rod of cutter		1	
16	10037475	Connecting rod of cutter		1	
17	10012752	Screw		1	
18		Automatic electric control		1	
19	10058569	Sensor component for emitter		1	
20	10037469	Magnet		1	
21	10058548	Component of surface cover		1	
22	10058571	Sensor component of the lifting presser foot		1	
23	10059002	Receiver component for front cut		1	
24	10058561	Lower knife bed		1	

### 5. MAIN SHAFT MECHANISM



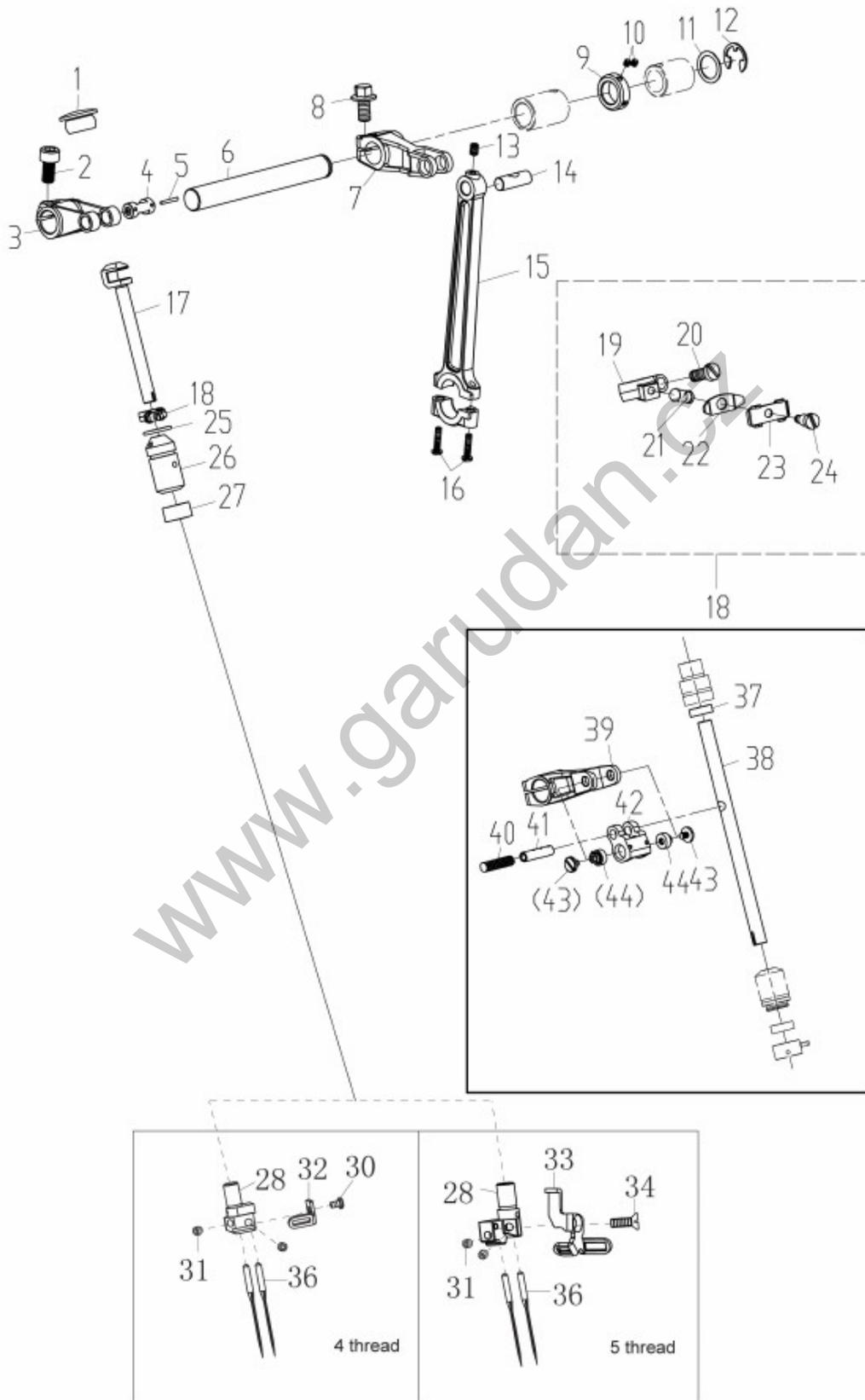
5. MAIN SHAFT MECHANISM					
Ref. No	Parts No.	Name of parts	Description	Qty	Note
1	10009643	Left cover		1	
2	10007842	Screw		1	
3	10009195	Screw		5	
4	10009104	Screw		1	
5	10009519	Left cover		1	
6	10010595	Screw		3	
7	10009448	O ring		1	
8	10025895	Bearing		1	
9	10009334	O ring		2	
10	10012162	Screw		1	
11	10002966	Bush mounted in bearing		1	
12	10009167	Screw		1	
13	10009187	Screw		1	
14	10009479	The spindle axis core		1	
15	10058553	Main shaft (general machine)		1	
	10058550	Main shaft (heavy machine)		1	
16	10009402	Balance block		1	
17	10003001	Screw		4	
18	10008898	Main shaft retainer ring		1	
19	10009780	Bearing		1	
20	10009392	Bush mounted in worm bush		1	
21	10009362	Worm bush		1	
22	10055917	Bush mounted in screw		1	
23	10009360	O ring		1	
24	10055926	Bearing		1	
25	10055918	Spring washer		1	
26	10055919	O ring		1	
27	10055920	Right cover		1	
28	10059605	Fan		1	
29	10059606	Motor		1	
30	10005537	Washer		4	
31	10001497	Screw		4	
32	10058555	Hand wheel assembly		1	
33	10003151	Screw		4	
34	10003249	Washer		1	
35	10001901	Screw		1	
36	10059383	Worm bush		1	

## 6. THREAD TENSION MECHANISM



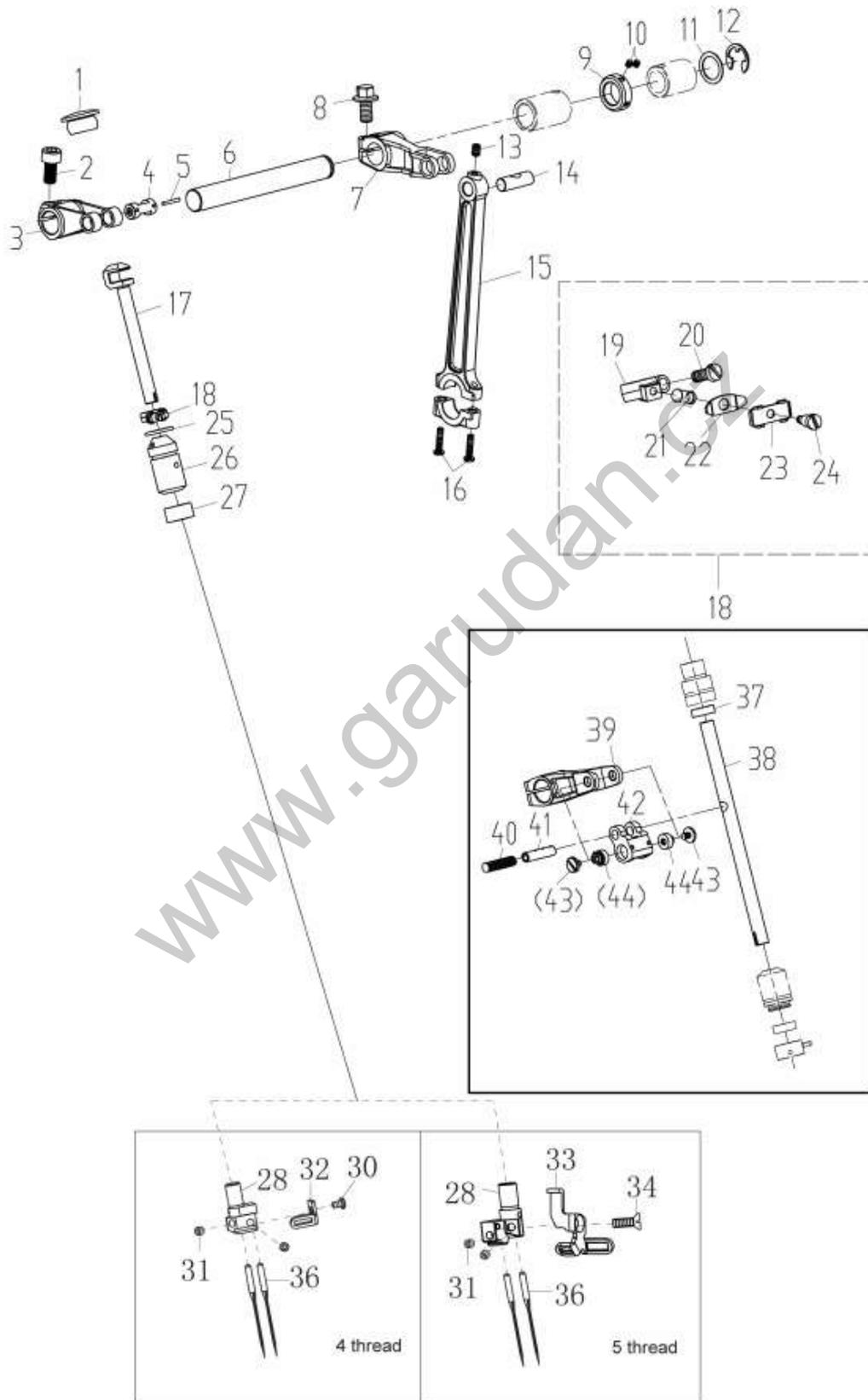
6. THREAD TENSION MECHANISM					
Ref. No	Parts No.	Name of parts	Description	Qty	Note
1	10058522	Thread tension aggregate for needle		1	
2	10058523	Thread tension aggregate for upper needle		1	
3	10058524	Thread tension aggregate for lower needle		1	
4	10058521	Thread tension nut		1	
5	10003111	Release-proof nut		1	
6	10009534	Spring		1	
7	10058520	Thread tension bowl		1	
8	10003116	Thread tension dish		2	
9	10009010	Cloth cushion		1	
10	10003112	Screw		1	
11	10009532	Spring		1	
12	10009533	Spring		1	
13	10057504	Thread guide plate with two hole		1	
14	10057503	Thread guide plate		3	

### 7. NEEDLE DRIVE MECHANISM (1/2)



7. NEEDLE DRIVE MECHANISM (1/2)					
Ref. No	Parts No.	Name of parts	Description	Qty	Note
1	10009576	Rubber plug		1	
2	10009245	Screw		1	
3	10009374	Crank on needle bar		1	
4	10009345	Crank pin for needle bar		1	
5	10008090	Oil wick		1	
6	10009423	Driving shaft for needle bar		1	
7	10009433	Crank on needle bar drive shaft		1	
8	10009164	Screw		1	
9	10009357	Retaining ring		1	
10	10009074	Screw		2	
11	10033718	Washer		1	
12	10003273	Retaining ring		1	
13	10009109	Screw		1	
14	10009432	Pin for connecting rod		1	
15	10002961	Connecting rod for needle bar		1	
16	10002939	Screw		2	
17	10009386	Needle bar		1	
18	20001229	The needle clamp clip		1	
19	10009344	The needle clamp clip		1	
20	10010888	Screw		1	
21	10009400	Spring		1	
22	10009341	Lower thread tension plate		1	
23	10009386	Upper thread tension plate		1	
24	10009383	Screw		1	
25	10009391	O ring		1	
26	10009401	Needle bar bush		1	
27	10009356	Felt		1	
28		Needle holder		1	
29	10003431	Thread guide plate of needle holder		1	
30	10009422	Screw		1	
31	10009255	Screw			
32	10009339	Thread guide plate of needle holder		1	
33	10009644	Thread guide plate of needle holder		1	
34	10009664	Screw		1	
35	10008205	Thread guide plate of needle holder		1	
36		Needle		1	
37	10059410	Felt		1	
38	10055906	Needle bar		1	

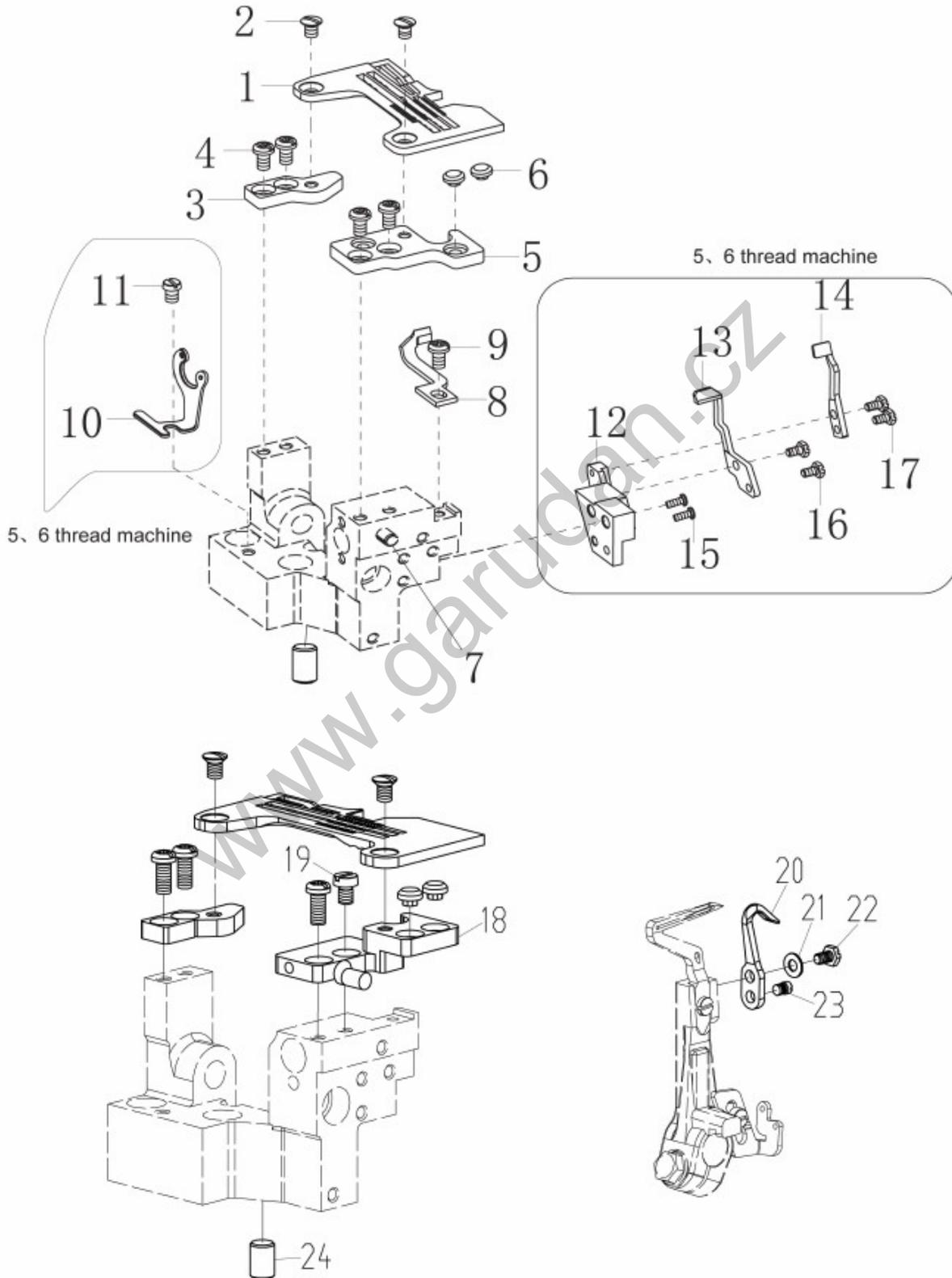
### 7. NEEDLE DRIVE MECHANISM (2/2)



<b>7. NEEDLE DRIVE MECHANISM (2/2)</b>					
<b>Ref. No</b>	<b>Parts No.</b>	<b>Name of parts</b>	<b>Description</b>	<b>Qty</b>	<b>Note</b>
39	10034103	Crank on needle bar		1	
40	10008072	Oil wick		1	
41	10055907	Pin		1	
42	10055903	Crank		1	
43	10034108	Screw		2	
44	10034106	Pin		2	

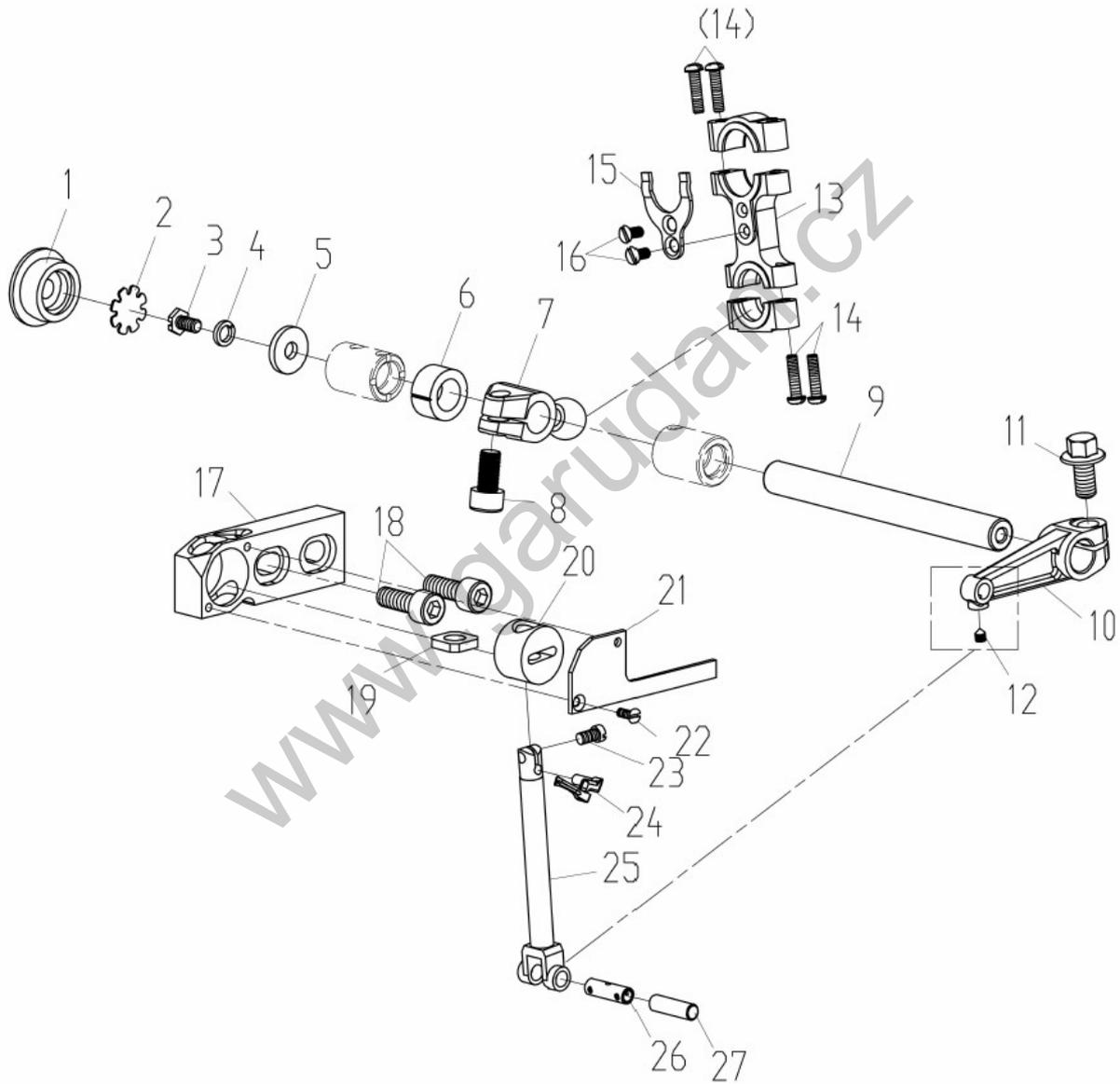
www.garudan.cz

## 8. NEEDLE DRIVE MECHANISM 2



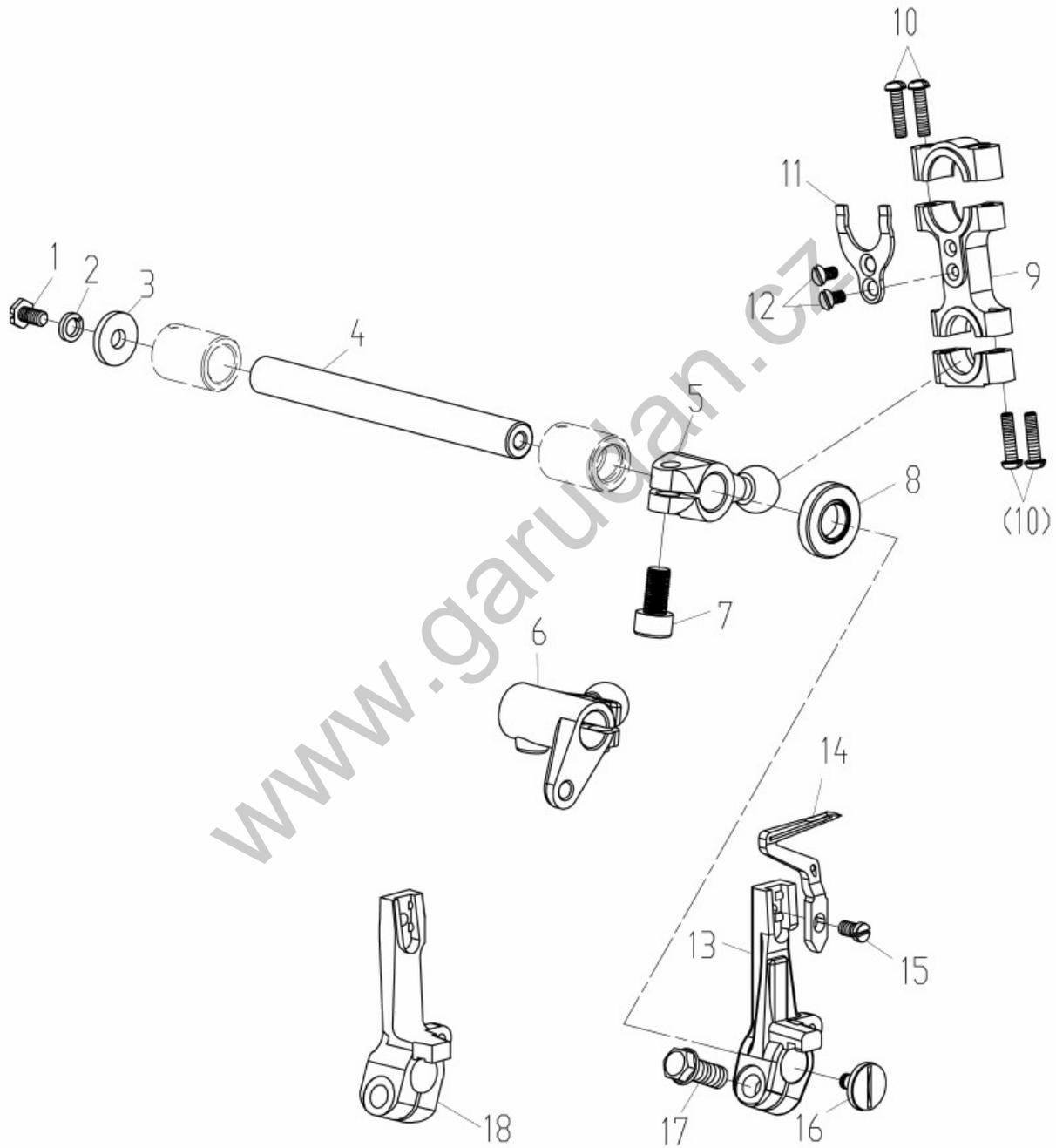
8. NEEDLE DRIVE MECHANISM 2					
Ref. No	Parts No.	Name of parts	Description	Qty	Note
1		Needle plate		1	
2	10009290	Screw		2	
3	10009354	Needle plate support		1	
4	10010595	Screw		4	
5	10009420	Base of needle guard		1	
6	10061231	Rubber cushion		2	
7	10012905	Pin		1	
8	10009377	Front needle guard (3, 4thread machine)		1	
	10009637	Front needle guard (5, 6thread machine)		1	
9	10010595	Screw		1	
10	10040242	Front thread guide		1	
11	10004171	Screw		1	
12	10009306	Needle guard bracket		1	
13	10009636	Rear needle guard		1	
14	10009657	Front needle guard		1	
15	10009638	Screw		2	
16	10010555	Screw		2	
17	10010555	Screw		2	
18	10058562	Base of needle guard		1	
19	10010554	Screw		1	
20	10009023	Rear needle guard		1	
21	10003274	Washer		1	
22	10009021	Screw		1	
23	10009020	Screw		1	
24	10009048	Pin		1	

### 9. UPPER LOOPER DRIVE MECHANISM



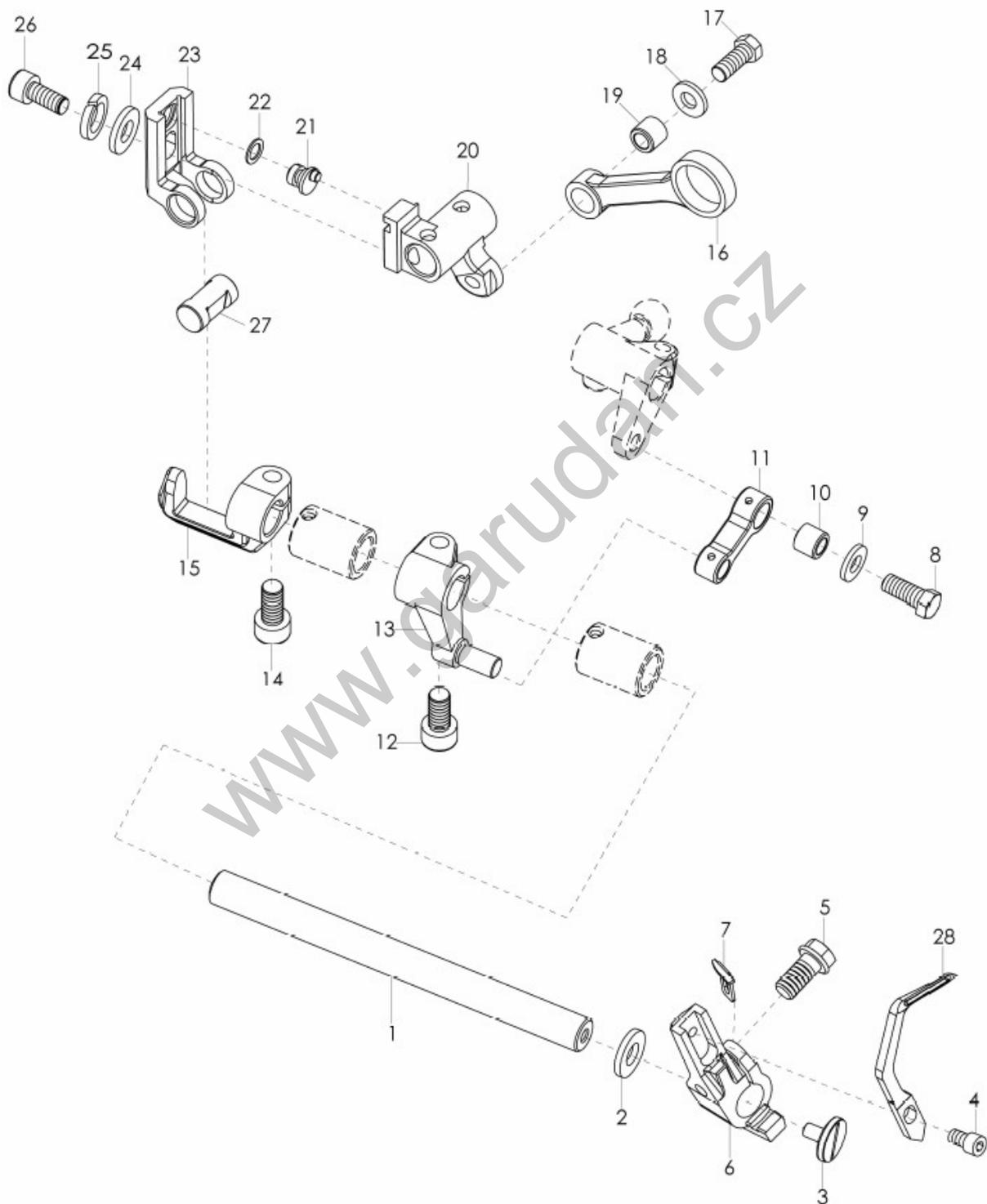
9. UPPER LOOPER DRIVE MECHANISM					
Ref. No	Parts No.	Name of parts	Description	Qty	Note
1	10039396	Rubber plug		1	
2	10039397	Oil baffle frame		1	
3	10009349	Screw		1	
4	10005537	Washer		1	
5	10033711	Washer		1	
6	10009338	Retaining ring		1	
7	10003062	Crank bush with ball head for upper looper		1	
8	10009164	Screw		1	
9	10009404	Drive shaft for upper looper		1	
10	10009373	Swing bar for upper looper shaft		1	
11	10009245	Screw		1	
12	10009240	Screw		1	
13	10003064	Connecting bar for upper looper drive		1	
14	10002939	Screw		4	
15	10009431	Fender for connecting bar		1	
16	10009626	Screw		1	
17	10002912	Sliding bar bracket		1	
18	10009008	Screw		2	
19	10009405	Felt		1	
20	10002905	Sliding bar bush		1	
21	10009370	Cover plate		1	
22	10009379	Screw		1	
23	10013969	Screw		1	
24		Upper looper		1	
25	10002913	Sliding bar		1	
26	10009406	Pin		1	
27	10008067	Oil wick		1	

### 10. LOWER LOOPER MECHANISM



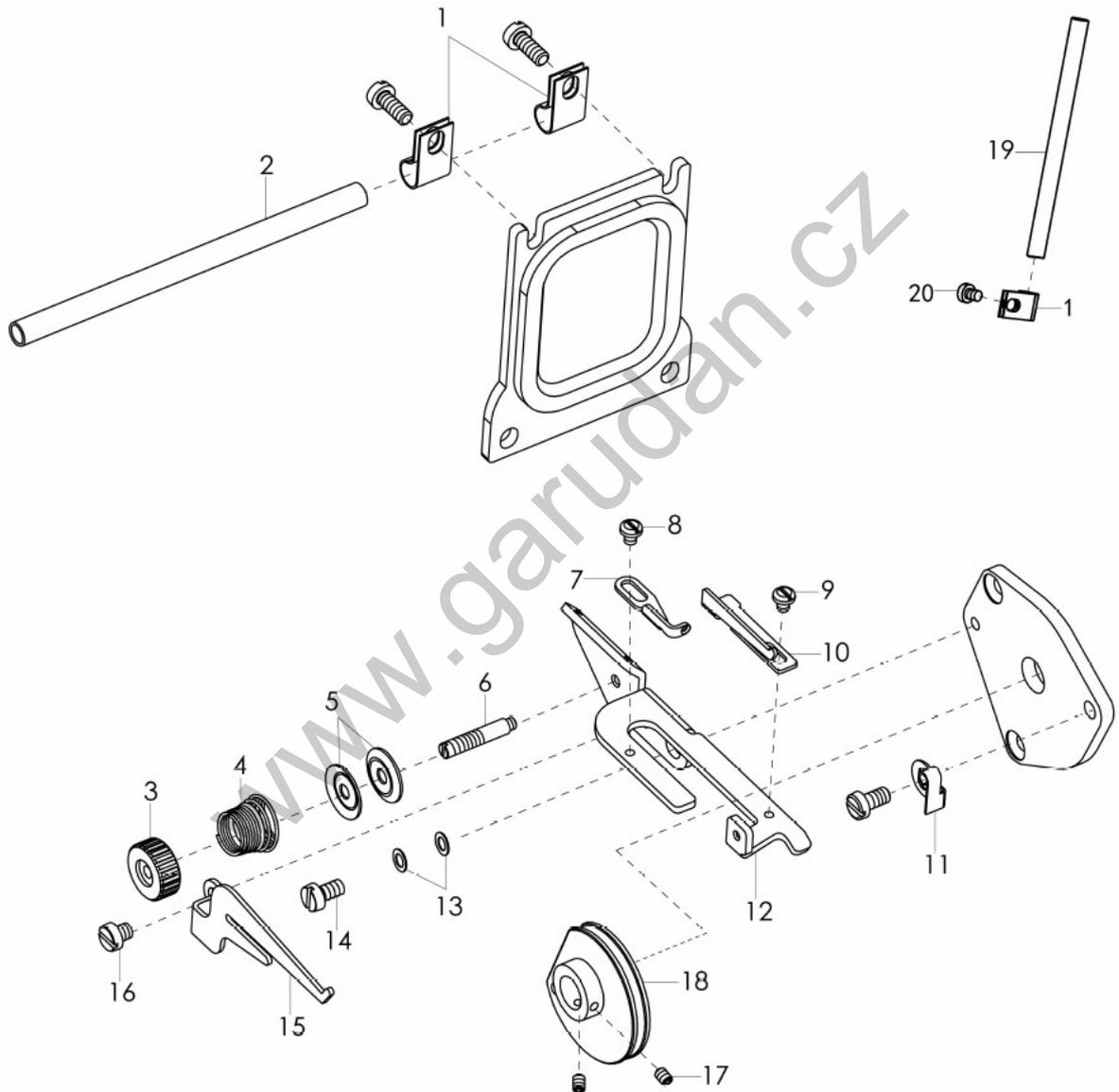
10. LOWER LOOPER MECHANISM					
Ref. No	Parts No.	Name of parts	Description	Qty	Note
1	10009349	Screw		1	
2	10005537	Washer		1	
3	10033711	Washer		1	
4	10009404	Drive shaft for upper looper		1	
5	10003061	Crank bush with ball head for		1	
6	10002825	Left crank bush with chain stitch looper		1	
7	10009164	Screw		1	
8	10009399	Seal ring		1	
9	10003064	Connecting bar for upper looper		1	
10	10002939	Screw		4	
11	10009431	Fender for connecting bar		1	
12	10009626	Screw		2	
13	10009026	Stand for lower looper		1	
14		Upper looper		1	
15	10000164	Screw		1	
16	10009394	Screw		1	
17	10031107	Screw		1	
18	10059412	Stand for lower looper		1	

## 11. CHAIN STITCH LOOPER MECHANISM



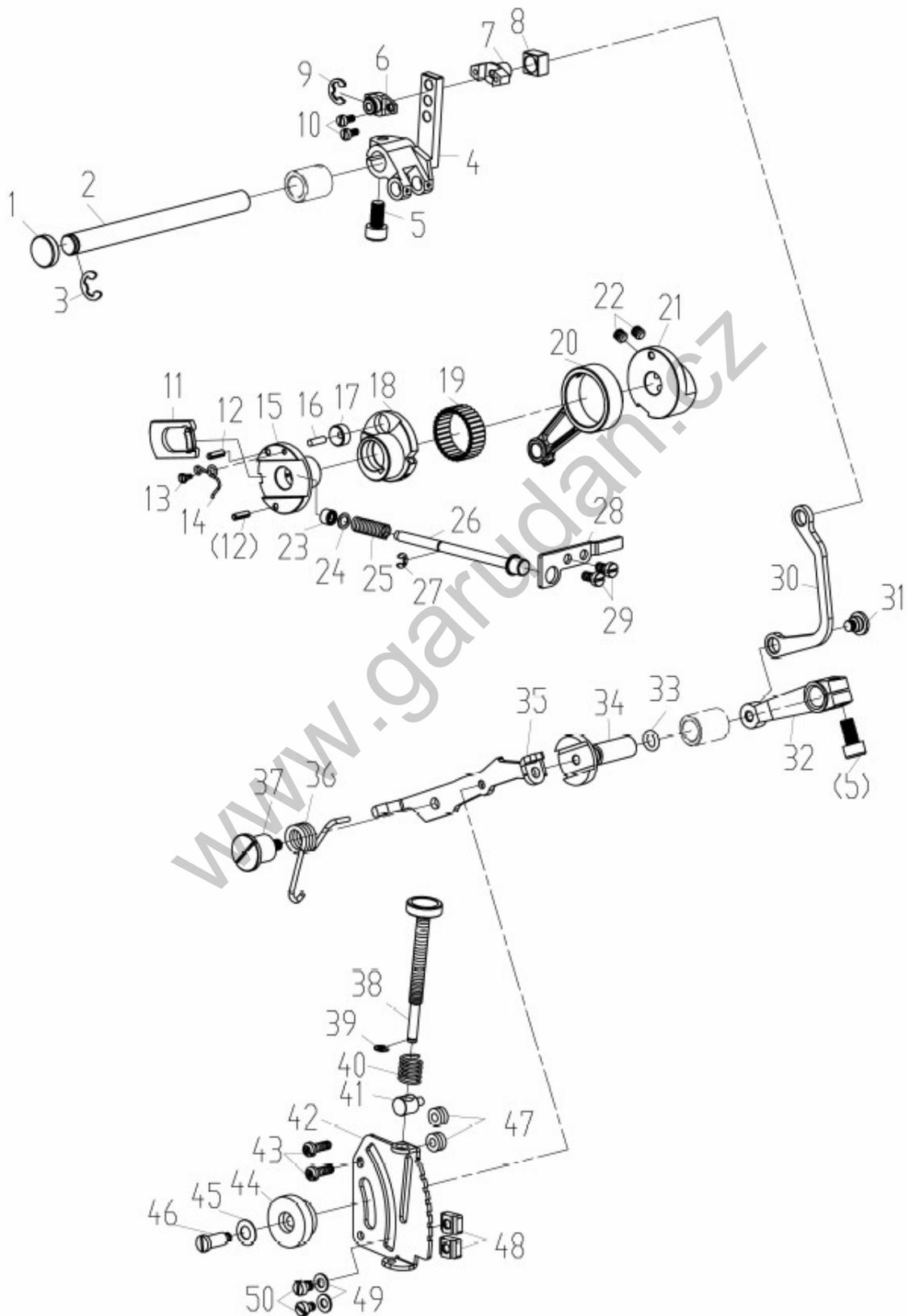
11. CHAIN STITCH LOOPER MECHANISM					
Ref. No	Parts No.	Name of parts	Description	Qty	Note
1	10009309	Shaft for chain stitch looper		1	
2	10009071	Seal ring		1	
3	10009394	Screw		1	
4	10010643	Screw		2	
5	10009310	Screw		2	
6	10009307	Stand of chain stitch looper		1	
7	10003294	Blocking ring		1	
8	10009142	Screw		2	
9	10009192	Washer		1	
10	10023487	Needle pin for connecting bar		1	
11	10009186	Connecting bar of feed dog		1	
12	10009245	Screw		1	
13	10009302	Swing crank		1	
14	10009245	Screw		1	
15	10009305	Swing fork		1	
16	10047854	Connecting bar for chain stitch looper		1	
17	10009142	Screw		1	
18	10009192	Washer		1	
19	10023487	Needle pin for connecting bar		1	
20	10009308	Crank of regulator		1	
21	10009311	Pin		1	
22	10009641	O ring		1	
23	10009303	Base of regulator		1	
24	10009192	Washer		1	
25	10005537	Washer		1	
26	10014210	Screw		1	
27	10034624	Shaft of adjusting bar		1	
28		Chain stitch looper		1	

## 12. CAM ASSEMBLY



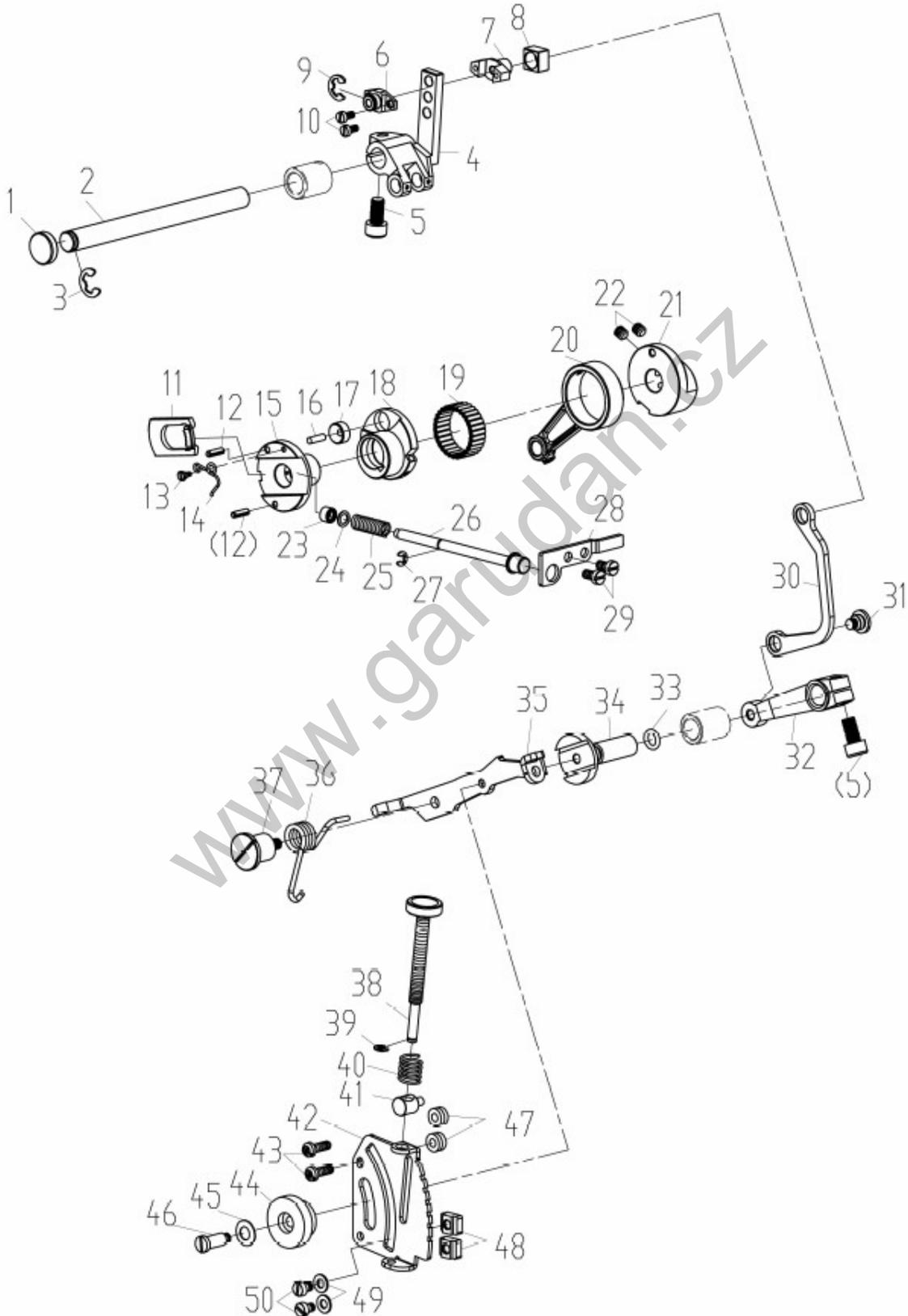
12. CAM ASSEMBLY					
Ref. No	Parts No.	Name of parts	Description	Qty	Note
1	10010693	Elastic clamp for thread guide		3	
2	10009283	Horizontal thread guide pipe		1	
3	10010609	Thread tension nut		1	
4	10010612	Spring		1	
5	10010613	Thread tension dish		2	
6	10010610	Screw		1	
7	10010654	Thread guide plate		1	
8	10009529	Screw		1	
9	10009529	Screw		1	
10	10010614	Thread guide plate		1	
11	10010596	Washer		1	
12	10010611	Thread tension stand		1	
13	10010596	Washer		2	
14	10010556	Screw		1	
15	10033740	Thread take-up stand		1	
16	10004171	Screw		1	
17	10010664	Thread take-up cam assembly		1	
18	10010196	Screw		2	
19	10009285	The vertical line pipe		1	
20	10009556	Screw		1	

### 13. DIFFERENTIAL FEED ASSEMBLY (1/2)



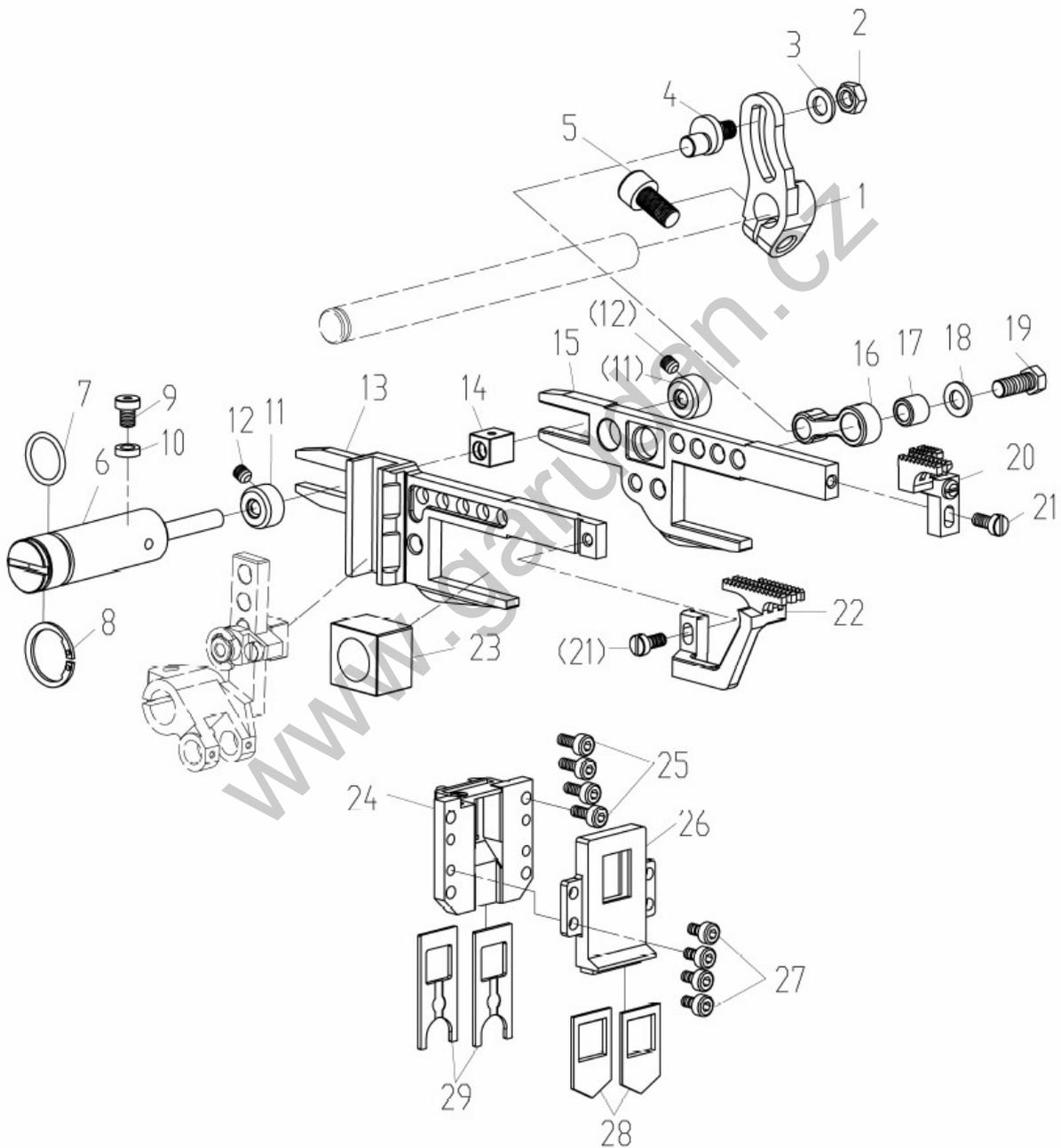
13. DIFFERENTIAL FEED ASSEMBLY (1/2)					
Ref. No	Parts No.	Name of parts	Description	Qty	Note
1	10008961	Rubber plug		1	
2	10009198	Feeding shaft		1	
3	10009239	Retaining spring		1	
4	10002593	Right crank of differential regulator		1	
5	10009164	Screw		2	
6	10002591	Crank slide cover		1	
7	10002592	Crank slide		1	
8	10009139	Sliding block		1	
9	10008989	Retaining spring		1	
10	10009625	Screw		2	
11	10012162	Sliding block with inner teeth		1	
12	10009298	Pin		2	
13	10002890	Screw		1	
14	10002887	Spring		1	
15	10002885	Adjusting cam for stitch length		1	
16	10003219	Pin		1	
17	10003218	Guiding wheel of feeding eccentric wheel		1	
18	10009327	Feeding eccentric wheel		1	
19	10002888	Bearing		1	
20	10002946	Connecting bar		1	
21	10002977	Eccentric wheel of stitch length regulator		1	
22	10012162	Screw		2	
23	10053036	Oil seal		1	
24	10009246	Washer		1	
25	10009248	Spring		1	
26	10009249	Button shaft		1	
27	10003248	Retaining spring		1	
28	10009040	Plate		1	
29	10010595	Screw		2	
30	10009000	Differential regulating connecting rod		1	
31	10009624	Screw		1	
32	10009256	Left crank of differential regulator		1	
33	10009608	O ring		1	
34	10034607	Shaft of differential regulator		1	
35	10009224	Adjusting bar		1	
36	10009563	Spring		1	
37	10009558	Screw		1	
38	10009218	Screw		1	

### 13. DIFFERENTIAL FEED ASSEMBLY (2/2)



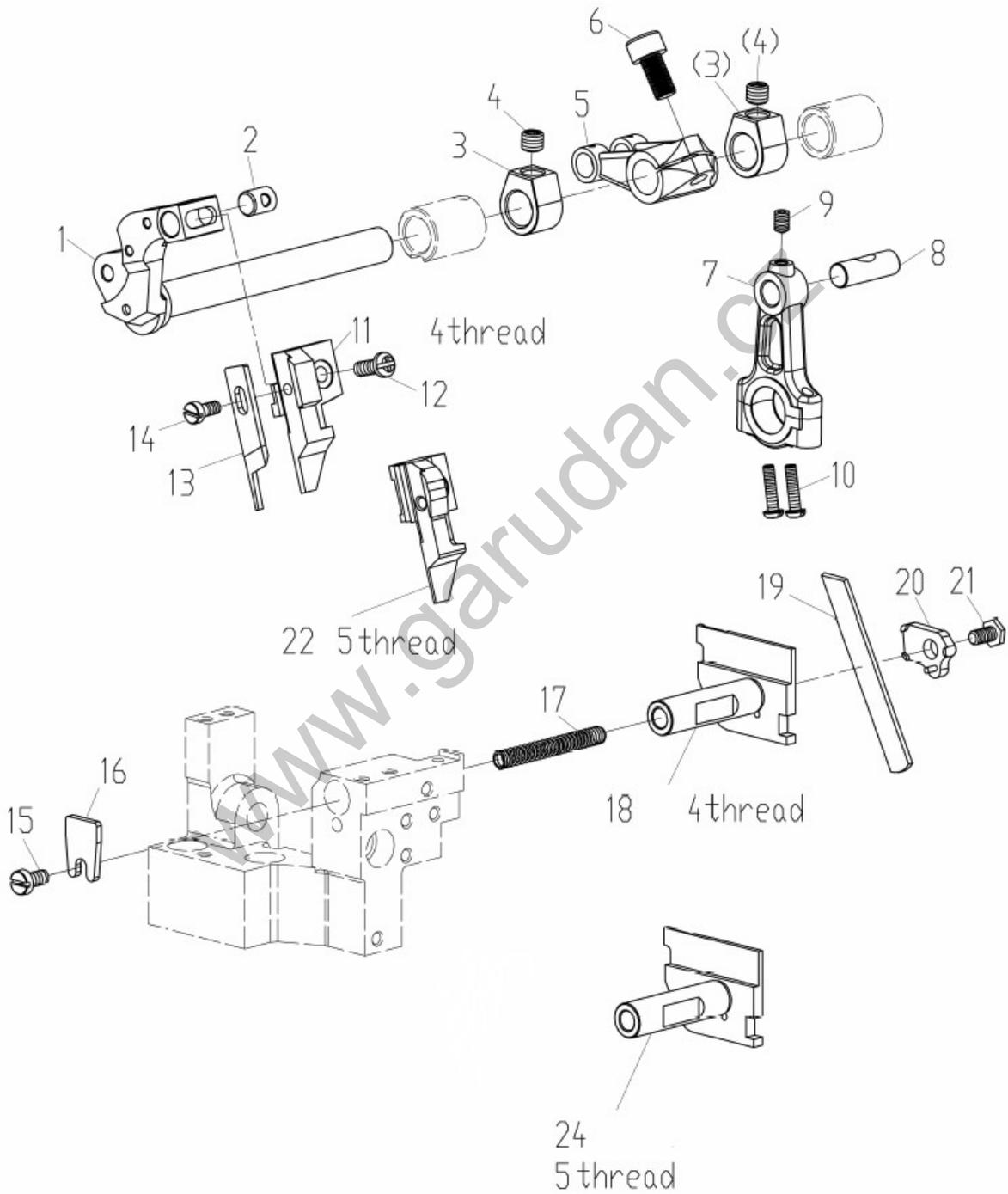
13. DIFFERENTIAL FEED ASSEMBLY (2/2)					
Ref. No	Parts No.	Name of parts	Description	Qty	Note
39	10003248	Retaining spring		1	
40	10009205	Spring		1	
41	10009203	Nut		1	
42	10009223	Indication plate of adjustment		1	
43	10009037	Screw		2	
44	10009565	Nut		1	
45	10009564	Washer		1	
46	10009562	Screw		1	
47	10009200	Washer		2	
48	10009221	Position plate		2	
49	10003083	Washer		2	
50	10010554	Screw		2	

### 14. DIFFERENTIAL FEED ASSEMBLY 2



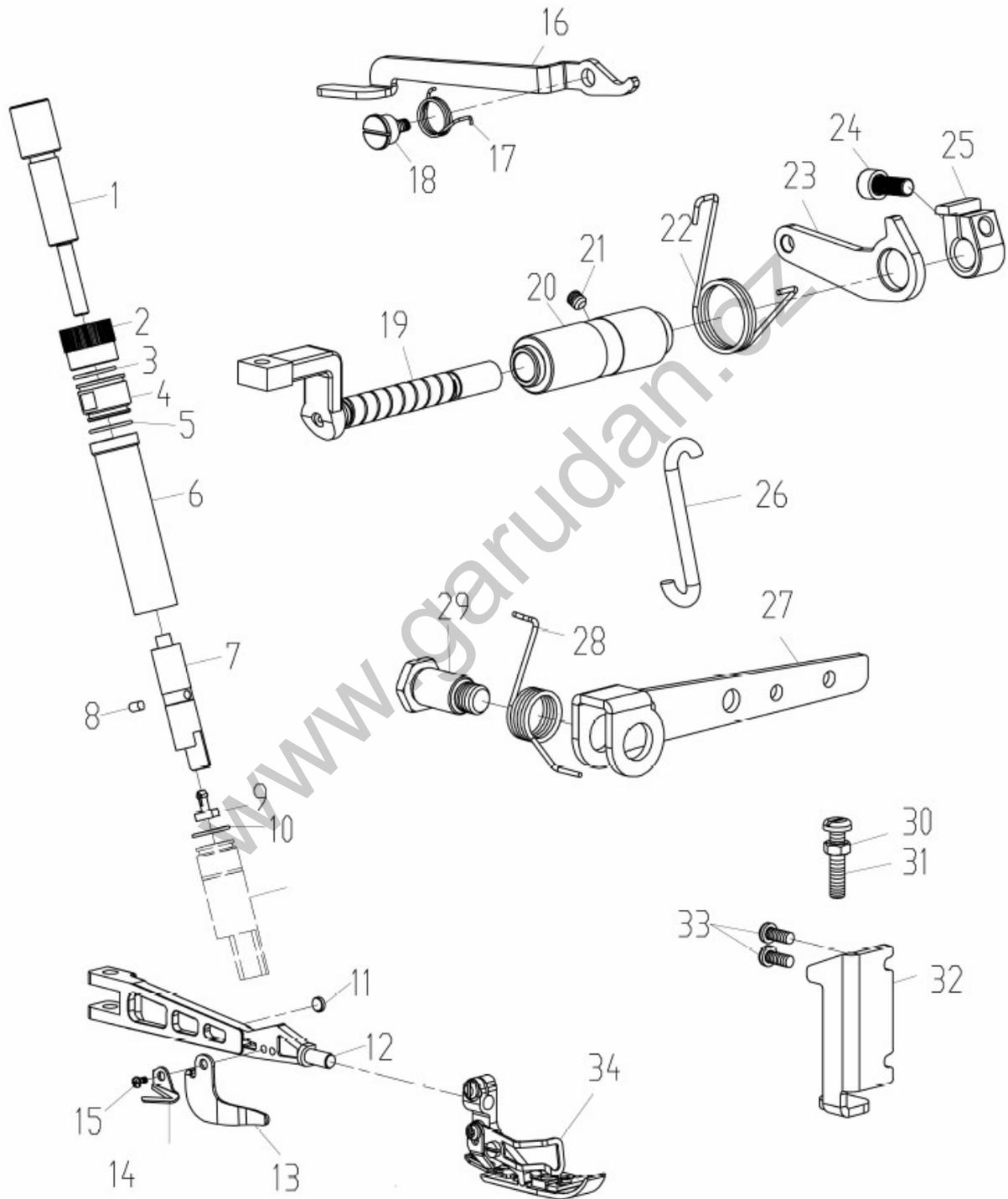
14. DIFFERENTIAL FEED ASSEMBLY 2					
Ref. No	Parts No.	Name of parts	Description	Qty	Note
1	10009194	Crank with rectangular shaft		1	
2	10009467	Nut		1	
3	10009192	Washer		1	
4	10009193	Pin with thread for feeding connecting rod		1	
5	10009164	Screw		1	
6	10009137	Eccentric shaft		1	
7	10009135	O ring		1	
8	10009136	Spring		1	
9	10009117	Screw		1	
10	10009114	Rubber cushion		1	
11	10009166	Washer		1	
12	10009074	Screw		1	
13	10009140	Stand of differential feed dog		1	
14	10009134	Sliding block		1	
15	10009141	Stand of feed dog		1	
16	10023486	Feeding connecting rod		1	
17	10023487	Bush connecting rod		1	
18	10009192	Washer		1	
19	10009142	Screw		1	
20		Body of main feed dog		1	
21	10009586	Screw		2	
22		Differential feed dog		1	
23	10009133	Sliding block for feed dog lifting		1	
24	10036169	Guiding plate of feed dog stand		1	
25	10009102	Screw		4	
26	10009161	Outer oil seal stand		1	
27	10002975	Screw		4	
28	10009081	Oil seal		2	
29	10037823	Oil seal		2	

### 15. KNIFE DRIVE ASSEMBLY



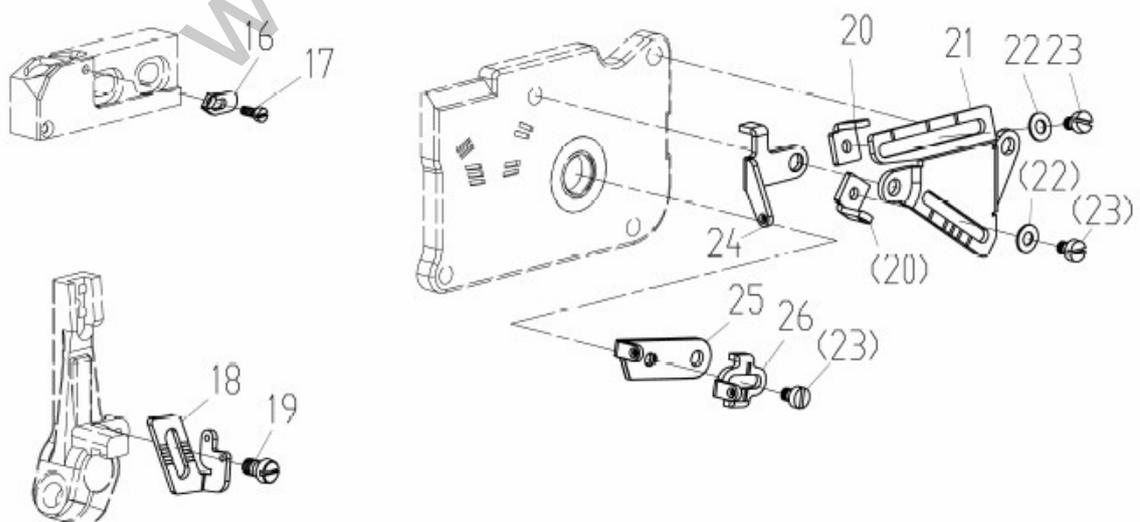
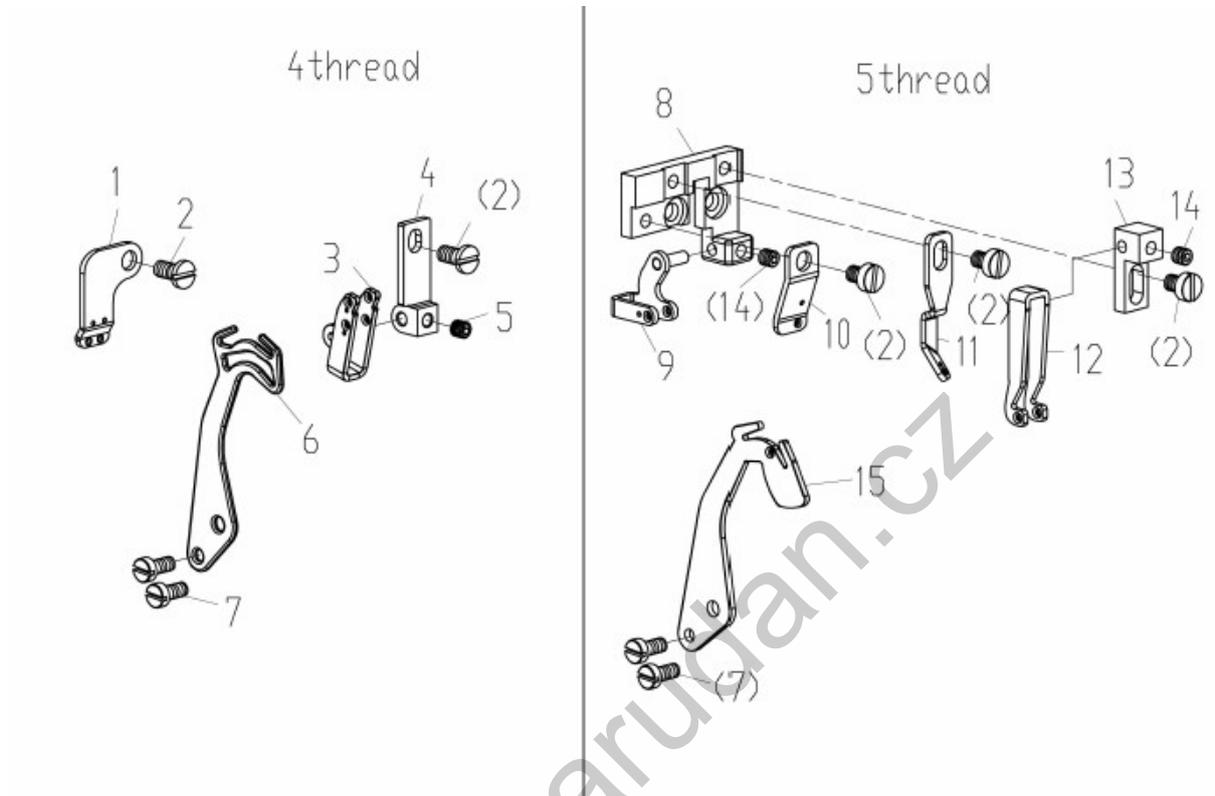
15. KNIFE DRIVE ASSEMBLY					
Ref. No	Parts No.	Name of parts	Description	Qty	Note
1	10037470	Shaft of upper knife drive		1	
2	10009070	Fastening pin for upper knife holder		1	
3	10009078	Retaining ring		2	
4	10011177	Screw		2	
5	10009434	Crank of upper knife drive		1	
6	10009164	Screw		1	
7	10002942	Connecting bar of upper knife drive		1	
8	10009432	Pin for connecting bar		1	
9	10009109	Screw		1	
10	10002939	Screw		2	
11	10009068	Upper knife holder		1	
12	10009037	Screw		1	
13		Upper knife		1	
14	10009115	Screw		1	
15	10009075	Screw		1	
16	10058572	Fender of spring		1	
17	10014399	Spring		1	
18	10009045	Lower knife holder		1	
19		Lower knife		1	
20	10009043	Press plate for lower knife		1	
21	10055368	Screw		1	
22	10009656	Upper knife holder		1	
24	10009301	Lower knife holder		1	

### 16. PRESSER FOOT ASSEMBLY



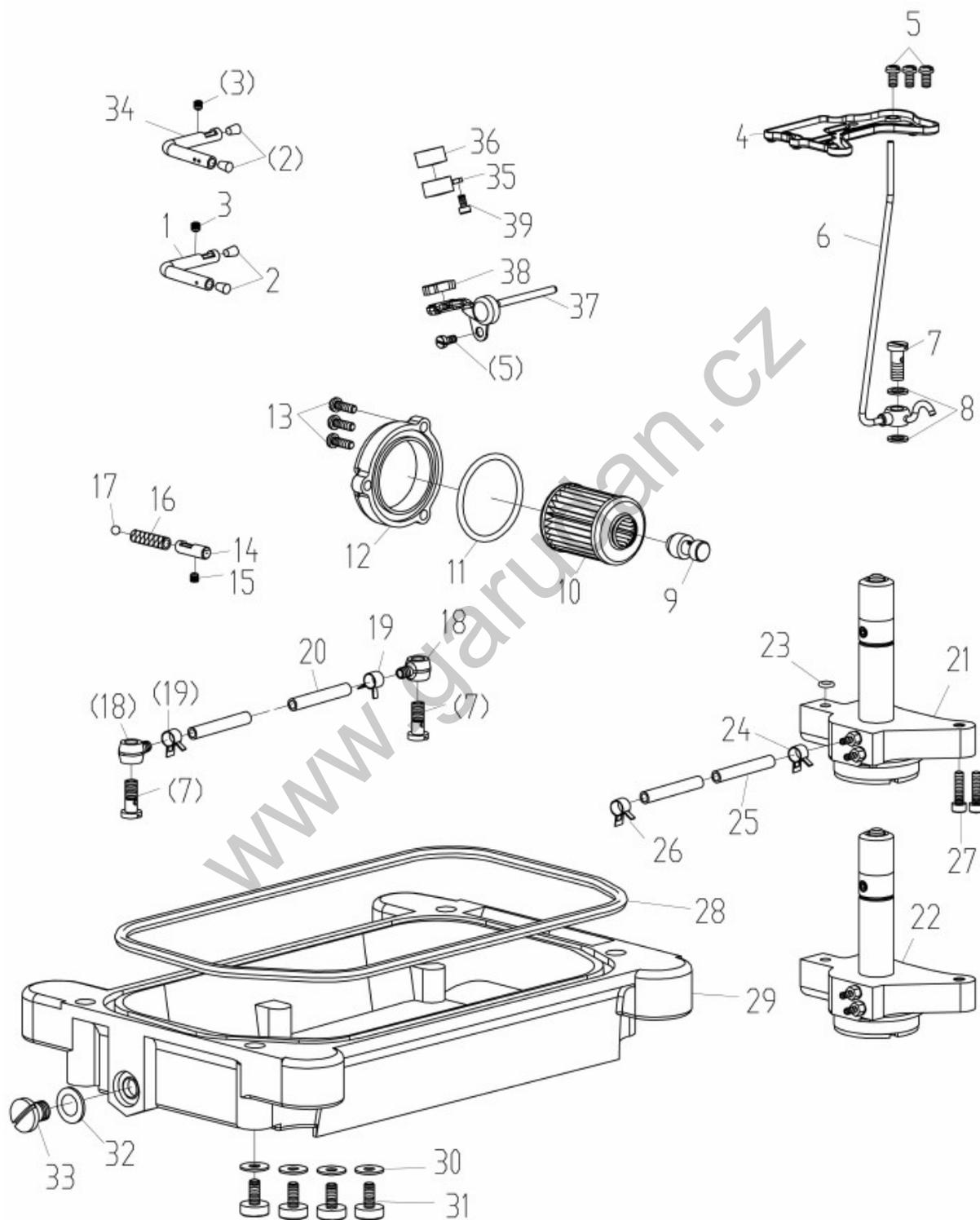
16. PRESSER FOOT ASSEMBLY					
Ref. No	Parts No.	Name of parts	Description	Qty	Note
1	10058290	Screw for adjusting pressure of presser foot		1	
2	10057465	Nut for adjusting pressure of presser foot		1	
3	10057462	O ring		1	
4	10057460	Press pin threaded sleeve		1	
5	10057464	O ring		1	
6	10057461	Press pin plastic cover		1	
7	10057455	Bar of presser foot		1	
8	10002776	Pin		1	
9	10009454	Plastic mat		1	
10	10057463	O ring		1	
11	10061365	Foot safety switch magnet		1	
12	10058563	Arm of presser foot lifting		1	
13	10037480	Guard plate of cutter		1	
14	10011912	Secant knife		1	
15	10009529	Screw		1	
16	10057457	Hand lifter of presser foot		1	
17	10059942	Spring		1	
18	10057459	Screw		1	
19	10009032	Shaft of presser foot		1	
20	10061300	Bush of presser foot lifting		1	
21	10023463	Screw		1	
22	10012101	Spring		1	
23	10033721	Connecting bar for presser foot lifting		1	
24	10009616	Screw		1	
25	10034616	Crank for presser foot lifting		1	
26	10009622	Pulling lever for presser foot		1	
27	10009158	Lever for the presser foot		1	
28	10009036	Spring for lever		1	
29	10036965	Screw		1	
30	10009623	Screw		1	
31	10009467	Nut		1	
32	10009159	Brake plate		1	
33	10009104	Screw		2	
34		Presser foot components		1	

### 17. THREAD TAKE-UP AND THREADING FRAME



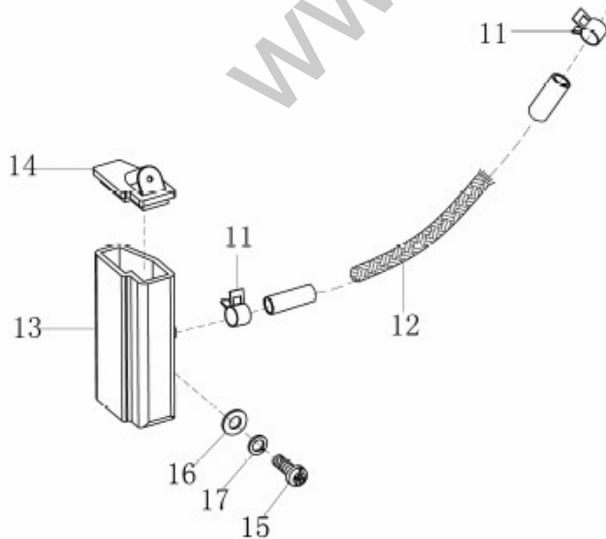
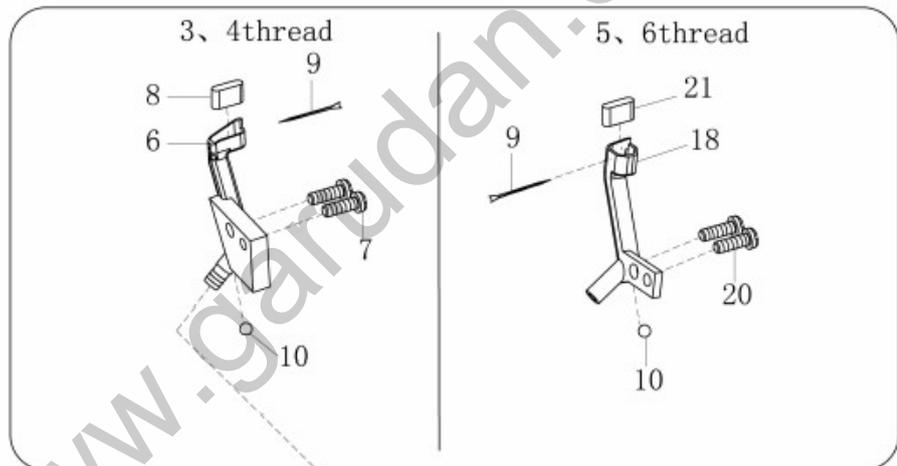
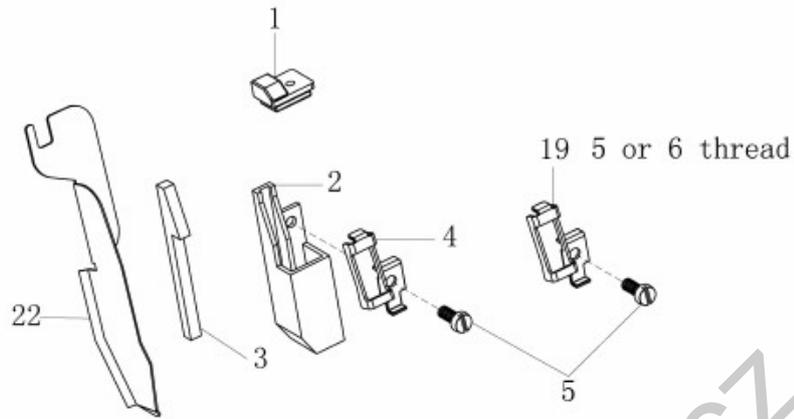
17. THREAD TAKE-UP AND THREADING FRAME					
Ref. No	Parts No.	Name of parts	Description	Qty	Note
1	10009014	Thread guide plate on the needle bar		1	
2	10010596	Screw		2	
3	10009058	Thread tension plate		1	
4	10009015	Fixing stand for thread take-up clamp		1	
5	10023463	Screw		1	
6	10009072	Thread take-up stand		1	
7	10009600	Screw		2	
8	10009639	Fixing plate		1	
9	10009663	Lower thread tension plate		1	
10	10009280	Thread guide plate of left		1	
11	10003252	Thread guide plate of right		1	
12	10002756	Upper thread tension plate		1	
13	10057518	Fixing stand for thread take-up clamp		1	
14	10009074	Screw		2	
15	10009640	Thread take-up stand		1	
16	10009369	Small thread guide plate of upper looper		1	
17	10009353	Screw		1	
18	10009018	Thread guide plate for lower looper		1	
19	10009363	Screw		1	
20	10009013	Thread guide plate of looper		2	
21	10009154	Stand of lower thread guide plate		1	
22	10009599	Washer		2	
23	10009529	Screw		3	
24	10009153	Thread guide plate of upper looper		1	
25	10009147	Inner thread guide plate		1	
26	10009012	Outer thread guide plate		1	

### 18. LUBRICATION ASSEMBLY



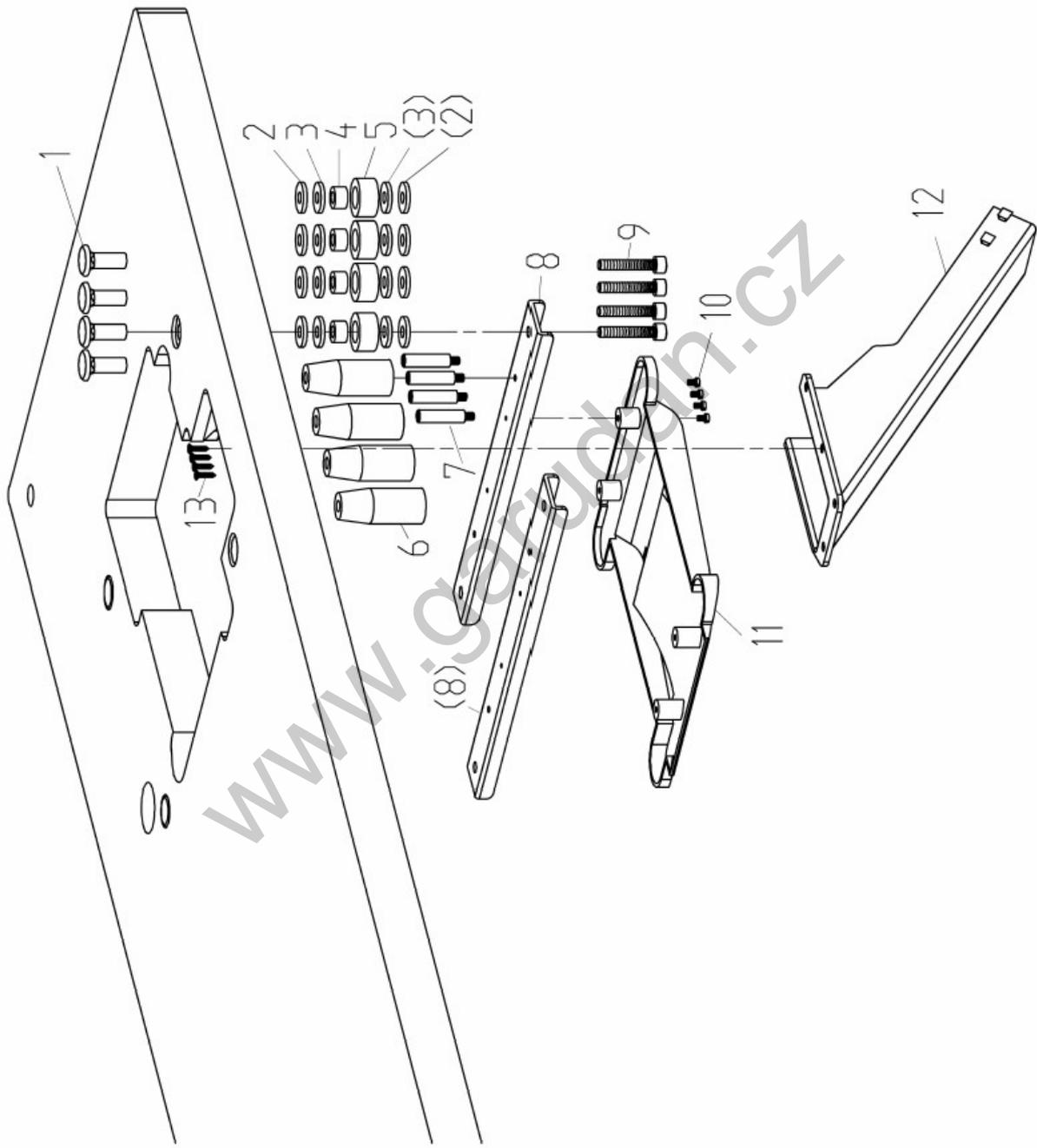
18. LUBRICATION ASSEMBLY					
Ref. No	Parts No.	Name of parts	Description	Qty	Note
1	10008992	Oil pin for needle bar		1	
2	10009039	Rubber plug		1	
3	10023463	Screw		1	
4	10058564	Oil distributing plate		1	
5	10010595	Screw		4	
6	10058565	Tubing assembly		1	
7	10012086	Washer		2	
8	10009592	Joint part		3	
9	10026644	Joint part		1	
10	10043169	Oil filter		1	
11	10026756	O ring		1	
12	20008187	Oil filter cover		1	
13	10009037	Screw		3	
14	10012322	Pin for oiling		1	
15	10009074	Screw		1	
16	10008090	Oil wick		1	
17	10009826	Steel ball		1	
18	10009588	Joint part		2	
19	10011471	Fastening ring		2	
20	10007796	Hose		2	
21	10026648	Assembly of oil pump		1	
22	10059706	Assembly of oil pump		1	
23	10003826	O ring		1	
24	10009469	Fastening ring		1	
25	10007800	Hose		2	
26	10012160	Spring		1	
27	10009103	Screw		2	
28	10052381	Washer for oil tray		1	
29	10052380	Oil tray		1	
30	10009447	Washer		4	
31	10009095	Screw		4	
32	10009263	Washer assembly		1	
33	10009264	Screw		1	
34	10059411	Oil pin for needle bar		1	
35	10055910	Oil return bush of needle bar stand		1	
36	10055889	Felt		1	
37	10009122	Oil return bush of needle bar stand		1	
38	10008991	Felt		1	
39	10002975	Screw		1	

### 19. HR DEVICE



19. HR DEVICE					
Ref. No	Parts No.	Name of parts	Description	Qty	Note
1	10008925	Box cover		1	
2	10009094	Upper silicon oil box		1	
3	10008924	Felt		1	
4	10008923	Presser plate for felt		1	
5	10009104	Screw		1	
6	10008931	Silicon oil box		1	
7	10009037	Screw		2	
8	10008922	Felt		1	
9	10003344	Pin		1	
10	10009826	Steel ball		1	
11	10011471	Fastening ring		2	
12	10008072	Oil wick		1	
13	10008971	Lower silicon oil box		1	
14	10008883	Box cover		1	
15	10002934	Screw		1	
16	10003133	Washer		1	
17	10009503	Washer		1	
18	10009661	Silicon oil box		1	
19	10023474	Presser plate for felt		1	
20	10009042	Screw		2	
21	10009659	Felt		1	
22	10008884	Seal plate		1	

## 20. OIL TANK BRACKET



20. OIL TANK BRACKET					
Ref. No	Parts No.	Name of parts	Description	Qty	Note
1	10009596	Bush with inner thread		4	
2	10059968	Plastic mattress		8	
3	10009272	Washer		8	
4	10059967	Rubber cushion steel ring		4	
5	10059966	Rubber blanket		4	
6	10059964	Pallet rubber mat		4	
7	10059965	Brace		4	
8	10059963	The tray support		2	
9	10003106	Screw		4	
10	10002924	Screw		4	
11	10059962	Tray		1	
12	10054990	The manger		1	
13	10004981	Screw		4	