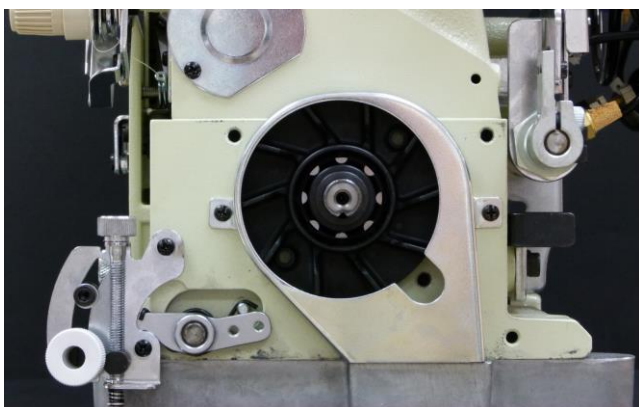
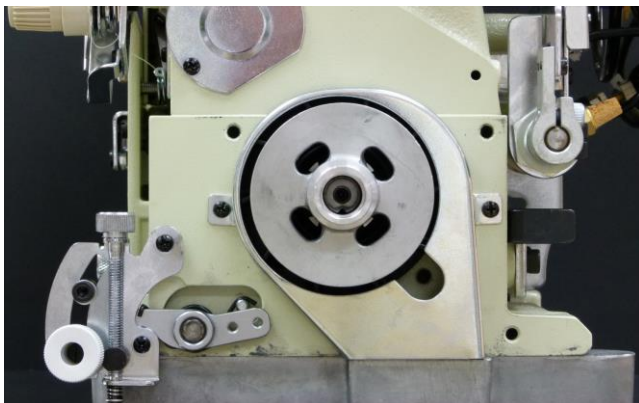


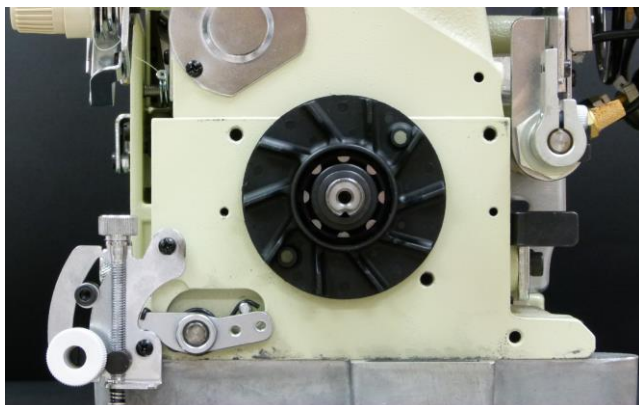
Efka motor DC1230 at sewing machine Yamato VC, VE, VF, VG (Efka set 1114102) or  
Efka motor DC1230 at sewing machine Yamato VG only (Efka set 1114143)

## 1 Remove not required parts from sewing machine

### 1.1 Remove pulley



### 1.2 Remove air channel

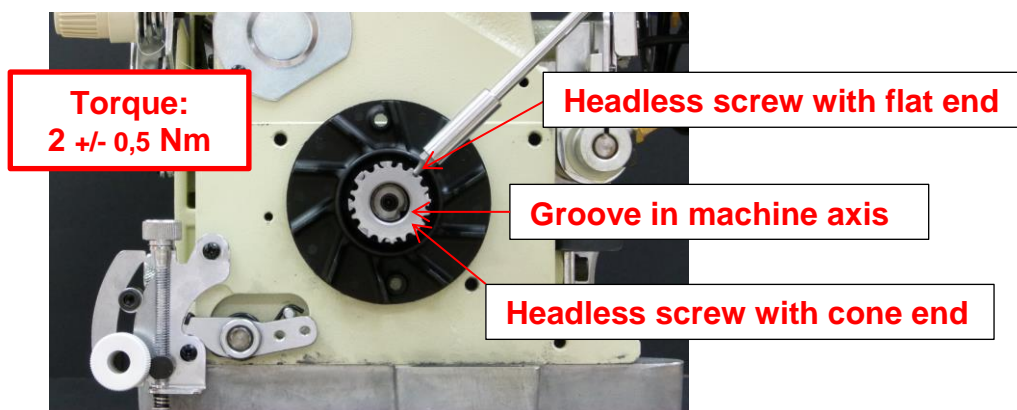


Efka motor DC1230 at sewing machine Yamato VC, VE, VF, VG (Efka set 1114102) or  
Efka motor DC1230 at sewing machine Yamato VG only (Efka set 1114143)

## 2 Mount toothed belt disc

### 2.1 Add toothed belt disc (Efka 1114096) and adjust it with 2 headless screws.

The machine axis has a groove. Insert first the headless “cone” screw into the groove. Push toothed disc up to the fan wheel and fasten both headless screws.



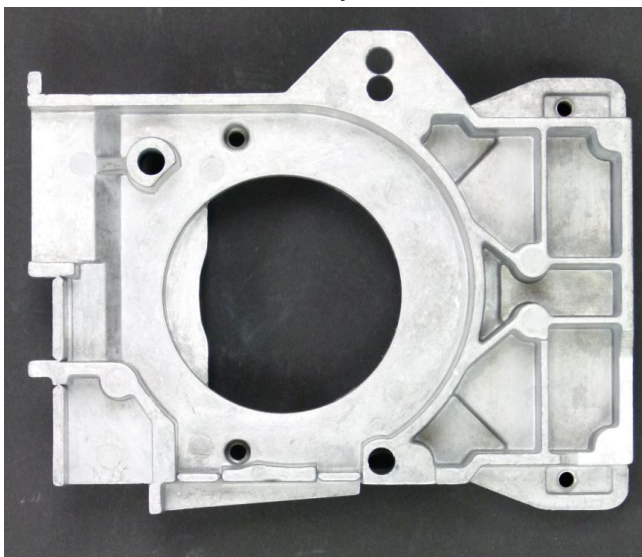
Efka motor DC1230 at sewing machine Yamato VC, VE, VF, VG (Efka set 1114102) or  
Efka motor DC1230 at sewing machine Yamato VG only (Efka set 1114143)

### 3 Mount adapter

- 3.1 Check type of sewing machine and prepare the adapter (Efka 1815) for your machine type.

**Machine type VC:**

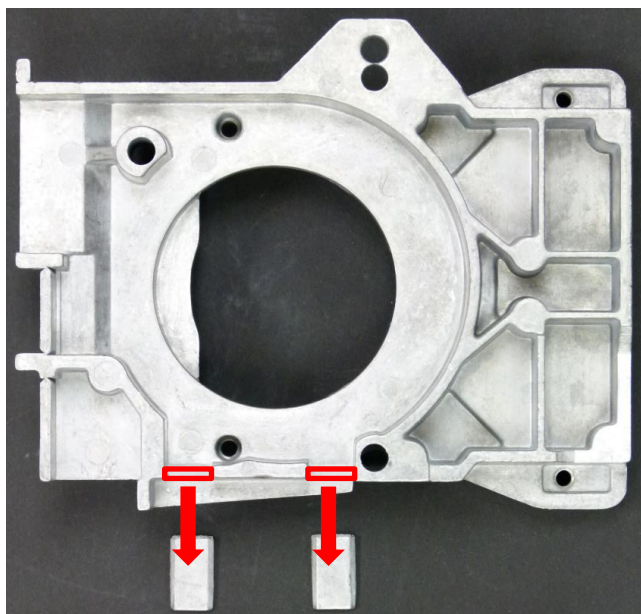
no modification necessary



**Machine type VE:**

Sewing machine VE has an additional belt drive. To fulfill this function, you have to break out 2 pieces from the adapter with a pliers. The two pieces are spotted in the following picture.

Efka motor DC1230 at sewing machine Yamato VC, VE, VF, VG (Efka set 1114102) or  
Efka motor DC1230 at sewing machine Yamato VG only (Efka set 1114143)



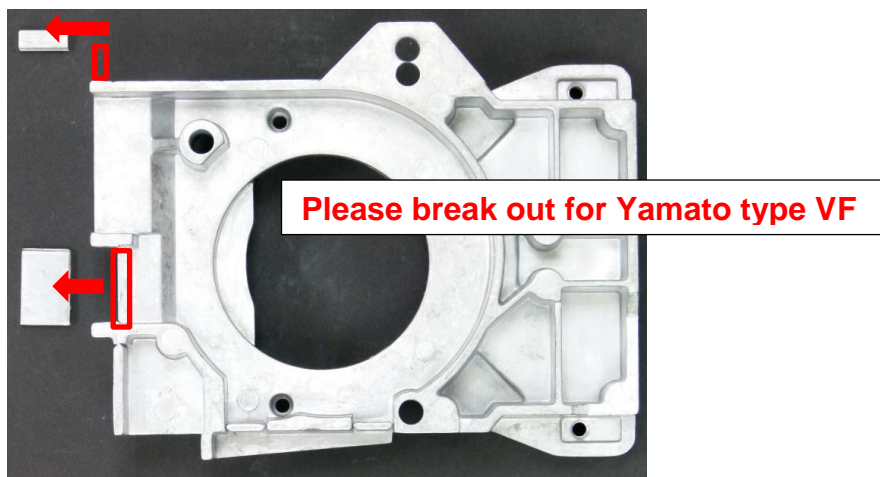
**Please break out for Yamato type VE**



Efka motor DC1230 at sewing machine Yamato VC, VE, VF, VG (Efka set 1114102) or  
Efka motor DC1230 at sewing machine Yamato VG only (Efka set 1114143)

## **Machine type VF:**

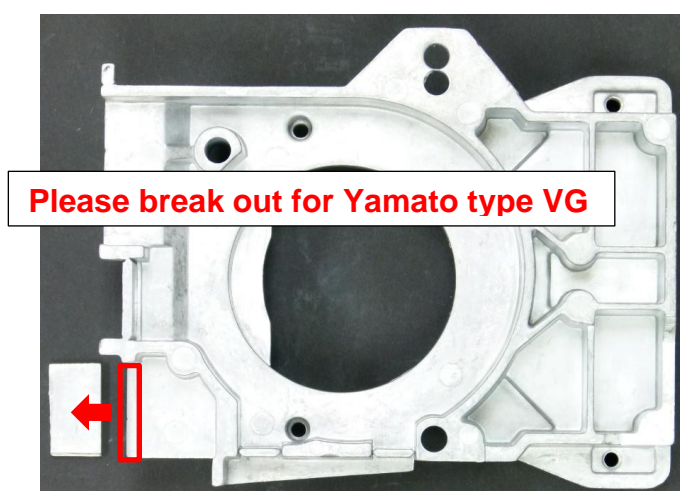
Sewing machine VF has a big air channel. To blow out more air and to get adaption on the air channel, two pieces on the adapter have to be removed. Please break out the two spotted pieces with a pliers.



## **Machine type VG:**

Sewing machine VG has a lever. To fix the adapter on the machine, you have to break out the spotted piece with a pliers.

**Alternativ head mounting bracked set 1114143 is fully prepared for VG and usable without any modification on the adapter.**

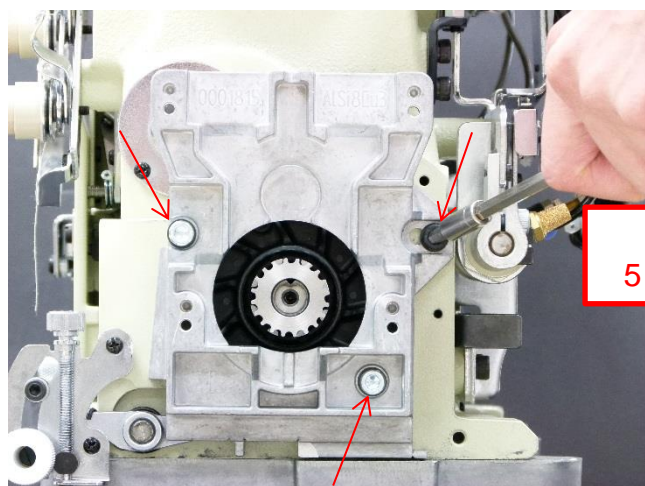
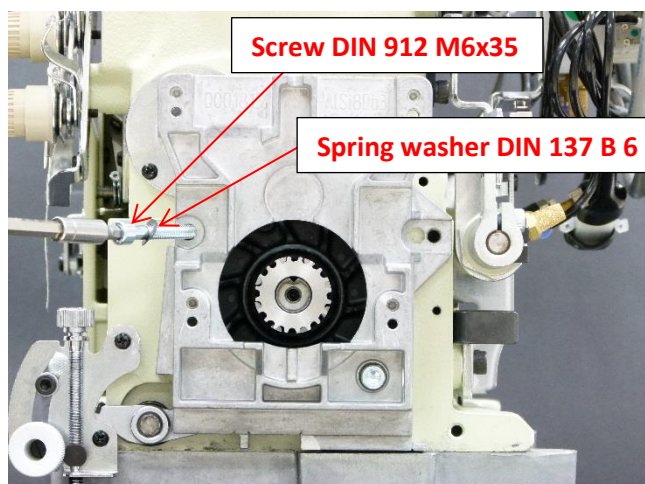




Efka motor DC1230 at sewing machine Yamato VC, VE, VF, VG (Efka set 1114102) or  
Efka motor DC1230 at sewing machine Yamato VG only (Efka set 1114143)

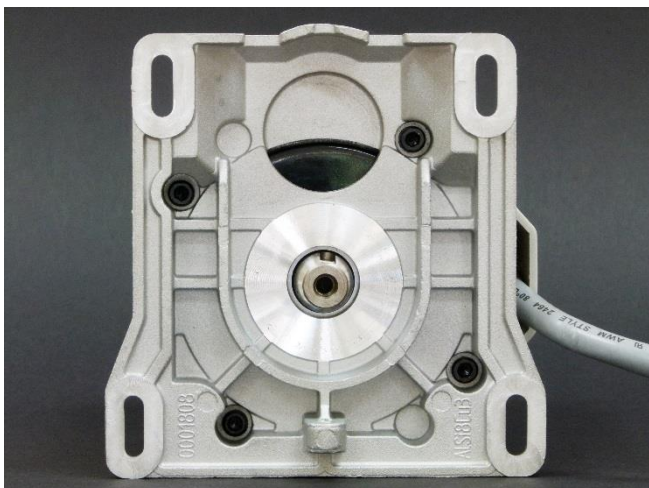
## 3.2 Fix adapter with 3 screws on the sewing machine

- 2 pc. Screw DIN 912 M6x35 (Efka 1304108)
- 1 pc. Screw DIN 912 M6x12 (Efka 1300894)
- 3 pc. Spring washer DIN 137 B6 (Efka 1300249)



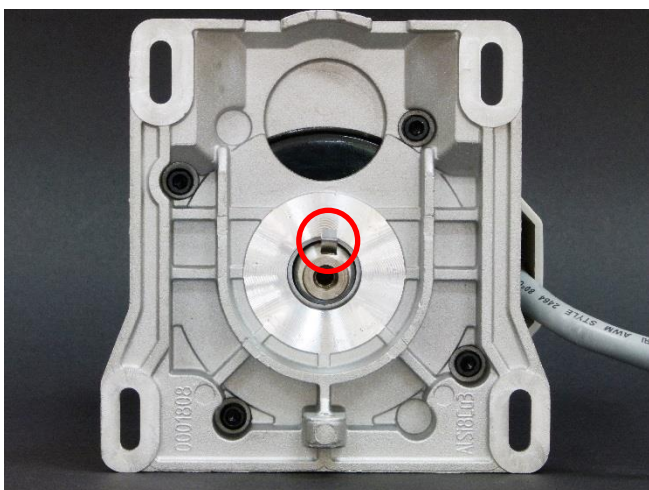
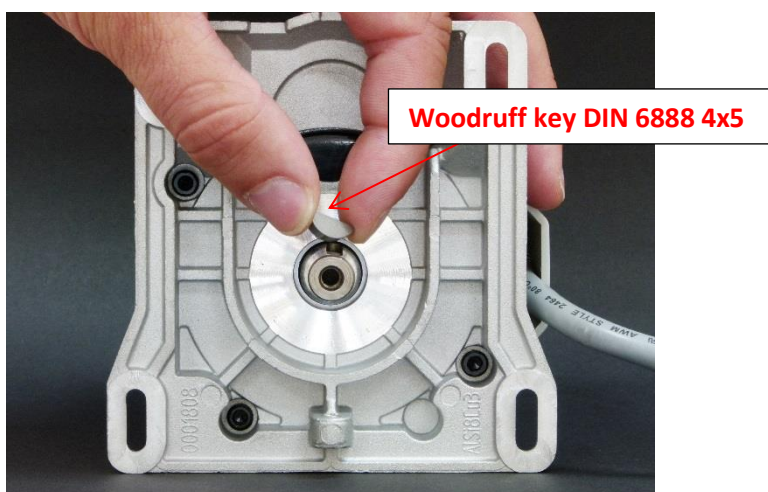
Efka motor DC1230 at sewing machine Yamato VC, VE, VF, VG (Efka set 1114102) or  
Efka motor DC1230 at sewing machine Yamato VG only (Efka set 1114143)

## 4 Mount toothed belt wheel on motor



### 4.1 Put woodruff key into the woodruff key slot

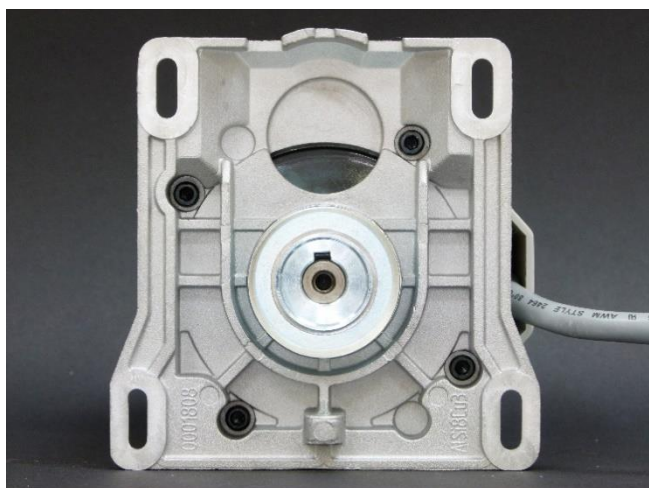
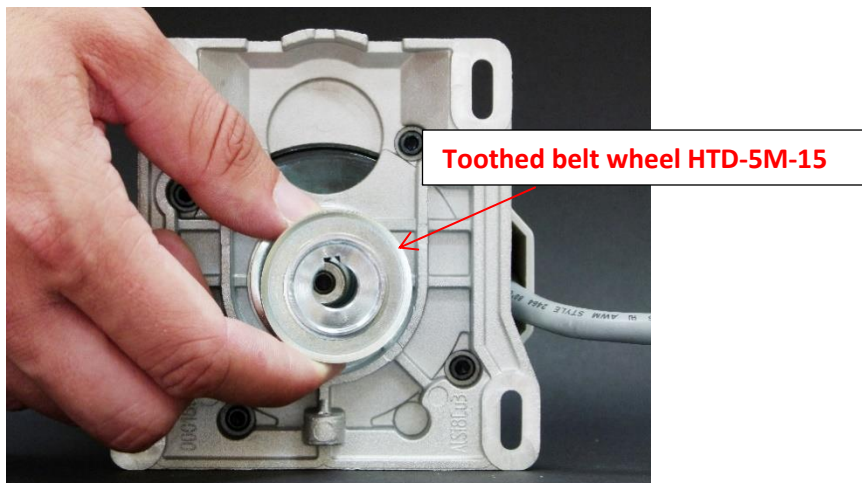
- 1 pc. Woodruff key DIN 6888 (Efka 1300294)



Efka motor DC1230 at sewing machine Yamato VC, VE, VF, VG (Efka set 1114102) or  
Efka motor DC1230 at sewing machine Yamato VG only (Efka set 1114143)

#### 4.2 Push the toothed belt wheel on the motor shaft

- 1 pc. Toothed belt wheel HTD-5M-15, 20 teeth (Efka 0301009)

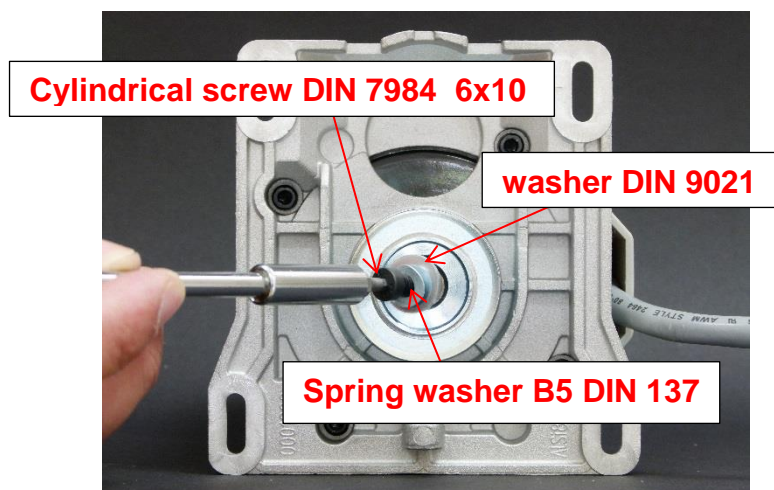




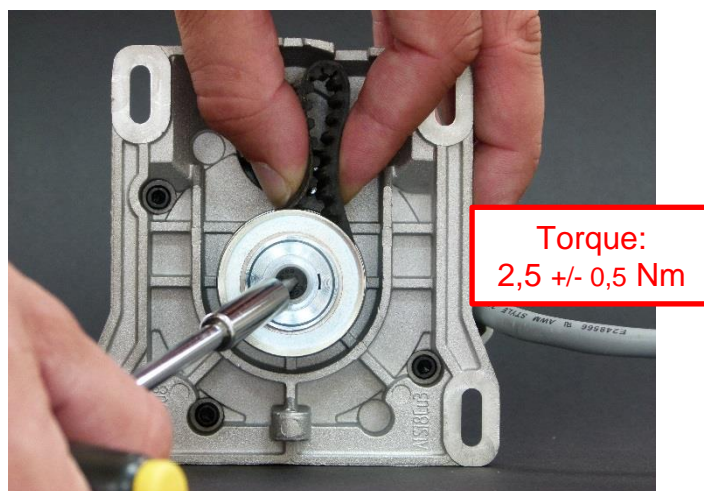
Efka motor DC1230 at sewing machine Yamato VC, VE, VF, VG (Efka set 1114102) or  
Efka motor DC1230 at sewing machine Yamato VG only (Efka set 1114143)

## 4.3 Fix toothed belt wheel on driver shaft

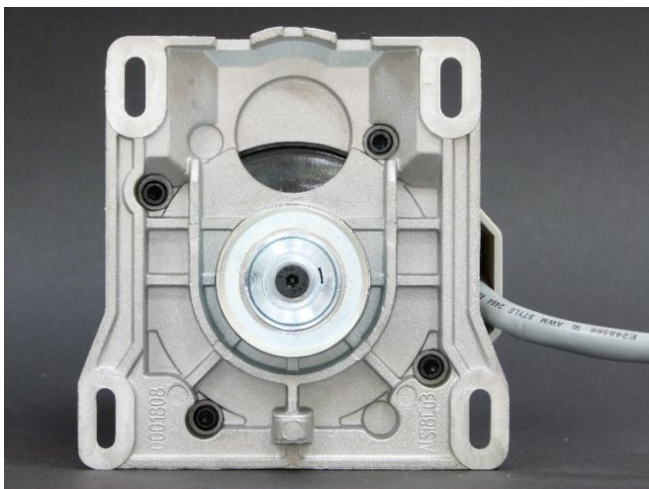
- 1 pc. Washer A5 3x15x1,2 DIN 9021 (Efka 1304141)
- 1 pc. Cylindrical screw DIN 7984 M6x10 (Efka 1304139)
- 1 pc. Spring washer B5 DIN 137 (Efka 1300248)



## 4.4 Use toothed belt to fix the toothed belt wheel for tighten the cylindrical screw



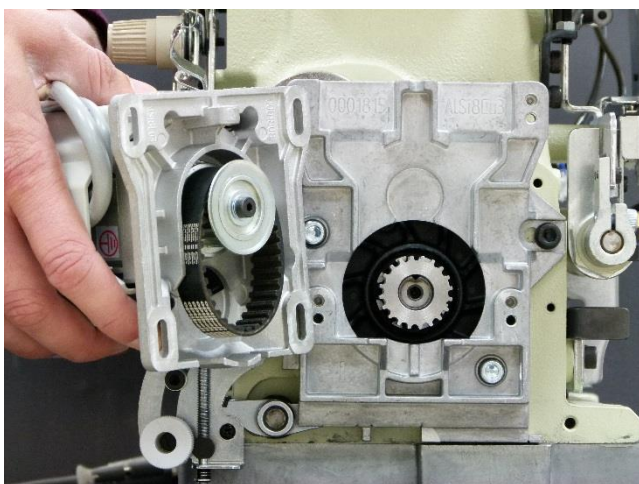
Efka motor DC1230 at sewing machine Yamato VC, VE, VF, VG (Efka set 1114102) or  
Efka motor DC1230 at sewing machine Yamato VG only (Efka set 1114143)



## 5 Mount motor on adapter

5.1 To fix the motor on the adapter, the motor has to be pre-assembled

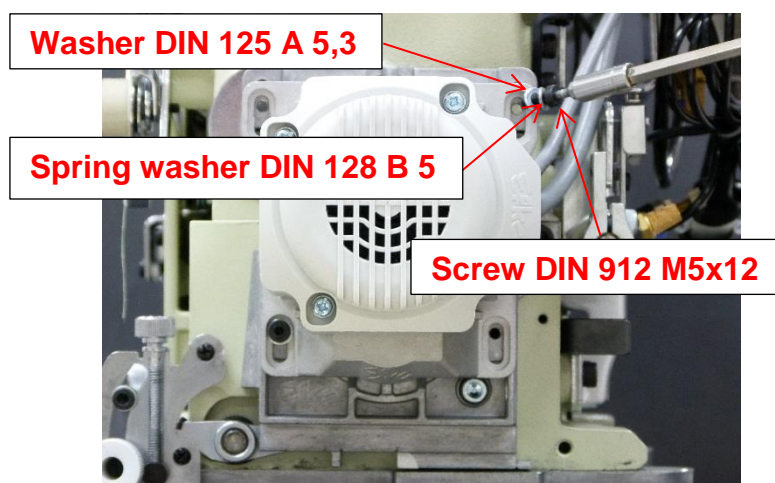
- Toothed belt disc (Efka 0301009) is mounted on motor shaft
- Toothed belt (Efka 0901007) lays in the space, that is designed for the belt



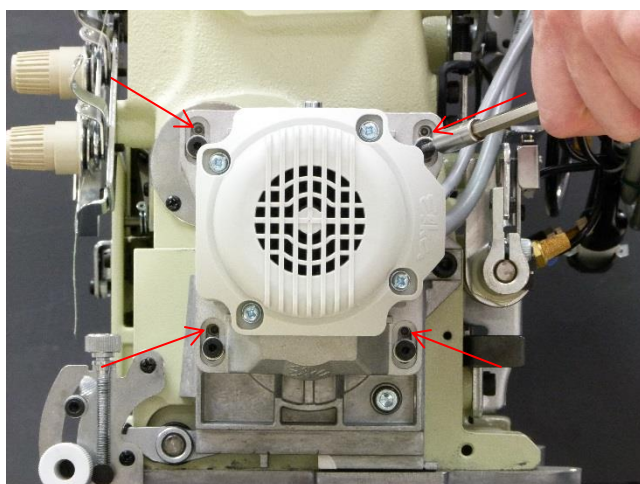
Efka motor DC1230 at sewing machine Yamato VC, VE, VF, VG (Efka set 1114102) or  
Efka motor DC1230 at sewing machine Yamato VG only (Efka set 1114143)

## 5.2 Mount motor with 4 screws at the adapter

- 4 pc. Screw DIN 7984 M5x12 (Efka 1300699)
- 4 pc. Washer DIN 125 A 5,3 (Efka 1304133)
- 4 pc. Spring washer DIN 128 B 5 (Efka 1304136)



**Do not fasten the screws!** Motor has to move inside the oblong holes.



Efka motor DC1230 at sewing machine Yamato VC, VE, VF, VG (Efka set 1114102) or  
Efka motor DC1230 at sewing machine Yamato VG only (Efka set 1114143)

### 5.3 Insert the screw, that is used to stretch the belt

- 1 pc. Screw DIN 7984 M5x20 (Efka 1301077)
- 1 pc. Spring washer DIN 137 B5 (Efka 1300248)

**Spring washer DIN 137 B5**

**Screw DIN 912 M5x20**





Efka motor DC1230 at sewing machine Yamato VC, VE, VF, VG (Efka set 1114102) or  
Efka motor DC1230 at sewing machine Yamato VG only (Efka set 1114143)

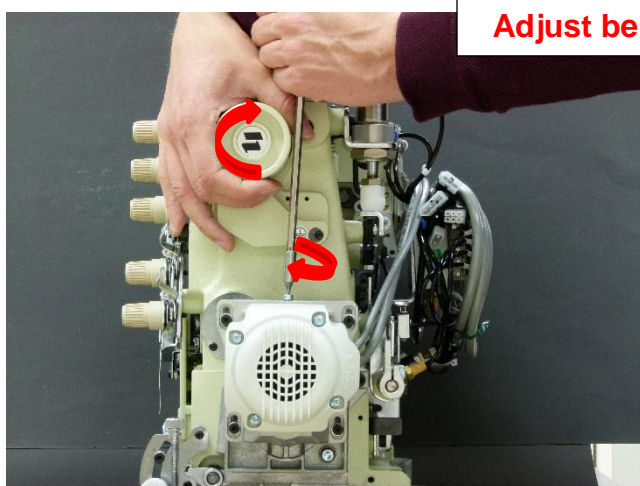
## 5.4 Adjust the motor

Turn handwheel and fasten the screw to stretch the belt.

If the strengt is too strong, while turning the handwheel, you can feel small interruptions. These interruption come from the theeth on wheel and belt.

Reduce the strength from this point just as much, that the belt turns without noticeable interruptions or additional force.

Let the motor turn electrically with the control box about 3000-4000 rpm. Listen to the noise of the motor and the belt. Find the point, where the noise grows up and stop the adjustment just before the noise increases. Target is, not to generate any additional noise from the toothed belt drive.



**Adjust belt strength**

## 5.5 Fix the adjusted motor with all 4 screws on the adaper.

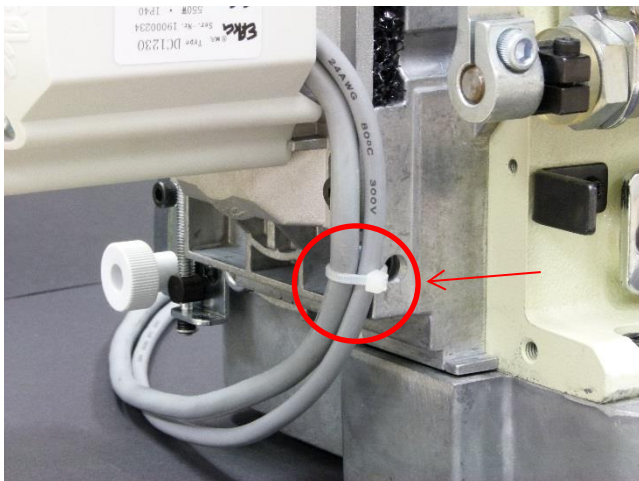


**Torque:**  
**2,5 +/- 0,5 Nm**

Efka motor DC1230 at sewing machine Yamato VC, VE, VF, VG (Efka set 1114102) or  
Efka motor DC1230 at sewing machine Yamato VG only (Efka set 1114143)

## 6 Fix cable with cable tie

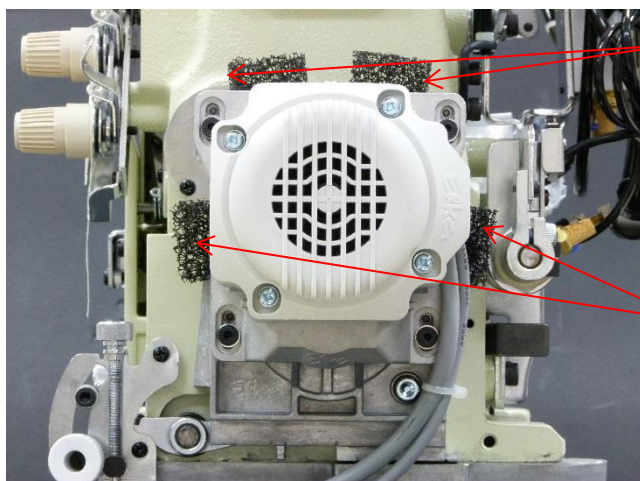
Fix the cable with a cable tie on adapter and cut off the excess.



Efka motor DC1230 at sewing machine Yamato VC, VE, VF, VG (Efka set 1114102) or  
Efka motor DC1230 at sewing machine Yamato VG only (Efka set 1114143)

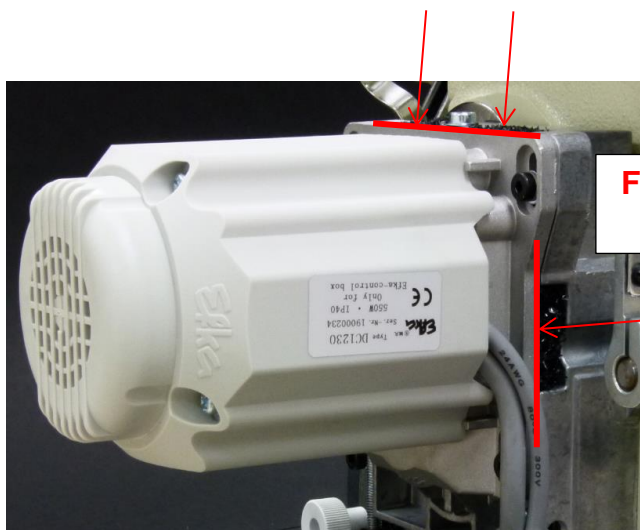
## 7 Insert air filter pad

### 7.1 Insert in every opening a filter pad 32x23x12mm (EFKA 0207272)



**Filter pad 32 x 23 x 12 mm**

**Openings for ventilation**



**Filter pads are plane with aluminium surface from motor.**

Efka motor DC1230 at sewing machine Yamato VC, VE, VF, VG (Efka set 1114102) or  
Efka motor DC1230 at sewing machine Yamato VG only (Efka set 1114143)

