



867  
867-M  
867-M PREMIUM

## Additional Instructions

Reflected light barrier

**IMPORTANT**  
**READ CAREFULLY BEFORE USE**  
**KEEP FOR FUTURE REFERENCE**

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## 1 General information

These additional instructions describe how to assemble and set up the reflected light barrier.

### 1.1 Components of the kit 0867 590074

This kit is intended for machines of the classes 867 and 867-M.

Check whether the scope of delivery for kit 0867 590074 is correct prior to assembly.

Part number	Quantity	Description
0667 105164	1	Head cover
0867 490030	1	Holder
1001 009243	4	Washer (4.3x10x2.5)
9330 000087	3	Washer (A4.3)
9204 201697	2	Pan-head screw (M4x16-H)
9815 920034	1	Light barrier
9204 201067	2	Pan-head screw (M3x10-H)
9840 120025	1	Mounting clip
9330 000087	1	Washer (A4.3)
9204 201657	1	Pan-head screw (M4x8-H)
9840 121001	2	Cable tie
9815 920024	2	Reflecting foil (7x280 mm)
0791 867710 EN	1	Additional Instructions

### 1.2 Components of the kit 0867 590294

This kit is intended for machines of the 867-M PREMIUM class.

Check whether the scope of delivery for kit 0867 590294 is correct prior to assembly.

Part number	Quantity	Description
0867 490030	1	Holder
0867 493600	1	Holder • to be used depending on head cover
1001 009243	4	Washer (4.3x10x2.5)
9330 000087	3	Washer (A4.3)
9204 201677	2	Pan-head screw (M4x10-H)

Part number	Quantity	Description
9204 201067	2	Pan-head screw (M3x10-H)
9815 920034	1	Light barrier
0798 120401	1	Cable clip
9840 121001	3	Cable tie
9815 920024	2	Reflecting foil (7x280 mm)
0791 867710 EN	1	Additional Instructions

## 2 Assembling the reflected light barrier

### WARNING



#### Risk of injury!

Crushing or electric shock possible.

Switch off the machine before assembling the kit.

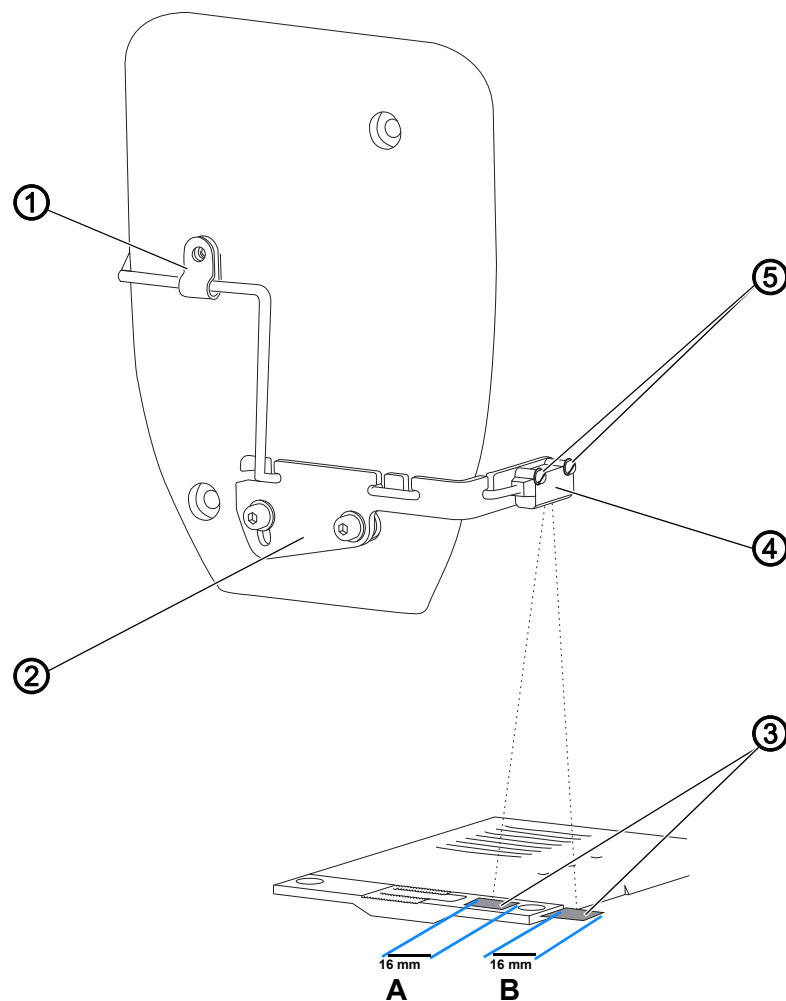


To assemble the reflected light barrier:

Classes 867 and 867-M require that you replace the head cover. This is not necessary for class 867-M PREMIUM.

1. Remove the head cover.
2. Place the new head cover.

Fig. 1: Assembling the reflected light barrier (1)



- (1) - Mounting clip/cable clip  
 (2) - Holder  
 (3) - Reflecting foils

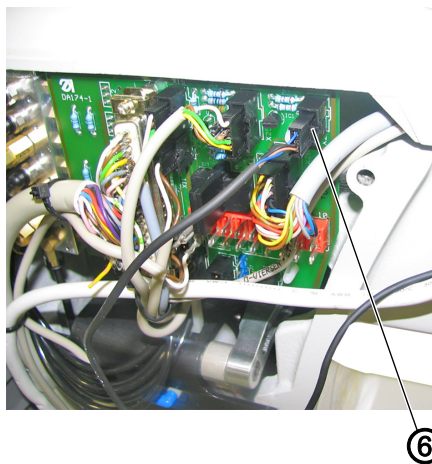
- (4) - Reflected light barrier  
 (5) - Screws



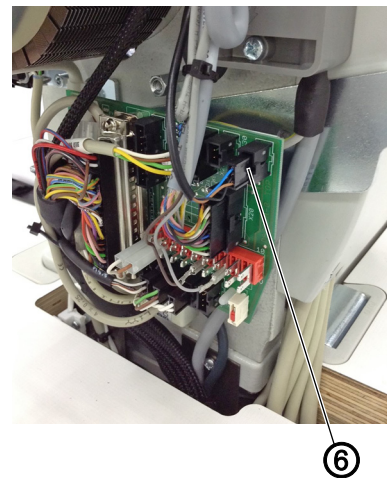
3. Tighten the reflected light barrier (4) to the holder (2) using screws (5).
4. Insert the connecting cable into the strain relief mechanism of the holder.
5. Screw the holder (2) with the reflected light barrier (4) to the head cover.
6. Feed the connecting cable through the clip (1).
7. Assemble the clip (1) to the head cover.
  - **867/867-M**: Tighten the mounting clip (1) on the head cover.
  - **867-M PREMIUM**: Use adhesive tape to fix the cable clip (1) in place on the head cover.

Fig. 2: Assembling the reflected light barrier (2)

**867/867-M**



**867-M PREMIUM**



(6) - Plug



8. Connect the plug (6) to the circuit board of the machine head.
  - Connection: **X21**
9. Stick the reflecting foils (3) into position.
  - **A**: for stitch lengths  $\leq 5$  mm
  - **B**: for stitch lengths  $\geq 5$  mm



### 3 Aligning and setting the light barrier

The setting of the reflected light barrier varies with the distance of the reflected light barrier to the reflecting foil.

The alignment is made using a light spot that is visible on the reflecting foil.

#### Setting the parameters of the light barrier function

##### Class 867

Parameter	Function	Setting
009	Light barrier	ON
004	Equalizing stitch, long stitch	
010	Equalizing stitch, short stitch	




##### Class 867-M

Parameter	Function	Setting
o 16 00	Equalizing stitches for normal stitch length	
o 16 01	Equalizing stitches for long stitch length	
o 16 10	Number of light barrier seams	
o 16 20	Equalizing stitches for knitted garment filter	
t 16 00	Speed for light barrier equalizing stitches	
t 16 01	Light barrier mode	1 = Seam beginning detection; 2 = Seam end detection; 3 = Seam beginning & seam end detection
t 16 02	Mode for seam beginning	0 = Release via light barrier; 1 = Start via front pedal and light barrier
t 16 03	Knitted garment filter	0 = OFF 1 = ON
t 16 04	Light barrier scan	0 = Bright; 1 = Dark
t 16 05	Light barrier automatic mode (only if t 16 01 = 2 or 3)	0 = OFF 1 = ON

**Class 867-M PREMIUM**

Parameter	Menu item	Setting
Light barrier • Operator level		
	<i>Light barrier</i>	ON = on OFF = off
	<i>Start</i> , Signal detection at the beginning of the material	ON/OFF
	<i>End</i> Signal detection at the end of the material	ON/OFF
	<i>Distance</i> Distance from signal detection to end of material	Value range 0 – 255
	<i>Seams</i> Number of signal detections	Value range 1 – 255
	<i>Filter</i> , Filter stitches up to signal detection	Value range 0 – 255

Parameter	Menu item	Setting
Light barrier • Technician level		
	<i>On/Off</i>	Light barrier active/inactive
	<i>Speed</i>	The last stitches after the detection of the end of the material (approx. 50 mm) can be sewn at a defined speed. (Value range 0010 – 2000 [rpm])
	<i>Fr.pedal.start</i>	<i>Free</i> Pedal start
		<i>On</i> Pedal can be pressed and the machine sews as soon as the material breaks the light barrier
		<i>Off</i> Pedal is pressed but the machine does not start sewing; must be started from neutral position
	<i>Sense</i>	<i>Dark</i> The signal is given when the light barrier is broken
		<i>Bright</i> The signal is given when the light barrier is complete
	<i>Automatic</i>	<i>On</i> The pedal starts a program, which runs automatically
		<i>Off</i> The pedal starts a program; the user determines the speed through the end of the program.

For further information on how to set the light barrier parameters, refer to  *Operating Instructions 867-M PREMIUM*,  *Service Instructions 867-M PREMIUM* and  *Parameter List 867-M PREMIUM*











DÜRKOPP ADLER GmbH  
Potsdamer Str. 190  
33719 Bielefeld  
Germany  
Phone: +49 (0) 521 925 00  
Email: [service@duerkopp-adler.com](mailto:service@duerkopp-adler.com)  
[www.duerkopp-adler.com](http://www.duerkopp-adler.com)