

COLOREEL[®]

Installation Manual

502 601 Stitch Sensor General v1

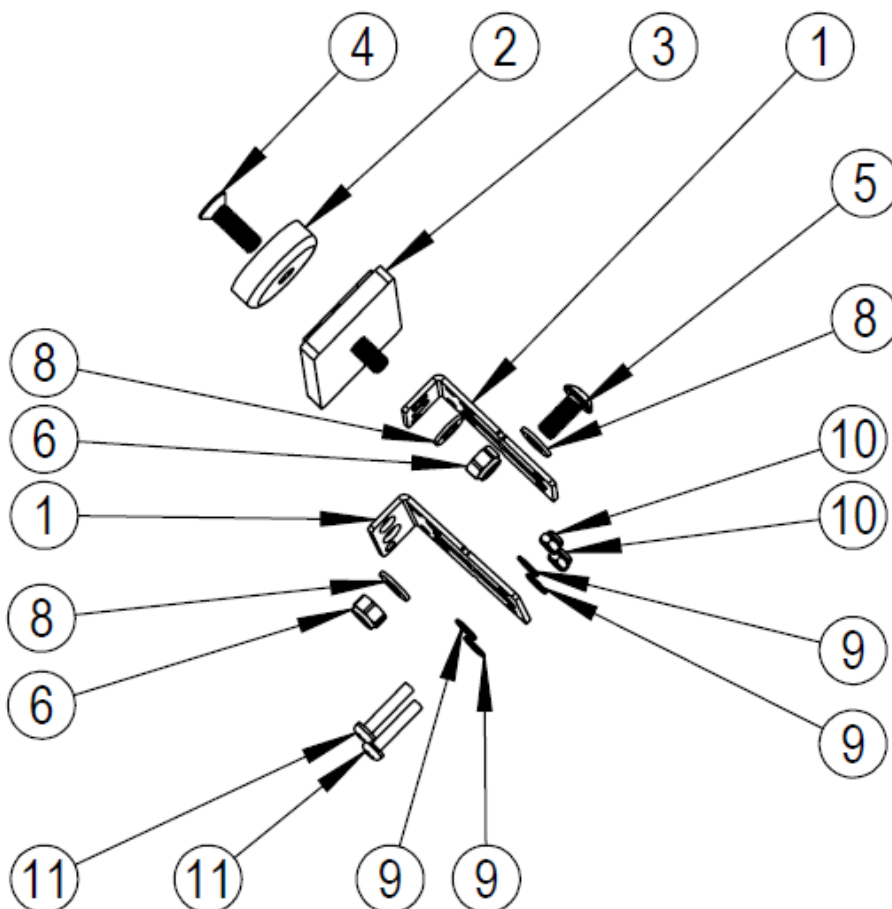
502 801 Stitch Sensor General v2

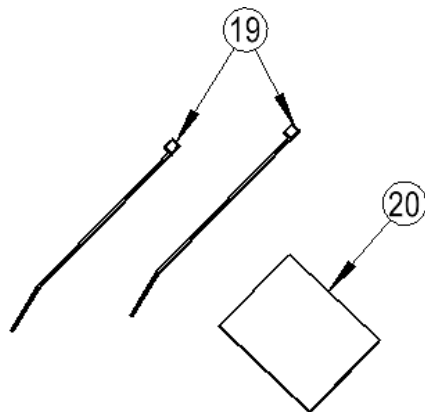
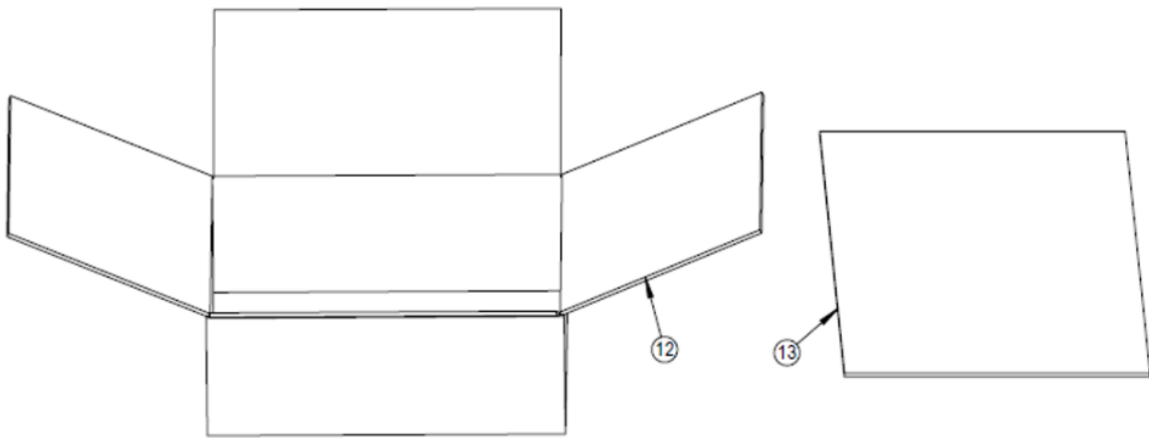
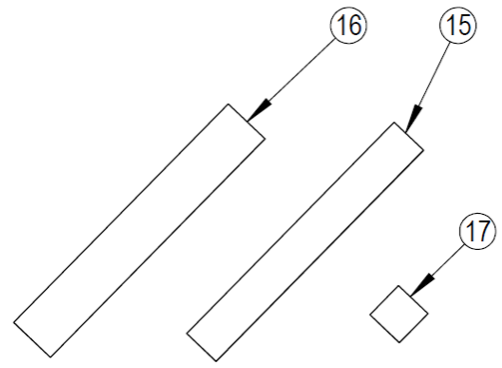
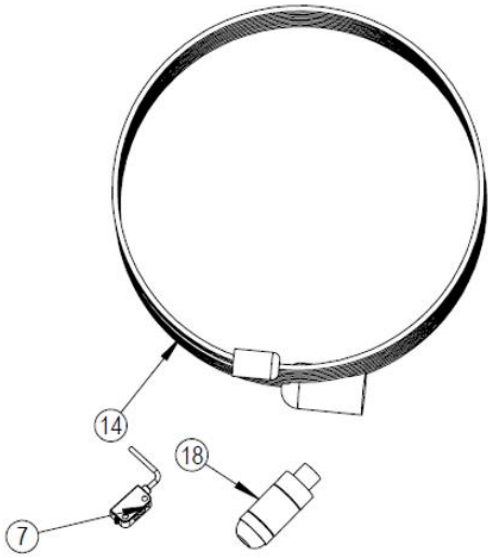


502 601 Stitch Sensor General v1

Installation kit

20	1	6183	ISOPROPANOL SACHET
19	2	6182	CABLE TIE 2,5 x 100
18	1	5708	Connector 4 pol male
17	1	5898	Foil Reflective
16	1	5897	Laminate Clear
15	1	5896	Foil Black
14	1	4214	Cable Stitch sensor
13	1	5894	Installation Manual Stitch Sensor General
12	1	5732	Cardboard Box 240x190x90
11	2	5903	Screw DIN 7985 MRT M3x16 8.8 FZB
10	2	0629	Nut M3 nyloc DIN 985 CL 6
9	4	4839	Washer M3 3.2x7x0.5 BRB FZB
8	3	5902	Washer 5.3x10x1 BRB FZB
7	1	5709	Photocell Stitch Sensor
6	2	3613	Locking nut M5 nyloc
5	1	5808	Screw ISO 7380 MK6S M5x12 steel KL 10.9 FZB
4	1	5916	Screw MFTS 8.8 FZB M5x16
3	1	5901	Sensor Mount Bottom Plate
2	1	5893	Magnet Stitch Sensor
1	2	5707	Stitch sensor bracket
Pos.	Qty.	Drawing no.	Description

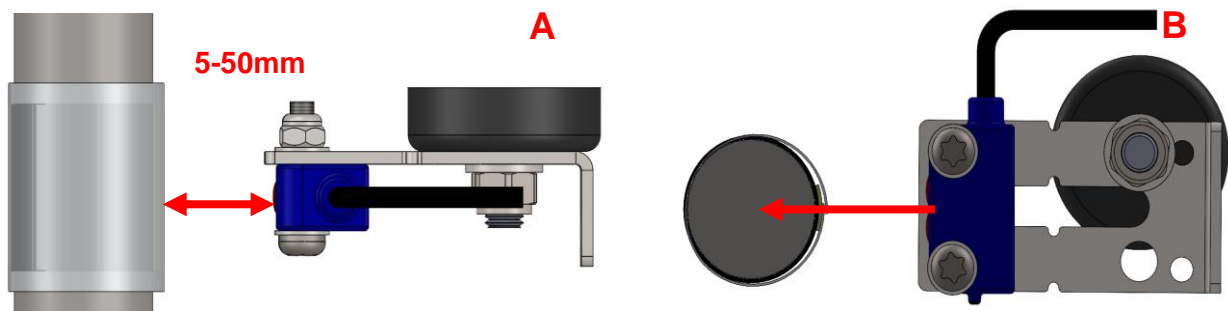




To install the 502 601 Stitch Sensor General v1

1. Stop the embroidery machine and disconnect the wall socket. Make sure that the embroidery machine is OFF.
2. Make sure that you have a warranty approval for this installation of the Stitch Sensor from your embroidery machine distributor.
3. Contact Coloreel Service & Support to get information/suggestion where to install the Stitch Sensor on your specific embroidery machine.
4. To work properly the distance shall be between 5 and 50mm between Sensor and the embroidery machine shaft (A).
5. The Sensor shall point at the center of the embroidery machine shaft (B).

502 601 Stitch Sensor General v1



Stitch Sensor and bracket

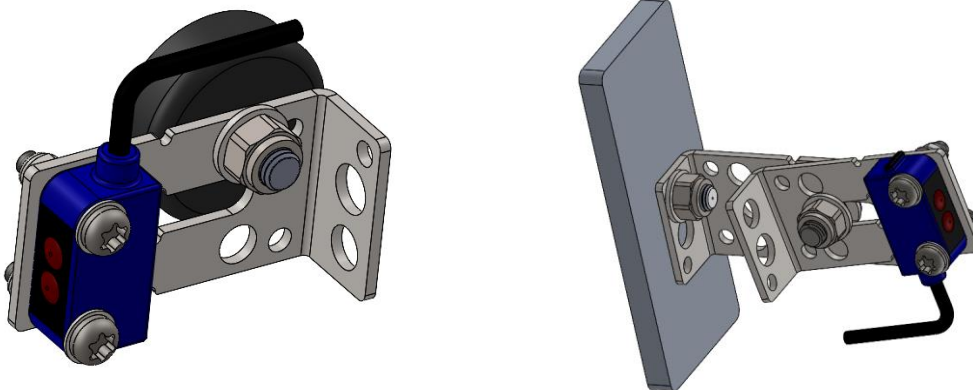
1. Choose the attachment type that fits your application. Magnet or adhesive plate.
2. Use 1 or 2 brackets and if necessary, cut down the bracket(s).
3. Attach the chosen attachment type with washer and nut.
4. Attach the Stitch Sensor to the bracket.
5. Make sure to tighten nuts on both side of the bracket, use the locking washer.

Note: There are many ways of attaching the bracket by itself or together, find the solution that fits your application.

The bracket may need to be cut down in size to be able to fit within the embroidery machine.

Before applying the attachment to the embroidery machine, ensure to clean the surface on the embroidery machine with isopropanol to secure good adhesion.

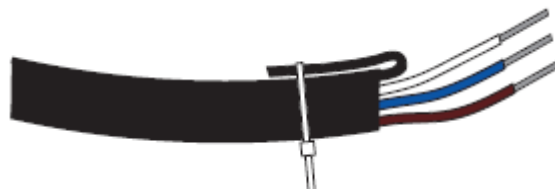
502 601 Stitch Sensor General v1



Installing contact to the sensor cables

502 601 Stitch Sensor General v1

1. Disassemble the Connector and pull the Stitch Sensor Cable through the parts of the Connector as shown in the illustration.
2. Attach a cable tie at the same place as in picture, this will prevent load on the cable connections if pulling in the cable later when the contact is assembled.



Cable tie 2,5mmx100mm

3. Install the cables:
 - A. The black cable to the cable tie according to picture above, shall not be connected to Connector.
 - B. The blue (-) cable to connection screw 3
 - C. The white (signal) cable to connection screw 4.
 - D. The brown (+) cable to connection screw 1.
 - E. No cable in screw 2, this connection shall be empty.

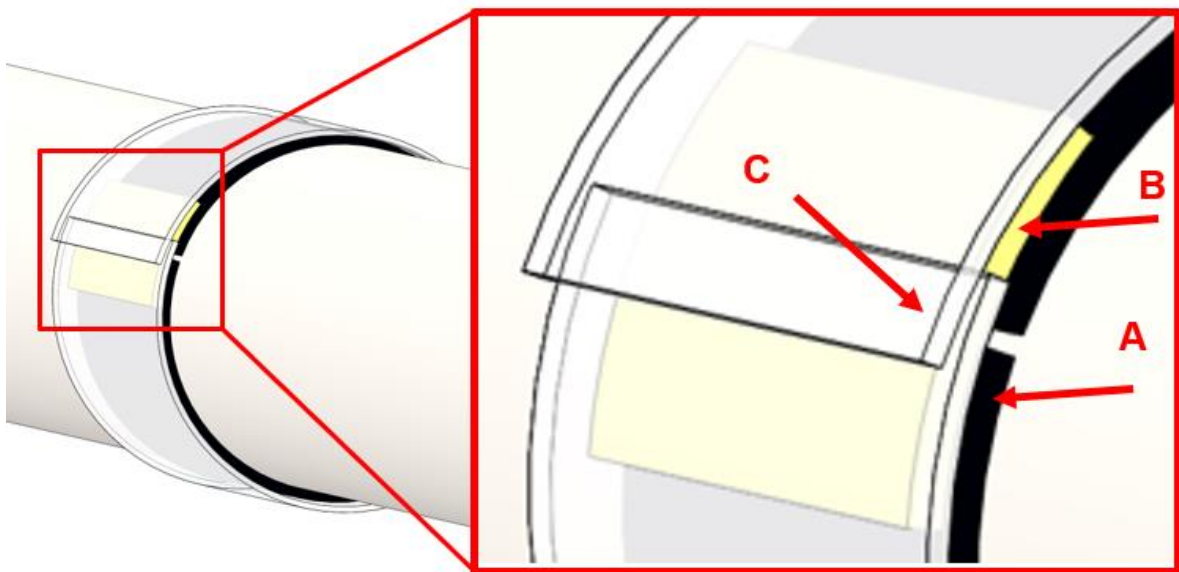


1	Brown (+)
2	-
3	Blue (-)
4	White

4. Assemble the Connector housing and make sure that the connector locks the cable

Installing foils on Embroidery machine drive shaft

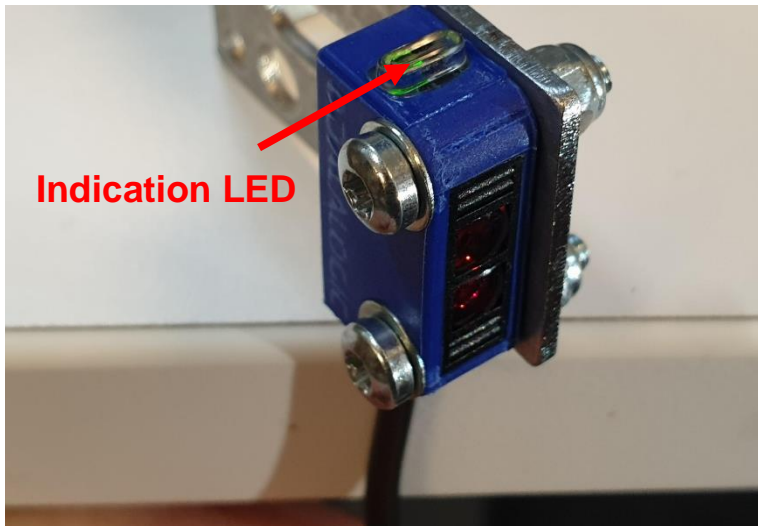
1. Stop the embroidery machine and disconnect the wall socket. Make sure that the embroidery machine is OFF.
2. Clean the embroidery machine shaft surface with isopropanol to secure good adhesion.
3. Cut the needed length of the black foil and attach it around the shaft, without any overlapping material (A).
4. Cut the reflective foil (length 10-15mm) and attach it over the black foil gap (B).
5. Cut the needed length of the transparent foil and attach it around the shaft, the transparent foil shall be overlapping, and the ends shall be placed over the reflective foil (C).



Finalizing

1. Stop the embroidery machine and disconnect the wall socket. Make sure that the embroidery machine is OFF.
2. Turn the embroidery machine shaft by hand, the indication LED on the sensor shall change color when the Sensor reading position is entering and exiting the area of the reflective foil.
3. Open Service Tool and navigate in the sidebar menu to Thread Regulator.
4. Turn the embroidery machine shaft by hand, the value for stitch count shall increase for each round.

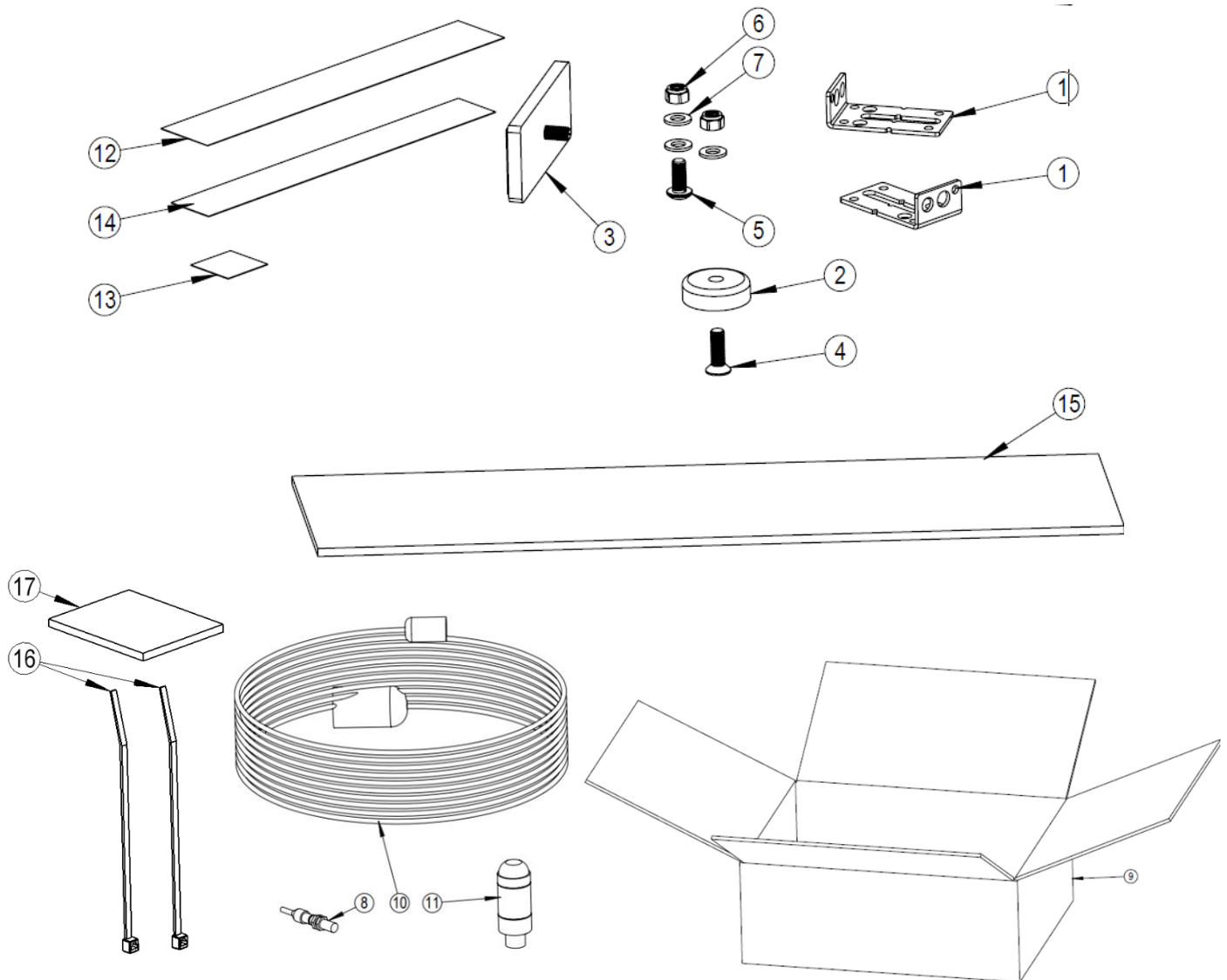
502 601 Stitch Sensor General v1



502 801 Stitch Sensor General v2

Installation kit

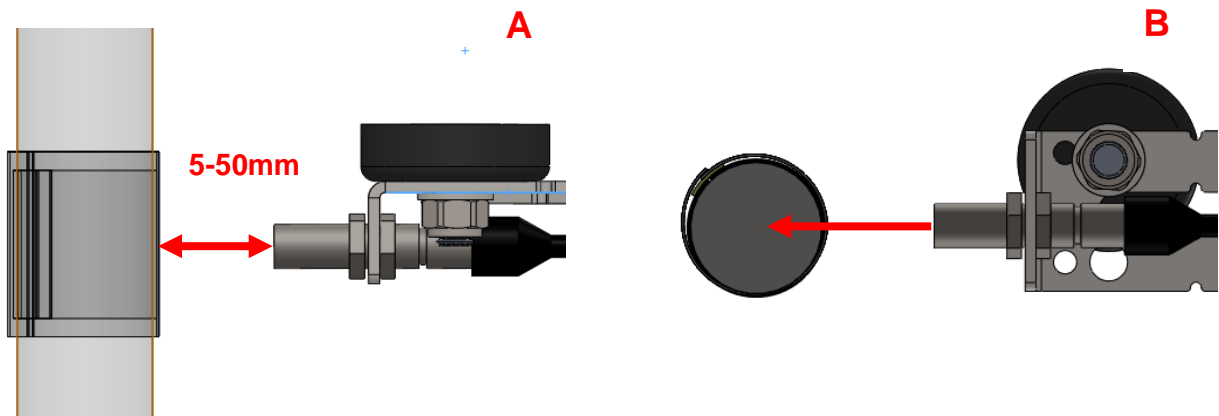
17	1	6183	ISOPROPANOL SACHET
16	2	6182	CABLE TIE 2,5 x 100
15	1	5894	Installation Manual Stitch Sensor General
14	1	5896	Foil Black
13	1	5898	Foil Reflective
12	1	5897	Laminate Clear
11	1	5708	Connector 4 pol male
10	1	4214	Cable Stitch sensor
9	1	5732	Cardboard Box 240x190x90
8	1	5883	Photocell UXR5V-PNP
7	3	5902	Washer 5.3x10x1 BRB FZB
6	2	3613	Locking nut M5 nyloc
5	1	5808	Screw ISO 7380 MK6S M5x12 steel KL 10.9 FZB
4	1	5916	Screw MFTS 8.8 FZB M5x16
3	1	5901	Sensor Mount Bottom Plate
2	1	5893	Magnet Stitch Sensor
1	2	5707	Stitch sensor bracket
Pos.	Qty.	Drawing no.	Description



To install the 502 801 Stitch Sensor General 2

1. Stop the embroidery machine and disconnect the wall socket. Make sure that the embroidery machine is OFF.
2. Make sure that you have a warranty approval for this installation of the Stitch Sensor from your embroidery machine distributor.
3. Contact Coloreel Service & Support to get information/suggestion where to install the Stitch Sensor on your specific embroidery machine.
4. To work properly the distance shall be between 5 and 50mm between Sensor and the embroidery machine shaft (A).
5. The Sensor shall point at the center of the embroidery machine shaft (B).

502 801 Stitch Sensor General 2



Stitch Sensor and bracket

1. Choose the attachment type that fits your application. Magnet or adhesive plate.
2. Use 1 or 2 brackets and if necessary, cut down the bracket(s).
3. Attach the chosen attachment type with washer and nut.
4. Attach the Stitch Sensor to the bracket.
5. Make sure to tighten nuts on both side of the bracket, use the locking washer.

Note: There are many ways of attaching the bracket by itself or together, find the solution that fits your application.

The bracket may need to be cut down in size to be able to fit within the embroidery machine.

Before applying the attachment to the embroidery machine, ensure to clean the surface on the embroidery machine with isopropanol to secure good adhesion.

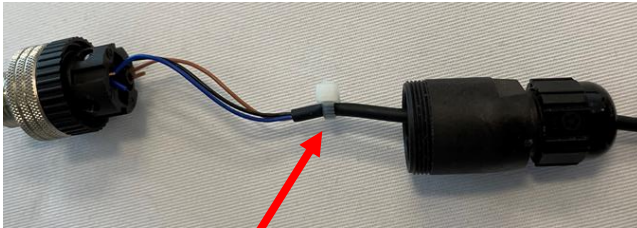
502 801 Stitch Sensor General v2



Installing contact to the sensor cables

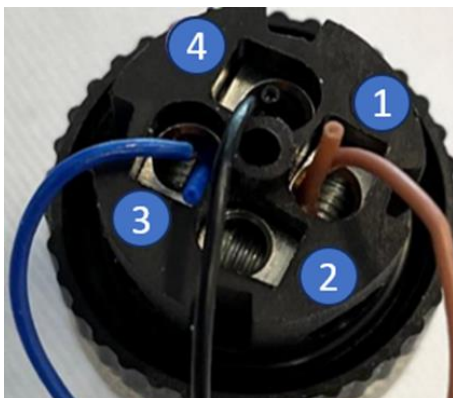
502 801 Stitch Sensor General v2

1. Disassemble the Connector and pull the Stitch Sensor Cable through the parts of the Connector as shown in the illustration.
2. Attach a cable tie at the same place as in picture, this will prevent load on the cable connections if pulling in the cable later when the contact is assembled.



Cable tie 2,5x100 mm

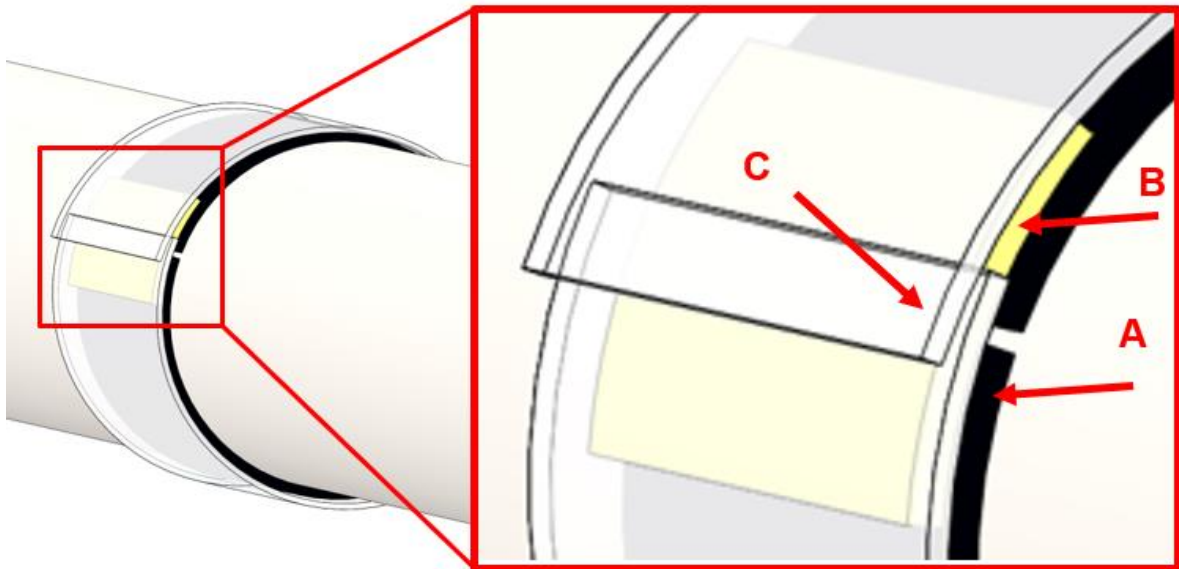
3. Install the cables:
 - F. The blue (-) cable to connection screw 3
 - G. The black (signal) cable to connection screw 4.
 - H. The brown (+) cable to connection screw 1.
 - I. No cable in screw 2, this connection shall be empty.



4. Assemble the Connector housing and make sure that the Connector locks the cable.

Installing foils on Embroidery machine drive shaft

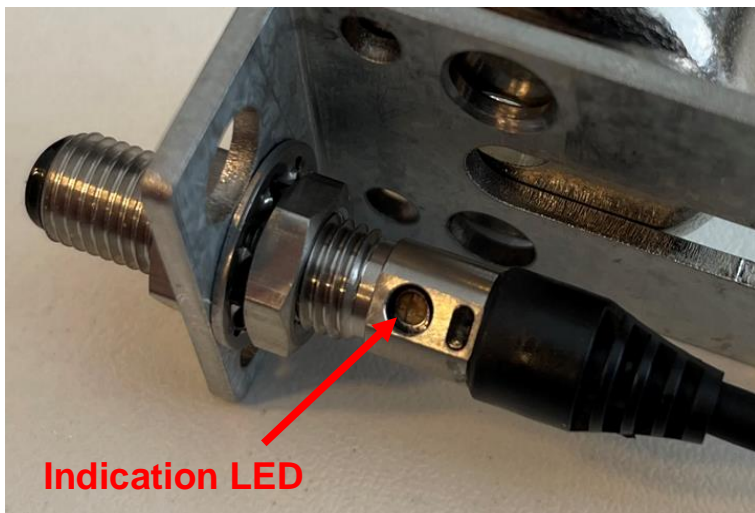
1. Stop the embroidery machine and disconnect the wall socket. Make sure that the embroidery machine is OFF.
2. Clean the embroidery machine shaft surface with isopropanol to secure good adhesion.
3. Cut the needed length of the black foil and attach it around the shaft, without any overlapping material (A).
4. Cut the reflective foil (length 10-15mm) and attach it over the black foil gap (B).
5. Cut the needed length of the transparent foil and attach it around the shaft, the transparent foil shall be overlapping, and the ends shall be placed over the reflective foil (C).



Finalizing

1. Stop the embroidery machine and disconnect the wall socket. Make sure that the embroidery machine is OFF.
2. Turn the embroidery machine shaft by hand, the indication LED on the sensor shall change color when the Sensor reading position is entering and exiting the area of the reflective foil.
3. Open Service Tool and navigate in the sidebar menu to Thread Regulator.
4. Turn the embroidery machine shaft by hand, the value for stitch count shall increase for each round.

502 801 Stitch Sensor General 2



5894 – Rev. C

Unlock your potential

Coloreel is a Swedish textile innovation brand with groundbreaking technology that enables high-quality coloring of textile thread on demand, unlocking a world of potential.

If you have questions contact us at: info@coloreel.com

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