

# Service and Maintenance

Repositioning of the Motor Conduit Box and Cable Entry  
Motor Frame Sizes 71-132



# Overview

- 1 Safety
- 2 Tooling
- 3 Changing the Conduit Box Position
- 4 Changing the Cable Entry

# Safety



## Safety First

1. Never perform any work that you are either unqualified for or uncomfortable in doing
2. Follow all local safety guidelines
3. Never perform work on equipment that is connected to a power source or energized
4. Always use the proper tooling
5. Make use of all required PPE or Personal Protective Equipment

# Safety



## Safety First

1. Disconnect all power sources



2. Remove power cables from the motor



# Safety



**Important!** – Following of these instructions will compromise the seal and paint coating applied during the assembly process at the SEW-Eurodrive assembly facility.

It is not recommended to change the conduit box position if the motor is an extreme installation such as wash-down or corrosive environments.

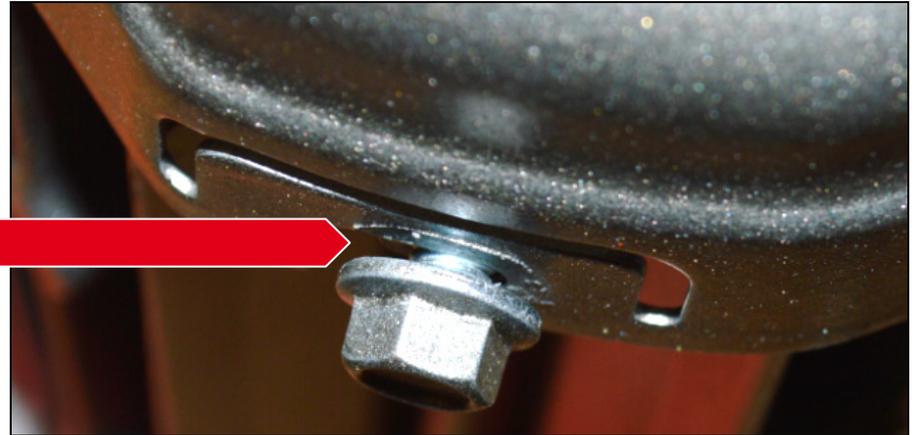
# Required Tooling

- Metric Nut Driver
- Flat head screw drivers
- External Circlip Pliers
- Torx Bit Driver/T-Handles
- Dead Blow Hammer
- Torque Wrench



# Conduit Box Position Change

**Step 1** – Using the 8mm nut driver, loosen the fan guard screws to allow an ~1/8” gap between fan guard and back side of the screw head



# Conduit Box Position Change

**Step 2** – Rotate the fan guard slightly counter-clockwise and remove completely from the motor



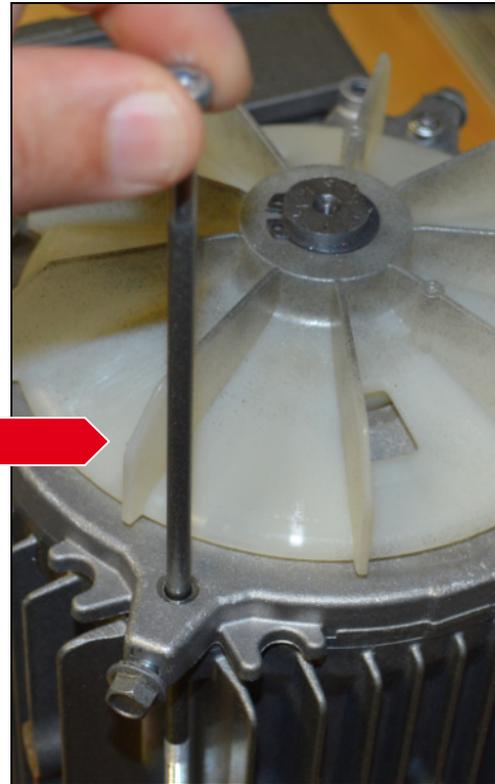
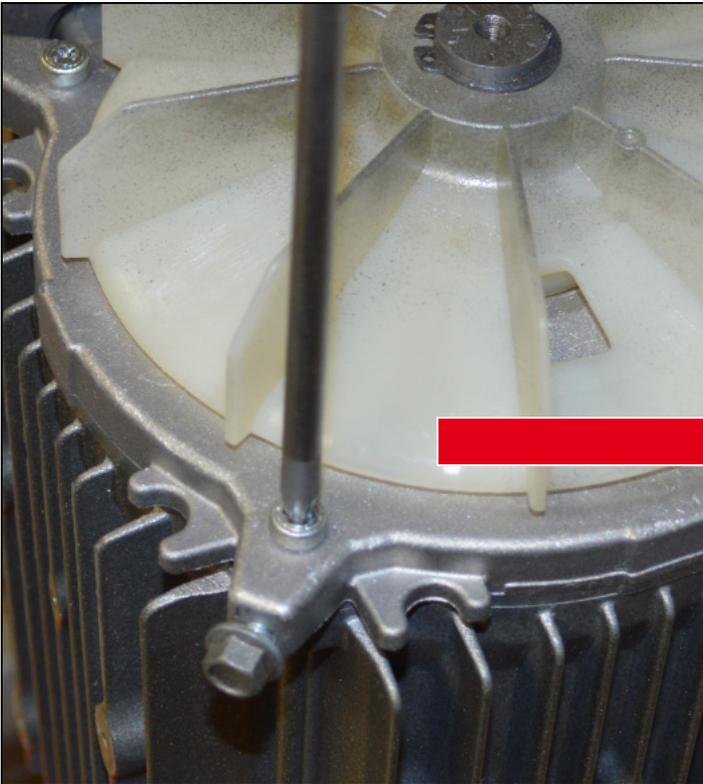
# Conduit Box Position Change

**Step 3** – Using the external circlip pliers, remove the circlip from the end of the motor rotor



# Conduit Box Position Change

**Step 4** – Using the proper Torx bit, remove all four tension rods completely from the motor



Motor Size	Torx Bit
DR.71	TX25
DR.80	
DR.90	TX30
DR.100	
DR.112	TX45
DR.132	

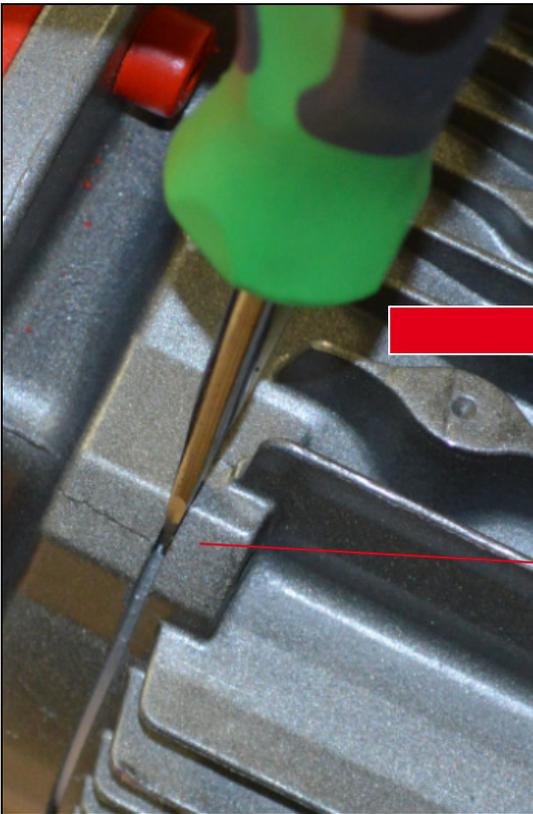
# Conduit Box Position Change

**Step 5** – Using the plastic headed dead blow hammer, lightly tap the backside of the conduit box to loosen the stator from the motor flange



# Conduit Box Position Change

**Step 6** – Using the two flat headed screw drivers, lightly pry the stator away from the motor flange until a gap of  $\sim 1/4$ " is present



Only pry from the corners to avoid damaging the parts

# Conduit Box Position Change

**Step 7** – Rotate the Stator to desired conduit box position

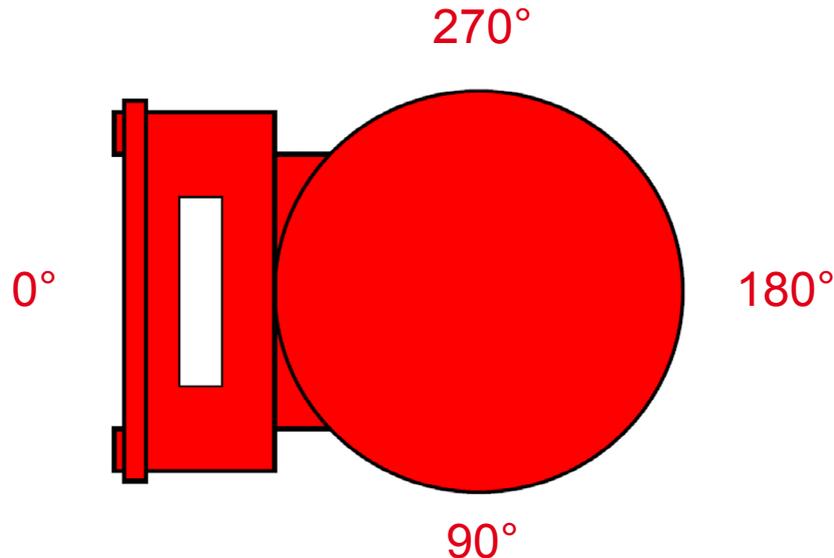


# Conduit Box Position Change

**Information** – SEW Motors allow for 4 different Conduit Box locations

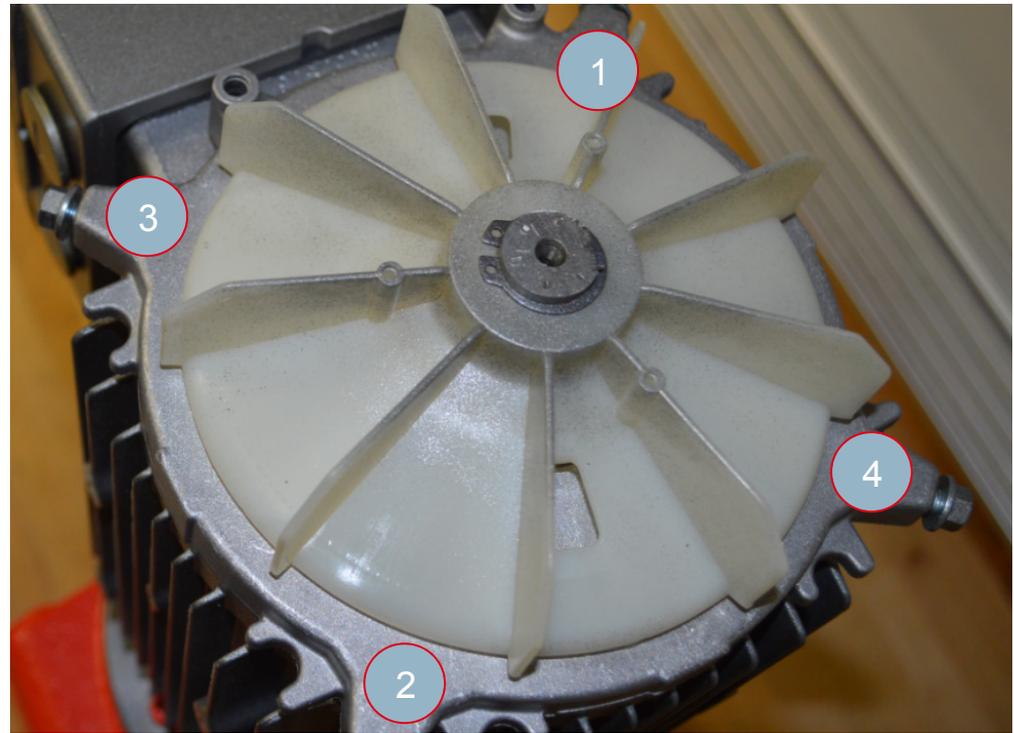
**0° / 90° / 180° / 270°**

This position is based on viewing the motor from the fan guard as illustrated below –



# Conduit Box Position Change

**Step 8** – Reinstall the tension rods by hand and then tighten them in a diametrically opposed pattern until the stator is completely tight against the motor flange and the proper tightening torque is reached



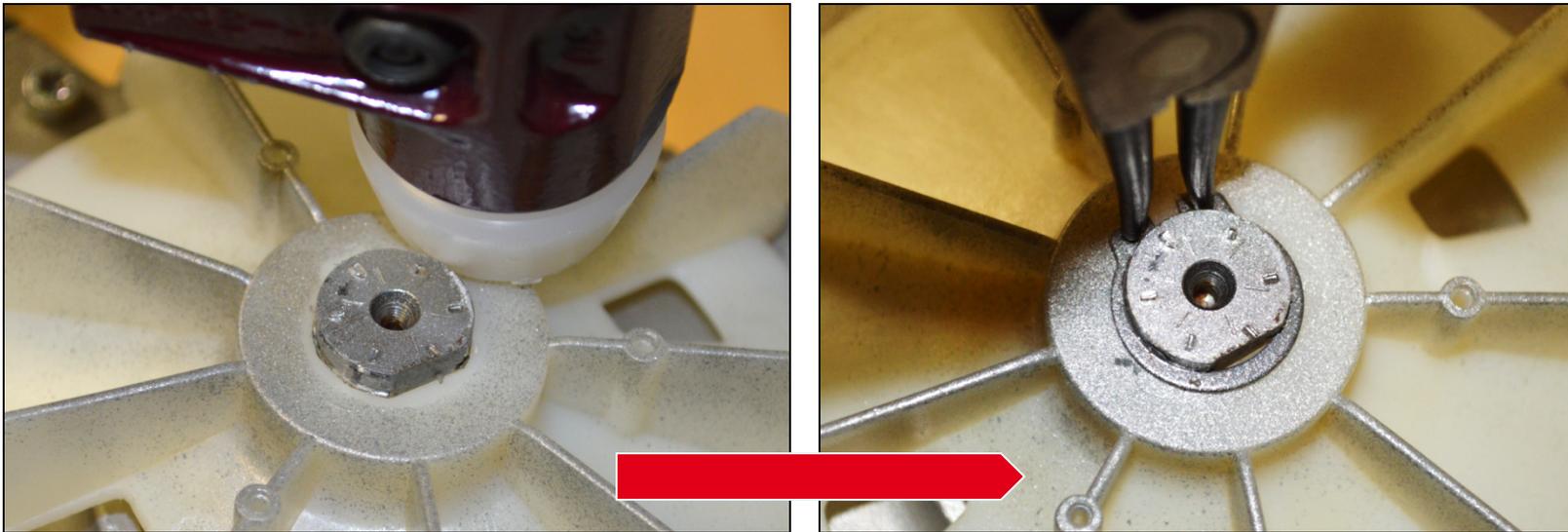
# Conduit Box Position Change

## Information – Tightening Torque (Tension Rods)

Motor Size	Torque [Nm]	Torque lb.-in]
DR71	5	45
DR80		
DR90	9	80
DR100		
DR112	21	186
DR132		

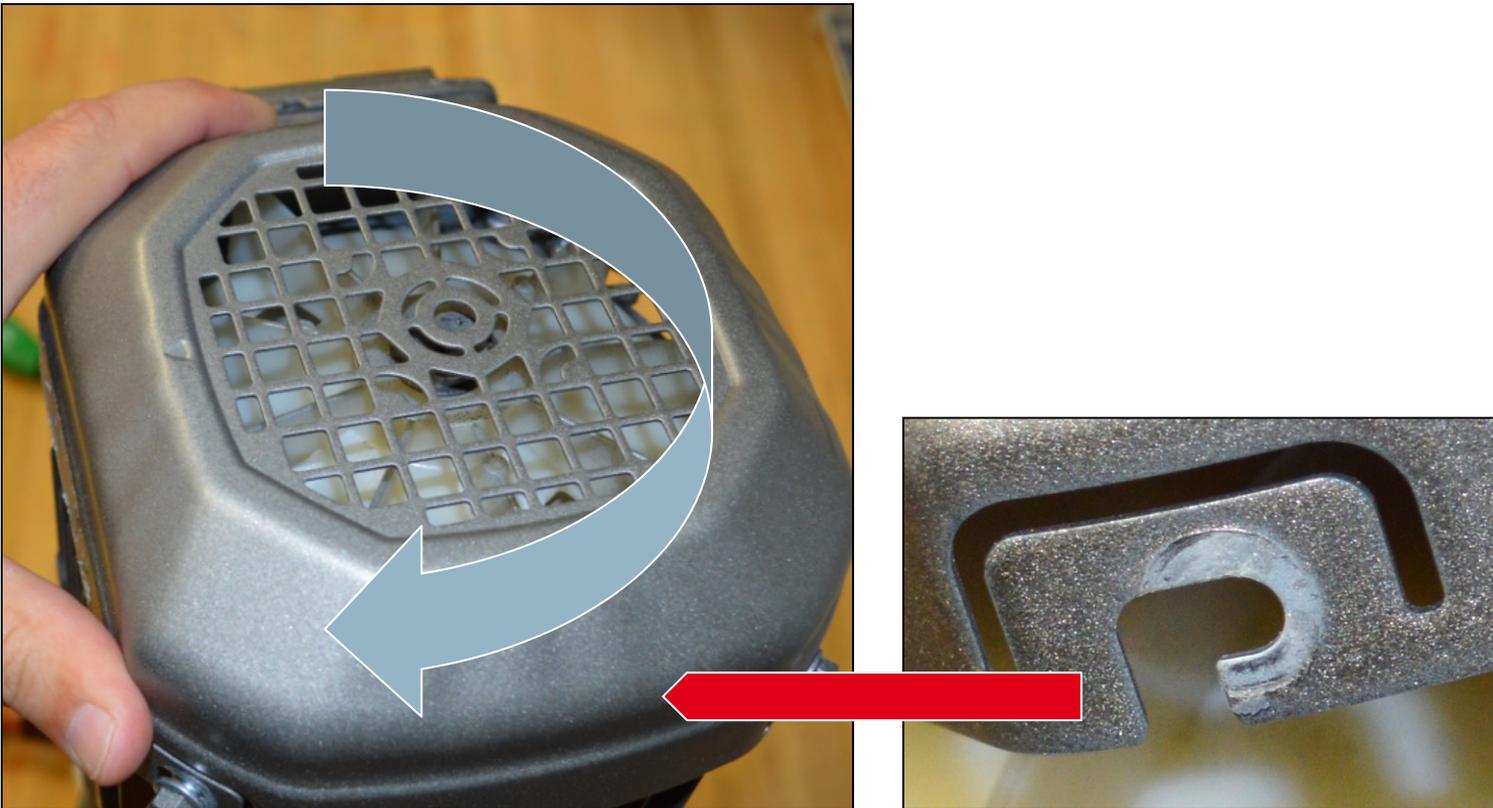
# Conduit Box Position Change

**Step 9** – Tap the fan back into place and reinstall the circlip



# Conduit Box Position Change

**Step 10** – Reinstall the fan guard by placing it over the fan and twisting in a clockwise manner until locked into place



# Conduit Box Position Change

**Step 11** – Tighten the fan guard screws in a diametrically opposed pattern to the proper torque



# Conduit Box Position Change

## Information – Tightening Torque (Fan Guard Screws)

Motor Size	Torque [Nm]	Torque lb.-in]
DR71	3.3	30
DR80		
DR90		
DR100		
DR112		
DR132		

# Conduit Box Position Change

**Step 12** – Visually inspect the unit to verify all steps are completed and that the motor is ready for use



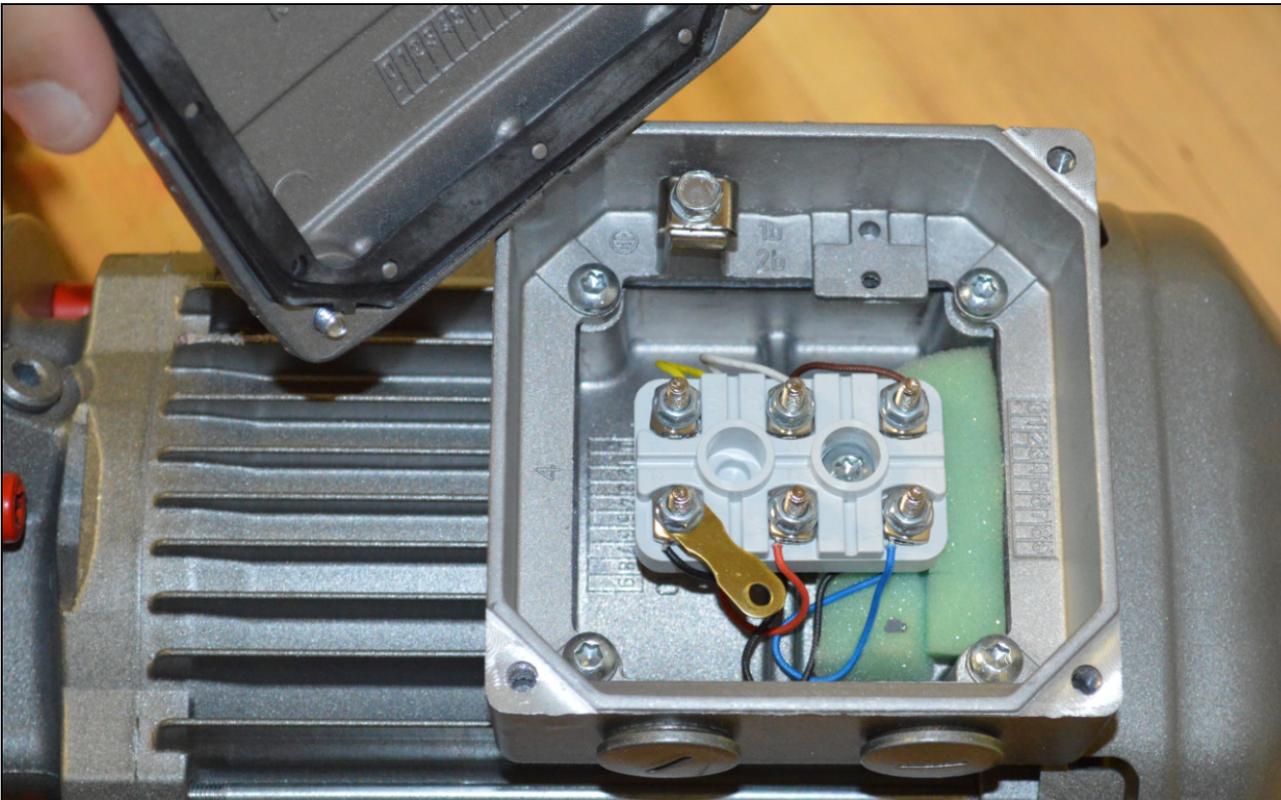
# Cable Entry Position Change

**Step 1** – Remove the conduit box lid by loosening the 4 screws using an 8mm nut driver



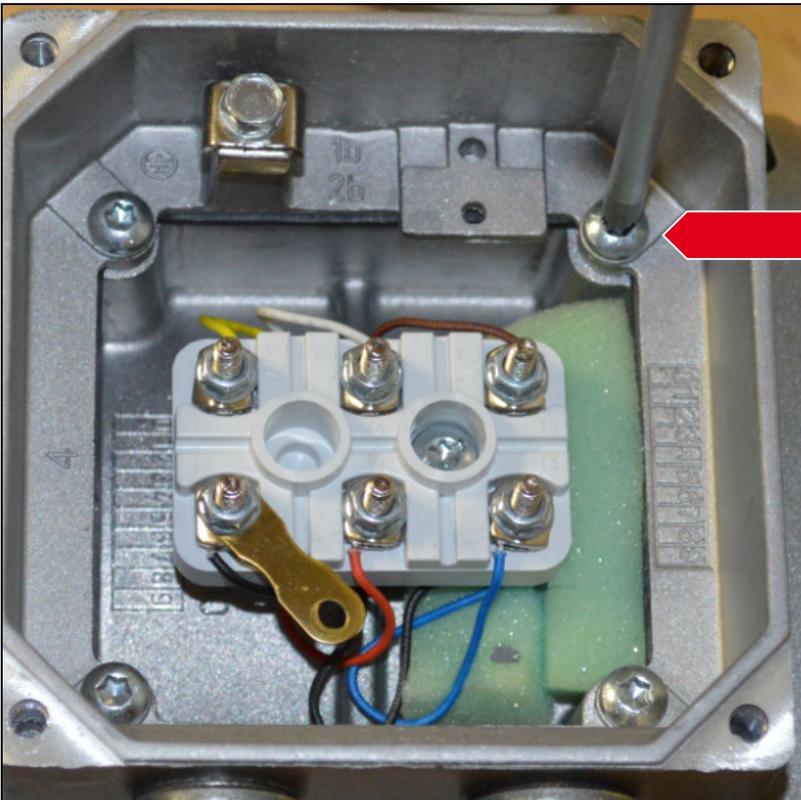
# Cable Entry Position Change

**Step 2** – Remove conduit box lid from the conduit box



# Cable Entry Position Change

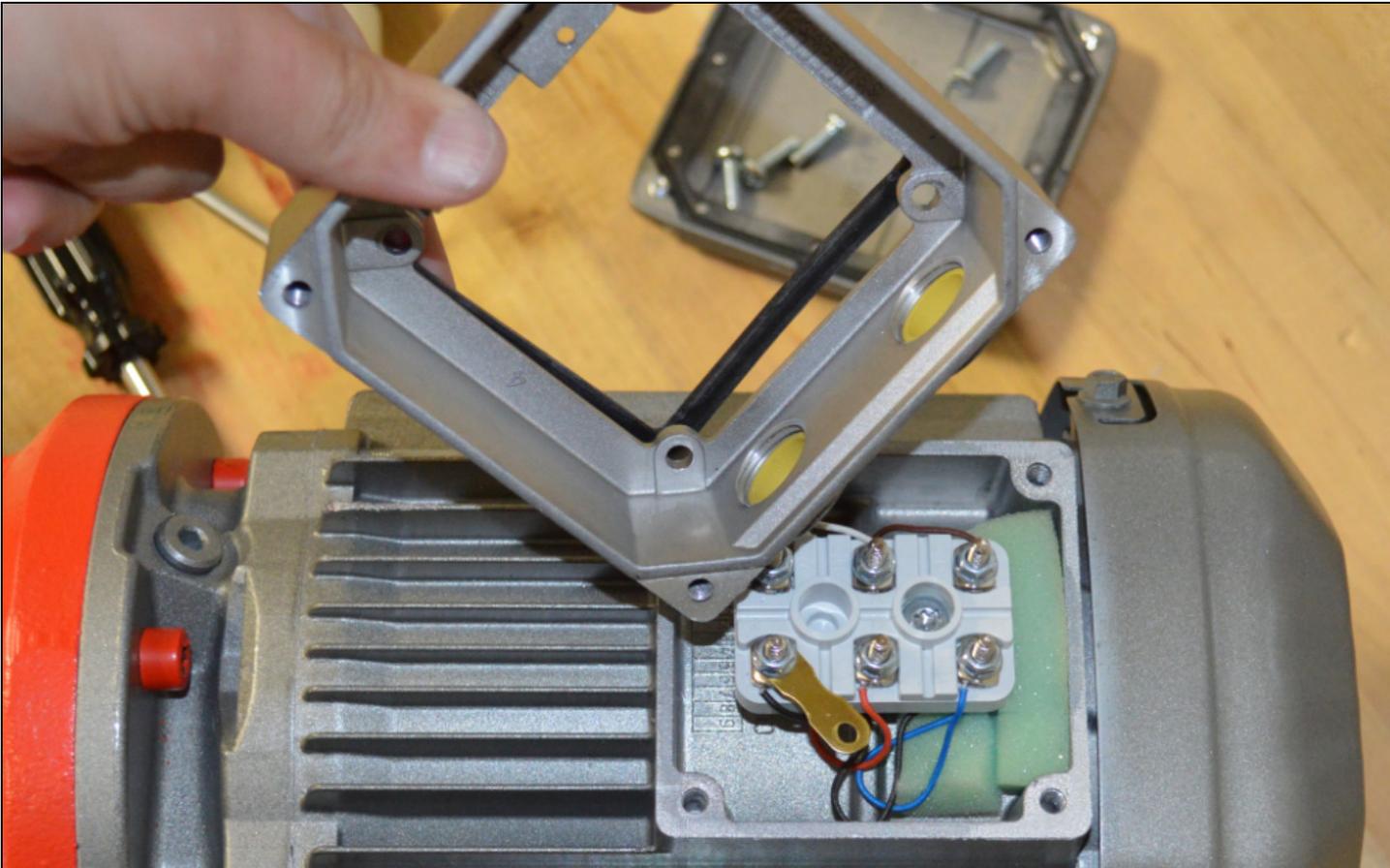
**Step 3** – Loosen and remove the 4 Torx screws from the conduit box



Motor Size	Torx Bit
DR.71	TX25
DR.80	
DR.90	
DR.100	
DR.112	
DR.132	

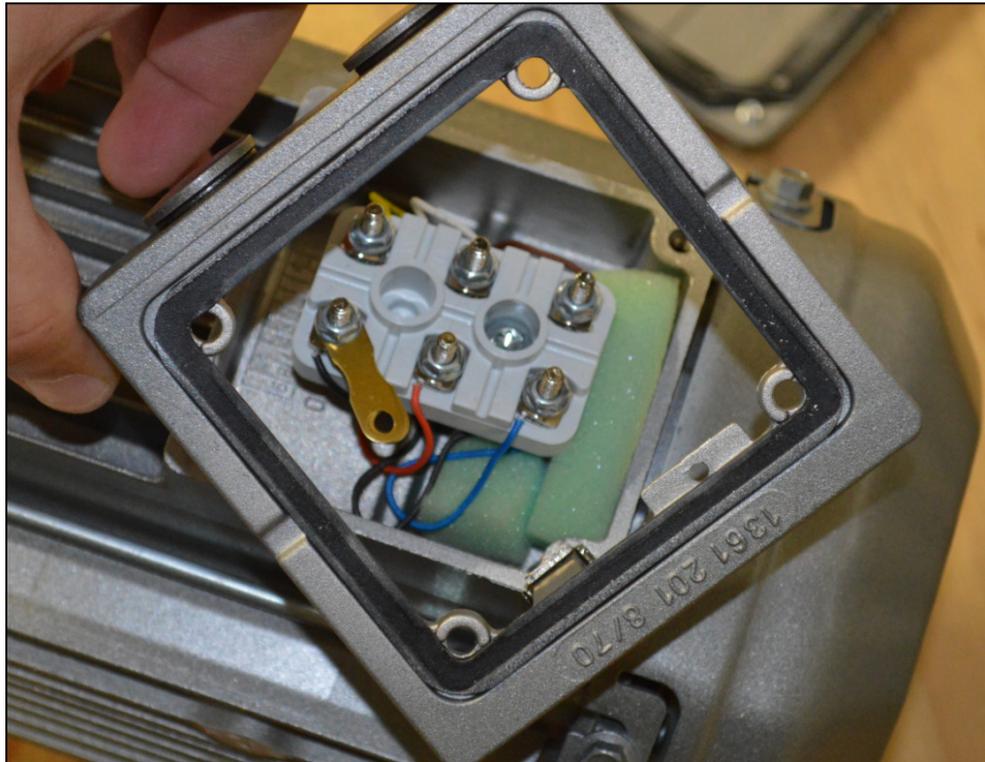
# Cable Entry Position Change

**Step 4** – Remove the Conduit Box from the motor



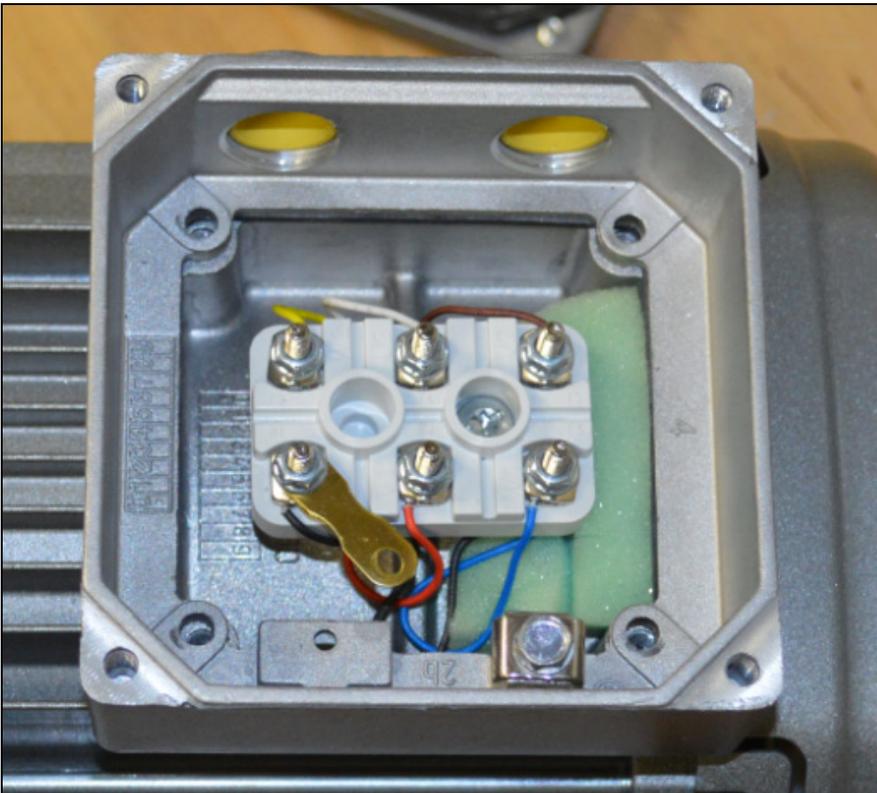
# Cable Entry Position Change

**Step 5** – Inspect the gaskets for damage and replace if necessary



# Cable Entry Position Change

**Step 6** – Install the Conduit Box in the desired Cable Entry location

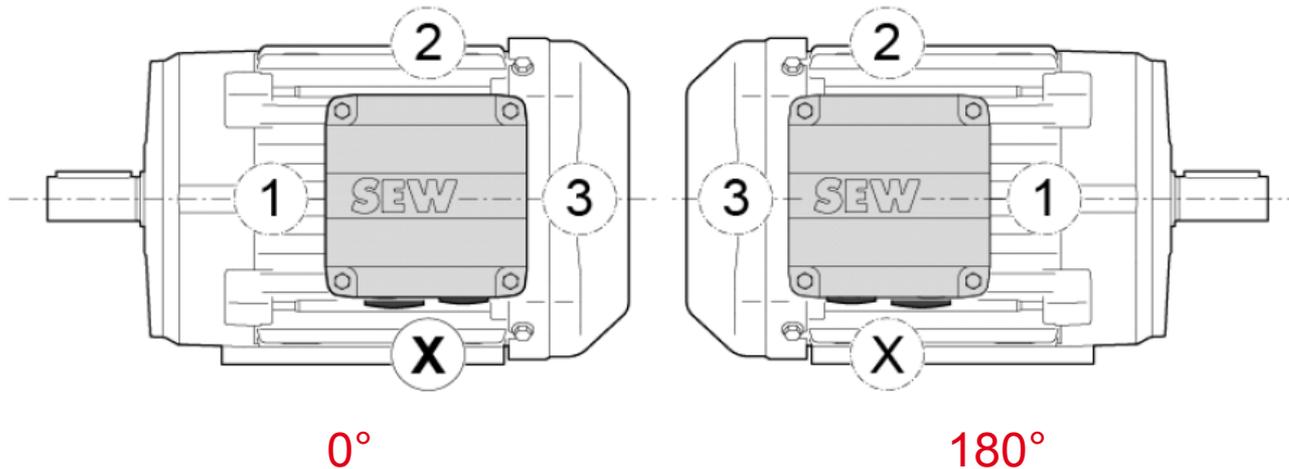


# Conduit Box Position Change

**Information** – SEW Motors allow for 4 different Cable Entry locations

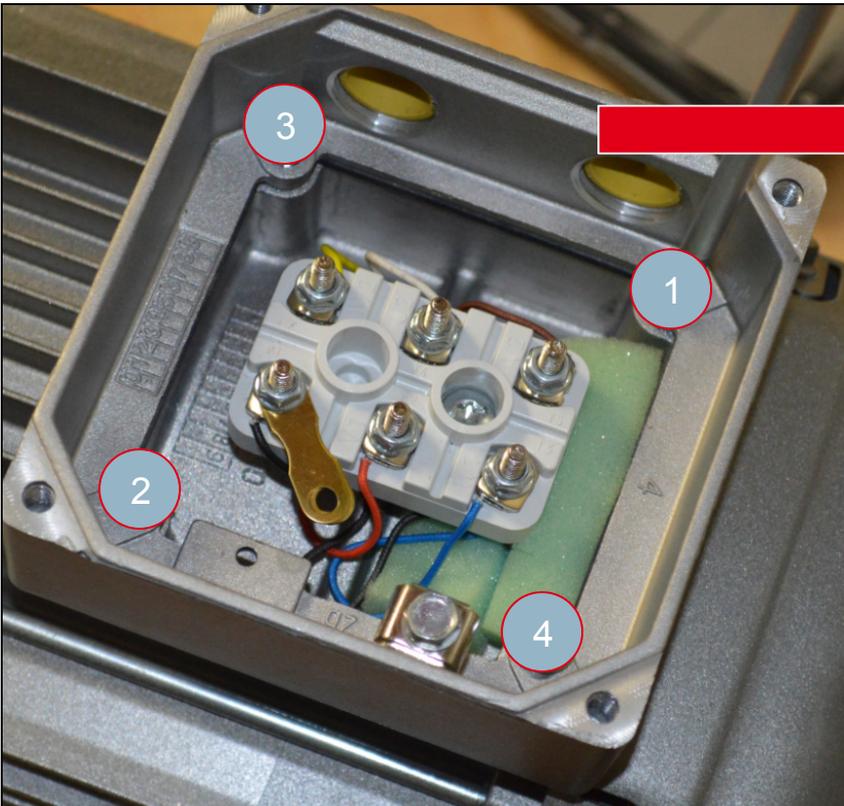
**X / 1 / 2 / 3**

This position is based on viewing the conduit box face. However positions X and 2 switch with Conduit Box Location 180°



# Cable Entry Position Change

**Step 7** – Install Torx screws and tighten to the proper torque in a diametric pattern. Verify there are no crimped wires between the seal



# Cable Entry Position Change

## Information – Tightening Torque (Conduit Box Screws)

Motor Size	Torque [Nm]	Torque [lb.-in]
DR71	6.5	58
DR80		
DR90		
DR100		
DR112		
DR132		

# Cable Entry Position Change

**Step 8** – Install the Conduit Box lid and tighten the screws for the lid using an 8mm nut driver according to the correct torque value



# Cable Entry Position Change

## Information – Tightening Torque (Conduit Box Lid Screws)

Motor Size	Torque [Nm]	Torque [lb.-in]
DR71	4	35
DR80		
DR90		
DR100		
DR112		
DR132		

# Cable Entry Position Change

**Step 9** – Visually inspect the unit to verify all steps are completed and that the motor is ready for use



# Conclusion

For more information on this and other service and maintenance topics, please visit our website at –

[www.seweurodrive.com/s\\_service/index.php5](http://www.seweurodrive.com/s_service/index.php5)

