# Hold Table - Maintenance and Service

This section will describe service procedures for major mechanical elements of a Hold Table.

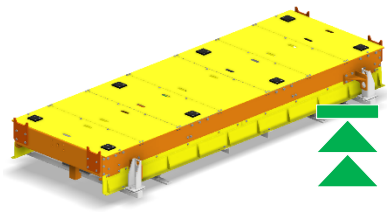
## ⚠ WARNING ⚠

- Only qualified and trained personnel should perform the disassembly and assembly of electrical and mechanical components.
- Before attempting any maintenance on this equipment all involved personnel should follow plant internal regulations along with any state, federal, or province regulations. Do not begin any repair procedure until the proper shutdown procedures and the appropriate power lockout procedures have been applied.

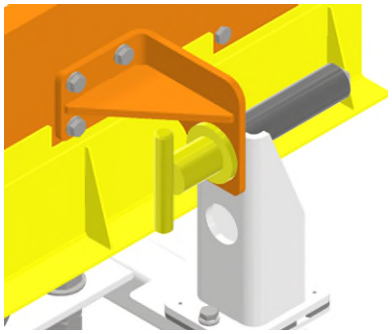
## Placing the Hold Table into the Maintenance Position

**1** Remove any payload from the Hold Table.

**2** Move the lift to the full UP position.



**3** Place safety pins in all designated locations (4 total) to lock lift position.



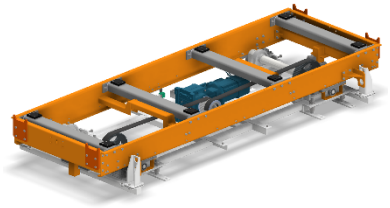
5 Cut and lock out power to the lift using your plant's safety procedures.

# How to Replace the Lifting Belts

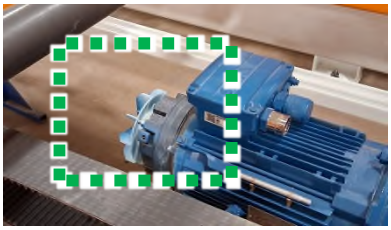
1 Place the lift into the maintenance position per the above section ***Placing the Hold Table into the Maintenance Position.***

Lock out power to the lift using your plant's safety procedures.

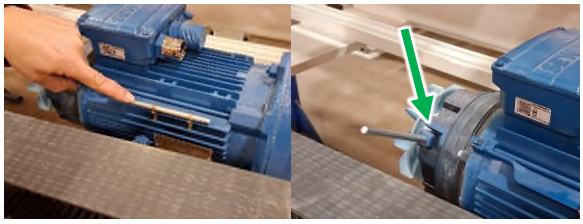

2 Remove safety covers.



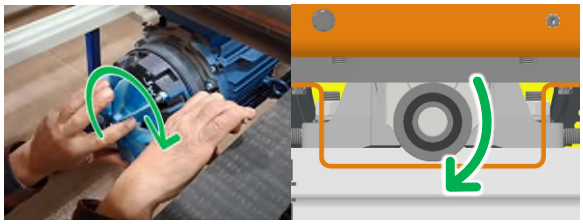
3 Remove the fan cover from the lift motor.



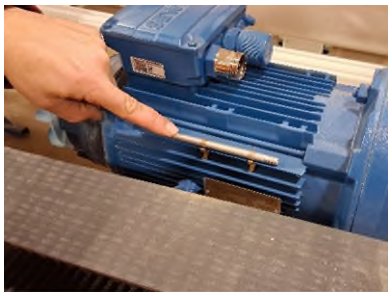
4 Remove the brake pin from the side of the motor and use it to temporarily disengage the brake.



5 Slowly rotate the motor fan to lower the lift frame onto the Safety Pins and relieve pressure from the cam rollers.

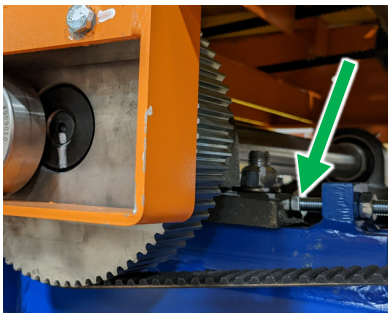


6 Re-engage the motor brake and return the pin to its storage location.

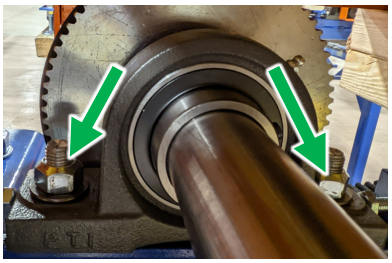


Loosen the inner jack screws for all the pillow block bearings.

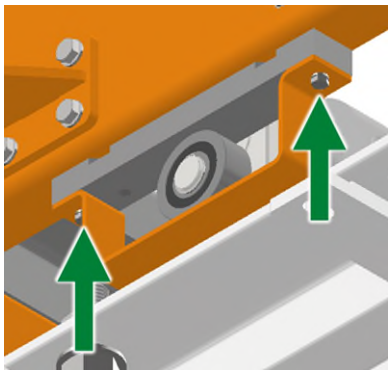
7 ***Note:*** *DO NOT make any adjustments to the outer jack screws at this time. They will be used as a reference when returning the pillow block bearings to their original positions.*



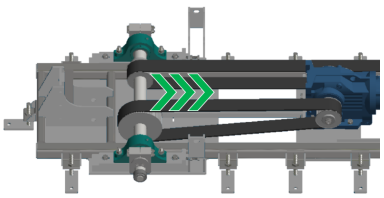
8 Loosen the pillow block bearing M16 bolts for all the pillow block bearings.



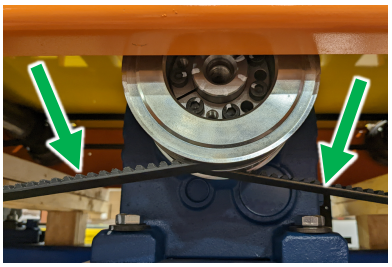
9 Loosen and remove the bolts that hold the cam roller rail to the lift table. Set the rail aside for now.
Repeat for the opposite side.



10 Pull the lifting cam assemblies slightly to the center of the lift to reduce tension on the lifting belts.

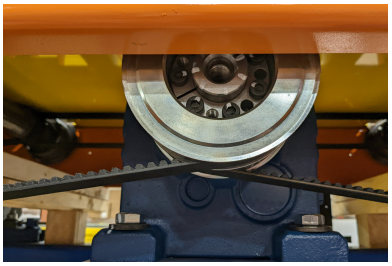


**11** Remove the lifting belts.

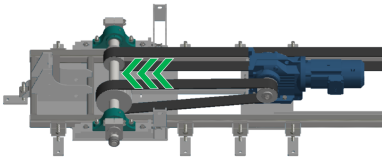


**12** Inspect the lift pulley, cam rollers, and the drive pulley for wear and damage. Replace as necessary.

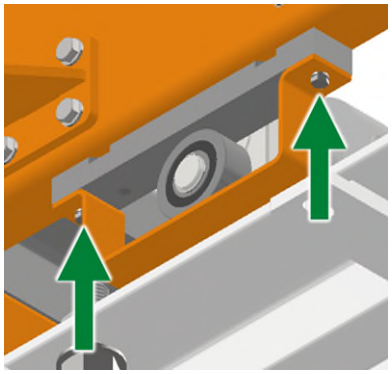
**13** Place the new lifting belts around lift and drive pulleys.



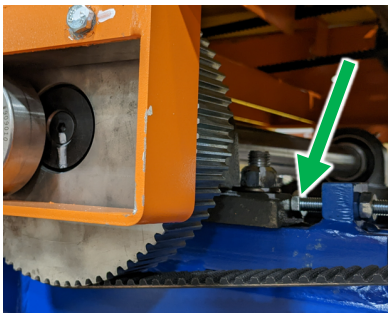
**14** Reposition the cam shafts back to their original locations.



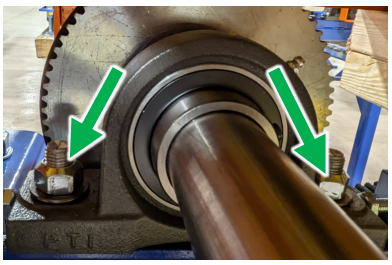
**15** Install the cam roller rails reusing any shims that were in place.



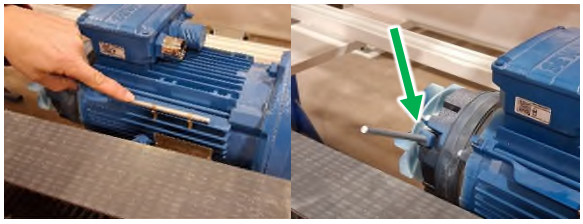
16 Tighten the inner jack screws evenly keeping the lift pulleys parallel with the drive pulley until the lift belts are properly tensioned. If necessary, adjust the outer jack screws.



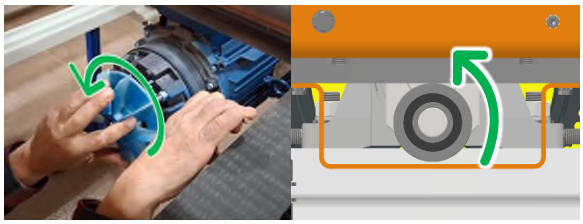
17 Tighten all the M20 bolts for the pillow block bearings.



18 Remove the brake pin from the side of the motor and use it to temporarily disengage the brake.

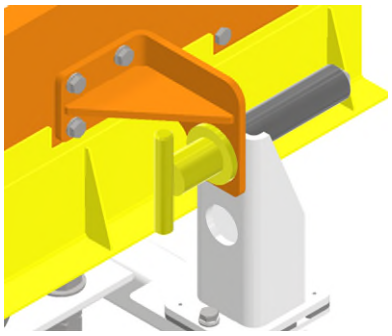


19 Slowly rotate the motor fan to raise the lift frame back to its highest position, relieving pressure from the Safety Pins.



20 Re-engage the brake, return the pin to its storage location, and replace the motor's fan cover.

**21** Restore power to the system and lift the table off the safety pins. Return the safety pins to their designated storage area.



**22** Cycle the lift table and observe that the lifting belts are tracking straight and that the table is even all around. Correct if necessary.

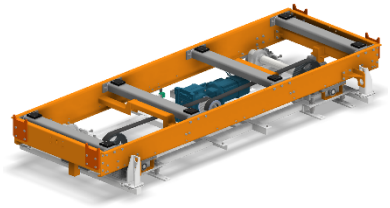
**23** Lock Out the system again to return safety covers then operate as normal.

# How to Replace a Drive Pulley

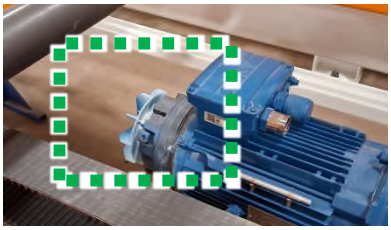
1. Place the lift into the maintenance position per the above section ***Placing the Hold Table into the Maintenance Position.***

   Lock out power to the lift using your plant's safety procedures.

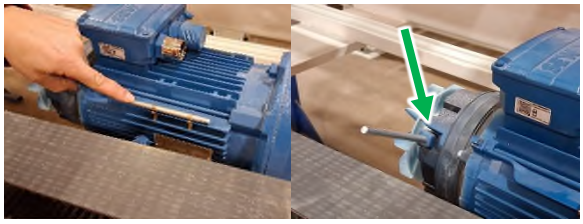

2. Remove safety covers.



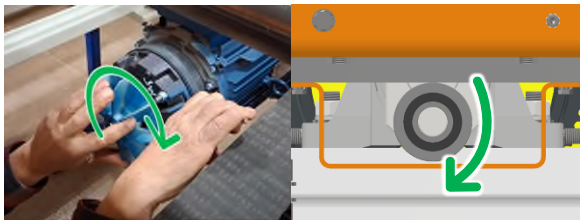
3. Remove the fan cover from the lift motor.



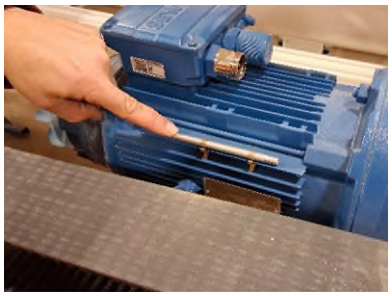
4. Remove the brake pin from the side of the motor and use it to temporarily disengage the brake.



5. Slowly rotate the motor fan to lower the lift frame onto the Safety Pins and relieve pressure from the cam rollers.

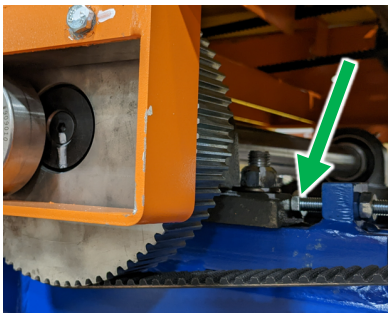


6 Re-engage the motor brake and return the pin to its storage location.

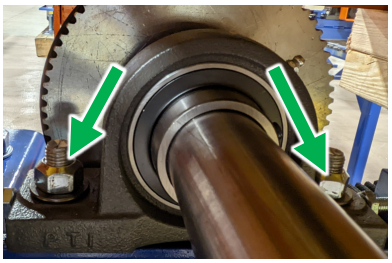


Loosen the inner jack screws for all the pillow block bearings.

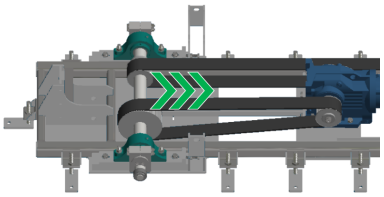
7 ***Note:*** *DO NOT make any adjustments to the outer jack screws at this time. They will be used as a reference when returning the pillow block bearings to their original positions.*



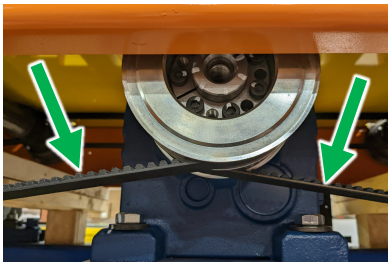
8 Loosen the pillow block bearing M16 bolts for all the pillow block bearings.



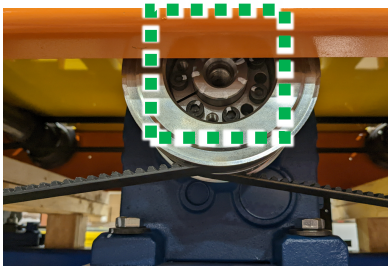
9 Pull the lifting cam assemblies slightly to the center of the lift to reduce tension on the lifting belts.



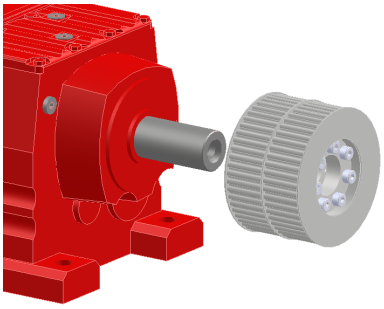
10 Remove the belts off the drive pulley.



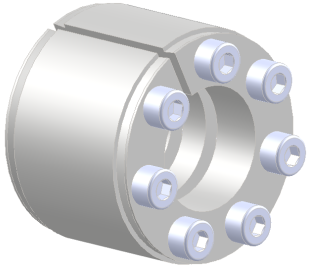
**11** Loosen the screws in the clamping set that is inside the drive pulley.



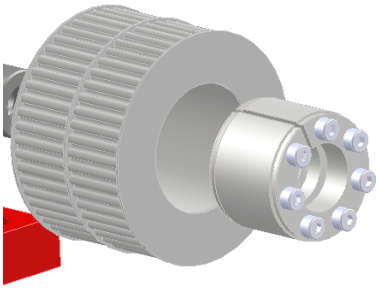
**12** Pull the original drive pulley off the motor drive shaft.



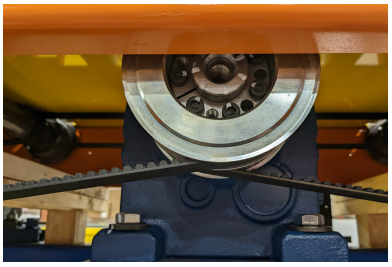
**13** Remove the clamping set and inspect for damage. Replace if necessary.



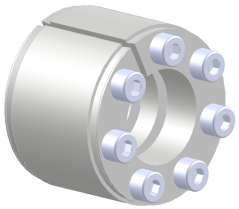
**14** Insert the clamping set into the new drive pulley



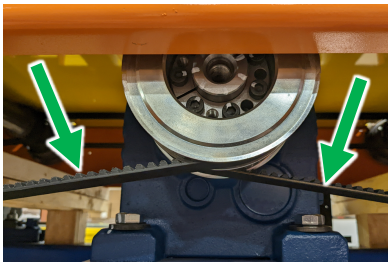
**15** Align the drive pulley so that the lifting belts will run in the center.



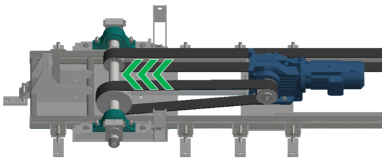
**16** Tighten the screws of the clamping set in an alternating pattern to 41 Nm.



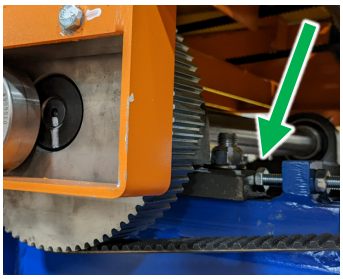
**17** Mount the belts onto the drive pulley.



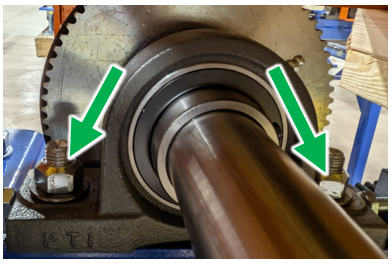
**18** Reposition the cam shafts back to their original locations.



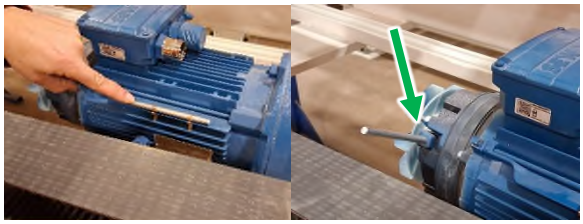
**19** Tighten the inner jack screws evenly keeping the lift pulleys parallel with the drive pulley until the lift belts are properly tensioned. If necessary, adjust the outer jack screws.



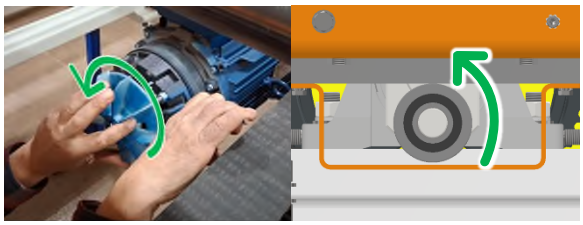
**20** Tighten all the M20 bolts for the pillow block bearings.



**21** Remove the brake pin from the side of the motor and use it to temporarily disengage the brake.

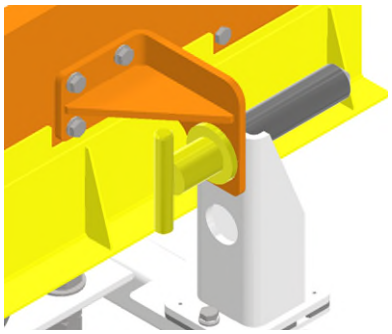


**22** Slowly rotate the motor fan to raise the lift frame back to its highest position, relieving pressure from the Safety Pins.



**23** Re-engage the brake, return the pin to its storage location, and replace the motor's fan cover.

**24** Restore power to the system and lift the table off the safety pins. Return the safety pins to their designated storage area.



**25** Cycle the lift table and observe that the lifting belts are tracking straight and that the table is even all around. Correct if necessary.

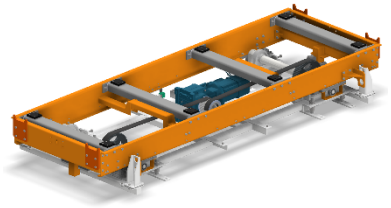
**26** Lock Out the system again to return safety covers then operate as normal.

# How to Replace a Cam Roller

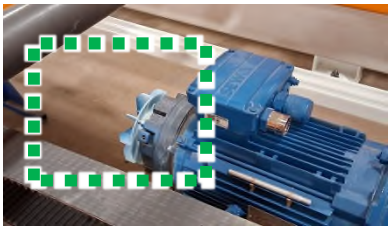
1 Place the lift into the maintenance position per the above section ***Placing the Hold Table into the Maintenance Position.***

Lock out power to the lift using your plant's safety procedures.

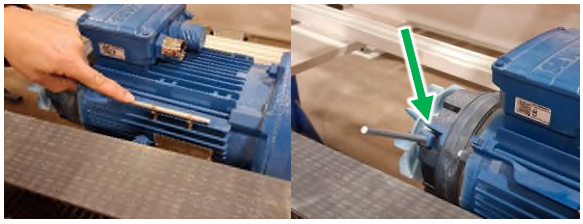

2 Remove safety covers.



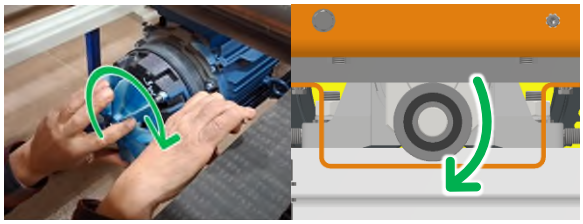
3 Remove the fan cover from the lift motor.



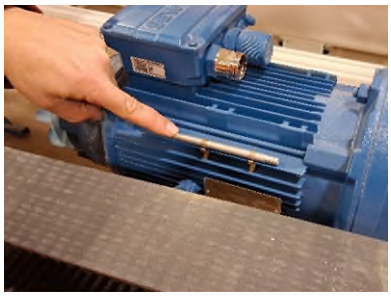
4 Remove the brake pin from the side of the motor and use it to temporarily disengage the brake.



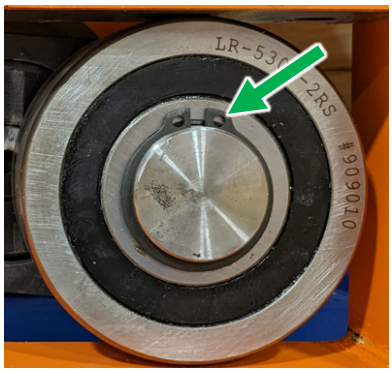
5 Slowly rotate the motor fan to lower the lift frame onto the Safety Pins and relieve pressure from the cam rollers.



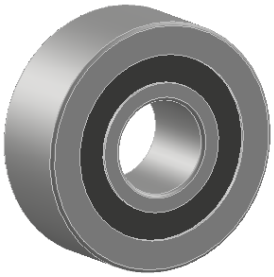
6 Re-engage the motor brake and return the pin to its storage location.



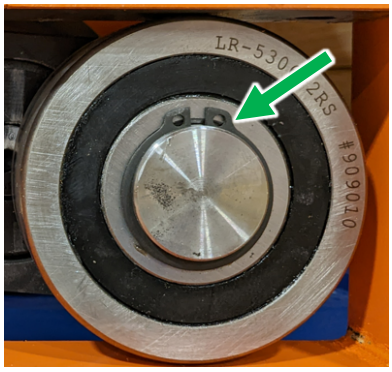
7 Remove the retainer ring from the original cam roller.



8 Replace the old cam roller with new part.

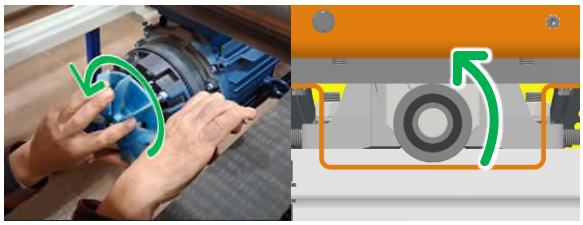


9 Install new retainer ring.



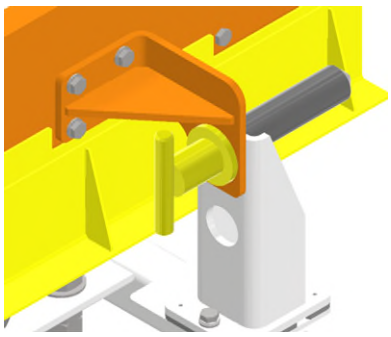
10 Remove the brake pin from the side of the motor and use it to temporarily disengage the brake.

**11** Slowly rotate the motor fan to raise the lift frame back to its highest position, relieving pressure from the Safety Pins.



**12** Re-engage the brake, return the pin to its storage location, and replace the motor's fan cover.

**13** Restore power to the system and lift the table off the safety pins. Return the safety pins to their designated storage area.



**14** Cycle the lift table and observe that the lifting belts are tracking straight and that the table is even all around. Correct if necessary.

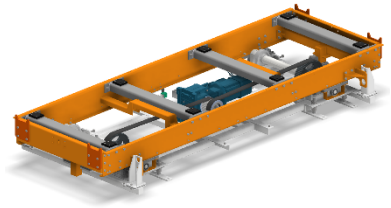
**15** Lock Out the system again to return safety covers then operate as normal.

# How to Replace the Lift Gearmotor

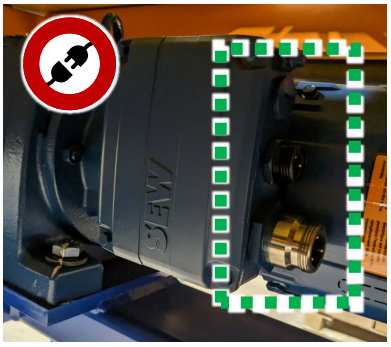
1 Place the lift into the maintenance position per the above section ***Placing the Hold Table into the Maintenance Position.***

Lock out power to the lift using your plant's safety procedures.

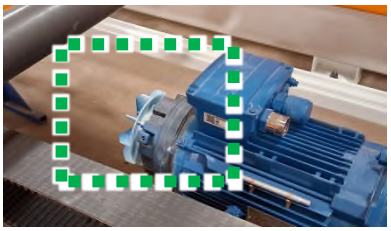

2 Remove safety covers.



3 Disconnect the cables from the lift motor.

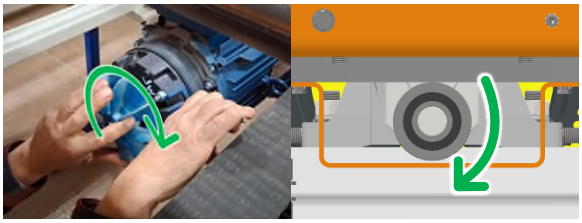


4 Remove the fan cover from the lift motor.



5 Remove the brake pin from the side of the motor and use it to temporarily disengage the brake.

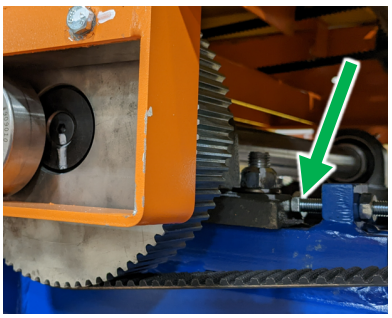
6 Slowly rotate the motor fan to lower the lift frame onto the Safety Pins and relieve pressure from the cam rollers.



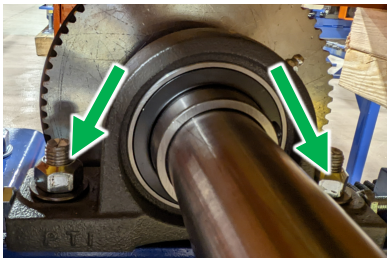
7 Re-engage the motor brake and return the pin to its storage location.

8 Loosen the inner jack screws for all the pillow block bearings.

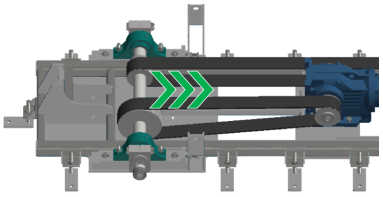
***Note:*** *DO NOT make any adjustments to the outer jack screws at this time. They will be used as a reference when returning the pillow block bearings to their original positions.*



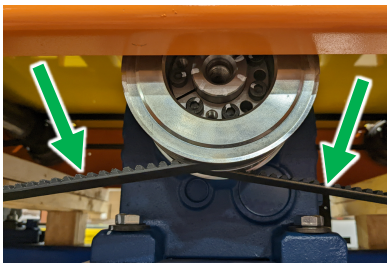
9 Loosen the pillow block bearing M16 bolts for all the pillow block bearings.



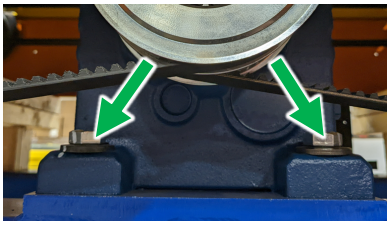
10 Pull the lifting cam assemblies slightly to the center of the lift to reduce tension on the lifting belts.



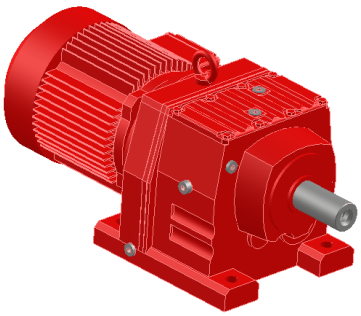
**11** Remove the lifting belts off the drive pulley.



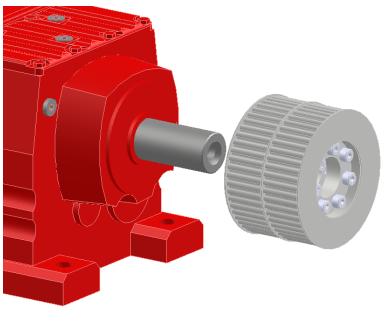
**12** Loosen and remove the M16 bolts (4) that hold the lift motor to the lift table base.



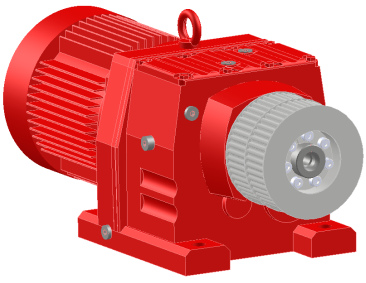
**13** Remove the motor from the lift table using jib crane.



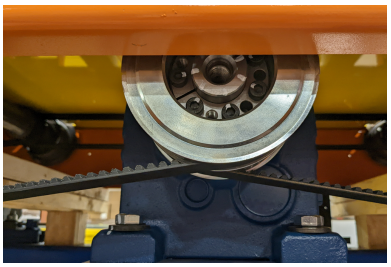
**14** Inspect the drive pulley for wear or damage. If none is found, remove the pulley from the old motor and re-install on the new motor. Otherwise install a new drive pulley onto the new motor.



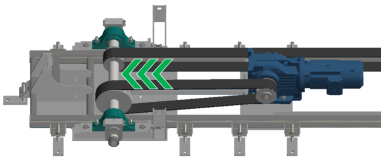
**15** Install the new motor into the lift table using jib crane.



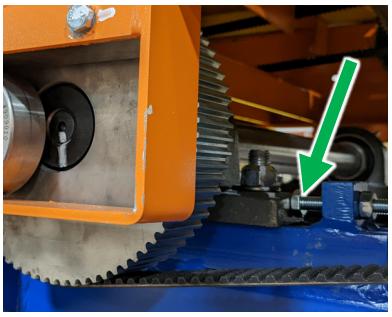
**16** Align the drive pulley so that the lifting belts will run in the center.



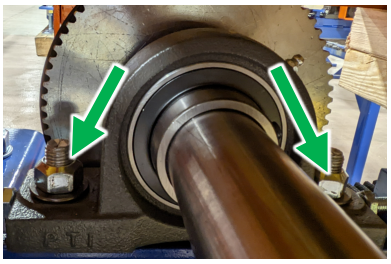
**17** Reposition the cam shafts back to their original locations.



**18** Tighten the inner jack screws evenly keeping the lift pulleys parallel with the drive pulley until the lift belts are properly tensioned. If necessary, adjust the outer jack screws.

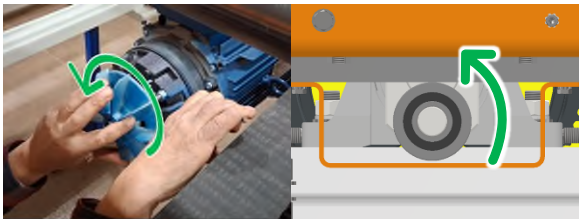


**19** Tighten all the M20 bolts for the pillow block bearings.



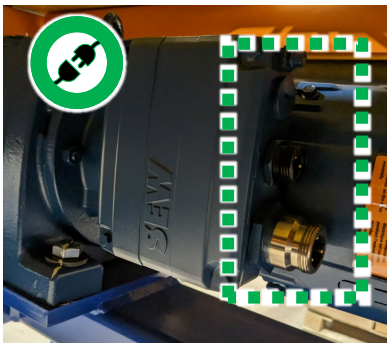
**20** Remove the brake pin from the side of the motor and use it to temporarily disengage the brake.

**21** Slowly rotate the motor fan to raise the lift frame back to its highest position, relieving pressure from the Safety Pins.

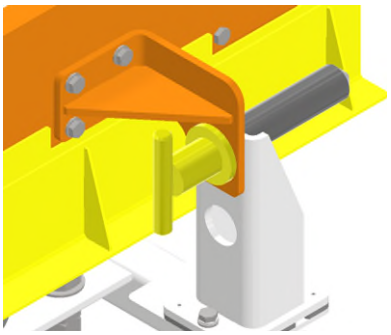


**22** Re-engage the brake, return the pin to its storage location, and replace the motor's fan cover.

**23** Reconnect the cables to the lift motor.



**24** Restore power to the system and lift the table off the safety pins. Return the safety pins to their designated storage area.



**25** Cycle the lift table and observe that the lifting belts are tracking straight and that the table is even all around. Correct if necessary.

**26** Lock Out the system again to return safety covers then operate as normal.