

2100 Series Center Drive Gearmotor Re-orientation

The 2100 Series center-drive conveyor gearmotor is shipped assembled from the factory as shown in Figure 1. When desired or required, the position of the gearmotor can be changed to the positions shown by the dashed outlines.

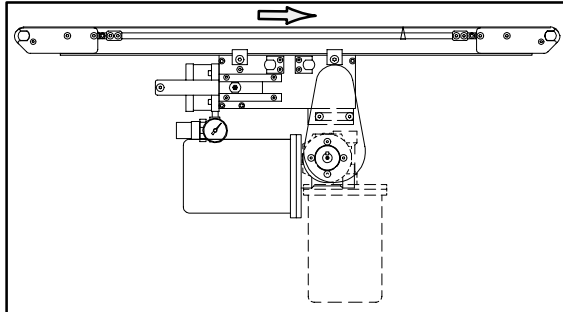
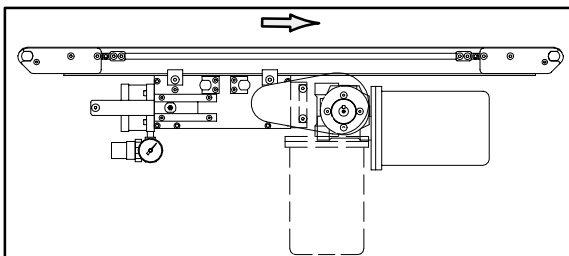


Figure 1: Type 1 (above) & Type 2 (below) 2100 Center Drive Gearmotor Re-orientation Details (Position "D" shown, Position "A" similar)



To change the gearmotor orientation, first disconnect and lockout electrical power to the gearmotor. Likewise, remove air pressure to the tension cylinder.

WARNING

To prevent injury, make sure all electrical and pneumatic power sources have been disconnected before you perform any maintenance or adjustments or replace any components.

1. Detach the belt guard (B of Figure 2) by removing and retaining the two (2) M4 x 6 mm socket head cap screws (A) on each side of the guard.
2. Release timing belt tension by loosening the M8 x 40 mm socket head cap screw (C) and sliding the belt tensioning roller assembly (D) away from the belt. With tension released, the timing belt and drive pulley can be removed.
3. Disassemble the drive pulley (E) by loosening the pulley set screws or Taper Lock[®] bushing set screws, securing either assembly to the gear reducer shaft.

NOTE:

Use the hex key wrench furnished with the Taper Lock[®] style pulley kit. Retain wrench for future service.

4. With the drive pulley (E) removed, proceed to re-orient the gearmotor to the alternate position shown in Figure 1, by detaching the four (4) mounting screws (F), turning the gearmotor 90° and re-securing the 4 screws.

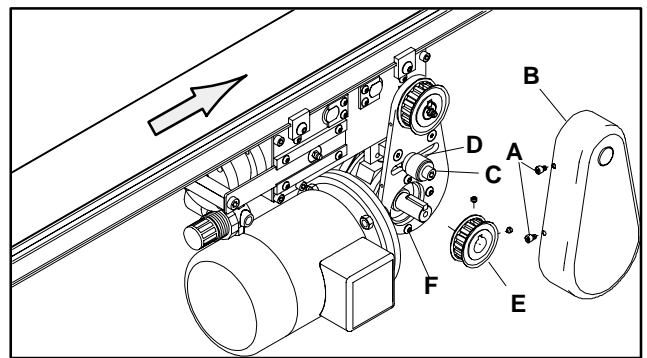


Figure 2

5. After the gearmotor has been re-oriented, replace the drive pulley (E). Then, install the timing belt (G of Figure 3) around the pulleys.
6. Determine which direction the conveyor belt is traveling and position the tensioning roller assembly (D) on the appropriate slack side of the timing belt, as shown. Make sure the timing belt is centered, with respect to all three components, before adjusting tension in the next step.
7. Adjust the timing belt tension by sliding the belt tensioning roller assembly (D) against the belt. Timing belt tension can be measured at the mid-point (H) on the tension side of the belt. At this point, tension should be adjusted for a 3 mm belt deflection with 0.5 kilograms of force applied.

NOTE:

Do not over-tension the timing belt. Over-tensioning may cause reduced belt life or bearing and drive damage. Every timing belt application exhibits its own individual operating characteristics. The optimum timing belt tension should be determined experimentally. If necessary, continue to slide the tensioning roller assembly (D of Figure 3) against the timing belt (G) until belt is tensioned so as to prevent jumping the teeth under the most severe conditions or heaviest load that the drive will encounter.

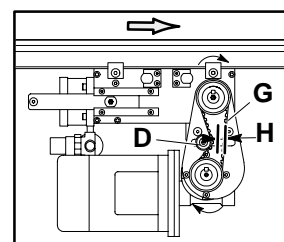
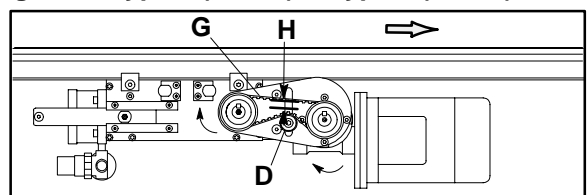


Figure 3: Type 1 (above) & Type 2 (below) Drives



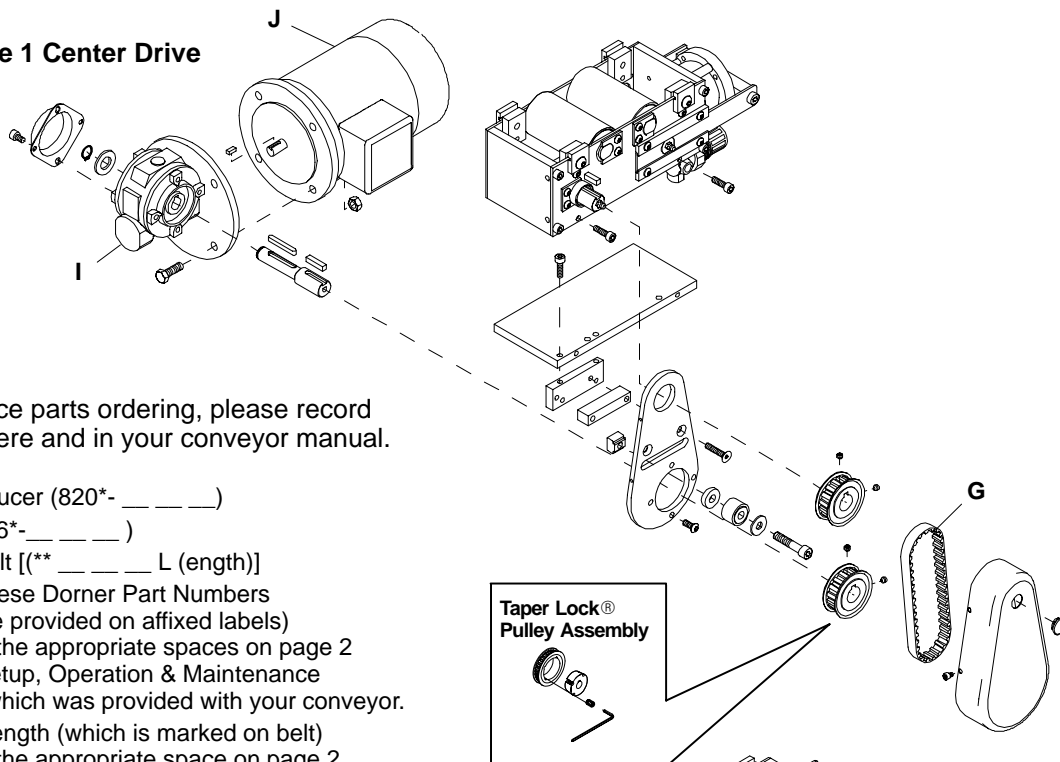
8. Tighten the M8 x 40 mm socket head cap screw (C), after the required tension is achieved.
9. Re-attach belt guard (N) using all four (4) M4 x 6 mm socket head cap screws (O).

Re-assembly Instructions

Replacement Parts

For unidentified items, contact factory.

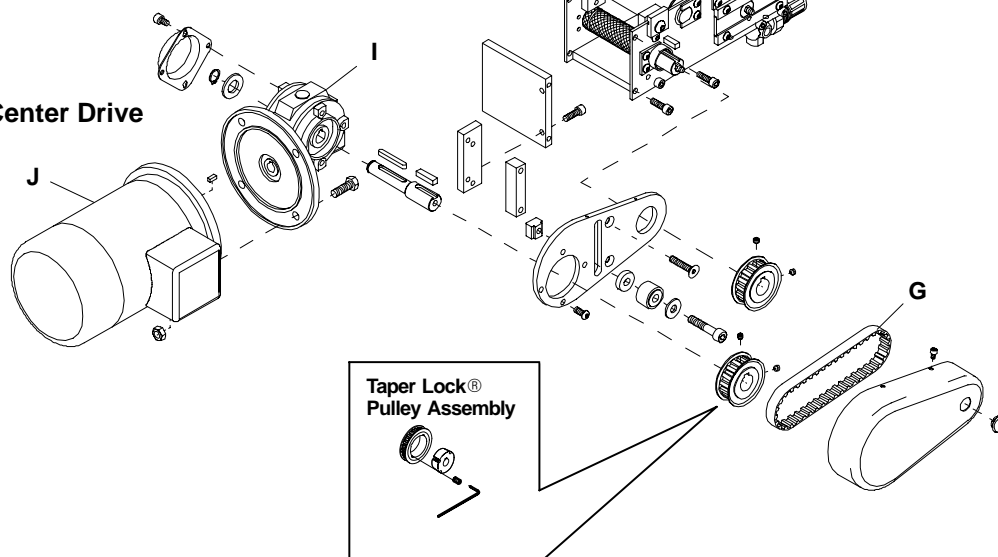
Type 1 Center Drive



For future service parts ordering, please record part numbers here and in your conveyor manual.

- I Gear Reducer (820*- ____)
J Motor (826*- ____)
G Timing Belt [(** ____ L (ength)]
* Record these Dorner Part Numbers (which are provided on affixed labels) here & in the appropriate spaces on page 2 of your Setup, Operation & Maintenance Manual, which was provided with your conveyor.
** Record Length (which is marked on belt) here & in the appropriate space on page 2 of your Setup, Operation & Maintenance Manual, which was provided with your conveyor.

Type 2 Center Drive



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