

VELMEX, INC.

BISLIDE<sup>®</sup> Screw Drive Slide Assembly

## PC4 Parallel Coupled Assembly Instructions

(Motor Outboard of Belt Drive)

**CAUTION** Failure to follow proper assembly procedure may result in system binding, poor performance, premature wear, and permanent damage not covered by warranty



**Required tools:** 1/8" & 3/16" hex keys, large framing square, accurate measuring device (Cal-x-Tender tm. or similar caliper extension) 9/16" open end wrench, dial or digital caliper.



Mount the slides to the separators using T-nuts and mounting cleats. Do not tighten at this time.

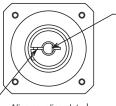
Remove outer plate on Idler (driven) end

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NOTE: If the Motor is not installed by Velmex then remove motor plate instead of idler plate.

When installing motor, If motor has flat on the output shaft, locate slot in coupling across flat on shaft as shown at right. Torque the four motor attaching 10-32 socket head cap screws to 70 in-lbs







Slide belt (guard) cover channel into each end







Slide belt over pulley and reinstall cover plate, torque the six 8-32 socket head cap screws to 50 in-lbs

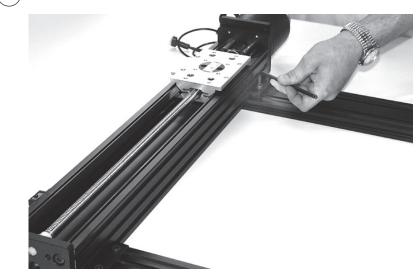




Square the motorized slide to the separator closest to the pulleys and tighten the mounting cleats. Leave the driven slide loose for now.



 $\overline{7}$  Tighten the mounting cleats on the drive (motor) side.



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Align the other separator at the far end of the slides parallel with the first one.





Rotating the pulleys by hand, bring both carriages into contact with the bearing assembly at the coupling/motor end of each unit, be careful not to force them.





10)

Align the driven slide parallel with the drive slide. Both slides should be of equal distance from the pulley end separator. Spread the slides so the belt has a little tension. Recheck for parallel and tighten the mounting cleats lightly.



Loosen the mounting cleats on the driven slide nearest to the pulley end. Place the belt tensioning rod between the motor mounting plates of both slides and tighten until the rod will support it's own weight.

**CAUTION** Do not tension Belt if Motor or Idler cover plate are not attached/secured, Severe damage to Pulley Shaft and Leadscrew will result!



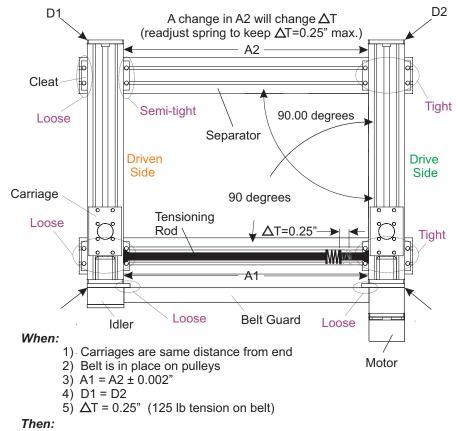
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Measure accurately between the washers on either side of the coil spring of the belt tensioning rod and record the measurement. Tighten the hex nut to change the distance between the washers by 0.25" then tighten the mounting cleats. This measurement is important to obtain the proper belt tension.



Check for parallel between the two slides and adjust the driven slide as necessary. Recheck the change in spring length. Periodically rotate the belt to ensure correct belt seating. **NOTE**: The slides should be parallel within 0.002" for proper slide operation. Use a cross pattern tightening sequence on the mounting cleats after final check.



6) Tighten all fasteners

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Place a small amount of BiSlide lubricant on the inside contact surface of the blue coupling cover. By hand, press down on the cover over the stand-offs until it seats on the bottom surface of the slide.



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Center the cover onto the belt guard and snap into place.





Before operation, be sure to set the limit switches to avoid accidental injury or damage.

Center the belt guard (cover channel) and tighten the screws at each end.



**CAUTION** Never remove Motor or Idler cover plate when belt is in tension, Severe damage to Pulley Shaft and Leadscrew will occur!

## **Contact Information**

By Phone:	585	5-657-6151	and	800-6	42-6446	3
By Fax:	585	657-6153				
Email:	info	o@velmex.c	om			
On the Internet:		www.BiSlic www.Velme				
By mail:		Velmex, In 7550 State Bloomfield	Route 5		USA	VELMEX

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