



## INSTALLATION INSTRUCTIONS

PART NUMBER	154-8292
PART DESCRIPTION	LDS PROX UPGRADE CENTER BLOCK
REV DATE	10/26/2012
MACHINE MODELS	PX-8 A/B & PXS A/B, ECHO, SM2



Basic knowledge on ALL aspects of the lane machine, including mechanical, electrical and operating software

### TOOLS NEEDED:

Phillips Screwdriver  
Snap Ring Pliers

Hammer  
½, 9/16 Wrench

Allen Set  
4' Level

Phoenix 8 pad Lane machine users please consult KEGEL prior to installing this kit. Additional parts may be necessary to complete this upgrade.

### **VERY IMPORTANT**

**You must have the ability to upgrade the software at the conclusion of the hardware installation procedure!**



### TECHNICAL NOTE

Please thoroughly read the instructions prior to performing the installation of this assembly.

To avoid any potential problems, if at any time during the process you have a question, stop and contact our Tech Support department at the numbers

Please visit our growing library of videos to see if these instructions are available!



[www.youtube.com/user/KegelBowling81](http://www.youtube.com/user/KegelBowling81)



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## Disassembly of Machine

1. Disconnect power and stand machine UP in the transport position.
2. Remove the 2 Snap Rings and White Kick-Up Wheel on the RIGHT side of the Lane Distance Sensor (LDS) shaft.
3. Loosen the 2 set screws on each Lane Distance Counter Wheel.
4. Loosen the jam nut and the square head adjusting bolt on the right side pillowblock.
5. Remove the #8 screws that attach the original LDS guard and the 2 center covers. Remove the guards and set it them aside for use later.
6. Remove screw and clamp from center block that holds the sensor cable to block. Then remove sensor from block.
7. Loosen the set screw in the old LDS counter hub and slide off shaft.
8. Loosen set screws in the sprocket on LDS shaft and slide both sprockets away from block, leave top sprocket locked to small shaft for later use. The chain will stay on LDS shaft.
9. Loosen the set screw in the old LDS counter sprocket on right side of machine.
10. Remove the shaft by sliding it out of the blocks to the left. As the shaft is removed collect the nylon washers. Set the washers, sprocket, chain and wheels aside.
11. Remove the original center pillowblock from the rear panel.

## Adding New Components:

1. Install the new sensor block in the middle position. Use the old fasteners to attach the new block to the panel. Do not tighten block down at this time.
2. Slide the LDS shaft back through the left pillowblock. Then slide the left LDS wheel on the shaft (hub toward center of machine).
3. Place the sprocket and chain (hub toward center pillowblock) on the shaft with a thick nylon washer supplied with the kit.
4. Slide the shaft through center block and then slide right LDS wheel on shaft (hub toward center of machine) followed by the old LDS sprocket and the nylon washers (the hub of the counter sprocket is toward the center).
5. Slide the shaft through the right pillowblock until it is centered.



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6. Replace the 2 Snap Rings and the White Kick-Up Wheel.
7. Tighten the original counter sprocket on the flat spot with the nylon washers between the sprocket and the pillowblock.
8. Push the shaft all the way to the right.
9. Push the LEFT lane distance wheel against the pillowblock, secure this wheel on the 2 flat spots, allowing about 1/16" of end play.
10. Place the right lane distance wheel over the two flat spots, and tighten both set screws.
11. Slide chain over LDS sprocket and slide small shaft with sprocket back through new block the way it was taken out of old block. (make sure nylon washer is between sprocket and block.
12. Position the sprocket on the flat spot of the LDS shaft. It should align with the sprocket on the block.
13. Tighten the sprocket on shaft.
14. Slide 3 thick nylon washers and 1 thin on small shaft to block, then slide the new 5-tooth sensor disc on shaft and tighten on flat spot with no play in shaft. (with set screw provided in kit)
15. Screw the new Prox sensor to block using two 4-40 x 1" screws provided in kit and using a drop of blue lock-tite on threads. Using a feeler gauge make sure there is .010" between disc and Prox.

### **Wiring the Sensor:**

1. Feed the Prox sensor cable through the grommet where the old sensor wire one came out.
2. Route the new Prox cable where the old sensor wire was routed while removing the old one at the same time.
3. Fasten the sensor cable to the wiring harness using the wire ties provided.
4. Wire this Prox sensor cable to the exact location in the terminal block where the original cable was attached.
5. Attach both of the sensor guards (original and new) to the pillowblocks using the 8-32 x 3/8" fasteners.



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### **Adjusting the Brush:**

1. Use a 4' level as a straight edge and place it on one lane distance wheel and the drive wheel (on the same side). This will cause the level to "crush" the brush bristles.
2. There should be an 1/8" of the bristle tips past the edge of the level. If there is not enough crush, loosen the outside blocks and turn the square head bolt into the adjustment block, allowing the pillowblock to push upward causing more crush.
3. If there is too much "crush" on the brush, loosen blocks and turn the square head bolt out of the adjustment block, causing the pillowblock to move down, pushing the level away from the brush.
4. Make adjustments 1/4 turn at a time on each side to assure proper settings.
5. When the "crush" is 1/8" tighten the pillowblock mounting bolts found underneath the block on the inside of the rear panel.
6. Do this on **both** sides of the machine. When both outside pillowblocks are secured, adjust the middle block so that the shaft spins freely without binding.
7. Tighten the center block and spin the shaft again, making sure it spins easily.
8. Lubricate bushings with a small amount of oil.
9. Secure the jam nuts for the square head bolt against the adjustment block.
10. Install new program and run on lane to assure proper installation.



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