



INSTALLATION INSTRUCTIONS

PART NUMBER	154-8291
PART DESCRIPTION	LDS PROX UPGRADE RIGHT 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
Allen Set

Hammer
Flat head screwdriver

Center Punch
½, 11/32 Wrench

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 listed

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



www.youtube.com/user/KegelBowling81



- Place orders with Distributor
- Maintenance reminders on phone
- Software updates
- How to videos

Take full control of your lane machine at My.kegel.net

Kegel's Lane Maintenance Central:
Within USA - 1-800-280-2695
Outside USA - +1 863-734-0200
via e-mail at LMC@Kegel.net
website www.kegel.net



Disassembly of Machine

1. Disconnect power and stand machine UP in the transport position.
2. Remove the 4 Snap Rings and 2 White Kick-Up Wheel on the each end 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 three #8 screws that attach the original LDS guard. Remove the guard.
6. Remove the pass-through sensor from the pillowblock.
7. Loosen the set screw in the old LDS counter sprocket.
8. Remove the shaft by sliding it out of the blocks to the left. As the shaft is removed collect the nylon washers. Set the wheels aside.
9. Remove the original center pillowblock from the rear panel.
10. The original Sensor is wired into the terminal block on the relay plate.

Modifying the Machine:

1. The next step is to drill two new holes in the rear panel. Using a center punch, mark the first hole at 25-1/8" from the LEFT side and 4-3/8" from the BOTTOM of the panel. Drill this hole using 1/2" drill bit.
2. Use the center punch to mark the second hole 7/8" from the RIGHT side and 5-1/4" from the TOP (near the original grommet hole). Drill this hole with a 3/16" drill bit.

Adding New Components:

1. Install the new pre-assembled Prox 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. Lay the new LDS shaft on a table and determine left side of shaft, to do this find the flat spot in center of shaft measure from the end of the shaft 22 1/4" to flat spot this will be the left side. Slide the LDS shaft back through the left pillowblock, right-side of the shaft first. Then slide the left LDS wheel on the shaft (hub toward center of machine).
3. Place the new 1/2" bore sprocket (hub toward center pillowblock) on the shaft then one nylon washer.
4. Slide the shaft through center block and then slide right LDS wheel on shaft (hub toward center of machine) followed by two nylon washers.
5. Slide the shaft through the right pillowblock until it is centered.
6. Replace the 2 Snap Rings and the White Kick-Up Wheel.
7. Push the LEFT lane distance wheel against the pillowblock, secure this wheel on the 2 flat spots, and allow about 1/16" of end play.
8. Place the right lane distance wheel over the two flat spots, and tighten both set screws.
9. Position the new sprocket on the flat spot of the LDS shaft. It should align with the sprocket



- Place orders with Distributor
- Maintenance reminders on phone
- Software updates
- How to videos

Take full control of your
lane machine at
My.kegel.net

Kegel's Lane Maintenance Central:
Within USA - 1-800-280-2695
Outside USA - +1 863-734-0200
via e-mail at LMC@Kegel.net
website www.kegel.net



on the block.

10. Tighten the sprocket on shaft and place the chain on both sprockets.
11. Connect the ends of the chain together with the No.25 Master Link.

Wiring the Sensor:

1. Place the round grommet in the new 1/2" hole and feed the Prox cable through grommet
2. Remove the fasteners on the three clamps toward the right side of the machine.
3. Use three of the new 1/8" clamps provided and double them up with the existing clamps. One clamp will be facing up and one will be facing down.
4. Fasten these six clamps to the machine with the 8-32 x 3/4" screws provided.
5. The 3/16" hole you drilled will also be used to fasten a clamp to the machine.
6. Feed the Prox cable through these clamps and route it along the right side of the machine into the electrical compartment.
7. Fasten the Prox cable to the wiring harness using the wire ties provided.
8. Wire this sensor cable to the exact location in the terminal block where the original cable was attached.
9. Attach the new sensor guard to the pillowblock using the 8-32 x 3/8" fasteners.

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 to machine, run on lane to assure proper installation.



- Place orders with Distributor
- Maintenance reminders on phone
- Software updates
- How to videos

Take full control of your
lane machine at
My.kegel.net

Kegel's Lane Maintenance Central:
Within USA - 1-800-280-2695
Outside USA - +1 863-734-0200
via e-mail at LMC@Kegel.net
website www.kegel.net

