

# **INSTALLATION INSTRUCTIONS**

PART NUMBER	164-8251
PART DESCRIPTION	BODINE DRIVE MTR HARDWARE KIT WITH BRACKETS
REV DATE	1/28/2020
USED WITH MOTOR #	164-8602



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

TOOLS NEEDED: Phillips Screwdriver ½" Wrench 5/32 Allen Wrench 9/16" Socket Gear puller (may be needed)

Telescope Magnet ½" Socket 1/8" Allen Wrench Long Needle nose pliers 1" hole saw

2- 7/16" Wrench 11/32" Wrench 3/32" Allen Wrench Feeler Gauge Blue loc-tite



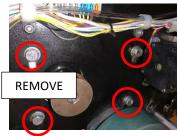
Within USA - 1-800-280-2695 Outside USA - +1 863-734-0200 via e-mail at LMC@Kegel.net website www.kegel.net

# KUSTODIAN WALKER A/B & SPORT MODEL LANE MACHINES – 164-8602 LEFT ZTR

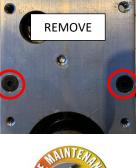
- 1. Lay the machine down in the operating position and remove the screws holding the side guards on.
- 2. Remove the screws that fasten down the electrical panel and tilt up to access the bottom of the center compartment.
- 3. Remove the battery or batteries from the machine.
- 4. Loosen the idler pulley for the buffer belt and remove the belt.
- 5. Remove the master link from the ZTR motor. This is easiest done from the top of the lane machine by rotating the motor until you have the master link on the sprocket.
- 6. Unplug both the ZTR motor and the buffer motor as they will come out of the lane machine together.
- With a ½" socket and wrench, loosen and remove all four mounting bolts, except the one in the upper right. You can leave it in the hole after unthreading it.
- 8. Lift the assembly out of the lane machine and to workbench.
- 9. Loosen the set screws in the bearing housing.

10. Set the assembly up on end and remove the two flathead bolts along with the two allen bolts using a 5/32'' allen wrench.











- 11. Now that all four mounting bolts are removed, lift the buffer motor and bracket assembly up and off the shaft of the ZTR motor assembly. This is a great opportunity to blow out the buffer motor and inspect or replace the brushes. (part number 164-8014 for Variable speed motor or, 158-8414 for Standard).
- 12. Before removing the sprocket, take a measurement of the sprocket on the shaft as shown.
- 13. With an 1/8" allen wrench, loosen the set screw on the sprocket of the motor and remove. A gear puller may be necessary to remove.
- 14. With a 5/16" wrench, remove the two bolts holding the motor adjustment bolt block and set aside for reinstallation. (Sport model only)
- 15. Clean up the sprocket and slide it onto the new motor until you reach the measurement you took in step 12, and fasten it into place.
- 16. Using two of the 153-2968 bolts, fasten one of the 158-6744 adapters to the one of the 158-6743 mount brackets as shown. Repeat steps for the other bracket.
- 17. Take two of the 164-2088, and slide a washer and a lock washer onto the bolt and push them through the motor mount bracket as shown. Repeat steps for the other mount bracket.
- 18. Set the new motor on the bench with the shaft towards the top and fasten the two motor mount brackets onto the motor as shown. ONLY FINGER
   TIGHTEN THEM.
- 19. Attach the motor adjustment bolt block onto the mount bracket as shown. (Sport model only)









20. Take the buffer motor bracket assembly and slide the entire assembly back onto the shaft of the new motor.

This step is a little tricky to try by yourself, but with perseverance, it can be done. The holes will be off a little and the reason for leaving all the bolts loose in step 18. They even may need to be loosened further.

- 21. Take two of the 153-2968 bolts and thread them through the bracket and into the motor. Do the same with the two flathead screws.
- 22. Once all screws are threaded in, go ahead and fasten all the way.
- 23. Fasten the set screws in the bearing housing as well.
- 24. With the wire harness's pulled back, and out of the way, carefully lower the motor bracket assembly into the lane machine.
- 25. Bolt the motor assembly to the side of the lane machine and fasten into place finger tight.
- 26. Stand the machine upright in the transport position.
- 27. Pull the chain through the bottom and around the bottom sprocket. Route the chain up to the top sprocket on the motor. (This is where a telescoping magnet, or a pair of long needle nose pliers will come handy). Wrap the chain around the sprocket, and replace the master link and clip.
- 28. Place the machine back down in operating position.
- 29. Tighten the adjusting bolt for the motor, all the way to the bottom of the frame
- 30. Go ahead and completely tighten up the mounting bolts for the motor assembly on the side of the lane machine.
- 31. Plug both the buffer motor and drive motor in.
- 32. Replace the buffer belt assembly and tighten up the idler pulley.
- 33. Replace the battery assembly.
- 34. Flip the electrical panel back over and fasten into place.
- 35. Replace the Lid assembly.
- 36. With the machine on the approach, test the walking features and the buffer motor. Additional balancing wire has been added just in case an adjustment is needed.

If you have any questions or concerns, please contact Kegel Tech Support team! 1-800-280-2695







# KUSTODIAN WALKER SPORT MODEL LANE MACHINES - 164-8602 RIGHT DRIVE

This motor change can be difficult. We recommend to put the machine on blocks to elevate it from the ground.

- 1. Lay the machine down in the operating position and remove the screws holding the side guards on.
- 2. Remove the lid assembly by loosening the mounting block on one side only. This will free up the lid to lift up and off the lane machine.
- 3. Remove the recovery tank.
- 4. With a 7/16" socket, remove the two bolts that fasten the vacuum motor to the interior wall and set the motor aside.
- 5. Remove the screws that fasten down the electrical panel and tilt up to access the bottom of the center compartment.
- 6. With a 7/16" wrench, remove the strap holding the battery or batteries in place. Lift the battery up and out of the machine.
- 7. With a 7/16" wrench, loosen the jam nut on both of the chain tensioners and back the bolt off.
- 8. With a 9/16" socket, loosen both of the tensioner blocks. You will need to remove the secondary chain tensioner block completely. This will allow you to remove the master link in the next step.
- 9. With a pair of pliers, remove the two master links from the main drive motor chain and the secondary chain.
- 10. With a 3/32" allen wrench, loosen the two set screws in the bearing assembly, that hold it on the shaft.
- 11. Loosen the mounting bolts for the bearing assembly. This will make it easier to slide out.
- 12. Next, remove the motor. Do this by loosening and removing the four bolts that mount it to the plate. It may be helpful to support the motor with some blocks of wood.
- 13. Lift the motor up and out of the lane machine and set on a workbench.
- 14. With an 1/8" allen wrench, loosen up the two set screws on each of the sprockets.
- 15. Slide the sprockets off the old motor. This is a good opportunity to clean up the sprockets.
- 16. Using a feeler gauge, slide the large sprocket onto the new motor until a gap of .020 is reached between the motor and the sprocket hub. Slide the smaller one onto the shaft of the motor and tighten them in place.





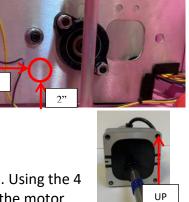
17. Before installing the new motor, a one inch access hole will need to be drilled so that you can reach the bottom bolt to fasten. Using a 1" hole saw, drill 3" from the back and 2" from the bottom frame.

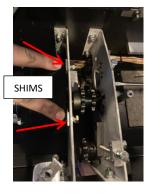
Clean up any metal shavings left in the machine.

- Take the motor assembly and slide it into the mounting plate. Using the 4

   164-2088 bolts and hardware finger tighten the bolts onto the motor assembly.
- 19. On the short chain, you will need to add an offset half link (153-9048) that was supplied with the motor.
- 20. Before continuing, you may need to fine-tune the alignment of the sprockets.
- 21. This part is a little tough, and may require an assistant. Take the secondary drive chain and wrap it around the sprocket on the machine and around the sprocket on the motor. This is where the telescoping magnet can help a great deal.
- 22. Using long needle nose pliers, take the master link and attach it to the chain through the hole that idle tensioner block goes. Install the clip.
- 23. Take the long main drive chain and install it onto the machine.
- 24. Once the chains are on the machine, insert the supplied shims between the motor and mounting plate and tighten the motor.
- 25. Reinstall the tensions block for the secondary drive chain. Fasten is down allowing for a little play in the chain when block is tight.
- 26. Thread the long ¼-20 bolt onto the block and tighten the jam nut.
- 27. Push the main drive chain tensioner block onto the chain. Again, allowing a little play and fasten it tight. Thread the long ¼- 20 bolt onto the block and tighten the jam nut.
- 28. Tighten the set screws in the bearing assembly, then fasten the bearing assembly to the plate.
- 29. Plug the drive motor in.
- 30. Install the vacuum motor back into the lane machine.
- 31. Install the battery/batteries back into the lane machine and fasten the electrical panel back in place.
- 32. Install the recovery tank.
- 33. Install the lid assembly.
- 34. Power the machine on and walk the machine to verify that its walking straight. A 12 foot adjusting wire is supplied with the motor if any adjustment is needed.







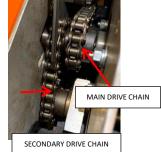


# KUSTODIAN WALKER A/B MODEL LANE MACHINES – 164-8602 RIGHT DRIVE

This motor change can be difficult. We recommend to put the machine on blocks to elevate it from the ground.

- 1. Lay the machine down in the operating position and remove the screws holding the side guards on.
- 2. Remove the lid assembly by loosening the mounting block on one side only. This will free up the lid to lift up and off the lane machine.
- 3. Remove the recovery tank.
- 4. With a 7/16" socket, remove the two bolts that fasten the vacuum motor to the interior wall and set the motor aside.
- 5. Remove the E-stop assembly and set aside.
- 6. Remove the screws that fasten down the electrical panel and lift up and carefully rest in the conditioning compartment. This will give you access the bottom of the center compartment.
- 7. With a 7/16" wrench, remove the strap holding the battery or batteries in place. Lift the battery up and out of the machine.
- 8. With a 9/16" socket, loosen the tensioner block. (in some cases there may be a bolt with a jam nut that holds block in place).
- 9. With a pair of pliers, remove the two master links from the main drive motor chain and the secondary chain. You will need to spin the motor toward you in operating position so that the master link on the secondary chain will come out towards the 10 pin side.
- 10. With a 3/32" allen wrench, loosen the two set screws in the bearing assembly, that hold it on the shaft.
- 11. Loosen the mounting bolts for the bearing assembly. This will make it easier to slide out.
- 12. Next, remove the motor. Do this by loosening and removing the four bolts that mount it to the plate. It may be helpful to support the motor with some blocks of wood.
- 13. Lift the motor up and out of the lane machine and set on a workbench.
- 14. With an 1/8" allen wrench, loosen up the two set screws on each of the sprockets.
- 15. Slide the sprockets off the old motor. This is a good opportunity to clean up the sprockets.
- 16. Using a feeler gauge, slide the large sprocket onto the new motor until a gap of .020 is reached between the motor and the sprocket hub. Slide the smaller one onto the shaft of the motor and tighten them in place.





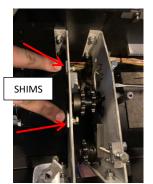


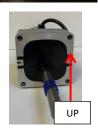
17. Before installing the new motor, a one inch access hole will need to be drilled so that you can reach the bottom bolt to fasten. Using a 1" hole saw, drill 3" from the back and 2" from the bottom frame.

Clean up any metal shavings left in the machine.

- Take the motor assembly and slide it into the mounting plate. Using the 4 164-2088 bolts and hardware finger tighten the bolts onto the motor assembly.
- 19. On the short chain, you will need to add an offset half link (153-9048) that was supplied with the motor.
- 20. Before continuing, you may need to fine-tune the alignment of the sprockets.
- 21. This part is a little tough, and may require an assistant. Take the secondary drive chain and wrap it around the sprocket on the machine and around the sprocket on the motor. This is where the telescoping magnet can help a great deal.
- 22. Using long needle nose pliers, take the master link and attach it to the chain through the hole that idle tensioner block goes. Install the clip. A trick here is to use a small wire tie and put through each end of the chain and zip together and put the link on.
- 23. Take the long main drive chain and install it onto the machine.
- 24. Once the chains are on the machine, insert the supplied shims between the motor and mounting plate and tighten the motor.
- 25. Reinstall the tensions block for the main drive chain. Fasten down allowing for a little play in the chain when block is tight.
- 26. If equipped, thread the long ¼-20 bolt onto the block and tighten the jam nut.
- 27. Push the main drive chain tensioner block onto the chain. Again, allowing a little play and fasten it tight. Thread the long ¼- 20 bolt onto the block and tighten the jam nut.
- 28. Tighten the set screws in the bearing assembly, then fasten the bearing assembly to the plate.
- 29. Plug the drive motor in.
- 30. Install the vacuum motor back into the lane machine.
- 31. Install the battery/batteries back into the lane machine and fasten the electrical panel back in place.
- 32. Install the recovery tank.
- 33. Install the lid assembly.
- 34. Power the machine on and walk the machine to verify that its walking straight. A 12 foot adjusting wire is supplied with the motor if any adjustment is needed.







## FLEX 2013-15 DRIVE MOTOR

#### REMOVING LIDS

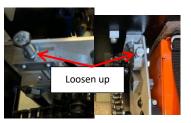
- 1. With the lane machine standing in the upright, transport position, remove the screws holding on the side guards.
- 2. Remove the Bumper wheel assembly.
- 3. Now set the machine down into the operating position, and remove the last two screws holding the side guard onto the machine. There will be one in the cleaning compartment and one in the conditioning compartment.
- 4. Remove both the cleaner and the conditioning lid assemblies.
- 5. Remove the clear electrical panel cover.
- 6. Remove the three screws that fasten down the electrical panel and pull the panel up towards you.
- 7. Remove the battery assembly.

#### REMOVING MOTOR

- 8. Using a 7/16" wrench, remove the two bolts that mount the vacuum motor to the wall. Remove the vacuum motor.
- 9. Using a 7/16" wrench loosen the jam nut on the threaded jam bolt. Back the bolt out and away from the block.
- 10. Using (2) 9/16" wrenches, loosen up the block tensioner to relieve tension from the chain. Do this for both chains tensioner blocks.
- 11. Remove the master links from both of the chains, and remove the chains.
- 12. Loosen up all of the sprockets on the shaft of the motor.
- 13. Loosen up the two set screws in the bearing housing.
- 14. Remove all four bolts that mount the drive motor to the inner plate assembly.
- 15. Unplug the motor and slide up and out of the machine.

#### **INSTALLING**

- 1. Before removing the sprockets, take a measurement of how far the sprockets are from the motor. This will make it easier to line up sprockets when the chains go back on.
- 2. Remove the sprockets.
- 3. Using the new key ways, install the sprockets onto the new motor assembly.
- 4. Reinstall the motor through the inner plate assembly and into the bearing.
- 5. Using the supplied bolts, place a washer and a lockwasher on them and fasten the motor to the plate.
- 6. Tighten all of the set screws. One on each of the sprockets, and two on the bearing.
- 7. Tighten the tension blocks back down onto the chains. Tighten up the long bolt for the tension block first, then fasten the bolt in the tension block.







- 8. Reinstall the vacuum motor.
- 9. Reinstall the recovery tank.
- 10. Reinstall the lid assembly.

After the lane machine is all back together, run an 'Auto Speed Adjust' so that the motor can be dialed in with the correct speeds. A yellow balancing wire has been added in case an adjustment is needed.



## REMOVAL

- 1. With the machine in the operating position, fasten the center compartment down with one of the screws you removed in the 'Removing Lid and Guard' instructions at the beginning. This will keep the center plate from falling when you stand the machine up in the following step 2.
- 2. Stand the machine up to the upright position, remove the buffer brush assembly from the machine.
- 3. Remove the drive chain by locating the master link and removing the link.
- 4. Lay the machine back down into the operating position, and remove the screw that you put back into the plate in step 1.
- 5. Tilt the center plate up towards you and remove the cleaner speed control board from the wall.
- 6. Remove the recovery tank from the cleaning compartment.
- 7. Remove the (4) four knurled screws the hold the cleaner pump onto the inner wall as shown to the right.
- 8. Unplug the cleaner pump motor assembly and unscrew the cleaner pump motor from the wall. Remove from the center compartment.
- 9. Remove the screw holding the proximity sensor in place. So that you don't lose the screw, just thread it back into the motor mount block.

- 10. Loosen the jam nut that secures the bolt to the drive chain tensioner block and back the bolt out 3 or 4 turns.
- 11. Inside the conditioning compartment, remove the 2 screws on the right and the 2 screws on the left holding the track assembly in place.
- 12. Also, remove the 2 screws on the right and the 2 screws on the left holding the drive shaft cover on.



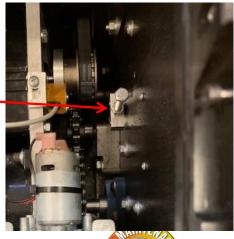








- 13. In the conditioner compartment, remove the two bolts on the left that hold the motor mounting bracket to the inside compartment.
- 14. In the cleaning compartment, remove the two bolts that are located under wear the cleaner pump was mounted.
- 15. Unplug both the Drive motor assembly and the Buffer motor assembly.
- 16. With a long T-handle allen wrench, loosen the set screw in the bearing assembly that the shaft of the drive motor slides into.
- 17. Take the drive and buffer motor assembly and lift up and out of the center compartment. This will be a tight fit.
- 18. With the assembly on a work bench, whichever motor you are replacing, remove the sprocket, or pulley and cam from the motor.
- 19. Unbolt the motor from the bracket.
- 20. Take a 9/32 drill bit and drill out the threads on the motor bracket of the motor you're changing. IMPORTANT: Double check to ensure you are drilling out the correct holes.
- 21. With the provided hardware (4) 153-2004,(4) 153-2014, (4) 164-2088 attach the new motor onto the motor bracket. These will be fastened from the outside in as shown.
- 22. Using the new keys, replace the sprocket, and/or the cam and pulley, back onto the shaft of the new motor.
- 23. Place the motor bracket assembly back into the machine. You will need to align the drive shaft with the bearing assembly and push the assembly all the way in. Do not fasten at this time.
- 24. This part is a bit difficult. Using your existing hardware, align the bracket assembly up with the holes in the inner wall. Partially thread them, but do not fasten until you have 4 bolts in place.
- 25. Fasten into place.
- 26. Plug the motors back in.
- 27. Replace the buffer brush assembly back into the lane machine. Wrap the buffer belt around the buffer motor and tighten up the idle pulley onto the buffer belt.
- 28. Replace the Drive chain for the motor. One little trick in helping to do this is to take a wire and loop it through each end of the drive chain link and pull together while place the master link on.
- 29. Tighten the bolt that applies tension to the drive chain and fasten the jam nut.
- 30. Replace the cleaner pump, cleaner speed control assembly and cleaner pump motor all into place.









- 31. With the machine in the operating position, go through the speeds of variable buff. They should be set to 50, 200, 500 and 720.
- 32. Check the walking features on the approach.
- 33. Replace the Lids, guards

## FLEX WALKER 2016 AND GREATER LEFT DRIVE MOTOR

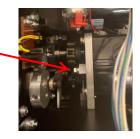
## **REMOVING LIDS**

- 1. With the lane machine standing in the upright, transport position, remove the screws holding on the side guards.
- 2. Remove the Bumper wheel assembly.
- 3. Now set the machine down into the operating position, and remove the last two screws holding the side guard onto the machine. There will be one in the cleaning compartment and one in the conditioning compartment.
- 4. Remove both the cleaner and the conditioning lid assemblies.
- 5. Remove the clear electrical panel cover.
- 6. Remove the three screws that fasten down the electrical panel and pull the panel up towards you.
- 7. Remove the battery assembly.

## REMOVING MOTOR

- 8. With the lane machine standing up, remove the allen bolt that goes through the bottom of the frame and into the motor bracket.
- 9. Remove the Drive Chain Idler pulley to take tension off the chain. (the reason for removing all the way, is because it will be easier to replace the chain).
- 10. Locate the master link in the chain and remove the link and the chain.
- 11. Loosen the two set-screws in the bearing housing.
- 12. Remove the two bolts that go through the inside panel and into the motor bracket.
- 13. Remove the threaded bolt that goes through the inside panel and keeps tension on the idler sprocket.
- 14. Unplug the drive motor and remove the motor from the lane machine.
- 15. Remove the sprocket off the old motor shaft and put on the new Bodine motor assembly.
- 16. Unbolt the motor bracket assembly from the old motor, and using the new supplied hardware, attach the bracket to the motor.





### INSTALLATION

- 1. Take the motor assembly and place into the lane machine.
- 2. With the supplied hardware, 4 153-2004, 153-2014 and 4 of the 164-2088, mount the motor to the new bracket assembly from the kit. 164-6273.
- 3. Set the motor into the machine and slide the shaft into the bearing.
- 4. Fasten the two bolts into the middle plate and into the motor bracket. Do NOT fasten all the way yet.
- 5. Stand the machine up and fasten the allen bolt that was removed in step 1 of REMOVAL, and fasten into the motor bracket tightly.
- 6. Set the machine back down into the operating position.
- 7. Fasten the two bolts that were hand tightened in step 4.
- 8. Fasten the two set screws in the bearing housing assembly.
- 9. Install the drive chain using the new master link.
- 10. Install the Drive Chain Idler pulley to take tension off the chain.
- 11. Install the threaded bolt that goes through the inside panel and keeps tension on the idler sprocket. Fasten down.
- 12. Plug the motor in.
- 13. Reassemble the lane machine. Electrical panel, cover and lids.
- 14. Test the motor on the approach for function.

# FLEX WALKER (2013-15) RIGHT DRIVE MOTOR - 164-8602

## **REMOVING LIDS**

- 1. With the lane machine standing in the upright, transport position, remove the screws holding on the side guards.
- 2. Remove the Bumper wheel assembly.
- 3. Now set the machine down into the operating position, and remove the last two screws holding the side guard onto the machine. There will be one in the cleaning compartment and one in the conditioning compartment.
- 4. Remove both the cleaner and the conditioning lid assemblies.
- 5. Remove the clear electrical panel cover.
- 6. Remove the three screws that fasten down the electrical panel and pull the panel up towards you.
- 7. Remove the battery assembly.





### **REMOVING MOTOR**

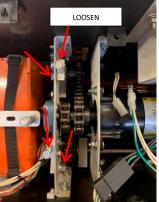
- 1. Using a 7/16" wrench, remove the two bolts that mount the vacuum motor to the wall. Remove the vacuum motor.
- 2. Using a 7/16" wrench loosen the jam nut on the threaded jam bolt. Back the bolt out and away from the block.
- 3. Using (2) 9/16" wrenches, loosen up the block tensioner to relieve tension from the chain. Do this for both chains tensioner blocks.
- 4. Remove the master links from both of the chains, and remove the chains.
- 5. Loosen up all of the sprockets on the shaft of the motor.
- 6. Loosen up the two set screws in the bearing housing.
- 7. Remove all four bolts that mount the drive motor to the inner plate assembly.
- 8. Unplug the motor and slide up and out of the machine.

#### **INSTALLING**

- 1. Before removing the sprockets, take a measurement of how far the sprockets are from the motor. This will make it easier to line up sprockets when the chains go back on.
- 2. Remove the sprockets.
- 3. Using the new key ways, install the sprockets onto the new motor assembly.
- 4. Reinstall the motor through the inner plate assembly and into the bearing.
- 5. Using the supplied bolts, place a washer and a lockwasher on them and fasten the motor to the plate.
- 6. Tighten all of the set screws. One on each of the sprockets, and two on the bearing.
- 7. Tighten the tension blocks back down onto the chains. Tighten up the long bolt for the tension block first, then fasten the bolt in the tension block.
- 8. Reinstall the vacuum motor.
- 9. Reinstall the recovery tank.
- 10. Reinstall the lid assembly.

After the lane machine is all back together, run an 'Auto Speed Adjust' so that the motor can be dialed in with the correct speeds. A yellow balancing wire has been added in case an adjustment is needed.





## KUSTODIAN ION SPORT DRIVE MOTOR

#### <u>REMOVAL</u>

- 1. Lay the machine down in the operating position and remove the screws holding the side guards on.
- 2. Remove the lid assembly by loosening the mounting block on one side only. This will free up the lid to lift up and off the lane machine.
- 3. Remove the recovery tank.
- 4. With a 7/16" socket, remove the two bolts that fasten the vacuum motor to the interior wall and set the motor aside.
- 5. Remove the screws that fasten down the electrical panel and tilt up to access the bottom of the center compartment.
- 6. With a 7/16" wrench, remove the strap holding the battery or batteries in place. Lift the battery up and out of the machine.
- 7. Loosen the jam nut on the idler bolt and back away.
- 8. Loosen the nut on the idler tension block and move the idler pulley away from the chain.
- 9. Locate the master link on the drive chain and remove the link, followed by the chain.
- 10. Loosen the set screws in the bearing housing.
- 11. Unplug the drive motor assembly.
- 12. Remove the four bolts that mount the drive motor to the inner plate assembly and lift up and out of the machine.
- 13. Remove the sprocket off of the old motor and install on the new motor assembly.
- 14. Using the (4) 153-2968 bolts, mount the new motor into the lane machine. You may need to loosen the idler bearing to help slide the motor into it.
- 15. Fasten the bearing assembly back into place.
- 16. Tighten the set screws in the bearing assembly to the shaft of the motor assembly.
- 17. Place the chain around both sprockets, and using the supplied master link, fasten in place.
- 18. Tighten the idler tensioner bolt down to take the slack out of the chain. Fasten the idler assembly.
- 19. Plug the motor back in and test the speeds through the outputs.
- 20. Install Vacuum motor.
- 21. Install battery assembly.
- 22. Fasten the electrical panel back into place.
- 23. Replace the guards and lid assembly.

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





BEARING HOUSING SET SCREWS