

# Replacing the Stroke Rate Sensor

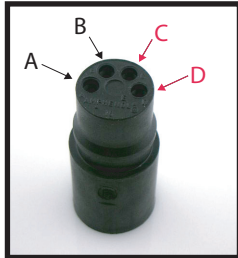
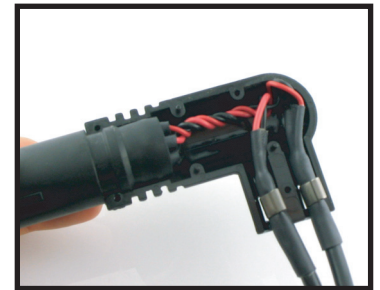
## (HD Harness, Part Number 0214)

This part replaces the stroke rate sensor that is installed in the shell - mounted on the deck under the seat magnet. For this repair, you also need needle nose pliers, a small screwdriver, a torx tool size 6 allen wrench, and Nyogel electrical grease.

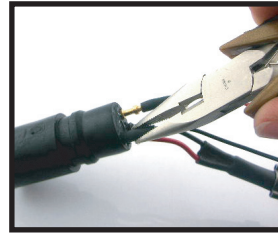


The screws are here:

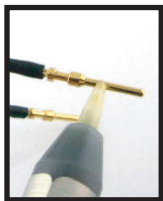
1) Locate the 4-pin rubber plug (R4) which plugs into the large plug on the front panel of the Cox-Box. The receptacle is in the shell and connects the wiring harness to the Cox-Box. Using the torx wrench, unscrew the four screws holding the plastic case in place. Gently pry the case open, and remove the R4 plug and wires from the plastic case.



2) Note the orientation of the installed wires in the R4 plug. The stroke rate sensor wires are in the 'A' and 'D' holes. The black wire goes in the 'A' hole and the red wire goes into the 'D' hole.



3) Using the pliers, hold the wire end of the sensor pin and carefully pull the stroke rate pins out of the R4 one at a time, being careful not to damage the two other pins. If the wires should come loose from the pins during removal, carefully pull the pins out separately.



4) Apply Nyogel to the new pins and into the corresponding holes.



5) Position the new seat sensor pins into holes. The red wire goes in the 'D' hole and the black wire goes into the 'A' hole.



6) Very carefully so as not to damage the pins, use the pliers to push each pin into their holes to the point where the black shrink wrap meets the pin. Be sure to grab the pin and not the wire. Then use a VERY small flat-headed screwdriver and insert it into the hole and feel for the top edge of the exposed pin. Gently push the pin into the R4. There is a noticeable detent when the pin is correctly positioned. DO NOT pull the pin into the plug from the other end! This will damage the pins, the plug, and possibly the soldered connection. Repeat with the second pin. If you accidentally push a pin in too far, use something small and flat to very gently push the pin back so that it is flush with the other pins.

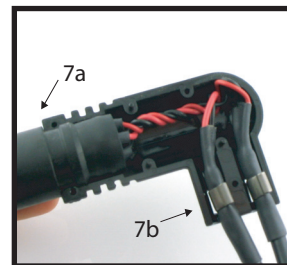
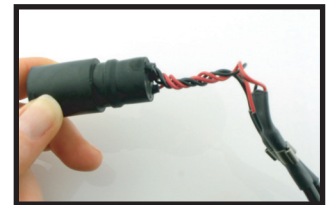


7) Check to make sure that the new pins should be even with the existing audio pins ('B' and 'C').



Place top of screwdriver here.

8) Twist the installed wires together.



9) Fit the plug back into the plastic housing, being sure to fit the metal clamps on the speaker and stroke rate wires into the holes at the base of the plastic case (note 7a). The rubber plug fits snugly in the case, with the widest part flush with the outside edge of the plastic case (note 7b).



10) Gently install the top half of the plastic case, squeezing the two pieces together. Using the torx wrench, screw the pieces together in the four spots. The completed plug looks like this.

### Need Help?



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For email assistance with the installation or operation of your NK product, write [techsupport@nkhome.com](mailto:techsupport@nkhome.com).

For help with an apparent malfunction, or to arrange or inquire about a repair, write [repairs@nkhome.com](mailto:repairs@nkhome.com).

Or call 800.784.4221 (610.447.1555 outside of the USA), Monday to Friday, 9 to 5, East Coast Time.