

### SHURE MODEL R180 REPLACEMENT CARTRIDGE FOR MODELS 588SDX, 515SDX, 515SBGX, 515SBG-18X, 515SBG-18XF, AND 515BSLX

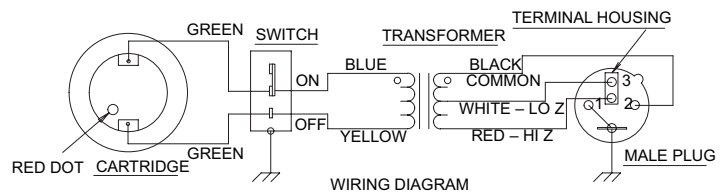
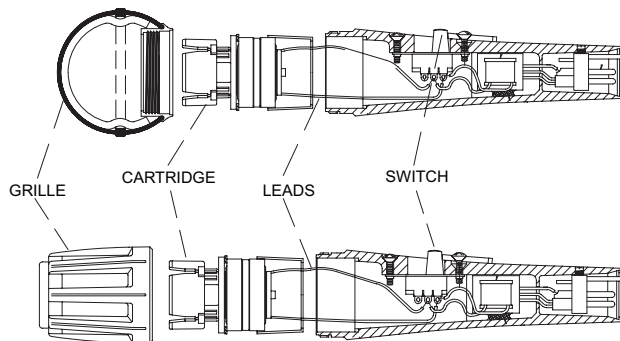
#### This kit contains the following:

- One R180 replacement cartridge
- Two pieces of shrink-wrap tubing (for 515SBGX, 515SBG-8X, 515SBG-8XF, and 515BSLX only)

#### The following tools are needed to replace the cartridge:

- Long-nose pliers (for 588SDX and 515SDX only)
- A soldering iron of 25 to 40 watts
- Wire cutters (for 515SBGX, 515SBG-18X, 515SBG-18XF, and 515BSLX only)
- #4 (.050 in., 1.3 mm) hex wrench (supplied with 515SBGX, 515SBG-18X, 515SBG-18XF, and 515BSLX only)

#### MODELS 588SDX AND 515SDX



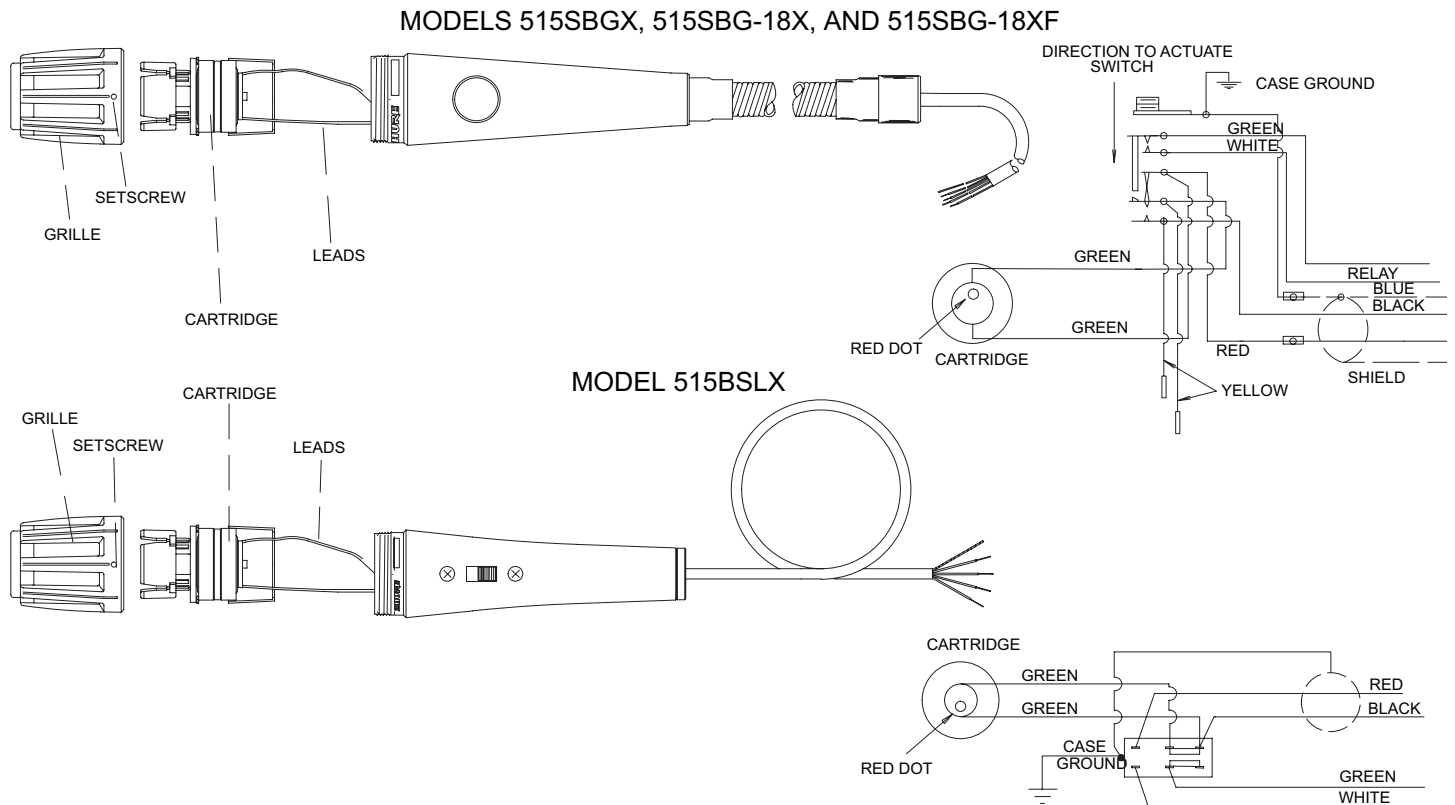
It is recommended that the following procedure be performed on a table or other flat surface to support the cartridge and case in order to avoid the possibility of breaking the cartridge leads.

#### To replace the R180 cartridge in the 588SDX and 515SDX, proceed as follows:

1. Unscrew and remove the grille (turning counterclockwise).
2. Gently pull out the old cartridge, being careful not to break the leads.
3. Using a Phillips screwdriver, remove the screws and lock plate which hold the switch in place.
4. Using long-nose pliers, gently pull out the switch, being careful not to break the leads.
5. Unsolder and remove the leads of the old cartridge from the switch.

**CAUTION:** To prevent damage to the switch, soldering iron between 25 and 40 watts is recommended.

6. Solder the lead closest to the RED dot on the new cartridge (see wiring diagram above) to the terminal with the YELLOW lead on the switch.
7. Solder the other lead from the new cartridge to the terminal with the BLUE lead on the switch.
8. Using long-nose pliers, carefully replace the switch in the case with the blank terminal on the switch facing towards the cartridge (to ensure the UP position is ON), being careful not to pinch the leads.
9. Placing your finger inside the case to support the switch, secure the switch in place by screwing the non-lockplate screw on the side of the switch closest to the grille.
10. Gently insert the new cartridge into the case, being careful not to pinch the leads, and making sure the foam gasket on the cartridge is above the aluminum ring.
11. Replace and screw on the grille.
12. Replace the lockplate on the side of the switch opposite the grille, then secure it with the remaining screw.



It is recommended that the following procedure be performed on a table or other flat surface to support the cartridge and case in order to avoid the possibility of breaking the cartridge leads.

**To replace the R180 cartridge in the 515X Series (except the 515SDX), proceed as follows:**

1. Slide the supplied shrink-wrap tubing over both leads on the R180 replacement cartridge.
  2. Using a #4 (.050 in., 1.3 mm) hex wrench, loosen the set-screw on the base of the grille.
  3. Unscrew and remove the grille (turning counterclockwise).
  4. Gently pull out the old cartridge, being careful not to break the leads.
  5. Using wire cutters, cut the lead from the old cartridge marked by the dot as close to the cartridge as possible, so the lead sticks out from the handle. Mark the cut lead with a small piece of tape.
  6. Strip about 1/4-in. (6 mm) of insulation from the end of the lead.
  7. Take the lead marked with a red dot on the R180 replacement cartridge and splice it to the taped lead, twisting the stripped ends together.
  8. Solder the spliced leads.
- CAUTION:** To prevent damage to the leads, a soldering iron of 25 to 40 watts is recommended.
9. Slide the shrink-wrap tubing so it entirely covers the soldered connection and bare wires. Gently rub the tip of the soldering iron back and forth along the shrink-wrap tubing until it shrinks.

10. Using wire cutters, cut the other lead of the old cartridge as close to the cartridge as possible, so the lead sticks out from the handle.
11. Strip about 1/4-in. (6 mm) of insulation from the end of the lead.
12. Take the unmarked lead on the R180 replacement cartridge and splice it to the second lead of the handle, twisting the stripped ends together. Solder the leads.
13. Slide the shrink-wrap tubing so it entirely covers the soldered connection and bare wires. Gently rub the tip of the soldering iron back and forth along the shrink-wrap tubing until it shrinks.
14. Gently insert the new cartridge into the case, being careful not to pinch the leads, and making sure the foam gasket on the cartridge is above the aluminum ring.
15. Replace and screw on the grille.
16. Using a #4 (.050 in., 1.3 mm) hex wrench, secure the grille by tightening the setscrew.

**CAUTION:** Do not torque the setscrew too tightly.



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