Section 11 - Replacement Procedures

The following components can be replaced in the field.

Upper Component Access:

There is a small cover that fits on the top portion of the rear of the console. This cover conceals 4 replaceable components, the RFID board, the WiFi Module, the iPod Cable, and the External USB Port.

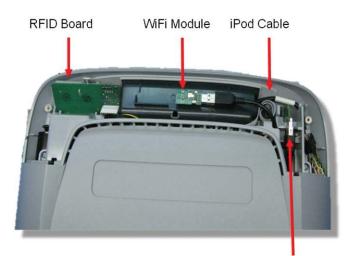


Figure 63: P80 Top Access Panel & Components

External USB Port

The RFID Board is held in place by plastic clips, and connected using a single cable.

The WiFi Module (not currently supported by the software) is held in with double stick mounting tape, and is connected via a USB cable.

The iPod Cable is the cable that the users will handle when plugging in their iPhone or iPod, and therefore will need occasional replacement. It plugs into another cable that leads from behind the armor.

The External USB port is mounted on a board that clips into the front port opening. It connects via a USB cable.

The Main Vented Access Cover & Components

Behind the main vented access cover, are 3 components that can be replaced in the field (the DC Power Splitter Cable, the TV Tuner USB Cable, and the Heart Rate Board), plus the Headphone Board at the bottom of the console.

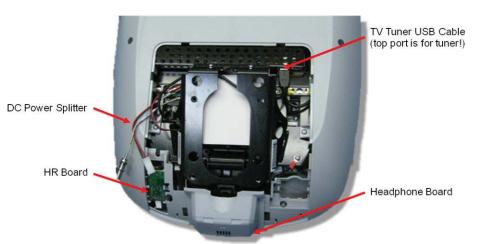


Figure 64: Main Vented Access Cover

The DC Power Splitter is used only in earlier hardware revisions of P80 consoles. It splits the power between the TV Tuner and the rest of the console.

The TV Tuner USB Cable connects the TV tuner to the top USB port. It is routed behind the mounting plate portion of the armor to avoid getting pinched by the mounting plate.

The Heart Rate Board snaps into clips in the console, and connects with 2 cables. There is a 3 pin cable connector at the bottom of the board that leads behind the armor, and there is a 4 pin cable connector at the top of the board that leads to the heart rate grips.

The Headphone Board connects via a signal cable and a ground wire that snaps onto a ground lug. The board then snaps into a plastic housing that then snaps onto the bottom of the console.

Replacing the P80 Console

Console Mounting - Removal

1 Remove the rear vent cover. Do not use a sharp tool, such as a flat bladed screwdriver, to pry up the cover, as you can damage the covers and possibly components inside the console. When the cover starts to come loose, gently unsnap it from the P80 and set it aside where it will not be scratched.

Figure 65: P80 Rear Cover Removal



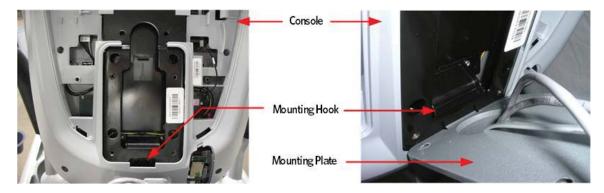
2 Remove the four flat head 5/8 inch long screws that secure the console to the plate.



Figure 66: Console Mounting Screws

Tilt the console forward (away from yourself) on the mounting hook.

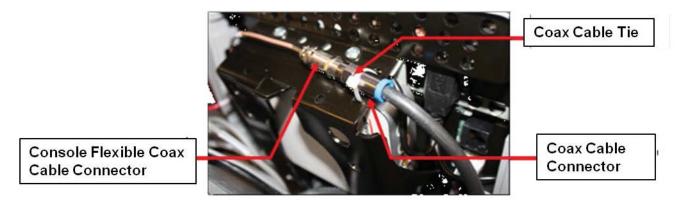
Figure 67: Maintenance Access Hook



Disconnecting Cables

1 Locate the coax connector and cut the wire tie that secures the coax connector to the console armor. Disconnect the coax cable connector from the consoles flexible coax cable connector.

Figure 68: Coax Cable



2 Disconnect the Ethernet cable, Data cable, the Power cable, HR cable, Auto Stop cable (Treadmill only), and Stop Switch cable (Treadmill only).

Figure 69: Disconnecting Cables

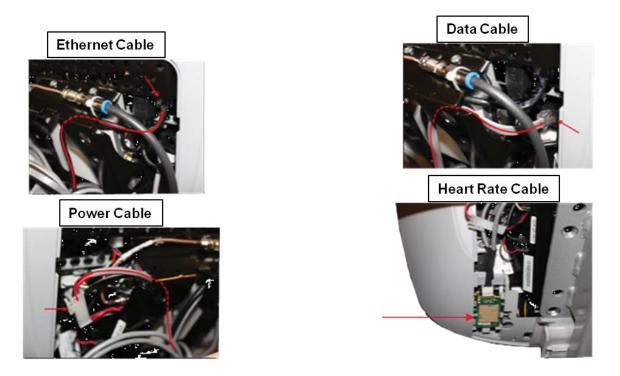


Figure 70: Auto Stop Cable Routing

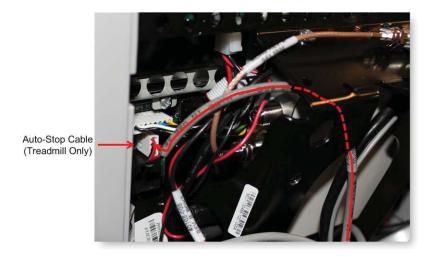
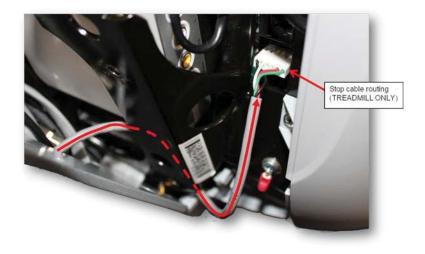


Figure 71: Stop Cable Routing (Treadmill Only)



3 Remove the console by lifting it off the mounting hook.

Console Installation

1 In the back of the P80 console there is a large black steel support called the Armor. At the bottom of Armor there is a notch about 1/4 inches in depth and about 11/2 inches across. Set the console notch over the over the mounting hook.

Note: Before releasing the console insure the notch is securely seated over the mounting hook.

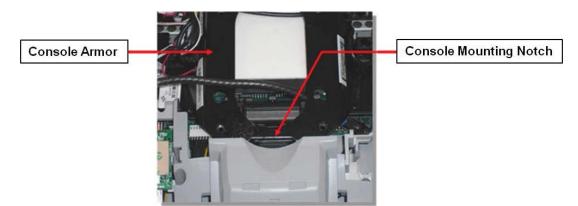
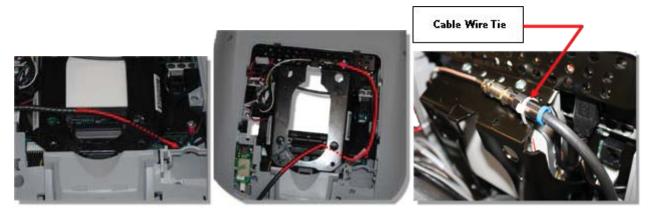


Figure 72: Console on Mounting Hook

Cable Connections

- 1 Route the RF coax cable down below the tuner and out the right bottom side of the armor. This is easier if you straighten the cable and gently push it in the direction as shown in diagram below. Feed about 10 inches of cable out though the plastic using your finger as a guide.
- 2 Bring the coax cable up over the top of the armor and connect it to the flexible cable attached to the tuner.
- 3 Secure the RF coax connectors in place with a zip tie.

Note: It is important that the connection be tied to the frame in this location to prevent the cable from being pinched, and the possibility of rattling noises during use. Be sure to secure the zip tie on the connector and not on the cable.



- 4 Route the black, round Ethernet cable through the opening in the upper right side of the armor, behind the tuner and connect the Ethernet cable to the upper RJ45 type connector.
- 5 Route the grey, flat Data cable through the opening in the upper right side of the armor, behind the tuner and connect the Data cable to the lower RJ45 type connector.

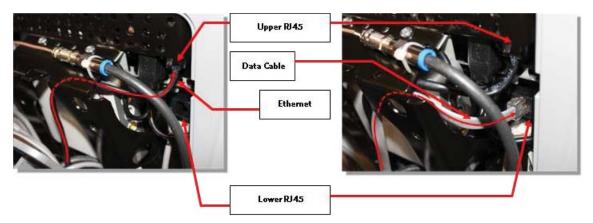


Figure 73: Cable Connections

6 Route the Power cable through the upper left corner of the weldment and connect it to the P80 power connector.

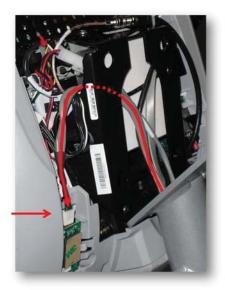
Note: Leave the connector on the side of the P80 as shown in below, as it might be necessary to access it for troubleshooting.



Figure 74: P80 Power Cable Routing

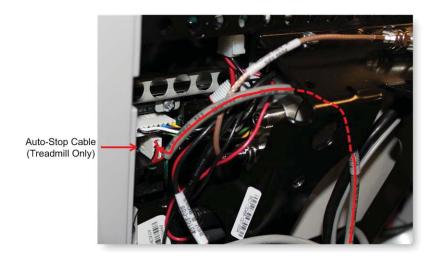
7 Route the Heart Rate cable through the upper left corner of the weldment and connect it to the HR PCA. Route any excess Heart Rate cable into the rectangular center section of the dash assembly.

Figure 75: P80 Heart Rate Cable Routing



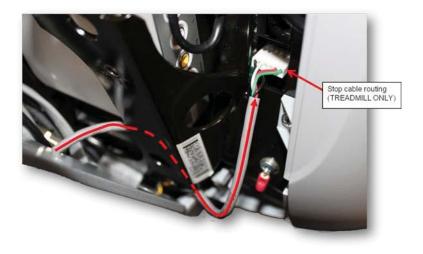
8 If applicable, route the Auto Stop cable through the upper left corner of the weldment and connect it to the Auto Stop connector.





9 If applicable, route the Stop Switch cable (Treadmill only) through the bottom right corner of the weldment and connect it to the Stop Switch connector.

Figure 77: Stop Cable Routing (Treadmill Only)



Securing the P80 Console

- 1 Make sure that all cables are fully and securely connected, and that cables are tied back properly. Make sure any extra cabling is pulled down through the neck and along the front of the dash, making sure the cables are routed through the plastic guides inside the neck.
- 2 Tilt the control console backward (toward yourself) until the tab on the top edge of the armor slides along the top edge of the console mount and the screw holes align properly.
- 3 Secure the console to the plate using the four flat head 5/8 inch long screws.

Note: You must use 5/8 inch long screws. If the screws are too short the console will not be properly grounded. If the screws are too long it is possible to damage the internal wiring

- 4 Tighten the screws fully using a $\frac{5}{32}$ -inch hex wrench.
- 5 Replace the rear vent cover.

Replacing the P80 Heart Rate PCA Board

Procedure

1 Remove the rear vent cover. Do not use a sharp tool, such as a flat bladed screwdriver, to pry up the cover, as you can damage the covers and possibly components inside the console. When the cover starts to come loose, gently unsnap it from the P80 and set it aside where it will not be scratched.

Figure 78: P80 Rear Cover Removal



- 2 The PCA's in the console are static sensitive. They can be damaged if proper static prevention equipment is not used. Attach an anti-static wrist strap to your arm, and then connect the ground lead of the wrist strap to frame ground.
- **3** The HR PCA snaps into its mounting. Press the release tab sideways and remove the HR PCA from its mounting.
- 4 Disconnect the HR cable and handlebar cable from the HR PCA.
- 5 Connect the HHHR Grip cable assembly to the upper connector on the HR PCA and the HR PCA Power cable to the lower connector on the replacement HR PCA.
- 6 Orient the replacement HR PCA so that the side with the protective foam pad is facing out and snap the HR PCA into its mounting.

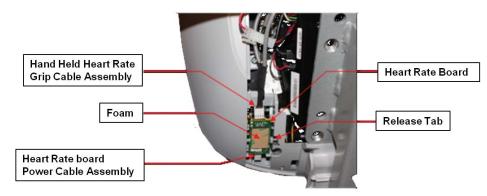


Figure 79: P80 Heart Rate PCA Board

- 7 Replace the rear vent cover.
- 8 Check operation per procedure, *Section 3 Operation Verification* (on page 21).