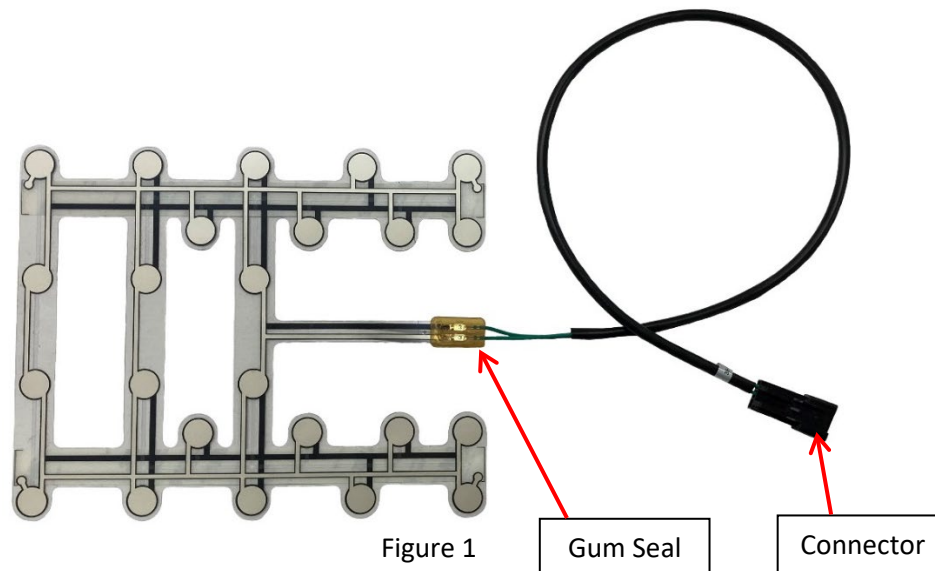




CUSTOMER INSTRUCTIONS FOR SEAT OCCUPANCY SENSOR INSTALLATION



GENERAL PRODUCT INFORMATION

The seat occupancy sensor is placed above the seat foam and under the seat cover. When the sensor connector is connected to the vehicle data recorder it sounds an alarm that occupants are seated but not belted in.

DOCUMENT PURPOSE

This document illustrates the process to install an occupancy sensor to a seat that is not currently equipped with one. This document also illustrates the process of how to replace an occupancy sensor on seat that is currently equipped with one. It is important that the installer read and understand all safety information and instructions before starting the installation/service procedure.

SAFETY INFORMATION

⚠ DANGER indicates a hazardous situation which, if not avoided, WILL result in death or serious injury.

⚠ WARNING indicates a hazardous situation which, if not avoided, COULD result in a death or serious injury.

⚠ CAUTION indicates a hazardous situation which, if not avoided, COULD result in minor or moderate injury.

NOTICE is used to address practices not related to physical injury.

SAFETY INSTRUCTIONS (or equivalent) signs indicate specific safety related instructions or procedures.

PARTS LISTS

8902-301H124: Occupancy Sensor Kit with Metri-Pack Series 280 Connector

8902-301H224: Occupancy Sensor Kit with Metri-Pack Series 150 Connector

8902-301H324: Occupancy Sensor Kit Deutsch DT04-2P Connector

Item #	Description	Quantity
1	Occupancy Sensor	1

TOOLS REQUIRED

Side cutters
Putty knife
Scissors
C-ring tool
3/16" hex key wrench

Socket Wrench
5/32" (4mm) hex key wrench
Swivel knuckle
Phillips Head Screwdriver

½" Socket
T27 Torx Driver
3/8" Socket
7/16" wrench

SEAT CUSHION VARIATIONS

The options shown are the various types of seat cushions that are manufactured by H.O. Bostrom. Determine the seat cushion style in which the sensor needs to be replaced/installed and reference the respective portion of this instruction.



Figure 2 – Fixed
w/ perimeter wire



Figure 3 – Flip-up/Fold
& hold w/ stapled



Figure 4 – Flip-up/Fold
& hold w/ Velcro

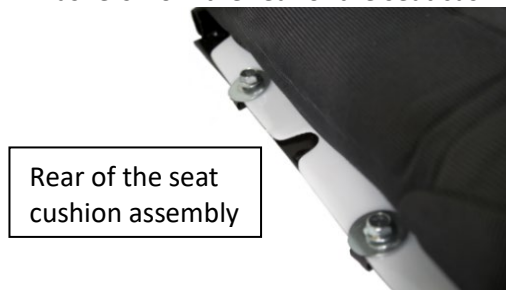


Figure 5 – Electric SCBA
6-Way/ non-SCBA 8-Way

TO ACCESS SEAT SENSOR FOR FIXED SEAT CUSHIONS WITH PERIMETER WIRE SUPPORT

CAUTION: The installer is liable for seat cushion installation. Failure to fasten the seat cushion to the seat frame could result in the seat cushion coming loose from its mounting.

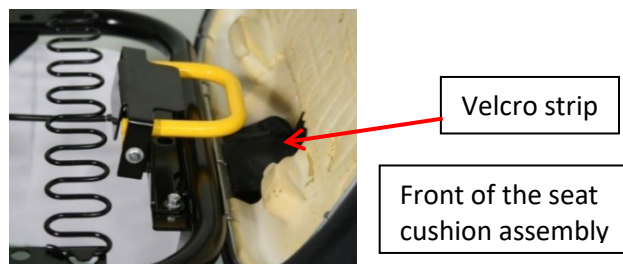
1. Disconnect the seat sensor wire connector.
2. If applicable, place the backrest in a recline position to expose the seat cushion mount hardware.
3. Remove the 2 bolts and 2 washers from the rear of the seat cushion assembly. Retain for reuse. See Figure 6.



Rear of the seat
cushion assembly

Figure 6

4. Rotate the seat cushion assembly upward to expose the bottom of the seat foam.
5. On seats equipped with the SecureALL Locking System™, open the Velcro strip located under the yellow release handle. See Figure 7.



Velcro strip

Front of the seat
cushion assembly

Figure 7

6. To separate the seat foam from the perimeter wire and cover, carefully pull the seat foam away from the perimeter wire at the front and corners of the cushion keeping perimeter wire and cover together.
7. Reference pages 5-7 for occupancy sensor placement and installation.
8. To reassemble the cushion, first orient the sensor wires at the back of the seat cushion to the same position as the old wires. Insert the seat foam back into the cover and perimeter wire assembly.
9. On seats equipped with the SecureALL Locking System™, re-attach the Velcro strip located under the yellow release handle.
10. Rotate the seat cushion assembly back down onto the frame, orient the sensor wires and connector rearward and fasten the back of the cushion assembly with the original (2) bolts and (2) washers.
11. Reconnect the seat sensor wire connector and test for proper operation.

TO ACCESS SEAT SENSOR FOR FLIP-UP/FOLD & HOLD SEAT CUSHIONS WITH STAPLED COVER

⚠ WARNING: The installer is liable for seat cushion installation. Failure to fasten the seat cushion to the flip-up pan could result in the seat cushion coming loose from its mounting.

1. Disconnect the seat sensor wire connector.
2. On seats equipped with the SecureALL Locking System™, remove and save the hardware holding the cable to the release latch mechanism. Then, disconnect the release cable from the release latch.
3. Holding the cable end that was detached from the latch, loosen only the top nut that is holding the cable sheath in place. Slide the entire cable end out from the SCBA bracket.
4. On the underside of the cushion, remove the four (4) or eight (8) screws that attach the seat cushion assembly to the flip-up seat pan. Retain screws for reuse.
5. Look at bottom of the seat cover to see if slits exist. If not, cut both sides of the bottom of the cover panel, beginning at the rear edge of the main flap forward to the mount position hole near the front. This will make it easier to un-cover and re-cover the seat. See Figure 8 and Figure 9 for views of seat cushion bottom.

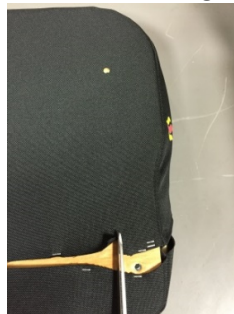


Figure 8

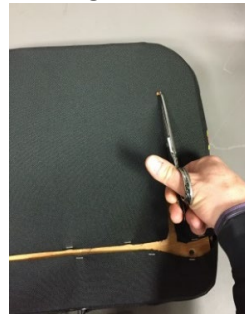


Figure 9

6. Remove staples from both the rearmost flap and rear side sections only. See Figure 10. DO NOT remove the staples from the main center flap. See Figure 11.

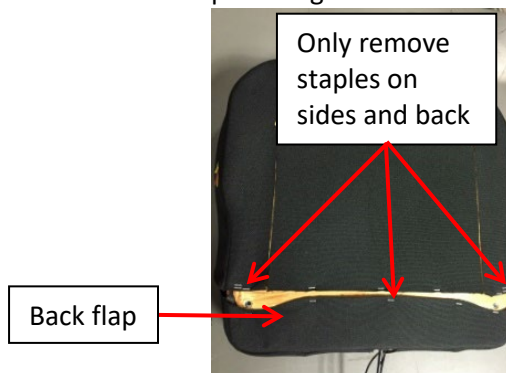


Figure 10

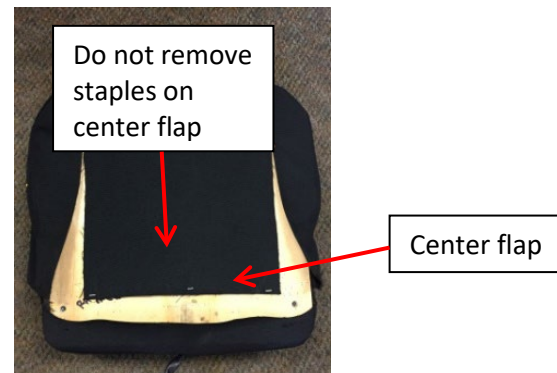


Figure 11

7. Peel back the cover from the rear of the seat and pull the release cable and sensor wire out thru the cover opening. Continue to remove the cover about $\frac{2}{3}$ of the way down from the back of the seat to un-cover the sensor. See Figure 12 for view of seat cushion bottom and Figure 13 and Figure 14 for rear views.



Figure 12



Figure 13



Figure 14

8. Reference pages 5-7 for occupancy sensor placement and installation.
9. To reassemble the cushion, insert the sensor wires through the opening at back of seat cover. On seats equipped with the SecureALL Locking System™, also insert the release cable through the seat cover opening and reconnect.
10. Re-position the cover over the foam and base board. Pull the cover tight so it is in the original position and staple the cover into place.
11. Using the original screws, reattach the seat cushion assembly to the seat pan. If applicable, reconnect the release cable to the release latch.
12. Reconnect the seat sensor wire connector and test for proper operation.

TO ACCESS SEAT SENSOR FOR FLIP-UP/FOLD & HOLD SEAT CUSHIONS WITH VELCRO COVER

! WARNING: The installer is liable for seat cushion installation. Failure to fasten the seat cushion and the flip-up pan to the seat frame could result in the seat cushion coming loose from its mounting.

1. Disconnect seat sensor wire connector.
2. On seats equipped with the SecureALL Locking System™, remove and save the hardware holding the cable to the release latch mechanism. Then, disconnect the release cable from the release latch.
3. Holding the cable end that was detached from the latch, loosen only the top nut that is holding the cable sheath in place. Slide the entire cable end out from the SCBA bracket.
4. On the underside of the cushion, remove the four (4) or eight (8) screws that attach the seat cushion assembly to the flip-up pan. Retain screws for reuse.
5. Undo Velcro at rear of seat.
6. Peel back the cover from the rear of the seat and pull the release cable and sensor wire out of the cover opening. Continue to peel the cover about $\frac{2}{3}$ of the way down from the back of the seat to expose the sensor.
7. Reference pages 5-7 for occupancy sensor placement and installation.
8. To reassemble the cushion, insert the sensor wires through the opening at the back of the seat cover. On seats equipped with the SecureALL Locking System™, insert the release cable through the same seat cover opening.
9. Re-position the cover on the seat cushion and Velcro it closed.
10. Using the original screws, reattach the seat cushion assembly to the seat pan. If applicable, reconnect the release cable to the release latch.
11. Reconnect the seat sensor wire connector and test for proper operation.

TO ACCESS SEAT SENSOR FOR SIERRA EX8 AND TANKER EX6 POWER ADJUSTABLE SEATS

! WARNING: The installer is liable for seat cushion installation. Failure to fasten the seat cushion to the power adjuster could result in the seat cushion coming loose from its mounting.

1. Raise the seat on the power unit to its full upward and full forward position.
2. Before continuing, make sure the power to the seat is disconnected.
3. Disconnect the seat sensor wire connector.

4. Remove four (4) fasteners from the bottom of the seat cushion. See following figure for location. Save hardware for reuse. Tip: Start with the front location; raise the front of the seat to gain space underneath the seat and improve access to the rear fasteners. Use ½" socket with swivel knuckle on short extension driver.
5. Remove the seat cushion for servicing seat sensor.
6. Remove the C-rings along the sides and back of the seat cover. Beginning at the rear of the cushion, peel the cover up and forward to expose seat sensor.
7. Reference pages 5-7 for occupancy sensor placement.
8. Re-position the seat cover and secure the cover to the frame using C-rings or zip-ties.
9. Replace the seat cushion. Ensure all studs on the bottom of the cushion are placed through the holes in the power unit.
10. Secure the seat cushion using the original hardware as shown in Figure 15.
11. Reconnect the seat sensor wire connector. Reconnect power to the seat. Test the seat sensor system for proper operation.

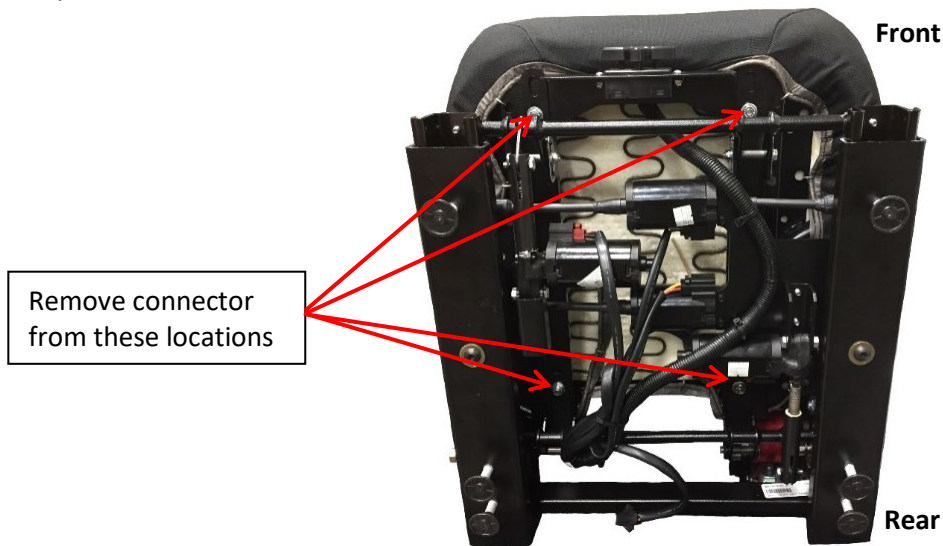


Figure 15 – BOTTOM VIEW of Seat

SENSOR INSTALLATION/ REPLACEMENT

NOTICE: The steps in this section of the instruction assume the seat cover has been removed or peeled back far enough to allow for sensor replacement/installation.

NOTICE: If no sensor is present, skip step 1 and proceed to step 2.

1. Use a putty knife to peel the sensor from the seat cushion, using caution to tear away as little foam as possible.
2. Peel backing away from sensor to expose adhesive. See Figure 16.
3. Center sensor side-to-side on seat cushion. See Figure 17. Place sensor on seat cushion following sensor placement guide in Figures 18-31.

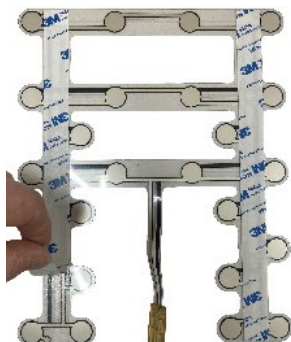


Figure 16

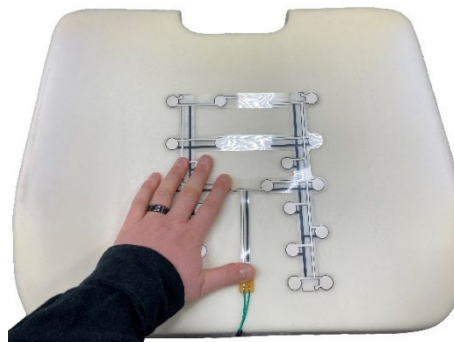


Figure 17

SENSOR POSITION PLACEMENT

Place occupancy sensor at specified distance from the front of the seat cushion, or as shown for each seat foam.

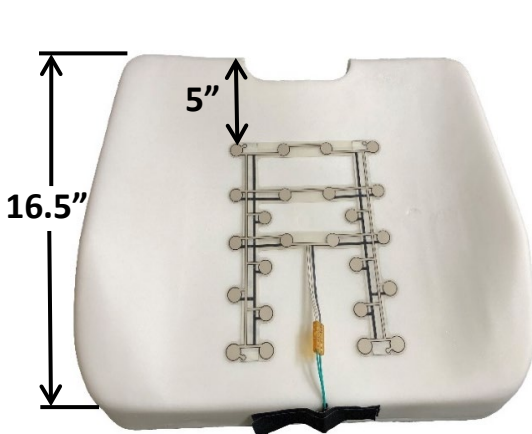


Figure 18 – Foam w/ & w/o Front Control Release Opening

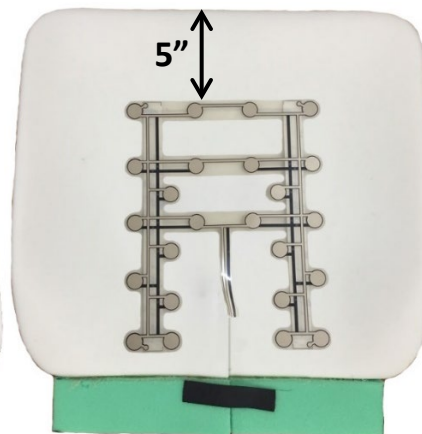


Figure 19 – Foam w/ Extension, w/ & w/o Front Control Release Opening

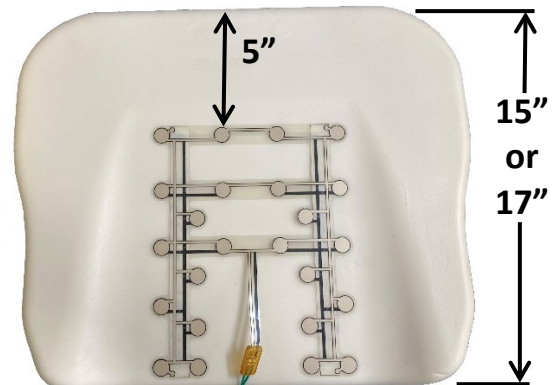


Figure 20 – Flip-Up/Fold-n-Hold Foam w/ & w/o Front Control Release Opening

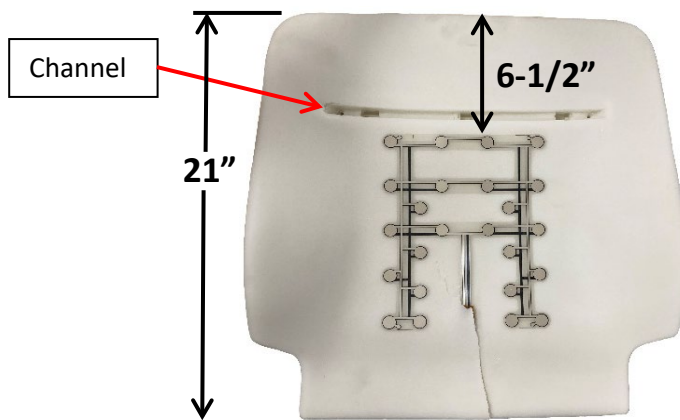


Figure 21 – Non-SCBA Foam

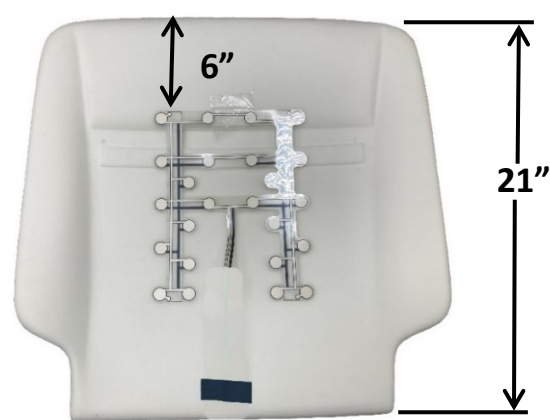


Figure 22 – Non-SCBA Low Profile Foam

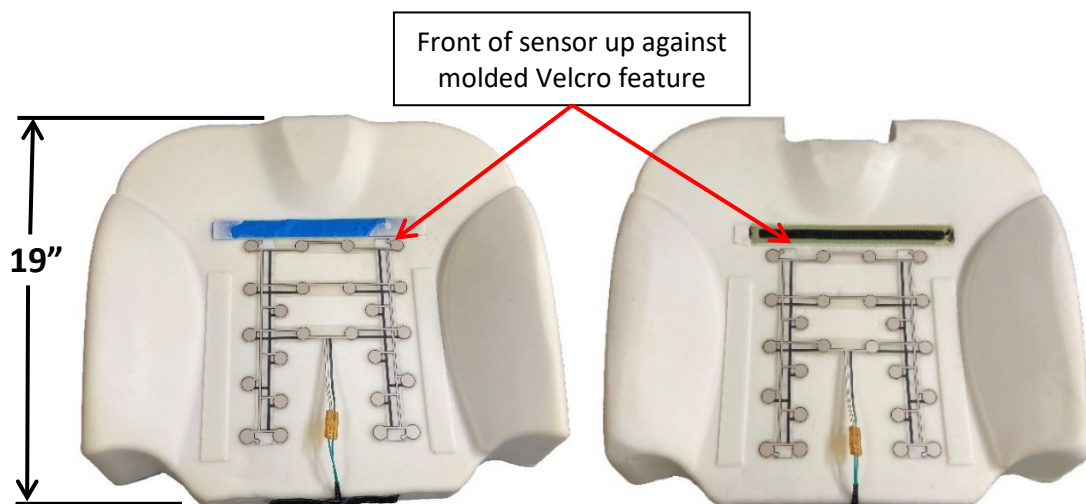


Figure 23 – SCBA 500 Series Fixed Cushion Foam

Figure 24 – SCBA 500 Series Fixed Cushion Foam w/ Front Control Release Opening

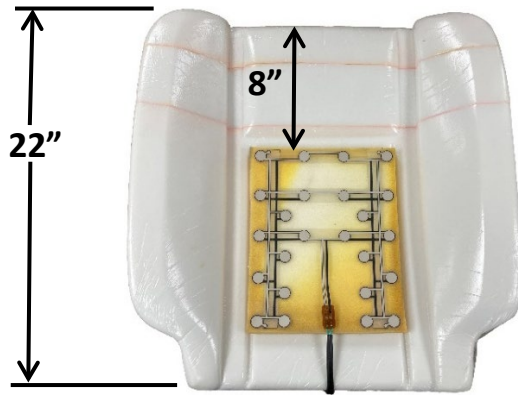


Figure 25 – High Contour Deep
Seat Foam (Film Covered)

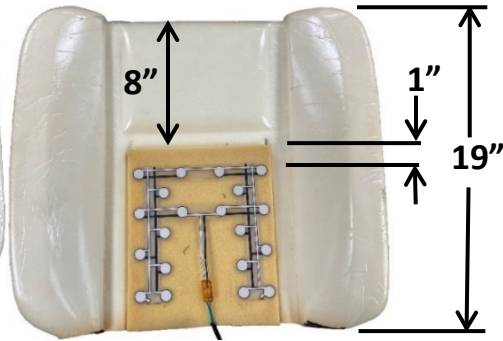


Figure 26 – High Contour Deep
Seat Foam (Film Covered) with
blue foam underside. See Figure
27 for sensor modifications.

Before applying to seat cushion,
use scissors to remove front of
sensor flush along this edge.

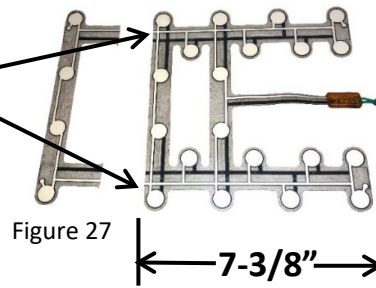


Figure 27

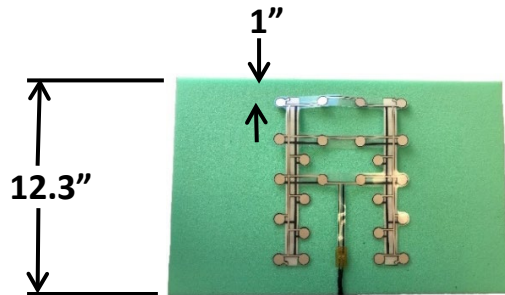


Figure 28 – Zico Mini Flip Foam

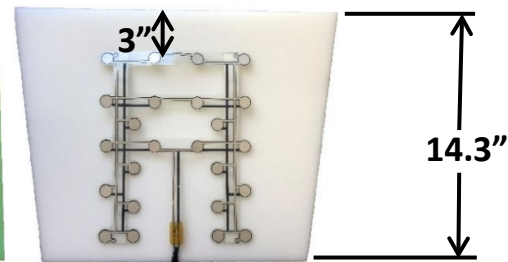


Figure 29 – Bronco Low
Back Fixed Seat Foam

Vista Lock Auto-lock Parking Brake System

1. Remove release paper and apply first sensor as shown in Figure 23 or 24.
2. Remove release paper from second sensor and apply second sensor rearward $\frac{3}{4}$ " from first sensor. Touch points and gums seals are not to overlap.
3. With gum seals close but not overlapping, apply two pieces of 1" wide black electrical tape approximately 4" long on rear surface of foam over the black wire covers.

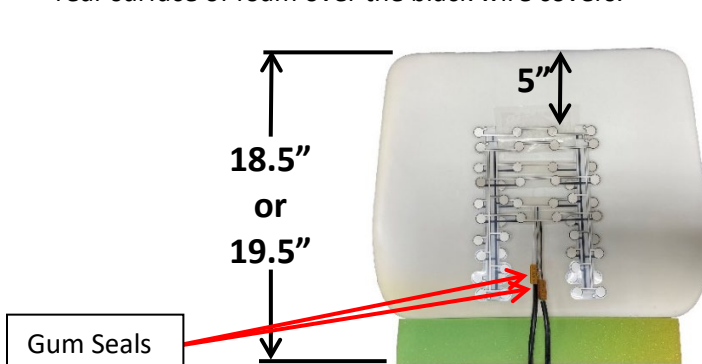


Figure 30 – Non SCBA Foam
with extension

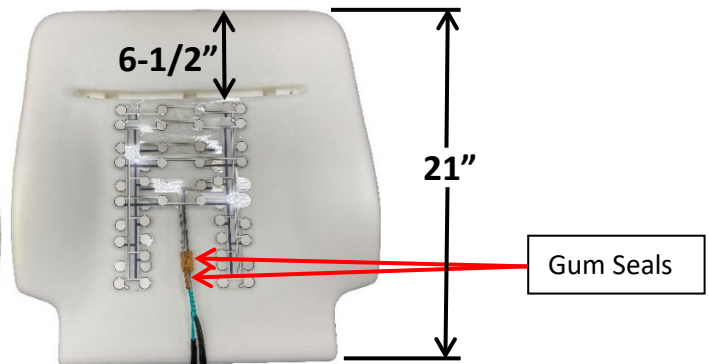


Figure 31 – Non SCBA Foam