

Autosampler Cover

User Manual

Specifications are subject to change without notice.

Issue: Rev A August 2004

© Copyright 1995-2004 ® All rights reserved. No part of this publication may be reproduced, transcribed, translated or reverse engineered into a computer, software program or other manual without express written permission.

This page intentionally left blank.

Table of Contents

1. Introduction to the Autosampler Cover	4
2. Tools Required	5
3. Unpacking Your Autosampler Cover	6
4. Assembly Instructions	10
5. Installation Instructions.....	18
6. General Use.	19
6.1 Door Operation	19
6.2 Connections	20
6.2.1 General.....	20
6.2.2 Exhaust Ducting.....	20
6.2.3 Purge Line	20
6.3 Care and Maintenance.....	20

1. Introduction to the Autosampler Cover

The Autosampler Cover encapsulates an 3 Rack or 2 Rack Autosampler and can be used for the following:

- As a protective cover to restrict access to the unit in operation and protect users from accidental contact with the moving probe-arm, or sharp edged sample probes.
- To protect the integrity of samples from dust and other environmental contaminants.
- For vapour and/or fume containment to protect the laboratory environment from possible exposure to harmful chemicals.

Caution

The Autosampler Cover is NOT to be used with volatile and corrosive chemicals without an air replenishment system incorporated. If this occurs the cover will trap and concentrate the volatiles producing a concentration which may be harmful to the Operator, the Autosampler Cover and/or the Autosampler.



Figure 1 Autosampler Cover

2. Tools Required

The tools required are:

- Cotton or rubber gloves are recommended to avoid fingerprints on the cover as a result of assembly.
- An 8mm (5/16") spanner is required to attach the door handles.
- A sharp knife or object to pierce the grommets for connecting sample lines etc.

The Autosampler Cover requires approximately 15-30 minutes to assemble. It is recommended that these instructions are read through first and then followed step by step from the beginning.

3. Unpacking Your Autosampler Cover

You will need a clean flat bench top area to unpack and assemble your Autosampler cover.

Hint!!

Using gloves when assembling your Autosampler cover will reduce fingerprints

Ensure you open the box from the top. When unpacking, remove the individual wrapping and arrange the components so they can be recognised from the photos below in this manual.

Caution

The clear parts of the cover are sensitive to scratching; avoid sliding these parts across the bench top or against each other

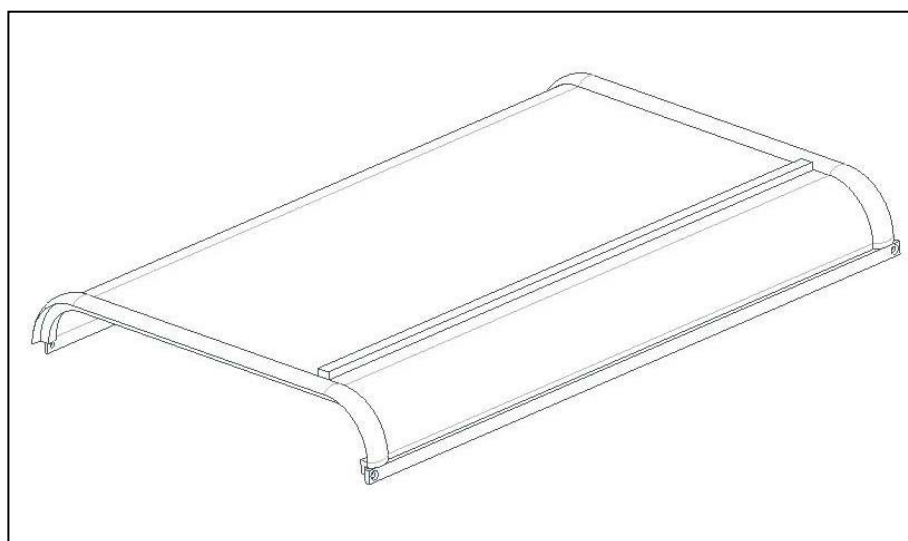
Your unpacked Autosampler cover should consist of:



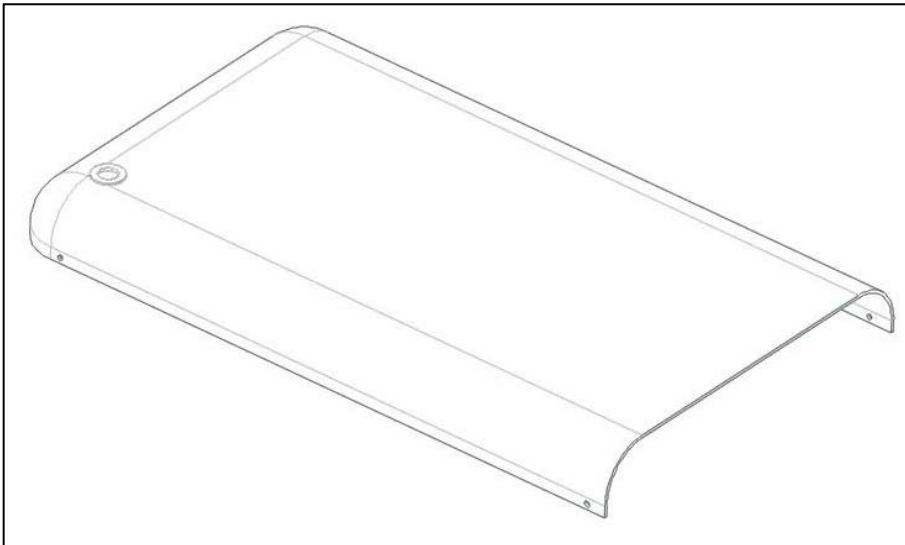
- A bag containing two door handles with nuts and washers, approximately 20 plastic rivets (4 are spare), and a length of rubber profile used on the bottom edge of the cover.



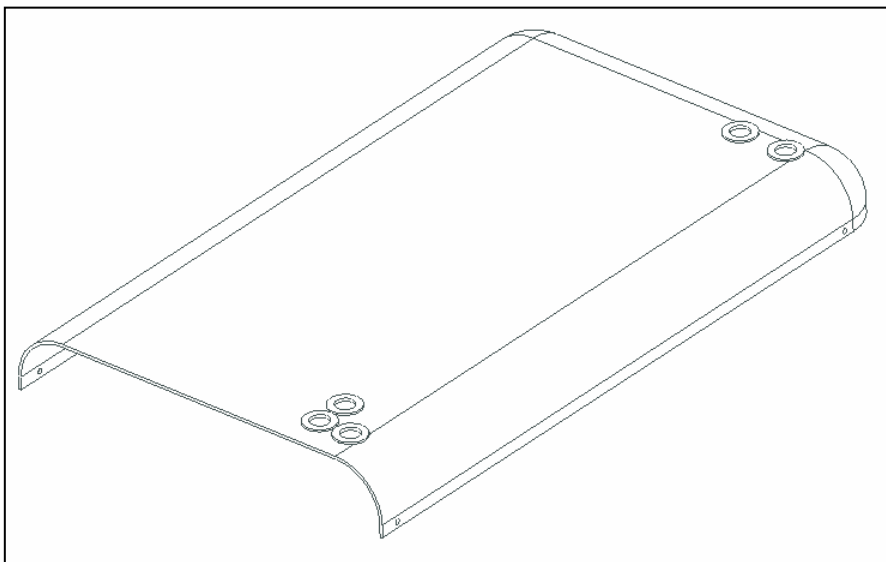
- A bundle containing 2 position spacers and 3 Door Tracks, one of which will have a metal stiffening plate inserted into it.



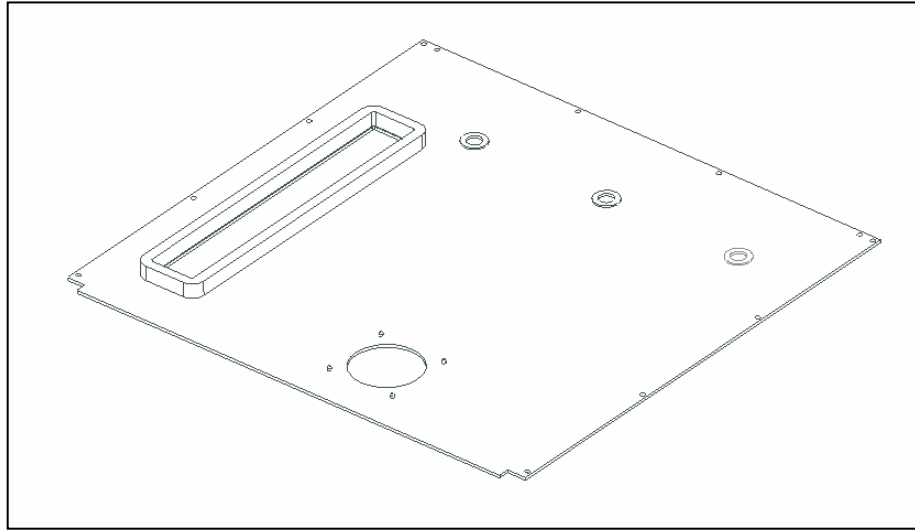
- A Top Panel.



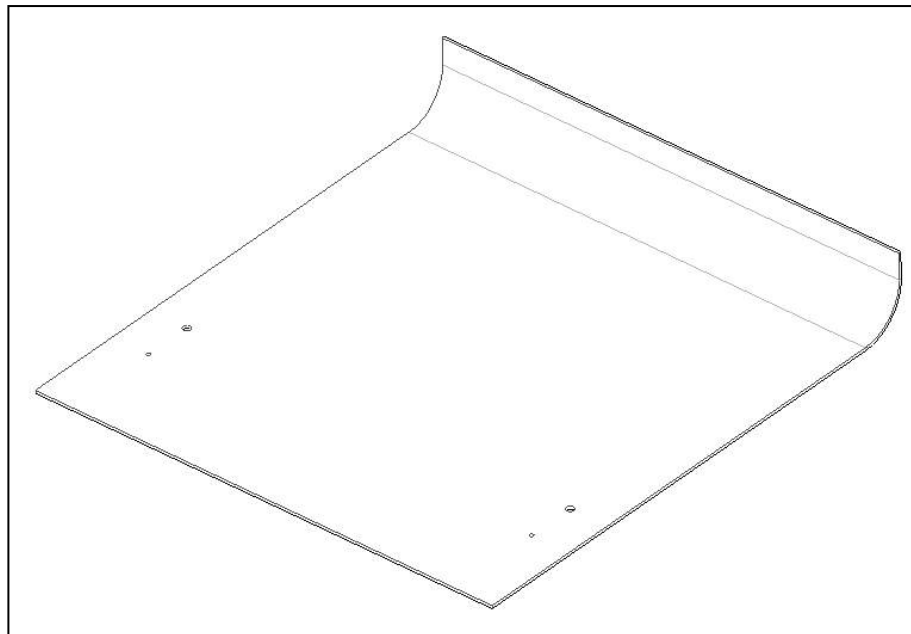
- A Right Side Panel.



- A Left Side Panel.



- A Back Panel.



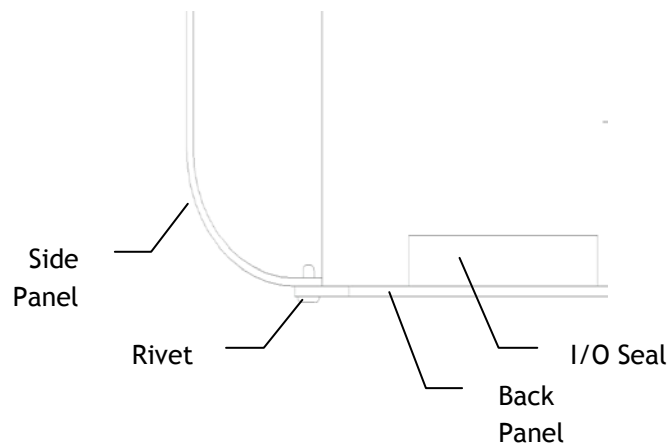
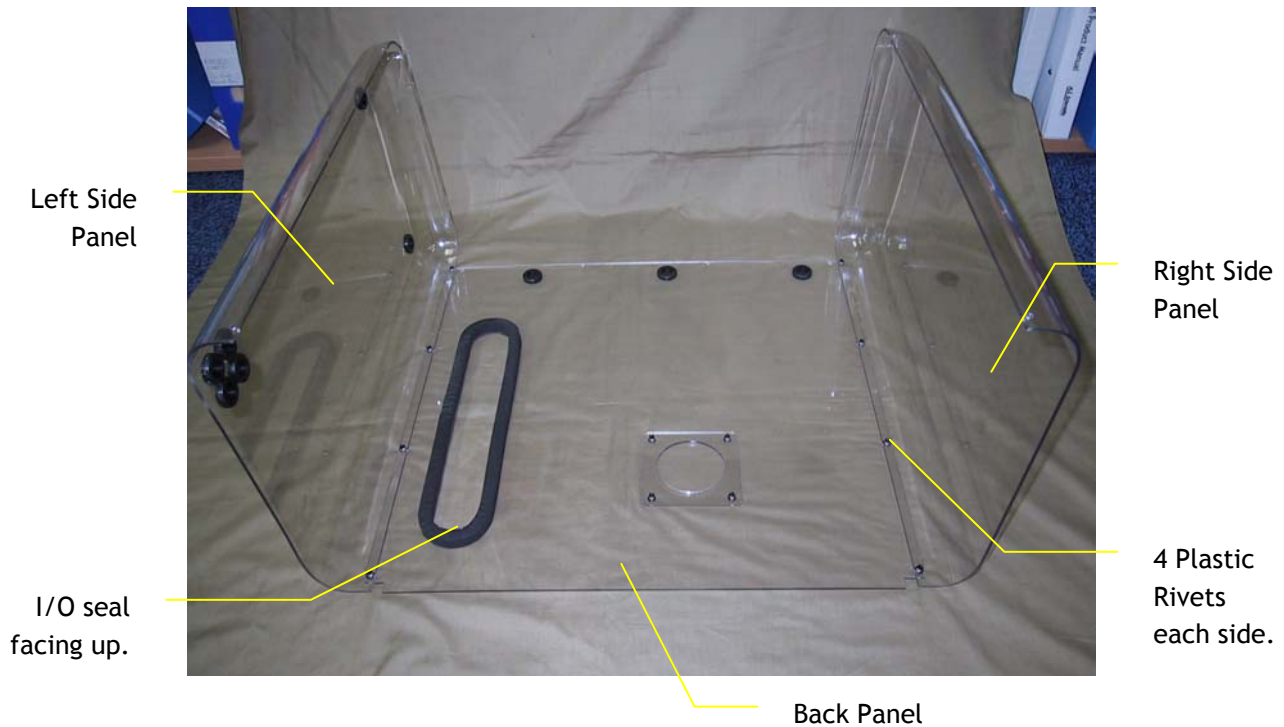
- A Door.

4. Assembly Instructions

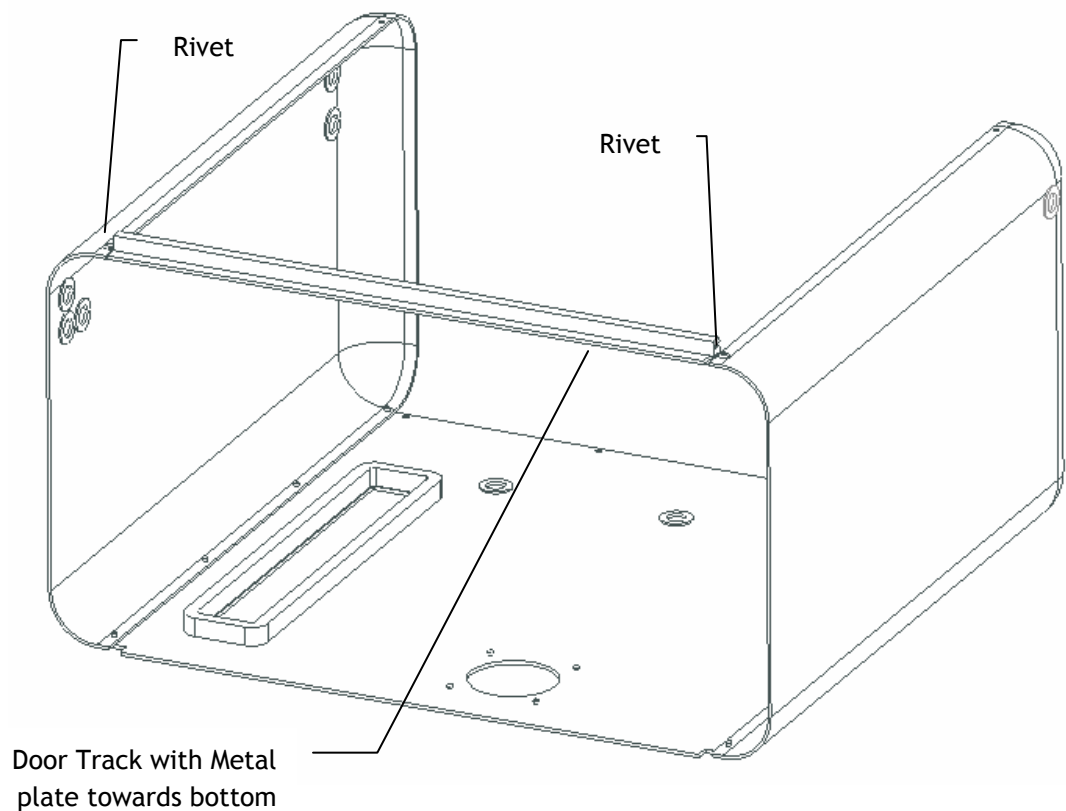
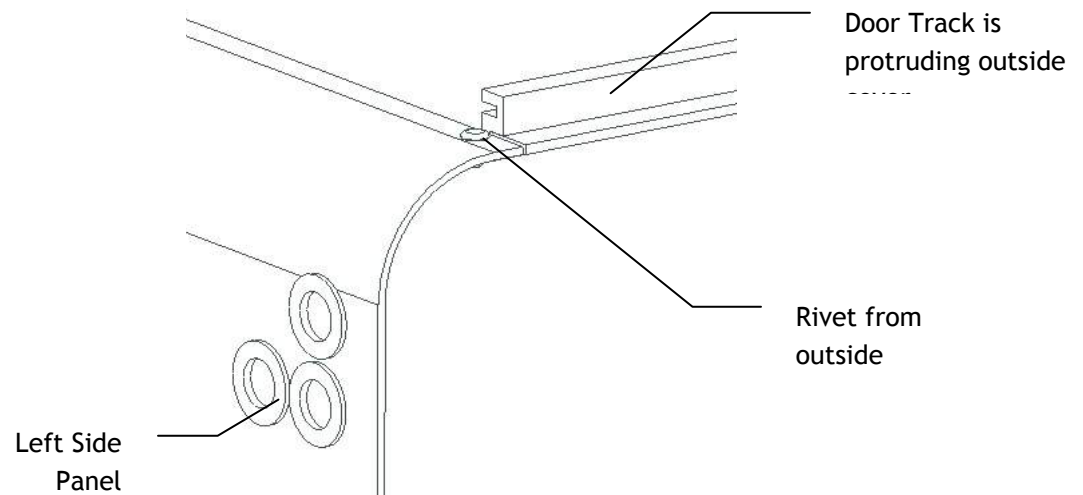
1. Lie the back panel down with the I/O seal facing up. Position four plastic rivets along each side from underneath as shown in the picture below. Be careful not to 'engage' the rivets by pressing on them until the side covers are in position.
2. Position the four holes in the back edge of the Side Panels on top of the back panel and over the rivets as shown below. Once positioned over all rivets, push down on the panel beside the rivet to lock in position. Repeat this for Both Side Panels.

Note:

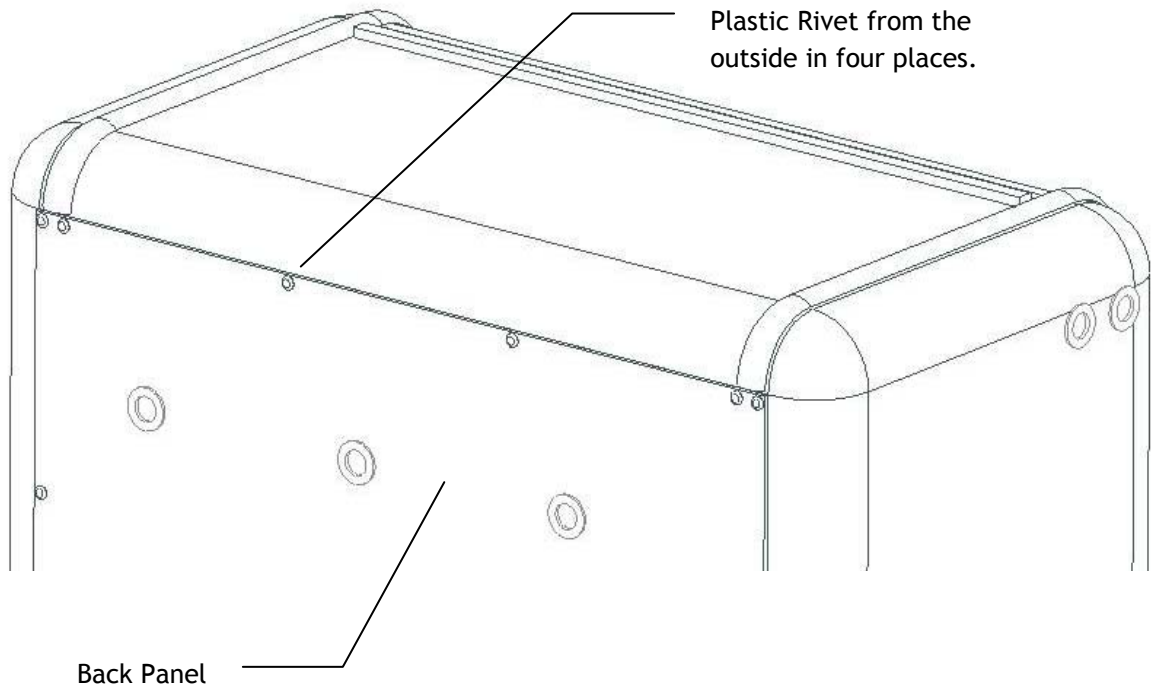
If a rivet is accidentally engaged then it can be removed by pressing on the centre part of the tail end of the rivet.



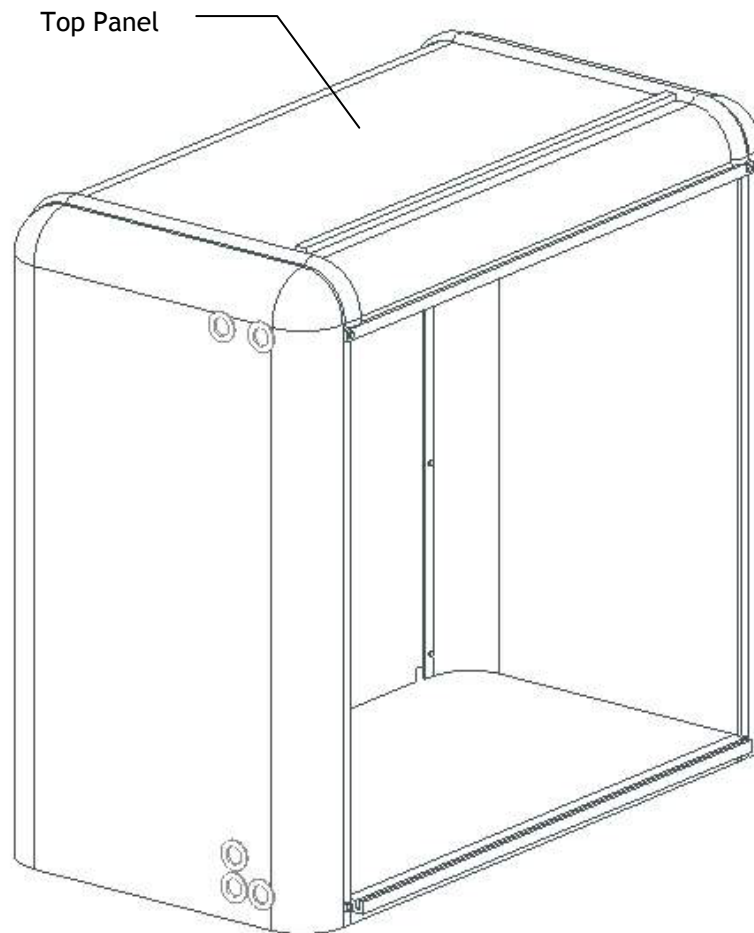
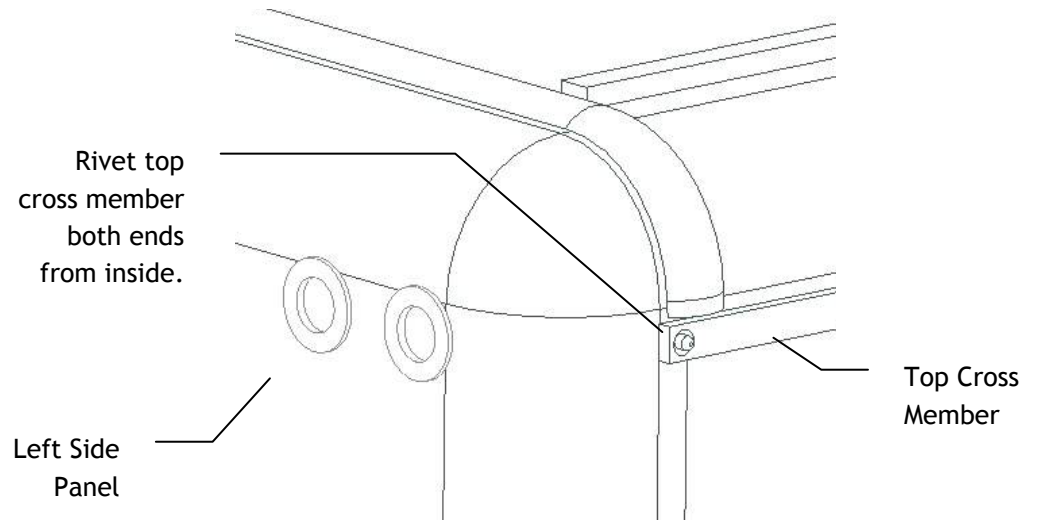
3. Take the Bottom Door Track (the one with the metal plate fitted) and position the holes in its ends behind the bottom holes in the side covers. Assemble from the outside a plastic rivet at each end tying the sides together as shown below. Ensure the track is towards the outside of the cover.



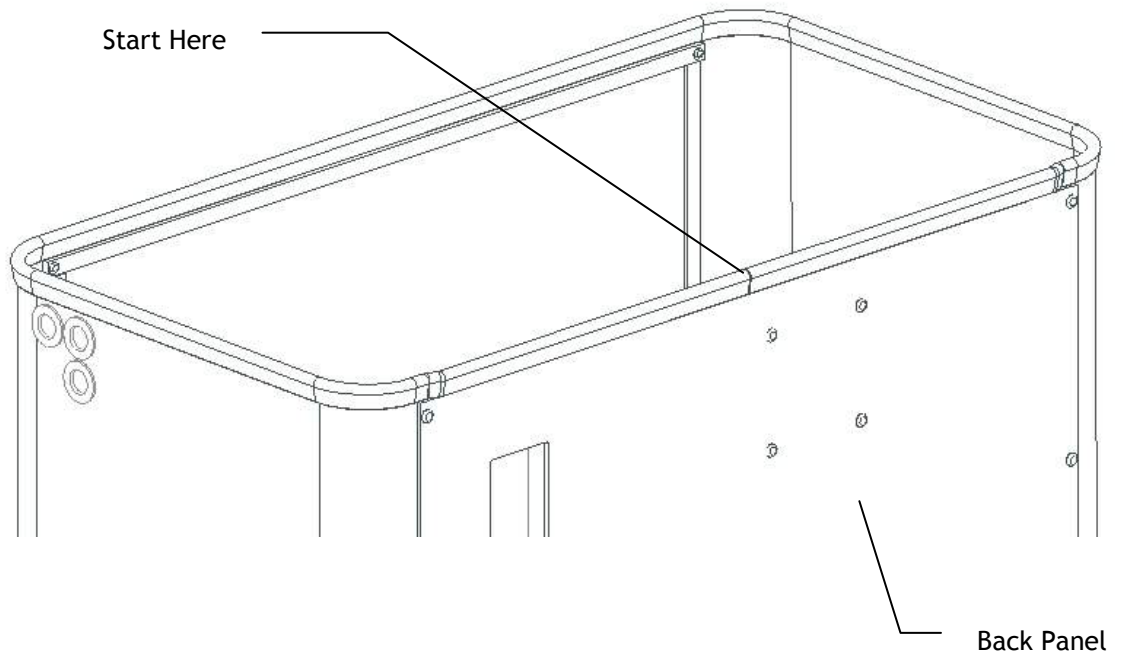
4. Orient the assembly onto its base. Take the top panel and position onto the assembly ensuring the back edge with the four holes in it is tucked in behind the back panel. Assemble the four plastic rivets along the back edge from the outside using a hand inside the cover to push against.



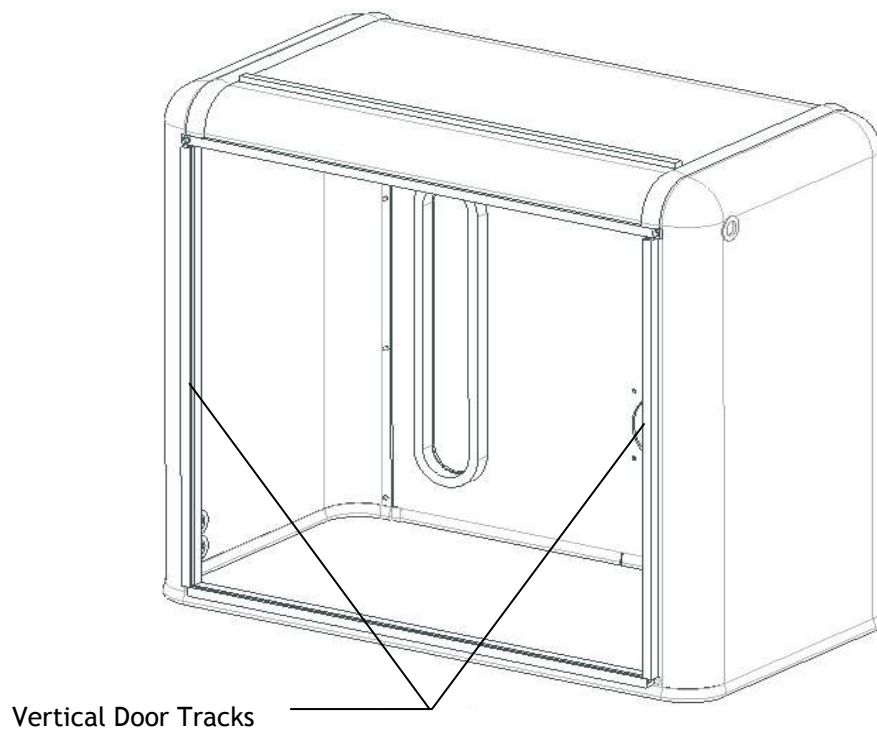
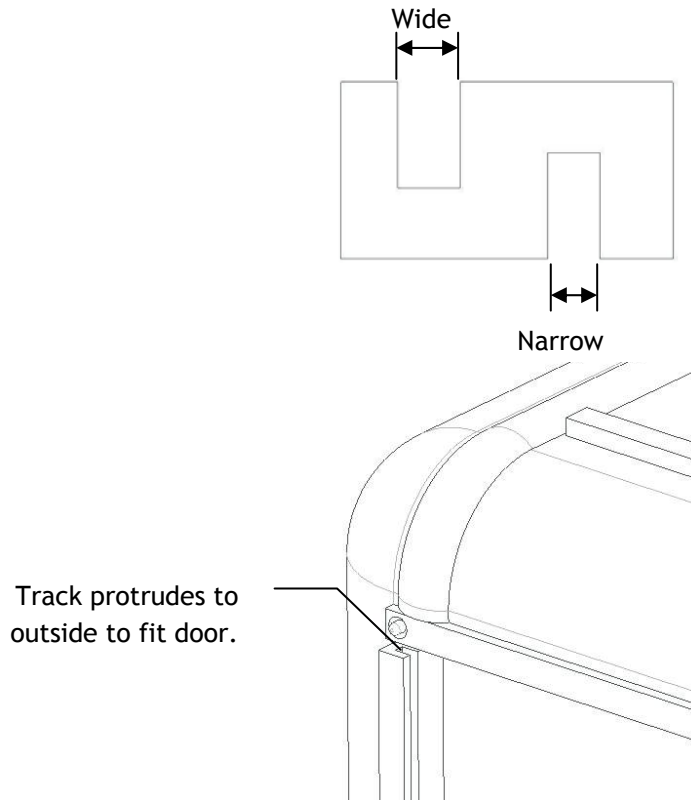
5. Push down firmly on the front and along the rubber seals. Fit a plastic rivet **FROM THE INSIDE** into each end of the top cross member.



6. Turn the cover upside down and rest on its roof. To fit the bottom seal start near the middle of the back panel, open the end of the seal and push the end over the edge. From here work the seal all the way around the bottom of the cover. To minimise the gap at the join the seal can be stretched around while in position. Pick up the assembly and orient back on its base.

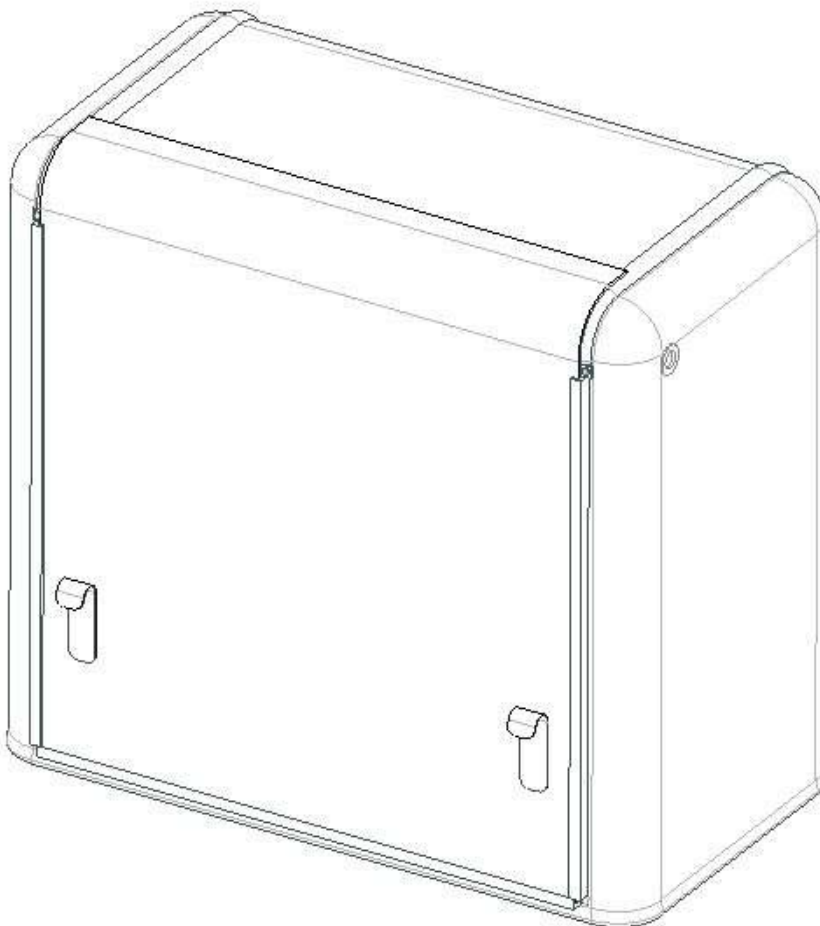


The vertical door tracks have a narrow and a wide slot (see picture below). Fit the tracks by pressing the narrow slot over the vertical edges of the Side Panels. Start at the bottom and work your way up. The wide slot is oriented towards the outside of the cover for the door to fit into. Ensure the tracks are fully seated or else the door will not run freely.



7. Fit the Door handles as shown using an 8mm (5/16") spanner. Slide the door into position from the top flex the door to get the nuts past the top cross member. See Section 6.1 on the recommended operation of the door.

Nut and Washer



8. Check all rivets are fully 'engaged'. If gaps exist at the ends of the top rubber seals then stretch the rubber along while in position to fill the gaps.



Top seal in 2 places. To close gaps at ends stretch rubber along while in position.

5. Installation Instructions

1. Turn off the power and remove all cables and connections to the Autosampler.
2. Position both the locating spacers underneath the feet of the Autosampler with the long end towards the front of the Autosampler (away from the power cable and communication ports).



Autosampler cover spacer.
(Long end)

3. Orient the Autosampler cover with the door to the front of the Autosampler (opposite power cable). Lift the Autosampler Cover up and over the Autosampler. Be careful not to damage the I/O seal or scratch the cover on the peristaltic pump (if option is fitted). Position the cover to suit the I/O seal and spread the front and back of the cover over the outside of the locating spacers ensuring the cover is sitting on the bench top and not on top of the position spacers.

6. General Use.

6.1 Door Operation

The door has two positions:

1. In the Closed position, the door creates an enclosure around the samples.
2. In the Open position, sample racks and standard racks/tubes can be added or removed.

The door is held in the open position via pins protruding from the back of the handles which rest on the top edge of the top cross member. To raise or lower the door these pins are retracted by pulling horizontally on the curved portion of the door handles.

Hints!

When pulling the handles to retract the locking pins push with your thumb against the door to avoid moving the whole cover.

Ensure the Sample Probe is in the home position before removing racks.



WARNING

It is recommended not to remove samples racks or standard racks or vials while the Autosampler is in motion.



6.2 Connections

6.2.1 General

There are multiple entry or exit points to the Autosampler cover through various rubber grommets. Use a sharp knife to pierce or cross cut the grommets where required to feed through any tubing etc.

6.2.2 Exhaust Ducting

On the back panel there is a location hole for connecting exhaust ducting which has a cover plate fitted. To fit the ducting, remove the cover plate by pressing on the centre part of the end of the plastic rivet. The hole will suit ducting of internal Diameter 75mm used in conjunction with an appropriate flange having $\text{Ø}4\text{mm}$ mount holes on a PCD of 101mm is suitable.

6.2.3 Purge Line

A purge line can be fitted to any of the $\text{Ø}20\text{mm}$ holes currently plugged with a rubber grommet. When the grommet is removed, a suitable fitting can be installed, such as a barb connector, to fit an inlet purge line.

6.3 Care and Maintenance

- Do not use abrasive cleaners or strong solvents to clean the cover as this will reduce the clarity of the cover.
- If using volatile chemicals ensure the cover is adequately purged.
- It is recommended not to place objects on top of the Autosampler cover.

This page intentionally left blank.