

# SERVICE BULLETIN

**Subject: New A22 Analog Cleaner Pressure Gauge**

**Date: 6/18/10**

**Bulletin No. SB10-7**

We are pleased to announce a product improvement on the Authority22 lane machine cleaning system.

The analog cleaner gauge that is mounted on the spray rail is being replaced with new style gauge that is larger and will be more accurate gauge. We have reports that the screwed in orifice in the bottom of the original gauge may come loose. This has caused the screw to become lodged in the cleaning system hoses. This causes abnormally high pressure that cannot be adjusted to the normal pressures.

We have tested and qualified a new gauge that is now on production units and can be purchased as a replacement service part. The new part number is 11-655065-000

The new gauge is 2" in diameter and has larger numbers on the face for better viewing and accuracy.

The new gauge can be replaced on the Authority22 lane machines with serial numbers 500-994 with little effort. See the replacement instructions for serial numbers 550-994. All factory 2.0 lane machines with serial numbers #1800 and above, and all field converted V2.0 lane machines, will have to follow the replacement instructions that follow.

## **Tools / Parts Required**

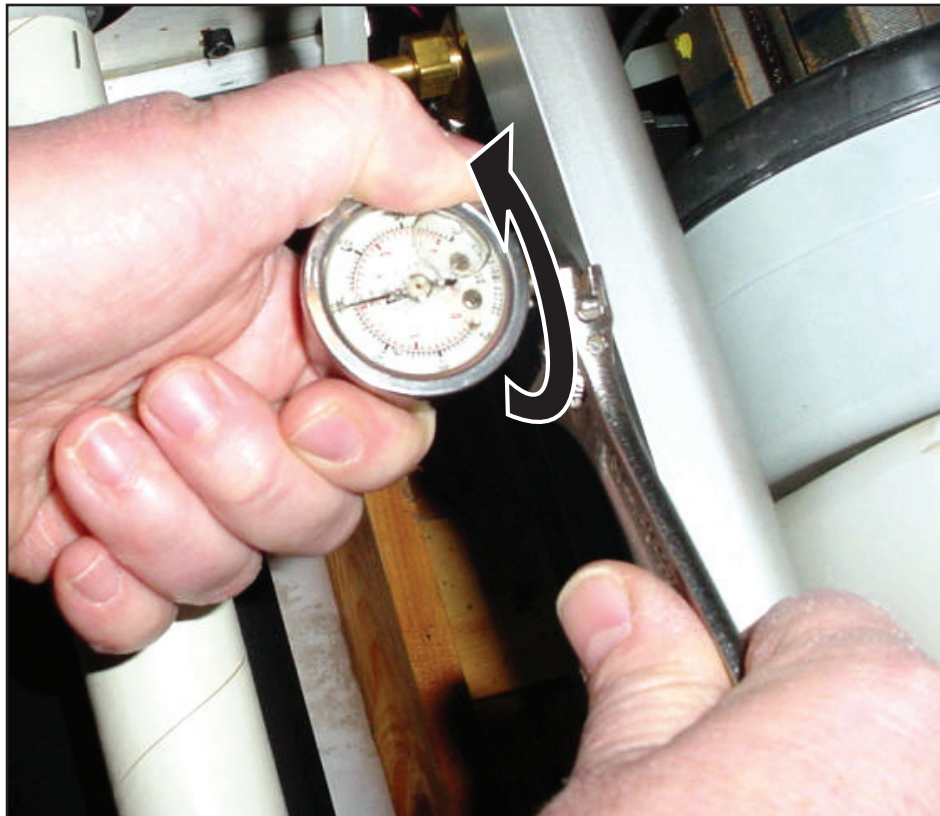
- 3/8" Box end wrench
- 7/16" Box end wrench
- 9/16" Open end wrench
- 5/32" Allen wrench
- 6" Adjustable wrench
- Teflon tape
- Cleaner gauge part # 11-655065-000
- Terry cloth towels



**WARNING! Disconnect the power cord from the Authority22 Lane Machine and make sure the power switch on the Electrical Control Enclosure is in the off position before doing this procedure!**

### **Instructions for Authority22 Lane Machines, Serial Numbers 500-994**

While holding the gauge with one hand and the 6" adjustable wrench in the other, turn the wrench counter clockwise while using your hand to apply pressure to help aid in removing the gauge. If you do not have a 6" adjustable wrench, you can use a 7/16" open end wrench but be careful, as the gauge base is made of brass and the flat, machined surface for the wrench can be rounded off easily when using just the 7/16" open end wrench by itself. Use both the wrench and your hand to remove the gauge. Refer to Figure 1.



*Figure 1*

Before installing the new gauge, clean out threaded area in the cleaner rail. Any pieces of Teflon tape left behind from the removal of the old gauge, could get into the system and clog the filters if not removed. Now wrap Teflon tape 2-1/4 (+/- 1/4) complete turns around threads on the new gauge, making sure that the tape does not overhang into the open hole of the gauge. Refer to Figure 2.

**i** **NOTE:** Wrap the Teflon tape around the gauge threads in a clockwise direction so the tape will not unwrap itself from the threads. Gauge Fitting must receive 2-1/4 +/- 1/4 wraps in the direction of the threads.

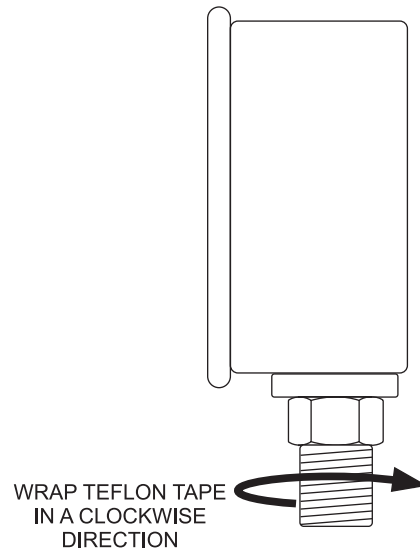


Figure 2

Install the new pressure gauge, part number 11-655065-000, onto the Cleaner Spray Rail using a 9/16" open end wrench. Use your hand to aid in turning the gauge while turning the 9/16" open end wrench at the same time. Tighten at least 1 full turn, but not more than 2 full turns, until gauge is in its final orientation as shown in Figure 3.

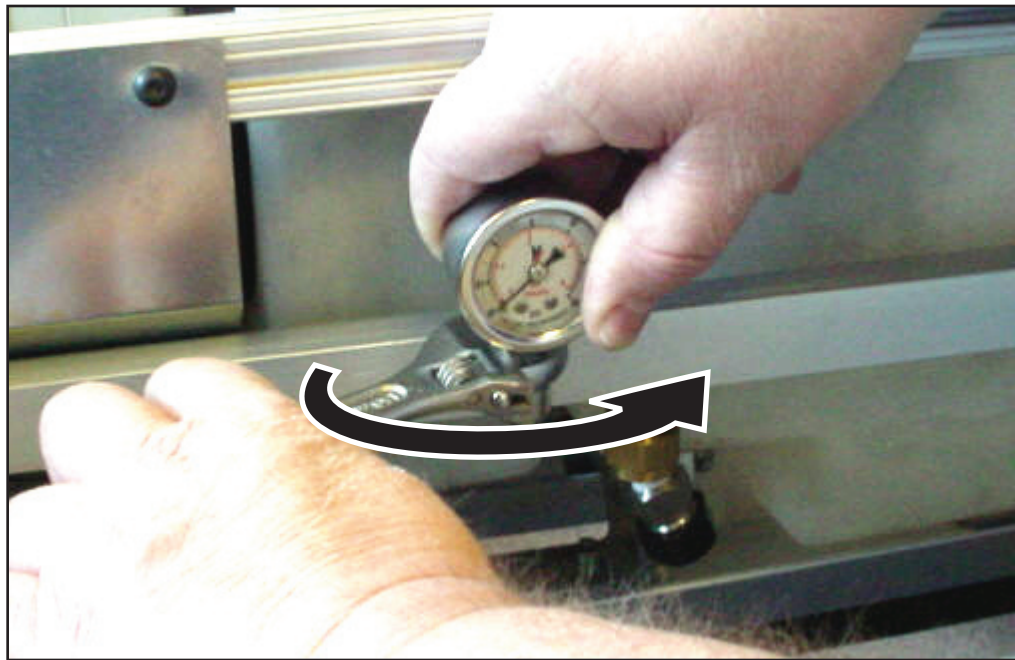


Figure 3

## Instructions for Authority22 Lane Machines, Serial Number 1800 and Up, Including All Field Converted V2.0 Machines

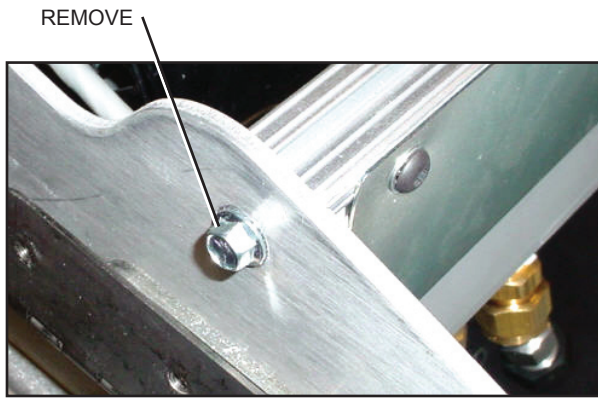
Installing this new, larger gauge on a version 2.0 machine requires a few components to be removed, and the position of the gauge will be at a different angle than the old gauge. These instructions will help explain what needs to be removed to install the new, larger face gauge.

While holding the gauge with one hand and the 6" adjustable wrench in the other, turn the wrench counter clockwise while using your hand to apply pressure to help aid in removing the gauge. If you do not have a 6" adjustable wrench you can use a 7/16" open end wrench, but be careful as the gauge base is made of brass and the flat machined surface for the wrench can be rounded off easily if using just the 7/16" open end wrench by itself. Use both the wrench and your hand to remove the gauge. Refer to Figure 4.

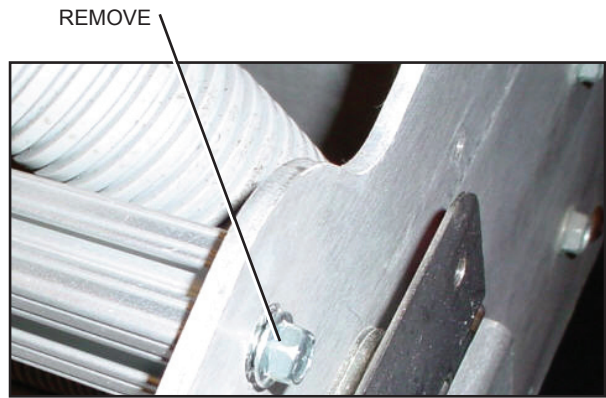


*Figure 4*

Remove the two rail support bolts using a 3/8" wrench from each end of the rail. Refer to Figures 5 & 6.

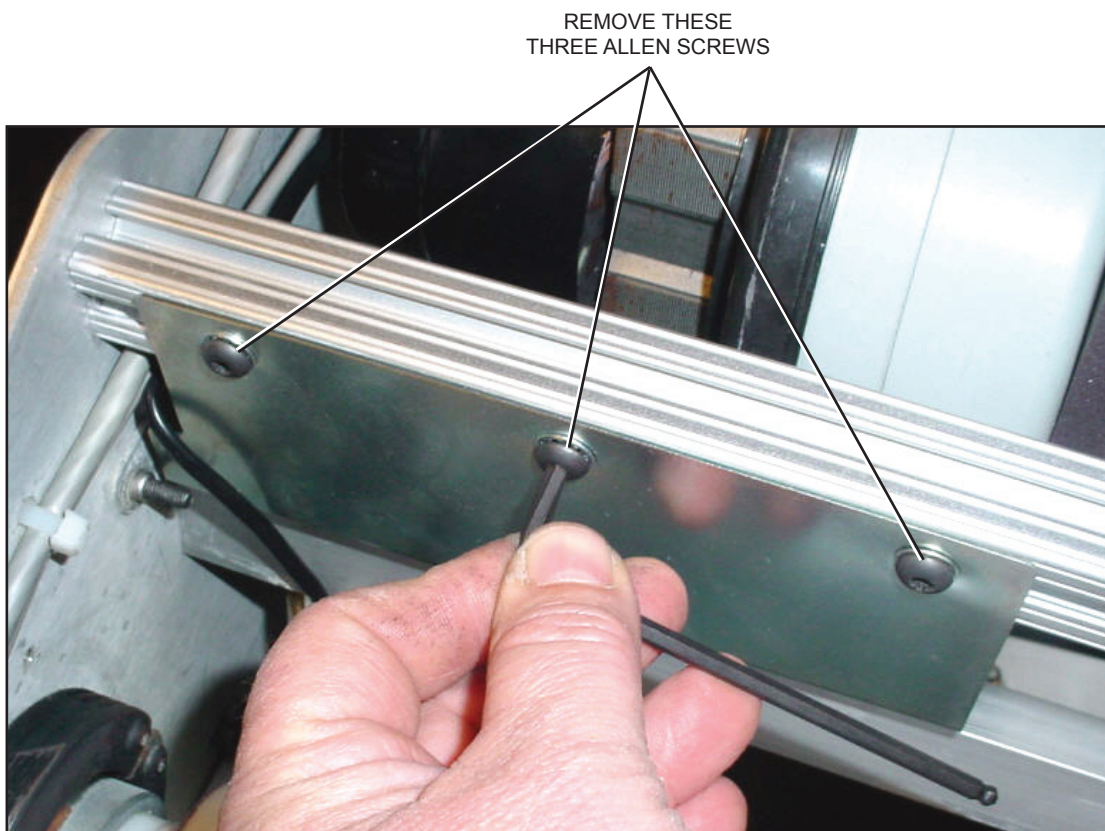


*Figure 5*



*Figure 6*

Remove the three Allen head cap screws using a 5/32" Allen wrench. Be careful when removing rail to not lose the three nut plates that are inside the rail slot. Refer to Figure 7.



*Figure 7*

Remove the left hand and right hand rail tank support bracket nuts from each side using a 7/16" open end wrench. These nuts are located on the inside compartment of the electrical enclosure right under the adjustment too. Refer to Figures 8, 9 & 10. When removing the rail, be careful not to lose the washers from the supports. Refer to Figure 11.

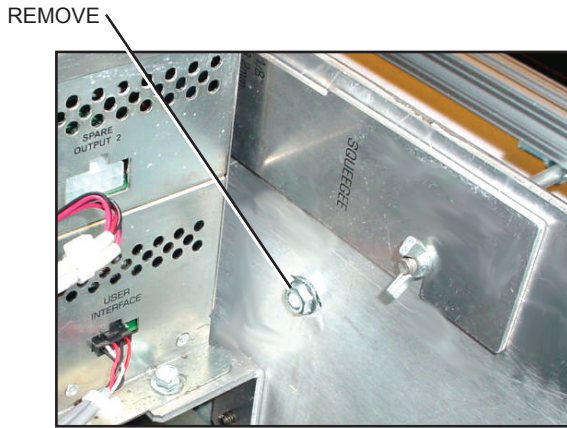


Figure 8



Figure 9

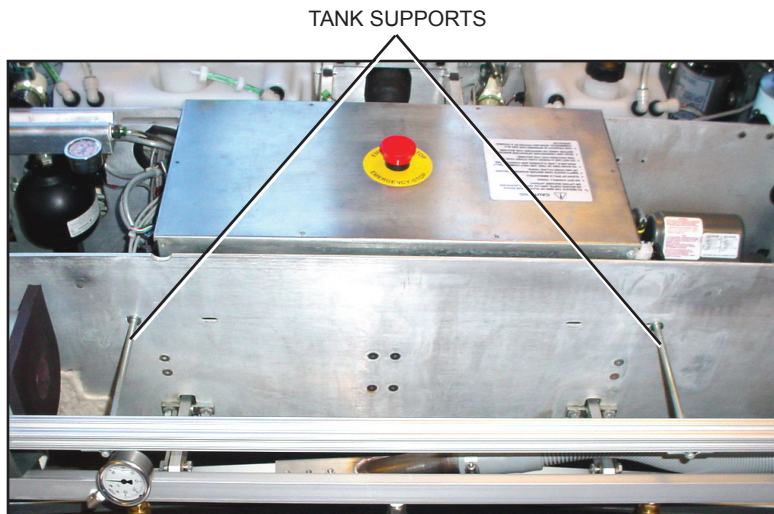


Figure 10

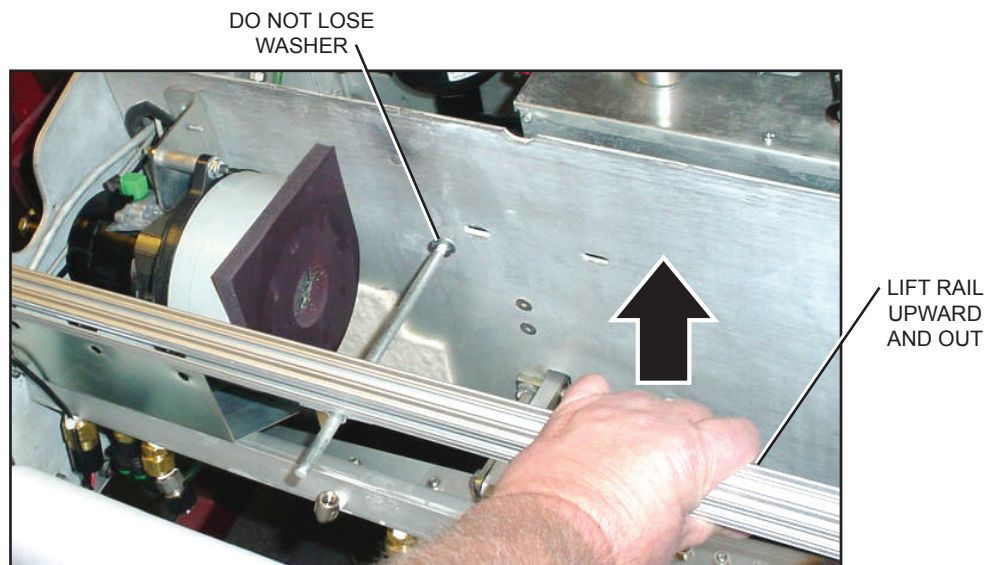


Figure 11

Install the new pressure gauge, part number 11-655065-000, onto the 90 degree elbow. Refer to Figure 13. Use your hand to aid in turning the gauge clockwise while turning the 9/16" open end wrench at the same time. Tighten at least 1 full turn, but not more than 2 full turns, until gauge is in its final orientation. The gauge face will be parallel to the flat side of the manifold. Using a 9/16" open end wrench, tighten elbow fitting another 45 degrees. Refer to Figure 14.

**i** **NOTE:** *Wrap the Teflon tape around the gauge threads in a clockwise direction so the tape will not unwrap itself from the threads. Gauge Fitting must receive 2-1/4 +/- 1/4 wraps in the direction of the threads.*

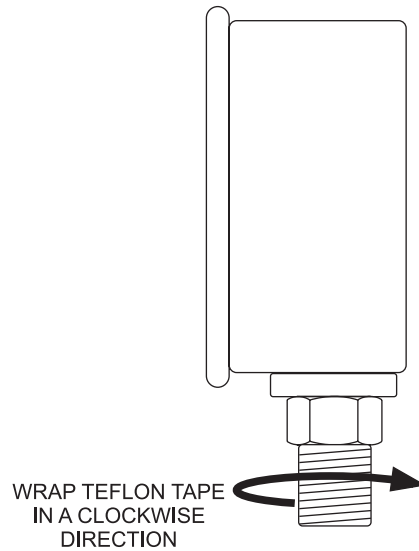


Figure 12



Figure 13

**i** **NOTE:** To gain more room to turn the gauge, you may need to remove the duster cloth from the top position and lay it down to gain a better position for the 9/16" wrench.

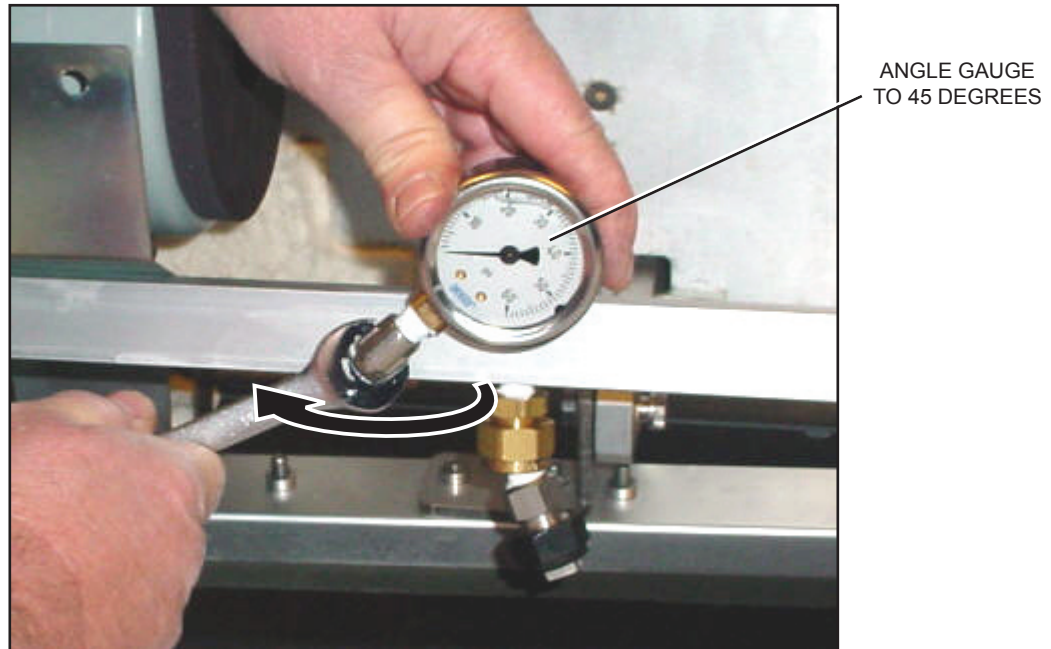


Figure 14

At this time, you can put the machine out onto the lane to test for leaks before you reassemble all the parts previously taken off. Check for leaks at the gauge and the fitting while using the cleaner pump test in the diagnostics section of the GUI.

**i** **NOTE:** Make sure this leak test is not done on the approach. Push the machine onto the lane surface to test for leaks.

If you have questions regarding the information contained in this Service Bulletin, please contact Brunswick Technical Support at 1-800-937-2695 or 231-725-4966, FAX 231-725-4667, or Email [techsupport@brunbowl.com](mailto:techsupport@brunbowl.com) Visit <http://www.brunswickbowling.com/service-support/tech-support/> for electronic files of this and other Service Bulletins.

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