Some of the items below relate to Galiso legacy systems only. Galiso REC4 Systems replace the transducer and load cell of legacy systems with digital components which allow for communication without the need for an A/D card.

Galiso is also able to provide remote operation, service and support for networked REC4 Systems. Customer Service: 1-800-854-3789 or (970) 249-0233

<u>Note</u>: Always check expansion problems at <u>Zero</u> pressure, hold at least 2 minutes and note reading every 15 secs

| PROBLEM | POSSIBLE CAUSE | SOLUTION (WHAT TO DO) |
|--|---|--|
| Expansion Decreasing in ONE Jacket only (Negative Expansion) | Temperature Problem (Problem will eventually stop as temperatures stabilize.) | Check to see that all temperatures (incoming water, test jackets, filled cylinders, and ambient air temperature) are within 5 degrees of each other. (2 degrees or less on small cylinders.) |
| Decreasing in BOTH Jackets (Negative Expansion) | Bowl Drain Valve Leaks | Remove 1/2" plastic tubing from the bottom of the Drain Valve, and Check to see if water is dripping from the valve. |
| Expansion unstable | Air Trapped in Expansion Line. | Flush expansion lines by filling bowl with water, and removing the head seal to each jacket while it is in verify. |
| | Damaged Load Cell | Remove Expansion Bowl from bolt on Load Cell, and see if expansion stabilizes without load. If expansion continues to drift, Load Cell may be damaged. |
| | Vibration | Weigh Bowl must be stable. If there is vibration coming through the floor, or other sources, this must be isolated. |
| Does not change from zero, no matter what you do. | Improper Calibration: Factor set to zero. | Recalibrate Expansion following the procedure step by step as detailed in the instructions. |
| | Cable not connected to the computer. | Check Load Cell Cable connection to the back of the computer. |

| Expansion Increasing | Bowl Fill Valve Leaks | Turn off water to the machine. If the problem goes away, the Bowl fill valve is leaking. If the problem doesn't go away, then there is a low pressure leak in the test head. Remove valve from the expansion manifold and check to see if water is leaking through the valve. |
|--|--|--|
| | Head Seal Leak | Switch heads (if another is available). If problem ceases, repair faulty head. If another head is not available, using proper Head Retaining Device, leak check head around diaphragm and boot. If any leaks exist, repair the head. Heads may be returned to Galiso for repair. |
| | Temperature Problem. (Problem will eventually stop as temperatures stabilize.) | Check to see that all temperatures (incoming water, test jackets, filled cylinders, and ambient air temperature) are within 5 degrees of each other. (Less than 2 degrees on small cylinders.) |
| Expansion Decreasing In ONE Jacket only (Negative Expansion) | Head Boot not sealing against Jacket | Check inside sealing surface of Test Jacket to ensure that the surface is smooth. Check Boot itself for deformations. |
| | Leak in expansion plumbing | Dry off all tubing with an air hose, and check for drops of water. |
| | Opposite Jacket Expansion Valve Leaks | Remove 1/2" plastic tubing from the bottom of the Valve, and check to see if water is dripping from the valve. |