Loosening the valves on the steel base plates of the valve assemblies during the installation procedure is **STRICTLY FORBIDDEN!!!** (see: the explanation of the valve assembly in the User Manual).

The correct pre-setting of the valves fixed on the base plates of the valve assemblies guarantees their precise functioning. The valve assemblies are adjusted and calibrated by the factory.

Only the following adjustments have to be made during installation. Further adjustments are only needed if a valve somehow gets mispositioned during transportation. In that case, the complete valve assembly has to be changed according to the distinct manual on the Change of the valve assembly.

The horizontality of the table surface can't be 100% assured; 1-2 degrees of inaccuracy can occur because of the dead zone of the valves. This can't be altered but it doesn't need to be. Dead zone is an essential feature of the valve. In the dead zone the valve assemblies keep the optimal working position of the cylinders with no air consumption of the table. The valve assemblies are adjusted and calibrated on this way by the factory.

The process of adjustment during installation:

1. Unpack the parts. Leave the yellow H-shaped fixing assembly on the leg system. It protects the leg system against bending during movement and adjustment of horizontality.

2. During transportation or repositioning of the table, the height sensing levers of the valve assemblies must be fixed downwards on the security bumpers by rubber rings or fixing tape. For the time being, they should remain fixed.
3. The leg system should be placed to its final location. Put the table-leg chocks (holding mats) on the floor on the desired place of the table. Put the leg system onto the table-leg chocks.

Adjust the perfect horizontal position of the leg system with the help of steel rods and water level (enclosed in the toolbox) according to Figure 1. in the User Manual and the following pictures.

80 mm in diameter or bigger table-leg chocks (holding mats) are packed together with the table. A table-leg chock should be placed under each leg. The 2” large adjusting screws on the bottom of the legs should be used for setting the horizontality of the table. For this, a 200 mm long water level and four pieces of steel rods are provided. The water level should be used on the lower horizontal joint beams connecting the legs (on all three of them, repeating and checking the process). After setting the horizontality it should be checked whether the lower screws of all four legs recline on the ground **with the same force**. The trick of measuring this force is that the bars spliced through the legs’ lower 2” adjusting screws should be screwed outwards from the legs **with the same torque**. That’s when the legs recline on the ground with the same force. There is no other means to measure this “reclining force” than tracking it back to the measuring of the torque of screwing outwards.
4. The top plate should be placed onto the leg system and adjusted properly (the top plate should be placed symmetrically in comparison to the leg system). Be very careful during lifting and positioning the top plate! If you are not careful enough, the valve assemblies can be destroyed or injured. Do not pull the top plate on the legs, always lift it.

5. The rubber rings or fixing tapes (used for safety during transportation to fix the height sensing levers to the lower security bumpers) should be taken off. If rubber rings were used, they should be put onto the ends of base plate of the valve assemblies (they would come handy in case of a possible future transportation of the table).

6. Remove the yellow H-shaped fixing assembly from the leg system.
7. Assemble the armrest screws, and install the armrest.

8. If nitrogen or high pressure pneumatic bottle is used for air supply, it should be checked whether the output tap of the pressure regulator is fully turned off and the screw of the pressure regulator is in “zero pressure” position. In this case, the bottle’s top high pressure tap can be opened and the pressure can be let onto the pressure regulator. The output pressure meter should still show zero. With screwing in the regulator’s pressure regulating screw (clockwise) a 1.5 Bar pressure should be set on the output pressure meter. The output tap of the regulator should be still turned off.

If Supertech’s Quiet Air Compressor is used for air supply, there’s no need for settings, the pressure is kept within the limits of 1.5-2.5 Bar by a built-in regulator.
9. Put the Quiet Air Compressor to its place. Keep it switched off. To connect it to the table, just push the free end of the blue tube to the output of the compressor (at its back side).

10. At the first start up, when you apply pressure to the table at first, any unexpected error can occur with the table. So during this time one’s finger should always be on the main switch of the compressor, while crouching down to observe all four cylinders. If nitrogen or high pressure pneumatic bottle is used for air supply, this procedure should be done while another person is standing at the throttle of the bottle.

One should crouch down to observe all four cylinders at once. The air supply should be switched on from time to time all the while PAYING CLOSE ATTENTION that every cylinder should move but not rise too high. If a cylinder “stays upwards” then the air supply must be turned off WITHOUT DELAY for fear of the bursting of the membranes and the height sensing lever of the given valve should be pushed high to RELEASE the pressure from that cylinder immediately. If the silicone rubber membrane of the cylinder would be overloaded with the air pressure the silicone membrane will blow up!
11. If neither of the cylinders has risen above the position shown in Pictures 4. and 5. of the User Manual during the procedure (in the previous paragraph), the air supply can be switched on permanently.

12. One by one it should be made sure that the upper plane of the cylinders' pistons are not only at the same height but also in the same plane as the upper plane of the rubber membrane’s clamping ring (see User Manual, Pictures 4. and 5.). This assures the table's “self-adjusting” mechanism during use. If the planes don't concur perfectly at any of the cylinders then the o-ringed lifting bracket has to be adjusted on the lower plane of the top plate. If this adjustment is required then the top plate should be lifted a bit more manually than the pneumatics do, on the side of the given lifting bracket. This is hard to do because of the weight of the top plate. You should **PAY ATTENTION** to the safety of your fingers as this is an accident-prone situation!

Properly set valves:
13. All three valve assemblies should be distinctly checked as follows: The properly set top plate (in stable, working state of the table, under normal air pressure applied) should be suddenly grabbed on the corner and lifted 20 mm high from the stable position. Only one corner of the top plate should be lifted at a time and the valve assembly under it should be observed. It should be noted whether the height sensing lever follows the upwards movement of the top plate safely and easily. If it's not so, then the faulty valve assembly must be replaced at once because if the height sensing lever doesn't follow the top plate correctly then this will result in the tearing (blowing up) of the membranes due to overly high pressure.

For the replacement of the valve assembly please order spare part and ask for detailed instructions from our experts.

Further information and the download link for an Installation Manual in English:

www.superte.ch or www.supertechinstruments.co.uk

Help via telephone in English: +36 20 9234 386

Help via email: office@superte.ch