

## DETAILS SERIES 3 TABLES: HOW THEY WORK

- Each Lifting Column contains a mechanical lift mechanism that requires an external force to operate.
- Lifting Columns and Gearboxes are connected to and mechanically synchronized with each other through a telescoping Driveshaft assembly.
- A hand-operated crank provides torque to operate the Lifting Columns.
- Each Lifting Column contains internal stops that define the top and bottom of the range of motion.
- Only one Crank Handle is used to drive the Lifting Columns, regardless of whether the Table has two or three Lifting Columns.
- The Crank Handle raises and lowers 2-leg Tables through a 4:1 ratio Gearbox.
- The Crank Handle raises and lowers 3-leg Tables through a 6:1 ratio Gearbox.
- Certain small Tables have a Top Crank Handle configuration; all other sizes have a Front Crank Handle. Refer to the SpecGuide for more information.

## READ THE ASSEMBLY DIRECTIONS AND USER GUIDE!

- The Assembly Directions and User Guide are available as free public downloads at [steelcase.com/details](http://steelcase.com/details).
- Many times, problems can be the result of improper assembly. Were the Assembly Directions followed in the assembly of your Table?
- If you are absolutely certain that the Table was assembled correctly, then work through the following troubleshooting steps.

## TROUBLESHOOTING PARTS KIT

Having a spare part that is known to work will quickly lead to accurate identification of faulty components. Without this, it can be little more than guesswork.

Details strongly recommends that every Dealer maintain a small kit of parts for troubleshooting purposes.

### This kit of parts should include:

			Tables	Bench
1.	Lifting Column	qty=2	Service Part no. 005204DSR	946910106SR
2.	Front-Crank Gearbox	qty=1	Service Part no. 18307402SR	18307402SR
3.	Front-Crank Handle	qty=1	Service Part no. 950200001SR	950200001SR
4.	Front-Crank 9" Driveshaft	qty=1	Service Part no. 800900173SR	800900173SR
5.	Top-Crank Gearbox	qty=1	Service Part no. 006010DSR	not applicable
6.	Top-Crank Handle	qty=1	Service Part no. 950200000SR	not applicable

Always maintain a complete kit of troubleshooting spare parts that are known to work properly, to quickly identify the root-cause of problems and resolve customer issues on the first try.

## TROUBLESHOOTING STEPS

**Step 1:** Check that all Driveshafts are connected to each other, and fully engaged with the Gearbox and Lifting Columns

**Step 2:** Check that the center Lifting Column on 90° 3-leg Tables are assembled in the correct orientation. Refer to the section on 90° Corner Tables in the Assembly Directions.

## COMMON PROCEDURES

### SYNCHRONIZING THE LIFTING COLUMNS:

- The Lifting Columns of Series 3 Tables are synchronized mechanically. All Lifting Columns must be in the lowest position, before the Driveshafts are installed.
- If the Table will not go up or down all the way, and no clicking sounds from the Lifting Columns or other signs of damage are observed, the Lifting Columns may need to be synchronized.
- For ease of access, remove all loads from the Table, and flip the Table upside-down.
- Slide all Driveshafts out of all Lifting Columns and Gearboxes.
- With the Driveshafts removed, push all Lifting Columns to their lowest position. Do not push too hard at the bottom of the range of motion, allow 1/8" of play before they hit full-bottom.
- Reinstall all Driveshafts. It may be necessary to lift up on the Lifting Columns slightly, in order to align the hex openings in the Lifting Columns with the hex shafts of the Driveshafts.
- Once the Table has been properly reassembled, operate the Table all the way up and all the way down to confirm proper function. Refer to the Assembly Directions as necessary.

## COMMON PROCEDURES CONTINUED

### CHECKING LIFTING COLUMN GEARS:

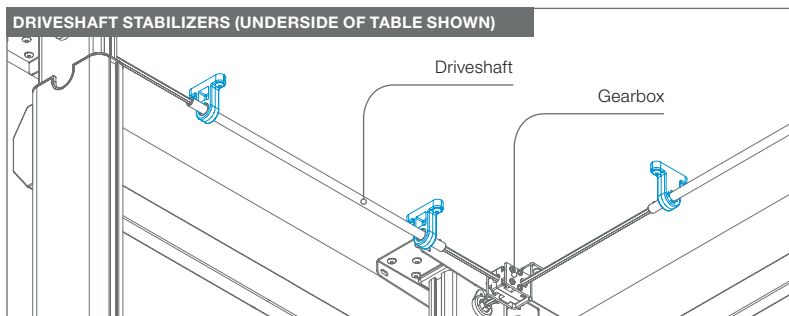
- If a Lifting Column reaches a certain point in its travel and stops, a clicking sound may be observed. This could indicate broken gear teeth inside the Lifting Column.
- For safety and ease of access, remove all loads from the Table, and flip the Table upside-down.
- Remove the Stretcher and Driveshaft from the suspect Lifting Column.
- Hold the suspect Lifting Column assembly firmly in place on the floor on its glides. With both hands, grip the Top Mounting Plate and raise the Lifting Column all the way up, so that it is fully extended, at its highest position.
- Using an 8 mm hex socket, remove the four bolts that hold the Top Mounting Plate in place. Remove the Top Mounting Plate.
- While looking down at the gears inside the top of the Lifting Column, slowly push the Lifting Column down, observing the gears as they turn.
- If any gear teeth are damaged or missing, the Lifting Column must be replaced.

**Any faulty Lifting Column must be replaced.**

**There are no field-servicable parts inside the Lifting Column.**

## PROBLEM ILLUSTRATIONS

Fig. 1 - Driveshaft Stabilizers are used on 3-leg Tables to ensure smooth adjustment.



## TROUBLESHOOTING: CAUSES AND SOLUTIONS

PROBLEM	POTENTIAL CAUSE	POTENTIAL SOLUTION
Table will not go up or down	Obstruction blocking Table movement	Remove obstruction
	One of the Lifting Columns is installed backwards	Was the Table assembled correctly? Refer to the Assembly Directions. Consider the direction that the Driveshaft(s) are rotating.
Table does not go through full range of motion	Lifting Columns not synchronized at Table assembly	Synchronize Lifting Columns (see Common Procedures).
...and / or...  Lifting Columns not synchronized (one Lifting Column is higher than other)	Faulty Lifting Column	Is there a 'clicking' sound at any point in the travel of the Table? An internal gear may be stripped or missing teeth (see Common Procedures). Replace any faulty Lifting Columns.  <i>Note: Be sure to explore the full range of travel. If one Lifting Column clicks at a certain point, push on the Table to help get it past that point, so that you can explore the full range of Table motion. Why? Because another Lifting Column may have the same problem at a different height.</i>

## TROUBLESHOOTING: CAUSES AND SOLUTIONS CONTINUED

PROBLEM	POTENTIAL CAUSE	POTENTIAL SOLUTION
<b>3-Leg Tables: Center Lifting Column moves in opposite direction vs. other Lifting Columns</b>	Center Lifting Column installed in wrong orientation.	Refer to the section on 90° Corner Tables in the Assembly Directions. Reassemble Table per the Assembly Directions.
<b>Table movement is not smooth, Lifting Columns jerk as raised or lowered</b>	Lifting Columns are not parallel with one another, causing them to bind	Ensure Table is unloaded and level. Loosen (but do not remove) all of the screws attaching the Lifting Columns to the Worksurface. For Series 3 Tables, also loosen the set-screws on the Stretcher. Operate the Table through a complete up/down cycle and then retighten set-screws and worksurface attachment screws. Still binding? Take everything off the Table, flip it upside-down, and remove the screws completely. Run the Table through another up-down cycle. The position of the Lifting Columns may shift slightly, reinstall all screws in the adjusted position.
	Faulty Lifting Column	Is there a 'clicking' sound at any point in the travel of the Table? An internal gear may be stripped or missing teeth ( <i>see Common Procedures</i> ). Replace any faulty Lifting Columns.  <i>Note: Be sure to explore the full range of travel. If one Lifting Column clicks at a certain point, push on the Table to help get it past that point, so that you can explore the full range of Table motion. Why? Because another Lifting Column may have the same problem at a different height.</i>
	Driveshaft Stabilizers not installed on 3-leg Tables	Refer to Assembly Directions on Driveshaft installation for 3-leg Tables. Reassemble Table per the Assembly Directions. ( <i>See Fig. 1, page 3</i> )
<b>Crank Handle is too difficult to turn</b>	Table is severely overloaded	Maximum Table capacity is 205 lbs., including the weight of the worksurface. Overloading the Table could lead to damage that would not be covered by warranty.
	Incorrect Gearbox used	Two-leg Tables use a 4:1 Gearbox. Since additional Lifting Columns require more force to operate, the 6:1 Gearbox used on 3-leg Tables keeps the force required to turn the crank handle low. Check to be sure that your 3-leg Table does not have a 4:1 Gearbox. Each Gearbox has its ratio stamped into its side. (All blue and black 90-degree Intermediate Gearboxes on 90-degree 3-leg Tables are 1:1 ratio.)

## OBTAINING REPLACEMENT PARTS

Contact your local Steelcase dealer to help identify and order Service Parts. If you need help, call 888.STEELCASE.

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For further information, please visit [steelcase.com/details](http://steelcase.com/details) or call 888.783.3522. P.O. Box 1967 / CD-5E / Grand Rapids / MI 49501-1967  
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