

# Troubleshooting the Shopsmith Lathe Duplicator

Most Lathe Duplicator problems have simple solutions. Under normal use, you should rarely have to service a component. Most problems can be corrected by performing periodic maintenance, alignment and adjustment tasks...and by changes in work habits.

This Troubleshooting Guide should help you diagnose and remedy the most commonly occurring Lathe Duplicator problems.

<b>Problem</b>	<b>Possible Cause</b>	<b>Solution</b>
Quality of cuts is poor (rough or torn surface)	Cutter is above workpiece centerline	Lower Table to bring down to centerline; or down to 1/16" maximum below centerline for certain types of wood.
	Lathe speed too slow	Check Speed Chart & increase speed
	Cutter is dull	Replace the Cutter
	Cutting too aggressively	Use a lighter touch
Inexact diameters	Improper alignment of Lathe Centers to Template Centers – or Follower to Cutter	Check alignment and adjust if required
	Using wrong Follower	Change to Follower with same shape as Cutter
	Way Tube Clamp improperly positioned	Check that recessed ends of both Clamps engage Way Tubes properly. Reposition as required.
	Alignment not checked when remounting Duplicator	Check alignment and adjust if required
Good cuts on one end of turning, but poor cuts on the other	Lathe Centers not parallel to Table	Check Table-to-Lathe Centers parallelism & align
	Way Tube Clamp improperly positioned	Check that recessed ends of both Clamps engage
	Template not centered properly or centerline not drawn squarely on template	Way Tubes properly & re-position if required Straighten template on centers or redraw centerline on template
Cuts are tapered	Way Tube Clamp improperly positioned	Check that recessed ends of both Clamps engage the Way Tubes properly & re-position, if required
Excessive vibration (whip & chatter) when turning thin spindles	Cutter is positioned below workpiece centerline	Raise Table so Cutter is on centerline
	Cutting too aggressively	Use a lighter touch
Excessive vibration when turning larger spindles or bowls	Workpiece Centers improperly located or wood is unbalanced	Check for proper centers and balance. Relocate center(s) or cut off stock until workpiece is balanced.