

MIMIK TROUBLE SHOOTING CHART

TROUBLE	CAUSE	REMEDIES
1. <u>VIBRATION</u> Occurring When Stylus Feeds Into Template Or Meets Profile Change.	a) Infeed rate too high	Reduce by adjusting infeed rate knob. See Page 2 (a).
	b) Air in hydraulic system	Check slide full stroke. Check for leakage at valve & tank fittings. Check for adequate oil in reservoir.
	c) Hydraulic pressure is too high	Reduce for proper setting. See Page 3(d). Check for broken pressure gauge.
	d) Stylus pressure too high or too low	Adjust. See Page 2 (c).
	e) Mechanical looseness	Check mounting bolts, cross-slide, tool-holder, template bracket & tool insert for tightness. Check tracer gib adjustment and piston rod connection.
	f) Lathe vibration	Eliminate by balancing or leveling.
2. <u>SURFACE FINISH</u>	a) Vibration in tracer system	See Section 1 above.
	b) Template contour not smooth	File, grind or polish.
	c) Valve hang-up	See Page 16.
	d) Air in hydraulic system	See Section 1 (b) above.
	e) Mechanical looseness	See Section 1 (e) above.
	f) Uneven tracer movement	Reduce hydraulic pressure to 50 p.s.i. and check for uniform movement. Check for distortion & lubrication. If tracing small taper, increase slide angle to provide faster tracer slide movement.
	g) Excessive stylus pressure	Reduce.
	h) Incorrect tool geometry	Check for adequate clearance and correct rake & relief angle.

2. <u>SURFACE FINISH PROBLEMS</u> continued....	i) Looseness or vibration in lathe	Check for spindle run out, loose carriage or cross-slide. Take straight cut with tracer in full forward or retract position and inspect for similar marks.
3. <u>PART-TO-PART VARIATIONS</u>	a) Varying cutting load	Provide uniform allowance for finish cut over entire contour.
	b) Excessive tool wear	Use throw-away carbide inserts. Use separate tool for finish cut. Check proper speed and feed.
	c) Operator errors	Use preset tools, turret stop, overlay templates, etc. Eliminate operator settings.
	d) Mechanical looseness	See Section 1 (e) Page 14 + 2 (i) above.
	e) Valve hang-up	See Page 16.
	f) Uneven tracer slide movement	See Section 2 (f) Page 14.
	g) Air in hydraulic system	See Section 1 (b) Page 14.
	h) Excessive variation in oil temperature	Let oil warm up before tracing. Cycle slide frequently. Install oil temperature control. Contact MIMIK for details.
4. <u>TEMPLATE-TO-PART VARIATIONS</u>	a) Tool not on center	Adjust cutting point to exact center height.
	b) Template not aligned in horizontal zone	Adjust template using a dial indicator.
	c) Variation in cutting load over length of part	See Section 3 (a) above.
	d) Incorrect tool-stylus relationship	Stylus-tool to have same profile and proper alignment. See Page 2.
	e) Incorrect tool geometry	See Section 2 (h) Page 14.
	f) Incorrect tracer slide angle	Reset slide to ensure full contour coverage.
	g) Excessive stylus deflection	Reduce infeed rate to approximately 10-20 i.p.m.

4. <u>TEMPLATE-TO-PART VARIATIONS</u> continued....	h) Mechanical looseness i) Valve hang-up j) Uneven tracer slide movement k) Excessive machine feed or insufficient tracer slide infeed	See Section 1 (e) Page 14. See Section 6 Page 16. See Section 2 (f) Page 14. Reduce machine feed, increase tracer infeed or change slide angle so stylus will follow contour without floating off template or over-deflecting.
5. <u>SLIDE HANG-UP</u> Slide Will Not Feed Forward With Valve Set To Infeed & Stylus Off Template Or Slide Continues To Retract When Stylus Meets A Reduced Slope.	a) Incorrect feed setting b) Slide at end of stroke c) Hose lines installed incorrectly d) No oil flow from pump e) Slide hang-up f) Valve hang-up	Adjust feed to desired rate. Reposition cross-slide to regain stroke. Connect hoses properly. Check for loose motor-to-pump coupling, burnt out motor, broken fittings inside tank, faulty relief valve or plugged filter. See Section 2 (f) Page 14. See Section 6 - below.
6. <u>VALVE HANG-UP</u>	a) Insufficient stylus pressure b) Dirt or gummy oil deposits in valve c) Distortion from over-tight fittings d) Air lock in valve e) Incorrect hydraulic oil	Increase stylus pressure and actuate stylus by hand. If tracer does not begin to infeed immediately, hang-up may be due to dirt. Drain tank, flush complete system and replace hydraulic oil & filter. Run tank until oil warms up. Actuate stylus by hand until smooth stylus action and positive spool return are obtained. Back off Tru-Seals, make sure fittings are just finger tight. Snug up Tru-Seals gently. Cycle tracer slide full stroke several times by activating stylus. Change to Sunvis 747.

If the tracer valve continues to hang up,
Contact Rosebrook Tracers Inc

This valve is factory sealed.
Any attempt to dismantle the tracer valve
Can result in damage and will void it's guarantee

FOR SERVICE OR PARTS CONTACT

ROSEBROOK TRACERS INC
TOLL FREE 800.265.3564
FAX 719.632.8894
rbtracer@rosebrooktracer.com

3105 North Cascade #106
Colorado Springs, CO 80907
USA