## SET UP TROUBLESHOOTING

PROBLEM	CAUSE
ROUGH FINISH	LACK OF COOLANT, OR MISDIRECTED DULL TOOL INSUFFICIENT SIDE CLEARANCE * WORN CLAMP OR TOOL HOLDER TOOL NOT ON CENTER # EXCESSIVE FEED RATE SPINDLE SPEED (RPM) LOW * SEE FIG. 4 # SEE FIG. 1
EXCESSIVE TOOL WEAR	LACK OF COOLANT, OR MISDIRECTED INSUFFICIENT SIDE CLEARANCE * CUT OFF WIDTH TO NARROW * SPINDLE SPEED (RPM) HIGH * SEE FIG. 4
TOOL CHIPPING	TOOL NOT ON CENTER # FRONT LEAD ANGLE TO LARGE + INSUFFICIENT CAM TRAVEL (RISE) WORN CLAMP OR TOOL HOLDER # SEE FIG. 1 + SEE FIG. 3
TOOL BREAKAGE	EXCESSIVE BLADE EXTENSION DULL TOOL EXCESSIVE FEED RATE CUT OFF MISALIGNED WITH BREAKDOWN WORN CLAMP, HOLDER OR SLIDE INSUFFICIENT CAM TRAVEL (RISE)
CHATTER	TOOL NOT ON CENTER (BELOW) # IMPROPER FRONT CLEARANCE @ EXCESSIVE BLADE EXTENSION WORN CLAMP OR TOOL HOLDER MACHINE SPINDLES WORN # SEE FIG. 1 @ SEE FIG. 2
PART LENGTH VARIATION	WORN CLAMP, HOLDER OR SLIDE CUT OFF W DTH TOO NARROW * END PLAY IN SPINDLE (COLLET) DULL TOOL EXCESSIVE FEED RATE FRONT LEAD ANGLE TO LARGE @ * SEE FIG. 4 • SEE FIG. 2

