

SECTION 7

TROUBLESHOOTING

PROBLEM

Chatter

CAUSE

Air in hydraulic lines. Bleed all hydraulic components several times. Make sure vacuum unit is not aerating hydraulic fluid.

Slide, rod or cylinder loose.
Tighten mounting hardware.

Tracer loose.
Tighten mounting hardware.

Gibs loose or tight.
Adjust to proper fit.

Ways not lubricated properly.
Keep ways clean and lubricate every four hours of operation.

Machine not properly level.
Level machine.

Blow-by in cylinders.
Replace worn or damaged seals.

Excessive hydraulic pressure.
Run between 200 PSI & 450 PSI.

Loose stylus.
Tighten set screw.

PROBLEM

Slow tracing

CAUSE

Air in hydraulic lines. Bleed all hydraulic components several times. Make sure vacuum unit is not aerating hydraulic fluid.

Gibs loose or tight.
Adjust to proper fit.

Ways not lubricated properly.
Keep ways clean and lubricate every four hours of operation.

Machine not properly level.
Level machine.

Blow-by in cylinders.
Replace worn or damaged seals.

Inadequate hydraulic pressure.
Run between 200 PSI & 450 PSI.

Cold hydraulic fluid.
Operate at 90-110 Farenheit.

Improper hydraulic fluid.
Use recommended fluid-Mobile DTE 24 or DTE 25. See page 3.

Contaminants in hydraulic system.
Change filter. Inspect systems for foreign particles & obstructions.

PROBLEM

Variation between
template & part.

CAUSE

Bent stylus.
Check stylus with indicator.

Improper Stylus oversize
allowance. See page 16.

Tracer loose.
Tighten mounting hardware.

Gibs loose or tight.
Adjust to proper fit.

Cutting tool deflection.
Use sturdier tool or finishing pass.

Loose template.
Secure template hardware.

Tapered template.
Make sure template is true in all
aspects.

High feed rate for cutting action.
Slow feed rate.

Loose stylus.
Tighten set screw.

PROBLEM

Excessive leakage

Valve fails to return
To template.

CAUSE

Vacuum not connected.
Connect vacuum.

Vacuum set too low.
Adjust vacuum level.

Blocked vacuum line.
Examine and clean/replace.

Leaking seals.
Examine, replace and tighten.

Bad fittings.
Examine, replace and tighten.

Improperly adjusted null.
Adjust-see page 14.

Improperly adjusted trim valve.
Adjust-see page 13.

Gibs loose or tight.
Adjust to proper fit.

Ways not lubricated properly.
Keep ways clean and lubricate
every four hours of operation.

Contaminants in hydraulic system.
Change filter. Inspect systems for
foreign particles & obstructions.

Blow-by in cylinders.
Replace worn or damaged seals.

Valve fails to move cylinder.

Improperly attached hydraulic lines. Check.

Cylinder out of range of motion. Direct stylus to return. If required use longer cylinder.

Contaminants in hydraulic system. Change filter. Inspect systems for foreign particles & obstructions.

Blow-by in cylinders. Replace worn or damaged seals.

Spool sticks

Contaminants in hydraulic system. Change filter. Inspect systems for foreign particles & obstructions.

Foreign objects between spool & sleeve. Burrs or nicks on spool or sleeve. CAUTION—removing burrs can change flow characteristics-hand work only.

Cold hydraulic fluid.
Operate at 90-110 Farenheit.