



Troubleshooting Aids

“A” & “J” Hause Air-Hydraulic

(Including Deep Hole Models)
June, 2001

Trouble	Probable Cause	Check	Remedy
Unit does not cycle.	No or low air pressure.	Air not turned on.	Correct – Adjust per Eng. Data Bul.
		Regulator connected backwards.	Correct.
		Air line too small or too many bends or fittings.	Correct.
	Directional valve does not actuate.	Check solenoid for continuity and valve spool to see if it is worn or frozen in position.	Add proper Lub. To air line – grease “O” rings when replacing. Replace solenoid, repair or replace valve
	Air leaks.	Air leaks around fitting.	Tighten or replace.
	No electric power to control circuit.	Make sure electric system is on. Check fuses. (Solenoid valve action is audible.)	Correct.
	Switches and/or valves not being actuated.	Levers, cam bars and/or poppet pin adjustment. (Air leaks around valves indicate defective parts.)	Re-adjust – Ref. Eng. Data Bul, Cam Bar Bul. And Lever Bul.
	Feed Rate Adjustments at Manifold closed.	Make sure feed rate adjustments are open 4 or 5 turns.	Adjust – Ref. Eng. Data Bul.
Directional valve operates but spindle does not advance.	Tool or spindle binding in external support.	Disengage tool and/or loosen bracket containing support.	Re-align unit or external support.
	Advance feed rate adjustment at manifold is closed.	Make sure feed rate adjustment is open 4 or 5 turns.	Adjust – Ref. Eng. Data Bul.
	Plunger valve assy. On advance side of manifold closed.	Turn advance rapid travel length adjustment counter-clockwise, (clockwise for deep hole units). This action should make lever arm depress plunger of plunger valve assy.	If plunger does not depress, reset cam follower or lever arm on lever Assy. Ref. Lever Assy. Bul.



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Spindle does not retract.	Solenoid operated air valve or poppet valve not working.	Air exhausts from advance valve continuously or will not deactuate. Check for line leaks.	Repair or replace valve. Re-check for leaks.	
	Switch or valve actuators.	Check adjustments.	Re-adjust.	
	Defective “O” rings.	“O” ring seals in cylinder assy. And/or directional valve assy.	Replace. Ref. Cylinder Assy. Bul. & Directional Valve Bul.	
Directional valve operates but spindle does not retract.	Tool or spindle binding in external support	Disengage tool and/or loosen bracket containing support.	Re-align unit or external support.	
	Low air pressure	Air pressure should be above 50 p.s.i.	Regulate per Eng. Data Bul.	
	Plunger valve assy. On retract side of manifold closed.	Turn retract cam bar knob to make lever arm depress plunger of plunger valve assy.	If plunger does not depress, reset cam follower or lever arm on lever Assy. Ref. Lever Assy. Bul.	
	Retract feed rate adjustment in manifold closed.	Turn retract feed rate knob counterclockwise to open.	Adjust.	
	Drive shaft & spindle coupling bind.	Remove spindle assy. and check spline tube for metal building up.	File drive spline & spline tube for free slip movement. Lubricate.	
	Spindle rapid advances beyond setting of advance rapid travel length adjustment.	Air in hyd. System.	Check for oil leaks around body of unit.	Reseal leaking area or return to factory for repair.
		Seal on quill piston in cylinder assy. is worn or broken.	Complete lack of control of spindle travel.	Replace piston seal Ref. Cylinder Assy. Bul.



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	Hyd. Piston section retaining ring in cylinder assy., loose or broken.	Complete lack of control of spindle travel. Oil leaks into drive shaft area.	Replace – Ref. Cylinder Assy. Bul.
	Advance plunger assy. in manifold sticks due to defective “O” rings.	Plunger movement should follow lever movement.	Replace “O” ring or complete assy. – Ref. Manifold Assy. Bul.
	Oil too heavy in hydraulic system	40 to 100 viscosity (light) hydraulic oil recommended.	Drain & refill by cycling unit – Ref. Bul. 21085-00.
	Dirt in advance plunger valve assy. in manifold.	Remove & inspect valve for dirt.	Clean & re-install Ref. Manifold Assy. Bul.
Erratic feed rate.	Air in hydraulic system	Check for leaks.	Reseal leaking area or return to factory for repair.
	Advance plunger valve assy. in manifold not closing.	Foreign material fouling valve.	Clean – Ref. Manifold Bul.
		Valve worn.	Replace assy. Ref. Manifold Assy. Bul.
	Advance cam bar worn.	Check	Replace – Ref. Cam Bar Bul.
Feed rate slows.	Dirt in compensating feed valve assy. in manifold.	Remove and inspect assy. for dirt.	Clean & replace 22093-1 filters – Ref. Manifold Assy. Bul.
	Parts of the compensating feed valve assy. in manifold worn.	Remove & inspect	Replace Assy. Ref. Manifold Assy. Bul.
	Feed rate adjustments at manifold closed.	Make sure feed rate adjustment is open 4 or 5 turns.	Adjust – Ref. Eng. Data Bul.
Spindle surges on tool break thru.	Air in hyd. System.	Check for leaks.	Reseal leaking area or return to factory for repair.
	Air input pressure too low.	Air pressure should be above 50 p.s.i.	Regulate per Eng. Data. Bul.



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Trouble	Probable Cause	Check	Remedy
	Thrust required to advance tool at desired feed rate approaches or exceeds thrust developed by air cylinder.	Consult drilling speed, feed and thrust charts and compare with developed thrust of unit.	Decrease feed rate. Increase input air pressure. Stagger drill lengths. Decrease size or number of tools. Substitute with Hyd. Powered Holomatic Unit.
	Plunger assy. allows air to enter hydraulic system	Remove & inspect seal and/or plunger.	Replace. Ref. Manifold Assy. Bul.



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FOR DEEP HOLE UNITS ONLY			
Trouble	Probable Cause	Check	Remedy
Spindle full retracts after each peck feed.	Retract cam bar not adjusted correctly to actuate retract mid-point limit switch	Check adjustment.	Adjust. Ref. Eng. Data Bul. & Cam Bar Bul.
	Retract midpoint limit switch is malfunctioning.	Check limit switch adjustment.	Replace if defective. Ref. Control Section Bul.
Spindle recycles but does not advance beyond the last stroke.	Drill.	Check cutting edges.	Replace.
	Advance cam bar friction adjustment.	Check the adjustment.	Adjust – Ref. Cam Bar Bul.
		Worn parts and/or cam bar.	Replace – Ref. Cam Bar Bul.
		Check for interference w/driver sleeve.	Correct or replace Ref. Bul. 21076-00.
	Low air pressure	Air pressure should be above 50 p.s.i.	Regulate per Eng. Data Bul.
	Thrust required to advance tool at desired feed rate approaches or exceeds thrust developed by air cylinder.	Consult drilling speed, feed and thrust charts and compare with developed thrust of unit.	Decrease feed rate. Increase output air pressure. Stagger drill lengths. Decrease size or number of tools. Substitute with Hyd. Powered Holomatic Unit.
Spindle peck drills 1 or 2 times then stops in full retract without completing operation.	Retract midpoint limit switch not functioning.	Check lever action.	Adjust Ref. Eng. Data Bul.
		Check limit switch	Replace.
Feed rate slows.	Drill re-approach clearance setting incorrect.	Check re-approach clearance. This is adjustable but should remain approximately the same thru out the entire stroke.	Adjust – Ref. Eng. Data Bul. – Cam bar replacement may be required.



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