

MODEL J TROUBLESHOOTING

1

LIGHT ON VALVE WILL NOT LIGHT WHEN TRIGGERED:

CHECK	WHAT TO DO
DOES MACHINE HAVE POWER?	CHECK FUSE
ARE LIMIT SWITCHES WORKING?	* TRIGGER SWITCH MANUALLY AND LOOK FOR LIGHT ON VALVE
LIGHT BURNED OUT?	IF VALVE WORKS AND NO LIGHT ILLUMINATES, THE LIGHT IS BURNED OUT
CHECK FOR BROKEN WIRE	* SHAKE WIRE WHILE TRIGGERING LIMIT SWITCH * IF HORIZONTAL-PULL WIRE IN AND OUT OF REEL WHILE TRIGGERING LIMIT SWITCH
CHECK CORD REEL	REPAIR OR REPLACE
IS SOLENOID ON VALVE BAD?	REPAIR OR REPLACE

JUMPY CARRIAGE:

CHECK	WHAT TO DO
HAS MACHINE NOT BEEN USED FOR AWHILE?	EXTEND LIMIT SWITCHES FOR FULL STROKE BOTH HORIZONTAL AND VERTICAL AND LET MACHINE RUN AT FULL SPEED FOR 10 MINUTES WITHOUT SAND FLOW
ARE WHEELS ROLLING FREELY?	GREASE OR REPLACE WHEELS <u>(THIS IS THE MOST COMMON PROBLEM)</u>
AIR IN OIL LINES/TANK?	ALWAYS PARK CARRIAGE TO THE LEFT WHEN NOT IN USE AND VERTICAL CYLINDER ROD RETRACTED
IS SANDHOSE HANGING UP?	REPOSITION SANDHOSE-(If machine runs properly without the sandhose pressurized, it is most likely the hose when pressurized causing the problem.)
OIL LEVEL IN SIGHT GAUGE?	WITH CYLINDER ROD COMPLETELY COLLAPSED INTO CYLINDER, OIL SHOULD SHOW IN SIGHT TUBE.
CONTAMINATION IN OIL?	CHANGE OIL-REPAIR CAUSE OF CONTAMINATION
LOW OIL	ADD OIL
CYLINDER GOING BAD	RAISE AIR PRESSURE-(SHOULD RUN 70 LB) REPLACE CYLINDER
CYLINDER BLOWING OIL OUT EXHAUST	REPLACE CYLINDER
DIRTY VALVE	VALVE NOT FULLY SHIFTED TO DIRECT AIR TO PROPER PORTS
POORLY ADJUSTED CABLE	CABLES MUST HAVE SPRING TENSION ON THEM AT ALL TIMES
INSUFFICIENT AIRFLOW	DO NOT USE 1/4" QUICK COUPLES, LOOK FOR PINCHED TUBING

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SLOW IN ONE DIRECTION:

CHECK	WHAT TO DO
CYLINDER GOING BAD	*RAISE AIR PRESSURE-(SHOULD RUN 70 LB)
CYLINDER BLOWING OIL OUT EXHAUST	REPLACE CYLINDER
DIRTY VALVE- VALVE NOT FULLY SHIFTED TO DIRECT AIR TO PROPER PORTS	CLEAN OR REPLACE VALVE
CONTAMINATION IN OIL?	CHANGE OIL
BAD REGULATOR	REMOVE REGULATOR AND RUN MACHINE. IS PROBLEM CORRECTED?
LEAKING CYLINDER	AIR LEAKING AROUND ROD OR BYPASSING CUPS IN CYLINDER
INSUFFICIENT AIR VOLUME/PRESSURE	INCREASE AIR PRESSURE/VOLUME- CHECK FOR RESTRICTIONS IN AIR SUPPLY TO MACHINE
SAND HOSE PULLING	REMOVE SANDHOSE FROM CARRIAGE AND CHECK HORIZONTAL SPEED-IF OK, INCREASE AIR PRESSURE
WEAK DETENT SPRING ON VERTICALLY MOUNTED SMC VALVES	ON SMC CONVERSION KITS THE DETENT SPRING MAY BECOME WEAK ALLOWING THE DETENT TO DROP BACK DOWN AFTER SHIFTING STARVING THE MACHINE FOR AIR -REPLACE VALVE OR INSTALL NEW DETENTS IN VALVE
WHEEL LOCKING UP	GREASE OR REPLACE WHEEL
POOR CYLINDER ALIGNMENT DUE TO WHEEL WEAR	RE-ALIGN CYLINDER AND/OR REPLACE WHEELS

MACHINE STOPS:

POOR CYLINDER ALIGNMENT DUE TO WHEEL WEAR	RE-ALIGN CYLINDER AND/OR REPLACE WHEELS
CYLINDER GOING BAD	*RAISE AIR PRESSURE-(SHOULD RUN 70 LB)
INSUFFICIENT AIR VOLUME/PRESSURE	INCREASE AIR PRESSURE/VOLUME- CHECK FOR RESTRICTIONS IN AIR SUPPLY TO MACHINE
WHEEL LOCKING UP	GREASE OR REPLACE WHEEL
SANDHOSE HANGING UP	REPOSITION SANDHOSE

MACHINE REVERSES INTERMITTENTLY OR NOT AT ALL:

CHECK	WHAT TO DO
DIRTY VALVE- VALVE NOT FULLY SHIFTED TO DIRECT AIR TO PROPER PORTS	CLEAN OR REPLACE VALVE
WATER IN SOLENOID	DRY OUT WATER OR REPLACE SOLENOID (Mac valves are more sensitive to this)

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CON'T:

WEAK SOLENOID ON VALVE	REPLACE
BAD LIMIT SWITCH	EXCHANGE WITH KNOWN GOOD SWITCH FROM THE MACHINE, IF PROBLEM IS SOLVED REPLACE BAD LIMIT SWITCH
BROKEN WIRING	* SHAKE WIRE WHILE TRIGGERING LIMIT SWITCH * IF HORIZONTAL-PULL WIRE IN AND OUT OF REEL WHILE TRIGGERING LIMIT SWITCH
TRIGGER TOO FAR AWAY FROM PROXIMITY SENSOR	BEND TRIGGER TO WITHIN 1/2" OF SENSOR FACE
INSUFFICIENT AIR VOLUME/PRESSURE	INCREASE AIR PRESSURE/VOLUME- CHECK FOR RESTRICTIONS IN AIR SUPPLY TO MACHINE
BAD REEL ON HORIZONTAL	REPLACE OR REPAIR REEL
BAD ELECTRICAL CONNECTION-(ARCING)	CHECK AND CLEAN CONNECTIONS AT VALVE (MAC VALVE PINS - MODULAR DESIGN)

MACHINE REVERSES HARD:

CHECK	WHAT TO DO
ARE WHEELS ROLLING FREELY?	CHECK THE 3 WHEELS ON CARRIAGE- GREASE OR REPLACE
AIR IN OIL LINES/TANK?	*ALWAYS PARK CARRIAGE TO THE LEFT WHEN NOT IN USE AND VERTICAL CYLINDER ROD RETRACTED * CYLINDER GOING BAD
POORLY ADJUSTED CABLE	CABLES MUST HAVE SPRING TENSION ON THEM AT ALL TIMES
CENTER TAB HITTING ON WHEEL AT END OF STROKE	THE CABLE CLAMP HAS SLIPPED-REALIGN VERTICAL TROLLEY TAB TO CENTER OF HORIZONTAL TROLLEY AND TIGHTEN CABLE CLAMP
IS SANDHOSE HANGING UP?	REPOSITION SANDHOSE-(If machine runs properly without the sandhose pressurized, it is most likely the hose when pressurized causing the problem.)

VERTICAL TROLLEY PULLS OUT OF TRACK:

CHECK	WHAT TO DO
IS SANDHOSE HANGING UP?	REPOSITION SANDHOSE-(If machine runs properly without the sandhose pressurized, it is most likely the hose when pressurized causing the problem.)
TRACK BOWING AS TROLLEY MOVES UP AND DOWN	TROLLEY WORE THIN-REPLACE TROLLEY OR WELD NEW ANGLE IN PLACE
IMPROPERLY ADJUSTED EXTENDED MOTION OR THUMBSCREW	ADJUST TO CORRECT TRAVEL OF TROLLEY

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4

WHEELS/AXLES WORN OUT	REPLACE
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HORIZONTAL CARRIAGE DERAILS:

CHECK	WHAT TO DO
IS SANDHOSE HANGING UP?	REPOSITION SANDHOSE-(If machine runs properly without the sandhose pressurized, it is most likely the hose when pressurized causing the problem.) NOTE: A 1" ID IS LESS LIMBER THAN A 3/4" SANDHOSE AND MAY CAUSE MORE OF THESE TYPES OF PROBLEMS.
DERAILS ON RIGHT	SANDHOSE JAMMING IN CORNER: REPOSITION SPRING AND HANGER 1 1/2' BY 1 1/2' OUT FROM RIGHT CORNER OF ROOM
DERAILS ON LEFT	SANDHOSE TOO SHORT OR HANGING UP ON OBSTACLE OIL/ELECTRIC LINES ON FRONT OF MACHINE CATCHING ON THUMBSCREWS

FRAYED CABLE:

CHECK	WHAT TO DO
WHEEL NOT ROLLING AND WEARING CABLE	GREASE, OR REPLACE
OLD CABLE	REPLACE

PREMATURE WEAR ON CYLINDERS:

CHECK	WHAT TO DO
POOR ALIGNMENT	REPLACEMENT CYLINDER NOT ALIGNED CORRECTLY
CONTAMINATION IN OIL	GRIT NOT CLEANED FORM AREA WHEN CHANGING CYLINDER -CHANGE OIL
STEEL WHEELS HAVE WORN AND APPLYING A SIDE FORCE ON CYLINDER	RE-ALIGN CYLINDER ROD
CONTAMINATION IN AIRLINES	REPLACE AIR FILTERS
HOLE IN BELLOW ALLOWING GRIT TO GET TO ROD	REPLACE BELLOW
BLOWING OIL OUT VALVE EXHAUST	BAD SEALS IN CYLINDER USUALLY DUE TO MISALIGNMENT OR WORE OUT CYLINDER-REPLACE CYLINDER