6351 ORANGETHORPE AVE, BUENA PARK, CA 90620 U.S.A (800) 755-1707

## **RO SERVICE GUIDE**

PROBLEM	POSSIBLE CAUSE	SOLUTION
R.O. DOES NOT START	A. NO POWER TO THE R.O.	1) CHECK 3 PHASE DISCONNECT IS ON.
		2) IF THE DISCONNECT IS FUSED CHECK ALL FUSE.
		3) CHECK THE 1.0 AMP SB FUSE ON THE CONTROL PANEL AND THE HIGH VOLTAGE TRANSFORMER.
		4) CHECK THE "POWER ON" SWITCH.
		5) CHECK FOR 24 VAC ACROSS #1 & #4 ON THE MAIN TERMINAL STRIP IN THE CONTROL UNIT.
		6) CHECK FOR 120 VAC ACROSS L1 & L2 ON THE SHORT TERMINAL STRIP. <b>NOTE: THIS STRIP HAS A SHIELD</b> .
	B. LOW PRESSURE ALARM	CHECK PRESSURE DROP ACROSS ALL FILTERS.
		2) CHECK LOW PRESSURE SWITCH. RO SHOULD SHUT OFF AT 5 PSI.
		3) REPLACE TDR-3 RELAY AND SET TO 3 SECONDS.
		4) REPLACE CR-2 CONTROL RELAY.
		5) CHECK INLET SOLENOID COIL FOR 24 VAC ACROSS TERMINALS #1 & #3.
	C. HIGH PUMP PRESSURE ALARM	ADJUST FLOW CONTROL VALVE TO BRING PRESSURE WITHIN LIMITS.
		2) CHECK HIGH PUMP PRESSURE SWITCH.
		3) REPLACE CR-3 CONTROL RELAY.
	D. "SOFT. IN REGEN" LIGHT IS ON	WATER SOFTNER MAY BE IN     REGENERATION, WAIT UNTIL     REGENERATION CYCLE IS COMPLETE.
		2) REPLACE CR-4 AND/OR CR-5 CONTROL RELAYS.
	E. INITIALIZE TIME DELAY RELAY DOES NOT ENERGIZE	1) REPLACE TR-5 RELAY.
	F. R.O. PUMP STARTER	1) PRESS STARTER RESET.
		2) CHECK STARTER COIL IS RECEIVING 24 VAC AT TERMINALS #1 & #20 IN THE CONTROL UNIT.

G.E.M. Water Systems, Int'l. LLC

DESIGNER AND MANUFACTURER OF REVERSE OSMOSIS SYSTEMS 6351 ORANGETHORPE AVE, BUENA PARK, CA 90620 U.S.A (800) 755-1707

PROBLEM	POSSIBLE CAUSE	SOLUTION
R.O. DOES NOT STAY IN FLUSH	A. FLUSH RELAY IS DEFECTIVE  B. FLUSH SOLENOID IS DEFECTIVE	1) REPLACE TDR-4 RELAY. 2) REPLACE FLUSH SOLENOID.
REJECT FLOW IS TOO HIGH AND THE PRODUCT FLOW IS TOO LOW	LOW WATER TEMPERATURE	1) IF THE FEED WATER TEMPERATURE IS BELOW 77° F, THE PRODUCT FLOW WILL DROP 1.5% FOR EACH DEGREE DROP IN TEMPERATURE. THE REJECT FLOW WILL ALSO INCREASE. NOTE: ALSO SEE "CONTROLLING FLOW RATES" IN THE OPERATING MANUAL.
OUT OF LIMIT WATER QUALITY	CHECK THE TDS OF EACH MEMBRANE	1) CLEAN OR REPLACE MEMBRANES. 2) CHECK TDS METER WITH A HAND HELD METER. 3) PRODUCT PROBE MAY BE DEFECTIVE.
NO 3 SECOND DELAY PRIOR TO LOW PRESSURE SHUT-OFF	LOW PRESSURE TIME DELAY RELAY	1) REPLACE TDR-3 RELAY AND SET TO 3 SECONDS.

FOR ADDITIONAL SERVICE INFORMATION, REFER TO THE RELAY FUNCTION GUIDE. ALSO REFER TO THE SERVICE MANUALS IN THE BOOK FOR SERVICE INFORMATION ON CONTROLLERS, PUMPS AND WATER QUALITY METER.