



INITIAL RELEASE E.O.: E.O. 29049		PART NUMBER A 55501373		REV. A
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INSTRUCTIONS FOR REPAIR OF 93-16 AIR ACTUATED DIAPHRAGM PACKLESS VALVES

WARNING: THIS PROCEDURE MAY ADVERSELY AFFECT THE CLEANLINESS FOR THE VALVE AND SHOULD BE PERFORMED ONLY BY PERSON THOROUGHLY FAMILIAR WITH THE VALVE'S END USE.

1. PRESSURIZE ACTUATOR TO 80 PSI. LOOSEN THREE SET SCREWS UNDER BONNET NUT. REMOVE ACTUATOR AND THEN REMOVE BONNET NUT, STEM BUTTON, DIAPHRAGMS, LOWER STEM & SPRING SUBASSEMBLY. ENSURE THAT NO FOREIGN MATTER CONTAMINATES THE INSIDE OF THE VALVE.
2. INSERT NEW LOWER STEM & SPRING SUBASSEMBLY INTO SEAT CHAMBER AS SHOWN.
3. ASSEMBLE NEW DIAPHRAGMS.
4. PLACE NEW DIAPHRAGMS INTO VALVE. MAKING SURE DOME ON EACH DIAPHRAGM IS UP AS SHOWN.
5. APPLY A SMALL AMOUNT OF FLUOROCARBON GREASE ON SHAFT AND RADIUS OF STEM BUTTON AND REASSEMBLE WITH BONNET NUT. PLACE BONNET NUT AND STEM BUTTON ASSEMBLY ON VALVE. TORQUE NUT TO 80 FT.-LBS.
6. SET SEAT POSITION BY TIGHTENING UNPRESSURIZED ACTUATOR 1/12 TURN PAST "BUBBLE TIGHT" POSITION. EVENLY TIGHTEN THREE SET SCREWS UNDER BONNET NUT.
7. REF. P/N ES-REPAIR-93-16

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

FRACTIONS ±1/64	TOLERANCES ON DECIMALS .XX = ±.01 .XXX = ±.005	ANGLES ±1/2°
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MACH. SURF. FLAT WITHIN .001 IN/IN
 CONCENTRICITY MACH. SURF.; TIR WITHIN 1/2 SUM OF DIAS. TOLERANCES
 REMOVE ALL BURRS
 BREAK SHARP EDGES .015 X 45°. MACHINE FILLETS .01R
 MACHINE FINISH 63 MICRO INCH.
 INTERPRET PER ASME Y14.5M-1994

DO NOT SCALE DRAWING

MATERIAL

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DRAWN LW	DATE 04/22/03	TITLE INSTRUCTIONS FOR REPAIR OF 93-16 DIAPHRAGM PACKLESS VALVES	
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