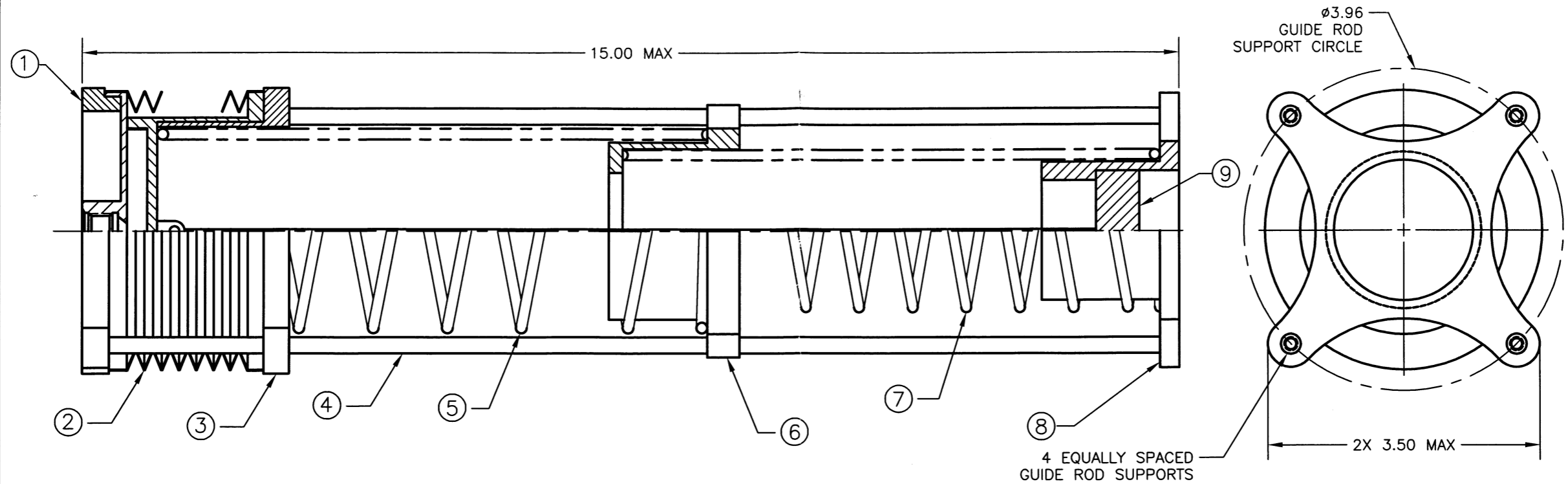


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REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
N/C	INITIAL RELEASE PER EO 7818		



8. WEIGHT
 TARGET: 2.5 POUNDS
 MAXIMUM: 3.0 POUNDS
7. PERFORMANCE:
 TOTAL BELLOW VOLUME: 1.4 L (MINIMUM)
 DISPENSABLE VOLUME: 1.2 L (MINIMUM)
 HYSTERESIS VOLUME: 100 ML (MAXIMUM)
 UN-USEABLE VOLUME: 100 ML (MAXIMUM)
 THE UNIT SHALL BE CAPABLE OF EXPANDING TO STORE 1.4 L (TOTAL) OF WATER WHEN THE INTERNAL SYSTEM PRESSURE IS INCREASED TO 10 PSI (MAX) ABOVE AMBIENT LOWERING THE INTERNAL PRESSURE TO 2.5 PSI ABOVE AMBIENT SHALL CAUSE THE UNIT DISPENSE 1.2 L (MINIMUM) OF WATER.
6. ENVIRONMENT:
 OPERATING:
 TEMPERATURE: 65 TO 90°F
 AMBIENT PRESSURE: 14.7±0.2 PSIA
 UNIT PERFORMANCE WILL BASE ON THE DIFFERENTIAL PRESSURE ABOVE AMBIENT. FOR EXAMPLE: FOR AN AMBIENT PRESSURE OF 14.70 PSIA THE UNIT WILL BEGIN TO FILL AT 15.2 PSIA.
 RELATIVE HUMIDITY: 25 TO 90%
 ACCELERATION: 0 TO 2.5 G VECTOR APPLIED PARALLEL OR PERPENDICULAR TO THE LONGITUDINAL AXIS OF THE ASSEMBLY. UNIT WILL NOT SUSTAIN DAMAGE OR FAIL TO OPERATED AS A RESULT OF THIS ACCELERATION HOWEVER OPERATIONAL PARAMETERS WILL BE EFFECTED BECAUSE OF ACCELERATION VECTOR.
- STORAGE:
 TEMPERATURE: 14 TO 131°F
 AMBIENT PRESSURE: 0 TO 15 PSIA
 RELATIVE HUMIDITY: 10 TO 90%
5. ALL WETTED MATERIALS TO BE COMPATIBLE WITH 50 PPM IODINATED WATER.
 4. CYCLE LIFE: 1,000 CYCLES (MINIMUM).
 3. PRESSURE:
 MAXIMUM OPERATING PRESSURE 20 PSIG
 MAXIMUM DESIGN PRESSURE 30 PSIG
 MAXIMUM PROOF PRESSURE 45 PSIG
 MAXIMUM BURST PRESSURE 75 PSIG
2. DIMENSIONS AND TOLERANCES PER ANSI Y14.5-1982.
 1. INTERPRET DWG PER DOD-STD-100C.
 NOTES: UNLESS OTHERWISE SPECIFIED

QTY	ITEM NO.	PART NUMBER	NOMENCLATURE	MATERIAL
1	7	N1078-9	STRING POTENTIOMETER ASSLY	
1	8	N1078-8	GUIDE ROD RETAINER	ULTEM 1000
1	7	N1078-7	SPRING, INNER	TITANIUM
1	6	N1078-6	CENTER FLANGE, MOVEABLE	ULTEM 1000
1	5	N1078-5	SPRING, OUTER	TITANIUM
4	4	N1078-4	GUIDE ROD	ALUMINIUM
1	3	N1078-3	END FLANGE, MOVEABLE	ULTEM 1000
1	2	N1078-2	BELLOWS ASSEMBLY	INCONEL 718
1	1	N1078-1	GUIDE ROD RETAINER	ULTEM 1000

← ASSY PARTS LIST

UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN INCHES
 TOLERANCES
 .XXX = ± .010
 .XX = ± .03
 .X = ± .1
 ANGLES = 50°30'

CAD FILES N1078

CHK D. NGUYEN 10/24/00

DWG DES AV 7/16/00

OTHER ACTIVITY APPD

PREECE APPD

PREECE INC. 11 CHRYSLER BLVD, IRVINE, CA 92618 **DECCA VALVES** A DIVISION OF PREECE INC.

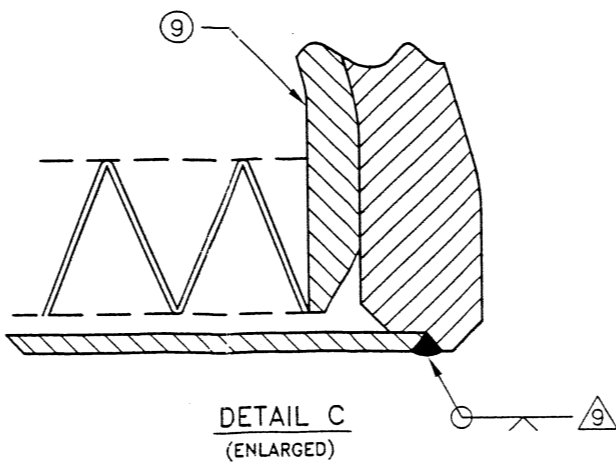
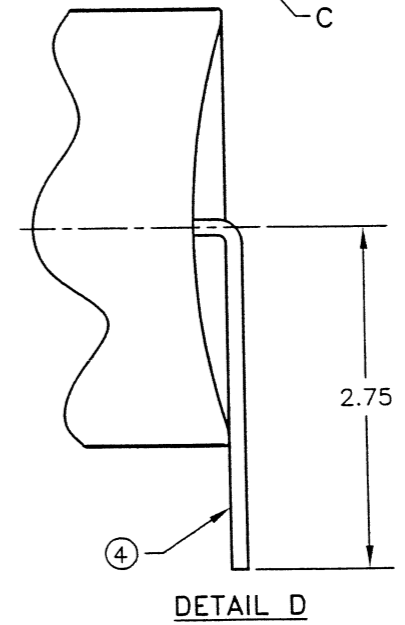
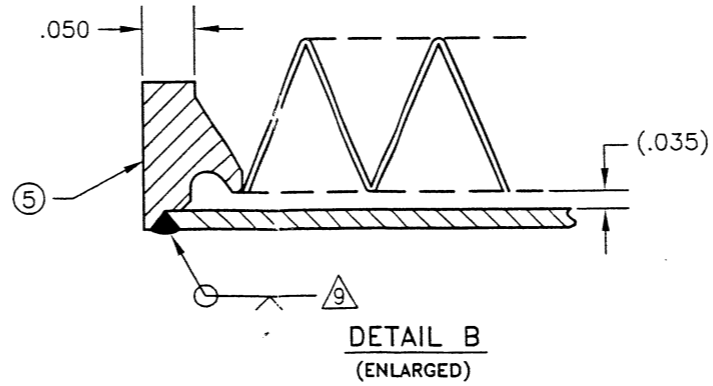
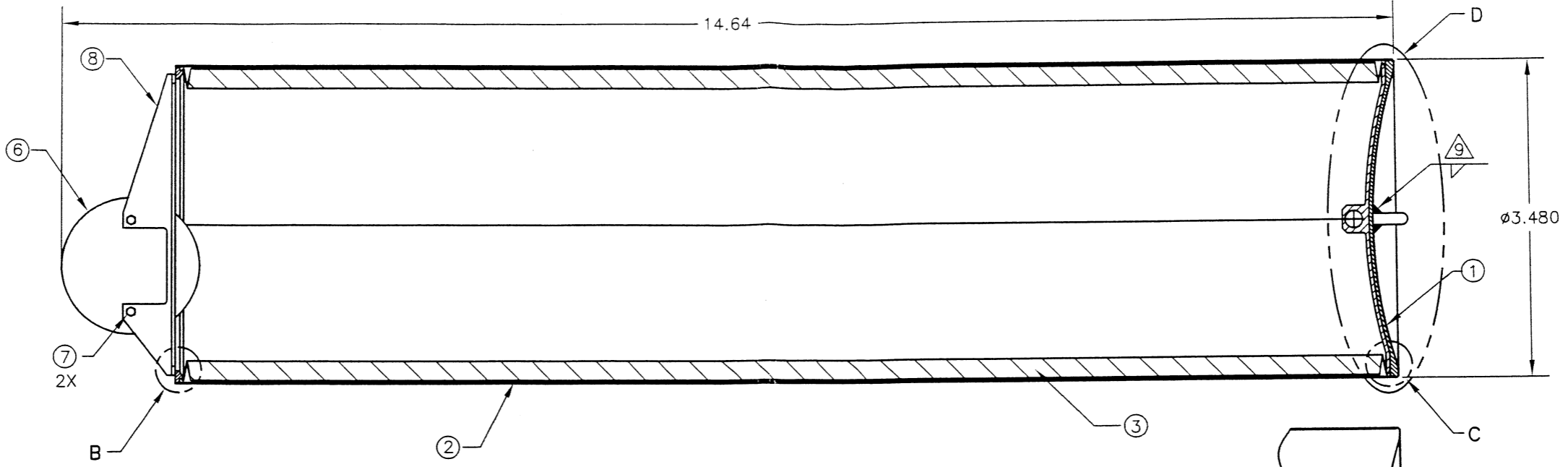
MAIN WATER ACCUMULATOR ASSY

SIZE	CODE IDENT NO.	DWG NO.	REV LTR
C	21392	N1078	N/C

SCALE FULL & NOTE RLSE DATE SHEET 1 OF 2

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REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
N/C	INITIAL RELEASE PER EO 8133	03/28/01	K.C.
A	REVISED PER EO 8173	05/03/01	K.C.
B	REVISED PER EO 8243	08/20/01	K.C.
C	REVISED PER EO 8429	9-11-01	JK



10. ELECTRICAL
 10.1 RESISTANCE VALUE: 5±.5KOHM
 10.2 POWER RATING: 1.5 WATTS AT 122°F
 10.3 MAX INPUT VOLTAGE: 80V
 10.4 DIELECTRIC STRENGTH: 1000V
9. WELD PER SEA-AMS-STD 2219, CLASS B, PENETRATION INSPECTION TO BE PERFORMED AFTER PROOF AND LEAK CHECK
8. WEIGHT
 DRY WEIGHT: 2.5 POUNDS
 WET WEIGHT: 3.0 POUNDS - DRY WEIGHT PLUS WEIGHT OF NON-DISPENSABLE WATER
7. PERFORMANCE:
 DISPENSABLE VOLUME: 1.2 L MINIMUM
 THE UNIT SHALL BE CAPABLE OF EXPANDING TO STORE 1.2 L OF WATER MINIMUM, WHEN THE INTERNAL SYSTEM PRESSURE IS INCREASED TO 10 PSID MAX. LOWERING THE INTERNAL PRESSURE TO 2.0 PSID SHALL CAUSE THE UNIT DISPENSE 1.2 L OF WATER MINIMUM
6. ENVIRONMENT:
 6.1 OPERATING:
 TEMPERATURE: 65°F TO 90°F
 AMBIENT PRESSURE: 14.7±0.2 PSIA
 UNIT PERFORMANCE WILL BASE ON THE DIFFERENTIAL PRESSURE ABOVE AMBIENT. FOR EXAMPLE: FOR AN AMBIENT PRESSURE OF 14.70 PSIA THE UNIT WILL BEGIN TO FILL AT 16.70 PSIA
 RELATIVE HUMIDITY: 25% TO 90%
 ACCELERATION 0 TO 2.5 G VECTOR APPLIED PARALLEL OR PERPENDICULAR TO THE LONGITUDINAL AXIS OF THE ASSEMBLY. UNIT WILL NOT SUSTAIN DAMAGE OR FAIL TO OPERATED AS A RESULT OF THIS ACCELERATION HOWEVER OPERATIONAL PARAMETERS WILL BE EFFECTED BECAUSE OF ACCELERATION VECTOR
- 6.2 STORAGE:
 TEMPERATURE: 14°F TO 131°F
 AMBIENT PRESSURE: 0 TO 15 PSIA
 RELATIVE HUMIDITY: 10% TO 90%
5. ALL WETTED MATERIALS TO BE COMPATIBLE WITH 50 PPM IODINATED WATER
 4. CYCLE LIFE: 1,000 CYCLES MINIMUM
 3. PRESSURE: DIFFERENTIAL PRESSURES REFERENCED TO AMBIENT
 OPERATING PRESSURE 20 PSID
 PROOF PRESSURE 45 PSID
 BURST PRESSURE 75 PSID
2. DIMENSIONS AND TOLERANCES PER ANSI Y14.5-1982
 1. INTERPRET DWG PER DOD-STD-100C
 NOTES: UNLESS OTHERWISE SPECIFIED

QTY REQD	ITEM NO.	PART NUMBER	NOMENCLATURE	MATERIAL
1	9	N1082-7	MOVEABLE TERMINATION	304L/316L
1	8	N1082-6	BRACKET	304L/316L
2	7	-	SCREW	-
1	6	300579	POTENTIOMETER, STRING	-
1	5	N1082-5	END TERMINATION	304L/316L
1	4	N1082-4	0.125" TUBING	300 SER CRES
1	3	N1082-3	BELLOWS ASSY	AM-350
1	2	N1082-2	TUBE, HOUSING	INCONEL 625
1	1	N1082-1	END CAP	304L/316L

UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN INCHES
 TOLERANCES
 .XXX = ±.010
 .XX = ±.05
 .X = ±.1
 ANGLES = 30°/30°

CAD FILES N1082
 DFT D. NGUYEN 02/16/01
 CHK
 DES
 OTHER ACTIVITY APPD
 PREECE APPD K. CHING 03/28/01

PI PREECE INC. 11 CHRYSLER DRIVE, CA 92618
DECCA VALVE A DIVISION OF PREECE INC.

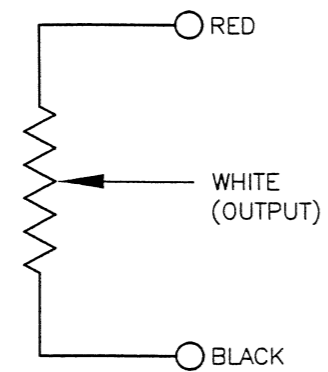
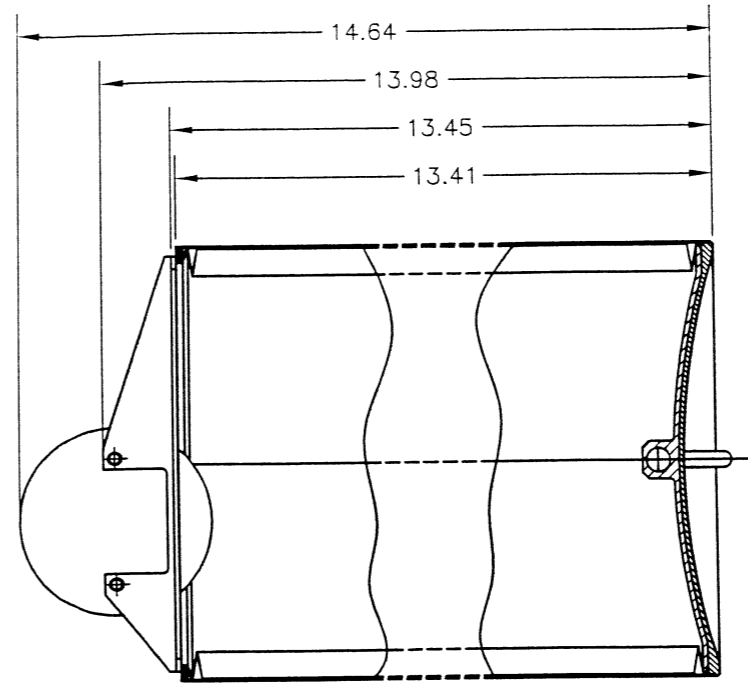
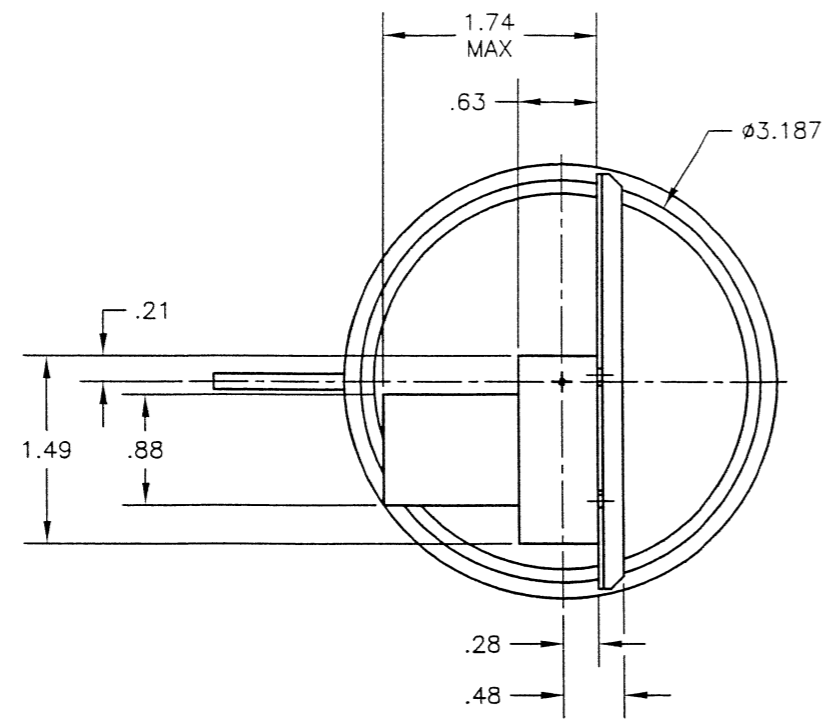
MAIN WATER ACCUMULATOR ASSY

SCALE NONE RLSE DATE SHEET 1 OF 2

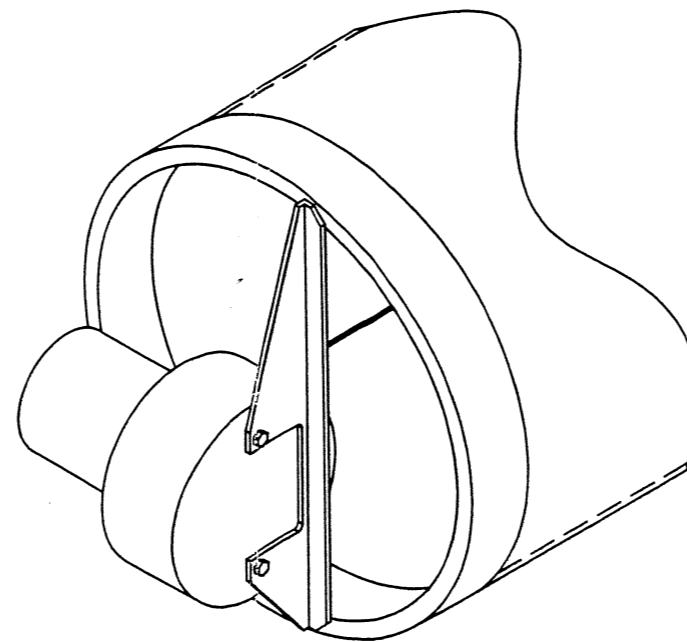
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REVISIONS

LTR	DESCRIPTION	DATE	APPROVED
	SEE SHEET 1		



WIRING SCHEMATIC

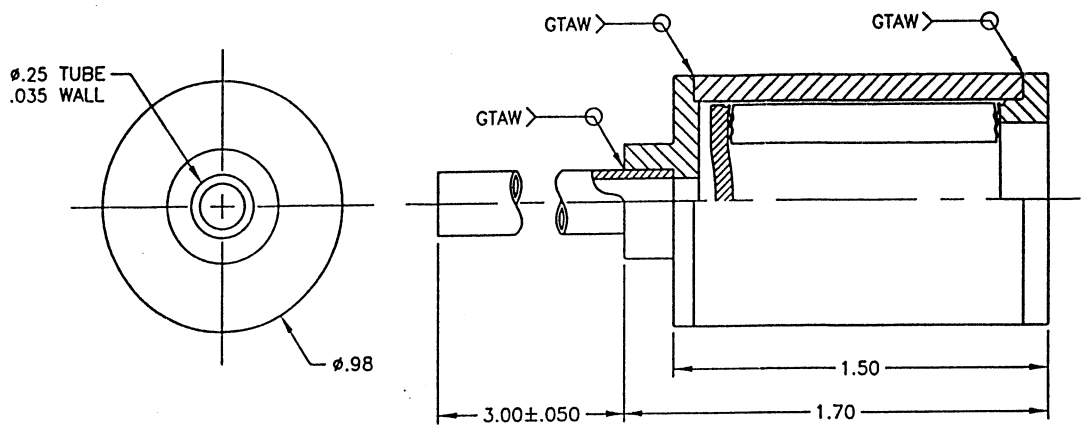


ISOMETRIC VIEW OF LEFT END

C	21392	N1082	C
SCALE	NONE	RLSE DATE	SHEET 2 OF 2

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LTR	DESCRIPTION	DATE	APPROVED
N/C	INITIAL RELEASE PER EO 8219	2/27/01	[Signature]



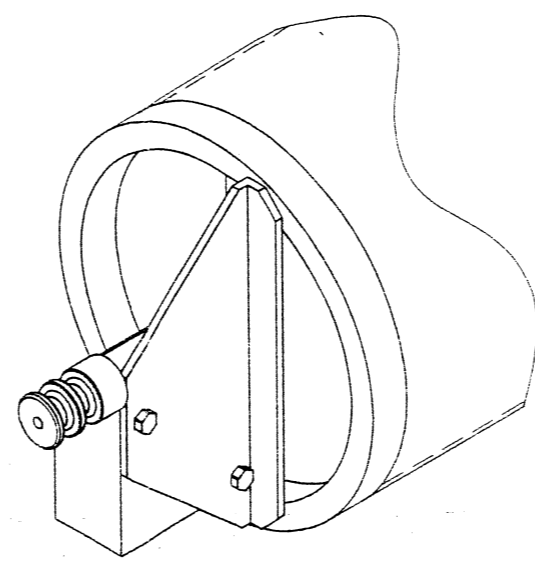
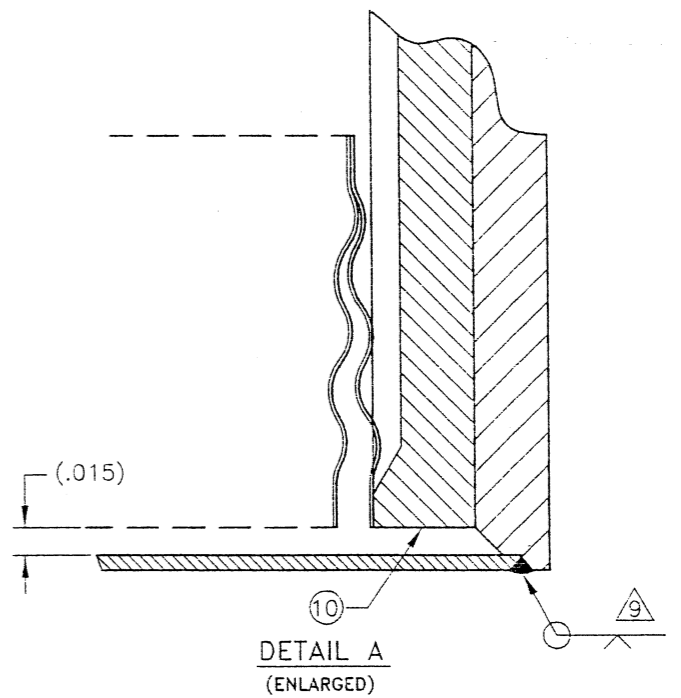
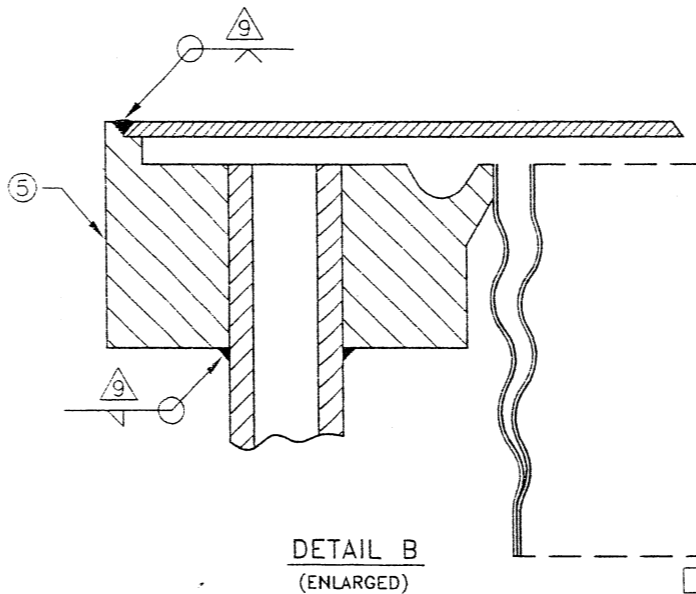
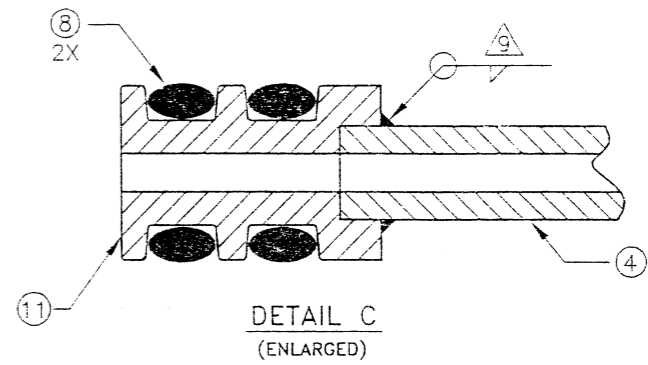
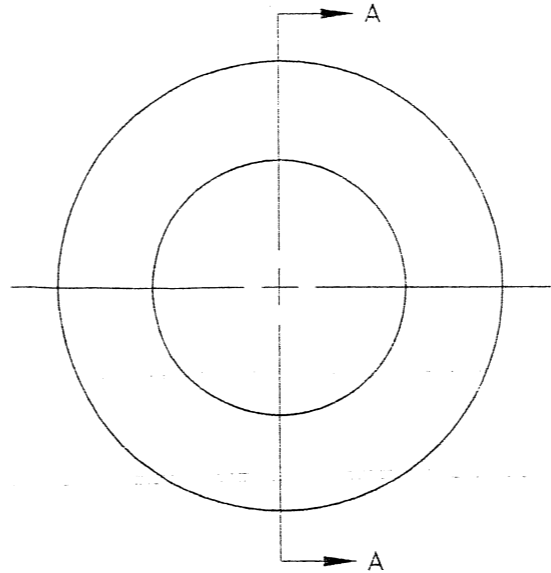
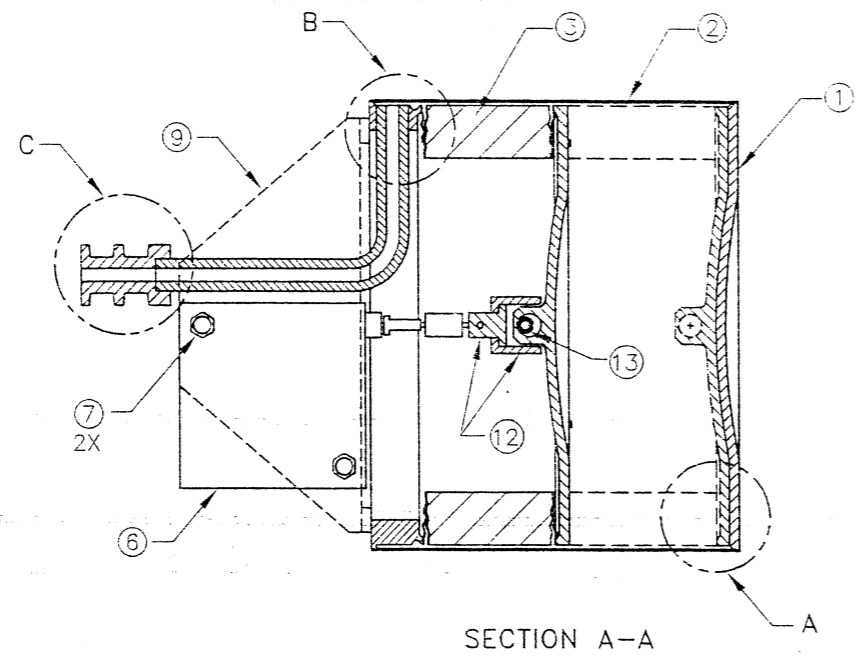
13. IDENTIFY PER MIL-STD-130 AS FOLLOWS:
 PREECE INC. 21392
 N1083 "REV LTR"
 DATE:
12. ELECTROPOLISH PER OD52533
11. CLEAN ASSEMBLY PER PS1003 AFTER ELECTROPOLISH
10. LEAKAGE:
 1X10E-6 SCCS HELIUM AT 121 PSIG INTERNAL PRESSURE
9. WEIGHT:
 0.22 LBS MAX
8. PERFORMANCE:
 DISPENSABLE VOLUME: 1.5 ML MINIMUM
7. TEMPERATURE:
 OPERATING ENVIRONMENT 59°F TO 122°F
 NON-OPERATING ENVIRONMENT -4°F TO 149°F
 FLUID TEMPERATURE 32.9°F TO 122°F
6. STORAGE:
 AMBIENT PRESSURE: 0 TO 15 PSIA
 RELATIVE HUMIDITY: 10% TO 90%
5. CORROSION RESISTANT STEEL USED THROUGHOUT
4. CYCLE LIFE: 10,000 CYCLES MINIMUM
3. PRESSURE:
 MINIMUM OPERATING PRESSURE: 85 PSID
 MAXIMUM OPERATING PRESSURE: 121 PSID
 PROOF PRESSURE: 242 PSIG
 BURST PRESSURE: 484 PSIG

2. DIMENSIONS AND TOLERANCES PER ANSI Y14.5-1982
 1. INTERPRET DWG PER DOD-STD-100C
 NOTES: UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES .XX = ± .010 .X = ± .03 X = ± .1 ANGLES = 80°30'		11 CHRYSLER IRVINE, CA 92618		 A DIVISION OF PREECE INC.
CAD FILES	N1083	ACCUMULATOR ASSY, 1.5 ML		
DRN	C. SCHOFIELD 02/16/01	SIZE	CODE IDENT NO.	DWG NO.
CHK	[Signature]	B	21392	N1083
DES	[Signature]			REV LTR
OTHER ACTIVITY APPD				N/C
PREECE APPD	[Signature]	SCALE	2/1	RLSE DATE
				SHEET 1 OF 1

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REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
N/C	INITIAL RELEASE PER EO 8134	3/28/01	K.C
A	REVISED PER EO 8174	5/03/01	K.C
B	REVISED PER EO 8244	8/20/01	[Signature]



10. ELECTRICAL
 10.1 RESISTANCE VALUE: $5 \pm .5 \text{ KOHM}$
 10.2 POWER RATING: .75 WATTS AT 158°F
 10.3 MAX INPUT VOLTAGE: 50V
 10.4 DIELECTRIC STRENGTH: 500V
9. WELD PER SEA-AMS-STD 2219, CLASS B, PENETRATION INSPECTION TO BE PERFORMED AFTER PROOF AND LEAK CHECK
8. WEIGHT
 DRY WEIGHT: 3.5 OZ
 WET WEIGHT: 4.0 OZ - DRY WEIGHT PLUS WEIGHT OF NON-DISPENSABLE WATER
7. PERFORMANCE:
 DISPENSABLE VOLUME: 15 ML MINIMUM
 THE UNIT SHALL BE CAPABLE OF EXPANDING TO STORE 15 ML OF WATER MINIMUM, WHEN THE INTERNAL SYSTEM PRESSURE IS INCREASED TO 1 PSID MAX. LOWERING THE INTERNAL PRESSURE TO 0.5 PSID SHALL CAUSE THE UNIT DISPENSE 15 ML OF WATER MINIMUM
6. ENVIRONMENT:
 6.1 OPERATING:
 TEMPERATURE: 65°F TO 90°F
 AMBIENT PRESSURE: 14.7±0.2 PSIA
 UNIT PERFORMANCE WILL BASE ON THE DIFFERENTIAL PRESSURE ABOVE AMBIENT. FOR EXAMPLE: FOR AN AMBIENT PRESSURE OF 14.70 PSIA THE UNIT WILL BEGIN TO FILL AT 15.20 PSIA
 RELATIVE HUMIDITY: 25% TO 90%
 ACCELERATION: 0 TO 2.5 G VECTOR APPLIED PARALLEL OR PERPENDICULAR TO THE LONGITUDINAL AXIS OF THE ASSEMBLY. UNIT WILL NOT SUSTAIN DAMAGE OR FAIL TO OPERATED AS A RESULT OF THIS ACCELERATION HOWEVER OPERATIONAL PARAMETERS WILL BE EFFECTED BECAUSE OF ACCELERATION VECTOR
- 6.2 STORAGE:
 TEMPERATURE: 14°F TO 131°F
 AMBIENT PRESSURE: 0 TO 15 PSIA
 RELATIVE HUMIDITY: 10% TO 90%
5. ALL WETTED MATERIALS TO BE COMPATIBLE WITH 50 PPM IODINATED WATER
4. CYCLE LIFE: 20,000 CYCLES MINIMUM
3. PRESSURE: DIFFERENTIAL PRESSURES REFERENCED TO AMBIENT
 OPERATING PRESSURE: 20 PSID
 PROOF PRESSURE: 45 PSID
 BURST PRESSURE: 75 PSID
2. DIMENSIONS AND TOLERANCES PER ANSI Y14.5-1982
1. INTERPRET DWG PER DOD-STD-100C
- NOTES: UNLESS OTHERWISE SPECIFIED

QTY REQD	ITEM NO.	PART NUMBER	NOMENCLATURE	MATERIAL
-	-	ATP1159	ACCEPTANCE TEST PROCEDURE	-
1	13	92373A105	SPRING PIN	18-8 STAINLESS
1	12	N1084-8	SWIVEL ASSY	300 SER CRES
1	11	N1084-9	FLANGE ASSY	304L/316L
1	10	N1084-7	MOVEABLE TERMINATION	304L/316L
1	9	N1084-6	BRACKET	304L/316L
2	8	9739-2-006-V	SEAL	VITON
2	7	-	SCREW	-
1	6	150-0121-L1N	POTENTIOMETER, STRING	-
1	5	N1084-5	END TERMINATION	304L/316L
1	4	N1084-4	0.125 TUBING	300 SER CRES
1	3	N1084-3	BELLOWS ASSY	AM-350
1	2	N1084-2	TUBE, HOUSING	CRES 316L
1	1	N1084-1	END CAP	304L/316L

UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN INCHES
 TOLERANCES:
 .XXX = ± .010
 .XX = ± .005
 .X = ± .001
 ANGLES = ± 9°30'

PREECE INC. 11 CHRYSLER VALVES
 IRVINE, CA 92618

DECCA VALVES

CAD FILES: N1084
 DFT: D. NGUYEN 02/16/01
 DES: [Blank]
 OTHER ACTIVITY APPD: [Blank]
 PREECE APPD: K. CHING 03/28/01

SCALE: NONE RLSE DATE: [Blank]

MINI WATER ACCUMULATOR ASSY

SIZE: C CODE IDENT NO.: 21392 DWG NO.: N1084 REV LTR: B

SHEET 1 OF 2