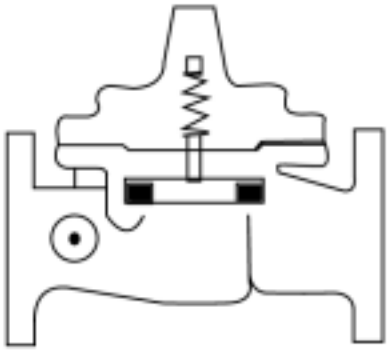
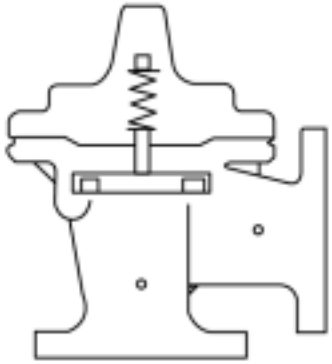
CLA-VAL
AUTOMATIC CONTROL VALVES

CFC2T-C1 AS

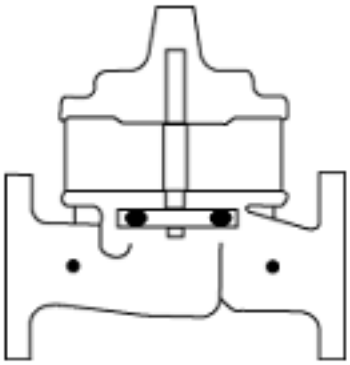
Place this manual with personal responsible for maintenance of this valve



INSTALLATION



OPERATION



MAINTENANCE

CLA-VAL

Distributed By:
M&M Control Service, INC.

CLA-VAL™

— MODEL — **CFC2**

Float Control For Closed Tanks

- **Accurate Liquid Level Control**
- **Fully Hydraulic Operation**
- **Simple Design, Easy Maintenance**
- **No Lubrication Necessary**
- **No Gears, No Mechanical Linkage Between Valve and Control**

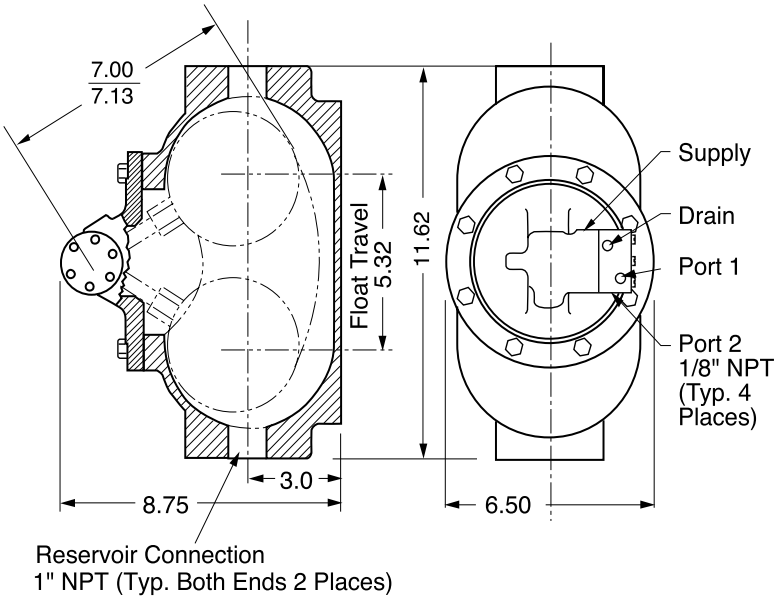
The Cla-Val Model CFC2 Float Control is a float-actuated multiport pilot control which provides non-modulating, two-position, on-off operation. It is used primarily to operate remotely located Cla-Val Valves requiring three-way or four-way pilot valve operation. Designed for use in closed tanks, this control operates on a minimum level change of approximately 1". Maximum level change of 51/2" is needed for full capacity.

Note: We recommend protecting the control tubing and valve from freezing temperatures.

Specifications

Control Piping Connections	1/8" NPT
Reservoir Connections	1" NPT
Pressure Rating	0-300 psi
Temperature Rating	Water: to 180°F.
Materials	In contact with operating fluid: Brass, stainless steel, monel, with Buna-N® Seals Float chamber: Cast Iron Pilot valve housing: Bronze Materials in contact with operating fluid: Brass, Stainless Steel, Monel with Buna-N® Seals Float ball: Stainless Steel Float arm: Brass Other material available: Cast steel or aluminum chamber and pilot valve housing. All stainless steel
Level Differential	Approximately 1" minimum required to change pilot valve operation. 5 5/16" required to develop full capacity.
Operating Fluids	Clean liquids or gases compatible with specified materials.
Shipping Weight	12 Lbs.

Dimensions (In Inches)



CLA-VAL™

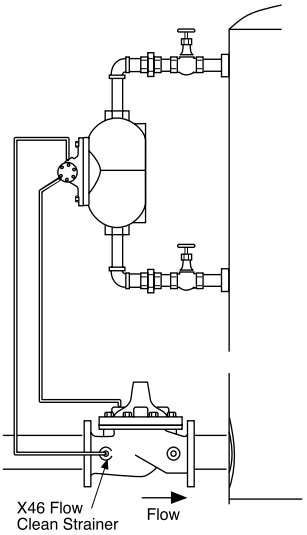
Installation Data

The float control is mounted at the high water level in the tank. The remote Cla-Val valve is installed in the line leading to the tank and is connected to the float control pilot by tubing. (Min. 3/8" for valves 6" and smaller, 3/4" or larger for valves 8" or larger.)

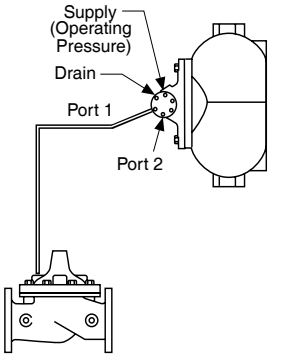
When line pressure is used to operate the valve, tubing connections are made from the float control pilot to the valve cover, and also to the inlet side of the valve. An X46 Flow Clean Strainer must be installed in the inlet side of the valve. The control may be installed at any elevation above the valve, providing that the flowing line pressure in psi is equal to, or greater than, the vertical distance in feet between the valve and the float control.

An independent source of air or water may be used to operate the valve. The pressure from this independent source must constantly be equal to or greater than pressure at the valve inlet. The independent source is connected to the float control pilot in place of the supply line connected to the inlet side of the valve. If the Model 100-01 under the control of the CFC2 is 8" or larger, auxiliary Hytrols may be required. Consult factory for details.

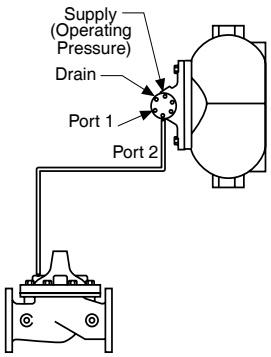
Note: We recommend protecting the control tubing and valve from freezing temperatures.



For Controlling Hytrol Valve



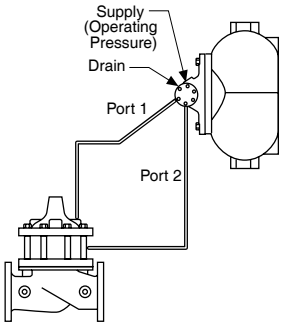
Float Up Closes Valve



Float Down Closes Valve

When Ordering, Please Specify

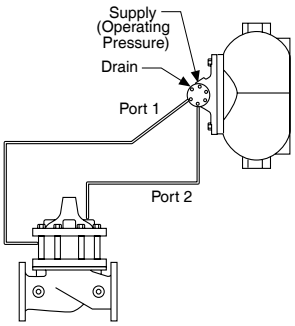
1. Catalog No. CFC2-C1
2. Size and type of Valve to be controlled.
3. Materials if different from standard
4. Specify gravity of fluid if other than water.

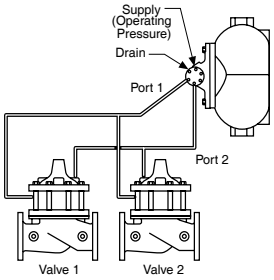


For Controlling Powertrol Valves

Float Up Closes Valve

Float Up Opens Valve

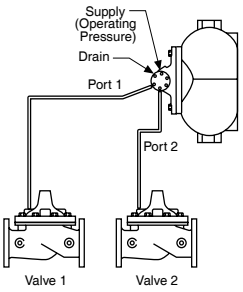




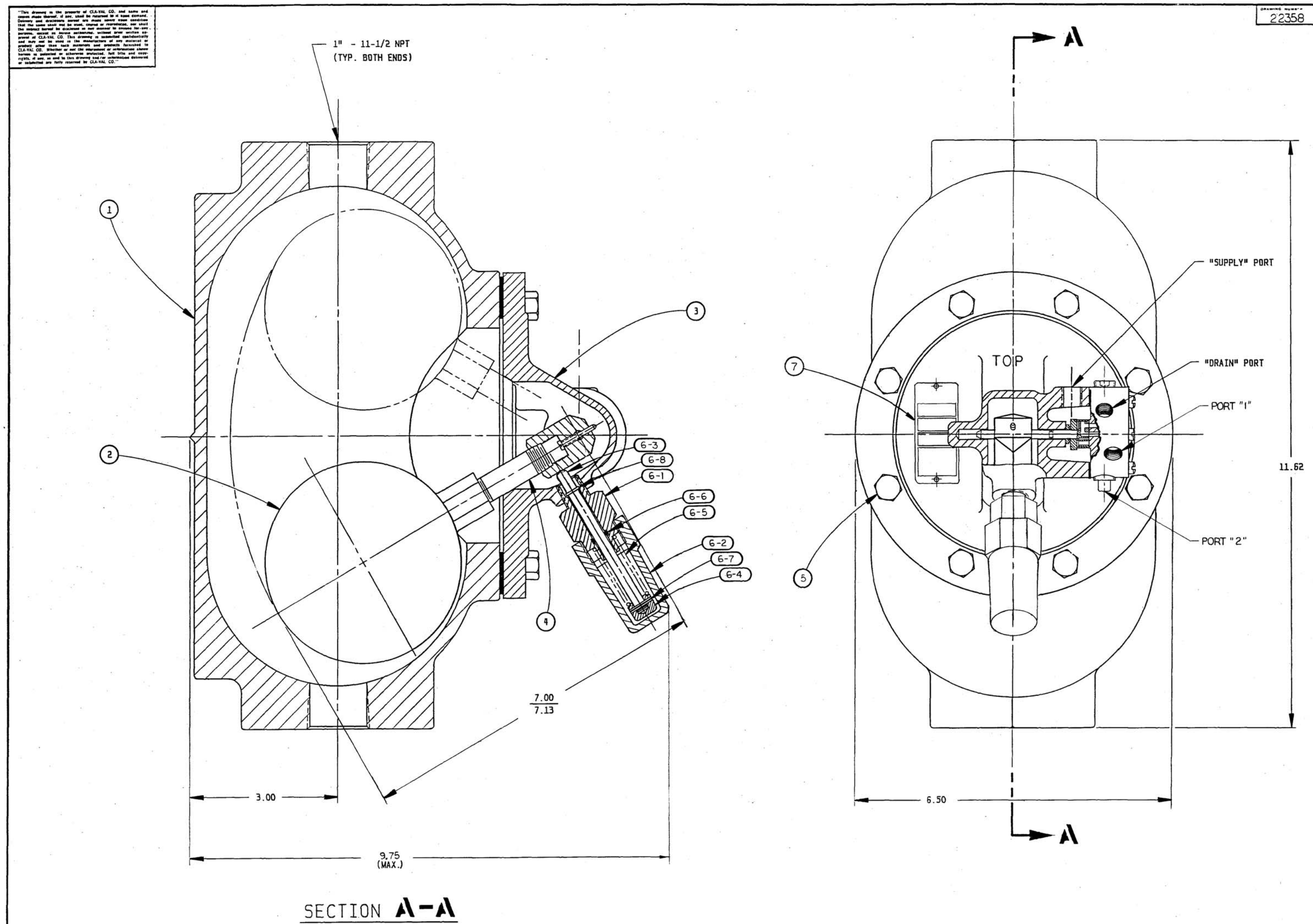
For Controlling Two Valves Simultaneously

Operation

Float Position	Valve 1	Valve 2
UP	CLOSED	OPEN
DOWN	OPEN	CLOSED



Distributed By:
M&M Control Service, INC.
Phone: 800-876-0036
Fax: 847-356-0747
Email: Sales@mmcontrol.com



22358 B

PARTS LIST

ITEM NO.	DESCRIPTION	QTY.
1	BODY	1
2	BALL, FLOAT	1
3	PILOT & HOUSING ASSEMBLY	1
4	NIPPLE, PIPE (1/4" NPT x 2.00 LONG)	1
5	BOLT, HEX NO (3/8"-16UNC x .88 LONG)	8
6	X75A ASSEMBLY	1
6-1	PLUG, GUIDE	1
6-2	CAP	1
6-3	STEM	1
6-4	BUTTON	1
6-5	SPRING	1
6-6	O-RING	1
6-7	PIN, ROLL	1
6-8	PIN, ROLL	1
7	NAMEPLATE	1

REVISION RECORD

LTR	DESCRIPTION	BY	DATE
B	ADDED ITEM NO 7, NAMEPLATE (ECO 13551)	TLC	2-12-93
A	REVISED DRAWING; TITLE DESC CFC2T-C1 WAS CFC2T-A1 (ECO 13258)	CN	12-16-92
—	RELEASE FOR PRODUCTION (NED 37000)	EK	6-14-91

DO NOT SCALE PRINT

CFC2T-C1 FLOAT CONTROL ASSEMBLY

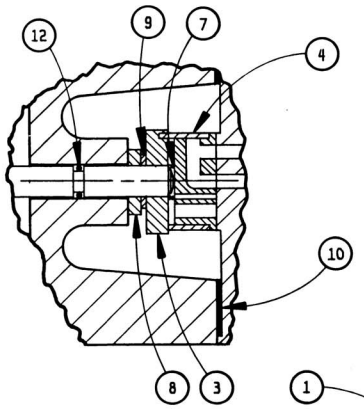
DRAWN EK 6-14-91 CHECKED I.C. 6-18-91 SCALE 1:1

CLA-VAL CO. NEWPORT BEACH CALIFORNIA

DRAWING NUMBER 22358 REV B

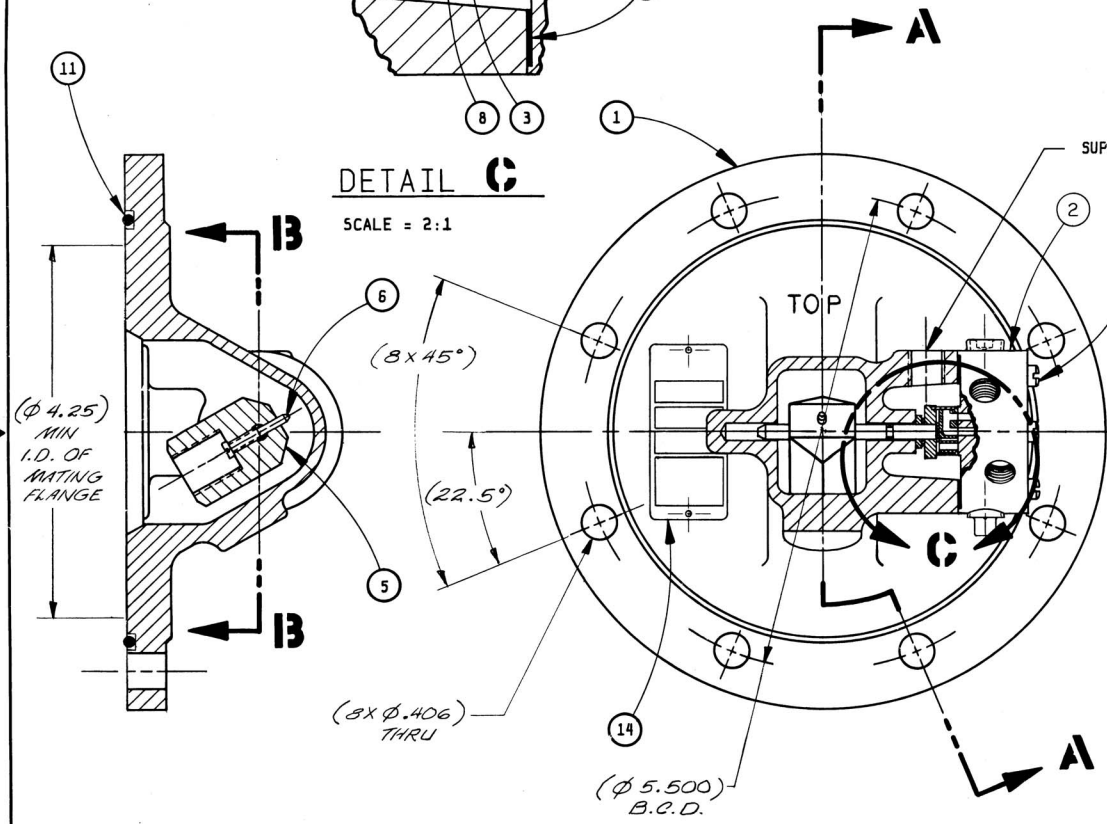
D.C. 007A

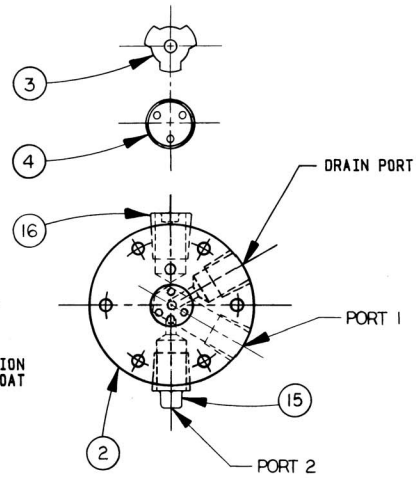
PARTS LIST		
ITEM NO.	DESCRIPTION	QTY.
1	HOUSING	1
2	DISTRIBUTOR	1
3	STEM & DRIVER ASSEMBLY	1
4	DISC ASSEMBLY	1
5	ARM, FLOAT	1
6	PIN, LOCK	1
7	SPRING	1
8	WASHER, THRUST	1
9	WASHER	1
10	GASKET, DISTRIBUTOR	1
11	O-RING	1
12	O-RING	1
13	SCREW, FIL. HD. (#6-32 UNC x 1.00 LONG)	6
14	NAMEPLATE	1
15	PLUG, PIPE 1/8" NPT	1
16	PLUG, ALLEN SOCKET 1/8" NPT	1



DETAIL C

SCALE = 2:1





OPERATION TABLE		
PORTS	1	2
FLOAT ARM UP	S	D
FLOAT ARM DOWN	D	S

D = DRAIN
S = SUPPLY

SECTION A-A

SECTION B-B

LTR.	DESCRIPTION	BY	DATE
	REVISION RECORD		
C	ADDED REF DIM'S (ECO 17640)	PMC	5-28-99
B	ITEM NO. 11, O-RING WAS GASKET. (ECO 14566)	VL	4-11-94
A	REVISED & REDRAWN; ADDED PART LIST & BALLOON ITEMS (ECO 13258)	CN	12-16-92

C CLA-VAL CO. NEWPORT BEACH, CALIFORNIA, U.S.A.

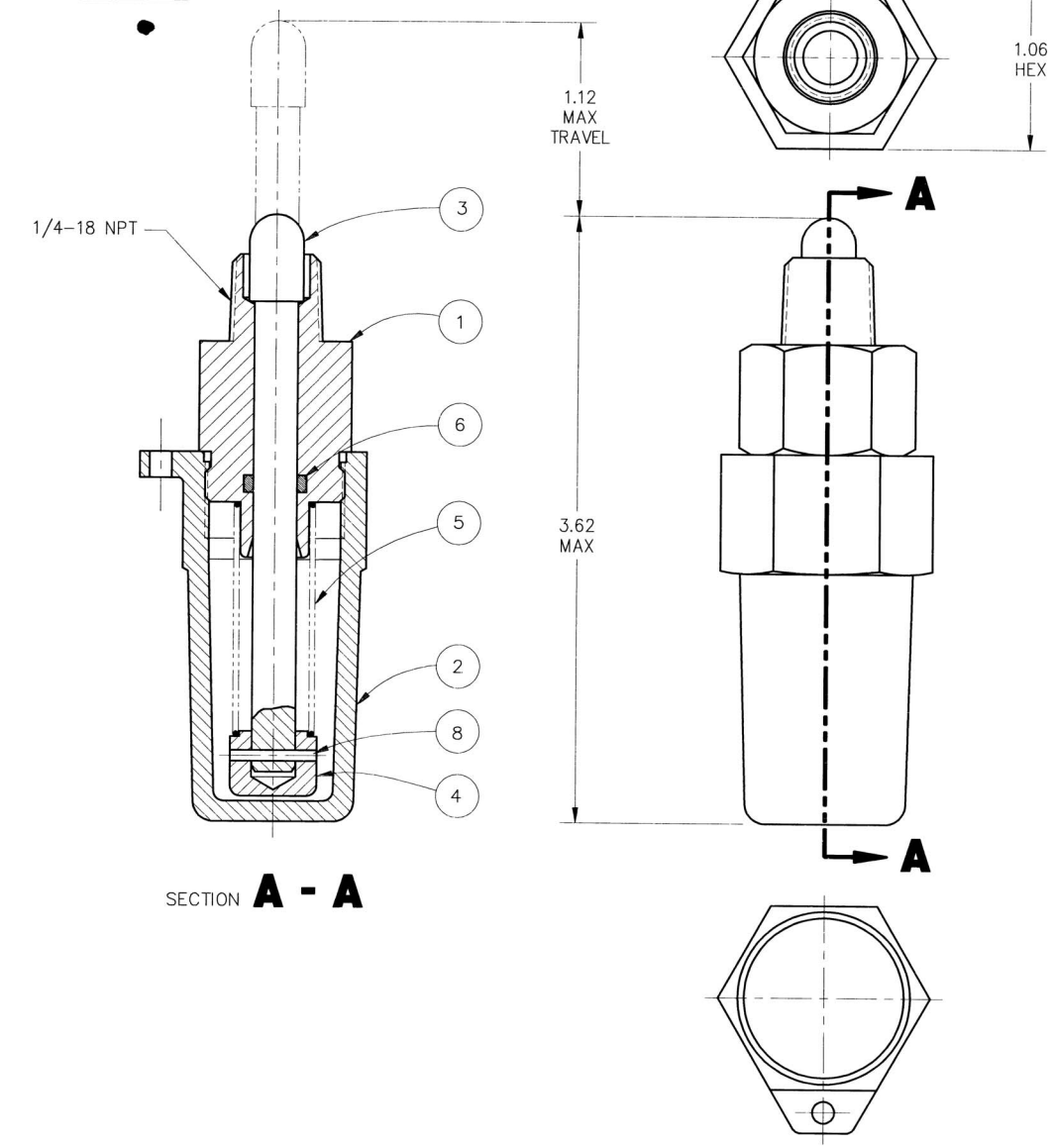
DESCRIPTION: CFC2-C1 PILOT & HOUSING ASSEMBLY

CODE IDENT. NUMBER: 86184

	DATE	DRAWING NUMBER	REV.
DR. LBJ	3-10-53	C2149	C
CHK.			
APPD.			
SCALE 1 : 1			

D.C. 007H

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REVISED O-RING GROOVE (ECO 8971)	7-16-87	KS
B	REDRAWN ON CAD; DELETED ROLLPIN ITEM # 7 AND REVISED ITEM # 3 (ECO 18036)	4-24-00	AK



SECTION **A - A**

ITEM NO.	QTY	DESCRIPTION
8	1	ROLLPIN
7		
6	1	O-RING
5	1	SPRING
4	1	BUTTON
3	1	STEM RISER
2	1	CAP
1	1	PLUG, GUIDE

PARTS LIST

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS ±1/32 DECIMALS .XX± .03 .XXX± .010 ANGULAR ± 5°
SURFACE FINISH 125
BREAK CORNERS .010 MAX
--DO NOT SCALE DRAWING--

CONTRACT NO. — — — — —

APPROVALS		DATE
DRAWN	MGR	2-22-82
CHECKED	KDN	3-24-82
APPROVED	CH	3-29-82
ENGR		

CLA-VAL CO. NEWPORT BEACH, CALIFORNIA

TITLE: X75A FLOAT TESTER ASSEMBLY

SIZE	CAGE CODE	DWG NO.	REV
C	86184	10991	B

SCALE 2/1 SHEET 1 OF 1

AK 05-09-00

DIST CODE 007A

DWG NO. 10991 SH 1 REV B