

LASCO[®]
Fittings, Inc.

NSF-pw

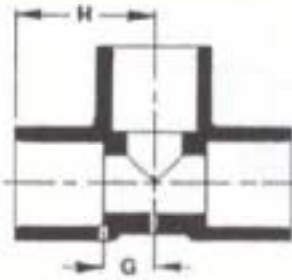
TECHNICAL DATA

SCHEDULE

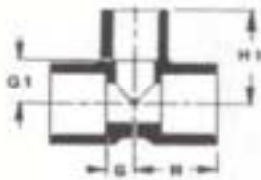
80 CPVC PIPE FITTINGS

Information contained in this publication is provided as a Preliminary Guide. Interpretation and application are functions of the user.

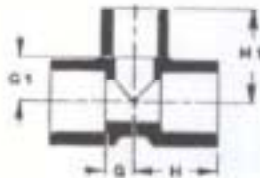
Schedule 80 CPVC



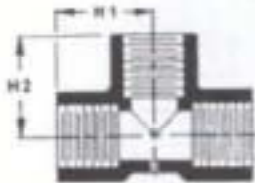
Tee
slip x slip x slip



Reducing Tee
slip x slip x slip



Tee
slip x slip x fipt



Tee
fipt x fipt x fipt



90 Deg Ell
slip x slip

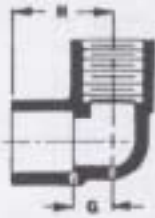
Part No.	Size	G	H
9801-005	1/2	1/2	1 3/8
9801-007	3/4	9/16	1 9/16
9801-010	1	3/4	1 7/8
9801-012	1 1/4	7/8	2 1/8
9801-015	1 1/2	1	2 3/8
9801-020	2	1 1/4	2 3/4
9801-025	2 1/2	1 1/2	3 1/4
9801-030	3	1 13/16	3 11/16
9801-040	4	2 9/32	4 17/32
9801-060	6	*	*
9801-080	8	*	*

Part No.	Size	G	H	G1	H1
9801-101	3/4 x 3/4 x 1/2	1/2	1 17/32	3/4	1 5/8
9801-130	1 x 1 x 1/2	1/2	1 21/32	3/4	1 5/8
9801-131	1 x 1 x 3/4	23/32	1 29/32	3/4	1 3/4

Part No.	Size	G	H	G1	H1
9802-005	1/2	1/2	1 3/8	15/32	1 5/32
9802-007	3/4	3/4	1 13/16	5/8	1 3/4
9802-010	1	3/4	1 7/8	13/16	1 7/8

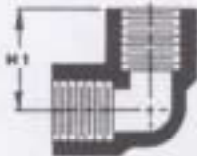
Part No.	Size	H1	H2
9805-005	1/2	1 13/32	1 11/32
9805-007	3/4	1 9/32	1 9/32
9805-010	1	1 7/8	1 7/8
9805-012	1 1/4	2 3/16	2 3/16
9805-015	1 1/2	2 7/16	2 13/32
9805-020	2	2 9/32	2 1/4

Part No.	Size	G	H
9806-002	1/4	*	*
9806-005	1/2	1/2	1 3/8
9806-007	3/4	9/16	1 9/16
9806-010	1	11/16	1 13/16
9806-012	1 1/4	7/8	2 1/8
9806-015	1 1/2	1 1/16	2 7/16
9806-020	2	1 1/4	2 3/4
9806-025	2 1/2	1 1/2	3 23/32
9806-030	3	1 13/16	3 11/16
9806-040	4	2 5/16	4 19/32
9806-060	6	3 1/2	6 1/2
9806-080	8	*	*



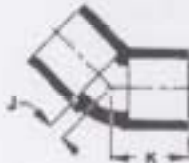
90 Deg Ell
slip x fipt

Part No.	Size	G	H
9807-005	1/2	17/32	1 3/8
9807-007	3/4	3/4	1 3/4
9807-010	1	3/4	1 7/8
9807-012	1 1/4	25/32	2 1/8
9807-015	1 1/2	1 3/32	2 1/2
9807-020	2	1 7/32	2 3/4



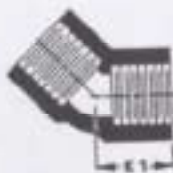
90 Deg Ell
fip x fip

Part No.	Size	H1
9808-005	1/2	1 3/8
9808-007	3/4	1 7/8
9808-010	1	2 7/32
9808-012	1 1/4	2 7/32
9808-015	1 1/2	2 3/8
9808-020	2	2 1/4



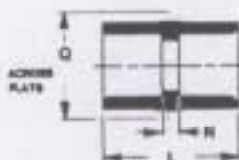
45 Deg Ell
slip x slip

Part No.	Size	J	K
9817-002	1/4	*	*
9817-005	1/2	5/16	1 3/16
9817-007	3/4	15/32	1 3/8
9817-010	1	11/32	1 1/2
9817-012	1 1/4	15/32	1 23/32
9817-015	1 1/2	17/32	1 15/16
9817-020	2	21/32	2 5/32
9817-025	2 1/2	1 1/32	2 29/32
9817-030	3	1 1/32	2 29/32
9817-040	4	1 7/32	3 1/2
9817-060	6	*	*
9817-080	8	*	*



45 Deg Ell
fip x fip

Part No.	Size	K	J
9819-005	1/2	*	*
9819-007	3/4	*	*
9819-010	1	*	*
9819-012	1 1/4	*	*
9819-015	1 1/2	*	*
9819-020	2	*	*



Coupling
slip x slip

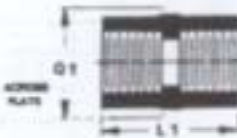
Part No.	Size	L	N	Q
9829-002	1/4	*	*	
9829-005	1/2	2 1/32	1/4	1 11/32
9829-007	3/4	2 9/32	1/4	1 9/16
9829-010	1	2 17/32	9/32	1 27/32
9829-012	1 1/4	2 13/16	1/4	2 3/16

Schedule 80 CPVC



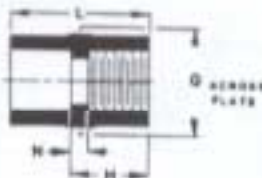
**Coupling
slip x slip**

Part No.	Size	L	N	Q
9829-015	1 1/2	3 1/32	1/4	2 17/32
9829-020	2	3 5/16	1/4	3
9829-025	2 1/2	3 3/4	1/4	3 5/8
9829-030	3	4	1/4	4 3/8
9829-040	4	4 23/32	3/16	
9829-060	6	6 5/16	3/16	
9829-080	8	*	*	*



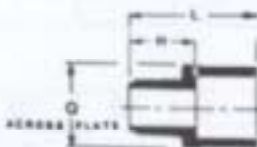
**Coupling
flpt x flpt**

Part No.	Size	L	Q
9830-005	1/2	2 1/32	1 11/32
9830-007	3/4	2 9/32	1 17/32
9830-010	1	2 17/32	1 27/32
9830-012	1 1/4	2 13/16	2 7/32
9830-015	1 1/2	3 1/32	2 17/32
9830-020	2	3 9/32	3 1/32



**Female Adapter
slip x flpt**

Part No.	Size	H	L	N	Q
9835-002	1/4	*	*	*	*
9835-005	1/2	1 5/32	2 031/32	1/4	1 11/32
9835-007	3/4	1 5/16	2 7/32	1/4	1 9/16
9835-010	1	1 3/8	2 1/2	1/4	1 27/32
9835-012	1 1/4	1 17/32	2 13/16	9/32	2 7/32
9835-015	1 1/2	1 21/32	3 1/32	5/16	2 17/32
9835-020	2	1 25/32	3 5/16	5/16	3 1/32
9835-030	3	*	*	*	*
9835-040	4	*	*	*	*



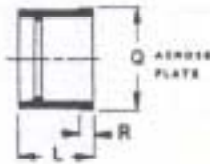
**Male Adapter
mipt x slip**

Part No.	Size	H	L	Q
9836-005	1/2	1	1 7/8	1 7/32
9836-007	3/4	1 3/16	2 3/16	1 7/16
9836-010	1	1 1/4	2 3/8	1 3/4
9836-012	1 1/4	1 9/32	2 17/32	2 1/8
9836-015	1 1/2	2 21/32	2 21/32	2 3/8
9836-020	2	1 3/8	2 7/8	2 29/32
9836-040	4	*	*	*



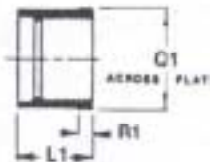
**Reducer Bushing
sp x slip**

Part No.	Size	L	R	Q
9837-072	1/2 x 1/4	*	*	*
9837-101	3/4 x 1/2	1 3/32	1/4	1 3/32
9837-130	1 x 1/2	1 1/4	1/4	1 11/32
9837-131	1 x 3/4	1 1/4	1/4	1 3/8



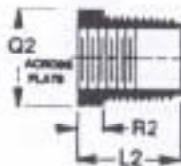
Reducer Bushing
sp x slip

Part No.	Size	L	R	Q
9837-166	1 1/4 x 1/2	*	*	*
9837-167	1 1/4 x 3/4	*	*	*
9837-168	1 1/4 x 1	1 19/32	5/16	1 13/16
9837-209	1 1/2 x 1/2	*	*	*
9837-210	1 1/2 x 3/4	*	*	*
9837-211	1 1/2 x 1	1 11/16	5/16	2 1/32
9837-212	1 1/2 x 1 1/4	1 11/16	5/16	2 1/16
9837-247	2 x 1/2	*	*	*
9837-248	2 x 3/4	*	*	*
9837-249	2 x 1	*	*	*
9837-250	2 x 1 1/4	*	*	*
9837-251	2 x 1 1/2	1 13/16	5/16	2 7/16
9837-292	2 1/2 x 2	*	*	*
9837-337	3 x 1 1/2	*	*	*
9837-338	3 x 2	*	*	*
9837-339	3 x 2 1/2	*	*	*
9837-420	4 x 2	*	*	*
9837-422	4 x 3	*	*	*
9837-532	8 x 4	3 17/32	1/2	6 23/32



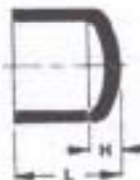
Reducer Bushing
sp x fipt

Part No.	Size	L1	R1	Q1
9838-101	3/4 x 1/2	1 1/32	1/4	1 3/32
9838-130	1 x 1/2	1 1/32	1/4	1 3/8
9838-131	1 x 3/4	1 1/4	1/4	1 11/32
9838-168	1 1/4 x 1	1 9/16	5/16	1 27/32
9838-209	1 1/2 x 1/2	*	*	*
9838-210	1 1/2 x 3/4	*	*	*
9838-211	1 1/2 x 1	1 5/8	5/16	2 1/32
9838-212	1 1/2 x 1 1/4	1 25/32	5/16	2 3/32
9838-248	2 x 3/4	*	*	*
9838-249	2 x 1	*	*	*
9838-251	2 x 1 1/2	1 13/16	5/16	2 7/16
9838-292	2 1/2 x 2	*	*	*
9838-338	3 x 2	*	*	*
9838-422	4 x 3	*	*	*



Reducer Bushing
mipt x fipt

Part No.	Size	L2	R2	Q2
9839-101	3/4 x 1/2	1 1/32	5/16	1 1/16
9839-131	1 x 3/4	1 1/8	5/16	1 11/32
9839-168	1 1/4 x 1	1 3/8	13/32	1 7/8
9839-212	1 1/2 x 1 1/4	1 7/16	13/32	1 31/32
9839-251	2 x 1 1/2	1 7/16	3/8	2 7/16



Cap
slip

Part No.	Size	H	L
9847-005	1/2	5/16	1 7/32
9847-007	3/4	9/32	1 3/8
9847-010	1	13/32	1 5/8

Schedule 80 CPVC



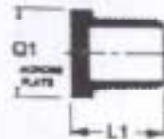
Cap slip

Part No.	Size	H	L
9847-012	1 1/4	1/2	1 13/16
9847-015	1 1/2	17/32	2
9847-020	2	5/8	2 3/16
9847-025	2 1/2	13/16	2 11/16
9847-030	3	1	3
9847-040	4	21/32	2 31/32
9847-060	6	*	*



Cap fip

Part No.	Size	L1
9848-005	1/2	1 1/4
9848-007	3/4	1 13/32
9848-010	1	1 19/32
9848-012	1 1/4	1 25/32
9848-015	1 1/2	2
9848-020	2	2 5/32
9848-030	3	2 31/32
9848-040	4	2 29/32



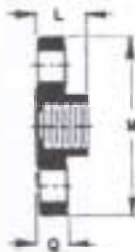
Plug mipt

Part No.	Size	L1	Q1
9850-002	1/4	*	*
9850-005	1/2	1 1/32	31/32
9850-007	3/4	1 1/32	1 3/32
9850-010	1	1 1/4	1 9/16
9850-012	1 1/4	1 5/16	1 25/32
9850-015	1 1/2	1 11/32	1 15/16
9850-020	2	1 3/8	2 7/16
9850-030	3	*	*
9850-040	4	*	*



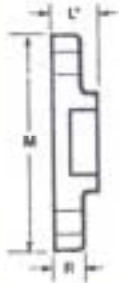
Class 150 Flange one piece slip

Part No.	Size	L	M	N	Q
9851-005	1/2	1 1/32	3 17/32	1/8	15/32
9851-007	3/4	1 5/32	3 29/32	5/32	17/32
9851-010	1	1 9/32	4 9/32	5/32	19/32
9851-012	1 1/4	1 13/32	4 21/32	5/32	5/8
9851-015	1 1/2	1 9/16	5 1/16	5/32	11/16
9851-020	2	1 11/16	6 1/32	3/16	25/32
9851-025	2 1/2	*	*	*	*



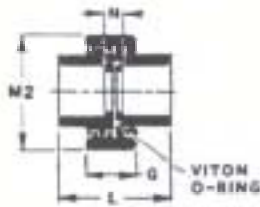
Class 150 Flange one piece fip

Part No.	Size	L	M	Q
9852-005	1/2	*	*	*
9852-007	3/4	31/32	3 7/8	9/16
9852-010	1	*	*	*
9852-012	1 1/4	*	*	*
9852-014	1 1/2	*	*	*
9852-020	2	*	*	*
9852-030	3	*	*	*
9852-040	4	*	*	*



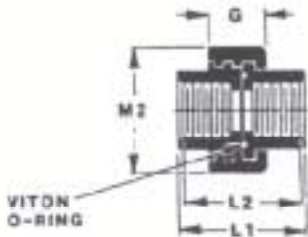
Class 150 Flange
one piece
Blind

Part No.	Size	M	L	R
9853-015	1 1/2	*	*	*
9853-020	2	*	*	*
9853-030	3	*	*	*



Union
slip x slip

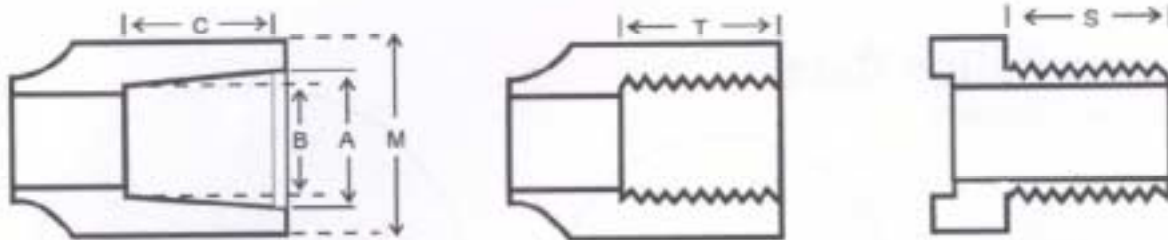
Part No.	Size	G	L	M2	N
9897-002	1/4	*	*	*	*
9897-005	1/2	31/32	2 3/16	2 1/8	13/32
9897-007	3/4	1	2 15/32	2 1/2	13/32
9897-010	1	1 3/32	2 23/32	2 15/16	13/32
9897-012	1 1/4	*	*	*	*
9897-015	1 1/2	*	*	*	*
9897-020	2	*	*	*	*
9897-030	3	*	*	*	*



Union
fipt x fipt

Part No.	Size	L1
9898-005	1/2	*
9898-007	3/4	*
9898-010	1	*
9898-012	1 1/4	*
9898-015	1 1/2	*
9898-020	2	*

Schedule 80 CPVC



Size	Pipe O.D.	A (entrance)		B (bottom)		Max. Out Of Round	C (socket) Depth (Min.)	T (thread) Female (Min.)	S (thread) Male (Min.)	M*
		Min.	Max.	Min.	Max.					
1/4	0.540	0.548	0.556	0.530	0.540	± .008	0.625	0.540	0.460	-
3/8	0.675	0.683	0.691	0.667	0.675	± .008	0.750	0.540	0.460	-
1/2	0.840	0.844	0.852	0.832	0.840	± .008	0.875	0.690	0.620	1.290
3/4	1.050	1.054	1.062	1.042	1.050	± .010	1.000	0.700	0.620	1.520
1	1.315	1.320	1.330	1.305	1.315	± .010	1.125	0.860	0.790	1.820
1 1/4	1.660	1.665	1.675	1.650	1.660	± .012	1.250	0.900	0.790	2.220
1 1/2	1.900	1.906	1.918	1.888	1.900	± .012	1.375	0.900	0.840	2.520
2	2.375	2.381	2.393	2.363	2.375	± .012	1.500	0.950	0.840	3.020
2 1/2	2.875	2.882	2.896	2.861	2.875	± .015	1.750	1.300	1.260	3.580
3	3.500	3.508	3.524	3.484	3.500	± .015	1.875	1.390	1.320	4.330
4	4.500	4.509	4.527	4.482	4.500	± .015	2.250	1.470	1.420	5.450
6	6.625	6.636	6.658	6.603	6.625	± .030	3.000	-	-	7.590
8	8.625	8.640	8.670	8.595	8.625	± .045	4.000	-	-	9.745

1/4 to 1 1/2 = ±1/32
2 to 8 = ±1/16

Maximum Pipe Operating Pressure

Pipe Size	Maximum Operating Pressure (p.s.i.) at 73.4°F	
	CPVC Pipe Schedule 80 Plain Ends	CPVC Pipe Schedule 80 Threaded Ends
1/2	850	420
3/4	690	340
1	630	320
1 1/4	520	260
1 1/2	470	240
2	400	200
2 1/2	420	210
3	370	190
4	320	160
5	290	Not Recommended
6	280	Not Recommended
8	250	Not Recommended

Do not use CPVC pipe fittings for steam or any other compressed air systems.

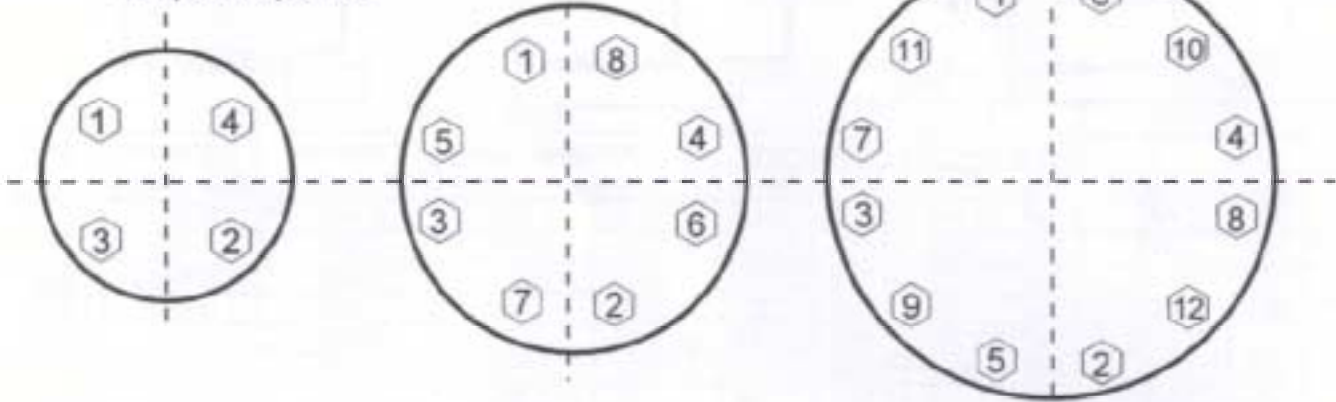
Temperature Correction Factors

Operating Temperature (°F)	PVC Pressure Rating Factor
75	1.00
80	1.00
90	0.92
100	0.85
110	0.75
120	0.65
130	0.57
140	0.50
150	0.45
160	0.40
170	0.32
180	0.25
190	0.22
200	0.20
210	0.15
220	Not Recommended

Not recommended above 210 °F. For more severe service, an additional correction factor may be required.

Flange Installation Data

Torque Sequence



1. Recommended Gaskets: full face, 1/8" thick, elastomeric, 50-70 Shore A hardness.
2. Bolt Threads should be well-lubricated.
3. Nut and bolt threads should be free-running during assembly.
4. Follow illustrated bolt-tightening Sequence.
5. Always use full size flat washers with bolts and nuts.

Size	Bolt Circle Diameter	No. of Bolts	Bolt Size (UNC x Length)	Recommended Torque
1/2	2.37	4	1/2 - 13 x 1-3/4	15-20
3/4	2.75	4	1/2 - 13 x 1-15/16	15-20
1	3.12	4	1/2 - 13 x 2	15-20
1-1/4	3.50	4	1/2 - 13 x 2-1/4	15-20
1-1/2	3.87	4	1/2 - 13 x 2-3/4	15-20
2	4.75	4	5/8 - 11 x 3	20-30
2-1/2	5.50	4	5/8 - 11 x 3-1/4	20-30
3	6.00	4	5/8 - 11 x 3-5/8	20-30
4	7.50	8	5/8 - 11 x 3-3/4	20-30
5	8.50	8	3/4 - 10 x 3-3/4	25-35
6	9.50	8	3/4 - 10 x 4-3/8	33-50
8	11.75	8	3/4 - 10 x 4-3/8	33-50
10	14.25	12	7/8 - 9 x 4-1/2	53-75
12	17.00	12	7/8 - 9 x 4-5/8	53-75

*UNC=Unified National Course

Note: Mating dimensions and configuration conform to ANSI B 16.5, Class 150 flanges. Socket diameters conform to ASTM D-2467. Recommended working pressure: 150 psi water at 73.4 F. Use primer and heavy-bodied PVC cement in accordance with ASTM D-2855.

Decimal Equivalents

1/64 = 0.0156	13/64 = 0.2031	25/64 = 0.3906
1/32 = 0.0313	7/32 = 0.2188	13/32 = 0.4063
3/64 = 0.0469	15/64 = 0.2344	15/32 = 0.4688
1/16 = 0.0625	1/4 = 0.2500	1/2 = 0.5000
5/64 = 0.0781	17/64 = 0.2656	9/16 = 0.5625
3/32 = 0.0938	9/32 = 0.2813	5/8 = 0.6250
7/64 = 0.1094	19/64 = 0.2969	11/16 = 0.6875
1/8 = 0.1250	5/16 = 0.3125	3/4 = 0.7500
9/64 = 0.1406	21/64 = 0.3281	13/16 = 0.8125
5/32 = 0.1563	11/32 = 0.3438	7/8 = 0.8750
11/64 = 0.1719	23/64 = 0.3594	15/16 = 0.9375
3/16 = 0.1875	3/8 = 0.3750	

LASCO

Schedule 80-CPVC

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Standards and Specifications

- ASTM F-437** — Threaded Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80.
ASTM F-439 — Socket Type Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80.
ASTM D-1784 — Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds.
MATERIAL — LASCO Schedule 80 CPVC Fittings are produced from CPVC Type IV, Grade 1. O-rings are produced from a fluorocarbon elastomer.
CPVC Fittings are listed by NSF (National Sanitation Foundation).

ATTENTION!

DO NOT use LASCO Fittings for **compressed air** or **gases**.
DO NOT test PVC piping systems with **compressed air** or **gases**.
DO NOT use fittings with liquids not recommended by LASCO.
Modifications of fittings voids the warranty.

LIMITED WARRANTY

LASCO fittings are made from 100% virgin materials and are warranted to be free from manufacturing defects in materials and workmanship. They are warranted against rot, rust and electrolytic corrosion for a period of 3 years from date of installation. If LASCO fittings prove defective due to manufacturing defects in material or workmanship during that period, the manufacturer will provide new replacement units of the same type and size. No remedy will be granted under this warranty if LASCO fittings are not used strictly in accordance with LASCO's directions with respect to use and storage or if the fittings have been modified in any way. THE MANUFACTURER'S LIABILITY UNDER EXPRESSED OR IMPLIED WARRANTY OR FOR ANY REASON IS LIMITED TO FURNISHING REPLACEMENT UNITS OR GRANTING CREDIT FOR DEFECTIVE UNITS. NO LABOR EXPENSE OR CONSEQUENTIAL DAMAGES WILL BE PAID BY LASCO. THIS WARRANTY IS IN LIEU OF ALL OTHER GUARANTEES AND WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PURPOSE, EXCEPT FOR ANY WARRANTIES IMPLIED BY LAW FOR NONCOMMERCIAL CONSUMERS. ANY SUCH WARRANTIES ARE LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY.