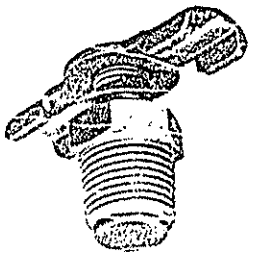
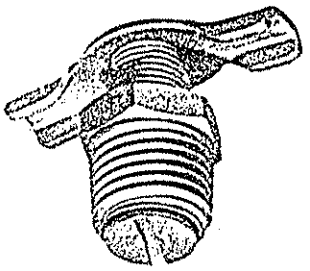
SCREW TYPE SHUT-OFF COCKS



EXTERNAL SEAT

1/8 PIPE SIZE

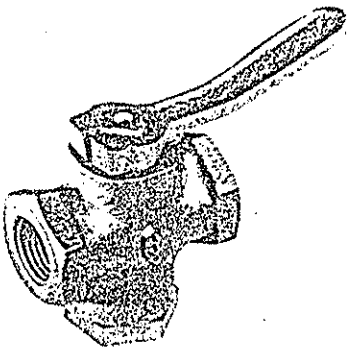


EXTERNAL SEAT

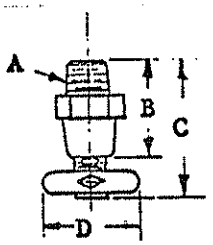
1/4 PIPE SIZE

PIPE THREAD SIZE	CLOSED HEIGTH	PART NUMBER
1/8	1- 5/8	23-09093-001
1/4	1- 5/8	23-09093-002
3/8	1- 9/16	23-09093-003
1/2	1-13/16	23-09093-004

PIPE THREAD SIZE	MANUFACTURER'S NUMBER		PART NUMBER
	BW		
1/8	--		23-09087-001
1/4	--		23-09087-002
3/8	--		23-09087-003
1/2	285172		23-09087-004
3/4	--		23-09087-005
1	--		23-09087-006



DRAIN COCK -
NEEDLE TYPE

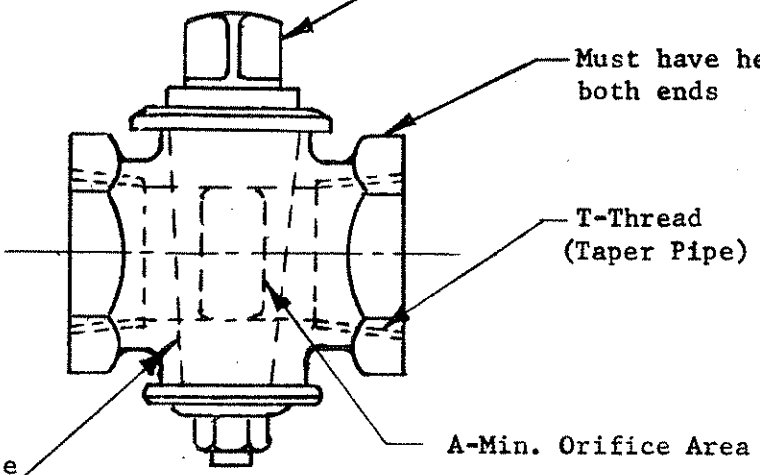


	A PIPE THD.	B	C CLOSED	D	MIN OPEN-ING
23-9093 -001	1/8	1-1/16	1-5/8	1	7/32
-002	1/4	1-5/32	1-5/8	1-1/8	5/16
-003	3/8	1-1/8	1-9/16	1-1/8	5/16
-004	1/2	1-3/8	1-13/16	1-1/4	13/32

General Use Part

PRINT ISSUED	TITLE	PART NO.
6/22/71	COCK, SHUT OFF	23-9087
LAST CHG. LTR. C		SHEET OF

SKETCH



125 P.S.I. W.O.G. Straightway Cock

PART NUMBERS

T	A	MFR'S NO'S		FREIGHTLINER PART NUMBER
		BW		
1/8	.03			23-9087-001
1/4	.045			-002
3/8	.09			-003
1/2	.15	285172		-004
3/4	.30			-005
1	.48			-006

ENGINEERING NOTES

1. Brass or Bronze

COMPLIED	PRJ	DATE DRAWN		MATERIAL	
APPROVED	K.J.A	12-17-68		1	

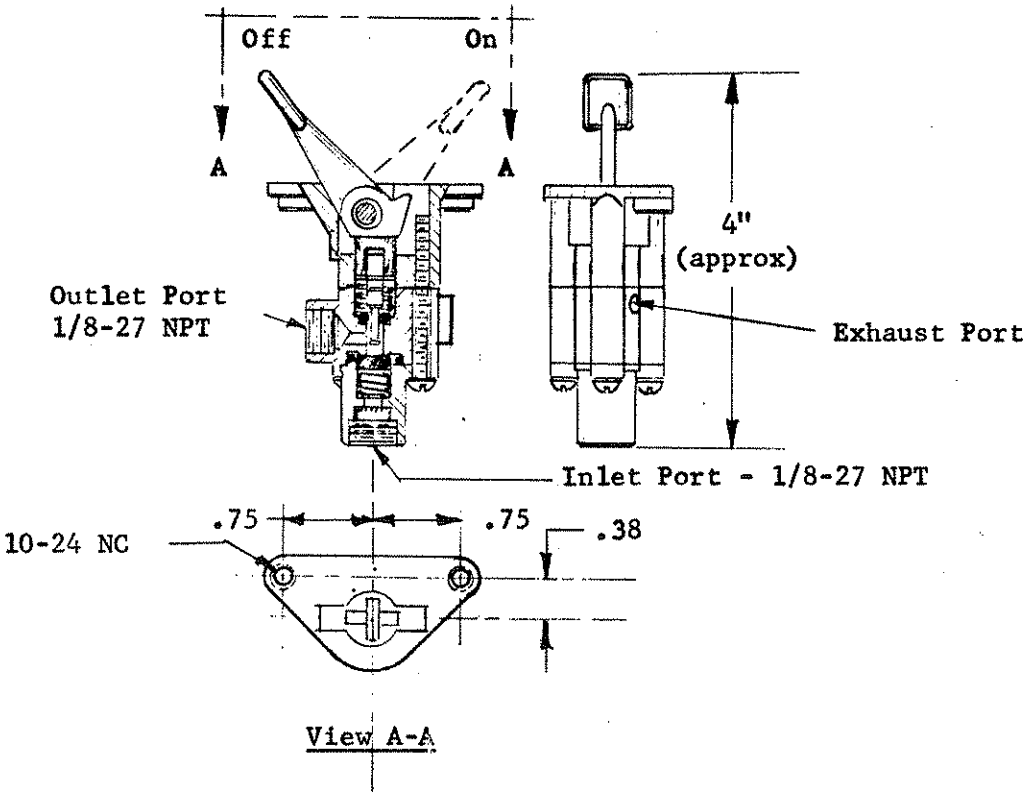
Portland FREIGHTLINER CORPORATION Oregon 97208

E-183

CHG	BY	DATE	WAS
B			

CHG	BY	DATE	WAS
A	PRJ	12-17-68	B Size Drawing
B	HJR	6-4-71	Note Added; format rev'd.
C	SB	2-17-78	217799 to 285172 #65539

PRINT ISSUED	TITLE	PART NO.
1-14-67	VALVE, TWO-WAY CONTROL	23-9088
LAST CHG. LTR. L		SHEET 1 OF 1



CHG	BY	DATE	WAS
H	TN	6-23-81	ADDED MID 13440DA
J	NR	10-9-81	DEL: WILLIAMS, WM 219-C4
J1	NR	10-14-81	MID 13440DA TO 13440DM
K	L.T.	12-16-81	REMOVED 13440DM

CHG	BY	DATE	WAS
D	PRJ	12-30-68	B Size Drawing
E	SK	12-8-78	Rev. Vendors #77900
F	B.E	3-6-79	DEL ET. SLOAN, ADD. HOLL.
G	N.R.	6-15-81	MID 13440H TO MID 13440AZ

CHG	BY	DATE	WAS
L	WTM	4-26-82	ADDED MID 13440DL

JOB No. 67202

(1) Approved Vendors:

(J)

Holland, 2527

Berg Mfg. & Sales Co., BRG 1559

Bendix Heavy Vehicle System Group BW 228229

Midland-Ross Corp. MID 13440AZ

APPROVED ALT. MID 13440DL (G) (L)

(K) (H) (J)

COMPILED	PRJ	DATE DRAWN		MATERIAL	NEXT ASSY. NO.
APPROVED	PRJ	12-30-68		(1)	VEHICLE

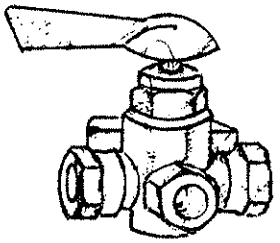
Portland FREIGHTLINER CORPORATION Oregon 97208

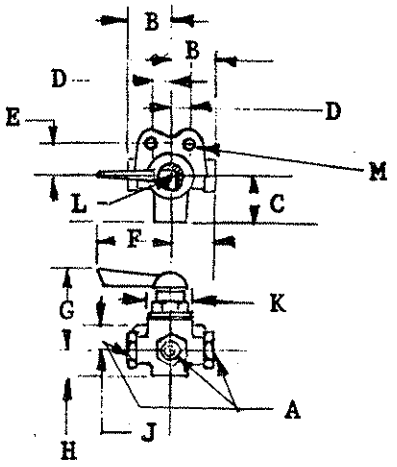
L K J H F E

23-9092

PRINT ISSUED	TITLE	PART NO.
1-20-69	VALVE, SHUT OFF - 3-WAY - FEMALE	23-9092
LAST CHG. LTR. B		SHEET OF

CHG	BY	DATE	WAS





DASH NUMBER	PIPE THD. A	B	C	D	E	F	G	H	J	K	PORT HOLE L	MTG. HOLE M
-001	1/8	7/8	15/16	3/8	21/32	1-1/2	1-45/64	1/2	1/2	29/32	3/16	17/64
-002	1/4	1-1/8	1-1/8	1/2	11/16	2-1/16	2-1/16	21/32	19/32	1-1/16	5/16	17/64
-003	3/8	1-5/16	1-5/16	1/2	27/32	2-9/16	2-29/64	23/32	5/8	1-1/4	7/16	17/64

CHG	BY	DATE	WAS
B	PRJ	12-30-68	B Size Drawing

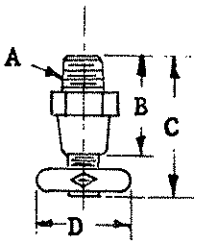
(1.) Brass Forging

COMPILED	PRJ	DATE DRAWN		MATERIAL	NEXT ASSY. NO.
APPROVED	KJA	12-30-68		(1)	VEHICLE

Portland FREIGHTLINER CORPORATION Oregon 97208

23-9093

PRINT ISSUED	TITLE	PART NO.
1-23-69	DRAIN COCK - NEEDLE TYPE	23-9093
LAST CHG. LTR. B		SHEET OF



DASH NUMBER	A PIPE THD.	B	C CLOSED	D	MIN OPEN-ING
-001	1/8	1-1/16	1-5/8	1	7/32
-002	1/4	1-5/32	1-5/8	1-1/8	5/16
-003	3/8	1-1/8	1-9/16	1-1/8	5/16
-004	1/2	1-3/8	1-13/16	1-1/4	13/32

CHG	BY	DATE	WAS

CHG	BY	DATE	WAS
B	PRJ	12-30-68	B Size Drawing

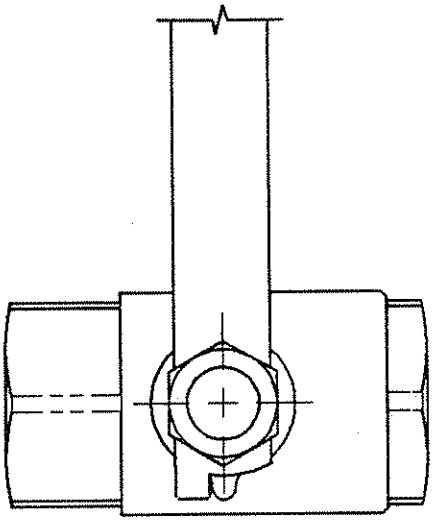
1. Brass - Imperial Eastman 200 - E Series or Equivalent - 100 psi W.O.G.

COMPILED	PRJ	DATE DRAWN		MATERIAL	NEXT ASSY. NO.
APPROVED	W. J. A.	12-30-68		(1)	VEHICLE

Portland FREIGHTLINER CORPORATION Oregon 97208

ORIGINAL JOB NO.	TITLE	PART NO.
9248C	VALVE ASSY, BALL	A23-09108
LAST CHG LTR: L		SHEET 1 OF 1

SKETCH:



SPECIFICATION NUMBERS:

PIPE SIZE	HANDLE SHOWN	MANUFACTURER'S NUMBER			FREIGHTLINER NUMBER
		CRA	VOS	APV	
1/2	OFF		59 62 10/NPT	70-103-B2	A23-09108-000
3/4	OFF	2180-3/4			-001
3/4	OFF	2180-3/4			(1) -002
1/2	ON	FLC22180-1/2			(2) -003
3/8	OFF	2180-3/8			-004

ENGINEERING NOTES:

1. MATERIAL: BRASS

(1) X2, REPLACED BY -001.

(2) (REF) MADE ONLY BY CRANE CO. PLANT, JONESBORO, ARK. AND STOCKED ONLY AT FREIGHTLINER SALES AND SERVICE BRANCH, PORTLAND, OREGON.

COMPILED	BT	DATE DRAWN	CADAM ORIGINAL	UNIT OF MEASURE	MASTER NUMBER
APPROVED	LESLIE	02-04-86		EACH	05315 000D1

PORTLAND FREIGHTLINER CORPORATION OREGON 97208

AC-826

CHANGE INFORMATION

LTR	JOB NO.	BY	DATE	CHANGE INFORMATION
K	9248C	BT	02-04-86	REVISED & REDRAWN
L	9248C	TAL	02-02-86	ARGUS TO VOS; ADD /NPT