

APPLICATION FOR RENEWAL OF APPROVAL FOR VALVES AND FITTINGS

- 1. AAR APPROVAL No. PRD-207032
- 2. Date of Application 7/10/2020
- 3. Previous AAR Approval PRD-107009
- 4. Applicant: McKenzie Valve & Machining LLC
- 5. Address: 145 Airport Road, McKenzie, TN 38201
- 6. Drawing No. See #12 7. Latest rev. See #12 8. Date of latest rev. See #12
- 9. Description of device: 75 psig Pressure Relief Valve, SS 10. Device ID No. See Attached Table

CERTIFICATION: The subject device is **unchanged** from the previous approval, and conforms with the latest revision of AAR Specifications for Tank Cars, Appendix A. The device conforms with drawing listed above.

11. By: _____ Title: _____

If device is **changed** since latest approval, fill in the following blanks

12. Reference Previous Drawing	New Drawing	If on Service Trial
No. <u>92534</u> Rev. <u>H</u> Date <u>7/8/2008</u>	No. <u>92534</u> Rev. <u>I</u> Date <u>10/26/17</u>	S.T. No. <u>n/a</u>
No. _____ Rev. _____ Date _____	No. _____ Rev. _____ Date _____	S.T. No. <u>n/a</u>
No. _____ Rev. _____ Date _____	No. <u>See Attached Table for New Drawings</u>	S.T. No. <u>n/a</u>

13. New drawing supersedes previous one or does not obsolete it

CHANGES

REASONS FOR CHANGES

- 14. a. See the attached table.
 - b. _____
 - c. _____
 - d. _____
- (if needed use supplemental sheet)

15. Normal operational effect of changes of device: None

16. Drawing submitted with this application: All drawings listed in the attached table.

CERTIFICATION: The above data is correct and conforms with AAR Specifications for Tank Cars, Appendix A. The device conforms with drawing listed above.

17. By: Roger Danzy *Roger Danzy* Title: Product Engineer

APPROVAL AAR Tank Car Committee:



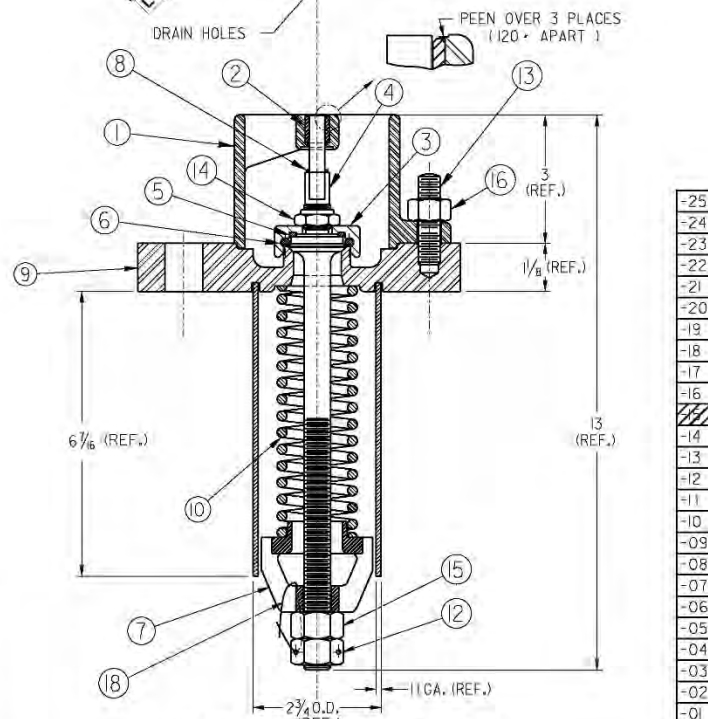
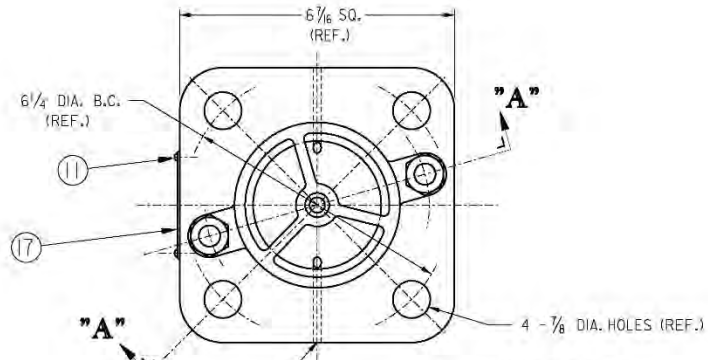
Date Approved: 9/14/2020

(Signature) on behalf of Committee

Valve S/A. 75# SST Safety Relief SRV-1075B, SS					
Drawing	Device ID / Model No.	Rev.	Date	Changes	Reason for Changes
92534	SRV-1075B-SSSS-F1	H	7/8/08	N/A - Approved on Previous Application	N/A
		I	10/26/17	External Change – Symbol 14 Locknut. Updated Company Information in Title Block	Vendor Change. Company Information

NEW Valve S/A. 75# SST Safety Relief SRV-1075B, SS					
Drawing	Device ID / Model No.	Rev.	Date	Changes	Reason for Changes
508491	SRV-1075B-SSSS-F3	A	8/26/10	External Change - AAR Small Tongue Flange (Fig. E.19.16)	To meet customer requirements
508493	SRV-1075B-SSSS-F4	A	8/26/10	External Change - AAR Large Tongue Flange (Fig. E.19.20)	To meet customer requirements
508553	SRV-1075B-SSSS-F2	A	2/2/10	External Change - Flange bolting changed to 3/4" diameter holes on a 6.25 bolt circle, flat face flange	To meet customer requirements

NEW Valve S/A. 75# SST Safety Relief SRV-1075B, CS with SS Spring					
Drawing	Device ID / Model No.	Rev.	Date	Changes	Reason for Changes
509719	SRV-1075B-CSSS-F3	A	1/17/12	Changes in materials of construction - Carbon steel body. External Change - AAR Small Tongue Flange (Fig. E.19.16)	To meet customer requirements.
509725	SRV-1075B-CSSS-F1	A	1/19/12	Changes in materials of construction - Carbon steel body, flat face flange 4-7/8" holes on 6.25 bolt circle	To meet customer requirements



SECTION "A" - "A"

FLOW RATE = 1212 SCFM @ 85 PSIG

BILL OF MATERIAL					
SYM.	PART NO.	REQ.	DESCRIPTION	MATERIAL	WT. (LBS.)
1	26041-01	1	GUIDE TOP	CAST STAINLESS STL	4.38
2	15910-01	1	BUSHING	TEFLON (R)	.02
3	10152-01	1	CAP	STAINLESS STEEL	.32
4	10151-01	1	STEM	STAINLESS STEEL	1.14
5	SEE TABLE	1	*O*-RING #2-215	SEE TABLE	--
6	SEE TABLE	1	*O*-RING #2-323	SEE TABLE	--
7	26049-01	1	FOLLOWER, SPRING	CAST STAINLESS STL	.56
8	208-7331	1	*O*-RING #2-012	BUNA 'N'	--
9	503166-03	1	SAFETY VALVE FLANGE S/A	A351GR CF8M	.13
10	26044-01	1	SPRING	STAINLESS STEEL	1.09
11	304-8745	2	SIZE #2 RD. HD. DRIVE SCREW, TYPE U, 1/4 LG.	STAINLESS STEEL	.02
12	24178-03	1	NUT, HVY. HEX, 5/8-11UNC - 2B S.F. W/HOLES	ASTM A94 DR. 6F	.12
13	09604-01	2	STUD, 1/2-13 UNC -2A X 2 1/8 LG.	STAINLESS STEEL	.2
14	304-8639	1	NUT, LOCK 5/8 HEX. HD., ESNA NTE-108 OR EQUAL	STEEL CAD. PLATED	.08
15	304-7091	1	NUT, HVY. HEX, 5/8-11 UNC-2B S.F.	ASTM A94 DR. 6F	.12
16	304-7055	2	NUT, HVY. HEX, 1/2-13 UNC - 2B S.F.	STAINLESS STEEL	.14
17	17387-46	1	IDENTIFICATION PLATE	STAINLESS STEEL	--
18	305-8425	1	SEAL WIRE & DISC	STAINLESS STEEL & TEAR	--

-25	-CS4560	208-0776	208-0777	CS 4560	
-24	-EPWFG	108-20156	108-20157	WHITE FOOD GRADE EPDM	
-23	-SZ7295	108-20135	108-20136	SIMRIZ 7295	
-22	-CS5350	208-16041	208-16042	CS5350	
-21	-9703	208-16039	208-16040	PAI 9703	
-20	-CSEP787	208-16037	208-16038	CS EP787	
-19	-CS4273	208-16031	208-16032	CS 4273	
-18	-VF	208-16028	208-16029	VITON® F	
-17	-BU	208-9672	208-9673	BUTYL RUBBER	
-16	-BNWFG	208-16055	208-16056	WHITE FOOD GRADE BUNA-N	
-15	-BSP	208-16058	208-16059	FOOD GRADE BUNA-N	
-14	-VB-C	208-16051	208-16050	DUPONT CERTIFIED VITON® B	
-13	-KZ6375	208-7301	208-7302	KALREZ 6375	
-12	-CZ505	308-9857	308-7318	CHEMRAZ 505	
-11	-VB	208-19992	208-19993	VITON® B	17387-45
-10	-VETP	208-16008	208-16012	VITON® BESTREME TIP	17387-44
-09	-VGF5	208-16007	208-16011	VITON® GF-S	17387-43
-08	-CS5355	208-16006	208-16010	CS5355	17387-46
-07	-CS4273B	208-16005	208-16009	CS4273B	17387-48
-06	-VGF LT	208-19989	208-19990	VITON® GFLT	17387-45
-05	-NE	308-7333	308-7334	NEOPRENE BLACK	17387-44
-04	-EP	208-7323	208-7328	EPDM - PC	17387-38
-03	-BN	208-7324	208-7329	BUNA 'N'	17387-31
-02	-NEW	208-7322	208-7327	FOOD GRADE NEOPRENE	17387-35
-01	-VA	208-7321	208-7326	VITON® 'A'	17387-25

DRAWING NO. 92534

NOTES:
1. ASSEMBLE AND TEST PER ES 41-68.

CROSS REFERENCE:
FOR CARBON STEEL VALVE S/A SEE DRAWING No. 92420

1	26 OCT 2017	DRG	LATEST REVISION
JRB	N/A	JRB	

REVISION	A
DATE	8/1/99
DRAWN	WTC
CHECKED	PA
DATE	N/A
PROJECT	PA

LINE	SYM #5 PART NO.	SYM #6 PART NO.	SYM #5&6 MATERIAL	SYM #1 PART NO.
1	26041-01			
2	15910-01			
3	10152-01			
4	10151-01			
5	SEE TABLE			
6	SEE TABLE			
7	26049-01			
8	208-7331			
9	503166-03			
10	26044-01			
11	304-8745			
12	24178-03			
13	09604-01			
14	304-8639			
15	304-7091			
16	304-7055			
17	17387-46			
18	305-8425			

ORIG. L-01 THRU L-05:	JULY 2002
SYM. #5 DESCRIPTION WAS	EP
SYM. #6 DESCRIPTION WAS	CC
SYM. #5&6 MATERIAL WAS	CC
SYM. #1 PART NO. WAS	CC
44833-07, ADDED DESCRIPTION.	
L-01, SYM. #5 PART NO. WAS	CC
44206-20, SYM. #6 PART NO.	
44833-07, SYM. #5 PART NO.	
44206-20, SYM. #6 PART NO.	
L-02 SUPERCEDED WITH L-05.	
44833-20, SYM. #6 PART NO.	
44833-99, PART NO. WAS	
44835-07, SYM. #5 PART NO.	
44835-05, MATERIAL	
44835-06, MATERIAL	
L-05, SYM. #5 PART NO. WAS	
44206-20, SYM. #6 PART NO.	
44835-07, SYM. #5 PART NO.	
44835-05, MATERIAL	
44835-06, MATERIAL	
L-05, SYM. #5 PART NO. WAS	
44206-20, SYM. #6 PART NO.	
44835-07, SYM. #5 PART NO.	
44835-05, MATERIAL	
44835-06, MATERIAL	

02 JUN 2008	JUN
02 JUL 2008	JUL
02 AUG 2008	AUG
02 SEP 2008	SEP
02 OCT 2008	OCT
02 NOV 2008	NOV
02 DEC 2008	DEC
01 JAN 2009	JAN
01 FEB 2009	FEB
01 MAR 2009	MAR
01 APR 2009	APR
01 MAY 2009	MAY
01 JUN 2009	JUN
01 JUL 2009	JUL
01 AUG 2009	AUG
01 SEP 2009	SEP
01 OCT 2009	OCT
01 NOV 2009	NOV
01 DEC 2009	DEC
01 JAN 2010	JAN
01 FEB 2010	FEB
01 MAR 2010	MAR
01 APR 2010	APR
01 MAY 2010	MAY
01 JUN 2010	JUN
01 JUL 2010	JUL
01 AUG 2010	AUG
01 SEP 2010	SEP
01 OCT 2010	OCT
01 NOV 2010	NOV
01 DEC 2010	DEC

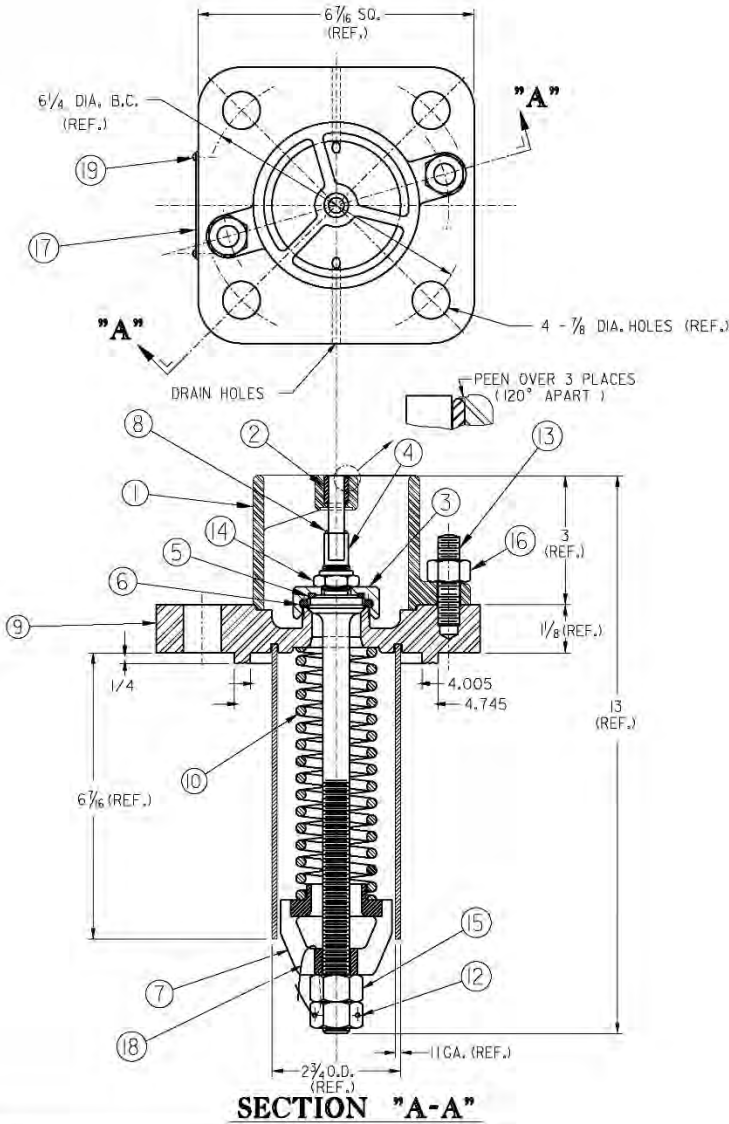
MCKENZIE VALVE & MACHINING LLC
115 AIRPORT RD.
MCKENZIE, TN 38201

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VALVE S/A, 75# SST
SAFETY RELIEF
SRV-1075B-SSSS-F1-ELASTOMER

DRAWN BY	DATE	SCALE	REVISOR	CHECKED
WTC	1/8/99	HALF	WTC	CARL
N/A	N/A	N/A	PCA	
WELDER	N/A	N/A	PRODUCT	

92534



BILL OF MATERIAL					
SYM.	PART NO.	REQ.	DESCRIPTION	MATERIAL	WT. (LBS.)
1	26041-01	1	GUIDE TOP	CAST STAINLESS STL.	4.38
2	15910-01	1	BUSHING	TEFLON (R)	.02
3	101152-01	1	CAP	STAINLESS STEEL	.32
4	101151-01	1	STEM	STAINLESS STEEL	1.14
5	SEE TABLE	1	*O*-RING #2-215	SEE TABLE	~
6	SEE TABLE	1	*O*-RING #2-323	SEE TABLE	~
7	26049-01	1	FOLLOWER, SPRING	CAST STAINLESS STL.	.56
8	208-7331	1	*O*-RING #2-012	BLUNA "N"	~
9	503166-05	1	SAFETY VALVE FLANGE S/A	ASSIGN CERN	13
10	26044-01	1	SPRING	STAINLESS STEEL	1.09
11					
12	24178-03	1	NUT, HVY. HEX., 5/8-11 UNC - 2B S.F. W/HOLES	ASTM A994 OR. CP	.12
13	09604-01	2	STUD, 1/2-13 UNC - 2A X 2 1/8 LG.	STAINLESS STEEL	.2
14	304-8597	1	NUT, LOCK 5/8 HEX. HD., ESNA #52-NTE-108 OR EQUAL	STAINLESS STEEL	.08
15	304-7091	1	NUT, HVY. HEX., 5/8-11 UNC-2B S.F.	ASTM A994 OR. CP	.12
16	304-7055	2	NUT, HVY. HEX., 1/2-13 UNC - 2B S.F.	STAINLESS STEEL	.14
17	17387-46	1	IDENTIFICATION PLATE	STAINLESS STEEL	~
18	305-8425	1	SEAL WIRE & DISC	STAINLESS STEEL LEAD	~
19	304-8745	2	SIZE #2 RD. HD. DRIVE SCREW, TYPE U, 1/4 LG.	STAINLESS STEEL	.02
20					

FLOW RATE = 1212 SCFM @ 85 PSIG

25	208-0776	208-0777	CS 4560
24	108-20156	108-20157	WHITE FOOD GRADE EPDM
23	108-20135	108-20136	SIMRIZ 7295
22	208-16041	208-16042	CS 5350
21	208-16039	208-16040	PAI 9703
20	208-16037	208-16038	CS EP787
19	208-16031	208-16032	CS 4273
18	208-16028	208-16029	VITON® F
17	208-9672	208-9673	BUTYL RUBBER
16	208-16055	208-16056	WHITE FOOD GRADE BLUNA-N
15	208-16053	208-16054	FOOD GRADE BLUNA-N
14	208-16051	208-16050	DUPONT CERTIFIED VITON® R
13	208-7301	208-7302	KALREZ 6375
12	308-9857	308-7318	CHEMRAZ 505
11	208-19992	208-19993	VITON® B
10	208-16008	208-16012	VITON® EXTREME FTS
9	208-16007	208-16011	VITON® GF-S
8	208-16006	208-16010	CS5355
7	208-16005	208-16009	CS4273B
6	208-19989	208-19990	VITON® GFLT
5	308-7333	308-7334	NEOPRENE BLACK
4	208-7323	208-7328	EPDM - PC
3	208-7324	208-7329	BLUNA "N"
2	208-7322	208-7327	FOOD GRADE NEOPRENE
1	208-7321	208-7326	VITON® "A"

DRAWING NO. 508491

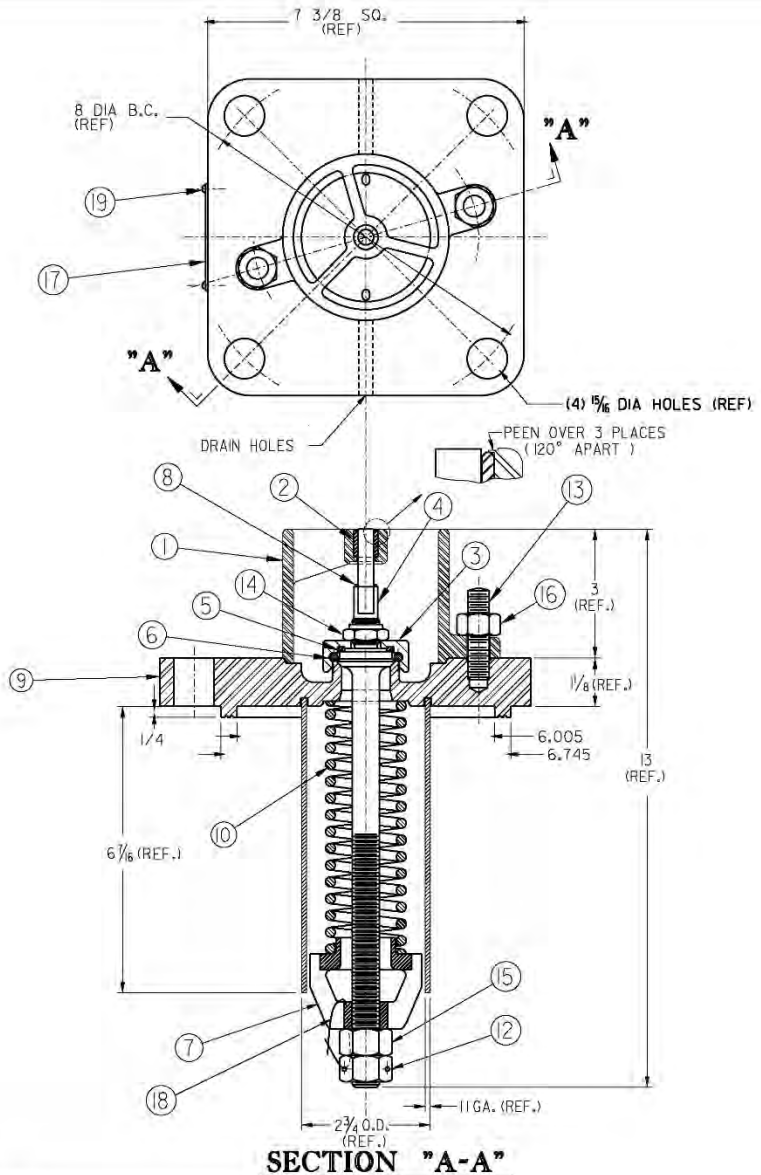
NOTES:
1. ASSEMBLE AND TEST PER ES 4I-68.

CROSS REFERENCE:
FOR FLAT FACE, SEE 92534
FOR LARGE TONGUE, SEE 508493
FOR CARBON STEEL VALVE, SEE 508490

REVISION	A
DATE	26 AUG 2010
DRAWN	DP
ECO NO.	GENL 03-01
CHECKED	DHP
MFG ENG'G	N/A
PRODUCT ENG'G	DHP

DEFAULT TOLERANCES - S/A DRAWING
ALL DIMENSIONS ARE UNLESS OTHERWISE NOTED
FRACTIONAL DIMENSIONS: ± 1/16
ANGULAR DIMENSIONS: ± 1°

UTLX UNION TANK CAR COMPANY 101 BY 8 BARRETT AVE EAST CAROL, INDIANAPOLIS, IN 46219			
THE TANK CAR PEOPLE		LATEST DESIGN	
THIS PRINT & ALL INFORMATION SET FORTH HEREON, IS THE PROPERTY OF UNION TANK CAR COMPANY & IS LOANED IN CONFIDENCE SUBJECT TO RETURN UPON REQUEST & WITH THE UNDERSTANDING THAT NO COPIES SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF UNION TANK CAR COMPANY. ALL RIGHTS TO DESIGN & INVENTION ARE RESERVED.			
VALVE S/A SAFETY RELIEF 75", SST			
DRAWN BY	DATE	SCALE	WEIGHT
DP	08/25/10	HALF	21.3"
N/A	N/A	DHP	508491
ENGINEERING APPROVALS		DRAWING NO.	



BILL OF MATERIAL					
SYM.	PART NO.	REQ.	DESCRIPTION	MATERIAL	WT. (LBS.)
1	26041-01	1	GUIDE TOP	CAST STAINLESS STL.	4.38
2	15910-01	1	BUSHING	TEFLON (R)	.02
3	101152-01	1	CAP	STAINLESS STEEL	.32
4	101151-01	1	STEM	STAINLESS STEEL	1.14
5	SEE TABLE	1	*O*-RING #2-215	SEE TABLE	~
6	SEE TABLE	1	*O*-RING #2-323	SEE TABLE	~
7	26049-01	1	FOLLOWER, SPRING	CAST STAINLESS STL.	.56
8	208-7331	1	*O*-RING #2-012	BUNA 'N'	~
9	503166-07	1	SAFETY VALVE FLANGE S/A	A351 GR CF8M	.19
10	26044-01	1	SPRING	STAINLESS STEEL	1.09
11					
12	24178-03	1	NUT, HVY. HEX, 5/8-11UNC - 2B S.F. W/HOLES	ASTM A994 OR EQ.	.12
13	09604-01	2	STUD, 1/2-13 UNC - 2A X 2 1/8 LG.	STAINLESS STEEL	.2
14	304-8597	1	NUT, LOCK 5/8 HEX. HD., ESNA #52- NTE-108 DR EQUAL	STEEL (CAD. PLATED)	.08
15	304-7091	1	NUT, HVY. HEX., 5/8-11 UNC-2B S.F.	ASTM A194 OR EQ.	.12
16	304-7055	2	NUT, HVY. HEX, 1/2-13 UNC - 2B S.F.	STAINLESS STEEL	.14
17	17387-46	1	IDENTIFICATION PLATE	STAINLESS STEEL	~
18	305-8425	1	SEAL WIRE & DISC	STAINLESS STEEL & TAD	~
19	304-8745	2	SIZE #2 RD. HD. DRIVE SCREW, TYPE U, 1/4 LG.	STAINLESS STEEL	.02
20					

25	208-0776	208-0777	CS 4560
24	108-20156	108-20157	WHITE FOOD GRADE EPDM
23	108-20135	108-20136	SIMRIZ 7295
22	208-16041	208-16042	CS 5350
21	208-16039	208-16040	PA19703
20	208-16037	208-16038	CS EP787
19	208-16031	208-16032	CS 4273
18	208-16028	208-16029	VITON® F
17	208-9672	208-9673	BUTYL RUBBER
16	208-16055	208-16056	WHITE FOOD GRADE BUNA-N
15	208-16053	208-16054	FOOD GRADE BUNA-N
14	208-16051	208-16050	DUPONT CERTIFIED VITON® B
13	208-7301	208-7302	KALREZ 6375
12	308-9857	308-7318	CHEMRAZ 505
11	208-19992	208-19993	VITON® B
10	208-16008	208-16012	VITON® EXTREME
9	208-16007	208-16011	VITON® GF-S
8	208-16006	208-16010	CS5355
7	208-16005	208-16009	CS4273B
6	208-19989	208-19990	VITON® GFLT
5	308-7333	308-7334	NEOPRENE BLACK
4	208-7323	208-7328	EPDM - PC
3	208-7324	208-7329	BUNA 'N'
2	208-7322	208-7327	FOOD GRADE NEOPRENE
1	208-7321	208-7326	VITON® 'A'

DRAWING NO. 508493

NOTES:
1. ASSEMBLE AND TEST PER ES 41-68.

CROSS REFERENCE:
FOR FLAT FACE, SEE 92534
FOR SMALL TONGUE, SEE 508491
FOR CARBON STEEL VALVE, SEE 508492

REVISION	A	ORIGINAL ISSUE
DATE	26 AUG 2010	
DRAWN	DP	
ECO NO.	GEN. 03-01	
CHECKED	DHP	
MFG. ENG'G	N/A	
PROJECT ENG'G	DHP	

DEFAULT TOLERANCES - S/A DRAWING
ALL DIMENSIONS ARE UNLESS OTHERWISE NOTED
FRACTIONAL DIMENSIONS: ± 1/16
ANGULAR DIMENSIONS: ± 1°

UTLX UNION TANK CAR COMPANY
1912 S. BROADWAY
EAST CHICAGO, ILLINOIS 60640
LATEST REVISION

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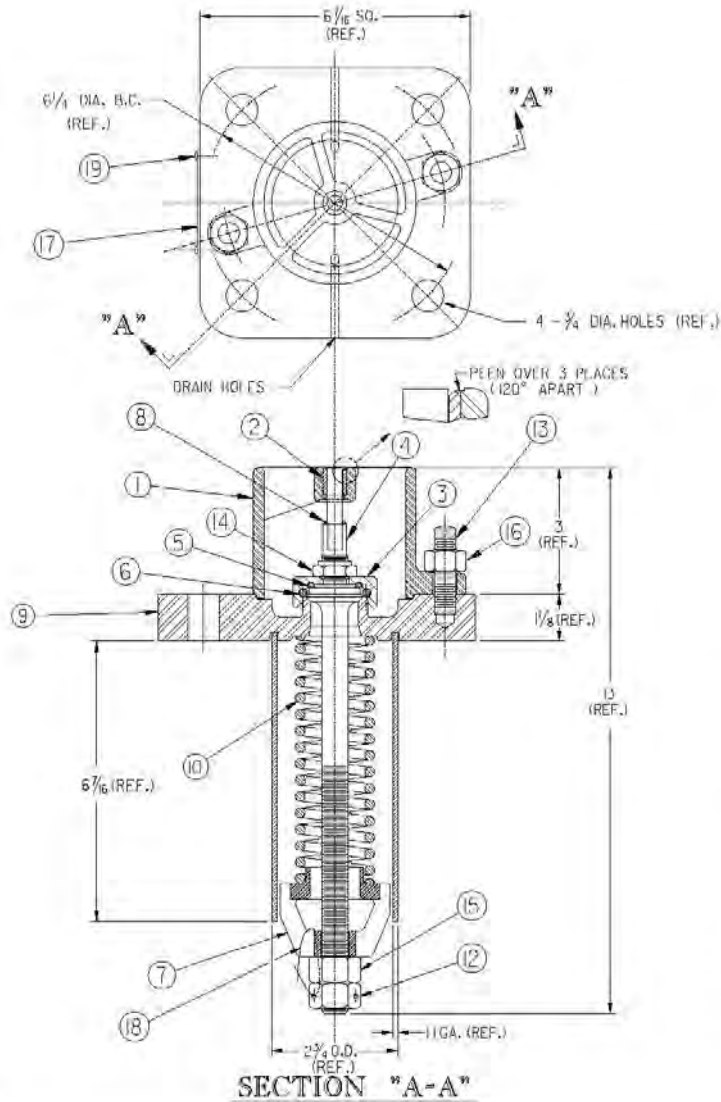
VALVE S/A
SAFETY RELIEF
75#, SST, LARGE TONGUE

DRAWN BY	DATE	SCALE	WEIGHT	CHECKED
DP	8/26/10	HALF	27.3#	DHP

N/A WELDING N/A MFG. DHP PRODUCT

ENGINEERING APPROVALS

508493
DRAWING NO.



BIL. OF MATERIAL					
SYM.	PART NO.	REQ.	DESCRIPTION	MATERIAL	WT. (LBS.)
1	26041-01	1	GUIDE TOP	CAST STAINLESS STL.	4.38
2	15910-01	1	BUSHING	TEFLON (R)	.02
3	10152-01	1	CAP	STAINLESS STEEL	.32
4	10151-01	1	STEM	STAINLESS STEEL	.14
5	SEE TABLE	1	O-RING #2-215	SEE TABLE	--
6	SEE TABLE	1	O-RING #2-323	SEE TABLE	--
7	26049-01	1	FOLLOWER, SPRING	CAST STAINLESS STL.	.56
8	208-7331	1	O-RING #2-012	BLUNA "N"	--
9	503166-09	1	SAFETY VALVE FLANGE S/A	ASSY FOR STEEL	.13
10	26044-01	1	SPRING	STAINLESS STEEL	1.09
11					
12	24178-03	1	NUT, HVY. HEX. 3/8-11UNC - 2B S.F. W/HOLES	304 SS	.12
13	09604-01	2	STUD, 1/2-13 UNC - 2A X 2 1/8 LG.	STAINLESS STEEL	.2
14	304-8597	1	NUT, LOCK 3/8 HEX. HD. ISNA #52 - NIT-10B OR EQUAL	STEEL CAP PLATED	.08
15	304-7091	1	NUT, HVY. HEX. 3/8-11 UNC-2B S.F.	304 SS	.12
16	304-7055	2	NUT, HVY. HEX. 1/2-13 UNC - 2B S.F.	STAINLESS STEEL	.14
17	17387-46	1	IDENTIFICATION PLATE	STAINLESS STEEL	--
18	305-8425	1	SEAL WIRE & DISC	STAINLESS STEEL & LEAD	--
19	304-8745	2	SIZE #2 RD. HD. DRIVE SCREW, TYPE U. 1/4 LG.	STAINLESS STEEL	.02
20					

FLOW RATE = 1212 SCFM @ 85 PSIG

DRAWING NO. 508553

19	208-16031	208-16032	CS 4273
18	208-16028	208-16029	VITON® F
17	208-9672	208-9673	BUTYL RUBBER
16	208-16055	208-16056	WHITE FOOD GRADE BUNA-N
15	208-16053	208-16054	FOOD GRADE BUNA-N
14	208-16051	208-16050	DUPONT IDENTIFIED VITON® B
13	208-7301	208-7302	KALREZ 2 G375
12	308-9857	308-7318	CHEMRAZ 505
11	208-19992	208-19993	VITON® B
10	208-16008	208-16012	VITON® EXTREME GIP
9	208-16007	208-16011	VITON® GF-S
8	208-16006	208-16010	CS5355
7	208-16005	208-16009	CS4273B
6	208-19989	208-19990	VITON® GFLT
5	308-7333	308-7334	NEOPRENE BLACK
4	208-7323	208-7328	EPDM - PC
3	208-7324	208-7329	BLUNA "N"
2	208-7322	208-7327	FOOD GRADE NEOPRENE
1	208-7321	208-7326	VITON® "A"

NOTES:

1. ASSEMBLE AND TEST PER ES #1-66.

CROSS REFERENCE:

FOR FLAT FACE, 7/8 HOLES, SEE 92534
 FOR SMALL TONGUE, SEE 508490
 FOR LARGE TONGUE, SEE 508492
 FOR CARBON STEEL VALVE, SEE 508554

REVISION	A
DATE	02 FEB 2018
DRAWN	DP
ECO NO.	05AL 03-01
ORDERED	DHP
W/D ENGR	N/A
PRODUCT MGR	DHP

ORIGINAL ISSUE

DEFAULT TOLERANCES - 3/4 DRAWING
 ALL DIMENSIONS ARE UNLESS OTHERWISE NOTED
 FUNCTIONAL DIMENSIONS ± .01
 ANGULAR DIMENSIONS ± 1°

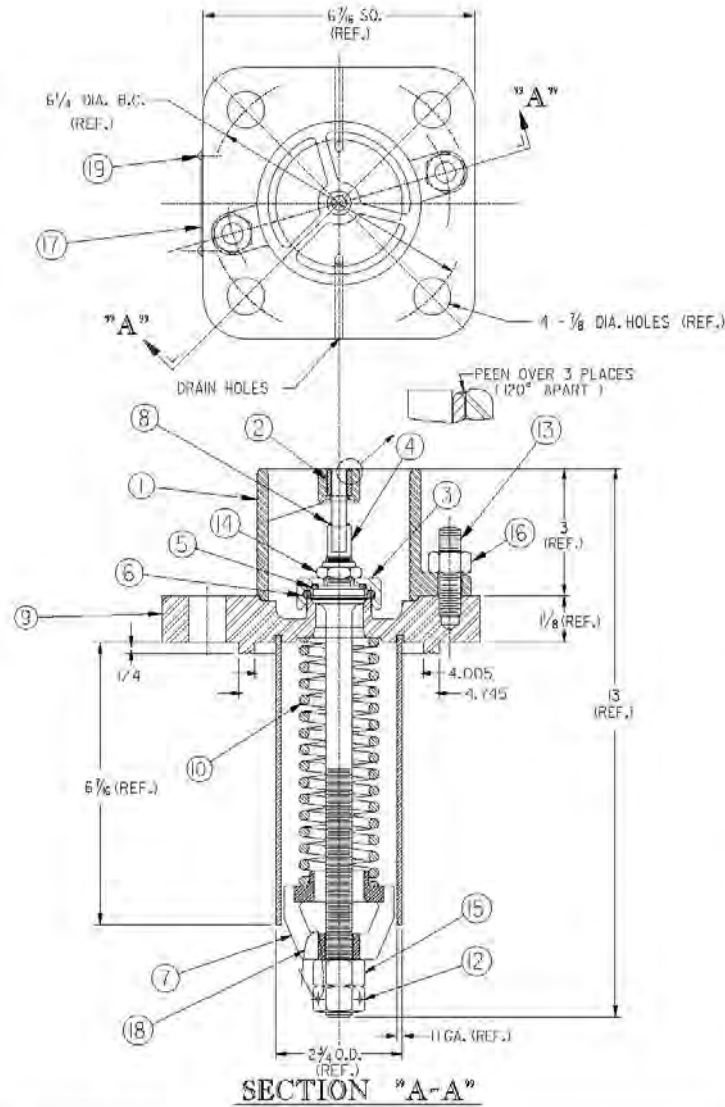
UTLX UNION TANK CAR COMPANY
 815 E. 44TH AVE. DENVER, CO 80218
 THE TANK CAR PEOPLE LATEST REVISION

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VALVE S/A SAFETY RELIEF
 75", 55", 11", 3/4 HOLES

DRAWN BY	DATE	SCALE	WEIGHT	ORDERED
DP	02/25/10	HALF	21.3"	DHP
N/A	N/A	N/A	DHP	PRODUCT

508553
 DRAWING NO.



BILL OF MATERIAL					
SYM.	PART NO.	REQ.	DESCRIPTION	MATERIAL	WT. (LBS.)
1	15909-01	1	GUIDE TOP	CAST STEEL	4.38
2	15910-01	1	BUSHING	TEFLON (R)	.02
3	101148-01	1	CAP	STEEL	.31
4	101151-01	1	STEM	STAINLESS STEEL	1.14
5	SEE TABLE	1	"O"-RING #2-215	SEE TABLE	~
6	SEE TABLE	1	"O"-RING #2-323	SEE TABLE	~
7	15966-01	1	FOLLOWER, SPRING	STEEL	.56
8	208-7331	1	"O"-RING #2-012	BUNA "N"	~
9	503166-06	1	SAFETY VALVE FLANGE S/A	STEEL	.13
10	26044-01	1	SPRING	STAINLESS STEEL	1
11					
12	24178-03	1	NUT, HVY. HEX. 5/8-11 UNC - 2B S.F. W/HOLES	ASTM A194 GR. 8	.12
13	101214-01	2	STUD, 1/2-13 UNC - 2A X 2 LG.	STEEL	.2
14	304-8597	1	NUT, LOCK 5/8 ESNA #52 NTE-10B OR EQUAL	STEEL	.04
15	304-7091	1	NUT, HVY. HEX. 5/8-11 UNC-2B S.F.	ASTM A194 GR. 8	.12
16	304-7030	2	NUT, HVY. HEX. 1/2-13 UNC - 2B S.F.	STEEL	.14
17	17387-45	1	IDENTIFICATION PLATE	STAINLESS STEEL	~
18	305-8425	1	SEAL WIRE & DISC	STAINLESS STEEL & LEAD	~
19	304-8745	2	SIZE #2 RD. HD. DRIVE SCREW, TYPE U, 1/4 LG.	STAINLESS STEEL	.02
20					

FLOW RATE = 1212 SCFM @ 85 PSIG

DRAWING NO.
509719

19	208-16031	208-16032	CS 4273
18	208-16028	208-16029	VITON® F
17	208-9672	208-9673	BUTYL RUBBER
16	208-16055	208-16056	WHITE FOOD GRADE BUNA-N
15	208-16053	208-16054	FOOD GRADE BUNA-N
14	208-16051	208-16050	DIPONT CERTIFIED VITON® N
13	208-7301	208-7302	KALREZ 6375
12	308-9857	308-7318	CHEMRAZ 505
11	208-19992	208-19993	VITON® B
10	208-16008	208-16012	VITON® EXTREME FIB
9	208-16007	208-16011	VITON® GF-S
8	208-16006	208-16010	CS5355
7	208-16005	208-16009	CS4273B
6	208-19989	208-19990	VITON® GFLT
5	308-7323	308-7324	NEOPRENE BLACK
4	208-7323	208-732B	EPDM - PC
3	208-7324	208-7329	BUNA "N"
2	208-7322	208-7327	1000 GRADE NEDRHL
1	208-7321	208-7326	VITON® "A"

NOTES:

1. ASSEMBLE AND TEST PER ES 41-58.
2. SPRING MATERIAL IS NOT SUITABLE FOR AMMONIA SERVICE.

REVISION	A	INITIALS	DATE
DRAWN	DP		
CHECKED	DHP		
APPROVED	N/A		
PRODUCT ENG'G	DHP		

ORIGINAL ISSUE.

DEFAULT TOLERANCES: S/A DRAWING
ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED
FRACTIONAL TO NEAREST 1/32"
UNLESS OTHERWISE SPECIFIED

UTLX UNION TANK CAR COMPANY
BY IT & SUCCESSORS
CART, TANK, TRAILER, HOSE
LATEST DESIGN

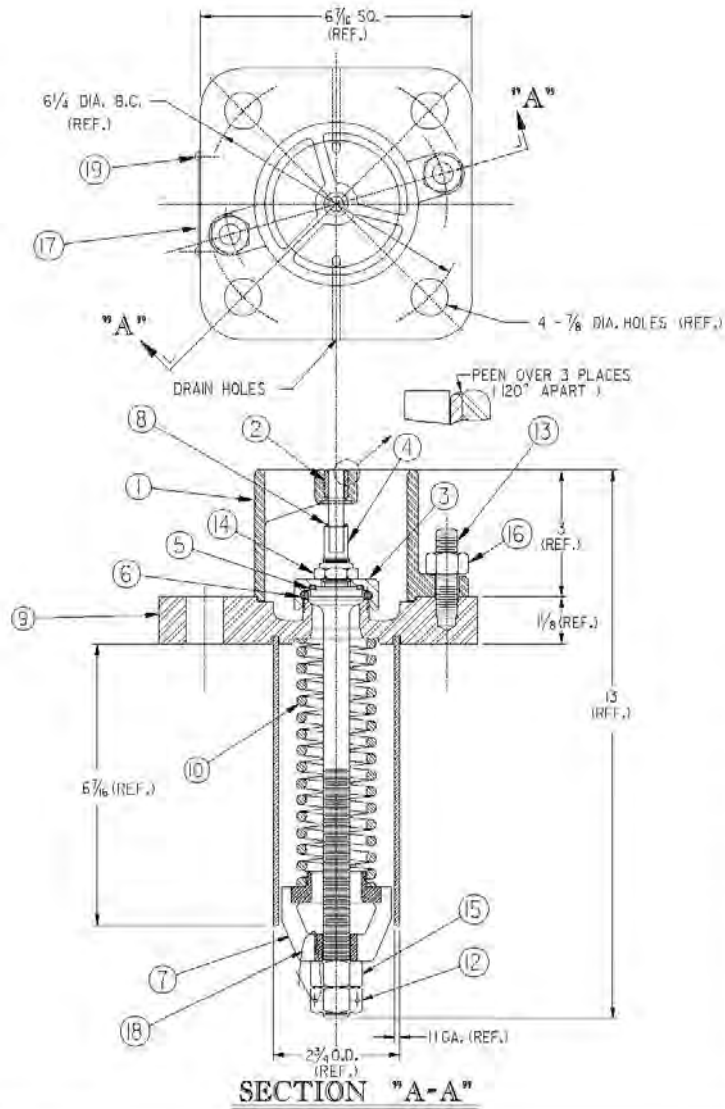
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VALVE S/A
SAFETY RELIEF
75", CS W/ 55 SPRING

DESIGN BY	DATE	SHEET	WEIGHT	CHECKED
DP	04/7/12	HALF	21.3#	DHP
N/A	N/A	DHP		
N/A	N/A	PRODUCT		

QUANTITY APPROVALS
DRAWING NO. 509719

DRAWING NO. 509719



BILL OF MATERIAL					
SYM.	PART NO.	REQ.	DESCRIPTION	MATERIAL	WT. (LBS.)
1	15905-01	1	GLIDE TOP	304 ST. STEEL	4.38
2	15910-01	1	BUSHING	TEFLON (R)	.02
3	10148-01	1	CAP	STEEL	.31
4	10151-01	1	STEM	STAINLESS STEEL	1.14
5	SEE TABLE	1	*O-RING #2-215	SEE TABLE	--
6	SEE TABLE	1	*O-RING #2-323	SEE TABLE	--
7	15966-01	1	FOLLOWER, SPRING	STEEL	.56
8	208-7331	1	*O-RING #2-012	BUNA 'N'	--
9	503166-04	1	SAFETY VALVE FLANGE S/A	STEEL	12.7
10	26044-01	1	SPRING	STAINLESS STEEL	1
11					
12	24178-03	1	NUT, HVY. HEX. 5/8-11 UNC - 2B S.F. W/HOLES	ASTM A194 CP. 8F	.12
13	10124-01	2	STUD, 1/2-13 UNC - 2A X 2 LG.	STEEL	.2
14	304-8597	1	NUT, LOCK 5/8 ESNA #52 NTF-108 OR EQUAL	STEEL	.04
15	304-7031	1	NUT, HVY. HEX. 5/8-11 UNC-2B S.F.	ASTM A194 CP. 8F	.12
16	304-7030	2	NUT, HVY. HEX. 1/2-13 UNC - 2B S.F.	STEEL	.14
17	17387-45	1	IDENTIFICATION PLATE	STAINLESS STEEL	--
18	305-8425	1	SEAL WIRE & DISC	STAINLESS STEEL & LEAD	--
19	304-8745	2	SIZE #2 RD. HD. DRIVE SCREW, TYPE U, 1/4 LG.	STAINLESS STEEL	.02
20					

FLOW RATE = 1212 SCFM @ 85 PSIG

DRAWING NO. 509725

19	208-16031	208-16032	CS 4273
18	208-16028	208-16029	VITON® F
17	208-9672	208-9673	BUTYL RUBBER
16	208-16055	208-16056	WHITE FOOD GRADE PTFE-11
15	208-16053	208-16054	FOOD GRADE BUNA-N
14	208-16051	208-16050	DUPONT CERTIFIED VITON® B
13	208-7301	208-7302	KALREZ 6375
12	308-9857	308-7318	CHEMRAZ 505
11	208-19992	208-19993	VITON® B
10	208-16008	208-16002	VITON® EXTREME
9	208-16007	208-16011	VITON® GF-S
8	208-16006	208-16010	CS5355
7	208-16005	208-16009	CS4273B
6	208-19989	208-19990	VITON® GFLT
5	308-7333	308-7334	NEOPRENE BLACK
4	208-7323	208-7328	EPDM - PC
3	208-7324	208-7329	BUNA 'N'
2	208-7322	208-7327	FOOD GRADE NEOPRENE
1	208-7321	208-7326	VITON® 'A'

- NOTES:
- ASSEMBLE AND TEST PER ES 41-68.
 - SPRING MATERIAL IS NOT SUITABLE FOR AMMONIA SERVICE.

REVISION	A
DATE	18 JAN 2012
ORIGIN	DHP
APP. NO.	GEN 02-01
DESIGNED	DHP
APP. NO.	N/A
PRODUCT GROUP	10HP

ORIGINAL ISSUE

DEFAULT TOLERANCES: S/A DRAWING
 ALL DIMENSIONS ARE DIMES UNLESS OTHERWISE NOTED
 FUNCTIONAL DIMENSIONS ONLY: ± .5%
 ANGULAR DIMENSIONS: ± 1°

UTLX UNION TANK CAR COMPANY
 BY A MEMBER OF THE UNION TANK CAR GROUP
 LATEST REVISION

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VALVE S/A
 SAFETY RELIEF
 75" CS WITH SST SPRING

DRAWN BY	DATE	SCALE	REVISION	CHECKED
DP	1/19/2012	HALF	210	DHP
M/DWG	N/A	DHP	PERMIT	509725
DRAWING NO.				

FIRST USED WITH: REPRO OF: 92920 SEQUENCE NO. 8213

DRAWING NO. 509725