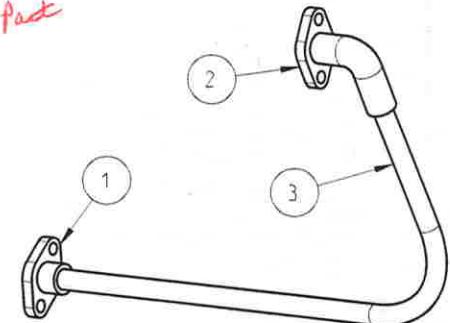
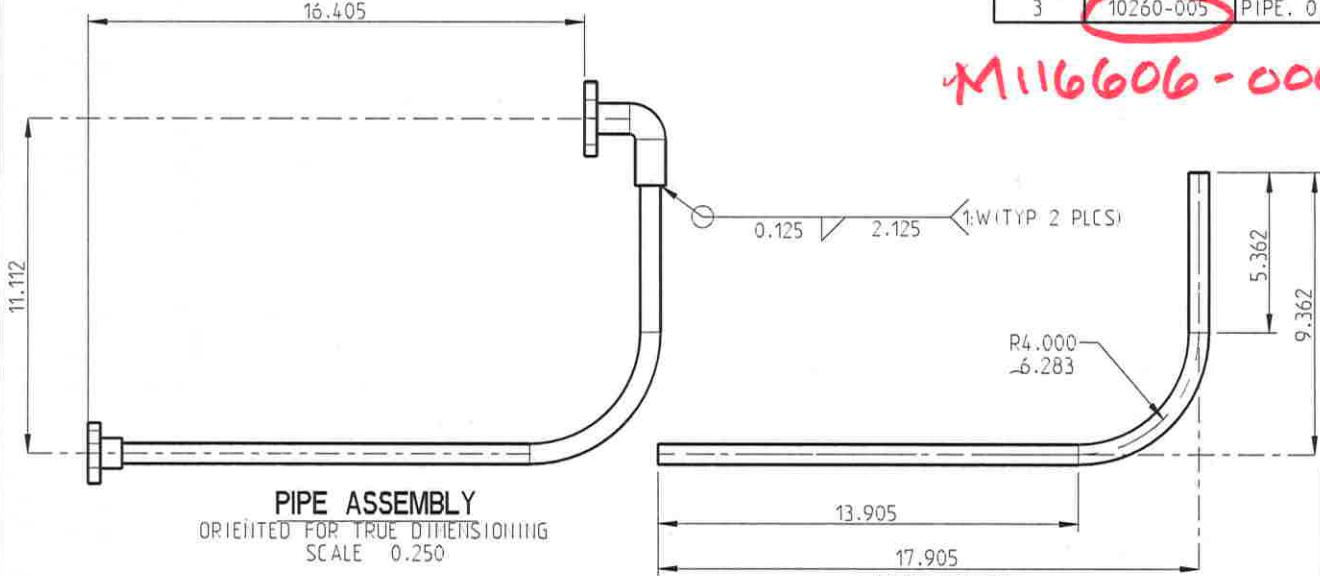


11/20/21
Rev.
done ✓

BILL OF MATERIAL

Item No.	Part No.	Description	Quantity	Unit Length
1	✓10240-070	FITTING, 3/8" STRT SWV FLG SW, GG	1	
2	✓10240-072	FITTING, 3/8" SWV FLG 90 ELBOW SW, GG	1	
3	10260-005	PIPE, 0.375 Ø, EXTRA HEAVY	1	25.550

M116606 - 000 *Circled part*



Level	Date	Approved	Description
REVISIONS			

FreightCar America

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Standard Tolerances (Unless Noted)

Decimal Dimensions ± 0.063	Hole Diameters ± 0.031
Diagonals 0.125 Max. Variation	Angles $\pm 1^\circ$
Radii will be thickness of material	Tolerances are not accumulative

Made By: MIK Date: 12-12-12 Ref Dwg: -
Approved: JW B/WB Do Not Scale Drawing Est. Wt: 2.60 lbs

ASSEMBLY, E/L TO VOLUME RES PIPE

Size	Drawing / Part Number	Rev.
B	A108965-000	-

NOTE:

1. UNLESS OTHERWISE NOTED, WELD LENGTHS SHOWN ARE MINIMUM LENGTHS. WELD TERMINATIONS MUST HAVE A MINIMUM EDGE DISTANCE OF 0.25.
2. ALL WELDING TO BE IN ACCORDANCE WITH RAILROAD WELDING SPECIFICATION AWS D15.1, LATEST REVISION, AND TO BE CLASS 2 UNLESS OTHERWISE SPECIFIED.
3. PIPE DIMENSIONS ARE FOR REFERENCE ONLY, MANUFACTURING TO DETERMINE FINAL ASSEMBLY DIMENSIONS.

Eco CAS600067

A✓

1/22/04
Per.
done

9	8	7	6	5	4	3	2	1																				
BILL OF MATERIAL																												
<table border="1"> <thead> <tr> <th>Item No.</th><th>Part No.</th><th>Description</th><th>Quantity</th><th>Unit Length</th></tr> </thead> <tbody> <tr> <td>1</td><td>✓10240-067</td><td>FITTING, 3/4" STRT SWV FLG SW, GG</td><td>1</td><td></td></tr> <tr> <td>2</td><td>✓10240-068</td><td>FITTING, 3/4" STRT SWV FLG SW</td><td>1</td><td></td></tr> <tr> <td>3</td><td>10260-004</td><td>PIPE, 0.750 Ø, EXTRA HEAVY</td><td>1</td><td>58.327</td></tr> </tbody> </table>									Item No.	Part No.	Description	Quantity	Unit Length	1	✓10240-067	FITTING, 3/4" STRT SWV FLG SW, GG	1		2	✓10240-068	FITTING, 3/4" STRT SWV FLG SW	1		3	10260-004	PIPE, 0.750 Ø, EXTRA HEAVY	1	58.327
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<p>PIPE DETAIL ORIENTED FOR TRUE DIMENSIONING SCALE 0.125</p>																												
<p>REVISIONS</p> <p>FreightCar America</p> <p>THIS DRAWING IS THE EXCLUSIVE PROPERTY OF FREIGHTCAR AMERICA AND CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION. BY ACCEPTING THIS DRAWING, THE RECIPIENT AGREES (A) TO USE THIS DRAWING ONLY FOR THOSE PURPOSES APPROVED IN WRITING BY FREIGHTCAR AMERICA, (B) NOT TO REPRODUCE OR MODIFY THIS DRAWING, IN WHOLE OR IN PART, AND (C) NOT TO DISCLOSE THIS DRAWING TO ANY PERSON OR ENTITY, NOR USE THE DRAWING FOR THE DESIGN OR MANUFACTURE OF ANY ITEM, PART, OBJECT OR APPARATUS THEREOF, EXCEPT UPON THE PRIOR WRITTEN PERMISSION OF FREIGHTCAR AMERICA.</p>																												
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Tolerances are not accumulative																												
<p>Made By: IHK Date: 12-12-12 Ref Dwg: -</p>																												
<p>Approved: JWB <i>JWB</i> Do Not Scale Drawing Est. Wt: 8.71 lbs</p>																												
<p>ASSEMBLY, CNTRL VALVE TO E/L PIPE</p>																												
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Size	Drawing / Part Number	Rev.																										
B	A108966-000	-																										

ECO CAS600067

NOTE:

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3. PIPE DIMENSIONS ARE FOR REFERENCE ONLY, MANUFACTURING TO DETERMINE FINAL ASSEMBLY DIMENSIONS.

A✓

11/20/21
Rev.
done

9	8	7	6	◊	4	3	2	

PIPE ASSEMBLY
ORIENTED FOR TRUE DIMENSIONING
SCALE 0.094

0.125 ✓ 3.313 1:W (TYP 2 PLCS)

70.522

69.272

48.964

R4.500
5.837
(TYP 2 PLCS)

74.3° (TYP)
17.55
8.527

PIPE DETAIL
ORIENTED FOR TRUE DIMENSIONING
SCALE 0.094

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4. PIPING TO BE IN ACCORDANCE WITH AAR SPECIFICATION S-402.

Eco CAS600067

BILL OF MATERIAL			
Item No.	Part No.	Description	Quantity
1	✓ 10240-067	FITTING, 3/4" STRT SWV FLG SW, GG	2
2	10260-004	PIPE, 0.750 Ø, EXTPA HEAVY	1

M 116608-000 *Control part*

1

2

1

A 10-31-17 JAG JAG ADDED NOTE #4 AND UPDATED PIPE TO MEET AAR SPECIFICATION.

Level	Date	Approved	Description
REVISIONS			
FreightCar America			

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Diagonals 0.125 Max. Variation	Angles $\pm 1^\circ$
Radii will be thickness of material	Tolerances are not accumulative

Made By: NHK	Date: 12-12-12	Ref Dwg: -
Approved: JWB	Do Not Scale Drawing	Est. Wt: 11.41 lbs

ASSEMBLY, CNTRL VALVE TO E/L PIPE

Size	Drawing / Part Number	Rev.
B	A108967-000	A

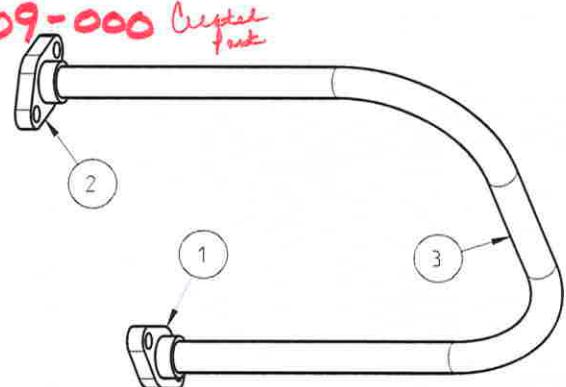
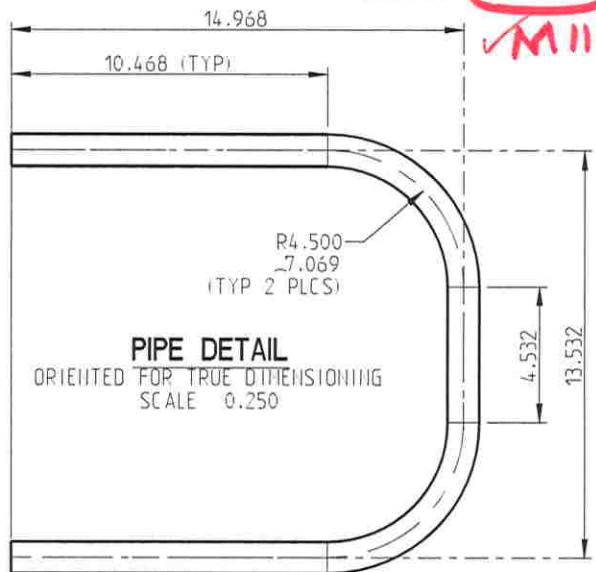
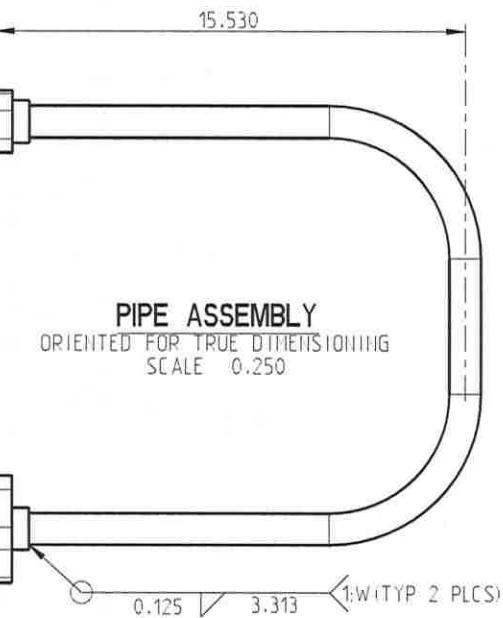
B

11/22/12
Per,
done ✓

9 8 7 6 ◇ 4 3 2 1

BILL OF MATERIAL

Item No.	Part No.	Description	Quantity	Unit Length
1	✓ 10240-067	FITTING, 3/4" STRT SWV FLG SW. GG	1	
2	✓ 10240-068	FITTING, 3/4" STRT SWV FLG SW	1	
3	10260-004	PIPE, 0.750 Ø, EXTRA HEAVY	1	39.604



Level	Date	Approved	Description
REVISIONS			

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Diagonals 0.125 Max. Variation	Angles $\pm 1^\circ$
Radius will be thickness of material	Tolerances are not accumulative

Made By: HHK Date: 12-12-12 Ref Dwg: -
Approved: JW BJB Do Not Scale Drawing Est. Wt: 6.41 lbs

ASSEMBLY, E/L TO CYLINDER PIPE

Size	Drawing / Part Number	Rev.
B	A108968-000	-

NOTE:

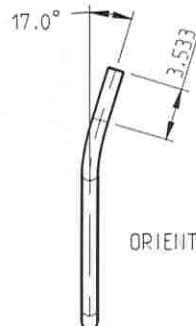
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ECO CAS600067

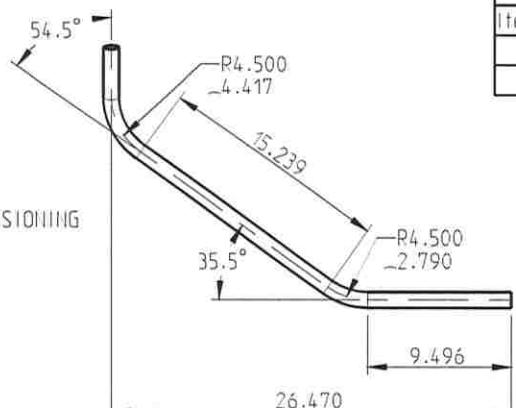
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per.
done

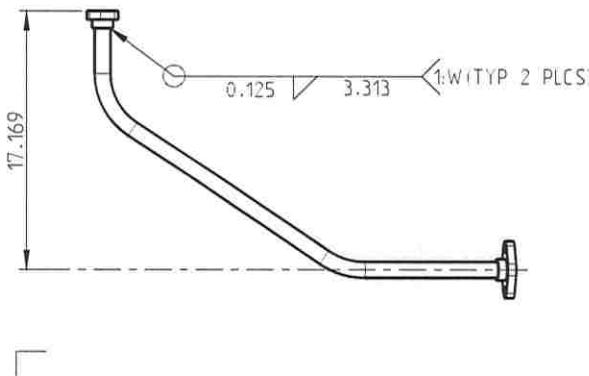
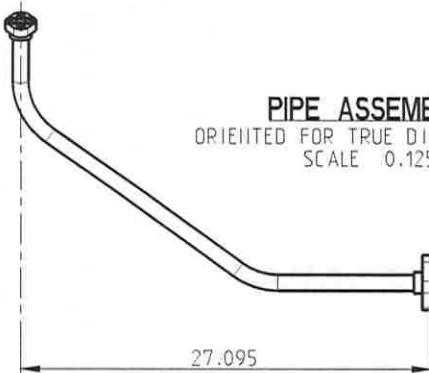
9 8 7 6 ◇ 4 3 2 1



PIPE DETAIL
ORIENTED FOR TRUE DIMENSIONING
SCALE 0.125



PIPE ASSEMBLY
ORIENTED FOR TRUE DIMENSIONING
SCALE 0.125



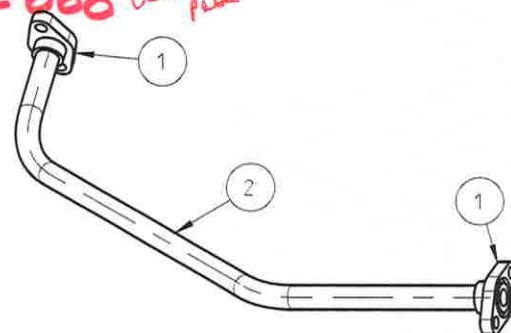
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BILL OF MATERIAL

Item No.	Part No.	Description	Quantity	Unit Length
1	✓ 10240-067	FITTING, 3/4" STRT SWV FLG SW, GG	2	
2	10260-004	PIPE, 0.750 Ø, EXTRU HEAVY	1	35.475

M116610-000 *Welded part*



B 11-01-17 JAG	JAG	ADDED NOTE #4 AND UPDATED PIPE TO MEET AAR SPECIFICATION
A 12-16-15 JAG		UPDATED PIPE ASSEMBLY TO MATCH CYLINDER DIMENSIONS
Level Date Approved		Description
		REVISIONS

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Diagonals 0.125 Max. Variation	Angles $\pm 1^\circ$
Radius will be thickness of material	Tolerances are not accumulative
Made By: NHK	Date: 12-12-12 Ref Dwg: -
Approved: JWB	Do Not Scale Drawing Est. Wt: 5.87 lbs

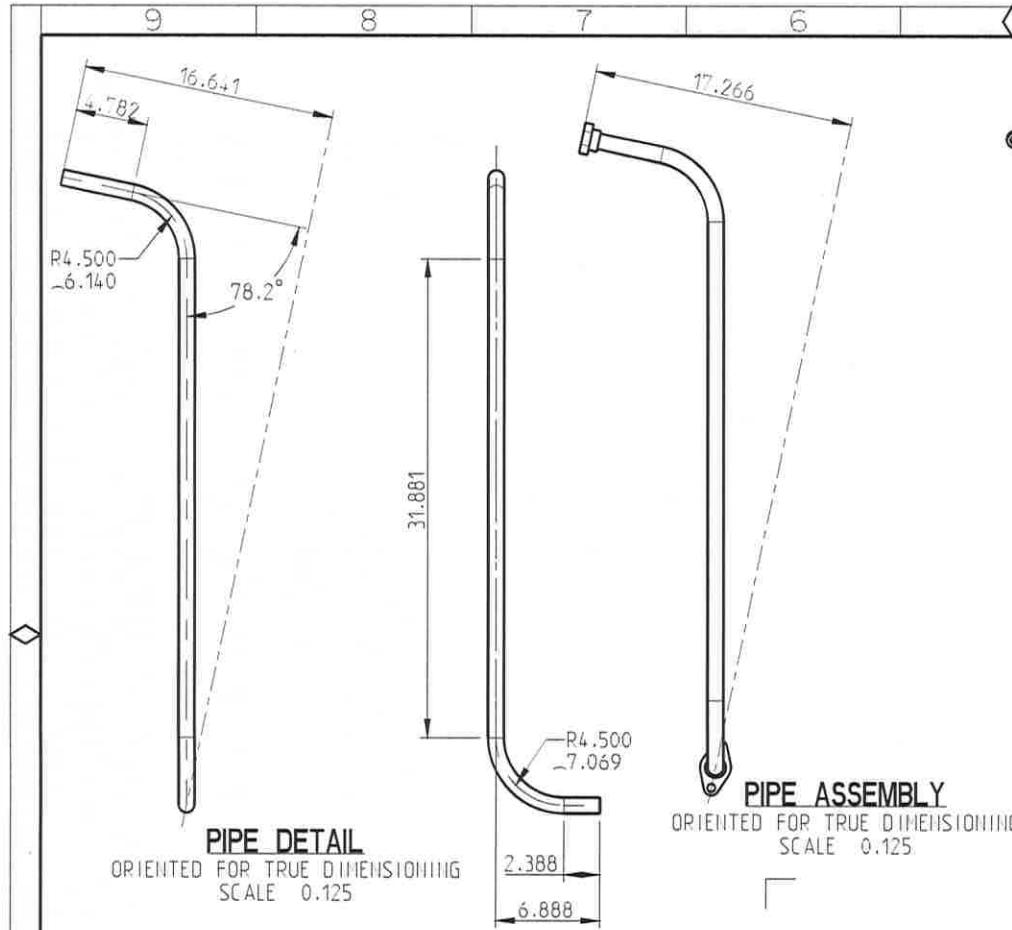
ASSEMBLY, E/L TO CYLINDER PIPE

Size	Drawing / Part Number	Rev.
B	A108969-000	B

C

ECO CAS600067

11/20/21
Rev:
done



NOTE:

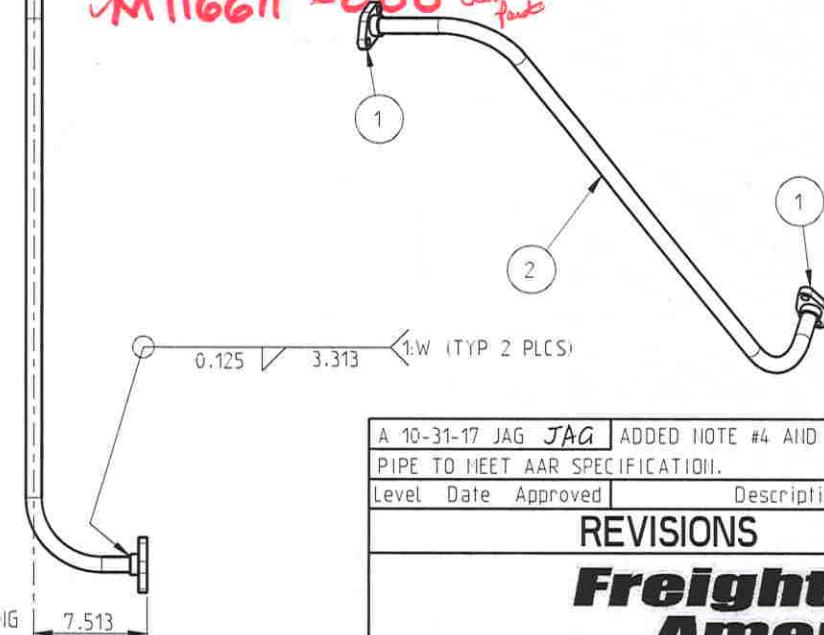
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MANUFACTURING TO DETERMINE FINAL ASSEMBLY DIMENSIONS.
 4. PIPING TO BE IN ACCORDANCE WITH AAR SPECIFICATION S-402.

Eco CAS600067

~~BILL OF MATERIAL~~

Item No.	Part No.	Description	Quantity	Unit Length
1	10240-067	FITTING, 3/4" STRT SWV FLG SW, GG	2	
2	10260-004	PIPE, 0.750 Ø, EXTRA HEAVY	1	52.260

M116611-000 *Centel
fact*



A 10-31-17 JAG JAG ADDED NOTE #4 AND UPDATED PIPE TO MEET AAR SPECIFICATION.

REVISIONS

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Radii will be thickness of material	Tolerances are not accumulative

Made By: MHK Date: 12-12-12 Ref Dwg: -

Approved: JWB Do Not Scale Drawing Est. Wt: 7.92 lbs

ASSEMBLY FLOOR BES TO CNTRL VAL

ASSEMBLY, EMER RES TO CNTRL VALVE

Size B	Drawing / Part Number A108970-000	Rev. A
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Drawing / Part Number
A108970-000

Rev.
A

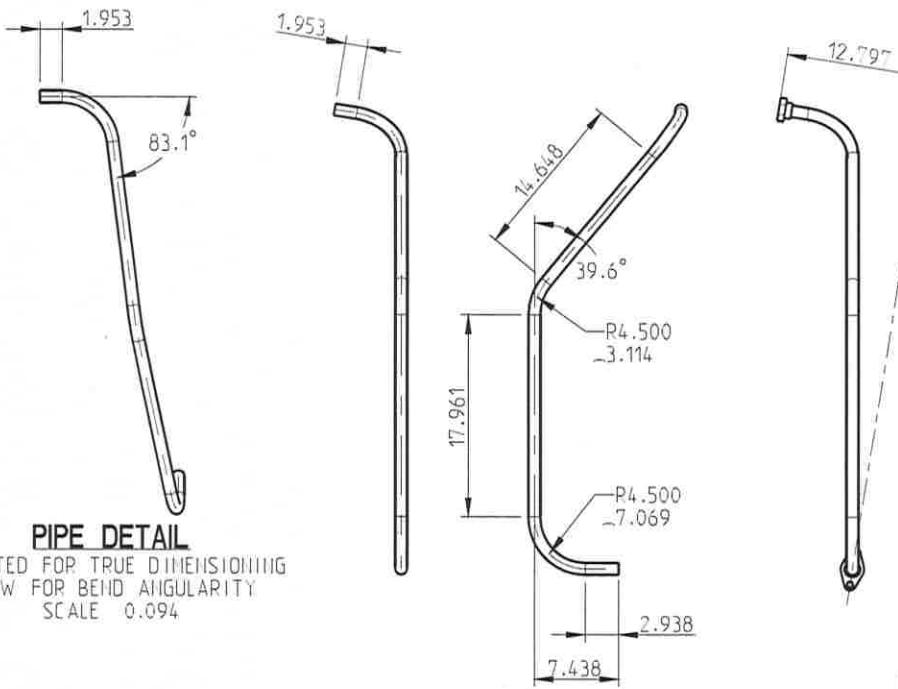
B

11/22/21
Peer ✓
done

BILL OF MATERIAL

Item No.	Part No.	Description	Quantity	Unit Length
1	✓ 10240-067	FITTING, 3/4" STRT SWV FLG SW, GG	2	
2	10260-004	PIPE, 0.750 O. EXTRA HEAVY	1	54.205

M116612-000 Cerset



PIPE DETAIL

ORIENTED FOR TRUE DIMENSIONING
VIEW FOR BEND ANGULARITY
SCALE 0.094

PIPE DETAIL
ORIENTED FOR TRUE DIMENSIONING
SCALE 0.094

PIPE ASSEMBLY
ORIENTED FOR TRUE DIMENSIONING
SCALE 0.094

NOTE:

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MANUFACTURING TO DETERMINE FINAL ASSEMBLY DIMENSIONS.
 4. PIPING TO BE IN ACCORDANCE WITH AAR SPECIFICATION S-402.

ECO CAS600067

A 10-31-17 JAG JAG	ADDED NOTE #4 AND UPDATED PIPE TO MEET AAR SPECIFICATION	
Level	Date Approved	Description

REVISIONS

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America**

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Diagonals 0.125 Max. Variation	Angles $\pm 1^\circ$
Radius will be thickness of material	Tolerances are not accumulative

Made By: MHK Date: 12-12-12 Ref Dwg: -

Approved: JWB Do Not Scale Drawing Est. Wt: 8-16 lbs

ASSEMBLY AUX REF TO CENTER VAL

ASSEMBLY, AUX RES TO CNTRL VAL

**Size Drawing / Part Number
P M2274-000**

B A108971-000

Digitized by srujanika@gmail.com

Digitized by srujanika@gmail.com

2

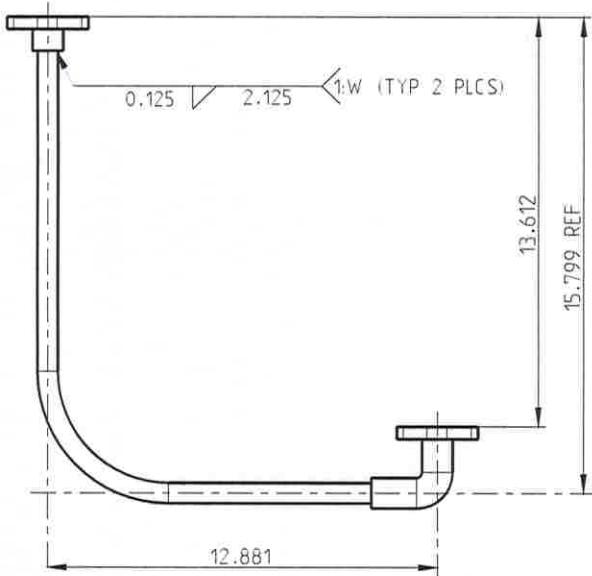
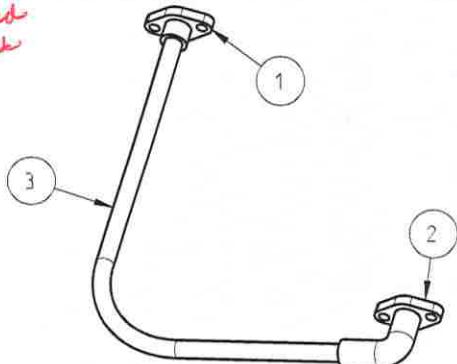
11/22/01
Per
done ✓

9 8 7 6 ◇ 4 3 2 1

BILL OF MATERIAL

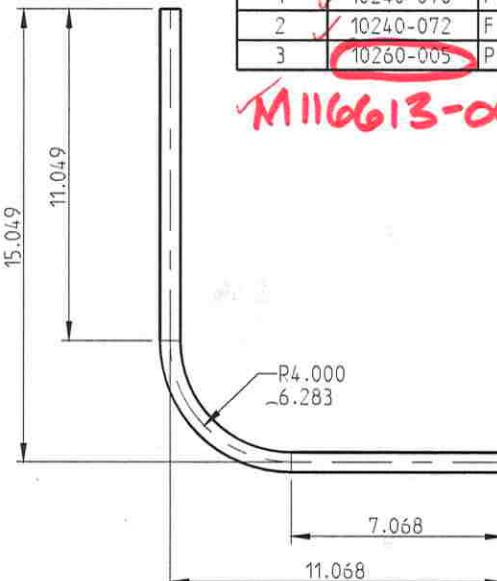
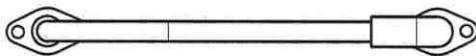
Item No.	Part No.	Description	Quantity	Unit Length
1	✓ 10240-070	FITTING, 3/8" STRT SWV FLG SW, GG	1	
2	✓ 10240-072	FITTING, 3/8" SWV FLG 90 ELBOW SW, GG	1	
3	10260-005	PIPE, 0.375 Ø, EXTRA HEAVY	1	24.400

M116613-000 Created part



PIPE ASSEMBLY

ORIENTED FOR TRUE DIMENSIONING
SCALE 0.250



PIPE DETAIL

ORIENTED FOR TRUE DIMENSIONING
SCALE 0.250

Eco CAS60006?

NOTE:

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4. PIPING TO BE IN ACCORDANCE WITH AAR SPECIFICATION S-402.

A 10-31-17 JAG JAG	ADDED NOTE #4 AND UPDATED PIPE TO MEET AAR SPECIFICATION
Level Date Approved	Description

REVISIONS

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Diagonals 0.125 Max. Variation	Angles $\pm 1^\circ$
Radii will be thickness of material	Tolerances are not accumulative

Made By: MHK Date: 12-12-12 Ref Dwg: -
Approved: JWB Do Not Scale Drawing Est. Wt: 2.54 lbs

ASSEMBLY, CNTRL VALVE TO RET VALVE

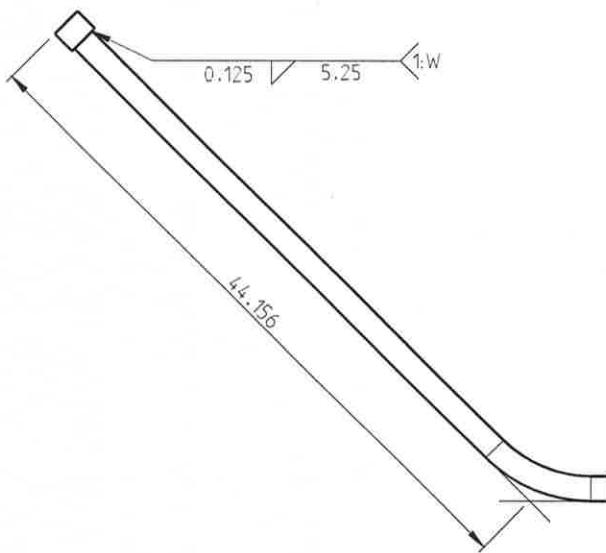
Size	Drawing / Part Number	Rev.
B	A108972-000	A

B✓

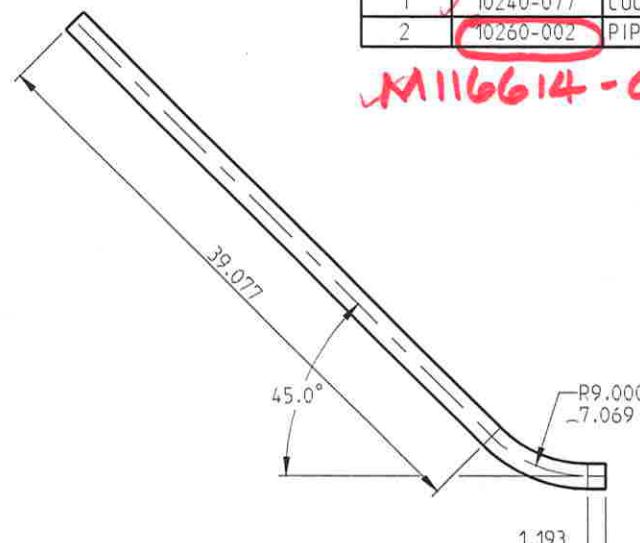
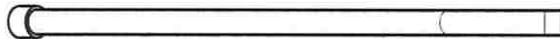
11/22/12

Rev.
done ✓

9 8 7 6 ◇ 4 3 2



PIPE ASSEMBLY
ORIENTED FOR TRUE DIMENSIONING
SCALE 0.125



PIPE DETAIL
ORIENTED FOR TRUE DIMENSIONING
SCALE 0.125

**NOTE:**

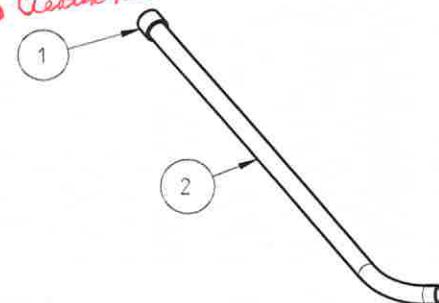
1. UNLESS OTHERWISE NOTED, WELD LENGTHS SHOWN ARE MINIMUM LENGTHS. WELD TERMINATIONS MUST HAVE A MINIMUM EDGE DISTANCE OF 0.25.
2. ALL WELDING TO BE IN ACCORDANCE WITH RAILROAD WELDING SPECIFICATION AWS D15.1, LATEST REVISION, AND TO BE CLASS 2 UNLESS OTHERWISE SPECIFIED.
3. PIPE DIMENSIONS ARE FOR REFERENCE ONLY.
MANUFACTURING TO DETERMINE FINAL ASSEMBLY DIMENSIONS.
4. PIPING TO BE IN ACCORDANCE WITH AAR SPECIFICATION S-402.

Eco GAS600067

BILL OF MATERIAL

Item No.	Part No.	Description	Quantity	Unit Length
1	✓ 10240-077	COUPLING, 1 1/4" SW X SW	1	
2	10260-002	PIPE, 1.250 Ø, EXTRA HEAVY	1	47.339

M116614-000 Created Part



B 11-01-17 JAG JAG ADDED NOTE #4 AND UPDATED PIPE TO MEET AAR SPECIFICATION
A 01-02-13 JWB ECO DAN100146: DIM 1.193 WAS 2.193. UPDATED PIPE LENGTH ACCORDINGLY.
Level Date Approved Description

REVISIONS

FreightCar America

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Standard Tolerances (Unless Noted)

Decimal Dimensions ± 0.063	Hole Diameters ± 0.031
Diagonals 0.125 Max. Variation	Angles $\pm 1^\circ$
Radius will be thickness of material	Tolerances are not accumulative

Made By: NIK	Date: 12-12-12	Ref Dwg: N/A
Approved: JWB	Do Not Scale Drawing	Est. Wt: 12.50 lbs

ASSEMBLY, TRAINLINE PIPE @ B-END

Size	Drawing / Part Number	Rev.
B	A108973-000	B

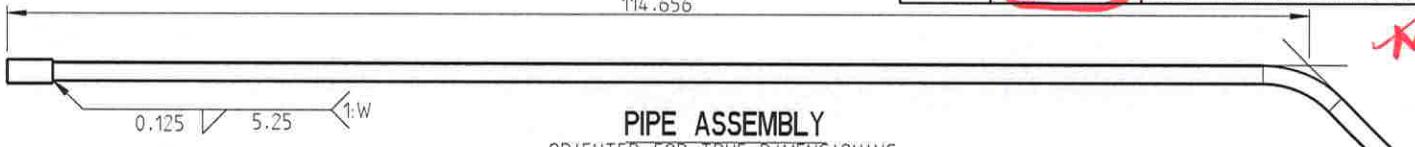
11/28/14
Rev. done ✓

9 8 7 6 ◇ 4 3 2 1

BILL OF MATERIAL

Item No.	Part No.	Description	Quantity	Unit Length
1	✓ 10240-145	COUPLING, 1 1/4" SW X SW DEEP	1	
2	10260-002	PIPE, 1.250 Ø, EXTRA HEAVY	1	124.887

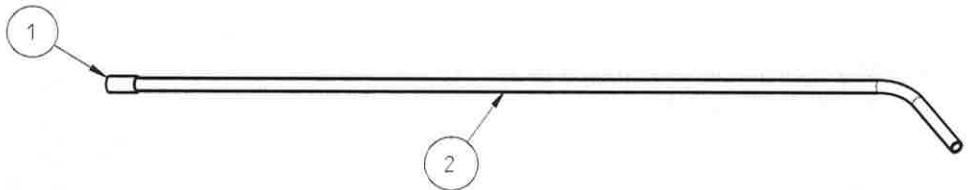
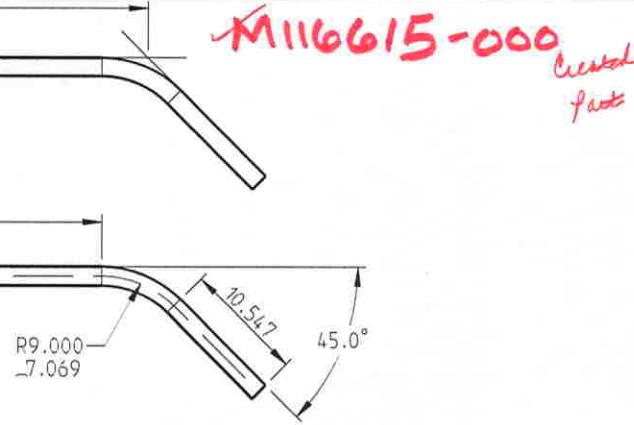
114.656



PIPE ASSEMBLY
ORIENTED FOR TRUE DIMENSIONING
SCALE 0.094

107.272

PIPE DETAIL
ORIENTED FOR TRUE DIMENSIONING
SCALE 0.094



Eco CAS600067

NOTE:

1. UNLESS OTHERWISE NOTED, WELD LENGTHS SHOWN ARE MINIMUM LENGTHS. WELD TERMINATIONS MUST HAVE A MINIMUM EDGE DISTANCE OF 0.25.
2. ALL WELDING TO BE IN ACCORDANCE WITH RAILROAD WELDING SPECIFICATION AWS D15.1, LATEST REVISION, AND TO BE CLASS 2 UNLESS OTHERWISE SPECIFIED.
3. PIPE DIMENSIONS ARE FOR REFERENCE ONLY. MANUFACTURING TO DETERMINE FINAL ASSEMBLY DIMENSIONS.

A 01-02-13 JWB JWB ECO DAH100146: DII 114.656 WAS 113.656. UPDATED PIPE LENGTH ACCORDINGLY.
Level Date Approved Description

REVISIONS

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Standard Tolerances (Unless Noted)

Decimal Dimensions ± 0.063	Hole Diameters ± 0.031
Diagonals 0.125 Max. Variation	Angles $\pm 1^\circ$
Radii will be thickness of material	Tolerances are not accumulative
Made By: MHK	Date: 12-12-12 Ref Dwg: II/A
Approved: JWB	Do Not Scale Drawing Est. Wt: 32.75 lbs

ASSEMBLY, TRAINLINE PIPE @ B-END ON SIDE SILL

Size	Drawing / Part Number	Rev.
B	A108974-000	A

B

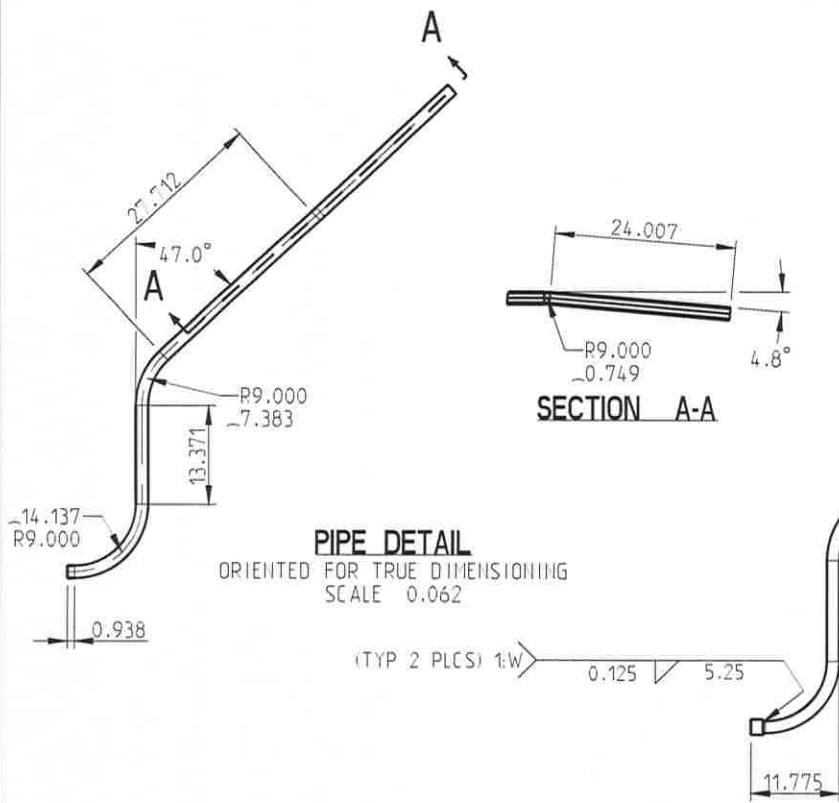
11/22/21
Per
done

9 8 7 6 ◇ 4 3 2

BILL OF MATERIAL

Item No.	Part No.	Description	Quantity	Unit Length
1	✓ 10240-077	COUPLING, 1 1/4" SW X SW	2	
2	10260-002	PIPE, 1.250 Ø, EXTRA HEAVY	1	88.297

A MIL6616-000 *Coupler part*



SECTION A-A

PIPE ASSEMBLY
ORIENTED FOR TRUE DIMENSIONING
SCALE 0.062

C 11-01-17 JAG JAG ADDED NOTE #4 AND UPDATED.
PIPE TO MEET AAR SPECIFICATION.
B 01-16-13 JWB PER ECO DAH100152: CHANGED PIPE
ASSEMBLY TO ALLOW FOR CLEARANCE.
A 01-02-13 JWB REVISED PRINT TO SHOW UPDATED
DIMENSIONS TO ALLOW FOR CLEARANCE ON CAR BODY.

Level Date Approved Description

REVISIONS

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Standard Tolerances (Unless Noted)

Decimal Dimensions ± 0.063	Hole Diameters ± 0.031
Diagonals 0.125 Max. Variation	Angles $\pm 1^\circ$
Radii will be thickness of material	Tolerances are not accumulative

Made By: MHK	Date: 12-12-12	Ref Dwg: N/A
Approved: JWB	Do Not Scale Drawing	Est. Wt: 23.41 lbs

ASSEMBLY, TRAINLINE PIPE @ A-END

Size	Drawing / Part Number	Rev.
B	A108975-000	C

NOTE:

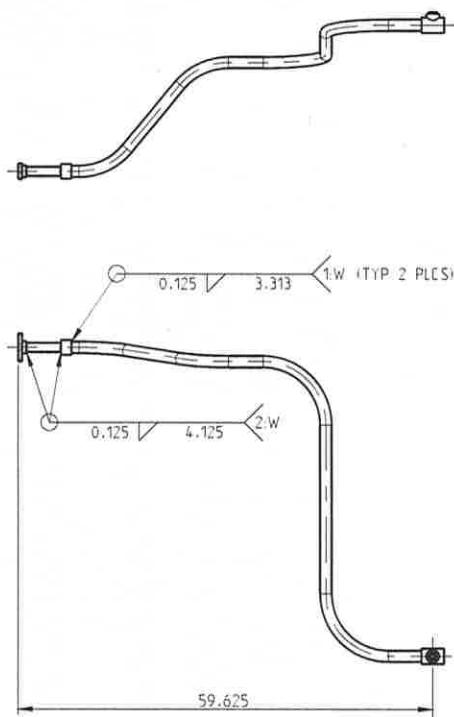
1. UNLESS OTHERWISE NOTED, WELD LENGTHS SHOWN ARE MINIMUM LENGTHS. WELD TERMINATIONS MUST HAVE A MINIMUM EDGE DISTANCE OF 0.25.
2. ALL WELDING TO BE IN ACCORDANCE WITH RAILROAD WELDING SPECIFICATION AWS D15.1, LATEST REVISION, AND TO BE CLASS 2 UNLESS OTHERWISE SPECIFIED.
3. PIPE DIMENSIONS ARE FOR REFERENCE ONLY, MANUFACTURING TO DETERMINE FINAL ASSEMBLY DIMENSIONS.
4. PIPING TO BE IN ACCORDANCE WITH AAR SPECIFICATION S-402.

ECO CAS600067

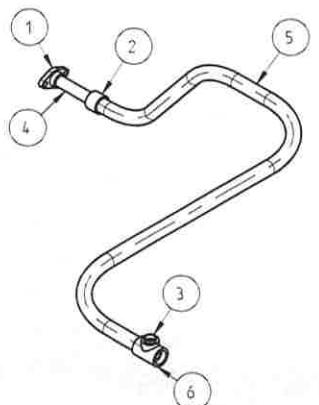
D ✓

✓BILL OF MATERIAL

Item No.	Part No.	Description	Quantity	Unit Length
1	✓ 10240-065	FITTING, 1" STRT SWV FLG SW, GG	1	
2	✓ 10240-130	COUPLING, 1 1/4" SW X 1" SW	1	
3	✓ 10240-149	PEDUCER INSERT, 1" TO 3/4"	1	
4	✓ 10240-333	HIPPLE, 1" X 6 1/4" XH PLAIN ENDS	1	
5	✓ 10260-002	PIPE, 1.250", EXTRA HEAVY	1	92.610
6	✓ 10293-001	BRAUCH TEE, REDUCING, 3000#	1	

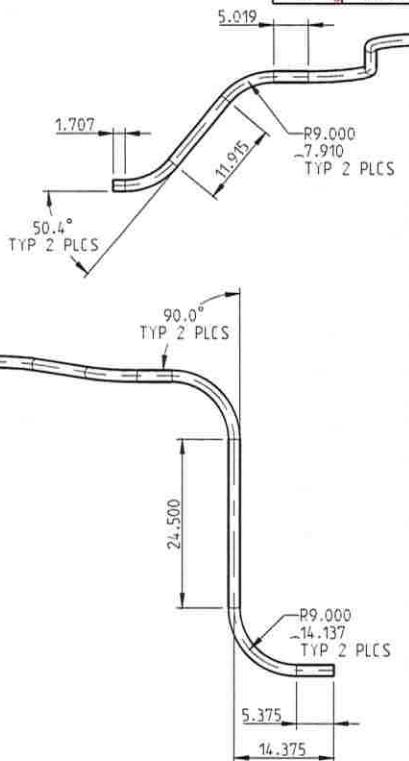
KA116617-000 Created
part

PIPE ASSEMBLY
ORIENTED FOR TRUE DIMENSIONS



NOTE:

- ALL WELDING TO BE IN ACCORDANCE WITH RAILROAD WELDING SPECIFICATION AWS D15.1, LATEST REVISION, AND TO BE CLASS 2 UNLESS OTHERWISE SPECIFIED.
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- PIPE DIMENSIONS ARE FOR REFERENCE ONLY. MANUFACTURING TO DETERMINE FINAL ASSEMBLY DIMENSIONS.
- PIPING TO BE IN ACCORDANCE WITH AAR SPECIFICATION S-402.



PIPE DETAIL
ORIENTED FOR TRUE DIMENSIONS

A 11-01-17 JAG JAG ADDED NOTE #4 AND UPDATED PIPE TO MEET AAR SPECIFICATION

Level Date Approved Description

REVISIONS

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Standard Tolerances (Unless Noted)

Decimal Dimensions ± 0.033	Hole Diameters ± 0.031
Diagonals 0.125 Max. Variation	Angles $\pm 1^\circ$
Radii will be thickness of material	Tolerances are not accumulative

Made By: STS Date: 12-17-12 Ref. Dwg: -

Approved: JWB Do Not Scale Drawing Est. Wt: 28.41 lbs

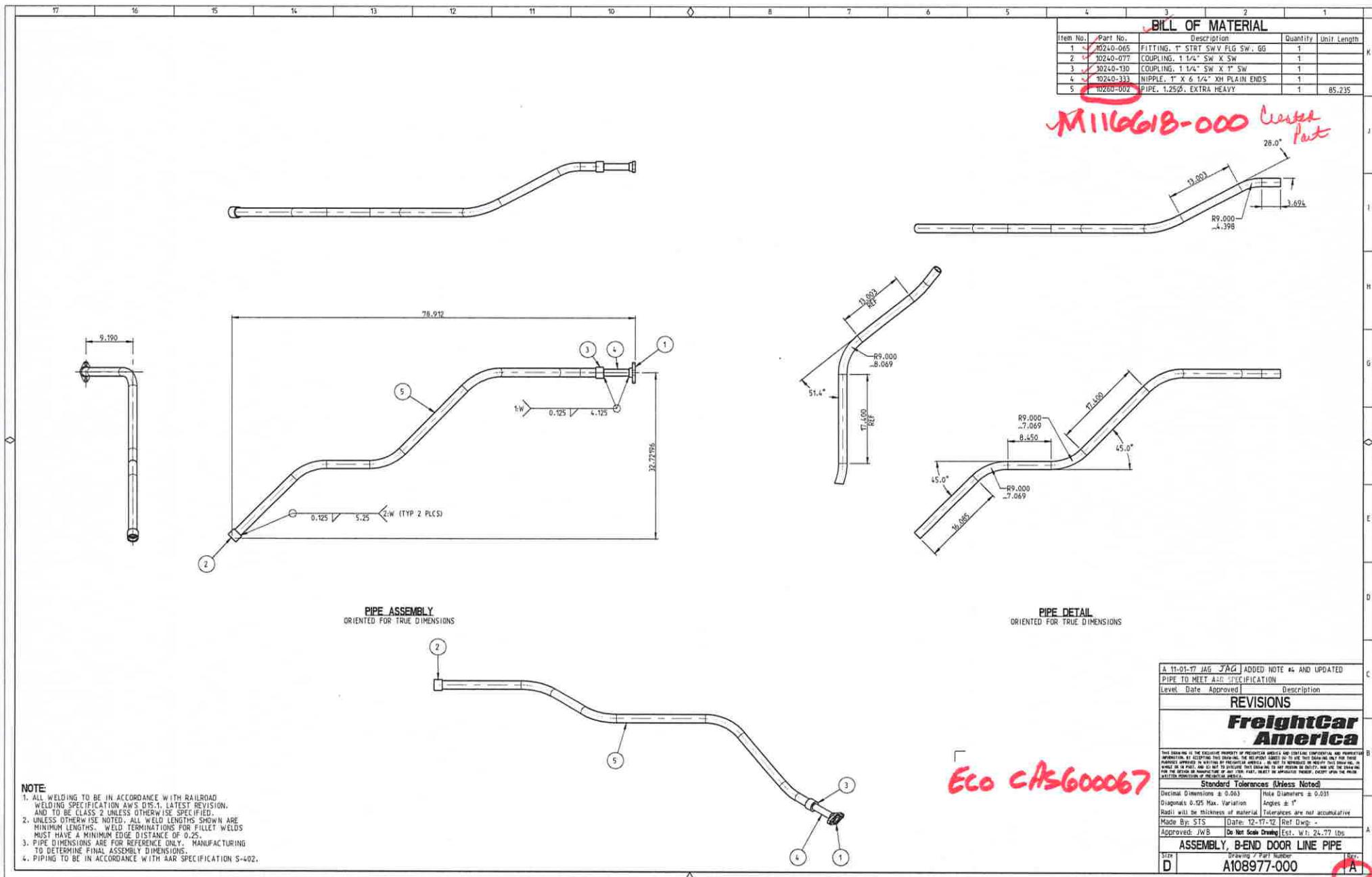
ASSEMBLY, A-END DOOR LINE PIPE

Size C	Drawing / Part Number A108976-000	Rev. A
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Eco CAS600067

R✓

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done



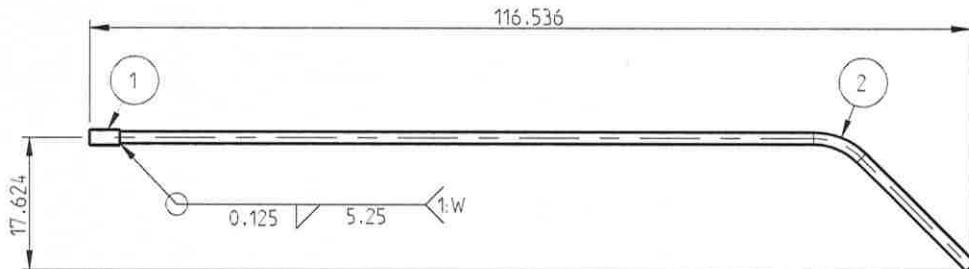
11/20/2011
Rev.
done

9 8 7 6 ◇ 4 3 2

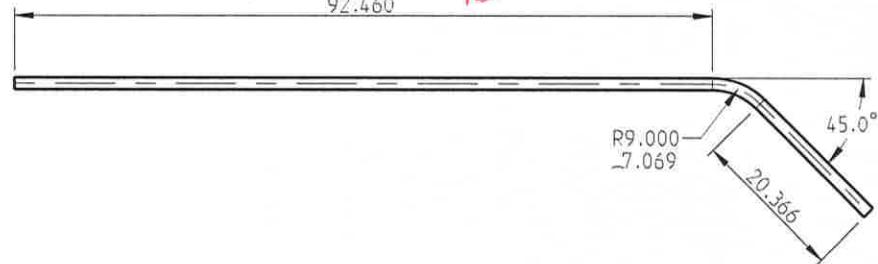
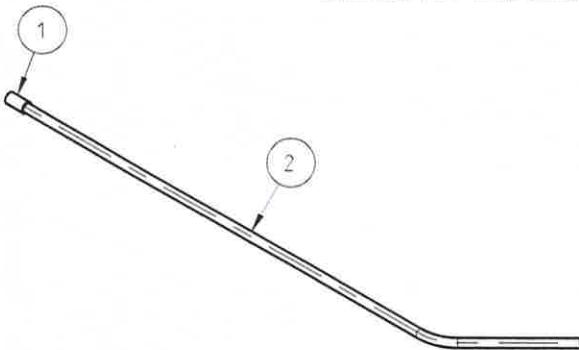
BILL OF MATERIAL

Item No.	Part No.	Description	Quantity	Unit Length
1	✓ 10240-145	COUPLING, 1 1/4" SW X SW DEEP	1	
2	10260-002	PIPE, 1.25 O, EXTRA HEAVY	1	119.894

M116619-000 Welded part



PIPE ASSEMBLY
ORIENTED FOR TRUE DIMENSIONS



PIPE DETAIL
ORIENTED FOR TRUE DIMENSIONS

NOTE:

1. ALL WELDING TO BE IN ACCORDANCE WITH RAILROAD WELDING SPECIFICATION AWS D15.1, LATEST REVISION, AND TO BE CLASS 2 UNLESS OTHERWISE SPECIFIED.
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3. PIPE DIMENSIONS ARE FOR REFERENCE ONLY. MANUFACTURING TO DETERMINE FINAL ASSEMBLY DIMENSIONS.

Eco (ASG0006)

Level	Date	Approved	Description
REVISIONS			
FreightCar America			

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Standard Tolerances (Unless Noted)

Decimal Dimensions ± 0.063	Hole Diameters ± 0.031
Diagonals 0.125 Max. Variation	Angles $\pm 1^\circ$
Radii will be thickness of material	Tolerances are not accumulative

Made By: STS Date: 12-17-12 Ref Dwg: -
Approved: JW B/WB Do Not Scale Drawing Est. Wt: 31.50 lbs

ASSEMBLY, B-END DOORLINE PIPE

Size	Drawing / Part Number	Rev.
B	A108978-000	-

A ✓

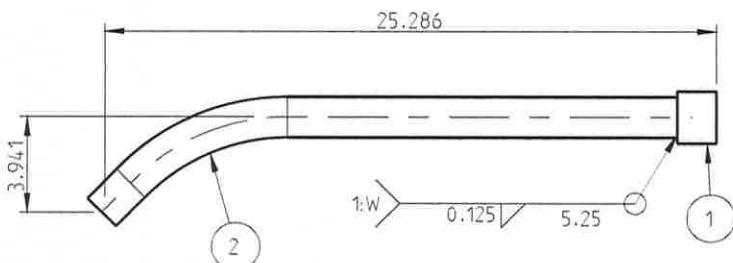
11/22/21
per.
done ✓

9 8 7 6 ◇ 4 3 2 1

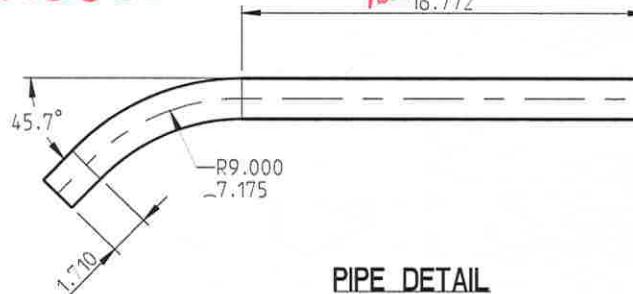
BILL OF MATERIAL

Item No.	Part No.	Description	Quantity	Unit Length
1	✓ 10240-077	COUPLING, 1 1/4" SW X SW	1	
2	10260-002	PIPE, 1.25 Ø EXTRA HEAVY	1	25.657

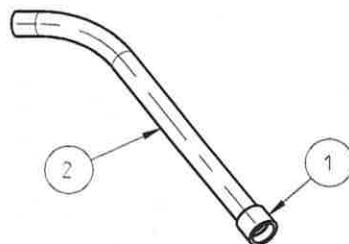
✓M116620-000 *tested per* 16.772



PIPE ASSEMBLY
ORIENTED FOR TRUE DIMENSIONS



PIPE DETAIL
ORIENTED FOR TRUE DIMENSIONS



Eco CAS600067

NOTE:

- ALL WELDING TO BE IN ACCORDANCE WITH RAILROAD WELDING SPECIFICATION AWS D15.1, LATEST REVISION, AND TO BE CLASS 2 UNLESS OTHERWISE SPECIFIED.
- UNLESS OTHERWISE NOTED, ALL WELD LENGTHS SHOWN ARE MINIMUM LENGTHS. WELD TERMINATIONS FOR FILLET WELDS MUST HAVE A MINIMUM EDGE DISTANCE OF 0.25.
- PIPE DIMENSIONS ARE FOR REFERENCE ONLY. MANUFACTURING TO DETERMINE FINAL ASSEMBLY DIMENSIONS.
- PIPING TO BE IN ACCORDANCE WITH AAR SPECIFICATION S-402.

A 11-01-17 JAG JAG ADDED NOTE #4 AND UPDATED PIPE TO MEET AAR SPECIFICATION
Level Date Approved Description

REVISIONS

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Standard Tolerances (Unless Noted)

Decimal Dimensions ± 0.063	Hole Diameters ± 0.031
Diagonals 0.125 Max. Variation	Angles $\pm 1^\circ$
Radii will be thickness of material	Tolerances are not accumulative

Made By: STS	Date: 12-17-12	Ref Dwg: -
Approved: JWB	Do Not Scale Drawing	Est. Wt: 7.08 lbs

ASSEMBLY, A-END DOORLINE TO TEE PIPE

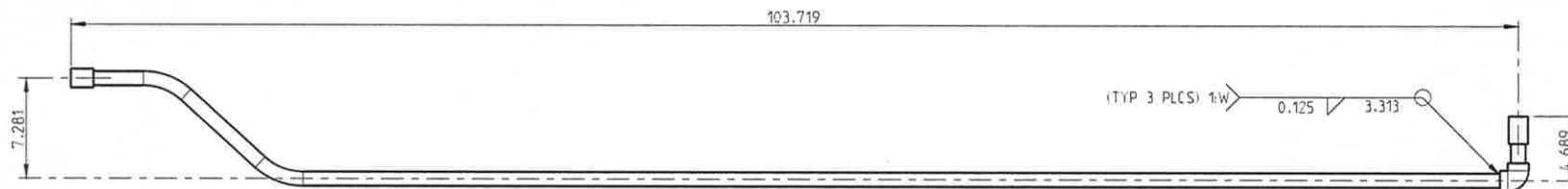
Size	Drawing / Part Number	Rev.
B	A108979-000	A

B✓

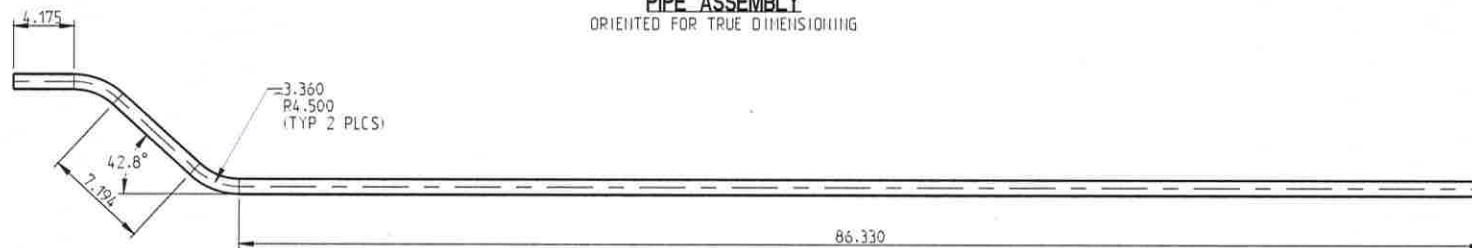
BILL OF MATERIAL

Item No.	Part No.	Description	Quantity	Unit Length
1	✓ 10240-018	FITTING, ELBOW, 3/4" X 90 SOCKET WELD	1	
2	✓ 10240-124	COUPLING, 3/4" TAPPED X 3/4" SW	1	
3	✓ 10240-296	NUIPPLE, 3/4" X 2 1/2" XH THREADED ONE END	1	
4	✓ 10240-346	COUPLING, 3/4" THREADED, 3000 LB. FORGED	1	
5	✓ 10260-004	PIPE, 0.75 Ø, EXTRA HEAVY	1	104.419

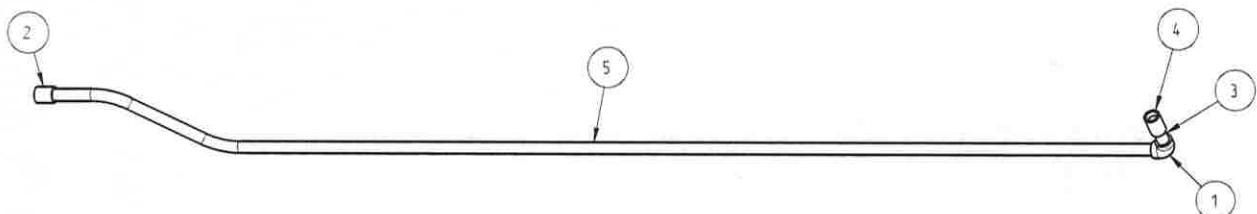
M110628-000 Central Park



PIPE ASSEMBLY
ORIENTED FOR TRUE DIMENSIONING



PIPE DETAIL
ORIENTED FOR TRUE DIMENSIONING



Eco CAS600067

NOTE:

1. UNLESS OTHERWISE NOTED, WELD LENGTHS SHOWN ARE MINIMUM LENGTHS. WELD TERMINATIONS MUST HAVE A MINIMUM EDGE DISTANCE OF 0.25.
2. ALL WELDING TO BE IN ACCORDANCE WITH RAILROAD WELDING SPECIFICATION AWS D15.1, LATEST REVISION. AND TO BE CLASS 2 UNLESS OTHERWISE SPECIFIED.
3. PIPE DIMENSIONS ARE FOR REFERENCE ONLY. MANUFACTURING TO DETERMINE FINAL ASSEMBLY DIMENSIONS.
4. PIPING TO BE IN ACCORDANCE WITH AAR SPECIFICATION S-402.

A 11-02-17 JAG JAG	ADDED NOTE #4 AND UPDATED PIPE TO MEET AAR SPECIFICATION		
Level	Date	Approved	Description

REVISIONS

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Standard Tolerances (Unless Noted)

Decimal Dimensions ± 0.063	Hole Diameters ± 0.031
Diagonals 0.125 Max. Variation	Angles $\pm 1^\circ$
Radii will be thickness of material	Tolerances are not accumulative
Made By: JAG/PLL	Date: 09-16-16
Approved: GJF	Ref Dwg: A109884-002
Do Not Scale Drawing	Est. Wt: 14.50 lbs

ASSEMBLY, SPOOL VALVE PIPE

Size C	Drawing / Part Number A113322-000	Rev. A
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R

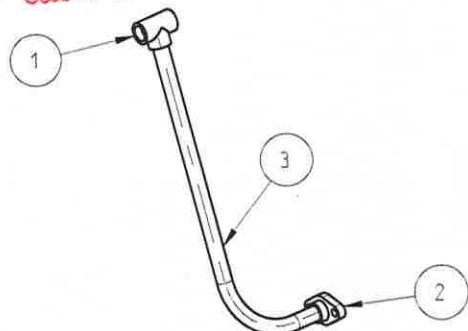
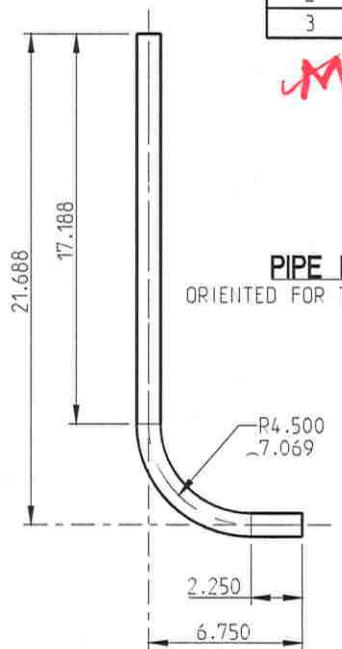
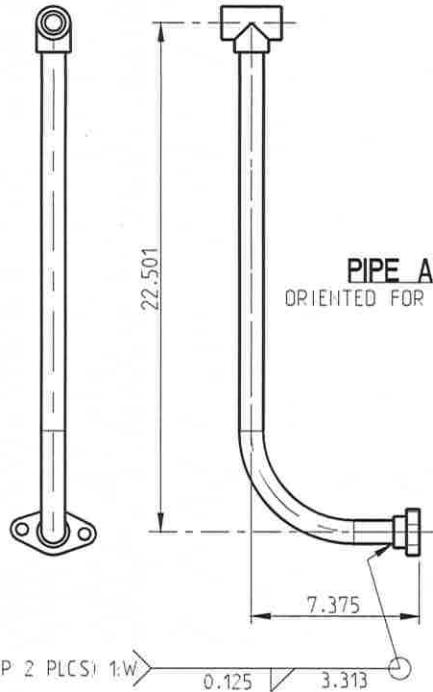
11/20/11
Per.
done ✓

9 8 7 6 ◇ 4 ✓ 3 2 1

BILL OF MATERIAL

Item No.	Part No.	Description	Quantity	Unit Length
1	✓ 10240-026	TEE, 3/4" SOCKET WELD	1	
2	✓ 10240-068	FITTING, 3/4" STRT SW V FLG SW	1	
3	10260-004	PIPE, 0.750, EXTRA HEAVY	1	26.507

M116621-000 Weld Part



A 11-02-17 JAG JAG ADDED NOTE #4 AND UPDATED
PIPE TO MEET AAR SPECIFICATION

Level Date Approved Description

REVISIONS

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Decimal Dimensions ± 0.063	Hole Diameters ± 0.031
Diagonals 0.125 Max. Variation	Angles $\pm 1^\circ$
Radii will be thickness of material	Tolerances are not accumulative

Made By: CSW Date: 12-17-12 Ref Dwg: -

Approved: JWB Do Not Scale Drawing Est. Wt: 5.04 lbs

ASSEMBLY, DOOR VALVE TO TEE PIPE

Size	Drawing / Part Number	Rev.
B	A108980-000	A

B ✓

NOTE:

- ALL WELDING TO BE IN ACCORDANCE WITH RAILROAD WELDING SPECIFICATION AWS D15.1, LATEST REVISION, AND TO BE CLASS 2 UNLESS OTHERWISE SPECIFIED.
- UNLESS OTHERWISE NOTED, ALL WELD LENGTHS SHOWN ARE MINIMUM LENGTHS. WELD TERMINATIONS FOR FILLET WELDS MUST HAVE A MINIMUM EDGE DISTANCE OF 0.25.
- PIPE DIMENSIONS ARE FOR REFERENCE ONLY. MANUFACTURING TO DETERMINE FINAL ASSEMBLY DIMENSIONS.
- PIPING TO BE IN ACCORDANCE WITH AAR SPECIFICATION S-402.

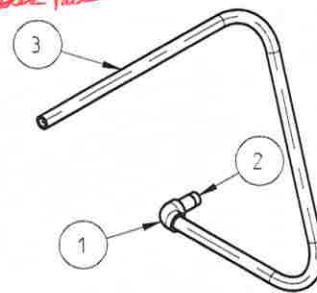
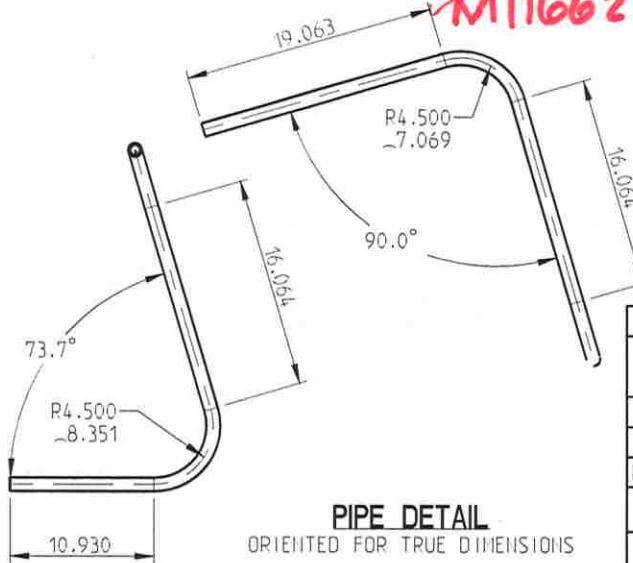
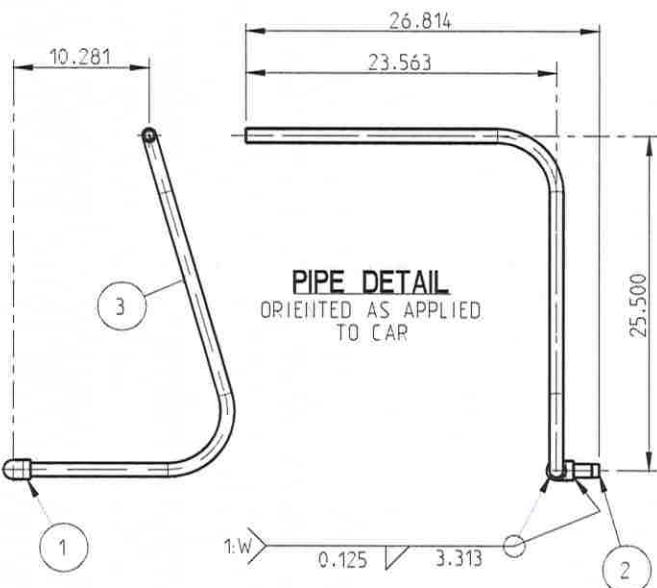
Eco CAS600067

11/22/14
Rev. done ✓

9 8 7 6 ◊ 4 3 2 1

BILL OF MATERIAL

Item No.	Part No.	Description	Quantity	Unit Length
1	✓ 10240-018	FITTING, ELBOW, 3/4" X 90 SOCKET WELD	1	
2	✓ 10240-296	HIPPLE, 3/4" X 2 1/2" XH THREADED ONE END	1	
3	10260-004	PIPE, 0.750, EXTRA HEAVY	1	61.476



B 11-27-17 HCH MCH DUE TO MOVING PIPE CLAMP TO INBOARD SIDE OF BOLSTER WEB FOR FIT-UP 10.930 DIN WAS 7.357

A 11-02-17 JAG ADDED NOTE #4 AND UPDATED PIPE TO MEET AAR SPECIFICATION

Level Date Approved Description

REVISIONS

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Standard Tolerances (Unless Noted)

Decimal Dimensions ± 0.063	Hole Diameters ± 0.031
Diagonals 0.125 Max. Variation	Angles $\pm 1^\circ$
Radii will be thickness of material	Tolerances are not accumulative

Made By: STS Date: 12-17-12 Ref Dwg: -

Approved: JWB Do Not Scale Drawing Est. Wt: 8.03 lbs

ASSEMBLY, "AR" WAYSIDE AIR PIPE

Size	Drawing / Part Number	Rev.
B	A108995-000	B

NOTE:

- ALL WELDING TO BE IN ACCORDANCE WITH RAILROAD WELDING SPECIFICATION AWS D15.1, LATEST REVISION, ADD TO BE CLASS 2 UNLESS OTHERWISE SPECIFIED.
- UNLESS OTHERWISE NOTED, ALL WELD LENGTHS SHOWN ARE MINIMUM LENGTHS. WELD TERMINATIONS FOR FILLET WELDS MUST HAVE A MINIMUM EDGE DISTANCE OF 0.25.
- PIPE DIMENSIONS ARE FOR REFERENCE ONLY. MANUFACTURING TO DETERMINE FINAL ASSEMBLY DIMENSIONS.
- PIPING TO BE IN ACCORDANCE WITH AAR SPECIFICATION S-402.

Eco CAS600067

B

C ✓

11/23/21
Per
done

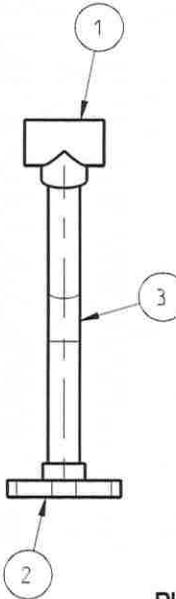
9 8 7 6 ◇ 4 3 2 1

BILL OF MATERIAL

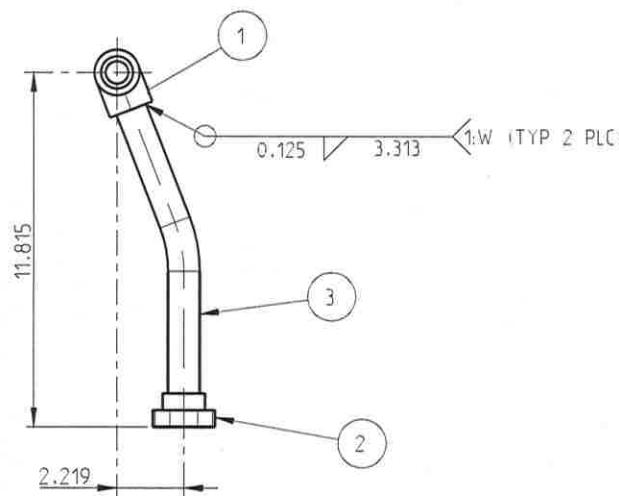
Item No.	Part No.	Description	Quantity	Unit Length
1	✓ 10240-026	TEE, 3/4" SOCKET WELD	1	
2	✓ 10240-068	FITTING, 3/4" STRT SWV FLG SW	1	
3	10260-004	PIPE, 0.750, EXTRA HEAVY	1	10.770

✓M116623-000

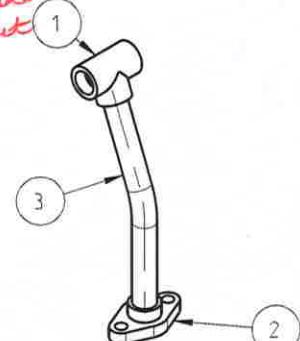
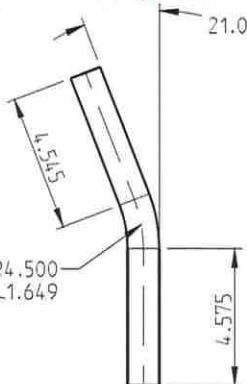
Circled part



PIPE ASSEMBLY
ORIENTED FOR TRUE DIMENSIONS



PIPE DETAIL
ORIENTED FOR TRUE DIMENSIONS



A 11-02-17 JAG JAG	ADDED NOTE #4 AND UPDATED PIPE TO MEET AAR SPECIFICATION
Level Date Approved	Description

REVISIONS

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Decimal Dimensions ± 0.063	Hole Diameters ± 0.031
Diagonals 0.125 Max. Variation	Angles $\pm 1^\circ$
Radius will be thickness of material	Tolerances are not accumulative

Made By: STS Date: 12-17-12 Ref Dwg: -
Approved: JWB Do Not Scale Drawing Est. Wt: 3.12 lbs

ASS'Y, A-END CHECK VALVE TO TEE PIPE

Size	Drawing / Part Number	Rev.
B	A108996-000	A

NOTE:

- ALL WELDING TO BE IN ACCORDANCE WITH RAILROAD WELDING SPECIFICATION AWS D15.1, LATEST REVISION, AND TO BE CLASS 2 UNLESS OTHERWISE SPECIFIED.
- UNLESS OTHERWISE NOTED, ALL WELD LENGTHS SHOWN ARE MINIMUM LENGTHS. WELD TERMINATIONS FOR FILLET WELDS MUST HAVE A MINIMUM EDGE DISTANCE OF 0.25.
- PIPE DIMENSIONS ARE FOR REFERENCE ONLY. MANUFACTURING TO DETERMINE FINAL ASSEMBLY DIMENSIONS.
- PIPING TO BE IN ACCORDANCE WITH AAR SPECIFICATION S-402.

ECO CAS600067

B✓

11/22/21
Per.
done

9	8	7	6	5	4	3	2	1

ASSEMBLY VIEW
ORIENTED FOR TRUE DIMENSIONING

DETAIL VIEW
ORIENTED FOR TRUE DIMENSIONING

NOTE:

- ALL WELDING TO BE IN ACCORDANCE WITH RAILROAD WELDING SPECIFICATION AWS D15.1, LATEST REVISION, AND TO BE CLASS 2 UNLESS OTHERWISE SPECIFIED.
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- PIPING TO BE IN ACCORDANCE WITH AAR SPECIFICATION S-402.

BILL OF MATERIAL

Item No.	Part No.	Description	Quantity	Unit Length
1	✓ 10240-018	FITTING, ELBOW, 3/4" X 90 SOCKET WELD	1	
2	✓ 10240-296	HIPPLE, 3/4" X 2 1/2" XH THREADED ONE END	1	
3	✓ 10260-004	PIPE, 0.750, EXTRA HEAVY	1	49.438

M110624-000 *Updated Part*

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Standard Tolerances (Unless Noted)

Decimal Dimensions ± 0.063	Hole Diameters ± 0.031
Diagonals 0.125 Max. Variation	Angles $\pm 1^\circ$
Radii will be thickness of material	Tolerances are not accumulative

Made By: STS Date: 12-18-12 Ref Dwg: -
Approved: JWB Do Not Scale Drawing Est. Wt: 6.55 lbs

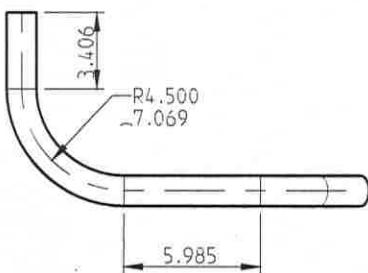
ASSEMBLY, DOOR LINE TO QUICK DISCON. PIPE

Size	Drawing / Part Number	Rev.
B	A108997-000	B

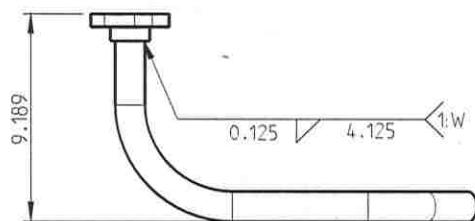
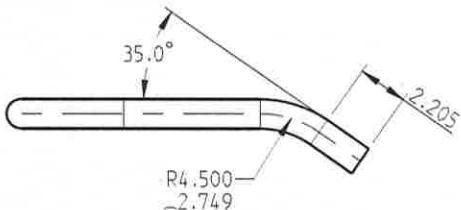
C

11/23/21
Rev.
Date

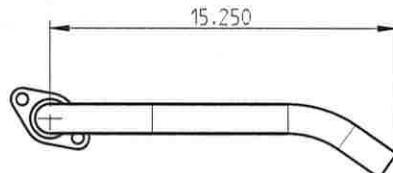
9 8 7 6 ◊ 4 3 2 1



PIPE DETAIL
ORIENTED FOR TRUE DIMENSIONING
SCALE 0.188



PIPE ASSEMBLY
ORIENTED FOR TRUE DIMENSIONING
SCALE 0.188



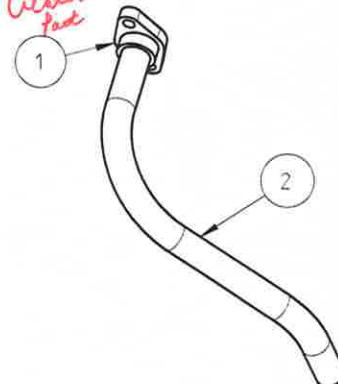
NOTE:

1. UNLESS OTHERWISE NOTED, WELD LENGTHS SHOWN ARE MINIMUM LENGTHS. WELD TERMINATIONS MUST HAVE A MINIMUM EDGE DISTANCE OF 0.25.
2. ALL WELDING TO BE IN ACCORDANCE WITH RAILROAD WELDING SPECIFICATION AWS D15.1, LATEST REVISION, AND TO BE CLASS 2 UNLESS OTHERWISE SPECIFIED.
3. PIPE DIMENSIONS ARE FOR REFERENCE ONLY. MANUFACTURING TO DETERMINE FINAL ASSEMBLY DIMENSIONS.
4. PIPING TO BE IN ACCORDANCE WITH AAR SPECIFICATION S-402.

ECO CAS600067

BILL OF MATERIAL				
Item No.	Part No.	Description	Quantity	Unit Length
1	✓10240-065	FITTING, 1" STRT SWV FLG SW, GG.	1	
2	10260-003	PIPE, 1.000 Ø, EXTRA HEAVY	1	21.414

M116625-000 *(except part 2)*



A 10-31-17 JAG JAG	ADDED NOTE #4 AND UPDATED PIPE TO MEET AAR SPECIFICATION
Level Date Approved	Description

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Decimal Dimensions ± 0.063	Hole Diameters ± 0.031
Diagonals 0.125 Max. Variation	Angles $\pm 1^\circ$
Radii will be thickness of material	Tolerances are not accumulative

Made By: JWB/IHK Date: 12-12-12 Ref Dwg: N/A

Approved: JWB Do Not Scale Drawing Est. Wt: 4.77 lbs

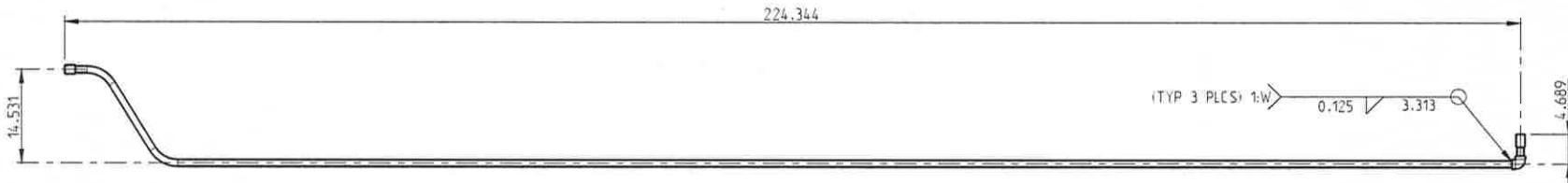
ASSEMBLY, BRANCH PIPE

Size	Drawing / Part Number	Rev.
B	A109012-000	A

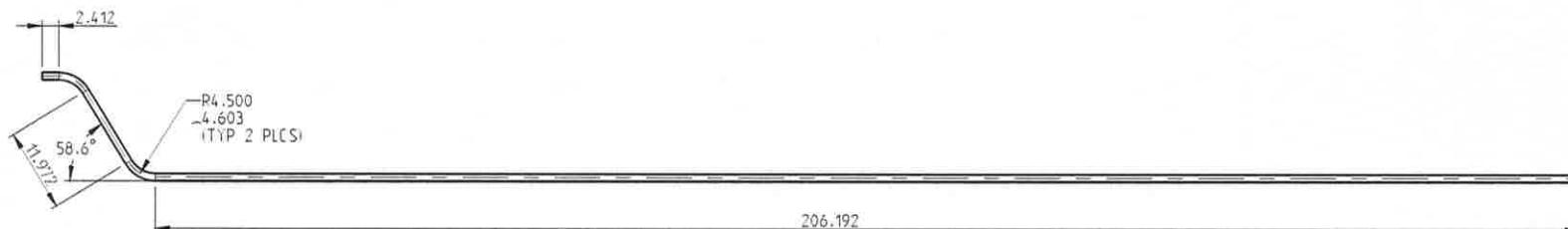
B

11	10	9	8	7	◊	5	4	3	2	1
BILL OF MATERIAL										
Item No.	Part No.	Description	Quantity	Unit Length						
1	10240-018	FITTING, ELBOW, 3/4" X 90 SOCKET WELD	1							
2	10240-124	COUPLING, 3/4" TAPPED X 3/4" SW	1							
3	10240-296	WIPPLE, 3/4" X 2 1/2" XH THREADED ONE END	1							
4	10240-346	COUPLING, 3/4" THREADED, 3000 LB. FORGED	1							
5	10260-004	PIPE, 0.75 O. EXTR. HEAVY	1	229.782						

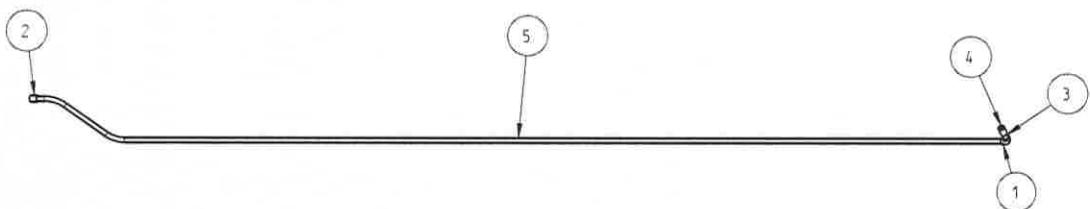
X1116626-000 *leaded part*



PIPE ASSEMBLY
ORIENTED FOR TRUE DIMENSIONING



PIPE DETAIL
ORIENTED FOR TRUE DIMENSIONING



NOTE:

1. UNLESS OTHERWISE NOTED, WELD LENGTHS SHOWN ARE MINIMUM LENGTHS. WELD TERMINATIONS MUST HAVE A MINIMUM EDGE DISTANCE OF 0.25.
2. ALL WELDING TO BE IN ACCORDANCE WITH RAILROAD WELDING SPECIFICATION AWS D15.1, LATEST REVISION, AND TO BE CLASS 2 UNLESS OTHERWISE SPECIFIED.
3. PIPE DIMENSIONS ARE FOR REFERENCE ONLY, MANUFACTURING TO DETERMINE FINAL ASSEMBLY DIMENSIONS.
4. PIPING TO BE IN ACCORDANCE WITH AAR SPECIFICATION S-402.

Eco CAS600067

A 11-02-17 JAG JAG	ADDED NOTE #4 AND UPDATED PIPE TO MEET AAR SPECIFICATION	
Level	Date Approved	Description

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Standard Tolerances (Unless Noted)

Decimal Dimensions ± 0.063	Hole Diameters ± 0.031
Diagonals 0.125 Max. Variation	Angles $\pm 1^\circ$
Radii will be thickness of material. Tolerances are not accumulative	
Made By: JAG/PLL	Date: 09-16-16
Approved: GJF	No Scale Drawing
Ref. Dwg: A106994-001	Est. Wt: 29.85 lbs

ASSEMBLY, SPOOL VALVE PIPE

Size C	Drawing / Part Number A113320-000	Rev. A
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R

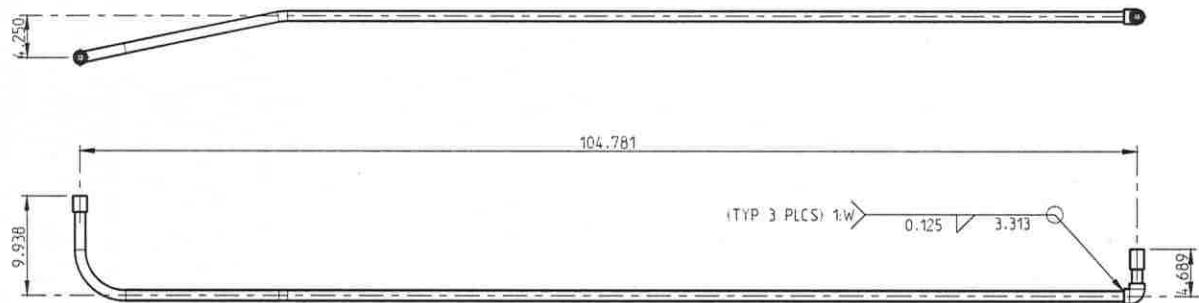
113321 Rev.
done

11 10 9 8 7 6 5 4 3 2 1

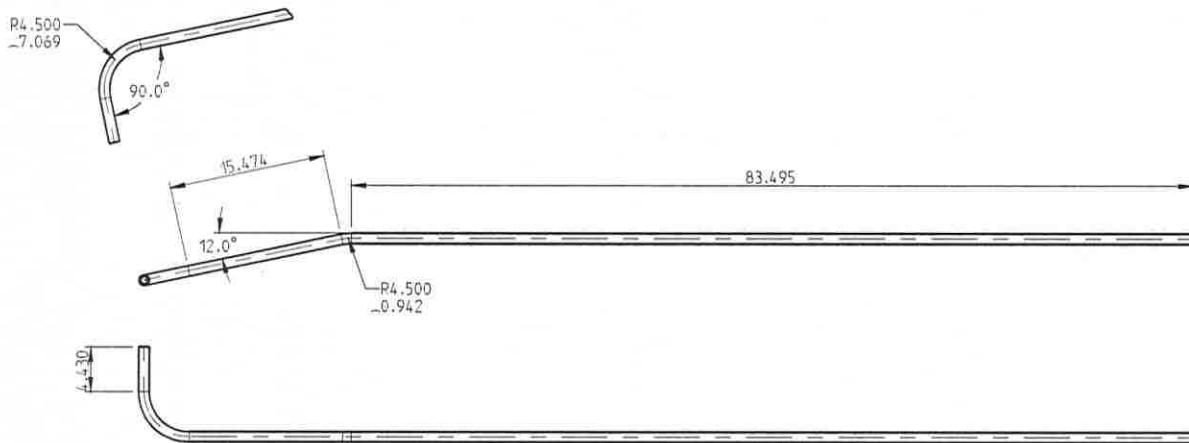
BILL OF MATERIAL

Item No.	Part No.	Description	Quantity	Unit Length
1	10240-018	FITTING, ELBOW, 3/4" X 90 SOCKET WELD	1	
2	10240-124	COUPLING, 3/4" TAPPED X 3/4" SW	1	
3	10240-296	HIPPLE, 3/4" X 2 1/2" XH THREADED ONE END	1	
4	10240-346	COUPLING, 3/4" THREADED, 3000 LB. FORGED	1	
5	10260-004	PIPE, 0.75 O. EXTR. HEAVY	1	111.409

M116627-000 Layout Part



PIPE ASSEMBLY
ORIENTED FOR TRUE DIMENSIONING



PIPE DETAIL
ORIENTED FOR TRUE DIMENSIONING

NOTE:

1. UNLESS OTHERWISE NOTED, WELD LENGTHS SHOWN ARE MINIMUM LENGTHS. WELD TERMINATIONS MUST HAVE A MINIMUM EDGE DISTANCE OF 0.25.
2. ALL WELDING TO BE IN ACCORDANCE WITH RAILROAD WELDING SPECIFICATION AWS D15.1, LATEST REVISION, AND TO BE CLASS 2 UNLESS OTHERWISE SPECIFIED.
3. PIPE DIMENSIONS ARE FOR REFERENCE ONLY, MANUFACTURING TO DETERMINE FINAL ASSEMBLY DIMENSIONS.
4. PIPING TO BE IN ACCORDANCE WITH AAR SPECIFICATION S-402.

Eco CAS600067

A 11-02-17 JAG JAG ADDED NOTE #4 AND UPDATED
PIPE TO MEET AAR SPECIFICATION

Level	Date	Approved	Description
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Standard Tolerances (Unless Noted)

Decimal Dimensions ± 0.063	Hole Diameters ± 0.031
Diagonals 0.125 Max. Variation	Angles $\pm 1^\circ$
Radius will be thickness of material.	Tolerances are not accumulative
Made By: JAG/PLL Date: 09-16-16 Pet Dwg: A108944-001	
Approved: GJF Do Not Scale Drawing Est. Wt: 15.35 lbs	
ASSEMBLY, SPOOL VALVE PIPE	
Size C	Drawing / Part Number A113321-000 Rev. A

R✓