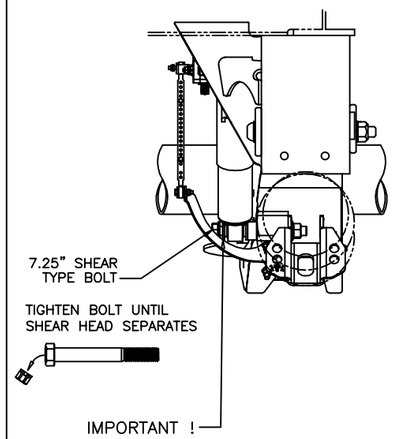


O.E.M. INSTALLED SHOCK BOLT KIT

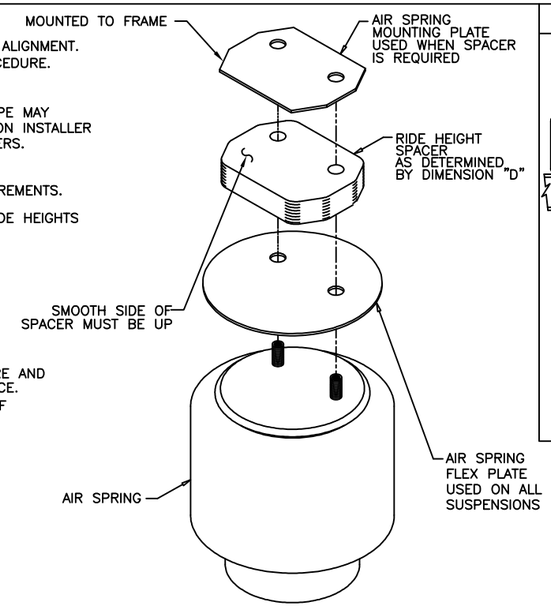
NOTES:

1. SEE L1073 FOR INFORMATION ON ASSEMBLY, WELDING PROCEDURE, AND ALIGNMENT.
2. SEE SERVICE MANUAL FOR INFORMATION CONCERNING MAINTENANCE PROCEDURE.
3. MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING PATENTS: OTHER PATENTS PENDING U.S. PATENT NOS. – 5,366,237 – 4,166,640
4. REQUIRED CROSSMEMBER LOCATIONS ARE SHOWN. ACTUAL SIZE AND SHAPE MAY VARY WITH TRAILER DESIGN. IT IS THE RESPONSIBILITY OF THE SUSPENSION INSTALLER TO ENSURE STRUCTURAL ADEQUACY OF TRAILER FRAME AND CROSSMEMBERS.
5. SEE L–1182 FOR HEIGHT CONTROL KIT OPTIONS.

6. SEE PAGE 7 AND 8 FOR C–CHANNEL AND FRAME BRACKET BRACE REQUIREMENTS.
7. DO NOT ROUTE ITEMS THROUGH THIS AREA FOR 9.0 INCH AND LOWER RIDE HEIGHTS DUE TO MINIMAL BEAM TO FRAME CLEARANCE.
8. SEE D–29431 FOR DIMENSIONS AND CROSSMEMBER LOCATIONS.
9. FOR BOLT–ON MOUNTING PATTERNS, SEE DRAWING D–26651.

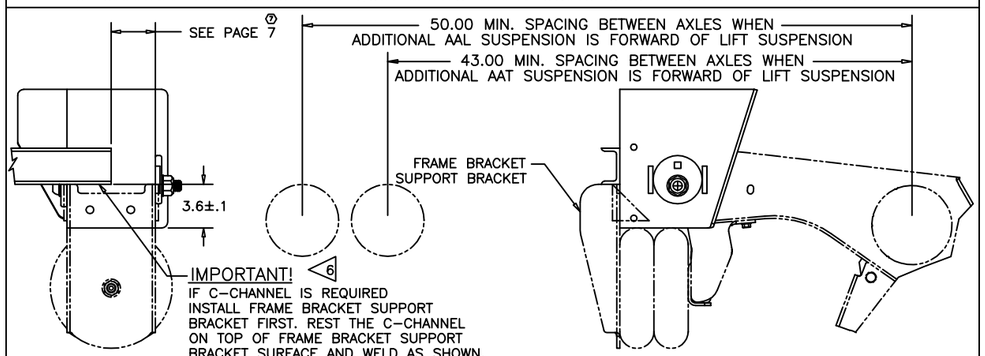
CLEARANCE SPECIFICATIONS:

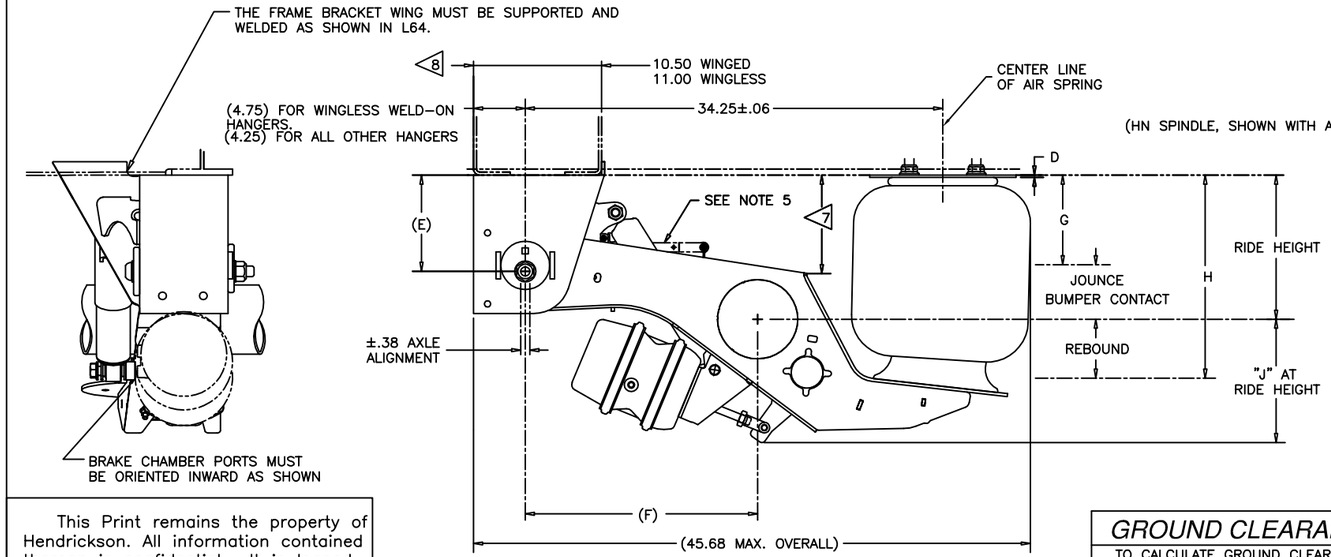
a) 1.0 INCH MINIMUM CLEARANCE REQUIRED BETWEEN TOP OF TIRE AND BOTTOM OF TRAILER STRUCTURE WHEN AXLE IS AT FULL JOUNCE.
b) 2.0 INCHES MINIMUM CLEARANCE REQUIRED BETWEEN INSIDE OF TIRE AND TRAILER STRUCTURE FOR LATERAL MOVEMENT.
c) .75 INCH MINIMUM CLEARANCE MUST BE MAINTAINED AROUND AIR SPRING WHEN IT IS AT MAXIMUM DIAMETER.



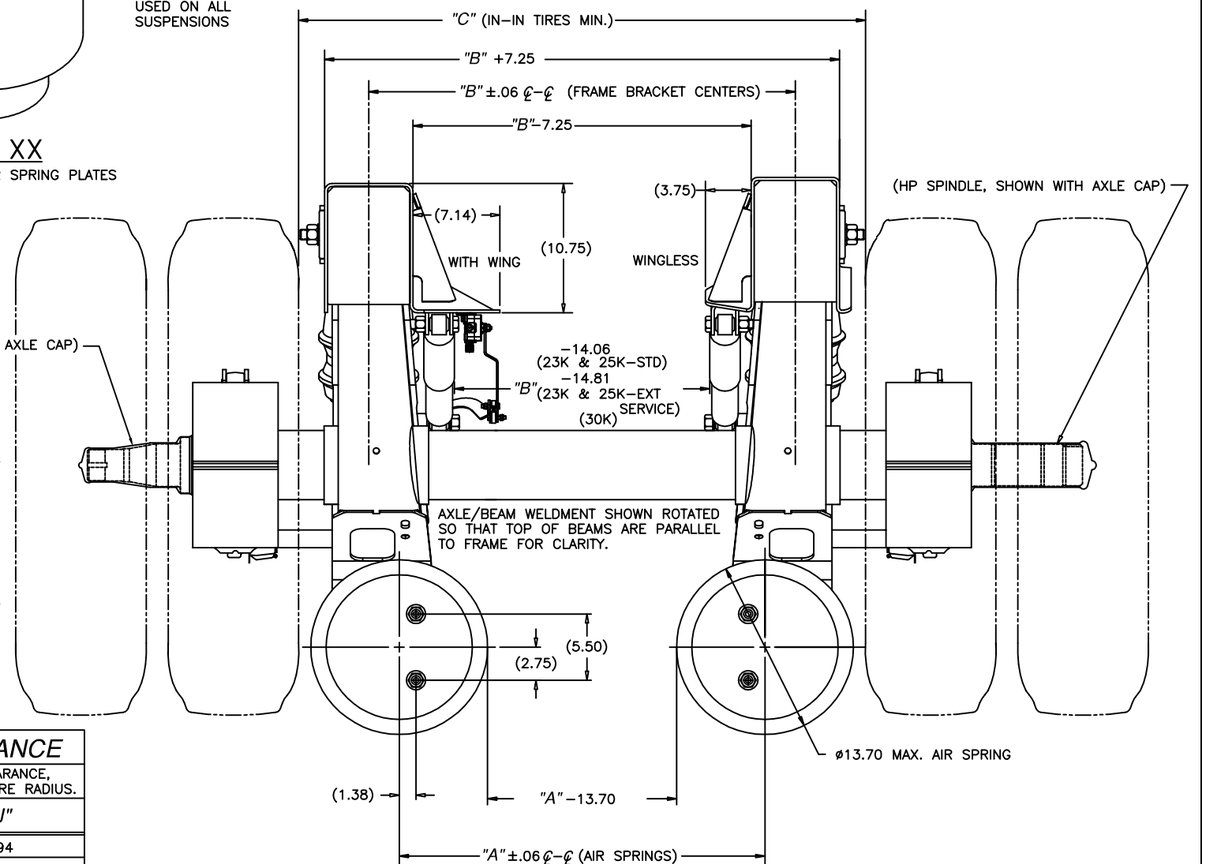
VIEW XX
INSTALLATION OF AIR SPRING PLATES

C–CHANNEL AND SPACING REQUIREMENTS WHEN USING UNDER BEAM LIFT ASSEMBLY





SEE PAGES 2, 4, 5 AND 7 FOR THE TABULATED DIMENSIONS SHOWN ABOVE



TORQUE SPECIFICATIONS

DESCRIPTION	SIZE	TORQUE (FT-LB)
SHOCK BOLTS	3/4–10	210–235
AIR SPRING NUTS, UPPER	3/4–16	80–100
AIR SPRING NUT, LOWER	1/2–13	25–35
S–CAM BEARING BOLTS	3/8–16	35–45
BRAKE CHAMBER MNTG. NUTS	5/8–11	100–110
ABS BRACKET BOLTS	1/4–20	75–100 IN–LB
BRAKE DUST SHIELD BOLTS	5/16–18	160–180 IN–LB

GROUND CLEARANCE

TO CALCULATE GROUND CLEARANCE, SUBTRACT "J" FROM LOADED TIRE RADIUS.

RIDE HEIGHT	"J"
6.5	9.94
7.5	9.98
8.0	10.01
9.0	10.04
12.0	10.03
14.0	10.03
15.0	10.04
16.0	10.03
17.0	10.04
19.0	10.04

MODEL	23K & 25K							30K						
TRACK WIDTH (IN)	71.5	73.0	75.5	76.5	77.5	83.5	85.0	71.5	73.0	75.5	76.5	77.5	83.5	85.0
DIMENSION "A" (IN)	31.00	32.50	35.00	36.00	37.00	43.00	44.50	30.00	31.50	34.00	35.00	36.00	42.00	43.50
DIMENSION "B" (IN)	35.00	36.50	39.00	40.00	41.00	47.00	48.50	35.00	36.50	39.00	40.00	41.00	47.00	48.50
DIMENSION "C" (IN)	46.50	48.00	50.50	51.50	52.50	58.50	60.00	46.50	48.00	50.50	51.50	52.50	58.50	60.00

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7	045136	DJD	10/21/24
6	042444	DJD	8–28–23
5	042123	SAK	07/07/23
4	26055	RML	11/28/16

DRAWN BY: D. DAGNALL 8–24–12
CH'D BY: C. RADCLIFF
APP'D BY: B. MUCKELRATH

INTRAAX® AAL LDA
INSTALLATION DRAWING

SCALE .166=1.000 | SIZE D | P PRODUCTION | PAGE 1 OF 12
DRAWING No. D–30900

STANDARD & HIGH CONTROL TRAVEL DIMENSIONS FROM PAGE 1 FOR AAL LDA 23K AND 25K

RIDE HEIGHT	<3 JOUNCE	<3 REBOUND W/FRONT SHOCKS	<3 <6 <7 REBOUND W/REAR SHOCKS	BUMPER CONTACT	D	<8 E	F	<4 G	<4 H W/FRONT SHOCKS	<4 <6 H W/REAR SHOCKS
6.5	2.0	4.6	4.0	1.6	.19	4.5	19.4	4.5	11.1	10.5
7.5	3.0	3.6	3.0	2.6			19.2			
8.0	3.5	5.3	4.7	3.1	.19	4.5	19.2	4.5	13.3	12.7
9.0	4.5	4.3	3.7	4.1	.19	4.5	18.9	4.5	13.3	12.7
12.0	4.9	4.9	3.5	4.5	.19	8.0	19.1	7.1	16.9	15.5
14.0	5.5	4.5	4.2	5.1	1.13	10.0	19.1	8.5	18.5	18.2
15.0	5.8	3.5	3.2	5.4	2.25	10.0	18.8	9.2	18.5	18.2
16.0	5.3	4.4	4.3	4.9	3.50	12.0	19.1	10.7	20.4	20.3
17.0	5.5	3.4	3.3	5.1	4.81	12.0	18.8	11.5	20.4	20.3
19.0	5.3	3.6	3.4	4.9	7.31	14.0	18.8	13.7	22.6	22.4

NOTES:

1. SEE L729 FOR SUSPENSION WEIGHT.
2. SEE L1073 FOR ALLOWABLE RIDE HEIGHT RANGES.

<3> JOUNCE AND REBOUND DIMENSIONS CHANGE AS THE RIDE HEIGHT CHANGES FROM THE NOMINAL POSITION.

<4> DIMENSIONS "G" & "H" WILL REMAIN CONSTANT REGARDLESS OF RIDE HEIGHT VARIATION FROM NOMINAL POSITION.

5 RIDE HEIGHT – JOUNCE = "G"
RIDE HEIGHT + REBOUND = "H"

<6> WHEN THE OPTION FOR FRONT AND REAR SHOCKS IS SELECTED, DIMENSIONS FROM "REBOUND WITH REAR SHOCKS" AND "H WITH REAR SHOCKS" SHOULD BE USED

<7> AIR DISC ONLY AVAILABLE WITH REAR SHOCKS

<8> BOLT–ON PIVOT HEIGHT CHANGES TO 4.6 FOR 6.5 TO 9.0 RIDE HEIGHTS

<7>

P
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TRAILER COMMERCIAL VEHICLE SYSTEMS
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XX: ± –
XXX: ± –
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DIMENSIONS ADHERE TO ANSI Y14.5M–1982

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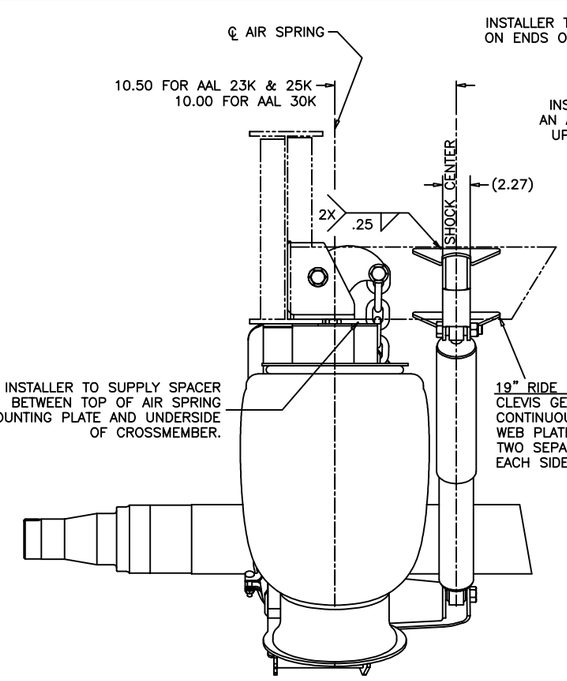
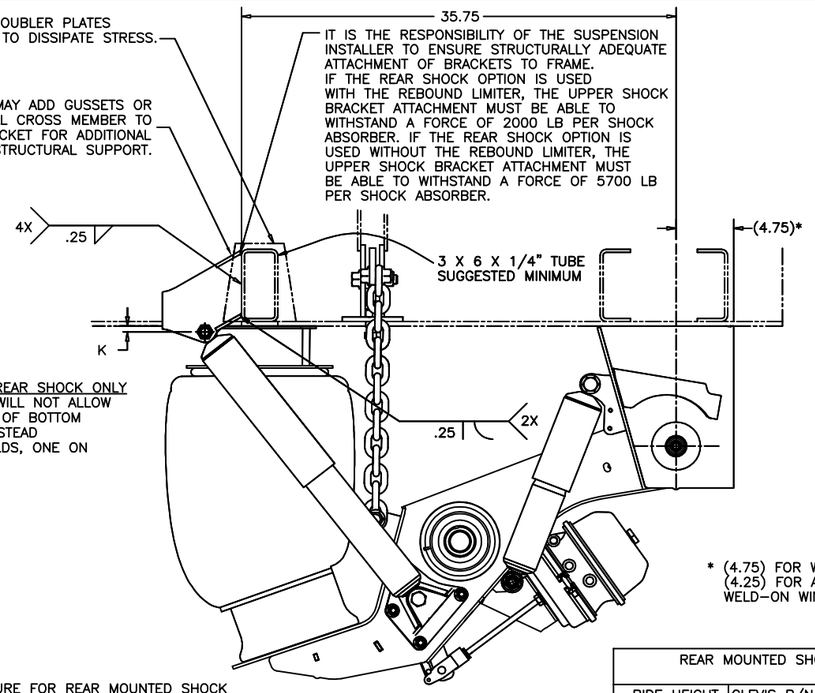
SCALE 1.00=1.00 | SIZE D | PAGE 2 OF 12
DRAWING No. D–30900



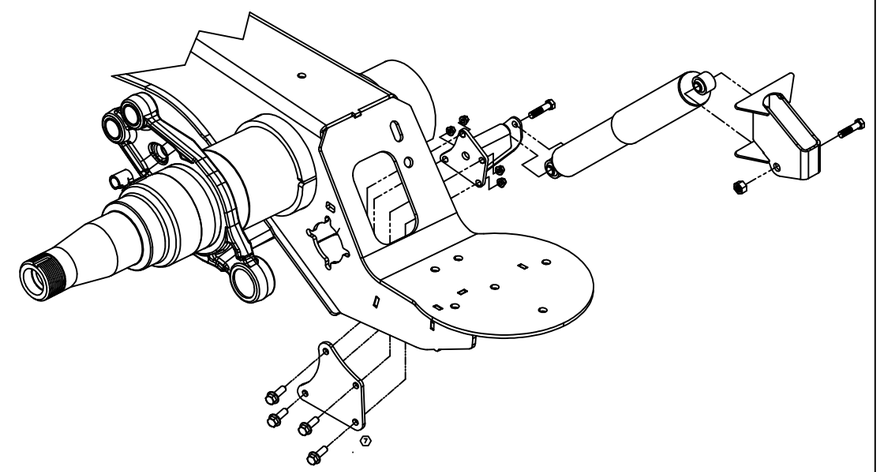


* (4.75) FOR WELD-ON WINGLESS HANGERS ONLY.
(4.25) FOR ALL OTHER HANGERS.
WELD-ON WINGLESS HANGER IS SHOWN.

ASSEMBLY PROCEDURE FOR REAR MOUNTED SHOCK
1. SET SUSPENSION TO RIDE HEIGHT.
2. LOCATE UPPER SHOCK BRACKET ACCORDING TO SHOWN DIMENSIONS AND WELD INTO PLACE. CROSSMEMBER MUST BE 6 X 3 X 1/4" MINIMUM TO WITHSTAND TORSION.
⑦ 3. BOLT LOWER SHOCK TOWER BRACKET AND BACKING PLATE TO BEAM USING 1/2-13 FLANGE BOLTS AND LOCKING FLANGE NUTS.
4. BOLT TOP OF SHOCK TO UPPER BRACKET USING THE CLEVIS INDICATED FOR THE APPLICATION'S RIDE HEIGHT (SEE "REAR MOUNTED SHOCK" CHART). BOLT BOTTOM OF SHOCK TO LOWER SHOCK TOWER BRACKET. TIGHTEN ALL FASTENERS TO SPECIFIED TORQUE.

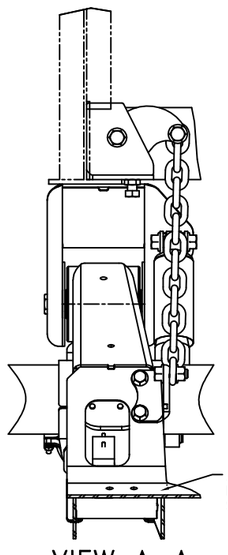
REAR MOUNTED SHOCK		
RIDE HEIGHT	CLEVIS P/N	DIM "K"
6.5	C-29967	.50
7.5		
8		
9		
12	C-25420	3.59
14	C-29967	.50
15		
16	C-25420	3.59
17		
19	C-37191	3.01

REAR SHOCK EXPLODED VIEW

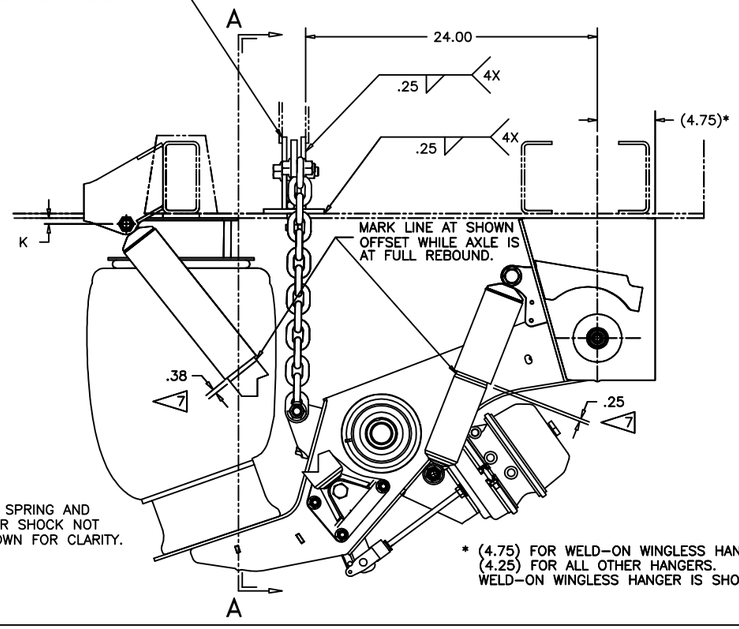


TORQUE SPECIFICATIONS		
DESCRIPTION	SIZE	TORQUE (FT-LB)
SHOCK ABSORBER BOLTS	3/4-10	210-235
LOWER SHOCK TOWER BOLTS	1/2-13	100-110
LOWER CHAIN BRACKET BOLTS	5/8-11	200-220
UPPER CHAIN BRACKET BOLTS	3/4-10	240-260
CHAIN ATTACHMENT BOLTS	3/4-10	240-260
JAM NUT	3/4-10	240-260

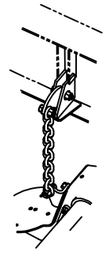
IT IS THE RESPONSIBILITY OF THE SUSPENSION INSTALLER TO ENSURE STRUCTURALLY ADEQUATE ATTACHMENT OF BRACKETS TO FRAME. REBOUND LIMITER UPPER BRACKET ATTACHMENT MUST WITHSTAND 7600 LB FORCE EXERTED BY EACH CHAIN.



VIEW A-A



* (4.75) FOR WELD-ON WINGLESS HANGERS ONLY.
(4.25) FOR ALL OTHER HANGERS.
WELD-ON WINGLESS HANGER IS SHOWN.



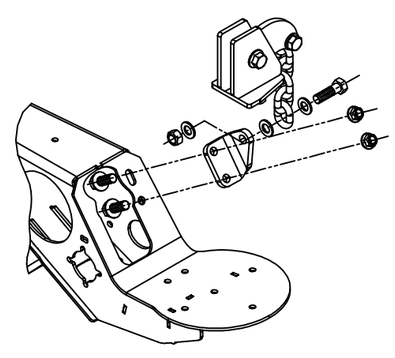
VIEW B
SCALE: 1.00=8.00
OPTION 1
REINFORCEMENT GUSSETS

VIEW C
SCALE: 1.00=8.00
OPTION 2
WEB STIFFENERS

CHAIN LENGTH	
RIDE HEIGHT	# OF LINKS
8	10
9	10
12	12
14	14
15	14
16	14
17	14
19	16

ASSEMBLY PROCEDURE FOR REBOUND LIMITER
1. RAISE REAR OF TRAILER AND SUPPORT SECURELY. TRAILER MUST BE HIGH ENOUGH FOR THE SUSPENSION TO BE AT FULL REBOUND WITHOUT TIRES TOUCHING GROUND.
2. POSITION UPPER BRACKET ASSEMBLIES ON FRAME RAILS TO INDICATED DIMENSION AND CLAMP INTO PLACE.
3. ATTACH LOWER BRACKETS TO TRAILING ARMS USING THE FOUR 5/8" FLANGE BOLTS AND NUTS.
4. VERIFY THAT THE CHAINS HAVE THE CORRECT NUMBER OF LINKS INDICATED FOR THE APPLICATION'S RIDE HEIGHT (SEE "CHAIN LENGTH" CHART). ATTACH CHAINS TO LOWER AND UPPER BRACKETS USING THE 3/4" BOLTS, NUTS, AND WASHERS AS SHOWN IN EXPLODED VIEW.
5. ROTATE THE ADJUSTMENT BOLT UNTIL THE SLACK IS TAKEN OUT OF THE CHAINS.
6. WELD THE UPPER BRACKETS TO THE FRAME AS SHOWN. BRACKETS MUST BE ADEQUATELY ATTACHED TO FRAME USING ONE OF TWO METHODS: WEB STIFFENER PLATES OR SUPPLEMENTARY GUSSETS. (SEE VIEW "B" AND "C").
⑦ ON REAR MOUNTED SHOCK ABSORBERS, MEASURE 3/8" OFFSET FROM THE BOTTOM EDGE OF THE SHOCK ABSORBER DUST TUBE AND MARK WITH A PAINT PEN OR FELT TIP MARKER. IF THE SUSPENSION IS NOT EQUIPPED WITH REAR SHOCKS, OFFSET 1/4" ON THE FRONT SHOCK AND MARK. (SEE SIDE VIEW).
8. ROTATING THE ADJUSTMENT BOLTS ON EACH SIDE, RAISE THE AXLE UNTIL THE BOTTOM EDGES OF THE SHOCK DUST TUBES ARE ALIGNED WITH THE MARKS.
9. TIGHTEN ALL FASTENERS, INCLUDING JAM NUT, TO SPECIFIED TORQUE. (SEE "TORQUE SPECIFICATIONS" CHART).

REBOUND LIMITER EXPLODED VIEW



⑦ P PRODUCTION

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4	26055	RML	11/28/16

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INTRAAX® AAL LDA
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SCALE .166=1.000 | SIZE D | PAGE 3 OF 12
DRAWING No. D-30900

LIMITED JOUNCE & HIGH CONTROL TRAVEL DIMENSIONS FROM PAGE 1 FOR AAL LDA 23K & 25K

RIDE HEIGHT	<3 JOUNCE	<3 REBOUND W/FRONT SHOCKS	<3 <6 <7 REBOUND W/REAR SHOCKS	BUMPER CONTACT	D	<8 E	F	<4 G	<4 H W/FRONT SHOCKS	<4 <6 H W/REAR SHOCKS
8.0	2.8	5.3	4.7	2.4	1.50	4.5	19.2	5.2	13.3	12.7
9.0	3.4	4.3	3.7	3.0	2.25	4.5	18.9	5.6	13.3	12.7
12.0	3.7	4.9	3.5	3.3	2.25	8.0	19.1	8.3	16.9	15.5
14.0	4.2	4.5	4.2	3.8	3.50	10.0	19.1	9.8	18.5	18.2
15.0	4.2	3.5	3.2	3.8	5.31	10.0	18.8	10.8	18.5	18.2
16.0	4.3	4.4	4.3	3.9	5.31	12.0	19.1	11.7	20.4	20.3
17.0	4.2	3.4	3.3	3.8	7.31	12.0	18.8	12.8	20.4	20.3
19.0	4.2	3.6	3.4	3.8	9.25	14.0	18.8	14.8	22.6	22.4

NOTES:

1. SEE L729 FOR SUSPENSION WEIGHT.
2. SEE 1073 FOR ALLOWABLE RIDE HEIGHT RANGES.

<3> JOUNCE AND REBOUND DIMENSIONS CHANGE AS THE RIDE HEIGHT CHANGES FROM THE NOMINAL POSITION.

<4> DIMENSIONS "G" & "H" WILL REMAIN CONSTANT REGARDLESS OF RIDE HEIGHT VARIATION FROM NOMINAL POSITION.

5 RIDE HEIGHT – JOUNCE = "G"
RIDE HEIGHT + REBOUND = "H"

<6> WHEN THE OPTION FOR FRONT AND REAR SHOCKS IS SELECTED, DIMENSIONS FROM "REBOUND WITH REAR SHOCKS" AND "H WITH REAR SHOCKS" SHOULD BE USED

<7> AIR DISC ONLY AVAILABLE WITH REAR SHOCKS

<8> BOLT–ON PIVOT HEIGHT CHANGES TO 4.6 FOR 8.0 AND 9.0 RIDE HEIGHTS.

<7>

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CHK'D BY: C. RADCLIFF
APP'D BY: B. MUCKELRATH

INTRAAX® AAL LDA
INSTALLATION DRAWING

SCALE 1.00=1.00 | SIZE D | PAGE 4 OF 12
DRAWING No. D–30900

STANDARD & HIGH CONTROL TRAVEL DIMENSIONS FROM PAGE 1 FOR AAL LDA 30K										
RIDE HEIGHT	<3> JOUNCE	<3> REBOUND W/FRONT SHOCKS	<3><6><7> REBOUND W/REAR SHOCKS	BUMPER CONTACT	D	<8> E	F	<4> G	<4> H W/FRONT SHOCKS	<4><6> H W/REAR SHOCKS
9.0	4.0	4.2	3.7	3.6	.19	4.5	18.9	5.0	13.2	12.7
12.0	4.7	4.8	3.5	4.3	.19	8.0	19.1	7.3	16.8	15.5
14.0	5.3	4.4	4.2	4.9	1.13	10.0	19.1	8.7	18.4	18.2
15.0	5.7	3.4	3.2	5.3	2.25	10.0	18.8	9.3	18.4	18.2
16.0	5.1	4.3	4.3	4.7	3.50	12.0	19.1	10.9	20.3	20.3
17.0	5.4	3.3	3.3	5.0	4.81	12.0	18.8	11.6	20.3	20.3
19.0	5.1	3.5	3.4	4.7	7.31	14.0	18.8	13.9	22.5	22.4

NOTES:

1. SEE L729 FOR SUSPENSION WEIGHT.
2. SEE L1073 FOR ALLOWABLE RIDE HEIGHT RANGES.

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5. RIDE HEIGHT – JOUNCE = "G"
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<6> WHEN THE OPTION FOR FRONT AND REAR SHOCKS IS SELECTED, DIMENSIONS FROM "REBOUND WITH REAR SHOCKS" AND "H WITH REAR SHOCKS" SHOULD BE USED

<7> AIR DISC ONLY AVAILABLE WITH REAR SHOCKS

<8> BOLT–ON PIVOT HEIGHT CHANGES TO 4.6 FOR 9.0 RIDE HEIGHT.

<7>

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INTRAAX® AAL LDA
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SCALE 1.00=1.00 | SIZE D | PAGE 5 OF 12
DRAWING No. D–30900

LIMITED JOUNCE & HIGH CONTROL TRAVEL DIMENSIONS FROM PAGE 1 FOR AAL LDA 30K										
RIDE HEIGHT	◁3 JOUNCE	◁3 REBOUND W/FRONT SHOCKS	◁3 ◁6 ◁7 REBOUND W/REAR SHOCKS	BUMPER CONTACT	D	◁8 E	F	◁4 G	◁4 H W/FRONT SHOCKS	◁4 ◁6 H W/REAR SHOCKS
9.0	2.9	4.2	3.7	2.5	2.25	4.5	⊘18.9	6.1	13.2	12.7
12.0	3.6	4.8	3.5	3.2	2.25	8.0	19.1	8.4	16.8	15.5
14.0	4.0	4.4	4.2	3.6	3.50	10.0	19.1	10.0	18.4	18.2
15.0	4.0	3.4	3.2	3.6	5.31	10.0	18.8	11.0	18.4	18.2
16.0	4.1	4.3	4.3	3.7	5.31	12.0	19.1	11.9	20.3	20.3
17.0	4.0	3.3	3.3	3.6	7.31	12.0	18.8	13.0	20.3	20.3
19.0	4.0	3.5	3.4	3.6	9.25	14.0	18.8	15.0	22.5	22.4

NOTES:

1. SEE L729 FOR SUSPENSION WEIGHT.
2. SEE L1073 FOR ALLOWABLE RIDE HEIGHT RANGES.

◁3 JOUNCE AND REBOUND DIMENSIONS CHANGE AS THE RIDE HEIGHT CHANGES FROM THE NOMINAL POSITION.

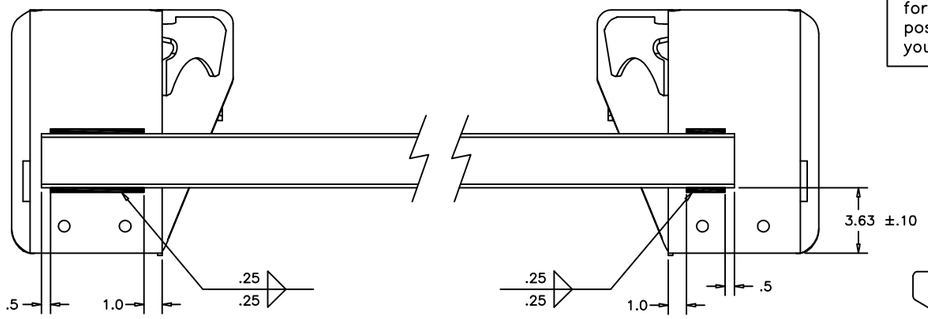
◁4 DIMENSIONS "G" & "H" WILL REMAIN CONSTANT REGARDLESS OF RIDE HEIGHT VARIATION FROM NOMINAL POSITION.

5. RIDE HEIGHT − JOUNCE = "G"
   RIDE HEIGHT + REBOUND = "H"

◁6 WHEN THE OPTION FOR FRONT AND REAR SHOCKS IS SELECTED, DIMENSIONS FROM "REBOUND WITH REAR SHOCKS" AND "H WITH REAR SHOCKS" SHOULD BE USED

◁7 AIR DISC ONLY AVAILABLE WITH REAR SHOCKS

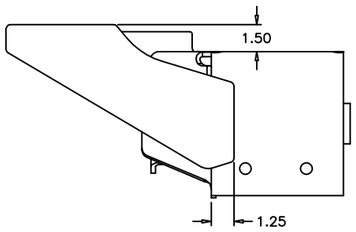
◁8 BOLT−ON PIVOT HEIGHT CHANGES TO 4.6 FOR 9.0 RIDE HEIGHT



C–CHANNEL WELDING AT 35" & 47" BEAM CENTERS

C–CHANNEL – WINGLESS, WELD–ON ALL EXCEPT 19" RIDE HEIGHT

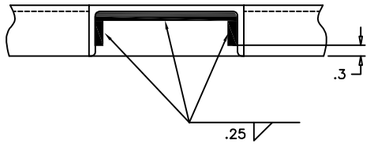
C–CHANNEL WELDING AT 41" & 48.5" BEAM CENTERS



VIEW B

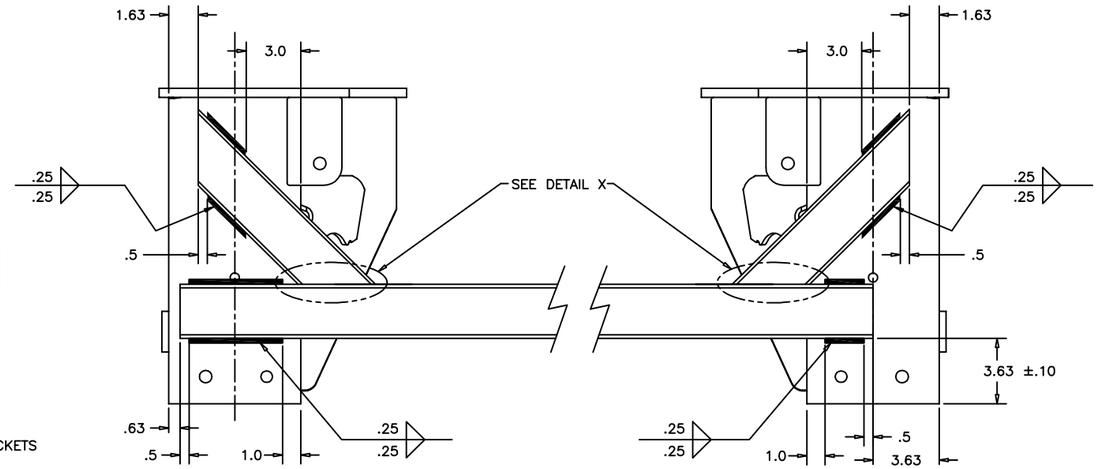
SCALE: .25=1.00

FOR SHORT, WINGED WELD–ON FRAME BRACKETS & SOME UBL INSTALLATIONS



DETAIL X

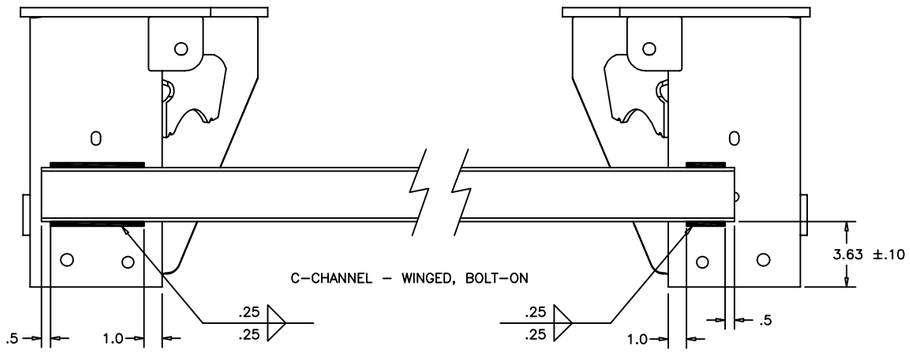
SCALE: .50=1.00



C–CHANNEL WELDING AT 35" & 47" BEAM CENTERS

C–CHANNEL & FRAME BRACKET BRACE 19" RIDE HEIGHT ONLY WINGED BOLT–ON SHOWN, OTHERS SIMILAR.

C–CHANNEL WELDING AT 41" & 48.5" BEAM CENTERS



C–CHANNEL – WINGED, BOLT–ON

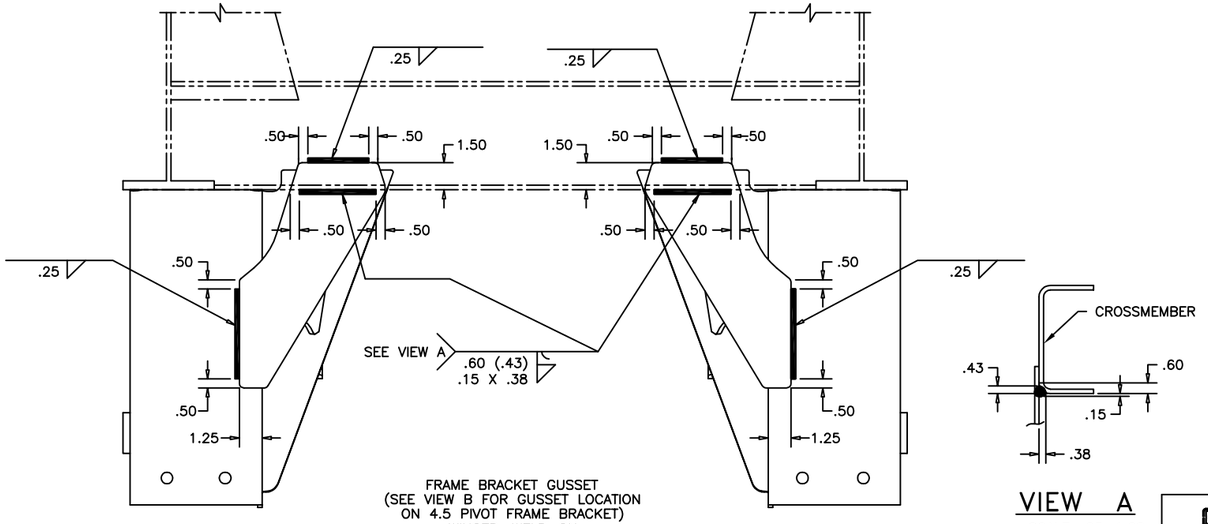
C–CHANNEL WELDING AT 35" & 47" BEAM CENTERS

C–CHANNEL WELDING AT 41" & 48.5" BEAM CENTERS

FRAME BRACKET BRACING				
FRAME ATTACHMENT––	WELD–ON		BOLT–ON	
HIGH CONTROL––	YES –OR– NO		NO	YES
FRAME BRACKET STYLE––	WINGED	WINGLESS	WINGED	
RIDE HEIGHT				
6.5	FRAME BRACKET GUSSET REQUIRED	C–CHANNEL REQUIRED	NONE	NONE
7.5				
8.0				
9.0				
12.0				C–CHANNEL REQUIRED
14.0				
15.0				
16.0			C–CHANNEL REQUIRED	
17.0				
19.0			C–CHANNEL & FRAME BRACKET BRACE REQUIRED	C–CHANNEL & FRAME BRACKET BRACE REQUIRED

IT IS THE RESPONSIBILITY OF THE SUSPENSION INSTALLER TO PROVIDE AN EQUIVALENT FRAME BRACKET SUPPORT IF THE FRAME BRACKET BRACING IS NOT PURCHASED FROM HENDRICKSON.

HD BOLT ON C–CHANNEL WITH STRUTS OPTION		BOLT–ON C–CHANNEL WITH STRUTS OPTION	
FRAME ATTACHMENT––	BOLT–ON	FRAME ATTACHMENT––	BOLT–ON
HIGH CONTROL––	YES –OR– NO	HIGH CONTROL––	YES –OR– NO
FRAME BRACKET STYLE––	WINGED	FRAME BRACKET STYLE––	WINGED
RIDE HEIGHT		RIDE HEIGHT	
6.5		6.5	WITHOUT STRUTS
7.5		7.5	
8.0		8.0	
9.0		9.0	
12.0		12.0	WITH STRUTS
14.0		14.0	
15.0		15.0	
16.0	WITH STRUTS	16.0	
17.0		17.0	
19.0		19.0	



FRAME BRACKET GUSSET (SEE VIEW B FOR GUSSET LOCATION ON 4.5 PIVOT FRAME BRACKET) WINGED, WELD–ON

VIEW A

SCALE: .25=1.00

HENDRICKSON

TRAILER COMMERCIAL VEHICLE SYSTEMS

2070 INDUSTRIAL PLAZA R.D., CANTON, OH 44707–2800 U.S.A.

UNLESS OTHERWISE NOTED: TOLERANCES ARE: DIMENSIONS ARE: INCHES .X: ± – .XX: ± – .XXX: ± – ANGULAR: ± – 3RD ANGLE PROJECTION DIMENSIONS ADHERE TO ANSI Y14.5M–1982

REV.	ECN NO.	BY	DATE
7	0451.36	DJD	10/21/24
6	042444	DJD	8–28–23
5	042123	SAK	07/07/23
4	26055	RML	11/28/16

DRAWN BY D. DAGNALL 8–24–12

CHK'D BY C. RADCLIFF

APP'D BY. B. MUCKELRATH

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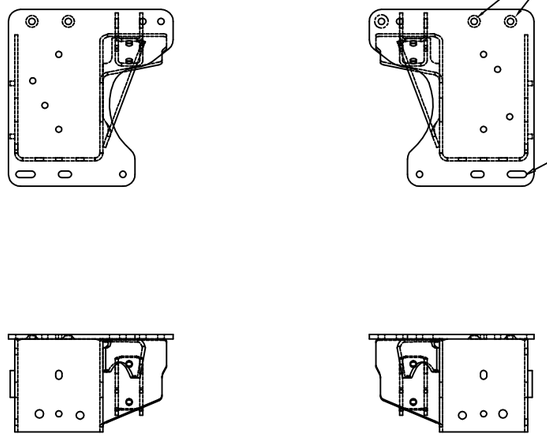
INTRAAX® AAL LDA

INSTALLATION DRAWING

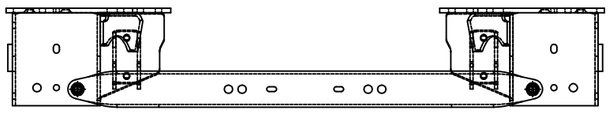
SCALE .25=1.00 | SIZE D | PAGE 7 OF 12

DRAWING No. D–30900

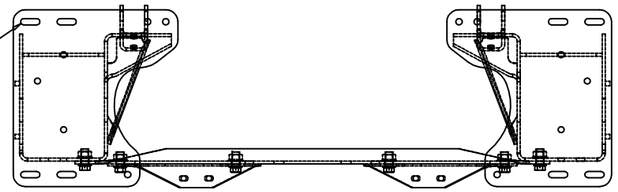
P PRODUCTION



6.5 THROUGH 9.0 RIDE HEIGHTS FOR BOLT ON UNITS ONLY.
STANDARD C-CHANNEL

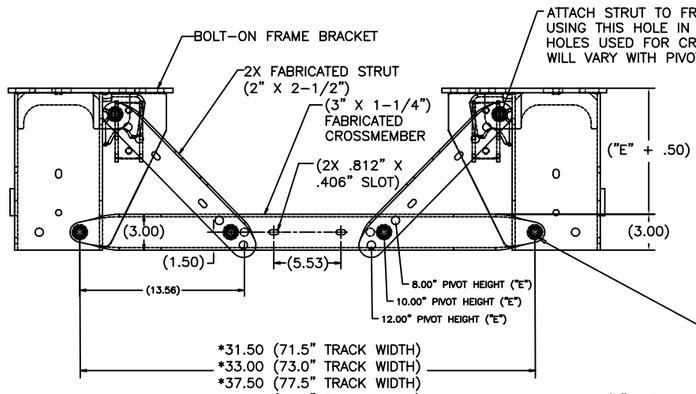


6.5 THROUGH 9.0 RIDE HEIGHTS FOR BOLT ON UNITS ONLY.
BOLT-ON C-CHANNEL
(SEE 12.0 THROUGH 19.0 RIDE HEIGHT VIEW FOR DIMENSIONS AND NOTES)



INSTALLATION SEQUENCE:

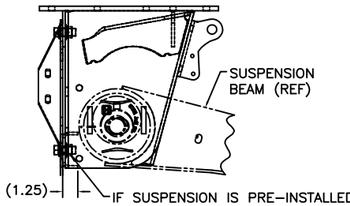
1. LOCATE FRAME BRACKETS ONTO TRAILER FRAME AND LOOSELY INSTALL MOUNTING BOLTS USING HARDENED WASHERS AT ALL SLOTTED HOLE LOCATIONS.
2. INSTALL CROSSMEMBER, USING 5/8" MOUNTING HOLES ON FRONT OF FRAME BRACKETS.
3. INSTALL STRUTS, USING 5/8" MOUNTING HOLES IN FRAME BRACKET GUSSET AND CROSSMEMBER.
4. TIGHTEN CROSSMEMBER MOUNTING BOLTS AND STRUT MOUNTING BOLTS IF PRESENT.
5. TIGHTEN FRAME BRACKET MOUNTING BOLTS.



*31.50 (71.5" TRACK WIDTH)
*33.00 (73.0" TRACK WIDTH)
*37.50 (77.5" TRACK WIDTH)
*43.50 (83.5" TRACK WIDTH)
OTHER TRACK WIDTHS NOT AVAILABLE
*THIS DIMENSION MUST BE MAINTAINED WITHIN ±.06"

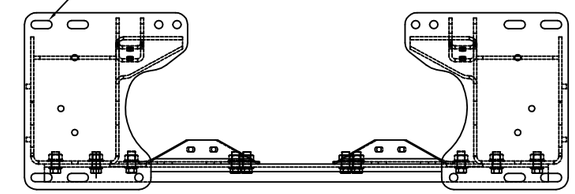
12.0 THROUGH 19.0 RIDE HEIGHTS FOR BOLT ON UNITS ONLY.
BOLT-ON C-CHANNEL WITH STRUTS

BOLT-ON C-CHANNEL WITH STRUTS



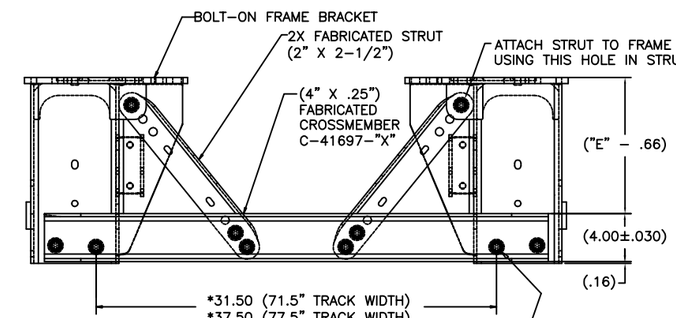
IF SUSPENSION IS PRE-INSTALLED IN FRAME BRACKETS, INSTALLATION OF CROSSMEMBER WILL REQUIRE HOLDING THIS NUT WITH AN OPEN-END WRENCH, WHILE TURNING THE BOLT HEAD TO TIGHTEN. (THERE IS NOT ENOUGH ROOM AHEAD OF THE BUSHING TUBE TO USE A BOX-END OR SOCKET WRENCH, NOR TO INSERT THE BOLT FROM INSIDE THE FRAME BRACKET).

USE 5/8" HEX HEAD FLANGE SCREW WITH SPIRALOCK FLANGE NUT.
(SEE KIT A-29822) CROSSMEMBER ONLY, KIT INCLUDES 2 SCREWS AND NUTS)
(SEE KIT A-30720) CROSSMEMBER & STRUTS, KIT INCLUDES 6 SCREWS AND NUTS)
TORQUE TO 190±20 FT-LB.
((TORQUE BY NUT WHERE POSSIBLE))



INSTALLATION SEQUENCE:

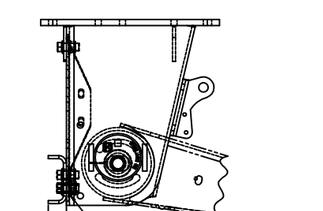
1. LOCATE FRAME BRACKETS ONTO TRAILER FRAME AND LOOSELY INSTALL MOUNTING BOLTS USING HARDENED WASHERS AT ALL SLOTTED HOLE LOCATIONS.
2. INSTALL CROSSMEMBER, USING 5/8" MOUNTING HOLES ON FRONT OF FRAME BRACKETS.
3. INSTALL STRUTS, USING 5/8" MOUNTING HOLES IN FRAME BRACKET GUSSET AND CROSSMEMBER.
4. TIGHTEN CROSSMEMBER MOUNTING BOLTS AND STRUT MOUNTING BOLTS.
5. TIGHTEN FRAME BRACKET MOUNTING BOLTS.



*31.50 (71.5" TRACK WIDTH)
*37.50 (77.5" TRACK WIDTH)
OTHER TRACK WIDTHS NOT AVAILABLE
*THIS DIMENSION MUST BE MAINTAINED WITHIN ±.06"

16.0 THROUGH 19.0 RIDE HEIGHTS FOR BOLT ON UNITS ONLY.
HD BOLT-ON C-CHANNEL WITH STRUTS

USE 5/8" HEX HEAD FLANGE SCREW WITH SPIRALOCK FLANGE NUT
(SEE KIT A-41823-1 FOR CROSSMEMBER & STRUTS, KIT INCLUDES 10 SCREWS AND NUTS)
190±20 FT-LB.
((TORQUE BY NUT WHERE POSSIBLE))



IF SUSPENSION IS PRE-INSTALLED IN FRAME BRACKETS, INSTALLATION OF CROSSMEMBER WILL REQUIRE HOLDING THIS NUT WITH AN OPEN-END WRENCH, WHILE TURNING THE BOLT HEAD TO TIGHTEN. (THERE IS NOT ENOUGH ROOM AHEAD OF THE BUSHING TUBE TO USE A BOX-END OR SOCKET WRENCH, NOR TO INSERT THE BOLT FROM INSIDE THE FRAME BRACKET).

4-INCH HEAVY DUTY BOLT-ON C-CHANNEL WITH STRUTS

HENDRICKSON
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2070 INDUSTRIAL PLACE S.E., CANTON, OH 44707-3600 U.S.A.

UNLESS OTHERWISE NOTED: TOLERANCES ARE: DIMENSIONS ARE: INCHES
X: ± –
.XX: ± –
.XXX: ± –
ANGULAR: ± –
3RD ANGLE PROJECTION
DIMENSIONS ADHERE TO ANSI Y14.5M-1982

REV.	ECN NO.	BY	DATE
7	045136	DJD	10/21/24
6	042444	DJD	8-25-23
5	042123	SAK	07/07/23
4	26055	RML	11/28/16

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CHK'D BY C. RADCLIFF
APP'D BY B. MUCKELRATH
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INTRAAX® AAL LDA
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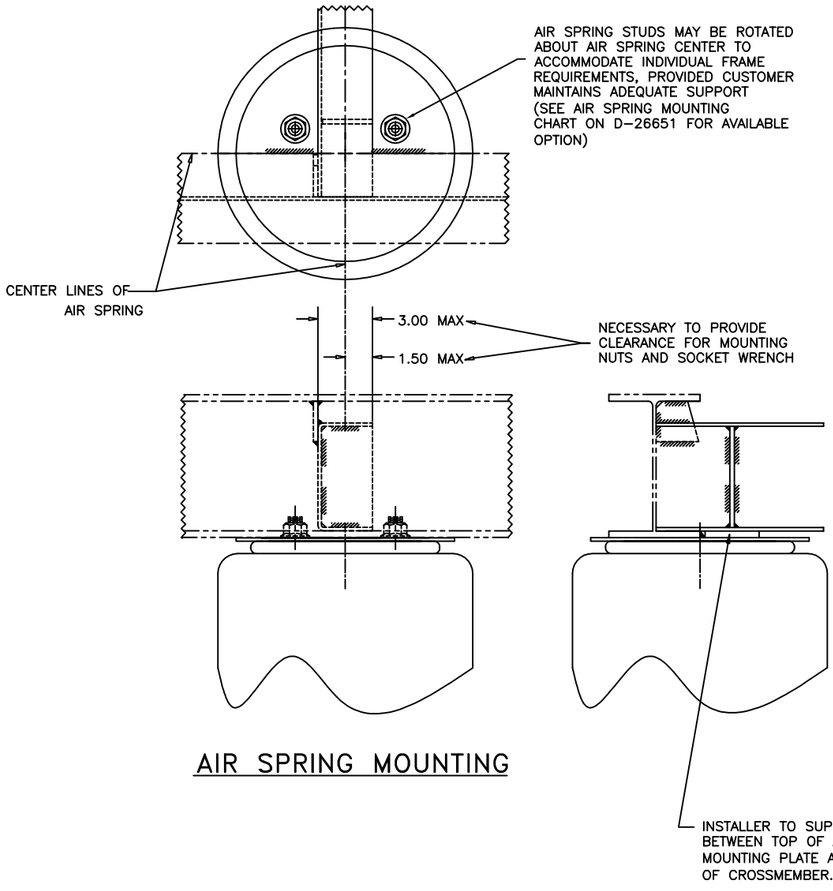
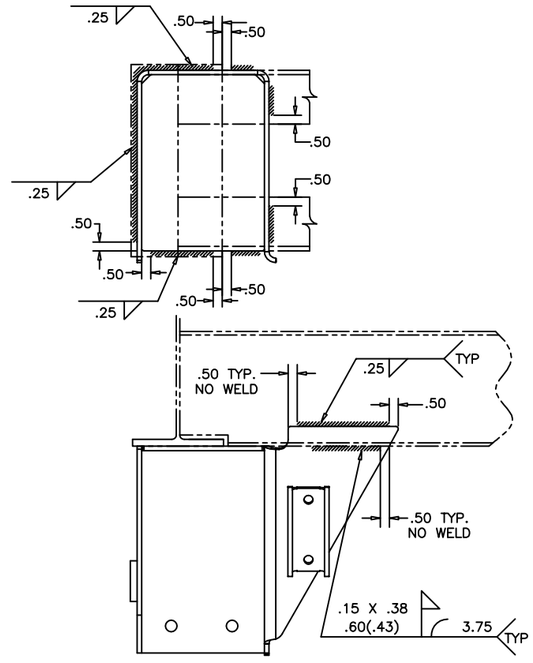
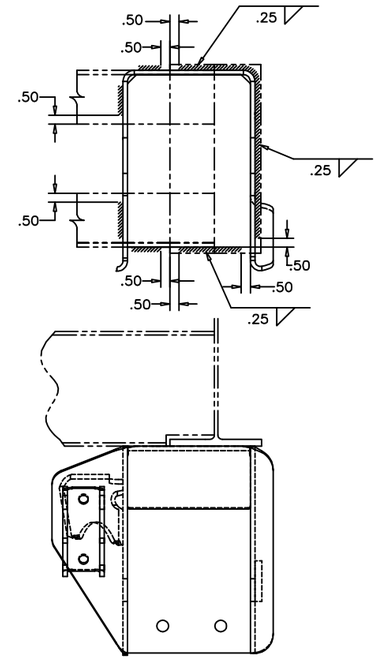
SCALE .166=1.000 SIZE D PAGE 8 OF 12
DRAWING No. D-30900
P PRODUCTION



AIR SPRING MOUNTING



WITH WING



WINGLESS

NOTES:

1. ////// PATTERN DENOTES WELD PLACEMENT.

HENDRICKSON
TRAILER COMMERCIAL VEHICLE SYSTEMS
2070 INDUSTRIAL PLACE S.E., CANTON, OH 44707-2800 U.S.A.

UNLESS OTHERWISE NOTED:
TOLERANCES ARE: DIMENSIONS ARE: INCHES
.X: ± –
.XX: ± –
.XXX: ± –
ANGULAR: ± –
3RD ANGLE PROJECTION
DIMENSIONS ADHERE TO ANSI Y14.5M–1982

REV.	ECN NO.	BY	DATE
7	045136	DJD	10/21/24
6	042444	DJD	9-28-23
5	042123	SAK	07/07/23
4	28055	RML	11/25/16

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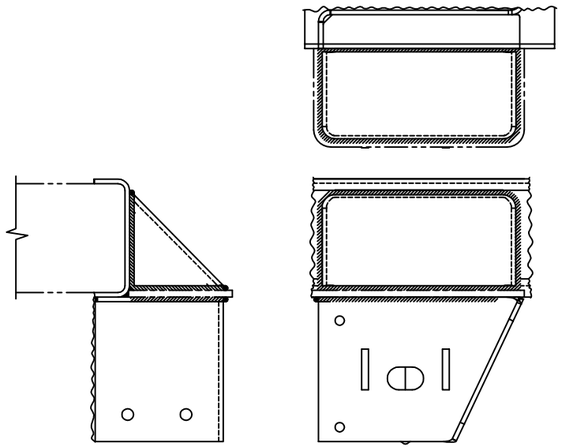
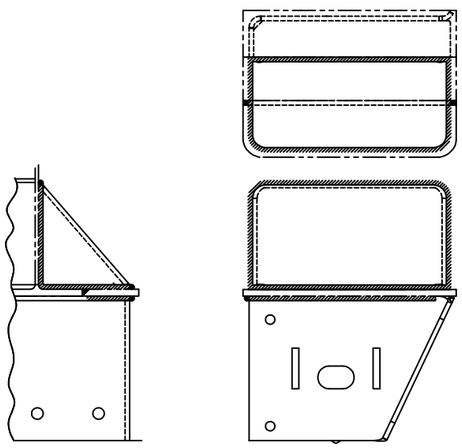
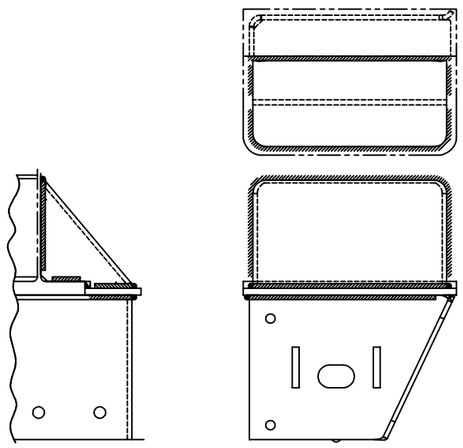
SCALE .25=1.00 | SIZE D | PAGE 9 OF12
DRAWING No. D–30900



CHANNEL



THIN FLANGE I–BEAM



THICK FLANGE I–BEAM

SUGGESTED METHOD OF SUPPORTING
FRAME BRACKET OVERHANG

NOTES:
1. PATTERN DENOTES WELD PLACEMENT.

HENDRICKSON
TRAILER COMMERCIAL VEHICLE SYSTEMS
2070 INDUSTRIAL PLACE S.E. CANTON, OH 44707-3900 U.S.A.

UNLESS OTHERWISE NOTED:
TOLERANCES ARE: DIMENSIONS ARE: INCHES
.X: ± –
.XX: ± –
.XXX: ± –
ANGULAR: ± –
3RD ANGLE PROJECTION
DIMENSIONS ADHERE TO ANSI Y14.5M–1982

REV.	ECN NO.	BY	DATE
7	045136	DJD	10/21/24
6	042444	DJD	9–13–23
5	042123	SAK	07/07/23
4	26055	RML	11/28/16

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CHK'D BY: C. RADCLIFF
APP'D BY: B. BUCKELRATH
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INSTALLATION DRAWING

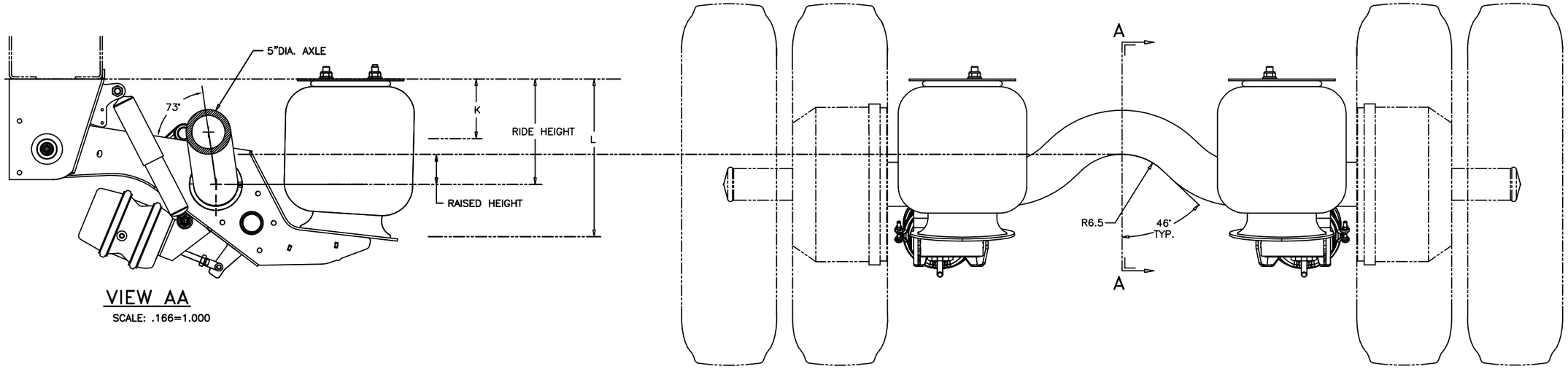
SCALE .25=1.00 SIZE D PAGE 10 OF 12
DRAWING No. D–30900

7 P PRODUCTION

NOTES:

1. THIS PAGE IS FOR AAL 23K AND 25K SUSPENSIONS WITH RAISED CENTER AXLE OPTION.
2. SUSPENSION DIMENSIONS AND TRAVEL: SEE PAGE 2.
3. SEE L1065 FOR SUSPENSION WEIGHT.

	RAISED HEIGHT		
RIDE HEIGHT	AT RIDE HEIGHT	AT FULL JOUNCE (K)	AT FULL REBOUND (L)
AAL 23K AND 25K RAISED CENTER AXLE DIMENSIONS			
STANDARD TRAVEL			
6.5	3.3	3.1	3.4
7.5	3.3	3.1	3.4
8.0	3.4	3.1	3.4
9.0	3.4	3.1	3.4
12.0	3.4	3.0	3.4
14.0	3.4	3.0	3.4
15.0	3.4	3.0	3.4
16.0	3.4	3.0	3.4
17.0	3.4	3.1	3.4
19.0	3.4	3.1	3.4
LIMITED JOUNCE TRAVEL			
8.0	3.4	3.2	3.4
9.0	3.4	3.2	3.4
12.0	3.4	3.2	3.4
14.0	3.4	3.1	3.4
15.0	3.4	3.2	3.4
16.0	3.4	3.1	3.4
17.0	3.4	3.2	3.4
19.0	3.4	3.2	3.4



VIEW AA
SCALE: .166=1.000

HENDRICKSON TRAILER COMMERCIAL VEHICLE SYSTEMS 2070 INDUSTRIAL PLACE S.E., CANTON, OH 44707-2800 U.S.A.	UNLESS OTHERWISE NOTED: TOLERANCES ARE DIMENSIONS ARE: INCHES .X: ± – .XX: ± – .XXX: ± – ANGULAR: ± – 3RD ANGLE PROJECTION DIMENSIONS ADHERE TO ANSI Y14.5M–1982	7	045136	DJD	10/21/24	DRWN BY D. DAGNALL	8–30–12	INTRAAX® AAL LDA INSTALLATION DRAWING
		6	042444	DJD	8–28–23	CHK'D BY C. RADCLIFF	THIS DRAWING IS THE CONFIDENTIAL PROPERTY OF HENDRICKSON	
		5	042123	SAK	07/07/23	APP'D BY B. MUCKELRATH		
		4	26255	RML	11/28/16			
	REV. ECN NO. BY DATE							

⑦ P PRODUCTION

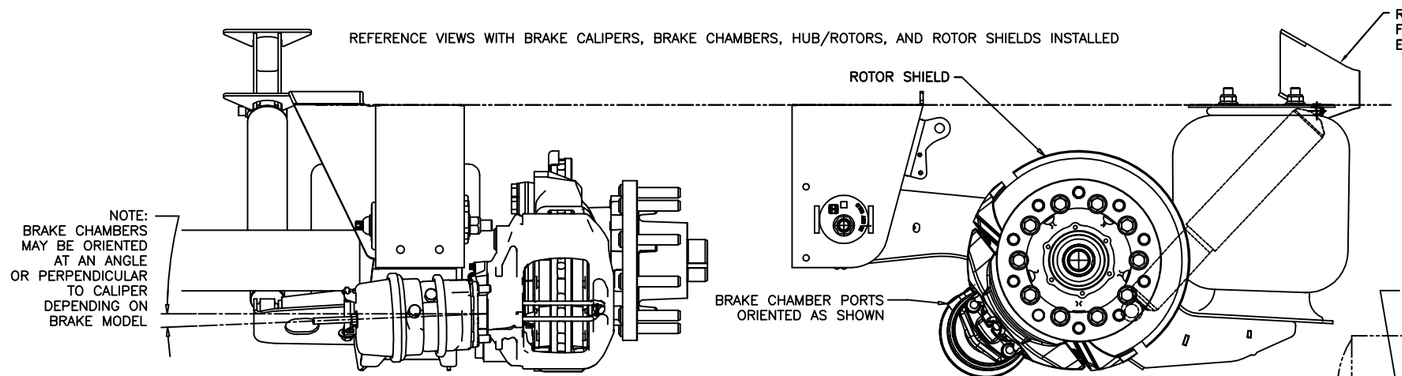
SCALE .166=1.000 | SIZE D | PAGE 11 OF 12

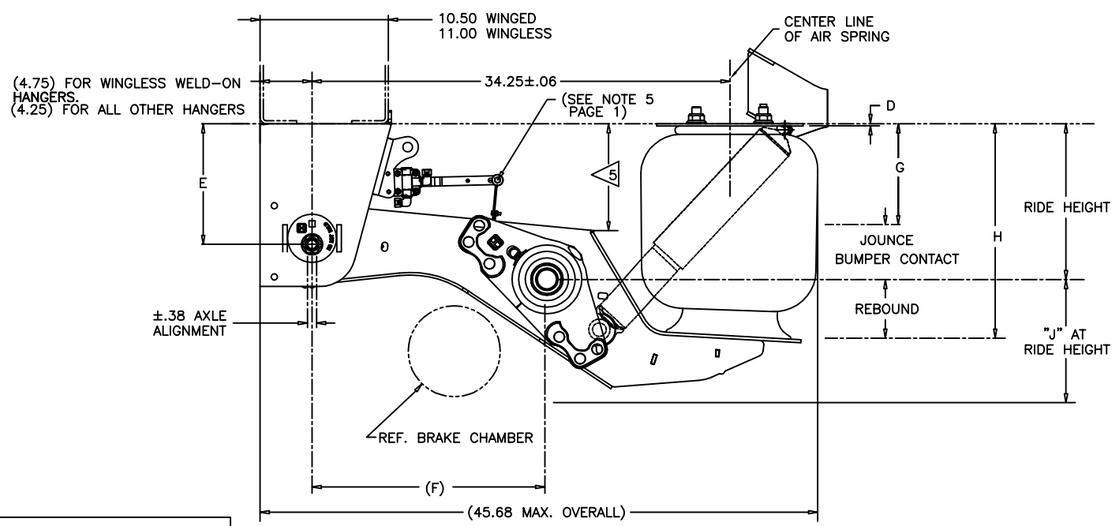
DRAWING No. D–30900

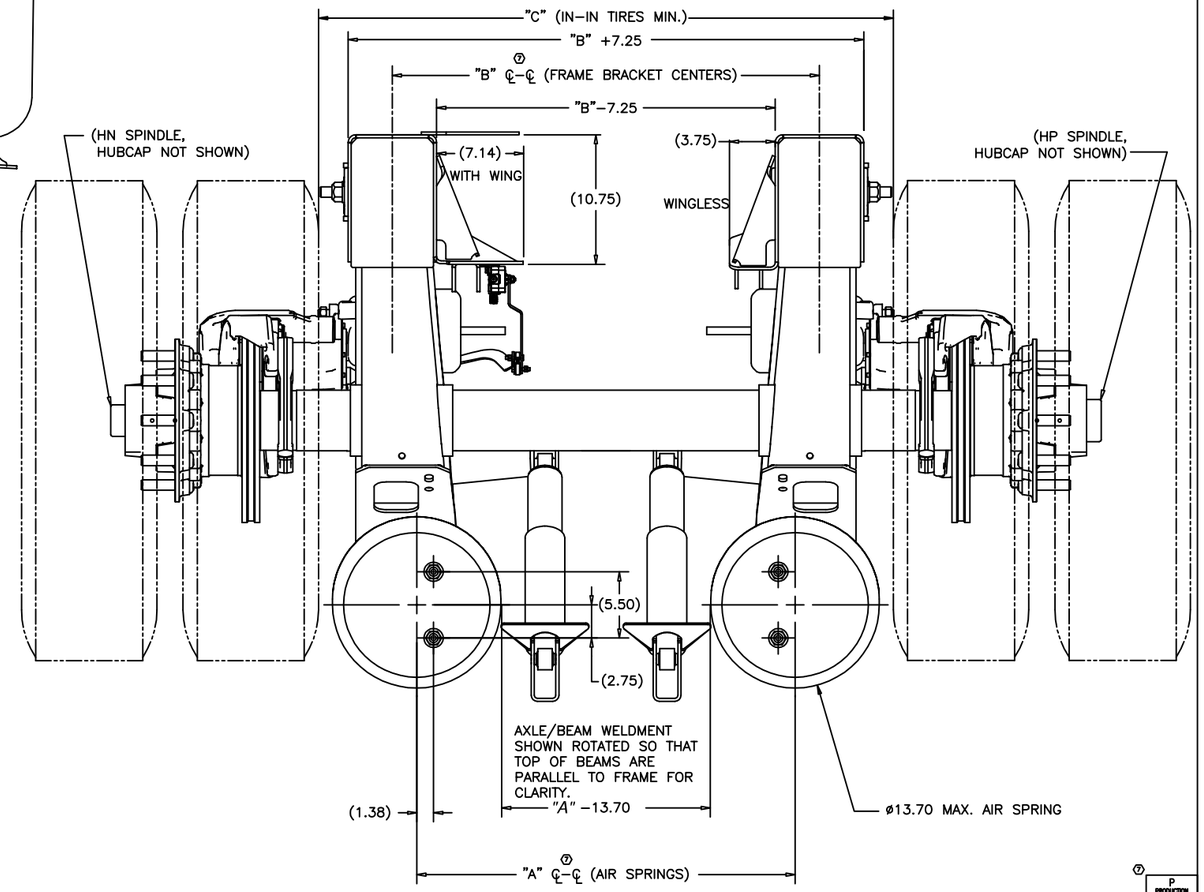
NOTES:

1. THIS PAGE IS FOR AAL 23K, 25K, AND 30K SUSPENSIONS WITH AIR DISC BRAKES OPTION.
2. MERITOR WABCO PAN22 BRAKE CALIPERS AND GUNITE DUCTILE IRON HUBS WITH GUNITE ROTORS REPRESENTED IN GRAPHICS.
3. NOT ALL HUB/ROTOR OPTIONS ARE AVAILABLE WITH ALL BRAKE OPTIONS.
4. AIR DISC BRAKES COMPATIBLE WITH 22.5" OR 24.5" TIRES ONLY.
5. DO NOT ROUTE ITEMS THROUGH THIS AREA FOR 9.0 INCH AND LOWER RIDE HEIGHTS DUE TO MINIMAL BEAM TO FRAME CLEARANCE.

REFERENCE VIEWS WITH BRAKE CALIPERS, BRAKE CHAMBERS, HUB/ROTORS, AND ROTOR SHIELDS INSTALLED







AIR DISC BRAKES ONLY

SEE PAGE 1,2,4,5, AND 7 FOR TABULATED DIMENSIONS AND NOTES

HENDRICKSON
TRAILER COMMERCIAL VEHICLE SYSTEMS
2070 INDUSTRIAL PLACE S.E., CANTON, OH 44707-2600 U.S.A.

UNLESS OTHERWISE NOTED: TOLERANCES ARE: DIMENSIONS ARE: INCHES
X: ± –
XX: ± –
XXX: ± –
ANGULAR: ± –
3RD ANGLE PROJECTION
DIMENSIONS ADHERE TO ANSI Y14.5M-1982

REV.	ECN NO.	BY	DATE
7	045136	DJD	10/21/24
6	042444	DJD	8-28-23
5	042123	SAK	07/07/23
4	26055	RML	11/28/16

DRAWN BY: D. DAGNALL 8-30-12
CHK'D BY: C. RADCLIFF
APP'D BY: B. MUCKELRATH
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INTRAAX ® AAL LDA
INSTALLATION DRAWING

SCALE .166=1.000 | SIZE D | ⑦ P PRODUCTION
DRAWING No. D-30900