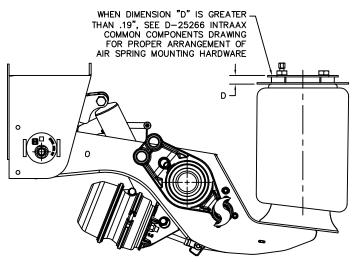
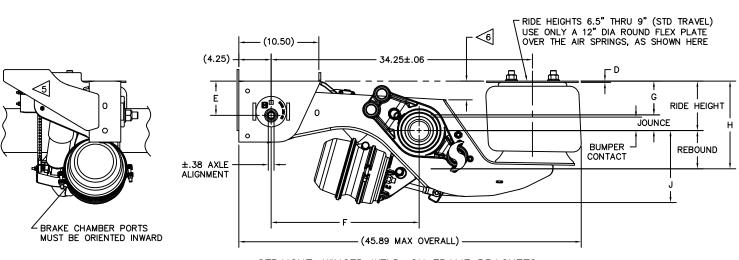
1. SEE L1073 FOR INFORMATION ON ASSEMBLY, WELDING PROCEDURE, AND ALIGNMENT. 2. SEE SERVICE MANUAL FOR INFORMATION CONCERNING MAINTENANCE - (6.72) - 3. MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING PATENTS: OTHER PATENTS PENDING U.S. PATENT NOS. — 5,366,237 — 4,166,640. ✓4 SEE L1182 FOR HEIGHT CONTROL KIT OPTIONS. 5 SEE PAGE 3 FOR FRAME BRACKET FRONT GUSSET REQUIREMENTS. DO NOT ROUTE ITEMS THROUGH THIS AREA FOR 9" AND LOWER RIDE HEIGHTS, DUE TO MINIMAL BEAM TO FRAME CLEARANCE. 7. SEE D-29431 FOR DIMENSIONS AND CROSSMEMBER LOCATIONS. 8. SEE D-25266 FOR INSTALLATION INSTRUCTIONS ON COMPONENTS THAT ARE COMMON BETWEEN DIFFERENT INTRAAX MODELS (PIVOT CONNECTION AIR SPRINGS, SHOCK ABSORBERS, BRAKE CHAMBERS AND SLACK ADJUSTERS). 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. This Print remains the property of Hendrickson. All information contained thereon is confidential. It is loaned, subject to return on demand and on express condition that it is not to be copied or used directly or indirectly for any purpose other than the pur-WHEN DIMENSION "D" IS GREATER pose for which it has been loaned to THAN .19", SEE D-25266 INTRAAX COMMON COMPONENTS DRAWING FOR PROPER ARRANGEMENT OF AIR SPRING MOUNTING HARDWARE

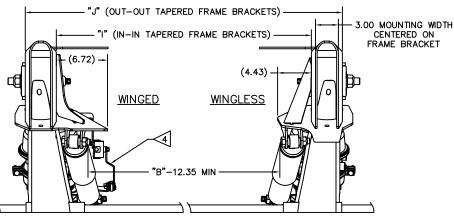




SHOWN AT 14" RIDE HEIGHT ALL NON-TABULATED DIMENSIONS SAME AS IN 6.5" RIDE HEIGHT VIEW, BELOW

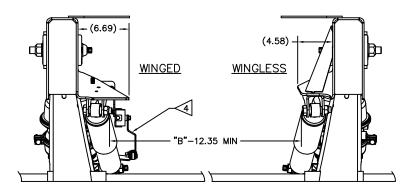


STRAIGHT, WINGED WELD-ON FRAME BRACKETS SHOWN AT 6.5" RIDE HEIGHT



TAPERED WELD-ON FRAME BRACKETS

SHOWN WITH 10" PIVOT HEIGHT FRAME BRACKETS DIMENSIONS SHOWN APPLY FOR 12" THRU 17" RIDE HEIGHTS ONLY ALL DIMENSIONS SAME AS IN FULL TOP VIEW BELOW, EXCEPT AS NOTED



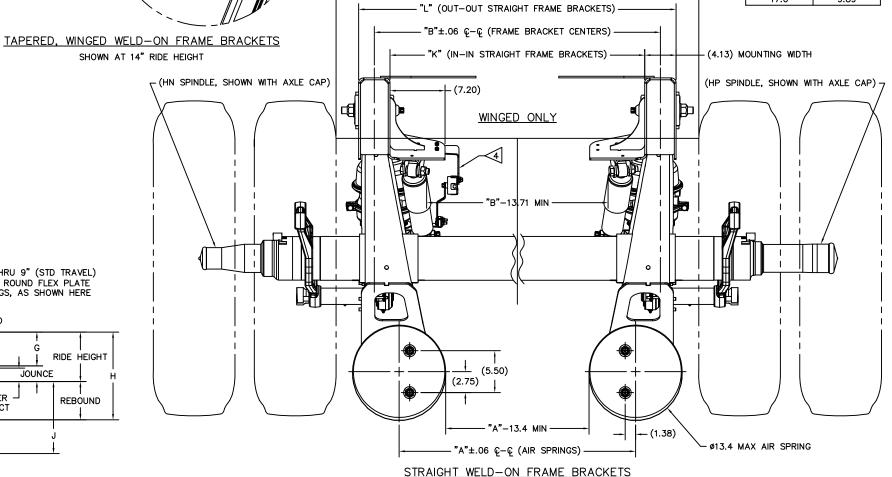
STRAIGHT WELD-ON FRAME BRACKETS

SHOWN WITH 10" PIVOT HEIGHT FRAME BRACKETS DIMENSIONS SHOWN APPLY FOR 12" THRU 17" RIDE HEIGHTS ONLY ALL DIMENSIONS SAME AS IN FULL TOP VIEW BELOW, EXCEPT AS NOTED

TRACK WIDTH (IN)	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
DIMENSION "B" (IN)	37.50	39.00	41.50	42.50	43.50	49.50	51.00
DIMENSION "C" (IN)	46.50	48.00	50.50	51.50	52.50	58.50	60.00
DIMENSION "/" (IN)	33.44	34.94	37.44	38.44	39.44	45.44	46.94
DIMENSION "J" (IN)	41.56	43.06	45.56	46.56	47.56	53.56	55.06
DIMENSION "K" (IN)	33.38	34.88	37.38	38.38	39.38	45.38	46.88
DIMENSION "L" (IN)	41.63	43.13	45.63	46.63	47.63	53.63	55.13

"C" MIN (IN-IN TIRES)

GROUND CLEARANCE OBTAIN GROUND CLEARANCE BY SUBTRACTING "J" FROM LOADED TIRE RADIUS. RIDE HT ".J" 6.5 9.43 7.5 9.54 8.0 9.58 9.0 9.67 12.0 14.0 9.61 15.0 9.89 16.0 9.61 17.0 9.89



SHOWN WITH 4.5" PIVOT HEIGHT FRAME BRACKETS, FOR 6.5" THRU 9" RIDE HEIGHTS ONLY

L.KEETON 01-09-07

INTRAAX® AANL INSTALLATION DRAWING .166=1.000 SIZE D PAGE 1 OF 6

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

D-29460

SEE PAGE 2 FOR TABULATED DIMENSIONS SHOWN ABOVE

RIDE HT	JOUNCE	REBOUND W/FRONT SHOCKS	26 REBOUND W/REAR SHOCKS	BUMPER CONTACT	D	E	F	G	H W/FRONT SHOCKS	H W/REAR SHOCKS
				WE	ELD-01	٧				
STANDARD TRAVEL										
6.5	2.1	5.0	4.7	1.7	.19	4.5	19.4	4.4	11.5	11.2
7.5	3.1	4.0	3.7	2.7	.19	4.5	19.3	4.4	11.5	11.2
8.0	3.6	5.2	4.4	3.2	.19	4.5	19.2	4.4	13.2	12.4
9.0	4.6	4.2	3.4	4.2	.19	4.5	19.0	4.4	13.2	12.4
12.0	5.1	4.5	3.2	4.7	.19	8.0	19.1	7.0	16.5	15.2
14.0	5.6	4.3	3.9	5.3	1.13	10.0	19.1	8.4	18.3	17.9
15.0	5.3	3.3	4.1	4.9	3.50	10.0	18.9	9.7	18.3	19.1
16.0	5.4	4.3	4.0	5.0	3.50	12.0	19.1	10.6	20.3	20.0
17.0	5.7	3.3	3.0	5.3	4.81	12.0	18.9	11.3	20.3	20.0
LIMITED JOUNCE TRAVEL										
8.0	2.9	5.2	4.4	2.5	1.50	4.5	19.2	5.1	13.2	12.4
9.0	3.5	4.2	3.4	3.1	2.25	4.5	19.0	5.6	13.2	12.4
12.0	3.9	4.5	3.2	3.5	2.25	8.0	19.1	8.1	16.5	15.2
14.0	4.3	4.3	3.9	3.9	3.50	10.0	19.1	9.7	18.3	17.9
15.0	4.3	3.3	4.1	3.9	5.31	10.0	18.9	10.7	18.3	19.1
16.0	4.4	4.3	4.0	4.0	5.31	12.0	19.1	11.6	20.3	20.0
17.0	4.3	3.3	3.0	3.9	7.31	12.0	18.9	12.7	20.3	20.0

NOTES:

1. SEE L729 FOR SUSPENSION WEIGHT

JOUNCE, REBOUND AND BUMPER CONTACT DIMENSIONS CHANGE AS THE RIDE HEIGHT CHANGES FROM THE NOMINAL POSITION.

JOUNCE, REBOUND AND BUMPER CONTACT DIMENSIONS FOR WELD-ON SUSPENSIONS ARE FROM TRAVEL STUDY DRAWING D-27476 (STRAIGHT WELD-ON). JOUNCE DIMENSIONS FOR BOLT-ON SUSPENSIONS ARE FROM TRAVEL STUDY DRAWING D-30134 (BOLT-ON CLASSIC).

REBOUND AND BUMPER CONTACT DIMENSIONS FOR BOLT-ON SUSPENSIONS ARE FROM TRAVEL STUDY DRAWING D-30132 (SIDE-MOUNT BOLT-ON).

- DIMENSIONS "G" & "H" WILL REMAIN CONSTANT REGARDLESS OF RIDE HEIGHT VARIATION FROM NOMINAL POSITION.
- 4. "G" = RIDE HEIGHT JOUNCE.
 "H" = RIDE HEIGHT + REBOUND.
- DIMENSION SHOWN IS FOR BOLT-ON CLASSIC FRAME BRACKET, WHICH USES .38 THICK MOUNTING PLATE.

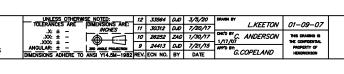
 ADD .12 INCH FOR SIDE-MOUNT BOLT-ON FRAME BRACKET, WHICH USES .50 THICK MOUNTING PLATE.
- 6 AIR DISC ONLY AVAILABLE WITH REAR SHOCKS
- 7. SEE L1073 FOR RIDE HEIGHT RANGE LITERATURE

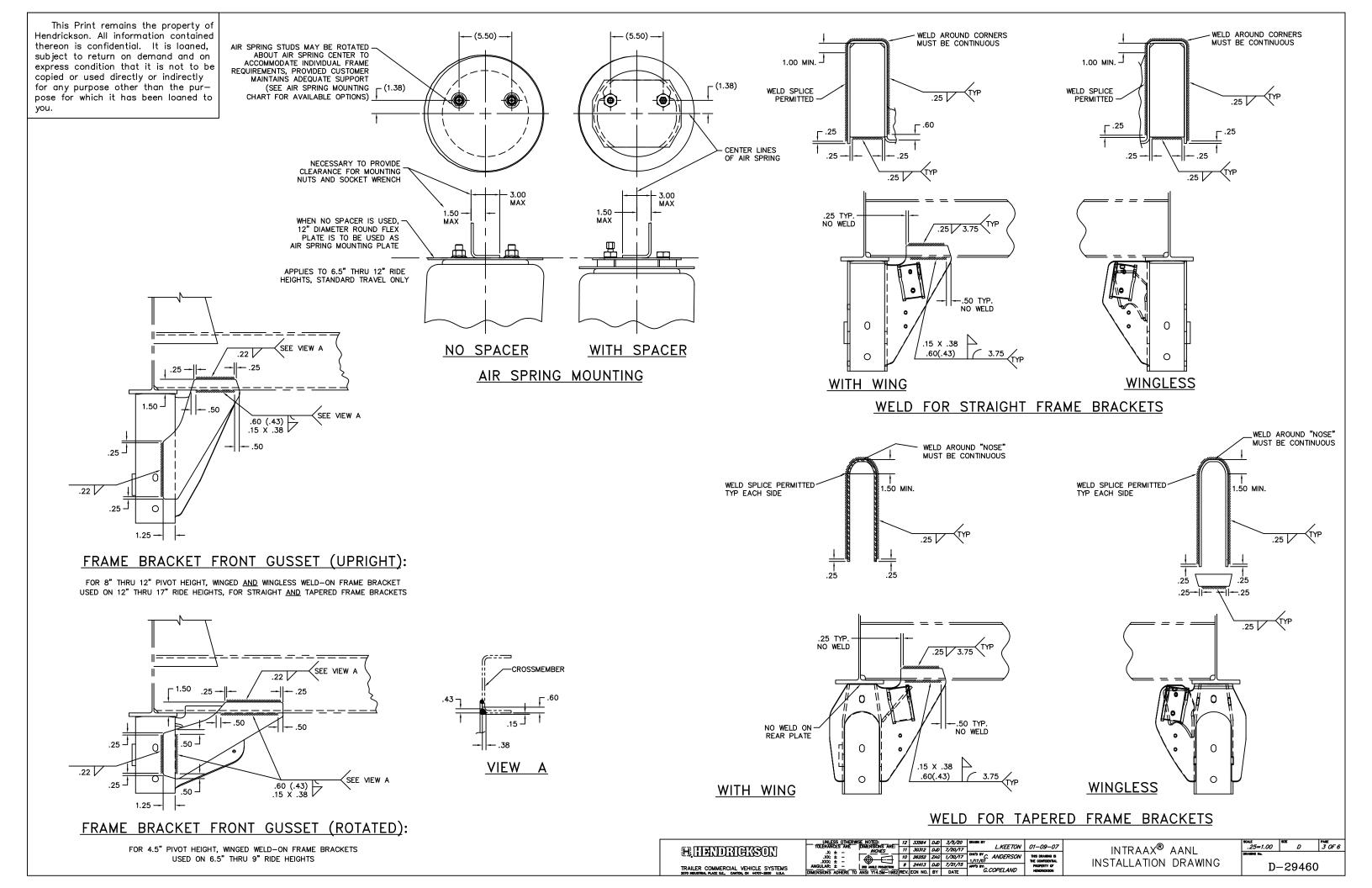
RIDE	2	<2	26	2		\sqrt{5}		<3	<u>3</u>	36
HT	JOUNCE	REBOUND W/FRONT SHOCKS	REBOUND W/REAR SHOCKS	BUMPER CONTACT	D	E	F	G	H W/FRONT SHOCKS	H W/REAR SHOCKS
					BOLT-	ON				
STANDARD TRAVEL										
6.5	2.0	4.9	4.7	1.6	.25	4.63	19.4	4.5	11.4	11.2
7.5	3.0	3.9	3.7	2.6	.25	4.63	19.3	4.5	11.4	11.2
8.0	3.5	5.1	4.4	3.1	.25	4.63	19.2	4.5	13.1	12.4
9.0	4.5	4.1	3.4	4.1	.25	4.63	19.0	4.5	13.1	12.4
12.0	4.9	5.0	3.2	4.4	.25	8.38	19.2	7.2	17.0	15.2
14.0	5.4	4.8	3.9	5.0	1.19	10.38	19.2	8.6	18.8	17.9
15.0	5.1	3.8	4.1	4.7	3.56	10.38	19.0	9.9	18.8	19.1
16.0	5.2	4.8	4.0	4.8	3.56	12.38	19.2	10.8	20.8	20.0
17.0	5.4	3.8	3.0	5.0	5.06	12.38	19.0	11.6	20.8	20.0
LIMITED JOUNCE TRAVEL										
8.0	2.8	5.1	4.4	2.4	1.56	4.63	19.2	5.2	13.1	12.4
9.0	3.4	4.1	3.4	3.0	2.31	4.63	19.0	5.6	13.1	12.4
12.0	3.7	5.0	3.2	3.3	2.31	8.38	19.2	8.3	17.0	15.2
14.0	4.1	4.8	3.9	3.7	3.56	10.38	19.2	9.9	18.8	17.9
15.0	4.0	3.8	4.1	3.6	5.56	10.38	19.0	11.0	18.8	19.1
16.0	4.1	4.8	4.0	3.7	5.56	12.38	19.2	11.9	20.8	20.0
17.0	4.0	3.8	3.0	3.6	7.56	12.38	19.0	13.0	20.8	20.0

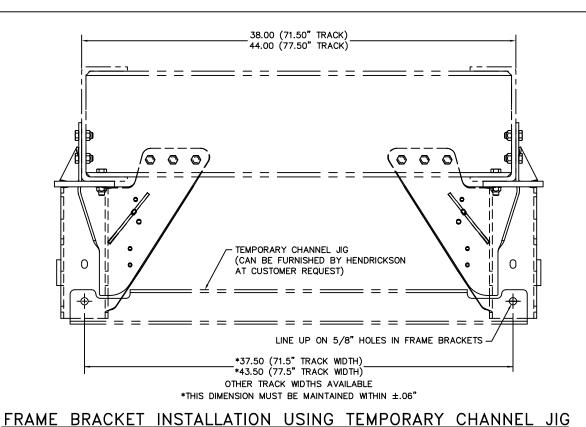
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H. TIPNDRIGISON

TRAILER COMMERCIAL VEHICLE SYSTEMS
2070 HOUSTRUL PLACE SE, CANTON, ON 44707-2000 U.S.A.





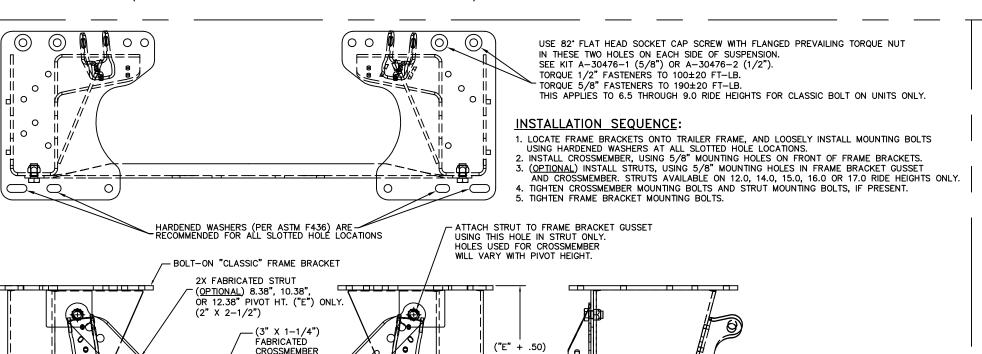


11.00 /2" BOLTS SHOWN. FRAME BRACKETS FOR 5/8" BOLTS ALSO AVAILABLE. 0 0 0 0 0 0

INSTALLATION SEQUENCE:

- 1. LOCATE FRAME BRACKETS ONTO TRAILER FRAME RAILS, AND LOOSELY INSTALL MOUNTING BOLTS.
- 2. PIN OR BOLT CHANNEL JIG INTO PLACE, AS SHOWN, USING 5/8" BOLTS OR PINS.
 3. TIGHTEN BOLTS ATTACHING FRAME BRACKETS TO FRAME TRAILER FRAME RAILS.
 4. MATCH DRILL WING GUSSET HOLES INTO TRAILER FRAME CROSSMEMBERS.
- 5. BOLT FRAME BRACKET WING GUSSETS TO TRAILER FRAME CROSSMEMBERS
- REMOVE BOLTS OR PINS FROM CHANNEL.

WINGED, SIDE-MOUNT BOLT-ON FRAME BRACKET (REQUIRED TO MAINTAIN PROPER FRAME BRACKET SPACING AT PIVOT LEVEL)



0

8.38" PIVOT HEIGHT ("E")

12.38" PIVOT HEIGHT ("E")

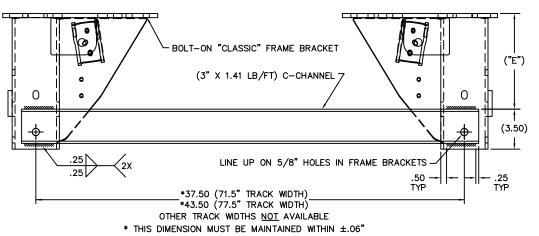
10.38" PIVOT HEIGHT ("E")

(3.00)

- IF SUSPENSION IS PRE-INSTALLED IN FRAME BRACKETS, INSTALLATION OF CROSSMEMBER WILL REQUIRE HOLDING

INSTALLATION SEQUENCE:

- LOCATE FRAME BRACKETS ONTO TRAILER FRAME, AND LOOSELY INSTALL MOUNTING BOLTS USING HARDENED WASHERS AT ALL SLOTTED HOLE LOCATIONS.
- 2. PIN OR BOLT CHANNEL INTO PLACE, AS SHOWN, USING 5/8" BOLTS OR PINS.
- 3. WELD CHANNEL TO FRAME BRACKETS, AS SHOWN.
- 4. TIGHTEN FRAME BRACKET MOUNTING BOLTS.
- 5. REMOVE BOLTS OR PINS FROM CHANNEL



BRACING CHANNEL INSTALLATION (WELD-ON)

BOLT-ON "CLASSIC" FRAME BRACKET

(REQUIRED TO MAINTAIN PROPER FRAME BRACKET SPACING AT PIVOT LEVEL)

INTRAAX® AANL INSTALLATION DRAWING

.25=1.00 SIZE D PAGE 4 OF 6

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pose for which it has been loaned to

thereon is confidential. It is loaned, subject to return on demand and on

CROSSMEMBER INSTALLATION (BOLT-ON)

--- (5.53) ---

*37.50 (71.5" TRACK WIDTH)

*39.00 (73.0" TRACK WIDTH) *43.50 (77.5" TRACK WIDTH)

OTHER TRACK WIDTHS NOT AVAILABLE
*THIS DIMENSION MUST BE MAINTAINED WITHIN ±.06"

•

(1.50) 🕹

(13.56)

(2X .812" X

.406" SLOT)

(

0

BOLT-ON "CLASSIC" FRAME BRACKET (REQUIRED TO MAINTAIN PROPER FRAME BRACKET SPACING AT PIVOT LEVEL) WITH PREVAILING TORQUE NUT. (SEE KIT A-29822)[CROSSMEMBER ONLY] (SEE KIT A-30720)[CROSSMEMBER & STRUTS] TORQUE TO 190±20 FT-LB.

(1.25)

-USE 5/8" HEX HEAD CAP SCREW

HIENDRICKSON

TRAILER COMMERCIAL VEHICLE SYSTEMS

THIS NUT WITH AN OPEN-END WRENCH, WHILE TURNING

(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).

THE BOLT HEAD TO TIGHTEN.

SUSPENSION BEAM (REF)

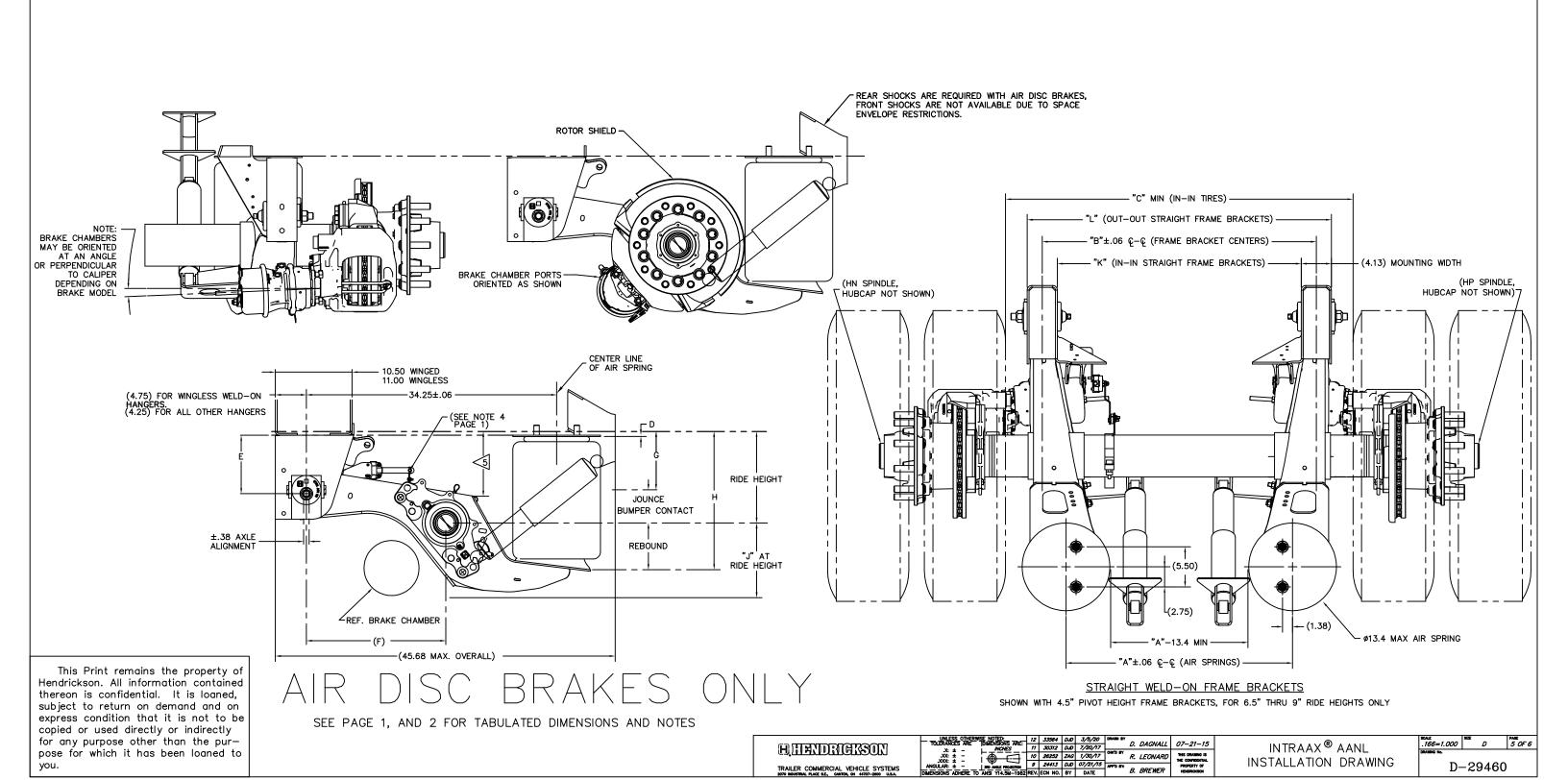
ANDERSON G.COPELAND

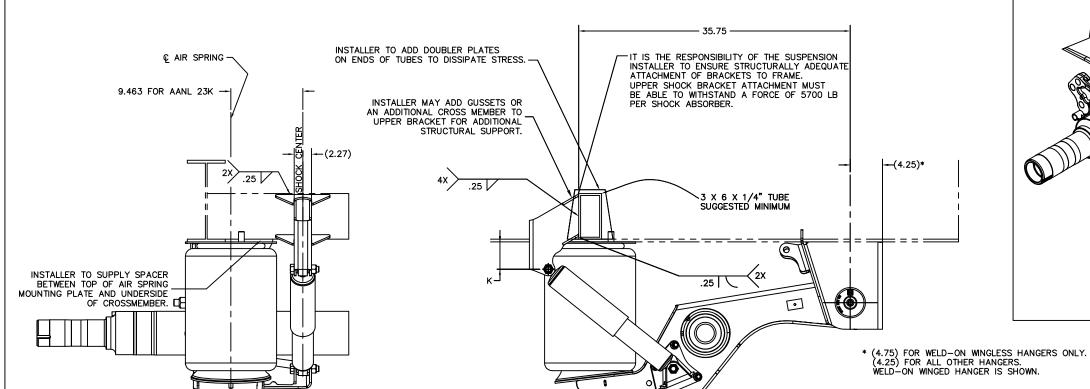
L.KEETON 01-09-07

D-29460

NOTES:

- 1. THIS PAGE IS FOR AANL 23K 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 19.5", 22.5" OR 24.5" TIRES ONLY.
- DO NOT ROUTE ITEMS THROUGH THIS AREA FOR 9.0 INCH AND LOWER RIDE HEIGHTS DUE TO MINIMAL BEAM TO FRAME CLEARANCE.





REAR SHOCK EXPLODED VIEW

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REAR MOUNTED SHOCK RIDE HEIGHT CLEVIS P/N DIM "K" C-25420 3.59 C-29967 .50 C-25420 3.59 .50 14 C-29967 15 16 C-25420 3.59

	TORQUE SPECIFICATIONS							
	DESCRIPTION	SIZE	TORQUE (FT-LB)					
	SHOCK ABSORBER BOLTS	3/4-10	210-235					
_	LOWER SHOCK TOWER BOLTS	1/2-13	100-110					

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

CROSSMEMBER MUST BE 6 X 3 X 1/4" MINIMUM TO WITHSTAND TORSION.

3. BOLT LOWER SHOCK TOWER BRACKET 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.