

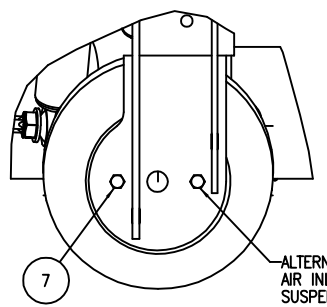
| BILL OF MATERIALS: |              |                              |      |
|--------------------|--------------|------------------------------|------|
| ITEM               | PART NUMBER  | DESCRIPTION                  | QTY. |
| 1                  | C-28610-1C   | FRONT BRACKET ASSEMBLY, L.H. | 1    |
| 2                  | C-28610-2C   | FRONT BRACKET ASSEMBLY, R.H. | 1    |
| 3                  | C-28614      | REAR BRACKET ASSEMBLY        | 2    |
| 4                  | C-28617-1    | LIFT BRACKET, L.H.           | 1    |
| 5                  | C-28617-2    | LIFT BRACKET, R.H.           | 1    |
| 6                  | C-23114      | AIR SPRING                   | 2    |
| 7                  | A-24614      | LIFT ASSEMBLY BOLT KIT       | 1    |
| 8                  | *DWG D-28630 | UBL-004 LIFT KIT DRAWING     | 1    |
| 9                  | *T91001      | UBL HARDWARE KIT INFORMATION | 1    |

\* NOT SHOWN

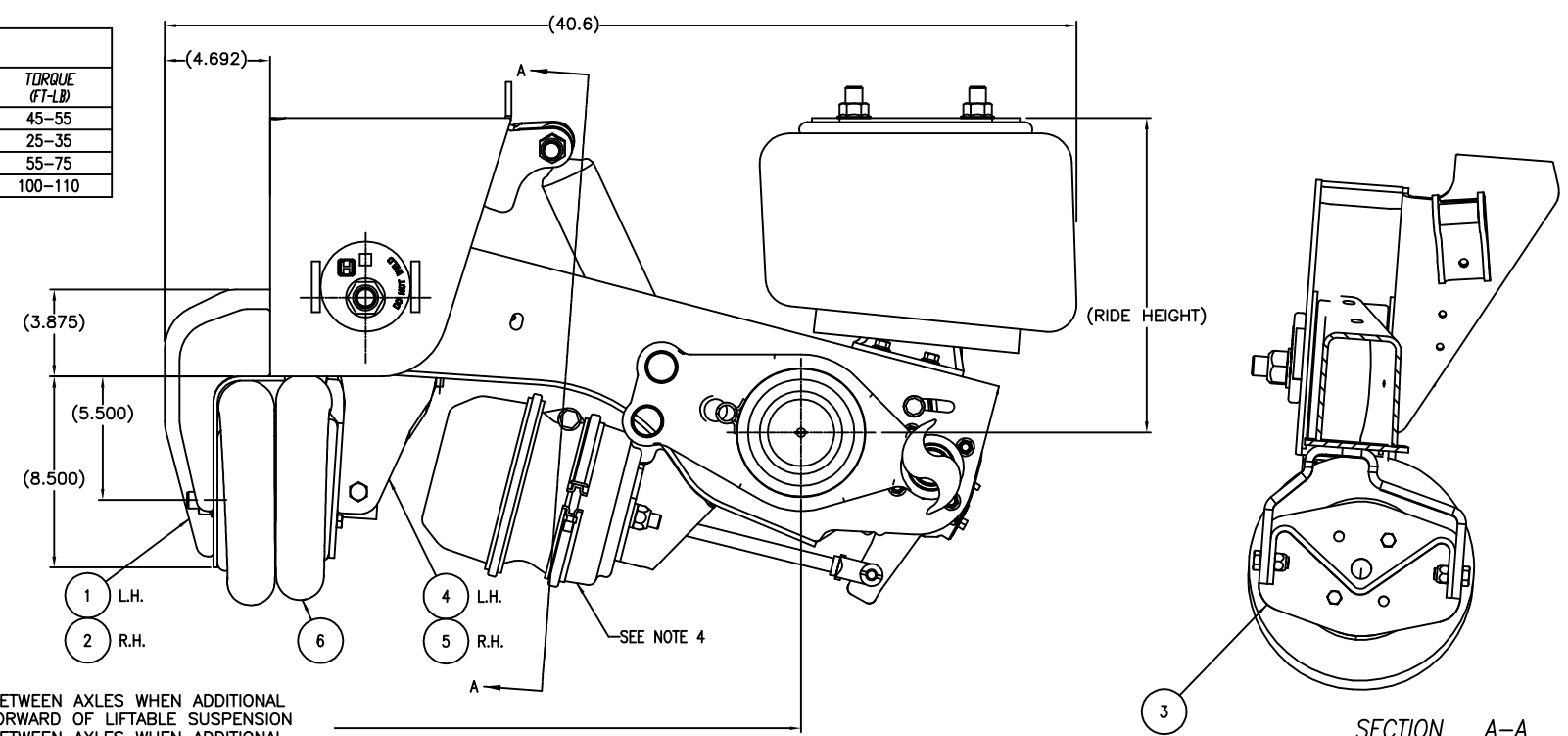
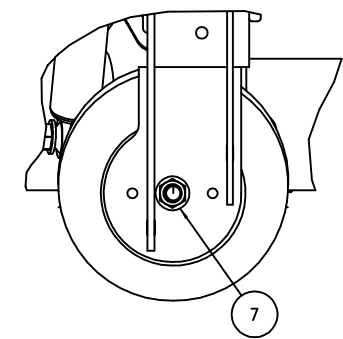
NOTES

- 14" RIDE HEIGHT SHOWN. INSTALLATION IS SAME FOR ALL RIDE HEIGHTS.
- WEIGHT: 52.39 LB. INCLUDES .33 LB FOR ATTACHMENT WELDS.
- WELDING PARAMETERS:  
SETTINGS FOR .045 DIAMETER WIRE  
STANDARD WIRE - AWS ER-70S-6; .045 DIAMETER  
OPTIONAL WIRE - AWS ER-70S-3; .045 DIAMETER  
GAS - 86 ARGON 14 CO2 (30-35 CFH)  
VOLTS - 26 TO 30  
WIRE FEED SPEED - 380 TO 420 IPM  
CURRENT - 275 TO 325 AMPS  
ELECTRODE EXTENSION: 3/4 TO 1 INCH  
SETTINGS FOR .035 DIAMETER WIRE  
STANDARD WIRE - ER80S-D2; .035 DIAMETER  
GAS - 85 ARGON 15 CO2 (35 TO 45 CFH)  
VOLTS - 25 TO 27.5  
WIRE FEED SPEED - 390 TO 425 IPM  
CURRENT - 160 TO 180 AMPS  
ELECTRODE EXTENSION: 3/4 TO 1 INCH  
FILL ALL CRATERS AT END OF WELDS.
- BRAKE CHAMBERS, IF ALREADY MOUNTED, MUST BE REMOVED BEFORE INSTALLING LIFT KIT.
- IF EXISTING LATERAL BRACING AT FRONT OF FRAME BRACKETS INTERFERES WITH INSTALLATION OF THE LIFT KIT FRONT BRACKETS, BRACING MUST BE MODIFIED OR REMOVED AND RELOCATED. CONTACT HENDRICKSON TRAILER SUSPENSION SYSTEMS AT 866-RIDEAIR (866-743-3247).
- IF POSSIBLE, IT IS HIGHLY RECOMMENDED THAT THE LIFT BRACKET WELDING SHOWN ON PAGE 2 BE PERFORMED WITH THE SUSPENSION INVERTED, TO ALLOW THE WELDS TO BE APPLIED IN THE DOWNHAND POSITION.
- UBL-004 INTENDED FOR USE WITH CARBON STEEL FRAME BRACKETS ONLY. USE UBL-401 OR UBL-402 FOR STAINLESS STEEL FRAME BRACKETS.

| TORQUE SPECIFICATIONS          |        |                |
|--------------------------------|--------|----------------|
| DESCRIPTION                    | SIZE   | TORQUE (FT-LB) |
| AIR SPRING NUT, AIR INLET STUD | 3/4-16 | 45-55          |
| AIR SPRING MOUNTING BOLTS      | 3/8-16 | 25-35          |
| REAR BRACKET ASSEMBLY BOLTS    | 1/2-13 | 55-75          |
| BRAKE CHAMBER MOUNTING NUTS    | 5/8-11 | 100-110        |



ALTERNATE INSTALLATION:  
AIR INLET TOWARD REAR OF SUSPENSION

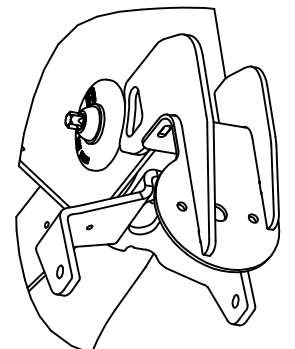


50.00 MIN SPACING BETWEEN AXLES WHEN ADDITIONAL AAL SUSPENSION IS FORWARD OF LIFTABLE SUSPENSION  
43.00 MIN SPACING BETWEEN AXLES WHEN ADDITIONAL AANT OR AAT SUSPENSION IS FORWARD OF LIFTABLE SUSPENSION

SECTION A-A  
SOME COMPONENTS NOT SHOWN FOR CLARITY.

FRONT BRACKET INSTALLATION

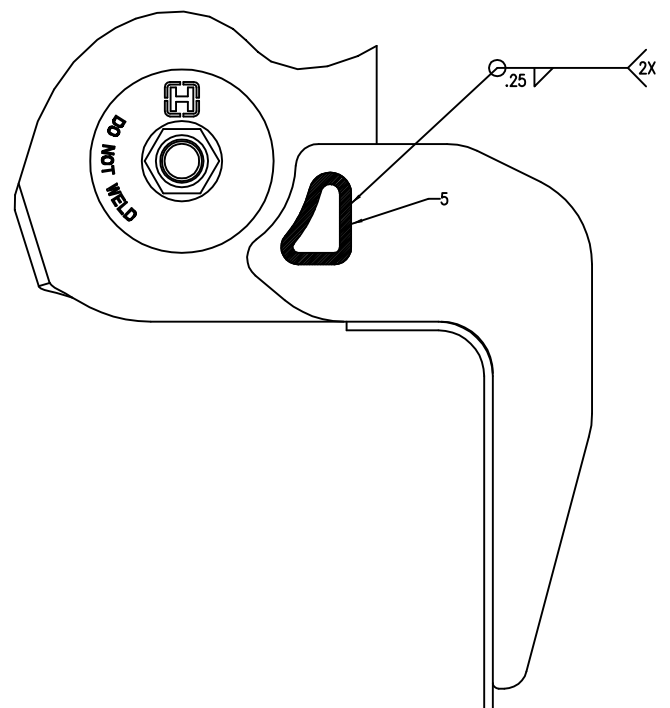
STEPS 7 & 8



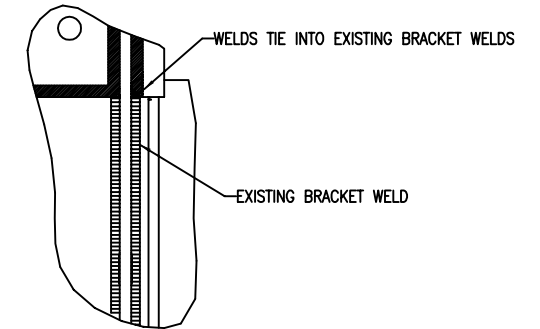
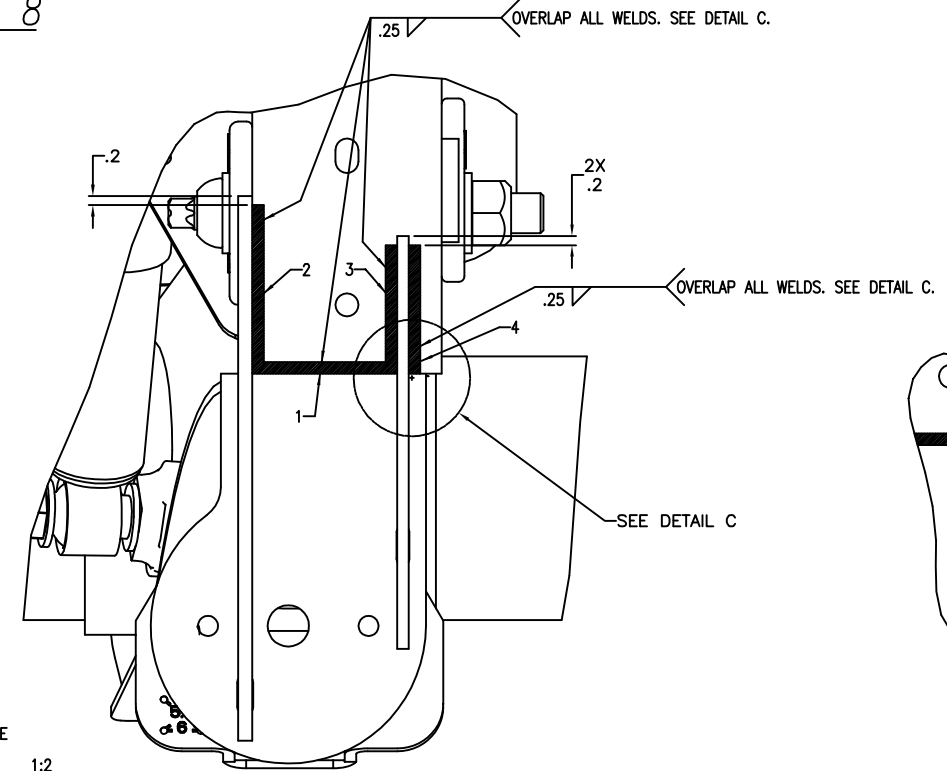
SCALE 1:4

ASSEMBLY PROCEDURE

- SEE PAGE 2 FOR ASSEMBLY STEPS 1 THROUGH 5. LIFT BRACKET MUST BE INSTALLED PRIOR TO FRONT BRACKET ASSEMBLY TO MAXIMIZE WELDING TORCH ACCESS TO LIFT BRACKET.
- \*UBL CANNOT BE INSTALLED WITH SUSPENSION ASSEMBLED TO FRAME BRACKET (UNITIZED), AS EXCESSIVE WELDING HEAT WILL DAMAGE THE PIVOT BUSHING. SUSPENSION MUST BE DISASSEMBLED FROM FRAME BRACKETS BEFORE WELDING.
- PREPARING THE FRAME BRACKET SURFACES. REMOVE PAINT FROM ALL AREAS OF FRAME BRACKET TO BE WELDED
  - POSITIONING THE FRONT BRACKET ASSEMBLY. LOCATE THE FRONT BRACKET ASSEMBLY AGAINST THE FRAME BRACKET, AS SHOWN. TACK INTO PLACE.
  - WELDING THE FRONT BRACKET ASSEMBLY. PLACE WELDS IN THE INDICATED SEQUENCE, STARTING WITH THE HORIZONTAL FRONT WELD, AND ENDING WITH THE SLOT WELD ON THE INBOARD SIDE OF THE HANGER.
  - ASSEMBLY OF REMAINING COMPONENTS. ALIGN THE MOUNTING HOLES OF THE REAR BRACKET ASSEMBLY WITH THE LIFT BRACKET HOLES AND INSERT THE TWO 1/2-13 x 1.25 BOLTS AND NUTS. TIGHTEN TO THE VALUE CALLED OUT IN THE TORQUE SPECIFICATIONS CHART. ASSEMBLE THE AIR SPRING WITH THE AIR INLET FACING TO THE FRONT OR REAR, DEPENDING ON AIR LINE ORIENTATION PREFERENCE. TIGHTEN THE 3/4-16 FLANGE NUT AND 3/8-16 x .88 BOLTS TO SPECIFIED



SCALE 1:2



DETAIL C  
OVERLAPPING WELDS  
SCALE 1:2

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|  |   |   |           |
|--|---|---|-----------|
| UNLESS OTHERWISE NOTED:<br>TOLERANCES ARE:<br>X: ± .1<br>XX: ± .06<br>XXX: ± .030<br>ANGULAR: ± .05° | # 33569 JAR 3-6-20<br>7 31804 DLD 9-27-18<br>8 31883 DLD 8-28-18<br>9 31103 PK 02-15-18 | DRWN BY E.FABRIS<br>CHKD BY CLA<br>APPD BY G.COPELAND | 08-Mar-06 |
|--|---|---|-----------|

| PART NUMBER | REV. |
|-------------|------|
| UBL-004     | 8    |

UBL-004  
LIFT KIT FOR AANT 23K

|                 |                |        |             |
|-----------------|----------------|--------|-------------|
| P<br>PRODUCTION | SCALE .25=1.00 | SIZE D | PAGE 1 OF 3 |
|-----------------|----------------|--------|-------------|

D-28630

**LIFT BRACKET INSTALLATION**

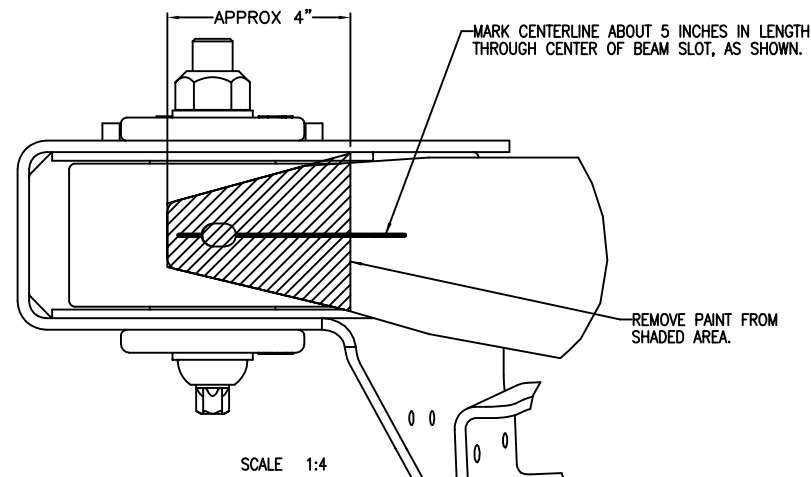
**ASSEMBLY PROCEDURE**

\*UBL CANNOT BE INSTALLED WITH SUSPENSION ASSEMBLED TO FRAME BRACKET (UNITIZED), AS EXCESSIVE WELDING HEAT WILL DAMAGE THE PIVOT BUSHING. SUSPENSION MUST BE DISASSEMBLED FROM FRAME BRACKETS BEFORE WELDING.

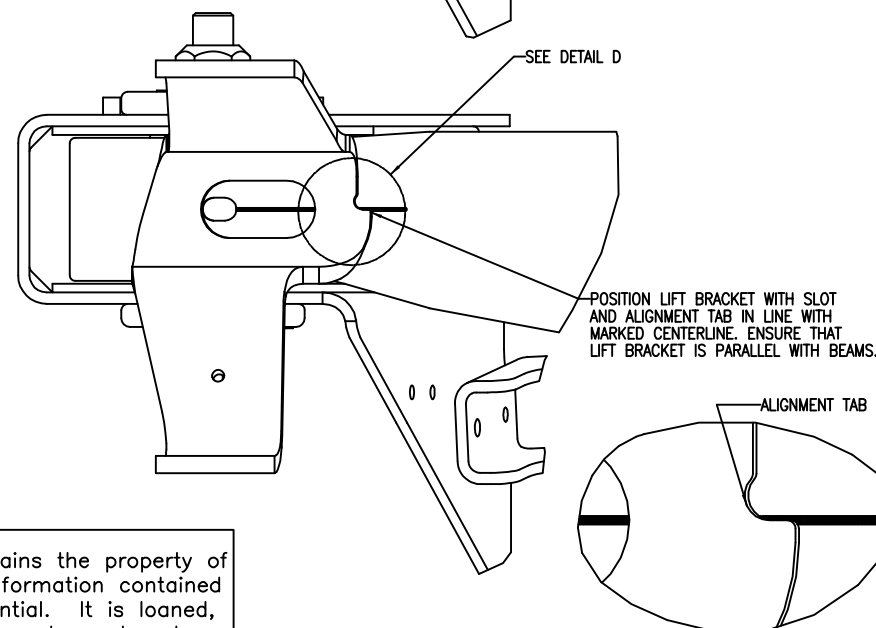
1. **PREPARING THE BEAM SURFACE.**  
REMOVE PAINT FROM UNDERSIDE OF TRAILING ARM BEAM AS INDICATED BY THE SHADED AREA.
2. **MARKING THE CENTERLINE.**  
MARK OR SCRIBE A LINE THROUGH THE CENTER OF THE SMALL OVAL SLOT ON THE UNDERSIDE OF THE TRAILING ARM BEAM, AS SHOWN. THE LINE SHOULD BE AT LEAST 5 INCHES IN LENGTH AND PARALLEL TO THE OUTBOARD SIDE OF THE BEAM.
3. **POSITIONING THE LIFT BRACKET.**  
LOCATE LIFT BRACKET (ITEM 4 - L.H., ITEM 5 - R.H.) TO UNDERSIDE OF BEAM, ALIGNING TAB AT REAR OF LIFT BRACKET TO MARKED LINE. MAKE SURE BRACKET SLOT IS PARALLEL TO MARKED LINE, AND FRONT OF THE BRACKET SLOT LINES UP WITH THE FRONT OF THE BEAM SLOT. TACK INTO PLACE.
4. **FILLING THE SMALL SLOT.**  
PRIOR TO MAKING THE 3-PASS WELD, COMPLETELY FILL THE SMALL SLOT ON THE UNDERSIDE OF THE BEAM.
5. **WELDING THE LIFT BRACKET.**  
COMPLETE ATTACHMENT OF LIFT BRACKET BY WELDING THE LARGE OVAL SLOT IN THE BRACKET TO THE BEAM. THIS IS A 3-PASS WELD. ALL THREE PASSES MUST BE UNINTERRUPTED AROUND THE FRONT OF THE SLOT, AS INDICATED IN "STEP 5" ILLUSTRATION. NO WELDING IS REQUIRED OUTSIDE OF THE SLOT AREA.

SEE PAGE 1 FOR FRONT BRACKET ASSEMBLY WELDING INSTRUCTIONS.

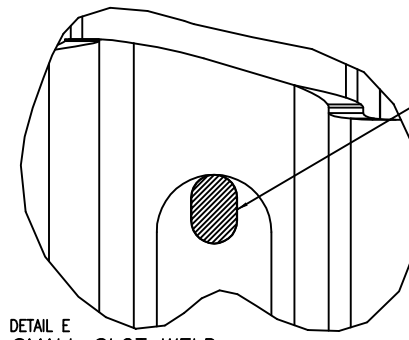
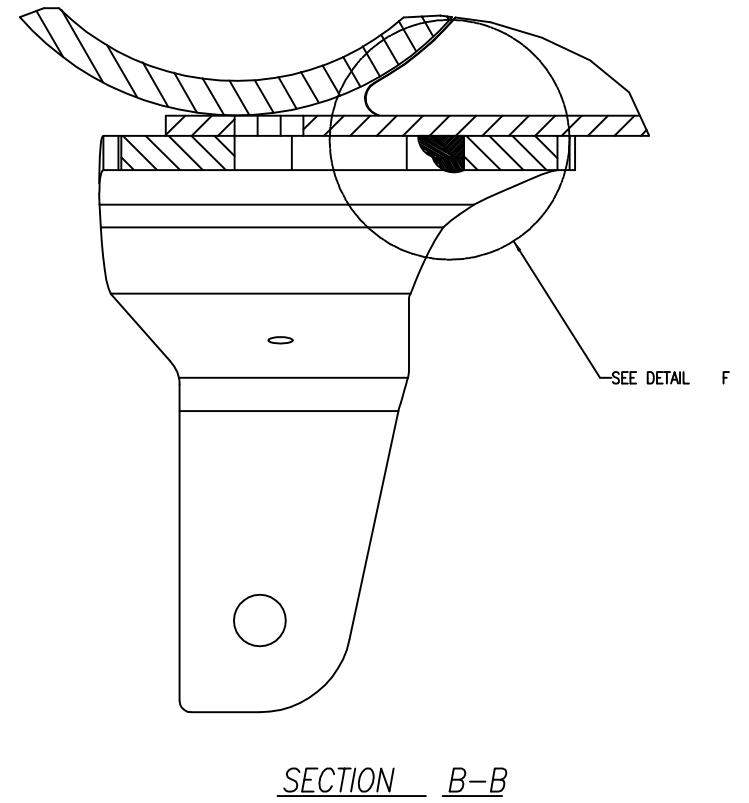
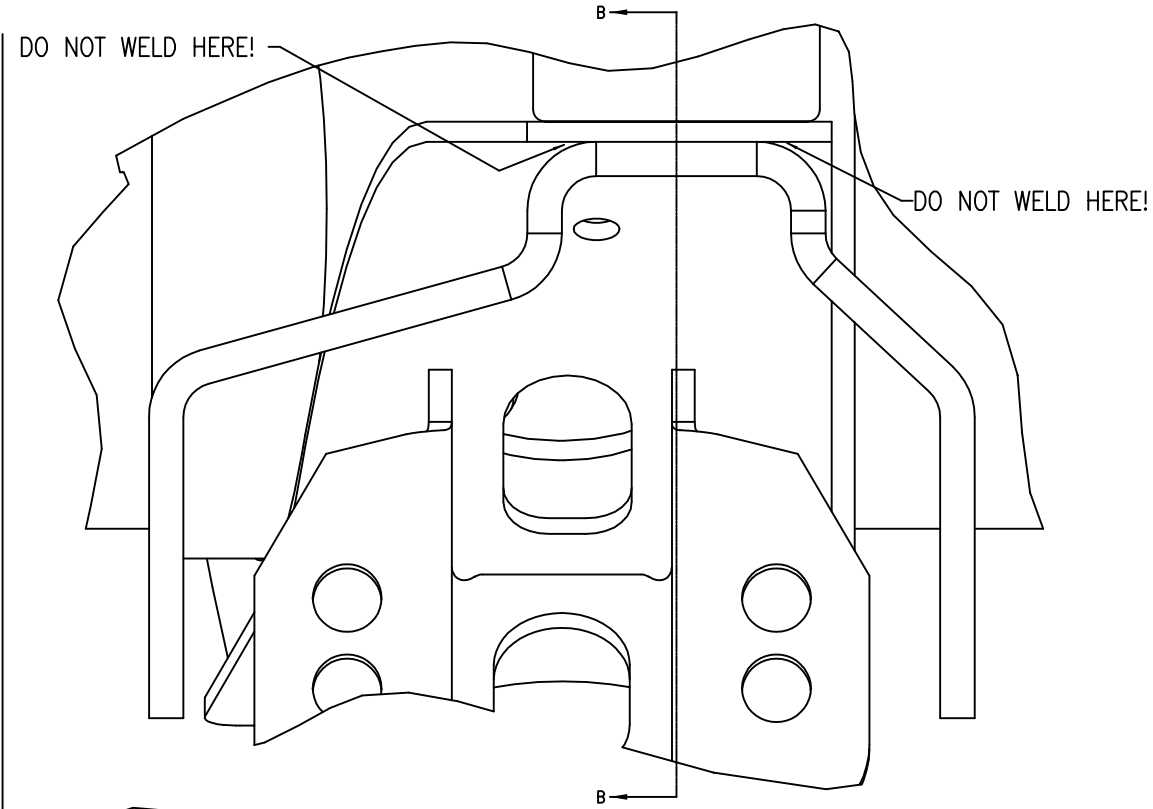
**STEPS 1 & 2**



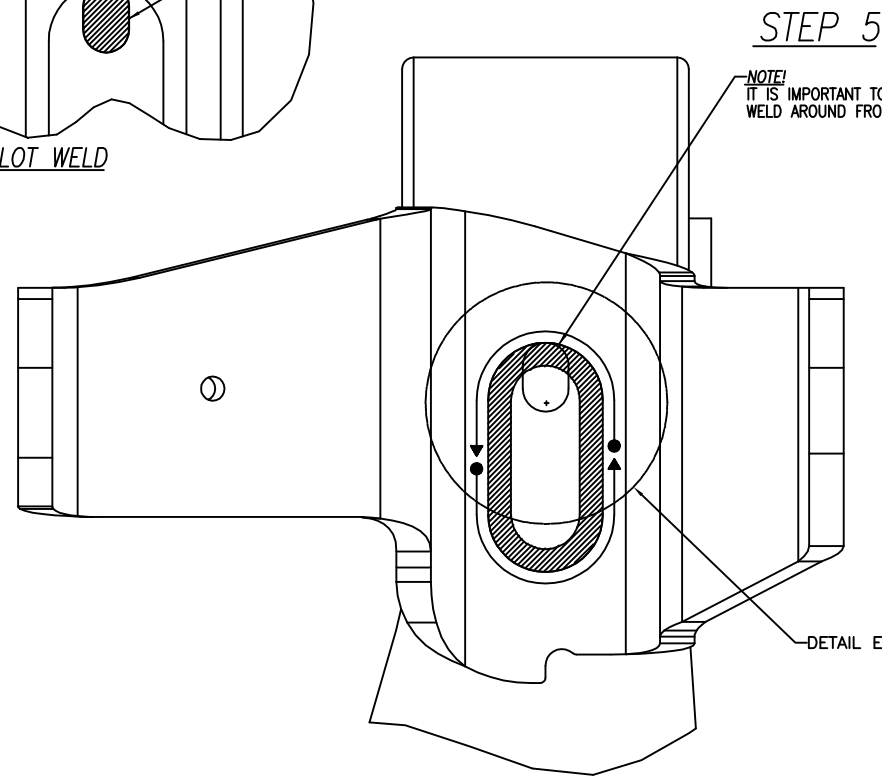
**STEP 3**



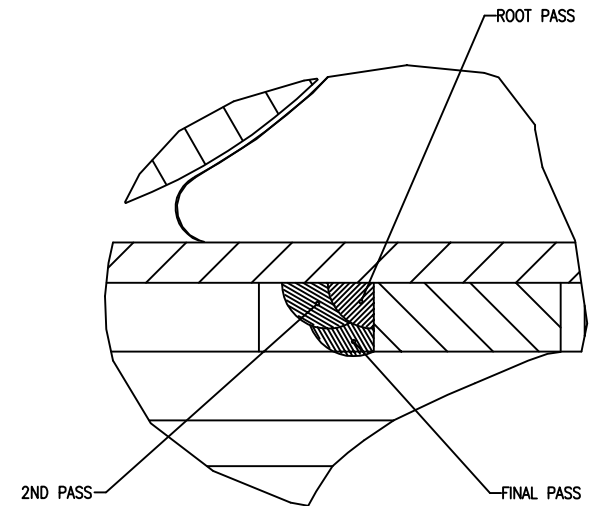
**DETAIL D  
ALIGNMENT TAB  
SCALE 3:2**



**DETAIL E  
SMALL SLOT WELD  
SCALE 1:1**



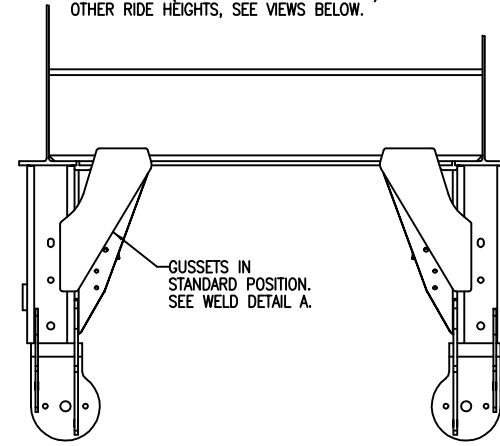
FRAME BRACKET, BRAKES, AND ASSOCIATED COMPONENTS NOT PICTURED FOR CLARITY.  
SCALE 1:1



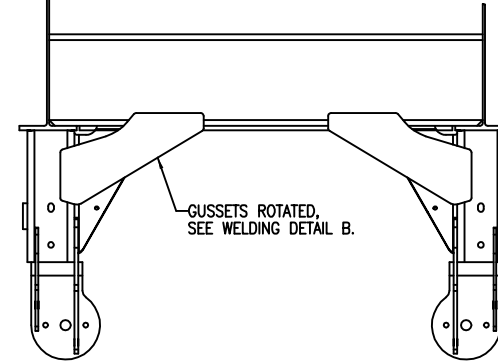
**DETAIL F  
TRIPLE-PASS WELD SEQUENCE  
SCALE 2:1**

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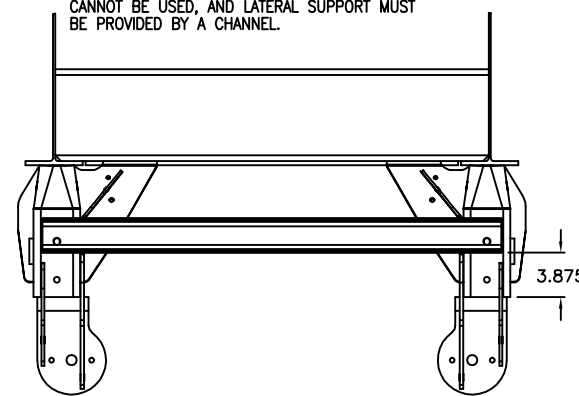
ON FRAME BRACKETS REQUIRING LATERAL SUPPORT GUSSETS, INCLUDING STRAIGHT-SIDED AND TAPERED WELD-ON FRAME BRACKETS, GUSSETS CAN BE ATTACHED IN STANDARD POSITIONS FOR 12" PIVOT HEIGHT ONLY (18" AND 19" RIDE HEIGHTS). FOR OTHER RIDE HEIGHTS, SEE VIEWS BELOW.



ON STRAIGHT-SIDED WELD-ON FRAME BRACKETS WITH A PIVOT HEIGHT OF 10" OR LESS (13.5" THROUGH 17.0" RIDE HEIGHTS), GUSSETS MUST BE ROTATED, AS SHOWN, TO AVOID UBL INTERFERENCE.



FOR TAPERED WELD-ON FRAME BRACKETS WITH A PIVOT HEIGHT OF 10" OR LESS (13.5" THROUGH 17.0" RIDE HEIGHTS), THE GUSSETS CANNOT BE USED, AND LATERAL SUPPORT MUST BE PROVIDED BY A CHANNEL.



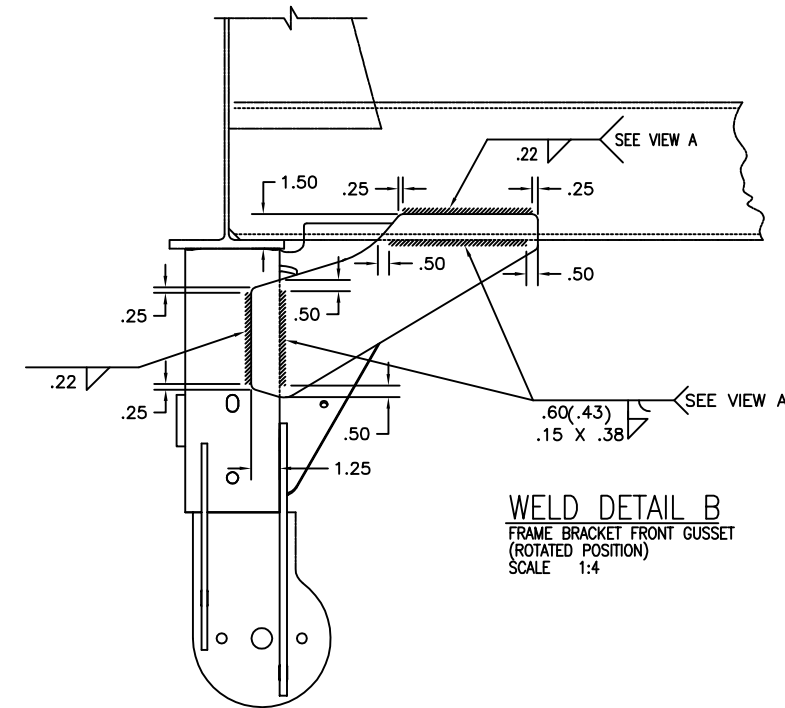
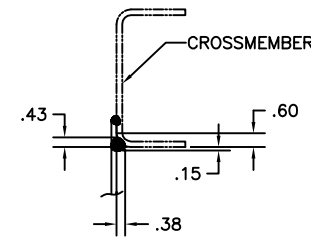
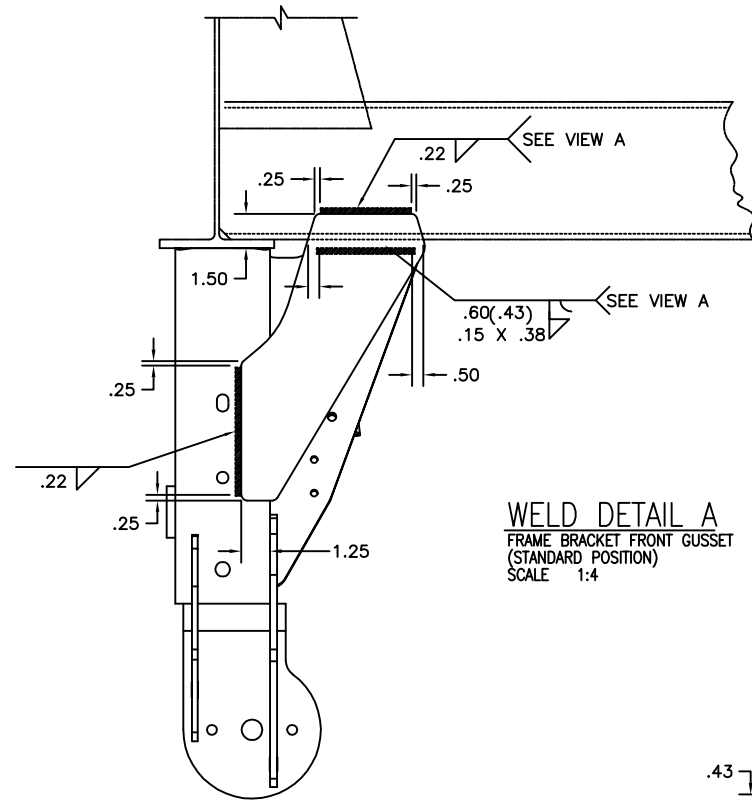
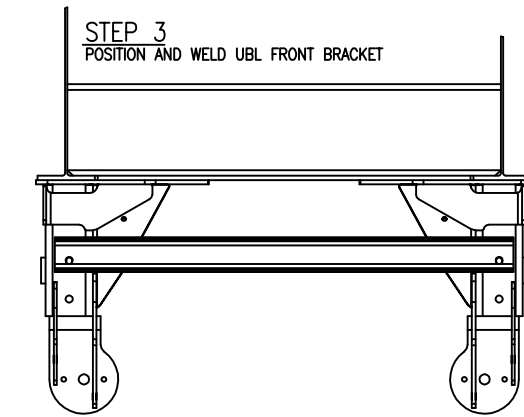
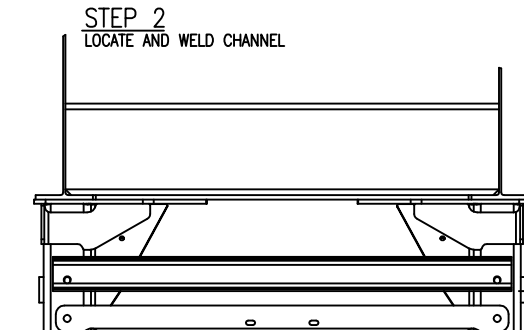
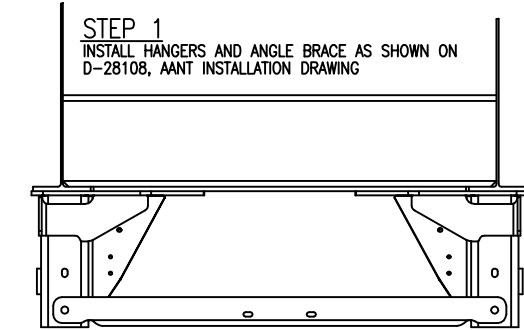
CERTAIN UBL APPLICATIONS MAY REQUIRE ALTERNATIVE FRAME BRACKET BRACING, DEPENDING ON FRAME HEIGHT AND STYLE.

FOR BOLT-ON SUSPENSIONS THAT REQUIRE A BRACING ANGLE OR CHANNEL:

1. FOLLOW PROCEDURE FOR INSTALLING FRAME BRACKETS AS OUTLINED IN THE INSTALLATION SEQUENCE, UNDER BRACING ANGLE INSTALLATION ON PAGE 2 OF D-28108, AANT INSTALLATION DRAWING, LEAVING THE BRACING ANGLE BOLTED IN PLACE.
2. WITH BRACING ANGLE IN PLACE, LOCATE C-CHANNEL AS SHOWN IN STEP 2. WELD C-CHANNEL IN PLACE AND REMOVE BRACING ANGLE.
3. INSTALL UBL FRONT BRACKET AS SHOWN.

FOR WELD-ON SUSPENSIONS THAT REQUIRE A FRONT GUSSET:

BEFORE INSTALLING FRONT GUSSETS, DETERMINE WHETHER THE UBL FRONT BRACKET WILL INTERFERE WITH THE RECOMMENDED FRONT GUSSET. SOME APPLICATIONS REQUIRE THE FRONT GUSSETS TO BE ROTATED TO PROVIDE CLEARANCE TO THE UBL BRACKET. IN CASES WHERE THERE IS INSUFFICIENT SPACE FOR A ROTATED GUSSET, A CHANNEL BRACE MUST BE USED. SEE ILLUSTRATIONS.



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