



## JBH 202481989 Beam Web and Support gear Repair



Great Dane Engineering  
July 2020



# Procedure

\*Make sure trailer is level and properly supported before beginning work. Proper Personal Protective equipment should be worn at all times. Read entire procedure before proceeding\*

With trailer properly supported, remove landing gear legs and attachment brackets to allow working access for the next steps.





# Procedure

3



Stop-drill cracks in beam web using 0.25" drill bit.

Inspect the beams around this support gear attachment area for other crack formations and stop-drill as necessary.



# Procedure



Due to excessive deformation from damage, it will be necessary to flatten out deformed areas using clamps, spreader bars, or other means.

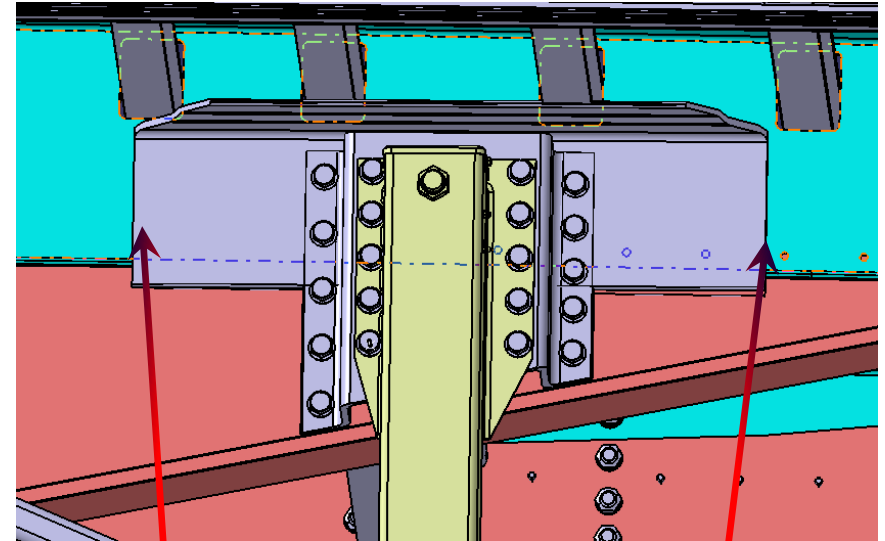
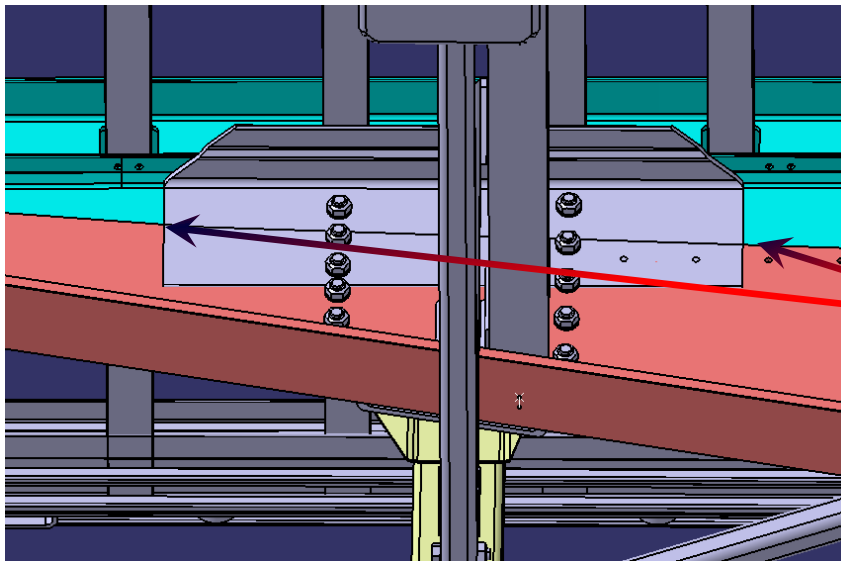
- Once a flat work area is obtained, carefully grind out cracked areas in preparation to accept a V-groove repair weld
- Fill cleared area with weld and grind back flush and smooth to allow for reinforcement placement.



# Procedure

- With damaged area now prepared, test fit and trim part 40106510 per location on the inside and outside of the beam web, both roadside and curbside.

INSIDE CS VIEW



OUTSIDE CS VIEW

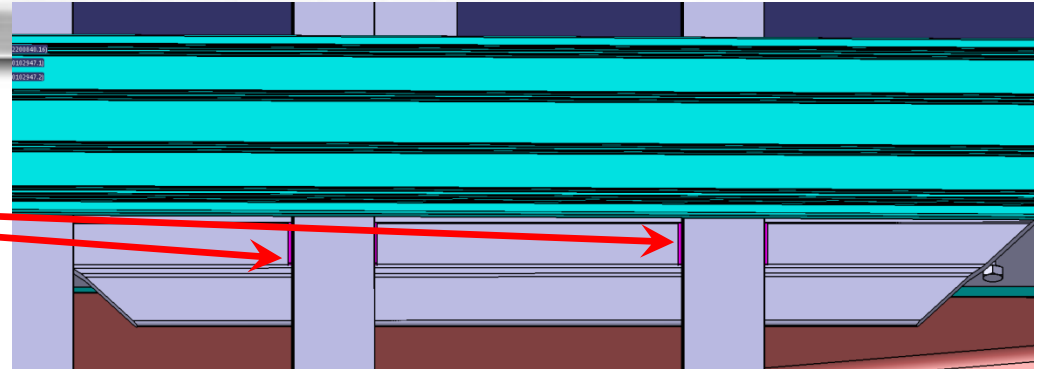
- Trim outer part just above fastener line.
- Trim inside part to upper edge of the lower extrusion.

Reinforcements should be centered below cross-members.



# Procedure

- Position and clamp both inner and outer, trimmed parts 40106510. Place spacers (40102947) at cross-member locations on the outside of the beams.



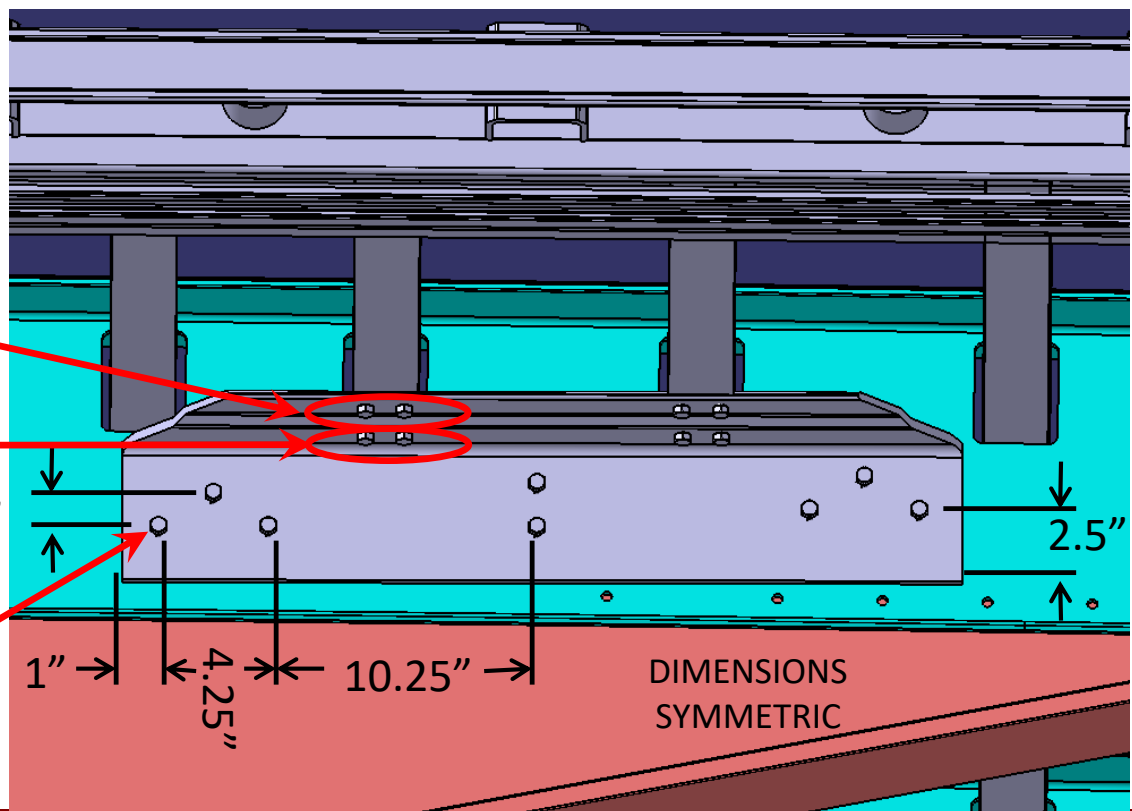
- Drill and bolt as mapped, inside and outside of beam webs. Use two washers (42201004) and one nut (42200925) at each location. Torque to 40 ft-lbs

42200825

42200840

2"

42200840



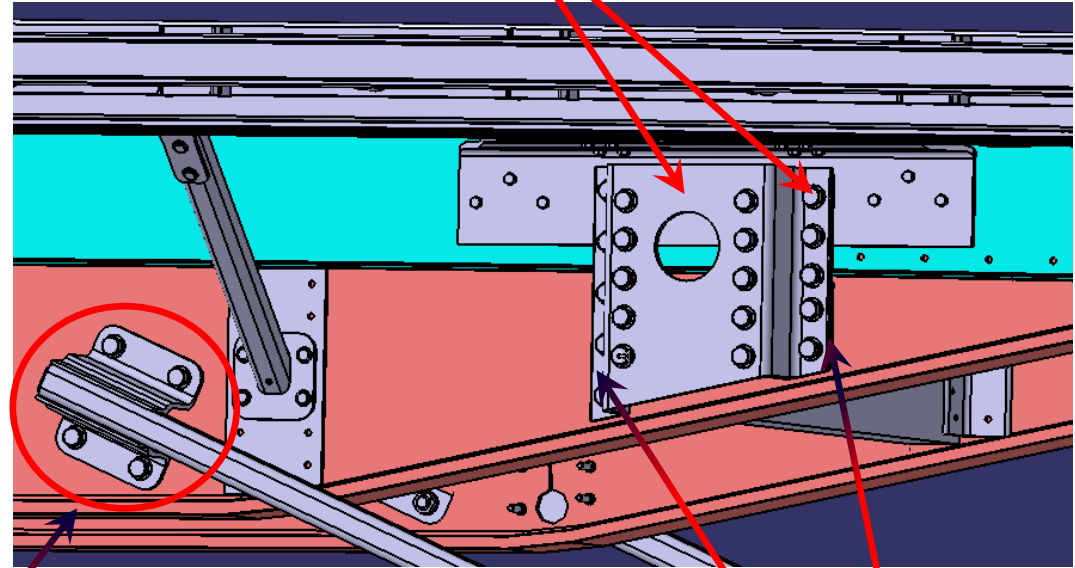


# Procedure

Install bracket 40112064 (CS shown),  
using fastener 42200854

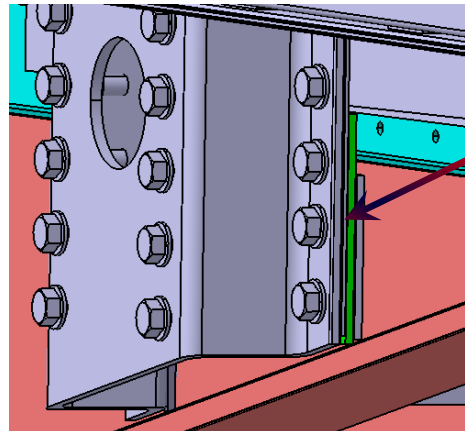
7

- Position new support gear bracket (40112061 & 64) and use holes as a guide for drilling through reinforcements and spacers (40102949 & 50). Fasten using new 2.75" bolt (42200854), and existing nuts and washers. Torque to 200 ft-lbs.



- Un-bolt support gear back-bracing and place 0.313" spacer (40102942). Back-drill holes and re-fasten bracing with exiting hardware.

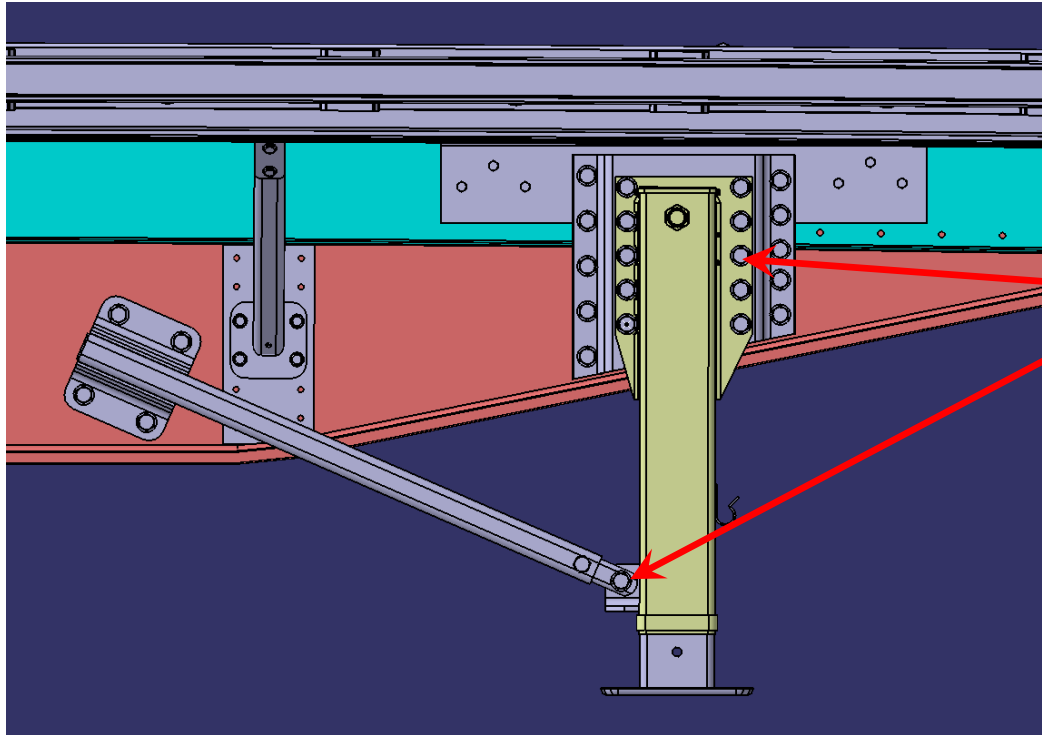
Install spacer  
40102942



Install spacer  
40102949 (forward)  
40102950 (rear)  
between existing  
spacers



# Procedure



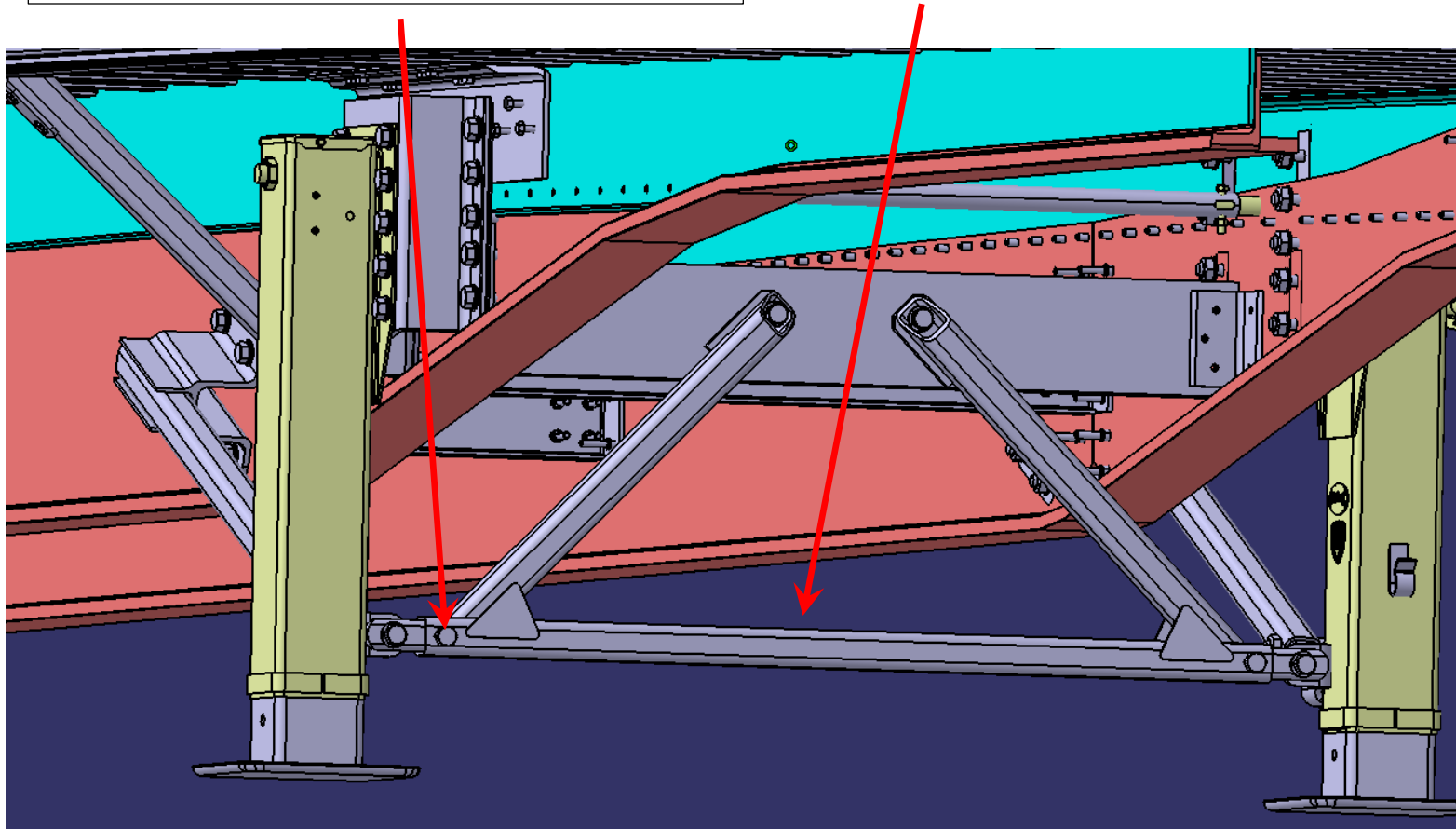
Re-attach LG leg with existing hardware



# Procedure

Lateral brace leg attachment component should be placed per assembly and drilled to fit.

Replace lateral brace assembly with new component (37000072) and reassemble with existing hardware.

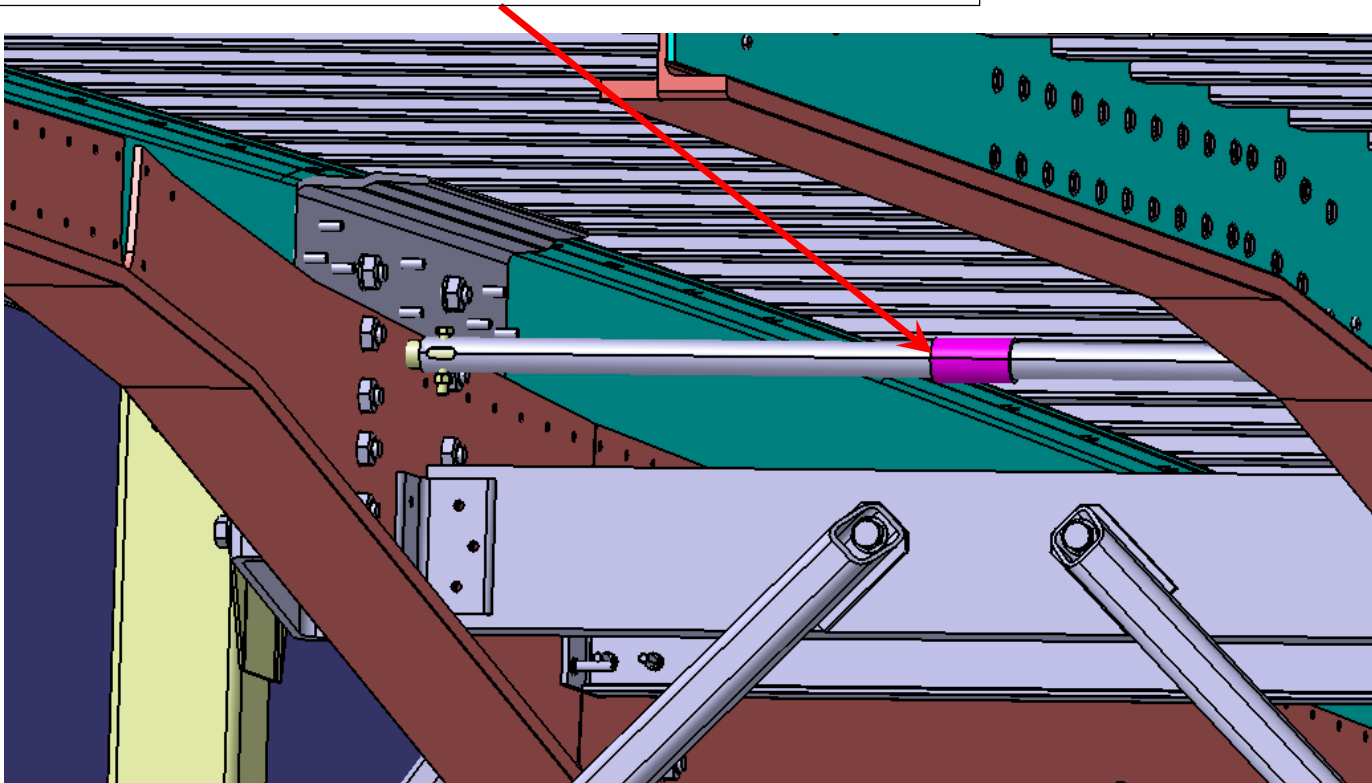




# Procedure

10

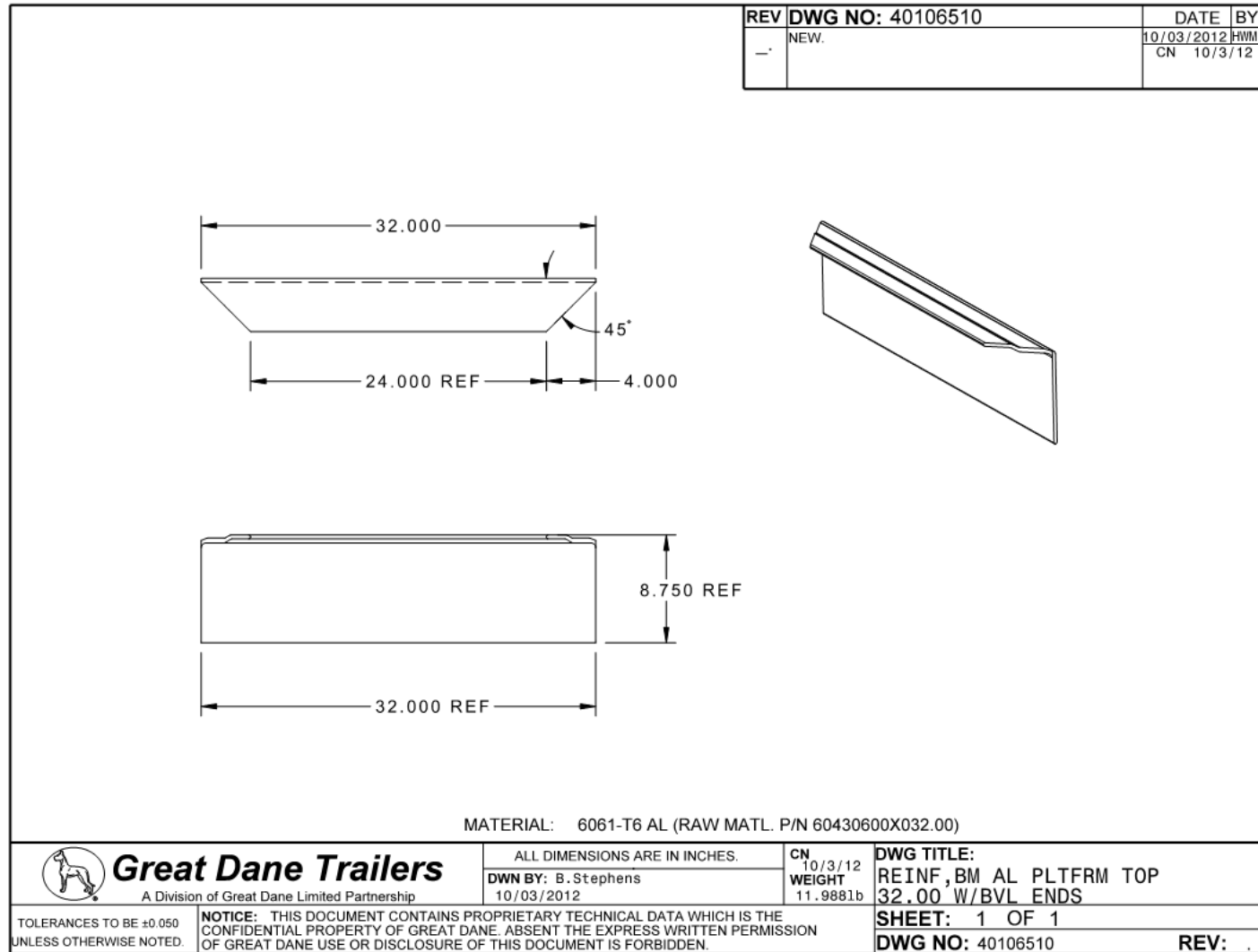
Upon re-installation, landing gear cross-shaft should be cut in half and fitted with collar part (60900831X003.00). Position collar and fasten each end of cross-shaft. Weld collar to each side of shaft and paint.

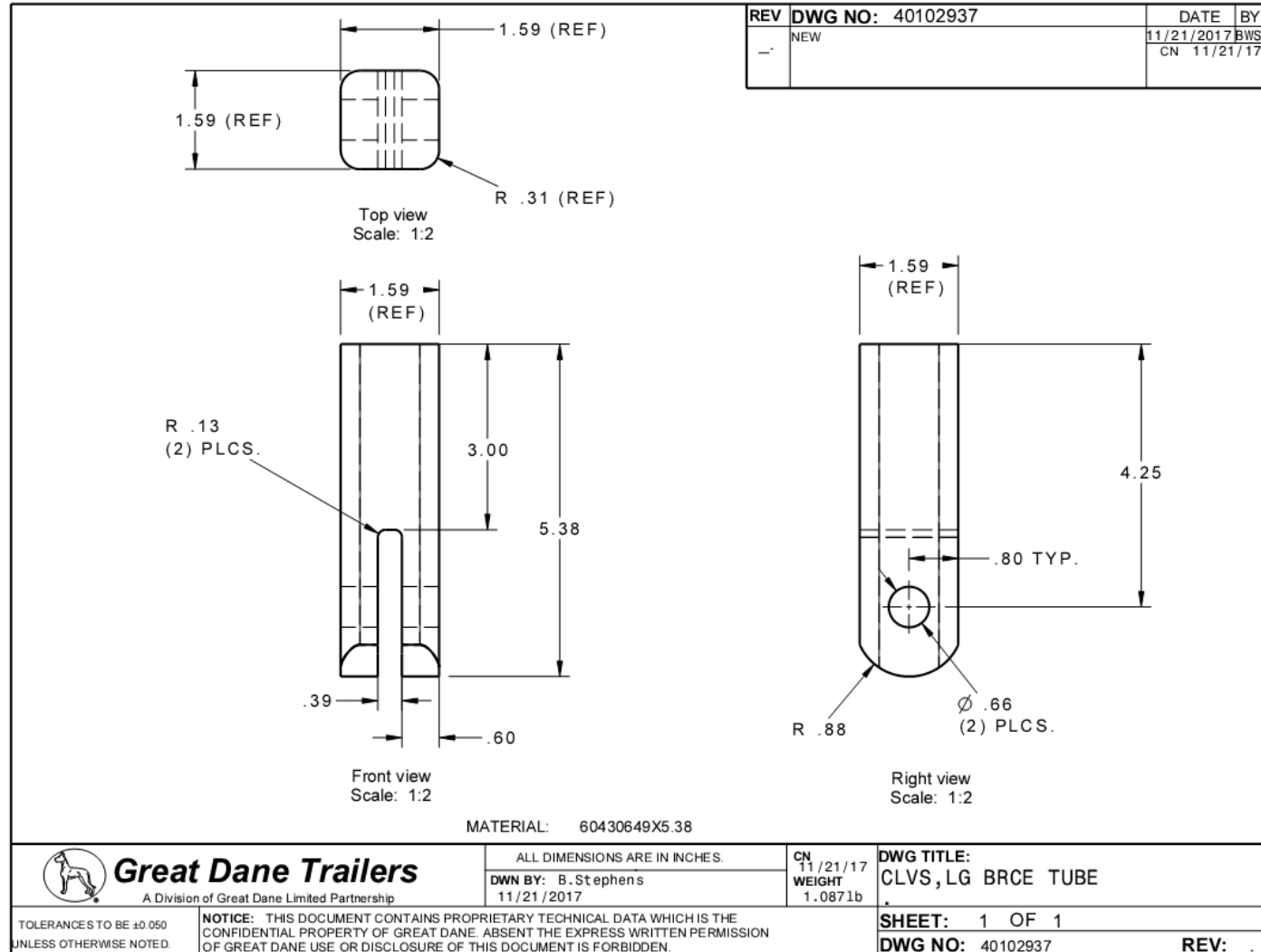


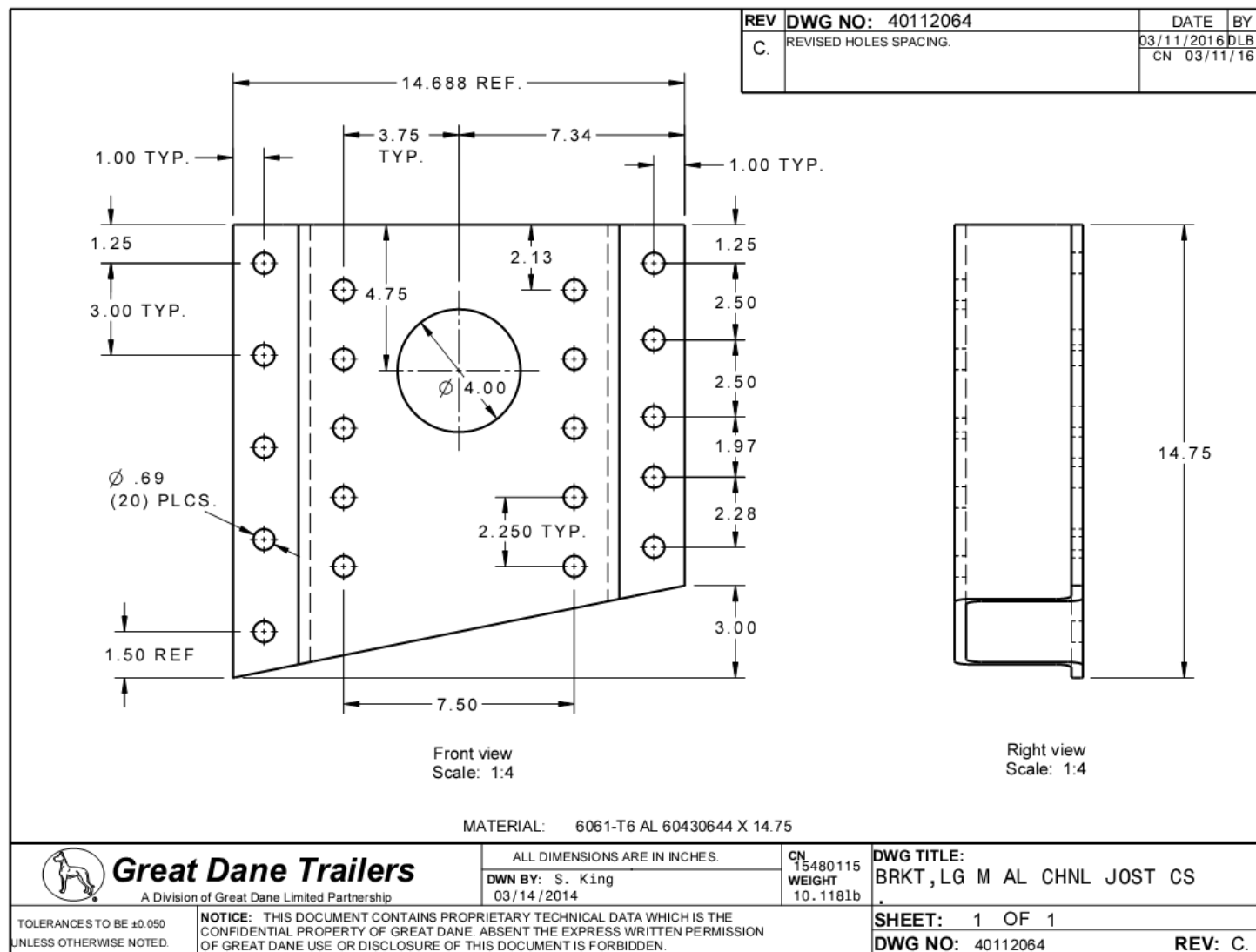


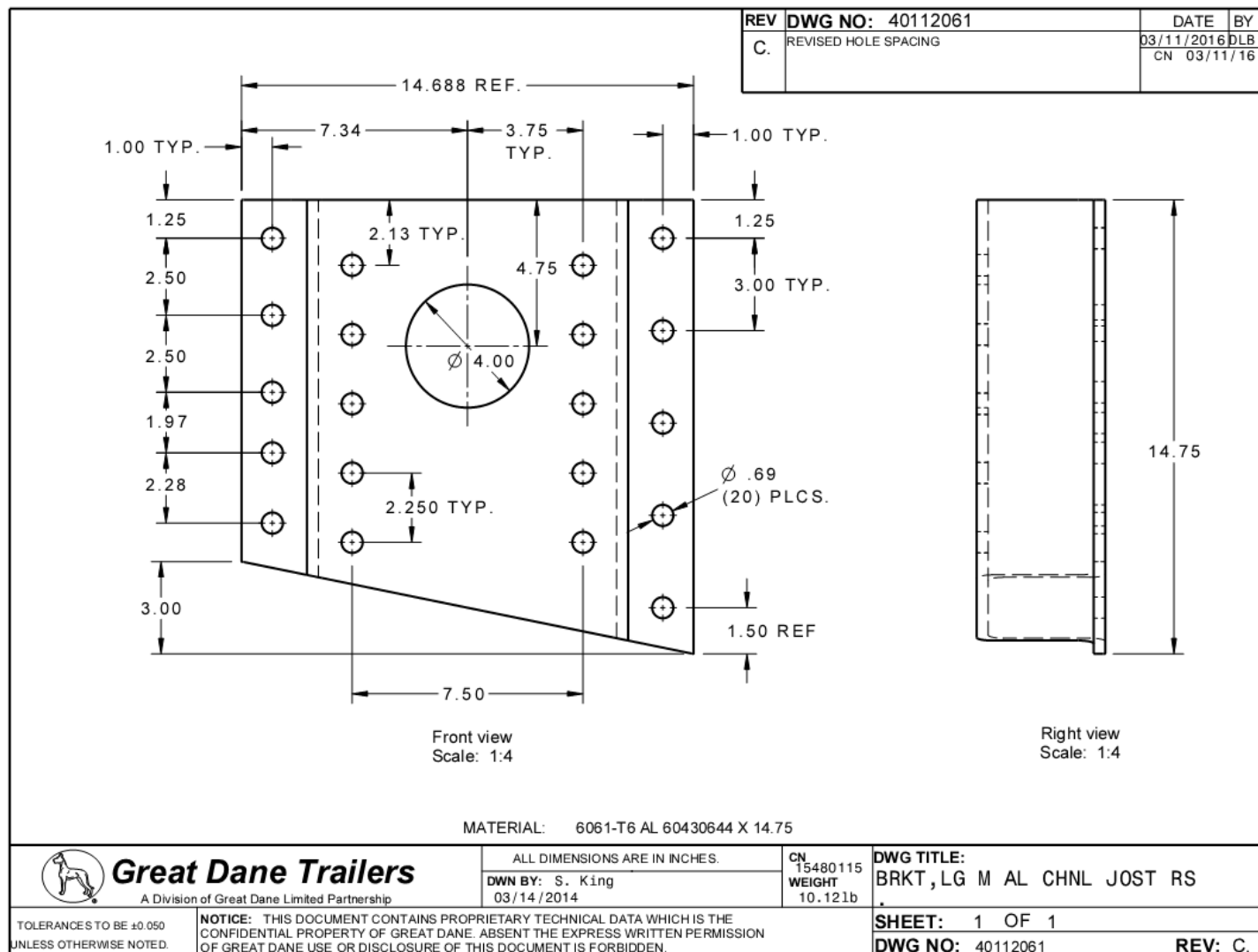
# Part List

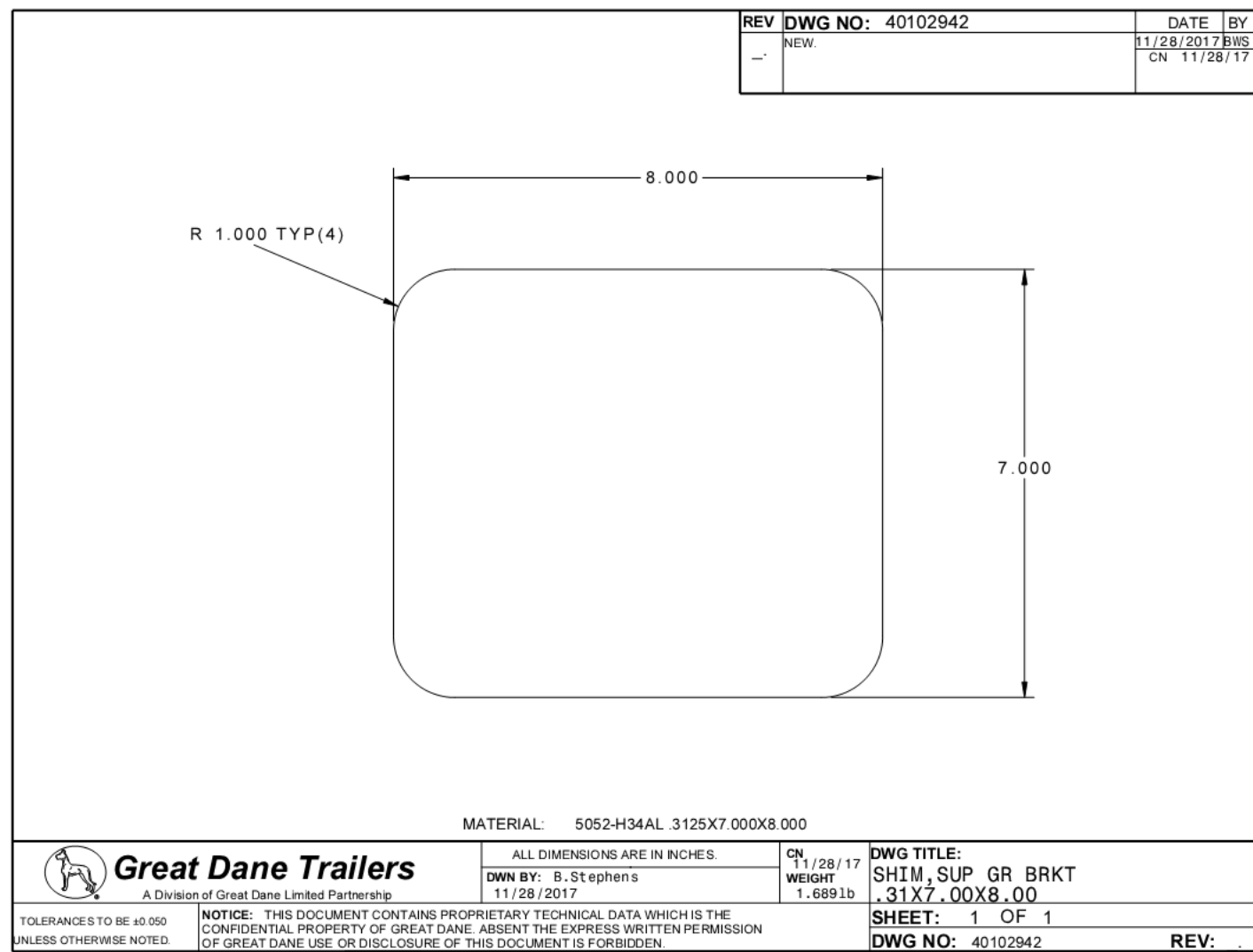
- (4) 40106510, REINF,BM AL PLTFRM TOP
- (2) 40102937, CLVS,LG BRCE TUBE
- (1) 40112064, BRKT,LG M AL CHNL JOST CS
- (1) 40112061, BRKT,LG M AL CHNL JOST RS
- (2) 40102942, SHIM,SUP GR BRKT
- (2) 40102949, SHIM, LG BRKT SPCR
- (2) 40102950, SHIM, LG BRKT SPCR
- (1) 37000072, XBRC ASY,AL LG 102
- (4) 40102947, SHIM,FXP FLR FLNG SPCR
- (1) 60900831X003.00, PIPE,STL 1.25 SCH 40
- (24) 42200840, CPSCW,HH NC ZN .375-16X2.00
- (8) 42200825, CPSCW,HH NC ZN .375-16X1.50
- (32) 42200925, NUT,LK NLN HH NC ZN .38-16
- (64) 42201004, WSHR,FLT .38 ZN
- (20) 42200854, CPSCW,HH NC .63-11X2.75

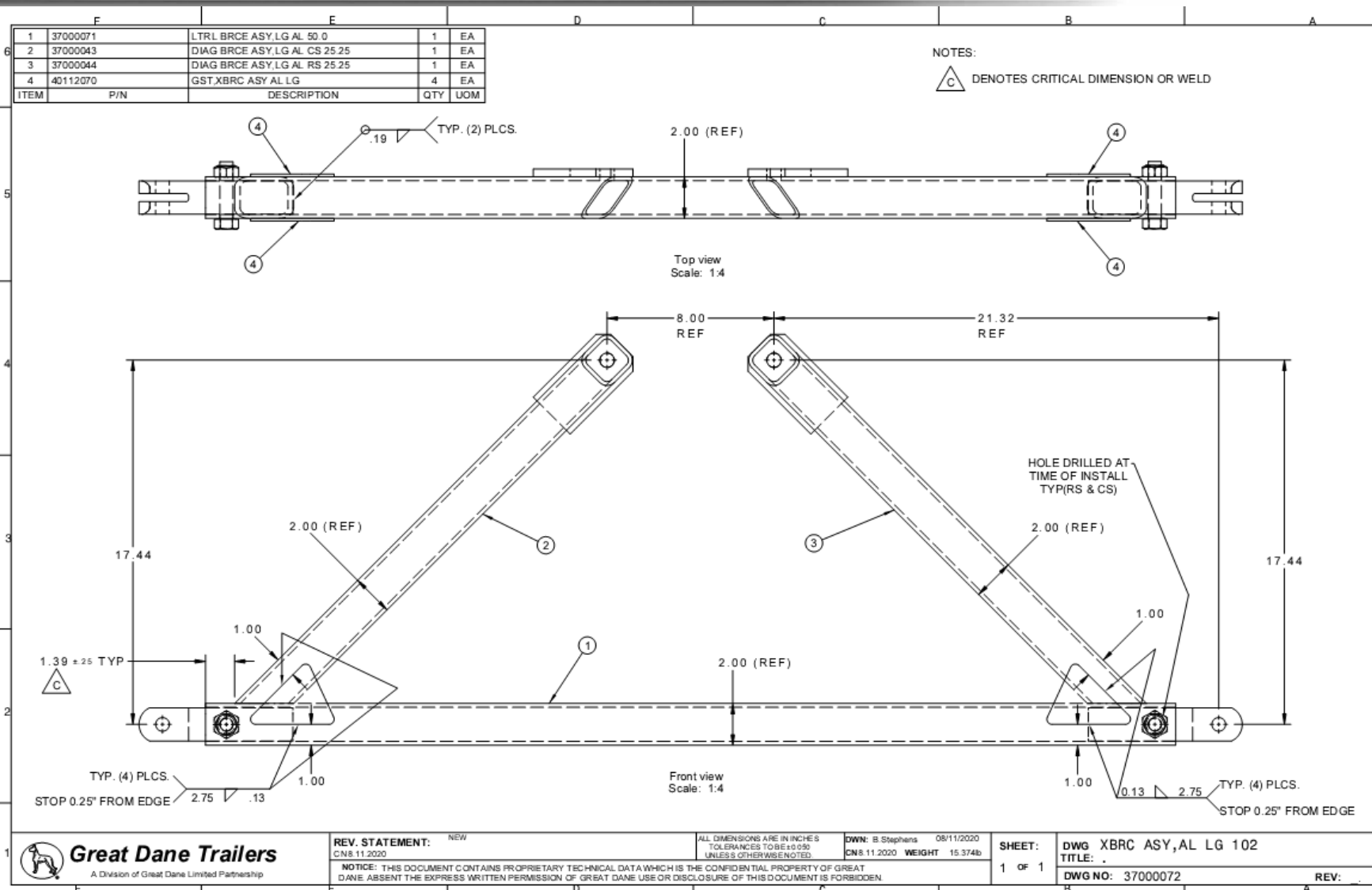












**Great Dane Trailers**  
A Division of Great Dane Limited Partnership

REV. STATEMENT: NEW  
CN8.11.2020

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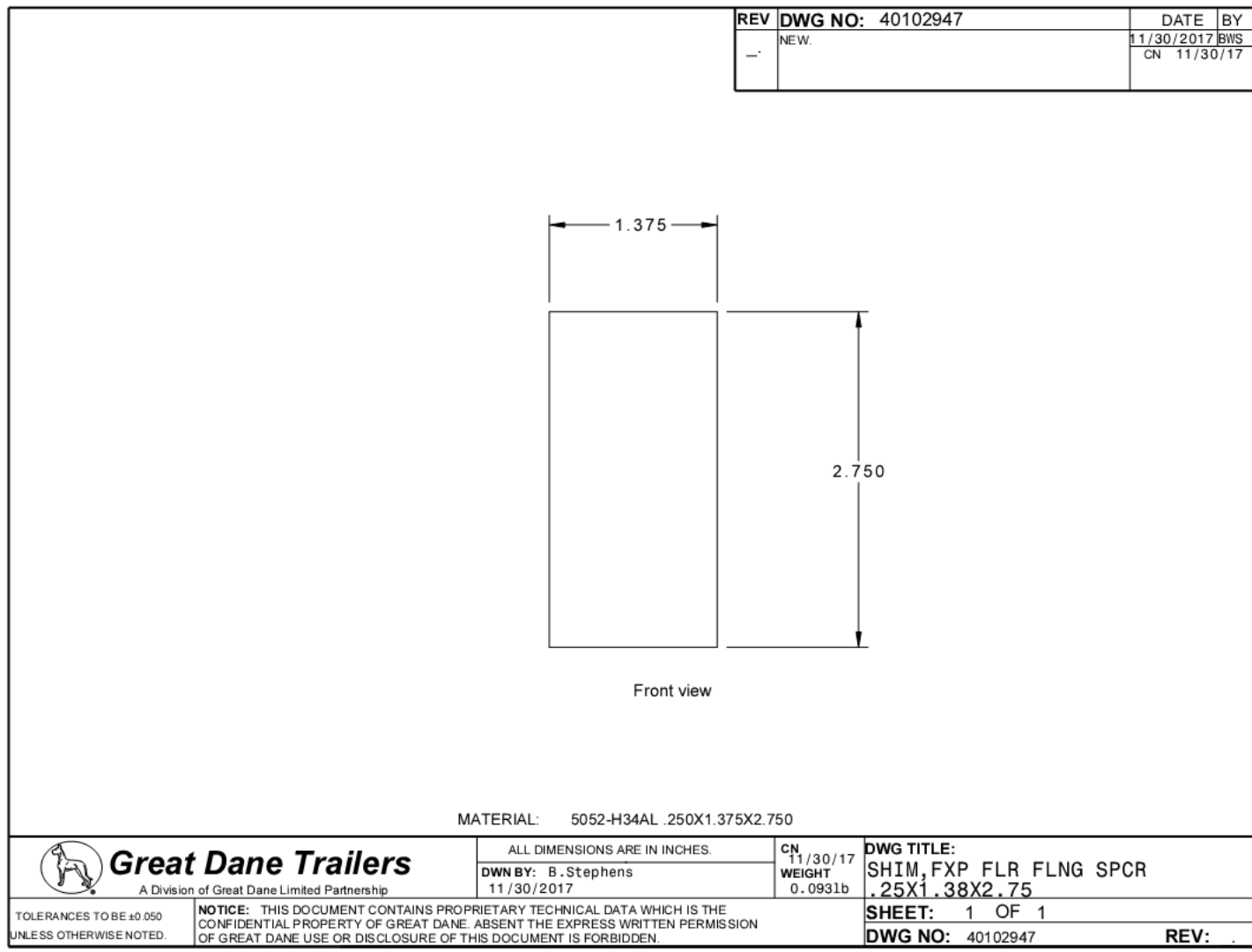
ALL DIMENSIONS ARE IN INCHES  
TOLERANCES TO BE ± 0.050  
UNLESS OTHERWISE NOTED

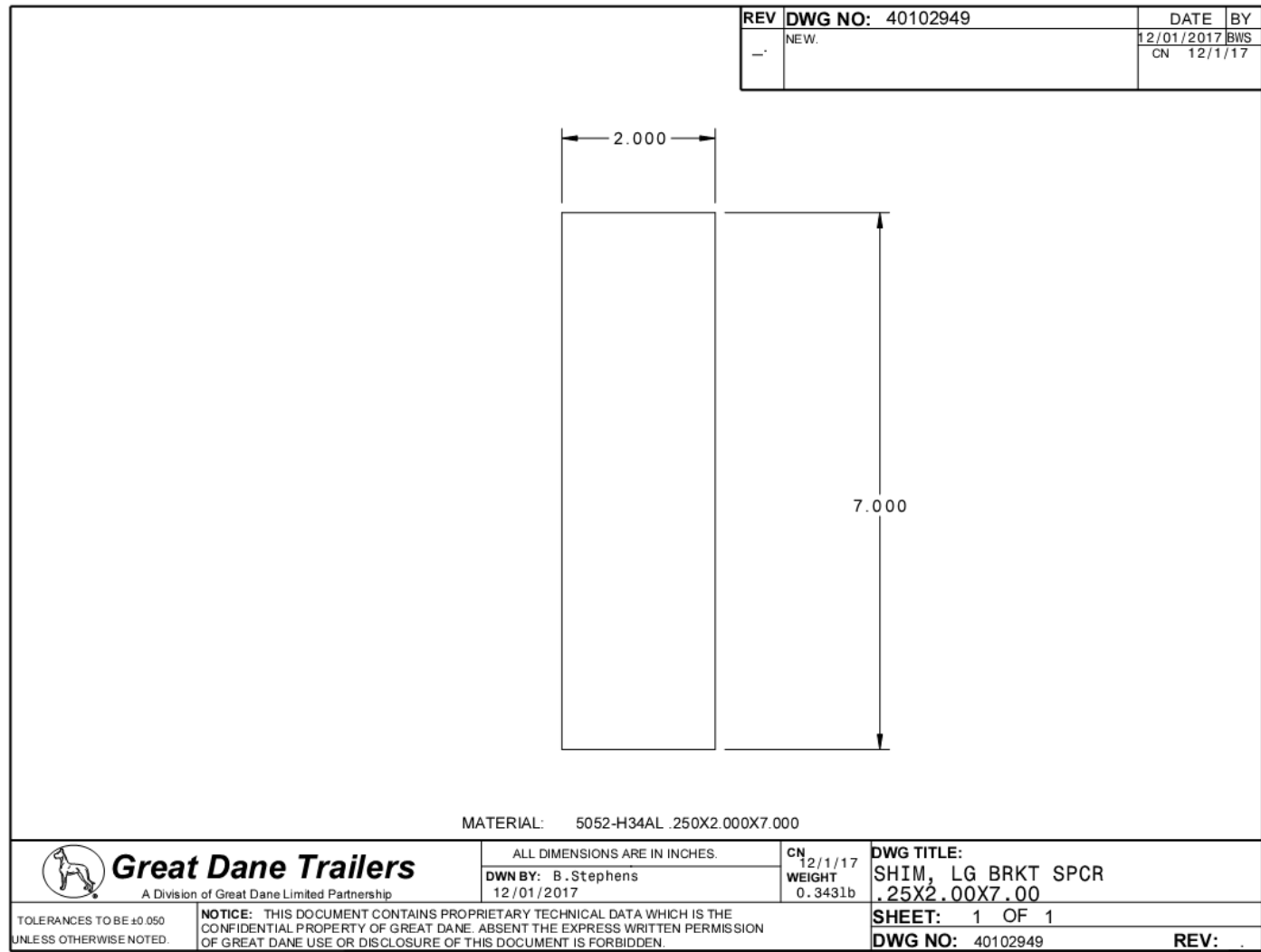
DWN: B. Stephens 08/11/2020  
CN8.11.2020 WEIGHT 15.374lb

SHEET:  
1 OF 1

DWG XBRC ASY,AL LG 102  
TITLE: .  
DWG NO: 37000072

REV: .







|  |     |                  |            |         |
|--|-----|------------------|------------|---------|
|  | REV | DWG NO: 40102950 | DATE       | BY      |
|  | —   | NEW              | 12/04/2017 | BWS     |
|  |     |                  | CN         | 12/4/17 |

2.000

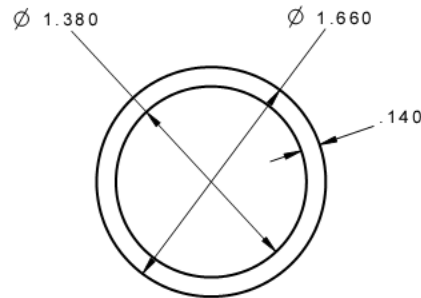
9.000

MATERIAL: 5052-H34AL .250X2.000X9.000

|                                                                                                                                                                |                                                                                                                                                                                                                        |                               |                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------|
|  <b>Great Dane Trailers</b><br>A Division of Great Dane Limited Partnership | ALL DIMENSIONS ARE IN INCHES.                                                                                                                                                                                          | CN 12/4/17<br>WEIGHT 0.4411lb | DWG TITLE:                          |
|                                                                                                                                                                | DWN BY: B.Stephens<br>12/04/2017                                                                                                                                                                                       |                               | SHIM, LG BRKT SPCR<br>.25X2.00X9.00 |
| TOLERANCES TO BE ±0.050<br>UNLESS OTHERWISE NOTED.                                                                                                             | NOTICE: THIS DOCUMENT CONTAINS PROPRIETARY TECHNICAL DATA WHICH IS THE<br>CONFIDENTIAL PROPERTY OF GREAT DANE. ABSENT THE EXPRESS WRITTEN PERMISSION<br>OF GREAT DANE USE OR DISCLOSURE OF THIS DOCUMENT IS FORBIDDEN. |                               | SHEET: 1 OF 1                       |
|                                                                                                                                                                |                                                                                                                                                                                                                        |                               | DWG NO: 40102950 REV: .             |

1. THIS IS A LENGTH-SUFFIXED PART WHERE THE LENGTH IS EXPRESSED IN DECIMAL INCHES. PART NUMBER IS IN THE FORM OF (BASE 8 DIGIT) XLLL.LL [EXAMPLE: (BASE 8 DIGIT)X107.37].  
 2. WEIGHT SHOWN IN THE TITLE BLOCK IS #/FT.

| REV | DWG NO: 60900831      | DATE        | BY |
|-----|-----------------------|-------------|----|
| B.  | REMOVED LENGTH CHART. | 03/07/2012  | JW |
|     |                       | CN 03/07/12 |    |



Front view  
 Scale: 1:1

MATERIAL: A36 STL PIPE 1.25 SCH 40 X LLL.LL



**Great Dane Trailers**

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ALL DIMENSIONS ARE IN INCHES.

DWN BY: J. Wells  
 11/11/2008

CN 62-1824  
 WEIGHT 2.2781b

DWG TITLE:  
 PIPE, STL 1.25 SCH 40 X LLL.LL  
 1.660OD 1.380ID 0.140WALL

TOLERANCES TO BE ±0.050  
 UNLESS OTHERWISE NOTED.

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SHEET: 1 OF 1

DWG NO: 60900831

REV: B.