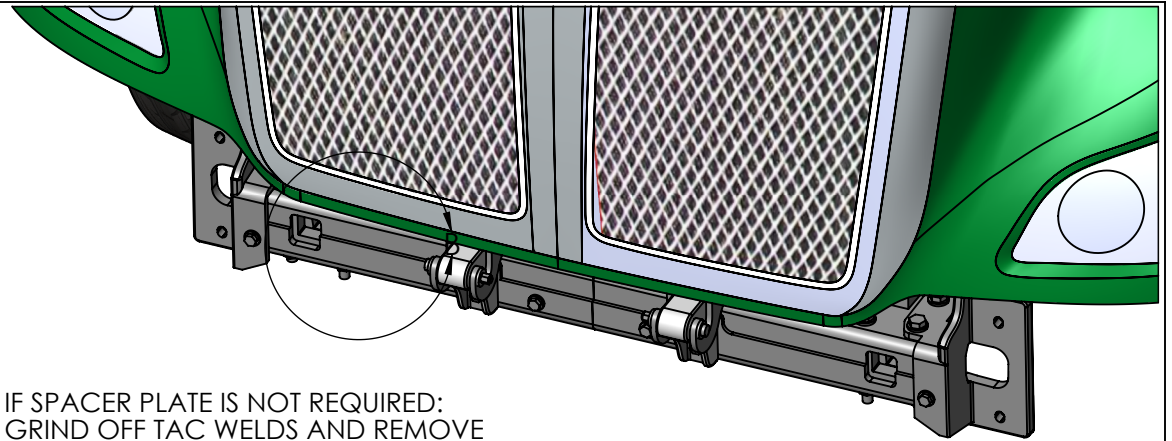
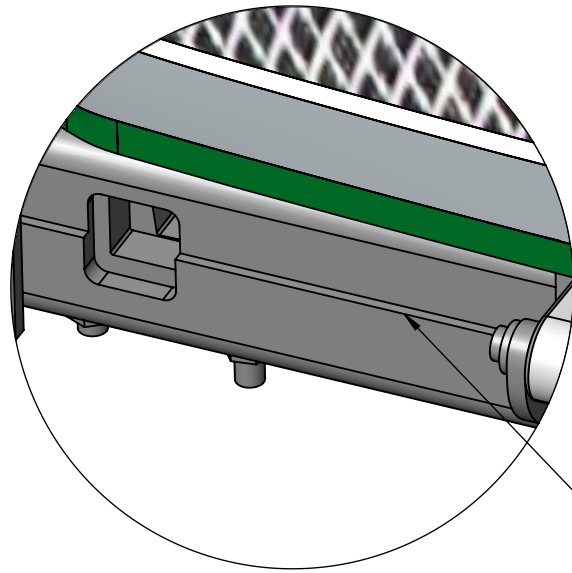


ATTENTION:

CHECK THE CROSS MEMBER OF THE TRUCK IN ORDER TO DETERMINE WHETHER THE SPACER PLATE IS REQUIRED. CONTRARY TO THE TWO CONFIGURATIONS OUTLINED IN DETAIL B COULD RESULT IN DAMAGE TO THE BUMPER AND/OR TRUCK.

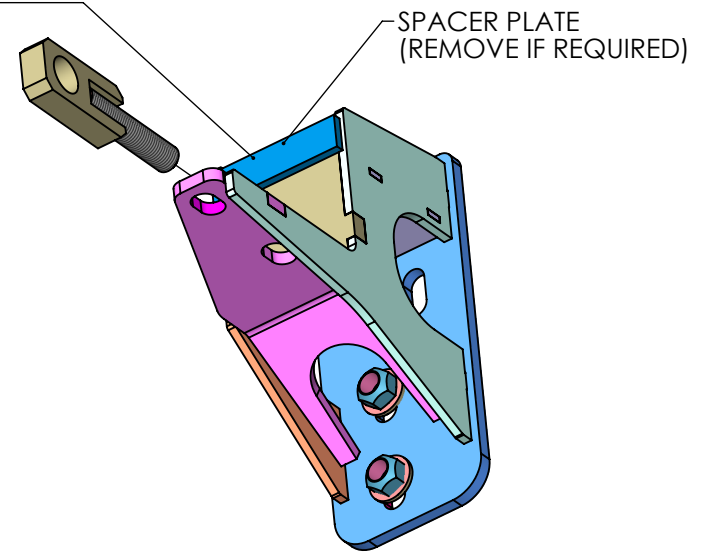


IF SPACER PLATE IS NOT REQUIRED: GRIND OFF TAC WELDS AND REMOVE SPACER. PAINT BARE METAL TO PREVENT CORROSION. REPEAT FOR OTHER MOUNTING BRACKET.



DETAIL B
SCALE 1 : 4

1. INSPECT CROSS MEMBER FOR RIDGE. IF THERE IS A RIDGE THE SPACER PLATE IS REQUIRED.
2. IF TRUCK CROSS MEMBER IS FLAT, SPACER IS NOT REQUIRED.



MOUNTING BRACKET ASSEMBLY

MAGNUM TRAILER & EQUIPMENT INC.

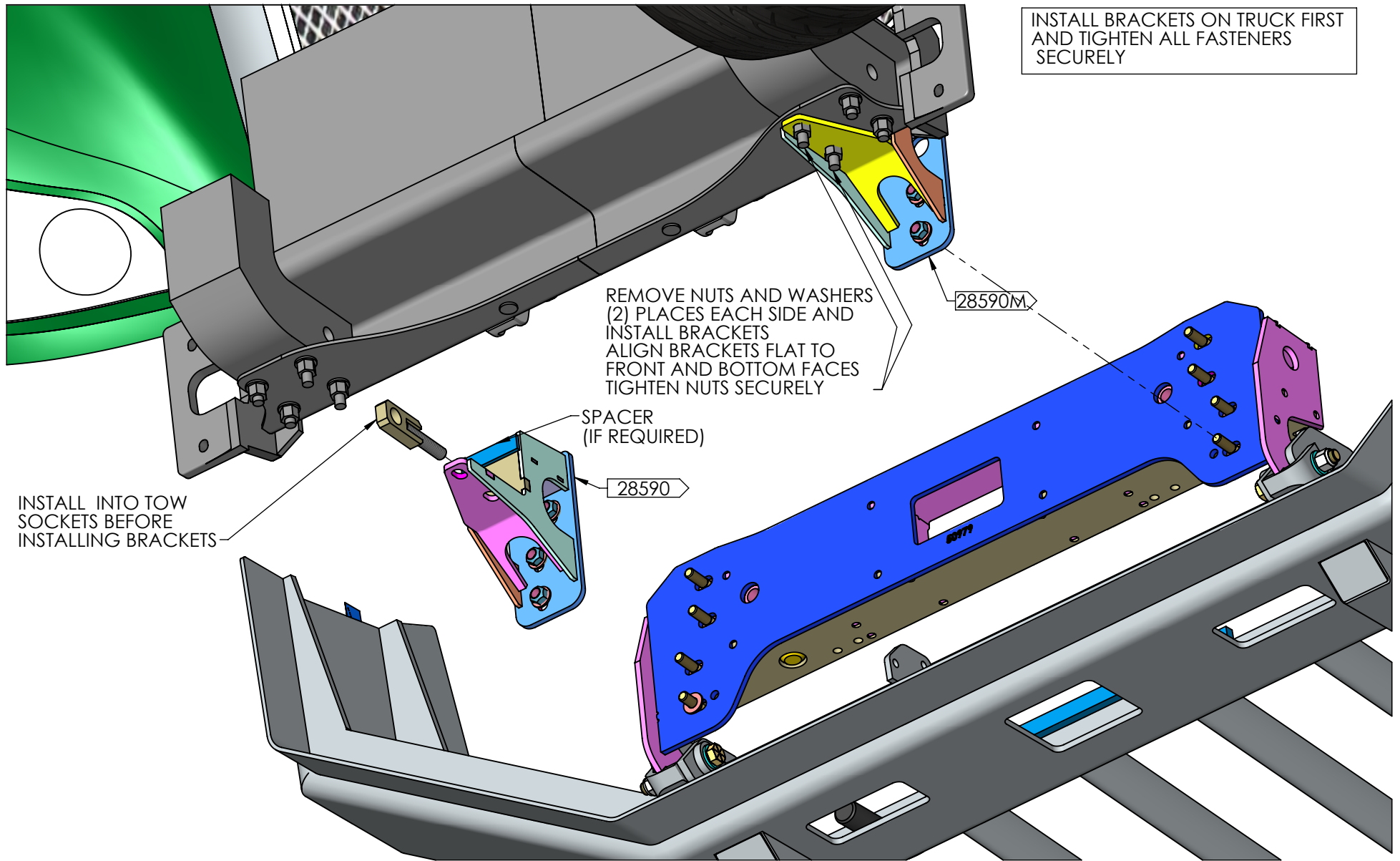
FRACTIONS CHART							
1/32	.03125	9/32	.28125	17/32	.53125	25/32	.78125
1/16	.0625	5/16	.3125	9/16	.5625	13/16	.8125
3/32	.09375	11/32	.34375	19/32	.59375	27/32	.84375
1/8	.125	3/8	.375	5/8	.625	7/8	.875
5/32	.15625	13/32	.40625	21/32	.65625	29/32	.90625
3/16	.1875	7/16	.4375	11/16	.6875	15/16	.9375
7/32	.21875	15/32	.46875	23/32	.71875	31/32	.96875
1/4	.25	1/2	.5	3/4	.75		

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE:

FRACTIONS	ANGLES
+/- 1/16"	+/- 1°
.XX"	.XXX"
+/- 0.03"	+/- 0.005"

DIMENSIONS TO SHARP POINTS

SHEET NAME SPACER PLATE		TITLE 17257-X-NL-X BUMPER ON 2013 KENWORTH T-680		
CURRENT CUSTOMER	STOCK NUMBER	VENDOR NUMBER	WEIGHT - LB.	
WO#	DRAWN BY MD	DRAWING DATE 11/5/2018	REV. B	
SCALE 1:12	MODELLER MD	DRAWING NUMBER AA-50977	NUMBER OF SHEETS 5	



MAGNUM TRAILER & EQUIPMENT INC.



FRACTIONS CHART

1/32	.03125	9/32	.28125	17/32	.53125	25/32	.78125
1/16	.0625	5/16	.3125	9/16	.5625	13/16	.8125
3/32	.09375	11/32	.34375	19/32	.59375	27/32	.84375
1/8	.125	3/8	.375	5/8	.625	7/8	.875
5/32	.15625	13/32	.40625	21/32	.65625	29/32	.90625
3/16	.1875	7/16	.4375	11/16	.6875	15/16	.9375
7/32	.21875	15/32	.46875	23/32	.71875	31/32	.96875
1/4	.25	1/2	.5	3/4	.75		

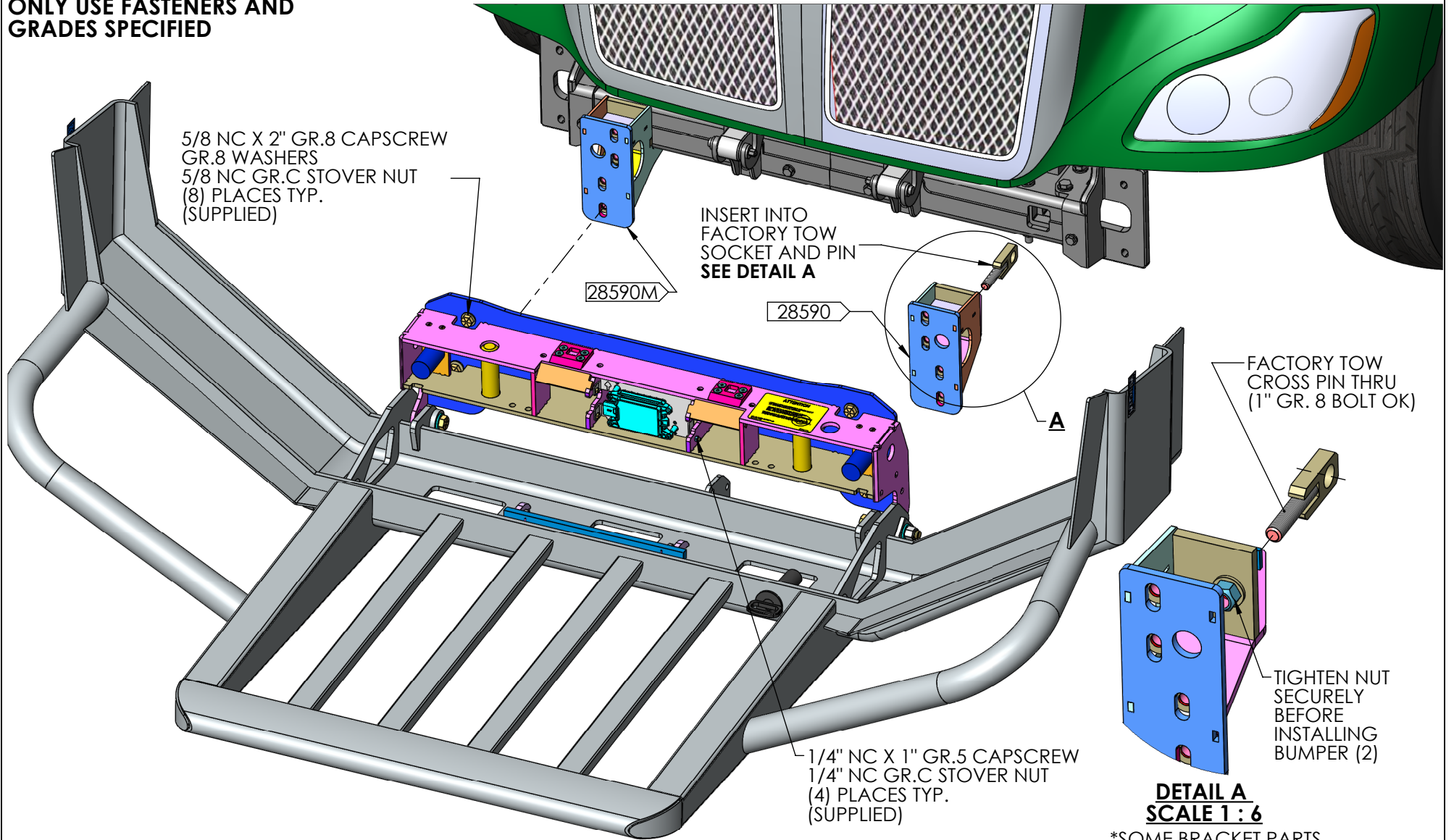
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:

FRACTIONS	ANGLES
+/- 1/16"	+/- 1°
.XX"	.XXX"
+/- 0.03"	+/- 0.005"

DIMENSIONS TO SHARP POINTS

SHEET NAME		TITLE	
BRACKET INSTALL		17257-X-NL-X BUMPER ON 2013 KENWORTH T-680	
CURRENT CUSTOMER	STOCK NUMBER	VENDOR NUMBER	WEIGHT - LB.
WO#	DRAWN BY	DRAWN DATE	REV.
	MD	11/5/2018	B
SCALE	MODELLER	DRAWING NUMBER	NUMBER OF SHEETS
1:8	MD	AA-50977	5

ONLY USE FASTENERS AND GRADES SPECIFIED



5/8 NC X 2" GR.8 CAPSCREW
GR.8 WASHERS
5/8 NC GR.C STOVER NUT
(8) PLACES TYP.
(SUPPLIED)

28590M

INSERT INTO
FACTORY TOW
SOCKET AND PIN
SEE DETAIL A

28590

A

FACTORY TOW
CROSS PIN THRU
(1" GR. 8 BOLT OK)

TIGHTEN NUT
SECURELY
BEFORE
INSTALLING
BUMPER (2)

1/4" NC X 1" GR.5 CAPSCREW
1/4" NC GR.C STOVER NUT
(4) PLACES TYP.
(SUPPLIED)

DETAIL A
SCALE 1 : 6

*SOME BRACKET PARTS
HIDDEN FOR CLARITY

**MAGNUM TRAILER
&
EQUIPMENT INC.**



FRACTIONS CHART

1/32	.03125	9/32	.28125	17/32	.53125	25/32	.78125
1/16	.0625	5/16	.3125	9/16	.5625	13/16	.8125
3/32	.09375	11/32	.34375	19/32	.59375	27/32	.84375
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1/4	.25	1/2	.5	3/4	.75		

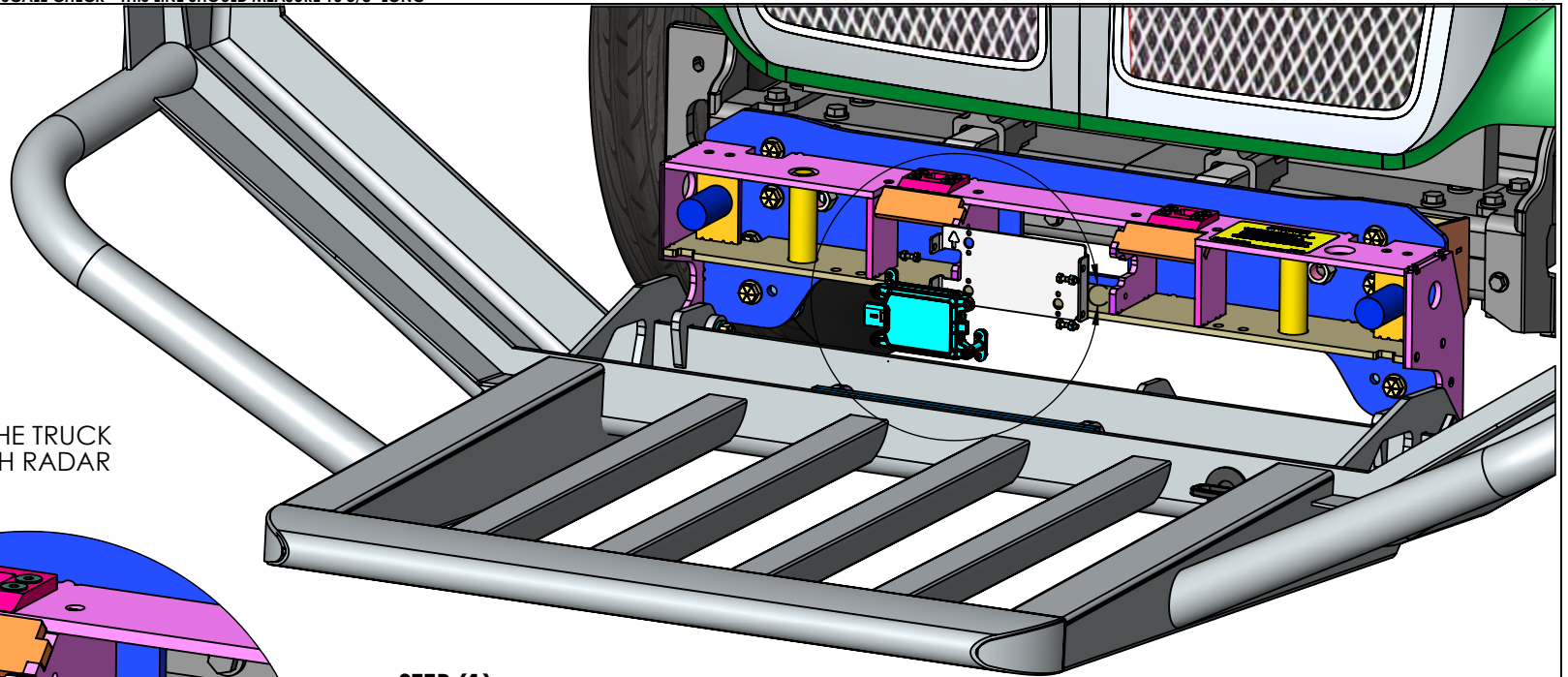
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:

FRACTIONS	ANGLES
+/- 1/16"	+/- 1°
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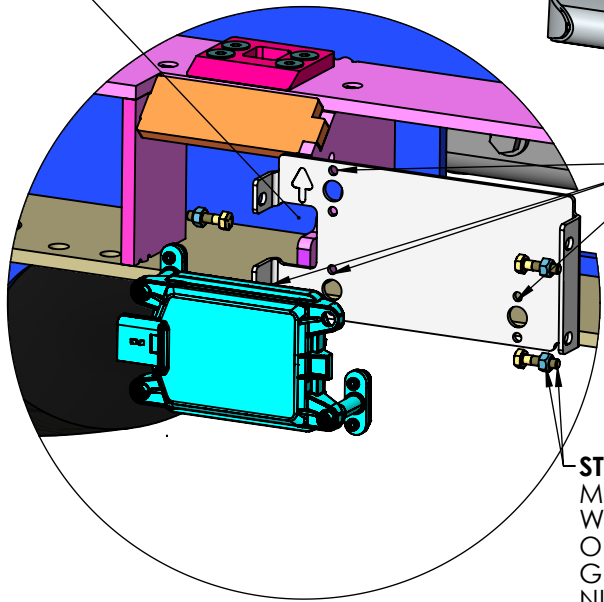
DIMENSIONS TO SHARP POINTS

SHEET NAME		TITLE		
BUMPER INSTALL		17257-X-NL-X BUMPER ON 2013 KENWORTH T-680		
CURRENT CUSTOMER	STOCK NUMBER	VENDOR NUMBER	WEIGHT - LB.	
WO#	DRAWN BY	DRAWN DATE	REV.	
	MD	11/5/2018	B	
SCALE	MODELLER	DRAWING NUMBER	NUMBER OF SHEETS	
1:12	MD	AA-50977	5	

USE ONLY FASTENERS AND GRADES SPECIFIED



STEP (2):
RECONNECT RADAR TO THE TRUCK
(USE BRACKET SLOT TO FISH RADAR
CABLE)



STEP (1):
INSTALL RADAR INTO RADAR
BRACKET SUPPLIED REUSING
ORIGINAL ADJUSTABLE STAND-OFF
AND FASTENERS

STEP (3):
MOUNT RADAR BRACKET
WITH RADAR INSTALLED
ON IT USING 1/4" NC X 1"
GR. 5 AND GR. C STOVER
NUTS (SUPPLIED)(4) PLACES

NOTE:
IF EQUIPED, RADAR MUST BE REMOVED BEFORE BUMPER INSTALLATION.

**RADAR MUST BE RE-CALIBRATED AFTER BUMPER INSTALLATION.
CALIBRATION CAN ONLY BE DONE BY AUTHORIZED PERSONNEL**

**MAGNUM TRAILER
&
EQUIPMENT INC.**



FRACTIONS CHART

1/32	.03125	9/32	.28125	17/32	.53125	25/32	.78125
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3/32	.09375	11/32	.34375	19/32	.59375	27/32	.84375
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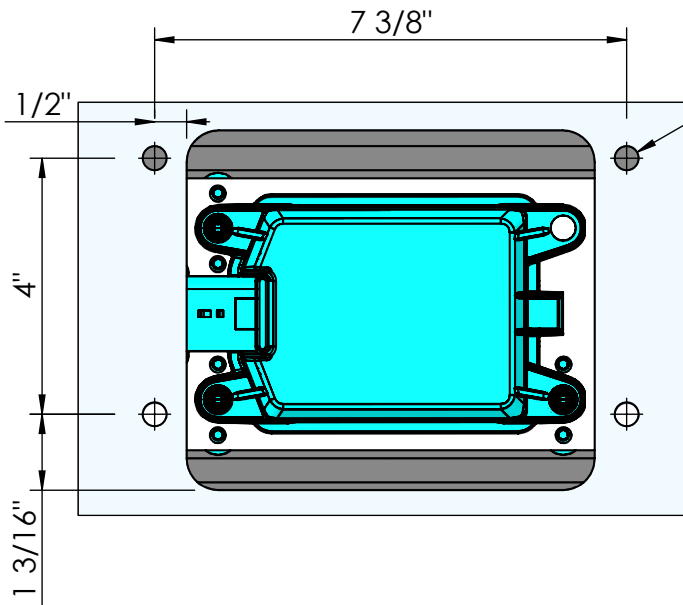
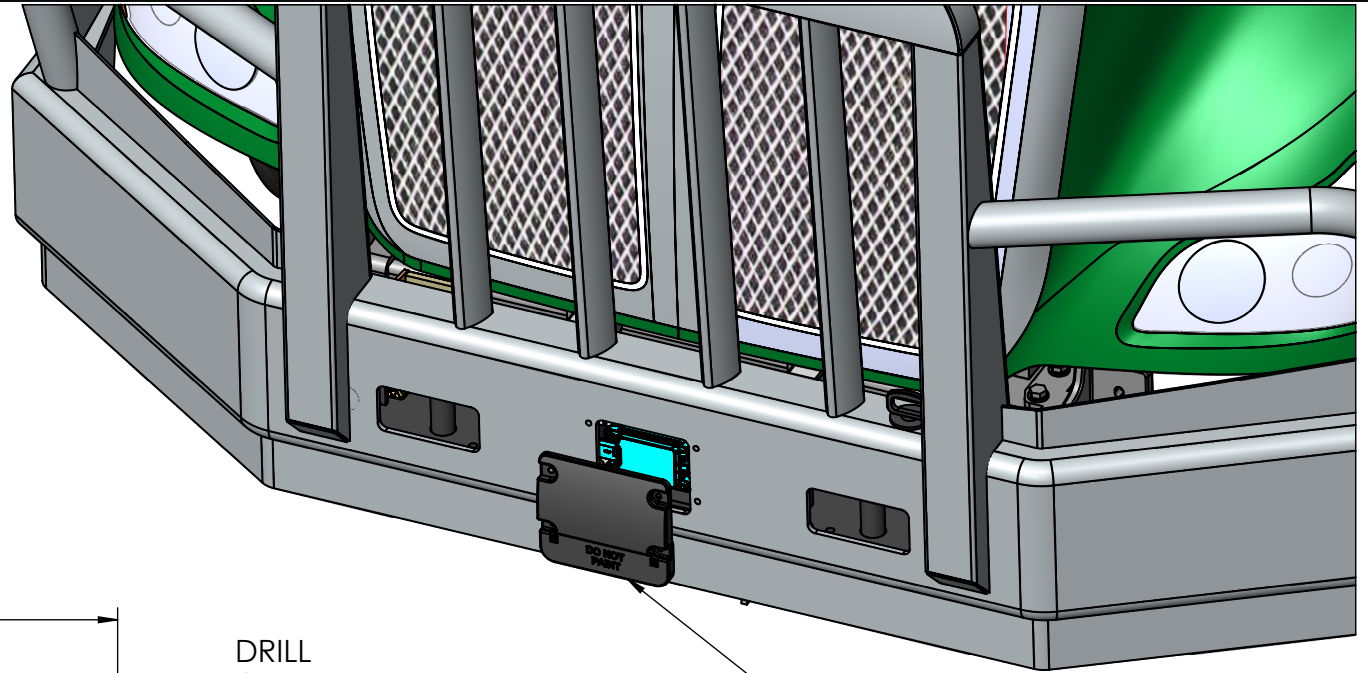
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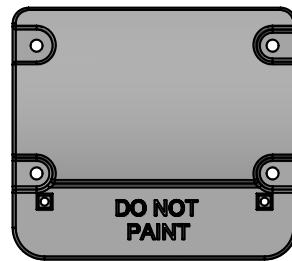
DIMENSIONS TO SHARP POINTS

SHEET NAME	TITLE		
RADAR INSTALL	17257-X-NL-X BUMPER ON 2013 KENWORTH T-680		
CURRENT CUSTOMER	STOCK NUMBER	VENDOR NUMBER	WEIGHT - LB.
WO#	DRAWN BY	DRAWN DATE	REV.
	MD	11/5/2018	B
SCALE	MODELLER	DRAWING NUMBER	NUMBER OF SHEETS
1:12	MD	AA-50977	5

ATTENTION:
INSTALLING THE LICENSE PLATE ON
THE RADAR COVER PLATE MAY INTERFERE
WITH THE RADAR.



DRILL
Ø 3/8".
TYP (4)



RADAR COVER PLATE

REMOVE COVER PLATE FROM THE
ORIGINAL BUMPER AND INSTALL USING
3/8" HARDWARE (NOT SUPPLIED).

**MAGNUM TRAILER
&
EQUIPMENT INC.**



FRACTIONS CHART

1/32	.03125	9/32	.28125	17/32	.53125	25/32	.78125
1/16	.0625	5/16	.3125	9/16	.5625	13/16	.8125
3/32	.09375	11/32	.34375	19/32	.59375	27/32	.84375
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1/4	.25	1/2	.5	3/4	.75		

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:

FRACTIONS	ANGLES
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.XX"	.XXX"
+/- 0.03"	+/- 0.005"

DIMENSIONS TO SHARP POINTS

SHEET NAME
RADAR COVER

CURRENT CUSTOMER

WO#

SCALE
1:12

TITLE
17257-X-NL-X BUMPER ON 2013 KENWORTH T-680

STOCK NUMBER

DRAWN BY

MD

MODELLER
MD

VENDOR NUMBER

DRAWN DATE
11/5/2018

DRAWING NUMBER
AA-50977

WEIGHT - LB.

REV.

B

NUMBER OF SHEETS
5