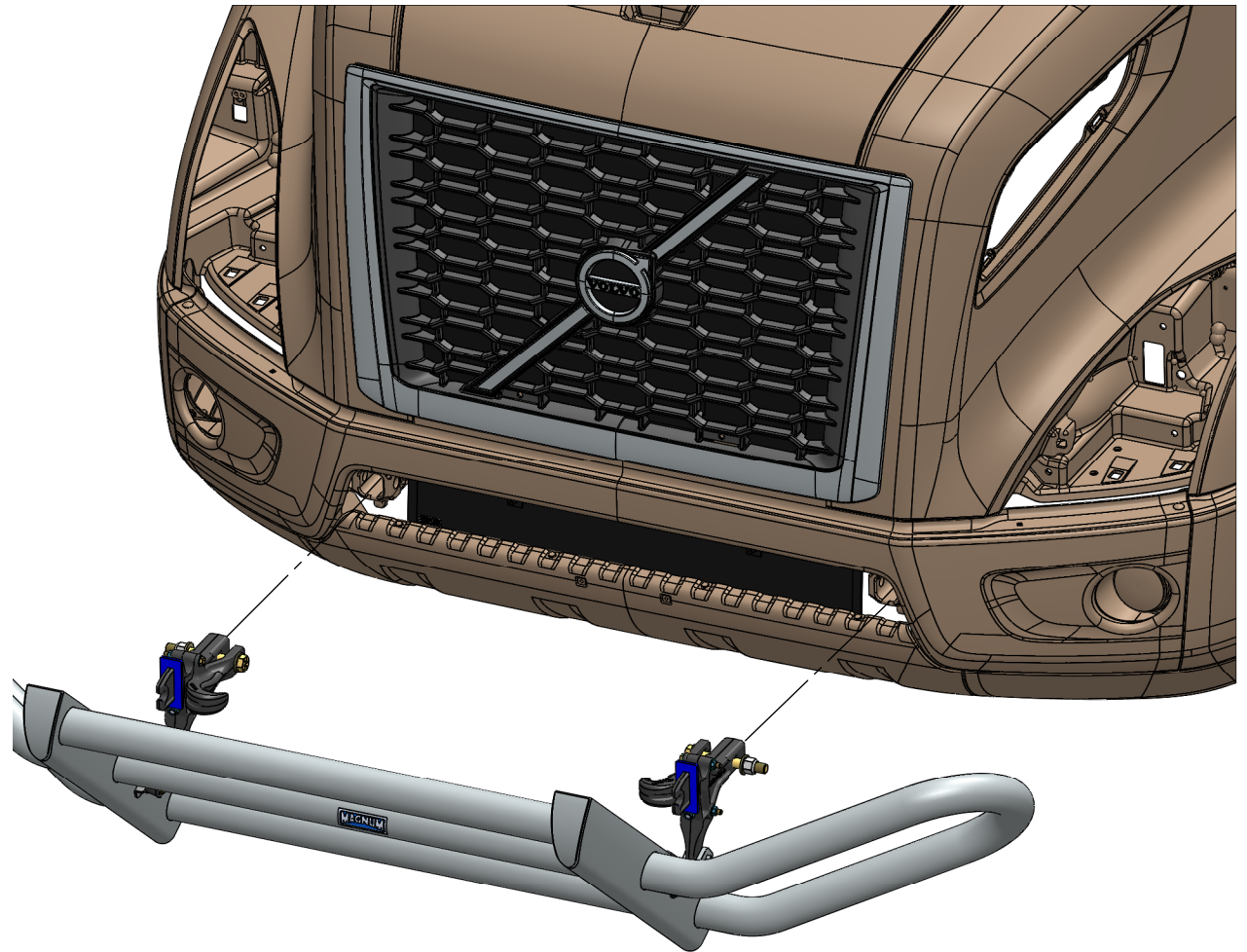


- 1) INSERT MOUNT BRACKETS FULLY INTO TOW SOCKETS
- 2) INSERT CROSS PIN THROUGH HOLE IN BRACKET AND TOW SOCKET
- 3) TIGHTEN LOCKING NUTS FIRMLY
- 4) CLOSE AND LOCK BUMPER AND CHECK FOR PLAY - ADD SHIMS (SUPPLIED) BEHIND URETHANE PAD TO SUIT



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" +/- 1deg

DIMENSIONS TO SHARP POINTS

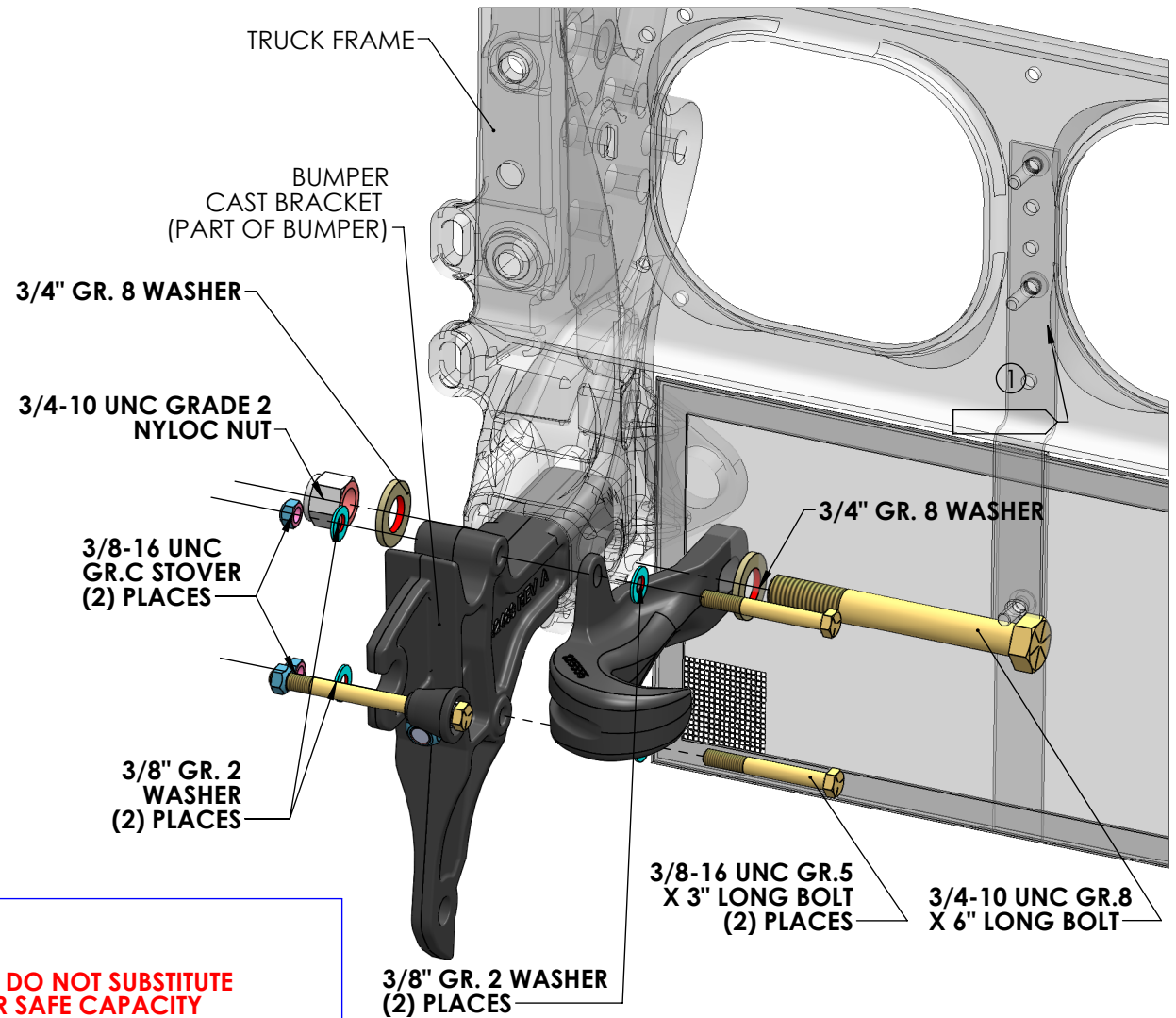
SHEET NAME BUMPER INSTALL		TITLE 17249 BUMPER ON VOLVO VNR 2018 AND UP		
CURRENT CUSTOMER	STOCK NUMBER	VENDOR NUMBER	WEIGHT - LB. 99.9	
WO#	DRAWN BY LS	DRAWN DATE 2017-12-15		REV. B
SCALE 1:4	MODELLER LS	DRAWING NUMBER AA-48519		NUMBER OF SHEETS 1

*TRUCK HOOD IS HIDDEN
IN THIS DRAWING

**DO NOT SUBSTITUTE
ANY FASTENERS**

INSTALLATION STEPS

1. POSITION HOOK TO INSIDE OF BUMPER BRACKET
2. INSERT 3/8" X 3" BOLTS WITH WASHERS THROUGH HOOK AND BUMPER BRACKET AS SHOWN.
3. INSTALL 3/8" WASHERS AND STOVER NUTS. LEAVE THESE LOOSE AT THIS POINT.
4. INSTALL 3/4" BOLT WITH WASHER THROUGH HOOK AND BRACKET.
5. INSTALL 3/4" NYLOC NUT WITH WASHER - LEAVE LOOSE AT THIS POINT
6. TIGHTEN 3/8" STOVER NUTS - TORQUE = 20 LB./FT
7. TIGHTEN 3/4" NYLOC NUT ONLY UNTIL THE BOLT HAS NO FREE END PLAY. **DO NOT TIGHTEN THIS NUT DOWN FULLY**



IMPORTANT SAFETY NOTES:

-THE (2) 3/8" DIAMETER BOLTS MUST BE GRADE 5 ONLY - DO NOT SUBSTITUTE BOLTS ARE DESIGNED TO BREAK TO INDICATE TOW OVER SAFE CAPACITY

-DO NOT FULLY TIGHTEN DOWN THE 3/4" NYLOC NUT. THERE MAY BE A GAP BETWEEN THE HOOK AND TRUCK FRAME - THIS IS NORMAL

**ALUMINUM PORTION OF BUMPER IS NOT SHOWN FOR CLARITY
TOW HOOKS CAN BE INSTALLED WITHOUT REMOVING BUMPER

**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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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:

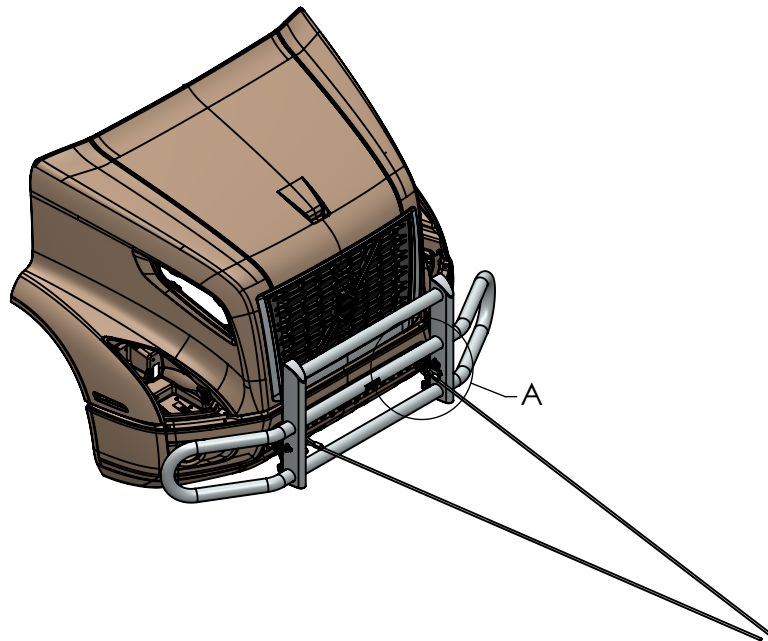
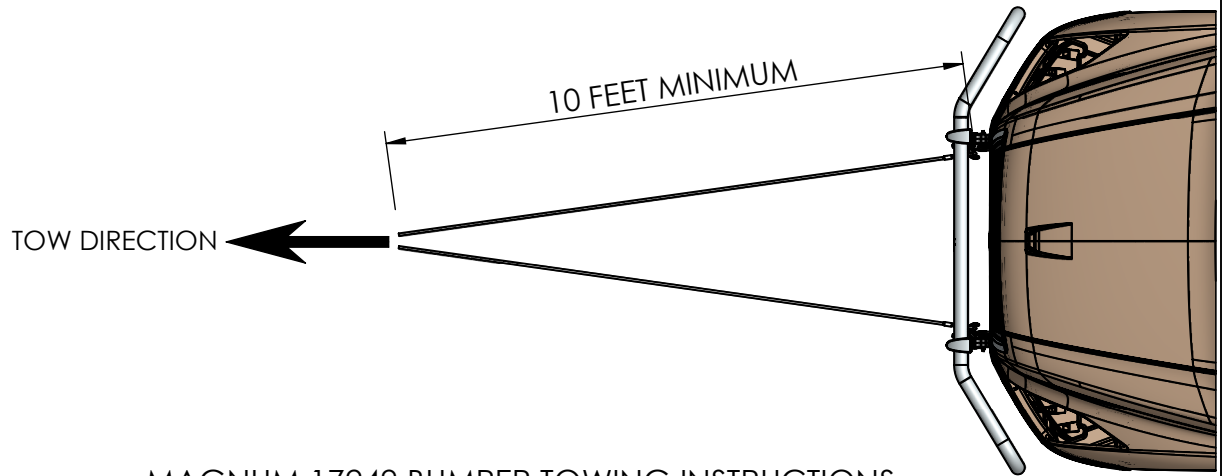
FRACTIONS	ANGLES
+/- 1/16"	+/- 1°
.XX"	.XXX"
+/- 0.03"	+/- 0.005"

DIMENSIONS TO SHARP POINTS

SHEET NAME		TITLE	
TOW HOOK INSTALL		17249 BUMPER ON VOLVO VNR 2018 AND UP	
CURRENT CUSTOMER	STOCK NUMBER	VENDOR NUMBER	WEIGHT - LB.
			99.9
WO#	DRAWN BY	DRAWN DATE	REV.
	LS	2017-12-15	B
SCALE	MODELLER	DRAWING NUMBER	NUMBER OF SHEETS
1:4	LS	AA-48519	1



DETAIL A
SCALE 1 : 12



MAGNUM 17249 BUMPER TOWING INSTRUCTIONS

- TOW CAPACITY PER HOOK IS **5000 lb. MAXIMUM.**
- TOW ONLY IN ACCORDANCE WITH THE ARRANGEMENT SHOWN IN THIS INSTRUCTION.
- TOW CAPABILITY IS NOT FOR VEHICLE RECOVERY FROM ACCIDENT OR OTHER VEHICLE OFF ROAD CONDITION - FOR VEHICLE RECOVERY REMOVE THE BUMPER AND USE THE VOLVO PROVIDED TOW YOKES.
- MINIMUM TOW CABLE LENGTH = 10 FT.
- TOW HOOKS MUST BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH MAGNUM INSTALLATION INSTRUCTIONS

DANGER!

ONLY USE RIGGING OF CORRECT RATED CAPACITY

CLEAR ALL PERSONS MINIMUM 15 METERS FROM VEHICLES WHEN TOWING

MAGNUM TRAILER & EQUIPMENT INC. 	FRACTIONS CHART				UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS ANGLES +/- 1/16" +/- 1° .XX" .XXX" +/- 0.03" +/- 0.005"		SHEET NAME TOWING		TITLE 17249 BUMPER ON VOLVO VNR 2018 AND UP		
	1/32 .03125	9/32 .28125	17/32 .53125	25/32 .78125			CURRENT CUSTOMER		STOCK NUMBER		VENDOR NUMBER
	1/16 .0625	5/16 .3125	9/16 .5625	13/16 .8125	WO#		DRAWN BY LS		DRAWN DATE 2017-12-15		REV. B
	3/32 .09375	11/32 .34375	19/32 .59375	27/32 .84375	SCALE 1:40		MODELLER LS		DRAWING NUMBER AA-48519		NUMBER OF SHEETS 1
1/8 .125	3/8 .375	5/8 .625	7/8 .875	DIMENSIONS TO SHARP POINTS							
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									