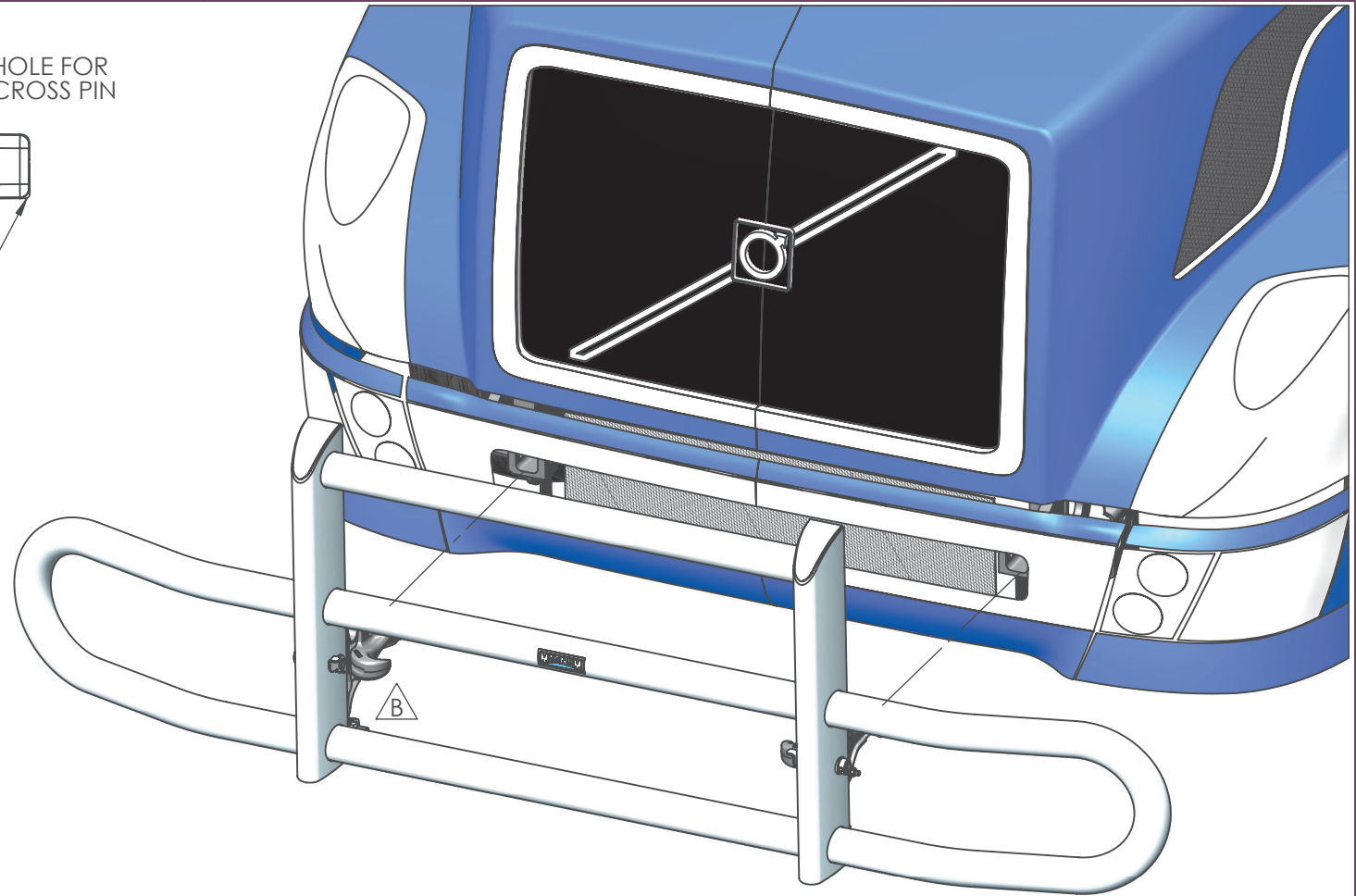


1. INSERT MOUNT BRACKETS FULLY INTO TOW SOCKETS
2. INSERT CROSS PIN THROUGH HOLE IN BRACKET AND TOW SOCKET
3. TIGHTEN LOCKING NUTS FIRMLY
4. CLOSE AND LOCK BUMPER AND CHECK FOR PLAY - ADD SHIMS (SUPPLIED) BEHIND URETHANE PAD TO SUIT



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

B	ADD TOW HOOK ASSEMBLY TO BOTH SIDES OF BUMPER	6/6/2018	DP
A	SHOW CAST BRACKETS	5/31/2016	GW
REV.	CHANGES OR ADDITIONS	DATE	REV BY

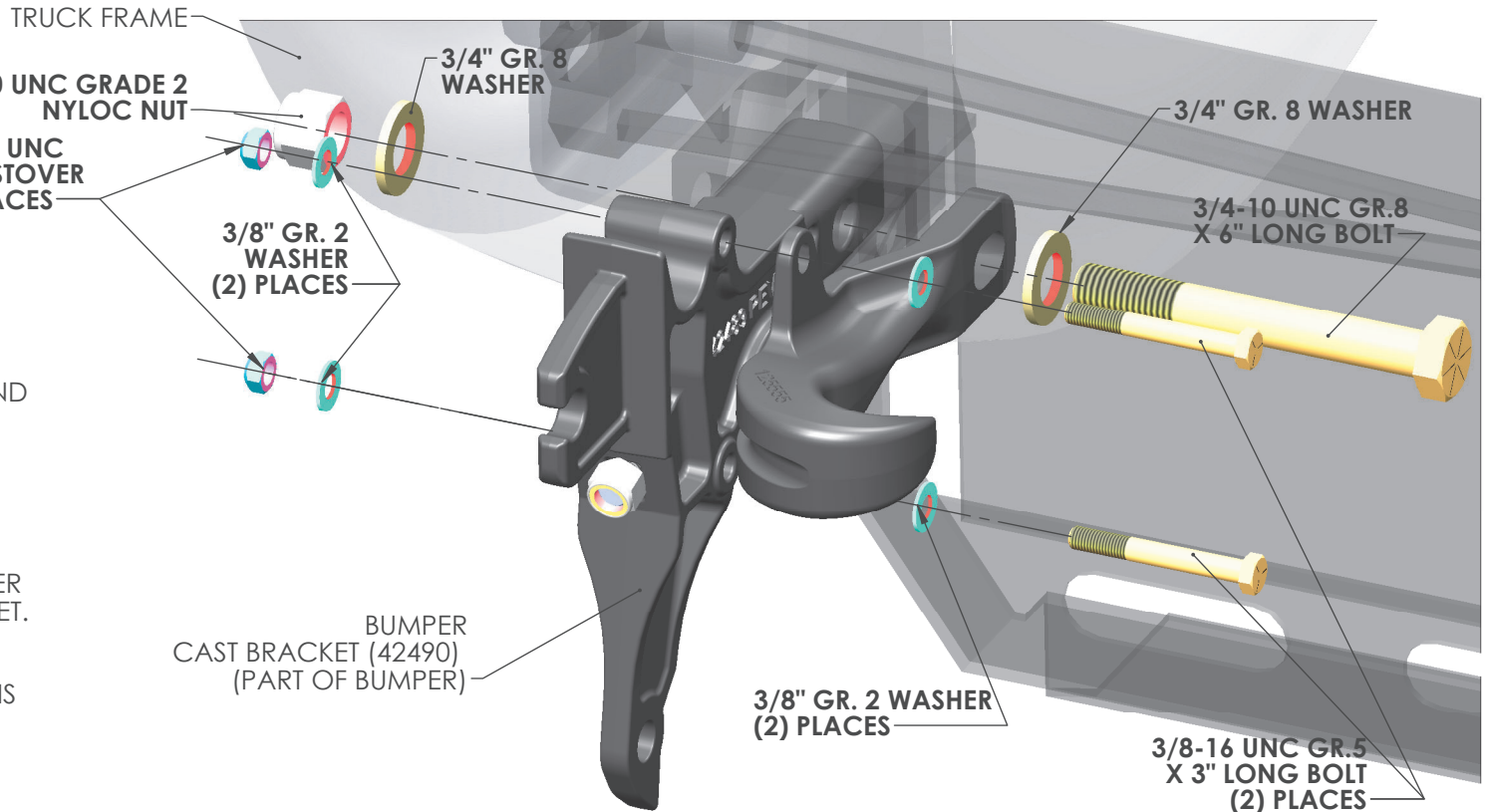
SHEET NAME BUMPER INSTALL		TITLE 17132 BUMPER ON VOLVO VN 2009	
CURRENT CUSTOMER	STOCK NUMBER	VENDOR NUMBER	WEIGHT - LB. 98.7
WO#	DRAWN BY GW	DRAWN DATE 3/22/2016	REV. B
SCALE 1:4	MODELLER GW	DRAWING NUMBER AA-43123	NUMBER OF SHEETS 1

*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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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 INSTALL (2)		TITLE 17132 BUMPER ON VOLVO VN 2009	
CURRENT CUSTOMER	STOCK NUMBER	VENDOR NUMBER	WEIGHT - LB. 98.7
WO#	DRAWN BY GW	DRAWN DATE 3/22/2016	REV. B
SCALE 1:3	MODELLER GW	DRAWING NUMBER AA-43123	NUMBER OF SHEETS 1