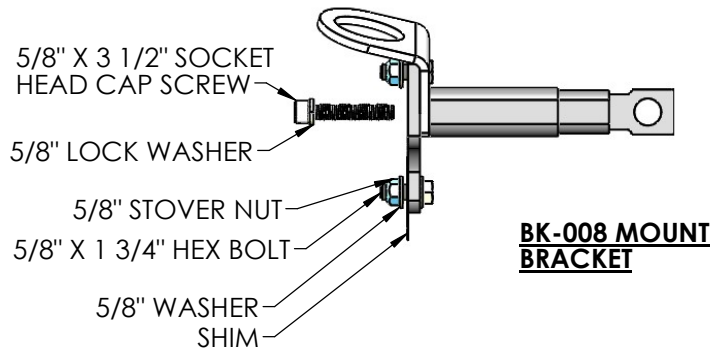
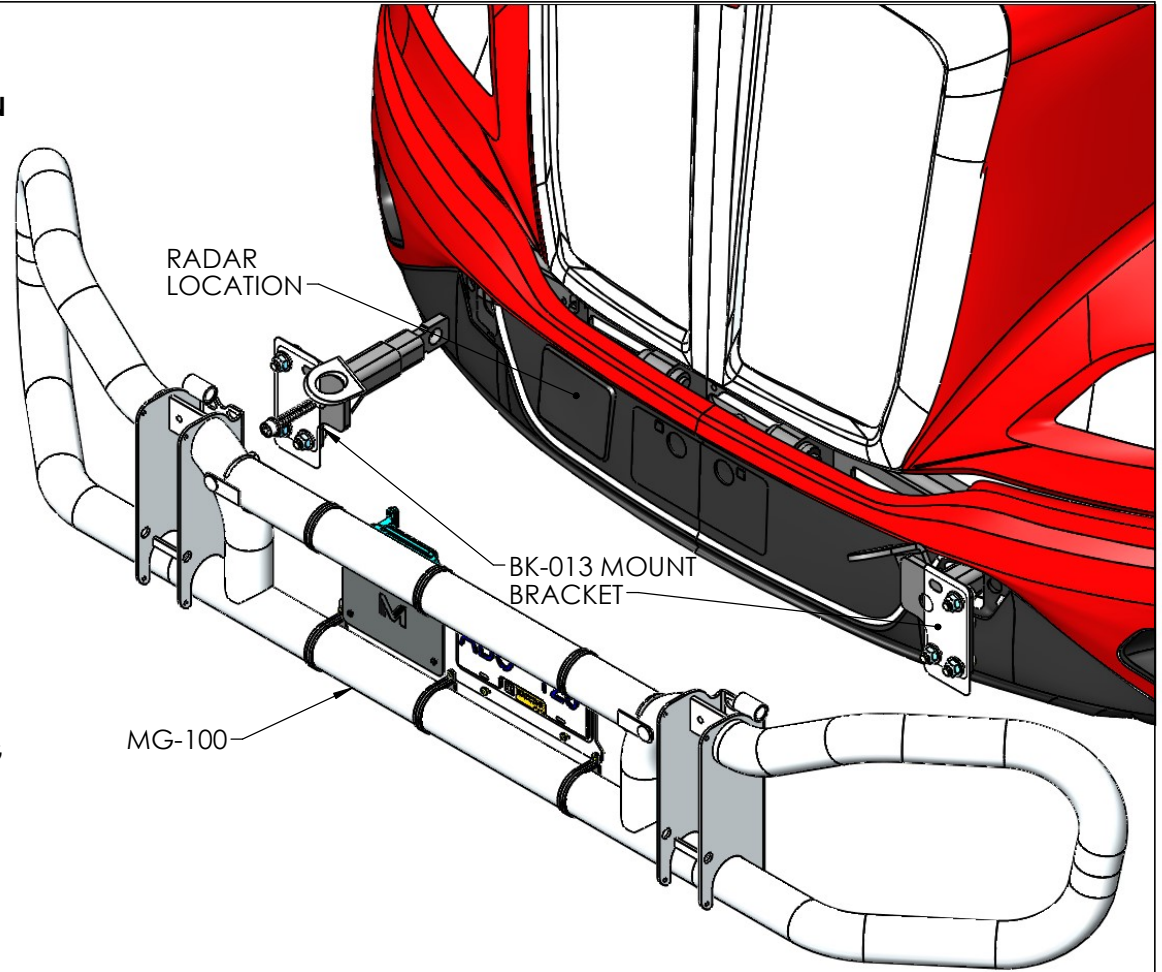


**INSTALLING MG-100/200/300**

- 1) SEE THE RADAR INSTALLATION SHEET IF RADAR IS EQUIPPED ON THE TRUCK.
- 2) OPEN HOOD AND REMOVE FACTORY TOW PINS FROM TRUCK
- 3) INSERT MOUNT BRACKETS INTO THE TOW SOCKETS (TOW PLATES SHOULD BE ON THE INSIDE OF THE BUMPER)
- 4) SLIDE FACTORY TOW PINS OR EQUIVALENT BOLT THROUGH THE TRUCK FRAME AND MOUNT BRACKETS.
- 5) TIGHTEN THE 5/8" X 3 1/2" SOCKET HEAD SCREW WITH A 5/8" LOCK WASHER TO 159 FT-LBS TO SECURE THE BRACKETS IN PLACE
- 6) ATTACH THE MG-100 TO THE MOUNT BRACKETS USING THE TOP TWO ROWS OF SLOTS. SHIMS SHOULD BE PLACED BETWEEN THE GUARD AND THE MOUNT BRACKETS.  
HARDWARE: 5/8" NC X 1 3/4" BOLT, 5/8" WASHER & 5/8" STOVER NUT  
TIGHTEN TO 159 FT-LBS (6 PLACES)
- 7) THE GUARD IS NOW INSTALLED. THE HOOD CAN NOW BE CLOSED. REFER TO DRAWING #54268 FOR INSTALLING THE MG-200T/300T IF REQUIRED.



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  
**BUMPER INSTALL**  
CURRENT CUSTOMER  
**WO#**  
SCALE  
1:12

TITLE			
<b>BK-013 ON 2021 KENWORTH T-680</b>			
STOCK NUMBER	VENDOR NUMBER	WEIGHT - LB.	
		219.	
DRAWN BY	DRAWN DATE	CHECKED BY	CHECKED DATE
MD	2/14/2022	LS	2/17/2022
MODELLER	DRAWING NUMBER	NUMBER OF SHEETS	
MD	<b>AA-60230</b>	2	

**USE ONLY FASTENERS AND GRADES SPECIFIED**

**NOTE:**  
IF EQUIPPED, RADAR MUST BE REMOVED BEFORE BUMPER INSTALLATION. THE OEM BUMPER NEEDS TO BE REMOVED IN ORDER TO REMOVE THE RADAR.

**RADAR MUST BE RECALIBRATED AFTER BUMPER INSTALLATION, CALIBRATION CAN ONLY BE DONE BY AUTHORIZED PERSONNEL.**

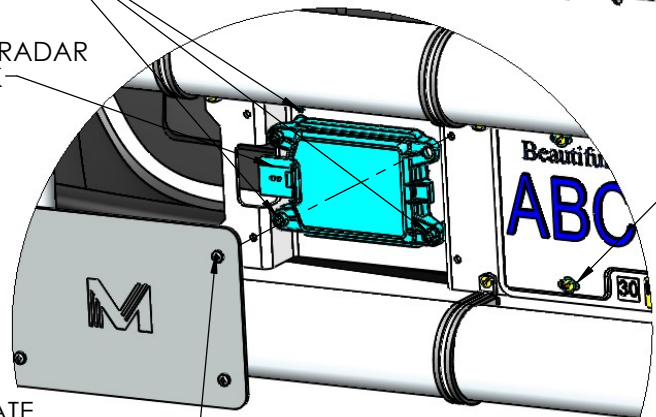
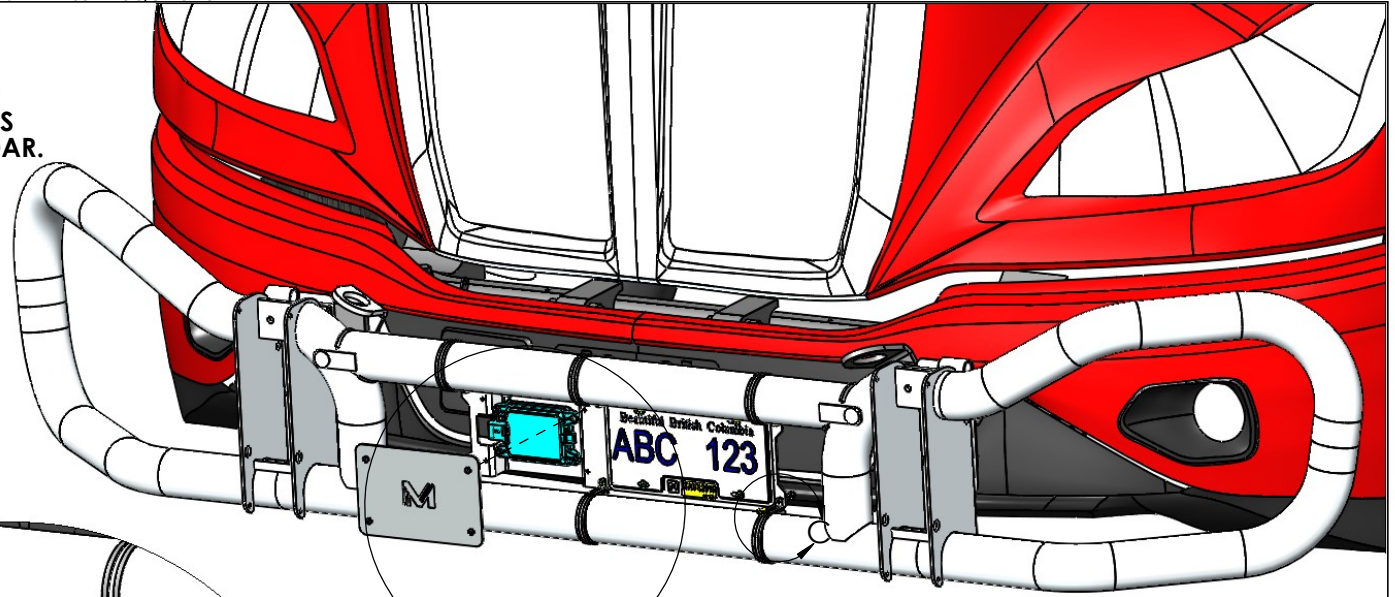
**STEP (2):**  
INSTALL RADAR INTO RADAR BRACKET SUPPLIED REUSING ORIGINAL ADJUSTABLE STAND-OFF AND FASTENERS

**STEP (3):**  
RECONNECT RADAR TO THE TRUCK

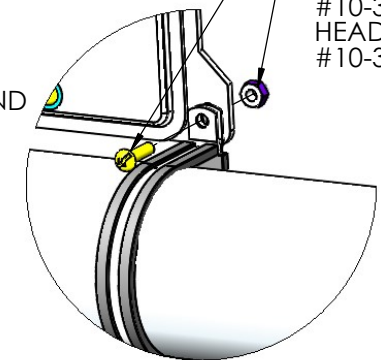
**STEP (4)**  
INSTALL COVER PLATE USING THE SUPPLIED HARDWARE:  
#10-32 BLACK OXIDE MACHINE SCREW X 1 1/4" (4),  
SPACERS (4) AND  
#10-32 NYLOC NUT (4)

**STEP (5):**  
INSTALL LICENSE PLATE USING HARDWARE SUPPLIED  
#10-32 PLATED MACHINE HEAD SCREW X 3/4" (4),  
GR. 2 #10 WASHER (4) AND  
#10-32 NYLOC NUT (4)

**STEP (1):**  
INSTALL RADAR BRACKET USING LOOP CLAMPS AND SUPPLIED HARDWARE TYP (6)  
#10-32 PLATED MACHINE HEAD SCREW X 3/4" AND  
#10-32 NYLOC NUT (6)



**DETAIL B  
SCALE 1 : 6**



**DETAIL C  
SCALE 1 : 3**

**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			
RADAR INSTALL		BK-013 ON 2021 KENWORTH T-680			
CURRENT CUSTOMER	STOCK NUMBER	VENDOR NUMBER		WEIGHT - LB.	
				219.	
WO#	DRAWN BY	DRAWN DATE	CHECKED BY	CHECKED DATE	REV.
	MD	2/14/2022	LS	2/17/2022	
SCALE	MODELLER	DRAWING NUMBER			NUMBER OF SHEETS
1:12	MD	AA-60230			2