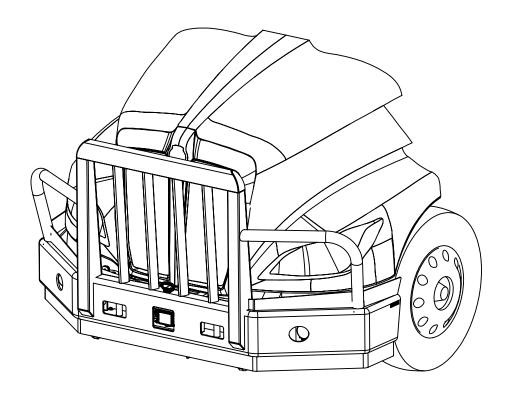


INSTALLATION GUIDE

MODEL NUMBER: 17291

TRUCK MODEL: 2021+ KENWORTH T-680



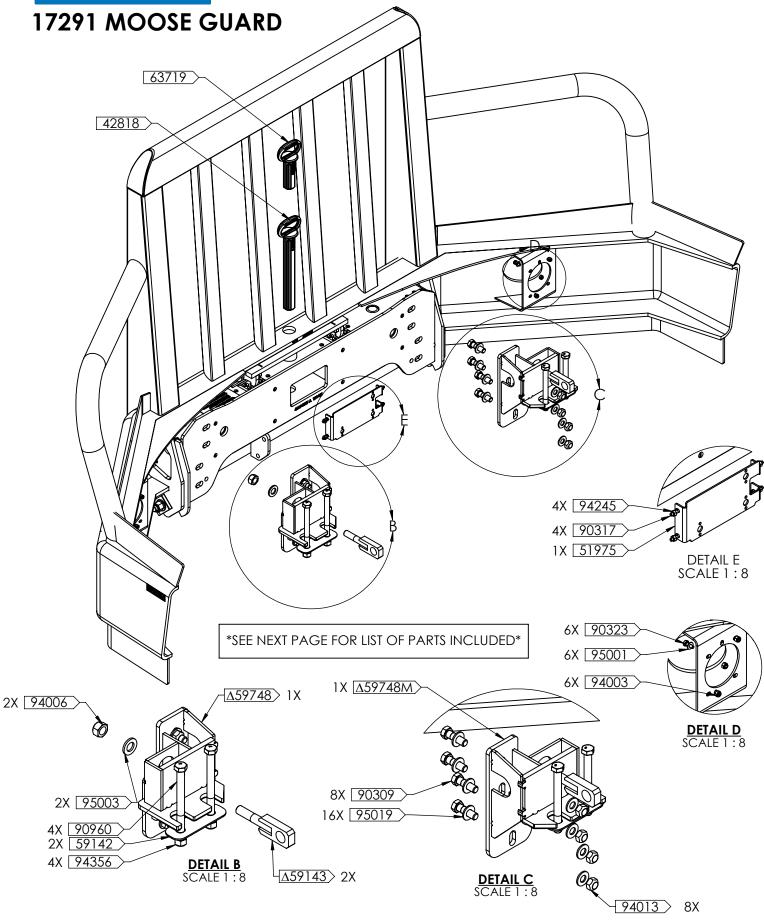
IMPORTANT INFORMATION

- THIS GUIDE IS ONLY APPLICABLE TO PRODUCTS AND TRUCK MODELS SPECIFIED.
- THE CORRECT SIZE AND GRADE OF HARDWARE SPECIFIED IN THIS GUIDE MUST BE USED.
- CHECK ALL MOUNTING POINTS AFTER THE FIRST 5000KM'S IN SERVICE AND PERIODICALLY THERE AFTER. RE-TORQUE IF NECESSARY.
- RECOMMENDED ADDING THREADLOCKER (LOCTITE BLUE 242) TO ALL THREADS BEFORE INSTALLING.
- ALL MAGNUM PRODUCTS MUST BE INSTALLED ACCORDING TO THIS INSTALLATION GUIDE. ANY DEVIATIONS MAY RESULT IN VOID OF WARRANTY.
- ANY ALTERATIONS TO THE PRODUCT MAY RESULT IN VOID OF WARRANTY.

SAFETY INFORMATION

- PROPER PERSONAL PROTECTIVE EQUIPMENT MUST BE WORN WHEN INSTALLING THIS PRODUCT.
- SOME PARTS OF THIS PRODUCT MAY BE HEAVY OR AWKWARD TO HANDLE. USE CAUTION WHEN HANDLING.







ASSEMBLY KIT PARTS

ITEM#	DESCRIPTION	MAT'L	DIMENSIONS	WT. EA	STOCK #	QTY.
42818	CAST TOWPIN	130-90-09 CAST IRON	Ø1 1/2 X 13 5/8	5.4	125613	1
51975	BENDIX RADAR (FLR-20) MOUNTING BRACKET (VER 3)	5052-H32	1/8" X 10 29/32" X 4 1/4"	.47	127701	1
59142	SPACER PLATE	44W	6" X 2" X 1/8" THK	.38	130244	2
59143	TOW MOUNT ASSEMBLY		ASSEMBLY	1.4	130245	2
59748	MOUNT BRACET ASSEMBLY		ASSEMBLY	16.7	130464	1
59748M	MOUNT BRACET ASSEMBLY - MIRROR		ASSEMBLY	16.2	130465	1
63719	SHORT CAST LATCH PIN (4-1/2 IN)	65-45-12 CAST IRON	Ø1 1/2 X 6 3/4	2.8	131663	1
90309	HEX CAPSCREW - PLATED	GR. 8	5/8" NC X 2"	.25	101976	8
90317	HEX CAPSCREW - PLATED	GR. 5	1/4" NC X 1"	.022	101551	4
90323	HEX HEAD BOLT - PLATED	GR. 5	1/4" NC X 3/4"	.019	101564	6
90960	HEX CAPSCREW - PLATED	10.9	M16 X 2 X 160	.64	130087	4
94003	NYLOC HEX NUT - PLATED	GR. 2	1/4" NC	.0097	101459	6
94006	STOVER NUT - PLATED	GR. C	3/4" NC	.12	101477	2
94013	STOVER NUT - PLATED	GR. C	5/8" NC	.063	101481	8
94245	STOVER NUT - PLATED	GR. C	1/4 NC	.0082	101476	4
94356	ALL METAL LOCK NUT - PLATED (STOVER)	CL 10	M16 X 2	.078	130088	4
95001	FLAT WASHER - PLATED	GR. 2	1/4" DIA SAE	.0043	102157	6
95003	FLAT WASHER - PLATED	GR. 8	3/4" DIA SAE	.055	102169	2
95019	FLAT WASHER - PLATED	GR. 8	5/8" DIA SAE	.035	102172	16



1. UNINSTALL THE OEM BUMPER FROM THE TRUCK.

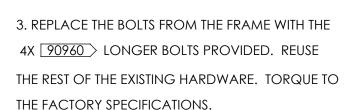
UNINSTALL THE FOG LIGHTS FROM THE BUMPER.

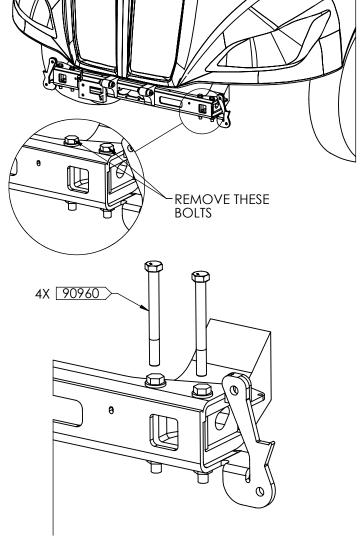
PASSENGER SIDE
FOG LIGHT

OEM BUMPER

DRIVER SIDE
FOG LIGHT

2. REMOVE THE FOUR M16 BOLTS FROM BOTH SIDES OF THE FRAME.







4. IF RADAR IS EQUIPPED ON THE TRUCK IT MUST BE REMOVED FIRST BEFORE INSTALLING THE MOOSE GUARD. KEEP THE ORIGINAL MOUNTING HARDWARE SEEN IN THE FIGURE TO THE RIGHT:

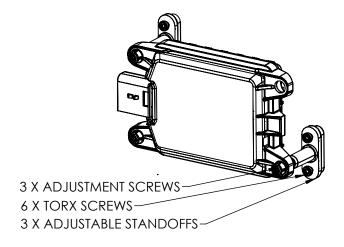
- 3 X ADJUSTABLE STANDOFFS
- 3 X ADJUSTMENT SCREWS
- 6 X TORX SCREWS

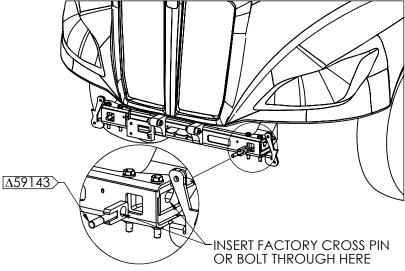
5. INSTALL $\triangle 59143$ IN BOTH TOW RECIEVERS. SECURE IT IN PLACE WITH THE FACTORY CROSS PIN OR A 1" GR.8 BOLT WITH WASHERS AND A LOCK NUT (NOT SUPPLIED).

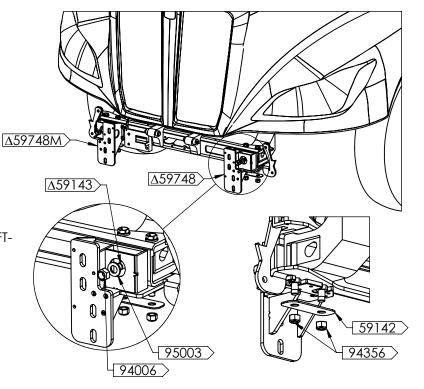
6. INSTALL $\triangle 59748$ ON THE DRIVER SIDE AND $\triangle 59748M$ ON THE PASSENGER SIDE. SLIDE THE MOUNT BRACKETS OVER $\triangle 59143$ SO THE STUD PASS THROUGH THE HOLE IN THE BRACKET.

7. ADD A $\boxed{95003}$ WASHER AND A $\boxed{94006}$ NUT TO $\boxed{\Delta59143}$. TORQUE TO 200 FT-LBS (LUBRICATED) / 260 FT-LBS (DRY).

8. ADD THE 59142 WASHER PLATE TO THE BOTTOM BOLTS. SECURE IT DOWN WITH TWO 94356 NUTS. TORQUE TO TORQUE TO 160 FT-LBS (LUBRICATED) / 210 FT-LBS (DRY).









9. ATTACH THE GUARD TO THE MOUNT BRACKETS USING THE FOLLOWING

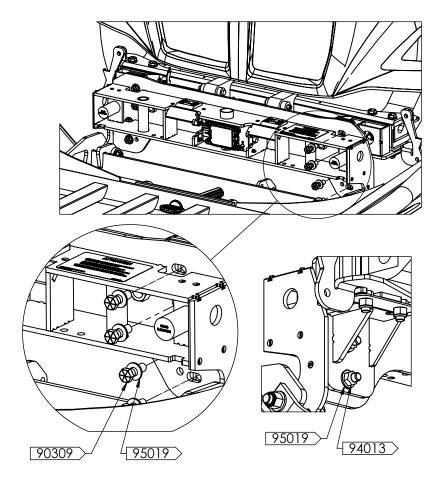
HARDWARE:

8 X 90309 BOLTS

16 X 95019 WASHERS

8 X 94013 NUTS

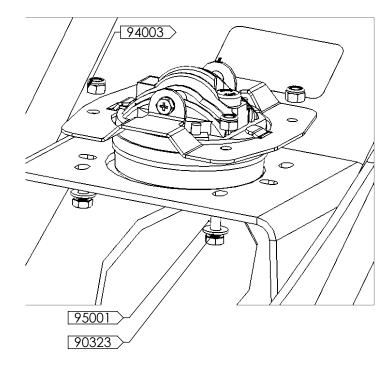
TORQUE TO 160 FT-LBS (LUBRICATED) / 210 FT-LBS (DRY).



10. INSTALL THE FOG LIGHTS INTO THE GUARD. SECURE THE FOG LIGHTS USING THE FOLLOWING HARDWARE:

- 6 X 90323 BOLTS
- 6 X 95001 > WASHERS
- 6 X 94003 NUTS

TORQUE TO 6 FT-LBS (LUBRICATED) / 8 FT-LBS (DRY).





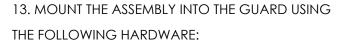
NOTE:

RADAR MUST BE ALIGNED AND RE-CALIBRATED AFTER GUARD INSTALLATION. ALIGNMENT AND CALIBRATION CAN ONLY BE DONE BY AUTHORIZED PERSONNEL.

11. INSTALL RADAR ONTO 51975 REUSING THE ORIGINAL HARDWARE:

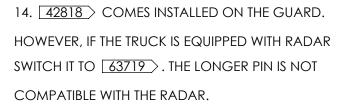
- 3 X ADJUSTABLE SCREWS
- 3 X ADJUSTABLE STANDOFFS
- **6 X TORX SCREWS**





- 4 X 90317 BOLTS
- 4 X 94245 NUTS

TORQUE TO 6 FT-LBS (LUBRICATED) / 8 FT-LBS (DRY).



CLOSE THE GUARD TO COMPLETE THE INSTALL.

THANK YOU FOR CHOOSING MAGNUM.

