



AUTOMOTIVE PRODUCTS, INC.

INSTRUCTIONS

APPLICATION: 2007-UP TOYOTA TUNDRA
APP PART # 46-22235, 45-92230, 40-92235, 57-92230/35, 57-93700/05
MAX WINCH TRAY/WINCH MOUNTED GRILLE GUARD

ITEM	QUANTITY	DESCRIPTION	TOOLS NEEDED
1	1	WINCH TRAY	18MM WRENCH
2,3	2	LOWER MOUNTING BRACKETS (2) DRIVERS SIDE, (3) PASSENGER SIDE	18MM SOCKET
4,5	2	UPPER MOUNTING BRACKETS (4) DRIVERS SIDE, (5) PASSENGER SIDE	16MM WRENCH
6	2	UPPER SUPPORT STRAP	16MM SOCKET
7	6	M12 BUTTON HEAD BOLTS	14MM MEDIUM DEPTH SOCKET
8	12	M12 FLAT WASHERS	RATCHET
9	6	M12 LOCK WASHERS	TORQUE WRENCH
10	6	M12 HEX NUTS	14MM WRENCH
11	4	M10 HEX HEAD BOLTS	ALLEN KEY (INCLUDED)
12	4	M10 FLAT WASHERS	SMALL PRY BAR
13	4	M10 SERRATED FLANGE NUTS	17MM SOCKET
14	4	M12 BUTTON HEAD BOLTS (INCLUDED WITH GRILLE GUARD)	
15	8	M12 FLAT WASHERS (INCLUDED WITH GRILLE GUARD)	
16	4	M12 LOCK WASHERS (INCLUDED WITH GRILLE GUARD)	
17	4	M12 HEX NUTS (INCLUDED WITH GRILLE GUARD)	
18	4	M10 BUTTON HEAD BOLTS (INCLUDED WITH GRILLE GUARD)	
19	8	M10 FLAT WASHERS (INCLUDED WITH GRILLE GUARD)	
20	4	M10 LOCK WASHERS (INCLUDED WITH GRILLE GUARD)	
21	4	M10 HEX NUTS (INCLUDED WITH GRILLE GUARD)	
22	4	SPACERS (INCLUDED WITH GRILLE GUARD), (2 INCLUDED FOR HDX GG KITS)	

1. Remove contents from box, verify if all parts listed are present and free from damage. Carefully read and understand all instructions before attempting installation. **Anti-seize lubricant must be used on all stainless steel fasteners to prevent thread galling.**
2. Starting at the front of the vehicle remove the cargo tie down loops/tow hooks (if equipped) and set factory hardware aside (the cargo tie down/tow hooks cannot be re-installed with this application).
3. Locate the four studs on the drivers side bumper frame, remove the top two factory nuts. Locate the single stud on the outside of the bumper frame and remove the factory nut; use the 14mm medium depth socket (Snap On part# FMS14 or equivalent) for this step. Take the drivers side upper mounting bracket and attach it to the bumper frame studs using the factory hardware. Do not fully tighten at this time. Repeat this step for the passenger side. FIG 1 & 2
4. For 2014+ vehicles remove the plastic bumper insert by simultaneously prying and pushing on the retaining tabs with a suitable tool from the front of the vehicle. It is recommended to use masking tape to prevent scratching the bumper. FIG 3
5. Take the drivers side lower mounting bracket and attach it where the tow hook was previously installed and attach it using the factory hardware. Do not fully tighten at this time. Repeat for the passenger side. FIG 4
6. With assistance take the winch tray and align it with the lower mounting brackets. Attach the winch tray to the lower mounting brackets using (4) M12 button head bolts, (8) M12 flat washers, (4) M12 lock washers, and (6) M12 hex nuts. FIG 5. Do not fully tighten at this time.
7. Locate the drivers side upper support strap and place it through the opening in the plastic valance and attach it to the upper mounting bracket using (2) M10 hex head bolts, (2) M10 flat washers, and (2) M10 serrated flange nuts. Do not fully tighten at this time. Repeat this step for the passenger side FIG 5. Using a closed end 14mm wrench to hold the nuts will aid in installation. NOTE: 2010-up vehicles may require minor trimming to the valance opening.
8. Attach the winch tray to the upper support straps using (2) M12 button head bolts, (8) M12 flat washers, (4) M12 lock washers, and (4) M12 hex nuts . Do not fully tighten at this time. FIG 7



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9. For 2014+ vehicles, hold the plastic bumper insert up to the opening, mark where the support straps protrude, trim as necessary, then reinstall it into the opening.
10. If only installing the winch tray without a grille guard, align and adjust the winch tray as needed then fully tighten all hardware at this time. Torque all M12 hardware to 50 ft lbs, M10 hardware to 30-35 ft lbs. Install the winch per the winch manufacturer's instructions. NOTE: in many cases the winch must be installed prior to installing a grille guard.
11. If installing the Sportsman winch tray grille guard, with assistance align the grille guard with the mounting holes located in the lower winch tray brackets and the winch tray. Use the included spacers between the lower mounting brackets and the grille guard. FIG 7. Attach the grille guard to the lower brackets using the (4) M12 button head bolts, (8) M12 flat washers, (4) M12 lock washers, and (4) M12 hex nuts; attach the grille guard to the winch tray using the (2) M10 button head bolts, (4) M10 flat washers, (2) M10 lock washers, and (2) M10 hex nuts. NOTE: for part # 45-92230 and 40-92235 the hardware is stainless steel. Do not fully tighten at this time.
12. If installing the HDX winch tray grille guard, with assistance align the grille guard with the mounting holes located in the lower winch tray brackets and the winch tray. Use the included spacers between the lower mounting brackets and the grille guard. FIG 8. Attach the grille guard to the lower brackets using (2) M12 button head bolts, (4) M12 flat washers, (2) M12 lock washers, and (2) M12 hex nuts, attach the grille guard to the winch tray using (4) M10 button head bolts, (8) M10 flat washers, (4) M10 lock washers, and (4) M10 hex nuts. NOTE: for part # 57-92230/92235 the hardware is stainless steel. Do not fully tighten at this time.
13. Align and adjust grille guard and winch tray as needed then fully tighten all hardware at this time. Torque all M12 hardware to 50 ft lbs, M10 hardware to 30-35 ft lbs. Torque all M12 stainless hardware to 30 ft lbs, and M10 stainless hardware to 20 ft lbs. NOTE: there will be extra hardware if installing 45-92230, 40-92235, 57-92230, or 57-92235.

DRIVER SIDE SHOWN

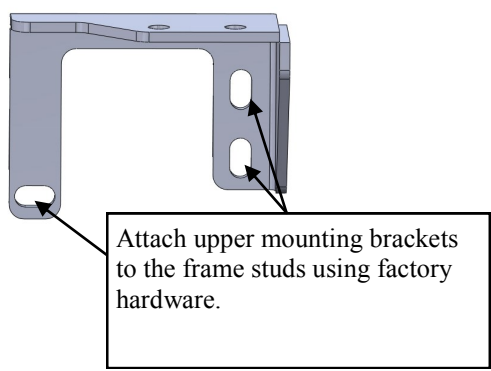


FIG 1

BACK OF BUMPER FRAME

Use these frame studs to mount the upper mounting brackets.

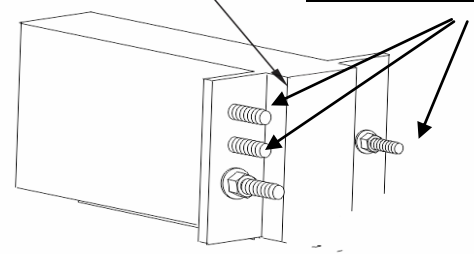


FIG 2



For 2014+ vehicles push and pry on the hidden snaps to remove the plastic bumper insert.

FIG 3

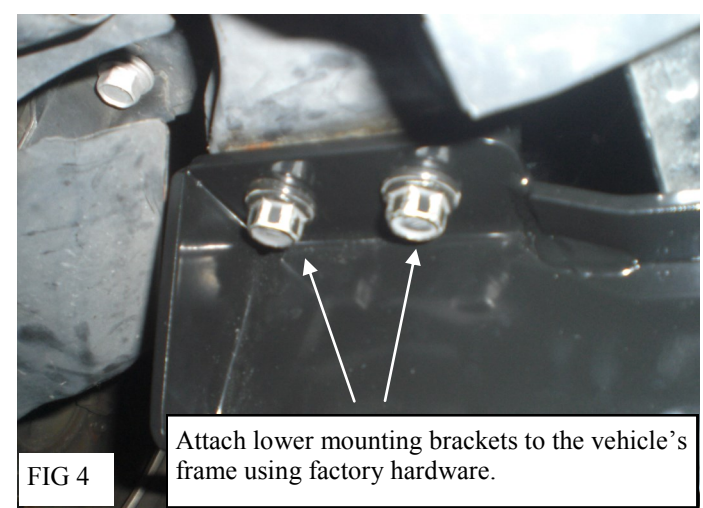


FIG 4



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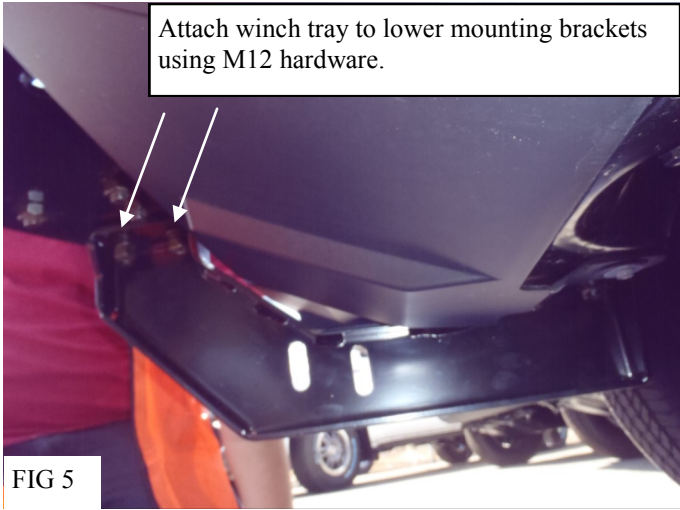


FIG 5

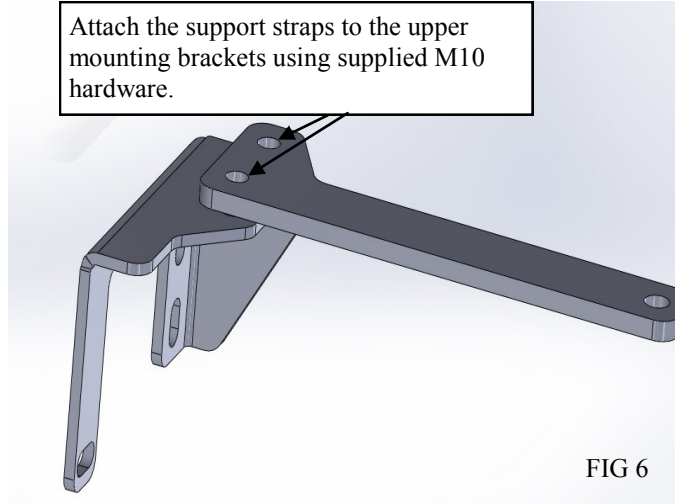


FIG 6

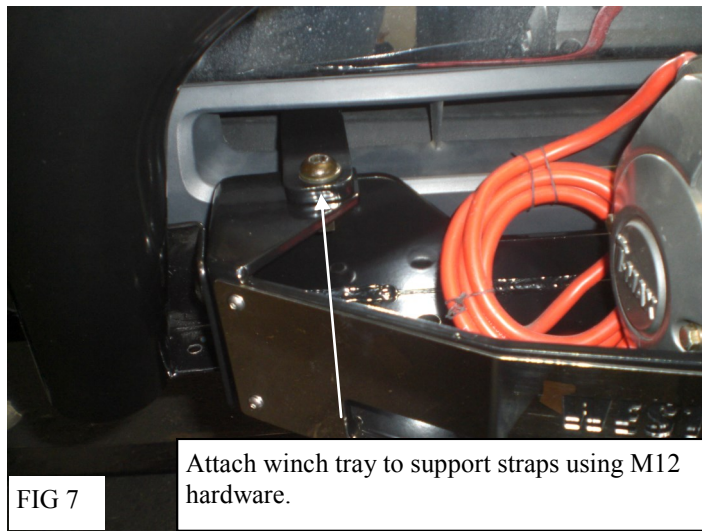


FIG 7

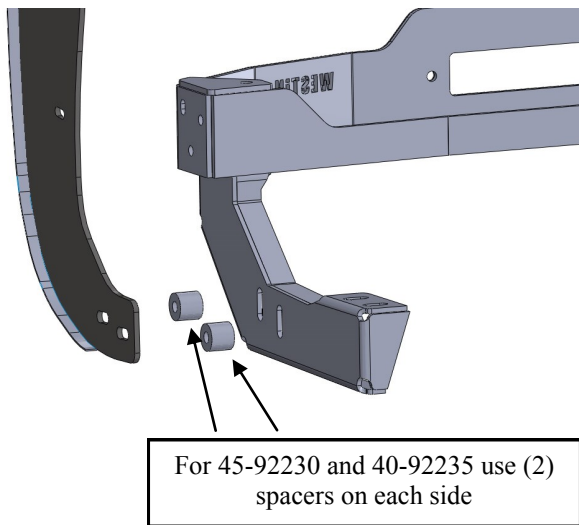


FIG 8

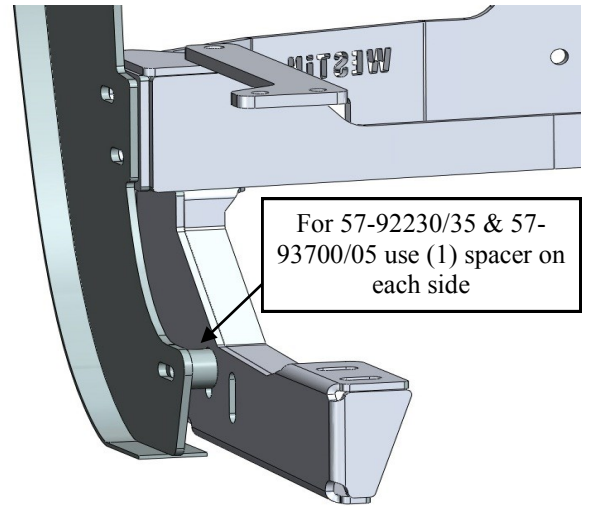
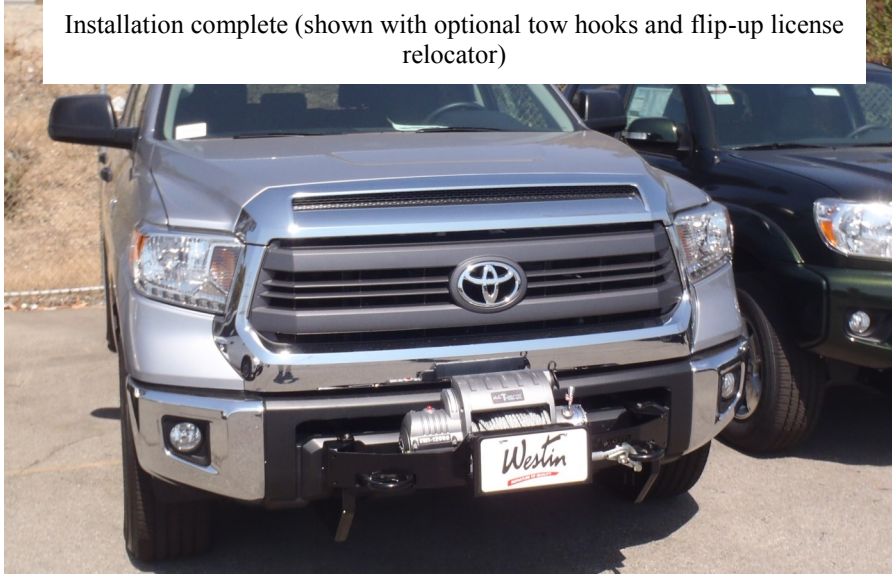


FIG 9

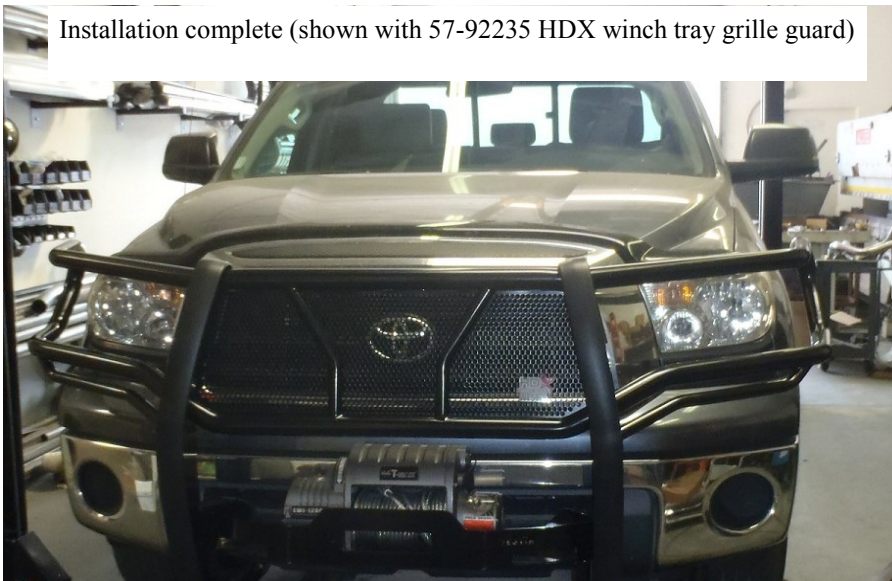


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Installation complete (shown with optional tow hooks and flip-up license relocator)



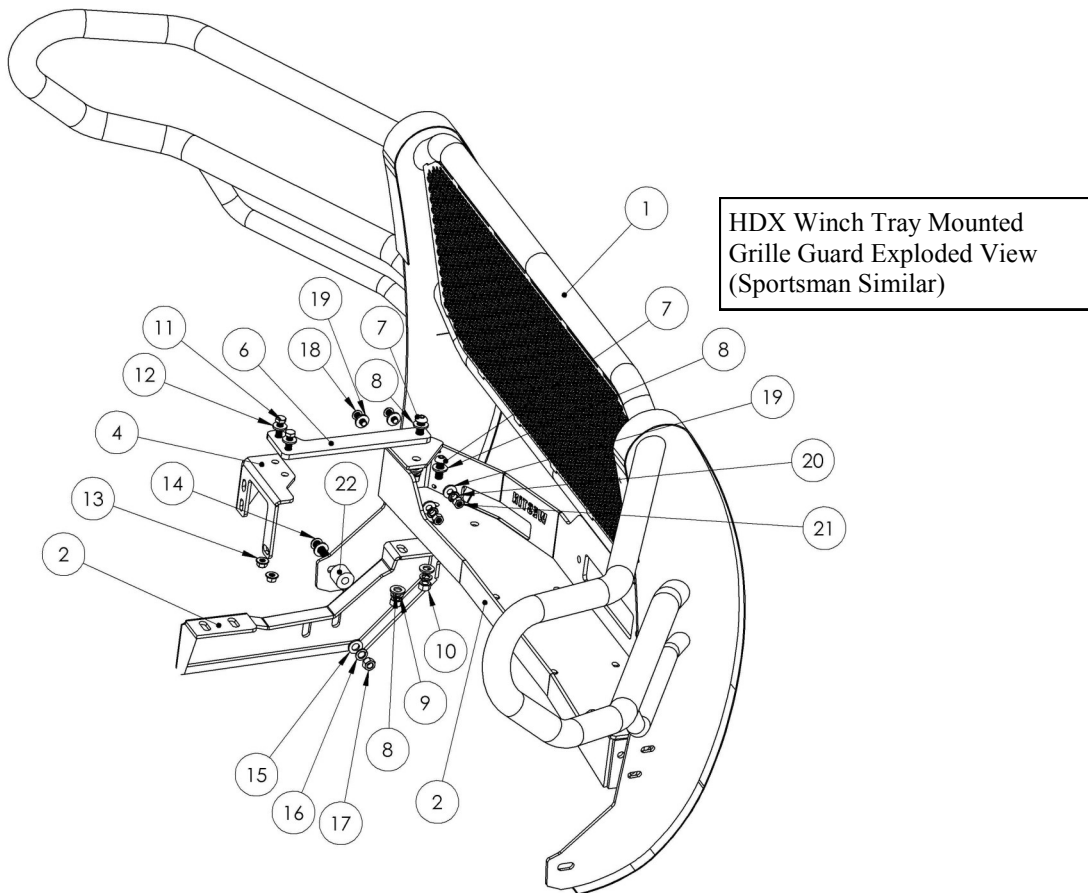
Installation complete (shown with 57-92235 HDX winch tray grille guard)



Installation complete (shown with 40-92235 winch tray grille guard)



Installation complete (shown with 57-93705 HDX winch tray grille guard)



CARE INSTRUCTIONS

- REGULAR WAXING IS RECOMMENDED. DO NOT USE ANY TYPE OF POLISH OR WAX THAT MAY CONTAIN ABRASIVES.
- STAINLESS STEEL PRODUCTS CAN BE CLEANED WITH MILD SOAP AND WATER. STAINLESS STEEL POLISH SHOULD BE USED TO POLISH SMALL SCRATCHES.
- GLOSS BLACK FINISHES SHOULD BE CLEANED WITH MILD SOAP AND WATER.



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