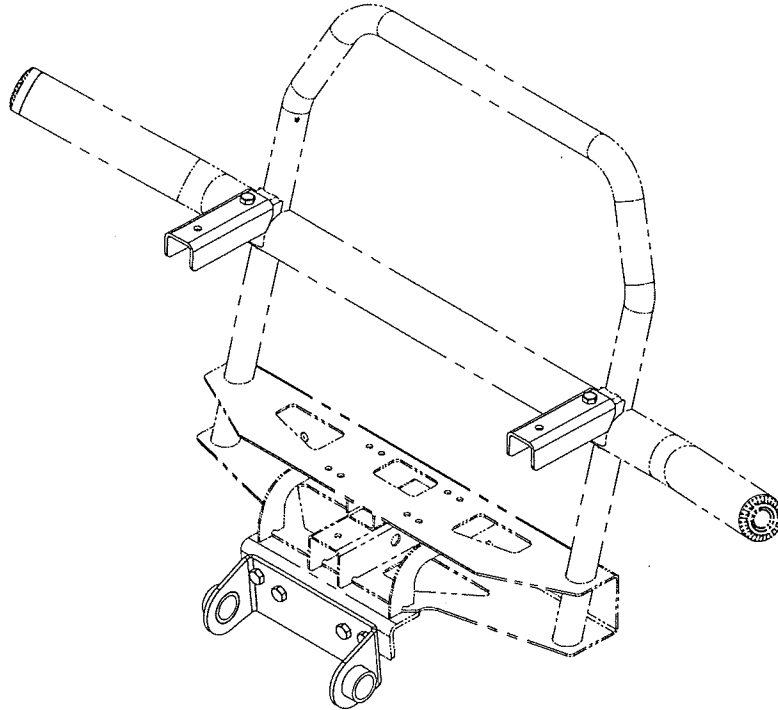


Kubota®



INSTRUCTION SHEET

V5278 - GRILL GUARD ADAPTOR KIT

REQUIRES: *V5293 4 Point Hitch & Power unit*

Estimated installation time: 20 min.

V5278-A
Rev1 12-15

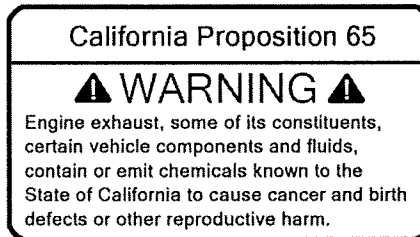
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SAFETY PRECAUTIONS



SAFETY FIRST

This symbol, the industry's "Safety Alert Symbol", is used throughout this manual and on labels on the machine itself to warn of the possibility of personal injury. Read these instructions carefully. It is essential that you read the instructions and safety regulations before you attempt to assemble or use this unit.



DANGER : Indicates an immediate hazardous situation which, if not avoided, will result in death or serious injury.



WARNING : Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION : Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

IMPORTANT : Indicates that equipment or property damage could result if instructions are not followed.

NOTE : Gives helpful information.

All products are designed to give safe, dependable service if they are operated and maintained according to instructions. **Read and understand this manual before operation.** It is the owner's responsibility to be certain anyone operating this product reads this manual, and all other applicable manuals, to become familiar with this equipment and all safety precautions. Failure to do so could result in serious personal injury or equipment damage. If you have any questions, consult your dealer.

BEFORE OPERATION

CHILDREN

Tragic accidents can occur if the operator is not alert to the presence of children. Children are generally attracted to machines and the work being done. Never assume children will remain where you last saw them.

1. Keep children out of the operating area and under the watchful eye of another responsible adult.
2. Be alert and turn machine off if children enter the work area.
3. Before and when backing, look behind for small children.
4. Never carry children while operating the machine. They may fall off and be seriously injured or interfere with the safe operation of the machine.
5. Never allow children to play on the machine or attachment even when they are turned off.
6. Never allow children to operate the machine even under adult supervision.
7. Use extra care when approaching blind corners, shrubs, trees, or other obstructions that might hide children from sight.

SAFETY PRECAUTIONS

THE VEHICLE

General Information

1. Read the operator's manual carefully before using vehicle. Lack of operating knowledge can lead to accidents.
2. Do not allow passengers on the vehicle at any time (except one on the passenger seat). The operator must sit in the driver seat.

Operating the Vehicle

1. Never run the vehicle engine in a closed building without adequate ventilation, as the exhaust fumes are very dangerous.
2. Never allow an open flame near the fuel tank or battery.
3. Park the vehicle/implement on level ground, place the transmission in neutral, set the parking brake, disengage the driving system, lower the equipment to the ground, place all levers including auxiliary control levers in neutral, shut off the engine and remove the ignition key BEFORE leaving the vehicle.
4. Never park the vehicle on a steep slope.
5. Do not attempt to operate on steep slopes.
6. Use of tire chains for better traction and stability is recommended.
7. Always drive the vehicle at speeds compatible with safety, especially when operating over rough ground, crossing ditches, or when turning.
8. Handle fuel with care, as it is highly flammable.
9. Use approved fuel container.
10. Never add fuel to a running engine or a hot engine.

11. Fill fuel tank outdoors with extreme care. Never fill fuel tank indoors. Replace fuel cap securely and wipe up spilled fuel.
12. Never allow anyone to operate the equipment until they have read the manual completely and are thoroughly familiar with basic vehicle and implement operation.
13. Make sure the vehicle is counterweighted as recommended by your dealer. Weights provide the necessary balance to improve stability, traction and steering. Use only those recommended by your dealer.
14. Always make sure all components are properly installed and securely fastened BEFORE operation.

During Operation

1. Do not allow anyone to ride on the vehicle/equipment at any time. There is no safe place for passengers on this equipment (except one on the passenger seat). The operator MUST sit in the seat.
2. Eye and hearing protection is recommended when operating the equipment.
3. Operate only during daylight hours, or when the area is well lit with bright artificial light.
4. Park the vehicle/implement on level ground, place the transmission in neutral, set the parking brake, disengage the driving system, lower the equipment to the ground, place all levers including auxiliary control levers in neutral, shut off the engine and remove the ignition key BEFORE leaving the vehicle.
5. Inspect the equipment after striking any foreign object to assure that all equipment parts are safe and secure and not damaged.

SAFETY PRECAUTIONS

MAINTENANCE

ALWAYS USE GENUINE PARTS WHEN REPLACEMENT PARTS ARE REQUIRED

1. Keep the vehicle and implement properly maintained.
2. Provide adequate blocking before working under the front implement when in raised position.
3. Park the vehicle/implement on level ground, set the parking brake, lower the implement to the ground, place all control levers in neutral, shut off the engine and remove the ignition key and allow the rotating parts to stop **BEFORE** making any implement adjustments.
4. To avoid injury, do not adjust, unblock the driving system, or service the implement with the vehicle engine running. Make sure rotating components have completely stopped before leaving the operator's seat.
5. Keep the vehicle/implement clean. Snow, dirt or ice build-up can lead to malfunction or personal injury from thawing and refreezing in garage.
6. Always wear eye protection when cleaning or servicing the implement or frame.
7. **DO NOT** service the vehicle while the engine is running or hot, or if the unit is in motion. Always lower implement to the ground. If necessary to service implement in raised position, securely support with stands or suitable blocking before working underneath. Do not rely on support devices already on the vehicle for your safety. They can settle suddenly or be accidentally lowered.
8. Do not attempt to service machine with the engine running. Always shut off engine and allow all motion to cease.
9. The manufacturer will not claim responsibility for fitment of unapproved parts and/or accessories and any damages as a result of their use.
10. Make sure all shields and guards are securely in place following all service, cleaning, or repair work.
11. Do not modify or alter this implement or any of its components or operating functions. If you have questions concerning modifications, consult with your dealer.
12. Do not operate a unit that is defective or has missing parts. Make sure that all recommended maintenance procedures are completed before operating the unit.
13. Check all controls regularly and adjust where necessary. Make sure that the brakes are evenly adjusted.
14. Periodically check all nuts and bolts for tightness, especially wheel hub and rim nuts.
15. Escaping hydraulic/diesel fluid under pressure can penetrate the skin causing serious injury. Do not use your hands to check for leaks. Use a piece of cardboard or paper to search for leaks. If you are injured by escaping high pressure fluid, see a medical doctor at once.
16. Stop engine and relieve pressure before connecting or disconnecting hydraulic lines. Tighten all connections before starting engine or pressurizing lines.

STORAGE

Before storing the subframe or implement, certain precautions should be taken to protect it from deterioration.

1. Clean the subframe and implement thoroughly.
2. Make all the necessary repairs.
3. Replace all safety signs that are damaged, lost, or otherwise become illegible. If a part to be replaced has a sign on it, obtain a new safety sign from your dealer and install it in the same place as on the removed part.
4. Repaint all parts from which paint has worn or peeled.
5. Lubricate the subframe and implement as instructed under "Lubrication" section.
6. When the subframe and implement are dry, oil all moving parts. Apply oil liberally to all surfaces to protect against rust.
7. Store in a dry place.
8. If equipment has hydraulic components, install protective plugs and caps on the quick couplers.

ASSEMBLY



WARNING: To avoid serious personal injury or death: Read and understand the SAFETY PRECAUTIONS on previous pages before installation and operation. Perform all assembly with unit properly blocked and supported. Torque all the bolts and the fittings according to the Torque Specification Table enclosed at the end of the Instruction Sheet.

FIRST INSTALLATION

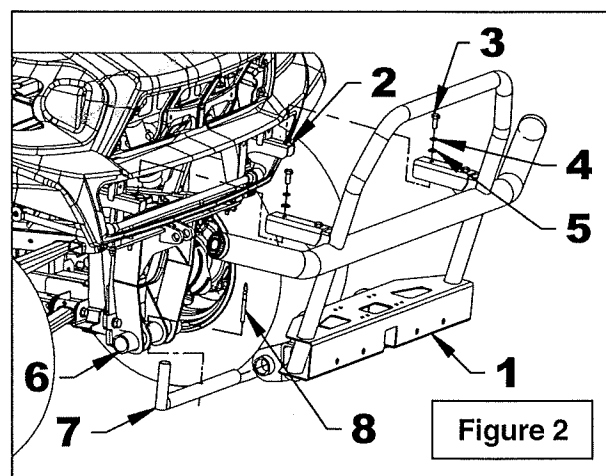
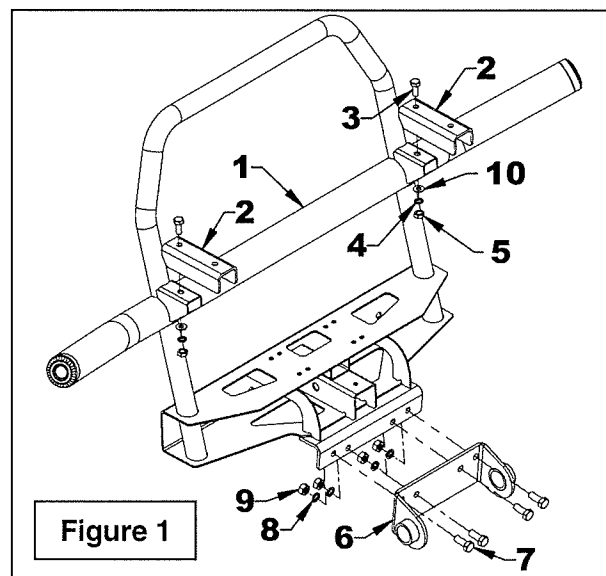
1. Remove the 4-point Hitch from the vehicle. Refer to the V5293 Operator Manual for procedure. Keep the 12" lg "L" pivot pin (fig.2, item 7) and the 5/16" x 1.8" lg shoulder quick-release pin (fig.2, item 8). They will be needed for the grill guard installation.
2. **Figure 1:** Install the upper protector supports (items 2) on the grill guard with two M10 X 25mm bolts (item 3), 10mm flat washers (item 10), 10mm lockwashers (item 4) and M10 nuts (item 5). **Do not tighten.**
3. **Figure 1:** Install the lower protector support (item 6) with four M12 X 25mm bolts (item 7), 12mm lockwashers (item 8) and M12 nuts (item 9). **Do not tighten.**
4. **Figure 2:** Install upper part of the grill guard (item 1) on the RTV's brackets (item 2) with two M10 X 25mm bolts (item 3), 10mm lockwashers (item 4) and 10mm flat washers (item 5). **Do not tighten.**
5. **Figure 2:** Install the lower part of the grill guard (item 1) on the subframe (item 6) with the 12" lg "L" pivot pin (item 7) and lock in place with the 5/16" X 1.8" lg shoulder quick-release pin (item 8).
6. Torque all bolts according to the **Torque Specification Table** at the end of the Instruction Sheet.

REMOVING THE GRILL GUARD

1. **Figure 2:** Remove the two M10 X 25mm bolts (item 3), 10mm lockwashers (item 4) and 10mm flat washers (item 5).
2. **Figure 2:** Remove the 5/16" X 1.8" shoulder quick-release pin (item 8) and the 12" lg "L" pivot pin (item 7).
3. **Figure 2:** Remove the grill guard (item 1) and then reassemble the bolts (item 3) and the pins (items 7-6) on the RTV.

REINSTALLATION

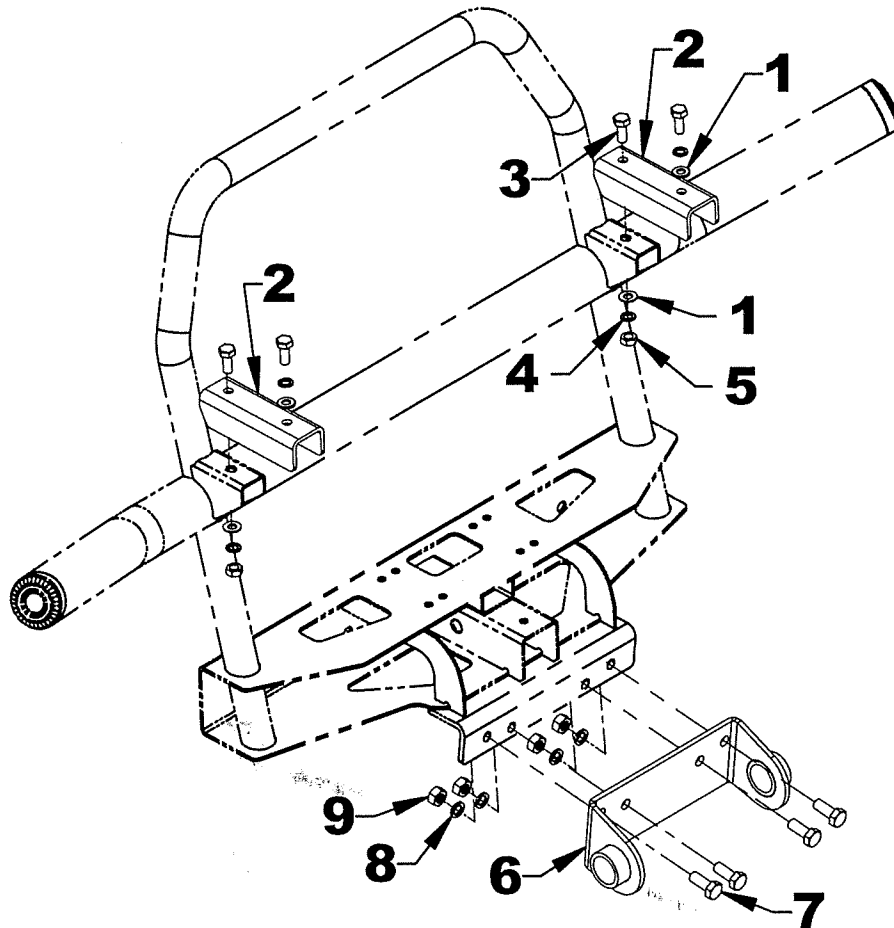
1. If installed, remove the 4-point Hitch.
2. **Figure 2:** Install the lower part of the grill guard (item 1) on the subframe (item 6) with the 12" lg "L" pivot pin (item 7) and lock in place with the 5/16" X 1.8" shoulder quick-release pin (item 8).
3. **Figure 2:** Install upper part of the grill guard (item 1) on the RTV's brackets (item 2) with the M10 X 25mm lg. bolts (item 3), the 10mm lockwashers (item 4) and the 10mm flat washers (item 5).



PARTS

PARTS

REF.	DESCRIPTION	QTY	PART #	CODE
1	Flat washer 10mm (10.5mm hole) PTD	4	70060-01942	1400019
2	Upper protector support	2	77700-04912	670574
3	Hex. bolt 10M x 1.25 x 25mm lg gr. 8.8 PTD	4	70060-02832	0200013
4	Lockwasher M10 PTD	4	70060-00792	1200018
5	Nut hex. M10 x 1.25mm PTD	2	77700-01169	0900075
6	Lower protector support	1	77700-07157	671431
7	Hex. bolt M12 x 1.25 x 25mm PTD	4	01133-61225	0200023
8	Lockwasher M12 PTD	4	70060-00793	1200019
9	Nut hex. M12 x 1.25 mm PTD	4	77700-02231	0900025









TORQUE SPECIFICATION TABLE

GENERAL SPECIFICATION TABLE

USE THE FOLLOWING TORQUES WHEN SPECIAL TORQUES ARE NOT GIVEN

Note: These values apply fasteners as received from supplier dry, or when lubricated with normal engine oil. They do not apply if special graphited or moly sidulphide greases or other extreme pressure lubricants are used. These values apply to dry conditions; under lubricated conditions reduce by 25% the torques in this table.

BOLT HEAD IDENTIFICATION

INCHES Bolt Size	 Grade 2		 Grade 5		 Grade 8		METRIC Bolt Size	 Class 5.8		 Class 8.8		 Class 10.9	
	in-tpi ¹	N-m ²	lbs-ft ³	N-m	lbs-ft	N-m		lbs-ft	mm x pitch ⁴	N-m	lbs-ft	N-m	lbs-ft
1/4" – 20NC	7.4	5.6	11	8	16	12	M 5 X 0.8	4	3	6	5	9	7
1/4" – 28NF	8.5	6	13	10	18	14	M 6 X 1	7	5	11	8	15	11
5/16" – 18NC	15	11	24	17	33	25	M 8 X 1.25	17	12	26	19	36	27
5/16" – 24NF	17	13	26	19	37	27	M 8 X 1	18	13	28	21	39	29
3/8" – 16NC	27	20	42	31	59	44	M10 X 1.5	33	24	52	39	72	53
3/8" – 24NF	31	22	47	35	67	49	M10 X 0.75	39	29	61	45	85	62
7/16" – 14NC	43	32	67	49	95	70	M12 X 1.75	58	42	91	67	125	93
7/16" – 20NF	49	36	75	55	105	78	M12 X 1.5	60	44	95	70	130	97
1/2" – 13NC	66	49	105	76	145	105	M12 X 1	90	66	105	77	145	105
1/2" – 20NF	75	55	115	85	165	120	M14 X 2	92	68	145	105	200	150
9/16" – 12NC	95	70	150	110	210	155	M14 X 1.5	99	73	155	115	215	160
9/16" – 18NF	105	79	165	120	235	170	M16 X 2	145	105	225	165	315	230
5/8" – 11NC	130	97	205	150	285	210	M16 X 1.5	155	115	240	180	335	245
5/8" – 18NF	150	110	230	170	325	240	M18 X 2.5	195	145	310	230	405	300
3/4" – 10NC	235	170	360	265	510	375	M18 X 1.5	220	165	350	260	485	355
3/4" – 16NF	260	190	405	295	570	420	M20 X 2.5	280	205	440	325	610	450
7/8" – 9NC	225	165	585	430	820	605	M20 X 1.5	310	230	650	480	900	665
7/8" – 14NF	250	185	640	475	905	670	M24 X 3	480	355	760	560	1050	780
1" – 8NC	340	250	875	645	1230	910	M24 X 2	525	390	830	610	1150	845
1" – 12NF	370	275	955	705	1350	995	M30 X 3.5	960	705	1510	1120	2100	1550
1 1/8" – 7NC	480	355	1080	795	1750	1290	M30 X 2	1060	785	1680	1240	2320	1710
1 1/8" – 12NF	540	395	1210	890	1960	1440	M36 X 3.5	1730	1270	2650	1950	3660	2700
1 1/4" – 7NC	680	500	1520	1120	2460	1820	M36 X 2	1880	1380	2960	2190	4100	3220
1 1/4" – 12NF	750	555	1680	1240	2730	2010							
1 3/8" – 6NC	890	655	1990	1470	3230	2380							
1 3/8" – 12NF	1010	745	2270	1670	3680	2710							
1 1/2" – 6NC	1180	870	2640	1950	4290	3160							
1 1/2" – 12NF	1330	980	2970	2190	4820	3560							

¹ in-tpi = nominal thread diameter in inches-threads per inch
² N-m = newton-meters
³ lbs-ft= pounds-foot
⁴ mm x pitch = nominal thread diameter in millimeters x thread Pitch

*Torque tolerance +0%, -15% of torquing values. Unless otherwise specified use torque values listed above

