

Please use the following safety precautions when servicing a Baroness mower:

**Wear protective clothing and gear.**

- Long pants, safety glasses, hard hat, gloves, and steel toe shoes or boots are recommended before doing any work on the greens mower. This will reduce your risk of injury.

**Notes for installation.**

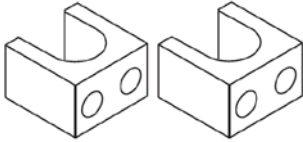
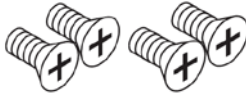


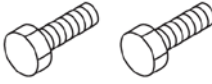

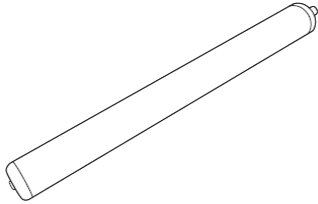


- Always refer to this installation manual or the owner's manual before beginning any work on the greens mower.
- Be sure to wear protective clothing and gear.
- "Left" and "right" directions in this manual are based on the viewpoint of the operator holding the handle of the mower and facing the mowing direction.
- Before doing any work on the mower, place it on a level surface and make sure all the switches are turned to the OFF position and that all the valves are closed.
- Engage parking brake and block tires while servicing the mower.
- Never attempt to install any parts or make any adjustments while the engine is running.
- Let the engine, muffler, and exhaust system cool before proceeding to service any parts which are in close proximity. These areas can be dangerously hot. Contact with these parts can cause bodily harm and or burns.
- Be mindful and take precaution around of the reel and blades as they contain sharp edges. These can inflict bodily harm and or injury.
- Always keep the safety symbols and instructions clean and attached to the mower. If they are lost or damaged, replace them immediately with new ones.
- Do not alter the machine. When replacing parts and grease, use only those specified by Kyoisha USA.
- The operation of a machine that has been modified or installed with parts other than those specified by Kyoisha USA could lead to mechanical malfunction resulting in damage to the mower and or injury to the operator.

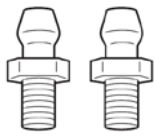
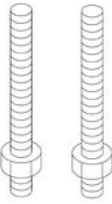
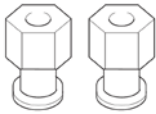
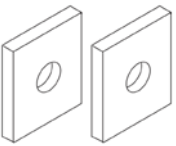
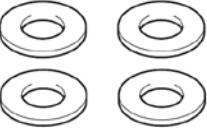
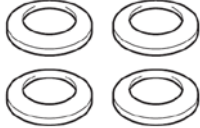
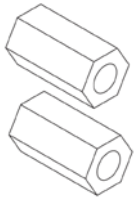
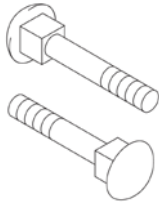

## Installing Optional Equipment for the LM56/66/18G

### LM56/66/18G Smooth Front Roller Kit

Check that all parts are included. The following parts are included in the package.

Should any part be missing or damaged, please contact the dealer you purchased it from.

<b>Smooth roller kit for standard basket : LM56GA-2909Z0 (LM56G) &amp; LM66GA-2909Z0 (LM66G)</b> <b>Smooth roller kit (Weighted) for IGCA : LM56GB--2905Z0 (LM56G) &amp; LM18G--2910Z0 (LM18G)</b>					
1	Height Adjustment Bracket K6090000592 Qty 2	2	6+ Flat Head Screw K0041060152 Qty 4	3	R Straight Roller Bracket 18 LM56G--8307Z2 Qty 1
					
4	L Straight Roller Bracket 18 LM56G--8306Z2 Qty 1	5	6 Bolt 20 K0000060202 Qty 2	6	6 Nut K0100060002 Qty 2
					
7	Smooth Front Roller Ass'y (Standard) / (Weighted for IGCA) Qty 1	8	1C5191P Washer 1547 K5051015470 Qty 2	9	Left-Hand Thread Roller Bolt K0071000152 Qty 1
					

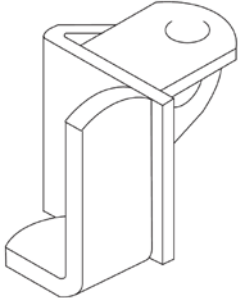
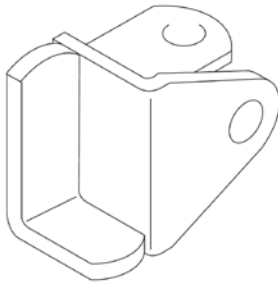

10	Grease Nipple K1440000010 Qty 2	11	Roller Adjuster Screw 2008 LM56GA-2901A0 Qty 2	12	Roller Adjuster 2008 K6084000162 Qty 2
					
13	Spacer 4.5x27x32Qty K5141000602 Qty 2	14	8 Washer K5000080002 Qty 4(IGCA) / 6 (STD)	15	8 Disc Spring Washer 1H K0213080002 Qty 4
					
16	8-13 Tall Nut 20 K0149083202 Qty 2	17	8Sq. Root Round Head Bolt 55 K0025080552 Qty 2	18	16 Extension Pin 19 K6083000042 Qty 1
					

**Parts number of No.7 Smooth Front Roller Kit**

Kit No.	Roller Ass'y No.	Parts Name	Specification
LM66GA-2909Z0	LM66G-8502Z0	LM66G Smooth Front Roller Ass'y	For Standard Basket
LM56GA-2909Z0	LM56G-8502Z0	LM56G Smooth Front Roller Ass'y	For Standard Basket
LM56GB-2905Z0	LM56GA-2910Z0	LM56G Smooth Front Roller Ass'y WEIGHTED	For IGCA
LM18G-2910Z0	LM18G-2911Z0	LM18G Smooth Front Roller Ass'y WEIGHTED	For IGCA

The parts equipped on LM18G/ packed in this roller kit for LM56G with IGCA.

(\* Use these parts only when installing IGCA)

A	Right Stopper Bracket LM18G--6807Z2 Qty 1	B	Left Stopper Bracket LM18G--6806Z2 Qty 1	C	8.5 STKM Collar 175 K6212000022 Qty 2
					

**Tightening torque**

Required tightening torque	Nominal diameter	Appropriate tightening torque [General bolts Strength class: 4.8]		
		N-m	kgf-cm	lb-in
○	M6	7-9	71.38~91.77	61.96~79.66
○	M8	14-19	142.76~193.74	123.91~168.17
○	M10	29-38	295.71~387.49	256.68~336.34

**Caution**

When tightening bolts, refer to the above table. We will not be held responsible for any damage resulting from improper or excessive tightening, etc.

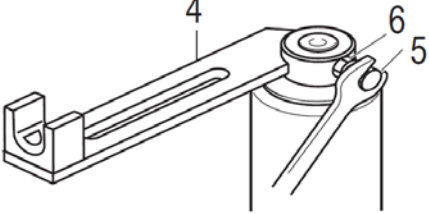
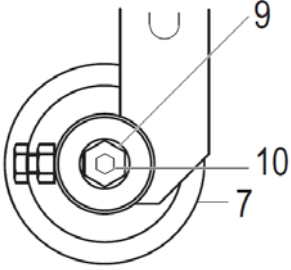
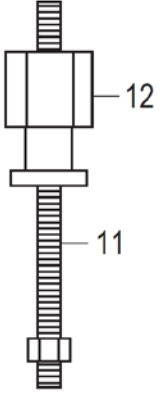
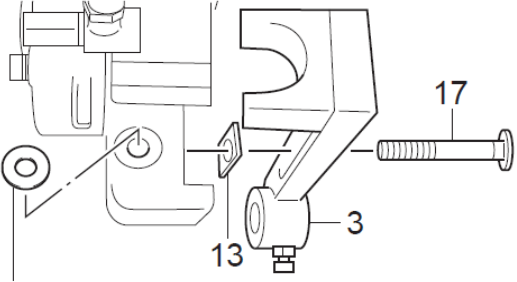
LM56/66/18G

Installing the LM56/66/18 Smooth Front Roller Kit Section

Step	Illustration	Description
1		<p>Spread threadlocking material (medium strength) on bolt, Part (2), then insert it into Part (3) from the taper treated side. Using bolt, Part (2) screw Part (1) on to Part (3). Then screw Part (1) onto Part (4).</p>
2		<p>Screw nut, Part (6) onto threaded leg of bolt, Part (5). When threading the nut, Part (6) onto Part (5), be sure to put round side of Part (6) on first. Repeat this so you have 2 sets of locking bolts. Now slightly screw threaded leg of Part (5) into front threaded hole on each roller bracket, Parts (4) and (3). Screw each locking bolt assembly by hand, so that the leg of Part (5) does not protrude into round cutout of Parts (4) and (3).</p>
3		<p>Hold front roller assembly, Part (7) with exposed shaft end facing upward, slide one washer, Part (8) onto protruding shaft of front roller, Part (7). Then slide left roller bracket, Part (4) onto shaft of Part (7).</p>
4		<p>Make sure that the machined flat portion of shaft that faces to the locking bolt on the shaft of Part (7) is facing forward, as in the direction of the threaded hole on the front side of Part (4).</p>

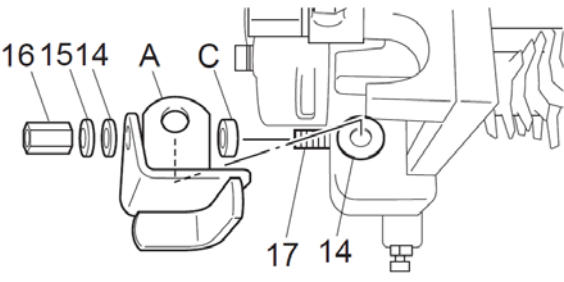
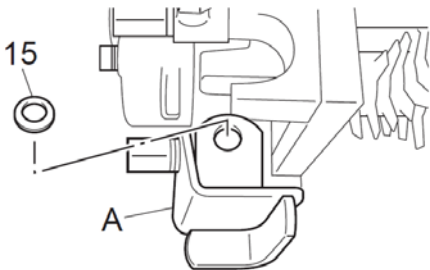
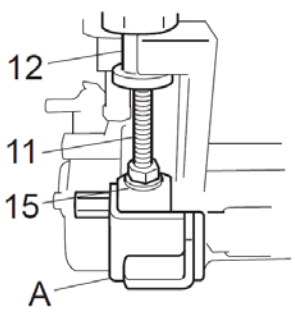
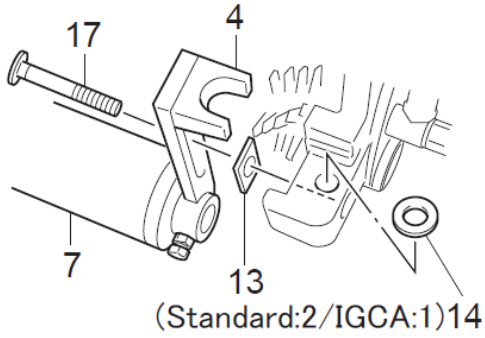
LM56/66/18G

Installing the LM56/66/18 Smooth Front Roller Kit Section

<p>5</p>		<p>Now tighten down the locking bolt, Part (5) to contact the flat portion of the shaft. Secure locking bolt's position by tightening Part (6) to front side of Part (4). Do not over torque. This is currently a temporary step to hold the shaft into the desired position.</p>
<p>6</p>		<p>Screw Part (9) counter clockwise into left side of Part (7). Using 2 wrenches lock down the grease nipple, Part (10) into Part (9).</p>
<p>7</p>		<p>Take roller adjuster screw, Part (11) and tread roller adjuster, Part (12) on the longer threaded side till it is sitting about half way down the tread. The non nut side of Part (12) goes on first. Repeat to have 2 sets.</p>
<p>8</p>	 <p>14(Standard:2/IGCA:1)</p>	<p>Place washer, Part (14) into the cutout slot on the front of the right frame. Place Part (13) between flame and Part(3), then insert Part (17).  *Use 2 pieces of Part (14) for without IGCA, and 1 piece of Part (14) for with IGCA version.</p>

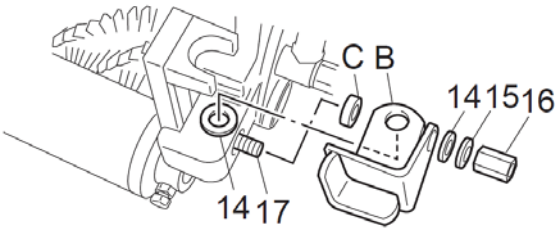
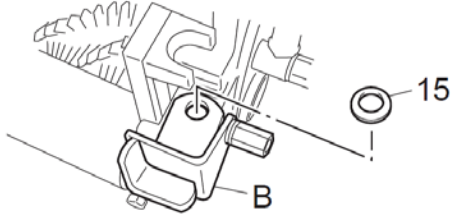
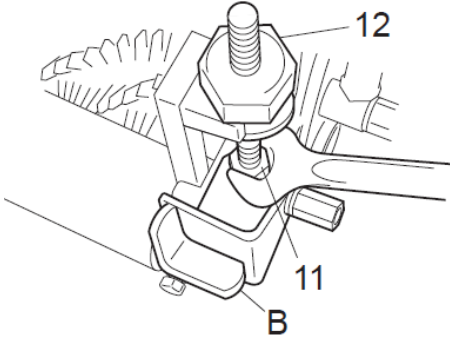
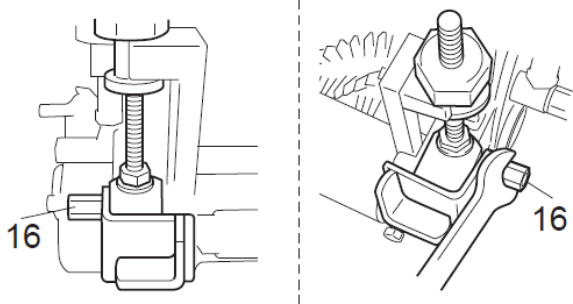
LM56/66/18G

Installing the LM56/66/18 Smooth Front Roller Kit Section

<p>9</p>		<p>Fit Part (C) onto Part (17), then insert Part (17) into right stopper bracket (A), as if it places onto the washer Part (14), then insert Part (14) and (15) onto Part (17), and screw Part (16) through Part (17).</p> <p>* Use Parts (A) &amp; (C), only when installing IGCA.</p>
<p>10</p>		<p>Place disc spring washer, Part (15) convex side up over Part (A).</p> <p>* Use Part (A), only when installing IGCA.</p>
<p>11</p>		<p>Screw short threaded leg of roller adjustment screw, Part (11) through Parts (15), (A), (14), and then into frame. When doing so, align roller adjuster, Part (12) so that it sits in forked tongue of the right roller bracket arm. Make sure that Part (A) is centered then lock and tighten Part (11) being mindful of the roller adjuster, Part (12) position.</p> <p>* Use Part (A) , only when installing IGCA.</p> <p>*Part (14) locates under the Part (A), not shown on this drawing.</p>
<p>12</p>	 <p>(Standard:2/IGCA:1)14</p>	<p>Place washer, Part (14) into the cut out slot on the front of the left frame.</p> <p>Lift up Roller Part (7), then place Part (13) between flame and bracket Part (4), then insert Part (17).</p> <p>*Use 2 pieces of Part (14) for without IGCA, and 1 piece of Part (14) for with IGCA version.</p>

LM56/66/18G

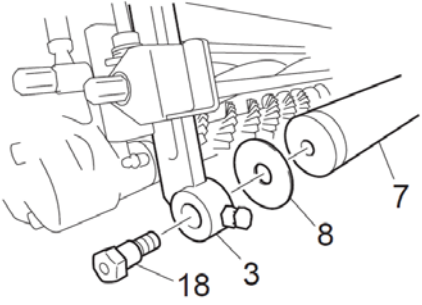
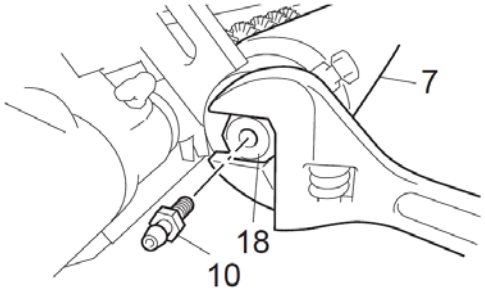
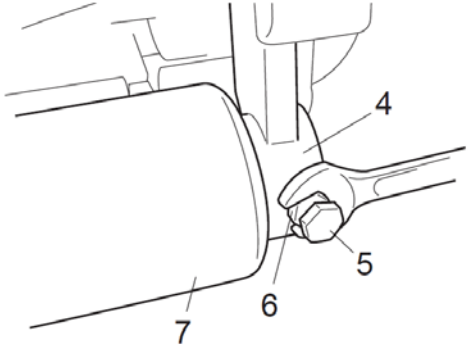
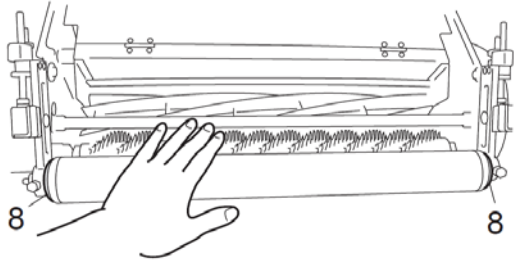
Installing the LM56/66/18 Smooth Front Roller Kit Section

<p>13</p>		<p>Fit Part (C) onto Part (17), then insert Part (17) into left stopper bracket Part (B), as if it places onto the washer Part (14), then insert Part (14) and (15) onto Part (17), and screw Part (16) through Part (17) temporary.</p> <p>* Use Parts (B) &amp; (C), only when installing IGCA.</p>
<p>14</p>		<p>Place disc spring washer, Part (15) convex side up over Part (B).</p> <p>* Use Parts (B), only when installing IGCA.</p>
<p>15</p>		<p>Screw short threaded leg of roller adjuster screw, Part (11) through Parts (15), (B), (14), and then into frame. At the same time, align roller adjuster, Part (12) so that it sits in forked tongue of the left roller bracket arm. Make sure that Part (B) is centered then lock and tighten Part (11) being mindful of the roller adjuster, Part (12) position.</p> <p>* Use Part (B), only when installing IGCA.</p> <p>*Part (14) locates under the Part (B), not shown on this drawing.</p>
<p>16</p>		<p>Tighten the Part (16) of both sides which was temporarily tightened.</p>



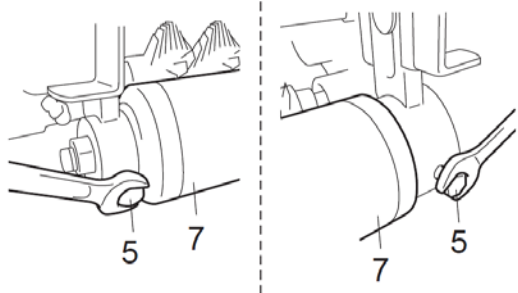
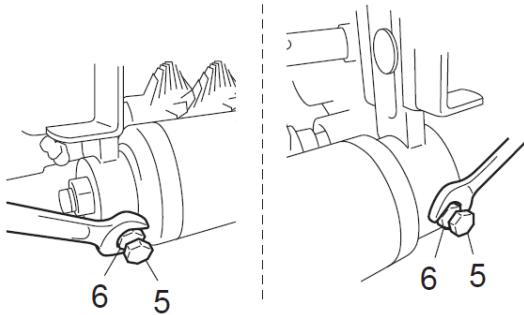
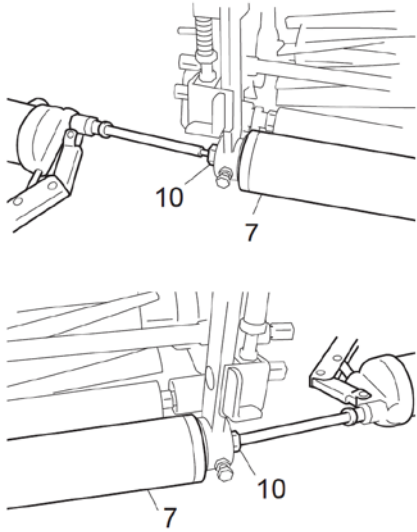
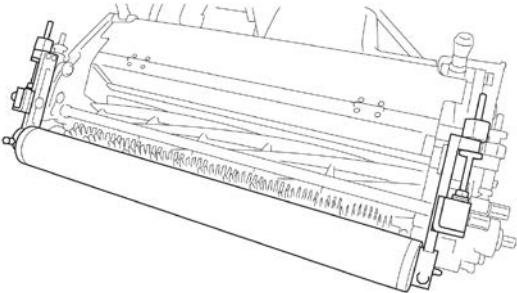
LM56/66/18G

Installing the LM56/66/18 Smooth Front Roller Kit Section

17		<p>Support the roller, Part (7), washer, Part (8) and bracket, Part (3) with your right hand and insert extension bolt, Part (18) through Parts (3), (8), and into right side shaft of Part (7).</p>
18		<p>Tighten and lock Part (18) into right shaft of Part (7). Be careful not to tighten the bolt too hard. Screw Part (10) into Part (18).</p>
19		<p>Loosen Part (6) then unlock locking bolt Part (5) on Part (4). Just slightly loosen Part (5) off of shaft of Part (7). Do not unscrew Part (5) too far off of shaft, otherwise shaft may spin excessively and you will lose positioning of the flat grooved surface.</p>
20		<p>Spin roller to ensure it runs free and make sure washers, Part (8) on both sides are not excessively tight.</p>

LM56/66/18G

Installing the LM56/66/18 Smooth Front Roller Kit Section

21		<p>Screw and lock Part (5) onto shaft of Part (7) on both sides. Be careful when locking down Part (5). Do not over torque, over tightening may cause the bolt to fail or potentially damage the thread.</p>
22		<p>Tighten and lock Part (6) on both sides to secure and lock position on Part (5).</p>
23		<p>Add slight amount of grease to Part (10) on both sides. Pump grease while spinning Part (7) to feel for smooth rotation. Be cautious not to add too much grease. Over packing of grease will force the seals out of their seated position.</p>
24		<p>Adjust the cutting height according to the mowing condition.</p>