

Bunker rake
SP05
[Sand Cultivator]
Assembly and installation manual

Serial No. #10001~

Thank you for purchasing this Baroness product.

This manual describes how to handle this product and make adjustments.

Please be sure to carefully read and fully understand the owner's manual and this manual before use.

This machine was shipped after a thorough inspection. However, the performance of the machine is greatly affected by handling and daily maintenance, such as inspection and adjustments before and after operation. Please handle this machine properly and perform necessary inspection and adjustments before and after operation in order for the product to fulfill its original function and ensure safe operation.

For operation and inspection, refer to the owner's manual. For necessary parts, refer to the parts catalogue.

KYOEISHA Co., Ltd.

Caution

The information described in this manual is subject to change without prior notice for improvement. When replacing parts, be sure to use genuine Baroness parts or parts designated by Kyo-eisha. Note that the Baroness product warranty may not apply to defects caused by the use of parts from other companies.



This symbol is accompanied by the word "Danger," "Warning," or "Caution." All labels with this symbol describe important safety precautions, so please read such labels carefully and only operate the machine after you have understood them completely. Failure to adequately follow these safety precautions may cause an accident.

Danger:

This symbol indicates that serious injury or death will occur if the warning is ignored.

Warning:

This symbol indicates that serious injury or death may occur if the warning is ignored.

Caution:

This symbol indicates that injury or damage to property may occur if the warning is ignored.



When installing, removing, and adjusting optional equipment and attachments, observe the following safety instructions to ensure safe operation.

1. Before installation, removal, adjustments, etc., park the machine on a level surface. Set the parking brake, stop the engine, and remove the key. Ensure that all the parts have come to a complete stop.
2. Keep your hands and feet away from moving parts. Avoid performing work with the engine running. Keep other people away from the machine during work.
3. If necessary, use appropriate chain blocks, hoists, or a jack. If the machine is lifted up, ensure that it is supported by jack stands or appropriate blocks.
4. When replacing parts or installing accessory parts, use genuine BARONESS parts.
5. Never start the engine in a closed room. Doing so could cause carbon monoxide poisoning.

Installing Optional Equipment for the SP05

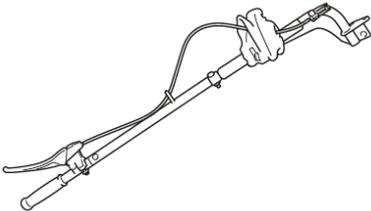
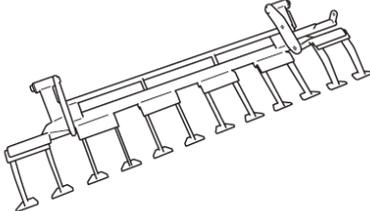
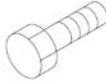
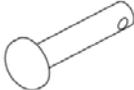
Sand Cultivator

Intended use: The sand cultivator section is used to loosen the bunker surface and soften the sand.

Operating width: 116 cm (46 in.)

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.

SAND CULTIVATOR ASSY SP05---0930B0					
1	LEVER, CULTIVATOR Qty:1	2	SAND CULTIVATOR Qty:1	3	WASHER,M8 K5000080002 Qty:1
					
4	WASHER, SPRING M10 K0200100002 Qty:7	5	BOLT, M10-30 K0000100302 Qty:4	6	WASHER, M10 K5000100002 Qty:7
					
7	BOLT, M10-25 K0000100252 Qty:3	8	PIN, ROUND HEAD M8-25.6 K6041080258 Qty:1	9	PIN, COTTER M2.5-20 K0300025202 Qty:1
					

Tightening torque

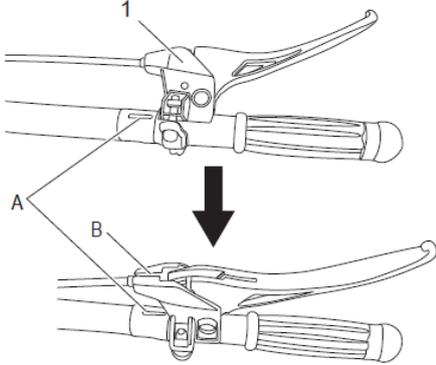
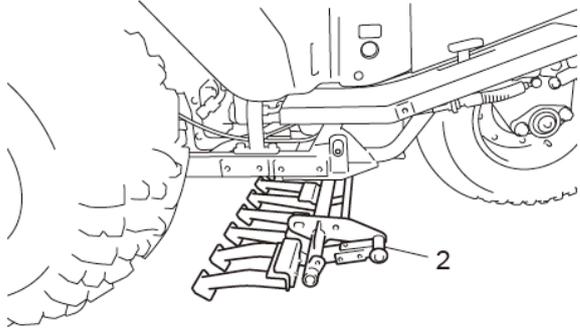
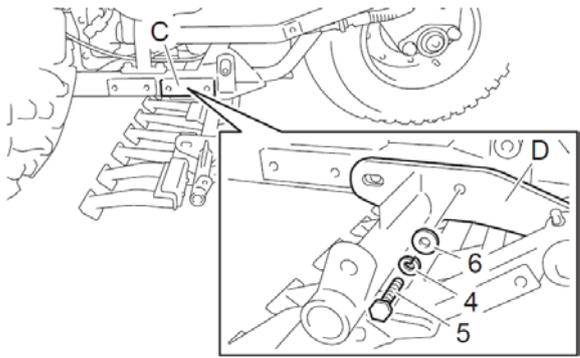
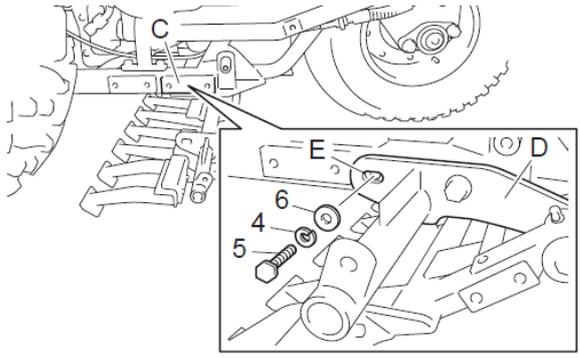
Required tightening torque	Nominal diameter	Appropriate tightening torque [General bolts Strength class: 4.8]		
		N-m	kgf-cm	lb-in
-	M6	7-9	71.38~91.77	61.96~79.66
-	M8	14-19	142.76~193.74	123.91~168.17
○	M10	29-38	295.71~387.49	256.68~336.34

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.

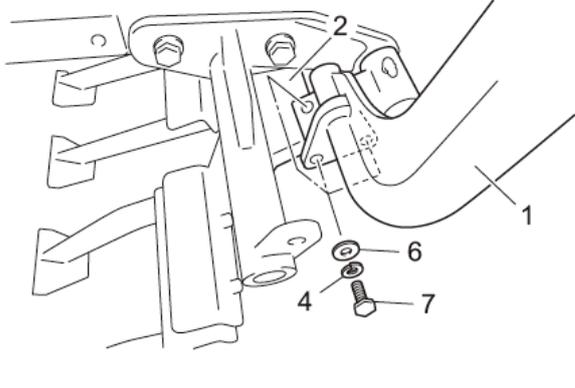
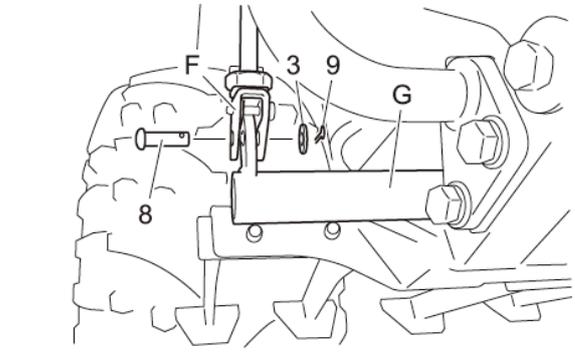
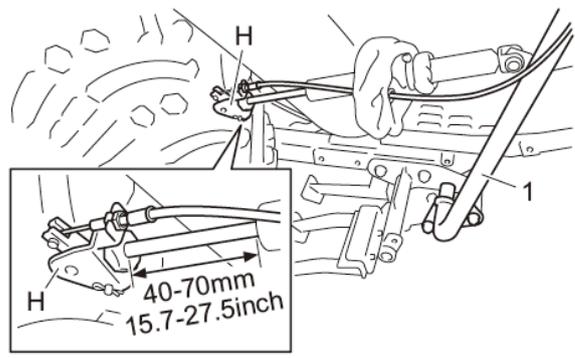
SP05

Installing the Sand Cultivator Section

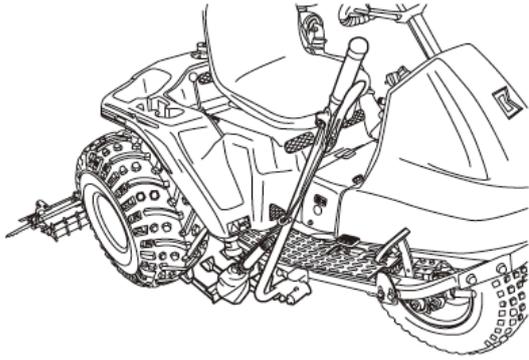
Steps	Illustrations	Descriptions
1		<p>The lever portion of the packaged Cultivator Lever(1) is out of alignment. Align the center(B) of the lever with A line.</p>
2		<p>Set Sand Cultivator(2) under the machine.</p>
3		<p>Secure the right fulcrum(D) to the right frame mounting portion(C) with Washer(6), S Washer(4) and Bolt(5). Secure the left fulcrum to the left frame mounting portion with Washer(6), S Washer(4) and Bolt(5).</p>
4		<p>Secure the slotted hole(E) of the right fulcrum(D) to the right frame mounting portion(C) with Washer(6), S Washer(4) and Bolt(5). Secure the slotted hole of the left fulcrum to the left frame mounting portion with Washer(6), S Washer(4) and Bolt(5).</p>

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Installing the Sand Cultivator Section

Steps	Illustrations	Descriptions
5		<p>Secure Cultivator Lever(1) to Sand Cultivator(2) with Washers(6), S Washers(4) and Bolts(7).</p>
5		<p>Secure the gas spring(F) to the right fulcrum(G) with Pin(8), Washer(3), Cotter Pin(9) and cover the rod.</p>
6		<p>In the case that the rod length of the gas spring does not meet the fitting distance of Cultivator, adjust the rod length of the gas spring according to the following procedure. <<Place the rod end(H) of the gas spring in contact with the block surface of the rear tire of the machine and push Cultivator Lever(1) toward the rear tire with gripping the lever portion of the Cultivator Lever to adjust the rod length of the gas spring to be within the range of 40-70mm (15.7-27.5inch) and then release the lever portion.>></p>

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Ensure that the cultivator moves smoothly and does not interfere with the other parts.

Removing Sand Cultivator Assy (See the illustrations for installing procedures)

1. Remove the Bolt(5), S Washers(4) and Washers(6) on the right and left frame mounting portions of the machine fitted with Sand Cultivator(2).
2. Remove Sand Cultivator Assy from under the machine.

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Quality on Demand

 **KYOEISHA CO., LTD.**
Head Office 1-26, Miyuki-cho, Toyokawa, Tel : (0533) 84-1390
Aichi-Pref. 442-8530 Japan. Fax : (0533) 89-3623