**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Model name</th>
<th>LBH-1790A</th>
<th>LBH-1790A</th>
<th>LBH-1790A</th>
<th>LBH-1790A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewing speed</td>
<td>Max. 4,200sti/min, Normal 3,600sti/min</td>
<td>Max. 4,200sti/min, Normal 3,600sti/min</td>
<td>Max. 4,200sti/min, Normal 3,600sti/min</td>
<td>Max. 4,200sti/min, Normal 3,600sti/min</td>
</tr>
<tr>
<td>Needle bar stroke</td>
<td>6.4-22.0mm (1/4&quot;-7/8&quot;)</td>
<td>6.4-21.6mm (1/4&quot;-7/8&quot;)</td>
<td>6.4-21.6mm (1/4&quot;-7/8&quot;)</td>
<td>6.4-21.6mm (1/4&quot;-7/8&quot;)</td>
</tr>
<tr>
<td>Bar tacking width</td>
<td>Max. 4.5mm</td>
<td>Max. 5.0mm (with special specification part: Max. 10mm*)</td>
<td>Max. 5.0mm</td>
<td>Max. 5.0mm</td>
</tr>
<tr>
<td>Buttonhole length</td>
<td>Max. 25mm (optional: 70mm, 120mm)</td>
<td>Max. 25mm (optional: 70mm, 120mm)</td>
<td>Max. 25mm (optional: 70mm, 120mm)</td>
<td>Max. 25mm (optional: 70mm, 120mm)</td>
</tr>
<tr>
<td>Precision of needle throwing mechanism</td>
<td>0.05mm</td>
<td>0.05mm</td>
<td>0.05mm</td>
<td>0.05mm</td>
</tr>
<tr>
<td>Needle thread tension</td>
<td>Active tension (electronic thread tension control system)</td>
<td>Active tension (electronic thread tension control system)</td>
<td>Active tension (electronic thread tension control system)</td>
<td>Active tension (electronic thread tension control system)</td>
</tr>
<tr>
<td>Number of stitches</td>
<td>Automatically computed from the size of the buttonhole and stitch pitch</td>
<td>Automatically computed from the size of the buttonhole and stitch pitch</td>
<td>Automatically computed from the size of the buttonhole and stitch pitch</td>
<td>Automatically computed from the size of the buttonhole and stitch pitch</td>
</tr>
<tr>
<td>Hook (at the time of delivery)</td>
<td>DP5 (11J, 11H)</td>
<td>DP5 (11J, 11H)</td>
<td>DP5 (11J, 11H)</td>
<td>DP5 (11J, 11H)</td>
</tr>
<tr>
<td>Full of the work clamp</td>
<td>14mm (17mm when the reverse-rotation needle-up function is used)</td>
<td>14mm (17mm when the reverse-rotation needle-up function is used)</td>
<td>14mm (17mm when the reverse-rotation needle-up function is used)</td>
<td>14mm (17mm when the reverse-rotation needle-up function is used)</td>
</tr>
<tr>
<td>Auto-lifter</td>
<td>Provided as standard (stepping motor type)</td>
<td>Provided as standard (stepping motor type)</td>
<td>Provided as standard (stepping motor type)</td>
<td>Provided as standard (stepping motor type)</td>
</tr>
<tr>
<td>Needle throw mechanism</td>
<td>Stepping motor</td>
<td>Stepping motor</td>
<td>Stepping motor</td>
<td>Stepping motor</td>
</tr>
<tr>
<td>Cloth feeding system</td>
<td>Interrupted feed by stepping motor</td>
<td>Interrupted feed by stepping motor</td>
<td>Interrupted feed by stepping motor</td>
<td>Interrupted feed by stepping motor</td>
</tr>
<tr>
<td>Cloth cutting knife system</td>
<td>Stepping motor</td>
<td>Stepping motor</td>
<td>Stepping motor</td>
<td>Stepping motor</td>
</tr>
<tr>
<td>Number of standard patterns</td>
<td>31 patterns</td>
<td>31 patterns</td>
<td>31 patterns</td>
<td>31 patterns</td>
</tr>
<tr>
<td>Number of patterns that can be input</td>
<td>Max. 99 patterns</td>
<td>Max. 99 patterns</td>
<td>Max. 99 patterns</td>
<td>Max. 99 patterns</td>
</tr>
<tr>
<td>Button thread winder</td>
<td>Built-in the machine head</td>
<td>Built-in the machine head</td>
<td>Built-in the machine head</td>
<td>Built-in the machine head</td>
</tr>
<tr>
<td>Machine drive system</td>
<td>Compact AC servomotor (direct-drive system)</td>
<td>Compact AC servomotor (direct-drive system)</td>
<td>Compact AC servomotor (direct-drive system)</td>
<td>Compact AC servomotor (direct-drive system)</td>
</tr>
<tr>
<td>Power requirement / Power consumption</td>
<td>500W (200~240V)</td>
<td>500W (200~240V)</td>
<td>500W (200~240V)</td>
<td>500W (200~240V)</td>
</tr>
<tr>
<td>Lubrication</td>
<td>Only the hook section needs a minute-quantity lubrication.</td>
<td>Only the hook section needs a minute-quantity lubrication.</td>
<td>Only the hook section needs a minute-quantity lubrication.</td>
<td>Only the hook section needs a minute-quantity lubrication.</td>
</tr>
<tr>
<td>Lubricating oil</td>
<td>Hook: JUKI New Defrix Oil No.1 (equivalent to ISO VG7)</td>
<td>Hook: JUKI New Defrix Oil No.1 (equivalent to ISO VG7)</td>
<td>Hook: JUKI New Defrix Oil No.1 (equivalent to ISO VG7)</td>
<td>Hook: JUKI New Defrix Oil No.1 (equivalent to ISO VG7)</td>
</tr>
<tr>
<td>Weight</td>
<td>Machine head (include motor) 55kg, Control box 5.5kg</td>
<td>Machine head (include motor) 55kg, Control box 5.5kg</td>
<td>Machine head (include motor) 55kg, Control box 5.5kg</td>
<td>Machine head (include motor) 55kg, Control box 5.5kg</td>
</tr>
<tr>
<td></td>
<td>Machine head (include motor) 55kg, Control box 5.5kg</td>
<td>Machine head (include motor) 55kg, Control box 5.5kg</td>
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<td>Machine head (include motor) 55kg, Control box 5.5kg</td>
</tr>
</tbody>
</table>

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**WHEN YOU PLACE ORDERS**

Please note when placing orders, that the model name should be written as follows:

**LBH1790A**

**MC602S**

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**JUKI ECO PRODUCTS**

- The LBH-1790A Series is an eco-friendly product which complies with JUKI ECO PRODUCTS standards for protecting the environment.
- The sewing machine reduces power consumption by 27% as compared with the conventional models.
- The sewing machine complies with the “Juki Group Green Procurement Guidelines” on the use of hazardous substances, which is stricter than other restrictions, such as those of the RoHS Directive.

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**SEWING MACHINERY & SYSTEMS BUSINESS UNIT**

2-11-1, TSURUMAKI, TAMA-SHI, TOKYO 206-8551, JAPAN

PHONE: (81) 42-357-2383

FAX: (81) 42-357-2274

http://www.juki.com
The LBH-1790A Series follows the world’s highest sewing speed and dry-head mechanism of its predecessor model. In addition, this machine comes with the latest model operation panel which is installed with a USB port. Furthermore, all drive mechanisms have been digitalized to manage each sewing pattern individually.

**Excellent operability by Digitization**

**Higher productivity**
- The maximum sewing speed is 4,200 sti/min., and the jump speed is 200 mm/sec. The cycle time has been further reduced for continuous sewing.

**Continuous sewing**
- Twenty different programs can be registered, and as many as 30 different patterns can be stored in one program.

**Cycle sewing and continuous sewing.**
- Electronic control of the material feed mechanism, needle feed mechanism, needle thread trimming mechanism, bobbin thread trimming mechanism, cloth trimming mechanism, presser lifter mechanism and other mechanisms has been achieved.
- All adjustment values are digitalized to enable the operator to set and store those values on the operation panel.
- Please order two-pedal model by a part.

**All drive mechanisms are electronically controlled**
- Operation with reduced noise is ensured by the adoption of the direct-drive motor.
- The illuminance of the LED light is adjustable and is located on the underside of the arm jaw. It is provided as standard for all models of the LBH-1790A Series.
- The sewing product can further be placed on the machine easily by installing the auxiliary table (standard accessory).
- In addition, the needle ejection is located in the center of the bed, promising easier positioning of the sewing product.
- The newly installed “hook oil quality adjustment screw” can be separately controlled through the operation panel and stored in memory according to various sewing conditions (e.g., type of thread, type of material and sewing speed).

**Improved maintainability**
- The machine is equipped with a multiple knife-dropping function.
- Thanks to our advanced dry-head technology, no lubrication is required except for the hook section. This eliminates oil stains on the sewing product.
- The machine can be completely changed into a dry-head machine by replacing the hook with an optional non-lubricated hook. (In this case, the maximum sewing speed will be 3,300 sti/min.)

**Excellent seam quality by Digitization**

**JUKI’s unique active tension (Electronic thread tension control system).**
- Needle thread tension for sewing parallel and bartacking sections of buttonholes can be separately controlled through the operation panel and stored in memory according to various sewing conditions (e.g., type of thread, type of material and sewing speed).
- The machine is able to change the needle thread tensions at the parallel and bartacking sections of the buttonhole, to produce a beautiful buttonhole shape. This capability helps greatly in preventing thread breakage.
- Needle thread tension is activated at the beginning and end of sewing. This prevents unthreading of the needle thread, and thread fraying that is likely to occur at the beginning of sewing.
- Thread tension for bartacking stitching can be specified separately.

**Basting stitch mechanism is effective for the production of beautiful buttonholes.**
- The basting stitch is effective on elastic materials such as knits. Basting stitch: Since the needle thread is tucked in without fail, it will never jut out of the buttonhole seams. Basting stitch can be sewn by nine rounds.
- Thanks to the multiple knife-dropping function, it is no longer required that the knife be changed at the time the buttonhole size is changed. The number of knife-dropping times can be automatically set according to the buttonholing size in cases where the buttonhole size is frequently changed for small-lot productions or during the cycle sewing of buttonholes that are different in size.
- The double-acting stepping motor type knife mechanism is free from the faulty dropping/returning of the knife.
- The knife supports sewing lengths of 41 mm at the maximum. In addition, knife mechanisms for 70 mm and 120 mm are optionally available.

**Sewing settings can be easily changed.**
- For a changeover between purl stitch and whip stitch, threading of bobbin, as well as the bobbin thread tension need to be changed.
- For double stitching, the bartacking section is skipped and only the parallel sections are sewn. This prevents any accidentally light thread in the bartacking section of the buttonhole.
- A front- and second-round stitches can be sewn using different stitch widths.

**Adjustment of the hook oil quantity**
- The newly installed “hook oil quality adjustment screw” can be found by opening the hook lid cover. With this screw, the operator is able to adjust the oil quantity in the hook with ease.
- Oil can be easily added to the hook oil quantity tank with an oiler.
- Only a minute-quantity of clean oil is fed to the hook section from the oil tank.
- The oil tank is made of shatter proof material, thereby preventing tank-related troubles such as breakage by some mishap.
The LBH-1796A (220mm presser type) is a subclass model of the LBH-1790A Series. This product is provided with a 220mm work clamp foot. It follows the world’s highest sewing speed, deeply recessed shape of the machine head and dry-head mechanism of the existing LBH-1790A. In addition, the LBH-1796A can also be used as a simplified indexer to sew three buttonholes in a row.

- The maximum sewing speed of the LBH-1796A is 4,200 sti/min (equivalent to the maximum sewing speed of the LBH-1790A).
- The jump speed has been increased. (LBH-1790A: Max 200 mm/s  LBH-1796A: Max 540 mm/s)
- Cycle time during continuous sewing has been improved to increase productivity.

Increased productivity is ensured!

When the optionally-available indexer mechanism is installed on the LBH-1796B, the operator can attend to two units of this model of sewing machine at one time or can use the LB-1903B button sewing machine together with the LBH-1796A, thereby not only further increasing productivity, but also ensuring consistent product quality due to the production capability without requiring the operator to have any special skills.

- Work waiting time is reduced even further when one operator operates two or more sewing machines, thereby increasing productivity.

The newly-developed shorter-thread remaining mechanism trims the thread short and eliminates the trouble of manual thread nipping.

- The length of remaining bobbin thread becomes shorter, less than 2.5mm on average.
- The newly-developed shorter-thread remaining mechanism trims the thread short and eliminates the trouble of manual thread nipping.

![Shorter-thread remaining functions](image)

The world’s first 220mm sewing may not be made according to sewing conditions.
The machine is provided as standard with as many as 31 stitch patterns for buttonholing. It is able to store 99 different patterns in its memory, which can be selected as desired from the operation panel.

### STANDARD LIQUID CRYSTAL PANEL (NEW)

- **USB Port** is provided as standard on the standard panel. The memory storage capability of the main body of the sewing machine has been dramatically enhanced. Now the USB-ready main body of the sewing machine uses many different kinds of media. The main body of the sewing machine is provided as standard with a USB port. Now, data can be input/output to/from various kinds of media (SD (Secure Digital Card), CF (Compact Flash), etc.) by means of a USB thumb device and a card reader.
- All kinds of data can be entered on or selected from the operation panel.
- The panel display supports 14 different languages.

### OPTION

- **Foot pedal for standing work**
- **PK-57**
  - [Part No. GPK570010B0]
  - To connect the cable from the sewing machine to the electrical box, conversion cable (separately available) is necessary.
- **Foot pedal for two-pedal switch**
  - [Part No. 40003491]
- **Pedal switch conversion cable asm.**
  - [Part No. GPK-510010B0]

### Cloth cutting knife, Work clamp, Work clamp foot

<table>
<thead>
<tr>
<th>Knife size</th>
<th>For stitch width 5mm</th>
<th>For stitch width 6mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part No.</td>
<td>LBN-1790A (standard)</td>
<td>LBN-1795A (standard)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Option</th>
<th>Work clamp*&lt;br&gt;For both 5mm and 6mm&lt;br&gt;(For sewing length 5~120mm)</th>
<th>Work clamp foot*&lt;br&gt;Exclusive to 70mm</th>
<th>Other option parts for knit</th>
</tr>
</thead>
</table>

### Throat plate

<table>
<thead>
<tr>
<th>For needle threading width</th>
<th>Other option parts for knit</th>
</tr>
</thead>
<tbody>
<tr>
<td>5mm</td>
<td>Part No. (Marking: A×B)</td>
</tr>
<tr>
<td>40002753 (1×4.4mm)</td>
<td>SB-605430 (1.2×7.4mm)</td>
</tr>
<tr>
<td>40002754 (1.2×7.4mm)</td>
<td>SB-605431 (1.4×7.4mm)</td>
</tr>
<tr>
<td>40002862</td>
<td>SB-8660612-TP (4 pcs.)</td>
</tr>
<tr>
<td>40003453 (1×4.4mm)</td>
<td>SB-8660612-TP (for knits)</td>
</tr>
</tbody>
</table>

### Other option parts for knit

<table>
<thead>
<tr>
<th>Part No. (Marking: A×B)</th>
<th>Description</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>13782105</td>
<td>Hook asm.</td>
<td></td>
</tr>
<tr>
<td>13782107</td>
<td>Hook timing gauge</td>
<td></td>
</tr>
</tbody>
</table>

- When changing LBN-1790A into knitting, please order parts of cloth cutting knife (standard: 25.4mm). work clamp, work clamp foot, throat plate, hook asm. and hook timing gauge.

### Designation

- **Non-lubricated hook**
  - Part No. 400-0846
  - RP hook (asm.)
  - By the installation of non-lubricated hook, the machine is changed to be a fully dry-head machine. (In this case, the maximum sewing speed will be 3,300sti/min)
  - SS-8660612-TP (4 pcs.)
  - Screws
- **Work clamp**<br>(For sewing length 5~120mm | 120mm)
  - Part No. 400-0848
  - Work clamp 50 (20mm asm.)
  - Exclusive to 70mm
  - Only 50mm
  - 13782107
  - Hook timing gauge
- **Electric bobbin winder**<br>(for sewin g length 30mm to 120mm)
  - 400-0495
  - Winder (asm.)
  - 400-0545
  - Motor (asm.)
  - It is a device for winding bobbin separately.