## SPECIFICATIONS

<table>
<thead>
<tr>
<th>Model name</th>
<th>LBH-1790ANB</th>
<th>LBH-1790AN</th>
<th>LBH-1795AN</th>
<th>LBH-1796AN</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>34.6mm</td>
<td>34.6mm</td>
<td>34.6mm</td>
<td>34.6mm</td>
</tr>
<tr>
<td>Size of cloth cutting knife</td>
<td>6.4-22.2mm (1/4”-7/8”)</td>
<td>6.4-31.8mm (1/4”-1-1/4”)</td>
<td>6.4-22.2mm (1/4”-7/8”)</td>
<td>6.4-31.8mm (1/4”-1-1/4”)</td>
</tr>
<tr>
<td>Bar-tacking width</td>
<td>Max. 4.0mm</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</td>
<td>Max. 41mm (optional: 70mm, 120mm)</td>
<td>Max. 120mm</td>
<td>Max. 220mm</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>Needle thread tension (all the time of delivery)</td>
<td>DP type, full-rotary hook</td>
<td>DP type, full-rotary hook</td>
<td>DP type, full-rotary hook</td>
<td>DP type, full-rotary hook</td>
</tr>
<tr>
<td>Lift 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 threading system</td>
<td>Sewing motor</td>
<td>Sewing motor</td>
<td>Sewing motor</td>
<td>Sewing motor</td>
</tr>
<tr>
<td>Cloth heading system</td>
<td>Intermittent feed by stepping motor</td>
<td>Intermittent feed by stepping motor</td>
<td>Intermittent feed by stepping motor</td>
<td>Intermittent feed by stepping motor</td>
</tr>
<tr>
<td>Cloth cutting knife system</td>
<td>Sewing motor</td>
<td>Sewing motor</td>
<td>Sewing motor</td>
<td>Sewing 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. 39 patterns</td>
<td>Max. 39 patterns</td>
<td>Max. 39 patterns</td>
<td>Max. 39 patterns</td>
</tr>
<tr>
<td>Bobbin 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 head 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>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>
</tbody>
</table>

### WHEN YOU PLACE ORDERS

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

<table>
<thead>
<tr>
<th>Model name</th>
<th>Code</th>
<th>Type</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>LBH-1790AN</td>
<td>05</td>
<td>Standard</td>
<td>MC602N</td>
</tr>
<tr>
<td>LBH-1795AN</td>
<td>06</td>
<td>120mm type</td>
<td></td>
</tr>
<tr>
<td>LBH-1796AN</td>
<td>06</td>
<td>220mm type</td>
<td></td>
</tr>
</tbody>
</table>

- For orders, please contact your nearest JUKI distributor.
- Specifications and appearance are subject to change without prior notice for improvement.
- Read the instruction manual before putting the machine into service to ensure safety.
- This catalogue prints with environment-friendly soy ink on recycle paper.

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#### JUKI ECO PRODUCTS

LBH-1790AN Series is an eco-friendly product which complies with JUKI ECO PRODUCTS standards for protecting the environment.

- 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.
- The RoHS Directive is an EU Directive limiting the use of 6 hazardous substances (lead, hexavalent chromium, mercury, cadmium, PBB and PBDE) in electrical and electronic equipment.
- The Juki Green Procurement Guideline is the voluntarily established criteria to eliminate not only the aforementioned six substances, but also other ones which also adversely affect the environment.

#### JUKI CORPORATION

Sewing Machinery & Systems Business Unit

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PHONE : (81) 42-357-2383
FAX : (81) 42-357-2274
http://www.juki.com

Specifications and appearance are subject to change without prior notice for improvement.

Read the instruction manual before putting the machine into service to ensure safety.

This catalogue prints with environment-friendly soy ink on recycle paper.
**Excellent operability by Digitization**

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

**Cycle sewing and continuous sewing.**
- **Cycle sewing**
  - Twenty different programs can be registered, and as many as 30 different patterns can be stored in one program.
- **Continuous sewing**
  - The machine is able to continuously sew two or more different patterns without requiring the work clamp foot to be lifted. As many as 20 programs can be registered, and six different patterns can be stored in one program. (Related parts need to be exchanged for optional ones.)

**All drive mechanisms are electronically controlled**
- 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.

**Many functions of the pedal.**
- The machine is provided as standard with a newly-developed auto-lifter driven by a stepping motor. This helps reduce the operator’s fatigue. As for the pedal, one-pedal and two-pedal models can both be changed over and the intermediate step, which facilitates positioning of the sewing product, can be specified.

**Explanation of pedal motion**

<table>
<thead>
<tr>
<th>Pedal motion</th>
<th>2-pedal</th>
<th>3-pedal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Initial position</td>
<td>Pedal gives half high up to the right side pedal, presser comes down when the left side pedal is depressed</td>
<td>Pedal comes down to maximum position</td>
</tr>
<tr>
<td>2. Sewing position</td>
<td>The first step of the right side pedal results in the presser automatically going to intermediate position</td>
<td>The second step of the right side pedal is a Sewing position</td>
</tr>
<tr>
<td>3. End of sewing</td>
<td>The right side pedal is depressed</td>
<td>The right side pedal is depressed</td>
</tr>
<tr>
<td>4. Work clamp position</td>
<td>(a) Presser automatically goes up to maximum position</td>
<td>(a) Presser automatically goes up to maximum position</td>
</tr>
<tr>
<td>5. Cloth</td>
<td>(b) Presser automatically goes up to intermediate position</td>
<td>(b) Presser automatically goes up to intermediate position</td>
</tr>
</tbody>
</table>

**Operator-friendly environment**
- 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-1790 Series.
- The sewing product can further be placed on the machine easily by installing the auxiliary table (standard accessory). In addition, the needle entry is located in the center of the bed, promising easier positioning of the sewing product.

**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 untwisting of the needle thread, and thread fraying that is likely to occur at the beginning of sewing.
- Thread tension for basting 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 knit. 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.

**The machine is equipped with a multiple knife-dropping function.**
- 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 41mm at the maximum. In addition, knife mechanisms for 70mm and 120mm are optionally available.

**Sewing settings can easily be changed.**
- For double stitching, the bartacking section is skipped and only the parallel sections are sewn twice. This prevents any excessively tight finishes in the bartacking section of the buttonhole.
- Purl- and second-round stitches can be sewn using different stitch widths.

**Management of sewing performance and sewing machine by the utilization of IoT (Internet of Things) software.**

- Data on sewing machine adjustments made according to the product to be sewn can be transferred to a commercially-available Android tablet in contactless mode. This enables quick check for uniform settings as well as confirmation of conditions of sewing machines in a sewing line, thereby facilitating setup changes. The operation panel is also provided as standard with a USB port. Data management and software update can be carried out with ease using a USB thumb drive.

- Data items of sewing can be numerically managed to ensure “stable quality” and “reduction in time required for setup changes”. Quantified sewing data can be externally taken from the sewing machine using an Android tablet or USB thumb drive.
**LBH-1790ANB (Shorter-thread remaining functions)**

- **LBH-1790AN**
  - The LBH-1790AN 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. The maximum sewing speed is 4,200 sti/min, and the jump speed is 200mm/s. The cycle time has been further reduced for continuous sewing.

**Shorter-thread remaining functions**

- 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. Remaining length of thread varies with sewing conditions.

**LBH-1795AN** (120mm presser type)

- The knife supports sewing lengths of 41mm at the maximum. Since the LBH-1795ANS is provided as standard with the 120mm presser, it is capable of sewing 120mm long buttonholes. The LBH-1795ANS is capable of sewing long buttonholes such as belt holes in car seats. In addition, it is applicable to the sewing of buttonholes in men's shirts (continuous sewing of two buttonholes and the use of two units of sewing machines), etc.

- The upper limit of the adjustment of the presser foot pressure has been expanded. The presser foot pressure is now digitally controlled. As a result, the machine acquires improved responsiveness to knit materials and car seats.

**LBH-1796AN** (220mm presser type)

- The LBH-1796AN is a subclass model of the LBH-1790AN 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-1790AN. In addition, the LBH-1796AN can also be used as a simplified indexer to sew three buttonholes in a row.

The LBH-1796ANS (table stand and parts for indexer are optionally available)

- The maximum sewing speed of the LBH-1796AN is 4,200 sti/min (equivalent to the maximum sewing speed of the LBH-1790AN).
- The jump speed has been increased. (LBH-1794AN: Max 200 mm/s LBH-1796AN: 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-1796AN, the operator can attend to two units of this model of sewing machine at one time or can use the LX-1903BN button sewing machine together with the LBH-1796AN, 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.

**Simplified buttonholing indexer**

When the optionally-available indexer mechanism is installed on the LBH-1796AN, the operator can attend to two units of this model of sewing machine at one time or can use the LX-1903BN button sewing machine together with the LBH-1796AN, 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.

**Productivity**

**Model**

- The LBH-1796AN permits easy addition to and change of the production line, thereby contributing to saved installation space. The table area of the LBH-1796AN is 56% less than that of the AC-172N-1790.

**Option <Parts for simplified indexer>**

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Auxiliary carrier clamp asm.: A set of solenoid valve and a regulator</td>
<td>40153979</td>
</tr>
<tr>
<td>2</td>
<td>A set of a laser marking lamp and an LED marking lamp</td>
<td>40153980</td>
</tr>
<tr>
<td>3</td>
<td>Both sets</td>
<td>40153978</td>
</tr>
</tbody>
</table>

*Note: No. 3 is not available.*
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.

### Improved maintainability

- **The machine eliminates oil stains on the sewing product.**
  - 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 3,300sti/min)

- **Adjustment of the hook oil quantity**
  - The newly installed "hook oil quantity 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.

### Option

- **Foot pedal for standing work**
  - PK-57  [Part No. GP070100B]
  - To connect the control unit to the electrical line. (For sewing length 100mm, 120mm)

- **Two-Pedal switch**
  - [Part No. 40003491]

- **Pedal switch conversion cable asm.**
  - [Part No. 40003493]