

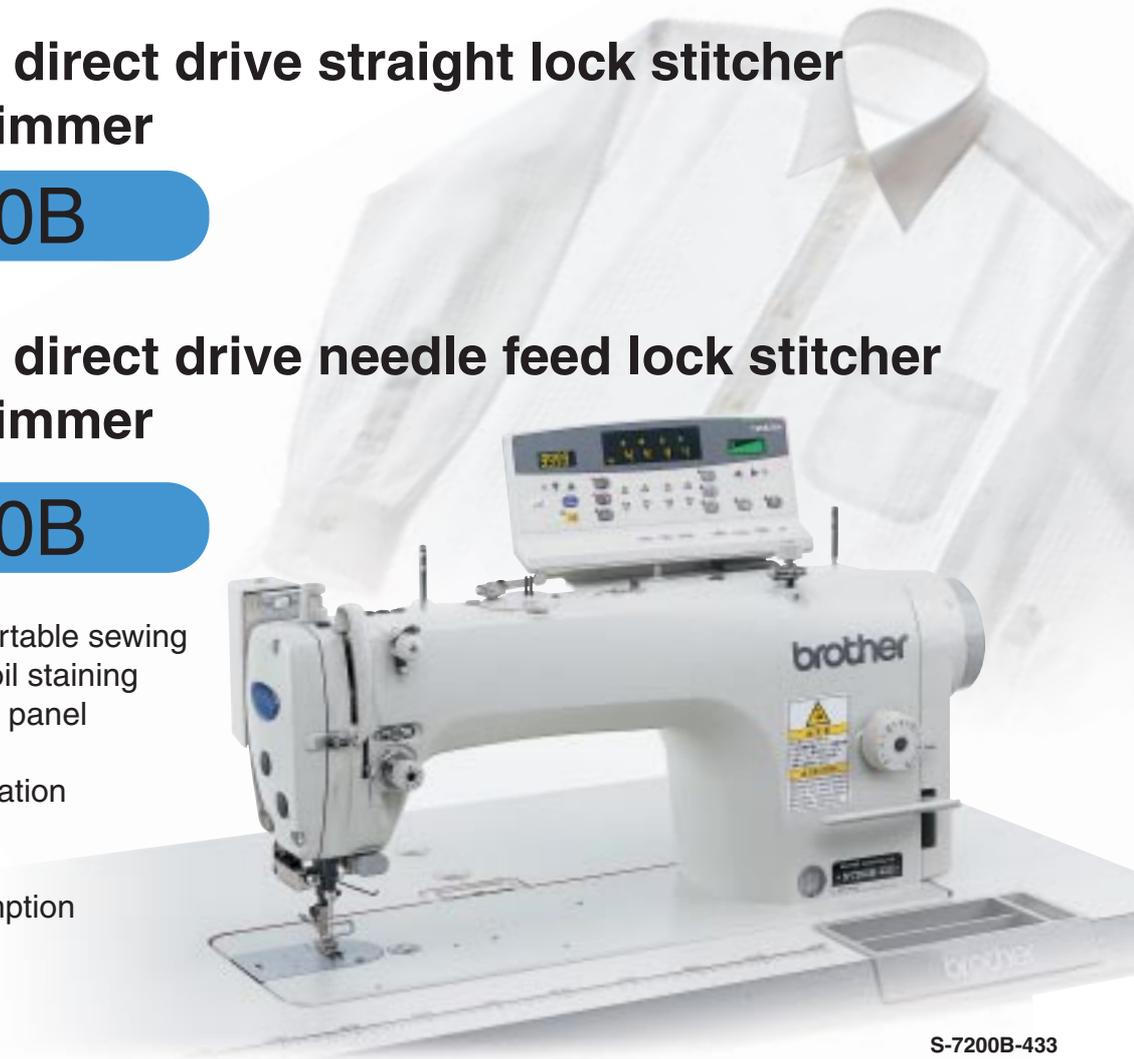
## Single needle direct drive straight lock stitcher with thread trimmer

**S-7200B**

## Single needle direct drive needle feed lock stitcher with thread trimmer

**S-7220B**

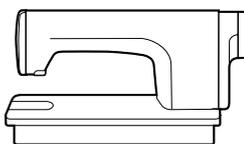
- Good response, comfortable sewing
- Clean sewing without oil staining
- User-friendly operation panel
- Comfortable operation with low noise and vibration
- Easy maintenance
- Economical models with low power consumption



S-7200B-433

*Further-evolved, clean direct-drive lock stitchers. Adding the needle feed type to the lineup, the machines provide quality sewing for a wide range of applications.*

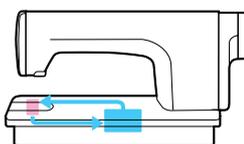
### Clean sewing without oil staining (S-7200B/S-7220B)



#### Complete dry type (S-7200B-□5□)

Max. sewing speed 4,000rpm

A lubrication-free rotary hook is used and no oil is supplied to the areas of the needle bar, thread take-up or hook.

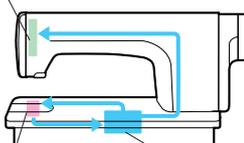


#### Semi-dry type (S-7200B/S-7220B-□3□)

Max. sewing speed 5,000rpm

This type is equipped with a sealed oil tank, supplying constant clean oil only to the rotary hook. It is also possible to stop the lubrication to the rotary hook and use a lubrication-free rotary hook.

needle bar, thread take-up



#### Minimum lubrication type (S-7200B/S-7220B-□0□)

Max. sewing speed 5,000rpm

This type is equipped with a sealed oil tank, supplying constant clean oil only to the minimum parts requiring lubrication.

rotary hook      oil tank

## Excellent sewing capability for a wide range of materials (S-7200B/S-7220B)

### Light and difficult-to-sew materials spec. (S-7200B-□□S)

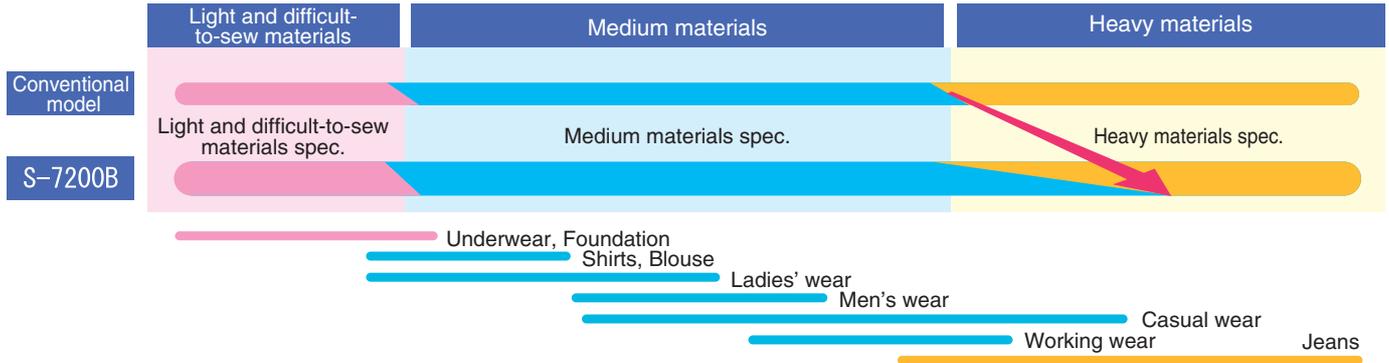
The needle bar stroke and feed dog track are specially designed for light and difficult-to-sew materials. Fine finishes without puckering or stitch slippage are available even with slippery or stretch materials.

### Medium materials spec. (S-7200B-□□3)

The thread take-up stroke can be changed to the longer stroke for heavy materials with two-step changeover. The range of sewing capability has been enlarged toward heavier materials.

### Heavy materials spec. (S-7200B/S-7220B-□□5)

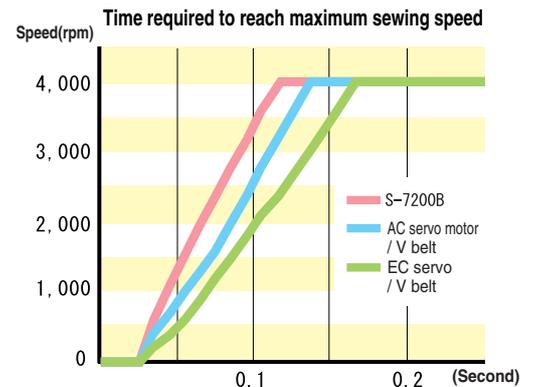
The height of the feed dog is up to a maximum of 1.3 mm. Materials can securely be fed in flat and overlapped. When the needle penetration resistance is increased in extra-thick overlapping part sewing, the needle penetration force is automatically increased by the vibration control. (All specifications are provided with this needle penetration force boosting function as standard. Patent applied for.)



## Smooth sewing with direct drive system (S-7200B/S-7220B)

The S-7200B and S-7220B come with the direct drive system most suitable for lock stitching process in which operator control is essential.

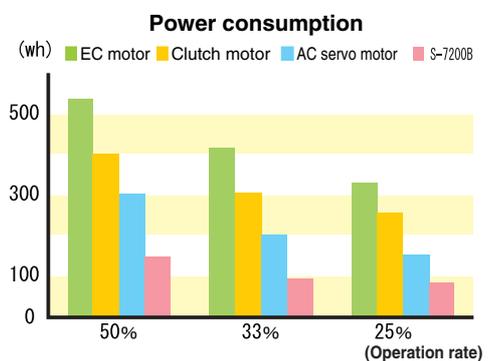
The proven, reliable direct-drive mechanism works with Brother's original AC servo motor developed in-house. This enables quicker starting and stopping of sewing and provides good responsiveness to the operator's control. Delicate speed control in curve sewing can be made as desired.



## The industry's most efficient energy savings (S-7200B/S-7220B)

The internal AC servo motor, designed through with magnetic field analysis, is the most compact in the industry. As the motor's driving force is transmitted directly to the mechanisms without a V-belt, energy loss can be reduced to a minimum. Electrical power consumption has been lowered to approximately 50%\* of that of the V-belt driven system (AC servo motor). The S-7200B and S-7220B are the most energy-saving models in the industry.

\*At a sewing speed of 5,000 rpm



## Low noise and vibration allow stress-free operation (S-7200B/S-7220B)

The operation noise of the solenoids of reverse feed changeover, thread trimming and thread wiping has been reduced. Sound during sewing has been improved in sound pressure and sound quality. Offensive sound and vibration are reduced to a minimum, helping reduce stress and fatigue of operators.

# S-720B

## Single needle direct drive needle feed lock stitcher with thread trimmer

The S-720B's advanced-function model with needle feed.

Having no material slippage, quality finish with uniform seams is available.

Adding the needle-feed function to the S-7200B, this model has been produced. With the needle penetrating the material, the needle and feed dog feed the material synchronously, minimizing material slippage. It is suitable for the sewing of slippery or multiple-laid materials, and meets quality sewing with diversified materials.



### Material slippage can be prevented

The needle feed amount is available up to 20% increase of the lower feed amount.



### Meeting designs with long stitches

The max. stitch length of heavy materials (-405) spec. is 5.5 mm. It meets a wide range of stitches such as for elaborate-designed jeans.

### Oil staining is prevented

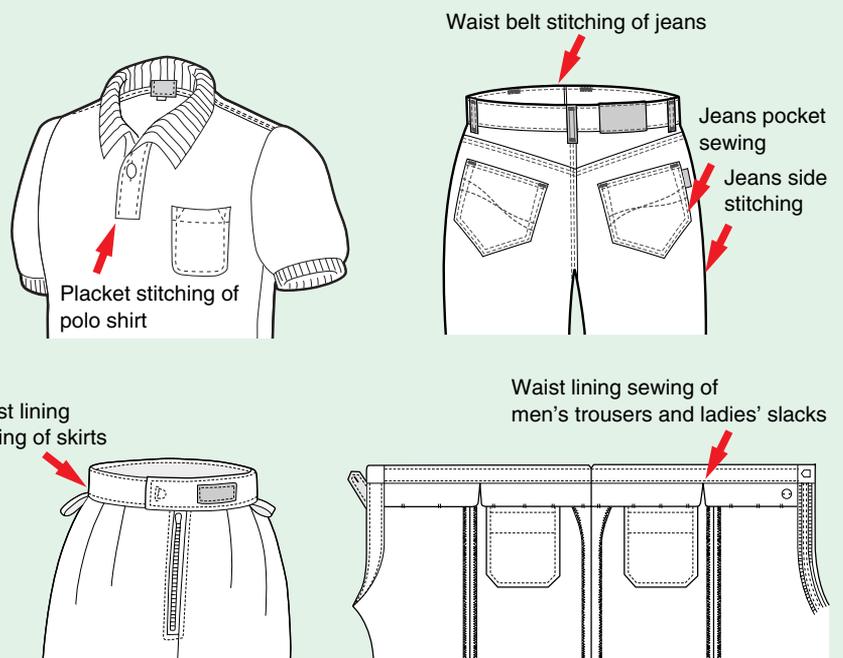
With the adoption of the most advanced lubrication-free technology, the amount of the oil lubricated to the area of the needle bar and thread take-up has substantially been reduced. Collection of oil around the jaw area is not necessary.

### The S-720B contributes to:

- preventing material slippage, skipped stitches and stitch gathering, for enhanced sewing quality
- producing uniform finishes unaffected by operator skill variation

### <Examples of suitable materials and processes>

- Slippery materials (Sportswear, rain wear)
- Different materials (Waist lining sewing of skirt and slacks)
- Overlapping parts (Stitching of jeans)
- Lengthy articles (Curtain, quilt cover)
- Sewing requiring quality (Placket stitching of polo shirt)
- Materials difficult to feed (Coat etc. Quilting / fleece)



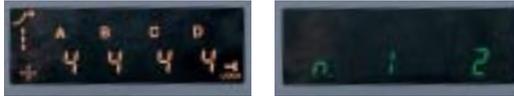
## User-friendly operation panel (S-7200B/S-7220B)

### Symmetrical layout easy to remember

Functions are grouped and color-coded by operation object so that users are not puzzled at operations.

### Two-color display and pictograms, easy to grasp

The display is shown with two colors, orange and green, distinguishing contents of displayed items. Pictograms easy to grasp are also used.



### Digital setting of maximum sewing speed

The maximum sewing speed can easily be set by entering a numeric value. The sewing speed can be changed with checking the sewing speed control display visually.



### Number of stitches are counted

The number of stitches, which have been sewn, is counted. When the number reaches to the number preset by a user, the machine notifies it with the pictogram and sound. It can be used as a measure of the lower thread's used amount or the sewn length, and as a production counter.

## Providing ease of operations (S-7200B/S-7220B)

### Smooth material handling

A large arm pocket allows easy material handling. The pulley operation is also easy with the adoption of a compact motor, having the distance to the pulley short.



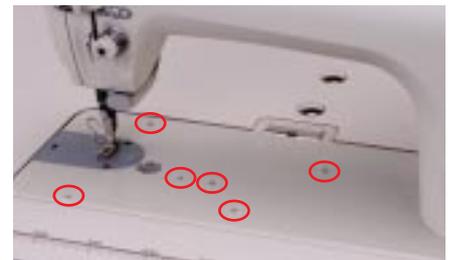
### Easy-to-use bobbin winder

The bobbin winder is located at the top of the machine arm. It is easier to adjust the bobbin thread amount and set and remove a bobbin.

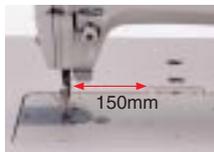


### Support for use of attachments

The machines are equipped with some attachment taps on the top of the beds for the use of attachments on the market.



### Hinge position out of the way



### Good view of needle area



### Smooth set and removal of materials

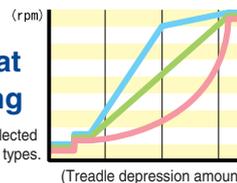


### Quick back switch close at hand



### Selectable acceleration at start of sewing

The acceleration can be selected from among the three types.



### Space under the table without the motor can be utilized

## Preventing needle breakage at reverse stitching (S-7200B/S-7220B)

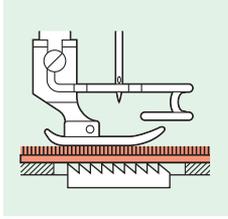
When reverse stitching is performed with thick materials (with the quick back switch), needle breakage tends to occur. With the thorough analysis of its cause, the function preventing needle breakage has been introduced.

## Enhanced sewing quality (S-7200B/S-7220B)

### Minute-adjustable pressing level

Material slippage with stretch materials and raised fabrics can be prevented, and damage to the fabrics can be reduced.

Handling in sewing three-dimensional articles with different curves can be made easier.



### Optimal presser foot pressure

The presser foot adjusting screw has a scale on it for easier control of the presser foot pressure with numeric value. The pressure can be reproduced easily and accurately.



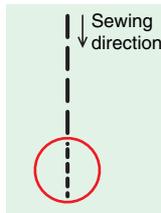
### Stable rotary-type thread trimmer

The rotary-type thread trimmer performs stable thread trimming regardless of materials of threads.



### Condensed stitching

It is suitable for light materials which tend to have puckering at reverse stitching.



### Selectable tension release operation

The thread tension can be maintained when the presser foot is lifted at corner stitching, to obtain fine finishes.

Having no V-belt enables to keep the sewing products clean without shaving of the belt.

## Easy maintenance (S-7200B/S-7220B)

### Greasing timing is notified automatically (S-7200B/S-7220B-□3□, S-7200B-□5□)

Greasing timing is calculated with the running condition such as motor revolutions, and automatically notified on the panel for operational ease. Please use Brother's special grease offering excellent durability.

### Duration of the grease is increased (S-7200B/S-7220B-□3□, S-7200B-□5□)

The duration of the grease has been increased to more than three times that of the conventional model (S-7200A). The frequency of greasing can be reduced, saving on additional maintenance.

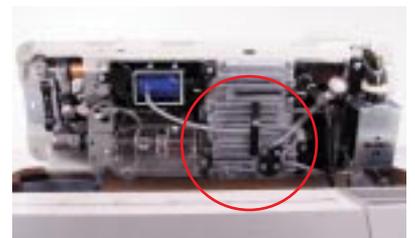


### Considerate of safe maintenance

With the safety sensor detecting, the motor does not start while the machine head is tilted back, even when the treadle is depressed.

### Gearbox oil amount can be checked at one view

The amount of oil in the gearbox can be checked visually. The gearbox has a heat-discharging structure with a fin.



### No lubrication required (S-7200B-□5□)

Lubrication is not necessary with the complete dry type, which uses a lubrication-free rotary hook and has no oil around the needle bar, thread take-up or rotary hook.

## Environment-conscious (S-7200B/S-7220B)

Brother has established our original "Brother Green Label" for the products in conformity with ISO 14021 and JIS Q14021. The S-7200B and S-7220B are certified as environment-conscious sewing machines according to "Brother Green Label" standard.



The industry's most energy saving  
A significant reduction of lubrication oil consumption

## Options (S-7200B/S-7220B)

- Thread wiper device assy. (SA1374-301)
- Solenoid-type presser foot lifter set (SA1397-001) / Knee switch assy. (S25457-101)
- Material edge sensor (J80975-001) ● Option actuator switch set (SA2407-001)

# Specifications

## S-7200B- [ ] [ ] [ ] Single needle direct drive straight lock stitcher with thread trimmer

	Quick back	Thread wiper		Lubrication type		Use
3	○	—	0	Minimum lubrication	S	Light-weight and difficult-to sew materials
4	○	○	3	Semi dry	3	Medium materials
			5	Complete dry	5	Heavy materials

## S-7220B-4 [ ] [ ] Single needle direct drive needle feed lock stitcher with thread trimmer

	Quick back	Thread wiper		Lubrication type		Use
4	○	○	0	Minimum lubrication	3	Medium materials
			3	Semi dry	5	Heavy materials

## Control box

## MD-741C/751C- [ ]

G-0	Without operation panel
G-40	With operation panel



	S-7200B						S-7220B		
	- 303, - 403	- 305, - 405	- 33S, - 43S	- 333, - 433	- 45S	- 453	- 403	- 405	- 433*5
Lubrication type	Minimum lubrication		Semi dry		Complete dry		Minimum lubrication		Semi dry
Application	Medium materials	Heavy materials	Light materials and difficult-to sew materials	Medium materials	Light materials and difficult-to sew materials	Medium materials	Medium materials	Heavy materials	Medium materials
Max. sewing speed	5,000 rpm*1	4,500 rpm*1	4,000 rpm	5,000 rpm*1	4,000 rpm	4,000 rpm	5,000 rpm*2	4,000 rpm*3	4,000 rpm
Sewing speed of start backtacking and continuous backtacking	220-3,000 rpm								
Sewing speed of end backtacking	1,800 rpm								
Max. stitch length	5mm	5mm	4.2mm	5mm	4.2mm	5mm	4.5mm	5.5mm	4.5mm
Presser foot height	Presser bar lifter: 6 mm, knee lifter: 16mm								
Needle bar stroke	31mm	35mm	29mm	31mm	29mm	31mm	33mm	35mm	33mm
Needle(DBx1· DPx5)	#11-#18	#19-#22	NS#9-#11	#11-#18	NS#9-#11	#11-#18	#11-#18	#19-#22	#11-#18
Rotary hook*4	Lubricated / For medium materials	Lubricated / For heavy materials	Lubricated / For light materials	Lubricated / For medium materials	Lubrication-free RP hook	Lubrication-free RP hook	Lubricated / For medium materials	Lubricated / For heavy materials	Lubricated / For medium materials
Feed dog	4 rows	4 rows	4 rows	4 rows	4 rows	4 rows	4 rows	4 rows	4 rows
Height of feed dog	0.8mm	1.2mm	0.8mm	0.8mm	0.8mm	0.8mm	1.0mm	1.2mm	1.0mm
Weight	Machine head 44 kg, Control box 6.1 kg, Operation panel 0.8 kg						Machine head 48 kg, Control box 6.1 kg, Operation panel 0.8 kg		
Arm pocket size	Width: 300 mm, Height: 136 mm								
Bed size	517.5mm x 178mm								
Bobbin winder	Built-in on the machine arm								
Machine head driving system	Direct drive								
Motor	AC servo motor (4-pole, 450 W)								
Control circuit	Microprocessor								
Power supply / Power consumption	Single phase 100-120V, 200-240V, 3-phase 200-240V, 380-415V, Power rating 400VA								
Lubrication oil	Rotary hook	High-speed spindle oil		High-speed spindle oil		—	High-speed spindle oil		High-speed spindle oil
	Needle bar	High-speed spindle oil		Brother's special grease		Brother's special grease	High-speed spindle oil		Brother's special grease

\*1 When sewing at a sewing speed of 4,000 rpm and above, set the stitch length to 4.2 mm and under.

\*2 When sewing at a sewing speed of 4,000 rpm and above, set the stitch length to 3.5 mm and under.

\*3 When sewing at a sewing speed of 3,000 rpm and above, set the stitch length to 4.5 mm and under.

\*4 When using a lubrication-free rotary hook, operate the machine at a sewing speed of 4,000 rpm and under.

\*5 Special specification depending on the area. Please ask your local Brother sales office for details.

Product specifications are subject to change for improvement without notice. Please read instruction manual before using the machine for safety operation.

**brother**

**BROTHER INDUSTRIES, LTD.**

15-1, Naeshiro-cho, Mizuho-ku, Nagoya 467-8561, Japan.  
Phone: 81-52-824-2177 Fax: 81-52-811-7789 <http://www.brother.com/>



Brother Industries, Ltd. Machinery & Solution Company  
Mizuho and Minato plants acquired ISO 9001 and 14001 certifications.

<b>R.P. CHINA</b>	BROTHER (CHINA) LTD. <a href="http://www.brothergroup.com.cn/cn/area_top.html">http://www.brothergroup.com.cn/cn/area_top.html</a>	+86-021-6237-1228
<b>HONG KONG</b>	BROTHER INTERNATIONAL (HK) LTD. <a href="http://www.brother.com.hk/eng/home/default.asp">http://www.brother.com.hk/eng/home/default.asp</a>	+852-2777-0010
<b>ASIA</b>	BROTHER INTERNATIONAL SINGAPORE PTE LTD. <a href="http://www.brother.com.sg/">http://www.brother.com.sg/</a>	+65-538-0311
<b>MIDDLE EAST</b>	BROTHER INTERNATIONAL (GULF) FZE <a href="http://www.brother.ae/">http://www.brother.ae/</a>	+971-4-8835878
<b>EUROPE</b>	BROTHER INTERNATIONALE INDUSTRIEMASCHINEN G. m. b. H. <a href="http://www.brother-ism.de">http://www.brother-ism.de</a>	+49-2822-6090
<b>AMERICA</b>	BROTHER INTERNATIONAL CORPORATION <a href="http://www.brother-usa.com/">http://www.brother-usa.com/</a>	+1-908-704-1700
<b>TURKEY</b>	BROTHER INTERNATIONAL CORPORATION TURKISH LIAISON OFFICE	+90-212-495-3971

To preserve environment, this catalog is produced using the ECF paper (Elemental Chlorine-Free) and SOY INK.

Printed in Japan 2006.6. I 6060907 B Vol.1