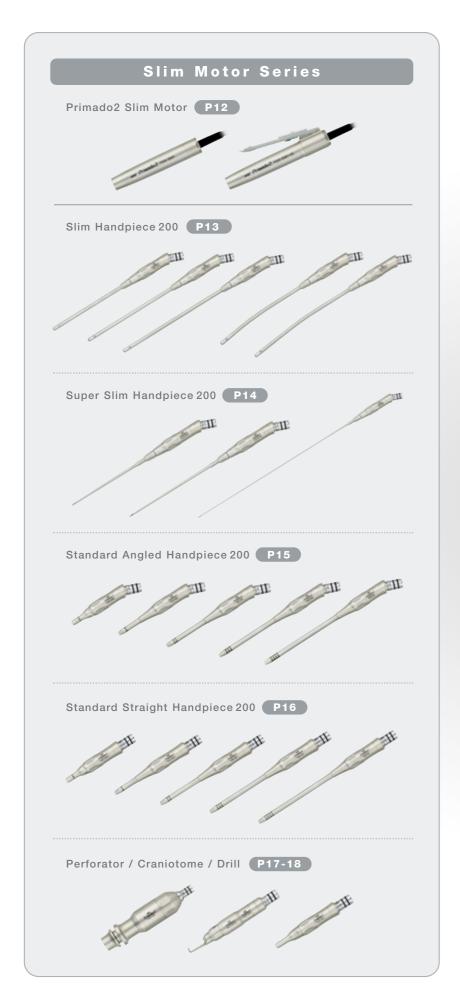


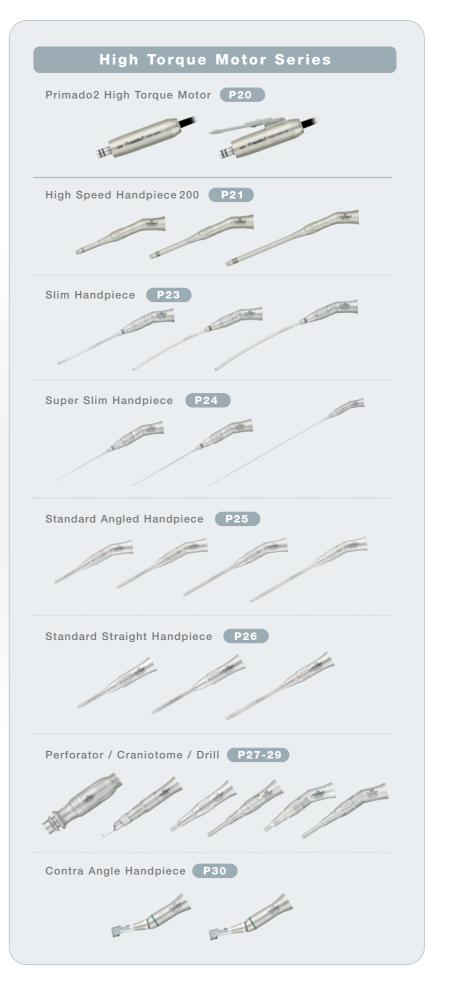


700 Shimohinata Kanuma-shi Tochigi 322-8666, Japan TEL: +81 (0)289-64-3380 FAX: +81 (0)289-64-3890

Primado2 Product Lineup







Feel the difference

Primado2 is NSK's second generation electric total surgical system, designed for fulfilling surgeons' demands.

During the five years since NSK have distributed Primado, we have obtained various feedback from surgeons throughout the world. Based on their input, Primado2 is uncompromisingly built to assume maximum quality throughout the product line. Four strong lineups including the new motor series, Slim Motor, are introduced in Primado2. They consummate excellent cutting, and achieve weight balance during drilling. Thus, using Primado2 is less fatiguing for surgeons, which is especially beneficial during long hours of surgery, and it allows them to concentrate on the operation at hand. Moreover, the product safety achieved reduces the risk of undesirable events. Hope you experience the exceptional use that Primado2 provides.



The sign of excellence

Primado2 makes it possible to conduct various types of surgeries.

New features include a control unit with a liquid crystal display touch screen, a multifunctional foot control, four lineups of motor handpieces, and extensive attachments.

Additionally, easy maintenance is highly valued as all of the Primado2 handpieces and attachments are thermo disinfector compatible.





Primado2 Control Unit

A 6.5 inch LCD touch screen is newly adopted. The simple design makes it user friendly and easy to use.

Two motor handpieces can be connected to the unit, allowing for easy switching between handpieces.

P200-CU-120

Primado2 Control Unit for 120V

P200-CU-230

Primado2 Control Unit for 230V

- Power Supply: AC120V / 230V 50/60 Hz
 Dimension: W278 x D268 x H160 (mm)
- Weight: 6.9 kg

Settings

Extensive options are available

[Control Unit]

- Brightness Volume
- Language (English, Japanese, German, French, Spanish, Italian)

[Motor Handpiece]

- Accelerator adjustment (min. 10% max. 100%)
- Brake adjustment (min. 10% max. 100%)
- Torque adjustment (min. 30% 100%)
- Oscillation adjustment (1-5 times, available only for Wire Pin Driver)

[Attachment]

• Handpiece selection (The rotational speed of the handpiece currently in use appears on the screen.)

Touch Panel

(Main Panel)

- Speed control
- Irrigation control
- Reverse rotation control
- Priming control

[Sub Panel]

• Allows to confirm the assigned functions of each foot control button.

[Mini Panel]

• Button for optional settings.

Configuration Settings

The control unit saves the last configurations made user the Option Set Up button, allowing the operator to proceed right away.

Automatic Recognition for Motor Handpieces

Four types of motor handpieces are automatically recognized by the control unit which displays the corresponding models and rotational speeds for each.

Regulation Equipment- Irrigation Pump

Primado2 comes equipped with an irrigation pump. Irrigation can be adjusted with 5% interval values allowing up to max. 75ml/min.



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Primado2 Foot Control

The foot control is available in two models: single (one functional button), and multi (three functional buttons). Each button can be set to a specific function to meet the operator's preference.



Functions are able to be allotted to each button

[Allocatable Features]

- Foot control ON/OFF
- A ⇔ B control (switching between motor handpieces)
- Speed control (adjust rotational speed; min. 30% ⇒ default ⇒ max. 100%)
- Reverse rotation mode
- Irrigation ON/OFF
- Flush (continuous 100% irrigation when depressed)
- Disable (disables function to the selected foot control button)







Primado2 Single Foot Control

- 1 pedal with button
- Speed control : variable
- IP code: IPX8



FC-74

Primado2 Multi Foot Control

- 1 pedal with 3 buttons
- Speed control : variable
- IP code: IPX8

Slim Motor Series

Slim Design

: A new design that combines being slim, compact and light, which reduces surgeons' stress during long hour operations.

High Speed

: High speed rotation of maximum 80,000min⁻¹ makes it possible to cut precisely.

Versatile

: Various types of handpieces available including a hand control type.

Easy Maintenance: All the motors and handpieces can be washed by a thermo disinfector.

Durable

: Motors and handpieces are made to be highly durable due to NSK's long years of experience in high precision technology, and are protected with a NSK original special coating called DURACOAT, creating long-lasting and scratch-free quality products.











Primado2 Slim Motor



P200-SMH-HS

Primado2 Slim Motor/HS

- Hand Control type
- Speed: Max. 80,000 min-1
- Available handpieces: 21 kinds
- Bundled Item: Spray Adaptor for Slim

P200-SMH

Primado2 Slim Motor

- Speed: Max. 80,000 min⁻¹
- Available handpieces: 21 kinds
- Bundled Item: Spray Adaptor for Slim (see p.40)

11 | Primado2 **12** | Primado2 The Slim Handpiece 200 has a bur guard tip of 4.8mm in diameter, and is available in various lengths as well as straight and curved models. These deliver excellent performance in endoscopic procedures with limited viewing access. The bur guard can be removed using a wrench that is included with delivery, making maintenance easy.



Super Slim Handpiece 200 for ø1.0 mm bur 20,000 min¹

The Super Slim Handpiece 200 is designed with a bur guard tip of 2.1mm in diameter, and can rotate max. 20,000min⁻¹ allowing sensitive drilling in an endoscopic procedure possible. The bur guard can be removed using a wrench that is included with delivery, making maintenance easy.



Five different length of handpieces are available with the Standard Angled Handpiece 200. This allows surgeons to deal with various types of operations. Perfect rotation balance and cutting balance performance are achieved.



Five different length of handpieces are available with the Standard Straight Handpiece 200. This allows surgeons to deal with various types of operations. Perfect rotation balance and cutting balance performance are achieved.



Perforator Handpiece 200

Craniotome Handpiece 200 for ø3.17 mm bur

The high performance handpiece for trephination. It delivers stable torque and achieves smooth and powerful cutting performance.



Drill Handpiece 200 for ø2.35 mm Twist Drill 80,000 min⁻¹



The corresponding handpiece for a trephination.

Cutting Accessories : P6



P200-2SD

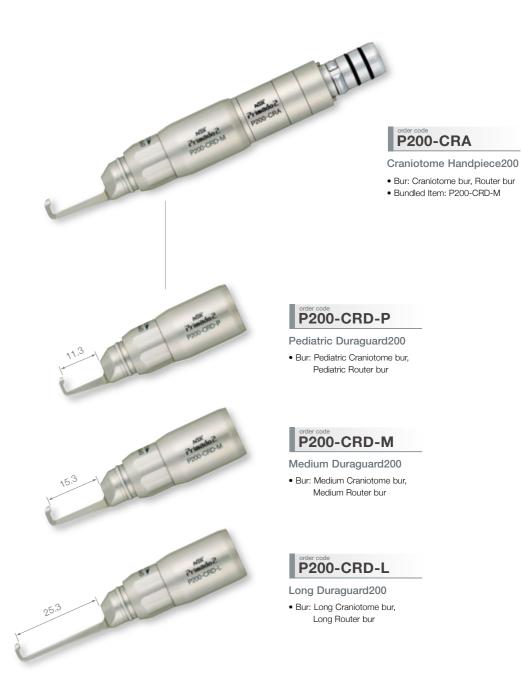
Straight Drill Handpiece200

Bur: ø2.35mm twist drill



PD-IN-D For P200-2SD

The high performance handpiece designed for cranial surgery. Three different types of duraguards are available for variable cranial bone thickness. The smooth and powerful cutting performance avoids adding additional stress to the surgeon.



High Torque Motor Series

High Torque: High torque motor delivers advanced cutting performance.

Versatile : Standard and hand control type are newly introduced.

Easy Maintenance: All of the motors and handpieces can be washed by a thermo disinfector.











Primado2 High Torque Motor



P200-HMH-HS

Primado2 High Torque Motor/HS

- Hand Control type
- Speed: Max. 60,000 min-1
- Available handpieces: 24 kinds

P200-HMH

Primado2 High Torque Motor

- Speed: Max. 60,000 min⁻¹
- Available handpieces: 24 kinds

High Speed Handpiece 200 for ø3.17 mm bur 100,000 min⁴



A maximum rotational speed of 100,000 min⁻¹ is attained with use of the motor increaser. Its powerful cutting perfomance is most suitable for open surgery.





PD-IN-3S For P200-3GAS (S)

PD-IN-3M For P200-3GAM (M)

PD-IN-3L For P200-3GAL (L)

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Slim Handpiece for Ø1.0 mm bur 60,000 min¹



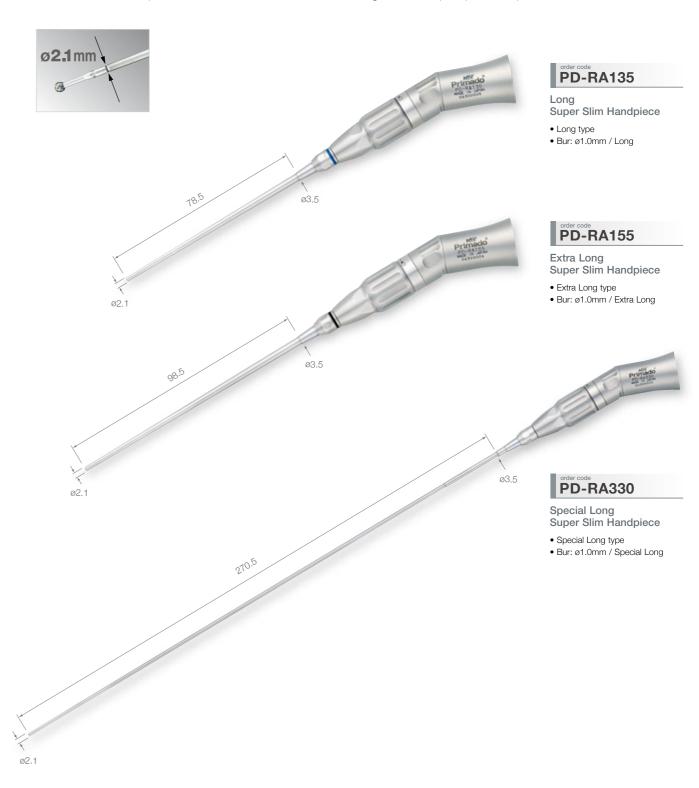
The Slim Handpiece has a narrow bur guard tip of 4.8mm in diameter. It allows direct visualization of a bur in surgical procedures with limited viewing access.



Super Slim Handpiece for ø1.0 mm bur

24,000 min⁻¹

The Super Slim Handpiece is designed with a bur guard tip of 2.1mm in diameter. Maximum rotational speed of 24,000 min⁻¹ allows sensitive cutting in endoscopic operations possible.



The Standard Angled Handpiece comes available in four different lengths to support diverse procedures, each with excellent cutting performance and stability.



PD-2AES

Extra Short Standard Angle Handpiece

- Extra Short type
- Bur: ø2.35mm / Extra Short

PD-2AS

Short

Standard Angle Handpiece

- Short type
- Bur: ø2.35mm / Short

PD-2AM

Medium

Standard Angle Handpiece

- Medium type
- Bur: ø2.35mm / Medium

PD-2AL

Standard Angle Handpiece

- Long type
- Bur: ø2.35mm / Long

Irrigation Nozzle



PD-IN-2S For PD-2AS (S)



PD-IN-2L For PD-2AL (L)

Standard Straight Handpiece for 02.35 mm bur

The Standard Straight Handpiece comes available in three different lengths to support diverse procedures, each with excellent cutting performance and stability.



PD-2SES

Extra Short Standard Straight Handpiece

- Extra Short type
- Bur: ø2.35mm / Extra Short

PD-2SS

Standard Straight Handpiece

- Short type
- Bur: ø2.35mm / Short

PD-2SM

Standard Straight Handpiece

- Medium type
- Bur: ø2.35mm / Medium





PD-IN-2ES For PD-2SES (ES)

PD-IN-2S

PD-IN-2M For PD-2SM (M)

Perforator Handpiece



The high performance handpiece for trephination. It delivers stable torque, and achieves smooth and strong cutting performance.



PD-PER

Perforator Handpiece

Compatible Chuck: Hudson Chuck

Craniotome Handpiece for Ø3.17 mm bur 60,000 min³

The high quality handpiece designed for craniotomy. Three different types of duraguards are available for variable cranial bone thickness. Strong cutting performance assists in a smooth operation.



Drill Handpiece for Ø2.35 mm Twist Drill 60,000 min⁻¹



The corresponding handpiece for a trephination. The NSK Drill Handpiece is available in straight and angled models for various types of operations.



PD-2SD

Straight Drill Handpiece

Bur: ø2.35 mm Twist Drill

PD-2SDM

Straight Drill Handpiece M

• Corresponds to ø2.35mm burs



Angled Drill Handpiece

• Bur: ø2.35 mm Twist Drill

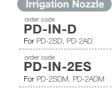


Angled Drill Handpiece M

• Corresponds to ø2.35mm burs







Contra Angle Handpiece

The Contra Angle Handpiece is useful when approaching at a blind angle. It is available in two types of speed reduction: 16:1 and 64:1.



PD-CA-16

Contra Angle Handpiece 16:1 Reduction

- 16:1 Reduction (Speed: Max. 3,750 min⁻¹)
- Latch Type Chuck
- Corresponds to ø2.35mm CA burs



PD-CA-64

Contra Angle Handpiece 64:1 Reduction

- 64:1 Reduction (Speed: Max. 940 min⁻¹)
- Latch Type Chuck
- Corresponds to ø2.35mm CA burs

29 | Primado2 30 | Primado2 Cutting Accessories : P6

Micro Bone Saw Series

Slim Design: The streamlined design with the reduced weight delivers well-balanced handling.

High Performance: Excellent cutting performance paired with low rotational vibration creates smooth operation.

Easy Maintenance: All of the motors and handpieces can be washed by a thermo disinfector.

Durable

: Motors and handpieces are made to be highly durable due to NSK's long years of experience in high precision technology, and are protected with a NSK original special coating called DURACOAT, creating long-lasting and scratch-free quality products.



Primado2 Reciprocating Saw Handpiece

20.000 min⁻¹

For P200-REC-S, P200-REC-S-HS



Cutting Accessories : P11~12 32 | Primado2







Wire Pin Driver Series

Powerful : Delivers powerful pinning, wiring, and drilling through elaborate design.

Ergonomic Design: Smart design lies comfortably in the surgeon's hand and creates smooth handling

Easy Maintenance: All of the motors and attachments can be washed by a thermo disinfector.











Primado2 Wire Pin Driver



- Speed : Max. 1,200 min-1
- Rotation Mode: Forward, Reverse, Oscillating
- Bundled Item: Spray Adaptor (see p.40)

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Wire & Pin Collet (1,200 min⁻¹)







Drill Attachment



Saw Attachment 12,000 min⁻¹



PD-SA-R

Reciprocating Saw Attachment

Blade: Reciprocating Saw Blades, Reciprocating Rasps

PD-SA-S

Sagittal Saw Attachment

Blade: Sagittal and Oscillating Saw Blades

Sterilization Case



SC-ML

Sterilization Metal Lid



SC-T-F

Sterilization Tray Divider-Free

 Dimensions : W480 x D250 x H60 (mm)



SC-C-H70

Sterilization Case/H70

• Dimensions : W512 x D262 x H70 (mm)



SC-SM

Silicone Mat

• The mat for the Sterilization Tray



SC-C-H125

Sterilization Case/H125

• Dimensions : W512 x D262 x H125 (mm)

Mobile Trolley

NSK offers a specially designed mobile trolley for the Primado control unit which is not only practical but also elegant. In this way, all the equipment can be stored in one place allowing easy access when needed. The trolley has adjustable height, lockable wheels and a bracket for the cable on the side.



Z299

iCart-L Mobile Trolley

Dimensions:

W360 x D420 x H800 (mm)

• Weight: 10 kg

Irrigation Tube



PD-IT-S

Surgical Irrigation Tube

• Pack of 10 (Sterilized)

Maintenance

PANA SPRAY Plus is a specially formulated, highly effective general handpiece lubricant. Frequent application of PANA SPRAY Plus will assure handpiece performance and durability. Apply PANA SPRAY Plus to handpieces after "Cleaning" in the maintenance process.





Z182100

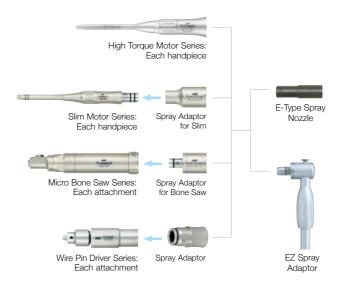
PANA Spray Plus

- For Handpieces, 480 mL
- Alcohol-contained Lubricant

Y900630

PANA Spray Plus (6pcs)

Pack of 6



Z019090

E-Type Spray Nozzle

• For Handpieces



PD-EZ-M

EZ Spray Adaptor

PANA Spray Plus is not included

Spray Mist Absorber

A convenient way to avoid mist spray from escaping into the environment. Simply insert the handpiece into the Absorber Pack then apply the spray lubricant.





Y900084

Spray Mist Absorber

• Pack of 10