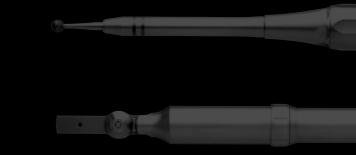
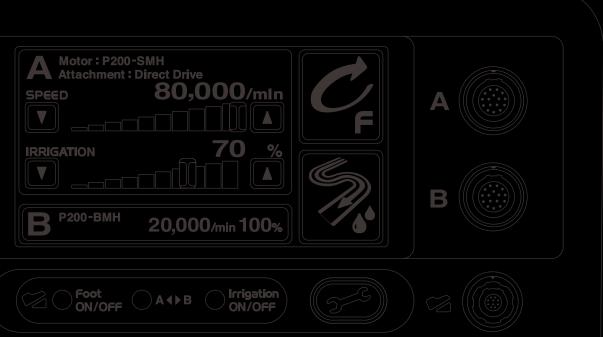


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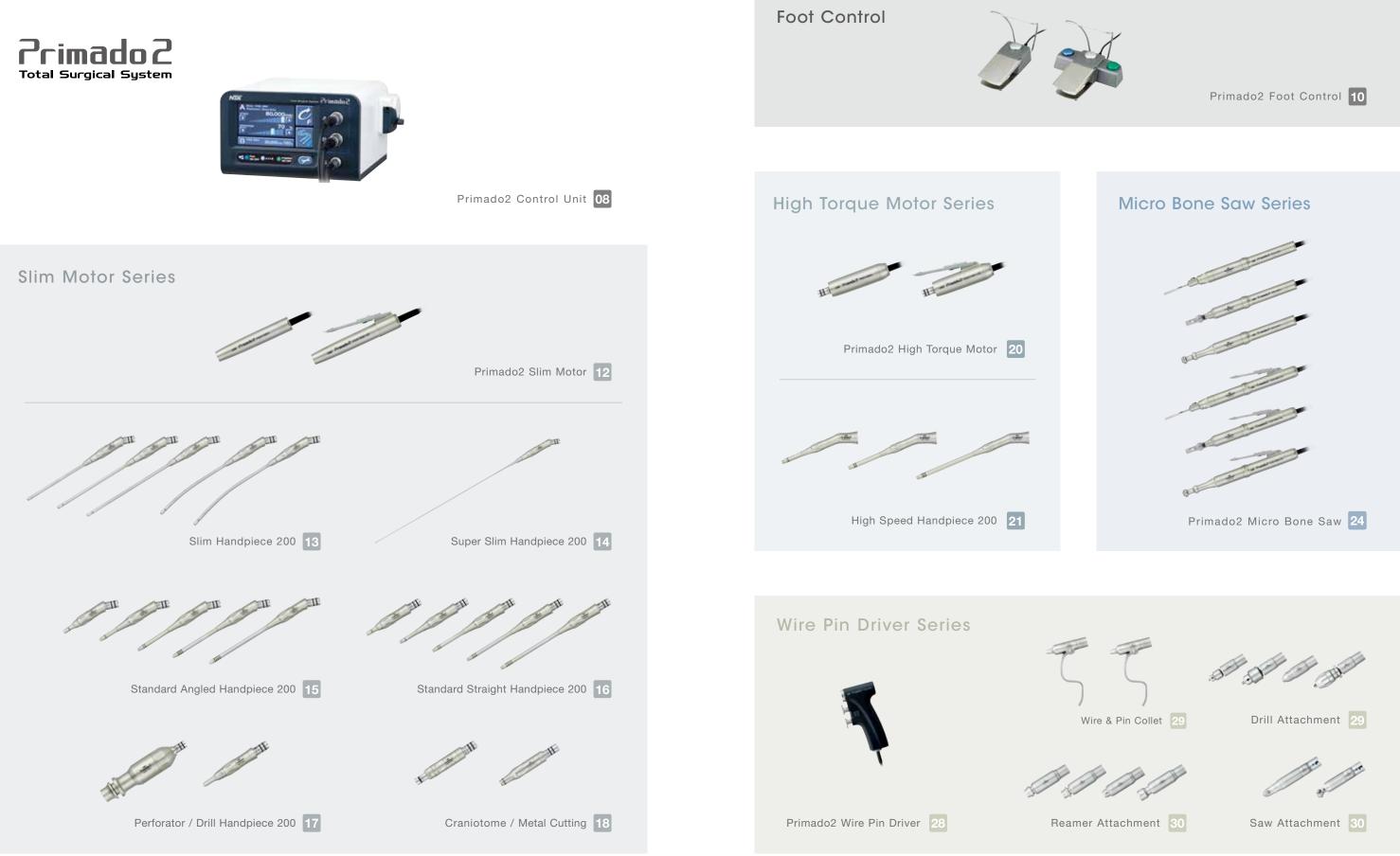


| A Motor : P200<br>Attachment : | Direct Drive       |
|--------------------------------|--------------------|
| SPEED                          | 80,000             |
|                                |                    |
|                                | <b>70</b>          |
| В Р200-ВМН                     | <b>20,000</b> /min |
|                                |                    |





# Primado2 Product Lineup



N





# FEEL THE DIFFERENCE

Made in Japan, Primado2 is NSK's second generation high speed total surgical system developed to keep up with demand from surgeons.

Since the launch of the first generation of Primado in 2006, we have been working with surgeons across the world. Their needs and requests gave shape to the new Primado2 which we created with balance, power, and a lightweight design to prevent stress from long operating hours.

We invite you to experience Primado2 – the next evolution of high speed drills.



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# Primado2 makes it possible

to conduct various types of procedures.

New features include a control unit with LCD display touch screen, a multifunctional foot control, four lineups of motor and extensive attachments. Since all Primado2 motors and handpieces are thermo disinfector compatible, easy maintenance is achievable.



1



### **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% max. 100%)
- Oscillation adjustment (1- 5 times, available only for Wire Pin Driver)

#### Attachment

 Handpiece selection (Displays rotation speed of engaged handpiece)

### **Touch Panel**

#### Main Panel

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

#### Sub Panel

• Displays the assigned function of each

#### Mini Panel

• Button for optional settings.

The control unit has a new 6.5 inch LCD screen and a simple design that makes it user friendly. Two motors can be connected to the unit simultaneously, allowing for quick and easy switching between motors.

### order code P200-CU-120

Primado2 Control Unit for 120V

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

### **Configuration Settings**

The control unit saves the configurations made by the last user except for speed, allowing the surgeons to proceed quickly.

### **Automatic Recognition** for Motors

Four types of motor are automatically recognized by the control unit which displays the corresponding models and rotation speed for each.

# Primado2 Control Unit

∞

## **Integrated High Performance Irrigation Pump**

Primado2 comes equipped with an irrigation pump. Irrigation is adjusted up to a max of 75ml/min.



# 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.



### **Functional Options**

#### <Allocatable Features>

- Foot control ON/OFF
- A ⇔ B control (switching between motors) • Speed control
  - (adjust rotational speed; min.  $30\% \Rightarrow$  default  $\Rightarrow$  max. 100%)
  - Reverse rotation mode
  - Irrigation ON/OFF
  - Flush (continuous 100% irrigation when pressed)
  - Disable (Set the status as no function)



order code FC-73

Primado2 Single Foot Control

 1 pedal with 1 functional button Speed control : variable • IP rating: IPX8

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Primado2





order code FC-74

#### Primado2 Multi Foot Control

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

# Slim Motor Series

| Slim Design     | : A compact and lightweight design reduces surgeon fatigue during long operations.       |
|-----------------|--|
| High Speed      | : High speed rotation with a maximum of 80,000min <sup>-1</sup> ensures precise cutting. |
| /ersatile       | : Foot control and hand control options available.                                       |
| asy Maintenance | : All motors and handpieces can be processed by a thermo disinfector.                    |
| Durable         | : The Slim Motor Series features a durable design as a result of NSK's long history with |

high precision technology. The wear-resistant coating contributes to long-lasting and scratch-free products of the high quality.



Primado2 Slim Motor



order code P200-SMH-HS

Primado2 Slim Motor/HS Hand Control type • Speed: Max. 80,000 min-1 Available handpieces: 20 types

11 Primado2

Bundled Item: P200-EZ-SM (see p.31)

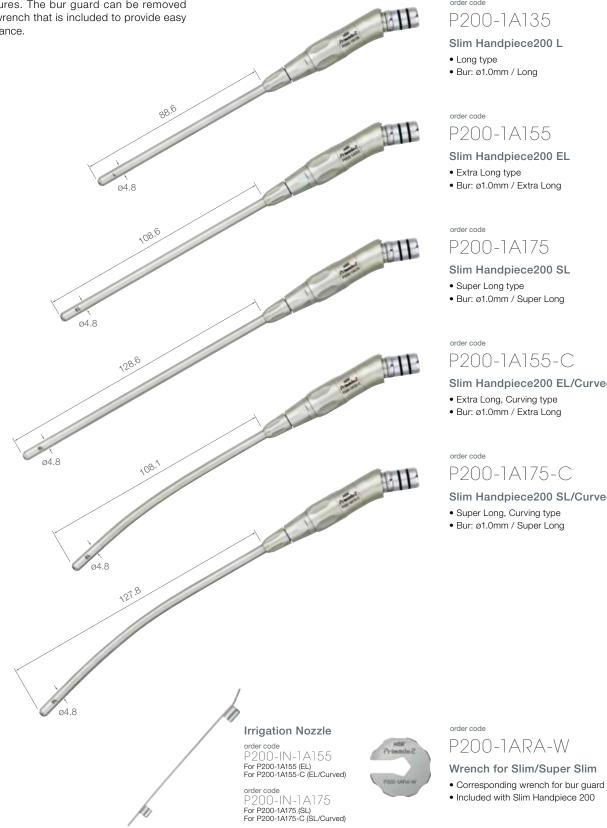
### order code P200-SMH

#### Primado2 Slim Motor

- Speed: Max. 80,000 min-1
- Available handpieces: 20 types
- Bundled Item: P200-EZ-SM (see p.31)

## Slim Handpiece 200 for ø1.0 mm bur 80,000 min<sup>-1</sup>

The Slim Handpiece has a 4.8mm diameter bur guard. Various length in curved and straight models that deliver great visualization in endoscopic and minimally invasive spine procedures. The bur guard can be removed with a wrench that is included to provide easy maintenance.



order code P200-1A135 Slim Handpiece200 L Long type

• Bur: ø1.0mm / Long

#### order code P200-1A155

Slim Handpiece200 EL • Extra Long type • Bur: ø1.0mm / Extra Long

#### order code P200-1A175

Slim Handpiece200 SL Super Long type • Bur: ø1.0mm / Super Long

#### order code P200-1A155-C

Slim Handpiece200 EL/Curved • Extra Long, Curving type • Bur: ø1.0mm / Extra Long

### order code P200-1A175-C

order code

Slim Handpiece200 SL/Curved Super Long, Curving type • Bur: ø1.0mm / Super Long

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

The Super Slim Handpiece has a 2.1mm diameter bur guard. It is exclusively designed to perform the endoscopic procedure with precise and sensitive drilling of 20,000min<sup>-1</sup> at maximum in rotation speed. The bur guard can be removed with a wrench that is included to provide easy maintenance.









Wrench for Slim/Super Slim

- Corresponding wrench for bur guard
- Included with Super Slim Handpiece 200

## Standard Angled Handpiece 200 for ø2.35 mm bur 80,000 min<sup>-1</sup>

Five different lengths of handpieces are available with the Standard Angled Handpiece 200 to address various types of procedures. Consistent rotation and well-balanced ergonomic design relieves fatigue.





order code

### order code P200-2AES

Std. Angled Handpiece200 ES

- Extra Short type • Bur: ø2.35mm / Extra Short
- order code P200-2AS
- Std. Angled Handpiece200 S Short type • Bur: ø2.35mm / Short

#### order code P200-2AM

Std. Angled Handpiece200 M Medium type • Bur: ø2.35mm / Medium

order code P200-2AL

Std. Angled Handpiece200 L

- Long type
- Bur: ø2.35mm / Long

Irrigation Nozzle

order code PD-IN-D For P200-2AMS (MS) order code PD-IN-2ES

For P200-2AES (ES) order code PD-IN-2S For P200-2AS (S)

order code

PD-IN-21

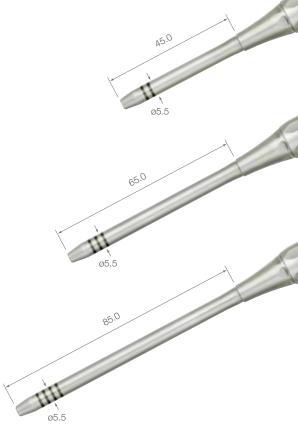
For P200-2AL (L)

## Standard Straight Handpiece 200 for ø2.35 mm bur 80,000 min<sup>-1</sup>

Five different lengths of handpieces are available with the Standard Straight Handpiece 200 to address various types of procedures. Consistent rotation and well-balanced ergonomic design relieves fatigue.







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#### order code P200-2SMS

#### Std. Straight Handpiece200 MS

- Mini type
- Bur: ø2.35mm / MS

### order code P200-2SES

#### Std. Straight Handpiece200 ES

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

order code P200-2SS

### Std. Straight Handpiece200 S

- Short type
- Bur: ø2.35mm / Short

#### order code P200-2SM

#### Std. Straight Handpiece200 M

- Medium type
- Bur: ø2.35mm / Medium

### order code P200-2SL

#### Std. Straight Handpiece200 L

- Long type
- Bur: ø2.35mm / Long

#### Irrigation Nozzle

order code PD-IN-D For P200-2SMS (MS)

order code PD-IN-2ES For P200-2SES (ES)

order code PD-IN-2S For P200-2SS (S)

order code PD-IN-2M For P200-2SM (M)

order code PD-IN-21 For P200-2SL (L)





## Perforator Handpiece 200 1,250 min<sup>-1</sup>

The perforator 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<sup>-1</sup>

The corresponding handpiece for a trephination.





order code

order code

P200-2SD

• Bur: ø2.35mm twist drill

Irrigation Nozzle

order code PD-IN-D

For P200-2SD

Straight Drill Handpiece200

P200-PER

Perforator Handpiece200 Compatible Chuck: Hudson Chuck

## Craniotome Handpiece 200 for ø3.17 mm bur 80,000 min<sup>-1</sup>

The craniotome handpiece designed for cranial surgery. Three different size of duraguards are available for variable cranial bone thickness from pediatric to adult. Newly offered rotatable duraguard enables smooth and powerful cutting performance contributing to the less fatigue and stress.

# P200-CRD-P Pediatric Duraguard200

• Bur: Pediatric Craniotome bur Pediatric Router bur



Medium Duraguard200 • Bur: Medium Craniotome bur Medium Router bur



# Metal Cutting Handpiece 200 for ø3.17 mm bur 80,000 min<sup>-1</sup>

The corresponding handpiece for cutting implants.





order code P200-CRA Craniotome Handpiece200 • Bur: Craniotome bur, Router bur



## P200-RCRD-P

Rotatable Duraguard200 P • Bur: Pediatric Craniotome bur

Pediatric Router bur



Rotatable Duraguard200 M • Bur: Medium Craniotome bur Medium Router bur



Rotatable Duraguard200 L

• Bur: Long Craniotome bur Long Router bur



order code P200-3MC

Metal Cutting Handpiece200

• Bur: Metal Cutting Carbide Bur Metal Cutting Diamond Disc 18

Primado2

# High Torque Motor Series

| High Torque      | : High torque motor delivers advanced cutting performance.  |
|------------------|---|
| Versatile        | : Foot control and hand control options available   |
| Easy Maintenance | : All motors and handpieces can be processed by a thermo disinfector.   |
| Durable          | : The High Torque Motor Series features a durable design as a result of NSK's long history with high precision technology. The wear-resistant coating contributes to long-lasting and |

scratch-free products of the high quality.



# Primado2 High Torque Motor



### order code P200-HMH-HS

Primado2 High Torque Motor/HS Hand Control type • Speed: Max. 60,000 min-1 Available handpieces: 3 types

order code P200-HMH

Primado2 High Torque Motor

• Speed: Max. 60,000 min-1

Available handpieces: 3 types

## High Speed Handpiece 200 for ø3.17 mm bur 100,000 min<sup>-1</sup>

The maximum rotational speed of 100,000 min-1 is attained by combining the High Speed Motor with a High Speed Handpiece. Its powerful cutting perfomance is suitable for open surgery. Prime Prin ø7.5

#### order code P200-3GAS

High Speed Handpiece200 S • Short type • Bur: ø3.17mm / Short

order code P200-3GAM

High Speed Handpiece200 M

- Medium type
- Bur: ø3.17mm / Medium

order code P200-3GAL

High Speed Handpiece200 L

Long typeBur: ø3.17mm / Long

Irrigation Nozzle order code PD-IN-3S For P200-3GAS (S) order code PD-IN-3M For P200-3GAM (M) order code PD-IN-3L For P200-3GAL (L)

2



Primado2

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# Micro Bone Saw Series

| Slim Design      | : The streamlined lightweight design delivers well-balanced handling.                           |
|------------------|---|
| High Performance | : Consistent cutting performance paired with low rotational vibration creates smooth operation. |
| Easy Maintenance | : All motors and handpieces can be processed by a thermo disinfector.                           |

 Durable
 : The Micro Bone Saw Series features a durable design as a result of NSK's long history with high precision technology. The wear-resistant coating contributes to long-lasting and scratch-free products of the highest quality.



HER Primado 2 rough

## Primado2 Reciprocating Saw Handpiece 20,000 min-1



# • Speed: Max. 20,000 min<sup>-1</sup>

P200-REC-S

Stroke Length: 2.5 mm

order code

- Blade: Reciprocating Saw Blades, Reciprocating Rasps
- Bundled Item: P200-EZ-BM (see p.31)

### order code P200-REC-S-HS

#### Primado2 Rec. Handpiece/HS

- Hand Control type
- Speed: Max. 20,000 min-1
- Stroke Length: 2.5 mm
- Blade: Reciprocating Saw Blades, Reciprocating Rasps
- Bundled Item: P200-EZ-BM (see p.31)



Primado 2 p200

#### Irrigation Nozzle

order code P200-IN-BS For P200-REC-S, P200-REC-S-HS CUTTIN

ACCESSORIES

13~14

# Primado2 Sagittal Saw Handpiece 20,000 min<sup>-1</sup>

## Primado2 Oscillating Saw Handpiece 20,000 min-1





Irrigation Nozzle order code P200-IN-BS

For P200-SAG-S, P200-SAG-S-HS

order code

P200-OSC-S

• Speed: Max. 20,000 min-1

Angle of Oscillation: 8°

Primado2 Osc. Handpiece

• Blade: Sagittal and Oscillation Saw Blades,

Oscillating Saw Blades (for Intra Oral) • Bundled Item: P200-EZ-BM (see p.31)

#### order code P200-OSC-S-HS

#### Primado2 Osc. Handpiece/HS

- Hand Control type
- Speed: Max. 20,000 min-1
- Angle of Oscillation: 8°
- Blade: Sagittal and Oscillation Saw Blades, Oscillating Saw Blades (for Intra Oral)
- Bundled Item: P200-EZ-BM (see p.31)



(for Intra Oral)

• Bundled Item: Corresponding wrench(1),

and screws (2)

#### Irrigation Nozzle

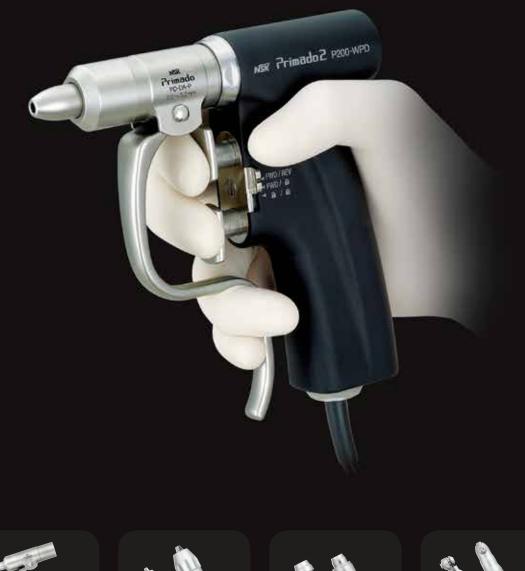
order code P200-IN-BS For P200-OSC-S, P200-OSC-S-HS

# Wire Pin Driver Series

| Powerful         | : Delivers powerful pinning, wiring, and drilling through elaborate design.                             |
|------------------|---|
| Ergonomic Design | : Smart design fits comfortably in the surgeon's hand and creates smooth handling and high operability. |
| Easy Maintenance | : All motors and handpieces can be processed by a thermo disinfector.                                   |

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Primado2







Drill Attachment

**Reamer Attachment** 

Saw Attachment

# Primado2 Wire Pin Driver



order code P200-WPD

Primado2 Wire Pin Driver • Speed : Max. 1,200 min-1 • Rotation Mode: Forward, Reverse, Oscillating • Bundled Item: P200-EZ-WPD (see p.31)

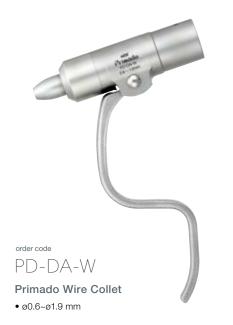
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# Attachment for Wire Pin Driver

# Attachment for Wire Pin Driver





## Reamer Attachment 300 min<sup>-1</sup>



Saw Attachment 12,000 min<sup>-1</sup>

**Trinkle Reamer** 



order code PD-SA-R

**Reciprocating Saw Attachment** • Blade: Reciprocating Saw Blades, Reciprocating Rasps

Drill Attachment 1,200 min<sup>-1</sup>



order code PD-DA-J4

PD-TW-J4

T wrench =

order code

Jacobs Keyed Drill Chuck • ø0.5~ø4.0 mm Bundled Item: T wrench

order code PD-DA-J6 Jacobs Keyed Drill Chuck • ø0.5~ø6.5 mm

Bundled Item: T wrench

order code PD-TW-J6 T wrench

order code PD-DA-A AO Drill Chuck

order code PD-DA-K **Keyless Drill Chuck** • ø0.6~ø7.4 mm

### Trinkle Reamer

AO Reamer

16~17



order code PD-SA-S

Sagittal Saw Attachment • Blade: Sagittal and Oscillating Saw Blades

# Maintenance

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



-



order code Z182600

PANA Spray Plus • For Handpieces, 480 mL Alcohol-contained Lubricant

order code Y1002906

order code Z019090

E-Type Spray Nozzle

• For Handpieces

PANA Spray Plus (6pcs) Pack of 6

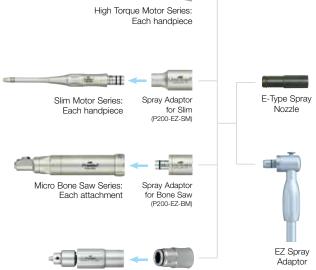
# Spray Mist Absorber

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.



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.



Wire Pin Driver Series: Spray Adaptor Each attachment (P200-FZ-WPD)





order code PD-EZ-M EZ Spray Adaptor

PANA Spray Plus is not included

# Irrigation Tube



| order code |  |
|------------|--|
| Y900084    |  |

Spray Mist Absorber

Pack of 10



#### order code Z299

#### iCart-L Mobile Trolley

- Dimensions :
- W360 x D420 x H800 (mm)
- Weight : 10 kg



#### order code PD-IT-S

- Surgical Irrigation Tube
- Pack of 10 (Sterilized)

Memo

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Manufacturer

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NSK America Corp

Specifications are subject to change without notice.