



Battery + Electro + Pneumatic Surgical Motor

www.aygun.com



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2016

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AYGÜN, one of the leading establishment of Turkey in the field of Medical Industry, was founded in 1988.

It manufactures Container Systems for Sterilization, Surgical Motor Systems, Medical Illumination Systems and Single Use Medical Systems in its facility at Samsun Central Organized Industrial Zone.

AYGÜN meets the needs of significant part of Turkey as a result of its continuous R&D works and the capacity increasing. It manufactures its products in international standards and put them to the world market with a high competitive power. Moreover with its integrated quality management system, it proves that it is a specialized establishment.

Besides being a manufacturer, AYGÜN is also a designer company and with its continuous product development works it increases number of its patents, on the other hand, is contributing career development of rising generation by acting as a school.

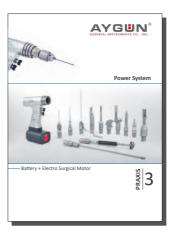








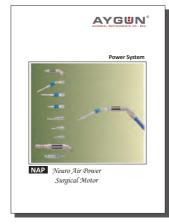






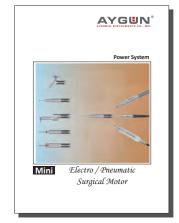


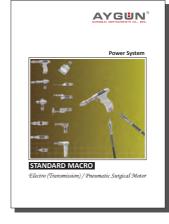


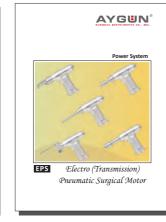


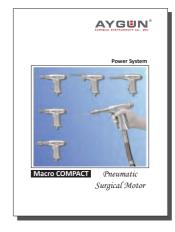


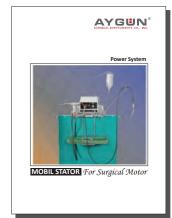














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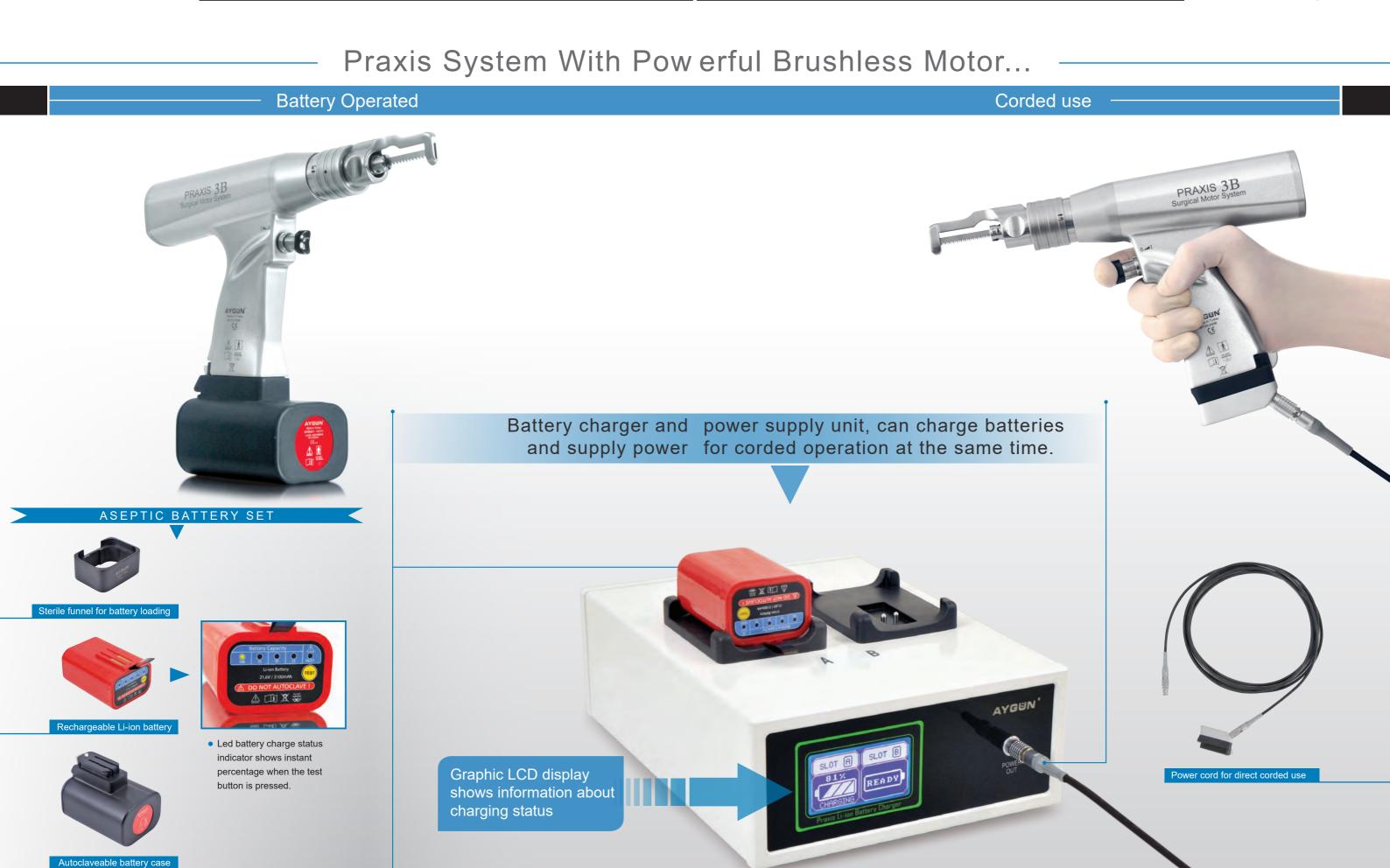




Container Set For Sterilization (28-29)









# Battery Charging Units with Power Supply

## **Battery Operated**



Rechargeable Li-ion battery

- Battery capacity: 3.1 Ah
- Voltage: 21.6 Volts
- Led battery charge status indicator
- Generates a "beep tone" when starts
- Not autoclaveable
- 84 x 63 x 47 mm / 355 g



M103-211 Autoclaveable battery case

- Steam sterilisable at 2 bar 134° C
- 102 x 82 x 72 mm / 235 g



Autoclaveable sterile funnel for aseptic battery loading

- Steam sterilisable at 2 bar 134° C
- 78 x 59 x 35 mm / 60 g

#### M103-226

Charger unit for 1 battery

- Main voltage 100-240 Volts, 50-60 Hz
- Charging monitored by LCD screen
- Charging current 1.4 A
- Charging voltage 21.6 Volts
- Protections: Short circuit / Overload / Over voltage
- Generates an audible tone when charging is started or finished
- Battery not included
- 137 x 128 x 110 mm / 700 g



#### M103-227

Charger unit for 2 batteries

- Main voltage 100-240 Volts, 50-60 Hz
- Charging monitored by LCD screen
- Charging current 1.4 A
- Charging voltage 21.6 Volts
- Protections: Short circuit / Overload / Over voltage
- Generates an audible tone when charging is started or finished
- Battery not included
- 237 x 230 x 126 mm / 3.2 kg



#### M103-229

Charger unit for 4 batteries

- Main voltage 100-240 Volts, 50-60 Hz
- Charging monitored by LCD screen
- Charging current 1.4 A
- Charging voltage 21.6 Volts
- Protections: Short circuit / Overload / Over voltage
- Generates an audible tone when charging is started or
- Battery not included
- 320 x 310 x 150 mm / 4.5 kg

# Power Supply For Direct Corded Use



• Easy coupling power cord maintains continuous operation.



Autoclaveable power cord for direct corded use

- Steam sterilisable at 2 bar 134° C
- 4 m / 310 g



#### M103-228

Power supply unit for direct corded use

- Main voltage 100-240 Volts, 50-60 Hz
- Power socket output 25.2 V / 14 A
- Protections: Short circuit / Overload / Over voltage
- Cable not included
- 235 x 230 x 116 mm / 3.5 kg



### M103-224

Power supply and Charger unit for 2 batteries

- Main voltage 100-240 Volts, 50-60 Hz
- Charging monitored by LCD screen
- Charging current 1.4 A
- Charging voltage 21.6 Volts
- Power socket output 25.2 V / 14 A • Protections: Short circuit / Overload / Over voltage
- Generates an audible tone when charging is started or finished
- Battery and Cable not included
- 320 x 230 x 140 mm / 4.9 kg



Power supply and Charger unit for 4 batteries

- Main voltage 100-240 Volts, 50-60 Hz
- Charging monitored by LCD screen
- Charging current 1.4 A
- Charging voltage 21.6 Volts
- Power socket output 25.2 V / 14 A
- Protections: Short circuit / Overload / Over voltage
- Generates an audible tone when charging is started or
- Battery and Cable not included
- 320 x 310 x 150 mm / 5.6 kg



## Sternum Saw System (Battery + Electro)

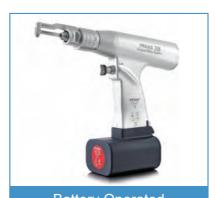


M103-240B

Sternum saw system

(Without saw blade, guide, battery and battery case)

16.000 cpm / ← > 4 mm 210 x 154 mm / 1280 g



**Battery Operated** 





M103-715 Adult saw guide

Adult saw blade	Code	Length	Usable Length	Blade Thickness	Cutting Thickness
	M103-709	58 mm	35 mm	0,6 mm	1 mm
·····	M103-710	58 mm	35 mm	0,8 mm	1,2 mm



M103-716 Pediatric saw guide

Pediatric saw blade	Code	Length	Usable Length	Blade Thickness	Cutting Thickness
-	M103-711	40 mm	18 mm	0.6 mm	0.6 mm
	M103-712	40 mm	18 mm	0.6 mm	0,8 mm

## Oscillating Saw System (Battery + Electro)



#### M103-300B

Sagittal saw system

(Without saw blades, battery and battery case)

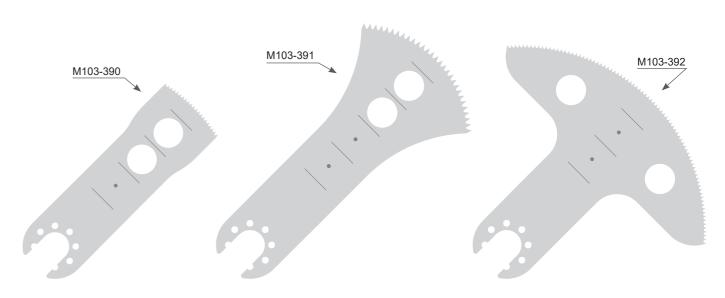
16.000 cpm /  $\angle$  4° 50' 180 x 160 / 1110 g



Battery Operated



### Blades for M103-300B



Code	Length	Width	Thickness
M103-390	35 mm	25 mm	0.8 mm
M103-391	50 mm	40 mm	0.8 mm
M103-392	35 mm	75 mm	0.8 mm



# Sternal Saw Set



M103-1009	Battery Sternal Saw Set
0	
Content	
M103-240B	Sternum saw System
M103-210	Rechargeable Li-ion battery
M103-211	Autoclaveable battery case
M103-212	Autoclaveable sterile funnel for
	aseptic battery loading
M103-226	Charger unit for 1 battery
M103-715	Adult saw guide
M103-710	Adult saw blade
K3-1731-S2	Basket with silicone fixations
	405 x 253 x 113 mm

M103-1010	Battery + Electro Sternal Saw Set
Content	
M103-240B	Sternum saw System
M103-210	Rechargeable Li-ion battery
M103-211	Autoclaveable battery case
M103-212	Autoclaveable sterile funnel for aseptic battery loading
M103-223	Autoclaveable power cord for direct corded use
M103-224	Power supply and Charger unit for 2 batteries
M103-715	Adult saw guide
M103-710	Adult saw blade
K3-1731-S2	Basket with silicone fixations 405 x 253 x 113 mm

# Cardio Vascular Set



M103-1011	Battery Cardio Vascular Set
Content	
M103-240B	Sternum saw System
M103-210	Rechargeable Li-ion battery (2 pcs)
M103-211	Autoclaveable battery case (2 pcs)
M103-212	Autoclaveable sterile funnel for
	aseptic battery loading
M103-226	Charger unit for 1 battery
M103-300B	Sagittal saw System
M103-715	Adult saw guide
M103-710	Adult saw blade
M103-392	Oscillating saw blade
K3-1723-S3	Basket with silicone fixations
	540 x 253 x 113 mm

M103-1012	Battery + Electro Cardio Vascular Set
Content	
M103-240B	Sternum saw System
M103-210	Rechargeable Li-ion battery (2 pcs)
M103-211	Autoclaveable battery case (2 pcs)
M103-212	Autoclaveable sterile funnel for
	aseptic battery loading
M103-223	Autoclaveable power cord for direct corded use
M103-224	Power supply and Charger unit for 2 batteries
M103-300B	Sagittal saw System
M103-715	Adult saw guide
M103-710	Adult saw blade
M103-392	Oscillating saw blade
K3-1723-S3	Basket with silicone fixations
	540 x 253 x 113 mm

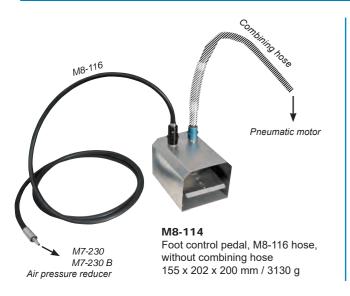


## **Pneumatic Motor Components**

For safe use; the systems must be operated by using compressed dry air or nitrogen gas, the oxygen gas must never be used.







**M7-220** 3 m **M7-221** 5 m Standard combining hose 3 m (for M7-230 + M7-150)

Sterilization= 3 Atm 134° C



### M7-150

Pneumatic Surgical Motor Speed= 22.000 rpm

Working Pressure= 6 Atm Sterilization= 3 Atm 143° C 155 x 35 mm / 400 g

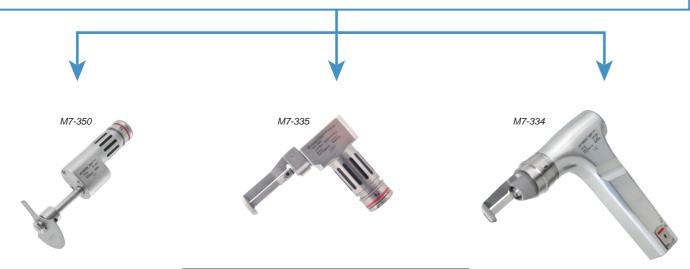




### M8-510

Spray oil, for motor and components before sterilization.

After cleaning of every use. Oil inside of all moving parts of device by spraying method and run the device for 2-3 seconds. Practice spraying inside of the device until the black used oil comes out and new oil clearly appears out of device as clear color and then put the device in store or process sterilization.



## **Electro Motor Components**



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Electro-surgical motor with forward and reverse gear to be used with flexible cables M4-137, M4-138, M6-060, M6-061, M6-065, M6-066 sound and light signal warning start at reverse running position. Foot control M6-054 (Foot control, flexible cable and hand piece have to be ordered separately)

15.000 rpm 340 x 286 x 106 mm / 6 kg



Foot pedal, with irrigation and F/R butons

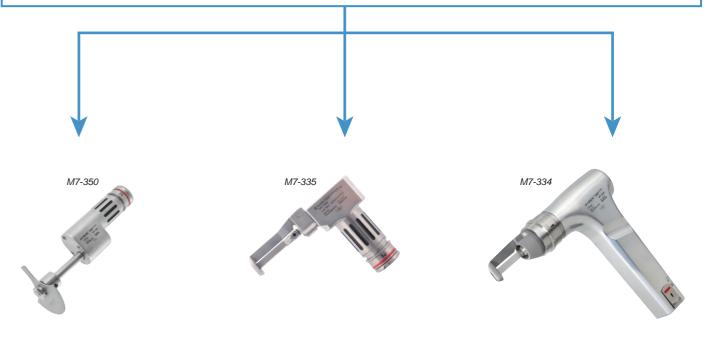
Cable Length: 4 m 200 x 155 x 150 mm / 1.550 kg



M6-061 210 cm Transmission Cable

Flexible standard cable. 160 cm. Autoclave up to max. 3 bar, 143°c





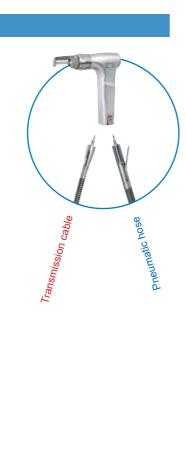
<sup>\*</sup> for detailed information, please check "Standard Macro" product catalog...



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# Sternum Reciprocating System







M4-715 Adult saw guide

Adult saw blade	Code	Length	Usable Length	Blade Thickness	Cutting Thickness
	M4-709	61 mm	35 mm	0,6 mm	1 mm
***************************************	M4-710	61 mm	35 mm	0,8 mm	1,2 mm



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M4-716 Pediatric saw guide

Pediatric saw blade	Code	Length	Usable Length	Blade Thickness	Cutting Thickness
	M4-711	41 mm	18 mm	0,6 mm	0,6 mm
	M4-712	41 mm	18 mm	0,6 mm	0,8 mm

## Sternum Reciprocating System



With saw guide (M7-331), blade (M7-330) and key (M7-320)

123 x 95 mm / 510 g

## Sternum Saw Blade And Guide





## Oscillating Saw System



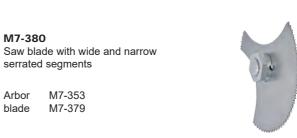


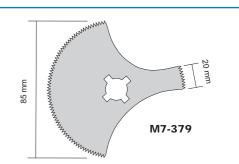






M7-352 Pair of wrenches, for changing saw blades







M7-351

Spray nozzle with clamp

M7-350

Oscillating saw system

(Without saw blade) With key M7-320 / M7-352

155 x 45 mm / 500 g



M7-353

Arbor, 39 mm long

use with M7-350







M7-354 Arbor, 58 mm long use with M7-350

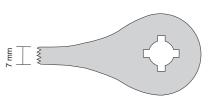
M7-320 Key only, for changing saw blades



Deep cutting saw blade, narrow

M7-353 Arbor M7-371 blade





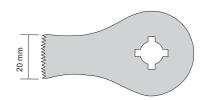
M7-371

#### M7-372

Deep cutting saw blade, wide

Arbor M7-353 M7-373 blade





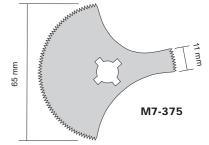
M7-373

#### M7-374

Saw blade with wide and narrow serrated segments

M7-353 Arbor M7-375 blade





#### M7-380

serrated segments

Arbor blade





M7-376 Double circular saw

Arbor M7-354 M7-377 + M7-378 blade







M7-377 Ø 45 mm

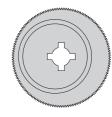
M7-378 Ø 45 mm

### M7-357

65 mm diameter circular saw blade with accentric disc to limit cutting depth from 4 to 11 mm

Arbor M7-354 Saw blade and M7-364 Limiting disc





M7-805 Ø 50 mm M7-806 Ø 65 mm M7-807 Ø 85 mm

M7-364 Ø 65 mm



## **Pneumatic Motor Components**

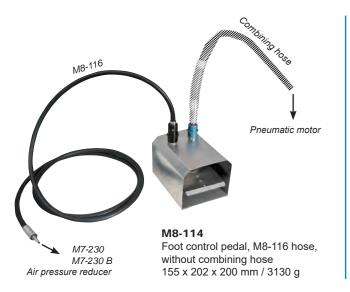
For safe use; the systems must be operated by using compressed dry air or nitrogen gas, the oxygen gas must never be used.





M7-230B Air pressure reducer, two way

Air pressure reducer, one way 185 x 243 mm / 2110 g



**M7-220** 3 m **M7-221** 5 m Standard combining hose 3 m (for M7-230 + M4-125)

Sterilization= 3 Atm 134° C



### M4-125

Pneumatic Surgical Motor

Speed= max 22.000 rpm Working Pressure= 6 Atm Sterilization= 3 Atm 143° C 122 x 35 mm / 400 g





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### M8-510

Spray oil, for motor and components before sterilization.

After cleaning of every use. Oil inside of all moving parts of device by spraying method and run the device for 2-3 seconds. Practice spraying inside of the device until the black used oil comes out and new oil clearly appears out of device as clear color and then put the device in store or process sterilization.



#### \* for detailed information, please check "EPS" product catalog..

## **Electro Motor Components**



Electro-surgical motor with forward and reverse gear to be used with flexible cables M4-137, M4-138, M6-060, M6-061, M6-065, M6-066 sound and light signal warning start at reverse running position. Foot control M6-054 (Foot control, flexible cable and hand piece have to be ordered separately)

15.000 rpm 340 x 286 x 106 mm / 6 kg



Foot pedal, with irrigation and F/R butons

Cable Length: 4 m 200 x 155 x 150 mm / 1.550 kg

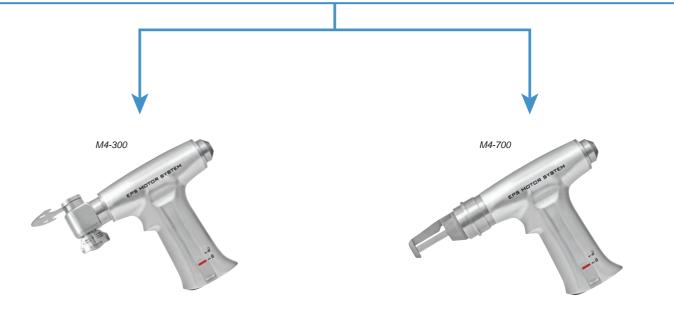


**M4-137** 160 cm M4-138 210 cm Transmission Cable

Flexible standard cable. 160 cm. Autoclave up to max. 3 bar, 143°c



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<sup>\*</sup> for detailed information, please check "EPS" product catalog...







Code	Length	Width	Thickness
M103-390	35 mm	25 mm	0.8 mm
M103-391	50 mm	40 mm	0.8 mm
M103-392	35 mm	75 mm	0.8 mm

# Sternum Reciprocating System

It is possible for you to run handpiece either with electrical motor, foot control pedal or flexible cable given below or according to your preference with those compenents of pneumatic system; motor, hose and pedal





Pneumatic hose

M4-715 Adult saw guide

Code	Length	Usable Length	Blade Thickness	Cutting Thickness
M4-709	61 mm	35 mm	0,6 mm	1 mm
M4-710	61 mm	35 mm	0,8 mm	1,2 mm
	M4-709	<b>M4-709</b> 61 mm	M4-709 61 mm 35 mm	Code Length Length Thickness  M4-709 61 mm 35 mm 0,6 mm



M4-716 Pediatric saw guide

Pediatric saw blade	Code	Length	Usable Length	Blade Thickness	Cutting Thickness
	M4-711	41 mm	18 mm	0,6 mm	0,6 mm
	M4-712	41 mm	18 mm	0,6 mm	0,8 mm



## Pneumatic Motor Components (Macro Compact)



EPS Motor System - 2 is used when the regulator at the output of pressure welding is directly connected to the handle of function tool with compressed air hose. EPS-2 is a pneumatic surgical motor system with trigger mechanism.

The system does not require an additional foot pedal as the speed control is performed with the speed control switch on the handle of the product In the design of EPS Motor System - 2, also a safety lock system has been developed on speed control trigger to prevent it from being pushed involuntarily.

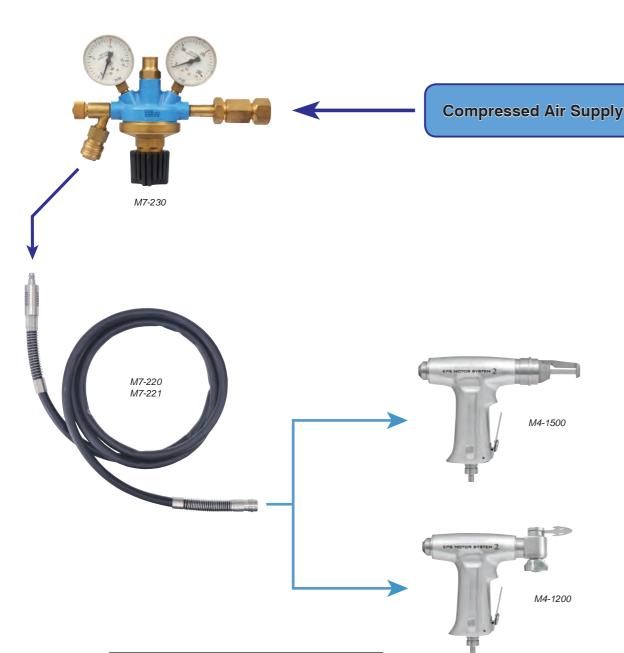
For safe use; the systems must be operated by using compressed dry air or nitrogen gas, the oxygen gas must never be used.



Air pressure reducer, two way



Air pressure reducer, one way 185 x 243 mm / 2110 g





M7-220 3 m M7-221 5 m Combining hoses for air supply (for M7-230 and M7-150)

Sterilization= 3 Atm 134° C



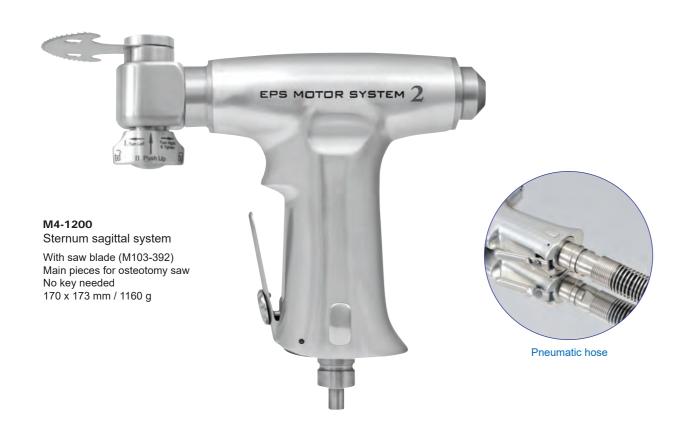
M8-510 Spray oil, for motor and components before sterilization.

After cleaning of every use. Oil inside of all moving parts of device by spraying method and run the device for 2-3 seconds. Practice spraying inside of the device until the black used oil comes out and new oil clearly appears out of device as clear color and then put the device in store or process sterilization.

www.aygun.com \* for detailed information, please check "Macro Compact" product catalog...



## Sternum Sagittal System (Pneumatic)



### Blades for M4-1200



Code	Length	Width	Thickness
11400 000	0.5	05	0.0
M103-390	35 mm	25 mm	0.8 mm
M103-391	50 mm	40 mm	0.8 mm
M103-392	35 mm	75 mm	0.8 mm

## Sternum Reciprocating System (Pneumatic)





M4-715 Adult saw guide

Adult saw blade	Code	Length	Usable Length	Blade Thickness	Cutting Thickness
	M4-709	61 mm	35 mm	0,6 mm	1 mm
	M4-710	61 mm	35 mm	0,8 mm	1,2 mm



M4-716 Pediatric saw guide

Pediatric saw blade	Code	Length	Usable Length	Blade Thickness	Cutting Thickness
	M4-711	41 mm	18 mm	0,6 mm	0,6 mm
	M4-712	41 mm	18 mm	0,6 mm	0,8 mm



## Container Set For Sterilization

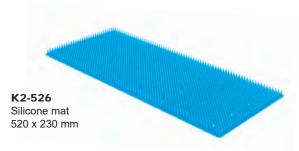


K6-107

Container, non perforated 600 x 272 x 138 mm





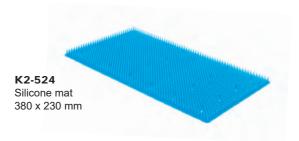




Container, non perforated 475 x 272 x 138 mm







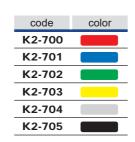


Class 6 Emulating Indicator Card 1 Pack (250 pcs)





Identification labels (aluminium) Coloured identification labels Engraved to your specifications Maximum 16 letters







K2-673

Labels (paper) 100 pcs. With indicator. For small size and special



K2-672 Labels (paper) 100 pcs. With indicator.

For full and half size containers





K1-900 Modular Auto Lock Mechanism (2 Pcs)





**K2-660** red Security seal 100 pcs made of plastic





For more information and alternative please see our Sterile Container System catalog. From our website www.aygun.com

# **STERNAL SAW 3B**

Battery + Electro + Pneumatic Surgical Motor



2016

Meeting Point For Surgery™



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