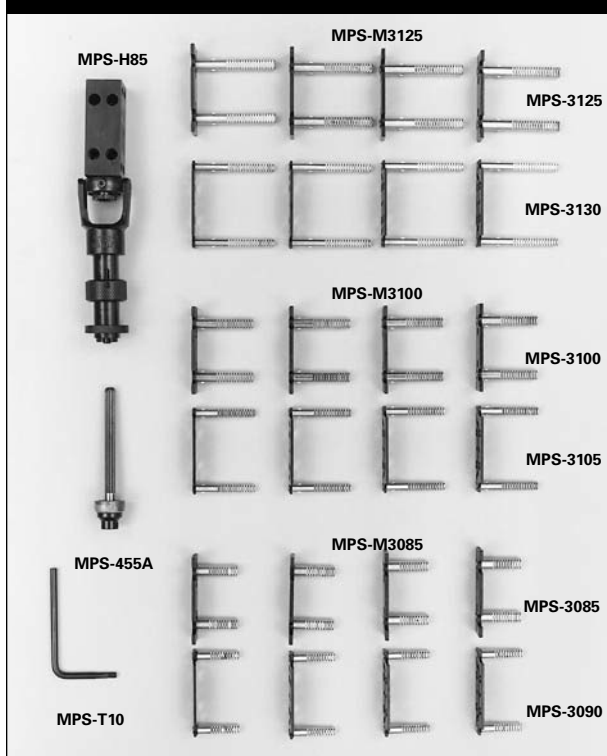


MPS Modular Tool System

HT/HL/STH - Type Systems

Diameter Range:
85 mm — 177 mm (3.4"-7.0")

MPS-H85 Hone Head Module



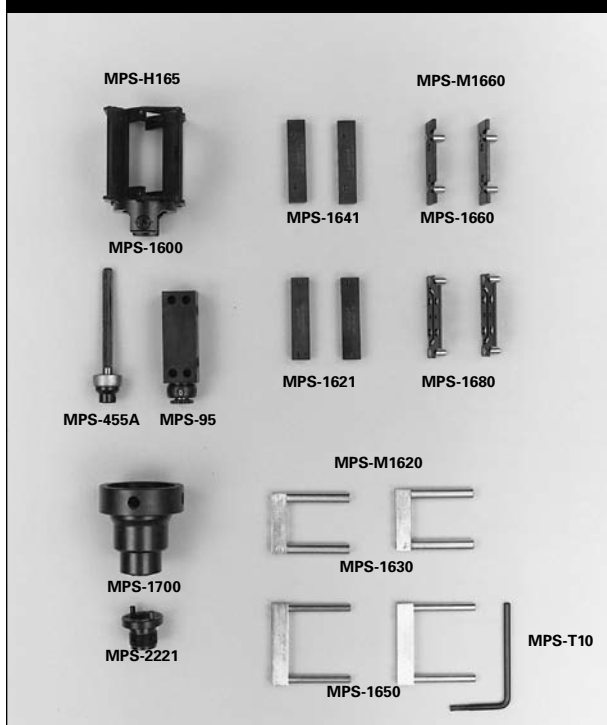
Part Number	Description
MPS-H85	Hone Head Assembly includes:
MPS-455A	Pinion Adjustment Assembly
MPS-57A	Body Gear (Not shown)
MPS-79A	Pins (Not shown)
MPS-170A	Inner Feed Assembly (Not shown)
MPS-M3085	Master Stoneholder Set (2 per set) Diameter Range: 86,4-111,8 mm (3.4"-4.4") includes:
MPS-3085	Stone Master Holder
MPS-3090	Guide Master Holder
MPS-M3100	Master Stoneholder Set (2 per set) Diameter Range: 101,6-139,7 mm (4.0"-5.5") includes:
MPS-3100	Stone Master Holder
MPS-3105	Guide Master Holder
MPS-M3125	Master Stoneholder Set (2 per set) Diameter Range: 127-177,8 mm (5.0"-7.0") includes:
MPS-3125	Stone Master Holder
MPS-3130	Guide Master Holder
MPS-T10	Swaging Tool

Order stones from the H70 Stone Selection Guide found on page 119.

Double length Hone Heads available as a special. Contact Customer Service.

Diameter Range:
165 mm — 216 mm (6.5"-8.5")

MPS-H165 Hone Head Module



Part Number	Description
MPS-H165	Hone Head Assembly includes:
MPS-1700	Yoke Assembly
MPS-1600	Cage Assembly
MPS-95	Hone Body Assembly includes:
MPS-57A	Body Gear (Not shown)
MPS-79A	Pin (Not shown)
MPS-2221	Output Drive Adapter
MPS-455A	Pinion Adjustment Assembly
MPS-M1620	Stone and Guide Adapter Set includes:
MPS-1630	Stone Extension Support (2 per set)
MPS-1650	Guide Extension Support (2 per set)
MPS-1621	Stone Adapter Block (2 per set)
MPS-1641	Guide Adapter Block (2 per set)
MPS-M1660	Stone and Guide Adapter Set includes:
MPS-1660	Stone Master Holder Assembly (2 per set)
MPS-1680	Guide Master Holder Assembly (2 per set)
MPS-T10	Swaging Tool

Order stones from the H70 Stone Selection Guide found on page 119.

Double length Hone Heads available as a special. Contact Customer Service.

MPS Modular Tool System

HT/HL/STH - Type Systems

Diameter Range:
203 mm — 299 mm (8"-11.5")

MPS-H200 Hone Head Module*

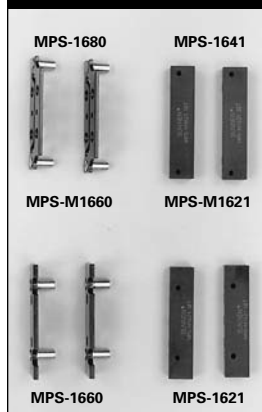


Part Number	Description
MPS-H200	Hone Head Assembly includes:
MPS-1700A	Yoke Assembly
MPS-1800A	Cage Assembly
MPS-95A	Hone Body Assembly includes:
MPS-57A	Body Gear (Not shown)
MPS-79A	Pin (Not shown)
MPS-2221	Output Drive Adapter
MPS-455A	Pinion Adjustment Assembly
MPS-M1820	Stone and Guide Extension Set includes:
MPS-1850	Guide Extension Support Assembly (2 per set)
MPS-1830	Stone Extension Support Assembly (2 per set)
MPS-T10	Swaging Tool

Order stones from the H70 Stone Selection Guide found on page 119.

* Order single length or double length Master Holder and Adapter Block Sets for MPS-H200 Hone Head separately.
For larger diameter MPS style hone heads, request product bulletin P-39071.

MPS-M1870 Single Length Stone and Guide Master Holder and Adapter Block Set



Part Number	Description
MPS-M1621	Single Length Adapter Block Set (1 per set) includes:
MPS-1641	Guide Adapter Block (2 per set)
MPS-1621	Stone Adapter Block (2 per set)
MPS-M1660	Stone and Guide Master Holder Set (1 per set) includes:
MPS-1680	Guide Master Holder Set (2 per set)
MPS-1660	Stone Master Holder Set (2 per set)

JS9X Cage Assembly and Stone and Guide Extension Set for the MPS System

Diameter Range 279,4 m-381,0 mm (11.0"-15.0")
Increases the diameter range of the MPS-H165 and MPS-H200 hone head modules to 279,4 mm-381,0 mm (11"-15"). Customers who currently have an MPS-H165 or MPS-H200 hone head need to order the following:

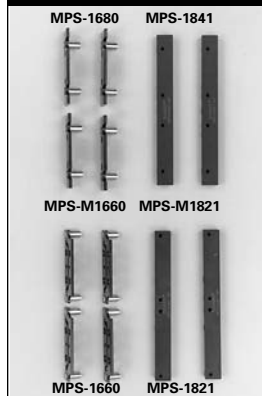
JS9X-1	Cage Assembly
JS9X-45	Stone and Guide Extension Set

For customers who do not have an MPS-H165 or MPS-H200 the following items need to be ordered for a complete unit.

MPS-1700A	Yoke Assembly
MPS-95A	Hone Body Assembly
MPS-455A	Pinion Adjustment Assembly
MPS-M1870	Single Length Stone and Guide Master Holder and Adapter Block Set or
MPS-M1880	Double Length Stone and Guide Master Holder and Adapter Block Set

Order stones from H70 Stone Selection Guide found on page 160.

MPS-M1880 Double Length Stone and Guide Master Holder and Adapter Block Set



Part Number	Description
MPS-M1821	Double Length Adapter Block Set (1 per set) includes:
MPS-1841	Guide Adapter Block (2 per set)
MPS-1821	Stone Adapter Block (2 per set)
MPS-M1660	Stone and Guide Master Holder Set (2 per set) includes:
MPS-1680	Guide Master Holder Set (4 per set)
MPS-1660	Stone Master Holder Set (4 per set)

MPS Modular Tool System

NH6X Cage Assembly and Stone and Guide Extension Set for the MPS System

Diameter Range 381,0mm-889,0mm (15"-35")

Increases the diameter range of the MPS-H165 and MPS-H200 hone head modules to 381,0mm-889,0mm (15"-35"). Customers who currently have a MPS-H165 or MPS-H200 hone head need to order the following:

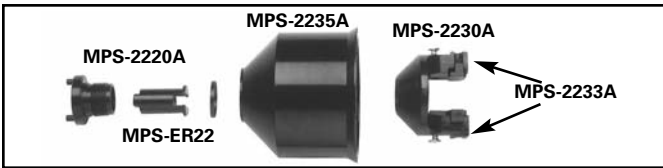
Diameter Range:	Cage	Stone and Guide Extensions
381mm-508mm(15"-20")	NH6X-1520-1	NH6X-1520-45
508mm-635mm(20"-25")	NH6X-2025-1	NH6X-2025-45
635mm-762mm(25"-30")	NH6X-2530-1	NH6X-2530-45
762mm-889mm(30"-35")	NH6X-3035-1	NH6X-3035-45

For customers who do not have an MPS-H165 or MPS-H200 the following items need to be ordered for a complete unit.

- 1.) 381mm-508mm (15"-20") NH6X-1520
508mm-635mm (20"-25") NH6X-2025
635mm-762mm (25"-30") NH6X-2530
762mm-889mm (30"-35") NH6X-3035
- 2.) MPS-1700A Yoke Assembly
- 3.) PH-633 Screws (4 Req.)
PG-587 Washers (4 Req.)
MPS-1608 Spacers (2 Req.)
- 4.) Stone and guide master holder and adapter block sets must be ordered separately. MPS-M1870 Single Length or MPS M1880 Double Length)

Adapter Sets

For use with Drive and Feed Extensions

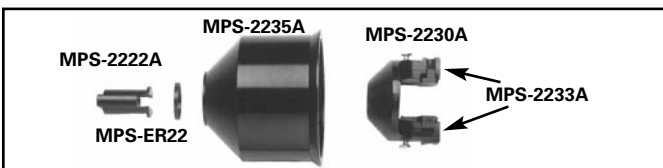


MPS-2200 Adapter Set

For use with MPS-H70 and MPS-H85 Hone Head Modules and MPS-1000JU5X Mandrel Driver.

Replacement Parts for Adapter Set

MPS-2220A	Output Flange
MPS-2230A	Input Yoke
MPS-2235A	Universal Cover
MPS-2232A	Trip Dogs (Package of 2) (Not shown)
MPS-2233A	Pins (Package of 2)
MPS-ER22	Disassembly Rings (Package of 6)



MPS-2201 Adapter Set

For use with MPS-H50, MPS-H165 and MPS-H200 Hone Head Modules.

Replacement Parts for Adapter Set

MPS-2230A	Input Yoke
MPS-2235A	Universal Cover
MPS-2222A	Output Feed Adapter
MPS-2232A	Trip Dogs (Package of 2) (Not shown)
MPS-2233A	Pins (Package of 2)
MPS-ER22	Disassembly Rings (Package of 6)

Drive and Feed Extensions for H50, H70, H85, H165 and H200 Hone Head Modules

Select proper Drive and Feed Extension(s) for your application from the following:

- MPS-E2015†** Length 150 mm (5.9")
For honing lengths up to 406 mm (16")
Shipping Weight: 1,1 kg (2.5 lbs.)
- MPS-E2040†** Length 399 mm (15.7")
For honing lengths up to 660 mm (26")
Shipping Weight: 1,6 kg (3.5 lbs.)
- MPS-E2100†** Length 998 mm (39.3")
For honing lengths up to 1244 mm (49")
Shipping Weight: 3,0 kg (6.5 lbs.)
- MPS-E2160†** Length 1600 mm (63")
For honing lengths up to 1844 mm (73")
Shipping Weight: 4,0 kg (8.8 lbs.)
- MPS-E2175†** Length 1750 mm (68.9")
For honing lengths up to 1981 mm (78")
Shipping Weight: 4,5 kg (10 lbs.)

MPS Drive Tubes can easily be connected when honing lengths longer than 1981 mm (78").

† Each Drive & Feed Extension comes with two Disassembly Rings. Should additional rings be required order the following Part Number: **MPS-ER22** Disassembly Rings (package of 6).



Drive Shafts can be bolted together by ordering one each of the following per Drive Shaft ordered.

- MPS-2211 Input Drive Adapter
- MPS-2212 Input Feed Adapter
- MPS-2221 Output Drive Adapter
- MPS-2222 Output Feed Adapter

GNR Drive Shaft Adapters for "Heavy Duty" Applications



These adapters allow GNR Drive Shaft Extensions to be used in place of MPS Drive Shaft Extensions in diameter 88,9 mm (3.50") and larger. The GNR Drive Shaft Extensions are stronger than MPS Drive Shaft Extensions and should be used in more demanding applications.

When ordering adapters for standard MPS tooling above 88,9 mm (3.50") order the following two items:

MPS-1720A Input Adapter and **MPS-1740A** Output Adapter

(Order 1-MPS-2211A Input Drive Adapter and 1-MPS-2212A Input Feed Adapter when Drive Shaft Adapters are to be used with MPS-H165 or MPS-H200 hone heads.)

When ordering adapters for GNR drive shafts and standard MPS tooling above 88.9 (3.50") Order the following items:

- 1-MPS-1720A Input Adapter (picture required)
 - 1-MPS-1740A Output Adapter (picture required)
- (This tooling combination is recommended for rough, out-of-round holes, large diameters, or heavy duty applications.)

When quick change-over of hone heads is desired order:

- 1-MPS-2211A Input Adapter
- 1-MPS-2212A Feed Adapter

These components allow for the drive shaft and hone head to be easily unbolted from each other. (Not recommended for rough, out-of-round holes, large diameters, or heavy duty applications.)

MPS Modular Tool System

For HT/HL/STH - Type Systems

Stone and Guide Sets

H50 Stone Sets for use with MPS-H50 Hone Head

Each set consists of two stone assemblies.

Stones in parentheses available 2 weeks after receipt of order.

		Grit Size							
		70	80	150	220	280	400	500	600
Hard-----Soft	Abrasive Type Aluminum Oxide Stones (A)			H50-A43 H50-A44N H50-A45 H50-A47 H50-A45N H50-A49		H50-A65 H50-A67			
		H50-A25							
Hard-----Soft	Abrasive Type Silicon Carbide Stones (J,C)								
			H50-J45		H50-J65 H50-J67	H50-J85 H50-J87	H50-J95 H50-J97	H50-C05*	

H70 Stone and Guide Set for use with MPS-H70, MPS-H85, MPS-H165 and MPS-H200 Hone Heads

Each set consists of two stone assemblies and two guides.

Contact Customer Service for price and availability.

		Grit Size							
		70	80	150	220	280	400	500	600
Hard-----Soft	Abrasive Type Aluminum Oxide Stones (A)		H70-A23	H70-A43		H70-A63			
			H70-A25N	H70-A45 H70-A45N		H70-A65			
Hard-----Soft	Abrasive Type Silicon Carbide Stones (J,C)		H70-A27	H70-A47 H70-A49		H70-A67			
		H70-J15		H70-J43 H70-J45 H70-J47	H70-J57	H70-J63 H70-J65 H70-J67	H70-J85 H70-J87	H70-J95 H70-J97	H70-C05

Miscellaneous Accessories & Tooling

MPS-1000-JU5X Mandrel Driver

For honing bores with interruptions, cross holes, undercuts which standard MPS tools will not bridge. MPS-1000-JU5X adapts to the MPS drive and feed extensions and can be used with standard P28/R28 tooling for the diameter range of 66 mm – 144 mm (2-5/16"-6"), where the mandrel driver has to enter the part. (Smaller mandrels may be used if the mandrel driver does not have to enter the part.)

Order mandrels and stones from the P28/R28 section on pages 58-59.

MPS-1000-JU5X available 4 weeks after receipt of order.



H50 and H70 Metal Bond Superabrasive Stone Sets

H50 and H70 Metal Bond Superabrasive Stone Sets are available for use on MPS-H50, MPS-H70, MPS-H85, MPS-H165, MPS-H200 and MPS-H200 with JS9X Extension Sets.

The following stone sets are available in stock for immediate shipment.

MPS-H50 Hone Heads

H50-NM37	100 Grit CBN
H50-NM55	220 Grit CBN
H50-NM57	220 Grit CBN

MPS-H70, MPS-H85, MPS-H165, MPS-H200 and JS9X Extension Sets

H70-NM17	70 Grit CBN
H70-NM35	100 Grit CBN
H70-NM37	100 Grit CBN
H70-NM39	100 Grit CBN
H70-NM55	220 Grit CBN
H70-NM57	220 Grit CBN
H70-NM85	400 Grit CBN

H70-DM37	100 Grit Diamond
H70-DM57	220 Grit Diamond
H70-DM85	400 Grit Diamond

Abrasive types, grit sizes, and hardnesses available:

		Grit Size						
		70	100	150	220	400	600	1200
H-S	Abrasive Type CBN	NM15*	NM35	NM47*	NM55	NM85	NM05*	NM005*
		NM17	NM37		NM57		NM07*	
H-S	Abrasive Type Diamond	DM17*	DM35*	DM45*	DM55*	DM85*	DM05*	DM005*
			DM37	DM47*	DM57*	DM87*	DM07*	
			DM39*	DM49				

* Special Order Item - Contact Customer Service for Availability.

SC-B-HL Heavy-Duty Bronze Guide Shoe

For use with H70 Diamond or CBN Honing Stones when standard guide shoes wear excessively. Also used for special finishing applications. (2 required per stone set used.)

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MPS Modular Tool System

MPS Portahones and Drive Extensions

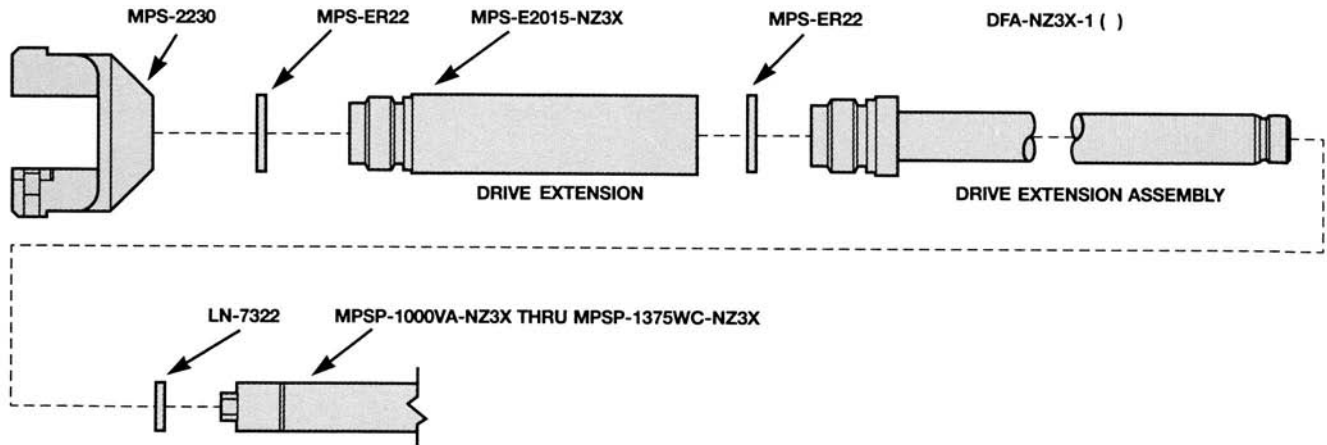
Diameter Range:
25,15 mm — 66,68 mm (.990"-2.625")

Portahones are to be used in applications below the MPS-H50 Hone Head diameter range or in situations where longer stone length is required to bridge ports or other interruptions that cannot be bridged with H50 length stones. (For applications where longer stone length is required in diameters larger than 66,68 mm [2.625"] use MPS-1000-JU5X with standard P28 mandrels.) All Portahones use standard P28 or R28 stones and guide shoes. (See pages 58-59 for Stone and Guide Shoe Selection.)

This style of Portahone is specifically designed for use in MPS applications. They incorporate all the features of standard portahones, but are used with drive tube extensions that are more suited for "power" honing.
Available 4-6 weeks after receipt of order.

For special application hone heads down to 1/2", contact your Sunnen sales representative for additional information.

Diameter Range: 25,15 mm – 38,1 mm (.990"-1.500")



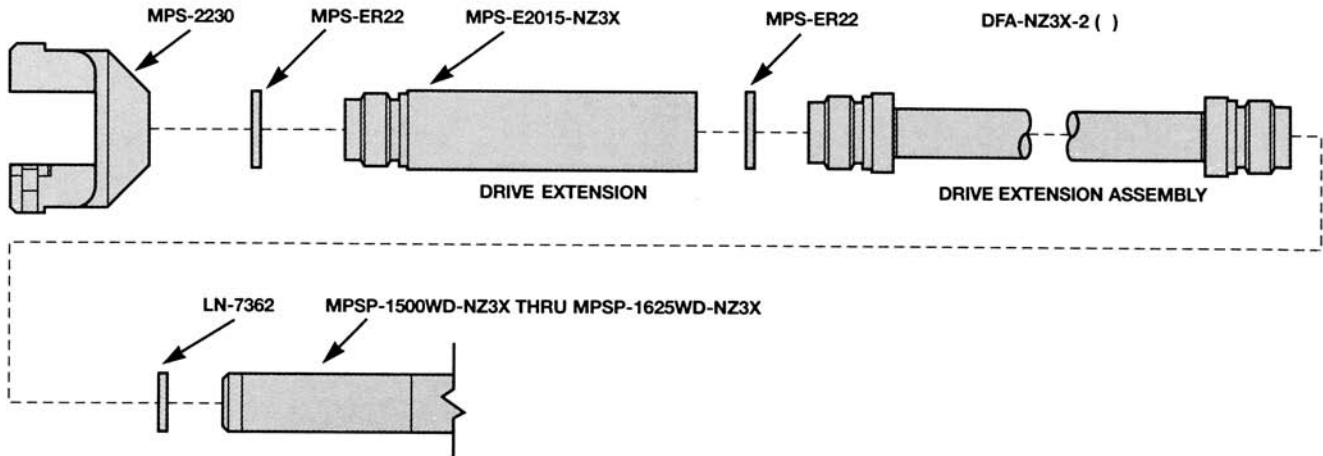
Open Hole: Order 1, 2, 4, 5, 6 For Complete MPS Honing Unit
Blind Hole: Order 1, 3, 4, 5, 6 For Complete MPS Honing Unit

1 Mandrel Number	Diameter Range		2-Stone	3-Stone	4-Stone	5-Stone*
	mm	in				
1	25,15-26,97	.990-1.062	2-MPSP-1000VA-NZ3X	3-MPSP-1000VA-NZ3X	4-MPSP-1000VA-NZ3X	5-MPSP-1000VA-NZ3X
	26,72-28,58	1.052-1.125	2-MPSP-1062VA-NZ3X	3-MPSP-1062VA-NZ3X	4-MPSP-1062VA-NZ3X	5-MPSP-1062VA-NZ3X
	28,32-30,15	1.115-1.187	2-MPSP-1125VB-NZ3X	3-MPSP-1125VB-NZ3X	4-MPSP-1125VB-NZ3X	5-MPSP-1125VB-NZ3X
	29,90-31,75	1.177-1.250	2-MPSP-1187VB-NZ3X	3-MPSP-1187VB-NZ3X	4-MPSP-1187VB-NZ3X	5-MPSP-1187VB-NZ3X
	31,24-34,93	1.230-1.375	2-MPSP-1250WB-NZ3X	3-MPSP-1250WB-NZ3X	4-MPSP-1250WB-NZ3X	5-MPSP-1250WB-NZ3X
	34,40-38,10	1.355-1.500	2-MPSP-1375WC-NZ3X	3-MPSP-1375WC-NZ3X	4-MPSP-1375WC-NZ3X	5-MPSP-1375WC-NZ3X
2 Open Hole	Mandrel Reach Length: Indicates longest bore length that can be honed without extensions.					
	—		236,5 mm (9-5/16")	319,8 mm (12-19/32")	403,2 mm (15-7/8")	486,6 mm (19-5/32")
3 Blind Hole	—		261,9 mm (10-5/16")	345,2 mm (13-19/32")	428,6 mm (16-7/8")	512 mm (206-5/32")
4 Portahone Adapter Set	MPS-2230A	Input Yoke				
	MPS-2235A	Universal Cover (Not Shown) Order separately.				
5 Drive Extension	MPS-E2015 motor.	150 mm (5.9") supplied with 2 MPS-ER22 Disassembly Rings. Required for hookup to MPS drive motor.				
6 Drive Extension Assembly	DFA-NZ3X-1 (3)	914 mm (3 ft.) length				
	DFA-NZ3X-1 (6)	1829 mm (6 ft.) length				
	DFA-NZ3X-1 (9)	2743 mm (9 ft.) length				
	DFA-NZ3X-1 (12)	3657 mm (12 ft.) length				

* Longer than 5-Stone Length Mandrels are available on special request. Contact Customer Service.
NOTE: When ordering, specify for open or blind hole honing.

MPS Modular Tool System

I.D. Range:
37,6 mm – 44,45 mm
1.480" – 1.750"



Open Hole: Order 1, 2, 4, 5, 6 For Complete MPS Honing Unit
Blind Hole: Order 1, 3, 4, 5, 6 For Complete MPS Honing Unit

1 Mandrel Number	Diameter Range		2-Stone	3-Stone	4-Stone	5-Stone*
	mm	in				
	37,6-41,3	1.480-1.625	2-MPSP-1500WD-NZ3X	3-MPSP-1500WD-NZ3X	4-MPSP-1500WD-NZ3X	5-MPSP-1500WD-NZ3X
	40,8-44,5	1.605-1.750	2-MPSP-1625WD-NZ3X	3-MPSP-1625WD-NZ3X	4-MPSP-1625WD-NZ3X	5-MPSP-1625WD-NZ3X
2 Open Hole	Mandrel Reach Length: Indicates longest bore length that can be honed without extensions.					
	—		236,5 mm (9-5/16")	319,8 mm (12-19/32")	403,2 mm (15-7/8")	486,6 mm (19-5/32")
3 Blind Hole	—		261,9 mm (10-5/16")	345,2 mm (13-19/32")	428,6 mm (16-7/8")	512 mm (206-5/32")
4 Portahone Adapter Set	MPS-2230A MPS-2235A	Input Yoke Universal Cover (Not Shown) Order separately.				
5 Drive Extensions	MPS-E2015	150 mm (5.9") supplied with 2 MPS-ER22 Disassembly Rings. Required for hookup to MPS drive motor.				
6 Drive Extensions Assembly	DFA-NZ3X-2 (3) DFA-NZ3X-2 (6) DFA-NZ3X-2 (9) DFA-NZ3X-2 (12)	914 mm (3 ft.) length 1829 mm (6 ft.) length 2743 mm (9 ft.) length 3657 mm (12 ft.) length				

* Longer than 5-Stone Length Mandrels are available on special request. Contact Customer Service.

NOTE: When ordering, specify for open or blind hole honing.

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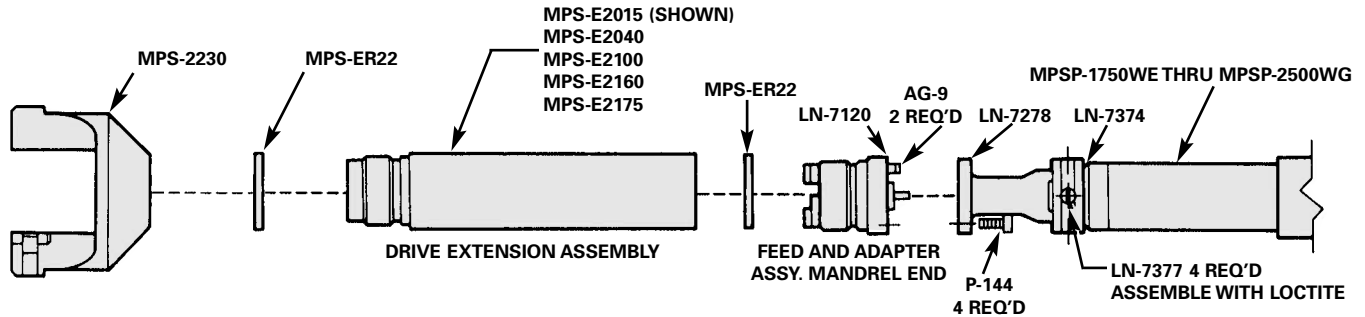
MPS Modular Tool System

MPS Portahones and Drive Extensions

Diameter Range:

43,94mm – 66,68mm

1.730" – 2.625"



Open Hole: Order 1, 2, 4, 5, 6 For Complete MPS Honing Unit
Blind Hole: Order 1, 3, 4, 5, 6 For Complete MPS Honing Unit

1 Mandrel Number	Diameter Range		2-Stone	3-Stone	4-Stone	5-Stone*
	mm	in				
	43,94-47,62	1.730-1.875	2-MPSP-1750WE	3-MPSP-1750WE	4-MPSP-1750WE	5-MPSP-1750WE
	47,12-50,80	1.855-2.000	2-MPSP-1875WE	3-MPSP-1875WE	4-MPSP-1875WE	5-MPSP-1875WE
	50,29-53,97	1.980-2.125	2-MPSP-2000WF	3-MPSP-2000WF	4-MPSP-2000WF	5-MPSP-2000WF
	53,47-57,15	2.105-2.250	2-MPSP-2125WF	3-MPSP-2125WF	4-MPSP-2125WF	5-MPSP-2125WF
	56,64-60,32	2.230-2.375	2-MPSP-2250WF	3-MPSP-2250WF	4-MPSP-2250WF	5-MPSP-2250WF
	59,82-63,50	2.355-2.500	2-MPSP-2375WG	3-MPSP-2375WG	4-MPSP-2375WG	5-MPSP-2375WG
	62,99-66,67	2.480-2.625	2-MPSP-2500WG	3-MPSP-2500WG	4-MPSP-2500WG	5-MPSP-2500WG
2 Open Hole	Mandrel Reach Length: Indicates longest bore length that can be honed without extensions.					
	—		236,5 mm (9-5/16")	319,8 mm (12-19/32")	403,2 mm (15-7/8")	486,6 mm (19-5/32")
3 Blind Hole	—		261,9 mm (10-5/16")	345,2 mm (13-19/32")	428,6 mm (16-7/8")	512 mm (20-5/32")
4 Portahone Adapter Set	MPS-2230A	Input Yoke	MPS-2235A Universal Cover (Not shown) Order separately.			
5 Drive Extensions	Supplied with 2 MPS-ER22 Disassembly Rings. Required for hookup to MPS drive motor.					
	MPS-E2015	150 mm (5.9")				
	MPS-E2040	399 mm (15.7")				
	MPS-E2100	998 mm (39.3")				
	MPS-E2160	1600 mm (63.0")				
	MPS-E2175	1750 mm (68.9")				
6 Feed and Adapter Assembly (Mandrel End)	LN-7120					
	Note: Will also adapt to SNR & JNR Tooling					

*Longer than 5-Stone Length Mandrels are available on special request. Contact Customer Service.

MPS Modular Tool System

Repair Parts List for Portahones

[]-MPSP-1000VANZ3X thru []-MPSP-1375WCNZ3X

[]-MPSP-1000VANZ3X	[] J-MPSP-1	Replacement Wedget
[]-MPSP-1062VANZ3X	[] J-MPSP-2	Replacement Wedget
[]-MPSP-1125VBNZ3X	[] J-MPSP-3	Replacement Wedget
[]-MPSP-1187VBNZ3X	[] J-MPSP-4	Replacement Wedget
[]-MPSP-1250WBNZ3X	[] J-MPSP-4	Replacement Wedget
[]-MPSP-1375WCNZ3X	[] J-MPSP-5	Replacement Wedget
	DFA-NZ3X-FN1	Feed Nut
	PBR-65NZ3X	Thrust Bearing
	LN-7311	Feed Screw

†Note: Specify Blind or Open Hole.

These Portahones have precision fit wedges. It is recommended that the entire unit be returned to the factory for wedge replacement.

[] is the space left for the number of stones.

[]-MPSP-1500WDNZ3X thru []-MPSP-1625WDNZ3X

[]-MPSP-1500WDNZ3X	[] J-P28-MPSP	Replacement Wedget
[]-MPSP-1625WDNZ3X	[] J-P28-MPSP	Replacement Wedget
	DFA-NZ3X-FN2	Feed Nut
	PBR-66A	Thrust Bearing
	LN-7361	Feed Screw
	LN-7366	Wedge Block
	LN-7262A	Ring

†Note: Specify Blind or Open Hole.

These Portahones have precision fit wedges. It is recommended that the entire unit be returned to the factory for wedge replacement.

[] is the space left for the number of stones.

[]-MPSP-1750WE thru []-MPSP-2500WG

[]-MPSP-1750WE	[] J-P28-MPSP	Replacement Wedge*
[]-MPSP-1875WE	[] PH-P28-MPSP	Replacement Wedge*
[]-MPSP-2000WF	[] PH-P28-MPSP	Replacement Wedge*
[]-MPSP-2125WF	[] PH-P28-MPSP	Replacement Wedge*
[]-MPSP-2250WF	[] PH-P28-MPSP	Replacement Wedge*
[]-MPSP-2375WG	[] PH-P28-MPSP	Replacement Wedge*
[]-MPSP-2500WG	[] PH-P28-MPSP	Replacement Wedge*
	LN-7358	Feed Nut
	PBR-66A	Thrust Bearing
	LN-7357	Feed Nut End
	LN-7361	Feed Screw
	LN-7366	Wedge Block
	LN-7278A	Fork
	LN-7374	Ring
	LN-7377	Screws (4 Required)

*For blind hole application, change "P28" to "R28."

[] is the space left for the number of stones.

Repair Parts List for Obsolete Style Portahones

[G]-MPSP-1000VA thru [G]-MPSP-1375WC

[G]-MPSP-1000VA	[] J-MPSP-1	Replacement Wedget
[G]-MPSP-1062VA	[] J-MPSP-2	Replacement Wedget
[G]-MPSP-1125VB	[] J-MPSP-3	Replacement Wedget
[G]-MPSP-1187VB	[] J-MPSP-4	Replacement Wedget
[G]-MPSP-1250WB	[] J-MPSP-4	Replacement Wedget
[G]-MPSP-1375WC	[] J-MPSP-5	Replacement Wedget
	LN-7308	Feed Nut
	PBR-65A	Thrust Bearing
	LN-7307	Feed Nut End
	LN-7311	Feed Screw

†Note: Specify Blind or Open Hole.

These Portahones have precision fit wedges. It is recommended that the entire unit be returned to the factory for wedge replacement.

[] is the space left for the number of stones.

[G]-MPSP-1500WD thru [G]-MPSP-1625WD

[G]-MPSP-1500WD	[] J-P28-MPSP	Replacement Wedget
[G]-MPSP-1625WD	[] J-P28-MPSP	Replacement Wedget
	LN-7358	Feed Nut
	PBR-66A	Thrust Bearing
	LN-7357	Feed Nut End
	LN-7361	Feed Screw
	LN-7366	Wedge Block
	LN-7277A	U-Joint Fork
	LN-7262A	Ring
	LN-7279A	Screws

†Note: Specify Blind or Open Hole.

These Portahones have precision fit wedges. It is recommended that the entire unit be returned to the factory for wedge replacement.

[] is the space left for the number of stones.

[G]-MPSP-1750WE thru [H]-MPSP-2500WG

[G]-MPSP-1750WE	[] J-P28-MPSP	Replacement Wedge*
[H]-MPSP-1875WE	[] PH-P28-MPSP	Replacement Wedge*
[H]-MPSP-2000WF	[] PH-P28-MPSP	Replacement Wedge*
[H]-MPSP-2125WF	[] PH-P28-MPSP	Replacement Wedge*
[H]-MPSP-2250WF	[] PH-P28-MPSP	Replacement Wedge*
[H]-MPSP-2375WG	[] PH-P28-MPSP	Replacement Wedge*
[H]-MPSP-2500WG	[] PH-P28-MPSP	Replacement Wedge*
	LN-7358	Feed Nut
	PBR-66A	Thrust Bearing
	LN-7357	Feed Nut End
	LN-7361	Feed Screw
	LN-7366	Wedge Block
	LN-7278A	Fork
	LN-7374	Ring
	LN-7377	Screws (4 Required)

*For blind hole application, change "P28" to "R28."

[] is the space left for the number of stones.

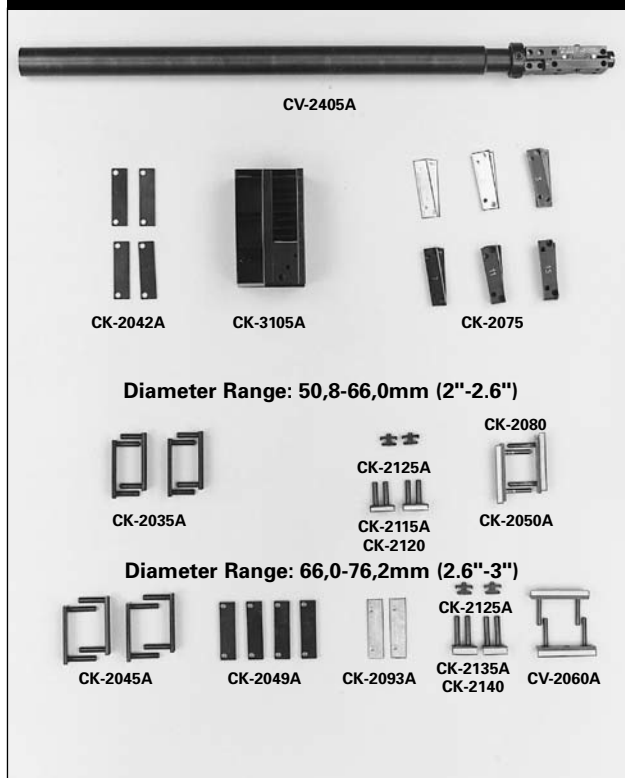
CV-2400 Midget Hone Tooling Parts and Accessories



Diameter Range:
50,8 mm – 76,2 mm
2.0" – 3.0"

For Use In: CK10, CK21, CV616, SV10, SV200, SV300 Machines

CV-2400 Midget Hone Unit



Part Number	Supplied with	Description
CV-2405A	1	Midget Head and Tube Assembly
CK-2035A	2 sets	Master Stoneholder Set (2 per set) 50,8-66,04 mm (2.0"-2.6") dia.
CK-2045A	2 sets	Master Stoneholder Set (2 per set) 66,04-76,2 mm (2.6"-3.0") dia.
CK-2042A	4	Stone Shim, 3,17 mm (1/8") (1 per package)
CK-2049A	2 sets	Stone Shim Set, 7,14 mm (9/32") (2 per set)
CK-2050A	2	Main and Centering Guides (Includes CK-2080)
CK-2080	—	Guide Shoe and Screw Set (2 shoes per set) (Included with CK-2050A)
CV-2060A	2	Main and Centering Guides (1 per package) (Includes CV-2070)
CV-2070	—	Guide Shoe, with Screws
CK-2093A	2	Guide Shim 4,75 mm (3/16") (1 per package)
CK-2115A	1 set	Alignment Guide Set (2 per set) 50,8-66,0 mm (2.0"-2.6") dia. (Includes CK-2120)
CK-2120	—	Alignment Guide Shoe and Screw Set (2 shoes per set)
CK-2135A	1 set	Alignment Guide Set (2 per set) 66,0-76,2 mm (2.6"-3.0") dia. (Includes CK-2140)
CK-2140	—	Alignment Guide Shoe and Screw Set (2 shoes per set)
CK-2125A	4	Clamp (1 per package)
CK-2075	1 set	Guide Shim Set, consisting of:
CK-2071	8 ea.	Guide Shim #1
CK-2072	8 ea.	Guide Shim #2
CK-2073	8 ea.	Guide Shim #3
CK-2074	4 ea.	Guide Shim #7
CK-2076	4 ea.	Guide Shim #11
CK-2077	4 ea.	Guide Shim #15
CK-3105A	1	Shim Rack

Superabrasive Stoneholders

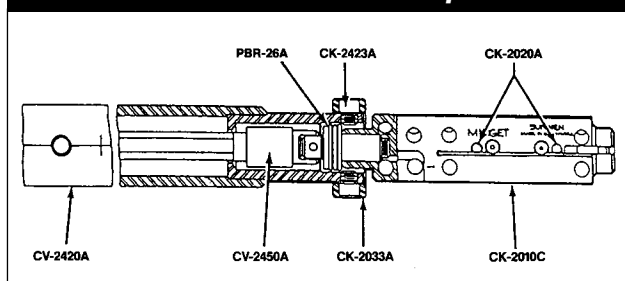
For CV-2400 Midget Hone Head 61-76,2 mm (2.4"-3.0"). Not available for diameters less than 61 mm (2.4").

Each set consists of two Master Stoneholders that use P20 diamond or CBN stones (select stones from the P20 superabrasive selection chart on pages 48 - 53).

CK-2035A-LF4X 61-66 mm (2.4"-2.6")

CK-2045A-LF4X 66-76,2 mm (2.6"-3.0") 2 stones required per set. Contact Customer Service for price and availability.

Repair Parts for CV-2400 Midget Hone Head



CV-2405A Midget Hone Head

Part Number	Qty per Machine	Description
CV-2405A	1	Midget Head and Tube Assembly
CV-2420A	1	Drive Tube-Lower Half includes
CK-2033A*	1	Universal Ring with Four Screws
CK-2423A	2	Screws (5/16-24x3/16") Socket Head
PHS-698A	2	Screws (5/16-24x3/8") Socket Head (Not Shown)
CV-2450A	1	Lower Feed Rod & "U" Joint Assembly with
PBR-26A	1	Thrust Bearing (Neiman #FT-015)
CK-2010C	1	Midget Hone Head Assembly with
CK-2015A	1	Wedge Assembly (Not Shown)
CK-2020A	1	Push Pin Set (4 Pins)

*Not recommended to be purchased separately.