

# HBS Accessories and Supplies

## HBS-1081 Level



The HBS-1081 level incorporates a ground and graduated main vial with an additional cross test vial built into the level base. The main vial is housed in a satin chrome brass tube with a friction fit closing cover to prevent breakage. Accuracy is .005" (0,13 mm) per 12.0" (30,4 cm).

HBS-1081-1A Replacement vial and sleeve assembly for HBS-1081 level.



## Optional Diesel Block Fixtures\*

**HBS-1100** This fixture features riser blocks with a height of 2 61/64" (75 mm). It allows the HBS to fixture blocks up to 24" (60,9 cm) in height. (Not illustrated)

**HBS-3305** Optional fixture for V-12 3412 CAT Diesel block. Parallels. (Not illustrated)

**HBS-3310** Optional fixture for V-8 92 Series Detroit Diesel block. Rollover bar. (Not illustrated)

*\*This Tooling Requires the HBS-1000 Fixture.*

## Sunnen HBS-1400 Head and Block Fixture



Heads can be quickly positioned in the fixture using its unique head locating and end clamping feature. The fixture can accommodate a wide variety of heads, blocks, and manifolds with its wide selection of accessories.

The HBS-1400 Head and Block Fixture is designed for quick and accurate leveling of heads, blocks, and manifolds on the Sunnen HBS Series Head and Block Surfacers.

# Portable Honers and Accessories

## Sunnen Portable Cylinder Honers

### Recommended Stone Sets for Sunnen SNJ-10 Portable Hone

Diameter Range	Stone Sets		
	SNJ1-	SNJ2-	SNJ3-
	1.250"-1.437" 31,75-36,50 mm	1.418"-1.604" 36,02-40,74 mm	1.580"-1.770" 40,13-45,00 mm
Deburring in Rough Bores, All Materials	SNJ1-A47	SNJ2-A47	SNJ3-A47
Fast Stock Removal in Bored, Ground or Deburred Holes in the following materials: Aluminum or Bronze	SNJ1-J45	SNJ2-J45	SNJ3-J45
Soft Brass	SNJ1-J63	SNJ2-J63	SNJ3-J63
Cast Iron	SNJ1-J45	SNJ2-J45	SNJ3-J45
Soft Steel	SNJ1-A45	SNJ2-A45	SNJ3-A45
Hard Steel (First Choice)	SNJ1-A45	SNJ2-A45	SNJ3-A45
Hard Steel (if A45 does not cut)	SNJ1-A43	SNJ2-A43	SNJ3-A43
Very Hard Steel (if A43 does not cut)	SNJ1-J63	SNJ2-J63	SNJ3-J63
Fine Finishing in the following materials: Aluminum or Bronze	SNJ1-J87	SNJ2-J87	SNJ3-J87
Soft Brass	SNJ1-J85	SNJ2-J85	SNJ3-J85
Cast Iron	SNJ1-J87	SNJ2-J87	SNJ3-J87
Soft Steel	SNJ1-J87	SNJ2-J87	SNJ3-J87
Hard Steel	SNJ1-J85	SNJ2-J85	SNJ3-J85

Select stone sets desired on next page.

- The fastest and most accurate (to one-half thousandth) portable hone for cylinder reconditioning in cars, trucks, tractors, stationary engines.
- The only method that maintains alignment of the original bore.
- Reconditions cylinder bore with less stock removal than other methods-assures longer block life.
- Produces any finish specified by engine and ring manufacturers.
- Recommended for fast seating of chrome or moly rings.
- Correct stone length.
- Fast stock removal-up to five thousandths (0,13 mm) per minute.
- Can be set up in a few minutes-no studs to remove.
- All cylinder honers include AN-1105A molded storage box.

## SNJ-10 Portable Hone

The SNJ-10 Portable Hone is recommended for sizing and finishing small holes in parts too heavy or awkward to stroke on a honing machine.

Includes a 2" (50,88 mm) drive shank and 12" (304,8 mm) extension.

Range: 1.250"-1.770" (31,5 mm-45,0 mm)

Shipping Weight: Approx. 5 lbs. (2,3 kg)



Note: All stone sets must be ordered separately.  
See page 81 for Plateau Honing Tools.

# Portable Hones and Accessories

## SN-75 Midget Portable Cylinder Hone

Range: 1.75"-2" (44-51 mm)  
Recommended for small compressors, outboard motors and similar small bore engines.

Includes 2" (50,8 mm) drive shank and 12" (304,8 mm) extension.



*Note: All stone sets must be ordered separately.*

*Shipping Weight: Approx. 5 lbs. (2,3 kg)*

## AN-111 Standard Portable Cylinder Hone

Range: 2.5"-7" (63 mm-178 mm)  
Shipped with roughing and medium finishing stone sets, (AN-100, AN-300) for range 2.7"-4.1" (69-104 mm). Stone sets available for complete range 2.5"-7" (63-178 mm). Includes 12" (304,8 mm) drive shank.



*Shipping Weight: Approx. 9 lbs. (4,1 kg)*

## AN-112 Standard Portable Cylinder Hone

Same as AN-111 except does not include any stone sets. Includes 2" (50,8 mm) drive shank and 12" (304,8 mm) extension.



*Note: All stone sets must be ordered separately.*

*Shipping Weight: Approx. 7 lbs. (3,2 kg)*

## JN-95 Junior Portable Cylinder Hone

Range: 2"-2.6" (50,8-66 mm)  
Ideal for outboard motors, motorcycle and similar small bore engines within its range. Includes 2" (50,8 mm) drive shank and 12" (304,8 mm) extension.



*Note: All stone sets must be ordered separately.*

**Stone Set Range:**  
2.0"-2.2" (50,8-55,9 mm)  
2.2"-2.4" (55,9-60,9 mm)  
2.4"-2.6" (60,9-66,0 mm)

*Shipping Weight: Approx. 5 lbs. (2,3 kg)*

## AN-815 Heavy-Duty Cylinder Hone

Range: 2.5"-15" (63-381 mm)  
Recommended for truck and stationary engines with cylinder bores 2.5"-15" (63-381 mm). Equipped with heavy-duty universal joint, 6" (152 mm) drive shank and 12" (304,8 mm) shank extension.



*Note: Order stone sets, master holder sets and stone supports separately.*

*Shipping Weight: Approx. 9 lbs. (4,1 kg)*

*NOTE: See chart at right for Stone Sets*

# Portable Hones and Accessories

## Stone Sets for Sunnen Portable Cylinder Hones




For Use in Cylinder Hone Models	Diameter Range		When Used In	Roughing Stone Set (70 Grit)	Finishing Stone Set (150 Grit)	Med. Finish Stone Set (220 Grit)	Fine Finish Stone Set (280 Grit)	Extra Fine Finish Stone Set (400 Grit)	Polishing Stone Set (600 Grit)	Stone Length	
	inches	mm								in	mm
SN Midget	1.75-2.0	44-51	Cast Iron	SN-100	SN-200	SN-300*	SN-500	S18-J87	S18-C05*	4	102
JN Junior	2.0-2.2	51-56	Cast Iron Hardened Sleeves	JN-100 JN-130	JN-200 JN-230	JN-300 -	JN-500 JN-530	T20-J87 T20-J85	T20-C05* T20-C05*	4 4	102 102
	2.2-2.4	56-61	Cast Iron Hardened Sleeves	JN-101 JN-131	JN-201 JN-231	JN-301 -	JN-501 JN-531	U22-J87 U22-J85	U22-C05* U22-C05*	4 4	102 102
	2.4-2.6	61-66	Cast Iron Hardened Sleeves	JN-102 JN-132	JN-202 JN-232	JN-302 -	JN-502 JN-532	V24-J87 V24-J85	V24-C05* V24-C05*	4 4	102 102
AN Standard and Heavy Duty	2.5-2.7	63-70	Cast Iron	AN-115	AN-215	G25-J55*	AN-515	G25-J87	G25-C05*	4	102
	2.7-4.1	69-104	Cast Iron Short C. Iron Cyls.	AN-100 AN-100-71	AN-200 AN-200-71	AN-300 AN-300-71	AN-500 AN-500-71	M27-J87 -	MM33-C05Ü -	4 2 <sup>-13/16</sup>	102 71
			Deutsch Diesel Cyls. VW Air Cooled Cyls. Harley Davidson Chilled Iron Liners	AN-100-F	-	-	-	-	-	-	4
	Hardened Sleeves Steel	AN-130 -	AN-230 AN-200A	- -	AN-530 AN-500A	M27-J85 M27-J87	MM33-C05† MM33-C05†	4 4	102 102		
		3.5-5.5	89-139	Cast Iron Short C. Iron Cyls.	AN-101 AN-101-71	AN-201 AN-201-71	AN-301 AN-301-71	AN-501 AN-501-71	N37-J87 -	NN40-C05† -	4 2 <sup>-13/16</sup>
	Hardened Sleeves Steel	AN-131 -	AN-231 AN-201A	- -	AN-531 AN-501A	N37-J85 N37-J87	NN40-C05† NN40-C05†	4 4	102 102		
4.7-15.0 ‡		119-381 ‡	Cast Iron Hardened Sleeves Steel	AN-106 AN-136 -	AN-206 AN-236 AN-206A	AN-306 - -	AN-506 AN-536 AN-506A	W47-J87 W47-J85 W47-J87	WW51-C05† WW51-C05† WW51-C05†	4 4 4	102 102 102
AN Keyway	2.5-3.3	64-84	Ported Cylinders	GY25-J15*	GY25-J45	-	GY25-J65	GY25-J85	GY25-C05*	4	102
	3.3-4.2	84-107	Ported Cylinders	MY33-J15*	MY33-J45	-	MY33-J65	MY33-J85	MY33-C05*	4	102
	4.0-5.6	102-142	Ported Cylinders	NY40-J15*	NY40-J45	-	NY40-J65	NY40-J85	NY40-C05*	4	102
	4.5-6.0	114-152	Ported Cylinders	WY51-J15	WY51-J45	-	WY51-J85	WY51-J85	WY51-J95*	4	102
Approximate Surface Finish in Microinches (Ra)			Cast Iron Hardened Sleeves Steel	120 55 -	45 30 32	32 20 20	20 12 15	8 5 7	3 2 3	-	-

\*Special, one week after receipt of order.

†Range on these sets as follows: MM33-3.3"-4.2"(84-107 mm), NN40-4.0"-5.6" (102-142 mm), WW51-4.5"-9.2" (114-234 mm).

‡Use this series of Stone Sets with Master Holder Sets and Stone Support (order right). Shipping Weight of all Stone Sets approximately 1-1/4 lbs. (1/2 kg) per Set.

## Stone Supports and Master Holder Sets

For Use In All AN Model Cylinder Hones	Single Length Master Holder Sets			Stone Supports		Double Length Master Holder Sets		
	 <p>For range 4.7"-15.0" (119-381 mm). One required for each range shown. Order stone sets separately.</p>			 <p>To provide stability and prevent chatter, stone supports must be used in diameters above 6.0" (152 mm). For use with both single length and double length Master Holder Sets.</p>		 <p>For range 4.7"-15.0" (119-381 mm). Uses two sets of stones in line for 8.0" (203 mm) stone length. One required for each range shown. Order stone sets separately.</p>		
	Range		Part Number	Part Number		Range		Part Number
inches	mm	Ship Wt. 3 lbs (1,4 kg)	Ship Wt. 2-1/2 lbs. (1,1 kg)		inches	mm	Ship Wt. 5 lbs (2,3 kg)	
4.7-7.0	119-178	AN-355	Not required		4.7-7.0	119-178	AN-855	
6.0-9.0	152-229	AN-365	AN-260		6.0-9.0	152-229	AN-865	
8.0-12.0	203-305	AN-375	AN-280		8.0-12.0	203-305	AN-875	
11.0-15.0	279-381	AN-385	AN-290		11.0-15.0	279-381	AN-885	

## PHT Plateau Honing Tools

Hone Body	For Diameter Range		Abrasive Sets (320 GRIT)
	Inches	mm	
SNJ	1.50-1.69	38,1-42,9	SNJ1-PHT-732
	1.67-1.86	42,4-47,2	SNJ2-PHT-732
	1.75-1.94	44,4-49,3	SNJ3-PHT-732
	1.91-2.10	48,5-53,3	SNJ4-PHT-732
	2.08-2.27	52,8-57,6	SNJ5-PHT-732
SN	2.15-2.40	54,6-60,9	SN-PHT-732

Hone Body	For Diameter Range		Abrasive Sets (320 GRIT)
	Inches	mm	
JN	2.40-2.60	60,9- 66,0	JN0-PHT-732
	2.60-2.80	66,0-71,1	JN1-PHT-731
	2.80-3.00	71,1-76,2	JN2-PHT-731
AN Standard and Heavy-Duty AN-60	2.98-3.78	75,7-96,0	GG-PHT-732
	3.78-4.68	96,0-118,9	MM-PHT-731
	4.48-6.08	113,8-154,4	NN-PHT-731
	4.98-9.68	126,5- 245,9	WW-PHT-731

# Portable Hones and Accessories

## Honing Aluminum Alloys

### UN-60 Universal Honing Stand

Convenient, easy-to-use, will not damage cylinder wall. Supports weight of drill and cylinder hone. Has adjustable stroking stop.

Shipping Weight: 20 lbs. (9,1 kg)

Part No.	Description
UN-30A	Strap and Buckle
UN-36A	Strap only
UN-37	Buckle only
UN-38	Hanger Rod Assembly



### High-Silicon Aluminum Alloy

Such as Porsche, Mercedes, Honda and Vega.



Note: Sunnen MAN-845 or MB-30 is MANDATORY when honing ALL aluminum.

### Tooling Required When Honing High Silicon Aluminum Blocks

- AN-111, AN-112 or AN-815 Cylinder Hone
- AN-80 Quick Coupler
- AN-1060 Heavy Duty Drill Motor
- UN-60 Universal Honing Stand
- MM33-J63 Roughing Stone Set
- MM33-J85 Finishing Stone Set
- MM33-CO5 Polishing Stone Set
- MM33-FO5 Felt Set
- AN-30 Sunnen Silicon Compound
- AN-35 Storage Box
- GA-2125 or GR-2125 Dial Bore Gage
- MAN-845 Honing Oil

### Sunnen Honing Oil

Finest quality honing oil. Not just a coolant, but carefully compounded oil developed especially for honing. Keeps honing stones clean and free cutting, reduces honing time, gives longer life to stones and mandrels, produces a controlled surface finish. Do not use substitutes such as kerosene, water-soluble oils and other imitations.



### MAN-845-5 Oil

One 5-Gallon (18,9 liter) Pail. For cylinder honing and other honing jobs.

Shipping Weight: 39 lbs. (17,7 kg)

### ANR-275 Remote Feed Heavy-Duty Cylinder Hone

Range: 2.5"-15" (63 mm-381 mm)



Must be used in a machine or honing rig. Illustration shows the ANR-275 Portable Hone assembled with Stone Support, Single Length Master Holder Set, Stone Set and 3" (76 mm) Drive Shank. 4" (104 mm) stone length or 8" (203 mm) stone length when two sets of stones are used with Double Length Master Holder Set.

Shipping Weight: 13 lbs. (5,9 kg)

Order stone sets, master holder sets and stone supports separately.

### AN-980 Chamfering Cone

Chamfers the sharp edges of cylinders for safe piston and ring installation. Handles all diameter cylinders or sleeves. Unit consists of tapered neoprene cone covered by long-lasting replaceable abrasive cone (plus a spare). Easy to use with 1/4" (6,3 mm) or larger drill.

Shipping Weight: 1-1/2 lbs. (.68 kg)

6 Replacement Cones in package:  
Order AN-994A

Shipping Weight: 1 lb. (.45 kg)



### AN-980 Replacement Parts

Part No.	Description
AN-991A	Extension
AN-986A	Rubber Cone

# Portable Hones and Accessories

## Drive Shanks and Shaft Extensions for ANR-275 Hone

Furnished with 3" (76 mm) Drive Shank. Other shanks or extensions may be selected from the table below to make up any practical length (either drive shank can be used with any combination of extensions).

Length		Replacement Drive Shanks	Shaft Extensions	Shipping Weight	
inches	mm			lbs.	kg
3	76	AN-608A	None	1/3	,15
6	152	AN-618A	None	2/3	,30
9 1/4	235	None	ANR-741	2	,91
19	483	None	ANR-742	4	1,2
42 3/4	1086	None	ANR-744	8	3,6
72 1/4	1835	None	ANR-746	13	5,9

## GGN-150 Portable Mandrel Driver



For portable honing applications such as spindle bushings mounted on axles, and other jobs that cannot be taken to honing machine. Recommended for use with Lifetime Honing Units. For holes 3/4" (19,1 mm) I.D. and larger, where length is at least 4 times the diameter. Graduated adjustment knob advances and retracts honing stones. Use with any half-inch drill (12,7 mm) or larger, 450 rpm or less.

Shipping Weight: 3 lbs. (1,36 kg)

## AN-1075 Speed Control Unit



Furnished with on/off switch, fuse, AC cord and grounded AC outlet plug. Reduces rpm when used with AC/DC drill motors and motors (brush-type only) where ampere rating is 15 amps or less.

Shipping Weight: 3 lbs. (1,4 kg)

## AN-1060 Drill Motor Kit (115V, 60Hz)

For Sunnen Portable Equipment and Cylinder Hones



The ANA-1060 Drill Motor has a speed torque relationship that is not found in ordinary electric drills. The power unit operates at 115V, has a no-load speed of 250 rpm and a fullload speed of 165 rpm. Has a full-load amp draw of 11 amps. Supplied with quick coupler, and AN-97 and AN-87 yoke adapters.

Shipping Weight: 23 lbs. (10,4 kg)

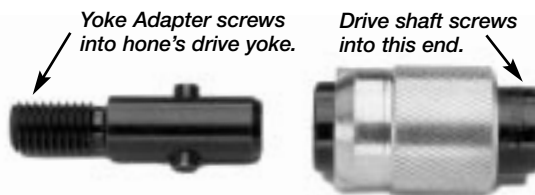
## AN-1055 Drill Motor Kit (220V, 50Hz)

(Does not come equipped with electrical plug)

### "Quick-Coupler"

Includes Yoke Adapter

Shipping Weight: 1 lb. (.45 kg)



Two models fit all Sunnen Cylinder Hones-make cylinder honing an easier, faster operation.

Permits drill (electric or air) to be quickly coupled or uncoupled from cylinder hone. Allows operator to have both hands free for removing hone from cylinder or for stone changing operations.

AN-80 Quick-Coupler. Used with all SN, JN and standard AN model Cylinder Hones.

AN-85 Quick-Coupler. For use with AN-815 Heavy-Duty Cylinder Hones.




Extra Yoke Adapters

AN-87 For use with AN-80 Quick-Coupler.

AN-97 For use with AN-85 Quick-Coupler.




Shipping Weight: 1/2 lb. (.23 kg)

# Stone Sets for AN, ANR, GNH and GNR Honing Units

<b>AVAILABLE STONES:</b> In some cases, stones other than those recommended may hone faster or last longer. For long or repetitive production runs, it may be economical to choose a stone slightly harder or softer, coarser or finer. If the stone wears out too fast, use a harder stone; if it does not cut, use a softer stone. Stones in parentheses ( ) available 2 weeks after receipt of order.			For Holes Without Keyways								For Holes With Keyways							
															Keyway Stone Sets			
															Maximum Keyway Width			
			General Purpose Stone Sets		Guideless Stone Sets						.8" (20,3 mm)	.9" (22,8 mm)	1.2" (30,4 mm)	1.4" (35,5 mm)				
Grit Size		2.5"-2.7" (64-69 mm)	2.7"-4.1" (69-104 mm)	3.5"-5.5" (89-140 mm)	4.1"-60"† (104-152 mm)	2.5"-3.3" (64-84 mm)	3.3"-4.2" (84-107 mm)	4.0"-5.6" (102-142 mm)	4.5"-60"† (114-152 mm)	2.5"-3.3" (64-84 mm)	3.3"-4.2" (84-107 mm)	4.0"-5.6" (102-142 mm)	4.5"-60"† (114-1524 mm)					
Aluminum Oxide	80 (2)	Soft	(G25-A23) (G25-A25) (G25-A27)	M27-A23 (M27-A24) M27-A25 (M27-A26) M27-A27 (M27-A28)	N37-A23 (N37-A24) N37-A25 (N37-A26) N37-A27 (N37-A28)	W47-A23 (W47-A24) W47-A25 (W47-A26) W47-A27 (W47-A28)	GG25-A23 GG25-A25 GG25-A27	MM33-A23 (MM33-A24) MM33-A25 (MM33-A26) MM33-A27 (MM33-A28)	NN40-A23 (NN40-A24) NN40-A25 (NN40-A26) NN40-A27 (NN40-A28)	WW51-A23 (WW51-A24) WW51-A25 (WW51-A26) WW51-A27 (WW51-A28)	(GY25-A23) (GY25-A25) (GY25-A27)	(MY33-A23) (MY33-A24) (MY33-A25) (MY33-A26) (MY33-A27) (MY33-A28)	(NY40-A23) (NY40-A24) (NY40-A25) (NY40-A26) (NY40-A27) (NY40-A28)	(WY51-A23) (WY51-A24) (WY51-A25) (WY51-A26) (WY51-A27) (WY51-A28) (WY51-A29)				
		Hard																
	150 (4)	Soft	(G25-A41) G25-A43 G25-A45 G25-A47 (G25-A48) G25-A49	(M27-A41) M27-A43 (M27-A44) M27-A45 (M27-A46) M27-A47 (M27-A48) (M27-A49) (M27-A411)	(N37-A41) N37-A43 (N37-A44) N37-A45 (N37-A46) N37-A47 (N37-A48) N37-A49 (N37-A411)	(W47-A41) W47-A43 (W47-A44) W47-A45 (W47-A46) W47-A47 (W47-A48) W47-A49 (W47-A411)	(GG25-A41) GG25-A43 GG25-A45 GG25-A47 (GG25-A48) (GG25-A49)	(MM33-A41) MM33-A43 MM33-A45 MM33-A47 (MM33-A48) (MM33-A49)	(NN40-A41) NN40-A43 NN40-A45 NN40-A47 (NN40-A48) (NN40-A49)	(WW51-A41) WW51-A43 WW51-A45 WW51-A47 (WW51-A48) (WW51-A49)	(GY25-A41) GY25-A43 GY25-A45 GY25-A47 (GY25-A48) GY25-A49)	(MY33-A41) MY33-A43 MY33-A45 MY33-A47 (MY33-A48) (MY33-A49)	(NY40-A41) NY40-A43 NY40-A45 NY40-A47 (NY40-A48) (NY40-A49)	(WY51-A41) WY51-A43 WY51-A45 WY51-A47 (WY51-A48) (WY51-A49)				
			Hard															
		220 (5)	Soft	(G25-A55) (G25-A57) (G25-A59)	(M27-A53) (M27-A55) (M27-A57)	(N37-A53) (N37-A55) (N37-A57)	(W47-A53) (W47-A55) (W47-A57)	(GG25-A55) (GG25-A57) (GG25-A59)	(MM33-A53) (MM33-A55) (MM33-A57)	(NN40-A53) (NN40-A55) (NN40-A57)	(WW51-A53) (WW51-A55) (WW51-A57)	(GY25-A55) (GY25-A57) (GY25-A59)	(MY33-A55) (MY33-A57) (MY33-A59)	(NY40-A55) (NY40-A57) (NY40-A59)	(WY51-A55) (WY51-A57) (WY51-A59)			
			Hard															
	280 (6)	Soft	G25-A63 G25-A65 G25-A67	(M27-A61) M27-A63 (M27-A64) M27-A65 (M27-A66) M27-A67 (M27-A68) M27-A69	(N37-A61) N37-A63 (N37-A64) N37-A65 (N37-A66) N37-A67 (N37-A68) N37-A69	(W47-A61) W47-A63 (W47-A64) W47-A65 (W47-A66) W47-A67 (W47-A68) W47-A69	(GG25-A63) GG25-A65 (GG25-A67)	(MM33-A61) MM33-A63 (MM33-A64) MM33-A65 (MM33-A66) MM33-A67 (MM33-A68) MM33-A69	(NN40-A61) NN40-A63 (NN40-A64) NN40-A65 (NN40-A66) NN40-A67 (NN40-A68) NN40-A69	(WW51-A61) WW51-A63 (WW51-A64) WW51-A65 (WW51-A66) WW51-A67 (WW51-A68) WW51-A69	(GY25-A63) GY25-A65 GY25-A67	(MY33-A61) (MY33-A63) (MY33-A64) MY33-A65 (MY33-A66) MY33-A67 (MY33-A68) (MY33-A69)	(NY40-A61) (NY40-A63) (NY40-A64) NY40-A65 (NY40-A66) NY40-A67 (NY40-A68) (NY40-A69)	(WY51-A61) (WY51-A63) (WY51-A64) WY51-A65 (WY51-A66) WY51-A67 (WY51-A68) (WY51-A69)				
			Hard															
		320 (7)	Soft	(G25-A79)	(M27-A75) (M27-A79)	(N37-A75) (N37-A79)	(W47-A75) (W47-A79)	(GG25-A79)	(MM33-A75) (MM33-A79)	(NN40-A75) (NN40-A79)	(WW51-A75) (WW51-A79)	(GY25-A79)	(MY33-A75) (MY33-A79)	(NY40-A75) (NY40-A79)	(WY51-A75) (WY51-A79)			
			Hard															
	500 (9)			(M27-A95)	(N37-A95)	(W47-A95)		(MM33-A95)	(NN40-A95)	(WW51-A95)		(MY33-A95)	(NY40-A95)	(WY51-A95)				

†These stones require Master Holder Sets.

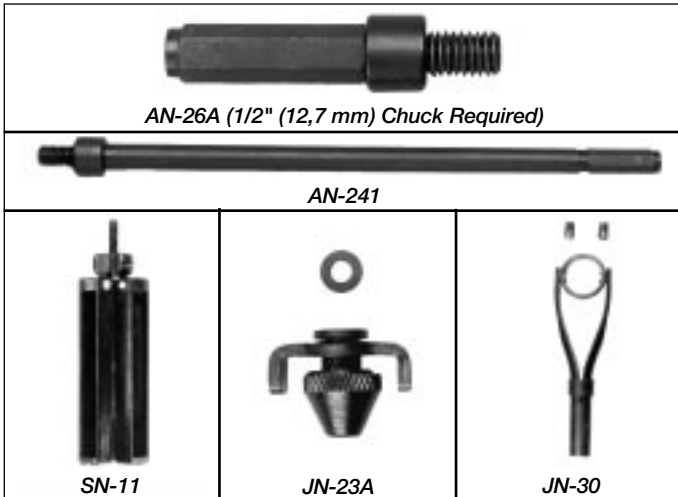
# Stone Sets for AN, ANR, GNH and GNR Honing Units

AVAILABLE STONES: In some cases, stones other than those recommended may hone faster or last longer. For long or repetitive production runs, it may be economical to choose a stone slightly harder or softer, coarser or finer. If the stone wears out too fast, use a harder stone; if it does not cut, use a softer stone. Stones in parentheses ( ) available 2 weeks after receipt of order.		For Holes Without Keyways								For Holes With Keyways				
														
		General Purpose Stone Sets				Guideless Stone Sets				Keyway Stone Sets				
										Maximum Keyway Width				
	Grit Size	2.5"-2.7" (64-69 mm)	2.7"-4.1" (69-104 mm)	3.5"-5.5" (89-140 mm)	4.1"-60"† (104-152 mm)	2.5"-3.3" (64-84 mm)	3.3"-4.2" (84-107 mm)	4.0"-5.6" (102-142 mm)	4.5"-60"† (114-152 mm)	.8" (20,3 mm)	.9" (22,8 mm)	1.2" (30,4 mm)	1.4" (35,5 mm)	
Silicon Carbide	70 (1)	Soft	(G25-J11)	M27-J11	N37-J11	W47-J11	(GG25-J11)	(MM33-J11)	(NN40-J11)	(VW51-J11)	(GY25-J11)	(MY33-J11)	(NY40-J11)	(WY51-J11)
			G25-J13	M27-J13	N37-J13	W47-J13	GG25-J13	MM33-J13	NN40-J13	VW51-J13	(GY25-J13)	(MY33-J13)	(NY40-J13)	(WY51-J13)
			G25-J15	(M27-J14)	(N37-J14)	(W47-J14)	GG25-J15	(MM33-J14)	(NN40-J14)	(VW51-J14)	(GY25-J15)	(MY33-J14)	(NY40-J14)	(WY51-J14)
			G25-J17	M27-J15	N37-J15	W47-J15	GG25-J17	MM33-J15	NN40-J15	VW51-J15	(GY25-J17)	(MY33-J15)	(NY40-J15)	(WY51-J15)
			(G25-J19)	(M27-J16)	(N37-J16)	(W47-J16)	(GG25-J19)	(MM33-J16)	(NN40-J16)	(VW51-J16)	(GY25-J19)	(MY33-J16)	(NY40-J16)	(WY51-J16)
				M27-J17	N37-J17	W47-J17		MM33-J17	NN40-J17	VW51-J17		(MY33-J17)	(NY40-J17)	(WY51-J17)
		Hard	(M27-J18)	(N37-J18)	(W47-J18)		(MM33-J18)	(NN40-J18)	(VW51-J18)		(MY33-J18)	(NY40-J18)	(WY51-J18)	
			M27-J19	N37-J19	W47-J19		(MM33-J19)	(NN40-J19)	(VW51-J19)		(MY33-J19)	(NY40-J19)	(WY51-J19)	
			G25-J43	(M27-J41)	(N37-J41)	(W47-J41)	GG25-J43	(MM33-J41)	(NN40-J41)	(VW51-J41)	(GY25-J43)	(MY33-J41)	(NY40-J41)	(WY51-J41)
			G25-J45	M27-J43	N37-J43	W47-J43	GG25-J45	MM33-J43	NN40-J43	VW51-J43	GY25-J45	(MY33-J43)	(NY40-J43)	(WY51-J43)
			G25-J47	(M27-J44)	(N37-J44)	(W47-J44)	(GG25-J47)	(MM33-J44)	(NN40-J44)	(VW51-J44)	GY25-J47	(MY33-J44)	(NY40-J44)	(WY51-J44)
			(G25-J49)	M27-J45	N37-J45	W47-J45	(GG25-J49)	MM33-J45	NN40-J45	VW51-J45	(GY25-J49)	MY33-J45	NY40-J45	WY51-J45
	220 (5)	Soft	(G25-J55)	(M27-J53)	(N37-J53)	(W47-J53)	(GG25-J55)	(MM33-J53)	(NN40-J53)	(VW51-J53)	(GY25-J55)	(MY33-J53)	(NY40-J53)	(WY51-J53)
			(G25-J57)	(M27-J55)	(N37-J55)	(W47-J55)	(GG25-J57)	(MM33-J55)	(NN40-J55)	(VW51-J55)	(GY25-J57)	(MY33-J55)	(NY40-J55)	(WY51-J55)
			(G25-J59)	(M27-J57)	(N37-J57)	(W47-J57)	(GG25-J59)	(MM33-J57)	(NN40-J57)	(VW51-J57)	(GY25-J59)	(MY33-J57)	(NY40-J57)	(WY51-J57)
				(M27-J58)	(N37-J58)	(W47-J58)		(MM33-J58)	(NN40-J58)	(VW51-J58)		(MY33-J58)	(NY40-J58)	(WY51-J58)
			G25-J63	M27-J63	N37-J63	W47-J63	GG25-J63	MM33-J63	NN40-J63	VW51-J63	(GY25-J63)	(MY33-J63)	(NY40-J63)	(WY51-J63)
			G25-J65	(M27-J64)	(N37-J64)	(W47-J64)	(GG25-J65)	(MM33-J64)	(NN40-J64)	(VW51-J64)	GY25-J65	(MY33-J64)	(NY40-J64)	(WY51-J64)
		Hard	G25-J67	M27-J65	N37-J65	W47-J65	(GG25-J67)	MM33-J65	NN40-J65	VW51-J65	GY25-J67	MY33-J65	NY40-J65	WY51-J65
			(G25-J69)	(M27-J66)	(N37-J66)	(W47-J66)	(GG25-J69)	(MM33-J66)	(NN40-J66)	(VW51-J66)	(GY25-J69)	(MY33-J66)	(NY40-J66)	(WY51-J66)
				M27-J67	N37-J67	W47-J67		MM33-J67	NN40-J67	VW51-J67		MY33-J67	NY40-J67	WY51-J67
				(M27-J68)	(N37-J68)	(W47-J68)		(MM33-J68)	(NN40-J68)	(VW51-J68)		(MY33-J68)	(NY40-J68)	(WY51-J68)
				(M27-J69)	(N37-J69)	(W47-J69)		(MM33-J69)	(NN40-J69)	(VW51-J69)		(MY33-J69)	(NY40-J69)	(WY51-J69)
			G25-J83	M27-J83	N37-J83	W47-J83	GG25-J83	MM33-J83	NN40-J83	VW51-J83	(GY25-J83)	(MY33-J83)	(NY40-J83)	(WY51-J83)
400 (8)	Soft	G25-J85	(M27-J84)	(N37-J84)	(W47-J84)	GG25-J85	(MM33-J84)	(NN40-J84)	(VW51-J84)	GY25-J85	(MY33-J84)	(NY40-J84)	(WY51-J84)	
		G25-J87	M27-J85	N37-J85	W47-J85	GG25-J87	MM33-J85	NN40-J85	VW51-J85	GY25-J87	MY33-J85	NY40-J85	WY51-J85	
		(G25-J89)	(M27-J86)	(N37-J86)	(W47-J86)	(GG25-J89)	(MM33-J86)	(NN40-J86)	(VW51-J86)	(GY25-J89)	(MY33-J86)	(NY40-J86)	(WY51-J86)	
			M27-J87	N37-J87	W47-J87		MM33-J87	NN40-J87	VW51-J87		MY33-J87	NY40-J87	WY51-J87	
			(M27-J88)	(N37-J88)	(W47-J88)		(MM33-J88)	(NN40-J88)	(VW51-J88)		(MY33-J88)	(NY40-J88)	(WY51-J88)	
			M27-J89	N37-J89	W47-J89		(MM33-J89)	(NN40-J89)	(VW51-J89)		(MY33-J89)	(NY40-J89)	(WY51-J89)	
	Hard	G25-J93	(M27-J93)	(N37-J93)	(W47-J93)	(GG25-J93)	(MM33-J93)	(NN40-J93)	(VW51-J93)	(GY25-J93)	(MY33-J93)	(NY40-J93)	(WY51-J93)	
		G25-J95	(M27-J94)	(N37-J94)	(W47-J94)	GG25-J95	(MM33-J94)	(NN40-J94)	(VW51-J94)	(GY25-J95)	(MY33-J94)	(NY40-J94)	(WY51-J94)	
		G25-J97	M27-J95	N37-J95	W47-J95	(GG25-J97)	MM33-J95	NN40-J95	VW51-J95	(GY25-J97)	MY33-J95	NY40-J95	WY51-J95	
			(M27-J96)	(N37-J96)	(W47-J96)		(MM33-J96)	(NN40-J96)	(VW51-J96)		(MY33-J96)	(NY40-J96)	(WY51-J96)	
			M27-J97	N37-J97	W47-J97		MM33-J97	NN40-J97	VW51-J97		(MY33-J97)	(NY40-J97)	(WY51-J97)	
			(M27-J98)	(N37-J98)	(W47-J98)		(MM33-J98)	(NN40-J98)	(VW51-J98)		(MY33-J98)	(NY40-J98)	(WY51-J98)	
500 (9)	Soft		(M27-J99)	(N37-J99)	(W47-J99)		(MM33-J99)	(NN40-J99)	(VW51-J99)		(MY33-J99)	(NY40-J99)	(WY51-J99)	
			(G25-C05)	(M27-C05)	(N37-C05)	(W47-C05)	GG25-C05	MM33-C05	NN40-C05	VW51-C05	(GY25-C05)	(MY33-C05)	(NY40-C05)	(WY51-C05)
600 (0)		(G25-C05)	(M27-C05)	(N37-C05)	(W47-C05)	GG25-C05	MM33-C05	NN40-C05	VW51-C05	(GY25-C05)	(MY33-C05)	(NY40-C05)	(WY51-C05)	

†These stones require Master Holder Sets.

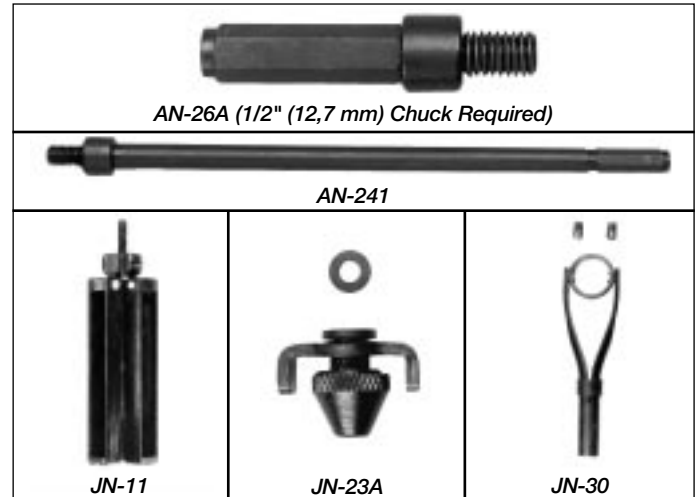
# Portable Hones and Accessories

## SN-75 Hone



Part No.	Description
SN-11	Hone Body
JN-30	Universal Joint Complete
JN-23A	Adjusting Nut and Washer
AN-26A	3" (76,2 mm) Drive Shaft
AN-241	12" (304,8 mm) Extension Assembly

## JN-95 Hone



Part No.	Description
JN-11	Hone Body
JN-30	Universal Joint Complete
JN-23A	Adjusting Nut and Washer
AN-26A	3" (76,2 mm) Drive Shaft
AN-241	12" (304,8 mm) Extension Assembly

## AN-111 and AN-112 Hones



Part No.	Description
AN-4	Hone Body
AN-50	Universal Joint Complete
AN-16	Center Pinion Adjustment
AN-3A	Body Gear
AN-26A	3" (76,2 mm) Drive Shaft
AN-241	12" (304,8 mm) Extension Assembly

## AN-815 Hone





Part No.	Description
AN-650	Universal Joint
AN-604	Hone Body
AN-16	Center Pinion
AN-3A	Body Gear Set
AN-618A	6" (152,4 mm) Drive Shaft
AN-841	12" (304,8 mm) Extension Assembly

## AN-28 Drive Shaft

12" (304,8 mm), 7/16-14 Thread  
 This is an economically priced replacement drive shaft for use with the SN-75, JN-95, AN-111, and AN-112 portable hones. Supplied as standard equipment with the AN-111. Requires 1/2" (12,7 mm) chuck  
 Shipping Weight: 3/4 lb. (.34 kg)

## AN Extension Couplers

Allows assembly of two or more AN-241 or AN-841 extensions for a longer reach with SN, JN and AN portable hones.  
 AN-630A 7/16-14 Thd., for SN, JN, AN-111 and AN-112 portable hones.  
 AN-640A 5/8-11 Thd., for the AN-815.  
 Shipping Weight: 1/4 lb. (.11 kg)

# Portable Honers and Accessories

## Lifter Bore Honing in V-6 and V-8 Cylinder Blocks

Special mandrels are available for honing lifter bores in V-type engines. The mandrels are extended length keyway type. A keyway type mandrel is the best mandrel for this type of bore because it adds stability for this hand honing operation and also because of the typically large oil ports in the sides of the bore. The recommended power source is a 3/8" (10 mm) chuck capacity air drill with an approximate speed of 250 rpm. Honing oil is required.



## Tooling Required for Tall Deck Blocks

For Complete Honing Unit Order		
1 2 3 4 5 6		
Part No.	Description	
1 AAY20-869BH-LK7X Used with .875 dia.	Extended Mandrel, 8 1/4" (20,9 cm) reach Diameter Range: .869"-.900" (22,07-22,86 mm)	
1 AAY20-838BH-LK7X Used with .843 dia.	Extended Mandrel, 8 1/4" (20,9 cm) reach Diameter Range: .838"-.869" (21,29-22,07 mm)	
2 Y20-W-LK7X	Extended Wedge	
3 LN-3688A-LK7X	Extended Retainer	
4 P-180*	Honall Head and Driver	
5 PAK20*-A	Adapter	
6 Y20-J67*	Recommended Stone	

## Tooling Required for Small Block Chevy

For Complete Honing Unit Order		
1 2 3 4 5 6		
Part No.	Description	
1 AAY20-838BH-6LH Used with std. .843 dia. GM lifter	Extended Mandrel, 6" (15,2 cm) reach Diameter Range: .838"-.869" (21,29 - 22,07 mm)	
1 AAYA20-869BH-6LH Used with .875 dia. Ford lifter	Extended Mandrel, 6" (15,2 cm) reach. Diameter Range: .869"-.900" (22,07-22,86 mm)	
2 Y20-W6LH	Extended Wedge	
3 LN-3688A-6LH	Extended Retainer	
4 P-180	Honall Head and Driver	
5 PAK20-A	Adapter	
6 Y20-J67	Recommended Stone	

For other applications, call Customer Service, Sunnen Products Co.

Shipment: Items marked with an asterisk (\*) are shipped from finished goods.

Items not marked with an asterisk (\*) are specials and are not shipped from stock. (If needed immediately call Customer Service, Sunnen Products Co. to check Special Products stock.)

## Camshaft Bore Honing on Overhead Cam Cylinder Heads

For the small shop with limited requirements, mandrels may be special ordered to allow honing various O.H.C. cylinder heads. Call Customer Service, Sunnen Products Co. for details and information.



Cylinder head being honed on CH-100 Honing Machine with a hand fed Porta-Hone.

## Tooling Required for 231 Buick

For Complete Honing Unit Order		
1 2 3 4 5 6		
Part No.	Description	
1 AAY20-869BH-675LH Used with .875 dia. Ford lifter	Extended Mandrel, 6-3/4" (17,1 cm) reach Diameter Range: .869"-.900" (22,07-22,86 mm)	
1 AAY20-838BH-675LH Used with .843 dia. GM lifter	Extended Mandrel, 6-3/4" (17,1 cm) reach Diameter Range: .838"-.869" (21,29-22,07 mm)	
2 Y20-W-675LH	Extended Wedge	
3 LN-3688A-675LH	Extended Retainer	
4 P-180	Honall Head and Driver	
5 PAK20-A	Adapter	
6 Y20-J67	Recommended Stone	

Note: Could be used on the V-8's but is not as stable as the shorter 6" (15,2 cm) reach mandrel

## OHC Line Hone Mandrel

Part No.	Description
7PL-1031M*	For VW Rabbit, Omni, Horizon, Ford 2.5 and 4.6 1.021"-1.094" (25,9-27,8 mm) Extended Range with 1/8" Shim-1.219" (31,0 mm)
7PL-1312M*	For Mitsubishi 3.0, Chrysler 2.2 and 2.5, Isuzu, Toyota 4 and 5 ME, Mazda GLC, Nissan Z24-Z28, Mitsubishi 2.6 1.292"-1.375" (32,8-34,9 mm) Extended Range with 1/8" Shim-1.500 (38,1 mm)
WB-D	Guide Shoes (2/box)
PL-5	Stones (12-Roughing)
PL-7	Stones (12-General Purpose)
PL-13	Stones (12-Finishing)

See Product Bulletin P-5501A thru P-5505A for more OHC Mandrel Selections.

\*Recommend using with GGN-150 Mandrel Driver and AN-87 Yoke adapter in CH-100 Line Hone Machine.