



Portable Hones and Accessories CATALOG



for
Engine Rebuilding

"SUNNEN, THE SUNNEN LOGO, GENERAL HONE AND THE GENERAL HONE LOGO ARE REGISTERED TRADEMARKS OF SUNNEN PRODUCTS COMPANY."

Sunnen Portable Hones and Accessories

Range: 1.25" - 15" (31,5 mm - 381 mm)

Sunnen Portable Cylinder Hones

For complete or partial honing, or following boring bar:

Select stone sets desired from chart below or on page 3.

- The fastest and most accurate (to one-half thousandth) portable hone for cylinder reconditioning in cars, trucks, motorcycles, tractors, stationary engines.
- The only method that maintains alignment of the original bore.
- Reconditions cylinder bore with less stock removal than other methods – maintains uniform wall thickness – assures longer block life.
- Produces any finish specified by engine and ring manufacturers.
- Recommended for fast seating of any type of 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 hones include AN-1105A molded storage box.

SNJ-10 Portable Hone

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

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 in. (50,88 mm) drive shank and 12 in. (304,8 mm) extension.

Note: All stone sets must be ordered separately. See chart below.

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



Recommended Stone Sets for Sunnen SNJ-10 Portable Hone

DIAMETER RANGE	STONE SETS		
	SNJ1-	SNJ2-	SNJ3-
	1.250-1.437 in. 31,75-36,50 mm	1.418-1.604 in. 36,02-40,74 mm	1.580-1.770 in. 40,13-45,00 mm
Deburring in Rough Bores in the following materials:			
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

SN-75 Midget Portable Cylinder Hone

Range: 1.75-2.0 in. (44,0-51,0 mm)

Recommended for small compressors, outboard motors and similar small bore engines.

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

Note: All stone sets must be ordered separately. See chart on page 3.

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



JN-95 Junior Portable Cylinder Hone

Range: 2.0-2.6 in. (50,8-66,0 mm)

Ideal for outboard motors, motorcycles and similar small bore engines within its range.

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

Note: All stone sets must be ordered separately. See chart on page 3.

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



AN-111 Standard Portable Cylinder Hone

Range: 2.5-7.0 in. (63,0-178 mm)

Shipped with roughing and medium finishing stone sets (AN-100, AN-300), for 2.7-4.1 in. (69,0-104 mm) range. Stone sets available for complete range 2.5-7.0 in. (63-178 mm). See chart on back page. Includes a 12 in. (304,8 mm) drive shank.

Note: To order additional stone sets see chart on page 3.

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

Note: All stone sets must be ordered separately. See chart on page 3.

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

AN-815 Heavy-Duty Cylinder Hone

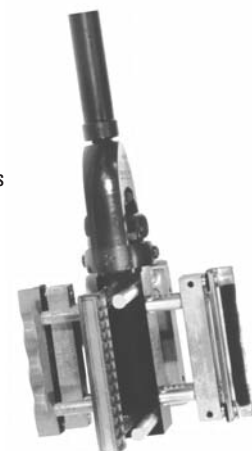
Range: 2.5-15.0 in. (63,0-381 mm)

Recommended for truck and stationary engines with cylinder bores within its range.

Equipped with heavy-duty universal joint, 6 in. (152 mm) drive shank and 12 in. (304,8 mm) extension.

Note: Order stone sets, master holders and stone supports separately. See chart on page 3.

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



Sunnen 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	
	in.	mm								in.	mm
SN Midget	1.75-2.0	44-51	Cast Iron	SN-100	SN-200	SN-300*	SN-500	S18-J87	S18-CO5*	4	102
JN Junior	2.0-2.2	51-56	Cast Iron	JN-100	JN-200	JN-300	JN-500	T20-J87	T20-CO5*	4	102
			Hardened Sleeves	JN-130	JN-230	—	JN-530	T20-J85	T20-CO5*	4	102
	2.2-2.4	56-61	Cast Iron	JN-101	JN-201	JN-301	JN-501	U22-J87	U22-CO5*	4	102
			Hardened Sleeves	JN-131	JN-231	—	JN-531	U22-J85	U22-CO5*	4	102
AN Standard and Heavy Duty	2.4-2.6	61-66	Cast Iron	JN-102	JN-202	JN-302	JN-502	V24-J87	V24-CO5*	4	102
			Hardened Sleeves	JN-132	JN-232	—	JN-532	V24-J85	V24-CO5*	4	102
	2.5-2.7	63-70	Cast Iron	AN-115	AN-215	G25-J55*	AN-515	G25-J87	G25-CO5*	4	102
	2.7-4.1	69-104	Cast Iron	AN-100	AN-200	AN-300	AN-500	M27-J87	MM33-CO5†	4	102
			Short Cast Iron Cyls.	AN-100-71	AN-200-71	AN-300-71	AN-500-71	—	—	2 ¹³ / ₁₆	71
			Harley-Davidson®	AN-100F	AN-200	AN-300	AN-500	M27-J87	MM33-CO5†	4	102
			Deutsch Diesel Cyls.	AN-100-F	—	—	—	—	—	4	102
			VW Air Cooled Cyls.	—	—	—	—	—	—	—	—
			Chilled Iron Liners	—	—	—	—	—	—	—	—
			Hardened Sleeves	AN-130	AN-230	—	AN-530	M27-J85	MM33-CO5†	4	102
			Steel	—	AN-200A	—	AN-500A	M27-J87	MM33-CO5†	4	102
	3.5-5.5	89-139	Cast Iron	AN-101	AN-201	AN-301	AN-501	N37-J87	NN40-CO5†	4	102
			Short Cast Iron Cyls.	AN-101-71	AN-201-71	AN-301-71	AN-501-71	—	—	2 ¹³ / ₁₆	71
			Hardened Sleeves	AN-131	AN-231	—	AN-531	N37-J85	NN40-CO5†	4	102
			Steel	—	AN-201A	—	AN-501A	N37-J87	NN40-CO5†	4	102
	4.7-15.0	119-381	Cast Iron	AN-106	AN-206	AN-306	AN-506	W47-J87	WW51-CO5†	4	102
	‡	‡	Hardened Sleeves	AN-136	AN-236	—	AN-536	W47-J85	WW51-CO5†	4	102
			Steel	—	AN-206A	—	AN-506A	W47-J87	WW51-CO5†	4	102
Approx. Surface Finish in Microinches (Ra)			Cast Iron	120	45	32	20	8	3	—	—
			Hardened SLeeves	55	30	20	12	5	2	—	—
			Steel	—	32	20	15	7	3	—	—

*Special, one week after receipt of order.

†Range on these sets as follows: MM33: 3.3-4.1 in. (84-107 mm) NN40: 4.0-5.6 in. (102-142 mm) WW51: 4.5-9.2 in. (114-234 mm)

‡Use this series of Stone Sets with Master Holder Sets and Stone Support (order below).

Note: For special high performance finishes when honing outboard or two cycle engines, call Customer Service for details.

Shipping Weight of all Stone Sets approximately 1.25 lbs (0.5 kg) per Set.

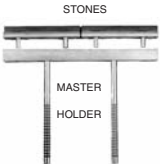
PHT Plateau Honing Tools

HONE BODY	FOR DIAMETER RANGE		ABRASIVE SETS (320 GRIT)
	in.	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
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	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

Sunnen's PHT tools are used as a final finishing step, after initial honing, to provide a plateau surface on cylinder walls. Made from special abrasive impregnated filaments, these long lasting honing tools are available for portable hones. For additional information contact your local Sunnen Field Engineer or call Customer Service toll-free in St. Louis.



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			
			For range 4.7-15.0 in. (119-381 mm) One required for each range shown. Order stone sets separately.		To provide stability and prevent chatter, stone supports must be used in diameters above 6.0 in. (152 mm). For use with both single and double length Master Holder Sets.			For range 4.7-15.0 in. (119-381 mm). Use two sets of stones in line for 8.0 in. (203 mm) stone length. One required for each range shown. Order stone sets separately.	
	Range					Part Number			
	inches	millimeters	Part Number	Ship Wt. 3 lbs (1,4 kg)	Part Number	Ship Wt. 21s lbs (1,1 kg)	Part Number	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	

Sunnen Portable Hones and Accessories

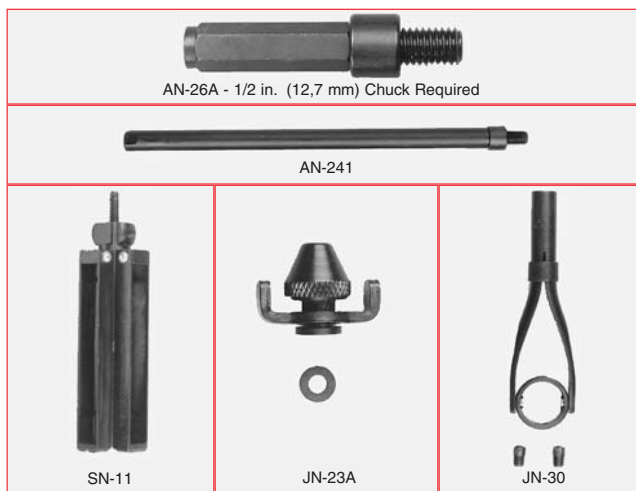
Repair Parts for Hand Feed Portable Hones

SN-75 Hone



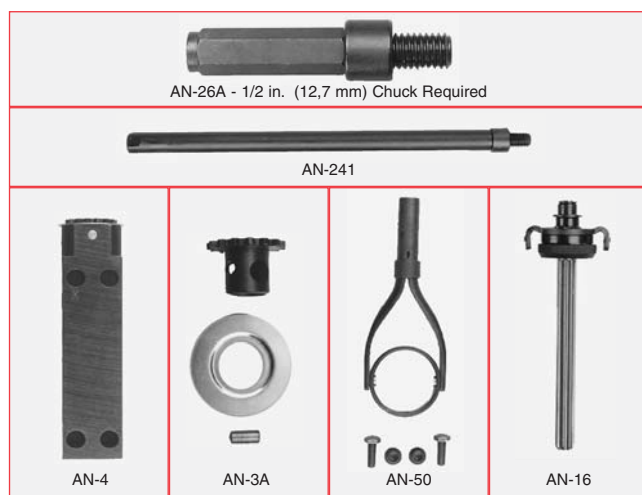
- SN-11** Hone Body
- JN-30** Universal Joint Complete
- JN-23A** Adjusting Nut and Washer
- AN-26A** 3 in. (76,2 mm) Drive Shaft
- AN-241** 12 in. (304,8 mm) Extension Assembly

JN-95 Hone



- JN-11** Hone Body
- JN-30** Universal Joint Complete
- JN-23A** Adjusting Nut and Washer
- AN-26A** 3 in. (76,2 mm) Drive Shaft
- AN-241** 12 in. (304,8 mm) Extension Assembly

AN-111 and AN-112 Hones



- AN-4** Hone Body
- AN-50** Universal Joint Complete
- AN-16** Center Pinion Adjustment
- AN-3A** Body Gear Set
- AN-26A** 3 in. (76,2 mm) Drive Shaft
- AN-241** 12 in. (304,8 mm) Extension Assembly

AN-28 Drive Shaft

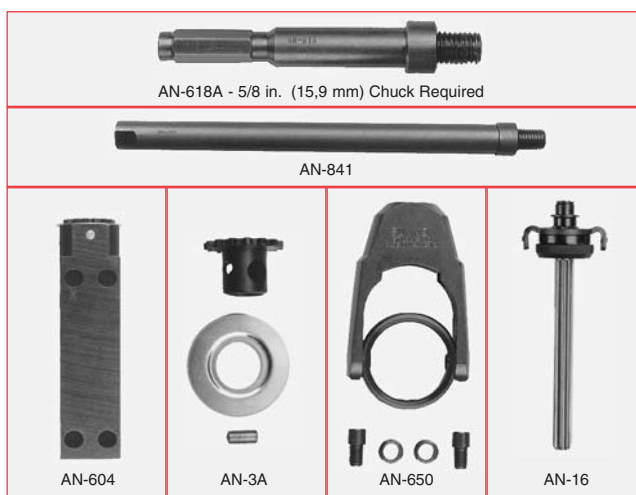
12 in. (304,8 mm) – 7/16-14 Thread



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 in. (12,7 mm) chuck.

Shipping Weight: 3/4 lb (0,34 kg)

AN-815 Hone



- AN-604** Hone Body
- AN-650** Universal Joint Complete
- AN-16** Center Pinion Adjustment
- AN-3A** Body Gear Set
- AN-618A** 6 in. (152,4 mm) Drive Shaft
- AN-841** 12 in. (304,8 mm) Extension Assembly

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 (0,11 kg)

Sunnen Portable Hones and Accessories

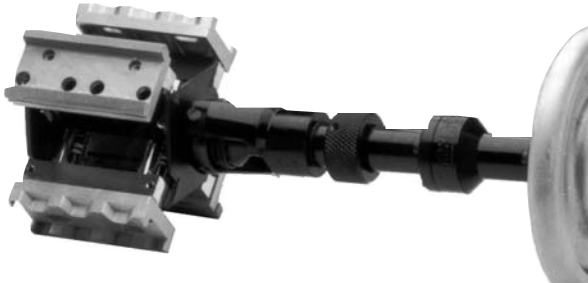
Accessories

ANR-275 Remote Feed Heavy-Duty Cylinder Hone

Range: 2.5-15 in. (63,0-381,0 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 in. (76 mm) Drive Shank. 4 in. (102 mm) stone length or 8 in. (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. See chart on page 3.

Drive Shanks and Shaft Extensions for ANR-275 Hone

Furnished with 3 in. (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	
in.	mm			lbs	kg
3	76	AN-608A	None	.30	0,15
6	152	AN-618A	None	.60	0,30
9.25	235	None	ANR-741	2.0	0,91
19	483	None	ANR-742	4.0	1,20
42.75	1086	None	ANR-744	8.0	3,60
72.25	1835	None	ANR-746	13.0	5,90

GGN-150 Mandrel Driver

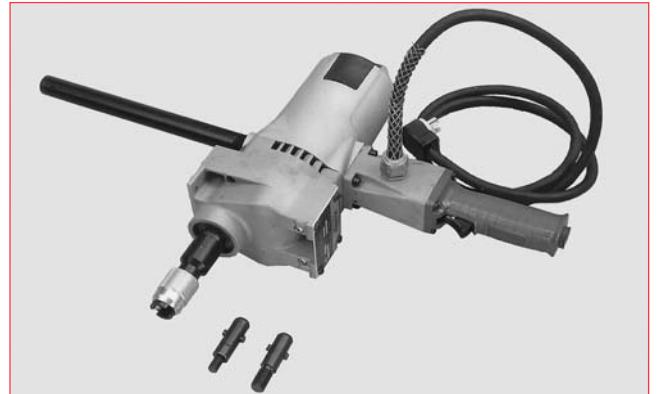
For portable honing applications such as spindle bushings mounted on axles, and other jobs that cannot be taken to honing machine. Recommended for use with Lifetime Honing Units. For holes 3/4 in. (19,1 mm) I.D. and larger, where length is at least 4 times the diameter. Graduated adjustment knob advances 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-1060 Heavy-Duty Drill Motor Kit

The AN-1060 Drill Motor has a speed torque relationship that is not found



in ordinary electric drills. The power unit operates at 115V, has no-load speed of 250 rpm and a full-load 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)

Quick-Coupler

Includes Yoke Adapter

Shipping Weight: 1 lb (0,45 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. Used with AN-815 and ANR-275 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 (0,23 kg)



Universal Joint

Designed for using the Portable Hones in a drill press or other rigid stroking device.

AN-70 Universal Joint. Use in place of

Drive Shank AN-26A.

AN-670 Universal Joint. Use in place of Drive Shank AN-618A.

Shipping Weight: .75 lb (0,34 kg)

Sunnen Portable Hones and Accessories

Honing Aluminum Alloys

Regular Aluminum

For **Roughing** use the 150 grit stone set, the same type as for cast iron cylinders.

For **Finishing** use the 280 grit stone set, the same type as for cast iron cylinders.

High-Silicon Aluminum Alloys

Such as Porsche, Mercedes, Honda and Vega.

One of the most significant features of these engines is the use of an aluminum die-cast engine block that does not require a steel or cast iron liner in the cylinder bore. Pure particles of silicon, averaging about .001 in. (0,03 mm) in diameter, are dispersed in the aluminum alloy throughout the engine block. To achieve the proper surface for ring and piston compatibility, the cylinders should be prepared in such a manner that the silicon particles protrude from the aluminum so the piston and rings contact only silicon. Because silicon is very hard, there will be very little wear in the cylinder bore. In fact, as far as the piston and rings are concerned, the cylinder wall is a silicon wall, and the aluminum's function is merely to "hold" the silicon particles.

If the cylinders become excessively scored or worn, they can be reconditioned with either automatic or manual honing equipment to accept oversize pistons. However, the usual sizing and finishing operation leaves a cylinder wall of silicon and aluminum... the silicon does not protrude. Therefore, a special conditioning operation is needed to remove aluminum from and between the silicon particles so the silicon will protrude. This is the reason for the conditioning operation which follows the honing operation.

For detailed information on the conditioning operation, contact Sunnen Customer Service.



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-C05 Polishing Stone Set
- MM33-F05 Felt Set
- AN-30 Sunnen Silicon Compound
- AN-35 Storage Box
- GA-2125 or GR-2125 Dial Bore Gage
- MAN-845 Honing Oil

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

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)

Replacement strap and buckle, order p/n UN-36.



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 in. (6,3 mm) or larger drill.

Shipping Weight: 1-1/2 lbs (0,68 kg)



AN-980 Replacement Parts

PART NO.	DESCRIPTION
AN-991A	Extension
AN-986A	Rubber Cone

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)



Valve Guide Sizing



P-190 Valve Guide Hone Set

Convenient set includes tooling and abrasives for the most popular valve guide diameters for automotive cylinder heads. See chart and information below for a complete listing of available tooling and items included in P-190 set. A slow speed drill (approximately 200 rpm) is recommended for driving power.

P-195 Valve Guide Hone Set

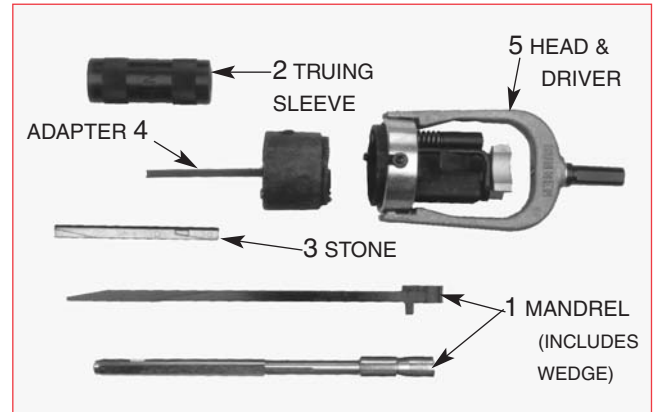
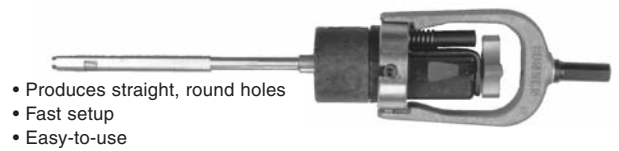
(For Harley-Davidson® Heads)

Designed for the needs of Harley-Davidson® engine builders. Set includes tooling and abrasives for the most popular Harley-Davidson® valve guide diameters. See chart and information below for a complete listing of available tooling and items included in P-195 set. A slow speed drill (approximately 200 rpm) is recommended for driving power.

Ordering Information

The head and driver are interchangeable with the adapters. Only one head and driver is required. Mandrels are available to cover all popular sizes. Please select the parts desired from photograph and order from chart for the range desired. We recommend that an adapter be purchased for each mandrel. This saves change-over time going from one mandrel to another.

Additional Mandrel Sizes Available – Call Sunnen Customer Service Department.



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.



NOMINAL FRACTIONAL SIZE (inches)	RANGE		1	2	3	4	5
	inches	millimeters	MANDREL	SLEEVE	STONE	ADAPTER	HEAD & DRIVER
3/16	.185-.190	4,7- 4,8	BL6-185CS	S-185	L6-J67		P-180 200 rpm max.
—	.195-.200	4,9- 5,1	BL6-195CS	S-195	L6-J67	PSK6-A	
7/32	.215-.220	5,5- 5,6	BL6-215CS	S-215	L6-J67	LN-3087C	
15/16	.235-.240	6,0- 6,1	BL6-235CS	S-235	L6-J67	†	
—	.255-.260	6,5- 6,6	BL8-255AS	S-255	L8-J67	PK8-A	
17/64	.270-.275	6,8- 7,0	BL8-270AS	S-270	L8-J67	PK8-A	
5/16*#	.308-.316	7,8- 8,0	LG-308M	S-308	LG-13	PK10-A	
11/32*#	.339-.347	8,6- 8,8	LG-339M	S-339	LG-13	PK10-A	
23/64	.354-.362	9,0- 9,2	BL10-354AS	S-354	LG-13	PK10-A	
3/8*#	.370-.385	9,4- 9,8	LH-370M	S-370	LH-13	PK12-A	
13/32	.400-.416	10,2-10,6	LH-400M	S-400	LH-13	PK12-A	
7/16*	.432-.447	11,0-11,4	LH-432M	S-432	LH-13	PK12-A	
15/32	.463-.479	11,8-12,2	BL12-463AS	S-463	LH-13	PK12-A	
1/2	.495-.526	12,6-13,4	LJ-495M	S-495	LJ-13	PK16-A	
35/64	.526-.557	13,4-14,1	LJ-526M	S-526	LJ-13	PK16-A	
9/16	.557-.588	14,1-14,9	LJ-557M	S-557	LJ-13	PK16-A	
5/8	.619-.650	15,7-16,5	LJ-619M	S-619	LJ-13	PAK16-A	
21/32	.650-.681	16,5-17,3	LJ-650M	S-650	LJ-13	PAK16-A	
11/16	.681-.713	17,3-18,1	LJ-681M	S-681	LJ-13	PAK16-A	
3/4	.744-.775	18,9-19,7	BAL20-744LA**	S-744	LM-13	PAK20-A	

*P-190 Valve Guide Honing Set consists of 1 each mandrel and sleeve for the popular 5/16", 11/32", 3/8", and 7/16" sizes; also includes PK10-A, PK12-A, P-180, AN-1105A Storage Box, and 6 each LG-13 and LH-13 Stones. Shipping Weight: 8 lbs.

#P-195 Valve Guide Honing Set consists of 1 each mandrel and sleeve for the popular 5/16", 11/32", and 3/8" sizes; also includes PK10-A, PK12-A, P-180, AN-1105A Storage Box, and 6 each LG-13 and LH-13 Stones. Shipping Weight: 8 lbs.

**Replaceable shoe type mandrel. Replacement shoe Part No. LA-C (2 required).

†Remove the LN-3087A stone retainer (standard part supplied with the PSK6-A adapter) and replace with LN-3087C. The LN-3087C must be ordered separately.

AN-1105A Storage Box available for convenient storage of tooling.

Sunnen Portable Hones and Accessories

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 in. (10 mm) chuck capacity air drill with an approximate speed of 250 rpm. Honing oil is required.

Tooling Required, Small Block Chevy

PART NO.	DESCRIPTION
AAAY20-838BH-6LH	Extended Mandrel, 6 in. (15,2 cm) reach.
Used with std. (.843 dia.) GM lifter	Diameter Range: .838-.869 in. (21,29-22,07 mm)
AAAY20-869BH-6LH	Extended Mandrel, 6 in. (15,2 cm) reach.
Used with std. (.875 dia.) Ford lifter	Diameter Range: .869-.900 in. (22,07-22,86 mm)
Y20-W-6LH	Extended Wedge
LN-3688A-6LH	Extended Retainer
P-180	Honall® Head and Driver
PAK20-A	Adapter
Y20-J67	Recommended Stone

Tooling Required, 231 Buick

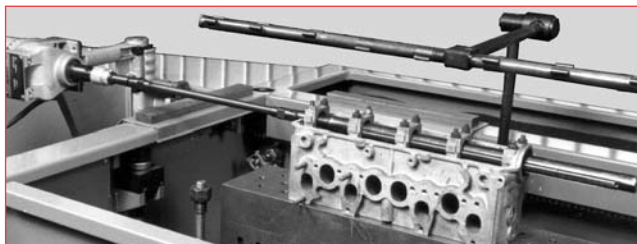
PART NO.	DESCRIPTION
AAAY20-838BH-675LH	Extended Mandrel, 6.75 in. (17,1 cm) reach.
Used with std. (.843 dia.) GM lifter	Diameter Range: .838-.869 in. (21,29-22,07 mm)
AAAY20-869BH-675LH	Extended Mandrel, 6.75 in. (17,1 cm) reach.
Used with std. (.875 dia.) Ford lifter	Diameter Range: .869-.900 in. (22,07-22,86 mm)
Note: Could be used on the V-8's but is not as stable as the shorter 6 in. (15,2 cm) reach mandrel.	
Y20-W-675LH	Extended Wedge
LN-3688A-675LH	Extended Retainer
P-180	Honall® Head and Driver
PAK20-A	Adapter
Y20-J67	Recommended Stone

Tooling Required, Tall Deck Blocks

PART NO.	DESCRIPTION
AAAY20-838BH-LK7X	Extended Mandrel, 8.25 in. (20,9 cm) reach.
Used with std. .843 dia.	Diameter Range: .838-.869 in. (21,29-22,07 mm)
AAAY20-869BH-LK7X	Extended Mandrel, 8.25 in. (20,9 cm) reach.
Used with .878 dia.	Diameter Range: .869-.900 in. (22,07-22,86 mm)
Y20-W-LK7X	Extended Wedge
LN-3688A-LK7X	Extended Retainer
P-180*	Honall® Head and Driver
PAK20*-A	Adapter
Y20-J67*	Recommended Stone

Camshaft Bore Honing on Overhead Cam Cylinder Heads

Ideally, camshaft housing bores are reconditioned on a CB-24000 Line Boring Machine designed for the purpose. However, 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 delivery information.



CYLINDER HEAD BEING HONED ON CH-100 HORIZONTAL HONE WITH A HAND FED PORTAHONE.

GA-2125 & GR-2125 Gage

For cylinders, sleeves, large con-rods ... many other gaging jobs

- Diameter Range: 2-8 in. (50,8-203,0 mm)
- Gage holes up to 12 in. (304 mm) long

The GA-2125 is self-aligning in the bore, requires no centering. Lets you explore the entire cylinder from top to bottom ... in seconds.

The retractable self-centering mechanism in the gaging head of the GR-2125 makes it easy to gage interrupted bores typical of 2-cycle motorcycle and marine engine applications without "hanging up". The retraction feature allows precise exploration of a high performance cylinder without leaving telltale gaging marks.

For metric models, order **GAM-2125** or **GRM-2125**. Range: 50-203 mm. Dial marked in 0,01 mm increments.

Note: Special length gages are available on a special order basis. Write for Product Bulletin No. P-4206 or call Customer Service, Sunnen Products Co. for information

The GA-2125 & GR-2125 can be set using Sunnen's CF-1126 Setting Fixture ... making gage setting fast and easy. Micrometer adjustment allows "dialing in" sizes. A precision tool, shipped with convenient storage case.



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 special and are not shipped from stock. (If needed immediately call Customer Service, Sunnen Products Co. to check Special Products stock.)

"SUNNEN" AND THE SUNNEN LOGO ARE REGISTERED TRADEMARKS OF SUNNEN PRODUCTS COMPANY."

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