

Operating & Service Manual  
PL19-6004EN  
08/03/2012

# Airetool®

## HG Series

Hole Gauges for Heat Exchanger Tubes



*For additional product information visit our website at <http://www.apextoolgroup.com>*

**Airetool®**  
Nomenclature

<b>Hole Gauge for Heat Exchanger Tubes</b>					
<b>Tube O.D.</b>	<b>Tool Number</b>	<b>Stock Number</b>	<b>Range</b>	<b>Range</b>	<b>Reach</b>
			<b>in.</b>	<b>mm</b>	<b>in.</b>
1/2"	HG-500-6	5171001	.350 to .440	8.89 to 11.8	6
1/2"	HG-500-12	5171100	.350 to .440	8.89 to 11.8	12
5/8"	HG-625-6	5171200	.440 to .545	11.18 to 13.84	6
5/8"	HG-625-12	5171300	.440 to .545	11.18 to 13.84	12
3/4"	HG-750-6	5171400	.550 to .700	13.97 to 17.78	6
3/4"	HG-750-12	5171500	.550 to .700	13.97 to 17.78	12
7/8"	HG-875-6	5171600	.675 to .825	17.15 to 20.96	6
7/8"	HG-875-12	5171700	.675 to .825	17.15 to 20.96	12
1"	HG-1000-6	5171800	.800 to .950	20.32 to 24.13	6
1"	HG-1000-012	5171900	.800 to .950	20.32 to 24.13	12
1-1/4"	HG-1250-6	5172000	.955 to 1.105	24.26 to 28.07	6
1-1/4"	HG-1250-12	5172100	.955 to 1.105	24.26 to 28.07	12

**Airetool®**  
Hole Gauge Instructions

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The Airetool HG series Hole Gauge is adjusted at the factory to read correctly through the entire range of the scale and should retain this setting for a long period of usage.

A setting ring is furnished with each gauge to check the setting. It can also be used to check the readings, while making adjustment to the gauge, should this become necessary after extended usage. This setting ring is ground and honed to a size which is .005" under the maximum reading of the scale and this dimension is stamped on the outside of the ring.

To adjust the reading, remove the spring closure in the back of the gauge. Beneath this closure there is a socket head set screw which secures the indicator to the indicator rod. Loosen this screw and the indicator can be moved on the indicator rod.

Loosen the thumb screw and slide the stop down to within 1/4" of the balls and retighten the thumb screw. Pull the hand knob back and slip the setting ring down the shaft nose, over the three balls, against the stop then release the knob. This will hold the balls at the dimension shown on the setting ring.

Check the size shown by the indicator on the scale, against the size stamped on the setting ring. If these two dimensions are not the same, slide the indicator on the indicator rod until they are the same dimension then tighten the set screw.

Before snapping the closure into position, it is best to double check the setting. Do this by pulling the hand knob back and releasing it several times and checking to see if the indicator returns to the proper reading. If it does not return to the proper reading, further adjustment will be necessary. If it does return correctly, tighten the set screw again and snap the closure into position.

**Airetool®**  
HG-500-6 & HG-500-12 1/2" Hole Gauge

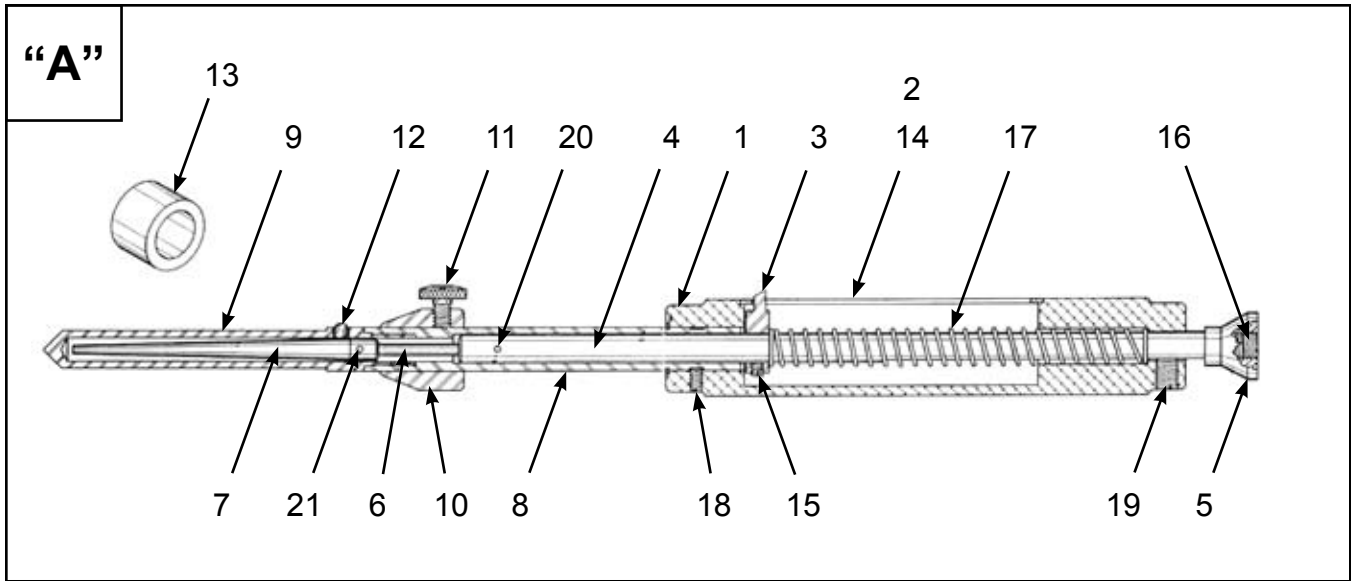


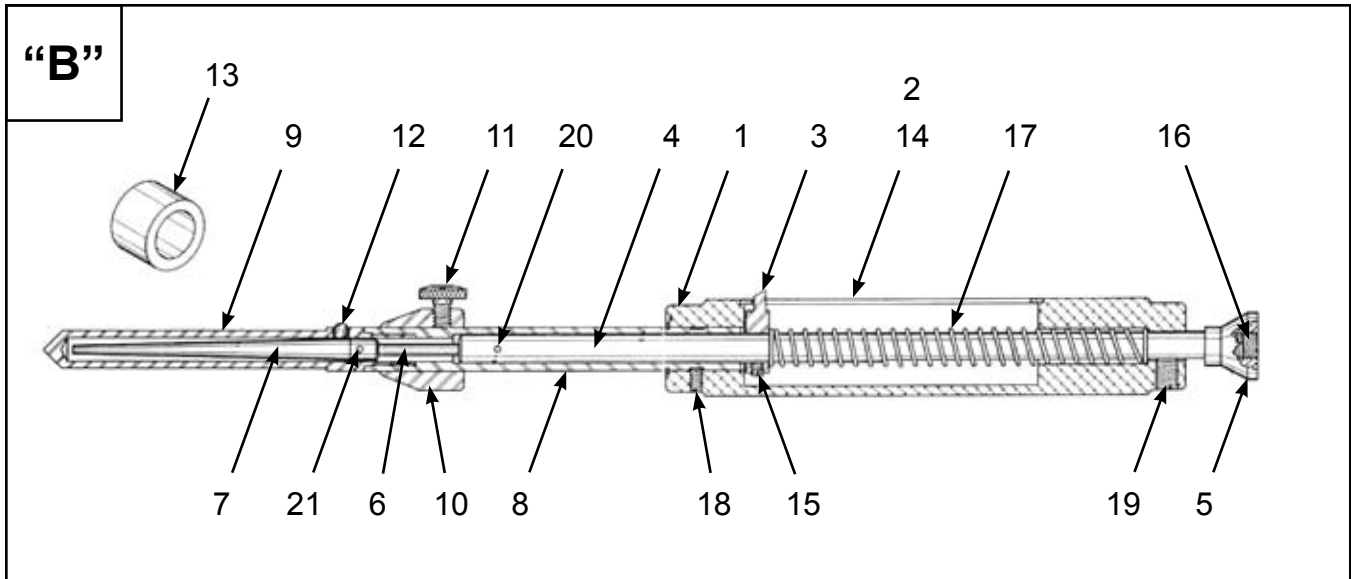
Illustration "A"

Ref	Number	#	X	EN
				Description
--	5171001	1		HG-500-6 Hole Gauge with Case
--	5171100	1		HG-500-12 Hole Gauge with Case
1	24722300	1		HG-5001 Body
2	2978115	1		HG-5002 MM Scale
3	24722500	1		HG-5003 Indicator
4	2472600	1		HG-5004 Indicator Rod
5	2472700	1		HG-5005 Knob
6	2472800	1		HG-5006-6 Connecting Rod (HG-500-6 Hole Gauge)
	2472900PT	1		HG-5006-12 Connecting Rod (HG-500-12 Hole Gauge)
7	2473000	1		HG-5007 Mandrel
8	2473100	1		HG-5008-6 Shaft (HG-500-6 Hole Gauge)
	2473200PT	1		HG-5008-12 Shaft (HG-500-12 Hole Gauge)
9	2473300	1		HG-5009 Shaft Nose
10	2473400	1		HG-5010 Stop
11	2473501PT	1		HG-5011 Thumb Screw
12	8010013	3	9	Steel Ball (9/64")
13	2903540	1	2	HG-1/2 Test Ring
14	8008900	6	12	2-56 x 3/16" Flat Head Socket Cap Screw (not shown; used with HG-5002 MM Scale)
15	8008700	1	2	#6-32 x 1/8" Socket Head Set Screw
16	8010417	1	2	1/4-28 x 1/8" Hollow Lock Set Screw
17	2473600	1	1	HG-5012 Spring
18	8009700	1	2	#8-32 x 1/8" Socket Head Set Screw
19	8010893	1	2	1/4-28 x 3/16" Flat Point Socket Head Set Screw
20	8010891	1	2	1 x 4mm Roll Pin
21	8010829	1	2	1 x 6mm Roll Pin
22	2994155	1		HG-NP Nameplate (not shown)
23	8010318	4		#2 x 1/8" Drive Screw (not shown - used with nameplate)
24	2973755	1		A12 Hole Gauge Case (not shown)

(#) Quantity

(X) Recommended Spare Parts

**HG-625-6 & HG-625-12 5/8" Hole Gauge**



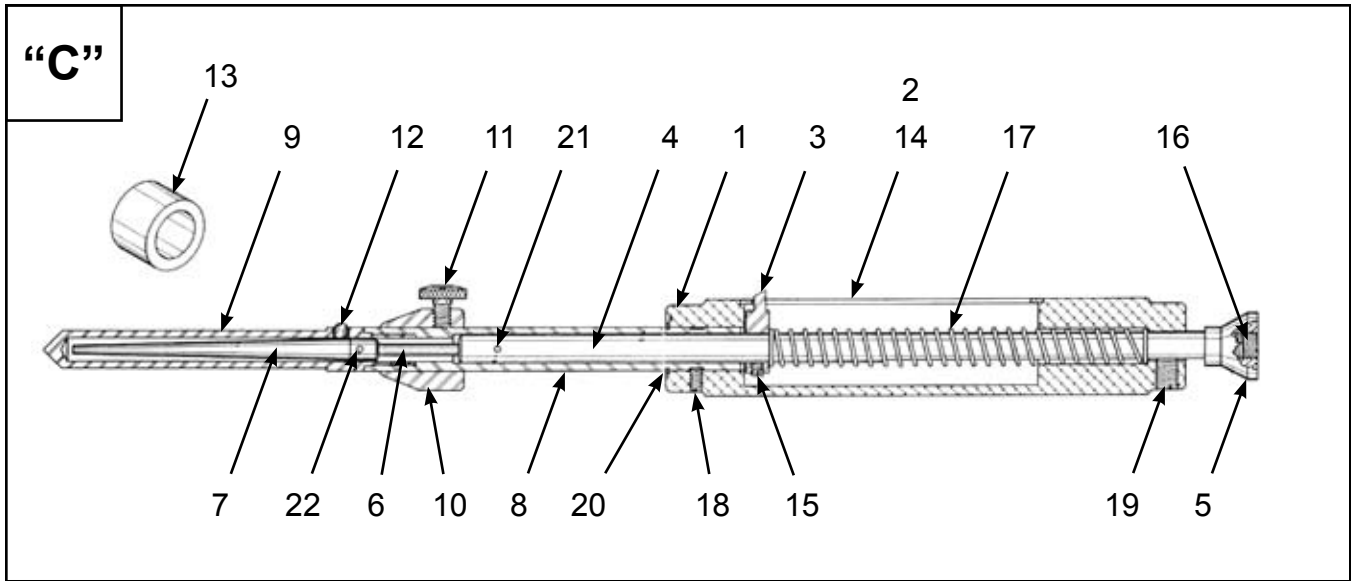
**Illustration "B"**

Ref	Number	#	X	EN
				Description
--	5171200	1		HG-625-6 Hole Gauge with Case
--	5171300	1		HG-625-12 Hole Gauge with Case
1	2473800	1		HG-6151 Body
2	2978116	1		HG-6252 MM Scale
3	24722500	1		HG-5003 Indicator
4	2472600	1		HG-5004 Indicator Rod
5	2472700	1		HG-5005 Knob
6	2472800	1		HG-5006-6 Connecting Rod (HG-625-6 Hole Gauge)
	2472900PT	1		HG-5006-12 Connecting Rod (HG-625-12 Hole Gauge)
7	2474000	1		HG-6257 Mandrel
8	2474100	1		HG-6258-6 Shaft (HG-625-6 Hole Gauge)
	2474200	1		HG-6258-12 Shaft (HG-625-12 Hole Gauge)
9	2474300	1		HG-6259 Shaft Nose
10	2477700	1		HG-62510 Stop
11	2473501PT	1		HG-5011 Thumb Screw
12	842161	3	9	Steel Ball (3/16")
13	2903541	1	2	HG-5/8 Test Ring
14	8008900	6	12	2-56 x 3/16" Flat Head Socket Cap Screw (not shown; used with HG-6252 MM Scale)
15	8008700	1	2	#6-32 x 1/8" Socket Head Set Screw
16	8010417	1	2	1/4-28 x 1/8" Hollow Lock Set Screw
17	2473600	1	1	HG-5012 Spring
18	8009700	1	2	#8-32 x 1/8" Socket Head Set Screw
19	8010893	1	2	1/4-28 x 3/16" Flat Point Socket Head Set Screw
20	8010891	1	2	1 x 4mm Roll Pin
21	8010829	1	2	1 x 6mm Roll Pin
22	2994155	1		HG-NP Nameplate (not shown)
23	8010318	4		#2 x 1/8" Drive Screw (not shown - used with nameplate)
24	2974351	1		B6 Hole Gauge Case (not shown)

(#) Quantity

(X) Recommended Spare Parts

**Airetool®**  
HG-750-6 & HG-750-12 3/4" Hole Gauge

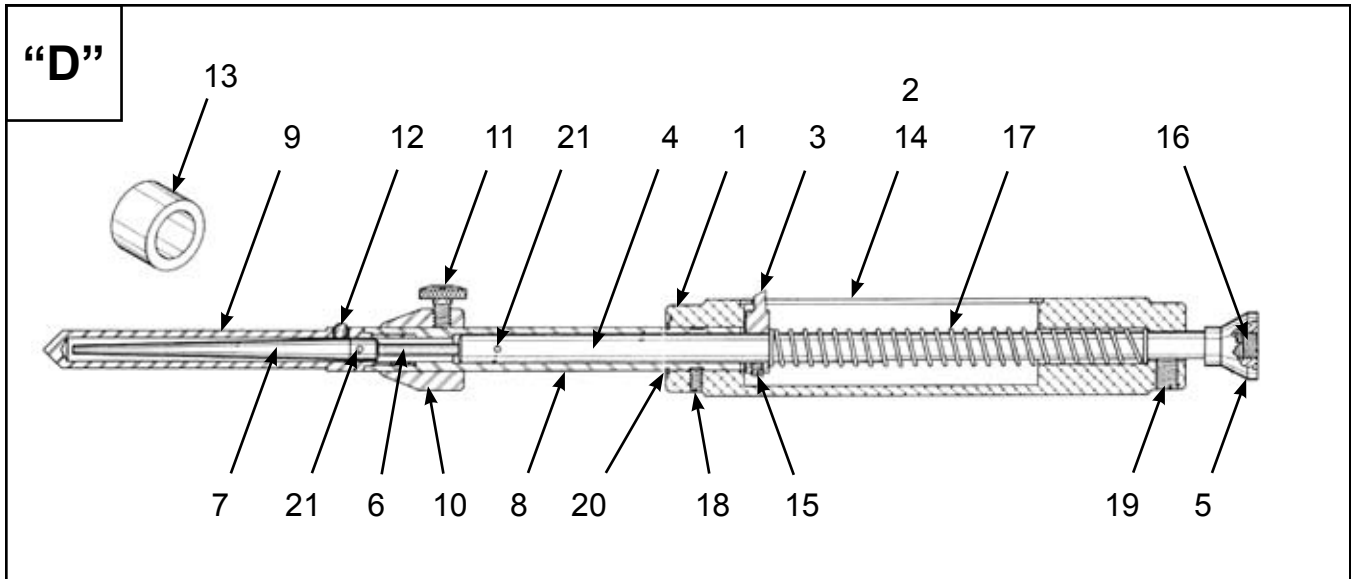


**Illustration "C"**

Ref	Number	#	X	EN
				Description
--	5171400	1		HG-750-6 Hole Gauge with Case
--	5171500	1		HG-750-12 Hole Gauge with Case
1	2474400	1		HG-7501 Body
2	2977929	1		HG-7502 MM Scale
3	2474600	1		HG-7503 Indicator
4	2474700	1		HG-7504 Indicator Rod
5	2474800	1		HG-7505 Knob
6	2474900	1		HG-7506-6 Connecting Rod (HG-750-6 Hole Gauge)
	2475000	1		HG-7506-12 Connecting Rod (HG-750-12 Hole Gauge)
7	2475100	1		HG-7507 Mandrel
8	2475200	1		HG-7508-6 Shaft (HG-750-6 Hole Gauge)
	2475300	1		HG-7508-12 Shaft (HG-750-12 Hole Gauge)
9	2475400	1		HG-7509 Shaft Nose
10	2475500	1		HG-7510 Stop
11	2475601PT	1		HG-7511 Thumb Screw
12	3235400	3	9	Steel Ball (7/32")
13	2903542	1	2	HG-3/4 Test Ring
14	8008900	6	12	2-56 x 3/16" Flat Head Socket Cap Screw (not shown; used with HG-7502 MM Scale)
15	8008800	1	2	#10-24 x 3/16" Socket Head Set Screw
16	8010418	1	2	3/8-24 x 3/16" Hollow Lock Set Screw
17	2475700	1	1	HG-7512 Spring
18	8007800	1	2	#10-24 x 1/4" Socket Head Set Screw
19	8010894	1	2	5/16-24 x 5/16" Flat Point Socket Head Set Screw
20	2247980	1	2	HG-5108-56 Retaining Ring
21	8010892	1	2	5/64" x 1/4" Roll Pin
22	8010156	1	2	5/64" x 5/16" Roll Pin
23	2994155	1		HG-NP Nameplate (not shown)
24	8010318	4		#2 x 1/8" Drive Screw (not shown - used with nameplate)
25	2974351	1		B6 Hole Gauge Case (not shown)

(#) Quantity  
(X) Recommended Spare Parts

**HG-875-6 & HG-875-12 7/8" Hole Gauge**



**Illustration "D"**

Ref	Number	#	X	EN
				Description
--	5171600	1		HG-875-6 Hole Gauge with Case
--	5171700	1		HG-875-12 Hole Gauge with Case
1	2475900	1		HG-8751 Body
2	2978117	1		HG-8752 MM Scale
3	2474600	1		HG-7503 Indicator
4	2474700	1		HG-7504 Indicator Rod
5	2474800	1		HG-7505 Knob
6	2474900	1		HG-7506-6 Connecting Rod (HG-875-6 Hole Gauge)
	2475000	1		HG-7506-12 Connecting Rod (HG-875-12 Hole Gauge)
7	2476100PT	1		HG-8757 Mandrel
8	2476200	1		HG-8758-6 Shaft (HG-875-6 Hole Gauge)
	2476300	1		HG-8758-12 Shaft (HG-875-12 Hole Gauge)
9	2476400	1		HG-8759 Shaft Nose
10	2477800	1		HG-87510 Stop
11	2475601PT	1		HG-7511 Thumb Screw
12	3227500	3	9	Steel Ball (1/4")
13	2903543	1	2	HG-7/8 Test Ring
14	8008900	6	12	2-56 x 3/16" Flat Head Socket Cap Screw (not shown; used with HG-8752 MM Scale)
15	8008800	1	2	#10-24 x 3/16" Socket Head Set Screw
16	8010418	1	2	3/8-24 x 3/16" Hollow Lock Set Screw
17	2475700	1	1	HG-7512 Spring
18	8007800	1	2	#10-24 x 1/4" Socket Head Set Screw
19	8010894	1	2	5/16-24 x 5/16" Flat Point Socket Head Set Screw
20	3154400	1	2	HG-402-23 Retaining Ring
21	8010156	2	4	5/64" x 5/16" Roll Pin
22	2994155	1		HG-NP Nameplate (not shown)
23	8010318	4		#2 x 1/8" Drive Screw (not shown - used with nameplate)
24	2974351	1		B6 Hole Gauge Case (not shown)

(#) Quantity

(X) Recommended Spare Parts

**Airetool®**  
HG-1000-6 & HG-1000-12 1" Hole Gauge

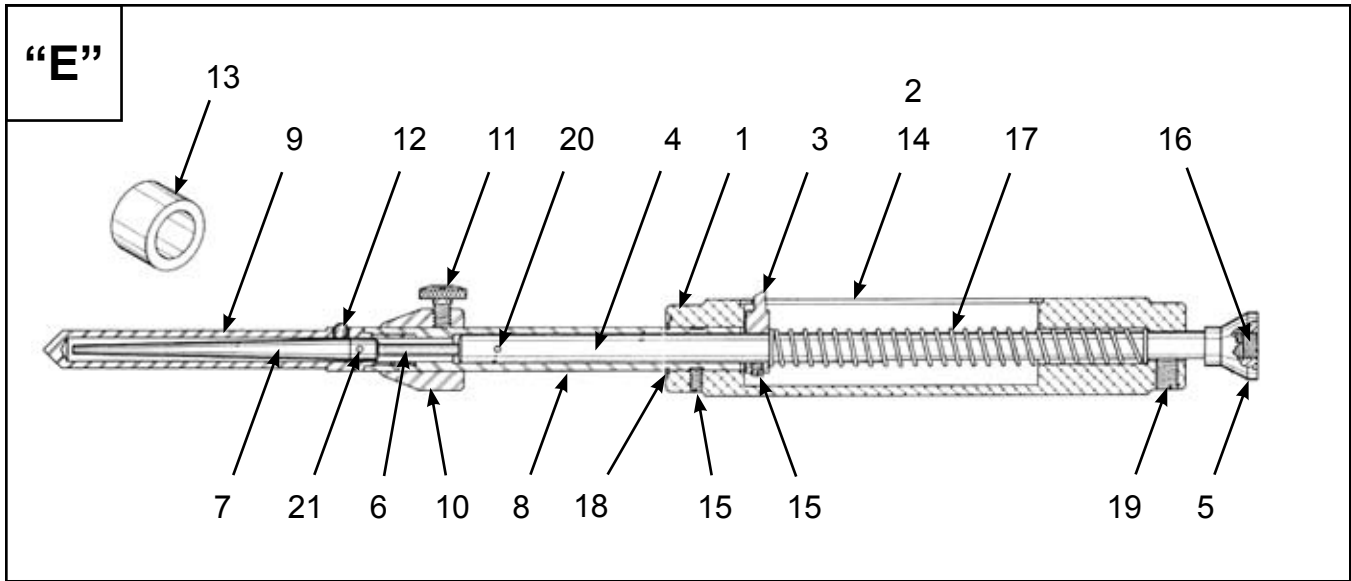


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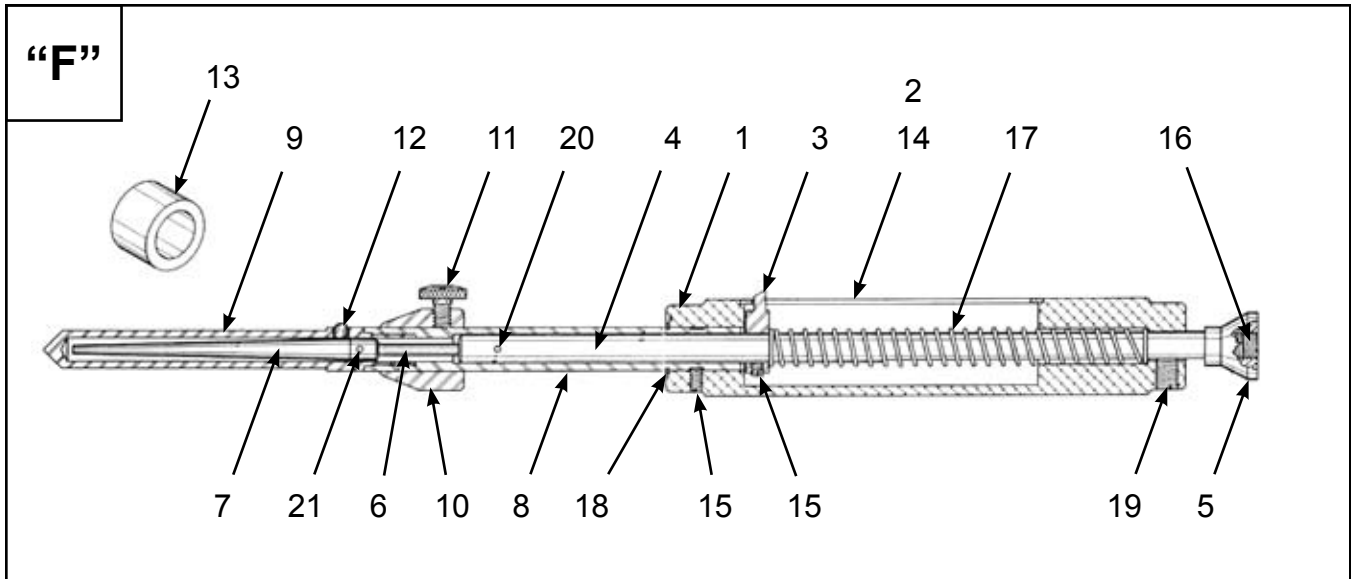
Ref	Number	#	X	EN
				Description
--	5171800	1		HG-1000-6 Hole Gauge with Case
--	5171900	1		HG-1000-12 Hole Gauge with Case
1	2476500	1		HG-10001 Body
2	2977828	1		HG-10002 MM Scale
3	2474600	1		HG-7503 Indicator
4	2474700	1		HG-7504 Indicator Rod
5	2474800	1		HG-7505 Knob
6	2474900	1		HG-7506-6 Connecting Rod (HG-1000-6 Hole Gauge)
	2475000	1		HG-7506-12 Connecting Rod (HG-1000-12 Hole Gauge)
7	2476700	1		HG-10007 Mandrel
8	2476800	1		HG-10008-6 Shaft (HG-1000-6 Hole Gauge)
	2476900	1		HG-10008-12 Shaft (HG-1000-12 Hole Gauge)
9	2477000	1		HG-10009 Shaft Nose
10	2477100	1		HG-10010 Stop
11	2475601PT	1		HG-7511 Thumb Screw
12	2477200	3	9	HG-10013 Steel Ball (9/32")
13	2903544	1	2	HG-1 Test Ring
14	8008900	6	12	2-56 x 3/16" Flat Head Socket Cap Screw (not shown; used with HG-10002 MM Scale)
15	8008800	2	4	#10-24 x 3/16" Socket Head Set Screw
16	8010418	1	2	3/8-24 x 3/16" Hollow Lock Set Screw
17	2475700	1	1	HG-7512 Spring
18	8503500	1	2	HG-5108-81 Retaining Ring
19	8010894	1	2	5/16-24 x 5/16" Flat Point Socket Head Set Screw
20	8010156	1	2	5/64" x 5/16" Roll Pin
21	8010869	1	2	5/64" x 3/8" Roll Pin
22	2994155	1		HG-NP Nameplate (not shown)
23	8010318	4		#2 x 1/8" Drive Screw (not shown - used with nameplate)
24	2974351	1		B6 Hole Gauge Case (not shown)

(#) Quantity

(X) Recommended Spare Parts



**HG-1250-6 & HG-1250-12 1-1/4" Hole Gauge**



**Illustration "F"**

Ref	Number	#	X	EN
				Description
--	5172000	1		HG-1250-6 Hole Gauge with Case
--	5172100	1		HG-1250-12 Hole Gauge with Case
1	2476500	1		HG-10001 Body
2	2978118	1		HG-12502 MM Scale
3	2474600	1		HG-7503 Indicator
4	2474700	1		HG-7504 Indicator Rod
5	2474800	1		HG-7505 Knob
6	2474900	1		HG-7506-6 Connecting Rod (HG-1250-6 Hole Gauge)
	2475000	1		HG-7506-12 Connecting Rod (HG-1250-12 Hole Gauge)
7	2477300	1		HG-12507 Mandrel
8	2477400PT	1		HG-12508-6 Shaft (HG-1250-6 Hole Gauge)
	2477500	1		HG-12508-12 Shaft (HG-1250-12 Hole Gauge)
9	2477600	1		HG-12509 Shaft Nose
10	2477100	1		HG-10010 Stop
11	2475601PT	1		HG-7511 Thumb Screw
12	2477650	3	9	HG-12513 Steel Ball (11/32")
13	2903545	1	2	HG-1-1/4 Test Ring
14	8008900	6	12	2-56 x 3/16" Flat Head Socket Cap Screw (not shown; used with HG-12502 MM Scale)
15	8008800	2	4	#10-24 x 3/16" Socket Head Set Screw
16	8010418	1	2	3/8-24 x 3/16" Hollow Lock Set Screw
17	2475700	1	1	HG-7512 Spring
18	8503500	1	2	HG-5108-81 Retaining Ring
19	8010894	1	2	5/16-24 x 5/16" Flat Point Socket Head Set Screw
20	8010156	1	2	5/64" x 5/16" Roll Pin
21	8010869	1	2	5/64" x 3/8" Roll Pin
22	2994155	1		HG-NP Nameplate (not shown)
23	8010318	4		#2 x 1/8" Drive Screw (not shown - used with nameplate)
24	2974351	1		B6 Hole Gauge Case (not shown)

(#) Quantity

(X) Recommended Spare Parts





## Sales & Service Centers

**Note:** All locations may not service all products. Please contact the nearest Sales & Service Center for the appropriate facility to handle your service requirements.

Detroit, MI  
**Apex Tool Group  
Sales & Service Center**  
2630 Superior Court  
Auburn Hills, MI 48326  
Tel: 248-391-3700  
Fax: 248-391-7824

Houston, TX  
**Apex Tool Group  
Sales & Service Center**  
6550 West Sam Houston  
Parkway North, Suite 200  
Houston, TX 77041  
Tel: 713-849-2364  
Fax: 713-849-2047

Lexington, SC  
**Apex Tool Group**  
670 Industrial Drive  
Lexington, SC 29072  
Tel: 800-845-5629  
Tel: 803-951-7544  
Fax: 803-358-7681

Los Angeles, CA  
**Apex Tool Group  
Sales & Service Center**  
15503 Blackburn Avenue  
Norwalk, CA 90650  
Tel: 562-623-4457  
Fax: 562-802-1718

Seattle, WA  
**Apex Tool Group  
Sales & Service Center**  
2865 152nd Avenue N.E.  
Redmond, WA 98052  
Tel: 425-497-0476  
Fax: 425-497-0496

York, PA  
**Apex Tool Group  
Sales & Service Center**  
3990 East Market Street  
York, PA 17402  
Tel: 717-755-2933  
Fax: 717-757-5063

Canada  
**Apex Tool Group  
Sales & Service Center**  
5925 McLaughlin Road  
Mississauga, Ont. L5R 1B8  
Canada  
Tel: 905-501-4785  
Fax: 905-501-4786

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**Apex Tool Group  
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73463 Westhausen  
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Fax: +49 (0) 73 63 81 222

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