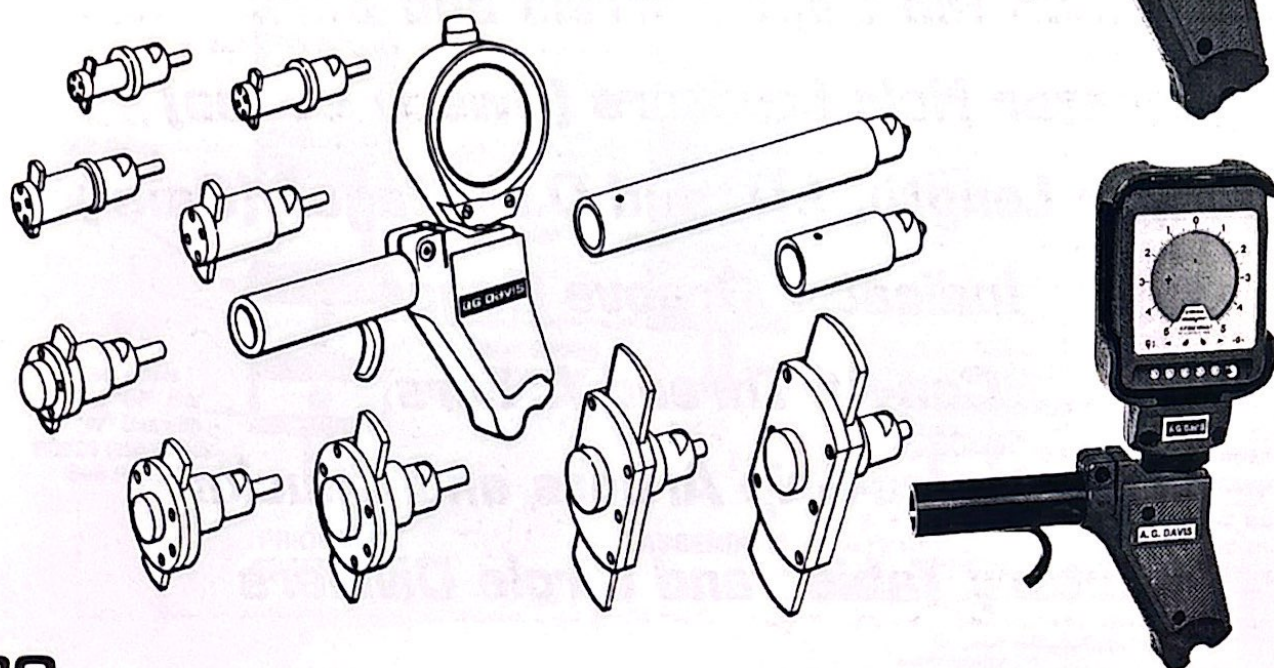
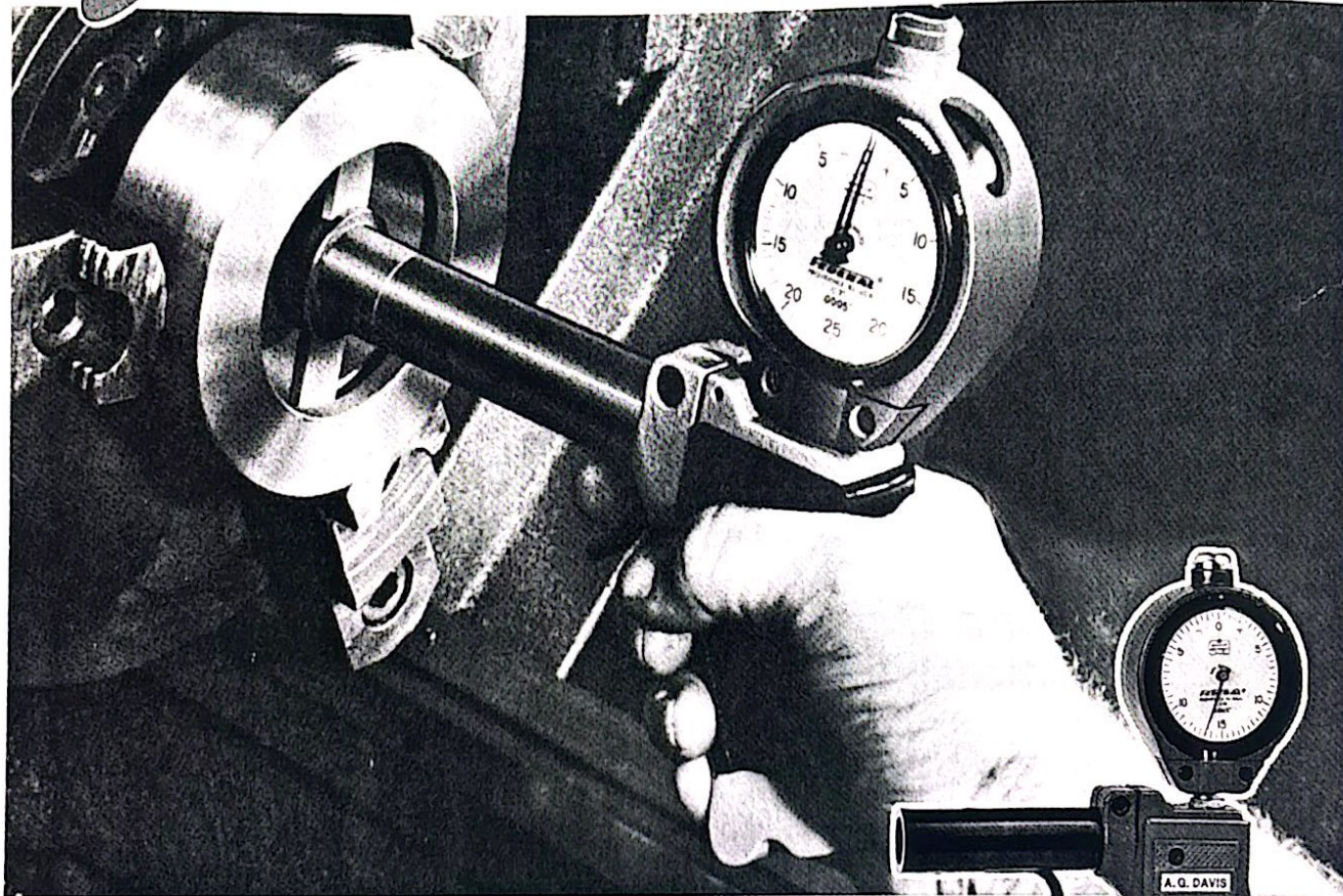


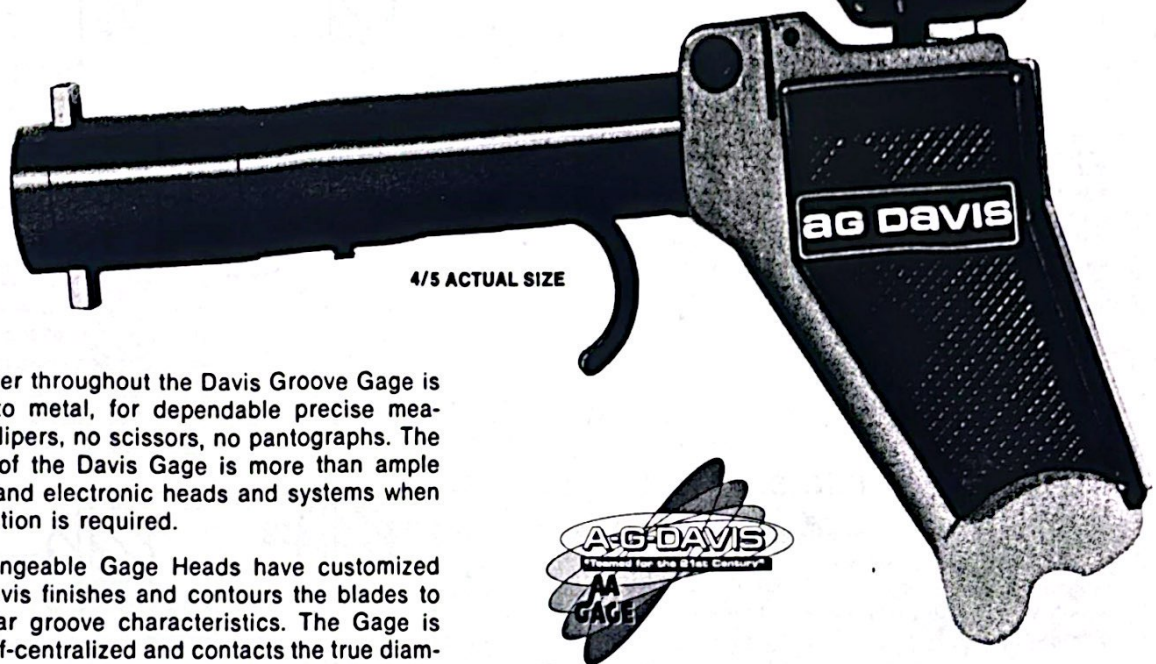
# Groove Gage Model GG





# The A. G. Davis Precision Groove Gage

Well-known for its exceptional accuracy and long-term dependability, the popular Davis Groove Gage has many outstanding features. Most important of these are the instantly interchangeable Gage Heads with "groove-matched" Blades, Pistol-Grip Handle, and precision Indicating Unit. With the A. G. Davis Groove Gage, you can quickly interchange Dial Indicators or substitute air and electronic sensing elements as magnification needs change. You can also adjust the Dial Indicator and Housing for right- and left-hand operation or for bench mounting. These features establish the Model GG Unit as the most dependable and versatile groove gage available.



4/5 ACTUAL SIZE

All motion transfer throughout the Davis Groove Gage is positive, metal to metal, for dependable precise measurement. No calipers, no scissors, no pantographs. The basic accuracy of the Davis Gage is more than ample for use with air and electronic heads and systems when higher magnification is required.

Quickly interchangeable Gage Heads have customized blades. A. G. Davis finishes and contours the blades to suit the particular groove characteristics. The Gage is automatically self-centralized and contacts the true diameter, even if the Gage is cocked.

Deep in-reach, up to 10". Using the longest of three quickly interchangeable extensions, the Davis Gage is ideal for deeply recessed diameters. Longer extensions available upon application.

The Davis Groove Gage operates with any AGD Group 2 Dial Indicator. Gages are normally furnished with a Federal Miracle Movement Indicator for long-term accuracy.

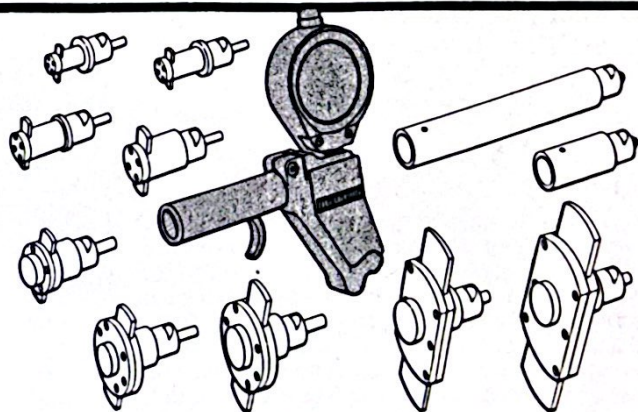
Over 15 models to choose from (See Back Page). Housing is tough, resilient, and provides dependable protection for the Indicator against shock. Indicator and Housing can be turned and locked in any radial position.

Lightweight aluminum, pistol-grip handle insures a secure grip. Trigger-type retraction operates smoothly over long range (up to 0.750" on special application).

## QUICK CHANGEOVER

Each Gage Head is a self-contained unit. Changing from one to another takes less than 60 seconds. Three extensions can be interchanged just as quickly. Thus, job-to-job changeover takes only a few minutes. Interchangeable heads check the standard sizes from 0.500" to 4.875". Larger sizes and thread P.D. quoted on request.

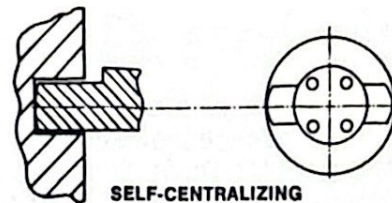
Blades can often be modified to suit a new groove size or condition. A. G. Davis will be pleased to quote on specific requirements.





## SELF-CENTRALIZING

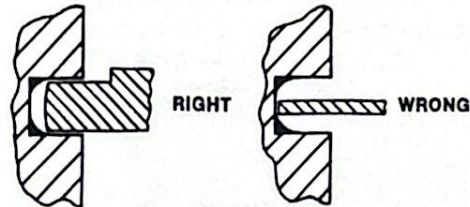
The Davis Groove Gage is automatically self-centralizing on the true diameter of the groove when the trigger is released. The operator will always obtain true groove diameter readings regardless of Gage alignment. Because the gaging contacts are profiled to conform to groove size and characteristics, no rocking is required.



SELF-CENTRALIZING

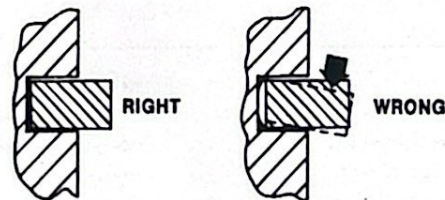
## CHECKS THE WHOLE GROOVE

Unlike narrow bladed gages, the Davis Groove Gage reaches into the groove corners. As the grooving tool wears and the corner radii of the groove increase, the Davis Gage detects these problems, while conventional gages won't. With the Davis Groove Gage you see changing groove configuration *before* scrap parts are produced.



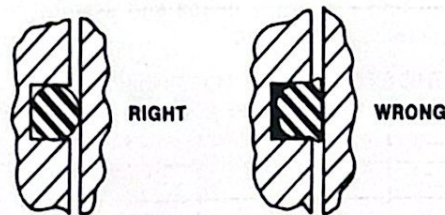
## RIGHT FOR SNAP RINGS

Because it detects corner build-up, the Davis Groove Gage instantly rejects parts which might otherwise not be scrapped until final assembly: or worse, not discovered until they fail in the field. Each groove accepted by the Davis Gage will meet assembly requirements with assurance that the snap ring will seat properly.



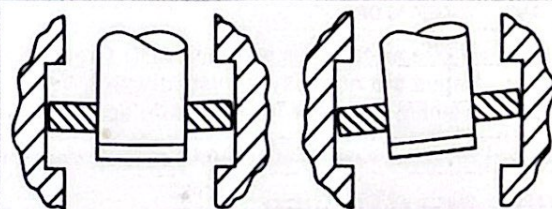
## RIGHT FOR "O" RINGS

Corner build-up in "O" Ring grooves spells trouble. Oversize corner radii cause excessive squeezing, resulting in failure under use. With the Davis Groove Gage, the operator can instantly detect build-up which would otherwise cause improper "O" Ring assembly.



## RIGHT FOR RECESSED DIAMETERS

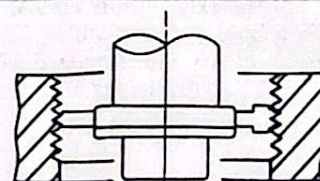
Gaging contacts of the Davis Gage are radiused front to back; they align on the true diameter, even though the Gage may not be positioned properly. This feature is vital for obtaining correct readings when conditions prevent rocking. Place the Davis Gage in the bore. Release the trigger. Read the Dial indicator. That's all.



RADIUSED FRONT TO BACK

## RIGHT FOR THREADS

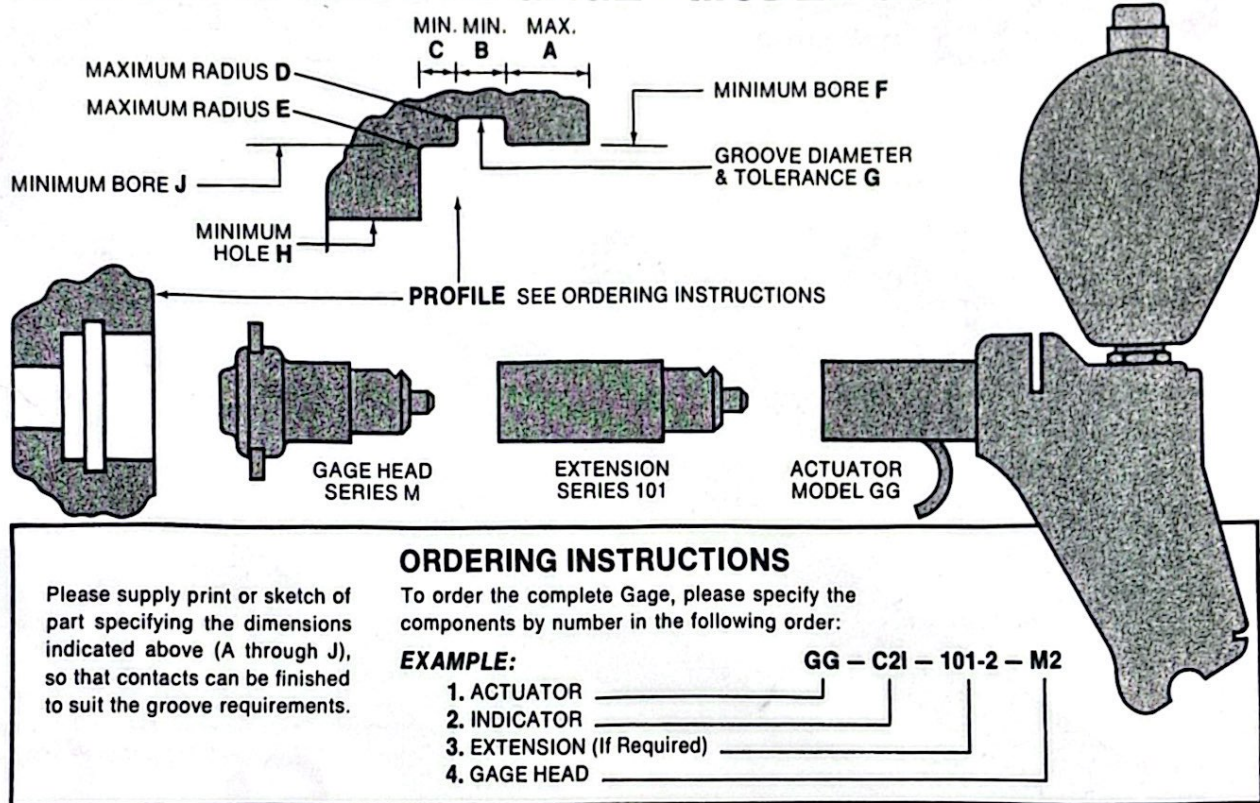
Gaging contacts are form-ground to suit thread size. With gaging blades retracted, the Davis Gage can be directly and quickly inserted into the piece-part unlike conventional "go" / "no-go" thread gages which must be screwed in. Release of the trigger allows the Gage blades to contact the flanks of the thread instantly showing thread size on the Dial indicator. Retract blades and remove Gage just as fast. Set Gage with special Thread Master.



FORM-GROUND CONTACTS



## A. G. DAVIS GROOVE GAGE – MODEL GG



**MIN. MIN. MAX.**  
C B A

MAXIMUM RADIUS D  
MAXIMUM RADIUS E  
MINIMUM BORE J  
MINIMUM HOLE H  
MINIMUM BORE F  
GROOVE DIAMETER & TOLERANCE G  
PROFILE SEE ORDERING INSTRUCTIONS

GAGE HEAD SERIES M  
EXTENSION SERIES 101  
ACTUATOR MODEL GG

**ORDERING INSTRUCTIONS**

Please supply print or sketch of part specifying the dimensions indicated above (A through J), so that contacts can be finished to suit the groove requirements.

To order the complete Gage, please specify the components by number in the following order:

**EXAMPLE:** **GG - C21 - 101-2 - M2**

1. ACTUATOR \_\_\_\_\_  
2. INDICATOR \_\_\_\_\_  
3. EXTENSION (If Required) \_\_\_\_\_  
4. GAGE HEAD \_\_\_\_\_

### SELECTOR GUIDES

#### DIAL INDICATORS

MODEL	GRADUATION	RANGE	DIAL
C1/2K	0.00005"	0.010"	0-2-0
C1K	0.0001"	0.020"	0-4-0
C21	0.0001"	0.025"	0-5-0
C2Q	0.00025"	0.025"	0-5-0
C3K	0.00025"	0.050"	0-10-0
C3Q	0.0005"	0.050"	0-10-0
C5M	0.0005"	0.075"	0-15-0
C6K	0.0005"	0.100"	0-20-0
C71	0.0005"	0.125"	0-25-0
C3W	0.001"	0.050"	0-10-0
C6Q	0.001"	0.100"	0-20-0
C70	0.001"	0.125"	0-25-0
C8I	0.001"	0.250"	0-50-0
P1I	0.002 mm	0.500 mm	0-10-0
P3I	0.005 mm	1.25 mm	0-25-0
P6I	0.010 mm	2.50 mm	0-50-0

#### OPTIONAL EXTENSIONS

MODEL	LENGTH
101-2	2.00"
101-6	6.00"
101-10	10.00"

#### GAGE HEADS

MODEL	FOR GROOVE DIAMETERS FROM	TO	CONTACT TRAVEL (ON DIAMETER)
M-1	0.500"	0.750"	0.203"
M-2	0.633"	0.875"	0.218"
M-3	0.760"	1.188"	0.218"
M-4	1.010"	1.438"	0.281"
M-5	1.260"	1.875"	0.406"
M-6	1.635"	2.250"	0.406"
M-7	2.010"	2.875"	0.406"
M-8	2.635"	3.750"	0.406"
M-9	3.260"	4.875"	0.406"

**NOTE:** Model M Gage Heads are modified according to the part conditions of each specific gaging application to insure centralizing, not to check the range of their contact travel.