

# INSTRUCTIONS FOR SUNNEN CF-1126 SETTING FIXTURE (Used with Sunnen GA/GR-2000 Series Dial Bore Gages) Dia. Range: 2 to 6 inches

## DESCRIPTION

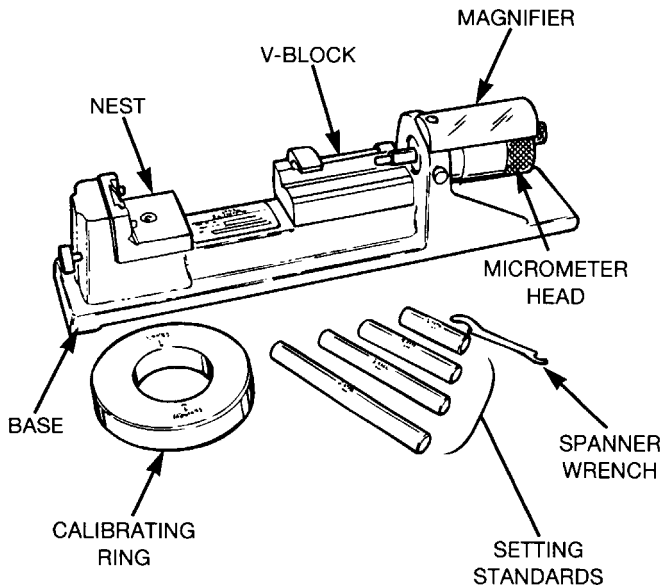
The Sunnen CF-1126 Setting Fixture greatly simplifies precise setting of Sunnen GA-2000 and GR-2000 Series Dial Bore Gages. Sunnen CK Series Dial Bore Gages can also be set with the CF-1126 Fixture by installing optional CF-155A Adapter Plate, which is available from Sunnen Products Company. CF-1126 Setting Fixture includes the following (see Figure 1):

1. The basic fixture which consists of:

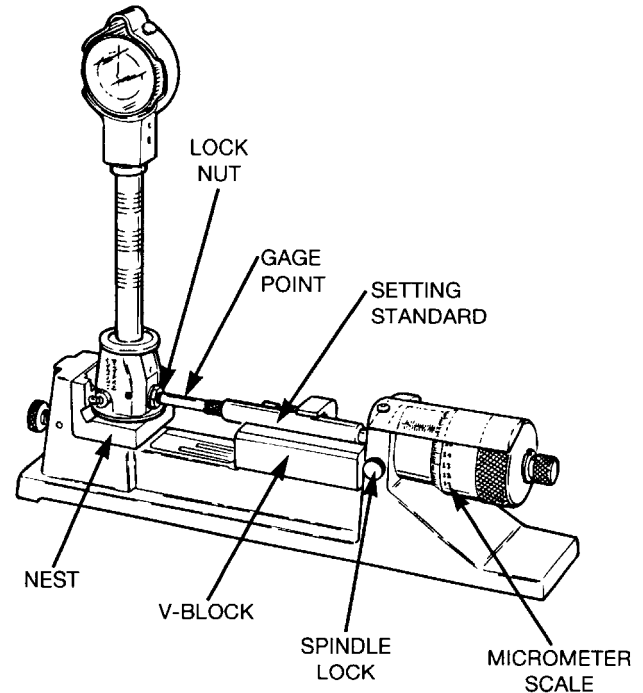
One-piece, stress-relieved cast iron Base with Swivel Adjusting Knob, for rocking nest to get minimum (-) reading;  
Nest, for GA/GR-2000 series gage;  
V-Block, for holding setting standards;  
Tenth reading (.0001") Micrometer Head, with Spindle Lock for locking in setting;  
Magnifier, for reading micrometer.

2. The following accessories are included:

2.000" Calibrating Ring, for checking fixture;  
2.000+ Setting Standard, for 2 - 3" range;  
3.000+ Setting Standard, for 3 - 4" range;  
4.000+ Setting Standard, for 4 - 5" range;  
5.000+ Setting Standard, for 5 - 6" range;  
Spanner Wrench, for setting micrometer;  
3/32" Hex Wrench;  
Storage Case.



**FIGURE 1**



**FIGURE 2**

## SETUP

These setup instructions are for use with Sunnen GA/GR-2000 series gages only (see Figure 2). The fixture can be used to set Sunnen CK series dial bore gages with the addition of optional CF-155A Adapter Plate.

For convenience, fixture can be used without removing it from protection of its storage case. If you choose to remove fixture from its protective case, DO NOT lift it by micrometer head; grip it by base.

1. Select setting standard for diameter to be set.

**Example:** For 3.784" bore; select standard marked 3.000+.

2. Clean v-block, micrometer spindle tip, and both ends of setting standard.

3. Loosen Spindle Lock; set Micrometer Scale to diameter desired; then retighten spindle lock. Set scale by moving from big to small. If you overshoot desired setting, back off micrometer and reset.

**Example:** For 3.784" bore; install 3.000+ standard and set scale to .784.

4. Place Setting Standard in V-Block.

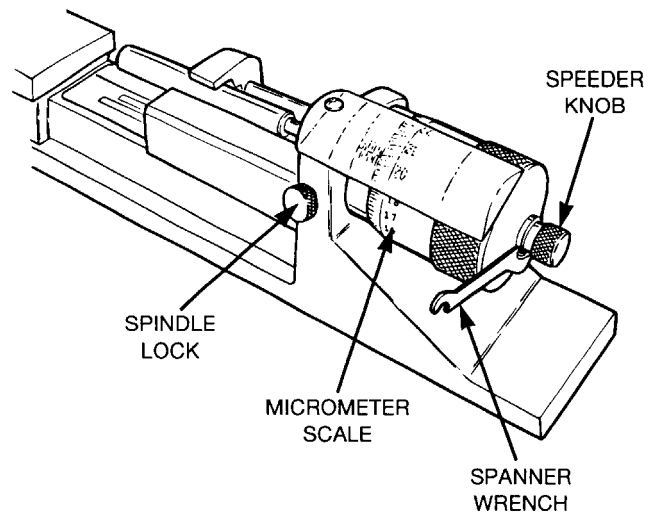
5. Screw correct gage point into gage and place gage in nest, so gage point is aligned with setting standard.

6. Unscrew gage point until it just touches end of setting standard and dial indicator hand moves.
7. With "0" on indicator dial face at approximately 12 o'clock position, adjust gage point until dial indicator hand moves to "0"; then tighten gage point's Lock Nut.
8. Insert a 3/32" hex wrench through both centralizer points on gage.
9. While pressing lightly against wrench, to keep centralizer points in contact with nest, zero gage in both horizontal and vertical planes.
10. Remove wrench from centralizer points and remove gage from fixture.

## CALIBRATION

To check calibration of setting fixture, proceed as follows (see Figure 3):

1. Remove 2.000" Calibrating Ring from case and clean thoroughly. Place ring on a flat surface so side with arrows and size marking is facing up.
2. Screw gage point #1 into gage and place gage in calibrating ring so gage point is aligned with arrow.
3. Screw gage point in or out until gage reads zero "0", then tighten lock nut.
4. Clean v-block and spindle tip.
5. Remove 2.000+ Setting Standard from case; clean thoroughly, and place in v-block.
6. Back off micrometer by turning Speeder Knob, so gage will fit in fixture, and place gage in nest. Align gage point with setting standard and turn Micrometer Head in until gage reads a plus (+) .001.
7. Insert a 3/32" hex wrench through both centralizer points on gage, and while pressing lightly against wrench to keep centralizer points in contact with nest, rock gage to obtain minimum (-) readings in both horizontal and vertical planes.
8. Turn Micrometer Head in until gage reads "0".
9. Micrometer Scale should now read the same as size marked on calibrating ring. If scale reads the same as ring, fixture is calibrated properly and is ready to use.



**FIGURE 3**

If scale does not read the same as ring, fixture is out of calibration and must be recalibrated. Proceed with step 10.

10. With gage reading "0", lock spindle lock.
11. While holding Micrometer Head, loosen Speeder Knob with Spanner Wrench; back off Micrometer Head half a turn; and set scale to read the same as ring.
12. Then while holding head at this position, carefully turn Speeder Knob until finger tight. Then release spindle lock and tighten Speeder Knob with Spanner Wrench.
13. Reset micrometer to size marked on ring. Gage should read "0". If gage does not read "0", repeat steps 10 thru 13. If gage reads "0", fixture is properly calibrated and ready to use.
14. Remove wrench from centralizer points and remove gage from fixture.
15. Wipe calibrating ring clean, and then replace in storage case.



### SUNNEN PRODUCTS COMPANY

7910 Manchester Ave., St. Louis, MO 63143 U.S.A., 314-781-2100  
 U.S.A. Toll-Free Sales and Service -  
 Automotive: 1-800-772-2878 • Industrial: 1-800-325-3670  
 Fax: 314-781-2268

International Division, FAX: 314-781-6128 Telex: 4312052 SUNNEN PRODSTL  
 Cable Address: "SUNPROCO" All Codes

website: <http://www.sunnen.com>

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### SUNNEN PRODUCTS LIMITED

No. 1 Centro, Maxted Road  
 Hemel Hempstead, Herts HP2 7EF ENGLAND  
 Phone: 1442 39 39 39 Fax: 1442 39 12 12

### SHANGHAI SUNNEN MECHANICAL CO., LTD.

Gaoxi Cun, Kangqiao Hengmian, Xiaogu, Pudong  
 Shanghai 201319 China

Phone: 86-21-5-813-3322 Fax: 86-21-5-813-2299