

Dial Indicators

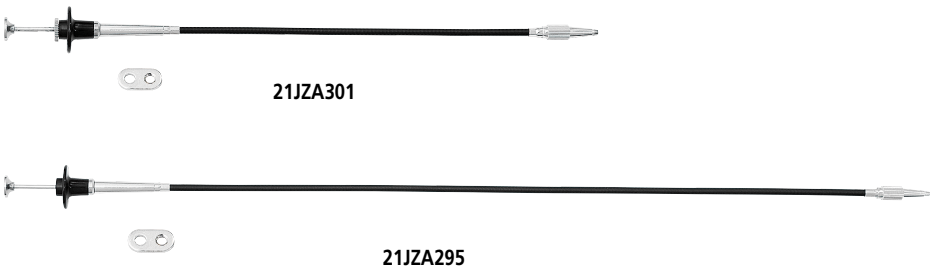
Spindle Lifting Lever and Cable Optional Accessories for Digimatic and Dial Indicators

Spindle Lifting Cable

- The spindle can be moved up and down using the lifting lever or the lifting cable.
- Attaching the dial indicator to a stand improves measurement accuracy and efficiency.

Lifting cable

Stroke: 10 mm



21JZA301: with auto-stop function (300 mm)
21JZA295: without auto-stop function (500 mm)

Note 1: This accessory is not applicable to dial indicators with a range of 20 mm or more, special models (**2048A(B)-10**, **2046A(B)-80**), certain models of 1 series (**1911A(B)-10**, **1913A(B)-10**, **1921A(B)-10**, **1923A(B)-10**, **1925A(B)-10**, **2971AB**, **2972AB**, **2973AB**, **2976AB**, **2977AB**, **2978AB**), back plunger type and water-proof type.

Note 2: The lifting cable is attached to the spindle. Therefore, its weight is added to the measuring force. (Approximately 0.3 N max.)

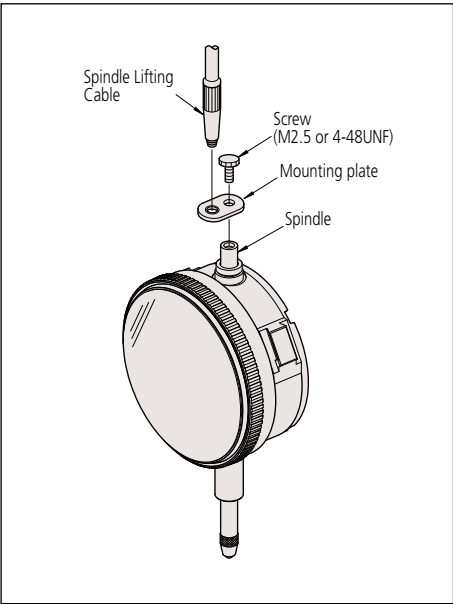
Spindle Lifting Lever

21EAA426

Suitable for 4.8 mm spindle diameter.



Typical application



Spindle Lifting Lever (A type)

902100*1

Use for A type SERIES **1** dial indicators.



Spindle Lifting Lever (S type)

902100*1

Use for S type SERIES **1** dial indicators.



21EZA198*2

Use for A type SERIES **2**, **3**, and **4** dial indicators (up to 10 mm/0.4 in).



21AZB149: Lever
101171: Stop screw

21AZB149*2

Use for S type SERIES **2**, **3**, and **4** dial indicators (up to 10 mm/0.4 in).



21AZB150*2

Use for A type SERIES **2** and **3** dial indicators (from 10 mm/0.4 in up to 20 mm/0.8 in).



21AZB150*2

Use for S type SERIES **2** and **3** dial indicators (from 10 mm/0.4 in up to 20 mm/0.8 in).



Spindle Lifting Lever (for ID-SS, ID-SX, ID-CX, ID-CNX)

21EZA198*1*3



21AZB149: Lever
101171: Stop screw

*1 Before use, replace the stop screw with the standard accessory.

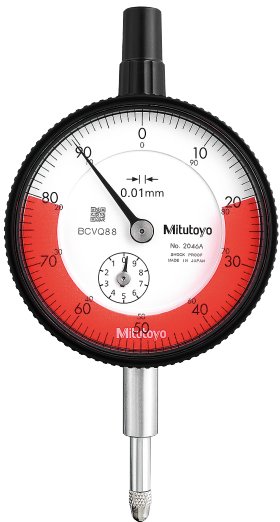
*2 Use the stop screw already fixed to the dial indicator body.

*3 Stop screw is for mm model.

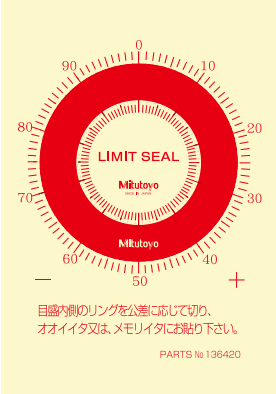
Dial Indicators

Limit Stickers

- Place limit stickers on a SERIES 2 indicator dial face or crystal to indicate tolerance limits. Stickers are available in: red, green, and yellow.



Red



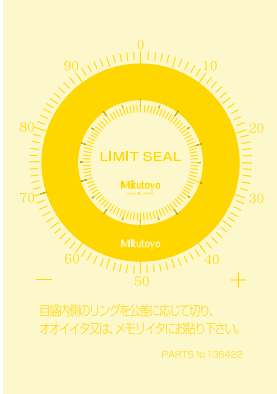
136420
(10 sheets/set)

Green



136421
(10 sheets/set)

Yellow



136422
(10 sheets/set)

Color-coded Spindle Caps

- 9 color-coded spindle caps are available for compact/standard dial indicators with a range of 10 mm or less.



Color	Code No.	
	Standard	Water-proof
Black	21AAB675	21AAB676
White	21AAB675W	21AAB676W
Red	21AAB675R	21AAB676R
Green	21AAB675G	21AAB676G
Blue	21AAB675B	21AAB676B
Yellow	21AAB675Y	21AAB676Y
Orange	21AAB675D	21AAB676D
Pink	21AAB675P	21AAB676P
Navy	21AAB675S	21AAB676S

Note: This accessory is not applicable to 1003A(B), 1911A(B)-10, 1913A(B)-10, 1921A(B)-10, 1923A(B)-10, 1925A(B)-10, 2971AB, 2972AB, 2973AB, 2976AB, 2977AB, and 2978AB.

Note: When attaching to small dial indicators, the measuring range height will be 8 mm taller.

Replacing bezels and graduation plates

A bezel and graduation plate must be swaged together so that the graduation plate always rotates with the bezel. Assemblies comprised of a swaged bezel and graduation plate are available for some models.

Code No. of dial indicators	Code No. of swaged assemblies
2046A	21AZB650
2109A-10	21AZB693



Pointer removing tip (ø0.8) (126630)



Pointer removing tip (ø0.5) (126630B)



Pointer removing tip (ø1.6) (126630C)



Adjustable nut (100699)



Pinion rest (129735)



Pin rest (129731)



Spindle rest (129730)



Reamer for pointer (ø0.5: 1/20 taper) (21JAA273)



Punch (129733)



Reamer (ø0.6: 1/50 taper) (193702)



Bearing adjuster (129734)



Reamer (ø1: 1/50 taper) (129736)



Pin remover (129732)

Typical applications

Remove the long hand

Select an appropriate pointer removing tip for the diameter of the hole of the long hand, and attach it to the pointer removing tool using the adjustable nut. Push the pivot with the pointer removing tool to remove the long hand.

Remove or replace a pin

Place the spindle on the V-groove of the spindle rest. Remove the pin using the pin remover and a commercially available hammer.

To press-fit the pin, tap it directly using a hammer, etc.

Replace the long or little hand

Screw the pinion rest into the pin rest.

Support the pinion with the pinion rest and press-fit the pointer using the punch and a commercially available hammer,

etc. When replacing with a new pointer on an old type of dial indicator or test indicator, reaming is necessary before press-fitting. Use a commercially available pin device (for ø0.8 to 1.2) with one of the following reamers attached.

- Pointers of dial indicators (A type) and TI-X Series*¹ do not require a reamer.
- Use the reamer for pointer (ø0.5: 1/20 taper) for S type and T type dial indicators*².
- Depending on the shaft diameter, use reamer (ø1: 1/50 taper) or reamer (ø0.6: 1/50 taper) for F type dial indicators and other than TI-X Series dial test indicators.

*¹ Dial test indicator whose model No. ends in "X".

*² Dial indicator whose code No. includes an "S" and "T".

Special repairing technique is necessary for repair work. Note that we cannot guarantee accuracy if critical parts are disassembled.

We recommend that you use our repair service to operate the instrument with peace of mind.