

SZ-ST
MODIFICATION MANUAL

OLYMPUS

INTRODUCTION

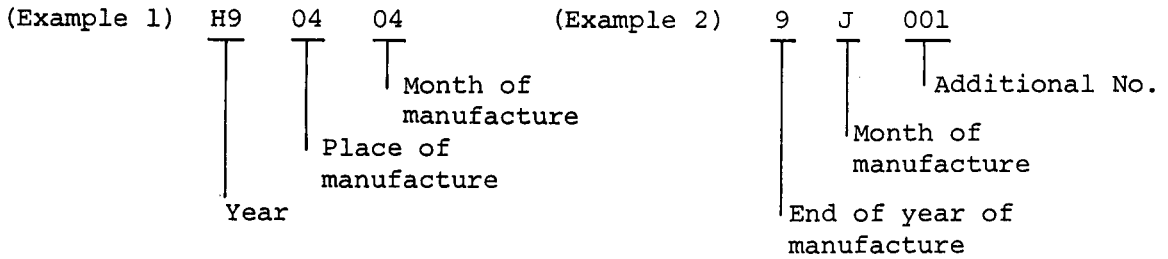
1. Scope of Application

This manual is applied to the following cases:

- (1) Focusing knobs become loose when it is focused by right-focusing knob. It is not effective by increasing the tension of the focusing knobs.
- (2) Those which manufactured before June , 1991.

2. Identification

Read the date of manufacture from the stamp on the base bottom.



Alphabet	A	B	C	D	E	F	G	H	J	K	L	M
Digit	1	2	3	4	5	6	7	8	9	10	11	12

3. Necessary parts for modification

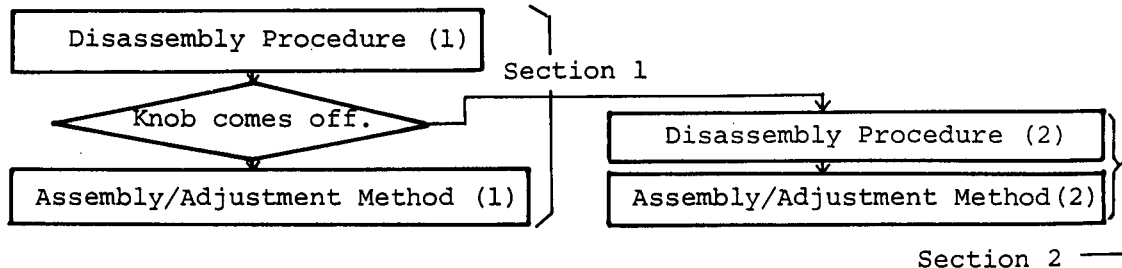
- (1) KNOB ASSEMBLY AQ413300

4. JIGS and TOOLS

- (1) ALLEN WRENCH (Size 2.5mm) (OT0207)
- (2) ALLEN WRENCH (Size 4.0mm) (OT0209)
- (3) TWEEZERS (OT0095)
- (4) SLIDE CALIPERS (OT0409)
- (5) GREASE Los 72515 (OT2008)
- (6) ADHESIVE "THREE BOND" 1401 (OT1378)
- (7) CLEANING MIXTURE (ether 70%:alcohol 30%) (OT2059) and LENS PAPER (OT0551)

5. Configuration

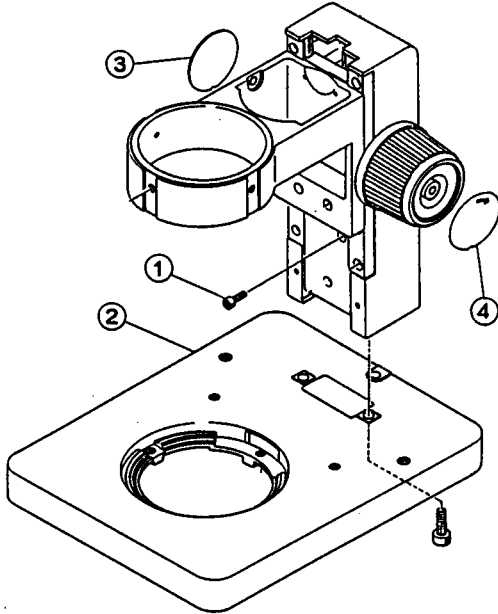
This manual is edited in two sections. The section 2 provides supplementary works for those which are not finished in the section 1. The configuration is as shown below.



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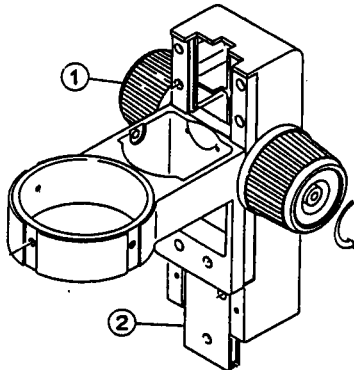
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1. DISASSEMBLY PROCEDURE (1)



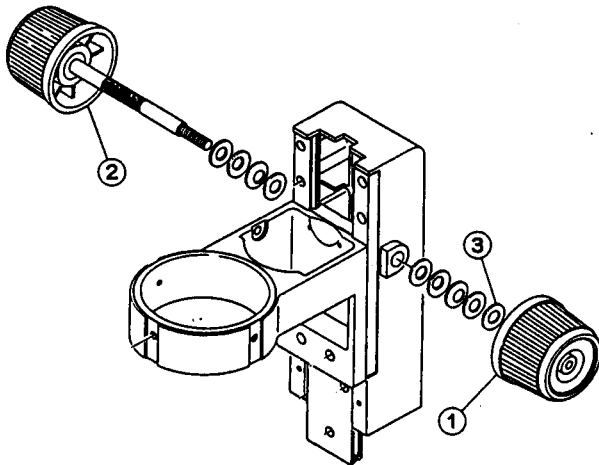
1-1 Remove the STOPPER SCREW (1), and take off the BASE (2).

1-2 Remove LEFT PLATE (3) and RIGHT PLATE (4).



1-3 Lower INNER BALL GUIDE (2) by rotating KNOB ASSEMBLY (1) to the position where the pinion and rack are not engaged.

* The rack and pinion will be disengaged at the lowest position of GUIDE (2). Otherwise, go to "Disassembly Procedure (2)" on page 4.

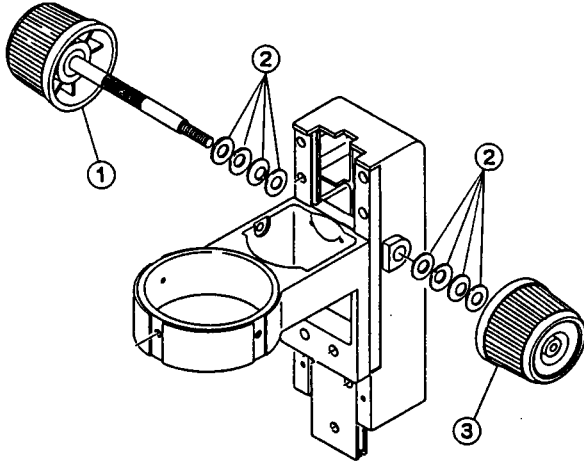


1-4 Remove KNOB-B (1) and KNOB ASSEMBLY (2).

* The washer will come off together.

* The washer (3) is unnecessary, and not used on assembly.

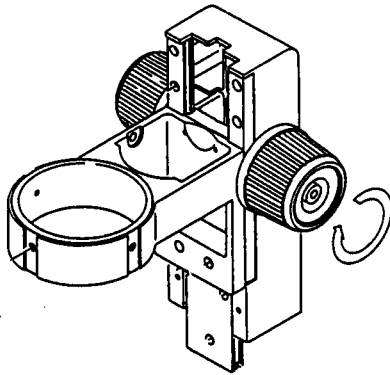
2. ASSEMBLY/ADJUSTMENT METHOD (1)



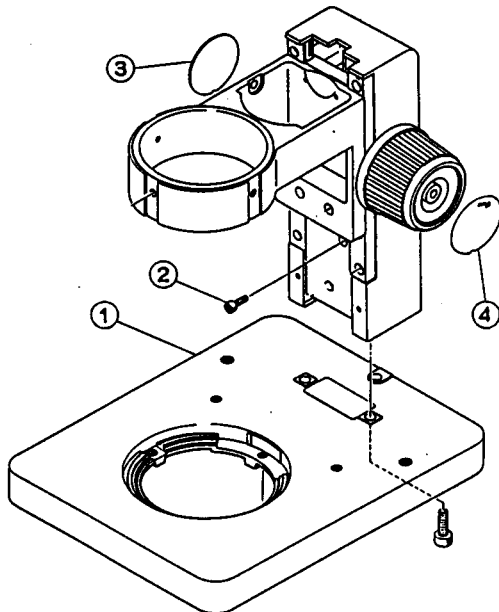
2-1 Assemble new KNOB ASSEMBLY (1) with WASHERS (2) as shown on the left, and screw new KNOB-B (3) up to the position where it stops lightly.

* Apply enough grease previously to the thread of KNOB ASSEMBLY (1), and apply small amount of grease to the PINION and WASHERS.

GREASE Los 72515 (OT2008)



2-2 Engage the PINION and RACK of KNOB ASSEMBLY.



2-3 Secure the BASE (1) and the STOPPER SCREW (2).

* Make the BASE position even.

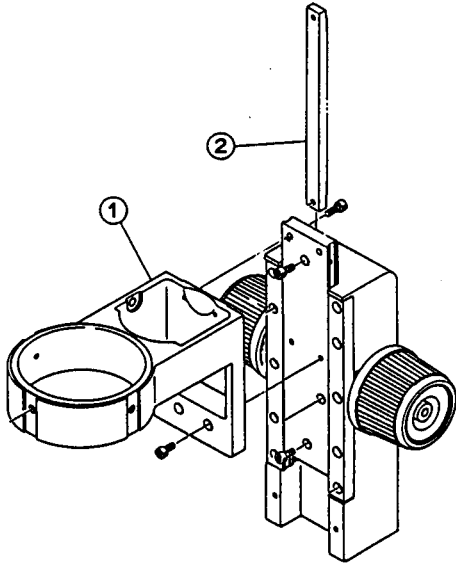
Screws AB5x12SA × 3
AB3x8SA × 1

2-4 Attach LEFT PLATE (3) and RIGHT PLATE (4).

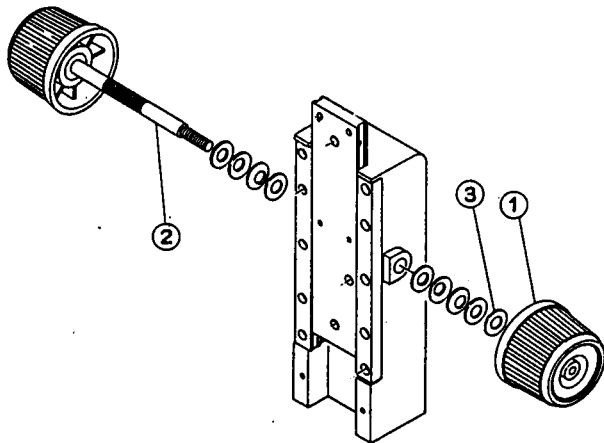
2-5 Apply adhesive to the screw head.

Adhesive Three bond 1401(OT1378)

3. DISASSEMBLY PROCEDURE (2)



3-1 Remove the arm (1) and the rack (2).

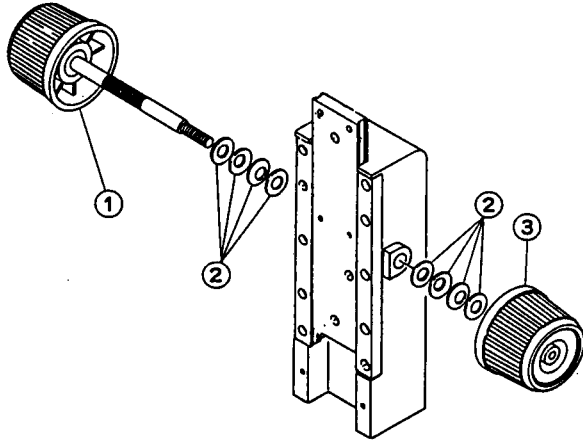


3-2 Remove KNOB-B (1) and KNOB ASSEMBLY (2).

* The washers come off together.

* The washer (3) is unnecessary, and not used on assembly.

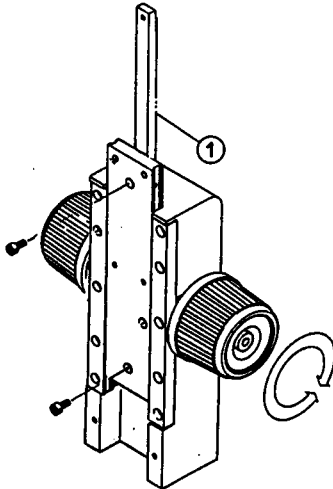
4. ASSEMBLY/ADJUSTMENT METHOD (2)



- 4-1 Assemble new KNOB ASSEMBLY (1) with WASHERS (2) as shown on the left, and screw new KNOB-B (3) up to the position where it stops lightly.

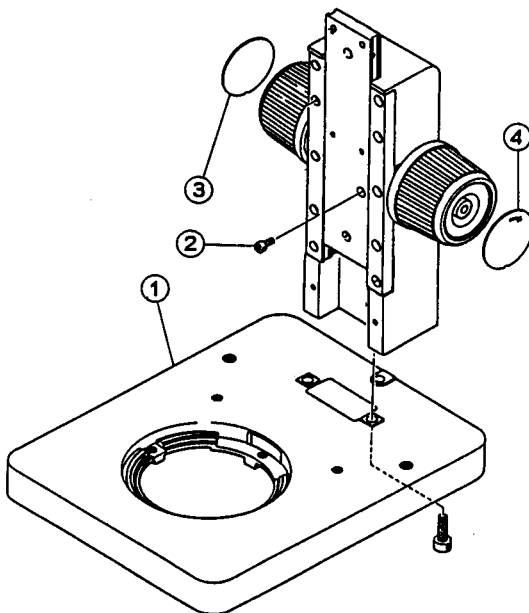
* Apply enough grease previously to the thread of KNOB ASSEMBLY (1), and apply small amount of grease to the PINION and WASHERS.

GREASE Los 72515 (OT2008)



- 4-2 Insert RACK (1) and engage it with the PINION of KNOB ASSEMBLY. Turn KNOB-B to familiarize RACK with the pinion. Secure RACK with screws.

Screw AB3x8SA × 2

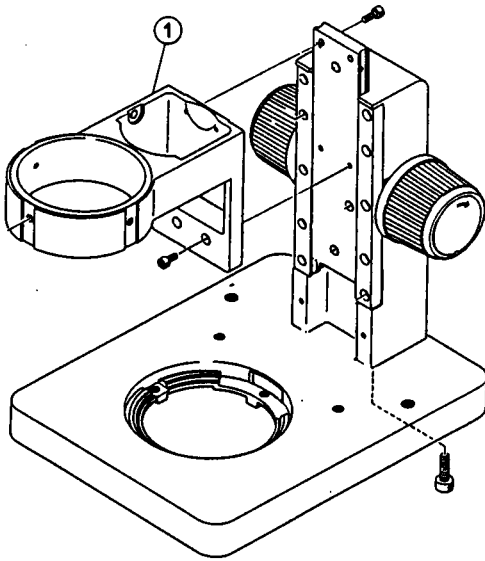


- 4-3 Secure the BASE (1) and the STOPPER SCREW (2).

* Make the base position even.

Screws AB5x12SA × 3
AB3x8SA × 1

- 4-4 Attach LEFT PLATE (3) and RIGHT PLATE (4).

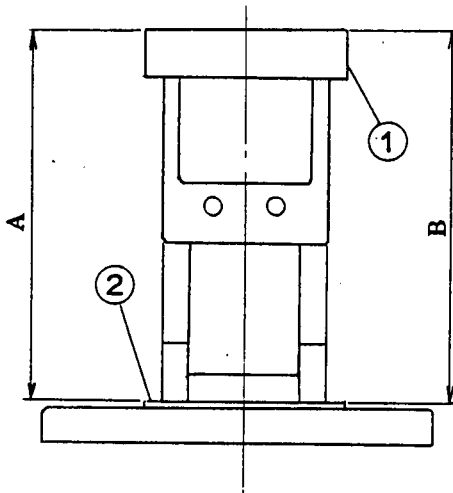


4-5 Assemble the arm ① tentatively.

Screw AB3x8SA × 4

4-6 Move the ARM ① and adjust it so that the parallelism between the ARM ① and the STAGE PLATE ② comes within standard.

Standard	Parallelism 0.15 mm./max.
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- (1) Measure with a SLIDE CALIPERS the height from the upper end of the ARM ① to the surface of the STAGE PLATE ②. (Dimension A)
- (2) Measure with a SLIDE CALIPERS the height from the upper end of the ARM ① to the surface of the STAGE PLATE ②. (Dimension B)
- (3) Check the difference between the dimensions A and B, and incline the ARM ① so that the parallelism come within the standard.
- (4) When the parallelism come within the standard, tighten the screw firmly to secure the ARM ①.

4-7 Apply adhesive to the screw head.

Adhesive Three bond 1401
(OT1378)