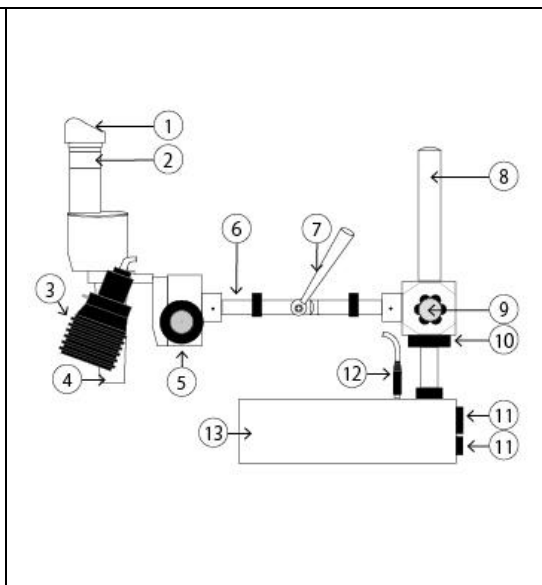
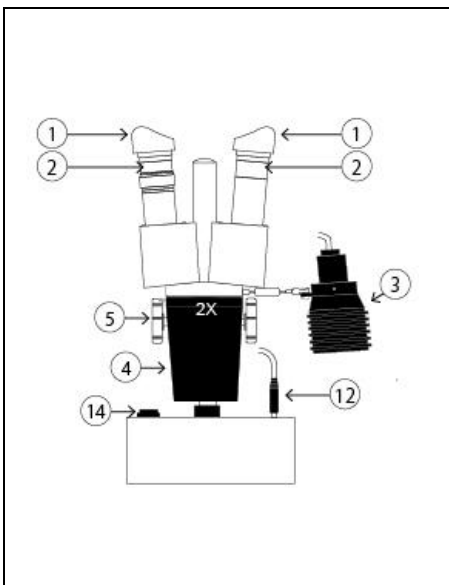




For viewing surface of items which will not fit onto conventional microscopes
 Heavy base plate 120 x 200 x 65mm houses transformer
 Overall column height 290mm
 Two 10x magnification Wide Field Eye Pieces.
 Two Rubber Eye Cups for fitting to Eye Pieces.
 Eye Piece width adjustment 50 – 75mm.
 Objective Lens: 2 x magnification
 Microscope provides 20x viewing magnification.
 Focal distance between base of Objective Lens and work piece = 115mm.
 Field of view at 20X mag. = 10mm.
 Maximum working height between bench top and objective lens 200mm.
 Rack and pinion adjustment 45mm.
 On/Off power switch.
 Side mounted articulated illumination lamp 12v 10w Halogen.
 Base dimensions: 195mm long, 120mm wide, 65mm high.
 Upright column: 210mm high x 18mm dia.
 Articulated Cross arm: 270mm total length between upright column and lens.
 Plastic dust cover
 Primary voltage 230v AC.
 Secondary voltage 12v 10w.

Packed Weight and Dimensions

Code	Description	Weight g	W mm	H mm	L mm
59-020-100	Stereo Microscope Long Reach	6550	180	455	295
59-020-105	Objective Lens 1X Mag	97	35	35	90
59-020-102	Spare Bulb Halogen	17	40	40	40
59-020-041	Eye Piece 15X mag.	60	45	45	80
59-020-042	Eye Piece 20X mag.	60	45	45	80
59-020-045	Eye Piece 10X mag. with Measuring Scale	60	45	45	80



1	Rubber Eye Cups (2)
2	Wide Field Eye Piece (2)
3	Illumination Unit
4	Objective Lens Cover
5	Focussing Wheels
6	Articulated Arm
7	Lever Clamp
8	Column
9	Column Clamp Screw
10	Support Collar
11	Fuse (2)
12	Illumination Cable
13	Base
14	Power Switch

Long Reach Microscope: 59-020-100

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Accessories:

Code	Description	Additional Information
59-020-041	Eye Piece 15X mag.	
59-020-042	Eye Piece 20X mag.	
59-020-045	Eye Piece 10X mag. with Measuring Scale:	Marked: Horizontal Scale: 0-16mm, grads 0.1mm Vertical Scale: 0-16mm, grads 0.5mm Angles: 30, 45 & 60 degrees
59-020-105	Objective Lens 1X mag.	
	Glass Fuse: 250VT1A	2 required

Magnification Data:

Standard Model 59-020-100: Magnification details highlighted in red

Required Viewing Magnification	Wide field Eyepiece Magnification	Wide field Eyepiece Code	Objective Lens Magnification	Objective Lens Code	Focal Length mm	Field of View mm
10	10	Fitted	1	59-020-105	115	20
15	15	59-020-041	1	59-020-105	115	3
20	10	Fitted	2	Fitted	115	10
30	15	59-020-041	2	Fitted	115	5
40	20	59-020-042	2	Fitted	115	2.5

Operating Instructions:

Carefully unpack the microscope from its fitted shipping box

Remove the protective plastic bag which covers the microscope

Place the microscope onto a solid working surface

Remove the two wide field eye pieces from their plastic tubes and fit into the microscope head

It will be necessary to loosen the small cross head screw situated in the lens mounting tube to allow the lens to be fully seated. This screw should be retightened so that it locates in to the annular groove in the lens body and stop it from being removed

Fit the rubber eye cups to the eye pieces

Connect the plug to the mains supply

Adjust microscope head for position using column clamp screw and articulated arm lever clamp

Move the microscope head so that there is approximately 115mm between the bottom of the objective lens cover and the face of the work piece. Clamp in this position

Switch on the illumination if required

Look in to the eye pieces and adjust to suit your eye width distance by pulling or pushing the lenses apart

Rotate the focussing wheel to achieve clear focus on the work piece

Once general focussing has been achieved, final focussing can be carried out to balance any magnification difference between your eyes by adjusting the vision correction ring situated on the left hand lens mount

It is good practice to clamp the support collar beneath the articulated arm bracket to ensure that the microscope head does not drop down the column and cause damage to either the optics or the component being viewed

Instrument Care:

Do not dismantle any part of the optical system
Clean the magnification lenses only, with soft clean dry paper

Illumination Unit

Illumination before Feb. 2000

Illumination lamp: 12v 2w Pea style bulb (Linear code 59-020-101)

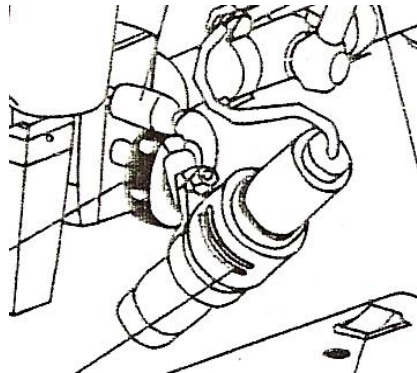
Illumination after Feb. 2000

Illumination lamp: 12v 10w Halogen (Linear code 59-020-102)

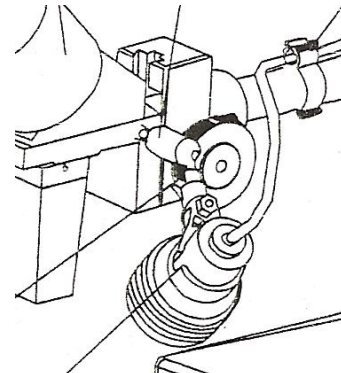
To change this lamp, unscrew black heat sink tube from front of lamp housing, pull out old lamp and push new one firmly into the 2 pin holes.

Replace the heat sink tube.

Illumination unit prior to February 2000



Illumination unit after February 2000



Objective Lens Adjustment

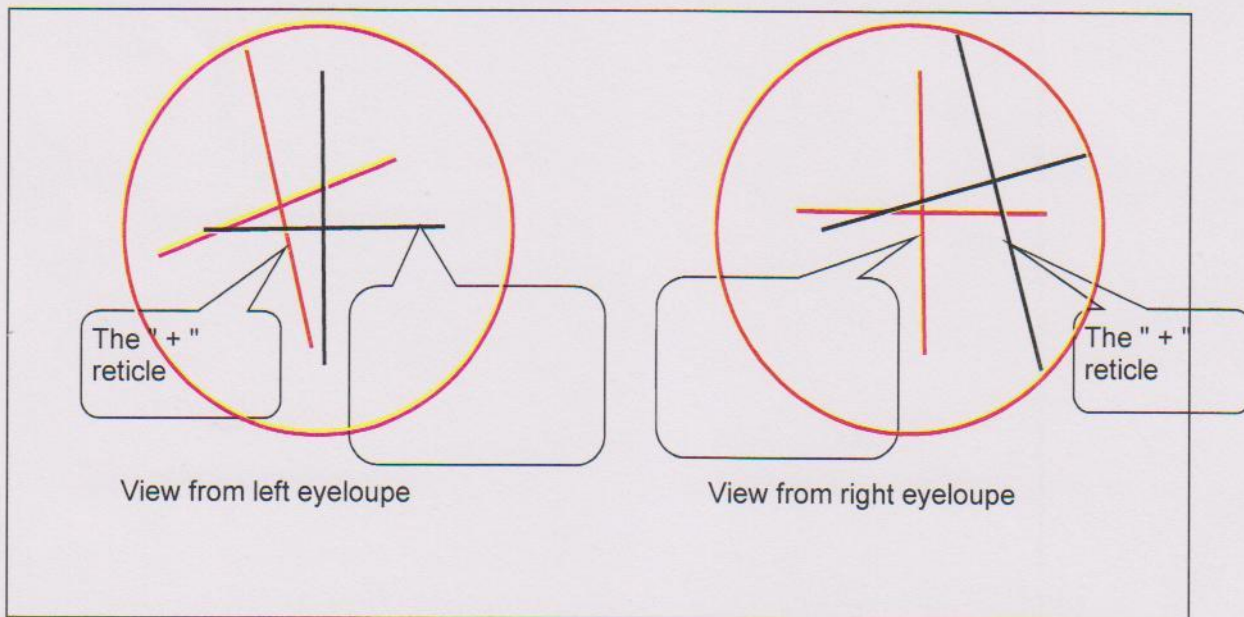
Adjustment instruction of 59-020-102 on 59-020-100

Tools:

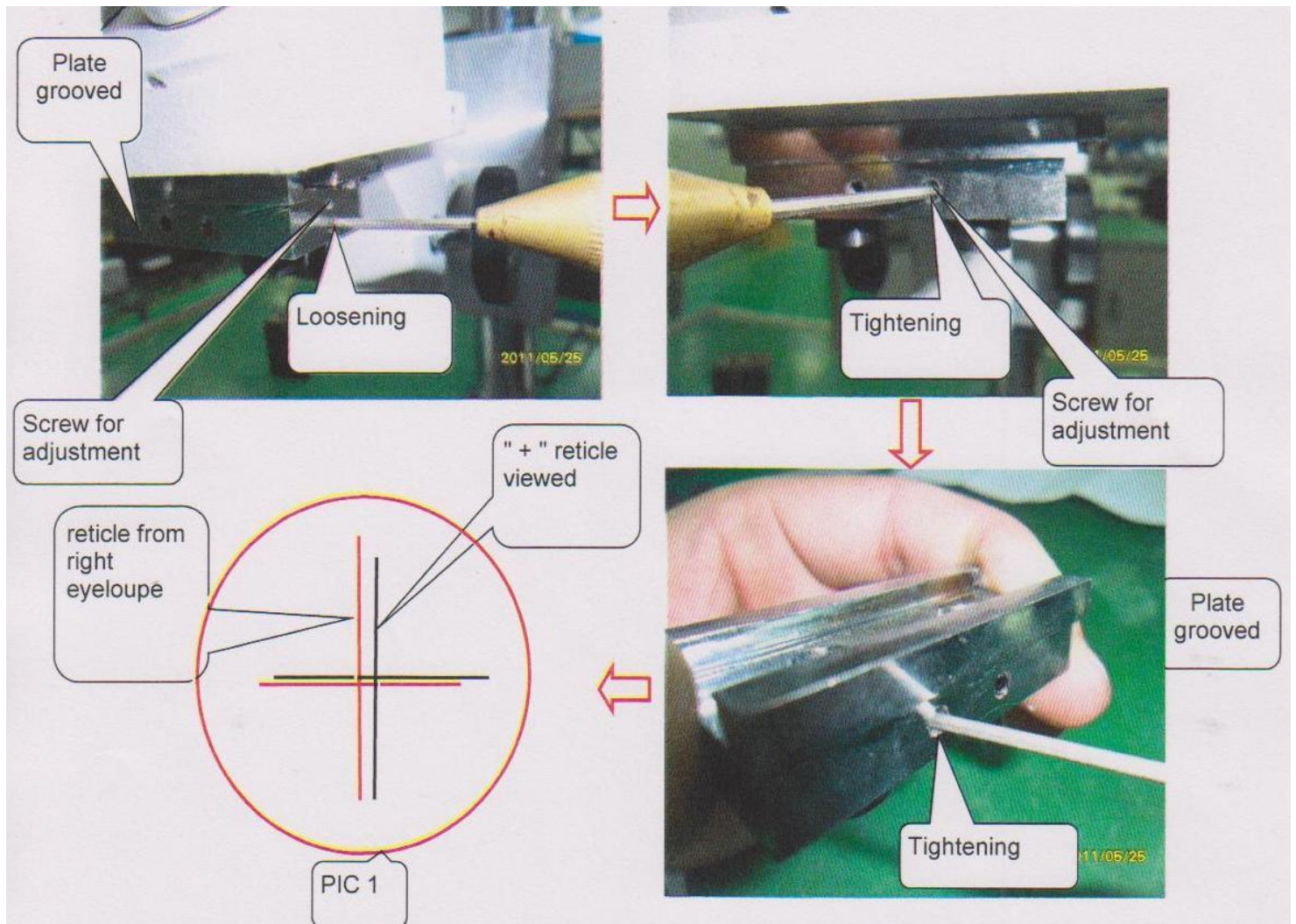
- a. One " + " reticle
- b. Left and right eye Loupes with reticle
- c. One Screwdriver

Steps:

Put the " + " reticle on working place

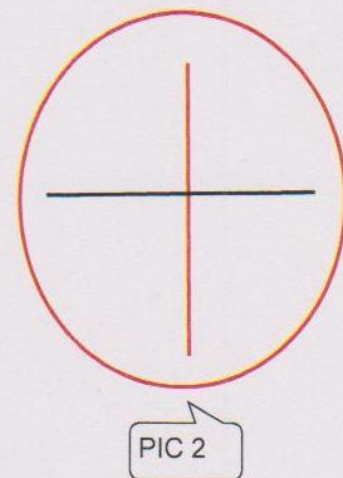


Objective Lens Adjustment



1、 Loosen the screw where "+" offset viewed , while tighten another two screws on other side . For instance , the "+" reticle offset top right viewed from right eye loupe , thus , loosen the screw on the right plate grooved ,while tighten another two screws . After doing like this , getting PIC 1 .

2、 Move the "+" reticle on working place till it meets the reticle on eyeloupe completely . PIC 2



3、 Based on PIC 2 , adjust the screws on left side on the plate grooved

4、 Repeat above 1、 2、 3、 till the "+" viewed meets both reticle on left and right eyeloupe completely .