



Meade Instruments Corporation

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Installation Instructions Meade® Equatorial Wedge

For Use With the Meade Field Tripod

INSTALLATION

The Equatorial Wedge attaches directly to the field tripod and permits the telescope to be used in an astronomical, or "equatorial" mode.

NOTE: *The Meade equatorial wedge is designed solely for use in conjunction with the Meade field tripod. The wedge should never be used without the field tripod (e.g. by placing the wedge alone on a table top and then mounting the telescope on the wedge).*

CAUTION: The telescope, placed onto the equatorial wedge alone without the field tripod attached to the wedge may become seriously unbalanced, to the point where it may actually tip over.

The equatorial wedge is of modern design, with several important features incorporated to simplify and facilitate telescope operation. After using the wedge, you will find that the functional design features included are of very significant value in routine telescope operations.

Features included are:

1. Attachment of the wedge to the field tripod by means of only one manual knob.
2. Quick azimuth adjustment by loosening the manual knob as described above.
3. Bubble level for rapid tripod/wedge leveling.
4. Etched latitude scale for fast adjustment of the latitude angle.

To assemble the equatorial wedge, follow this procedure (note that all required wedge hardware and manual knobs are shipped within the wedge carton):

1. The wedge consists of two basic parts: the wedge body and the tilt-plate, as shown in Fig. 1. Attach the tilt-plate to the wedge body by threading in the four knobs provided. Two knobs, with washers, should be used on each side of the wedge body so that a total of 4 knobs attach the tilt plate to the wedge body.
2. Place the wedge onto the field tripod with the central threaded rod of the tripod fitting through the center hole in the floor of the wedge. Thread the 2-1/2" diameter manual knob onto the threaded rod of the tripod and firmly tighten the manual knob.

AZIMUTH CONTROL

The Azimuth Control for the Meade Equatorial Wedge and Field Tripod is shipped in a plastic bag and includes the following parts:

- Azimuth Base (large U shaped piece of aluminum)
- Azimuth Arm (small T shaped piece of aluminum)
- 2 - Azimuth Knobs
- 2 - 8-32 x 1/2" flat-head machine screws
- 2 - 8-32 x 1" round-head machine screws

- (1) Tilt-Plate
- (2) Attachment Knob
- (3) Tilt Angle Adjustment Knob
- (4) Fine Latitude Adjustment Mechanism
- (5) Latitude Scale
- (6) Wedge Body
- (7) Bubble Level

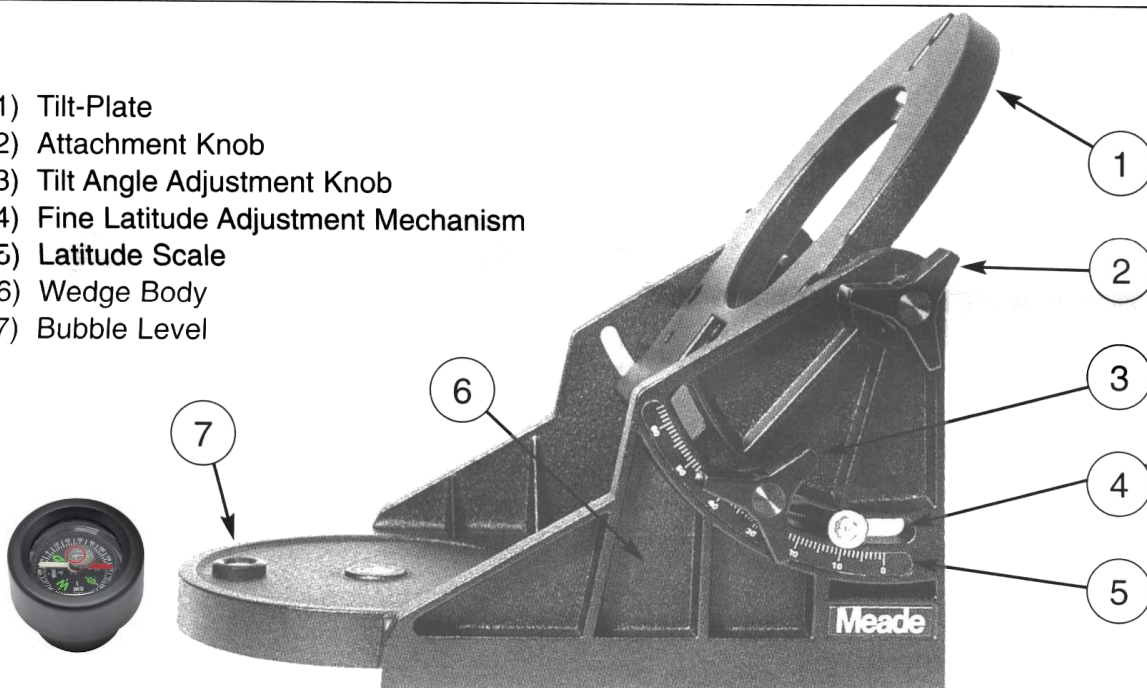


Fig. 1: Equatorial Wedge

To attach the Azimuth Control to your wedge and tripod, follow these steps:

1. Remove the 4 set screws from the wedge and field tripod (which plug the attachment holes) using a screwdriver.
2. Attach the Azimuth Arm to the Equatorial Wedge using the 2 ea. 8-32 x 1/2" flat-head machine screws.
3. Attach the Azimuth Base to the Field Tripod using the 2 ea. 8-32 x 1" round-head machine screws.
4. Thread the two Azimuth Adjustment Knobs into the Azimuth Base, until they just touch the Azimuth Arm.

The Azimuth control is now ready to use. To adjust in Azimuth, loosen the 3" central wedge knob. Rotate the wedge by using the two Azimuth knobs in a push-pull manner. After positioning the wedge, tighten the central wedge knob.

DELUXE LATITUDE ADJUSTER

The Deluxe Latitude Adjuster (DLA) attaches directly to the Equatorial Wedge and permits very precise adjustments in latitude angle by the simple turning of one knob.

The Equatorial Wedge is shipped with the main crossbar of the DLA already installed. Loosen the two socket-head screws that lock the main crossbar in place, to allow the crossbar to rotate slightly if needed. Thread the long adjustment knob (3, Fig. 3) into the main crossbar and position the end of the adjustment knob into the cavity on the underside of the Equatorial Wedge Tilt-Plate. Tighten the two socket-head screws locking the main crossbar into place.

The DLA is now ready to use. To make fine latitude adjustments, follow this procedure:

1. Slightly loosen the knobs (5, Fig. 1), on each side of the wedge.
2. Turn the DLA's adjustment knob (pressing against the bottom of the tilt-plate), so that the tilt-plate moves in latitude angle.
3. Re-tighten the two knobs, which were loosened in step 1, above.

NOTE: When installing the tilt-plate to the wedge, note that it is a tight fit and the sides must generally spread slightly to accept the tilt-plate. If the main crossbar of the DLA is already tightened into place this will inhibit your installation of the wedge tilt-plate. You will therefore see that by releasing the screws on the ends of the DLA crossbar your installation of the wedge tilt-plate will be facilitated.

If you have any questions regarding the use of the Equatorial Wedge, please call Meade Customer Service at (949) 451-1450. Customer Service hours are from 8:30 am to 4:30 pm Pacific Time, Monday through Friday.

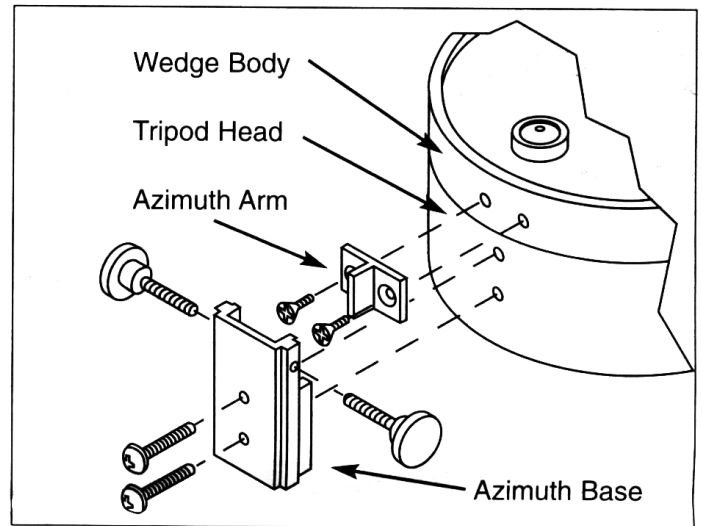
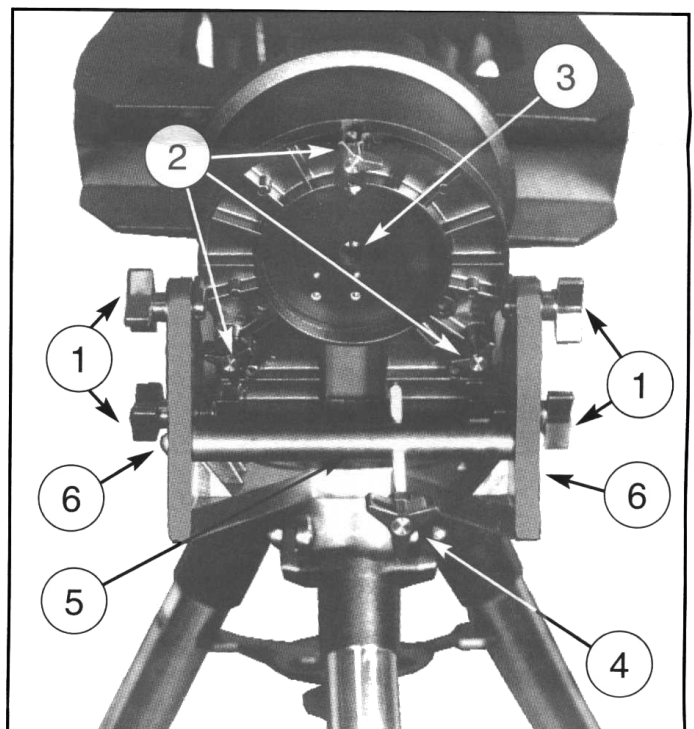


Fig. 2: Azimuth Control



- (1) Tilt Plate Attachment Knobs
- (2) Telescope-to-Tilt Plate Attachment Knobs
- (3) 1/2-13 Altazimuth Attachment Hole
- (4) Deluxe Latitude Control (DLC) Knob
- (5) Deluxe Latitude Control Main Crossbar
- (6) DLC Main Crossbar Attachment Screws

Fig. 3: Telescope On Wedge

Meade® LX90 Wedge Adapter Plate

The LX90 Wedge Adapter Plate permits attachment of the LX90 to the Meade Equatorial Wedge and yields rock solid stability for sensitive applications of the LX90 telescope.

Parts List

Adapter plate
1/2"-13 Allen screw
3/8" Hex wrench

You will also need:

Attachment knobs (3) (included with Wedge)

Installation

1. Attach the equatorial wedge to the tripod as explained on the equatorial wedge instruction sheet (packaged with the equatorial wedge).
2. Place the LX90 telescope on its side on the floor or a sturdy surface. Note the three recessed slots on the bottom of the telescope and the three protrusions (6, Fig. 1) on top of the adapter plate.
3. Insert the Allen screw (2, Fig. 1) through the center hole of the adapter plate. Line up the three protrusions (6, Fig. 1) on the adapter plate with the three recessed slots on the bottom of the telescope and begin to thread the Allen screw into the center hole of the telescope.
4. Using the supplied 3/8" hex wrench, tighten the Allen screw to a firm feel.
5. Note that the adapter plate has two tabs protruding from its sides (5, Fig. 1), each with a threaded hole next to it. Also note a third threaded hole which is not next to a tab. Screw in one of the attachment knobs (4, Fig. 1) into this hole three complete turns.
6. Slide this attachment knob into the slot (3, Fig. 1) at the top of the equatorial wedge tilt-plate, so that it hooks the telescope onto the wedge.
7. The two remaining threaded holes will line up with matching holes in the tilt-plate. Insert the two remaining attachment knobs (4, Fig. 1) through these holes and tighten all three knobs to a firm feel.

The assembly is now complete.

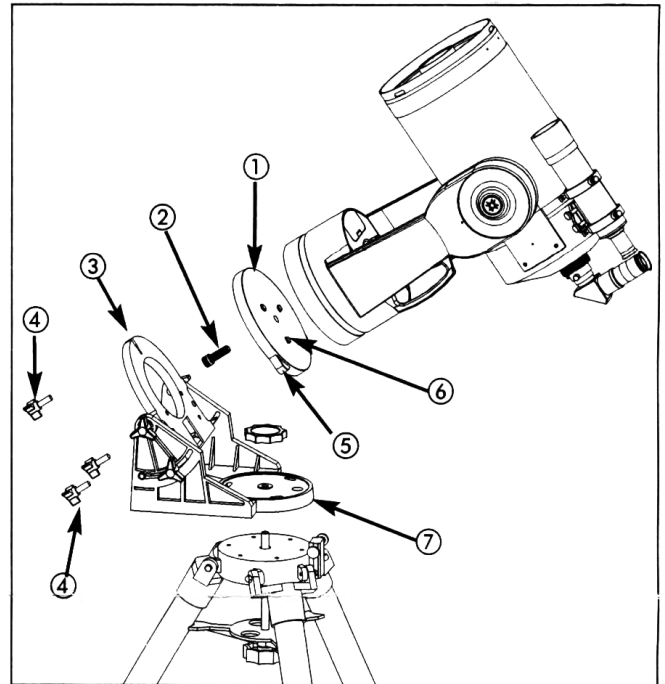


Figure 1: Item 1: Adapter plate; Item 2: Allen screw; Item 3: Wedge slot; Item 4: Attachment knobs; Item 5: Tabs; Item 6: Protrusions on adapter plate; Item 7: Equatorial wedge.

To reduce tripod vibration time, Meade #895 Vibration Isolation Pads are recommended. Contact the Customer Service Department for more information.

If you have any questions regarding the use of the **LX90 Adapter Plate**, please call the Meade Customer Service Department at (949) 451-1450, or fax to (949) 451-1460. Customer Service hours are from 8:30 am to 4:30 PM, Pacific Time, Monday through Friday.



ADVANCED PRODUCTS DIVISION

Meade Instruments Corporation

World's Leading Manufacturer of Astronomical Telescopes for the Serious Amateur

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