

Supplement E5 Horizon, LUN 1241

SUPPLEMENT E5 TO THE AIRPLANE FLIGHT MANUAL DA 40 D

ATTITUDE INDICATOR LUN 1241 MIKROTECHNA

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0.1 RECORD OF REVISIONS

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1. GENERAL

This Supplement supplies the information necessary for the efficient operation of the airplane when the attitude indicator MIKROTECHNA LUN 1241 is installed. The information contained within this Supplement is to be used in conjunction with the complete AFM.

This Supplement is a permanent part of this AFM and must remain in this AFM at all times when the attitude indicator LUN 1241 is installed.

2. LIMITATIONS

Caging is only accomplished when the airplane is in a wing level, normal cruise attitude, as indicated by other instruments or the natural horizon.

3. EMERGENCY PROCEDURES

If the warning flag of the attitude indicator LUN 1241 comes into view, use the remaining instruments to control the attitude of the airplane.

4A. NORMAL PROCEDURES

No change.



4B. ABNORMAL PROCEDURES

No change.

5. PERFORMANCE

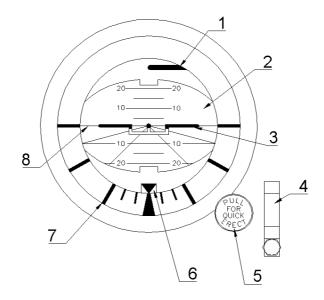
No change.

6. MASS AND BALANCE

Upon removal or installation of the attitude indicator LUN 1241 the change of the empty mass and the corresponding center of gravity of the airplane must be recorded according to Chapter 6 of the Airplane Flight Manual.

7. DESCRIPTION OF THE AIRPLANE AND ITS SYSTEMS

CONTROLS AND DISPLAY



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DA 40 D AFM



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- 1. **Power Warning Flag** When in view, the flag indicates that the power of the attitude indicator is OFF. When retracted, the flag indicates that the power is ON.
- 2. **Display** Directly linked to a vertical gyroscope. It provides direct indication of pitch displacement in 5° increments. Lower area of display, when referenced to the miniature airplane, indicates that the airplane nose is below horizon. Upper area of display indicates that the airplane nose is above horizon.
- 3. **Miniature Airplane** Represents airplane nose and wings. Indicates roll and pitch attitude relative to the horizon.
- 4. **Guard for the Caging Knob** (not part of the attitude indicator) The guard is installed to prevent unintended caging of the attitude indicator.
- 5. Caging Knob (Manual Erection) Pull to cage the indicator.
- 6. **Fixed Roll Index** Attached to gyro case. Indicates airplane roll displacement relative to a rotating roll scale that is attached to gyro roll gimbal.
- 7. **Rotating Roll Scale** Attached to gyro roll gimbal to indicate airplane roll displacement relative to a fixed roll index attached to the gyro case.
- 8. **Horizon Line** Indicates earth horizon relative to airplane pitch attitude.



OPERATING PROCEDURES

The following operational procedures are recommended when preparing the indicator for use:

CAUTION

The indicator may be damaged if the 'PULL FOR QUICK ERECT' knob is released with a 'snap'. Release 'PULL FOR QUICK ERECT' knob avoiding a 'snap' release.

NOTE

The indicator may be momentarily caged by pulling the 'PULL FOR QUICK ERECT' knob to the fully extended position, holding the knob until the display stabilizes, and then allowing the knob to return quickly to the normal position. An increase in audible noise, when the indicator is operated in the caged position, may be evident but is not abnormal.

- Apply power to the indicator. Note that power flag stows out of view. Allow two
 minutes for presentation stabilization.
- If caging is required, caging is only accomplished when the airplane is in a wing level, normal cruise attitude, as indicated by other instruments or the natural horizon. If the gyro is caged when the airplane is not in this attitude, the resulting attitude presentation immediately after caging will be in error by the difference between true vertical and actual airplane attitude.

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8. AIRPLANE HANDLING, CARE AND MAINTENANCE

No change.

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