

## GD031 Instruction of Directional Gyro-Air

1. **FUNCTION**: Indicating heading angle of a small aircraft. It accords with TSO-C5d.

### 2. SPECIFICATIONS:

OPERATING TEMPERATURE .....	-20°C(-4°F) ~ 55°C(120°F);
RELATIVE HUMIDITY .....	30% ~ 85%
FLIGHT ALTITUDE .....	4600m.(15000ft.)
MAXIMUM ALLOWED VIBRATION (peak to peak) .....	5~50 Hz ope 0.5 mm amplitude(.020 inches)
OPERATING PRESSURE .....	15~18 kPa(114 ~ 136 mm Hg or 4.5~5.4 inHg)
AIR CONSUMPTION.....	25 Liter/min(0.9 cubic ft./min.)
WORKING RANGE .....	Indicating heading angle in 360°
GYROWHEEL RPM .....	Not less than 20000/min
FROM START TO RUNNING SPEED MAX .....	5 min.
MOMENTUM OF INERTIA .....	310 gr.cm <sup>2</sup>
ANGULAR MOMENTUM .....	0.64×10 <sup>6</sup> grcm <sup>2</sup> /s
WEIGHT .....	1kg.(2.2lbs.)

### 3 INSTALLATION AND USING

- (1) Assemble the instrument on a shock-resistant panel so it is not subject to exceeding vibrations. The instrument shall be mounted on the rear of panel using four screws. Dimensions of cutout to be made in instrument panel for installation shown in Fig. attached.
- (2) Before use the instrument, checking and be sure it is qualified: Connect the instrument to an operating air that pressure is 15 ~ 18 kPa (or the aircraft vacuum system and make a vacuum 15 ~ 18 kPa) for 5 minutes. Push the heading-given pin in and turn it while the dial shall be turned with it. When direction of aircraft is changing, the gyro dial shall be turning following.
- (3) After every 50hs (or 6 month) working time, check up if the fixed screws are loose and be sure the gyro is working properly. Clean the gyro's glass with silk or chammy.

### 4 THE SOLUTION OF MALFUNCTION WHILE INSTALLING

Malfunction mode	Debugging Ways
No gyro turning sound after connect to an operating air (or the aircraft vacuum system).	Checking and be sure the air pressure ( or vacuum ) is correct.
The heading-given pin is locked and the dial can not be turned when push it in and turning.	Turning the heading-given pin before push ,then push it into the end while turning again.

### 5 GUARANTEE

The gyro can be repaired by manufacturer when the following items are satisfied.

To use according to the INSTRUCTION correctly. Describe in details in the WORKING RECORD when the malfunction can not be solved. Send the gyro packed by original material back to your dealer with WORKING RECORD.

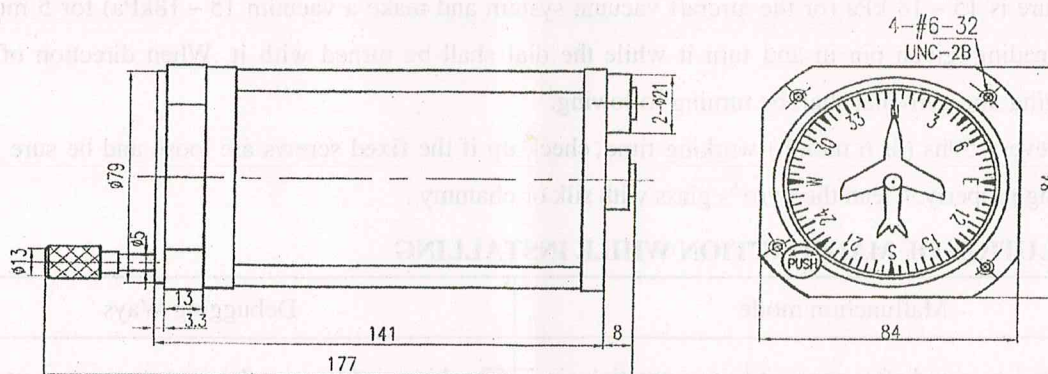
## GD031 WORKING RECORD OF DIRECTIONAL GYRO-AIR

Gyro No.:

<b>Purchase Time</b>		
<b>Unsealing Time</b>		
<b>Checking Record Before Using</b>	1. Operating air (or vacuum): 15 ~ 18 kPa <input type="checkbox"/> Yes <input type="checkbox"/> No 2. The dial is turning when heading-given pin has been pushed in and turned. <input type="checkbox"/> Yes <input type="checkbox"/> No 3. The dial is turning when aircraft change its direction. <input type="checkbox"/> Yes <input type="checkbox"/> No	
<b>Installing Time</b>		
<b>Malfunction Happened Time</b>		
<b>Description Of Malfunction</b>		

As the malfunction happens, fill in the form in details and you will be offered the best service.

## OUTLINE OF DIRECTIONAL GYRO-AIR



## INSTALLATION DIMENSIONS

