GUAN SHENG OPTICAL (GSO) 'ORIGINAL MODEL' 8"/10"/12" DOBSONIAN ALTITUDE ENCODER INSTALLATION

1) The 'original model' GSO Dobs can be identified by having springs on their Altitude axis as shown in Fig1. Detach spring 'A', as indicated in Fig 1, from rocker box.

2) Remove existing screw 'B' as shown in Fig 2. and retain plastic sleeve and spring.

3) Identify Alt encoder coupler as seen in Fig. 3.

4) We recommend not to refit spring. Couple encoder shaft into coupler and fasten encoder shaft M4 set screw using supplied M2 hex key.

5) Insert the supplied 5/16" socket head should screw into the circular tangent arm locating coupler as seen in Fig 4. With one hand, rotate the tangent arm around to approx. the 7 o'clock position as shown in Fig 5. With the other hand, slide the locating coupler beneath the slot in the tangent arm so that the shoulder screw is mid-way along the length of the slot. Being careful not to shift the position of the locating coupler, remove the shoulder screw so as to allow the tangent arm to be positioned out of the way. Using the three mounting holes as a template, carefully spot three holes approximately 2mm deep using a 2mm drill bit. Using three supplied 5g x 16mm self-tapping wood screws, fasten the locating coupler in place. Locate tangent arm slot above the locating coupler. Thread supplied 5/16" socket head shoulder screw through the slot and into the locating coupler. Tangent arm should be free to 'float' and slide on silver colored shoulder of shoulder screw.

6) Fasten two of the supplied self adhesive cable clips onto the side of the rocker near the end of the tangent arm to act as strain reliefs for the encoder cable. Orient one clip with the opening one way and the other clip with the opening oriented 180 degrees with respect the first.

7) The Alt encoder is designed to be easily removed whilst transporting the scope. Simply loosen the set screw on the encoder coupler to free the encoder shaft and remove the shoulder screw to free the tangent arm

PARTS LIST -

- 1. Alt encoder coupler
- 2. Alt encoder and tangent arm bracket
- 3. Tangent arm coupler
- 4. 5/16" socket head shoulder screw
- 5. Qty 3 x 5g x 16mm wood screws
- 6. Qty 2 x self-adhesive cable clips
- 7. M2 hex key (in Az encoder installation bag)

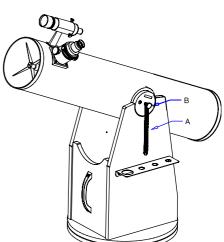


Fig 1. Spring 'A' and existing bolt 'B'



Fig 2. Removing existing Alt screw

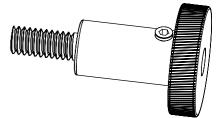


Fig 3. Alt Encoder Coupler

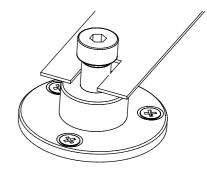


Fig 4. Circular tangent arm coupler

