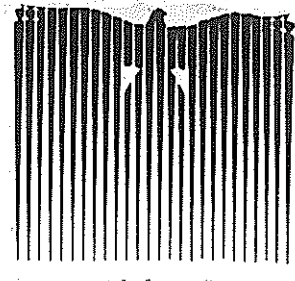


# mainair sports

MAINAIR SPORTS LIMITED Alma Industrial Estate  
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TRI-FLYER - GENERAL BULLETIN No. 9

25th August, 1983

If you have sold your Tri-flyer, please let us know the address of the new owner so we can keep him up to date. It would be appreciated if you could post on this bulletin to him.

## Airworthiness

We are currently working hard to meet the coming requirements of airworthiness. January 1st is the date after which all aircraft we manufacture will need a permit to fly. Existing customers will need a permit for their aircraft after July 1st, 1984 and, as yet, it is not clear exactly how this will be applied. We have manufacturing records of all the aircraft we have made and we expect there to be little difficulty, although airframe wear could be a major consideration. Our workshops are to be inspected by the C.A.A. within the next few

## Transport Damage

We are still seeing the results of poor transport techniques. It is essential on all monopole trikes that when trailered folded down, transit ties are fixed to prevent sideways movement of the engine assembly. This can be a simple rope from one axle to propeller hub and back to the other axle, pulled taut and tied tightly. Failure to do this will lead to excessive wear at the keel/vertical strut junction. An alternative is to trailer the trike fully rigged with the front strut in place.

## 440 Upright Engines

It seems that high-frequency vibrations are more obvious with the upright model than with the inverted. This is not a serious problem but it is essential that all the fixing bolts are checked from time to time for tightness. Do not over-tighten, but DO check.

## Steering Damper

We have developed an adjustable hydraulic damper kit which attaches to the front fork to remove kick-back upon take-off and landing. It works very well indeed, particularly on the dual machines. The complete fitting kit, with instructions and all parts, is available at £30 + VAT. If you require one, please contact us.

## Gemini Owners

The front cockpit support is inadequate. As a result we have a modification which involves two supports between the keel and lower front strut section. If you have a Gemini and require the kit, please write in with an official order and the serial number of your machine. The kit is free, but we do insist upon a written request.

## Rapier 1 + 1

Rapier 1 + 1 owners are reminded that airworthiness requirements demand a 180 kg pilot and passenger capacity which is beyond the Rapier 1 + 1. The machine is limited to single-seat use only in the U.K.

John Hudson  
Mainair Sports

**WARNING** This work must be carried out, before further flight, by a qualified engineer. If you do not have the facilities to undertake this work, please take the machine to a qualified engineer.

We will carry out this work ourselves free of charge, but it will be necessary for you to despatch the front plate and bearing hub assembly to us by air parcel post. We will credit air or surface parcel post but cannot accept air freight charges.

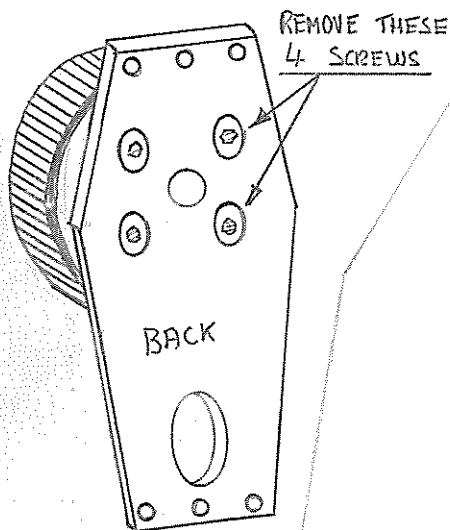
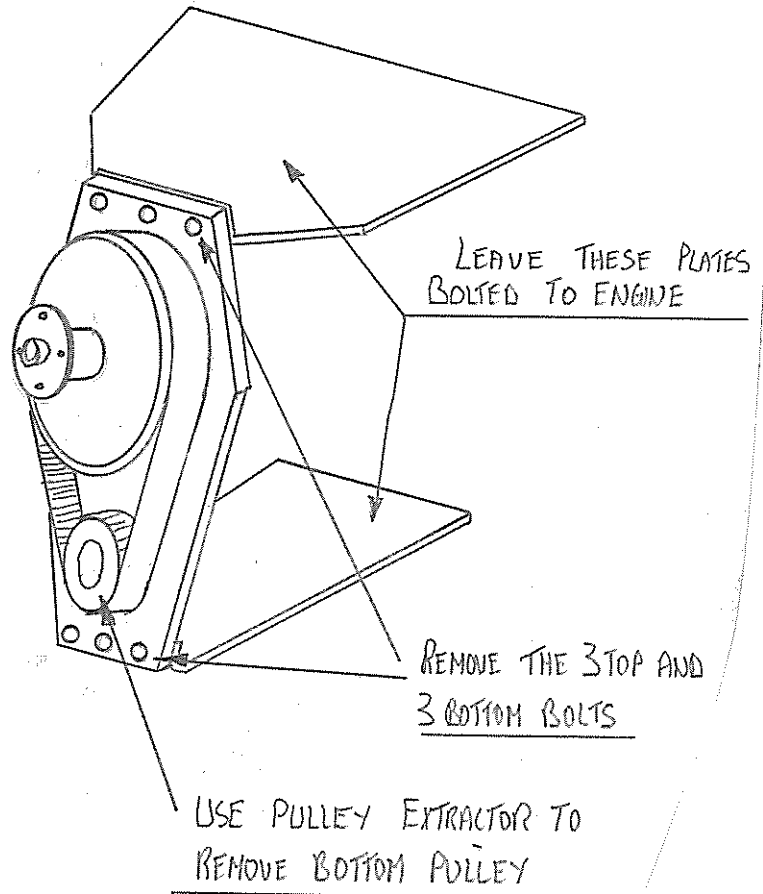
**FAULT** The bearing hub unit required greasing at 10-hour intervals. Unfortunately our sealed bearings are passing grease and will eventually fail.

Equipment provided:

- 1 grease nipple;
- 1 3mm drill;
- 1 5.2mm drill;
- 1  $\frac{1}{4}$  BSP tap;
- 1 hexagon key;
- 4 spare counter sunk screws; hole blanking plug.

METHOD

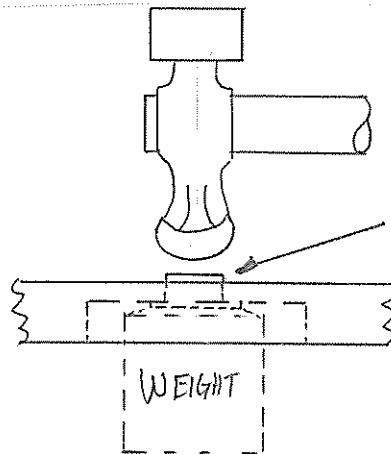
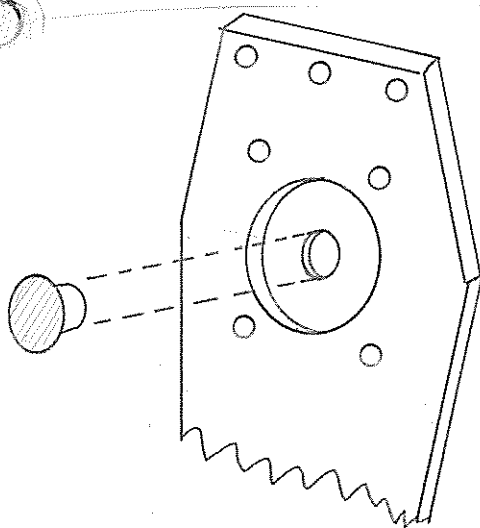
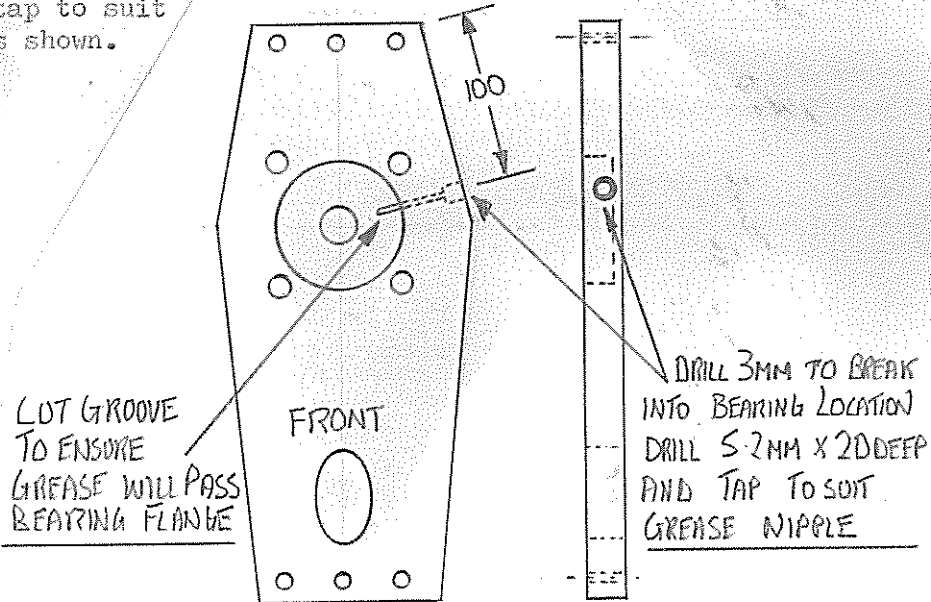
1. Detach front plate by removing the 3 top and 3 bottom bolts. Remove bottom pulley with pulley drawer.



2. Reverse plate and remove the 4 countersunk screws with the key provided

METHOD continued

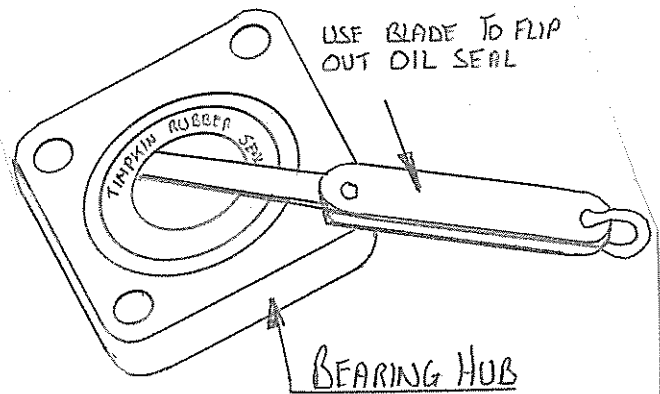
3. Mark, drill and tap to suit grease nipple, as shown.



4. Blank hole to prevent loss of grease by fitting hole blanking plug and riveting from back to hold in place.

Fit grease nipple and grease to clear hole of swarf.

6. Clean well and remove oil seal from back of housing. Discard seal.



7. Re-assemble using nut locking compound. Tension belt. Grease and test run.

We apologise for this problem, we had hoped that the special seals would prevent loss of grease and that the bearing hub would be sealed for life. Unfortunately, we mis-calculated, but at least the problem can be rectified with a little effort. It is in your interest to carry out this work for your customer immediately.