SERVICE BULLETIN NO. 85 ISSUE 1

TITLE: INSPECTION AND REPLACEMENT OF FRONT FORK TRAILING LINKS.

CLASSIFICATION Compliance is strongly advised by Pegasus Aviation.

COMPLIANCE Before next flight

APPLICABILITY ALL PEGASUS QUASAR AND QUANTUM RANGE.

INTRODUCTION:

Over the production run to date of 400 Quasar and Quantum aeroplanes, there have been two cases of premature trailing link failure due to defects in the bronze welding of the link eye to the link box section.
The front fork links have now been modified. They are now TIG welded. They can be identified by the box section drain hole , which is now a separate 4mm hole, being located away from the joint area.

ACTION

1. Inspect visually, with a magnifying glass, the bronze welded areas on the front fork links, especially near the drain hole edges.
If there is any sign of cracking and/or distortion, the aeroplane must not be flown until the front fork links can be exchanged.
Even if there is no sign of any defect, replacement is strongly advised as there is a small possibility that a defective link may fail prematurely in a heavy landing.

"Premature failure" is defined as failure of the link bronze welding before there is permanent distortion of the box section itself. Permanent distortion of the box section links or fork legs indicates loads well in excess of the BCAR S ultimate undercarriage loads have been applied.

ELM TREE PARK, MANTON, MARLBOROUGH, WILTSHIRE SN8 1PS, UK
Tel: +44 (0)1672 861578 Fax: +44 (0)1672 861550 E Mail:pegasus@cccp.net

New TIG welded front fork links to drawing SW89236 issue B are available , from Pegasus Aviation. Old links should be returned.

REPLACEMENT:

Refer to the parts book drawing of the front fork assembly.

1) Support the nose of the trike, avoiding concentrated loads on the pod or tank.
2) Undo the front wheel axle pinch bolts 39 and axle nut 33.
3) Extract the axle 9, taking care not to damage the threads.
4) Remove link pivot bolts 42 and 41.
5) Remove links 4 and bushes 6.
6) Reassemble new links to pivot bushes 6 with grease.
7) Refit links, using new M8 and M6 nylocs where necessary.
8) Refit front wheel and axle.
9) Assemble (but do not tighten) pinch bolts through links 4, axle 9 and bearing adjustment tube 16A.
10) Fit bearing adjustment cap 16B, washer 28 and tighten axle nut 33.
11) Tighten pinch bolts 39.
12) Check free rotation of wheel, clearance, alignment and operation of nose suspension.
13) On completion annotate logbook “SB 85 (Mod PG73) Complied with”

Approved: Date:

ELM TREE PARK, MANTON, MARLBOROUGH, WILTSHIRE SN8 1PS, UK
Tel: +44 (0)1672 861578 Fax: +44 (0)1672 861550 E Mail:pegasus@cccp.net

Item	Description	Quantity	Part Number
1	FRONT FORKS	1	TQU-19510
2	THROTTLE PEDAL	1	TQU-19590
3	BRAKE PEDAL	1	TQU-19592
4	TRAILING LINK	2	TQU-19520
5	PUSHROD	2	ZMA-024
6	TRAILING INK BEARING	4	ZMP-030
7	PUSHROD BEARING	4	ZMP-034
8	PISTON	2	ZMP-033
9	FRONT WHEEL AXLE	1	ZMS-161
10	BEARING CARRIER	2	ZMA-048
11	FRONT SUSPENSION RUBBER	2	ZMP-037
12	FRONT SUPENSION PACKER (LEFT)	1	ZMP-026
13	FRONT SUPENSION PACKER (RIGHT)	1	ZMP-027
14	PARKING BRAKE LEVER	1	ZMS-119
15	THROTTLE CABLE BUSH	1	ZSP-031
16	BEARING SPACER	1	ZMA-051
16A	BEARING ADJUSTMENT TUBE	1	ZMA-053
16B	BEARING ADJUSTMENT CAP	1	ZMA-052
17	HUFA WHEEL	1	WW-006
18	INNER TUBE	1	WTU-003
19	TYRE	1	WTY-003
20	FOOTREST RUBBER	2	PMM-007
21	RETURN SPRING	1	HS-004
22	BEARING	2	BEA-BB-2
23	PUSH CLIP	4	FMPC-001
24	THROTTLE CABLE		
25	BRAKE CABLE		
26	WASHER	3	FWM5-B
27	WASHER	7	FW4-T3
28	WASHER	15	FWM8-B
29	WASHER	4	FWM10-B
30	BEARING	2	BEA-BB-6
31	NYLOC NUT	1	FNM5-NT
32	NYLOC NUT	5	FNM6-NT
33	NYLOC NUT	1	FNM6-NP
34	NYLOC NUT	6	FNM8-NT
35	NYLOC NUT	1	FNM10-NT
36	BLACK END PLUG	1	PEP6-001
38	HEX HT BOLT	1	FBM5-30
39	HEX HT BOLT	5	FBM6-40
41	BOLT	2	ZMF-008
42	HEX HT BOLT	2	FBM8-55
43	HEX HT BOLT	1	FBM10-180

ELM TREE PARK, MANTON, MARLBOROUGH, WILTSHIRE SN8 1PS, UK
Tel: +44 (0)1672 861578 Fax: +44 (0)1672 861550 E Mail:pegasus@cccp.net