

## SERVICE BULLETIN

### Title: Streak 3 & Cruze Wing Knuckles

Identification	SB-003
Status	Mandatory
Issue	1
Issue Date	06 October 2005
Applicability	Streak 3 & Cruze Wings
Compliance	Before further flight

Issued by: Scott Barrett

Approved by: Inspection only no change to type design

Summary of Changes  
Initial issue

### **Introduction**

The knuckles on Streak 3 & Cruze Wing control frames have exhibited stress corrosion cracking. This service bulletin details an inspection program to ensure safe use.

A later issue of this service bulletin will detail the measures required to affect a long-term solution.

### **Skills**

Where allowable by the applicable National Airworthiness Authority according to the category of registration, the owner / maintainer can incorporate this service bulletin with care.

### **Tooling**

Allen key 4mm  
Allen key 3mm  
Blue Loctite #243

### **Action**

Inspection is detailed in two parts, a detailed inspection with removal of the parts and a more frequent external visual pre flight inspection.

Inspection Schedule

Inspection Type	Schedule
Detailed inspection by disassembly	First instance: Before further flight Subsequent inspections: Every 2 calendar months
External visual inspection	Daily Inspection prior to flight.

Note that once started, stress corrosion cracking progresses as a function of calendar hours.

## Documentation

The compliance notice at the rear of this document should be filled out entered in the rear of the applicable maintenance manual.

## Ordering

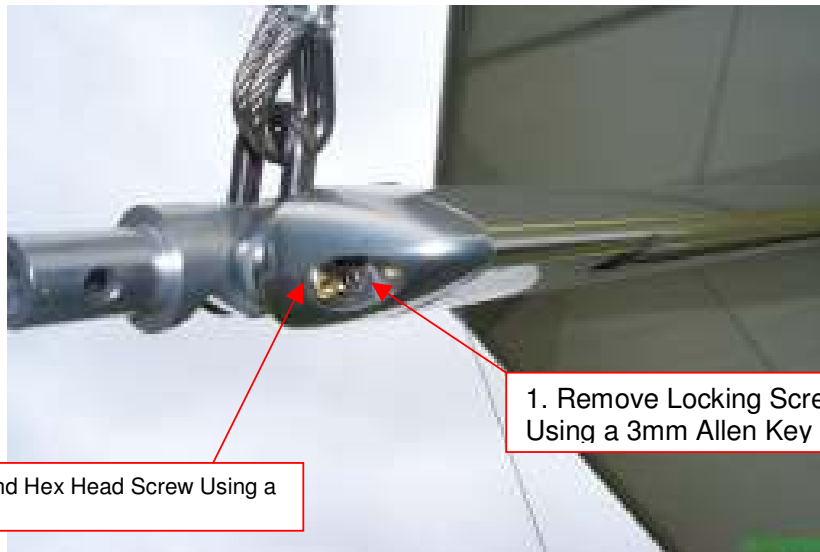
If it is determined that replacement parts are required, the following parts should be ordered from AirBorne.

Part Name	Part Number
KNUCKLE AERO 35x85 BOTTOM LHS	106200
KNUCKLE AERO 35x85 BOTTOM RHS	106201

## Performing an Inspection

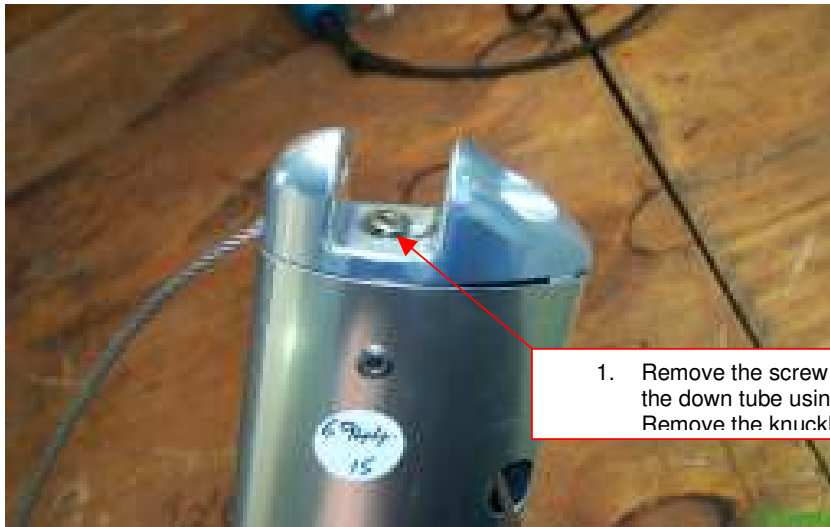
### DISASSEMBLY PROCEDURE

1. With the wing on the trike the bottom knuckles may be removed
2. Remove locking screw using a 3mm Allen key.
3. Remove the main bolt that holds the side wires, shackle and knuckle. Using a 4mm Allen key.
4. Remove the screw that holds the knuckle to the down tube using a 4mm allen key. Remove the knuckle completely.
5. Remove the wires from the knuckle
6. Inspect the knuckle for cracking and signs of corrosion.

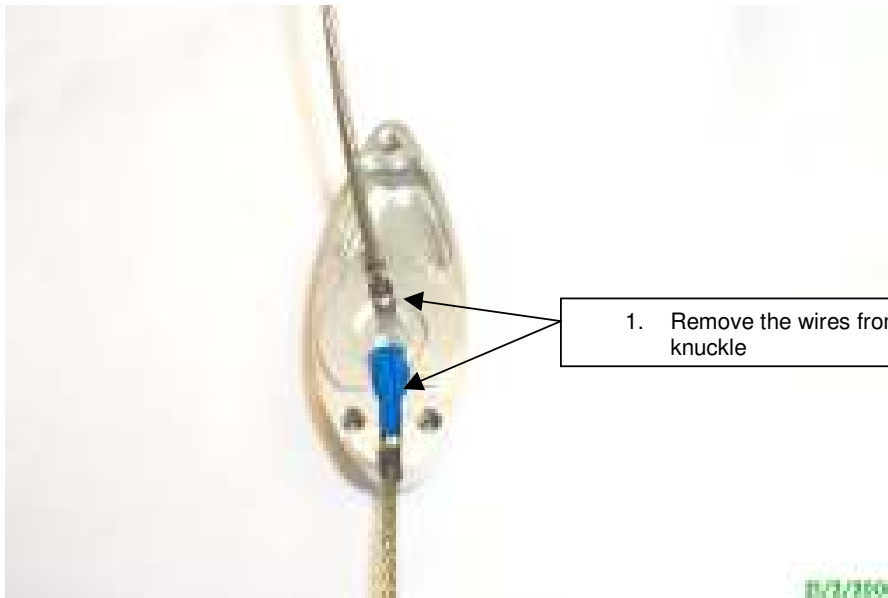


2. Remove Second Hex Head Screw Using a 4mm Allen Key.

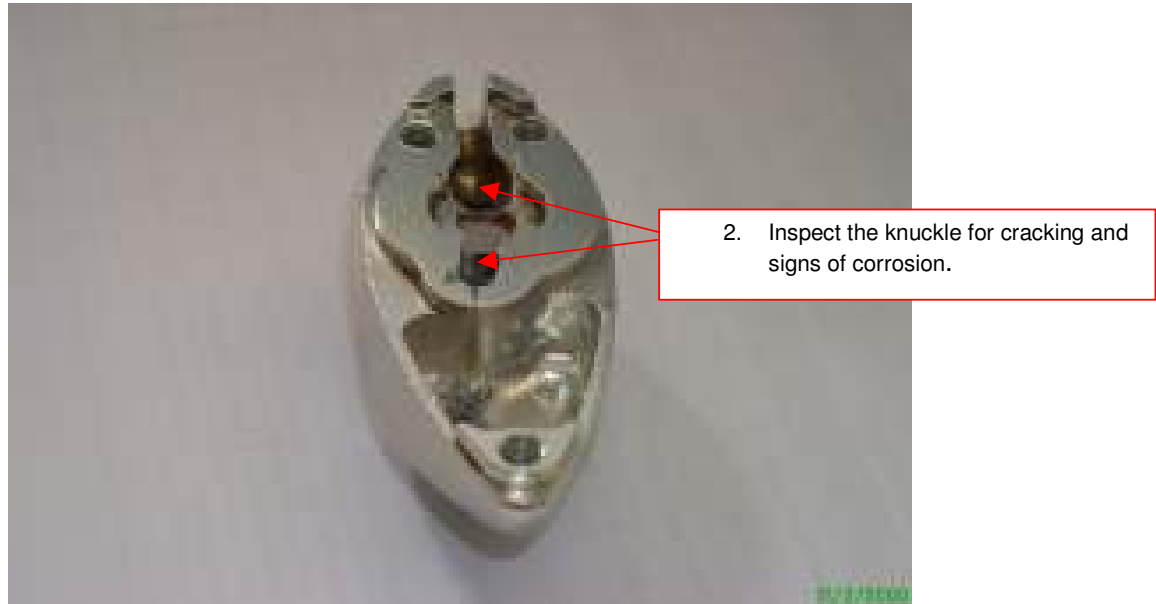
1. Remove Locking Screw Using a 3mm Allen Key



1. Remove the screw that holds the knuckle to the down tube using a 4mm allen key. Remove the knuckle completely.



1. Remove the wires from the knuckle



## RE-ASSEMBLE

1. If the knuckle is in good order re insert the wires into the knuckle, making sure they are fully seated in their slots.
2. Screw the knuckle back down onto the down tube using a 4mm Allen key and some blue loctite 243. Screw the knuckle down so the knuckle is neat and even on the down tube.
3. Make sure the side wires aren't twisted or tangled, insert the shackle into the base bar knuckle. Insure the nylon washers are in between the knuckle and the shackle. **NO LOCTITE GOES ON THIS BOLT.** The bolt should be installed so that it is seated finger tight, it is not to be over tightened. The hinged parts should be able to move with little friction.
4. Using blue loctite 243 reinsert the locking screw.

***Repeat these procedures for other side.***

An assembly drawing for the downtube and knuckle is provided attached to the end of this document.

## **Safety Bulletin Compliance**

### **SB-003 Streak 3 & Cruze Wing Knuckles**

This template is to be completed by a person with appropriate maintenance authority as determined by the National Airworthiness Authority in the country of registration, for the category of registration of the aircraft.

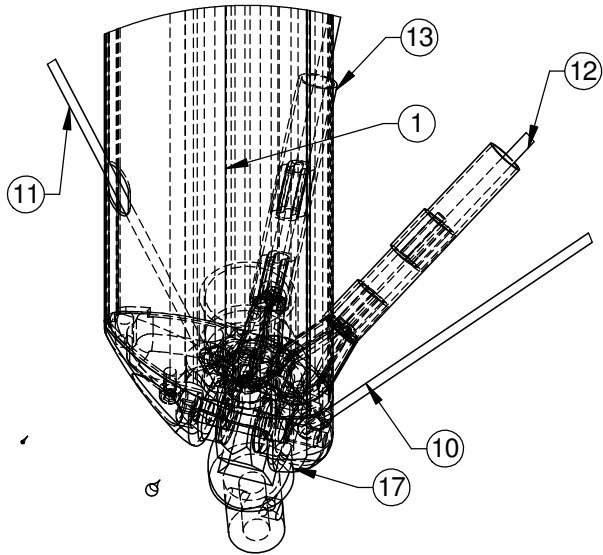
#### **Wing Serial Number**

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I/we have incorporated Service Bulletin SB – 003 for the above aircraft component

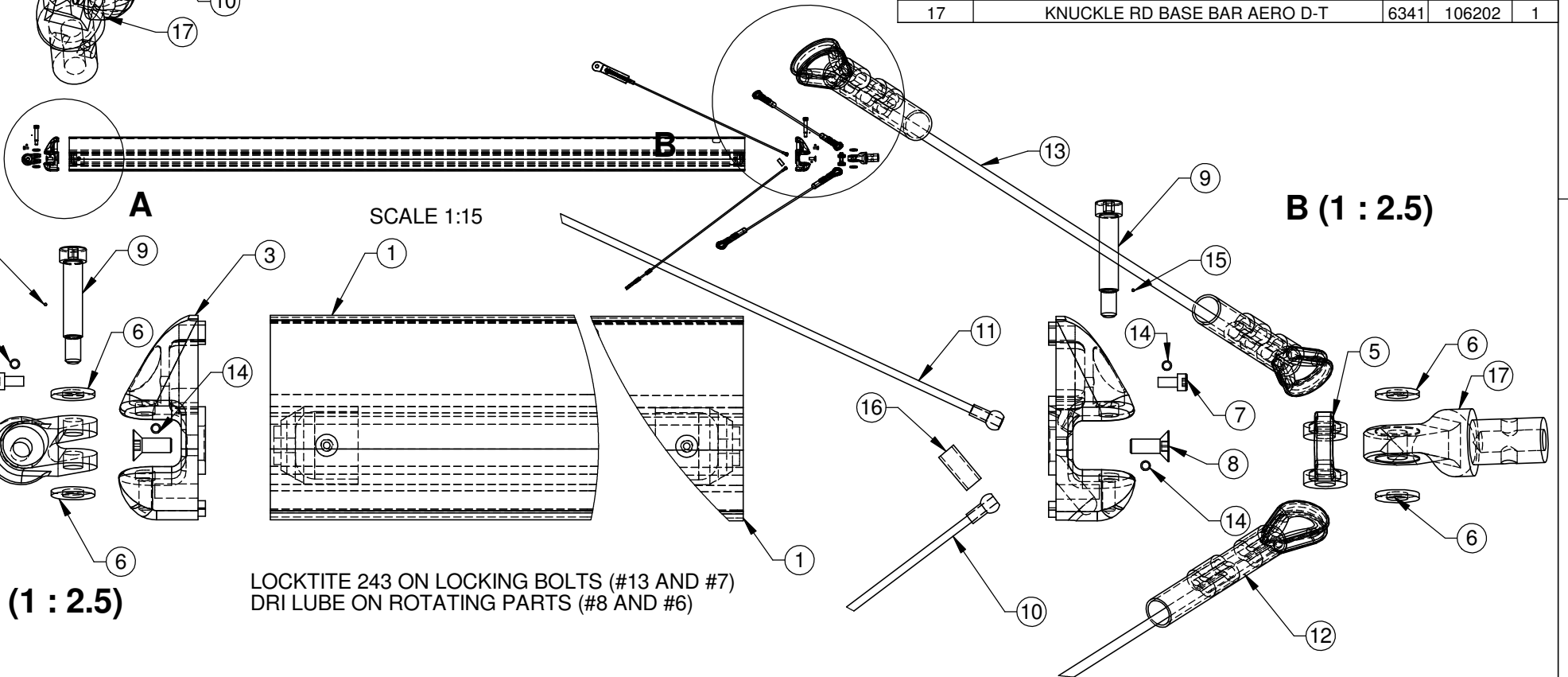
<b>Signed:</b>	
<b>Print Name</b>	

Once complete inset sheet in rear of applicable maintenance manual.



**QUASI ISOMETRIC VIEW  
SCALE 1:2.5**

ITEM NO	NAME	DWG	PART NO	QTY.
1	D-TUBE AERO S3-CRUZE LHS SUB-ASSEM	6408	106312	1
2	KNUCKLE AERO 35x85 BOTTOM LHS	6339	106200	1
3	KNUCKLE TW AERO 35x85 TOP LHS	6343	106204	1
4	A-FRAME TOP BRACKET AERO D-T TRIKE	6342	106203	1
5	SHACKLE MODIFIED RM-24 HD	6445	106385	1
6	WASHER NYLON M8 STD	5540	100595	4
7	SKT CAP SCREW SS M 4 X 8	5603	106322	2
8	SKT CSK SCREW M6x16 SS	5668	106275	2
9	SKT SHOULDER SCREW 5-16x1-1-4 BSW1-4"	6395	106323	2
10	WIRE BOTTOM FRONT AERO CRUZE	6423	107122	1
11	WIRE BOTTOM REAR AERO CRUZE	6422	107123	1
12	WIRE BOT SIDE FWD AERO S3-CRUZE	6440	106377	1
13	WIRE BOT SIDE AFT AERO S3-CRUZE	6440	106378	1
14	LOCTITE 243 Blue Med Strength	5637	103706	4
15	DRI LUBE SOLID LUBE	5637	106432	2
16	TUBE PVC CLEAR 6mm x 18L	5583	106434	1
17	KNUCKLE RD BASE BAR AERO D-T	6341	106202	1



LOCKTITE 243 ON LOCKING BOLTS (#13 AND #7)  
DRI LUBE ON ROTATING PARTS (#8 AND #6)

Rev	AMENDMENTS	Date
1	CHANGED NAME DCR 2100	05-04-05

**PART NO. 107125 - 0**

LAST ACESSED: Tuesday, 5 April 2005

ALL DIMENSIONS IN MILLIMETERS UNLESS STATED OTHERWISE



**DOWN TUBE CRUZE LHS WITH WIRES**

Drawn By	Scale	Date
Simon	1:20	04-04-05



**6783**  
SHEET 1 of 1