

# RotorSport UK Ltd

## Service Bulletin

This form is the response from RotorSport UK Ltd either against a problem found in the product in service requiring a containment or rectification action, or as service information for aircraft modification incorporation.

Upon completion of the action, the person responsible must enter details into the aircraft logbook/worksheet with the SB and/or CAA MPD (Mandatory Permit Directive) number and sign as normal (see instructions below).

For help, contact RotorSport on 44(0)1588 650769, or email [info@rotorsport.org](mailto:info@rotorsport.org).

<b>SB No.: 040 issue 2</b>	CCAR No.: None	Classification: <b>OPTIONAL</b> or <b>RECOMMENDED</b> or <b>MANDATORY</b>
Aircraft type & model (applicability) RotorSport UK MT-03, MTOsport	Aircraft serial Nos. effected RSUK/MT-03/any RSUK/MTOsport/any	

Effective date: Iss1 09.09.11 Iss2 21.06.16
---

Introduction

In 2011RSUK introduced RotorSystem II for fitment to MT-03, MTOsport and Calidus gyroplanes (and subsequently used the same system for Cavalon gyroplanes). This new rotor system has a service life 2,500 hours, a significant improvement over the original system's 700 hours. It is readily recognisable by the scalloped hub-bars, taller teeter tower and red end caps fitted to each blade. The rotor system was approved by CAA under modification MC-175.

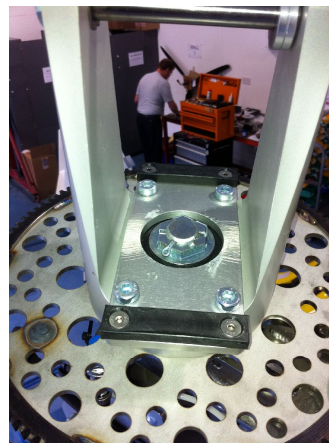
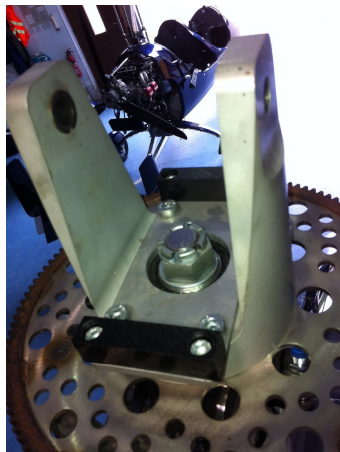
Further development in 2016 has resulted in a heavier variant of RotorSystem II, designed for more benign flight characteristics. It is designated the "TOPP" variant of RotorsystemII and is recognisable by the blue end caps fitted to each blade. The TOPP rotor was approved by CAA under modification MC-328.

This service bulletin SB-040 describes how an MT-series aircraft may be upgraded to Rotorsystem II (with either the standard or TOPP variant rotors). Once the upgrade has been done then subsequently either the standard variant or the TOPP variant rotors may be fitted under the conditions of service bulletin SB-116 "RSII rotor interchange". Note that as the weight of each rotor variant is different the aircraft's AWC and weight placard must be amended accordingly, together with an application to CAA for amendment of the Permit-to-Fly.

(Original) problem description & cause of problem if known

A comprehensive study on the flight loading conditions of the original rotor system (RSI) used on both Calidus and the MT-series showed that, whilst the rotor system is safe and robust, the system could be significantly improved. A complete new rotor system was therefore been developed and approved by CAA. A field-service kit was also been developed to enable upgrade to the new rotor system (Rotorsystem II) without the need to return the aircraft to the factory and this may now be embodied by any CAA-approved A3-7 engineer.

Important note: The new rotors by themselves (identified by red end-caps or blue end-caps) are not directly interchangeable with any other rotors having black, grey or orange end-caps. In embodying this SB-040 the whole rotor system (consisting of rotating parts and teetering parts) must be changed (see photos below).



The rotating parts of the original rotor system (RS1) on left and RotorSystemII on right  
Note the taller teeter tower, smaller teeter blocks and special castle nut of RotorSystemII

# RotorSport UK Ltd

## Service Bulletin

This form is the response from RotorSport UK Ltd either against a problem found in the product in service requiring a containment or rectification action, or as service information for aircraft modification incorporation.

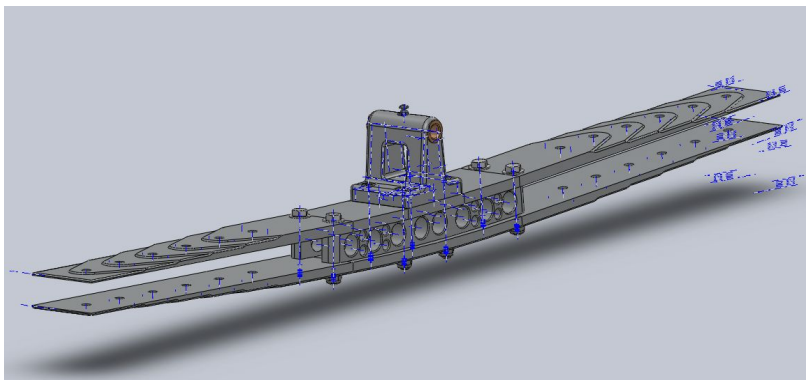
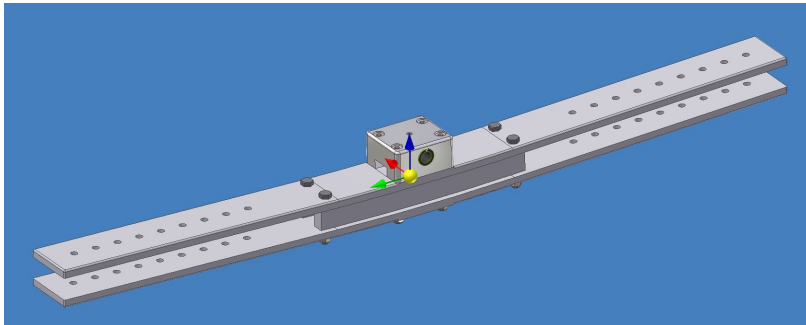
Upon completion of the action, the person responsible must enter details into the aircraft logbook/worksheet with the SB and/or CAA MPD (Mandatory Permit Directive) number and sign as normal (see instructions below).

For help, contact RotorSport on 44(0)1588 650769, or email [info@rotorsport.org](mailto:info@rotorsport.org).

<b>SB No.: 040 issue 2</b>	CCAR No.: None	Classification: <b>OPTIONAL</b> or <b>RECOMMENDED</b> or <b>MANDATORY</b>
Aircraft type & model (applicability) RotorSport UK MT-03, MTOsport	Aircraft serial Nos. effected RSUK/MT-03/any RSUK/MTOsport/any	



Close-up views of the different teeter-towers and teeter stops.  
Rotorsystem II (red or blue end-caps) is used with the taller tower shown on the left  
An original rotor (black or grey end-caps) must NEVER be fitted to the taller tower



The hub-bar assemblies of the original rotor system (RS1) above and RotorSystemII (below)  
Note the scalloped hub-bars, perforated spacers, taller teeter block and 6-bolt blade attachment of RotorSystem II

# RotorSport UK Ltd

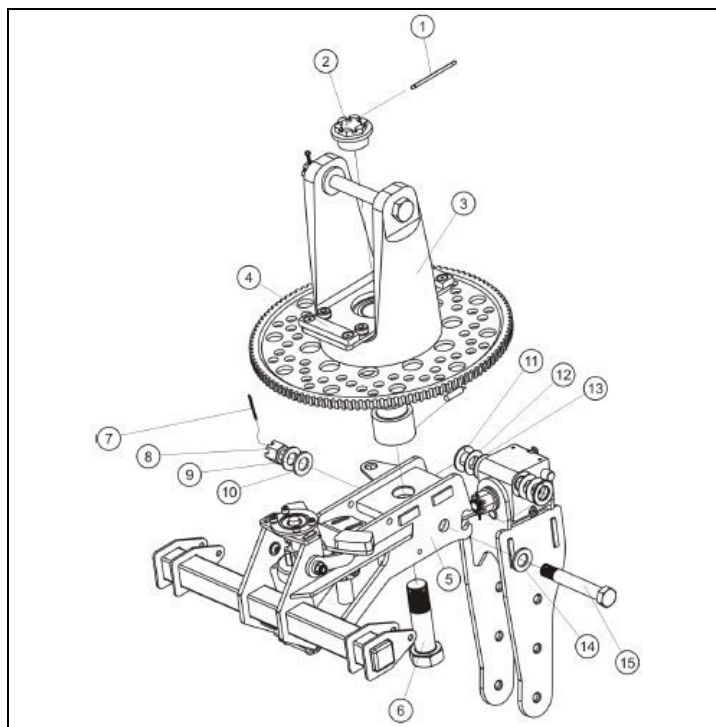
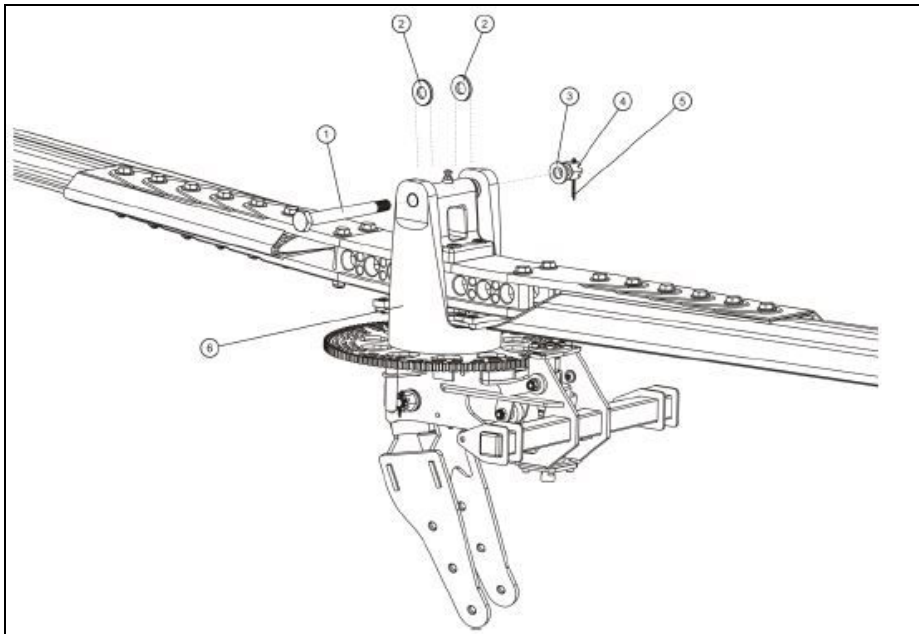
## Service Bulletin

This form is the response from RotorSport UK Ltd either against a problem found in the product in service requiring a containment or rectification action, or as service information for aircraft modification incorporation.

Upon completion of the action, the person responsible must enter details into the aircraft logbook/worksheet with the SB and/or CAA MPD (Mandatory Permit Directive) number and sign as normal (see instructions below).

For help, contact RotorSport on 44(0)1588 650769, or email [info@rotorsport.org](mailto:info@rotorsport.org).

<b>SB No.: 040 issue 2</b>	CCAR No.: None	Classification: <b>OPTIONAL</b> or <b>RECOMMENDED</b> or <b>MANDATORY</b>
Aircraft type & model (applicability) RotorSport UK MT-03, MTOsport	Aircraft serial Nos. effected RSUK/MT-03/any RSUK/MTOsport/any	



Schematics of RotorSystemII installation (MTOS shown)  
– see AMM’s RSUK0012 and RSUK0044 for further information

# RotorSport UK Ltd

## Service Bulletin

This form is the response from RotorSport UK Ltd either against a problem found in the product in service requiring a containment or rectification action, or as service information for aircraft modification incorporation.

Upon completion of the action, the person responsible must enter details into the aircraft logbook/worksheet with the SB and/or CAA MPD (Mandatory Permit Directive) number and sign as normal (see instructions below).

For help, contact RotorSport on 44(0)1588 650769, or email [info@rotorsport.org](mailto:info@rotorsport.org).

<b>SB No.: 040 issue 2</b>	CCAR No.: None	Classification:
Aircraft type & model (applicability) RotorSport UK MT-03, MTOsport	Aircraft serial Nos. effected RSUK/MT-03/any RSUK/MTOsport/any	<b>OPTIONAL</b> or <b>RECOMMENDED</b> or <b>MANDATORY</b>

Safety effect resulting from change from RSI to RSII (standard variant or TOPP variant)

Improved by reduction of stress in rotor blades, leading to improved service life.

Note. The rotor bearing is changed as part of this service bulletin, with a new safe life of 1500hrs.

Weight and CG effect

Option 1) Rotorsystem II (8.4m standard variant, red end caps) is 2.15kg heavier than the AutoGyro original (black end-cap) 8.4m rotor system and 2.90kg heavier than the AutoGyro optional (grey end-cap) 8m rotor system. It is approximately the same weight as the very early Aircoputer/Autogyro systems (which contained some "Aircoputer" proprietary components.)

If replacing a black or grey end-cap system the greater weight on the top of the mast will raise the CG approximately 7mm. This is within the current CG tolerance, due to the weight of the Rotorsystem II (standard variant) rotor closely matching that of the original Aircoputer rotor fitted in 2006 when the MT-03 was first approved. There is therefore no change in the certified CG limitations of the aircraft.

The actual aircraft empty weight may however be changed so a new AWC may be issued and the "Aircraft Payload Specification" placard amended. The data for the new AWC and placard change is listed below:

- If replacing black-end-cap 8.4m rotor system (RSD7040) add 2kg to the present declared weight
  - If replacing a grey end-cap 8.0m rotor system (RSD7139) add 3kg to the present declared weight
  - If replacing an Aircoputer 8.4m rotor system (RSD7033) do not amend the weight
- (note, no 8.0m or Aircoputer systems are known to be in UK service at the time of the SB)

Option 2) Rotorsystem II (8.4m TOPP variant, blue end caps) is 6.15kg heavier than the AutoGyro original (black end-cap) 8.4m rotor system and 6.90kg heavier than the AutoGyro optional (grey end-cap) 8m rotor system. It is approximately 4kg heavier than the very early Aircoputer/Autogyro systems.

If replacing any earlier rotor system (see list below) the greater weight on the top of the mast will raise the CG further than the 7mm noted above. This is slightly greater than the current CG tolerance, due to the weight of the Rotorsystem II (TOPP variant) rotor being some 4kg heavier than the original Aircoputer rotor fitted in 2006 when the MT-03 was first approved. The allowable CG range in Z is therefore increased by 20mm. **There is no change in the certified max empty weight of the aircraft, so care must be taken to ensure that the additional weight does not take the aircraft over the maximum permitted empty weight.** (For further information see POH RSUK0011 Iss 12 (MT-03) or RSUK0043 Iss 9 (MTOsport))

Because the actual aircraft weight is changed a new AWC will be issued and the "Aircraft Payload Specification" placard amended. The data for the new AWC and placard change is listed below:

- If replacing black-end-cap 8.4m rotor system (RSD7040) add 6kg to the present declared weight
- If replacing a grey end-cap 8.0m rotor system (RSD7139) add 7kg to the present declared weight
- If replacing an Aircoputer 8.4m rotor system (RSD7033) add 4kg to the present declared weight

Continued Airworthiness / Maintenance aspects

Once Rotorsystem II has been fitted under this Service Bulletin the only change in the ongoing airworthiness requirements is the increased time interval to first inspection (see Form F138 100hr/Annual Repetitive Service Worksheet), and increase in rotor system safe life to 2,500hrs. There is no change to the performance or limitations of the aircraft, the rotor is, however, faster/easier to assemble due to the reduction from nine bolts to six bolts per blade

# RotorSport UK Ltd

## Service Bulletin

This form is the response from RotorSport UK Ltd either against a problem found in the product in service requiring a containment or rectification action, or as service information for aircraft modification incorporation.

Upon completion of the action, the person responsible must enter details into the aircraft logbook/worksheet with the SB and/or CAA MPD (Mandatory Permit Directive) number and sign as normal (see instructions below).

For help, contact RotorSport on 44(0)1588 650769, or email [info@rotorsport.org](mailto:info@rotorsport.org).

<b>SB No.: 040 issue 2</b>	CCAR No.: None	Classification:
Aircraft type & model (applicability) RotorSport UK MT-03, MTOsport	Aircraft serial Nos. effected RSUK/MT-03/any RSUK/MTOsport/any	<b>OPTIONAL</b> or <b>RECOMMENDED</b> or <b>MANDATORY</b>

Action required to implement this service bulletin – full head removal, rebuild and replacement.

(i) Remove from aircraft

1. Position the aircraft on level ground and apply brakes/chock wheels. Remove the rotor as described in the Maintenance Manual.
2. Disconnect the two control rods at the top joints and tie to the mast.
3. Disconnect the pitch trim cylinder air-pipes noting the relative positions and blank air pipes. Remove the cylinder from its mast mounting (temporarily hold the shaft safety loop in place on the mast)
4. Remove the plug from the rotor-speed sensor and cut any cable ties so that the cable can be held clear and the rotor bearing temperature sensor can be unplugged
5. Remove the cross bolt from the top universal joint (UJ) and tip the rotor-head forwards so that the long drive-shaft comes free from the UJ. Rest the long drive shaft inside the safety loop.
6. Disconnect the 4mm pneumatic pipe from the bendix drive cylinder, blank open pipe, and tie clear
7. Remove the split pin, and unscrew the nut from the pitch –pivot-bolt. Remove the bolt and lift the rotor-head away from the aircraft
8. NB: on early aircraft the pivot bolt head may be adjacent to the rotor-speed sensor requiring that the sensor is temporarily removed. Before doing this use a feeler-gauge to establish the clearance between the sensor face and the disk and note the orientation of the sensor. As soon as the head assembly is on the bench replace the sensor in the original position. Its face should be clear of the disk by 2mm.

(ii) Bench work

1. Place a 30mmAF ring spanner on the hex-head bolt on the underside of the rotor-head. Clamp this ring spanner in a substantial vice.
2. Remove the split-pin from the castle-nut. With an assistant to steady the assembly in the vice, use a 30mmAF socket to unscrew the castle-nut from the bolt. It will be very tight.
3. Remove the M20bolt, M20 plain washer and aluminium spacer (with bonded-in sensor)
4. Note the orientation of the ring-gear on the teeter tower. Clamp the tower in the soft-jaws of a vice and remove the six low-profile capscrews retaining the gear to the tower. If necessary use a temperature-controlled heat-gun to heat the bolt-heads and degrade the Loctite bond (NB: 120degC max to avoid damage to the alloy teeter-tower).
5. Using a nylon hammer carefully drift the gear off the spigot of the teeter tower.
6. Clean-up the gear mating surfaces using Amberklene LO30 solvent and a soft rag.
7. Position the ring gear on the new tower's spigot so that the witness-mark from the rotor brake is on the underside and the welded-plug is at the 11-o'clock position relative to the rotor axis
8. Replace the M8 low-profile screws using new M8 friction washers and Loctite 243. Progressively tighten the screws to 20Nm.
9. Temporarily fit the bolt into the aluminium collar and bond the temperature sensor into the collar with a bead of hot-melt adhesive RSD4659. When the adhesive has solidified the bolt may be removed.
10. Reassemble the ring-gear/teeter-tower to rotor-head bridge using this collar, the new (special) castle-nut, the new bolt and plain washer. Holding the assembly in the vice as described in (1) above tighten to 160Nm +/-20Nm and fit the new split-pin supplied in the kit. Check that the ring-gear/tower rotates freely both with and without the bendix gear engaged. Adjust clearance by slackening the bearing nut and moving the head to suit, and re-tightening.
11. Fit the new split-pin supplied in the kit. Back-off to nearest split-pin hole is acceptable but minimum torque 140Nm must be realised. Fit pin in nut as shown in later bulletin photo.

# RotorSport UK Ltd

## Service Bulletin

This form is the response from RotorSport UK Ltd either against a problem found in the product in service requiring a containment or rectification action, or as service information for aircraft modification incorporation.

Upon completion of the action, the person responsible must enter details into the aircraft logbook/worksheet with the SB and/or CAA MPD (Mandatory Permit Directive) number and sign as normal (see instructions below).

For help, contact RotorSport on 44(0)1588 650769, or email [info@rotorsport.org](mailto:info@rotorsport.org).

<b>SB No.: 040 issue 2</b>	CCAR No.: None	Classification:
Aircraft type & model (applicability) RotorSport UK MT-03, MTOsport	Aircraft serial Nos. effected RSUK/MT-03/any RSUK/MTOsport/any	<b>OPTIONAL</b> or <b>RECOMMENDED</b> or <b>MANDATORY</b>

(iii) Reassemble to aircraft

1. Offer the rotor-head assembly to the gimbal-block, replace the pitch-pivot bolt so that its thread is adjacent to the rotor rpm sensor and refit the washers, and castle-nut. Tighten the nut to 15Nm then back-off so that the head moves freely and there is no free-play. Fit the split-pin. Note: Fitting the pivot bolt with its nut adjacent to the rotor-speed sensor is the standard configuration for later aircraft and its reversal on early aircraft is approved under MC-056.
2. Lift the head so that the bendix drive shaft may be engaged then fit the cross-bolt and new nyloc nut/Loctite243. Tighten to 13-15Nm. Refit the bendix cylinder air pipe.
3. Reattach the pitch trim cylinder to its mast mounting using Loctite 243 and a new nyloc nut (M8). Check that the safety loop is correctly positioned
4. Refit the pneumatic pipes to the trim cylinder, confirming correct orientation
5. Refit the electrical cables to the rotor-speed sensor and rotor-bearing temperature sensor. Route and attach the cables with cable-ties so that they are clear of all mechanical movement.
6. Refit the control rods ensuring that all spacers are correctly positioned to allow unrestricted movement of the rod-end bearings. Use Loctite 243 and new nyloc nuts (2-off M6). Paint-mark the nut after tightening.
7. Using the control stick verify that the control system has full-and-free movement and correctly reaches the mechanical stops in pitch and roll. With the stick in mid-position, fully forward, the rotor head is set 1 degree to the left.
8. Verify that the rotor head rotates freely without and binding or bearing noise.
9. Switch on the a/c master switch and check that the trim/brake system functions correctly and that there is no leakage of air pressure. Set the rotor-brake fully on (stick will move forwards) and switch off the master switch.
10. Fit the new RotorSystemII rotor as described in the Pilots Handbook and Maintenance Manual, positioning the new shims provided against the appropriate dot-marks. Note that the new rotor has been tracked but in-flight balancing may be required – see below
11. Determine the empty weight of the aircraft in order to issue a new AWC (if required). If the weight has changed, update the aircraft weight placard by carefully wiping the old weight marking off with Amberclean (taking care to only clean off the weight) and marking the new weight with a permanent fine marker. Cover the marking with a small piece of clear self adhesive film. If the placard does not wipe clean, or is not clear, replace with new.
12. Complete the inspection sheet appended to this SB to ensure correct task completion
13. Carry out flight test to verify that the new rotor system is satisfactorily balanced, or balance as required.

Action required to implement this service bulletin – Alternative process, remove and replace teeter tower and drive assy in situ.

1. Position the aircraft on level ground and apply brakes/chock wheels. Remove the rotor as described in the Maintenance Manual.
2. Remove rotor bearing nut split pin, and slacken/remove nut. Use a slimmed spanner to locate the bolt head.
3. Remove the pitch bolt split pin, nut and bolt. On early MT's this may also require the removal of the rotor speed sensor as per above item (i) 8.
4. Slide the head rearwards, noting that it will not fall off due to the pre rotator restraint strap, and remove the bearing bolt and tower assy.
5. Replace the tower as (ii) 2 to 9. Refit tower assy to head in situ with new collar, bearing nut and bolt, leaving the nut slack until the head is back in place.
6. Move the heads forwards and replace pitch pivot bolt and nut as per (iii) 1.

# RotorSport UK Ltd

## Service Bulletin

This form is the response from RotorSport UK Ltd either against a problem found in the product in service requiring a containment or rectification action, or as service information for aircraft modification incorporation.

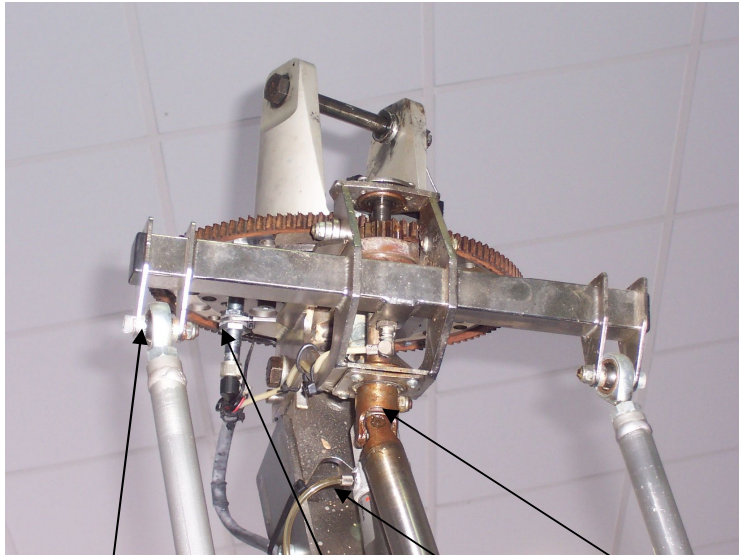
Upon completion of the action, the person responsible must enter details into the aircraft logbook/worksheet with the SB and/or CAA MPD (Mandatory Permit Directive) number and sign as normal (see instructions below).

For help, contact RotorSport on 44(0)1588 650769, or email [info@rotorsport.org](mailto:info@rotorsport.org).

<b>SB No.: 040 issue 2</b>	CCAR No.: None	Classification: <b>OPTIONAL</b> or <b>RECOMMENDED</b> or <b>MANDATORY</b>
Aircraft type & model (applicability) RotorSport UK MT-03, MTOsport	Aircraft serial Nos. effected RSUK/MT-03/any RSUK/MTOsport/any	

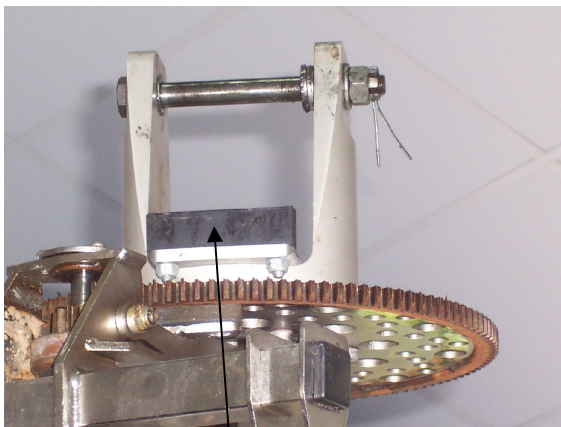
7. Refit speed sensor if removed, gap to drive wheel is 1-2mm.
8. Holding the bolt with a suitable slimmed spanner, tighten nut to 160Nm +/-20Nm. Check that the ring-gear/tower rotates freely both with and without the bendix gear engaged. Adjust clearance by slackening the bearing nut and moving the head to suit, and re-tightening.
9. Fit the new split-pin supplied in the kit. Back-off to nearest split-pin hole is acceptable but minimum torque 140Nm must be realised. Fit pin in nut as shown in later bulletin photo.
10. Continue process from (iii) 7.

### Photographs

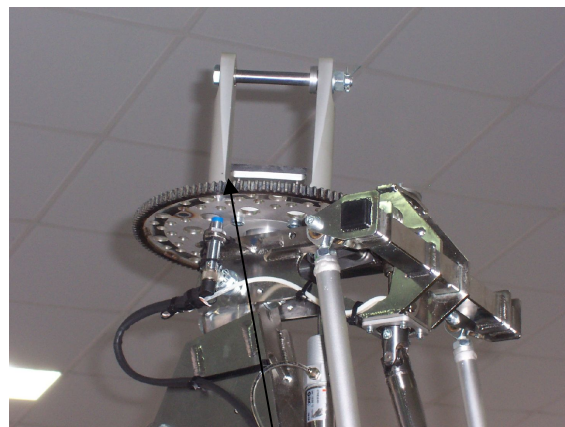


control rod mounting      speed sensor      4mm air pipe      UJ cross-bolt

MT-03 installation ready for removal



Original 18.8mm teeter-stop (MT-03 shown)



Rotorsystem II 7mm teeter-stop (MTOS shown)

# RotorSport UK Ltd

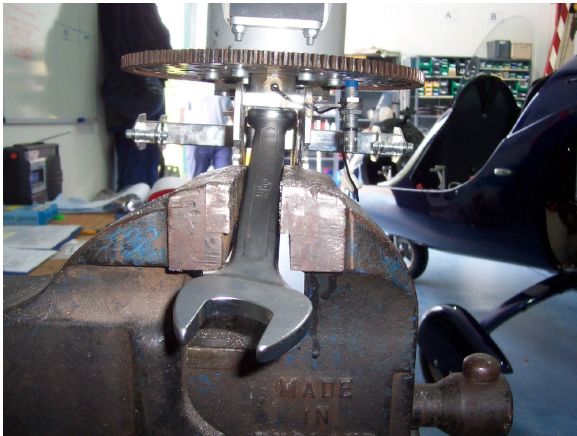
## Service Bulletin

This form is the response from RotorSport UK Ltd either against a problem found in the product in service requiring a containment or rectification action, or as service information for aircraft modification incorporation.

Upon completion of the action, the person responsible must enter details into the aircraft logbook/worksheet with the SB and/or CAA MPD (Mandatory Permit Directive) number and sign as normal (see instructions below).

For help, contact RotorSport on 44(0)1588 650769, or email [info@rotorsport.org](mailto:info@rotorsport.org).

<b>SB No.: 040 issue 2</b>	CCAR No.: None	Classification: <b>OPTIONAL</b> or <b>RECOMMENDED</b> or <b>MANDATORY</b>
Aircraft type & model (applicability) RotorSport UK MT-03, MTOsport	Aircraft serial Nos. effected RSUK/MT-03/any RSUK/MTOsport/any	



Head assembly held in bench-vice



Low-profile capscrews (6-plcs)



Top view of rotor bearing nut with split pin fitted.



Installation kit C.RK38  
The conical spacer shown is for Calidus and is not required for an MT-series installation.



Welded plug at 11-o'clock position to rotor axis



# RotorSport UK Ltd

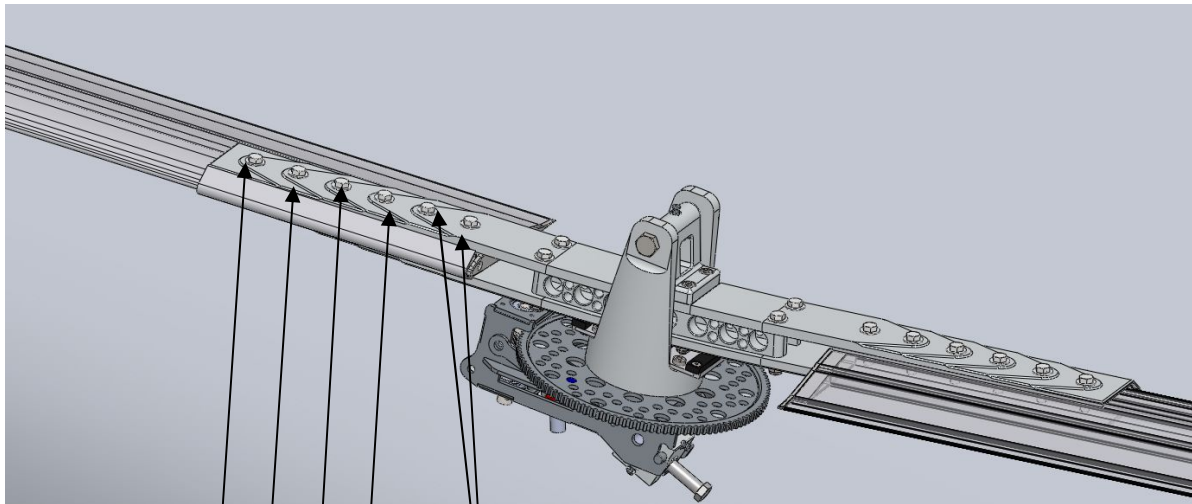
## Service Bulletin

This form is the response from RotorSport UK Ltd either against a problem found in the product in service requiring a containment or rectification action, or as service information for aircraft modification incorporation.

Upon completion of the action, the person responsible must enter details into the aircraft logbook/worksheet with the SB and/or CAA MPD (Mandatory Permit Directive) number and sign as normal (see instructions below).

For help, contact RotorSport on 44(0)1588 650769, or email [info@rotorsport.org](mailto:info@rotorsport.org).

<b>SB No.: 040 issue 2</b>	CCAR No.: None	Classification: <b>OPTIONAL</b> or <b>RECOMMENDED</b> or <b>MANDATORY</b>
Aircraft type & model (applicability) RotorSport UK MT-03, MTOsport	Aircraft serial Nos. effected RSUK/MT-03/any RSUK/MTOsport/any	



- Bolt BT3697, 49mm
- Bolt BT3698, 52mm
- Bolt BT3699, 55mm
- Bolt BT3670, 58mm
- Bolt BT661, 60mm long

Schematic view of Rotorsystem II. Note the different length bolts

**WARNING!** It is important to fit the correct length bolt in the associated hole! Fitting the wrong length bolt may result in insufficient safety protrusion through the nylock nut, or that the nut jams on the shank of the bolt before the joint is properly tightened.

Parts required to implement this service bulletin

- M.RK68 (BG1898) Conversion kit Rotorhead II (or Calidus kit C.RK38 (BG1895) which contains a surplus bush that is only used for the Calidus installation)
- M.RK66 (BG1793) Red end-cap rotor assembly (8.4m) or M-38946 (BG8946) Blue end cap TOPP rotor assembly
- 6-off M8 friction washer RSD6068
- 2-off Split pin RSD6054
- 1-off M8 nyloc nut RSD6009
- 3-off M6 nyloc nut RSD6008
- RSD4655 Amberklene LO30
- RSD4000 Loctite 243
- RSD4659 Hot-melt adhesive
- Cable-ties and wire-locking wire(as required)
- Form F206 (life-limited parts record)

Disposal of removed parts

Cut the inner end of the rotor blade showing the blade serial numbers and return to RSUK, otherwise the full normal value of the rotors are chargeable.  
Retained parts to be labelled with life undertaken so far and aircraft source, or scrapped.

# RotorSport UK Ltd

## Service Bulletin

This form is the response from RotorSport UK Ltd either against a problem found in the product in service requiring a containment or rectification action, or as service information for aircraft modification incorporation.

Upon completion of the action, the person responsible must enter details into the aircraft logbook/worksheet with the SB and/or CAA MPD (Mandatory Permit Directive) number and sign as normal (see instructions below).

For help, contact RotorSport on 44(0)1588 650769, or email [info@rotorsport.org](mailto:info@rotorsport.org).

<b>SB No.: 040 issue 2</b>	CCAR No.: None	Classification: <b>OPTIONAL</b> or <b>RECOMMENDED</b> or <b>MANDATORY</b>
Aircraft type & model (applicability) RotorSport UK MT-03, MTOsport	Aircraft serial Nos. effected RSUK/MT-03/any RSUK/MTOsport/any	

Effect on Pilots Handbook or Maintenance Manual?

Yes, MT-03 Pilot's Handbook RSUK0011 issue 12, MTOsport Pilots Handbook RSUK0043 issue 9, MT-03 AMM RSUK0012 issue 10 and MTOsport AMM RSUK0044 issue 9 released.

Service Bulletin Completion action:

Issue Permit Maintenance Release Certificate

CAA BCAR A3-7 Authorised Person to certify that the work is completed by writing 'SB-040 Rotorsystem II serial no.... fitted' in the aircraft logbook white pages, and record the action in the pink pages entitled 'Aircraft Modifications'. The rotor and rotor bearing new safe lives of 2,500hrs and 1500hrs respectively to be recorded on form F206 which must be inserted into the 'Repetitive Requirements' section of the aircraft logbook.

Both entries must be signed by the CAA Authorised Person with their CAA Authorisation number. As a primary control has been disturbed a second authorised person must check that the control system installation is correct and countersign the log-book together with their CAA authorisation number.

*The technical content of this document is approved under the authority of the UK CAA  
Design Organisation Approval Ref: **DAI/9917/06***

SB authorised by: (name, signature, and date of signature)

Quality Conformance Manager	Engineering Manager	Chief Test Pilot (if flight performance or safety effect)	Head of Airworthiness
-----------------------------	---------------------	---	-----------------------

Document completion date:	Issued to:	When	Issuer name	Signature
	Internal			
	CAA			
	Owners			

# RotorSport UK Ltd

## Service Bulletin

Appendix 1 to SB-040

Aircraft serial no.  Registration G-	<b>Service Bulletin implementation Worksheet</b>	Date raised:  Raised by:	
Purpose – record service bulletin implementation actions and return to service information.		Document reference: <b>SB-040 Iss2</b>	
Aircraft Maintenance Manual (AMM) referred to and issue level/date:			
Note; attach SB sheets to this document			
<b>Task</b>	Notes	Eng'r check/date	Inspector check/date
Record serial number of rotor blades fitted as new items (i.e. zero time) Identify variant below: <ul style="list-style-type: none"> <li>• Standard (red end caps)</li> <li>• TOPP (blue end caps)</li> </ul>	Blade serial no:  Blade serial no:		
Confirm completed F206 is inserted in the Aircraft logbook 'Repetitive Requirements'	RSII Rotor safe life is 2,500 hrs Rotor main bearing safe life is 1500 hrs		
Confirm all electrical cables re-installed and cable-tied (Temperature sensor and rotor-speed sensor)			
Confirm trim cylinder pneumatic pipes re-installed and properly cable-tied.			
Confirm control rods correctly refitted and control system limited by head stops. Confirm pitch and roll pivot bolt and main bearing bolt split pins in place (3-off items)			
Confirm rotor teeter action free and reaching teeter stops. Confirm teeter bolt split pin in place			
Confirm pre-rotator bendix engages and releases and that air-pipe is reconnected.			
Confirm new AWC issued			
Confirm placard change or state 'not required'			
Confirm trim/brake function, rotor speed detection and bearing temperature indication satisfactory	Refer to Aircraft Maintenance Manual (AMM)		
Confirm logbook entries completed, with blade serial numbers shown			
Issue PFRC to release aircraft for flight-test (general handling and rotor balance as required). Balance rotors as described in AMM. When satisfactory sign PMR in aircraft log-book. Note: Flight test must be conducted by an approved Test Pilot			
Customer acceptance: Name:  Signature/date:	Aircraft hobbs meter reading  Confirm logbooks annotated:		
<b>Permit Maintenance Release: The work recorded above has been completed to my satisfaction and in that respect the aircraft is considered fit for flight.</b>			
Engineer/Inspector signature  Name: CAA Authorisation code :	Date of work  Location where work completed		

PLEASE FAX THIS BACK TO 01588650769 (or send by email to info@rotorsport.org)

