RotorSport UK Ltd Service Repair

This form (Part 2 of 2) is the response from RotorSport UK Ltd to a Service Repair and Evaluation/Approval request, which specifies the company authorised repair method. Deviation from this method renders the authorisation ineffective.

Upon completion of the repair the repairer must enter details into the logbook/worksheet with the repair number and sign as normal.

If there are any problems with carrying out the work authorised, contact RSUK immediately on 44(0)1588 650769, or email gerry@rotorsport.org.

Repair No.: SR-001	CCAR No.: None	Repair classification:
Aircraft type:	Aircraft serial No affected: . RSUK/MT-03/002	MAJOR or
RotorSport UK MT-03	onwards where a Garmin GPSmap is fitted	MINOR

Repair problem description & cause of problem if known

The Garmin GPSmaps 196, 296, 495, 496 and similar units exhibit magnetic fields that vary dramatically from unit to unit in terms of strength and polarity, and also vary between battery packs and the units themselves. It is not possible to degauss the GPS units as this destroys the electronics. The units are positioned relatively near (due to the compact nature of the instrument panel) to the compass. As a result the compass may change headings between having a removable GPS fitted to the aircraft, and not having one fitted.

Service repair authorised by RotorSport UK Ltd

Action required.

- 1. Remove key and ensure mag switches are OFF.
- 2. Turn the FLIGHT switch to FLIGHT, remove the tie down bag, and secure the rotor such that the stick is fully rearwards.
- 3. Remove instrument panel retaining screws (seven around the top, and three either side). Leave the top centre screw until last. Put a piece of card or other protective material under the foot of the panel to protect the panel edge and keel placard.
- 4. Remove last screw, and pull panel back. Remove screws and nuts retaining mounting to panel, and remove plastic mounting.

View of existing panel mount



GPS mounting bracket Remove four securing screws and nuts/washers on the rear of the panel

Panel securing screws, 13off

- 5. Fit mounting bracket to RAM unit utilising fastenings removed with bracket, with new nylock nuts and washers under.
- 6. Fit mounting to panel, utilising dome head screws with washers under the head, and nylock nuts on the panel reverse side. Tighten securely.
- 7. Trial fit GPS unit to bracket, fit power lead, and tie lead to extension bracket with plastic ties as shown. Pull lead thru panel as required to reach the GPS, releasing the lead from any ties on the back of the panel to achieve this. Refit ties if needed.
- 8. Refit panel to enclosure, starting with the top screw, and loosely fitting all screws first before tightening

RotorSport UK Ltd Service Repair

This form (Part 2 of 2) is the response from RotorSport UK Ltd to a Service Repair and Evaluation/Approval request, which specifies the company authorised repair method. Deviation from this method renders the authorisation ineffective.

Upon completion of the repair the repairer must enter details into the logbook/worksheet with the repair number and sign as normal.

If there are any problems with carrying out the work authorised, contact RSUK immediately on 44(0)1588 650769, or email gerry@rotorsport.org.

	Repair No.: SR-001	CCAR No.: None	Repair classification:
RotorSport UK MT-03onwards where a Garmin GPSmap is fittedMINOR	Aircraft type:	Aircraft serial No affected: . RSUK/MT-03/002	MAJOR or
	RotorSport UK MT-03	onwards where a Garmin GPSmap is fitted	MINOR

all securely. Remove protective material.

- 9. Secure rotors back to the front of the aircraft, restore power and engage rotor brake. Clear up.
- 10. Enter MC-082 in the modification section and white pages of the aircraft logbook, as sign/date the entry.

See pictures for guidance

View of mount with GPS bracket fitted



Use countersunk screws from original bracket to panel mounting. Fit washers under the nylock nuts (four places).

View of new mounting and finished panel



4mm Plastic tie securing cable Put second 2mm tie around here to retain cable. Cut waste ends off the ties

Dome head screws with washers under the head and nut

RotorSport UK Ltd Service Repair

This form (Part 2 of 2) is the response from RotorSport UK Ltd to a Service Repair and Evaluation/Approval request, which specifies the company authorised repair method. Deviation from this method renders the authorisation ineffective.

Upon completion of the repair the repairer must enter details into the logbook/worksheet with the repair number and sign as normal.

If there are any problems with carrying out the work authorised, contact RSUK immediately on 44(0)1588 650769, or email gerry@rotorsport.org.

Repair No.: SR-001	CCAR No.: None	Repair classification:
Aircraft type:	Aircraft serial No affected: . RSUK/MT-03/002	MAJOR or
RotorSport UK MT-03	onwards where a Garmin GPSmap is fitted	MINOR

Special tools & Health and Safety requirements, and/or components required for repair:

Use service kit RSD7112 comprising 1off RAM extension mounting unit, 4 dome head M4 screws, washers and nylock nuts, and three ties – two 4mm (one spare), one 2mm.



Quality Inspection requirements after repair:

- 1. Check that extension unit clamps securely.
- 2. Check that the GPS bracket engages correctly with the GPS and locks.
- 3. Check that the GPS powers up on aircraft power, and that the power lead is not overstretched.
- 4. Check all fastenings disturbed or new-made are tight.
- 5. Swing compass and check calibration.

Service repair authorised by: (name, signature, and date of signature) Structures (where **Civil Aviation** Ouality Chief Test Pilot Engineering Authority (if a major Conformance Manager (where an effect on required) Manager flight performance repair) or safety) G-SASICH 05/09/ 519108 When Issuer name Document Signature Issued to: completion Internal date: CAA Owners PFA/BMAA Inspectorate

Form F023 Issue 1 Part 2 of 2