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PR-407SD-900M

Rev C

DZUS Snow Deflector Installation Instructions

Revision History

Revision	Date	Detail of Changes	By
N/C	12/01/99	Original	RHSM
A	11/30/09	Updated for Clarification	REB, LS
B	11/01/13	Updated for clarification; Added section 1.2 for -3 & -4 installations	JT
C	01/27/14	Updated -3 & -4 for clarification. Removed note to temporary install DZUS studs for positioning of receptacle installation.	JT

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1 INSTALLATION INSTRUCTIONS

1.1 407SD-200-1 & -2 SNOW DEFLECTOR PROVISIONS INSTALLATION

- i. Remove inlet cowling from aircraft (Reference, BHT-407-MM).

CAUTION: To prevent contamination of the inlet filter during this procedure, cover inlet filter. Ensure all rivet tails and debris are recovered from cowling.

- ii. Top of Cowling, reference installation drawing 407SD-200-1/-2.
 - a. Locate and remove existing snow deflector nutplates and rivets (per BHT-ALL-SRM section 3-2-22) where doublers are to be installed.
 - b. As indicated on drawing 407SD-200 View C-C', enlarge existing stud holes in cowling to accept new DZUS fasteners, three locations on each side.
 - c. Position, mark and match drill doublers to existing rivet hole locations (one doubler on each side).

NOTE: Temporarily install DZUS studs shimmed with washers as a work aid, to hold fastener doublers in proper position.
 - d. Install doublers to cowling with blind rivets as shown on 407SD-200 drawing.
 - e. Install receptacles (2 each) to cowling per 407SD-200-2 (right side only).

- iii. Side of Cowling, reference installation drawing 407SD-200-1/-2.

- a. Locate and remove existing snow deflector nutplates and rivets (per BHT-ALL-SRM section 3-2-22) on each side of the cowling (6 ea.). Using a #10-32 screw and provided drill template, match-drill rivet holes for DZUS receptacle installation.

NOTES:

(a)The rivets used to install the uppermost "corner" style nutplate must be drilled out without the use of the provided drill template.

(b) Rivet holes in DZUS receptacles must be drilled $\varnothing 0.161$ for specified rivets. This aligns the original cowling holes with those in the receptacles.

(c)After uppermost nutplate removal, position drill template for best fit, then drill fastener holes. Note recommendation to countersink the lower rivet hole through the doubler and into the cowling skin, see drawing 407SD-200 View E-E'.

- b. As indicated on drawing 407SD-200 View D-D', enlarge existing nutplate holes in cowling to accept new DZUS fasteners, six locations on each side.
- c. As shown on drawing 407SD-200 View E-E', the remaining holes from the previous receptacles should be countersunk and filled using solid rivets.
- d. Install receptacles (six each side) using indicated hardware on 407SD-200 View D-D'.

NOTE: Dimples remaining from partially filled rivet holes may be filled using epoxy per

BHT-ALL-SRM Section 4-5-3. Sand smooth all affected areas and spot refinish cowling as necessary, per BHT-ALL-SPM.

1.2 407SD-200-3 & -4 SNOW DEFLECTOR PROVISIONS INSTALLATION

- i. Remove inlet cowling from aircraft (Reference, BHT-407-MM or BHT-206L4-MM, as applicable).

CAUTION: To prevent contamination of the inlet filter during this procedure, cover the inlet filter. Ensure all rivet tails and debris are recovered from cowling.

NOTE: Due to its abrasive nature, carbon fiber composite parts require special tooling for drilling, countersinking etc. (Cobalt alloy tooling is suggested).

- ii. Top of Cowling, reference installation drawing 407SD-200-3/-4 Views F-F', G-G'.
 - a. Locate and remove existing snow deflector nutplates (per BHT-ALL-SRM section 3-2-22) where doublers are to be installed (3 nutplates each side). Reference drawing View F-F' for locations of new doublers.
 - b. As indicated on drawing View F-F', enlarge existing stud holes in cowling to accept new DZUS fasteners, three locations on each side.

NOTE: Temporarily clamp doublers in proper position to match drill holes.
 - c. Position and match drill rivet holes in doublers to cowling per drawing, one doubler on each side.
 - d. Install doublers to cowling with blind rivets and adhesive as shown on drawing View G-G'.

NOTE: When bonding doublers to cowling, ensure epoxy fills all previous rivet holes.
- iii. Side of Cowling, reference installation drawing 407SD-200-3/-4.
 - a. Locate and remove existing snow deflector nutplates and old adhesive (per BHT-ALL-SRM section 3-2-22) on each side of the cowling (4 each side) where doublers are to be installed. For locations of new doublers, refer to View H-H' and View J-J' of the 407SD-200 drawing.
 - b. Locate and remove existing snow deflector nutplates and old adhesive (per BHT-ALL-SRM section 3-2-22) on each side of the cowling (2 each side) where new receptacles are to be installed. For locations of new receptacles, refer to View K-K' and View L-L' of the 407SD-200 drawing.

NOTE: Rivet holes in lower DZUS receptacles must be drilled $\varnothing 0.128$ for specified rivets, as shown in View K-K' and View L-L' of the 407SD-200 drawing.

NOTE: Temporarily clamp doublers in proper position to match drill holes.
 - c. As indicated on drawing 407SD-200 View G-G', enlarge existing stud holes in cowling to accept new DZUS fasteners, 6 locations on each side.

- d. Position, mark and match drill doublers and receptacles to cowling, one doubler and two receptacles per side. Use pre-drilled holes in doublers and receptacles for rivet hole locations.
- e. Repair existing rivet holes of forward corner nutplate (one each side) per drawing Views M-M' and N-N'.
- f. Install doublers and receptacles using blind rivets as indicated on the drawing.

NOTE: Dimples remaining from partially covered rivet holes may be filled using epoxy per BHT-ALL-SRM Section 4-5-3. Sand smooth all affected areas and spot refinish cowling as necessary, per BHT-ALL-SPM.

2 SNOW DEFLECTOR ASSEMBLY MODIFICATIONS

- 2.1 As shown in the 407SD-200 drawing, enlarge holes to 0.250 dia. in deflector assemblies to permit installation of DZUS studs. Ensure proper alignment with receptacle locations in cowling.
- 2.2 Temporarily install deflectors with stud fasteners to determine proper lengths. Note that the installation kit includes alternate stud fasteners in expected lengths for use if required.
- 2.3 Remove deflectors and complete stud installation per 407SD-200 drawing, using indicated hardware.

3 SNOW DEFLECTORS INSTALLATION/REMOVAL

- 3.1 Refer to aircraft Flight Manual and applicable supplement to determine ambient temperature and operations for Snow Deflectors use.
- 3.2 Refer to PR-206/407SD-120M for DZUS Snow Deflector Instructions for Continued Airworthiness.

REFERENCES

Paravion Technology Inc. documents:

PR-206/407SD-120M, Instructions for Continued Airworthiness

407SD-200, DZUS Snow Deflector Installation drawing

Bell Helicopter Textron (BHT) documents:

BHT-407-MM, Maintenance Manual

BHT-206L4-MM, Maintenance Manual

BHT-ALL-SPM, Standard Practices Manual

BHT-ALL-SRM, Standard Repair Manual