

REFERENCE INSTRUCTION LETTER

TO: All operators	FROM: Service Engineering	CONTROL NO: RIL # BD-033	REVISION: A
ATTN: Maintenance	ORIGINATOR: Etienne Charron	PAGE: 1 of 5	
PHONE NO:	PHONE NO: 514-855-7342	A/C MODEL: Challenger 300 and 350	A/C S/N: 20238 to 20999
FAX NO:	FAX NO:	ATA NO: 52	
DATE OF REQUEST: XX-DEC-2016	PUBLICATION AFFECTED: Specific Aircraft SMM		

TITLE: Floor Mat installation

REFERENCE: Drawing #1002510200

ISSUE: Procedure not available in AMM/SMM - Anti-slip mat coming unglued - Improved Procedure

Description

Installation of the Passenger Door Anti-Slip Mat

A. Reference Information

REFERENCE	DESIGNATION
SPM TASK 51-24-00-910-801	Bonding Safety Precautions
SPM TASK 51-25-00-110-801	Solvent Cleaning
SPM TASK 51-31-01-910-801	Environmental Precautions

B. Tools and Equipment

REFERENCE	DESIGNATION
Commercially Available	Roller, Hard plastic/rubber
Commercially Available	Wood Dowel 0.125 x 16 in (3 x 400 mm)
Commercially Available	Scraper, Plastic
Commercially Available	Roller, Paint, Synthetic
Commercially Available	Brush, Synthetic or Natural
Commercially Available	Cleaner, Vacuum

D. Consumable Materials

NOTE: All references are to the Standard Practice Manual (SPM), Chapter 51.

REFERENCE	DESIGNATION	MANUFACTURER'S REFERENCE AND/OR SPECIFICATION
05-022	Cloth, Abrasive, Aluminum Oxide, 180-grit	Commercially Available
05-035	Cloth, Cleaner, Low-Lint	A-A-59323A
05-528	Tape, Aluminum	Commercially Available
06-397	Adhesive, RT Curing, Polychloroprene Rubber (For Challenger 300/350 and Global)	Scotch Weld EC-1357 lt Yel. 3M – Minnesota Mining and Manufacturing Co.
07-012	Alcohol, Isopropyl	Commercially Available
08-020	Naphtha, Aliphatic (Solvent)	TT-N-95

D. Setup

- (1) Obey all the environmental safety precautions (SPM TASK 51-31-01-910-801).
- (2) Obey all the bonding safety precautions (SPM TASK 51-24-00-910-801).
- (3) Make a plywood jig to fit the angle of the steps of the airstair and cover the entire anti-slip mat. Make sure the jig exceed the width of the anti-slip mat by at least 0.250 in. (6.35 mm). Refer to Figure 1.

E. Procedure for installation of a new anti-slip mat

- (1) To prepare the surfaces for an anti-slip mat installation, do the steps that follow:
 - (a) If necessary, carefully remove the damaged anti-slip mat with a plastic scraper. Make sure not to damage the airstair surface.
 - (b) With the 07-012 Isopropyl alcohol and abrasive paper, make sure to remove any remaining adhesive on the airstair surface (SPM TASK 51-25-00-110-801).
 - (c) Apply aluminum tape to protect the surface around the anti-slip mat to be installed. Use the anti-slip mat to have the correct size. Make sure the anti-slip mat is centered on the airstair (or aligned with the other anti-slip mats) and has a length of 1.50 in. (38.1 mm) of material to fold over the stair.
 - (d) If required, with the abrasive paper, lightly sand the airstair surface to remove the gloss from the paint. Make sure to sand the whole surface to the edge of the aluminum tape.
 - (e) Remove the dust from the airstair and the back of the anti-slip mat with a vacuum cleaner.

- (2) To apply the anti-slip mat, do the steps that follow:

NOTE: Always do one step of the airstair at the time and start from the top of the airstair.

- (a) Use a clean, low-lint cloth, moist with the 07-012 Isopropyl alcohol, to clean the area specified for installation and the back of the anti-slip mat (SPM TASK 51-25-00-110-801)
- (b) Allow the solvent to evaporate.

- (c) Make 2 base samples of bare aluminum of 3 x 3 in.(76 x 76 mm) to test for adhesive dryness.

NOTE: Make sure the temperature of all the surfaces and adhesive is between 19-29°C (65 - 85°F).

- (d) Prepare the adhesive according to manufacturer instructions.
- (e) With a roller or a brush, apply an even coat of 06-397 adhesive on the anti-slip mat and the base samples.
- (f) Allow the two surfaces to dry for 30 minutes.
- (g) Apply a second even coat of adhesive on the airstair surface, the back of the anti-slip mat, and on the base samples.
- (h) Apply an even coat of adhesive on the airstair surface. Apply adhesive to the edge of the aluminum tape.
- (i) Allow the two surfaces to dry until tacky.

NOTE: Use the base samples to test if the adhesive is tacky.

- (j) Hold the anti-slip mat by the edges, align with the edge of the aluminum tape, and carefully position the anti-slip mat over the prepared surface.

NOTE: Wood dowels can be used to prevent premature surface contact because the assembly cannot be moved after the surfaces touched.

- (k) Remove the aluminum tape.
- (l) Push down with maximum pressure on the anti-slip mat with the hard rubber roller. Make sure to roll three times over the full surface of the anti-slip mat.
- (m) With isopropyl alcohol and a scraper, make sure to remove any excess adhesive (SPM TASK 51-25-00-110-801). Make sure to remove any isopropyl alcohol.
- (n) Apply aluminum tape over the edges of the anti-slip mat to hold it in place.
- (o) Do not touch or move the anti-slip mat until the adhesive is fully cured.
NOTE: The adhesive cure in approximately 24 hours (between 19-29°C (65 - 85°F) and a humidity level between 20% and 80%).
- (p) Remove the aluminum tape.
- (q) If necessary clean the area with isopropyl alcohol and a scraper (SPM TASK 51-25-00-110-801).
- (r) Make sure that the edges of the anti-slip mats are bonded.

F. Procedure to repair a partially disbanded anti-slip mat

- (1) To prepare the surfaces for a anti-slip mat installation, do the steps that follow:
 - (a) With the 07-012 Isopropyl alcohol, a scraper and abrasive paper, make sure to remove any remaining adhesive on the airstair surface and the back of the anti-slip mat from the disbanded portion (SPM TASK 51-25-00-110-801).
 - (b) Apply aluminum tape to protect the surface around the area of the anti-slip mat to be bonded.
 - (c) If required, with the abrasive paper, lightly sand the airstair surface to remove the gloss from the paint. Make sure the whole surface to the edge of the aluminum tape.

(d) Remove the dust from the airstair and the back of the anti-slip mat with a vacuum cleaner.

(2) To bond the anti-slip mat, do the steps that follow:

NOTE: Always do one step of the airstair at the time and start from the top of the airstair.

(a) Use a clean, low-lint cloth, moist with the 07-012 Isopropyl alcohol, to clean the area specified for installation (SPM TASK 51-25-00-110-801).

(b) Allow the solvent to evaporate.

(c) Make 2 base samples of bare aluminum of 3 x 3 in.(76 x 76 mm) to test for adhesive dryness.

NOTE: Make sure the temperature of all the surfaces and adhesive is between 19-29°C (65 - 85°F).

(d) Prepare the adhesive according to manufacturer instructions.

(e) With a roller, apply an even coat of 06-397 adhesive on the airstair surface, the anti-slip mat and the base samples. Apply adhesive to the edge of the aluminum tape

(f) Allow the two surfaces to dry for 30 minutes.

(g) Apply a second even coat of adhesive on the airstair surface, the back of the anti-slip mat, and on the base samples.

(h) Allow the two surfaces to dry until tacky.

NOTE: Use the base samples to test if the adhesive is tacky.

(i) Hold the anti-slip mat by the edges, align with the edge of the aluminum tape, and carefully position the anti-slip mat over the prepared surface.

(j) Remove the aluminum tape.

(k) Push down with maximum pressure on the anti-slip mat with the hard rubber roller. Make sure to roll three times over the full surface of the anti-slip mat.

(l) With isopropyl alcohol and a scraper, make sure to remove any excess adhesive (SPM TASK 51-25-00-110-801).

(m) Apply aluminum tape over the edges of the anti-slip mat to hold it in place.

(n) Do not touch or move the anti-slip mat until the adhesive is fully cured.

NOTE: The adhesive cure in approximately 24 hours (between 19-29°C (65 - 85°F) and a humidity level between 20% and 80%).


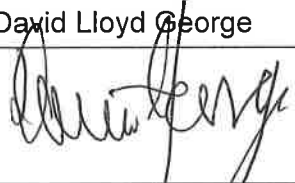
(o) Remove the aluminum tape.

(p) If necessary, clean the area with isopropyl alcohol and a scraper (SPM TASK 51-25-00-110-801).

(q) Make sure that the edges of the anti-slip mats are bonded.

G. Closeout

(3) Remove all tools, equipment, and unwanted materials from the work area.

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