SOUNDPROOFING - MAINTENANCE PRACTICES

1. General

A. This section covers the soundproofing panels in the cabin area. The soundproofing material is a combination of fiberglass batting and damping foam panels. Specific percentages of soundproofing damping foam panels with self-adhesive backing are installed in designated areas.

NOTE: Soundproofing damping foam panels do not overlap stringers, longerons, bulkheads or other raised surfaces.

B. A layer of fiberglass batting is required in most of the cabin area and is cemented over the entire surface, including damping foam panels and all raised surfaces (stringers, longerons and bulkheads).

C. The firewall, passenger door and lower cargo door soundproofing is 100 percent coverage, using a combination of a cushion (two layers of Therma-Sil with a Fiberfrax Durablanket filler) and a single layer Therma-Sil blanket attached with clips.

2. Soundproofing Damping Foam Panel Removal/Installation

A. Remove Soundproofing Damping Foam Panels (Refer to Figure 201).

(1) Pull panel away from airplane surface. Damping foam will probably separate, leaving fragments stuck to airplane surface.

CAUTION: Do not allow solvent to touch window, painted trim, upholstery or carpet.

(2) Loosen fragments by applying Methyl n-Propyl Ketone (MPK) (or equivalent). Apply two to five minutes for fragments and adhesive to soften.

(3) Using a non-metallic scraper, remove all fragments and residue.

B. Install Soundproofing Damping Foam Panels (Refer to Figure 201).

NOTE: Soundproofing panels cover either 80 percent or 100 percent of designated areas. Refer to Figure 201 for soundproofing coverage percentages explanation.

NOTE: Soundproofing material shall be applied to the lower surface of floorboards, including all access panels (Model 208 only).

(1) Ensure surface to be covered is clean and smooth.

(2) Measure surface to be covered and make a paper template.

(3) Using paper template, cut out soundproofing panel.

(4) Remove protective cover sheet from adhesive surface of panel.

CAUTION: Care should be taken in positioning panels. Once panel adhesive contacts airplane surface, panel cannot be repositioned.

(5) Position panel to surface of airplane.

(6) Press entire panel surface against airplane surface.

3. Fiberglass Batting Removal/Installation

A. Remove Fiberglass Batting (Refer to Figure 201).

NOTE: Remove only as much fiberglass batting as is necessary to perform repairs and maintenance.

(1) Pull fiberglass batting away from structure. Batting separation will probably leave fragments stuck to structure.

CAUTION: Do not allow solvent to touch windows, painted trim, upholstery or carpet.

(2) Loosen fragments by applying Methyl n-Propyl Ketone (MPK), or its equivalent, and allowing two to five minutes to soften adhesive.

(3) Using a non-metallic scraper, remove all fragments and residue.

B. Install Fiberglass Batting (Refer to Figure 201).

(1) Cut a piece of fiberglass batting sufficient to cover repair area.

(2) Brush industrial cement (EC-1300L or equivalent) over entire repair area.

CAUTION: Care should be taken in positioning batting. Once batting has contacted cement, it may be difficult to reposition without damage to batting.

(3) Position batting to surface.

(4) Press entire surface of batting against airplane.

4. Therma-Sil Removal/Installation

A. Remove Therma-Sil Blanket and Cushion (Refer to Figure 201).

(1) Remove clips securing Therma-Sil blanket and Fiberfrax Durablanket/Therma-Sil cushion.

(2) Remove Therma- Sil blanket and Fiberfrax Durablanket/Therma-Sil cushion.

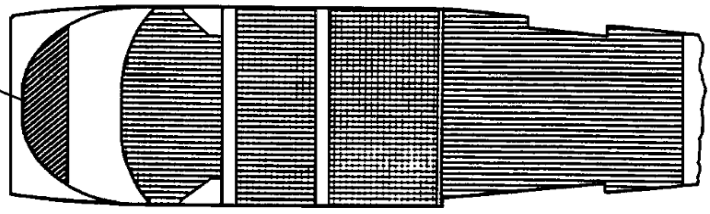
B. Install Therma-Sil Blanket and Cushion (Refer to Figure 201).

(1) Position Therma-Sil blanket and Fiberfrax Durablanket/Therma-Sil cushion to firewall.

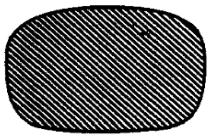
(2) Install clips securing Therma-Sil blanket and Fiberfrax Durablanket/Therma-Sil cushion to firewall.

Figure 201 : Sheet 1 : Soundproofing Installation

A22700

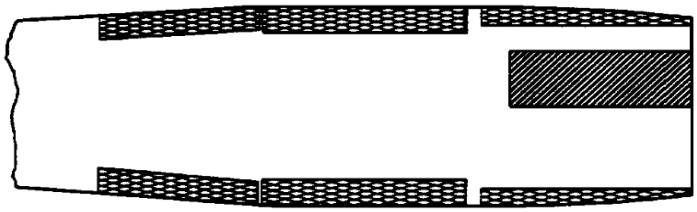


VIEW LOOKING UP AT CABIN TOP AND
LOWER SURFACE OF GLARESHIELD



FIREWALL

VIEW LOOKING FORWARD
AT FIREWALL



INTERIOR OF FUSELAGE BELLY

VIEW LOOKING UP AT LOWER
SURFACE OF AIRPLANE

100 PERCENT	COVERAGE USINGTHERMA-SIL BLANKET PLUS 100 PERCENT COVERAGE USING FIBERFRAX DURABLANKET/THERMA-SIL CUSHION ATTACHED WITH CLIPS
100 PERCENT	COVERAGE USING TWO INCH BATTING APPLIED TO SKIN INTERIOR
100 PERCENT	COVERAGE USING C3202-25 ALPSA DAMPING FOAM PLUS 100 PERCENT COVERAGE USING 2.0 INCH BATTING OVERLAY
80 PERCENT	COVERAGE USING C3202-25 ALPSA DAMPING FOAM PLUS 100 PERCENT COVERAGE USING 2.0 INCH BATTING OVERLAY
100 PERCENT	COVERAGE USING C3202-50 PSA DAMPING FOAM APPLIED TO LOWER SURFACE OF FLOORBOARD
100 PERCENT	COVERAGE USING C3202-25 ALSPA DAMPING FOAM APPLIED TO BELLY SKIN INTERIOR

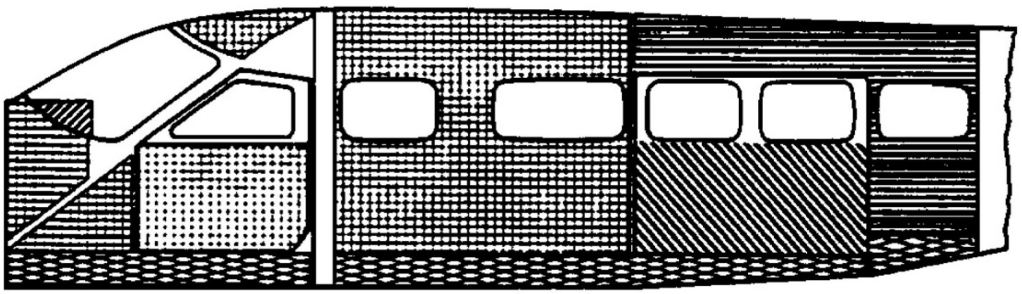
MODEL 208 ONLY

26193011

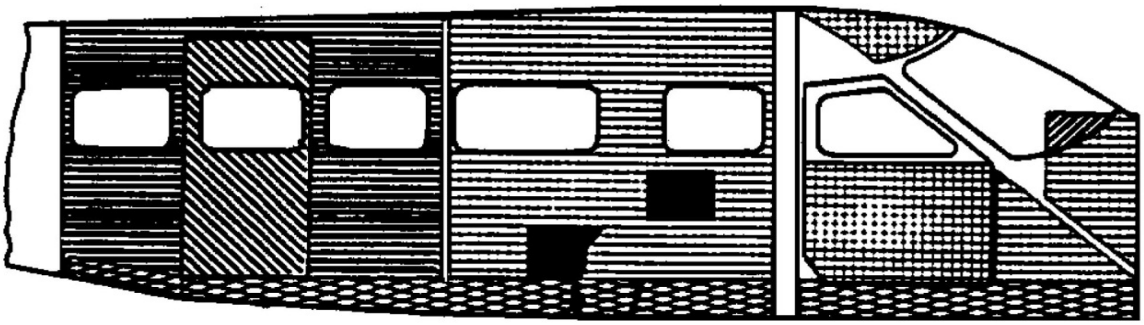
Figure 201 : Sheet 2 : Soundproofing Installation

A22701

LEFT FUSELAGE FIREWALL TO AFT CABIN PARTITION



VIEW LOOKING INBOARD

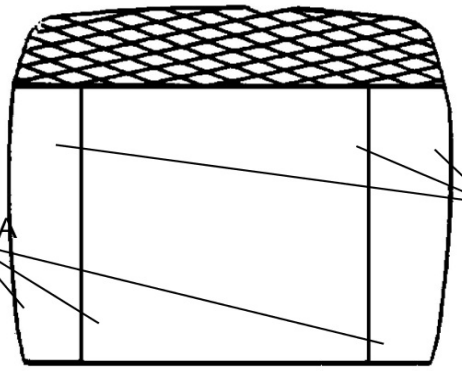


RIGHT FUSELAGE FIREWALL TO AFT CABIN PARTITION

APPLY Câ’2003â’05 PSA DAMPING FOAM TO BACK SIDE OF THESE TWO PANELS IN ADDITION TO DAMPING FOAM AND FIBERGLASS BATTING APPLIED TO FUSELAGE SIDEWALL.

AFT SIDE

FORWARD SIDE

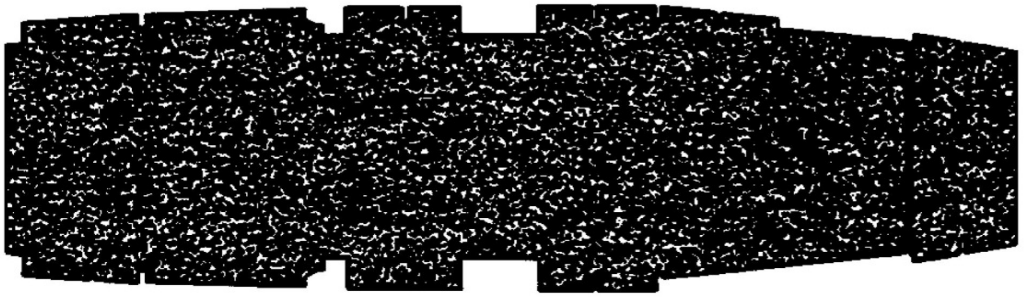


ONE LAYER OF Câ’2003â’50 PSA DOUBLEâ’BACK ADHESIVE.
ONE LAYER OF E1002 FGUB.
100 PERCENT COVERAGE FOR BOTH LAYERS.

ONE LAYER OF Câ’3002â’50 P DAMPING FOAM.
100 PERCENT COVERAGE.

AFT CABIN PARTITION

COVER LOWER SURFACE OF FLOORBOARD ONLY



CABIN FLOORBOARD
VIEW LOOKING UP AT LOWER SURFACE OF FLOORBOARD

MODEL 208 ONLY

26193011
26191119
26191120

Figure 201 : Sheet 3 : Soundproofing Installation

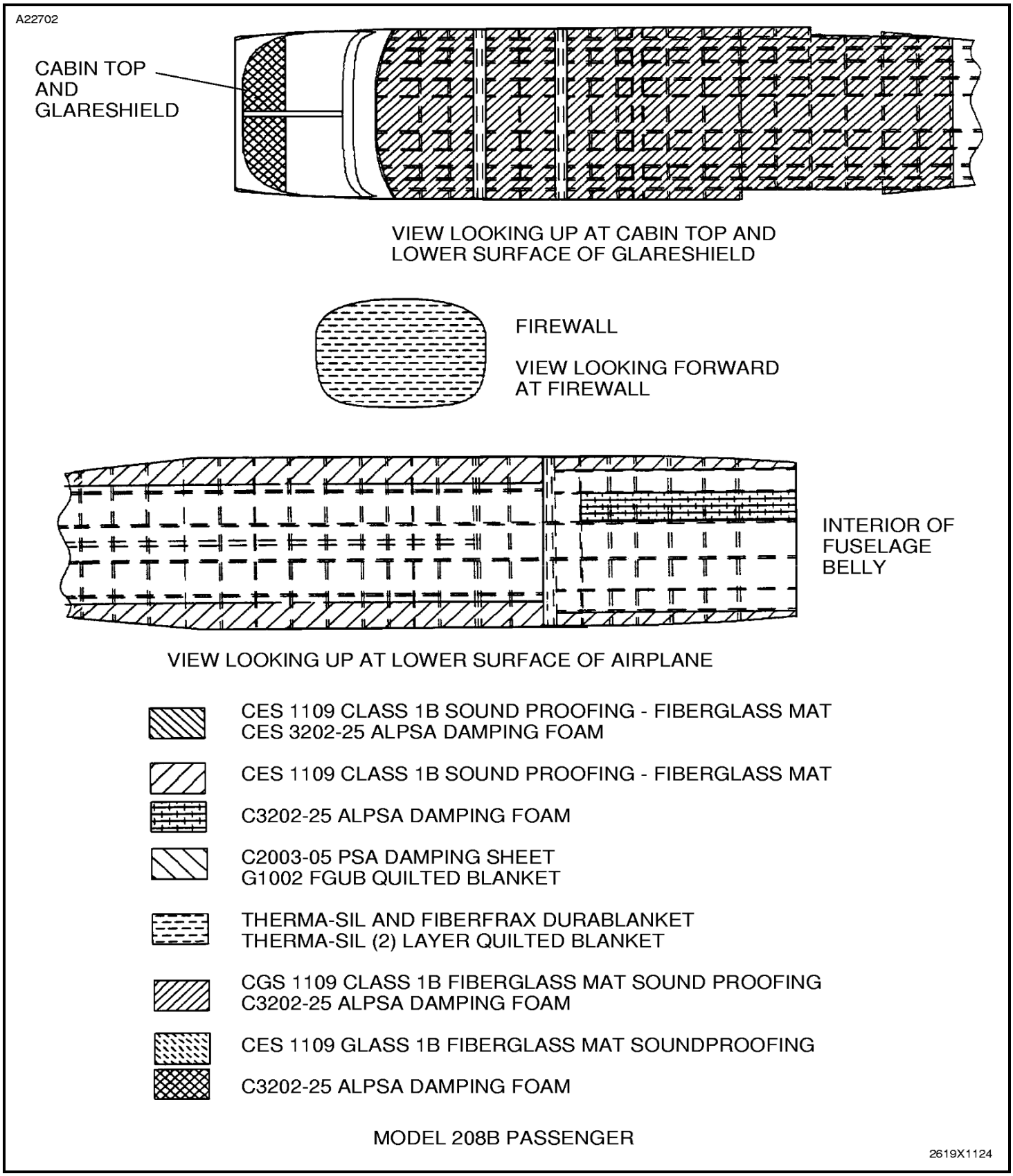
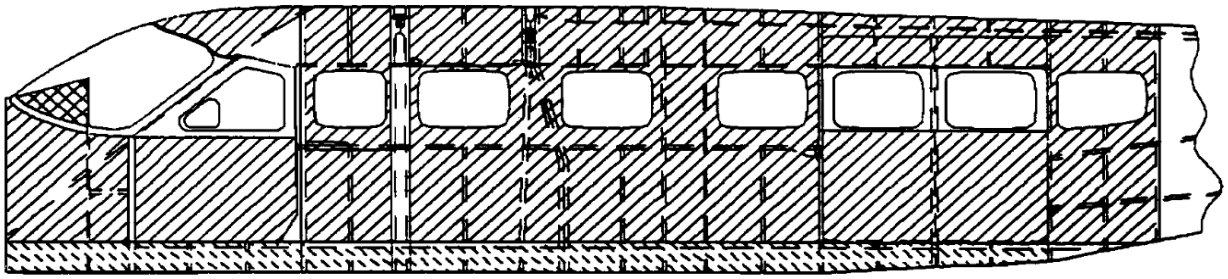


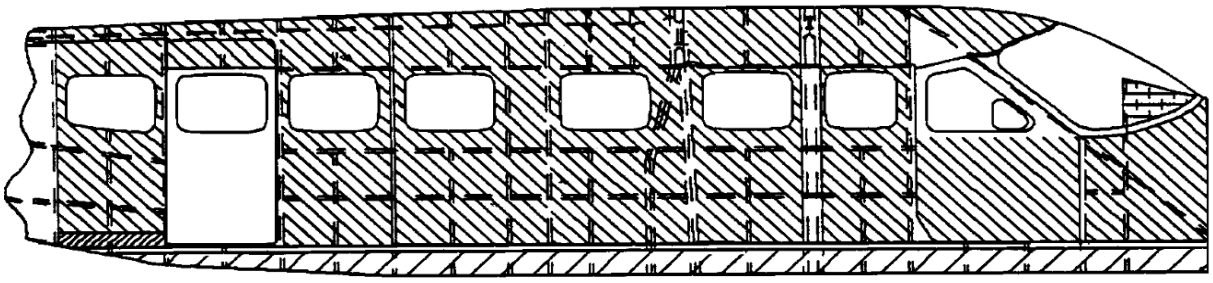
Figure 201 : Sheet 4 : Soundproofing Installation

A22703



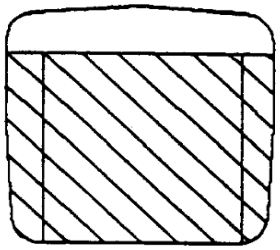
LEFT FUSELAGE
FIREWALL TO AFT
CABIN PARTITION

VIEW LOOKING INBOARD



VIEW LOOKING INBOARD

RIGHT FUSELAGE
FIREWALL TO AFT
CABIN PARTITION



AFT CABIN PARTITION

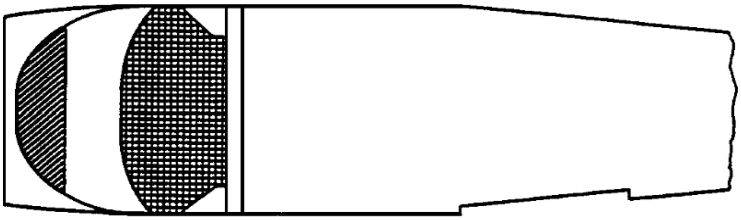
MODEL 208B PASSENGER

2619X1125
2619X1125
A26191120

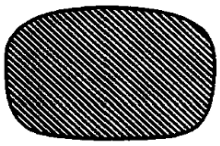
Figure 201 : Sheet 5 : Soundproofing Installation

A22704

CABIN TOP
AND
GLARESHIELD

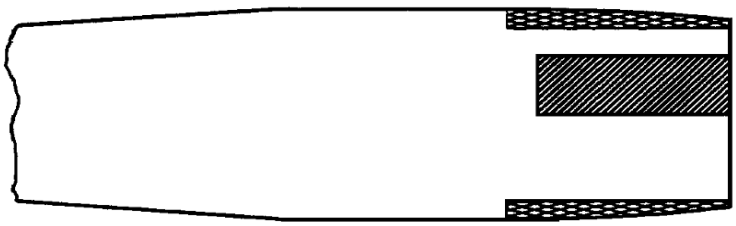


VIEW LOOKING UP AT CABIN TOP AND
LOWER SURFACE OF GLARESHIELD



FIREWALL

VIEW LOOKING FORWARD
AT FIREWALL



INTERIOR OF FUSELAGE BELLY

VIEW LOOKING UP AT LOWER
SURFACE OF AIRPLANE

100 PERCENT COVERAGE USINGTHERMA-SIL BLANKET PLUS 100 PERCENT COVERAGE USING FIBERFRAX DURABLANKET/THERMA-SIL CUSHION ATTACHED WITH CLIPS

100 PERCENT COVERAGE USING TWO INCH BATTING APPLIED TO SKIN INTERIOR

100 PERCENT COVERAGE USING C3202-50 PSA DAMPING FOAM APPLIED TO LOWER SURFACE OF FLOORBOARD

100 PERCENT COVERAGE USING C3202-25 ALSPA DAMPING FOAM APPLIED TO BELLY SKIN INTERIOR

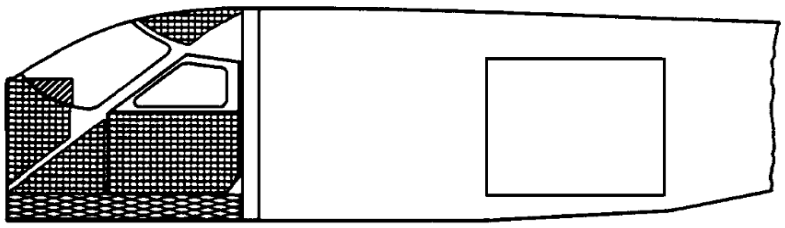
100 PERCENT COVERAGE USING C3202-25 ALPSA DAMPING FOAM PLUS 100 PERCENT COVERAGE USING 2.0 INCH BATTING OVERLAY

MODEL 208B

2619M3011

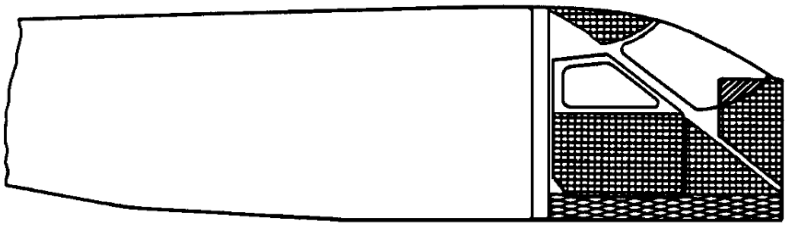
Figure 201 : Sheet 6 : Soundproofing Installation

A22705



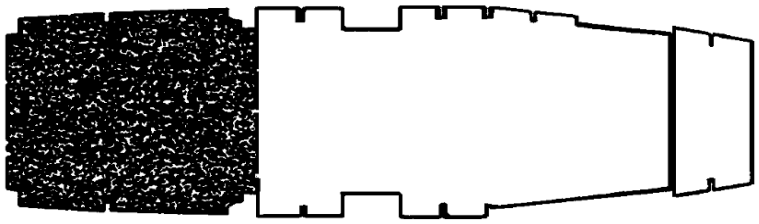
LEFT FUSELAGE
FIREWALL TO AFT
CABIN PARTITION

VIEW LOOKING UP INBOARD



RIGHT FUSELAGE
FIREWALL TO AFT
CABIN PARTITION

COVER LOWER
SURFACE OF
FLOORBOARD
ONLY



CABIN FLOORBOARD

VIEW LOOKING UP AT LOWER
SURFACE OF FLOORBOARD

CARGOMASTER AND TYPICAL 208B

2619M3011
2619M1122

Figure 201 : Sheet 7 : Soundproofing Installation