#### CARGO COMPARTMENT COMPONENTS - MAINTENANCE PRACTICES

#### 1. General

- A. Cargo airplanes may be equipped with a variety of nets, barriers and hold-down devices designed to secure and restrain cargo at various points in the airplane. The following devices may be installed on the airplanes:
  - (1) Cargo Tie-Down Straps Cargo tie-down straps are used to secure cargo against movement. Tie-down straps are typically secured to the airplane fuselage by either seat rail tracks or anchor plates.
    - (a) Beginning at Airplane 20800093 and On, a system of tie-down straps and anchors are offered that can be utilized to both tie down cargo within the airplane and to tie down the airplane itself.
      - 1 The standard tie-down configuration, with a 3,000 pound rating, may be utilized to restrain cargo at any attach point within the airplane. Additionally, this strap may be used to tie down the airplane at approved mooring points.
      - The heavy duty tie-down configuration, with a 5,000 pound rating, may be utilized only at the aft passenger seat tracks to restrain cargo. Additionally, this strap may be used to tie down the airplane at approved mooring points.
  - (2) Cargo Barrier The cargo barrier is located aft of the flight compartment at station 166.45. Brackets on the lower edge of the barrier are bolted to pilot and copilot seat rails. Brackets on the top edge of the barrier are bolted to the bulkhead. Pilot and copilot can gain access to cargo compartment through access nets located outboard, and on top of, the cargo barrier. Access nets are secured with four to six quick-disconnect fasteners, anchored to the cargo barrier and the bulkhead.
  - (3) Cargo Partition Nets The airplane may be equipped with two canvas partition nets. When in use, partition nets are secured with quick-disconnect fasteners engaged with anchor plates. The anchor plates are secured to seat rails and bulkheads located at FS168.70, 181.50, 208.00, 234.00, 259.00 and 284.00 (Model 208); or FS188.70, 246.80, 282.00, 307.00, 332.00 and 356.00 (Model 208B). When not in use, partitions are stored with the airplane loose equipment.
  - (4) Cargo Door Restraint Nets The airplane may be equipped with cargo restraint nets installed at the cargo door entrance to protect personnel from shifted cargo when cargo door is opened. Rings, attached to the top edges of restraint nets, encompass a rod which is secured to fuselage structure. Nets are joined together from top to bottom, at center of cargo door entrance, with snap fasteners. Edges of nets, opposite to snaps, are secured to fuselage with screws.

### 2. Cargo Tie-Down Straps Removal/Installation

- A. Remove Cargo Tie-Down Straps on Airplanes 20800001 Thru 20800092 (Refer to Figure 201).
  - (1) Loosen tie-down straps.
  - (2) Press down on plunger and slide fittings forward to remove from seat rail or anchor plate.
- B. Install Cargo Tie-Down Strap on Airplanes 20800001 Thru 20800092 (Refer to Figure 201).
  - (1) Position fitting over top of seat rail (or anchor plate). Push down on plunger and slide fitting rearward until fitting seats fully in place.
  - (2) Grasp tie-down strap and pull firmly to ensure a positive lock in the seat rail or anchor.
- C. Remove Cargo Tie-Down Straps on Airplanes 20800093 and On (Refer to Figure 201).
  - (1) Loosen tie-down straps.
  - (2) Remove fittings from seat rails or anchor plates.
- D. Install Cargo Tie-Down Strap on Airplanes 20800001 Thru 20800092 (Refer to Figure 201).
  - (1) Position fittings on top of seat rail (or anchor plate). Push down (or pull up) on release and slide fitting rearward until fitting seats fully in place.
  - (2) Grasp tie-down strap and pull firmly to ensure a positive lock in the seat rail or anchor.

# 3. Cargo Barrier and Access Nets Removal/Installation

- A. Remove Access Nets (Refer to Figure 202).
  - (1) Position thumb on plunger.
  - (2) Position fitting between forefinger and middle finger and pull on fitting.

- (3) Slide plunger out of anchor plate.
- (4) Repeat steps (1) thru (3) until access net is free of all anchor plates.
- B. Install Access Nets (Refer to Figure 202).
  - (1) Position net in place.
  - (2) Grasp fitting between forefinger and middle finger, and push plunger in with thumb.
  - (3) Slide plunger into anchor plate and release fitting. Ensure all fasteners are secured.
- C. Remove Anchor Plates (Refer to Figure 202).
  - (1) Remove cargo nets. Refer to Cargo Barrier And Access Nets Removal/Installation.
  - (2) Remove screws securing anchor plates to barriers or bulkheads and remove anchor plates.
- D. Install Anchor Plates (Refer to Figure 202).
  - (1) Position anchor plates to barriers or bulkheads and secure using screws.
  - (2) Install Access Nets. Refer to Cargo Barrier And Access Nets Removal/Installation.
- E. Remove Cargo Barrier (Refer to Figure 202).
  - (1) Remove cargo nets. Refer to Cargo Barrier And Access Nets Removal/Installation.
  - (2) On Airplanes 20800001 Thru 20800108, remove cotter pin, washers and clevis pins at bottom of cargo barrier.
  - (3) On Airplanes 20800109 and On, and 208B0001 and On, remove pins, nuts, washers and bolts from bottom of cargo barrier.
  - (4) Remove bolts and washers securing top of cargo barrier to bracket.
  - (5) Remove cargo barrier.
- F. Install Cargo Barrier (Refer to Figure 202).
  - (1) Position cargo barrier to seat rails and bulkhead.
  - (2) Secure top of cargo barrier to bulkhead using bolts and washers.
  - (3) Secure bottom of cargo barrier to seat rail using cotter pins, nuts, washers and bolts or clevis pins as required.
  - (4) Check for security of installation.

### 4. Cargo Partition Nets Removal/Installation

- A. Remove Cargo Partition Nets (Refer to Figure 203).
  - (1) Loosen adjustable straps.
  - (2) Position thumb on plunger.
  - (3) Position fitting between forefinger and middle finger and pull on fitting.
  - (4) Slide plunger out of anchor plate.
    - NOTE: On seat rail fasteners, slide plunger to cutout and lift plunger out of seat rail.
  - (5) After all fasteners have been released, remove cargo partition net.
- B. Install Cargo Partition Nets (Refer to Figure 203).
  - (1) Position cargo partition properly so that fasteners will align with correct anchor plates.
  - (2) Position fittings between forefinger and middle finger and push plunger with thumb.
  - (3) Slide plunger into anchor plate and release fitting.
    - NOTE: On seat rail fasteners, position plunger down through cutout in seat rail. Slide plunger forward or aft enough to align fitting with cutouts so that when released, fitting will drop down through cutout and secure fastener to seat rail.
  - (4) When all fasteners have been installed, tighten adjustable straps as required.
- C. Remove Anchor Plates (Refer to Figure 203).
  - (1) Remove partition nets. Refer to Cargo Partition Nets Removal/Installation.
  - (2) Remove screws securing anchor plate to bulkhead floorboard.
  - (3) Remove anchor plate.
- D. Install Anchor Plates (Refer to Figure 203).

- (1) Position anchor plate to bulkhead floorboard and secure using screws.
- (2) Install partition nets. Refer to Cargo Partition Nets Removal/Installation.

# 5. Cargo Door Restraint Net Removal/Installation

- A. Remove Door Restraint Net (Refer to Figure 204).
  - (1) Unsnap and separate cargo net.
  - (2) Remove screw securing nets to fuselage structure.
  - (3) Remove screws, washers and brackets securing rod to fuselage structure.
  - (4) Slide rod out of net rings.
- B. Install Door Restraint Net (Refer to Figure 204).
  - (1) Slide rod through net rings and brackets.
  - (2) Position rod to fuselage structure and secure using screws and washers.
  - (3) Position nets to fuselage structure using screws.
  - (4) Ensure that net rings slide easily on rod.

A22663 TIE-DOWN -**STRAP** TIE-DOWN STRAP **PLUNGER FITTING PLUNGER FITTING SEAT RAIL** ANCHOR PLATE DETAIL A (TYPICAL) 2619X1104 26191007 A26192009

Figure 201 : Sheet 1 : Cargo Tie-Downs

Figure 201: Sheet 2: Cargo Tie-Downs

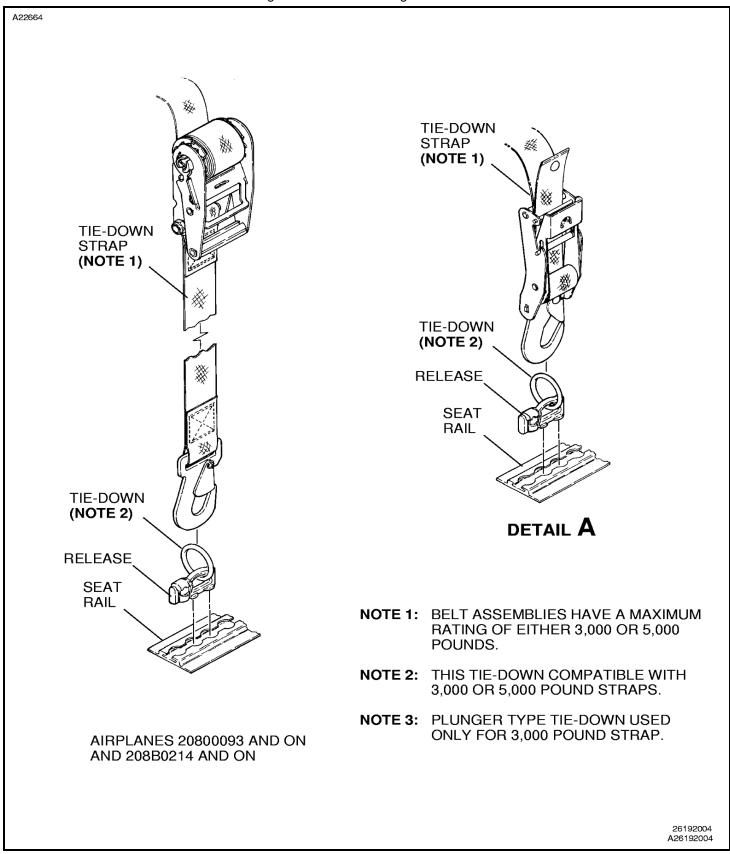
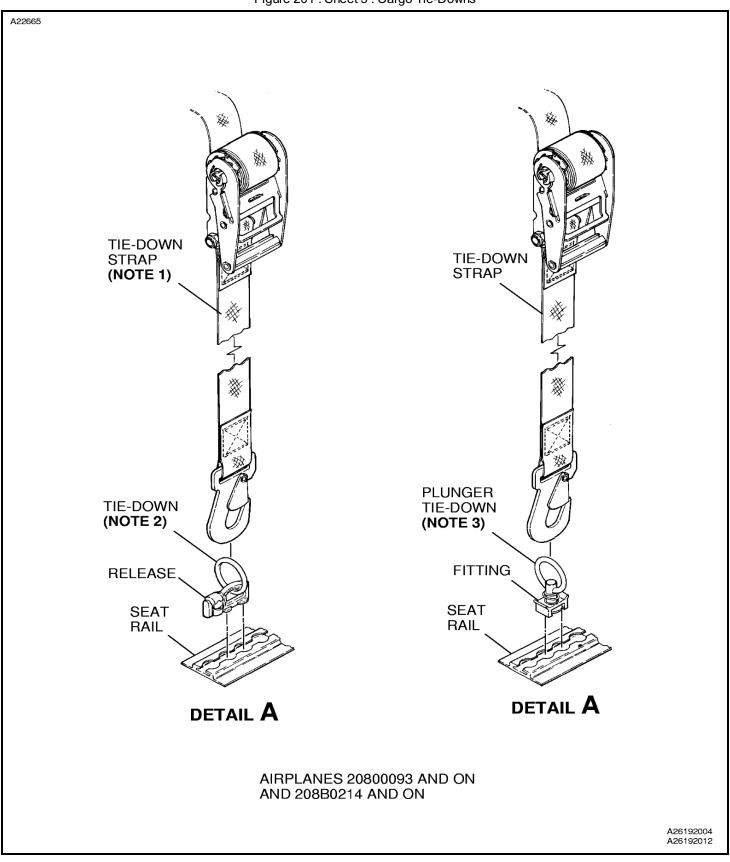


Figure 201: Sheet 3: Cargo Tie-Downs



A22666 В **ANCHOR PLATE SCREW FITTING PLUNGER ACCESS NET CARGO** DETAIL A BARRIER (TYPICAL) **ANCHOR PLATE** - SCREW **WASHER BRACKET** - COTTER **WASHERS BRACKET** PIN **CLEVIS** PIN **WASHER** DETAIL C **BOLT** (TYPICAL) SCREW AIRPLANES 20800001 THRU 20800108 **EXCEPT AIRPLANES INCORPORATING SK208-37 ANCHOR PLATE** DETAIL B (TYPICAL) 2619X1106 A2618X1107 B26191012 C26191010

Figure 202: Sheet 1: Cargo Barrier and Access Nets Installation

A22668 B **ANCHOR PLATE FITTING PLUNGER ACCESS NET** DETAIL A **CARGO** BARRIER (TYPICAL) **ANCHOR PLATE WASHER** COTTER **BRACKET** PIN **BOLT** DETAIL C (TYPICAL) **ANCHOR PLATE** DETAIL B AIRPLANES 20800129 AND ON (TYPICAL) AND 20800001 THRU 20800128 **INCORPORATING SK208-37** 2619X1106 A26181009 B26191012 C26191010

Figure 202: Sheet 2: Cargo Barrier and Access Nets Installation

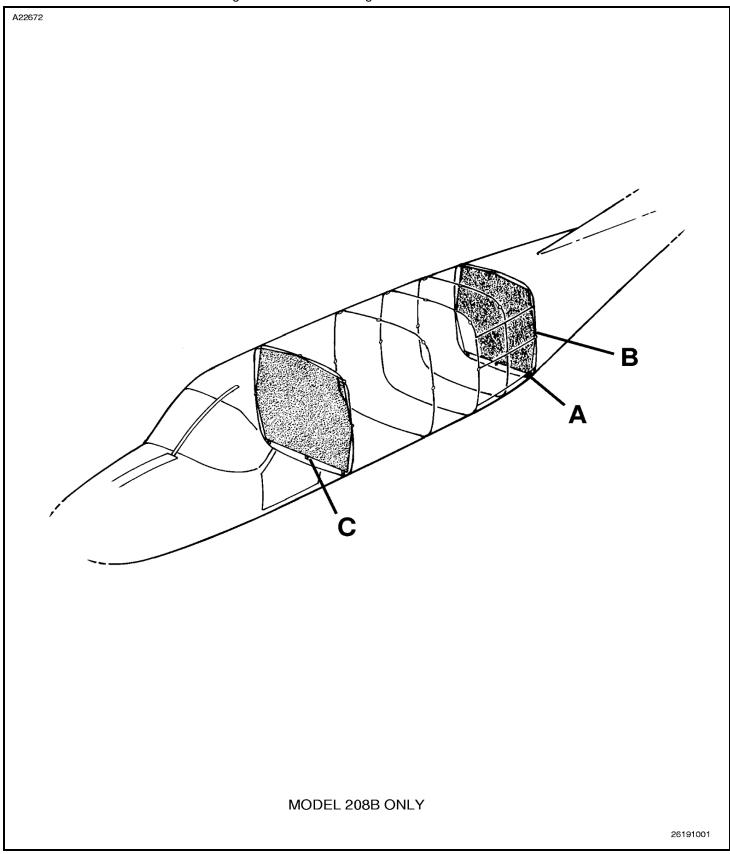
A22669 B **ANCHOR PLATE FITTING PLUNGER ACCESS NET** DETAIL A (TYPICAL) **CARGO** BARRIER **ANCHOR PLATE WASHER** COTTER PIN **BOLT BRACKET ANCHOR** PLATE DETAIL C (TYPICAL) DETAIL B (TYPICAL) AIRPLANES 208B0001 AND ON 2619X1106 A26181009 C26191010

Figure 202: Sheet 3: Cargo Barrier and Access Nets Installation

A22670 **PLUNGER** FITTING, SCREW-**ANCHOR PLATE** ANCHOR PLATE **SCREW** DETAIL A **FITTING** (TYPICAL) **PLUNGER ADJUSTABLE** STRAP **PLUNGER** DETAIL B (TYPICAL) **FITTING SEAT RAIL** DETAIL C 26191001 A26192010 B2619X1111 C26191007 MODEL 208 AND CARGOMASTER (TYPICAL)

Figure 203: Sheet 1: Cargo Partition Net Installation

Figure 203 : Sheet 2 : Cargo Partition Net Installation



A22674 **PLUNGER FITTING** SCREW-**ANCHOR PLATE ANCHOR PLATE SCREW** DETAIL A **FITTING** (TYPICAL) PLUNGER **PLUNGER ADJUSTABLE** STRAP DETAIL B FITTING (TYPICAL) DETAIL C 2619X1111 A26192010A B2619X1112 **MODEL 208B PASSENGER** (TYPICAL) C26191007

Figure 203: Sheet 3: Cargo Partition Net Installation

A22675 **BRACKET** - ROD **WASHER SCREW BRACKET WASHER** NET ROD **SCREW** NET **SCREW SCREW SNAP FASTENER** DETAIL A (TYPICAL) 2619X1114 A2619X1114

Figure 204 : Sheet 1 : Cargo Door Restraint Net Installation