

SOLOY AVIATION SOLUTIONS
450 Pat Kennedy Way SW
Olympia, WA 98501
Phone: 360-754-7000
Fax: 360-943-7659

SERVICE INSTRUCTION NO. 910-01

Issue Date: March 19, 2009
Revision 1: January 13, 2010
Revision 2: August 3, 2012
Revision 3: September 9, 2014

Observation Seat Kit Installation
(Kit 910-1000-1 and 910-1000-3)

Provided

Drawings: 910-0010 – Observation Seat Instl, Cessna 206
910-1000-1 – Observation Seat Instl, Cessna 206H & T206H or
910-1000-3 – Observation Seat Instl, Cessna U206G & TU206G
910-1016 – Armrest Installation, Observation Seat

Reason: Installation of second-row, rotating observation seat.

Note: Technical aspects of this Service Instruction are FAA approved.

Model

Applicability: All Cessna 206H and T206H model aircraft.
All Cessna U206G and TU206G model aircraft

Flight Manual

Data Required: No.

Note: If ownership of this airplane has changed, please forward this document to the new owner.

THIS PAGE INTENTIONALLY LEFT BLANK

Section I

Installation Instructions for Cessna 206H & T206H Model Aircraft

Description:

This installation provides a second-row observation seat with a swivel base. The existing right-hand, second-row seat is modified with arm rests and installed on a Soloy-provided rotating base. The base is attached to existing Cessna seat rails and allows 270° of rotation.

Installation:

To install the observation seat kit (910-1000-1) in a Cessna 206H or T206H model aircraft, accomplish the following:

- A. Remove second-row seats and corresponding seat restraints, per Cessna 206H/T206H model Maintenance Manual, Chapter 25.

NOTE: Replace inflatable pilot and co-pilot restraints with approved, non-inflatable restraints. Remove restraints per Cessna 206H/T206H model Maintenance Manual, Chapter 25

- B. Remove aft bench-seat and corresponding seat restraints, per Cessna 206H/T206H model Maintenance Manual, Chapter 25.

- C. Modify right-hand, second-row seat assembly as follows:

- (1) Inspect seat assembly for serviceability and condition. Refer to Note 8 on drawing 910-1000-1.
- (2) Install new restraint harness assembly (Reference drawing 910-1000-1). Install lap belt and buckle to seat using kit-provided hardware per drawing 910-1000-1, Detail H. Assemble clip (910-1150-1) to inertial reel (part of 3114-3-031-2396) using kit provided hardware and install inertia reel to fuselage using existing hardware. Refer to drawing 910-1000-1, Detail A. Ensure smooth operation and positive locking of the shoulder harness inertial reel assembly.
- (3) Install guide assembly (910-1350-1) per Note 14 on drawing 910-1000-1.
- (4) Attach clamp supports (910-1665-1) and base mount plates (910-1666-1) to seat frame using kit-provided hardware (Reference drawing 910-1016).
- (5) Install tube assembly (910-1661-1) to clamp supports (910-1665-1) using kit-provided hardware (Reference drawing 910-1016).
- (6) Secure left and right arm rest assemblies (Reference drawing 910-1016).

- D. Install base and rotating plate assembly (910-1300-1), as follows: (Reference drawing 910-1000-1)

- (1) Install forward clamp assemblies (910-1315-1) and spacers (910-1315-5) on the existing Cessna second-row seat-rails per drawing 910-1000-1, Detail C. Leave hardware loose to allow free movement in clamp assembly slots. Clamp bolts (AN6-14A) pickup existing 3/8-inch holes in the existing Cessna seat-rails. Refer to dimensional location per drawing 910-1000-1.
- (2) Install aft anchor assemblies (910-1316-1) to existing nutplates in cabin floor per drawing 910-1000-1, Detail F. Leave hardware loose to allow for free movement in anchor assembly slots. Trim floor covering for solid attachment to cabin floor.
- (3) Position installation tool (910T1099-1 for 206H model aircraft or 910T1099-3 for 206G model aircraft) over clamp and anchor assemblies and attach using supplied (AN3-5A) bolts at 4 locations.
- (4) Assemble 2 of 4 middle inboard clamp assemblies (910-1315-3 - one each side) and middle outboard fitting assemblies (910-1317-1) to installation tool using supplied (AN3-5A) bolts. Adjust location of installation tool to achieve a mean position in slots of forward clamp assemblies and aft anchor assemblies. Tighten all hardware.
- (5) Match drill from middle inboard clamp assemblies and middle outboard fitting assemblies thru existing Cessna seat-rails. Refer to drawing 910-1000-1 Detail D and Detail E. Disassemble middle inboard clamp assemblies and middle outboard fitting assemblies from installation tool and deburr new holes (8 places).
- (6) Reassemble middle inboard clamp assemblies (2 per side) per drawing 910-1000-1, Detail D and ensure alignment with holes in installation tool. Reassemble middle outboard fitting assemblies per drawing 910-1000-1, Detail E and ensure alignment with holes in installation tool. Tighten all hardware and remove installation tool.
- (7) Separate rotating plate assembly (910-1330-1) from the base plate assembly (910-1320-1). Attach base plate assembly to previously installed clamp assemblies and anchor assemblies with kit-provided hardware per drawing detail.
- (8) Join rotating and base plate assemblies with hardware provided in kit (Reference drawing 910-1000-1, Section G-G). Install center pivot bolt using Loctite Threadlocker 222. Check for proper rotation of rotating plate assembly.
- (9) Attach retainer assemblies (910-1318-1) to middle-outboard fitting assemblies (910-1317-1) per drawing 910-1000-1, Detail E, using kit-provided hardware.
- (10) Install aft seat-stop (AN3-10A) in rotating plate right hand seat-rail, using existing hardware removed from Cessna seat-rails. Install plug bolt (AN3-4A) supplied with kit, in rotating plate left hand seat rail. Refer to drawing 910-1000-1 for specific locations.
- (11) Install seat assembly onto rotating plate seat-rails. Install forward seat-stop (AN3-10A) in rotating plate left hand seat rail using existing hardware removed from Cessna seat-rails. Refer to drawing 910-1000-1 for specific location. Check for proper seat operation in all modes of adjustment.

- (12) Install placard (910-9008-1) above window and on inside of aft, cabin-access door in full view of observation-seat occupant.
- (13) Verify seat operates without binding when sliding forward and aft and while rotating on the observation seat platform.

Installation Instructions for Cessna U206G & TU206G Model Aircraft

Description:

This installation provides a second-row observation seat with a swivel base. The existing right-hand, second-row seat is modified with arm rests and installed on a Soloy-provided rotating base. The base is attached to existing Cessna seat rails and allows 270° of rotation.

Installation:

To install the observation seat kit (910-1000-3) in a Cessna U206G or TU206G model aircraft, accomplish the following:

- A. Remove second-row seats and corresponding seat restraints, per Cessna 206/T206 model Service Manual, Section 3.
- B. Remove aft bench-seat and corresponding seat restraints, per Cessna 206/T206 model Service Manual, Section 3.
- C. Modify right-hand, second-row seat assembly as follows:
 - (1) Inspect seat assembly for serviceability and condition. Refer to Note 7 on drawing 910-1000-3.
 - (2) Install new restraint harness assembly (Reference drawing 910-1000-3). Install lap belt and buckle to seat using kit-provided hardware per drawing 910-1000-3, Detail B. Assemble inertial reel (part of 3114-3-031-2396) to fuselage using kit provided hardware. Refer to drawing 910-1000-3, Detail C. Ensure smooth operation and positive locking of the shoulder harness inertial reel assembly.
 - (3) Install guide assembly (910-1350-1) per Note 12 on drawing 910-1000-3.
 - (4) Attach clamp supports (910-1665-1) and base mount plates (910-1666-1) to seat frame using kit-provided hardware (Reference drawing 910-1016).
 - (5) Install tube assembly (910-1661-1) to clamp supports (910-1665-1) using kit-provided hardware (Reference drawing 910-1016).
 - (6) Secure left and right arm rest assemblies (Reference drawing 910-1016).
- D. Install base and rotating plate assembly (910-1300-3), as follows: (Reference drawing 910-1000-3)
 - (1) Install forward clamp assemblies (910-1353-1 and 910-1353-2) on the existing Cessna second-row seat-rails per drawing 910-1000-3, Detail R. Refer to dimensional location per drawing 910-1000-3, Detail G and Note 2. Secure clamp assemblies and match drill thru existing Cessna seat-rails. Install clamp bolts (AN3-12A) to secure clamp assemblies.

- (2) Position installation tool (910T1099-1 for 206H model aircraft or 910T1099-3 for 206G model aircraft) over clamp assemblies and attach using supplied bolts (AN3-5A) at 2 locations.
- (3) Assemble remaining clamp assemblies (four each 910-1353-1 and 910-1353-2) to installation tool using supplied bolts (AN3-5A). Refer to dimensional locations per drawing 910-1000-3, Detail G. Secure clamp assemblies and match drill thru existing Cessna seat-rails. Install clamp bolts (AN3-12A) to secure clamp assemblies.
- (4) Assemble support assemblies (910-1354-1) to installation tool using supplied bolts (AN3-5A). Position and secure fitting assemblies (910-1356-1) in line with support assemblies and match drill thru existing Cessna seat-rails. Refer to dimensional locations per drawing 910-1000-3, Detail G.
- (5) Remove installation tool (910T1099-1 for 206H model aircraft or 910T1099-3 for 206G model aircraft) and all clamp assemblies (six each 910-1353-1 and 910-1353-2). Deburr all new holes in existing Cessna seat-rails (16 places).
- (6) Reassemble all clamp assemblies (six each 910-1353-1 and 910-1353-2) per drawing 910-1000-3, Detail L, Detail M, and Detail P. Assemble support assemblies (910-1354-1) and fitting assemblies (910-1356-1) per drawing 910-1000-3, Detail N. Tighten all hardware.
- (7) Separate rotating plate assembly (910-1330-1) from the base plate assembly (910-1320-3). Attach base plate assembly to previously installed clamp assemblies and support assemblies with kit-provided hardware. Refer to drawing 910-1000-3.
- (8) Join rotating and base plate assemblies with kit-provided hardware (Reference drawing 910-1000-3, Detail F). Install center pivot bolt using Loctite Threadlocker 222. Check for proper rotation of rotating plate assembly.
- (9) Using kit-provided hardware, attach retainer assemblies (910-1355-1) to fitting assemblies (910-1356-1) per drawing 910-1000-3, Detail E.
- (10) Install aft seat-stop (AN3-10A) supplied with kit, in rotating plate right hand seat-rail. Install plug bolt (AN3-4A) supplied with kit, in rotating plate left hand seat rail. Refer to drawing 910-1000-3 for specific locations.
- (11) Install seat assembly onto rotating plate seat-rails. Install forward seat-stop (AN3-10A) supplied with kit, in rotating plate left hand seat rail. Refer to drawing 910-1000-3 for specific location. Check for proper seat operation in all modes of adjustment.
- (12) Install placard (910-9008-1) above window and on inside of aft, cabin-access door in full view of observation-seat occupant.
- (13) Verify seat operates without binding when sliding forward and aft and while rotating on the observation seat platform.

THIS PAGE INTENTIONALLY LEFT BLANK

Section II

Weight and Balance

1. Perform a new aircraft weight and balance by weighing aircraft after observation-seat installation or calculating new weight and balance using data listed below.

Step 1: Log Current Empty Weight and Balance of Aircraft			
Item	Weight (lb)	Arm (in)	Moment (in-lb)
Basic Empty Weight			
Step 2: Record Items Removed			
Item	Weight (lb)	Arm (in)	Moment (in-lb)
LH, 2nd Row Seat			
RH, 2nd Row Seat			
Bench Seat, Aft Seats 5 & 6			
2nd Row Seat Harnesses			
Bench Seat Harnesses			
Additional Hardware			
Step 3: Items Installed			
Item	Weight (lb)	Arm (in)	Moment (in-lb)
RH, 2nd Row Seat (From 206H Model Airplane)			
Observation Seat Harness incl. Armrest and Guide Assemblies	8.0	82.7	661.60
Base Plate Assembly	23.2	81.9	1900.08
Swivel Plate Assembly	25.3	81.5	2061.95
Seat Rail Attach Brackets/Hardware	5.0	80.4	402.00
Step 4: Total Weight			
Add Weights from Steps 1 and 3 Subtract Weights from Step 2	Total Weight = Step 1 – Step 2 + Step 3 = _____ lb		
Step 5: Total Moment			
Add Moments from Steps 1 and 3 Subtract Moments from Step 2	Total Moment = Step 1 – Step 2 + Step 3 = _____ in-lb		
Step 6: Determine Arm			
Divide the Total Moment from Step 5 by the Total Weight from Step 4. The result is the Moment Arm after installation of the Observation Seat Assembly.			
$\text{Arm} = \frac{\text{Total Moment}}{\text{Total Weight}} = \text{_____ in}$			

THIS PAGE INTENTIONALLY LEFT BLANK

Section III

Instructions for Continued Airworthiness

1. Introduction:

These instructions for continued airworthiness (ICA) pertain to Soloy's Observation Seat Kit installed on a Cessna 206H/T206H or U206G/TU206G model airplane. The second- and third-row seats are removed, and a second-row, right-hand 206H model seat is modified per kit P/N 910-1000-1 or 910-1000-3. This allows for an observer to rotate for an improved field of vision.

2. Description:

The second- and third-row belt/harness assemblies are removed with the center and aft seats. A shoulder harness guide is installed at the seat head-rest. An adjustable arm rest assembly is mounted to the base of a second-row, right-hand seat. Along with a new overhead shoulder restraint system, a new lap restraint belt is installed on the second-row, right-hand seat.

The plate assembly consists of a base plate assembly and attaching brackets, a rotating plate assembly, arm rest assembly, and lap and shoulder harness restraint system. The base plate assembly fastens to existing Cessna seat-rails and provides a central pivot point and smooth surface for the rotating plate assembly. The rotating plate is equipped with modified seat-rails to install the modified second-row, right-hand seat and a stop-pin used to lock the plate in position.

3. Control:

The observation seat allows for 270° of rotation with stop pin lock at each 45° increment. To set seat rotation, pull upward on the stop-pin, rotate seat, and release the stop-pin ensuring that it securely locks into place. During takeoff and landing the seat must be locked in the forward facing position with the lap and shoulder harness restraint system securely latched. In all other positions the shoulder harness portion of the restrain system may be unlatched.

4. Servicing Information:

There are no regular servicing requirements for the rotating observation seat and restraint system installation beyond normal cleaning. There is no regular servicing of the attachment hardware required.

5. Maintenance Instructions:

The following maintenance instruction practices describe removal/installation of specific observation-seat components. For additional removal/installation detail, refer to kit-provided drawings (910-1000-1 or 910-1000-3 & 910-1016).

A. Seat Removal/Installation (Reference Section V, Detail N, Q):

Seat Removal:

- 1) Remove shoulder harness belt (Item 11) from web guide (Item 202)
- 2) Remove forward seat-stop (Item 171C) from left hand seat-rail (Item 171) on the rotating plate assembly (Item 71).
- 3) Unlatch seat from seat-rail and move seat forward on seat-rail until rear rollers clear seat-rail.
- 4) Remove seat from airplane.

Seat Installation:

- 1) Position rear roller of seat on seat-rails (Items 170 & 171).
- 2) Slide seat backward on seat-rails until all four rollers are captured.
- 3) Install forward seat-stop (Item 171C) in left hand rotating plate assembly (Item 71) seat-rail.
- 4) Insert shoulder harness belt (Item 11) through web guide (Item 202).
- 5) Test seat through full range of motion to ensure proper operation.
- 6) Ensure seat-stops (Items 171C & 170A) are properly installed at left hand seat rail forward location and right hand seat rail aft location.

B. Armrests Removal/Installation (Reference Section V, Detail P):

Armrests Removal:

- 1) Remove seat per Maintenance Practice A.
- 2) Disengage clamps (Item 198) and raise arm support assemblies (Item 190) until tube assembly (Item 191) is cleared.
- 3) Remove screws (Item 195) at each support (Item 190), and separate padded armrests (Item 199) from supports.
- 4) Remove bolts (Item 194) at tube assembly (Item 191), and remove tube assembly.
- 5) Remove screws (Item 197) joining clamp supports (Item 192) and base mounting plates (Item 193), and remove clamp supports and base mounting plates from seat frame.

Armrests Installation:

- 1) Apply Loctite Threadlocker 222 to screws (Item 197) and install to secure clamp supports (Item 192) and plates (Item 193) to seat frame per drawing 910-1016.
- 2) Attach tube assembly (Item 191) to clamp supports (Item 192) using bolts (Item 194).
- 3) Secure padded armrests (Item 199) to supports (Item 190) using screws (Item 195).
- 4) Insert support (Item 190) ends into tube assembly (Item 191) per drawing 910-1016 detail.
- 5) Adjust armrests to appropriate height and engage clamp (Item 198).

C. Shoulder Harness Guide Removal/Installation (Reference Section V, Detail Q)

Shoulder Harness Guide Removal:

- 1) Remove shoulder harness belt (Item 11) from web guide (Item 202).
- 2) Remove cotter pins from headrest riser tubes (inside seat back) and remove headrest from seat.
- 3) Loosen set screws (Item 206).
- 4) Remove the guide assembly (Item 4) from the headrest riser tubes.

Shoulder Harness Guide Installation:

- 1) Slide guide assembly (Item 4) onto headrest riser tubes and secure using set screws (Item 206) and Loctite Threadlocker 222.
- 2) Slide headrest into seat back and install cotter pins in headrest riser tubes (inside seat back).
- 3) Pull shoulder harness belt (Item 11) through web guide (Item 202).

D. Rotating Plate Assembly Removal/Installation (Reference Section V, Details E, H, I, J, M):

Rotating Plate Assembly Removal:

- 1) Remove seat per Maintenance Practice A.
- 2) Remove cotter pin (Item 164) and disengage ball lock pin (Item 163).
- 3) Remove roller assembly (Item 162).
- 4) Remove screws (Item 52) securing retainer assemblies (Item 51) to fitting assemblies (Item 50).
- 5) Remove bolt (Item 134) and cap (Item 128) at pivot (Item 123).
- 6) Remove rotating plate assembly (Item 71).
- 7) Remove bushing (Item 127), shim (Item 129) and thrust bearing (Item 125).

Rotating Plate Assembly Installation:

- 1) Place thrust bearing (Item 125), followed by shim (Item 129) and bushing (Item 127), on pivot (Item 123).
- 2) Install rotating plate assembly (Item 71) on base plate assembly (Item 70).
- 3) Apply Loctite Threadlocker 222 to bolt (Item 134) and use to secure cap (Item 128) to pivot (Item 123).
- 4) Check distance between cap (Item 128) and rotating plate assembly (Item 71) per Inspection Requirement G.
- 5) Install and secure retainer assemblies (Item 51) to fitting assemblies (Item 50) using screws (Item 52).
- 6) Install roller assembly (Item 162) and secure using ball lock pin (Item 163) and cotter pin (Item 164).

E. Rotating Plate Assembly Seat-Rail Removal/Installation (Reference Section V, Detail I, N):

Seat-Track Removal:

- 1) Remove screws (Item 172) securing seat-rails (Items 170 & 171) to rotating plate assembly (Item 71).

Seat-Track Installation:

- 1) Install seat-rails (Items 170 & 171) to rotating plate assembly (Item 71) using screws (Item 172).

F. Base Plate Assembly Removal/Installation (Reference Section V, Details C through F).

Base Plate Assembly Removal:

- 1) Remove seat per Maintenance Practice A.
- 2) Remove rotating plate assembly (Item 71) per Maintenance Practice D.
- 3) Remove screws (Item 53) securing base plate assembly (Item 70) to middle-outboard fitting assemblies (Item 50).

- 4) Remove screws (Item 32) securing base plate assembly (Item 70) to forward clamp assemblies (Item 30).
- 5) Remove screws (Item 41) securing base plate assembly (Item 70) to middle-inboard clamp assemblies (Item 40) on 206H model aircraft or middle inboard clamp assemblies (Items 40 and 45) on 206G model aircraft.
- 6) Remove screws (Item 61) securing base plate assembly (Item 70) to aft anchor assemblies (Item 60) on 206H model aircraft or aft clamp assemblies (Items 64 and 65) on 206G model aircraft.
- 7) Remove screws/bolts (Item 54) securing fitting assemblies (Item 50) on 206H model aircraft or clamp assemblies and support assemblies (Items 50 and 57) on 206G model aircraft to seat-rails.
- 8) Remove bolts (Item 33) securing forward clamp assemblies (Item 30) and spacers/clamp assemblies (Item 31) to seat-rails.
- 9) Remove bolts (Item 42) securing middle-inboard clamp assemblies (Item 40) to seat-rails.
- 10) On 206H model aircraft, remove bolts (Item 62) securing aft anchor assemblies (Item 60) to nutplates in cabin floor.
On 206G model aircraft, remove bolts (Item 66) securing clamp assemblies (Items 64 and 65) to seat rails.

Base Plate Assembly Installation: (To achieve proper alignment of mounting components, use tool 910T1099-1/-3 as described at Installation Instructions, Part C).

- 1) On 206H model aircraft, install aft anchor assemblies (Item 60) using bolts (Item 62) per drawing 910-1000-1 or 910-1000-3.
- 2) On 206G model aircraft, install clamp assemblies (Items 64 and 65) using bolts (Item 66) per drawing 910-1000-1 or 910-1000-3.
- 3) Install middle-inboard clamp assemblies (Item 40) using bolts (Item 42) to seat rails.
- 4) Install forward clamp assemblies (Item 30) and spacers/clamp assemblies (Item 31) using bolts (Item 33) per drawing 910-1000-1 or 910-1000-3.
- 5) Install fitting assemblies (Item 50) on 206H model aircraft or clamp assemblies and support assemblies (Items 50 and 57) on 206G model aircraft using screws/bolts (Item 54) per drawing 910-1000-1 or 910-1000-3.
- 6) Locate base plate assembly (Item 70) to aft anchor assemblies (Item 60) on 206H model aircraft or aft clamp assemblies (Items 64 and 65) on 206G model aircraft, middle-inboard clamp assemblies (Item 40), forward clamp assembly (Item 30) and middle-outboard fitting assemblies (Item 50) per drawing 910-1000-1 or 910-1000-3.
- 7) Secure base plate assembly (Item 70) at aft anchor assemblies (Item 60) on 206H model aircraft or aft clamp assemblies (Items 64 and 65) on 206G model aircraft using screws (Item 61).
- 8) Secure base plate assembly (Item 70) at middle-inboard clamp assemblies (Item 40) on 206H model aircraft or middle inboard clamp assemblies (Items 40 and 45) on 206G model aircraft using screws (Item 41).
- 9) Secure base plate assembly (Item 70) at forward clamp assemblies (Item 30) using screws (Item 32).
- 10) Secure base plate assembly (Item 70) at middle-outboard fitting assemblies (Item 50) using screws (Item 53).

G. Aircraft Seat-Track Removal/Installation:

Seat-Track Removal:

- 1) Refer to Cessna 206H model Maintenance Manual, Chapter 25 or 206G model Service Manual, Section 3.

Seat-Track Installation:

- 1) Refer to Cessna 206H model Maintenance Manual, Chapter 25 or 206G model Service Manual, Section 3.

H. Shoulder Restraint Removal/Installation (Reference Section V, Detail A, Q):

Shoulder Restraint Removal:

- 1) Remove shoulder harness (Item 11) belt from web guide (Item 202).
- 2) Remove bolts (Item 12) securing inertia reel (Item 11) to aircraft structure.
- 3) Perform maintenance on the inertia reel shoulder harness assembly in accordance with BAS, Inc. Airworthiness Report No. 1502. Item No. 5 of the continued airworthiness states that:

“Maintenance of the inertia reel and harness is limited to cleaning. The attachment hardware and bracketry should be inspected as a part of the annual inspection of the aircraft for deformation or cracking of the bracketry and that the hardware is secure (see AC 43.13-1B, 9-8-98, Paragraph 5-15). Check the attachment bracketry and hardware for corrosion per AC 43.13-1B, 9-8-98, Chapter 6. Any bent, damaged or corroded parts must be replaced.”

Shoulder Restraint Installation:

- 1) Secure inertia reel (Item 11) to aircraft structure using bolts (Item 12) per drawing 910-1000-1 or 910-1000-3 detail.
- 2) Pull shoulder harness belt (Item 11) through web guide (Item 202).

I. Lap Restraint Removal/Installation (Reference Section V, Detail B):

Lap Restraint Removal:

- 1) Remove bolt (Item 21) and bushing (Item 20) securing restraint (Item 24) to seat structure.

Lap Restraint Installation:

- 1) Secure restraint to seat structure using bolt (Item 21) and bushing (Item 20) per drawing 910-1000-1 or 910-1000-3 detail.

6. Troubleshooting: N/A

7. Removal and Replacement Information:

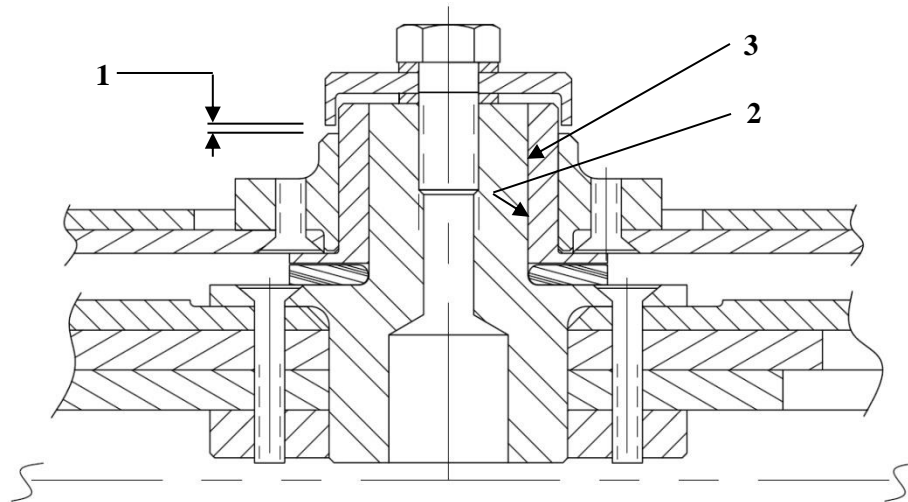
See Item No. 5. Maintenance Instructions of these ICA.

8. Diagrams: N/A

9. Special Inspection Requirements (Reference Section V for Detail, Item Identification):

Components of the observation seat assembly (910-1000-1 or 910-1000-3) are “on condition” components with no life limitations. It is necessary that the components meet the following check/inspection requirements as part of each aircraft annual inspection and be replaced “on condition”.

- A. Check condition of placard (Item 1).
- B. Remove the seat from the rotating plate assembly (Detail G, Item 71) per Maintenance Practice A. Inspect seat for wear and proper operation. Check seat rollers for wear and freedom of rotation. Inspect cables at forward stop-pins for wear and proper operation.
- C. Inspect armrest (Item 3) and shoulder harness guide (Item 4) for wear, proper operation, and security/condition of attachment hardware.
- D. Remove rotating plate assembly (Detail G, Item 71) per Maintenance Practice D. Inspect entire assembly for cracks and wear. Inspect roller assembly (Detail M, Item 162) for excessive wear, freedom of rotation, and security/condition of attachment hardware (Detail M, Item 163). Inspect rotating plate stop assembly (Detail I, Item 105) for condition, and serviceability. Inspect center pivot bolt (Detail J, Item 134), cap (Detail J, Item 128), bushing (Detail J, Item 127), shim (Detail J, Item 129), and thrust bearing (Detail J, Item 125) for excessive wear and general condition. The center-pivot bushing (Detail J, Item 127) has a maximum allowable inner diameter wear limit of 1.010 inches (Figure 1).



- 1 Pivot Plate Assembly to Cap Inspection Point
- 2 Bushing Inspection Point
- 3 Pivot Inspection Point

Figure 1: Center Pivot Inspection Points

- E. Remove base plate assembly (Detail G, Item 70) per Maintenance Practice F. Inspect entire assembly for cracks and wear. Inspect roller assemblies (Detail H, Item 87) for excessive wear and freedom of rotation. Inspect aft anchor assemblies (Detail F, Item 60) on 206H model aircraft or aft clamp assemblies (Detail F, Items 64 and 65) on 206G

model aircraft, middle-inboard clamp assemblies (Detail D, Item 40) on 206H model aircraft or middle inboard clamp assemblies (Detail D, Items 40 and 45) on 206G model aircraft, forward clamp assemblies/spacers (Detail C, Items 30 and 31) and fitting assemblies (Detail E, Item 50) on 206H model aircraft or clamp assemblies and support assemblies (Detail E, Items 50 and 57) on 206G model aircraft for security of hardware, and general condition. The pivot (Detail H, Item 86) has a minimum allowable diameter wear limit of 0.989 inch (Figure 1). Inspect existing Cessna seat-rails for cracks and wear.

- F. Remove inertia reel (Detail A, Item 11) per Maintenance Practice H. Perform maintenance on inertia reel shoulder harness in accordance with BAS, Inc. Airworthiness Report No. 1502. Item No. 9 of the continued airworthiness states the following:

“The inertia reel and attachment hardware and bracketry should be inspected for proper operation during annual inspection of the aircraft. The reel should allow for extension of the harness during a slow pull, but should lock up during a quick pull of the harness. Failure of the reel to function properly in either of these conditions is cause for removal and return to AmSafe for repair or replacement.”

- G. Upon reinstallation verify there is at least 0.020-inch clearance between the pivot plate assembly (Detail I, Item 101) and the cap (Detail J, Item 128) using a “feeler gauge” (Figure 1).

10. Application of Protective Treatments: N/A

11. Data: N/A

12. List of Special Tools: N/A

13. For Commuter Category Aircraft: N/A

14. Recommended Overhaul Periods:

There are no required overhaul periods. Components of the observation seat assembly (910-1000-1 or 910-1000-3) are “on condition” components with no life limitations. It is required for all components to be inspected per Subsection 9 and replaced/overhauled “on condition” during each aircraft annual inspection.

15. Airworthiness Limitation Section:

There are no limitations on the operation of the aircraft due to the installation of the Observation Seat Kit installation.

The Airworthiness Limitations section is FAA approved and specifies maintenance required under 43.16 and 91.403 of the Federal Aviation Regulations unless an alternate program has been FAA Approved.

16. Revisions:

In the event a revision to the ICA is required, Soloy Aviation Solutions will mail the revised ICA to all owner/operators of record having the Soloy observation seat installed.

Section IV

Instructions For Ordering

Order parts by part number nomenclature as indicated in Section V of this publication. Specify quantity, required method of shipment and P.O. number if applicable. Do not order by nomenclature alone.

Referring to Section V, it should be noted that items in bold are parts/hardware included with the installation kit.

Soloy Aviation Solutions reserves the right to supply substitute parts interchangeable with the part ordered wherein design change, later specifications, conditions of supply or product improvement make such substitution necessary.

All orders for parts will be filled in the shortest possible time, with parts of any emergency nature given special attention. Items not in stock will be placed on backorder and the customer notified as to the date when shipment will be made. Parts are shipped on open account to all customers having an approved credit rating with Soloy Aviation Solutions. All other orders are shipped C.O.D. Method of transportation on shipments will be designated by the customer. When no such designation is made, method of transportation will be by the most expeditious means, at the discretion of Soloy Aviation Solutions. When shipping charges are prepaid, as on parcel post, the amount of the charges will be added to the customer's invoice.

Orders for spare parts should be addressed to:

SOLOY AVIATION SOLUTIONS
450 Pat Kennedy Way SW
Olympia, Washington 98501 U.S.A.
Attention; Spare Parts Department

or call direct

Phone: 360-754-7000
Fax: 360-943-7659
Email: soloy@soloy.com
Website: www.soloy.com

NOTICE

This data is furnished with the understanding that it will be used for operational service and maintenance purposes only, and not to manufacture or procure the manufacture of the part shown and/or described.

THIS PAGE INTENTIONALLY LEFT BLANK

Section V

Illustrated Parts List

NOTE: Items in bold are parts/hardware included with the installation kit.

Figure Item	Manufacturer's Part number	Description	Quantity "C206H"	Quantity "C206G"
1	910-9008-1	Placard	2	2
2	910-1300-1	Base & Rotating Plate Assembly	1	
	910-1300-3	Base & Rotating Plate Assembly		1
3	910-1016-1	Armrest Install	1	1
4	910-1350-1	Guide Assembly	1	1
10	910-1150-1	Clip, Rear Seat Belt Reel	1	
11	3114-3-031-2396	Rear Seat Harness (Shoulder)	1	1
12	AN4-5A	Bolt	2	2
13	NAS1149F0463P	Washer	5	
	NAS1149D0432J	Washer		2
14	AN4-4A	Bolt	1	
15	MS21042L4	Nut	1	
16	910-1375-1	Bracket Assembly		1
16A	910-1375-11	Clamp		1
16B	910-1375-13	Spacer		1
16C	MS21076L4	Nutplate		1
16D	MS20426AD3-5	Rivet		2
17	910-1380-1	Closeout (Optional)		1
18	MS20470AD4-4	Rivet		2
20	1214198-3	Bushing	2	2
21¹	AN4-16A	Bolt	2	2
	AN4-17A	Bolt	2	2
22	NAS1149F0463P	Washer	6	6
23	MS21044N4	Nut	2	2
24	3114-3-031-2396	Rear Seat Harness (Lap)	2	2
30	910-1315-1	Clamp Assembly, Forward	2	
	910-1353-1	Clamp Assembly, Forward		2
30A	910-1310-11	Clamp	2	
	910-1353-11	Clamp		2
30B	F2552-02	Barrel Nut	2	2
30C	2552-02RET	Retainer	2	2
31	910-1315-5	Spacer	2	
	910-1353-2	Clamp Assembly		2
31A	910-1353-12	Clamp		2
31B	F2552-02	Barrel Nut		2
31C	2552-02RET	Retainer		2
32	MS24694S56	Screw	2	2
33	AN6-14A	Bolt	4	
	AN3-12A	Bolt		4

¹ Drawing 910-1000, Note 8

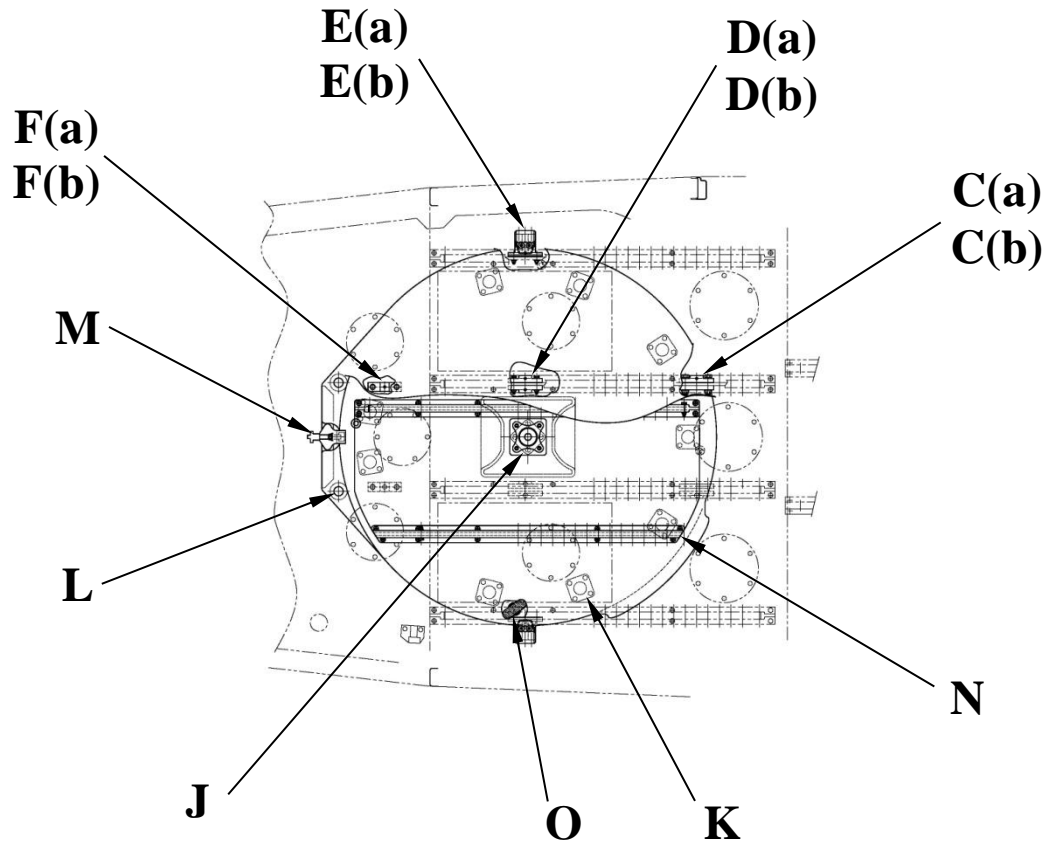
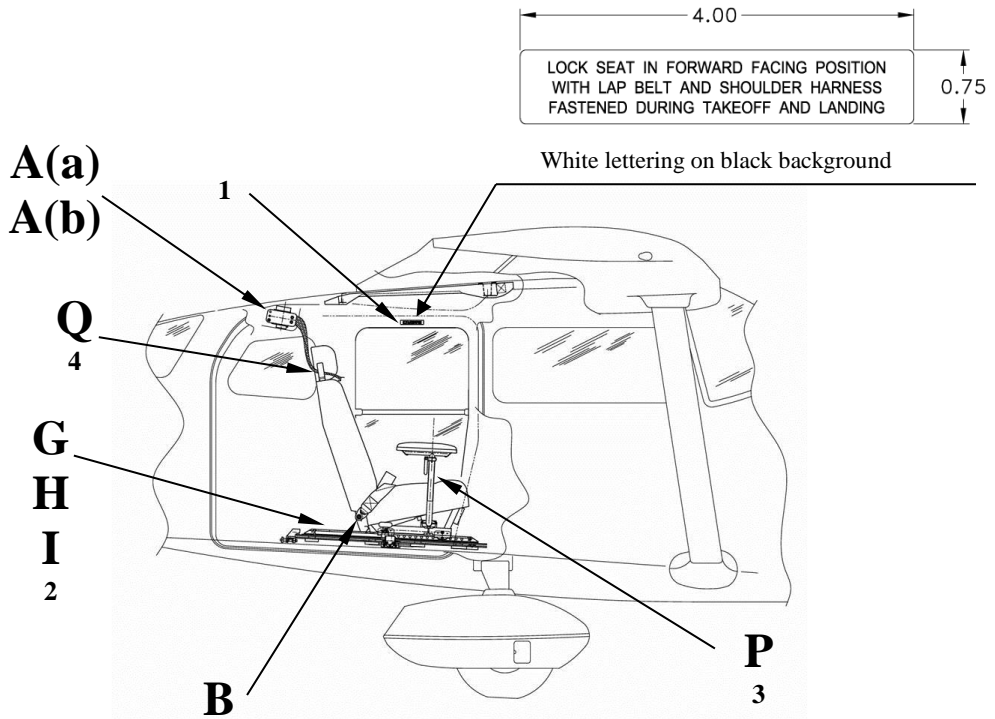
34	MS21042L6	Nut	4	
	MS21042L3	Nut		4
35	NAS1149F0663P	Washer	8	
	NAS1149D0363J	Washer		8
40	910-1315-3	Clamp Assembly, Middle	4	
	910-1353-1	Clamp Assembly, Middle		2
40A	910-1315-13	Clamp	4	
	910-1353-11	Clamp		2
40B	F2552-02	Barrel Nut	4	2
40C	2552-02RET	Retainer	4	2
41	MS24694S56	Screw	4	4
42	AN3-13A	Bolt	4	
	AN3-12A	Bolt		4
43	MS21042L3	Nut	4	4
44	NAS1149F0332P	Washer	8	
	NAS1149D0363J	Washer		8
45	910-1353-2	Clamp Assembly		2
45A	910-1353-12	Clamp		2
45B	F2552-02	Barrel Nut		2
45C	2552-02RET	Retainer		2
50	910-1317-1	Fitting Assembly	2	
	910-1356-1	Clamp Assembly		2
50A	910-1317-11	Fitting	2	
	910-1356-11	Fitting		2
50B	F2552-02	Barrel Nut	2	
50C	2552-02RET	Retainer	2	
50D	NAS1394-3L	Insert	6	6
51	910-1318-1	Retainer Assembly	2	
	910-1355-1	Retainer Assembly		2
51A	910-1318-11	Retainer	2	
	910-1355-11	Retainer		2
51B	910-1319-1	Rub Strip	2	2
51C	MS20426AD3-7	Rivet	4	4
52	MS24694S53	Screw	6	
	MS24693S51	Screw		6
53	MS24694S56	Screw	2	2
54	MS24678-14	Screw	4	
	AN3-12A	Bolt		4
55	MS21042L3	Nut	4	4
56	MS15795-807	Washer	8	
	NAS1149D0363J	Washer		8
57	910-1354-1	Support Assembly		1
57A	910-1354-11	Support		1
57B	F2552-02	Barrel Nut		1
57C	2552-02RET	Retainer		1
60	910-1316-1	Anchor Assembly	2	
	910-1316-11	Anchor	2	
60B	F2552-02	Barrel Nut	2	
60C	2552-02RET	Retainer	2	

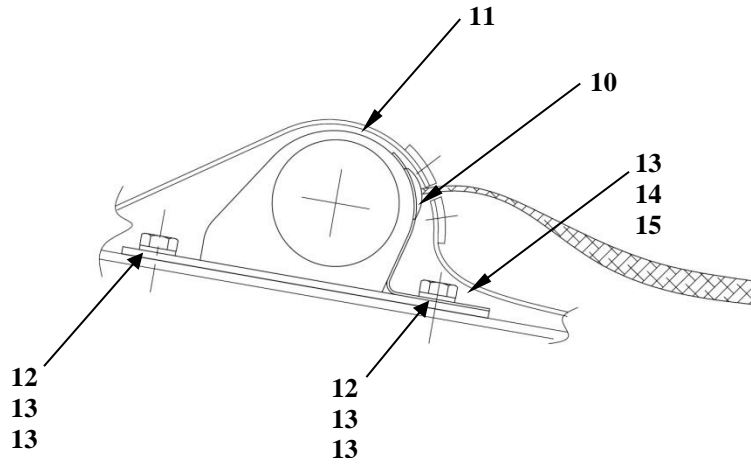
61	AN525-10R14	Screw	2	2
62	AN3-3A	Bolt	4	
63	NAS1149F0332P	Washer	4	
64	910-1353-1	Clamp Assembly		2
64A	910-1353-11	Clamp		2
64B	F2552-02	Barrel Nut		2
64C	2552-02RET	Retainer		2
65	910-1353-2	Clamp Assembly		2
65A	910-1353-12	Clamp		2
65B	F2552-02	Barrel Nut		2
65C	2552-02RET	Retainer		2
66	AN3-12A	Bolt		4
67	MS21042L3	Nut		4
68	NAS1149D0363J	Washer		8
70	910-1320-1	Base Plate Assembly	1	
	910-1320-3	Base Plate Assembly		1
71	910-1330-1	Rotating Plate Assembly	1	1
80	910-1311-1	Roller Support	1	
	910-1311-3	Roller Support		1
81	910-1312-1	Roller Assembly	1	1
82	910-1321-1	Plate	1	1
83	910-1322-1	Doubler	1	1
84	910-1323-1	Doubler	1	1
85	910-1324-1	Pivot Base	1	1
86	910-1325-1	Pivot	1	1
87	910-1327-1	Roller Support Assembly	9	9
88	MS24694S58	Screw	4	4
89	MS20426AD5-11	Rivet	4	4
90	MS20426AD5-16	Rivet	12	12
91	MS20470D5-8	Rivet	6	6
100	910-1331-1	Plate, Rotating	1	1
101	910-1332-1	Pivot Plate Assembly	1	1
102	910-1334-1	Doubler	1	1
103	910-1338-1	Rail, Modified (RH)	1	1
104	910-1338-3	Rail, Modified (LH)	1	1
105	910-1341-1	Stop Assembly	1	1
106	AN525-10R6	Screw	20	20
107	MS20426AD5-8	Rivet	21	21
108	MS20426AD4-10	Rivet	4	4
109	MS24694S49	Screw	4	4
110	NAS1394-3L	Insert	20	20
120	910-1322-1	Doubler	1	1
121	910-1323-1	Doubler	1	1
122	910-1324-1	Pivot Base	1	1
123	910-1325-1	Pivot	1	1
124	910-1321-1	Plate	1	1
125	910-1326-1	Thrust Bearing	1	1
126	910-1332-1	Pivot Plate Assembly	1	1
126A	910-1332-11	Plate	1	1

126B	NAS1394-3L	Insert	4	4
127	910-1333-1	Bushing	1	1
128	910-1336-1	Cap	1	1
129	910-1337-1	Shim	1	1
130	910-1334-1	Doubler	1	1
131	910-1331-1	Plate, Rotating	1	1
132	MS24694S49	Screw	4	4
133	MS24694S58	Screw	4	4
134	AN6-6A	Bolt	1	1
135	NAS1149F0663P	Washer	2	2
140	910-1327-1	Roller Support Assembly	9	9
140A	910-1327-11	Support	9	9
140B	910-1397-1	Roller	9	9
140C	MS16562-252	Pin	9	9
140D	NAS1394-3L	Insert	36	36
141	MS24694S51	Screw	36	36
150	910-1314-1	Washer	2	2
151	910-1329-1	Bumper Mount Assembly	2	2
151A	910-1329-11	Mount	2	2
151B	NAS1394-3L	Insert	2	2
152	910-1328-1	Spring, Bumper	2	2
153	AN525-10R6	Screw	2	2
154	MS20470AD4-8	Rivet	2	2
160	910-1311-1	Roller Support	1	1
161	MS20470AD5-8	Rivet	6	6
162	910-1312-1	Roller Assembly	1	1
162A	910-1312-11	Fitting	1	1
162B	910-1396-1	Roller	1	1
162C	MS21042L6	Nut	1	1
162D	NAS1149F0663P	Washer	1	1
163	910-1339-1	Pin, Ball Lock	1	1
164	MS9245-24	Cotter Pin	1	1
170	910-1338-1	Rail, Modified (RH)	1	1
170A	AN3-10A	Bolt	1	1
170B	NAS43HT3-12	Spacer	2	2
170C	MS21044N3	Nut	1	1
171	910-1338-3	Rail, Modified (LH)	1	1
171A	AN3-4A	Bolt	1	1
171B	MS21042L3	Nut	1	1
171C	AN3-10A	Bolt	1	1
171D	NAS43HT3-12	Spacer	2	2
171E	MS21044N3	Nut	1	1
172	AN525-10R6	Screw	20	20
173	NAS1394-3L	Insert	20	20
180	910-1341-1	Stop Assembly	1	1
180A	910-1342-1	Collar	1	1
180B	SP1040-1	Pin, Pull	1	1
180C	MS16562-216	Roll Pin	1	1

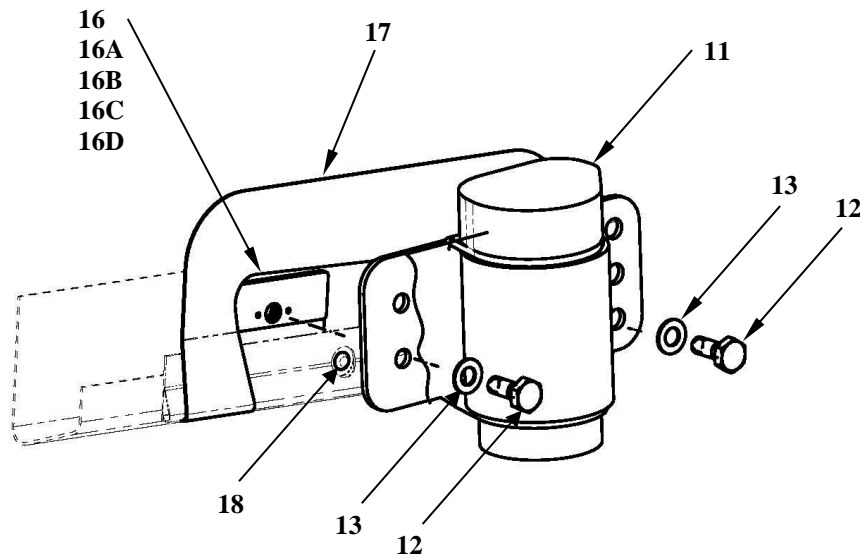
181	MS20426AD4-10	Rivet	4	4
190	910-1651-1	Arm Support Assembly	2	2
191	910-1661-1	Tube Assembly	1	1
192	910-1665-1	Clamp Support	2	2
193	910-1666-1	Plate	2	2
194	AN4-5A	Bolt	4	4
195	MS35207-268	Screw	4	4
196	NAS1149F0463P	Washer	4	4
197	MS16998-32	Screw	4	4
	Alt: MS24679-15	Screw	4	4
198	SP1021-01	Clamp	2	2
199	SP1030-01	Armrest, Padded	2	2
200	910-1351-1	Support	1	1
201	910-1352-1	Bushing	1	1
202	505561	Web Guide	1	1
203	AN4-7A	Bolt	1	1
204	MS21042L4	Nut	1	1
205	NAS1149D0463J	Washer	1	1
206	MS51963-21	Set Screw	2	2

THIS PAGE INTENTIONALLY LEFT BLANK

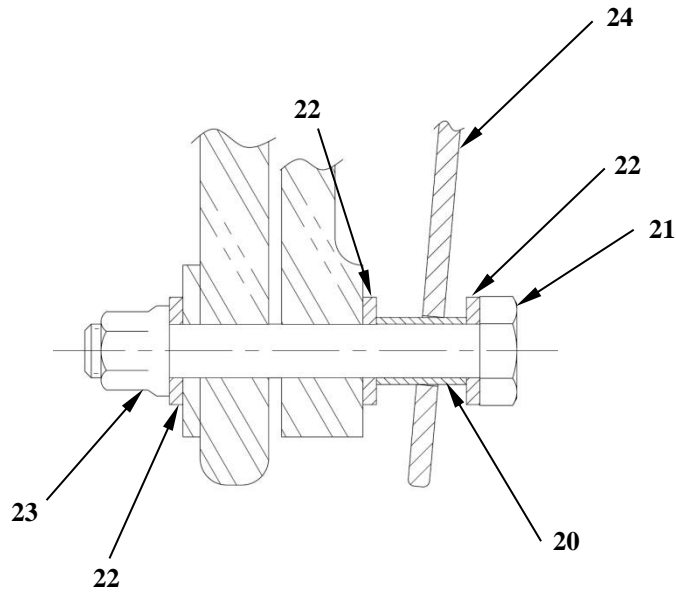




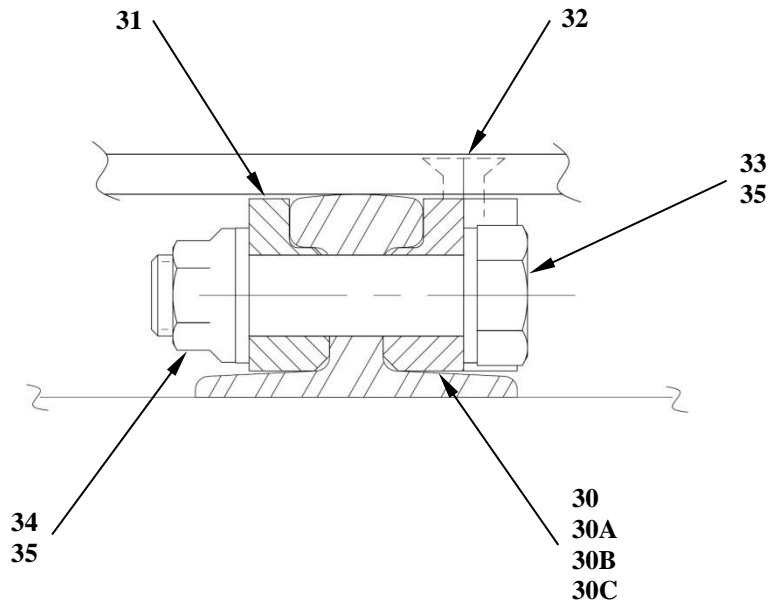
DETAIL "A(a)" C206H



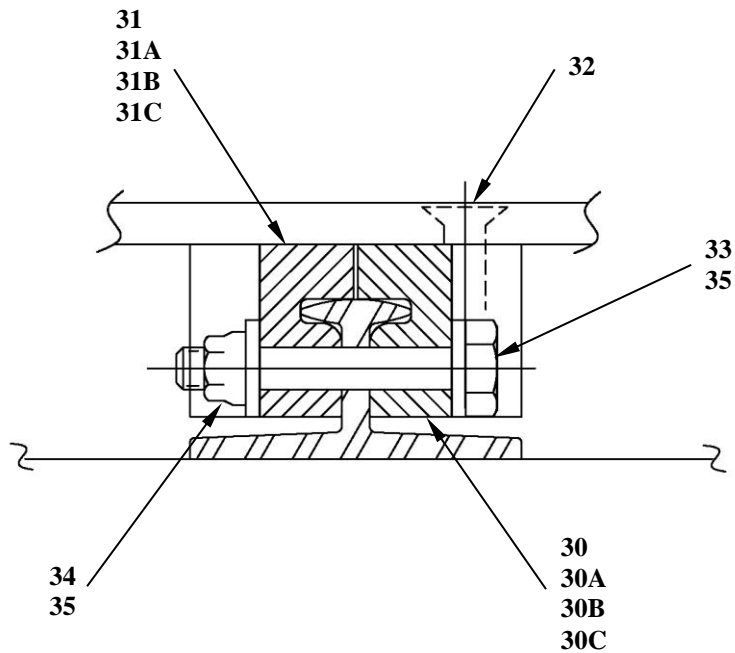
DETAIL "A(b)" C206G



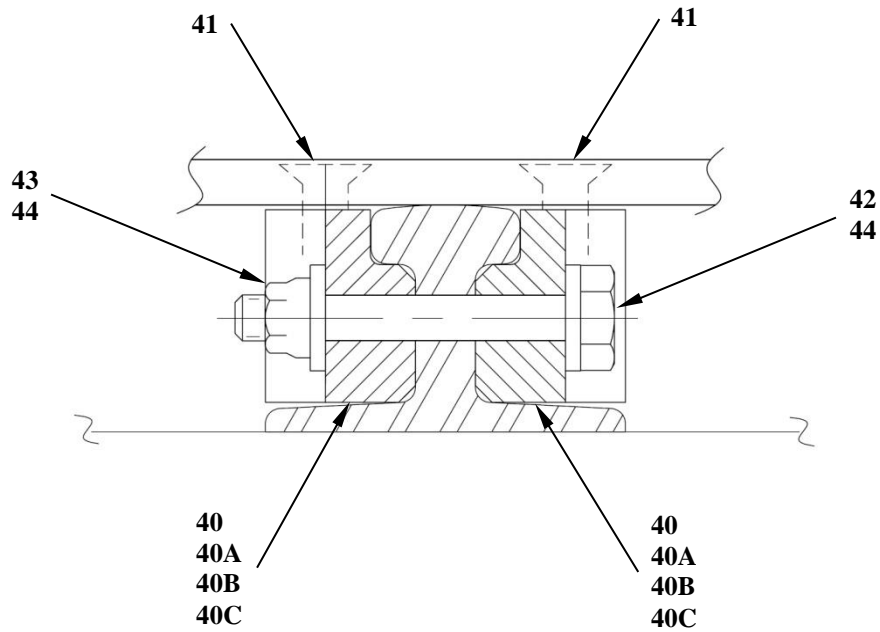
DETAIL "B"
2 PLACES



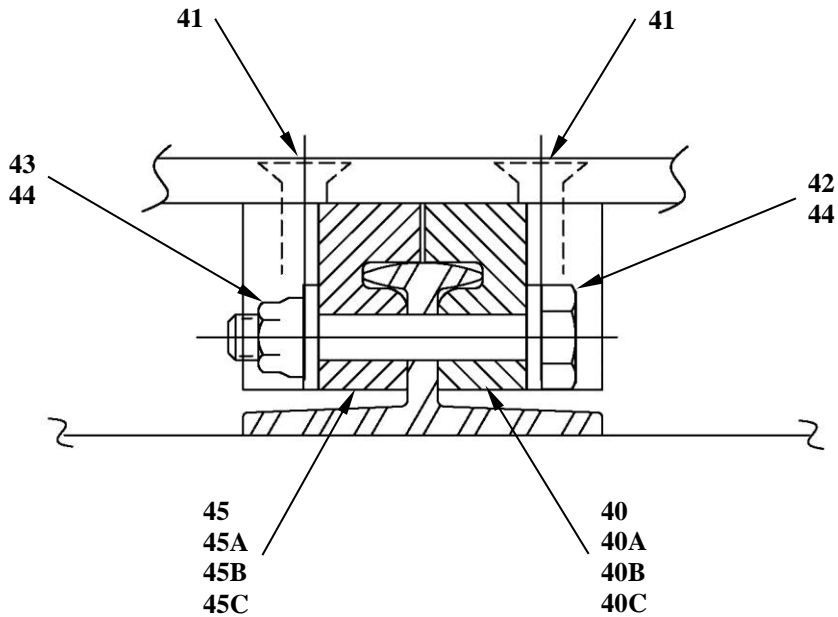
DETAIL "C(a)" C206H
2 PLACES



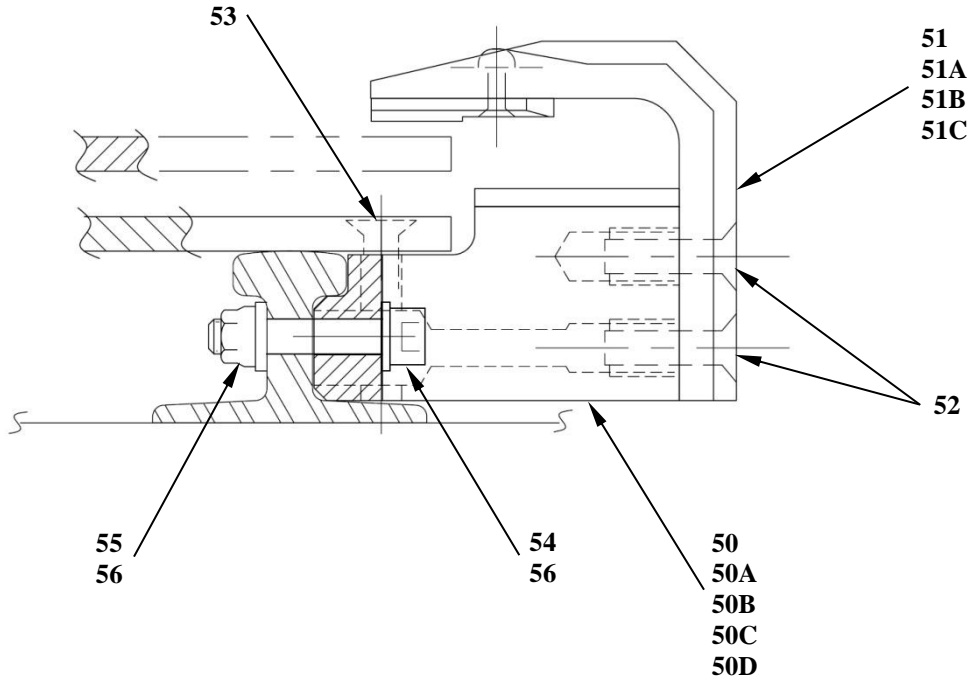
DETAIL "C(b)" C206G
2 PLACES



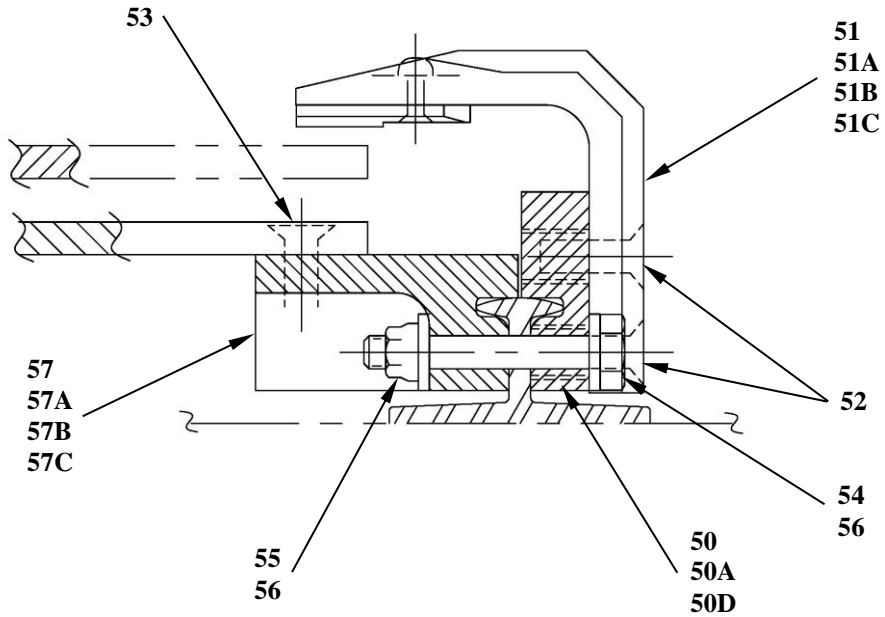
DETAIL "D(a)" C206H
2 PLACES



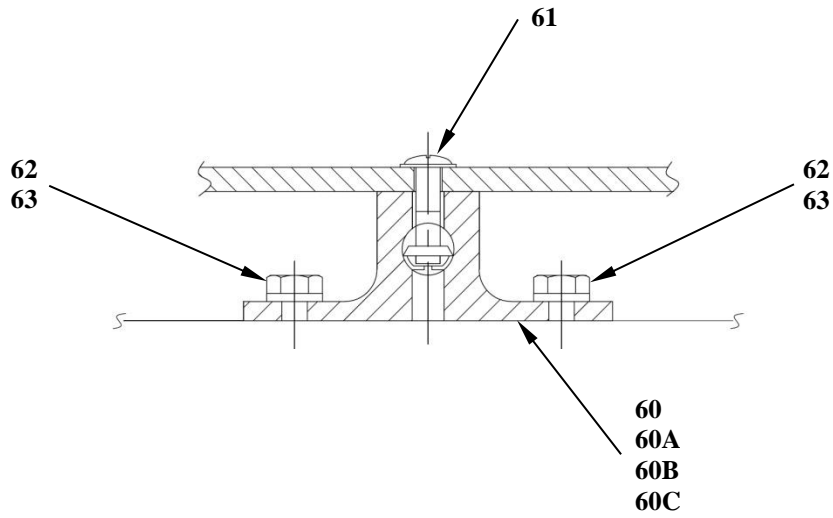
DETAIL "D(b)" C206G
2 PLACES



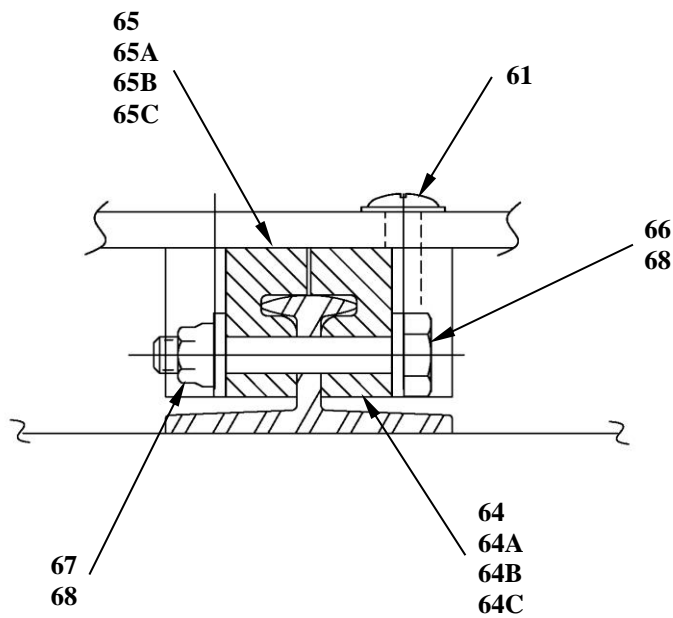
DETAIL "E(a)" C206H
2 PLACES



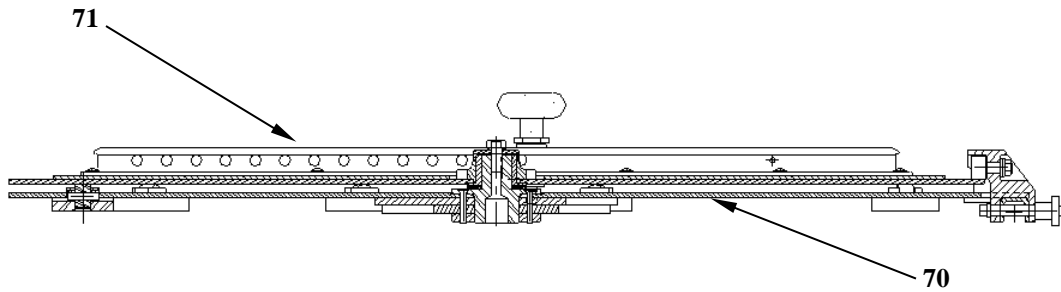
DETAIL "E(b)" C206G
2 PLACES



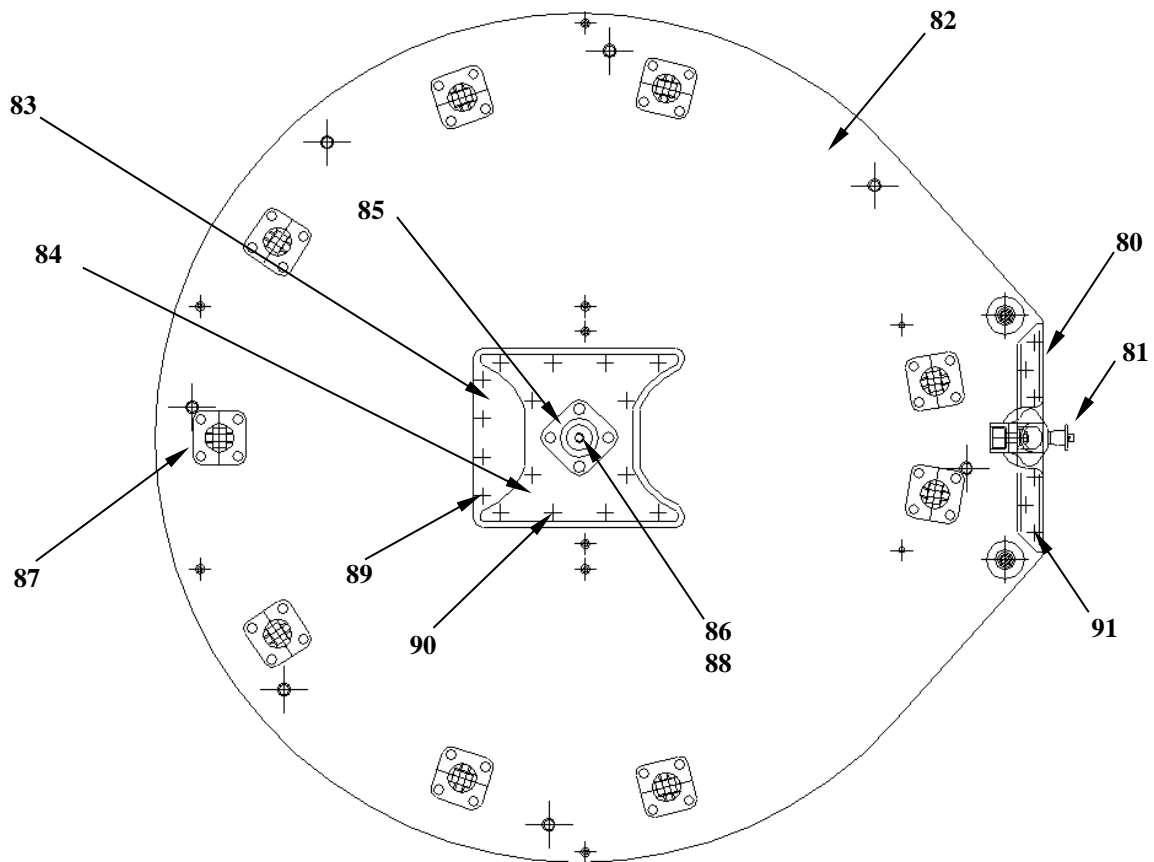
DETAIL "F(a)" C206H
2 PLACES



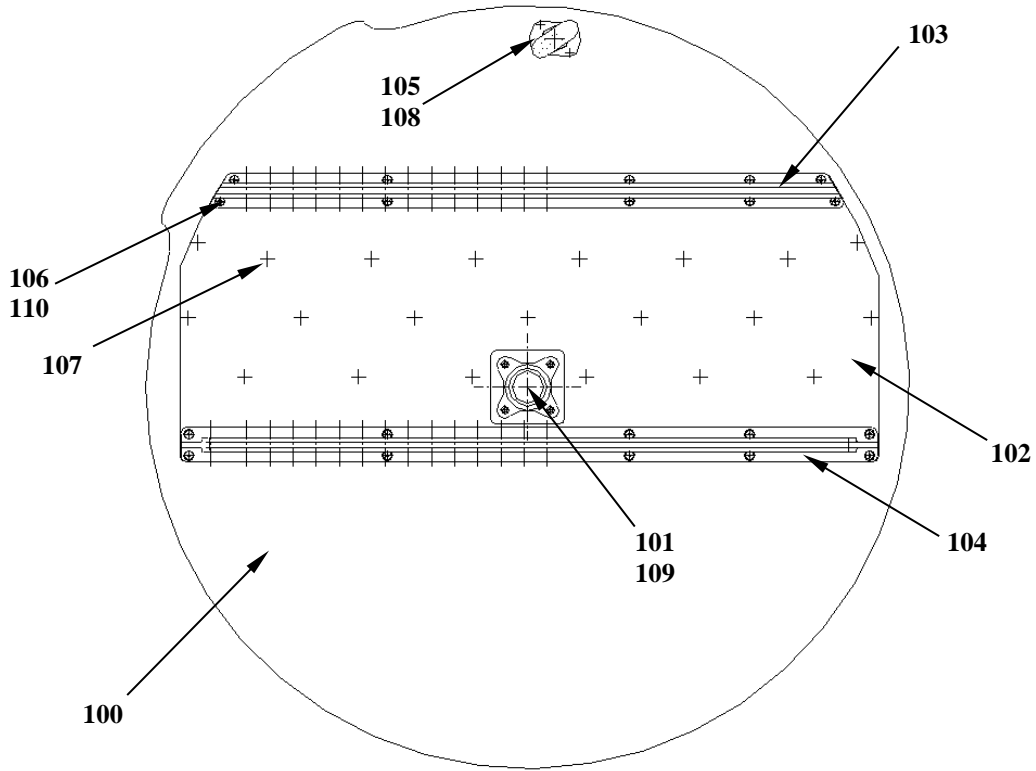
DETAIL "F(b)" C206G
2 PLACES



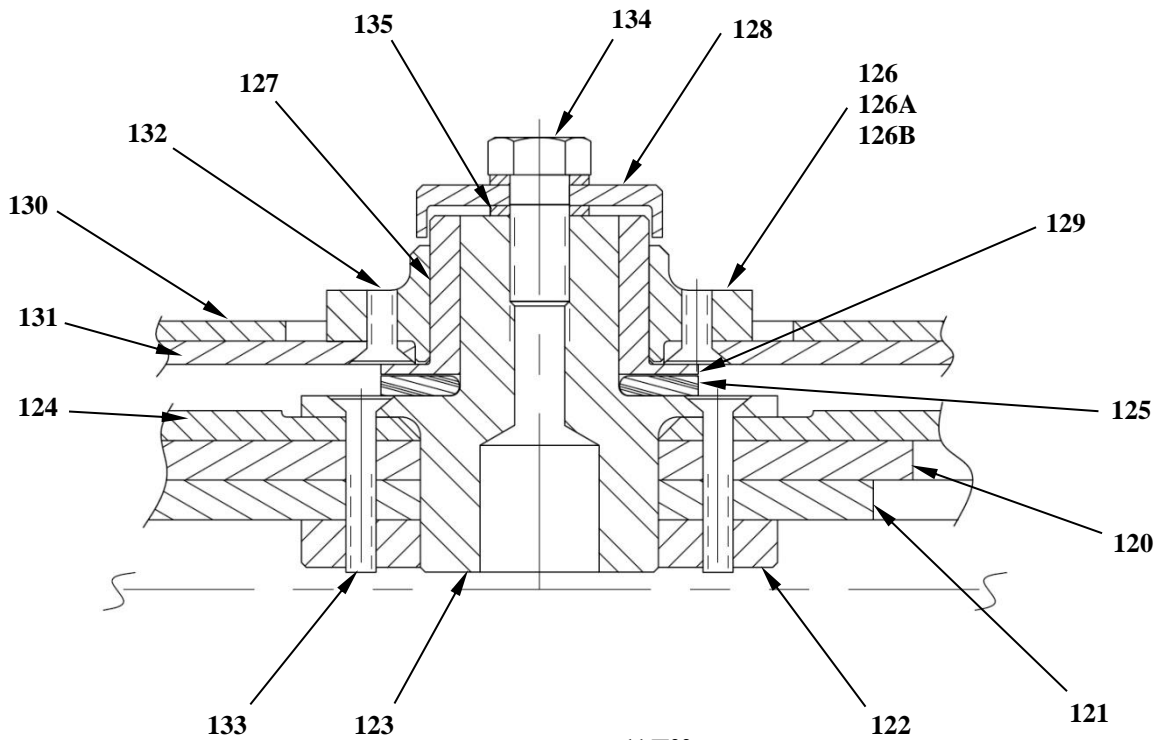
DETAIL "G"



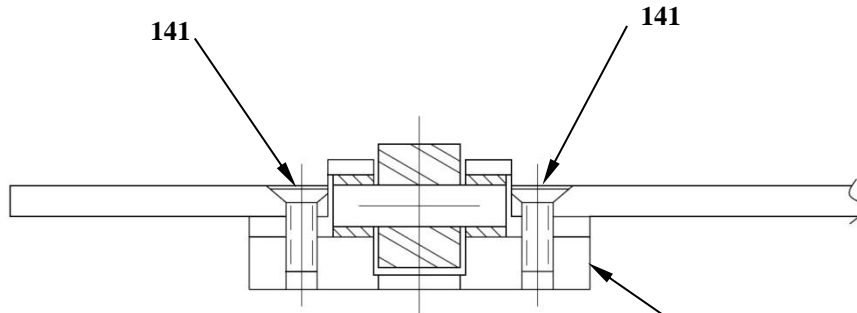
DETAIL "H"



DETAIL "I"

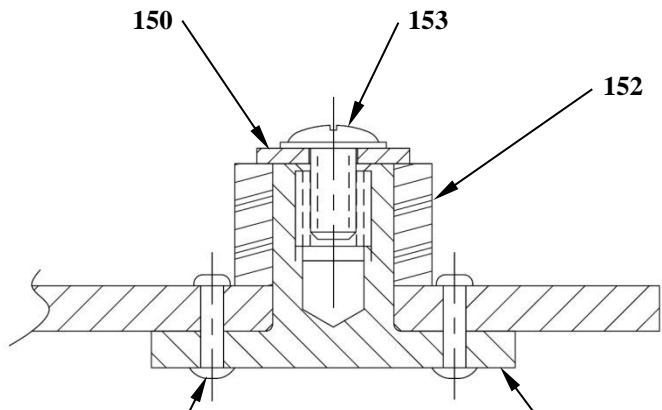


DETAIL "J"



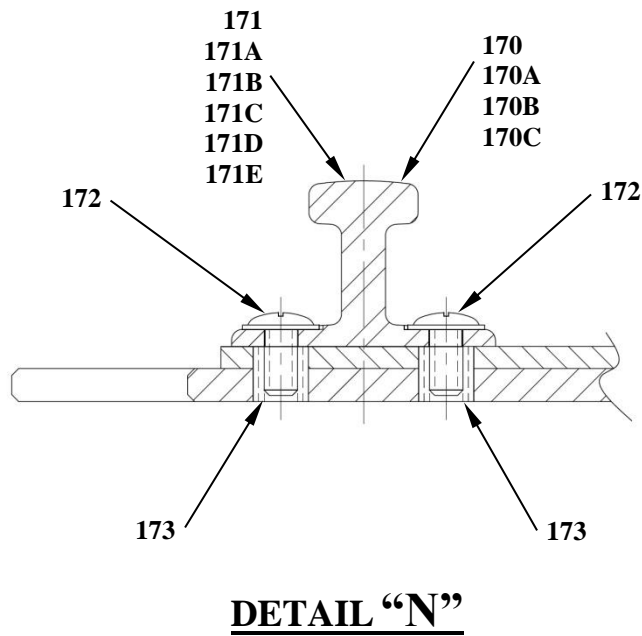
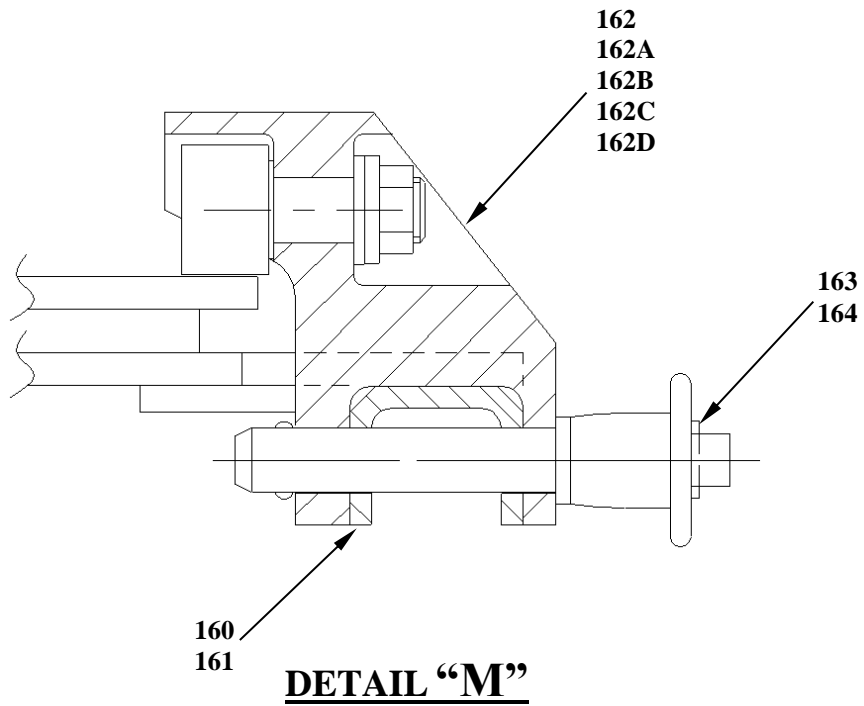
DETAIL "K"
9 PLACES

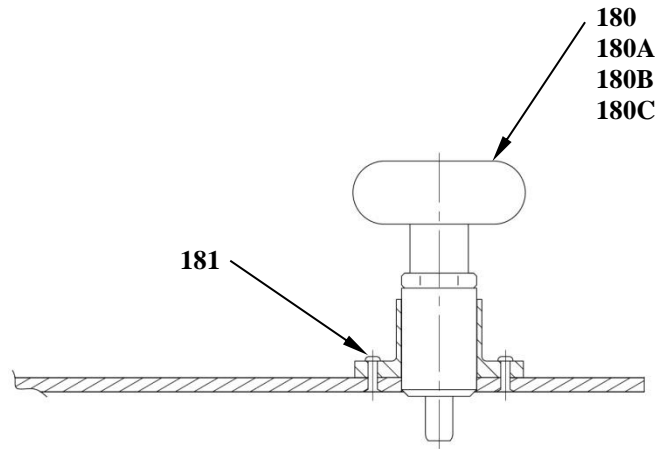
- 140
- 140A
- 140B
- 140C
- 140D



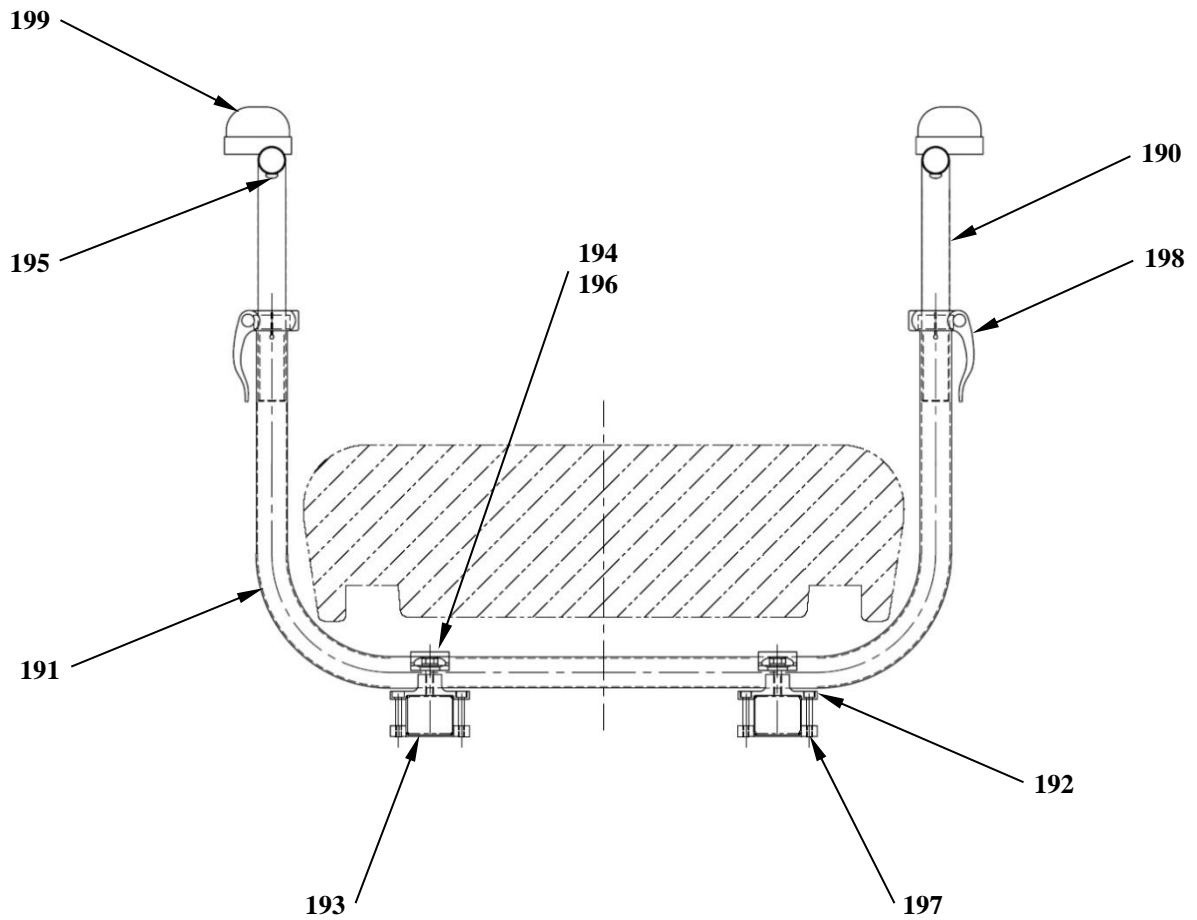
DETAIL "L"
2 PLACES

- 151
- 151A
- 151B

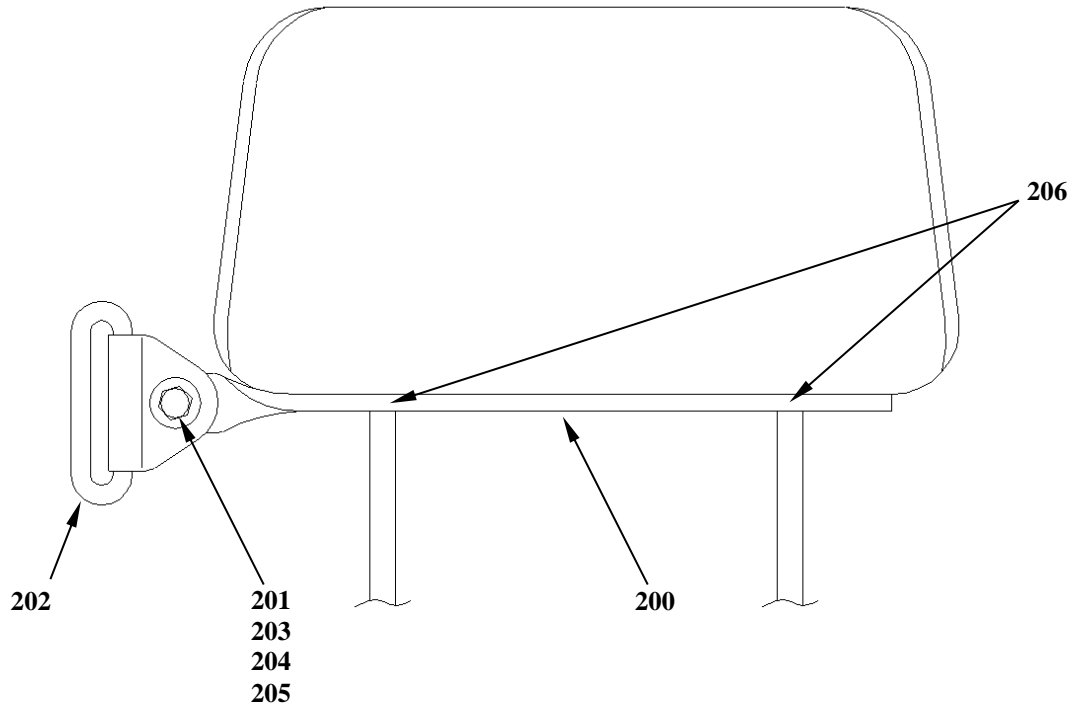




DETAIL "O"



DETAIL "P"



DETAIL "Q"

THIS PAGE INTENTIONALLY LEFT BLANK