



A Textron Company

TECHNICAL BULLETIN

206-12-199  
2 February 2012

**MODEL AFFECTED:** 206A/B

**SUBJECT:** IMPROVED UPPER LEFT LONGERON/FITTING ASSEMBLY P/N 206-031-314-223A AND AFT FUSELAGE BULKHEAD 407-030-027-105, INTRODUCTION OF.

**HELICOPTERS AFFECTED:** Serial numbers as listed in Table 1.

**COMPLIANCE:** At customer's option.

**DESCRIPTION:**

Bell Helicopter recently introduced a new upper left tailboom attachment fitting to the fuselage of the 407 helicopter. This new fitting, made from CRES material can also be used on all 206A/B series helicopters as a replacement part. However, because the installation of this fitting requires "cold expansion process (Cx)" of the fastener holes, the fitting is not procurable as a stand-alone part from BHT-Approved spares. An assembly, including this new fitting, re-enforced longeron and channel assemblies and clips, is procurable as a spare unit under P/N 206-031-314-223A. Detail parts of this assembly will not be procurable separately. This bulletin also introduces a new machined aft fuselage bulkhead. This improved bulkhead is made of aluminum with thicker material in radius and wider flanges for better fit and reliability. This bulkhead can be used as a direct replacement on the 206A/B.

**PART I** of this bulletin provides instructions to install the new upper left longeron/fitting assembly and reuse the existing sheet metal aft bulkhead. Even though reusing the sheet metal aft bulkhead is possible, it is recommended to install the new machined aft fuselage bulkhead in accordance with **PART II**.

**PART II** of this bulletin provides instructions to install the new machined aft fuselage bulkhead.

-NOTE-

Model 206B helicopters S/N 4450 through 4633 and S/N 5101 through 5313 were manufactured with upper left fitting 407-030-750-103 made of CRES material. This improved fitting is also part of the longeron/fitting assembly 206-031-314-201A. Product Support Engineering has authorized field replacement of this assembly on Model 206B helicopters in the past. Aircraft fitted with fitting 407-030-750-103 meet the intent of PART I of this bulletin

**APPROVAL:**

The engineering design aspects of this bulletin are Transport Canada Civil Aviation (TCCA) approved.

**CONTACT INFO:**

For any questions regarding this bulletin, please contact:

Bell Helicopter Product Support Engineering - Light Helicopters  
Tel: 450-437-2862 / 1-800-363-8023 / [pselight@bellhelicopter.textron.com](mailto:pselight@bellhelicopter.textron.com)

**MANPOWER:**

Approximately 16.0 man-hours are required to complete this bulletin. Man-hours are based on hands-on time, and may vary with personnel and facilities available.

**WARRANTY:**

There is no warranty credit applicable for parts or labor associated with this bulletin.

**MATERIAL:**

**Required Material:**

The following material is required for the accomplishment of this bulletin and may be obtained through your Bell Helicopter Textron Supply Center.

| <u>Part Number</u> | <u>Nomenclature</u>            | <u>Quantity</u> |
|--------------------|--------------------------------|-----------------|
| 206-031-314-223A   | Longerons and fitting assembly | 1               |
| NAS6606-25         | Bolt (4)<br>or                 | 1               |
| NAS6606-29         | Bolt (5)                       | 1               |
| 407-030-027-105    | Aft bulkhead (1)               | 1               |

|                 |                     |                |
|-----------------|---------------------|----------------|
| 206-033-003-153 | L/H aft skin (2, 6) | 1 (optional)   |
| 206-031-003-187 | Upper skin (6)      | 1 (optional)   |
| 100-048-6-7     | Pin                 | 2              |
| 30-015-6        | Collar              | 2              |
| MS21075L3N      | Nutplate            | 7              |
| MS21061L3       | Nutplate            | 1 (optional)   |
| MS20470AD3      | Rivet (3)           | A/R            |
| MS20470AD4      | Rivet (3)           | A/R            |
| MS20470AD5      | Rivet (3)           | A/R            |
| MS20426AD3      | Rivet (3)           | A/R            |
| MS20426AD4      | Rivet (3)           | A/R            |
| MS20426AD5      | Rivet (3)           | A/R            |
| MS20615-3MP     | Rivet (3)           | A/R            |
| NAS1738MW5      | Rivet (3)           | A/R            |
| NAS1200M4P      | Rivet (3, 6)        | 10 (optional)  |
| M7885/6-4       | Rivet blind (3)     | A/R            |
| M7885/7-4       | Rivet blind (3)     | A/R (optional) |
| M7885/9-4       | Rivet blind (3)     | A/R (optional) |

**Notes:**

- (1) Required only if existing bulkhead 206-031-308-015 or 407-030-027-105 needs replacement when performing PART I and II.
- (2) Required only if existing skin 206-033-003-153 or old skin configuration need replacement.
- (3) Quantity and rivet length to be determined at installation.
- (4) Bolt (NAS6606-25) required if installed tailboom is P/N 206-031-004-115 and prior or spare tailboom is P/N 206-031-004-159.
- (5) Bolt (NAS6606-29) required if thicker tailboom fitting is 206-032-409-001 or installed tailboom is P/N 206-031-004-147/ or -155.
- (6) If hot dimpling capability is not available. As an alternate to hot dimpling the longeron, install new L/H aft skin 206-033-003-153 and upper skin 206-033-003-187. Install a quantity of 10 NAS1200M4P rivets in lieu of MS20426AD4 rivets. Countersink upper skin only. Refer to Figure 1, note 9.

**Consumable Material:**

The following material is required to accomplish this bulletin, but may not require ordering, depending on the operator's consumable material stock levels. This material may be obtained through your Bell Helicopter Textron Supply Center.

| <u>Part Number</u>   | <u>Nomenclature</u>     | <u>Quantity</u> | <u>Reference/Notes</u> |
|----------------------|-------------------------|-----------------|------------------------|
| MIL-PRF-81733 2.5 OZ | Sealant                 | 1               | C-392 (1)              |
| Acetone              | Acetone (per Q-A-51)    | 1               | C-316 (2)              |
| EWDE072              | Primer                  | 1               | C-204 (3)              |
| MIL-C-81706 1 QT     | Chem Film, alodine 1200 | 1               | C-100                  |

**NOTES:**

- (1) As an alternate, use MIL-S-81733
- (2) As an alternate, use Methyl Ethyl Ketone (C-309).
- (3) As an alternate, use MIL-P-23377.

**SPECIAL TOOLS:**

Drill plate (refer to Structural Repair Manual BHT-206-SRM-1, Appendix B-2).

**WEIGHT AND BALANCE:**

Not affected.

**ELECTRICAL LOAD DATA:**

Not affected.

**REFERENCES:**

BHT-206A/B-SERIES-IPB, Illustrated Parts Breakdown  
BHT-ALL-SRM-1, Structural Repair Manual  
BHT-206A/B-MM-1, Maintenance Manual  
ASB 206-06-110, Upper left hand tailboom attachment hardware, inspection of  
BHT-ALL-SPM, Standard Practice Manual

**PUBLICATIONS AFFECTED:**

BHT-206A/B-SERIES-IPB Illustrated Parts Breakdown, Chapter 53.

**ACCOMPLISHMENT INSTRUCTIONS:****PART I: Installation of New Longeron/Fitting Assembly**

1. Prepare the helicopter for maintenance.
2. Disconnect the battery.
3. Gain access to the aft upper left longeron assembly by removing the following items;
  - a. Engine cowling and doors assembly (BHT-206A/B-SERIES-MM, Chapter 71).
  - b. Oil cooler blower fairing (BHT-206A/B-SERIES-MM, Chapter 71).
  - c. Tail rotor drive (steel) shaft between engine and oil cooler (BHT-206A/B-SERIES-MM, Chapter 65).
  - d. Engine (BHT-206A/B-SERIES-MM, Chapter 71).
  - e. Engine oil reservoir (BHT-206A/B-SERIES-MM, Chapter 79).
  - f. Segmented short shaft assembly (BHT-206A/B-SERIES-MM, Chapter 71).

- g. Oil cooler and blower assemblies (BHT-206A/B-SERIES-MM, Chapter 65).
  - h. Tailboom assembly (BHT-206A/B-SERIES-MM, Chapter 53).
  - i. Remove any ducts, doors, or equipment in the aft cabin closure.
  - j. Remove baggage compartment door and aft baggage compartment liner (BHT-206A/B-SERIES-MM, Chapters 52 and 53).
  - k. Stabilize the fuselage with jacks (BHT-206A/B-SERIES-MM, Chapter 7).
  - l. Protect or remove any electrical, electronic, ECU and heating equipment that may be mounted on canted web.
4. Locally manufacture a drill plate (1, Figure 2) to dimensions shown in the BHT-206-SRM-1.
5. Verify that the fuselage to tailboom attachment bolts pattern match with the drill plate (1), as follows;


-NOTE-

Maximum diameter allowed in service on upper and lower longeron bolt hole is 0.391 inch.

- a) Position the drill plate (1) against the aft fuselage bulkhead (5) at this time using all four bolts (11).
  - b) The bolt (11) at each position should move freely without any binding or interference while the other 3 are installed in the adjacent fittings.
  - c) If interference exists at any of the four fitting locations, contact Product Support Engineering for assistance.
  - d) If each hole in the fuselage-to-tailboom attachment fitting matches the drill plate (1) without any interference, remove the drill plate (1) and proceed to Step 6.
6. Remove the aft fuselage bulkhead (1, Detail B, Figure 1) in accordance with procedure in the 6-2-13 of the SRM (BHT-206-SRM-1).
7. Verify that the four longeron/fittings (6 and 9, Figure 2) are in plane within 0.002 inch.

-NOTE-

Four spacers of equivalent thickness (+/- 0.001 inch) may be required between each tailboom attachment fitting and the drill plate to prevent interference with the fuselage skins.

- a. Position the drill plate (1) against all four tailboom attachment fittings (6 and 9) and insert the four bolts (11) through each fitting (6 and 9). Do not install the nut (12) and washers (13).
- b. With a filler gauge verify if there is gap between fittings (6 and 9) and plate (1). Gap must not exceed 0.002 inch (0.050 mm).
- c. If one of the fittings (6 and 9) has a gap in excess of a 0.002 inch (0.050 mm), stop process and contact Product Support Engineering with details for further assistance.
- d. If the gap is within limit, install washer (13) and nut (12)  and proceed to Step 8.

-NOTE-

It is not necessary to disassemble the left fuselage-to-tailboom attachment fitting from the main longeron and the inboard channel. The new longeron, angle, clips and fitting assembly 206-031-314-223A will replace existing parts as a unit.

8. Record type, size and location before removing all rivets securing oil cooler cowl left retainer (6, Figure 1). Break sealant between faying surfaces using a thin blade warm putty knife. Remove retainer (6) and keep for reinstallation.

-NOTE-

Skins (7) or (9) layout may differ from what is shown as delivered from factory.

9. Record type, size and location of the rivets securing skin (7) or (9) before drilling. Use care to break sealant and remove skin (7) or (9).
10. Refer to Figure 1, View C, View D, View F-F, and View G-G and remove fasteners securing the aft longeron (10) located between FS 167.00 and 206.4.
11. Remove sealant from faying surfaces of all parts.
12. Carry out a first fit check on the new replacement longeron (10) in place in the aft fuselage. Make sure adequate edge distance exists at all places. If the position of the upcoming fasteners in the longeron (10) are all acceptable at all locations, keep the longeron (10) in place in aft fuselage.
13. Temporarily install bulkhead (1, Detail B) into position.

-NOTE-

Four spacers of equivalent thickness (+/- 0.001 inch) may be required between each tailboom attachment fitting and the drill plate to prevent interference with the fuselage skins.

14. Temporarily secure the drill plate (1, Figure 2) to the R/H upper longeron/fitting and both lower longeron/fittings (9, Figure 2, View D) using bolts (11), washer (13) and nuts (12) **T**. A stack of washers (13) might be required to ensure that grip length is adequate. Attach the drill plate (1) to the new longeron/fitting assembly (6, View A) with 3/16 size bolt (7) and nut (8) through existing 3/16 inch pilot hole already drilled in the longeron/fitting (6) **T**. Verify there is no gap at four locations between longeron/fittings (6 and 9) and bulkhead (5).

-NOTE-

New skins (7 and 9, Figure 1) must be installed if minimum edge distance of 2D is not met on longeron.

15. Position the forward portion of the longeron (10) to ensure that the top surface of the longeron (10) is tight against the upper surface of bulkhead (1) and the upper skin (47). Temporarily clamp aft longeron (10) to the forward longeron (11). Mark all rivet holes, using a felt pen, including the lower skin (47) and doubler (29, View F-F).
16. Remove the longeron (10) from the fuselage and inspect each hole for proper edge distance. If all fastener holes are acceptable, reinstall the longeron (10). Do not drill upper flange of the longeron (10) at this time.
17. Temporarily install splice (46, View G-G), clips (31 and 36) with clecos.
18. Temporarily install splice (43, View H-H) and clips (39, 40 and 41) with clecos.
19. At STA 167.00, transfer 10 rivet holes from the forward longeron (11, View C). Transfer 4 rivet holes (30, View F-F) from splice doubler (29) to lower flange of longeron (10). At STA179.92, transfer 2 rivet holes from clip (36, View G-G).
20. At STA 192.81, transfer 2 rivet holes from clip (39, View H-H) and clip (41) to side of longeron (10) and secure with clecos.
21. Transfer rivet holes from splices (43 and 46, View D) to upper flange of longeron (10).

22. Temporarily install skin (7) and (9) with clecos. Transfer all rivets holes from skins (7, 9 and 47) to upper flange of longeron (10) and secure with clecos.
23. Transfer rivet hole (12, View A) from flange of bulkhead (1) to longeron (10). Transfer 4 rivets holes (18) from bulkhead (1) to clips (2 and 4, Detail B).

**CAUTION**

The longeron is made of 7075 t6 material that is chemically milled from 0.063 inch at sta 206.4 to 0.032 inch at sta 167.00. Failure to hot dimple the longeron for the countersunk rivet may result in cracks. Cold dimple process to the longeron is not acceptable.

24. Remove all clecos and drill plate (1, Figure 2). Remove longeron/fitting assembly (10, Figure 1) from the structure. Deburr all rivets holes.

**-NOTE-**

As an alternate to hot dimpling the longeron (10) at the location for the 10 flush rivets (27, View D), it is acceptable to use new skins (7 and 47) and do countersunk holes in skin (47) only. Install new L/H aft skin (7) and new upper skin (47) with 10 shallow head type rivets (51, View D) in lieu of standard flush rivets (27). Countersink upper skin (47) only to suit rivet (51). Do not perform Step 25.

25. Dimple 10 rivet holes (27) using hot dimple process (BHT-ALL-SRM, Chapter 3).
26. Brush coat mating faces of longeron (11, View C) and longeron (10) with sealant (C-392). Install longeron (10) into place with clecos. Do not install skin (7) at this time.
27. Reinstall bulkhead (5, Figure 2) with clecos. Attach drill plate (1) with 3/16 size bolt (7, View A) at the new longeron/fitting assembly (6). Attach drill plate (1, View B) to the three other fittings (9) with bolt (11) and nut (12) **T**.
28. Refer to Figure 1, View C, View D, View F-F, View G-G, and View H-H and use fasteners (25, 30, 32, 33, 34, 42, 44, and 45, Figure 1) for securing the aft longeron (11), doubler (29), clips (31 and 36), and clips (39, 40 and 41), located between FS 167.00 and 206.4.
29. Apply sealant (C-392) to all faying surfaces of the fuselage skins (7, 9 and 47).

30. Do not install rivets for retainer (6) at this time. Secure skins (7, 9 and 47) to longeron (10) with rivets (25 and 26, View D).
31. Brush coat mating surface of retainer (6) with sealant (C-392). Install retainer (6) on top of skin (9) and (47). Secure retainer (6) to skins (9) (47) and to the longeron (10) with same type of rivets recorded before their removal. Do not install the rivets through bulkhead (1) at this time.
32. Install all remaining rivets through skin (7 and 9) using same type of rivets recorded before their removal.

-NOTE-

It is acceptable to reuse the previously removed sheet metal aft bulkhead (1). However it is recommended to install the new machined aft bulkhead. If a new machined bulkhead (1) is installed, accomplish PART II of this bulletin and proceed to Step 33. If the same sheet metal aft bulkhead (1) is reinstalled, proceed to Step 33.

33. Secure aft bulkhead (1, View A) to aft fuselage.
34. Remove bolt (7, Figure 2, View A) and nut (8) from upper L/H upper longeron/fitting (6). Remove bushing (3).

-NOTE-

L/H upper fitting (6) is made of CRES material that is difficult to drill. Low speed drilling is required to avoid overheating material. Drill by increasing size of drill bit until final ream can be achieved. Drilling by step increments will require a variety of bushing sizes that are not listed in this bulletin; it is at the discretion of the operator to use proper tooling to achieve final reamed diameter.

35. Enlarge hole until you can final ream to 0.376 to 0.378 inch (9.55 and 9.60 mm) in diameter through bulkhead (5, Figure 2, View C), longeron/fitting (6) and bonded radius block (15).
36. Spotface to 0.750 inch diameter the forward surface of the radius block (50, Figure 1) deep enough to obtain a constant flat surface. Maximum depth of the spotface not to exceed 0.040 inch.
37. Remove drill plate (1, Figure 2) from aft fuselage. Deburr and clean the hole and the spotface in the L/H upper longeron/fitting (6).

38. Apply primer (C-204) to all bare surfaces including spotface surface in radius block (50, Figure 1). Apply sealant (C-392) at each edge of skins.
39. Refinish paint as required.
40. Remove protective cover from equipment on canted web.

-NOTE-

The total thickness of the longeron/fitting (10) and radius block (50) is greater as compared to previous installation; therefore a longer bolt (53) is required at the upper L/H longeron to attach the tailboom. Refer to ASB 206-06-110 for thread count and washer requirements.

41. Reinstall all items that were removed in Step 1 of PART I. Use new bolt (53, Detail B) at upper L/H longeron to attach tailboom to fuselage.
42. Make an entry in helicopter historical service records indicating compliance with this Technical Bulletin.

## **PART II: Installation of a New Machined Aft Bulkhead 407-030-027-105**

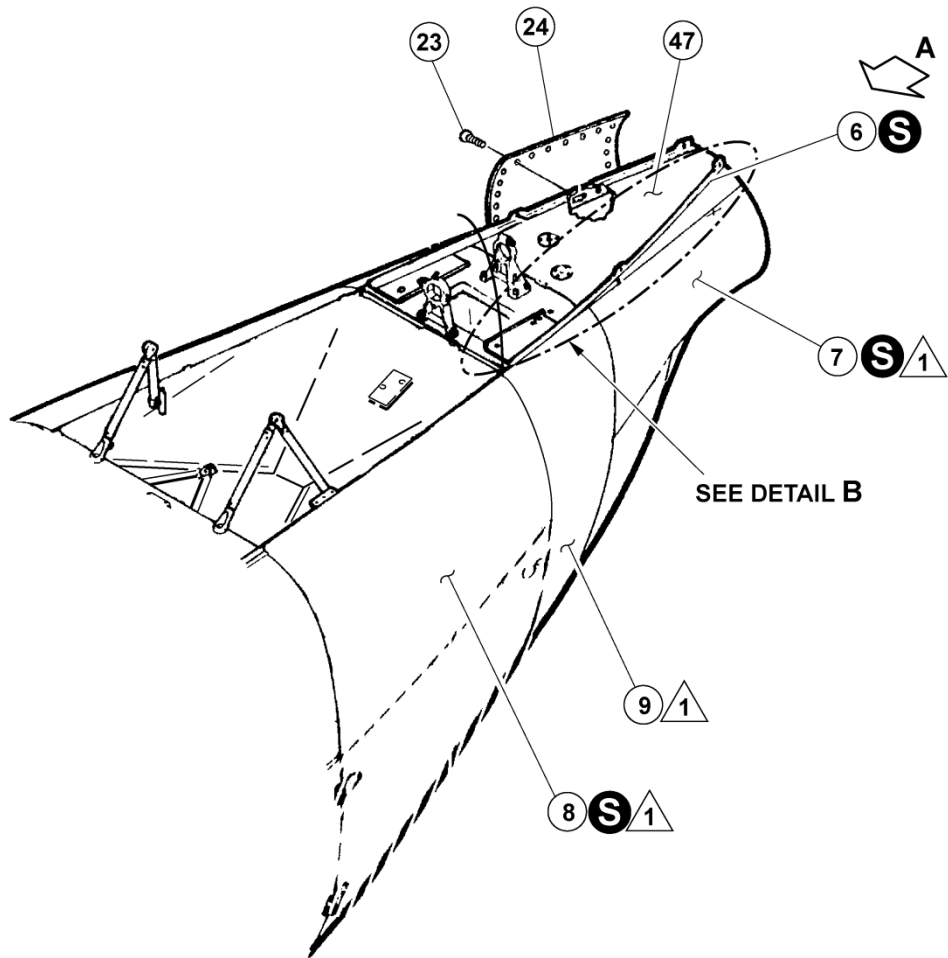
-NOTE-

The new machine bulkhead has the same fit and function as the previous one.

1. Replace existing bulkhead by new machine bulkhead (1, figure 1) in accordance with procedure in the 6-2-13 of the BHT-206-SRM-1 and information provided in figure 1, View A.
2. Refinish paint as required.
3. Make an entry in helicopter historical service records indicating compliance with this Technical Bulletin.

**Table 1: Helicopters Affected**

|  |
|--|
| <p><b>PART I</b></p> <p>206A/B helicopter serial numbers 004 through 4633.</p> <p>206A/B (TH-67) helicopter serial numbers 5101 through 5313.</p> <p>[Model 206 helicopters serial number 4634 and subsequent will have the intent of this bulletin accomplished prior to delivery.]</p> <p>[Model 206 helicopters (TH-67) serial number 5314 and subsequent will have the intent of this bulletin accomplished prior to delivery.]</p>  |
| <p><b>PART II</b></p> <p>206A/B helicopter serial numbers 004 through 4644.</p> <p>206A/B (TH-67) helicopter serial numbers 5101 though 5313.</p> <p>[Model 206B helicopters serial number 4645 and subsequent will have the intent of this bulletin accomplished prior to delivery.]</p> <p>[Model 206 helicopters (TH-67) serial number 5314 and subsequent will have the intent of this bulletin accomplished prior to delivery.]</p> |



09514\_001a

**Figure 1: Installation of L/H Upper Longeron (sheet 1 of 7)**

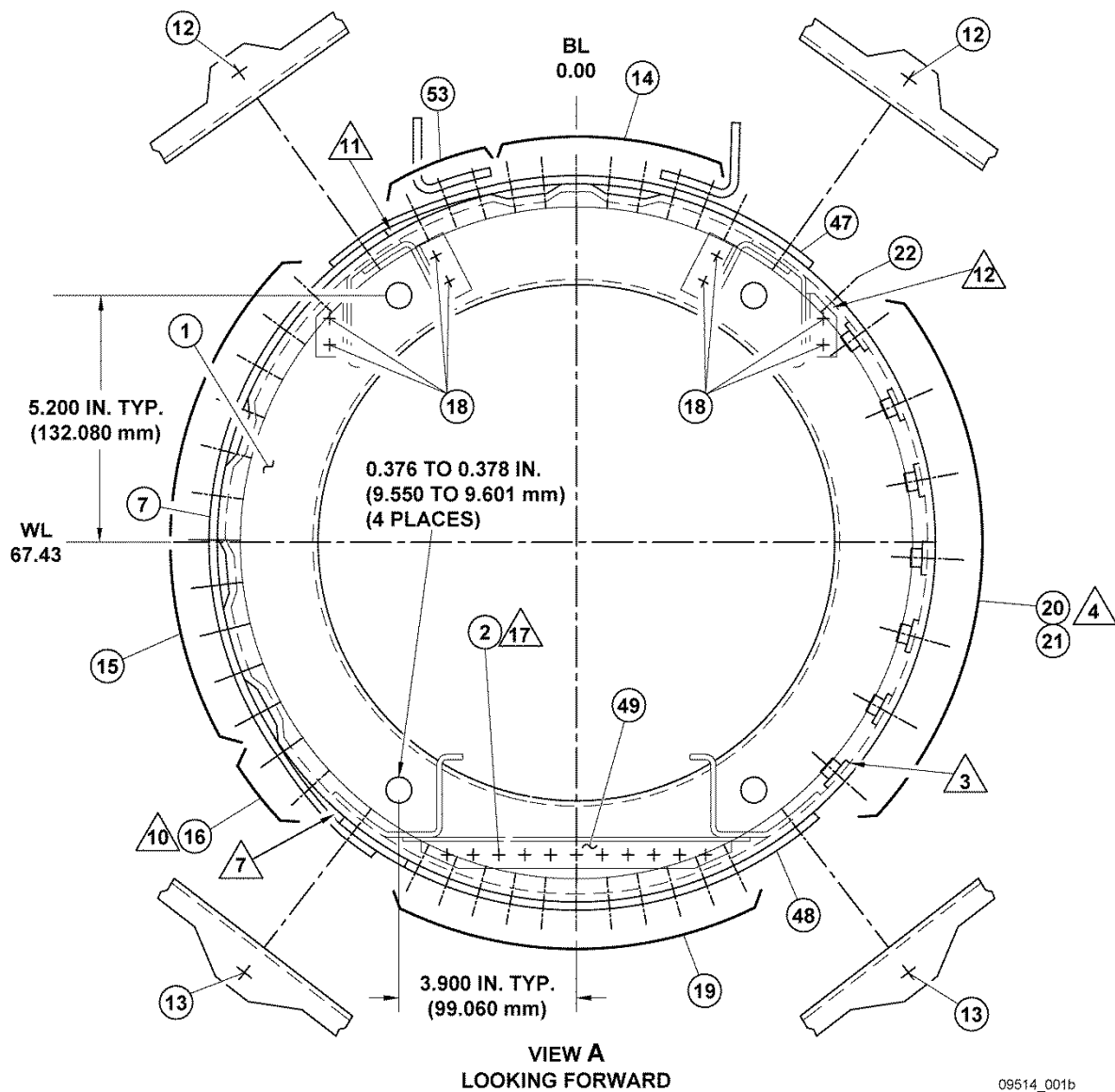
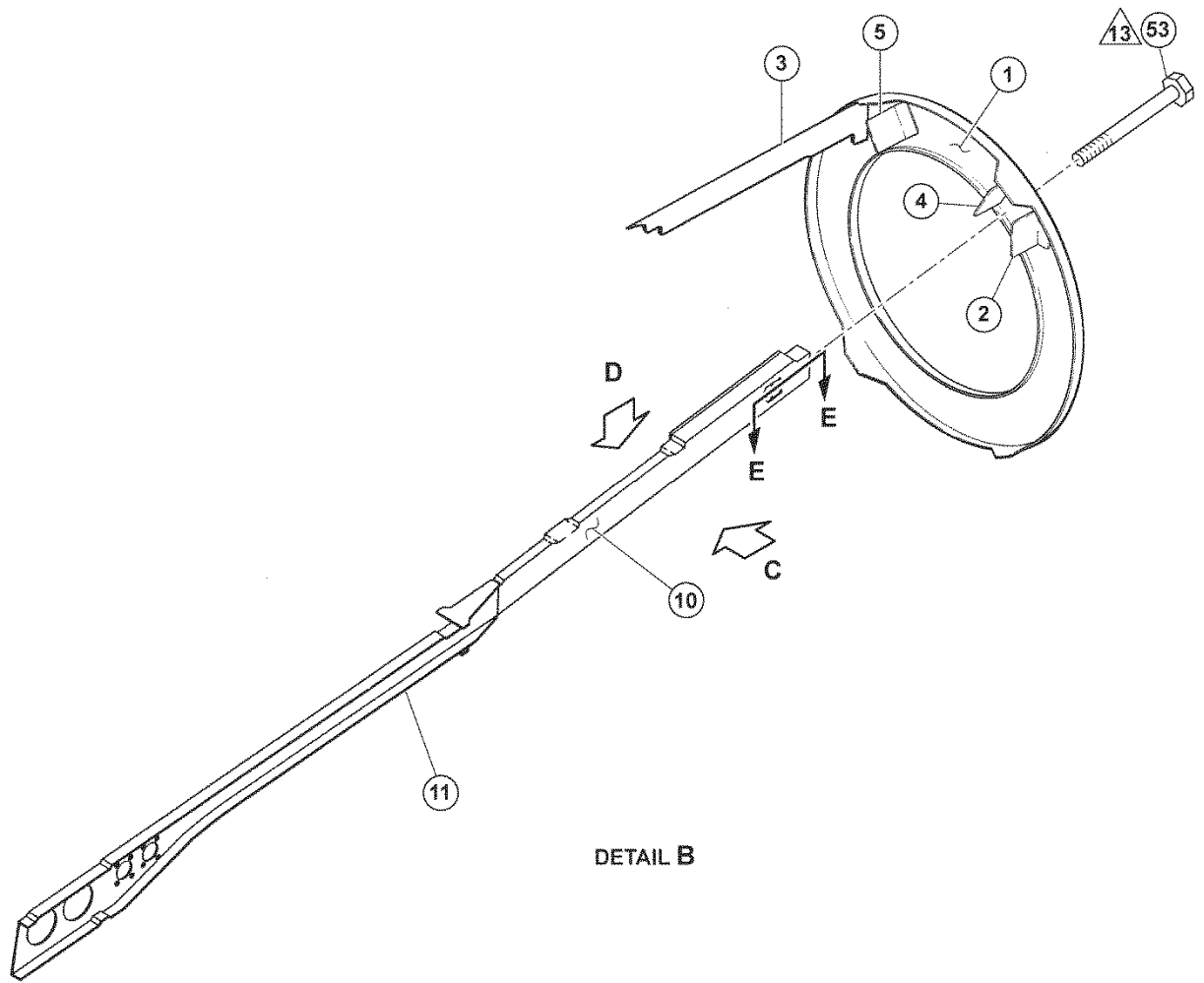
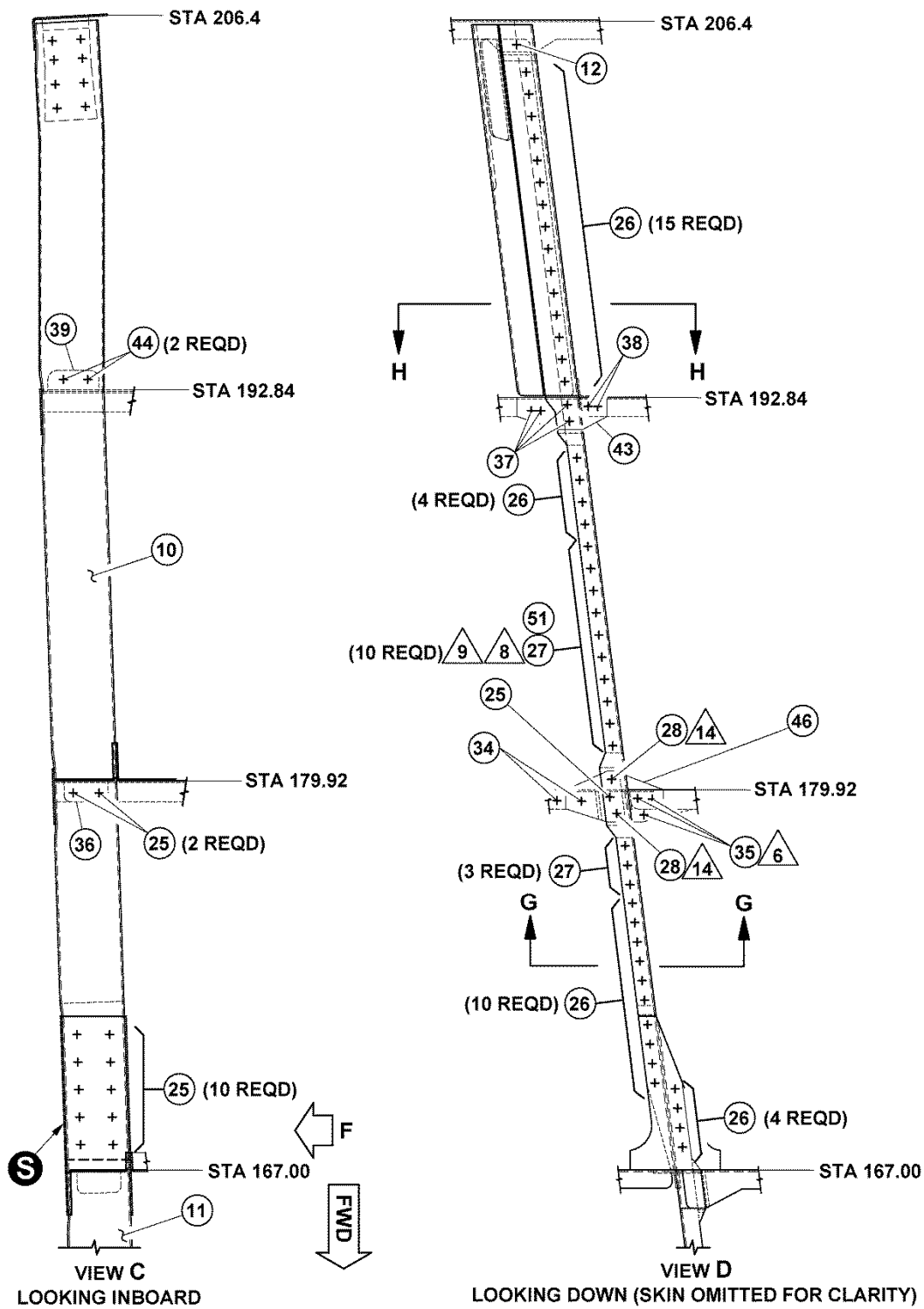


Figure 1: Installation of L/H Upper Longeron (sheet 2)



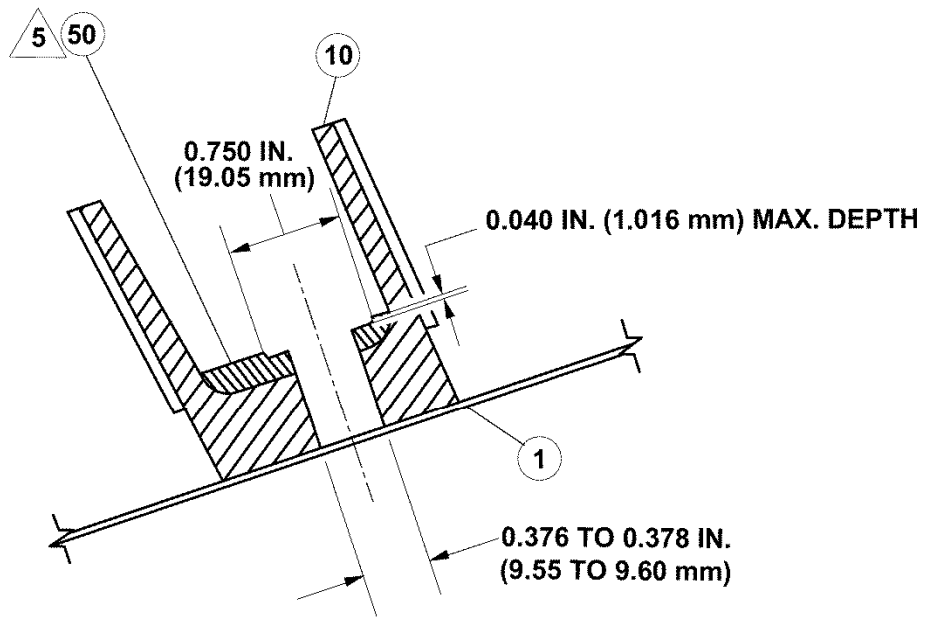
09514\_001c

**Figure 1: Installation of L/H Upper Longeron (sheet 3)**

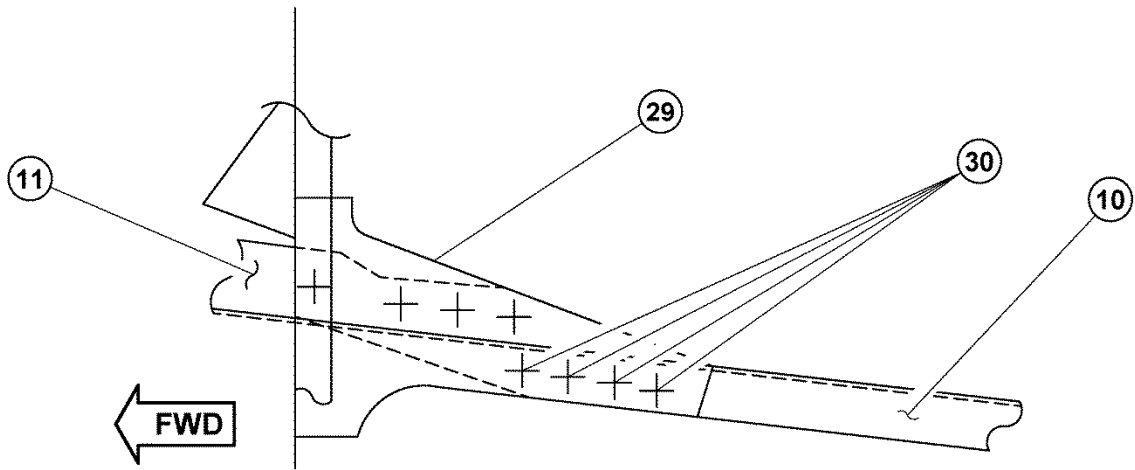


09514\_001d

Figure 1: Installation of L/H Upper Longeron (sheet 4)



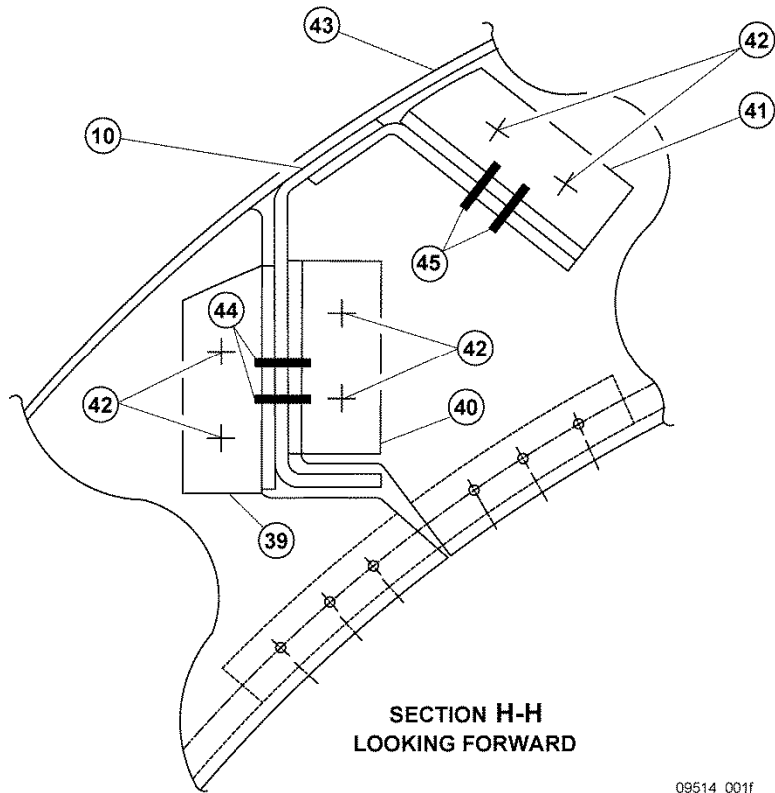
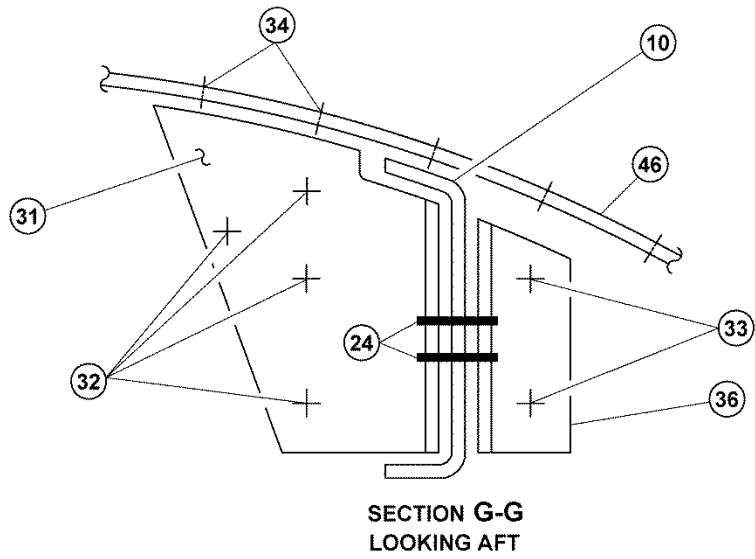
SECTION E-E



VIEW F  
LOOKING UP

09514\_001e

Figure 1: Installation of L/H Upper Longeron (sheet 5)



09514\_001f

**Figure 1: Installation of L/H Upper Longeron (sheet 6)**

- |   |  |   |
|---|--|---|
| 1. Bulkhead<br>(206-031-308-015/407-030-027-105)            | 16. Rivet (MS20615-3MP) <sup>10</sup>            | 34. Rivet (MS20470AD5)                    |
| 2. Clip, upper L/H outboard (Ref)                           | 17. Rivet (MS20426AD4) <sup>2</sup>              | 35. Rivet (MS20470AD5) <sup>6</sup>       |
| 3. Angle support (Ref)                                      | 18. Rivet (MS20426AD4)                           | 36. Clip (206-031-306-011) (Ref)          |
| 4. Clip, upper L/H inboard (Ref)                            | 19. Rivet (M7885/6-4)                            | 37. Rivet (MS20470AD5)                    |
| 5. Clip, upper R/H inboard (Ref)                            | 20. Nutplate (MS21075L3)                         | 38. Rivet (NAS1738MW5)                    |
| 6. Retainer L/H (Ref)                                       | 21. Rivet (MS20426AD3)                           | 39. Clip (206-031-307-025) (Ref)          |
| 7. Aft skin (206-033-003-153)                               | 22. Rivet (MS20426AD4)                           | 40. Clip (206-031-307-023) (Ref)          |
| 8. Forward skin (206-033-003-165) (Ref)                     | 23. Screw (Ref)                                  | 41. Clip (206-031-307-021) (Ref)          |
| 9. Aft skin (206-033-003-139) (Ref)                         | 24. Door (Ref)                                   | 42. Rivet (MS20470AD5)                    |
| 10. Aft longeron and fitting assembly<br>(206-031-314-223A) | 25. Rivet (MS20470AD5)                           | 43. Splice (206-031-307-017) (Ref)        |
| 11. Forward longeron  | 26. Rivet (MS20470AD4)                           | 44. Rivet (MS20470AD5)                    |
| 12. Rivet (MS20470AD5)                                      | 27. Rivet (MS20426AD4) <sup>8</sup> <sup>9</sup> | 45. Rivet (MS20470AD5)                    |
| 13. Fastener<br>Pin (100-048-6-7)<br>Collar (30-015-6)      | 28. Rivet (MS20426AD5) <sup>14</sup>             | 46. Frame (206-031-306-035) (Ref)         |
| 14. Rivet (MS20470AD3)                                      | 29. Doubler<br>(206-031-314-009) (Ref)           | 47. Upper skin<br>(206-031-003-187) (Ref) |
| 15. Rivet (MS20470AD3)                                      | 30. Rivet (MS20470AD4)                           | 48. Lower fairing (Ref)                   |
|   | 31. Clip (206-031-306-009) (Ref)                 | 49. Web (Ref)                             |
|   | 32. Rivet (MS20470AD4)                           | 50. Radius block (Ref)                    |
|   | 33. Rivet (MS20470AD5)                           | 51. Rivet (NAS1200M4P) <sup>9</sup>       |
|   |  | 52. Rivet (MS20615-3MP)                   |
|   |  | 53. Bolt <sup>13</sup>                    |

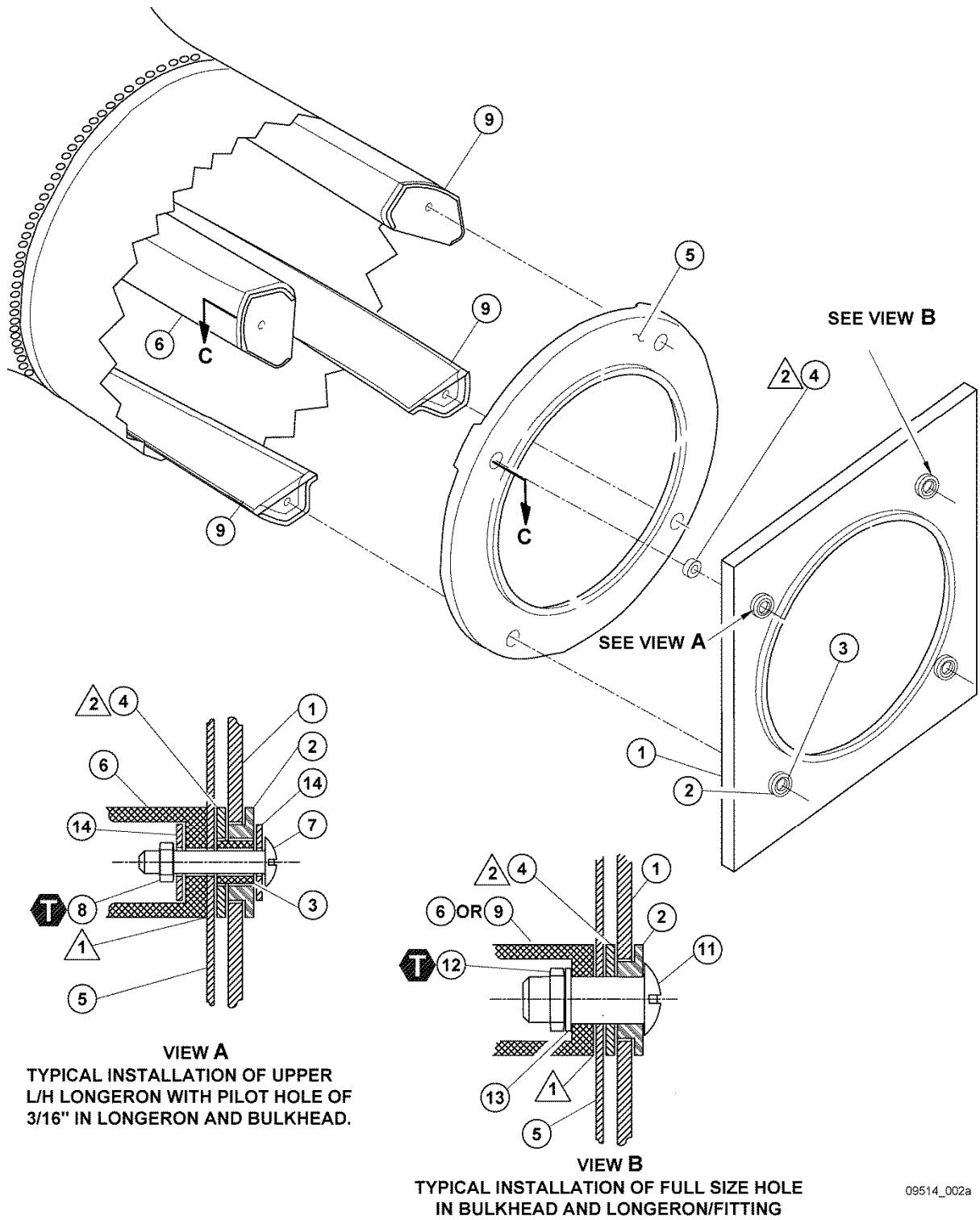
**S** MIL-PRF-81733 (C-392)

### NOTES

- <sup>1</sup> Only new skin configuration is shown, illustration may differ from your aircraft.
- <sup>2</sup> As an alternate, blind rivet M7885/7-4 can be installed in lieu of MS20426AD4.
- <sup>3</sup> MS21061L3 nutplate may be used as alternate for MS21075L3 at this location only.
- <sup>4</sup> Hole size for nutplate is 0.190 to 0.196 (4.8 to 5.0 mm) in frame to match door (23).
- <sup>5</sup> Spot face 0.750 inch (19.0 mm) diameter X 0.030 inch (0.76 mm) radius, 0.040 inch (1.0 mm) maximum depth on radius block.
- <sup>6</sup> NAS1738MW5 rivets may be used as an alternate at this location only.
- <sup>7</sup> Fill gap with tapered shim manufactured from 2024T3 aluminum material. Install in wet sealant (C-392) at this location. Maximum shim thickness not to exceed 0.063 inch (1.6002 mm) thick.
- <sup>8</sup> Hot dimple 10 rivet holes in longeron only.
- <sup>9</sup> As an alternate to hot dimpling the longeron: Replace L/H aft skin (7) and upper skin (47) with new ones. Install ten NAS1200M4P rivet (51) in lieu of MS20426AD4 rivet (27). Countersink upper skin (47) only to suit NAS1200M4P rivet.
- <sup>10</sup> If MS20470AD4 type rivet is already installed at this location only, same type rivet can be reinstalled.
- <sup>11</sup> Fill gap with tapered shim manufactured from 2024T3 aluminum material. Maximum shim thickness not to exceed 0.032 inch (0.8128 mm) thick. Prepare surface and clean with acetone (C-316) per BHT-206-SRM-1. Shim must be bonded to frame with 299-947-100 TY2 CL2 adhesive.
- <sup>12</sup> If required, fill gap between bulkhead and access door support angle with shim manufactured from 2024T3 aluminum material. Maximum shim thickness not to exceed 0.020 inch (0.508 mm) thick at this location.
- <sup>13</sup> L/H side bolt (NAS6606-25) required if tailboom 206-031-004-115 and prior or spare tailboom 206-031-004-157 installed.  
Longer L/H side bolt (NAS6606-29) required if thicker tailboom attachment fitting 206-032-409-001 or tailboom 206-031-004-147 or 206-031-004-155 installed.
- <sup>14</sup> Dimple skin only.

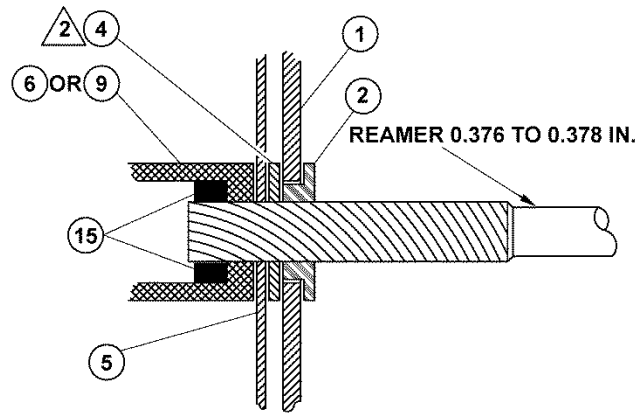
09514\_001g

**Figure 1: Installation of L/H Upper Longeron (sheet 7)**



09514\_002a

Figure 2. Installation of Drill Plate (Sheet 1 of 2)



**SECTION C-C**  
**TYPICAL INSTALLATION TO DRILL**  
**FULL SIZE THROUGH BULKHEAD**  
**AND/OR FITTING**

1. Drill plate
2. Bushing 0.376 to 0.378 inch inside diameter
3. Bushing 0.187 to 0.189 inch inside diameter  
0.376 to 0.378 inch outside diameter
4. Spacer
5. Bulkhead
6. Longeron and fitting, upper left
7. Bolt 3/16 inch diameter
8. Nut
9. Longeron and fitting
10. Flange bushing 0.187 to 0.189 inch inside diameter  
0.376 to 0.378 inch outside diameter
11. Bolt 3/8 inch diameter
12. Nut
13. Washer, 3/8 inch inside diameter
14. Washer, 3/16 inch inside diameter
15. Radius block

**T** 50 IN-LBS  
(5.65 Nm)

**NOTES**

- 1 Verify that there is no gap between longeron and bulkhead.
- 2 A quantity of four spacers of the same thickness within 0.001 inch must be used to clear interference between drill plate and aft fuselage skin.

09514\_002b

**Figure 2. Installation of Drill Plate (Sheet 2)**