

# CABIN FLOOR PROTECTION, KIT INSTRUCTIONS FOR CONTINUING AIRWORTHINESS

**MODELS: BELL 505** 

Read all of the Instructions for Continuing Airworthiness thoroughly prior to performing any activities relating to this product

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#### **Notes**

- 1. If changes to this document are required, Alpine Aerotech LP shall revise all pages and reissue the entire document.
- 2. Alpine Aerotech LP shall make any subsequent revisions of this document available free of charge upon request. Alpine Aerotech LP also recommends that the end user of this product periodically verify the revision level of this document.

### **SECTION 1: INTRODUCTION**

This document comprises Instructions for Continuing Airworthiness that apply to the Cabin Floor Protection, Kit, FWD, installed on Bell 505 rotorcraft. The information and data contained in this document are supplemental to the information contained in the existing ICA for the Bell 505

#### **Applicability**

The Cabin Floor Protection, Kit (AAL-312-060-901) is applicable to all serial numbers of Bell 505 rotorcraft with OEM interiors.

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### **SECTION 2: DESCRIPTION**

The following information provides a functional description of the Cabin Floor Protection, Kit as defined in Alpine Aerotech LP datasets AAL-312-060-901.

- The Cabin Floor Protection, Kit includes rigid pieces of material that are installed atop the
  existing floor to protect it from dents and punctures associated with typical aircraft usage. This
  occurs most frequently during loading and unloading operations, but can also occur during small
  inflight shifts of said cargo.
- The Cabin Floor Protection, Kit when installed, adds additional protection to the floor panels, as it is manufactured from a material specifically designed to spread and attenuate energy.

### **SECTION 3: OPERATION**

1. With the Cabin Floor Protection, Kit installed no special considerations required for operation.

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# **SECTION 4: MAINTENANCE INSTRUCTIONS**

#### **General Notes**

- 1. The following information defines the instructions for continuing airworthiness, repair allowances and airworthiness limitations for the item(s) referenced within this document.
- 2. Refer to the current revisions of the Bell 505 Maintenance Manual for Instructions for Maintenance/Inspection with respect to the item(s) referenced within this document.
- 3. Refer to the Section 6: Removal/Replacement Instructions and Section 9: Illustrated Parts Breakdown for the replacement and/or installation of the item(s) referenced within this section.
- 4. Scheduled inspection for the item(s) referenced within this document shall be accomplished in accordance with (IAW) the Inspection Procedures specified.
- 5. Repair allowances for the item(s) referenced within this document shall be accomplished IAW the Repair Procedures specified.
- 6. Limitations for the item(s) referenced within this document are IAW the Airworthiness Limitations specified.

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# **Inspection Procedures**

# **Supplement to applicable Maintenance Manual, Chapter 5, Inspection and Component Overhaul Schedule**

#### **Notes**

- 1. Refer to the applicable Maintenance Manual, Chapter 4, for general information on inspections, inspection definitions, inspection intervals, inspection methods and inspection schedules.
- 2. General Inspections, as indicated within this document, are defined as visual, non-thorough checks.
- 3. Detailed Inspections, as indicated within this document, are defined as visual and thorough, searching checks.
- 4. Perform 600 Hour/12 Month Inspections every 600 hours or every 12 months, whichever occurs first, prior to flight operation. If damage is detected, refer to the Repair Procedures section within this document.

# **Scheduled Inspections**

1. 600 Hour/12 Month Inspections

Data Reference: Section 3: Installation and Removal Instructions

Section 4: Illustrated Parts Breakdown

- I. Perform a Detailed Inspection on all items to ensure proper security.
- II. Perform a Detailed Inspection on all items/materials to ensure proper integrity.
- III. Perform a Detailed Inspection on the Cabin Floor Protection, Kit to ensure that it is not delaminating.
- IV. Perform a Detailed Inspection on all surfaces & locations with Velcro applied to ensure no damage has occurred to the aircraft floor.

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# **SECTION 5: TROUBLESHOOTING**

1. Repairs to all other item(s) referenced within this document are <u>not</u> permitted. Contact Alpine Aerotech LP for further information if repairs are required to all other item(s) referenced within this document.

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# **SECTION 6: REMOVAL/REPLACEMENT**

#### **General Notes**

- 1. All Installation Instructions shall be accomplished IAW standard aircraft practices. Refer to the current revision of the FAA publications AC 43.13-1B and AC 43.13-2B for details on standard aircraft practices.
- 2. All Dimensions are in imperial measures (inches/pounds).
- 3. Refer to Section 4: Maintenance Instructions for instructions on maintenance for the item(s) referenced within this section.
- 4. Refer to the Section 9: Illustrated Parts Breakdown for the part numbers of the item(s) referenced within this section.
- Remove and retain for future use.
- Install for Non Dual Configuration

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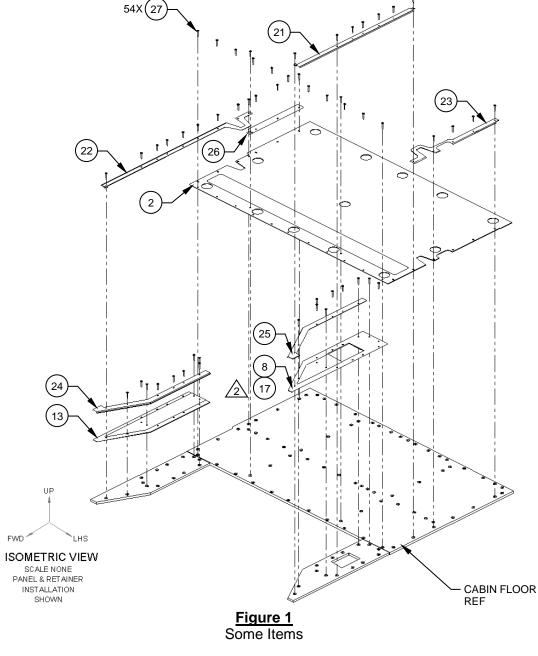
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# **6.1 REMOVAL INSTRUCTIONS**

# AFT Cabin Floor Protection, Kit, AAL-312-060-001

1. Gain access to the aircraft and make ready for maintenance. Temporarily remove all passenger seats. Reference Figure 1.



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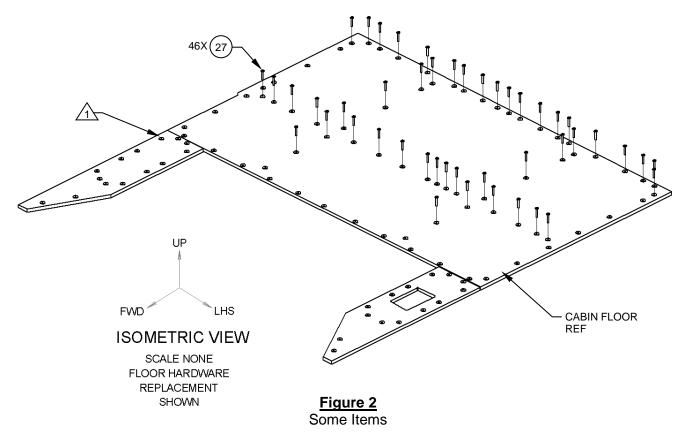


# Removed for Clarity

#### Removal Instructions (cont.)

#### AFT Cabin Floor Protection, Kit, AAL-312-060-001

- 2. Remove 54x Screw, Washer Head, (Item 27), in the locations shown. Reference Figure 1.
- 3. Remove the 1x LHS FWD Sill, Detail, (Item 21), 1x RHS FWD Sill, Detail, (Item 22), 1x LHS AFT Sill, Detail, (Item 23), 1x RHS INBD Sill, Detail, (Item 24), 1x LHS INBD Sill, Detail, (Item 25), and 1x RHS AFT, Sill, Detail, (Item 26), from their respective locations. Reference Figure 1.
- 4. Remove either, LHS, FWD Panel, Assy, (Item 8), or LHS, FWD Panel, Non Dual, Assy, (Item 5), from it's respective location. Reference Figure 1.
- 5. Remove the AFT Cabin Floor Protection, Assy, (Item 2), and the RHS, FWD Panel, Assy, (Item 13) in their respective locations. Reference Figure 2.
- 6. Remove 46X Screw, Washer Head, (Item 27), in locations shown. Reference Figure 2.
- 7. Re-install 100x OEM fasteners. Reference Figures 1 & 2.



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# Removed for Clarity

8. Update the aircraft logbook for the removal of the affected components of the AFT Cabin Floor Protection, Kit.

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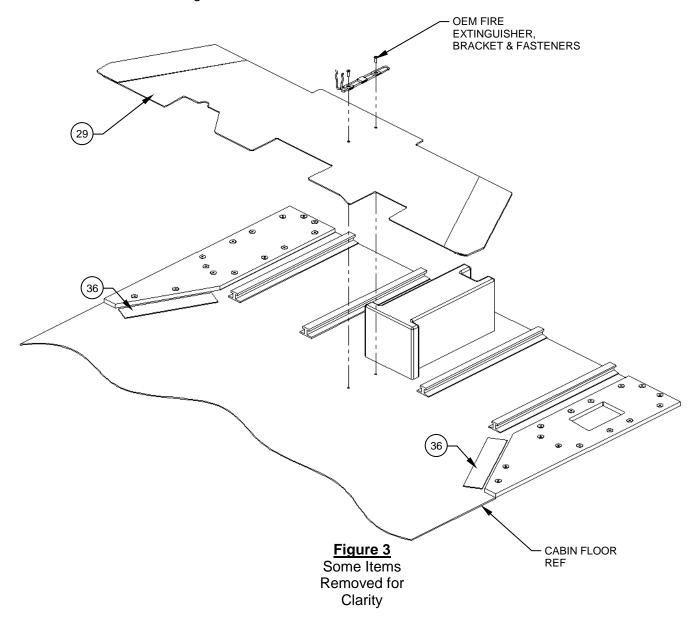
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# Removal Instructions (cont.)

### FWD Floor Protection Panel, Kit, AAL-312-060-002

1. Gain access to the aircraft and make ready for maintenance. Temporarily remove all crew seats. Reference Figure 3.



2. Temporarily remove the fire extinguisher & extinguisher bracket, and associated fasteners. Remove the FWD Cabin Floor Protection, Assy, (Item 29). Reference Figure 4.

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- 3. Re-install the fire extinguisher & extinguisher bracket, using the OEM fasteners. Reference Figure 3.
- 4. Update the aircraft logbook for the removal of the affected components of the FWD Floor Protection Panel, Kit.

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# **6.2 REPLACEMENT INSTRUCTIONS**

1. As there are no special considerations, the replacement of the Cabin Floor Protection, Kit can be considered the opposite of the removal.

### **SECTION 7** GENERAL

There are no general considerations for this kit.

#### **SECTION 8 AIRWORTHINESS LIMITATIONS**

The Airworthiness Limitations section is approved by the Minister and specifies maintenance required by any applicable airworthiness or operating rule unless an alternative program has been approved by the Minister.

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

# **Supplement to applicable Maintenance Manual, Chapter 4, Airworthiness Limitations Schedule**

#### Notes

- 1. Refer to the Maintenance Planning Information, Chapter 4, for general information on airworthiness limitations and airworthiness limitation schedules.
- Item(s) <u>not</u> listed in the Scheduled Airworthiness Limitations section within this document have an unlimited airworthiness life.

#### Scheduled Airworthiness Limitations

1. There are <u>no</u> airworthiness limitations associated with the item(s) referenced within this document.

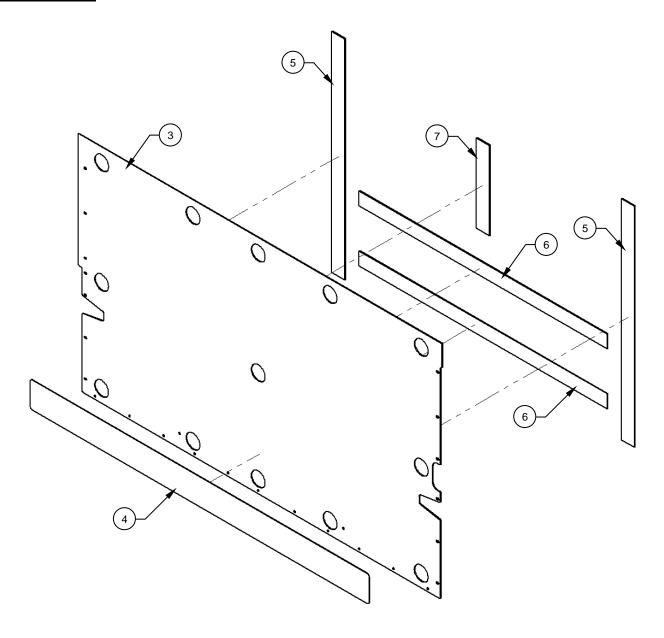
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# **SECTION 9: ILLUSTRATED PARTS BREAKDOWN**

# **General Notes**

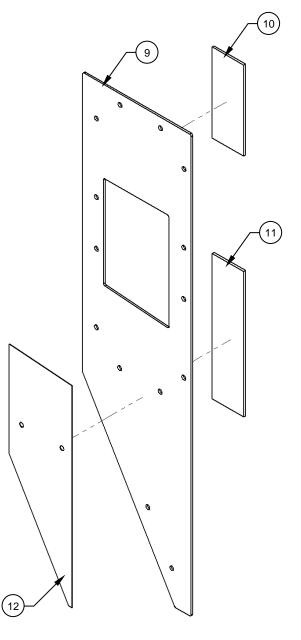


AAL-312-061-001 (ITEM 2) SHOWN

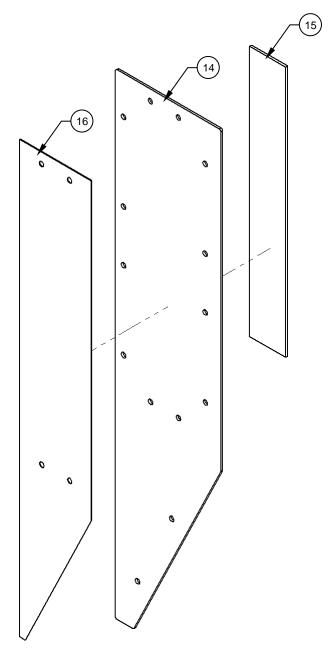
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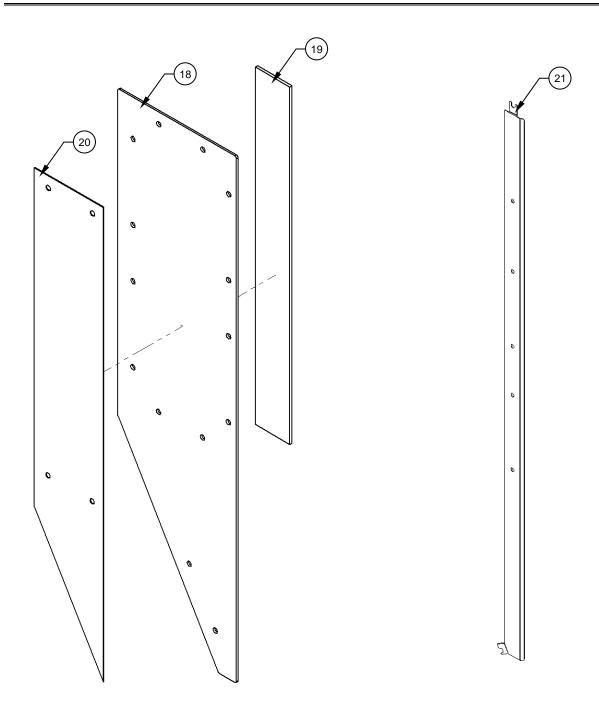
AAL-312-061-003 (ITEM 8) SHOWN



AAL-312-061-004 (ITEM 13) SHOWN

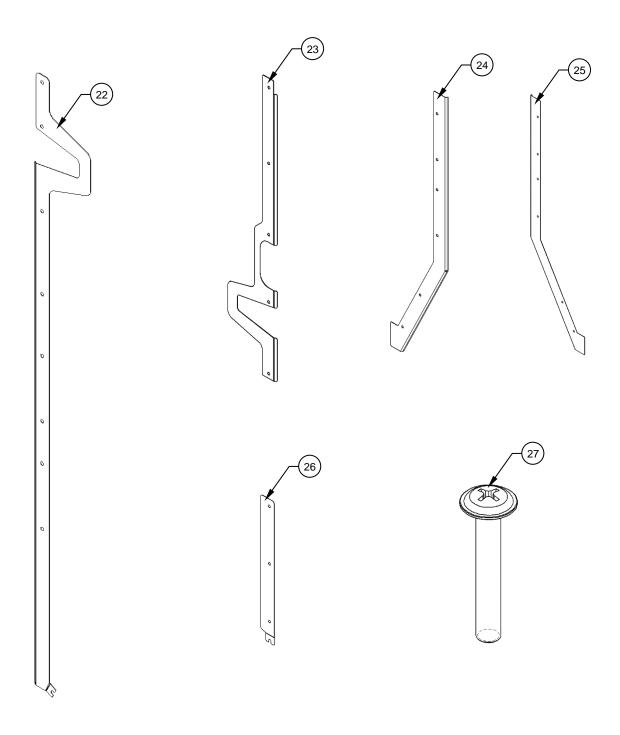
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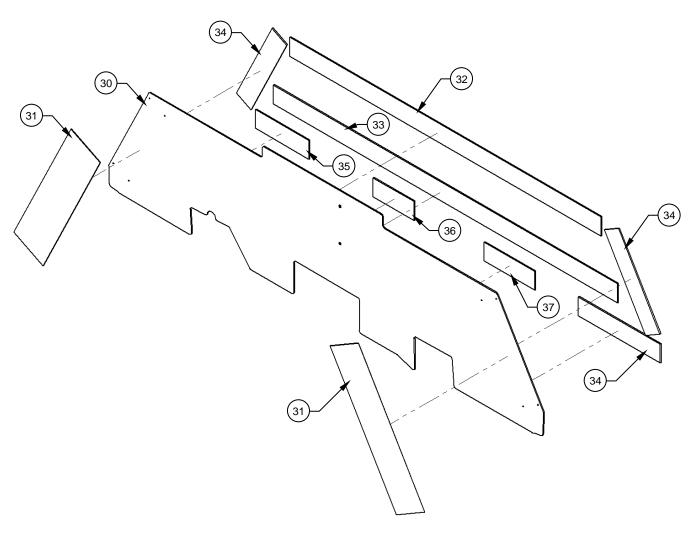


AAL-312-061-004 (ITEM 17) SHOWN

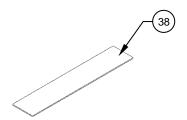








AAL-312-061-002 (ITEM 29) SHOWN





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# Illustrated Parts Breakdown (cont.)

| ITEM | QTY | NUMBER   | DESCRIPTION                                 | MATERIAL                         | REF<br>STOCK | SPEC    | FINISH                 | MANUFACTURER          | NCAGEC |
|------|-----|--|---|----------------------------------|--------------|---------|------------------------|-----------------------|--------|
| -    | -   | AAL-312-060-901  | CABIN FLOOR PROTECTION,<br>KIT              | C/O SHADED<br>ITEMS              |              |         |                        | ALPINE AEROTECH LP    | L0171  |
| 1    | 1   | AAL-312-060-001  | AFT CABIN FLOOR<br>PROTECTION, KIT          | NA                               | NA           | NA      | NA                     | ALPINE AEROTECH<br>LP | L0171  |
| 2    | 1   | >AAL-312-061-001   | AFT CABIN FLOOR<br>PROTECTION, ASSY         | NA                               | NA           | NA      | NA                     | ALPINE AEROTECH<br>LP | L0171  |
| 3    | 1   | >>AAL-312-062-001  | AFT CABIN FLOOR<br>PROTECTOR, DETAIL        | NA                               | NA           | NA      | NA                     | ALPINE AEROTECH<br>LP | L0171  |
| 4    | 1   | >>3M SAFETY-WALK<br>SLIP-RESISTANT<br>GENERAL PURPOSE<br>TAPES AND TREADS<br>620, CLEAR 4in -<br>70070975621 | SAFETY-WALK GENERAL<br>PURPOSE GRIP<br>TAPE | POLY-<br>URETHANE                | 58.00"       | NA      | NFSI<br>SCOF <<br>0.60 | 3M                    | NA     |
| 5    | 2   | >>151394   | VELCRO, DETAIL                              | LOOP 1000,<br>BLACK,<br>8224 PSA | 2 x 32.00    | SEE MFR | SEE MFR                | VELCRO USA INC.       | 11153  |
| 6    | 2   | >>151394   | VELCRO, DETAIL                              | LOOP 1000,<br>BLACK,<br>8224 PSA | 2 x 38.00    | SEE MFR | SEE MFR                | VELCRO USA INC.       | 11153  |
| 7    | 1   | >>151394   | VELCRO, DETAIL                              | LOOP 1000,<br>BLACK,<br>8224 PSA | 2 X 12.00    | SEE MFR | SEE MFR                | VELCRO USA INC.       | 11153  |
| 8    | 1   | >AAL-312-061-003   | LHS, FWD, PANEL, ASSY                       | NA                               | NA           | NA      | NA                     | ALPINE AEROTECH<br>LP | L0171  |
| 9    | 1   | >>AAL-312-062-003  | FWD, LHS, PANEL DUAL,<br>DETAIL             | NA                               | NA           | NA      | NA                     | ALPINE AEROTECH<br>LP | L0171  |
| 10   | 1   | >>151394   | VELCRO, DETAIL                              | LOOP 1000,<br>BLACK,<br>8224 PSA | 2 x 5.00     | SEE MFR | SEE MFR                | VELCRO USA INC.       | 11153  |
| 11   | 1   | >>151394   | VELCRO, DETAIL                              | LOOP 1000,<br>BLACK,<br>8224 PSA | 2 X 8.00     | SEE MFR | SEE MFR                | VELCRO USA INC.       | 11153  |

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| 12 | 1 | >>3M SAFETY-WALK<br>SLIP-RESISTANT<br>GENERAL PURPOSE<br>TAPES AND TREADS<br>620, CLEAR 4in -<br>70070975621 | SAFETY-WALK GENERAL<br>PURPOSE GRIP<br>TAPE | POLY-<br>URETHANE                | 12.00"    | NA      | NFSI<br>SCOF <<br>0.60 | 3M                    | NA    |
|----|---|--|---|----------------------------------|-----------|---------|------------------------|-----------------------|-------|
| 13 | 1 | >AAL-312-061-004   | RHS, FWD, PANEL, ASSY                       | NA                               | NA        | NA      | NA                     | ALPINE AEROTECH<br>LP | L0171 |
| 14 | 1 | >>AAL-312-062-004  | FWD, RHS, PANEL, DETAIL                     | NA                               | NA        | NA      | NA                     | ALPINE AEROTECH<br>LP | L0171 |
| 15 | 1 | >>151394   | VELCRO, DETAIL                              | LOOP 1000,<br>BLACK,<br>8224 PSA | 2 x 14.00 | SEE MFR | SEE MFR                | VELCRO USA INC.       | 11153 |
| 16 | 1 | >>3M SAFETY-WALK<br>SLIP-RESISTANT<br>GENERAL PURPOSE<br>TAPES AND TREADS<br>620, CLEAR 4in -<br>70070975621 | SAFETY-WALK GENERAL<br>PURPOSE GRIP<br>TAPE | POLY-<br>URETHANE                | 24.00"    | NA      | NFSI<br>SCOF <<br>0.60 | ЗМ                    | NA    |
| 17 | 1 | >AAL-312-061-005   | FWD, LHS, PANEL NON<br>DUAL, ASSY           | NA                               | NA        | NA      | NA                     | ALPINE AEROTECH<br>LP | L0171 |
| 18 | 1 | >>AAL-312-062-011  | FWD, LHS, PANEL NON<br>DUAL, DETAIL         | NA                               | NA        | NA      | NA                     | ALPINE AEROTECH<br>LP | L0171 |
| 19 | 1 | >>151394   | VELCRO, DETAIL                              | LOOP 1000,<br>BLACK,<br>8224 PSA | 2 X 18.00 | SEE MFR | SEE MFR                | VELCRO USA INC.       | 11153 |
| 20 | 1 | >>3M SAFETY-WALK<br>SLIP-RESISTANT<br>GENERAL PURPOSE<br>TAPES AND TREADS<br>620, CLEAR 4in -<br>70070975621 | SAFETY-WALK GENERAL<br>PURPOSE GRIP<br>TAPE | POLY-<br>URETHANE                | 24.00"    | NA      | NFSI<br>SCOF <<br>0.60 | 3M                    | NA    |
| 21 | 1 | >AAL-312-062-005   | LHS FWD SILL, DETAIL                        | NA                               | NA        | NA      | NA                     | ALPINE AEROTECH       | L0171 |
| 22 | 1 | >AAL-312-062-006   | RHS FWD SILL, DETAIL                        | NA                               | NA        | NA      | NA                     | ALPINEAEROTECH LP     | L0171 |
| 23 | 1 | >AAL-312-062-007   | LHS AFT SILL, DETAIL                        | NA                               | NA        | NA      | NA                     | ALPINE AEROTECH       | L0171 |
| 24 | 1 | >AAL-312-062-008   | RHS INBD SILL, DETAIL                       | NA                               | NA        | NA      | NA                     | ALPINE AEROTECH<br>LP | L0171 |
| 25 | 1 | >AAL-312-062-009   | LHS INBD SILL, DETAIL                       | NA                               | NA        | NA      | NA                     | ALPINE AEROTECH<br>LP | L0171 |
| 26 | 1 | >AAL-312-062-010   | RHS AFT SILL, DETAIL                        | NA                               | NA        | NA      | NA                     | ALPINE AEROTECH<br>LP | L0171 |

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| 27 | 100 | >AN525-10R20   | SCREW, WASHER HEAD                          | SEE SPEC                         | SEE SPEC  | NASM525 | SEE<br>SPEC            | SOURCE AS<br>REQUIRED | NA    |
|----|-----|--|---|----------------------------------|-----------|---------|------------------------|-----------------------|-------|
| 28 | 1   | AAL-312-060-002  | FWD FLOOR PROTECTION PANEL, KIT             | NA                               | NA        | NA      | NA                     | ALPINE AEROTECH<br>LP | L0171 |
| 29 | 1   | >AAL-312-061-002   | FWD CABIN FLOOR<br>PROTECTION, ASSY         | NA                               | NA        | NA      | NA                     | ALPINE AEROTECH<br>LP | L0171 |
| 30 | 1   | >>AAL-312-062-002  | FWD CABIN FLOOR,<br>DETAIL                  | NA                               | NA        | NA      | NA                     | ALPINE AEROTECH<br>LP | L0171 |
| 31 | 2   | >>3M SAFETY-WALK<br>SLIP-RESISTANT<br>GENERAL PURPOSE<br>TAPES AND TREADS<br>620, CLEAR 4in -<br>70070975621 | SAFETY-WALK GENERAL<br>PURPOSE GRIP<br>TAPE | POLY-<br>URETHANE                | 24.00"    | NA      | NFSI<br>SCOF <<br>0.60 | 3M                    | NA    |
| 32 | 1   | >>151394   | VELCRO, DETAIL                              | LOOP 1000,<br>BLACK,<br>8224 PSA | 2 x 38.00 | SEE MFR | SEE MFR                | VELCRO USA INC.       | 11153 |
| 33 | 1   | >>151394   | VELCRO, DETAIL                              | LOOP 1000,<br>BLACK,<br>8224 PSA | 2 X 42.00 | SEE MFR | SEE MFR                | VELCRO USA INC.       | 11153 |
| 34 | 3   | >>151394   | VELCRO, DETAIL                              | LOOP 1000,<br>BLACK,<br>8224 PSA | 2 x 10.00 | SEE MFR | SEE MFR                | VELCRO USA INC.       | 11153 |
| 35 | 1   | >>151394   | VELCRO, DETAIL                              | LOOP 1000,<br>BLACK,<br>8224 PSA | 2 X 6.50  | SEE MFR | SEE MFR                | VELCRO USA INC.       | 11153 |
| 36 | 1   | >>151394   | VELCRO, DETAIL                              | LOOP 1000,<br>BLACK,<br>8224 PSA | 2 x 5.00  | SEE MFR | SEE MFR                | VELCRO USA INC.       | 11153 |
| 37 | 1   | >>151394   | VELCRO, DETAIL                              | LOOP 1000,<br>BLACK,<br>8224 PSA | 2 X 6.20  | SEE MFR | SEE MFR                | VELCRO USA INC.       | 11153 |
| 38 | 2   | 151405   | VELCRO, DETAIL                              | HOOK 88, BLACK<br>8289 PSA       | 2 X 10.00 | SEE MFR | SEE MFR                | VELCRO USA INC.       | 11153 |

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