AERODYNAMIC FAIRINGS

1. DESCRIPTION

This section describes those components which make up the aerodynamic fairings. A fixed, composite wing root fairing is installed around the wing root, enclosing the space between the wing and fuselage. The fairing is installed with sealant and closeout is installed with two-sided tape.

A fixed, composite horizontal stabilizer root fairing is installed around the horizontal stabilizer root, enclosing the space between the horizontal stabilizer and tail. The fairing is installed with two-sided tape.
2. MAINTENANCE PRACTICES

A. Wing Root Fairing - *Serials 0002 thru 2437* (See Figure 53-501)

(1) Removal - Wing Root Fairing

(a) Acquire necessary tools, equipment, and supplies.

(b) Sand edges at end of wood stirring stick to a blunt, beveled edge.

(c) *Serials 0002 thru 0007, 0012 w/o closeout*: At wing root, use die grinder and cut-off wheel to cut wing root fairing along chord line to fairing outboard edge.

(d) *Serials 0008 thru 0011, 0013 & subs, 0002 & subs w/ closeout*: Remove closeout.

   1. Apply small amount of cleaner to edge of stick.
   2. Carefully press wood stirring stick edge into seam between closeout and wing root fairing. Apply cleaner to edge of stick when necessary and continue to pry along seam until closeout is separated from fairing.

CAUTION: Avoid applying any adhesive cleaner at the contact point between the fairing and wing walk as the cleaner may break down adhesive securing wing walk to wing.

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### Table 2.1: Wing Root Fairing - Tools and Equipment

<table>
<thead>
<tr>
<th>Description</th>
<th>P/N or Spec.</th>
<th>Supplier</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Die Grinder</td>
<td>-</td>
<td>Any Source</td>
<td><em>Serials 0002 thru 0007, 0012 w/o closeout</em>: Cut wing root fairing at leading edge.</td>
</tr>
<tr>
<td>Metal Cut-Off Wheel and Arbor</td>
<td>2.0 inches (50.8 mm)</td>
<td>Any Source</td>
<td><em>Serials 0002 thru 0007, 0012 w/o closeout</em>: Cut wing root fairing at leading edge.</td>
</tr>
<tr>
<td>Plastic Scraper</td>
<td>-</td>
<td>Any Source</td>
<td>Remove residue.</td>
</tr>
<tr>
<td>Wood Stirring Stick</td>
<td>1.0 inch (25.4 mm) wide x 0.25 inch (6.35 mm) thick</td>
<td>Any Source</td>
<td>Pry wing root fairing from wing.</td>
</tr>
<tr>
<td>Sandpaper</td>
<td>100 grit</td>
<td>Any Source</td>
<td>Sand beveled edge on stick.</td>
</tr>
<tr>
<td>Masking Tape</td>
<td>2.0 inches (50.8 mm)</td>
<td>Any Source</td>
<td>Restrict working area for adhesive cleaner.</td>
</tr>
<tr>
<td>General Purpose Adhesive Cleaner</td>
<td>08984</td>
<td>3M Company</td>
<td>Remove residue.</td>
</tr>
<tr>
<td>Isopropyl Alcohol</td>
<td>TT-I-735 Grade A or Grade B</td>
<td>Any Source</td>
<td>Clean installation area.</td>
</tr>
<tr>
<td>Cotton Cloth (clean and lint free)</td>
<td>-</td>
<td>Any Source</td>
<td>Clean installation area.</td>
</tr>
</tbody>
</table>

CAUTION: When cutting wing root fairing, verify blade does not penetrate too far and damage leading edge of wing or fuselage skin.

Do not damage fuselage painted finish or laminate when removing fairing.

Prolonged exposure to adhesive cleaner can damage the exterior paint finish. Wipe up any excess cleaner immediately.
(e) Apply masking tape to wing walk edge along fairing seam to protect wing walk.
(f) Apply small amount of cleaner to edge of stick.
(g) Beginning at leading edge of wing, carefully press wood stirring stick edge into seam between fairing and airplane and slowly pry fairing away from wing. Apply cleaner to edge of stick when necessary and continue to pry along seam until fairing is separated from airplane.
(h) Remove residue from fairing installation areas using scraper and cleaner.
(i) Solvent clean installation areas on fairing and wing root. (Refer to 20-30)

(2) Installation - Wing Root Fairing

(a) Acquire necessary tools, equipment, and supplies.

<table>
<thead>
<tr>
<th>Description</th>
<th>P/N or Spec.</th>
<th>Supplier</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Die Grinder</td>
<td></td>
<td>Any Source</td>
<td>Cut wing root fairing at leading edge.</td>
</tr>
<tr>
<td>Metal Cut-Off Wheel and Arbor</td>
<td>2.0 inches</td>
<td>Any Source</td>
<td>Cut wing root fairing at leading edge.</td>
</tr>
<tr>
<td></td>
<td>(50.8 mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isopropyl Alcohol</td>
<td>TT-I-735</td>
<td>Any Source</td>
<td>Clean installation area.</td>
</tr>
<tr>
<td></td>
<td>Grade A or</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grade B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cotton Cloth (clean and lint free)</td>
<td></td>
<td>Any Source</td>
<td>Clean installation area.</td>
</tr>
<tr>
<td>Two-Sided Tape</td>
<td>4946</td>
<td>3M Company</td>
<td>Secure wing root fairing.</td>
</tr>
<tr>
<td>0.5 inch (1.3 cm) wide</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.045 inch (0.114 cm) thick</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two-Sided Tape Primer</td>
<td>94</td>
<td>3M Company</td>
<td>Promote tape adhesion at fairing installation areas.</td>
</tr>
<tr>
<td>Paper Towels</td>
<td></td>
<td>Any Source</td>
<td>Apply primer to installation areas.</td>
</tr>
<tr>
<td>90° Bent Tip Pick</td>
<td></td>
<td>Any Source</td>
<td>Remove tape backing from fairing.</td>
</tr>
<tr>
<td>Sealant w/ Semkit Applicator</td>
<td>(Refer to 51-30)</td>
<td>(Refer to 51-30)</td>
<td>Seal fairing to wing root.</td>
</tr>
<tr>
<td>Masking Tape</td>
<td>2.0 inches</td>
<td>Any Source</td>
<td>Restrict working area for sealant.</td>
</tr>
<tr>
<td></td>
<td>(50.8 mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic Film Tape</td>
<td>0.5 inch</td>
<td>Any Source</td>
<td>Restrict working area for sealant and caulk.</td>
</tr>
<tr>
<td></td>
<td>(12.7 mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wax Paper</td>
<td>6 × 6 inches</td>
<td>Any Source</td>
<td>Facilitate closeout placement.</td>
</tr>
<tr>
<td></td>
<td>(15 × 15 cm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caulk Sealant</td>
<td>(Refer to 51-30)</td>
<td>(Refer to 51-30)</td>
<td>Seal closeout and aft lower fairing seam.</td>
</tr>
</tbody>
</table>

**CAUTION:** Fairing must be cut at leading edge to facilitate installation.

(b) At leading edge of fairing, use die grinder and cut-off wheel to cut wing root fairing along chord line.
(c) Solvent clean installation areas on fairing and wing root. (Refer to 20-30)
Note: Fairing may be secured with either tape, sealant, or any combination of tape and sealant.

(d) With paper towel, apply tape primer 4 inches (10 cm) outboard and 4 inches (10 cm) up from wing root.
(e) Repeat tape primer application below wing root, except apply to only 10 inches (25 cm) from leading edge and 6 inches (15 cm) from trailing edge of wing.
(f) For upper fairing surfaces, apply two-sided tape (0.025 inch thick) to backside of fairing against lip on outboard and vertical edges.
(g) Repeat two-sided tape application for lower fairing surfaces, except apply to only 10 inches (25 cm) from leading edge and 6 inches (15 cm) from trailing edge of wing.
(h) Install fairing.

CAUTION: To facilitate positioning fairing correctly, leave tape backing in place.

1. Position fairing against trailing edge of wing root and press firmly into place.
   
   CAUTION: Verify that fairing is tightly positioned vertically against the fuselage and horizontally against the wing.

2. Remove tape backing from upper, flat section of fairing.
3. Press upper fairing section firmly against length of wing root.
4. Using 90° bent tip pick, snag end of tape backing from upper, vertical surface of fairing section and pull tape backing from fairing.
5. Press upper, vertical surface of fairing firmly against length of wing root.
6. At lower fairing surfaces not secured by tape, apply film tape along edges of seam.
7. Apply masking tape to area around film tape to prevent sealant from making contact with painted finish.
8. Position fairing against trailing edge of wing root and firmly press into place vertically against the fuselage and horizontally against the wing.
9. At lower, trailing edge, use semkit applicator to gradually apply sealant approximately 0.5 inch (1.3 cm) wide to lower, vertical and horizontal surfaces, and press fairing against length of wing root while working towards leading edge.
10. Remove masking and film tape.

(i) Solvent clean installation areas on closeout. (Refer to 20-30)
(j) With paper towel, apply tape primer 4 inches (10 cm) outboard from closeout installation area.
(k) Apply two-sided tape (0.045 inch thick) to backside of closeout against lip on edges.
(l) Install closeout.

1. Cut leading edge of wing root profile from wax paper.
2. Remove tape backing from surface of closeout section.
3. Position wax paper against fuselage at leading edge of wing root.
4. Position closeout against leading edge of wing root fairing.
5. Press outboard surface of closeout firmly against wing root leading edge.
6. Press inboard surface of closeout firmly against wing root leading edge while pulling wax paper away from wing root.

(m) Apply film tape 0.1 inch (2.5 mm) from both edges of seam around closeout.
(n) Apply film tape 0.1 inch (2.5 mm) from both edges of lower aft fairing seam approximately 0.75 inch (19.0 mm) in length.
(o) Apply caulk to seam around closeout and use finger to smooth caulk uniformly in seam.
(p) Apply caulk to lower aft fairing seam and use finger to smooth caulk uniformly in seam.
(q) Allow caulk to dry overnight for best results.
(r) Install forward and aft access panels on lower fairing section.
(s) Remove film tape.
Serials 0002 thru 0007, 0012 w/o closeout: When cutting wing root fairing, ensure blade does not penetrate too far and damage leading edge of wing or fuselage skin.

Apply sealant approximately 0.5 inch (1.3 cm) wide to backside of fairing against lip on outboard and vertical edges.

Apply 2-sided tape 0.025 inch (0.060 cm) thick to backside of fairing against lip on outboard and vertical edges.

Apply 2-sided tape 0.45 inch (1.14 cm) thick to backside of closeout against lip around edges.

Apply plastic tape 0.10 inch (2.54 mm) from seam on both sides.

Sand edges at end of wood stirring stick to a blunt, beveled edge.

Maximum gap 0.50 inch (12.70 mm)

LEGEND
1. Wing Root Fairing
2. Wing Root Fairing Closeout Section
3. Wood Stirring Stick
4. Plastic Film Tape
5. 2-Sided Tape (0.025 inch thick)
6. 2-Sided Tape (0.045 inch thick)

NOTE

SR22_MM53_1672C

Figure 53-501
Wing Root Fairing and Closeout Installation - Serials 0002 thru 2437

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EFFECTIVITY:
Serials 0002 thru 2437
NOTE
Applying plastic tape 0.10 inch (2.54 mm) from seam at fairing and wing on both sides.

LEGEND
1. Wing Root Fairing
2. Wing Root Fairing Closeout Section
4. Plastic Tape
7. Masking Tape

Figure 53-502
Wing Root Fairing and Closeout Protective Taping - Serials 0002 thru 2437

Serials 0002 thru 2333, 2335 thru 2419, 2421 thru 2437.

EFFECTIVITY:
Serials 0002 thru 2437

15 Apr 2007
B. Wing Root Fairing - Serials 2438 & subs (See Figure 53-501)

(1) Removal - Wing Root Fairing

(a) Acquire necessary tools, equipment, and supplies.

<table>
<thead>
<tr>
<th>Description</th>
<th>P/N or Spec.</th>
<th>Supplier</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastic Scraper</td>
<td>-</td>
<td>Any Source</td>
<td>Remove residue.</td>
</tr>
<tr>
<td>Wood Stirring Stick</td>
<td>1.0 inch (25.4 mm) wide x 0.25 inch (6.35 mm) thick</td>
<td>Any Source</td>
<td>Pry wing root fairing from wing.</td>
</tr>
<tr>
<td>Sandpaper</td>
<td>100 grit</td>
<td>Any Source</td>
<td>Sand beveled edge on stick.</td>
</tr>
<tr>
<td>Masking Tape</td>
<td>2.0 inches (50.8 mm)</td>
<td>Any Source</td>
<td>Restrict working area for adhesive cleaner.</td>
</tr>
<tr>
<td>General Purpose Adhesive Cleaner</td>
<td>08984</td>
<td>3M Company</td>
<td>Remove residue.</td>
</tr>
<tr>
<td>Isopropyl Alcohol</td>
<td>TT-I-735 Grade A or Grade B</td>
<td>Any Source</td>
<td>Clean installation area.</td>
</tr>
<tr>
<td>Cotton Cloth (clean and lint free)</td>
<td>-</td>
<td>Any Source</td>
<td>Clean installation area.</td>
</tr>
</tbody>
</table>

CAUTION: Do not damage fuselage painted finish or laminate when removing fairing.

Prolonged exposure to adhesive cleaner can damage the exterior paint finish. Wipe up any excess cleaner immediately.

(b) Remove screws securing access panel to fairing. Remove access panel from airplane.

(c) Remove screws securing fairing to wing.

CAUTION: Avoid applying any adhesive cleaner at the contact point between the fairing and wing walk as the cleaner may break down adhesive securing wing walk to wing.

(d) Apply masking tape to wing walk edge along fairing seam to protect wing walk.

(e) Sand edges at end of wood stirring stick to a blunt, beveled edge. (See Figure 53-503)

(f) Apply small amount of cleaner to edge of stick.

(g) Beginning at trailing edge of wing, carefully press wood stirring stick edge into seam between fairing and airplane and slowly pry fairing away from wing. Apply cleaner to edge of stick when necessary and continue to pry along seam until fairing is separated from airplane.

(h) Remove residue from fairing installation areas using scraper and cleaner.

(i) Solvent clean installation areas on fairing and wing root. (Refer to 20-30)
(2) Installation - Wing Root Fairing

(a) Acquire necessary tools, equipment, and supplies.

<table>
<thead>
<tr>
<th>Description</th>
<th>P/N or Spec.</th>
<th>Supplier</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl Alcohol</td>
<td>TT-I-735 Grade A or Grade B</td>
<td>Any Source</td>
<td>Clean installation area.</td>
</tr>
<tr>
<td>Cotton Cloth (clean and lint free)</td>
<td>-</td>
<td>Any Source</td>
<td>Clean installation area.</td>
</tr>
<tr>
<td>Adhesive Promoter</td>
<td>111</td>
<td>3M Company</td>
<td>Promote tape adhesion.</td>
</tr>
<tr>
<td>Paper Towels</td>
<td>-</td>
<td>Any Source</td>
<td>Apply adhesive promoter.</td>
</tr>
<tr>
<td>Two-Sided Tape</td>
<td>4946 0.5 inch (1.3 cm) wide 0.045 inch (0.114 cm) thick</td>
<td>3M Company</td>
<td>Secure wing root fairing.</td>
</tr>
<tr>
<td>Rubber Roller</td>
<td>-</td>
<td>Any Source</td>
<td>Install two-sided tape.</td>
</tr>
<tr>
<td>Sealant w/ Semkit Applicator</td>
<td>(Refer to 51-30)</td>
<td>(Refer to 51-30)</td>
<td>Seal fairing to wing root.</td>
</tr>
<tr>
<td>Masking Tape</td>
<td>2.0 inches (50.8 mm)</td>
<td>Any Source</td>
<td>Restrict working area for sealant.</td>
</tr>
<tr>
<td>Plastic Film Tape</td>
<td>0.5 inch (12.7 mm)</td>
<td>Any Source</td>
<td>Restrict working area for sealant and caulk.</td>
</tr>
<tr>
<td>Caulk Sealant</td>
<td>(Refer to 51-30)</td>
<td>(Refer to 51-30)</td>
<td>Seal gaps along fairing seams.</td>
</tr>
</tbody>
</table>

(b) Solvent clean installation areas on fairing and wing root. *(Refer to 20-30)*

**Note:** Fairing may be secured with either tape, sealant, or any combination of tape and sealant.

(c) If installing fairing with tape, perform the following:

1. With paper towel, apply adhesive promoter to installation area on wing root.
2. Using rubber roller with moderate pressure, apply two-sided tape around perimeter of fairing.

   **CAUTION:** To facilitate positioning fairing correctly, leave tape backing in place.

3. Position fairing against leading edge of wing root and firmly press into place vertically against the fuselage and horizontally against the wing.
4. Remove tape backing from inboard and outboard edges of upper fairing.
5. Press upper fairing against length of wing root while working towards trailing edge.
6. Remove tape backing from inboard and outboard edges of lower fairing.
7. Press lower fairing against length of wing root while working towards trailing edge.

(d) If installing fairing with sealant, perform the following:

1. Apply film tape along edges of seam between fairing and wing root.
2. Apply masking tape to area around film tape to prevent sealant from making contact with painted finish.

3. Position fairing against leading edge of wing root and firmly press into place vertically against the fuselage and horizontally against the wing.

4. Use semkit applicator to gradually apply sealant approximately 0.5 inch (1.3 cm) wide to inboard and outboard edges of upper fairing.

5. Press upper fairing against length of wing root while working towards trailing edge.

6. Use semkit applicator to gradually apply sealant approximately 0.5 inch (1.3 cm) wide to inboard and outboard edges of lower fairing.

7. Press lower fairing against length of wing root while working towards trailing edge.

8. Allow sealant to cure. (Refer to 51-20)

9. Remove masking and film tape.

(e) Install screws securing fairing to wing.

**Note:** For aesthetic purposes, caulk may be used to fill gaps along fairing seams.

(f) If necessary, fill gaps along fairing seams with caulk.

1. Apply film tape 0.1 inch (2.5 mm) from edge of fairing seam.

2. Apply caulk to fairing seam and use finger to smooth caulk uniformly in seam.

3. Allow caulk to dry overnight for best results.

4. Remove film tape.

(g) Position access panel to lower fairing and secure with screws.
If securing fairing with sealant, apply sealant approximately 0.5 inch (1.3 cm) wide along fairing perimeter.

Sand edges at end of wood stirring stick to a blunt, beveled edge.

Fairing may be secured with either tape, sealant, or any combination of tape and sealant.

If securing fairing with tape, apply adhesive promoter to installation area, then apply two-sided tape around fairing perimeter.

If securing fairing with sealant, apply sealant approximately 0.5 inch (1.3 cm) wide along fairing perimeter.
C. Repair

(1) Repair - Wing Root Fairing

If a bubble forms between the fairing and any wing root surface, perform the following procedure.

(a) Acquire necessary tools, equipment, and supplies.

<table>
<thead>
<tr>
<th>Description</th>
<th>P/N or Spec.</th>
<th>Supplier</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Putty Knife</td>
<td>-</td>
<td>Any Source</td>
<td>Remove any residue.</td>
</tr>
<tr>
<td>Isopropyl Alcohol</td>
<td>TT-I-735 Grade A or Grade B</td>
<td>Any Source</td>
<td>Clean installation area.</td>
</tr>
<tr>
<td>Cotton Cloth (clean and lint free)</td>
<td>-</td>
<td>Any Source</td>
<td>Clean installation area.</td>
</tr>
<tr>
<td>Sealant w/ Semkit Applicator</td>
<td>(Refer to 51-30)</td>
<td>(Refer to 51-30)</td>
<td>Seal fairing to wing root.</td>
</tr>
<tr>
<td>Masking Tape</td>
<td>2.0 inches (50.8 mm)</td>
<td>Any Source</td>
<td>Restrict working area for seal-ant.</td>
</tr>
<tr>
<td>Plastic Film Tape</td>
<td>0.5 inch (12.7 mm)</td>
<td>Any Source</td>
<td>Restrict working area for seal-ant.</td>
</tr>
<tr>
<td>Wood Stirring Stick</td>
<td>1.0 inch (25.4 mm) wide x 0.25 inch (6.35 mm) thick</td>
<td>Any Source</td>
<td>Pry wing root fairing from wing.</td>
</tr>
</tbody>
</table>

(b) Apply film tape along edges of seam.
(c) Apply masking tape to area around film tape to prevent sealant from making contact with painted finish.
(d) Sand edges at end of wood stirring stick to a blunt, beveled edge.
(e) Carefully press wood stirring stick edge into seam between fairing and wing root at bubble location to create a working area for sealant application.

CAUTION: When removing excess tape with putty knife, verify blade does not penetrate too far and damage wing or fuselage skin.

(f) If necessary, use putty knife at working area where bubble has occurred to remove tape between fairing and wing root surface.
(g) Apply sealant between working area of fairing and wing root surface.
(h) Press fairing firmly to wing root at working area.
(i) Remove masking and film tape.
D. Horizontal Stabilizer Root Fairing (See Figure 53-504)

(1) Removal - Horizontal Stabilizer Root Fairing
   (a) Acquire necessary tools, equipment, and supplies.

<table>
<thead>
<tr>
<th>Description</th>
<th>P/N or Spec.</th>
<th>Supplier</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastic Scraper</td>
<td></td>
<td>Any Source</td>
<td>Remove tape residue.</td>
</tr>
<tr>
<td>General Purpose Adhesive Cleaner</td>
<td>08984</td>
<td>3M Company</td>
<td>Remove tape residue.</td>
</tr>
<tr>
<td>Cotton Cloth (clean and lint free)</td>
<td></td>
<td>Any Source</td>
<td>Remove tape residue.</td>
</tr>
</tbody>
</table>

Note: Fairing is not re-usable.

CAUTION: Do not damage the empennage painted finish or laminate when removing fairing.

   (b) Beginning at trailing edge of horizontal stabilizer, pull fairing away from stabilizer and remove fairing from airplane.
   (c) Remove tape residue from fairing installation areas using scraper and solvent.

(2) Installation - Horizontal Stabilizer Root Fairing
   (a) Acquire necessary tools, equipment, and supplies.

<table>
<thead>
<tr>
<th>Description</th>
<th>P/N or Spec.</th>
<th>Supplier</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl Alcohol</td>
<td>TT-I-735</td>
<td>Any Source</td>
<td>Clean installation area.</td>
</tr>
<tr>
<td></td>
<td>Grade A or</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grade B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cotton Cloth (clean and lint free)</td>
<td></td>
<td>Any Source</td>
<td>Clean installation area.</td>
</tr>
<tr>
<td>Two-Sided Tape 0.5 inch (1.3 cm) wide</td>
<td>4951</td>
<td>3M Company</td>
<td>Secure horizontal stablizer fairing.</td>
</tr>
<tr>
<td>0.045 inch (1.143 cm) thick</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two-Sided Tape Primer</td>
<td>94</td>
<td>3M Company</td>
<td>Promote tape adhesion at fairing installation areas.</td>
</tr>
<tr>
<td>Paper Towels</td>
<td></td>
<td>Any Source</td>
<td>Apply primer to installation areas.</td>
</tr>
<tr>
<td>Awl Straight Pick</td>
<td></td>
<td>Any Source</td>
<td>Create pilot hole in fairing.</td>
</tr>
<tr>
<td>Drill Bit #7 (5.08 mm)</td>
<td></td>
<td>Any Source</td>
<td>Drill hole in fairing for drainage.</td>
</tr>
<tr>
<td>90° Bent Tip Pick</td>
<td></td>
<td>Any Source</td>
<td>Remove tape backing from fairing.</td>
</tr>
</tbody>
</table>

(b) Solvent clean installation areas on fairing and horizontal stabilizer. (Refer to 20-30)
(c) With paper towel, apply tape primer 4 inches (10 cm) outboard and 4 inches (10 cm) up from stabilizer root.
(d) Apply two-sided tape to backside of fairing against lip on outboard and vertical edges.
(e) Drill drain hole location on fairing.

**CAUTION:**
To facilitate positioning fairing correctly, remove 3 inches (76 mm) of tape backing from the leading edge of fairing. Leave remaining tape backing in place.

1 At 3 inches (76 mm) from leading edge, score and remove tape backing from leading edge of fairing.

**CAUTION:**
Verify that fairing is tightly positioned vertically against the tail and horizontally against the stabilizer.

2 Position fairing against leading edge of horizontal stabilizer root and firmly press into place.
3 At horizontal trailing edge, slightly pull trailing edge of fairing away from stabilizer to determine drain location and punch through fairing with awl so that hole is within ± 0.20 inch (5.08 mm) of stabilizer drain hole.
4 Using #7 (5.08 mm) bit, drill hole in fairing.

(f) Secure fairing.
1 Remove tape backing from lower, flat section of fairing.

**CAUTION:**
Verify drilled hole is aligned with stabilizer drain hole and that no tape is obstructing drain hole.

2 Align drain holes and press lower fairing section firmly against length of horizontal stabilizer root.
3 Using 90° bent tip pick, snag end of tape backing from lower, vertical surface of fairing section and pull tape backing from fairing.
4 Press lower, vertical surface of fairing firmly against length of horizontal stabilizer root.
5 Remove tape backing from upper, flat section of fairing.
6 Press upper fairing section firmly against length of horizontal stabilizer root.
7 Using 90° bent tip pick, snag end of tape backing from upper, vertical surface of fairing section and pull tape backing from fairing.
8 Press upper, vertical surface of fairing firmly against length of horizontal stabilizer root.

(g) **Serials 0334 & subs w/ Ice Protection System:** If gap exists between the horizontal stabilizer porous panel and fairing, perform the following step.
1 Acquire necessary tools, equipment, and supplies.

<table>
<thead>
<tr>
<th>Description</th>
<th>P/N or Spec.</th>
<th>Supplier</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sealant w/ Semkit Applicator</td>
<td>(Refer to 51-30)</td>
<td>(Refer to 51-30)</td>
<td>Seal fairing seam.</td>
</tr>
<tr>
<td>Masking Tape</td>
<td>2.0 inches (50.8 mm)</td>
<td>Any Source</td>
<td>Restrict working area for seal-ant.</td>
</tr>
<tr>
<td>Plastic Film Tape</td>
<td>0.5 inch (12.7 mm)</td>
<td>Any Source</td>
<td>Restrict working area for seal-ant.</td>
</tr>
<tr>
<td>Plastic Scraper</td>
<td>-</td>
<td>Any Source</td>
<td>Smooth sealant at seam.</td>
</tr>
</tbody>
</table>
2. Apply film tape along edges of seam.
3. Apply masking tape to area around film tape to prevent sealant from making contact with painted finish.
4. Apply sealant to seam at leading edge of fairing.
5. Use plastic scraper to smooth sealant uniformly in seam.
NOTE

⚠️ Do not remove tape backing from upper and lower sections prior to match drilling drainage hole.

⚠️ At 3 inches (76 mm) from leading edge, score tape backing at upper and lower sections of fairing.

⚠️ Apply 2-sided tape to backside of fairing against lip on outboard and vertical edges.

LEGEND

1. Horizontal Stabilizer Fairing

DETAIL A

1. MASKING TAPE
2. PLASTIC FILM TAPE
3. UPPER SECTION

DETAIL B

ICE PANEL
PLASTIC FILM TAPE
MASKING TAPE
SEAM
PLASTIC FILM TAPE
PLASTIC FILM TAPE

NOTE

Do not remove tape backing from upper and lower sections prior to match drilling drainage hole.

At 3 inches (76 mm) from leading edge, score tape backing at upper and lower sections of fairing.

Apply 2-sided tape to backside of fairing against lip on outboard and vertical edges.