Personal Fall Arrest System

EUROPE, MIDDLE EAST AFRICA & ASIA
PHONE: +44 (0) 845 1550 058
FAX: +44 (0) 845 1557 756

NORTH & SOUTH AMERICA
PHONE: +1 785 989 3000
TOLL FREE: +1 800 255 0317
FAX: +1 785 989 3070

AUSTRALIA
PHONE: +61 1300 700 450
FAX: +61 2 9609 3057

NEW ZEALAND
PHONE: +64 6 3689 168
FAX: +64 6 3689 164

Local Distributor / Lokaler Vertiebshändler / Distributeur local
El Distribuidor local / Il Distributore locale

User's Manual
Part Number 0182150
January 2014 (Replaces July 2013)
Personal Fall Arrest System Parts

Kit Part Number 0182146

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>0182138</td>
<td>Bracket, PFAS Lanyard Mount</td>
</tr>
<tr>
<td>2</td>
<td>16</td>
<td>0182139</td>
<td>Clamp, PFAS Lanyard Mount</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>0182140</td>
<td>Doubler, PFAS Lanyard Mount</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
<td>0182147</td>
<td>Decal, Do Not Lift</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>0182149</td>
<td>Decal, Danger PFAS Falling Hazard</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>0360891</td>
<td>Bracket, PFAS Lanyard Attachment</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>0360892</td>
<td>Tie Down, D-ring</td>
</tr>
<tr>
<td>8</td>
<td>24</td>
<td>986299</td>
<td>Washer, Flat .375</td>
</tr>
<tr>
<td>9</td>
<td>24</td>
<td>5560033</td>
<td>Nut, Hex Locking .375-16</td>
</tr>
<tr>
<td>10</td>
<td>4</td>
<td>5563028</td>
<td>U-Bolt, .375-16 x 1.5D</td>
</tr>
<tr>
<td>11</td>
<td>16</td>
<td>5563029</td>
<td>Bolt, Hex Head .375-16 3.25 GR8</td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>0182150</td>
<td>PFAS User’s Manual</td>
</tr>
</tbody>
</table>

For additional information contact your local dealer or Snorkel at:
Snorkel International
P.O. Box 1160
St. Joseph, MO 64502-1160 USA
1-800-255-0317
http://www.snorkellifts.com
Personal Fall Arrest System Kit

Installation
The PFAS components must be installed and tested by a Snorkel International approved representative.

The PFAS must only be installed on approved bump rail platforms with walk through swinging gates.

The PFAS must only be installed on approved bump rail platforms. Snorkel recommends that the PFAS be installed on platforms with walk through swinging gates, however, with proper training and care, platforms with gravity gates may be used for PFAS installation.

1. Position a lanyard mounting bracket (0182138) at one corner of the platform. Loosely fasten it to the inner top rail using a U-bolt (5563028), doubler (0182140), and a washer (986299) and nut (5560033) on each leg of the U-bolt. Refer to Figure 1.

2. Slide a tie-down D-ring (0360892) over a lanyard attachment bracket (0360891) as shown in Figure 2.

3. Loosely mount this assembly to the lanyard mounting bracket using four each of the bolts (5563029), clamps (0182139), washers (986299) and nuts (5560033) as shown in Figure 3.

4. Position the lanyard mounting bracket and hardware to fit the handrails so the assembly fit without any twisting or side loads when the nuts are properly torqued.

5. Torque the two U-bolt nuts to 180 in lb. Torque the four mounting bracket nuts to 37 in lb.

6. Repeat Steps 1 through 5 for each corner of the platform.

Personal Fall Arrest System Features

Personal Fall Arrest System
The personal fall arrest system (PFAS) allows an approved Snorkel International aerial platform to function as an anchorage for a Personal Fall Arrest System. The PFAS allows personnel to work outside the platform on a wing, fuselage, or other surface where it is not practical to use other means of fall protection.

The PFAS includes the following:
• Four brackets with D-ring anchorages.
• Mounting hardware.
• User’s Manual with safety, operator’s and parts information.

If the PFAS was not installed at the factory, refer to page 4, Personal Fall Arrest System Kit.

Important Safety Information

Safety Practices
The following safety practices may be used as a guide while using the PFAS on the job. The operator bears ultimate responsibility for following all manufacturer’s instructions and warnings, regulations and safety rules of their employer and/or any state or federal law.

Platform Compatibility
The PFAS must only be installed on approved bump rail platforms. Snorkel recommends that the PFAS be installed on platforms with walk through swinging gates, however, with proper training and care, platforms with gravity gates may be used for PFAS installation.

Safety Alerts
A safety alert symbol is used in this manual to indicate danger, warning, and caution instructions. Follow these instructions to reduce the likelihood of personal injury and property damage. The terms danger, warning, and caution indicate varying degrees of personal injury or property damage that can result if the instruction is not followed.

⚠️Danger
Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is to be used in the most extreme situations.

⚠️Warning
The potential for an accident increases when the aerial platform and associated equipment is operated by personnel who are not trained and authorized. Death or serious injury can result from such accidents. Do not operate the PFAS when personnel are outside the platform, tied-off to the PFAS anchorages.

Training is essential and must be performed by a qualified person. Become proficient in knowledge and actual operation before using this manual and on the placards and decals on the machine before operating the aerial platform and using the PFAS on the job.

Operator Responsibilities
The PFAS has been factory tested for compliance with Snorkel specifications and industry standards. However, its use can be potentially dangerous in the hands of untrained or careless operators.

Training is essential and must be performed by a qualified person. Become proficient in knowledge and actual operation before using the PFAS on the job. You must be trained and authorized to perform any functions of the aerial platform. Use of the PFAS must be within the scope of the manufacturer’s specifications.

⚠️Warning
The potential for an accident increases when proper safety procedures are not followed while using the PFAS. Death or serious injury can result from such accidents. Do not operate any machine functions while personnel are outside the platform, tied-off to the PFAS anchorages.

Machine functions shall not be operated at any time while personnel are external to the platform and anchored to the PFAS anchorages.
**Important Safety Information**

⚠️ **Warning**
The potential for an accident increases when proper safety procedures are not followed while using the PFAS. Death or serious injury can result from such accidents. Read, understand, and follow the safety information in this manual and in the aerial lift Operator’s Manual to help prevent injury.

The operator bears ultimate responsibility for following all manufacturer’s instructions and warnings, regulations and safety rules of their employer and/or any state or federal law.

**Maintenance**

Every person who maintains, inspects, tests, or repairs the PFAS components must be qualified to do so. Daily inspection will help keep the components in optimum working condition. Other maintenance functions must be performed by qualified maintenance personnel.

Do not modify this PFAS and its associated components without prior written consent of the Snorkel Engineering Department. Modification may void the warranty, adversely affect stability, or affect the operational characteristics of the aerial platform.

Placards and Decals

Include the PFAS placards and decals in the daily Prestart Inspection of the machine. Make certain they are in place, in good condition, and are legible.

The placards and decals may be cleaned with soap and water, and a soft cloth if the words or pictures cannot be seen.

⚠️ **Caution**

Solvents may contain hazardous ingredients. Follow the manufacturer’s label for proper use and disposal. Wear protective gloves and splash-proof safety glasses when using solvents.

Wet paint overspray may be removed using a natural biodegradable solvent and a soft cloth.

Replace any missing or illegible placards or decals before operating the aerial platform. Placard and decal kits are available from Snorkel.

The PFAS placards and decals are illustrated below.

### Personal Fall Arrest System Use

The PFAS option consists of personal fall arrest lanyard anchorages on each of the four upper outside corners of the aerial platform guardrail system.

All personnel must be connected to an approved anchorage at all times, while using a double leg, 100% tie-off, shock absorbing lanyard that limits arresting force to 900 pounds.

⚠️ **Warning**

The potential for an accident increases when proper safety procedures are not followed while using the PFAS. Death or serious injury can result from such accidents. Do not operate any machine functions while personnel are outside the platform, tied-off to the PFAS anchorages.

Machine functions shall not be operated at any time while personnel are external to the platform and anchored to the PFAS anchorages.

Only one operator at a time may be outside of the platform and must be anchored to any of the four PFAS anchorages using a double leg shock absorbing lanyard. The weight of the operator anchored to the PFAS anchor must not exceed 310 lbs. The operator must transition from one corner anchorage to another by first attaching the second leg of their lanyard to the new position before disconnecting the first leg from the current position.

The operator must have at least one leg of their lanyard attached to any of the four PFAS anchorages, or a fall restraint anchorage inside the platform, at all times.

The operator bears ultimate responsibility for ensuring that the aerial platform is properly set up for the particular conditions encountered.

The Snorkel PFAS must be used under the supervision of a qualified person for PFAS use. A qualified person is anyone who:

1. Has been trained by Snorkel International.
2. Is an approved Snorkel International representative.
3. Has been trained by an approved Snorkel International representative.
4. Has been trained and qualified by anyone who meets the requirements of 1, 2, or 3.

The platform must be positioned so the PFAS anchorages are at, or above the height of the fall arrest harness lanyard attachment.

While inside the platform, all personnel must use the fall restraint system. Fall restraint anchorages are located inside the platform and are commonly located below the upper control box.

Only one person at a time is allowed outside the platform, tied-off to the PFAS anchorages.

⚠️ **Danger**

The aerial platform will tip over if it becomes unstable. Death or serious injury will result from a tip-over accident. Do not exceed the capacity values indicated on the platform rating placard.

The weight of the operator anchored to the PFAS anchor must not exceed 310 lbs.

The total weight of the personnel outside of the platform, other personnel and material inside the platform, must not exceed the rated platform capacity.

Other than while transferring from one anchorage to another:

- Only one leg of the lanyard shall be attached to any single PFAS anchorage.
- No personnel shall be tied-off to the fall restraint anchorage inside the platform while they are outside of the platform.

PFAS anchorages are only to be used for attaching shock absorbing lanyards and are not for lifting or tying the machine down during transport.
### Important Safety Information

**Warning**
The potential for an accident increases when proper safety procedures are not followed while using the PFAS. Death or serious injury can result from such accidents. Read, understand, and follow the safety information in this manual and in the aerial lift Operator’s Manual to help prevent injury.

The operator bears ultimate responsibility for following all manufacturer’s instructions and warnings, regulations and safety rules of their employer and/or any state or federal law.

**Maintenance**
Every person who maintains, inspects, tests, or repairs the PFAS components must be qualified to do so. Daily inspection will help keep the components in optimum working condition. Other maintenance functions must be performed by qualified maintenance personnel.

Do not modify this PFAS and its associated components without prior written consent of the Snorkel Engineering Department. Modification may void the warranty, adversely affect stability, or affect the operational characteristics of the aerial platform.

Placards and Decals
Include the PFAS placards and decals in the daily Prestart Inspection of the machine. Make certain they are in place, in good condition, and are legible.

The placards and decals may be cleaned with soap and water, and a soft cloth if the words or pictures cannot be seen.

**Caution**
Solvents may contain hazardous ingredients. Follow the manufacturer’s label for proper use and disposal. Wear protective gloves and splash-proof safety glasses when using solvents.

Wet paint overspray may be removed using a natural biodegradable solvent and a soft cloth.

Replace any missing or illegible placards or decals before operating the aerial platform. Placard and decal kits are available from Snorkel.

The PFAS placards and decals are illustrated below.

**Personal Fall Arrest System Use**

The PFAS option consists of personal fall arrest lanyard anchorages on each of the four upper outside corners of the aerial platform guardrail system.

All personnel must be connected to an approved anchorage at all times, while using a double leg, 100% tie-off, shock absorbing lanyard that limits arresting force to 900 pounds.

**Danger**
The aerial platform will tip over if it becomes unstable. Death or serious injury will result from a tip-over accident. Do not position the aerial platform for PFAS use on soft, uneven, or sloping surfaces.

**Warning**
The potential for an accident increases when proper safety procedures are not followed while using the PFAS. Death or serious injury can result from such accidents. Do not operate any machine functions while personnel are outside the platform, tied-off to the PFAS anchorages.

Machine functions shall not be operated at any time while personnel are external to the platform and anchored to the PFAS anchorages.

Only one person at a time may be outside of the platform, tied-off to the PFAS anchorages.

The Snorkel PFAS must be used under the supervision of a qualified person for PFAS use. A qualified person is anyone who:

1. Has been trained by Snorkel International.
2. Is an approved Snorkel International representative.
3. Has been trained by an approved Snorkel International representative.
4. Has been trained and qualified by anyone who meets the requirements of 1, 2, or 3.

The platform must be positioned so the PFAS anchorages are at, or above the height of the fall arrest harness lanyard attachment.

While inside the platform, all personnel must use the fall restraint system. Fall restraint anchorages are located inside the platform and are commonly located below the upper control box.

Only one person at a time is allowed outside the platform, tied-off to the PFAS anchorages.

**Danger**
The aerial platform will tip over if it becomes unstable. Death or serious injury will result from a tip-over accident. Do not exceed the capacity values indicated on the platform rating placard.

The weight of the operator anchored to the PFAS anchor must not exceed 310 lbs.

The total weight of the personnel outside of the platform, other personnel and material inside the platform, must not exceed the rated platform capacity.

Other than while transferring from one anchorage to another:

- Only one leg of the lanyard shall be attached to any single PFAS anchorage.
- No personnel shall be tied-off to the fall restraint anchorage inside the platform while they are outside of the platform.

PFAS anchorages are only to be used for attaching shock absorbing lanyards and are not for lifting or tying the machine down during transport.

-
**Personal Fall Arrest System Kit**

The PFAS components must be installed and tested by a Snorkel International approved representative.

The PFAS must only be installed on approved bump rail platforms with walk through swinging gates.

1. Position a lanyard mounting bracket (0182138) at one corner of the platform. Loosely fasten it to the inner top rail using a U-bolt (5563028), doubler (0182140), and a washer (986299) and nut (5560033) on each leg of the U-bolt. Refer to Figure 1.

2. Slide a tie-down D-ring (0360892) over a lanyard attachment bracket (0360891) as shown in Figure 2.

3. Loosely mount this assembly to the lanyard mounting bracket using four each of the bolts (5563029), clamps (0182139), washers (986299) and nuts (5560033) as shown in Figure 3.

4. Position the lanyard mounting bracket and hardware to fit the handrails so the assembly fit without any twisting or side loads when the nuts are properly torqued.

5. Torque the two U-bolt nuts to 180 in lb. Torque the four mounting bracket nuts to 37 in lb.

6. Repeat Steps 1 through 5 for each corner of the platform.

**Personal Fall Arrest System Features**

The PFAS includes the following:
- Four brackets with D-ring anchorages.
- Mounting hardware.
- User’s Manual with safety, operator’s and parts information.

If the PFAS was not installed at the factory, refer to page 4, Personal Fall Arrest System Kit.

**Safety Practices**

The following safety practices may be used as a guide while using the PFAS on the job. The operator bears ultimate responsibility for following all manufacturer’s instructions and warnings, regulations and safety rules of their employer and/or any state or federal law.

**Platform Compatibility**

The PFAS must only be installed on approved bump rail platforms. Snorkel recommends that the PFAS be installed on platforms with walk through swinging gates, however, with proper training and care, platforms with gravity gates may be used for PFAS installation.

**Safety Alerts**

A safety alert symbol is used in this manual to indicate danger, warning, and caution instructions. Follow these instructions to reduce the likelihood of personal injury and property damage. The terms danger, warning, and caution indicate varying degrees of personal injury or property damage that can result if the instruction is not followed.

**Danger**

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is to be used in the most extreme situations.

**Warning**

The potential for an accident increases when the platform and associated equipment is operated by personnel who are not trained and authorized. Death or serious injury can result from such accidents. Do not operate any machine functions while personnel are outside the platform, tied-off to the PFAS anchorages.

Training is essential and must be performed by a qualified person. Become proficient in knowledge and actual operation before using the PFAS on the job. You must be trained and authorized to perform any functions of the aerial platform. Use of the PFAS must be within the scope of the manufacturer’s specifications.

**Caution**

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

**Operator Responsibilities**

The PFAS has been factory tested for compliance with Snorkel specifications and industry standards. However, its use can be potentially dangerous in the hands of untrained or careless operators.

The potential for an accident increases when proper safety procedures are not followed while using the PFAS. Death or serious injury can result from such accidents. Do not operate any machine functions while personnel are outside the platform, tied-off to the PFAS anchorages.
Personal Fall Arrest System Parts

Kit Part Number 0182146

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>0182138</td>
<td>Bracket, PFAS Lanyard Mount</td>
</tr>
<tr>
<td>2</td>
<td>16</td>
<td>0182139</td>
<td>Clamp, PFAS Lanyard Mount</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>0182140</td>
<td>Doubler, PFAS Lanyard Mount</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
<td>0182147</td>
<td>Decal, Do Not Lift</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>0182149</td>
<td>Decal, Danger PFAS Falling Hazard</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>0360891</td>
<td>Bracket, PFAS Lanyard Attachment</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>0360892</td>
<td>Tie Down, D-ring</td>
</tr>
<tr>
<td>8</td>
<td>24</td>
<td>986299</td>
<td>Washer, Flat .375</td>
</tr>
<tr>
<td>9</td>
<td>24</td>
<td>5560033</td>
<td>Nut, Hex Locking .375-16</td>
</tr>
<tr>
<td>10</td>
<td>4</td>
<td>5563028</td>
<td>U-Bolt, .375-16 x 1.5D</td>
</tr>
<tr>
<td>11</td>
<td>16</td>
<td>5563029</td>
<td>Bolt, Hex Head .375-16 3.25 GR8</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>0182150</td>
<td>PFAS User’s Manual</td>
</tr>
</tbody>
</table>

For additional information contact your local dealer or Snorkel at:

Snorkel International
P.O. Box 1160
St. Joseph, MO 64502-1160 USA
1-800-255-0317

http://www.snorkellifts.com
Local Distributor / Lokaler Vertiebshändler / Distributeur local
El Distribuidor local / Il Distributore locale

Snorkel
EUROPE, MIDDLE EAST
AFRICA & ASIA
PHONE: +44 (0) 845 1550 058
FAX: +44 (0) 845 1557 756

NORTH & SOUTH AMERICA
PHONE: +1 785 989 3000
TOLL FREE: +1 800 255 0317
FAX: +1 785 989 3070

AUSTRALIA
PHONE: +61 1300 700 450
FAX: +61 2 9609 3057

NEW ZEALAND
PHONE: +64 6 3689 168
FAX: +64 6 3689 164

User’s Manual
Part Number 0182150
January 2014 (Replaces July 2013)