## TEAM WENDY® EXFIL® CARBON

USER GUIDE



#### DESCRIPTIONS AND CAPABILITIES

| PERFORMANCE STANDARDS AND CERTIFICATIONS              | 5  |
|---|----|
| EQUIPMENT CAPABILITIES, CHARACTERISTICS AND FEATURES  | 6  |
| MAJOR SUBSYSTEMS                                      | 7  |
| SUSPENSION SUBSYSTEM                                  | 9  |
| ACCESSORY RAIL SUBSYSTEM FEATURES                     | 10 |
| SECTION 2 OPERATOR INSTRUCTIONS                       |    |
| DONNING / REMOVING THE HELMET AND ADJUSTING RETENTION | 12 |
| SIZING BY HEAD CIRCUMFERENCE                          | 15 |
| SIZING AND FITTING INSTRUCTIONS                       | 15 |
| INSTALLING / REMOVING COMFORT PADS                    | 16 |
| OVERHEAD COMMUNICATIONS FITTING                       | 16 |

#### MAINTENANCE PROCEDURES

| STORAGE INSTRUCTIONS                | 19 |
|-------------------------------------|----|
| INSPECTION AND REPLACEMENT SCHEDULE | 19 |
| OPERATOR'S INSPECTION CHECKLIST     | 19 |
| WASHING INSTRUCTIONS                | 21 |

#### SECTION 4

#### REPLACEMENT INSTRUCTIONS

| RETENTION SUBSYSTEM REPLACEMENT      | 24 |
|--------------------------------------|----|
| SUSPENSION SUBSYSTEM REPLACEMENT     | 25 |
| ACCESSORY RAIL SUBSYSTEM REPLACEMENT | 26 |
| SHROUD SUBSYSTEM REPLACEMENT         | 28 |

#### **■ NOTE**

For any topics not outlined in this guide, including warranty information, please visit TeamWendy.com.

# DESCRIPTIONS AND CAPABILITIES



#### **Performance Standards and Certifications**

- BS EN 1385:2012 (Whitewater)
- Exceeds ACH Blunt Impact Protection requirement per AR/PD10-02, 16Dec'13

#### DESCRIPTIONS AND CAPABILITIES

#### Equipment Capabilities, Characteristics and Features

The Team Wendy® EXFIL® Carbon is made of a lightweight carbon fiber shell and offers a stable, comfortable platform for mounting night vision devices and other accessories while providing a high level of impact protection.

The helmet features a Wilcox® W shroud for night vision mounts. It comes preinstalled with a Zorbium® Foam Liner and adjustable comfort pads for optimal fit. Its CAM FIT™ Retention System features easily adjustable Cam Lock sliders and a microadjustable BOA® Fit System. It is compatible with tactical communication headsets.

The Team Wendy® EXFIL® Rail 3.0 accessory mounting system features Tslots for custom mounting and has a built-in Picatinny at its front for more efficient use of the accessory rail. The Team Wendy® EXFIL® Rail 3.0 is compatible with all Team Wendy® EXFIL® accessories and also provides integrated visor and shield mounting capability.

Review any compatibility restrictions for the accessory you would like to mount on its respective product page on TeamWendy.com.

#### DESCRIPTIONS AND CAPABILITIES

#### **Major Subsystems**

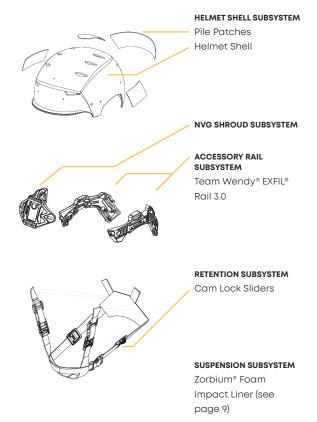
The Team Wendy® EXFIL® Carbon is composed of the following major subsystems, which are illustrated on page 8:

- Helmet Shell Subsystem
- NVG Shroud Subsystem
- Accessory Rail Subsystem, also referred to as adapter rails
- Retention Subsystem, containing a chinstrap and headband fit system
- Suspension Subsystem, containing an impact liner and set of adjustable comfort pads

#### **↑** WARNING

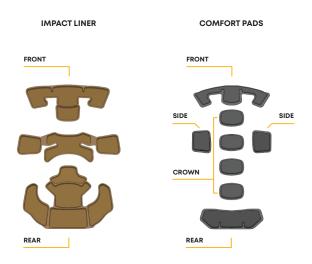
Do not remove the suspension impact liner for any reason other than washing or replacement. Helmets are tested with the liner in its preinstalled configuration. Wearing the Team Wendy\* EXFIL\* Carbon without a properly installed impact liner could result in serious injury or death. The exception to this warning is discussed in the section titled Overhead Communications Fitting on page 16.

#### **Major Subsystems**

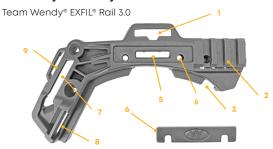


#### **Suspension Subsystem**

The Zorbium® Foam Liner utilizes the same Zorbium® foam that has been proven in the ZAP™ 7-Pad NSN Liner System for the standard-issue ACH, packaged into a 3-piece impact liner with a removable center channel to better accommodate overhead communication headbands. The liner system, which features an antimicrobial wicking fabric, also contains a series of adjustable comfort pads that allow the operator to customize fit and minimize pressure points.



#### **Accessory Rail Subsystem Features**



- Quick release mounting slot. Used for Team Wendy® EXFIL® Picatinny Quick Release Rail Adapter and Team Wendy® EXFIL® Peltor™ Quick Release Adapters.
- Integrated Picatinny rail for use with Team Wendy® EXFIL® Ballistic Visor and EXFIL® Face Shield. Can also be used in conjunction with rail mounted lights and accessories.
- Locating feature for the Team Wendy® EXFIL® Mandibles.
- Captured nuts (#10-32 thread) for mounting accessories, such as

- Magpul® MOE® rails or Princeton Tec® Charge MPLS
- Locating feature for Team Wendy® EXFIL® Picatinny Quick Release Rail Adapter.
- Team Wendy® EXFIL® W Spacer Plate. Covers features when not in use.
- T-slot. Use weld nuts to secure ESS Pivot™ Rail Mounts.
- Buckle housing for centerrelease buckles. Used for the Team Wendy® EXFIL® Oxygen Mask Strap Kit.
- Webbing slot for securing objects to the back of the helmet, such as a counterweight.

# OPERATOR INSTRUCTIONS

#### OPERATOR INSTRUCTIONS

## Donning / Removing the Helmet and Adjusting Retention

This section provides instructions for donning and removing the Team Wendy® EXFIL® Carbon, including adjusting the retention chinstrap and headband fit system.

**Step 1:** Prior to donning, visually inspect the suspension pads and retention system to make sure they appear to be in operational condition. Make sure the chin cup release buckle is unbuckled.

**Step 2:** Prepare the headband system by releasing any tension on the straps. If the dial is in the locked position, pull the dial head directly outward until it clicks to release the locking mechanism. Pull headband sleeves and nape pad outward to expand the circumference of the headband.





#### OPERATOR INSTRUCTIONS

Step 3: Position the helmet on top of the head.

**Step 4:** While wearing the helmet, press the dial head directly inward to engage the locking mechanism. Twist clockwise to tighten the headband as desired. The headband should pass just above the operator's ears. Adjust the fabric sleeve to cover as much of the cable as possible.





#### **■ NOTE**

To remove the Team Wendy® EXFIL® Carbon, unbuckle the chinstrap release buckle and release the dial from the locked position by pulling the dial directly outward until it clicks. Then lift the helmet up and away from the head.

#### OPERATOR INSTRUCTIONS

**Step 5:** Adjust the position of the retention chin cup by adjusting the length of the four attached webbing straps. To adjust the strap length, lift up on the tab of the Cam Lock slider so that it rotates out of the locked position. Grip the tab and pull the buckle in the desired direction. Secure the position of the slider by pushing down on the tab until it snaps into the locked position, which is flat against the surface of the webbing. Repeat as necessary for all Cam Lock sliders. Be sure to adjust the strap length while donning the helmet to fit appropriately.





**Step 6:** Buckle the chin cup release buckle. If necessary, repeat the strap adjustment process in step 5 until proper fit is achieved. The retention system chinstrap and headband should be tightened enough to secure the helmet to the head. They should not be so tight as to cause discomfort. The operator should be able to comfortably move the head and open the jaw to speak.

#### OPERATOR INSTRUCTIONS

#### Sizing by Head Circumference

| HEAD CIRCUMFERENCE | SIZE 1 (M/L) | SIZE 2 (XL) |
|--------------------|--------------|-------------|
| CENTIMETERS        | 53 - 58      | up to 63    |
|                    |              |             |
| INCHES             | 20.75 - 23.0 | up to 24.75 |

#### Sizing and Fitting Instructions

This section provides instructions for selecting a helmet and properly fitting it to the operator's head. Throughout the measuring and fitting procedure, evaluations should take place with the operator in an upright standing position and looking directly forward.

#### Step 1: Select preliminary helmet size based on

**measurement.** Wrap a tape measure around the head, just above the eyebrows and around the back of the head at its widest circumference. Record the measurement. Select a preliminary helmet size (size 1 or size 2) for test fitting using the information in the above sizing chart.

Step 2: Don the helmet. Don the helmet by following the instructions in the Donning and Removing the Helmet section, including the retention chinstrap and headband. If the helmet fit is too tight or too loose, consult the helmet sizing chart above to see if your head circumference is within

the range of the next smaller or next larger helmet size. If so, exchange the helmet for the alternate size.

#### **Installing / Removing Comfort Pads**

Each comfort pad has a hook panel permanently adhered to the back of the pad. Install a comfort pad by pressing the hook panel against the brown loop fabric of the suspension system impact liner pad. Remove a comfort pad by peeling the hook panel off the impact liner pad.

#### **Overhead Communications Fitting**

Under normal operating circumstances, none of the impact liner system (three brown pads) may be removed. Operating the helmet with the impact liner removed may result in serious injury or death.

An exception may be made only in the situation where the operator must wear a communications headset which includes an overhead strap. In this situation it is allowable for the operator to remove the center pad of the impact liner. However, it is recommended that the operator first attempt to accommodate the overhead strap by adjusting only the comfort pad position.



# MAINTENANCE PROCEDURES

#### MAINTENANCE PROCEDURES

#### Storage Instructions

Store the Team Wendy® EXFIL® Carbon in a temperature and humidity controlled location where temperature is within 15-27°C (60-80°F) and humidity is within 30-65% Relative Humidity. Avoid exposure to UV radiation, including sunlight.

#### Inspection and Replacement Schedule

Replace the suspension padding system after every six (6) months of continuous use. Inspect all components frequently for signs of damage using the Inspection Checklist. Replace damaged components as soon as possible.

A helmet that exhibits damage to the shell or suspension liner, such as cracking, deformation or soft spots, should be removed from active use.

#### **Operator's Inspection Checklist**

#### **Exterior Inspections**

- Shell: The shell is not cracked or dented.
- Shroud: The shroud is not cracked or otherwise damaged. All three mounting nuts are securely fastened
- Accessory Rails: The accessory rails are not cracked or otherwise damaged. All three mounting nuts are securely fastened on each rail.

#### MAINTENANCE PROCEDURES

#### Interior Inspections

- Zorbium® Foam Impact Liner: All three brown pads are installed and undamaged. Pads should be replaced immediately if a soft spot is found.
- Retention Cam Locks: All four Cam Locks slide freely and lock securely.
- Retention BOA® Fit System: Headband tightens when dial is engaged and rotated; headband loosens freely when dial tension is released.
- Retention Attachment: All four straps are securely held against the inside of the shell by fasteners.
- 5. Retention Stitching: All stitches are secure.

#### **⚠ WARNING**

Do not use the helmet until all of the inspection criteria are met. Heed the warning label attached to each Team Wendy® EXFIL® Carbon about the importance of shell inspection and proper fit. No helmet can protect the wearer from all foreseeable injuries. Severe head and neck injuries may still occur despite proper use of helmet.

#### MAINTENANCE PROCEDURES

#### **Washing Instructions**

Wash the helmet regularly, particularly after exposure to sand, salt, sweat and other contaminates. All components of the Team Wendy® EXFIL® Carbon may be hand washed and air-dried. Hand wash components using a soft bristle brush and mild laundry detergent. Rinse thoroughly and allow components to fully dry before reassembly and use.

The suspension system (pads) and retention system may be removed for washing. Instructions are in the Component Replacement section. Removal of the shroud and accessory rails is not recommended.



# REPLACEMENT INSTRUCTIONS

#### REPLACEMENT INSTRUCTIONS

#### **Retention Subsystem Replacement**

Tools Required: Hex Driver or Hex Key, 1/8-inch
Step 1: Remove the front and back sections of the impact liner to access the retention mounting holes.

**Step 2:** Use the hex driver to unscrew each of the four cap screws that attach the retention straps to the helmet shell. If needed, use a flat screwdriver to prevent the nut inside the helmet from rotating.





**Step 3:** Install each retention strap by pushing the hole in the webbing strap onto the shoulder of the mounting nut.

**Step 4:** Push the mounting screw through the helmet shell and tighten to the nut using the 1/8-inch hex driver. If needed, use a flat screwdriver to prevent the nut from rotating.

#### REPLACEMENT INSTRUCTIONS

Step 5: Reattach the rear straps.

**Step 6:** Ensure the webbing straps and headband straps are not twisted before attaching the front straps. The mounting nut used on the front straps must attach the chinstrap and the headband strap.



#### Suspension Subsystem Replacement

**Tools Required: None** 

**Replacing Impact Liner Pads** 

**Step 1:** Remove the old impact liner pads and make sure the hook panels are securely attached to the inside of the shell. Loosen headband strap completely.

**Step 2:** Install the rear pad of the new impact liner as close to the edge of the shell as the retention system allows.

**Step 3:** Install the front pad of the new impact liner along the front of the shell.

#### REPLACEMENT INSTRUCTIONS

**Step 4:** Install the center pad between the front and rear pads. Adjust pad positions as needed to avoid covering the vent holes in the shell

Step 5: Place comfort pads as desired.



#### **Accessory Rail Subsystem Replacement**

Tools Required: Hex Driver or Hex Key, 1/16-inch Step 1: Remove the impact liner to access the mounting screws.

**Step 2:** Use the hex driver to remove each of the three cap screws (per rail). Hold each nut in place with a fingertip to prevent rotation while removing the screw.

#### REPLACEMENT INSTRUCTIONS





**Step 3:** To install the new rail, align the shell and rail mounting holes. For the Team Wendy® EXFIL® Rail 3.0, begin with the lower rear mounting hole.

**Step 4:** Press a friction nut into the hole in the shell. Hold with a fingertip to prevent rotation.

**Step 5:** Push the cap screw through the rail and use the 1/16-inch hex key to tighten lightly. Repeat for the remaining mounting locations. Get all three screws started before firmly tightening.

#### INNOVATE TO PROTECT

Founded in 1997, Team Wendy is dedicated to providing exceptional head protection systems designed from the inside out for those who risk their lives every day. Our Cleveland-based company places a strong focus on the prevention of traumatic brain injury (TBI) in honor of our namesake Wendy Moore, who died tragically from a TBI following a ski accident. In Wendy's name, we are steadfast in our pursuit of improving head protection research, design and development, bringing more choice, better technology and reliable customer service to the industry.







Law Enforcement



Search & Rescue



Adventure





TEAMWENDY.COM 216.738.2518