

# USER MANUAL

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**day WOLF**  
EYEWEAR



AT ONE WITH THE RISING SUN

**ACTION SPORT TITANIUM SUNGLASSES**



# DAYWOLF® SEPTENTRIAL I USER MANUAL

(Version 1.0)

[www.daywolf.com](http://www.daywolf.com)

Salt Lake City, Utah

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# INCLUDED PARTS

## I. ASSEMBLED EYEWEAR PART LIST

Each pair of Daywolf® Septentrial™ eyewear consists of 33 assembled parts/components (including eight optional parts). These parts include:

1. **Seven Titanium Frame Pieces**. These parts forming the frame are made from aerospace Grade 5 titanium (made from 89.55% titanium, 6% aluminum, 4% vanadium, and 0.45% iron/oxygen). These pieces are highly heat and corrosion resistant. These parts are die cast, drilled, tapped, and polished, then optionally anodized and/or plated.
2. **Two Lenses**. The lenses are approximately 57 mm wide x 36 mm tall. The lenses may vary in thickness with material used from 1.5 mm to 2.2 mm, with the safety lenses being thicker. The lens color and specifications vary with user preferences, some lenses being polarized and alternatively

fabricated from nylon, polycarbonate, Tri Acetate Cellulose (TAC), or other materials.

3. **Eight Screws**. Eight stainless steel screws bolt the frames together. Each of these screws uses a 1.5 mm hex key (or hex screwdriver). Specifications for replacement screws are provided below. These screws include four 3 mm wide set screws for the nose bridge and the jack screw mechanism on the rearward hinges, as well as four shoulder screws for the forward and rearward hinges.
4. **Four Pads/Megals**. These pads include two sleeves for the arms and two pads on the nose bridge. These pads are formed from heat- and oil-resistant silicone and polymeric materials in approximately Shore 80A durometer. These pads are replaceable and typically adhered to the frames.
5. **Two Flex Pads (Optional)**. Two polymeric pads may optionally be disposed within the forward hinges against which the cantilevered forward arms

press, allowing the arms to flex. These pads are not currently included with most orders, but are optionally available from Daywolf® for smaller head sizes.

6. **Eight Nylon Washers (Optional)**. Eight ultra-thin nylon washers position within the frames, two at each of the four hinges. These washers are 0.15 mm thick and allow the hinges to be opened and closed repeatedly during use without torqueing (and axially rotating and loosening) the screws. These washers also mitigate friction between the titanium frame parts. These washers are optional because they are not necessary for function of the eyewear and some users prefer the hinges to be stiffer without the washers. Currently, Daywolf® eyewear is assembled with washers in the forward hinges only (the washers in the rearward hinges being optional).
7. **Two Shock Absorbers (Optional)**. Each of the lens grooves in the orbital are configured to optionally receive an elongated polymeric shock absorber similar to a rubber band. These shock absorbers are adapted

prevent lenses from cracking when the eyewear is dropped and to ease tensile force applied to the lenses when the forward hinges are tightened down, as well as to ensure tight lens positioning within the eyewear. The shock absorbers are optional and may be inserted or replaced with lenses as necessary.

## II. PACKAGING COMPONENT LIST

Each order of Daywolf® Septentrial eyewear is shipped in a box which, at the time of this publication, is intended to consist of the following items:

1. **Cylindrical Two-Piece Box**. A cylindrical two-piece box for housing the eyewear and all accessory parts. The box is three inches in diameter by approximately eight inches in length. The box is labeled exteriorly with four separate labels, each comprising the Daywolf® logos, bar codes,

graphic design and proprietary information, as well as lens and frame configuration information.

2. **Eyewear.** Each box contains one pair of Daywolf® Septentrial glasses described above.
3. **Replacement Lenses.** Each box should contain a plurality of replacement lenses of varying colors and materials, including at least one pair of polarized lenses. If any of these lenses are foggy, please remove the protective film protecting the obverse and reverse surfaces, which may be difficult to see. The protective covering is left on the lenses to prevent scratching.
4. **User Manual.** Each box should contain this user manual which is 3.5 inches by 6 inches.
5. **Polishing Cloth.** A polishing cloth bearing the Daywolf® stylized logo is included, which is approximately five inches by five inches.

6. **Service Pack / Replacement Parts.** Each box should contain a plurality of replacement parts, including screws and pads of varying colors.
7. **Hex Key.** A small hex key is included for adjusting and screwing the eight screws incorporated into the frames. We recommend using a larger key (i.e., aftermarket screwdriver) for regular maintenance if available. This key is included for emergencies and is less than 60 mm in length.
8. **Accessories.** The box may contain aftermarket accessories if ordered by the user. Some after market accessories ordered by users from Daywolf® are simply inserted into the box during shipping, including extra lenses, service packs, carrying pouches, neck cords, floats, receipts, and the like.

# PRODUCT DESCRIPTION

## *INDESTRUCTIBLE ACTION SPORT TITANIUM SUNGLASSES*

Each pair of Daywolf® glasses are formed from a seven-piece bolted titanium alloy frame with six optionally-vulcanized, oil-resistant thermoplastic pads optionally color-coordinated to match the lenses. Daywolf® aims to serve a market segment abandoned and untended by today's titanic sunglass conglomerate(s): those seeking stylized, high-strength, virtually unbreakable metal eyewear. In a world where other sunglass manufacturers have focused solely on reducing weight and unit costs to produce cheap plastic gimmicks, Daywolf® revives quality and ravages innovations of the past.

Daywolf® eyewear includes organic, vented surfacing contoured to minimize air flow causing watery eyes during high-speed sporting activities like skiing, motorcycling and boating. Lightweight plastic sunglasses often blow off users' faces and are lost during action sports events. Daywolf® eyewear features a second hinge on the arms, rearward of the first, having a jack screw adjustable to vary the fit of the glasses and accommodate different-size heads. This adjustability likewise gives users control over the compressive force the glasses apply to the head, allowing a user to increase this applied force to keep the glasses more securely in place during athletic or powersport activities. Daywolf® glasses are designed to optionally flex at the arm connection points (rather than through the nose bridge) to keep the angle of the lenses relative to the surface of any wearer's eyes static. The terminal ends of each arm are apertured to affix to a retaining chain or cord (aftermarket) which circumscribes the head and allows the eyewear to hang from a user's neck. This also permits the eyewear to detachably affix to floats

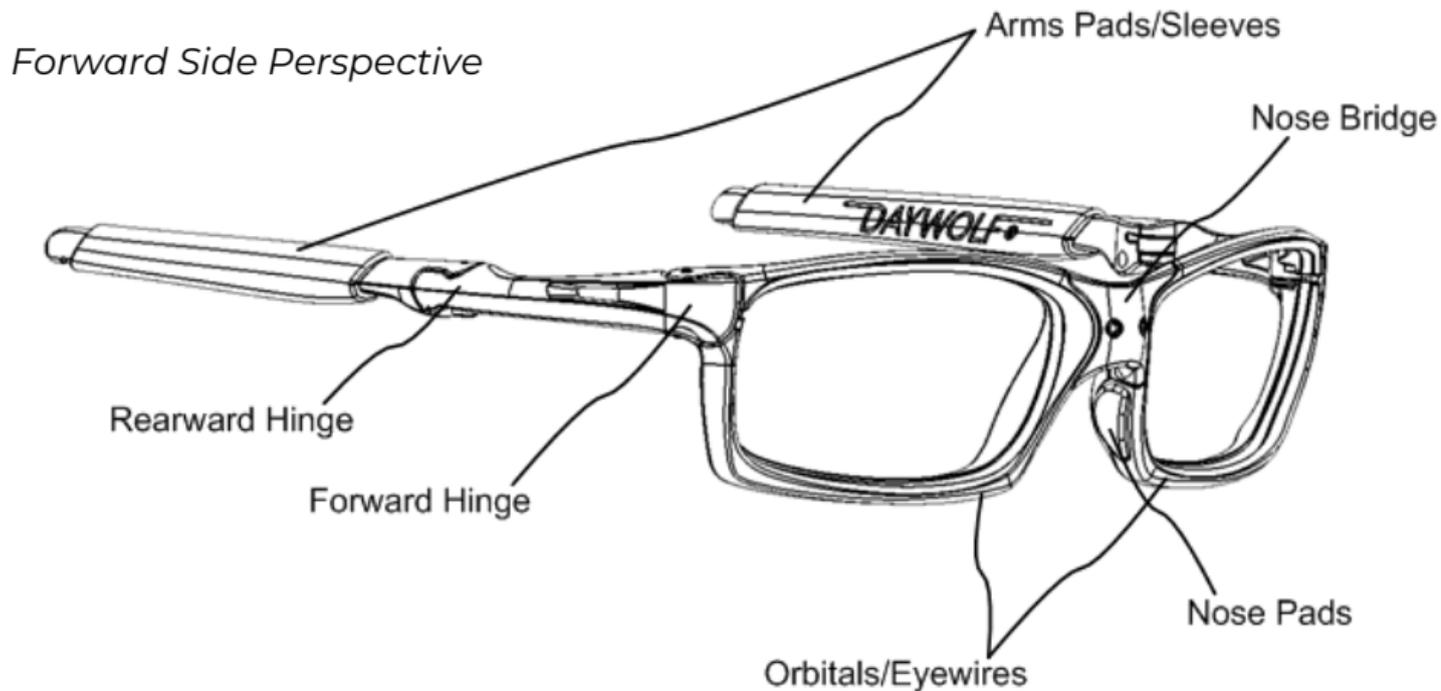
to keep the glasses from sinking in water. The lens grooves in the eyewire/orbital components are designed to accommodate lenses over 2 mm thick; far stronger than lenses found in other sunglasses.

Daywolf® had one goal in mind when creating the eyewear: to develop the most durable, high precision, artfully crafted titanium eyewear ever to reach the market. To this end, customers of Daywolf® can expect an everlasting, stylized piece; built to tolerances of only thousandths of a millimeter; available in a variety of polished, anodized or plated frame colors, lens colors, and pad colors (polarized and non-polarized). Two-tone frame variations will be available, including black-gold, black and chrome combinations, allowing further customization. Competing titanium eyepieces currently in production are typically formed from stamped sheet metal and do not compare.

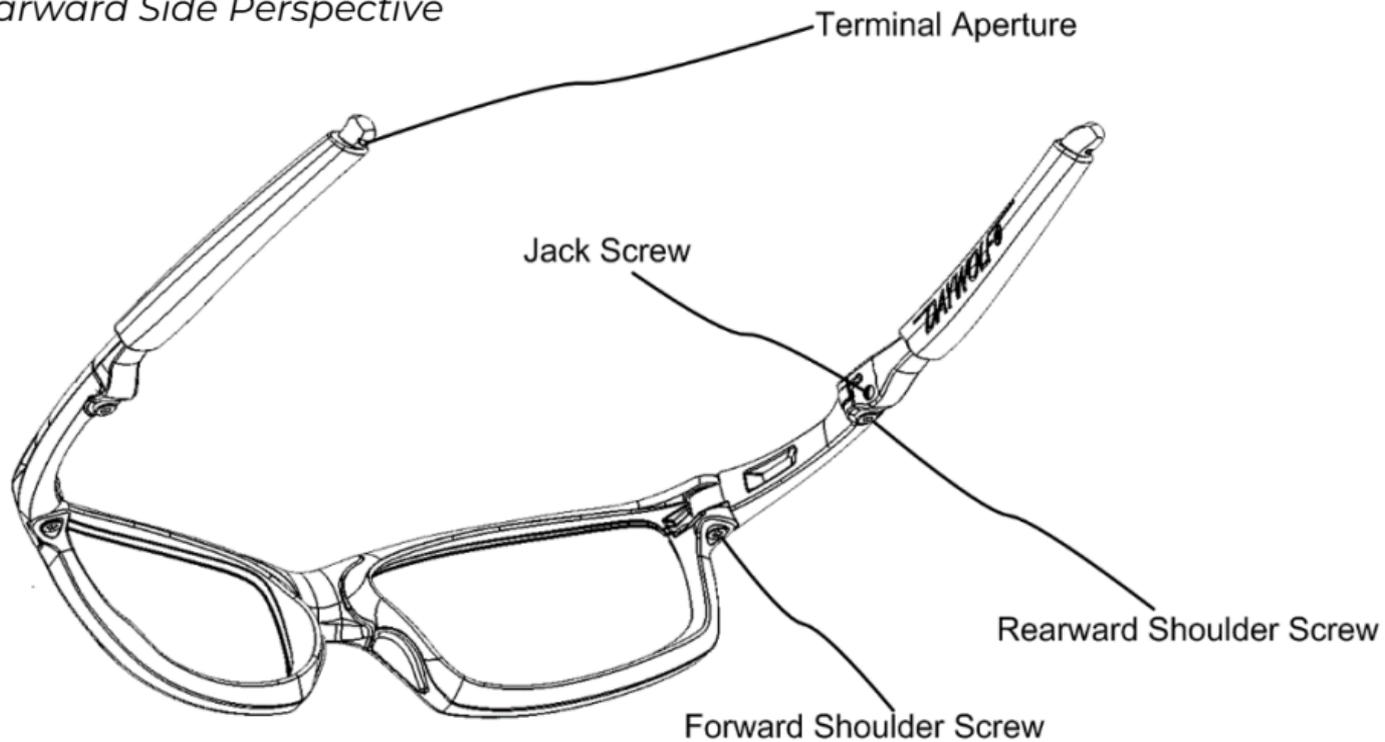
Motorcyclists, golfers, shooters and bikers wearing plastic eyewear have been blinded by flying rocks, branches, bullet casings, and golf balls (which pass through aviator and wayfarer glasses). Daywolf's frames are dimensioned so that golf balls will not easily pass through the eyewires/orbitals. There is a need on the part of powersports enthusiasts for sunglasses which are strong, rather than only lightweight.

*STYLE AND STRENGTH WED IN METAL*

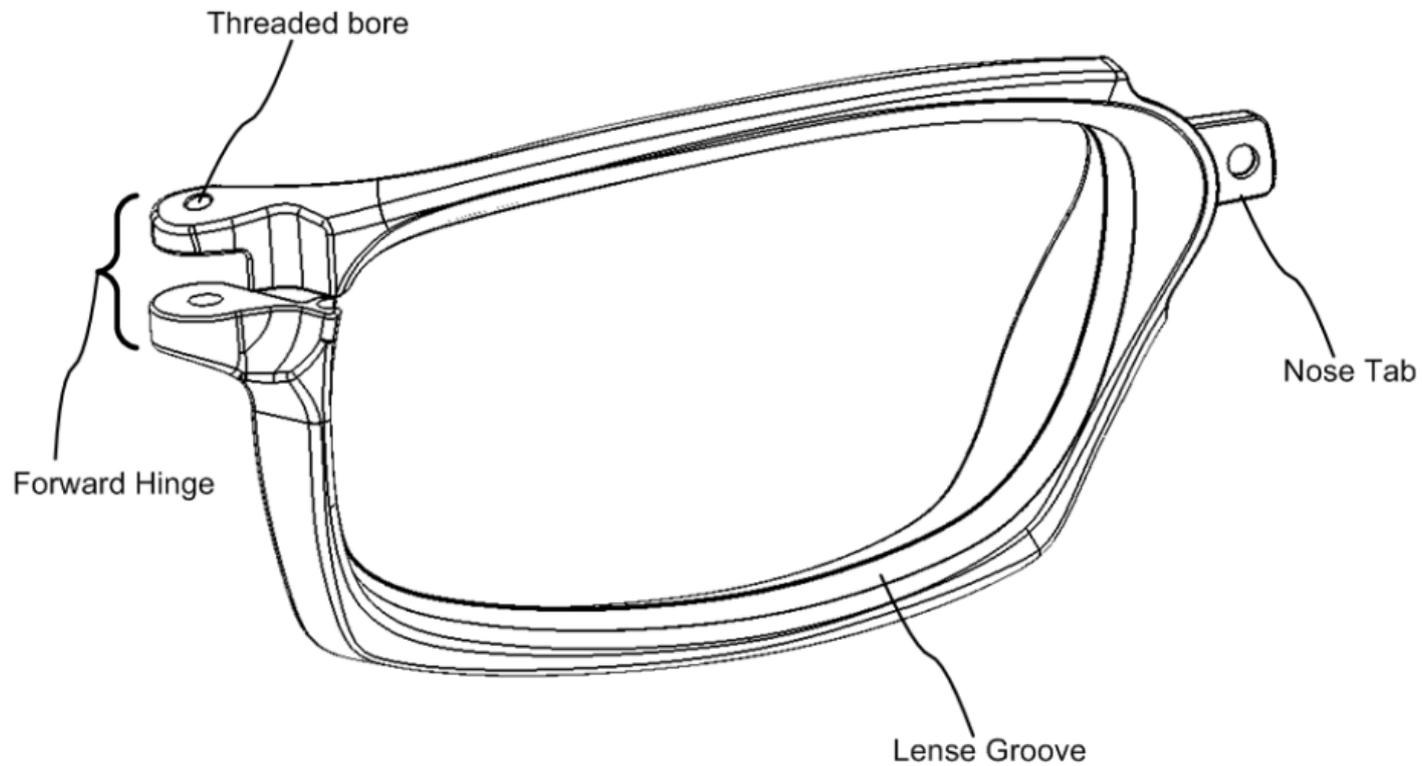
## COMPONENT KEY



*Rearward Side Perspective*



*Orbital Forward Perspective*



## **FIT AND UPKEEP**

### I. Eyewear Fit & Tightness

The frames are designed to be approximately 130 mm wide in the open position. This is the size that a typical male about 6'1" in height with a standard head size requires, but should fit typically males between 5'9" and 6'3". The frames are designed to apply higher than average tension to heads of wearers to keep the frames secure during powersports.

If the frames feel tight upon purchase, the frames will relax over the first seven hours of wear. The frames are also tighter with stiffer lenses. To loosen the fit, please ensure the jack screws in the rearward hinges are entirely retracted and that the rearward hinges are entirely open. If necessary, tensile force can be

applied by hand to the open arms to further increase the fit (meaning the arms can be pulled apart and held momentarily to relax the fit). Titanium is inherently springy, and typically returns to its originally molded form, but can be bent slightly with force.

The Daywolf® frames are uniquely modular, meaning parts can be swapped in and out. Daywolf® sells aftermarket flex pads which position within the forward hinges to reduce the fit, as well as extra-wide nose bridges which add 8 mm width to the open fit and which may be preferred by African American wearers or wearers over 6'3" – 6'4" inches in height. Additionally, extra-wide arms are also available through Daywolf® which add an additional 10 mm to the fit. Configuring the frames with the extra-wide nose bridge and the extra-wide arms should add 18 mm to the open fit and allow the frames to fit wearers up to 7' in height.

## II. Maintaining Tight Frames

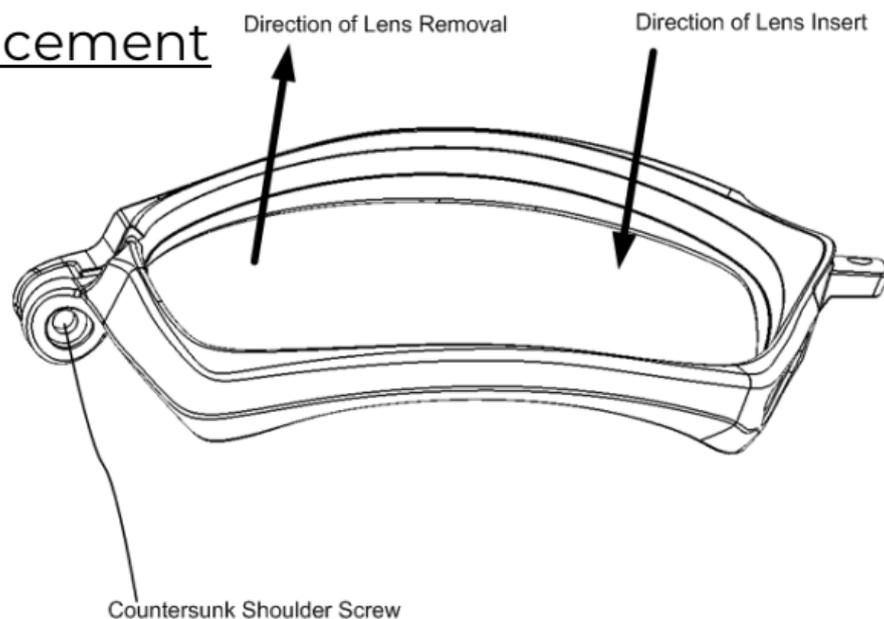
Like all metal eyewear comprising bolts or screws, the screws may loosen over time particularly if the arms are opened and closed regularly. Daywolf® advises against closing the arms unless necessary when resting the eyewear on desks or in residences. The forward hinges in the frames each consist of two ultra-thin nylon washers which should allow easy rotation (opening and closing of the arms), even when the screws are very tight. These washers also help prevent the screws from loosening during use. Wearers not regularly closing the arms may wish to remove the washers from the hinges, which will stiffen the rotation of the arms.

The eight screws in the frames are all driven by a 1.5 mm hex key. A small 1.5 hex key (or hex screwdriver) is included with every order. Wearers should regularly tighten the screws in the frames (particularly during the first few weeks) to ensure

they do not become loose, particularly the set screw in the nose bridge, which can loosen and release the orbitals from the nose bridge.

## LENS AND ARM REPLACEMENT

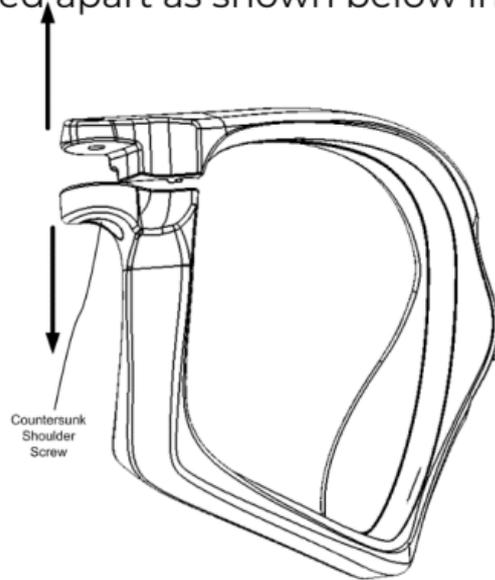
### I. Lens Replacement



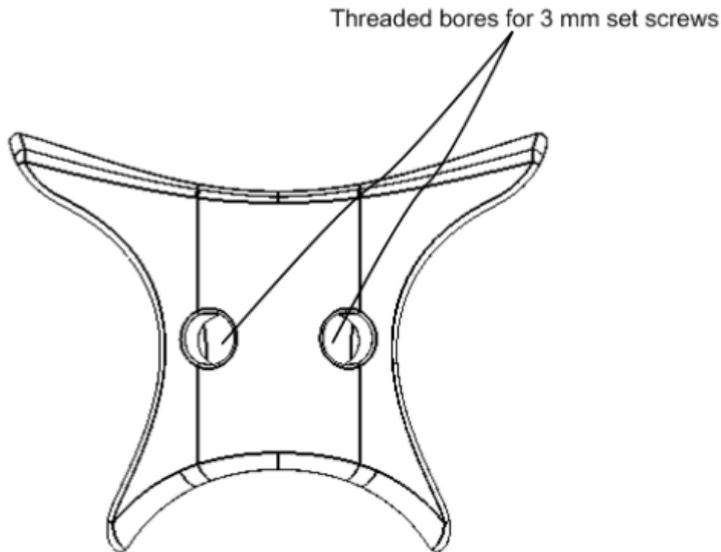
To replace a lens, the countersunk shoulder screw whose head positions beneath the forward hinge must be removed using 1.5 mm hex key (included). The top and bottoms of the orbital should be pulled apart at the forward hinge prongs (as shown below), the old lenses removed from the front of the orbitals, and the new lens inserted into the front of the orbitals. Lenses cannot be readily removed or inserted through the obverse (i.e., rearward) face of the orbitals. Some lenses may require an elongated shock absorber be disposed into the lens groove to position properly. The elongated shock absorber is similar to a rubber band, and should be positioned in the bottom, inside corner of the lens groove near the nose bridge.

## II. Arm Replacement

Like the lenses, to replace or remove the arms, the countersunk shoulder screw whose head positions beneath the forward hinge must be removed and the prongs of the forward hinge pulled apart as shown below in the direction of the arrows.

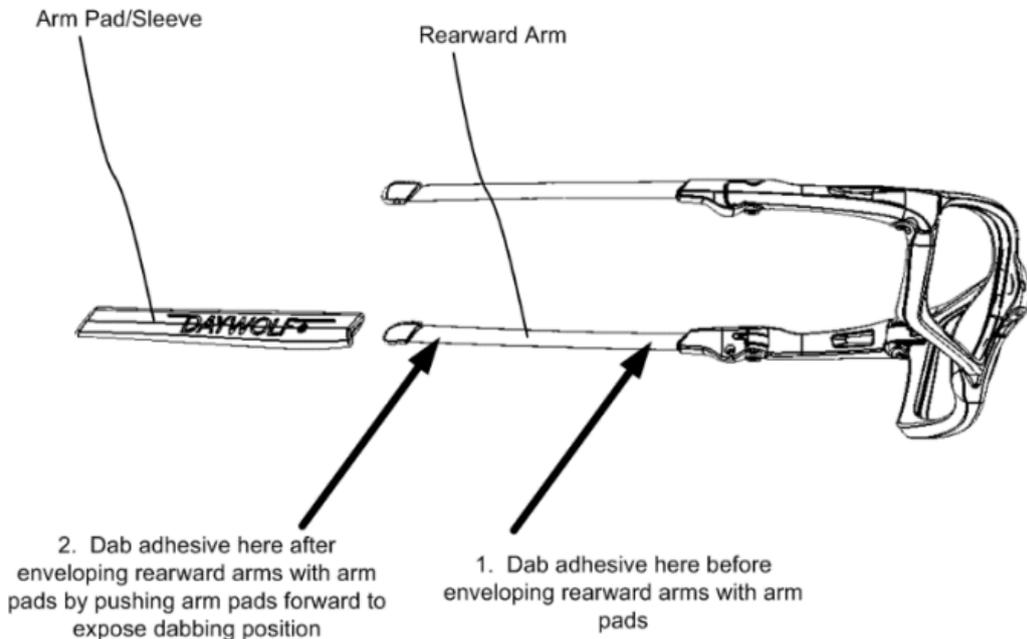


## NOSE BRIDGE REPLACEMENT

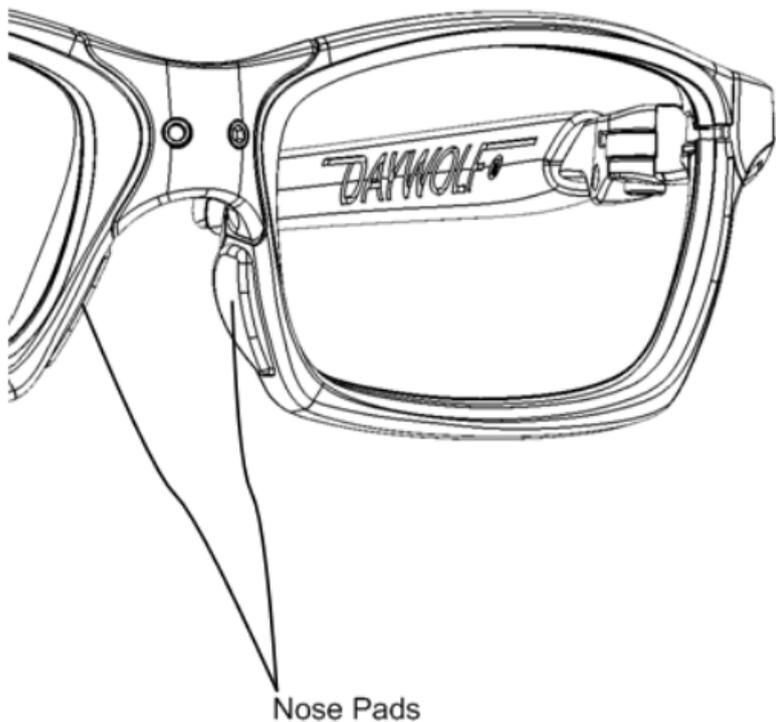


The nose bridge can be removed and replaced by unscrewing the two set screws sunk into the forward surface of the nose bridge with a 1.5 hex key. These screws are 3 mm wide and replacement specs are provided below. The set screws do not penetrate the nose tabs, but engage them and force them into static position. Extra-wide nose bridges are available through Daywolf®.

# PAD REPLACEMENT



Typically, the arm and nose bridge pads must be destroyed to be removed. Replacement parts are included and available aftermarket. Although we recommend adhering the arms pads to the frames, adhesive is not required. The rearward arms are ovoid through their cross section to help prevent axial rotation of the pads around the arms.

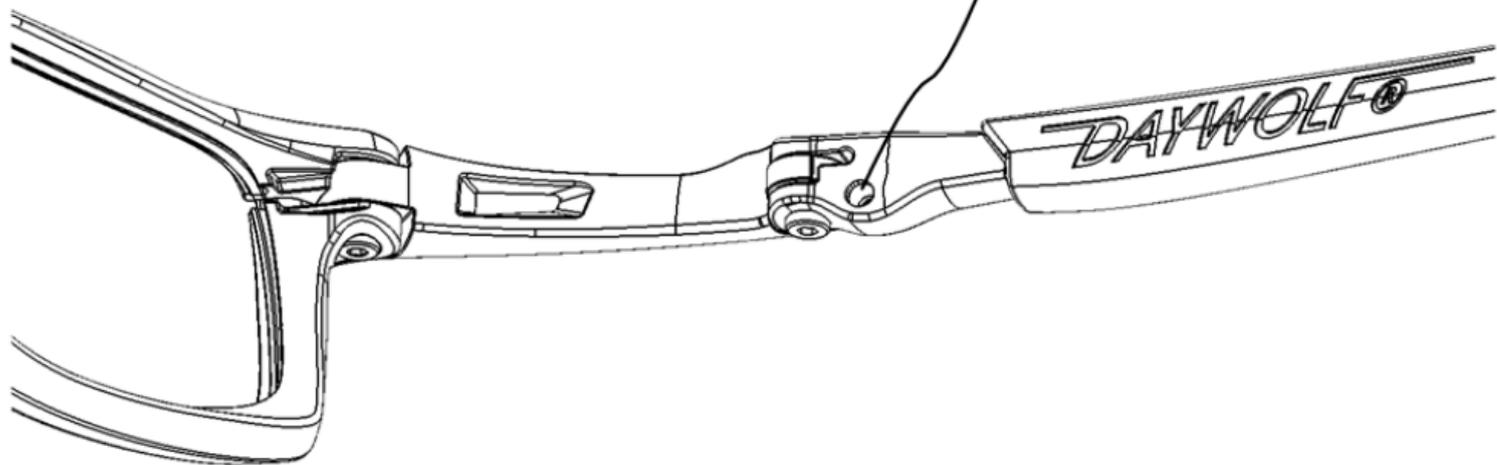


The nose pads should be adhered to the frames using a non-toxic adhesive. We recommend a non-toxic, copolymer oil-based adhesive. Remove the old pads using pliers.

Earlier prototypes of the Daywolf<sup>®</sup> designs included nose pads which snapped to the frames. This was determined to be a nonoptimal design feature. The prongs to which the pads snapped were necessarily thin, the pads easily dislodged, and the prongs sharp against the skin after dislodgement. The pads were also unnecessarily bulky.

## ADJUSTING ARM WIDTH

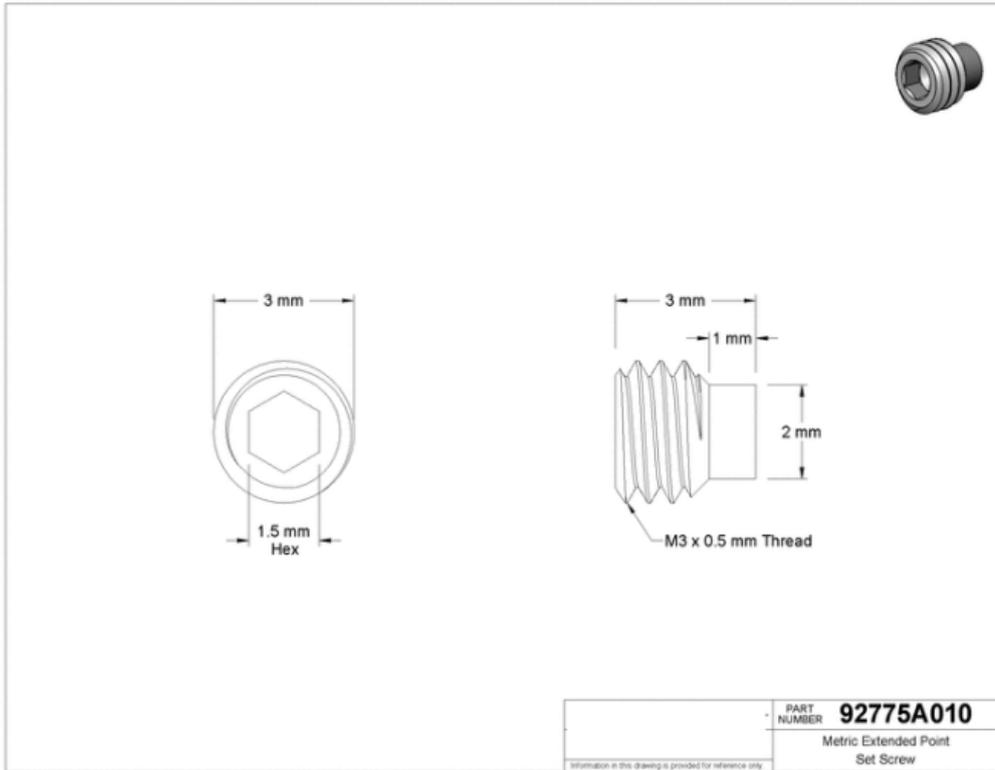
Position of jack screw on rearward hinges, rotatable to adjust arm width



# **SPECIFICATIONS, ACCESSORIES AND REPLACEMENT PARTS**

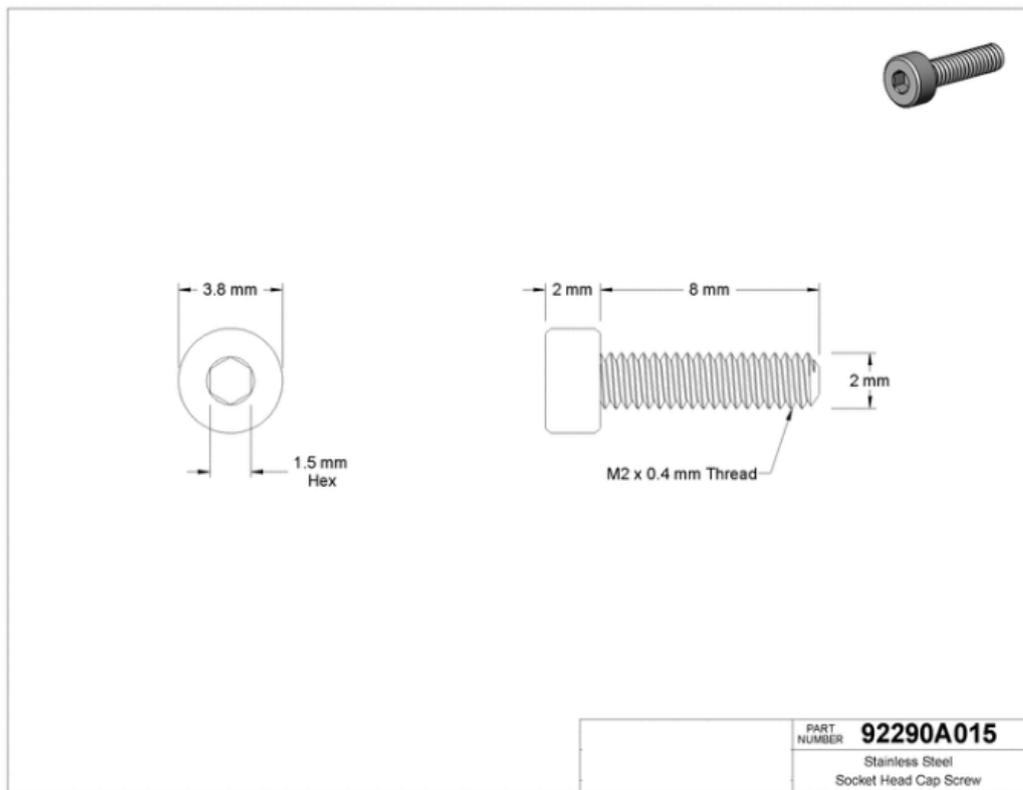
Replacement parts, including screws, pads, nose bridges, arms and lenses are available for order through Daywolf's website at [daywolf.com](http://daywolf.com). Accessories including wooden cases for storing Daywolf® eyewear are also available online, including cases made of walnut, cherry and red heart. Aftermarket parts, such as neck cords and velvet pouches are available online. Apparel is available online, including shirts, hats and jackets.

Some specifications are provided below. More specifications can be found online.



Replacement set screws may be ordered through Daywolf® or fastener providers online such as McMaster-Carr. Specs are shown to the left with a part number.

Nose bridge set screws have 3 mm shafts while jack screws are identical, but with 5 mm shafts.



Replacement shoulder screws may be ordered through Daywolf® or fastener providers online such as McMaster-Carr. Specs are shown to the left with a part number for the shoulder screws in the forward hinge. The forward hinges take an 8 mm shaft while the rearward take a 6 mm shaft.

# Sunglasses Certification Report

Standard: ANSI Z80.3:2010

Item	Value	Requirement	Result
Lens Primary Function	General Purpose		
Luminous Transmittance Tv	16.34%	8% - 40%	PASS
Color Limit, Yellow(y)	(0.5787 - 0.4220)		PASS
Color Limit, Green(g)	(0.1948 - 0.3976)		PASS
Color Limit, Red(r)	(0.2087 - 0.3326)		PASS
Yellow Tint (Y)	16.28%	>= 8%	PASS
Red Tint (R)	15.28%	>= 6%	PASS
Teig, Yellow Signal	17.05%	>= 3.27% (0.27V)	PASS
Teig, Green Signal	14.48%	>= 2.04% (0.125V)	PASS
Tmax UVB (280 - 315nm)	0.00%	<= 16.34% (TV)	PASS
Tmax UVA (315 - 380nm)	0.00%		PASS
Tbb (380 - 500nm)	15.20%		

Standard: EN ISO 12312-1:2013

Item	Value	Requirement	Result
Filter Category	3		
Luminous Transmittance Tv	16.36%	8% - 18%	PASS
Incandescent Lights			
Q, Red	0.84	>= 0.60	PASS
Q, Yellow	0.84	>= 0.50	PASS
Q, Green	1.02	>= 0.60	PASS
Q, Blue	1.12	>= 0.50	PASS
LED Signal Lights			
Q, Red	0.83	>= 0.80	PASS
Q, Yellow	0.89	>= 0.60	PASS
Q, Green	1.14	>= 0.60	PASS
Q, Blue	1.18	>= 0.50	PASS
Tmin (476 - 660nm)	14.83%	>= 3.27% (0.27V)	PASS
Tmax (315 - 380nm)	0.00%	<= 8.18% (0.57V)	PASS
Tmax (380 - 315nm)	0.00%	<= 1.0%	PASS
Tavg (280 - 380nm)	0.00%		PASS
Tbb (380 - 500nm)	15.20%		

Standard: AS/NZS 1067:2003 (A1:2009)

Item	Value	Requirement	Result
Lens Category	3		
Luminous Transmittance Tv	16.36%	8% - 18%	PASS
Q, Red	0.93	>= 0.60	PASS
Q, Yellow	0.93	>= 0.60	PASS
Q, Green	1.11	>= 0.70	PASS
Q, Blue	1.11	>= 0.70	PASS
Tmax (280 - 315nm)	0.00%	<= 0.62% (0.05TV)	PASS
Tmax (315 - 350nm)	0.00%	<= 6.19% (0.57V)	PASS
Tmin (450 - 650nm)	14.48%	>= 3.27% (0.27V)	PASS
Tmax (315 - 600nm)	0.00%	<= 6.19% (0.57V)	PASS
Tmax (380 - 315nm)	0.00%	<= 1.9% (0.15TV)	PASS
Tavg (280 - 400nm)	0.00%		
Tbb (400 - 500nm)	15.24%		

CIE 1976 L\*, a\*, b\* color space coordinates, Illuminant D65  
L\* = 47.4  
a\* = -0.52  
b\* = 2.41

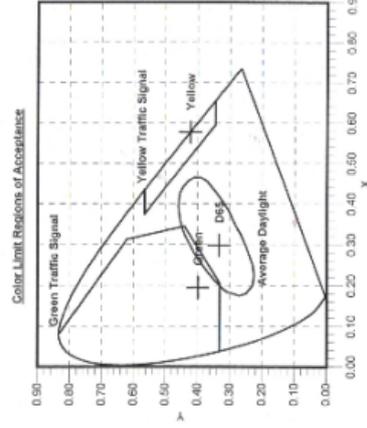
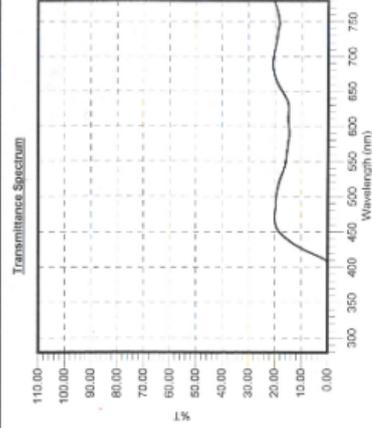
Spectrum Data:

nm	%T												
280	0.000	290	0.000	300	0.000	310	0.000	320	0.000	330	0.000	340	0.000
350	0.000	400	0.000	410	0.591	420	5.520	430	11.273	440	15.168	450	18.179
460	18.179	470	18.658	480	18.367	490	17.628	500	16.573	510	15.690	520	14.968
530	14.893	540	14.792	550	14.826	560	14.826	570	14.826	580	14.826	590	14.826
600	14.893	610	14.923	620	15.093	630	15.233	640	15.233	650	15.233	660	15.233
670	15.233	680	15.233	690	15.233	700	15.233	710	15.233	720	15.233	730	15.233
740	15.233	750	15.233	760	15.233	770	15.233	780	15.233	790	15.233	800	15.233

- (1). ANSI Z80.3:2010
- (2). EN ISO 12312-1:2013
- (3). AS/NZS 1067:2003 (A1:2009)
- (4). UV380  
UV400

Lens Primary Function  
Filter Category  
Lens Category

General Purpose  
3  
3



Light transmission profiles vary with the lens material, thickness, color and polarization, but a typical light transmission profile approximating average light transmission for most Daywolf® lenses is provided to the left (profile shown is of a red, unpolarized Daywolf® lenses). Additional transmission profiles are available at Daywolf<sup>s</sup> website.

## **CONTACT INFORMATION**

Daywolf® recommends checking its website for the latest contact information. With the intention of upgrading facilities, Daywolf's office and mailing address may change.

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## LEGAL

U.S. Patent 9,759,929. U.S. Patent D828,438. Patent Pending U.S. 15/965,674. Patent Pending U.S. 15/965,917. International Industrial Design Pending. U.S. Trademark Reg. No. 5,522,941. Utah State Registered Trademark No. 10675151-0190. DAYWOLF® is a trademark of Daywolf, LLC. SEPTENTRIAL™, FACE THE DAY™, IN SUNLIGHT RUN™, TRYST WITH LIGHT™, and AT ONE WITH THE RISING SUN™ are trademarks of Daywolf, LLC. Copyright 2018. All rights reserved.

Daywolf, LLC is 100% American-owned. Some of the 33 components forming each eyepiece are manufactured overseas while others are U.S.-made. All assembly takes place in the United States. Machining operations, including polishing, anodizing and plating takes place in the United States in Utah. All design work for

Daywolf is done in the United States by U.S. citizens, including structural and industrial design. All prototyping is done in the United States. All graphic design and technical writing is drafted and printed in the U.S.

Daywolf is pursuing certification as OSHA ANSI Z87.1 safety glasses to allow users to wear Daywolfs on the job as safety glasses. Daywolf is also seeking certification as military ballistic eyewear (MCEPS GL-PD 10-12 Military Standard). These certifications have not yet been granted or denied.

For current warranty information, please visit the Daywolf website at [www.daywolf.com](http://www.daywolf.com).

**Thank you for purchasing Daywolf's® debut product.**



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