Wolf ATEX Rechargeable Mini Worklite Features

- Ideal for task lighting and work activities in the hazardous area.
- ATEX, UKEX and IECEx approved for Zone 1,2, 21 and 22 potentially explosive gas and dust atmospheres.
- Compact and lightweight design for ease of portability.
- High power 'fitted for life' LED light source.
- Up to 3,100 lumens at source.
- Robust and durable aluminium construction.
- Rechargeable high capacity battery, providing up to 10 hours light output.
- IP66 & IP67 ingress protection rating.
- Supplied with mains charger with state of charge indication, powered from 100 to 254Vac.
- Toughened glass lens with disposable lens guard.
- ATEX/UKEX/IECEx approved accessories available.



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ATEX

UKCA 1180 CE 0598

IECEx

W-4850 - Issue 8
DF 593

Authorised Representative (EU)2019R1020:
Authorised Representative Service, 77 Camden Street Lower, Dublin, D02 XE80, Ireland

ATEX LED WORKLITE

WL-50
WL-50HT



OPERATION AND MAINTENANCE INSTRUCTIONS

Wolf ATEX Rechargeable Mini Worklite – WL-50 and WL-50HT

Operation and Maintenance Instructions
Please Retain - Read Before Use

EU Declaration of Conformity

The Wolf ATEX Worklites WL-50 and WL-50HT meet all relevant provisions of the 2014/34/EU Explosive Atmospheres (ATEX Equipment) Directive by virtue of the issued EU type examination certificate, and subsequent review confirming compliance with all relevant harmonised standards and essential health and safety requirements.

The Wolf ATEX Worklites WL-50 and WL-50HT are self-contained portable Worklights with a durable, lightweight cast marine grade aluminium construction with a powder coated finish and a toughened glass lens. The Wolf ATEX Worklites are powered by a specific sealed lead acid battery available in two versions, 9Ah for 50°C ambient applications and 10Ah for 45°C ambient applications. This powers an array of 18 High Power LEDs. The Worklite range is approved as Group II, Category 2 equipment for use in zone 1 & 2 potentially explosive gases, vapours, mists and dusts where the T4 temperature class/135°C maximum surface temperature permits.

Certification/Approval Code:

Ⓔx II 2 GD

Ex eb ib mb IIC T4 Gb			Ex tb IIIC T135°C Db
WL-50	(10Ah)	....	Ta = -20°C to +45°C
WL-50HT	(9Ah)	....	Ta = -20°C to +50°C
With WF-462 protection cover			Ta = -20°C to +40°C

EU Type examination certificate: **CML 18ATEX3373X**
Notified Body: SGS FIMKO OY, PO Box 30 (Särkiniementie 3), 00211, Helsinki, Finland.
Notified Body Number: **0598**
Harmonised standards applied:
EN IEC60079-0:2018, EN IEC60079-7:2015+A1:2018, EN 60079-11:2012, EN 60079-18:2015+A1:2017, IEC 60079-31:2022.
Ingress protection level: **IP66, IP67** to EN60529:1992.

Wolf Worklites are compliant with the 2014/30/EU EMC Directive to the following harmonised EMC standards;
BS EN 61000-6-3:2007+A1:2011 and BS EN 61000-6-2:2005

The **WL-125 Charger for WL-50 and WL-50HT** is compliant with the 2014/30/EU EMC Directive and 2014/35/EU Low Voltage Directive to the following harmonised EMC standards;
EN 55032:2012 Class B, IEC 61000-3-2: 2014
IEC 61000-3-3: 2013, EN 55024:2010 and to the following LVD standards; EN 62368-1:2014 +A11:2017

This declaration is issued under the sole responsibility of Wolf Safety Lamp Company.

Alex Jackson – Managing Director,
Wolf Safety Lamp Company Ltd.,
Sheffield, S8 0YA. Dated: 01 May 2022

IECEx Scheme Certification

Certificate Number: **IECEx CML 18.0199X**
Ex eb ib mb IIC T4 Gb
Ex tb IIIC T135°C Db

WL-50	(10Ah)	....	Ta = -20°C to +45°C
WL-50HT	(9Ah)	....	Ta = -20°C to +50°C
With WF-462 protection cover			Ta = -20°C to +40°C

IP66 IP67
IEC Standards applied: IEC 60079-0:2017, IEC 60079-7:2017, IEC 60079-11:2011, IEC 60079-18:2017, IEC 60079-31:2022

The Mini Worklite is compliant with the 2011/65/EU RoHS Directive to the harmonised standard EN IEC 63000:2018.

UK Declaration of Conformity

The Wolf ATEX Worklites WL-50 and WL-50HT meets all the statutory requirements of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016/1107 as amended by UKSI 2019/696 by virtue of the issued UKEX type examination certificate, demonstrating compliance with all relevant designated standards and essential health and safety requirements.

Certification/Approval Code:

Ⓔx II 2 GD

Ex eb ib mb IIC T4 Gb			Ex tb IIIC T135°C Db
WL-50	(10Ah)	....	Ta = -20°C to +45°C
WL-50HT	(9Ah)	....	Ta = -20°C to +50°C
With WF-462 protection cover			Ta = -20°C to +40°C

UK Type examination certificate: **CML 21UKEX3646X**
Approved Body: SGS Baseefa Ltd, Rockhead Business Park, Staden Lane, Buxton, SK17 9RZ, UK.
Approval body number: **1180**

Designated Standards Applied:
EN IEC 60079-0:2018, EN IEC 60079-7:2015+A1:2018, EN 60079-11:2012 EN IEC 60079-18:2015+A1:2017, IEC 60079-31:2022

Wolf Worklites also meet all the statutory requirements of the UK EMC Regulations 2016, UKSI 2016/1091 as amended by UKSI 2019/696 to the following relevant designated standards:-
BS EN 61000-6-2:2005, EN 61000-6-3:2007+A1:2011

The **WL-125 Charger for WL-50 and WL-50HT** meet all the statutory requirements of the UK EMC Regulations 2016, UKSI 2016/1091 as amended by UKSI 2019/696 to the following relevant designated standards:- EN 55032:2012 Class B, IEC 61000-3-2: 2014 IEC 61000-3-3: 2013, EN 55024:2010 and the following designated electrical safety standard EN 62368-1:2014 +A11:2017

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Alex Jackson – Managing Director,
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IMPORTANT: SPECIAL CONDITIONS FOR SAFE USE (X)

The Worklites can be fitted with approved accessories designed to protect the product, this should be checked, and replaced when the light output is obscured by damage or contaminant. See over for more details. Only use Wolf genuine accessories.

Inspect the following before each use:

- If any damage is visible to any seals or the glass lens, replace as necessary.
- Charge socket cover is in place and tightened by hand. Inspect the seal, replace if necessary.
- The unit is clean and dust has not built up on any surfaces.
- The vent on the rear is not blocked.

If any parts are damaged or missing, the Worklite should be removed from service. Worklite parts should be replaced or repaired in accordance with these instructions using only Wolf authorised parts, before being put back into service.

Photobiological Safety: Risk Group 2

CAUTION: Possibly hazardous optical Radiation emitted from this product. Do not stare at operating lamp. May be harmful to

Disposable Lenses:

The W-3130 Polycarbonate Anti-Static Lens Guard for WL-50 and WL-50HT can be fitted to protect the Worklite glass lens and front face from damage. This cover should be checked and/or replaced when the ability to protect the Worklite is compromised and/or when the light output is obscured.

Spare Parts - Replacement Battery

Model	Description	Battery Pt No:	Circuit Spare Pt No:
WL-50	12V 10Ah 18 LED	W-3200	W-3400
WL-50HT	12V 9 Ah 18 LED	W-3300	W-3400

Spare Parts

Item No.	Part No.	Spare Part Description	Quantity
1	W-3064	Replacement rear casting, enclosure seal, retaining bolts, labelled	1
2	W-3066	Replacement front cover assembly, complete with glass, retaining brackets, seal and wiring labels	1
3	W-3068	Enclosure screws kit (6)	1
4	W-3070	Glass lens, seal and bracket pads	1
5	W-180	LED panel, thermal pad and fixing screws	1
6	W-3400	Control circuit for WL-50	1
7	W-3074	Control circuit retention brackets with screws (2)	1
8	W-3003	Enclosure seal	1
9	W-3004	Lens seal	1
10	WF-462	Pack of 5 Anti-Static Protection Cover Kit	1
11	W-3060	Charger cap assembly with tether, screw and o-ring	1
12	W-3062	O-ring for charger cap	1
13	W-484	Charge socket assembly for WL-50	1
14	W-556	Vent for WL-50	1
15	W-245	Switch assembly & connector for WL-50	1
16	W-4560	Indicator assembly	1
17	W-3152	Bridle fasteners kit including wing screw	1
18	W-3150	Frame and bridle assembly	1
19	WL-125	Mains Charger	
20	CALL	Certification label and bracket are specific to the individual product, contact your authorised Wolf supplier for replacement	

A short charge with charger WL-125 will be required each time a battery is re-connected before the lamp will light.

Table 1:

MODEL	BATTERY	LAMP	HIGH POWER DURATION	LOW POWER DURATION	CHARGE DURATION
WL-50	12V 10 Ah	18 LED 3100lm	5h	10h	8h
WL-50HT	12V 9 Ah	18 LED 3100lm	4.5h	9h	8h
Durations are approximate and vary with ambient temperature and battery condition.					

WARNING:

- USE ONLY WOLF WL-125 CHARGERS WITH THESE PRODUCTS.
- USE ONLY GENUINE WOLF REPLACEMENT PARTS.
- LAMP MUST NOT BE USED WITHOUT BATTERY SPACERS AND PACKING CORRECTLY IN POSITION.
- LAMP MUST NOT BE USED WITHOUT CHARGE CAP FITTED AS THIS WILL COMPROMISE IP RATING.

Disposal of Waste Material:

Disposal of packaging, redundant WL-50 or WL-50HT products and parts should be carried out in accordance with applicable regulations.

The Wolf Safety Lamp Co. Ltd has a policy of continuous product improvement. Changes in design details may be made without prior notice. Prices and design are subject to alteration without notice. All products sold are subject to our conditions of sale. A copy of these instructions with any relevant revisions can be found at www.wolfsafety.com.

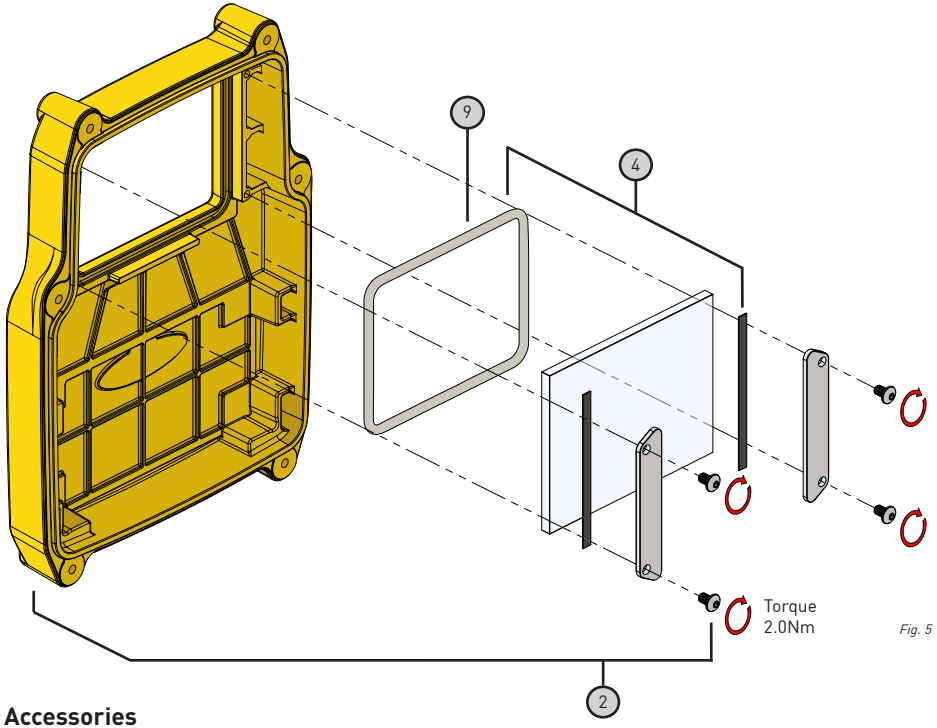
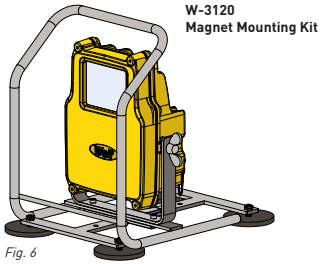


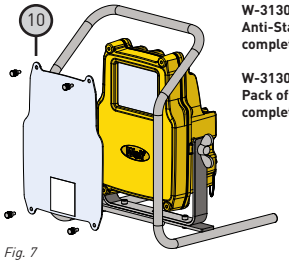
Fig. 5

Accessories



W-3120
Magnet Mounting Kit

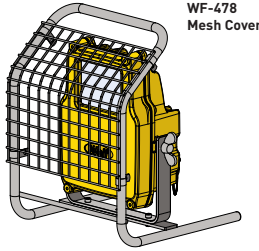
Fig. 6



W-3130
Anti-Static Lens Guard Kit, complete with 4 screws

W-3130/3
Pack of 3 Anti-Static Lens Guard Kit, complete with 4 screws

Fig. 7



WF-478
Mesh Cover

Fig. 8



WF-462
Pack of 5 Anti-Static Protection Cover Kit

Fig. 9

Anti-static Protection Cover:
The WF-462 Anti-Static Protection Cover can be fitted to protect the lamp from paint spray etc. When this is fitted, the approved ambient in which the lamp may be used reduces to 40°C as per the marking on the protection cover.

Use of the Wolf Worklite WL-50 and WL-50HT
First Use: Please Read
Charge fully before first use.

Operation: -Press Switch Once – ON Full Power
-Press Switch Again – ON Half Power
-Press Switch Again – OFF

Head Angle Adjustment:
To adjust head angle for your work area, loosen the wing screw, adjust and re-tighten.

Battery Level Indication:
The indicator LED on the rear enclosure will indicate in the sequence as shown in table 2. Actual indication periods may vary as a result of temperature, charge cycle, battery condition, and electrical tolerances. When the battery level is very low; the red indicator and beam will flash.

To assess whether a battery needs to be replaced, the duration of a full discharge should be compared with table 1. Replace the battery if the duration is no longer suitable for intended use.

Use in high temperature ambients will result in reduced battery life. Shallow discharges will extend the battery life.

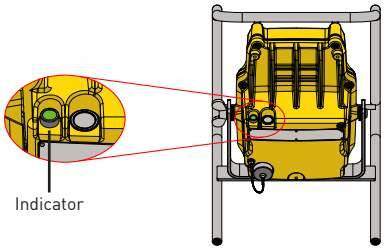


Fig. 1

Table 2 (@ high Power Duration):

WL-50	2 hours	2 hours	1 hour
WL-50HT	2 hours	1.5 hours	1 hour

Deep discharge protection:
The lamp will automatically cut off when the battery reaches a pre-determined low voltage. A red followed by flashing red indicator and flashing beam will warn of imminent cut-off. The lamp must be re-charged immediately before further use or storage.

Storage:
Due to the self-discharge characteristics of this type of Sealed Lead Acid battery, it is imperative that it is charged every SIX months when in storage, otherwise permanent loss of capacity could occur.

Lamp Cleaning:
Use a mild soap and water and soft brush only. Do not immerse.

Charging:
Use only the **WL-125 Worklite Charger.**
The charge socket cover must first be removed before the charger plug can be connected.
The Worklite indicator will show flashing Red and Green when connected to a charger.
Do not modify the charger.

Charger Status LEDs:
RED = Mains power connected and charger is switched ON.
ORANGE = Charging (Cooling fan on fast speed).
GREEN = Fully Charged (Cooling fan on slow speed).
The charger continues to supply a trickle charge and can be left in this mode on standby.

WL-125 has a system to detect when the battery in the Worklite has reached the end of its life and cannot be charged. At the end of the normal charging period if the RED LED is OFF and the other LED is ORANGE or GREEN (and no LED indication on the Worklite) then the battery in the Worklite **must** be replaced.

To ensure the ingress protection level is maintained, The charge socket cover MUST be re-fitted to the casting and tightened beforehand. (Ensure area around charge socket is free from dirt)

- Do not charge in Hazardous Area.
- Charger operating ambient: +10°C to +25°C.
- Charger ingress protection IP20, protect from dirt and moisture
- Do not cover ventilation slots.
- When charger is not in use: disconnect from Worklite.

The WL-125 Charger is rated to the following.
Peak Output Current (during charge period) = 1.75A
Peak Output Voltage (at battery) (standby - fully charged) = 14.6V
Voltage (at battery) on Trickle Charge = 13.8V

MAINTAINENCE. [Repair by qualified technicians ONLY]
Disconnect battery before maintenance to any of the Worklite circuit. USE caution when handling batteries to prevent short circuits. At the battery 2-way terminal block release only the lower wires to the control circuit. Do not allow battery cables to short. Do not allow battery terminals to contact any metal parts. When re-connecting it is essential that the polarity at the battery terminal is correct as instant, permanent, damage occurs to the control circuit which would require replacement.

Removal of Front Cover
The lamp can remain in the stand for access. Remove the six retaining screws from the rear while holding the front cover in place by hand. Rotate the lamp so the lens is facing up then lift off. Inspection and maintenance can then begin.

Disconnecting the Battery
Lift the battery taking care not to pull on any of the connecting wires inside the enclosure and remove the control circuit red and blue wires from the terminal block. it is important to disconnect the battery first. The battery can now be placed to one side.

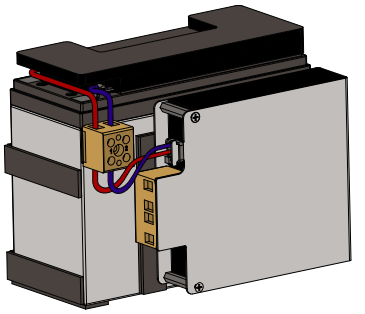


Fig. 2

Reinstalling a Battery
Check all other connections first. Connect battery last.
Only a specified battery from Wolf Safety may be fitted. See Spares Table. Take special care to check polarity is correct at the 2-way terminal block!

Carefully feed the battery wires in to the free space around the switch before installing the battery ensuring the wires are not trapped on circuit retention bars or between the casting and battery side.

Wolf ATEX Rechargeable Mini Worklite – WL-50 and WL-50HT

Re-fitting front cover:
Inspect lens and casting seals for damage. Ensure no wires are over the sealing edge. Ensure the seals are correctly positioned Align the front cover and fit the six screws. Tighten screws in equal increments to ensure lid lowers evenly.

Torque Setting: Front Cover Screws (x6) = 3.6 – 3.8Nm
Torque Setting: Pivot Bolt (not wing screw) (x1) = 6.0 Nm (Use Loctite 222 on thread)

Switch Replacement: Item 15
(Requires removal of front cover and battery)
i) Prize off the switch connector. ii) Using a spanner, remove switch locknut and push switch through the casting. iii) Place new switch in casting in the same orientation as the removed switch ensuring the red o-seal is in place, fit and tighten. iv) re-connect the push-on connector, arrange wiring in to free space and reassemble lamp.

Torque Setting: Switch Locknut = 2.5Nm

Charge Socket Assembly Replacement:
(Requires removal of front cover and battery)
i) Remove the charge cap cover. Ii) Disconnect the Yellow and Violet wires from the 4 way terminal block. iii) remove socket locknut and extract socket from casting rear. Replace with specified Wolf part only. Assembly is the reverse of removal.

Torque Setting: Charge Socket locknut = 2.0Nm
Torque Setting: Terminal block connections = 0.5-0.7Nm

Indicator Replacement: Item 16
(Requires removal of front cover and battery)
i) Disconnect the indicator LED in-line connector. ii) Pull the LED from the indicator housing. If necessary, using a spanner, remove locknut and pull the indicator housing through the casting, Ensure new bezel is tightened to the indicator body compressing the internal red seal. Ensure indicator assembly Flange seal is present. Assembly is the reverse of removal. Align clip feature with location hole in indicator body.

Torque Setting: Indicator Locknut = 1.8Nm

Glass Lens Replacement: Item 4, W-3070
i) Remove the four screws (WF-410) retaining the clamp plates (WF-208).
ii) Inspect the lens seal (W-3004) and replace if necessary.
iii) Replace (if necessary) the glass with a replacement W-422 glass lens fitted with two WF-215 silicone strips between glass and lens clamp. Ensure seal, glass and seal channel are clean. Initially engage the lens clamp screws just half a turn with the glass in place then ensure the seal sits entirely in to the seal groove. Manipulate if necessary. then tighten the lens clamp screws.

Torque Setting: Lens Clamp Screws (x4) = 2.0Nm

Vent Replacement: Item 14
Should the vent in the rear become blocked or if there is visible damage to the white membrane the vent must be replaced. Using a large flat blade screwdriver, remove vent, clean surface and fit a replacement vent with o-ring.

Torque Setting: Vent = 2.5Nm

Control Circuit Replacement: Item 6
(Requires removal of front cover and battery)
i) Disconnect the Battery. ii) At the control circuit terminal block; disconnect LED+, LED-, CHG- and CHG+, Indicator push connector, and prize the connector from the switch pins. iii) Remove the two clamp plates and the control circuit can be removed.
Assembly is the reverse of removal.

Torque Setting: Terminal Block Screws = 0.5-0.7Nm

LED Panel Replacement: Item 5, W-180
(Requires removal of front cover approval label bracket and battery)
i) Loosen terminal screws for LED+ and LED- at the control circuit and extract wires. Remove the four LED panel screws (WF-442) in the Worklite potted LED array (WF-435). Behind the LED array is a WF-444 Thermal Pad for heat transfer. When refitting an LED panel, ensure the WF-444 thermal pad is complete and free from creases or folds. It is recommended a new replacement is fitted and that the heat transfer faces of the casting and LED panel are clean and flat. Assembly is the reverse of removal. Route wires such that they cannot be crushed by plates or battery.

A THERMAL PAD MUST ALWAYS BE USED

Torque Setting: LED PCB Screws WF-442 (x4) = 0.8 – 1.0Nm (and threadlock medium strength, Loctite 222 or equivalent)

Wiring Diagram

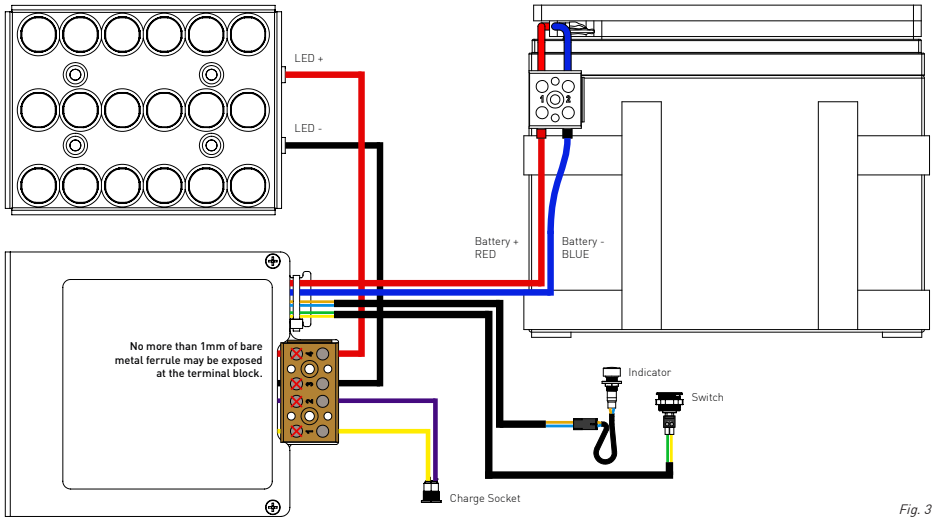
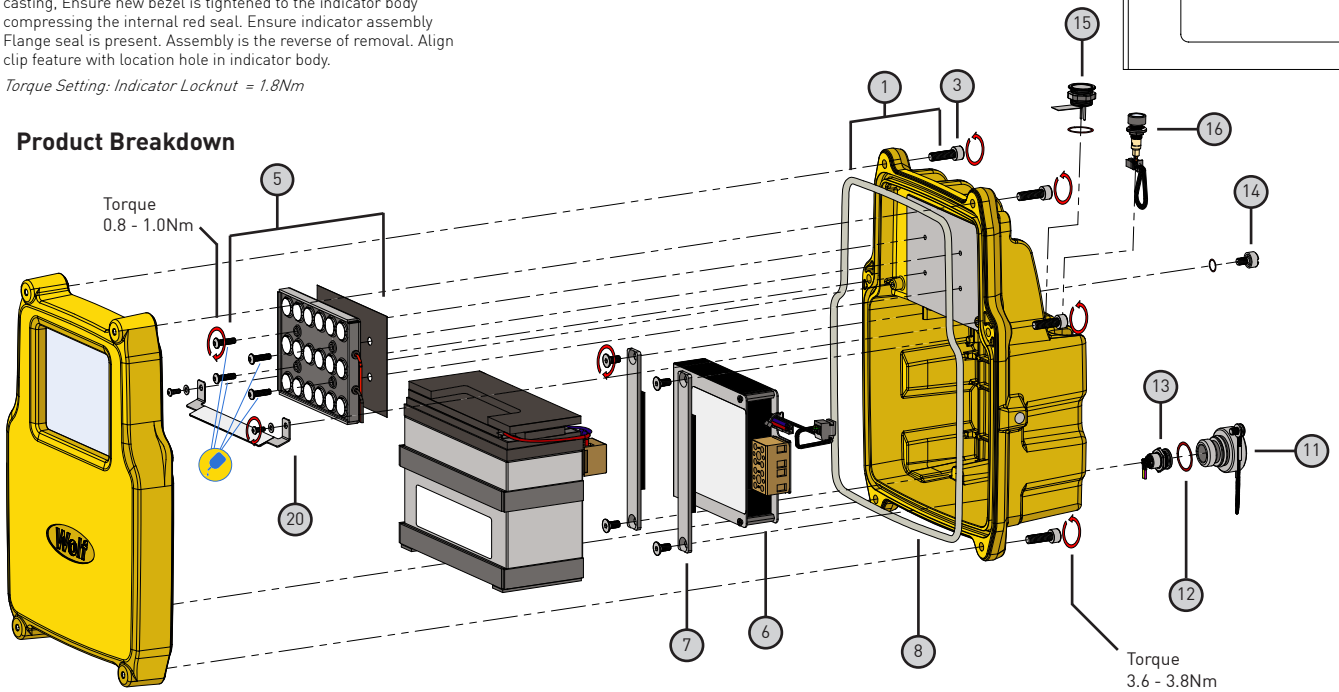


Fig. 3

Product Breakdown



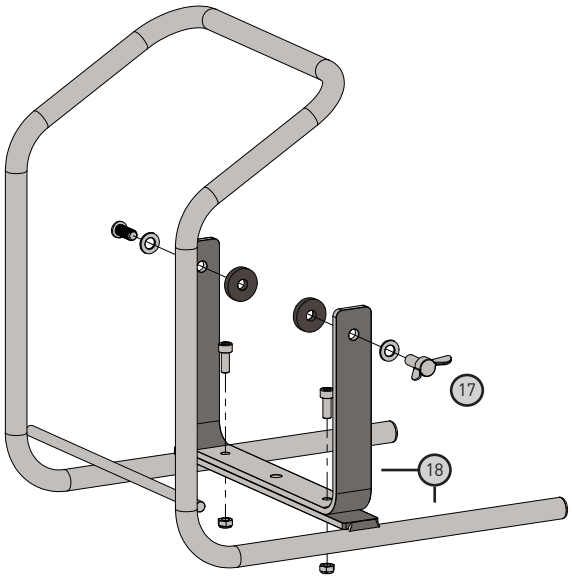


Fig. 4