

Stinger[®]

Stinger[®] Hornet Operator's Manual Revision A.4



Patent No. 10,746,353

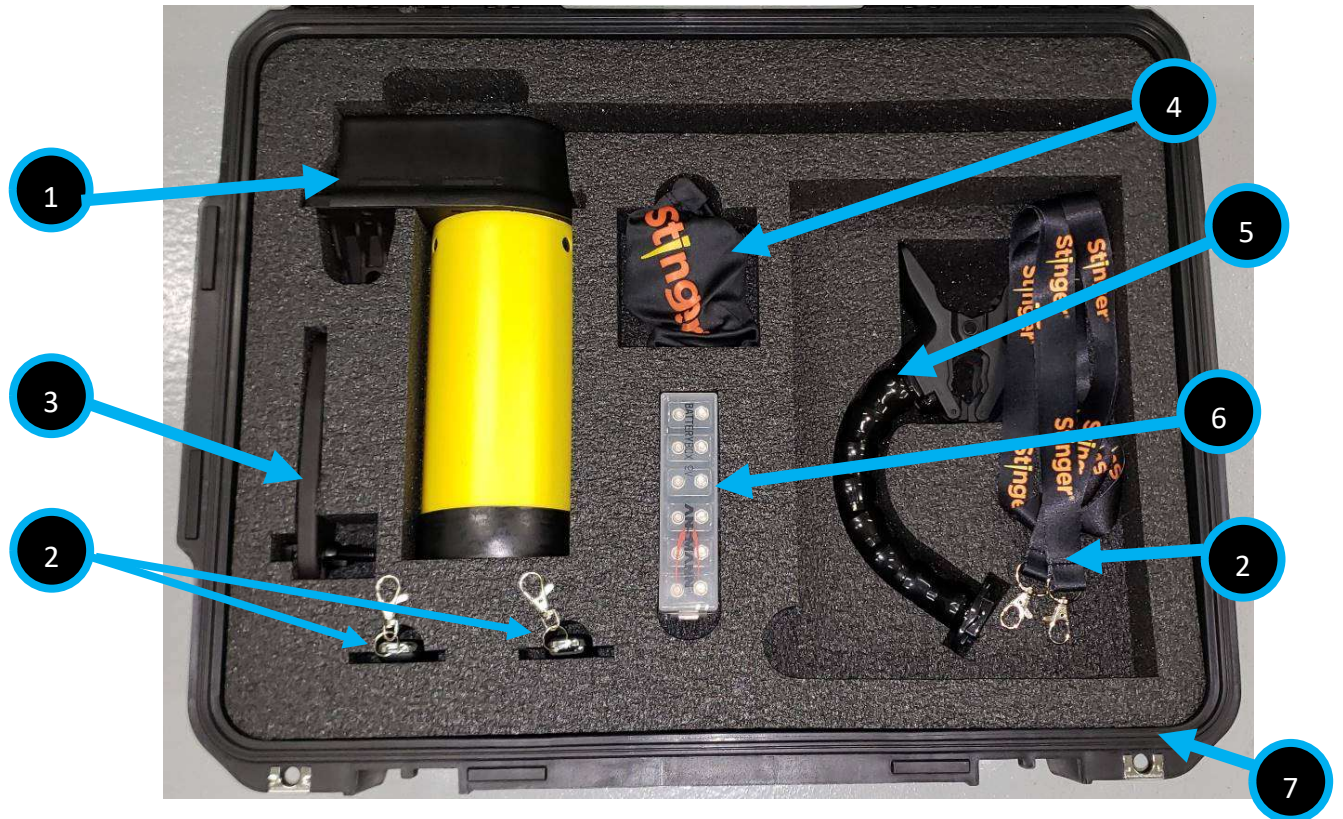
FIRSTPOWER
GROUP LLC

8941 Dutton Dr, Twinsburg, Ohio 44087
330-963-2050

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Stinger® Hornet Kit Overview



1. **Stinger® Hornet:** Non-conductive housing and Can Cover safely protects the can and houses the Receiver electronics, plumbing and valve to route the Stinger® fluid to the nozzle. The Stinger® Hornet is shipped with two spare nozzles.
2. **Keyfob Transmitters:** The Stinger® Hornet comes with two Keyfob Transmitters & Lanyards, allowing Stinger® fluid to be dispensed from a safe location.
3. **Hornet Extension:** Install between the Stinger® Hornet and the hot stick if needed for positioning. Includes a screw and wing nut to attach the Extension to the Hornet.
4. **GoPro® Camera:** The camera captures live video where the Stinger® fluid is applied / dispensed.
5. **Camera mount:** Flexible arm mounts the camera to the hot stick.
6. **Batteries:** Six 9V batteries are provided in addition to the batteries installed in the Stinger® Hornet.
7. **Case:** The Stinger® Hornet Kit comes in a durable and waterproof case.
8. **Stinger® Hornet Manual:** This document

Operation Guide

Step 1: Take the Stinger® Hornet out of the Case.



Step 2: Remove the (yellow) Can Cover on the bottom of the Stinger® Hornet by rotating counter-clockwise.

Step 3: Fully screw in the threaded top of the appropriate Stinger® Fluid Can (1FR™, 2NP™, 3PAO™) with your hand until hand tight. It is normal to hear a pressure release sound before the can is fully screwed in. Typically, you should give the can another ½ turn after hearing the pressure release. **Warnings: If it is hard to screw in the can, remove the can and try again. DO NOT FORCIBLY SCREW IN THE CAN.** If the can isn't fully screwed in, the can could leak. The Stinger® Hornet can only be used with proprietary Stinger® fluids, DO NOT attempt to insert other cans into the Stinger® Hornet.



Step 4: After installing a can, be sure to attach the yellow Can Cover. Slide over the can, up to the Stinger® Hornet and rotate clockwise until the cover latches.

Operation Guide

Step 5: Power on the Stinger® Hornet by flipping the Switch from the Off Position to On Position.



Step 6: Test fluid stream into a rag away from equipment for proper function.

Step 7: Attach the fully assembled Stinger® Hornet to the hot stick using the toothed hot stick adapter (Hot Stick Adapter) on the bottom of the Stinger® Hornet. Be sure to attach the Stinger® Hornet at an appropriate angle to easily aim stream of Stinger® fluid to the desired location. Use the Hornet Extension if needed.

We recommend you practice moving and operating the Stinger® Hornet when the hot stick is fully extended before using it in the field.

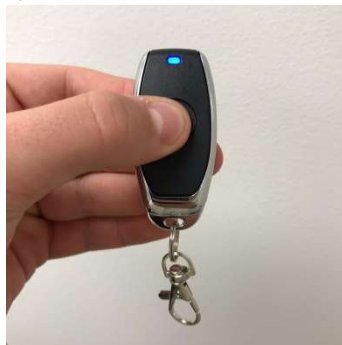


The Stinger® Hornet Kit includes a hot stick adaptor extension that can be used for additional positioning of the Stinger® Hornet. The Extension is installed between the Hornet and the hot stick using the included screw and wing nut.



Operation Guide

Step 8: Press the Button on one of the Keyfob Transmitters provided to disperse the liquid. The liquid will continuously stream out of the nozzle while the Keyfob Transmitter is pressed. If the Keyfob Transmitter LED does not flash ON when the button is pressed, the batteries in the Keyfob Transmitter must be replaced.



Step 9: Turn the Stinger® Hornet power OFF after use.



Step 10: After the Can Cover is removed, unscrew and remove the can. Make sure the Stinger® Hornet is upright to prevent the Stinger® fluids from leaking onto equipment or personnel when the can is unscrewed. Attach the Can Cover.

Step 11: Place the Stinger® Hornet into the Case and close the Case. Make sure this manual is in the Case when not in use.

GoPro® Camera Installation and Usage

Note: FirstPower Group LLC does not supply the microSD cards with the camera.

Step 1: Lift the grey Rubber Locking Plug that is a part of the GoPro® Camera so that it is touching the back of the camera as shown below.

Before



After



Step 2: To easily slide the GoPro® Camera into (or out of) the Camera Mount (shown on the next page), gently pinch the black plastic Clip Ends.



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GoPro® Camera Installation and Usage

Step 3: Slide the GoPro® Camera into the camera mount and press down the Locking Plug. Make sure that the camera lens is in the proper direction.



Sliding the GoPro® Camera into the camera mount

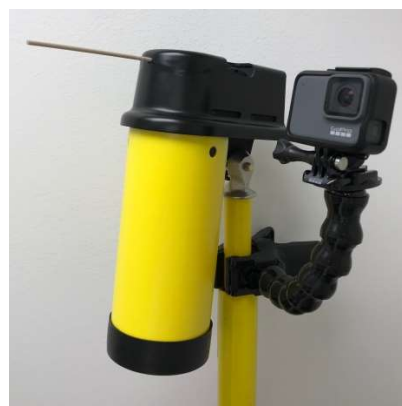
Step 4: Clamp the Camera Mount onto the hot stick at the desired height.



Step 5: Download the Manufacturer's App and follow the instructions to connect Wi-Fi to the camera.
<https://gopro.com/en/us/shop/softwareandapp>

Turn the power on to the camera and cell phone/tablet and use the App to view the images.

Note that before use, the cell phone or tablet must be paired to the Camera using the manufacturer's App.



Stinger® Hornet and GoPro® Camera mounted to the hot stick.

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Battery Replacement

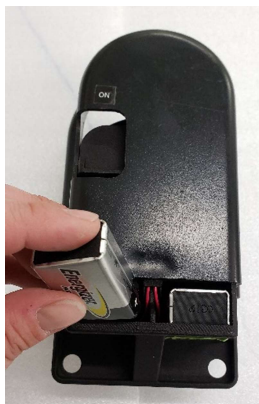
Replace Stinger® Hornet Batteries

Step 1. Turn the Stinger® Hornet OFF

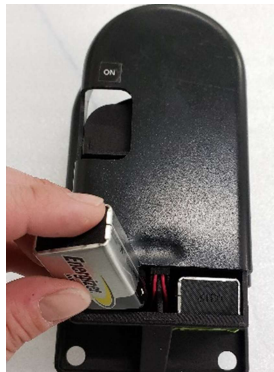


Step 2. Slide the Stinger® Hornet cover forward to expose the Battery compartment.

Step 3. Push down and then forward on each battery to remove. The springs will cause the batteries to “pop up” for removal. Pull each battery out and disconnect from the connector.



Step 4. Use standard Alkaline 9V batteries for replacement. Always replace with 2 new batteries. Carefully connect each of the 2 batteries to the connectors and install by pushing down and then back so the batteries are retained.



Trouble Shooting Guide

Replace Transmitter Keyfob Batteries

The status of the batteries is indicated by the Transmitter keyfob's LED. If the LED doesn't flash on when the button is pressed, then the batteries must be replaced.

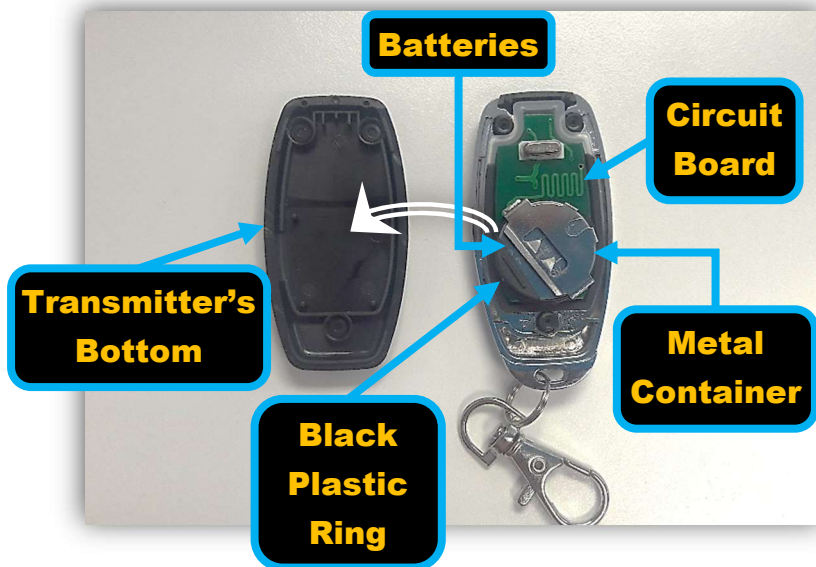
Top



Bottom



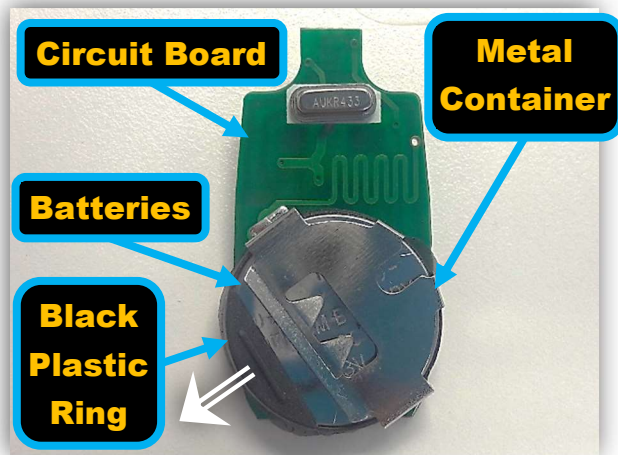
Step 1: Flip the Transmitter over so that it is on its bottom side. Then use a #2 Phillips head screwdriver to unscrew three screws on the Transmitter's bottom. **Make sure to not lose the screws.**



Step 2: Lift the Transmitter's bottom, flip over, and set aside. You will see the batteries are on the green circuit board held by a metal container and secured with a black plastic ring as shown on the left.

Trouble Shooting Guide

Replace Transmitter Keyfob Batteries



Step 3: Remove the green circuit board from the Transmitter. Gently pull on the black plastic ring that holds the batteries, from the metal container. **Both batteries are directly stacked on top of each other and will fall out once the black plastic ring is completely out of the metal container.**



Step 4: Use standard CR2016 coin batteries for replacement. Replace the old batteries with 2 new CR2016 coin batteries in the orientation (shown at left) into the black plastic ring. Push the black plastic ring containing the new batteries back into the metal until it can't move further.

Step 5: Carefully set the green circuit board with batteries back into the Transmitter's bottom, and carefully replace the Transmitter's top. Hold it together and secure with the 3 screws.

Stinger® Fluid Overview



1FR - Penetrant

Stinger® Fluid 1FR (Patent No. 10,689,591) is a fast-acting penetrant that frees corroded disconnect switches, bushings, and bolts. 1FR has a proprietary threaded top which only allows it to be used in the Stinger® Hornet. Simply apply to a seized joint and let sit for 20-30 minutes to ensure penetration and repeat if needed. This fluid can be used on energized equipment.



2NP - Cleaner

Stinger® Fluid 2NP is a switch and contact cleaner and degreaser for removing contaminants, oils, adhesives, tar, sludge and corrosion. 2NP has a proprietary threaded top that allows it to only be used in the Stinger® Hornet. This fluid can be used on energized equipment.



3PAO - Lubricant

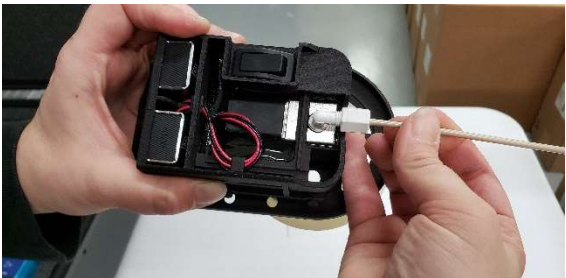
3PAO is a high-quality synthetic lubricant, containing anti-wear additives. It is great for lubricating seized parts, such as gears and knuckles. After using 1FR to open the switch, 3PAO may be used to make the switch move freely and ensure it closes properly. This fluid can be used on energized equipment.

Nozzle Replacement



Removal of Nozzle Tube

Loosen and remove plastic white swage nut from end of solenoid assembly, remove nozzle.



Nozzle Tube Assembly

- a. Insert peek tube into nut.
- b. Replace nut – push peek tube all the way in.
- c. Hand tighten nut – Until you cannot pull out peek tube

Recommended Maintenance and Safety

Recommended Maintenance

- Extend the life of the Stinger® Hornet by not storing outdoors or in extreme conditions
- Wipe the Stinger® Hornet using a clean lint-free cloth after each use.
 - **DO NOT USE CHEMICAL SOLVENTS AS THIS WILL VOID WARRANTY. THIS WILL COMPROMISE THE DIELECTRIC PROPERTIES OF THE STINGER® HORNET.**
 - **DO NOT SUBMERGE THE STINGER® HORNET. THIS WILL VOID WARRANTY**
- Power off the Stinger® Hornet when not in use.
- **Remove can from Stinger® Hornet when not in use.**
- Remove batteries when stored long term.

Safety

Stinger® Hornet

- Do not use on energized equipment without the Can Cover installed
- Make sure to practice operating the Keyfob Transmitter while holding the hot stick. Also, practice getting used to the weight of the Stinger® Hornet.

Stinger® Fluids

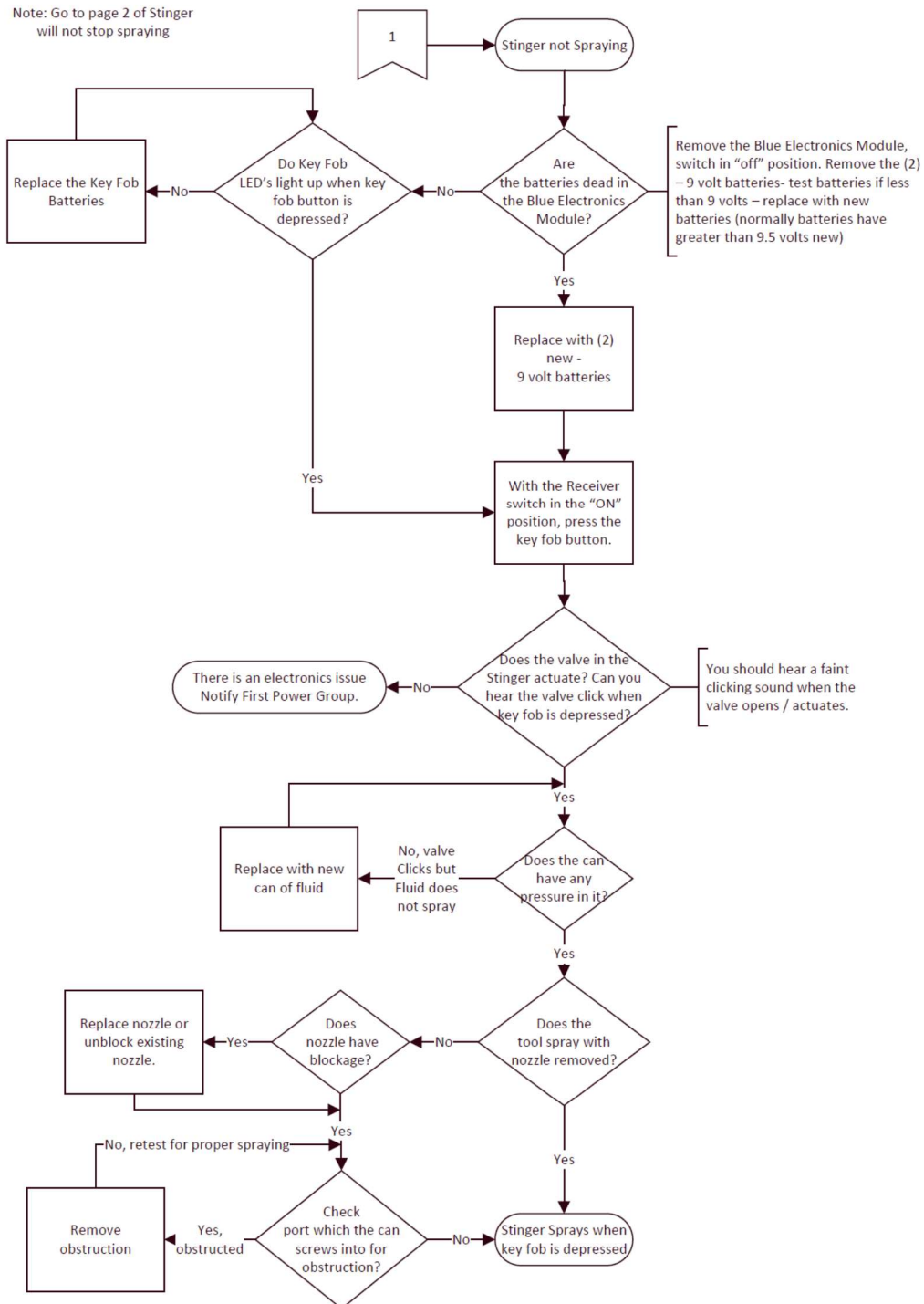
- If any fluids contact skin, wash the area of contact immediately with soap and water.
- Do not ingest any of the fluids, if ingested please contact emergency services.
- Do not store fluids near extreme heat or cold because cans are under pressure.

Trouble Shooting Guide

PFC-02

Stinger V2 Trouble Shooting Flow

Rev 00 4/14/2021



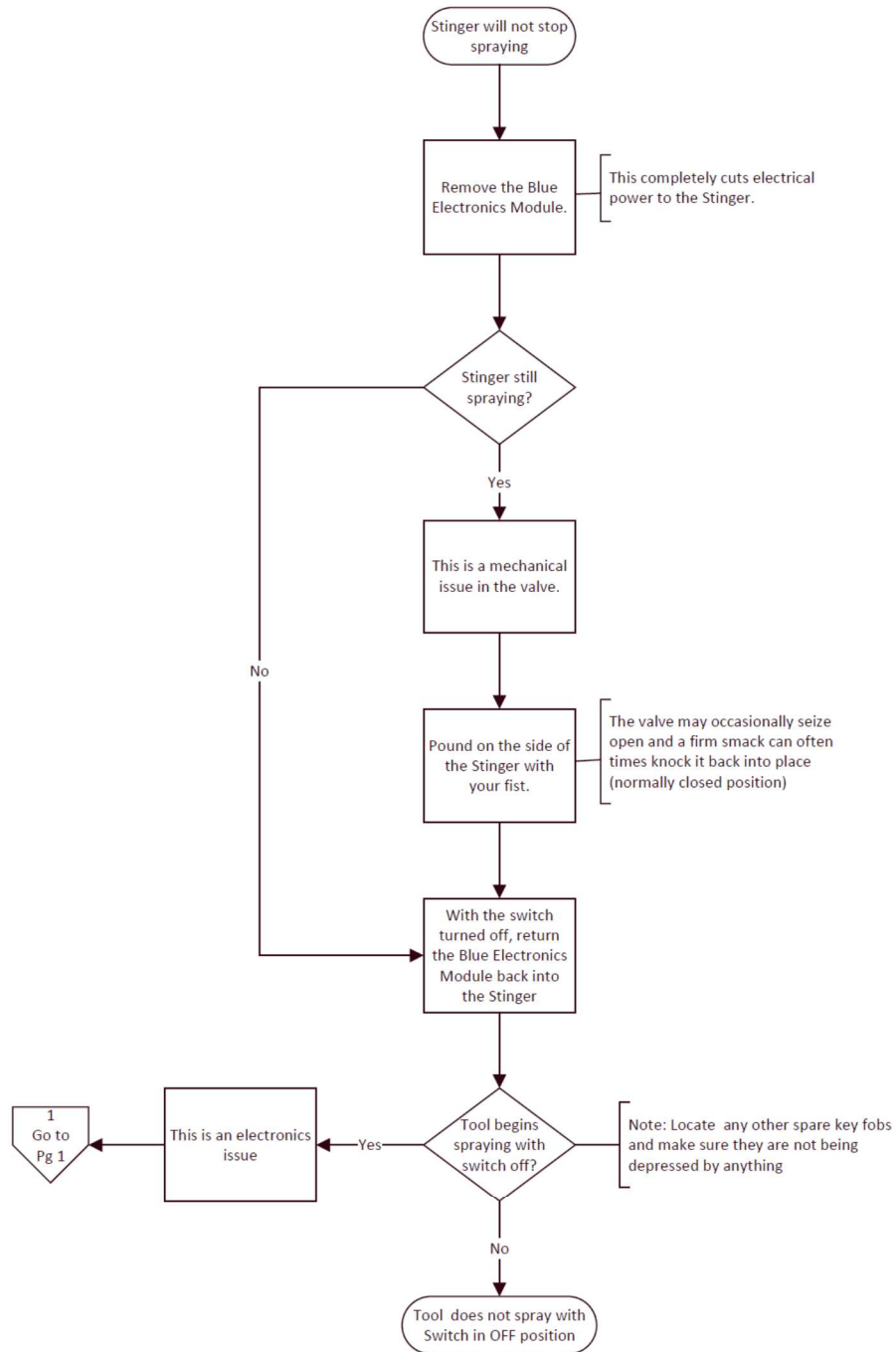
1 of 2

Trouble Shooting Guide

PFC-02

Stinger V2 Trouble Shooting Flow

Rev 00 4/14/2021



2 of 2

Specifications and Certifications

The Stinger® Hornet:

- Dimensions: 10.25 inches by 10.75 inches
- Weight: 2 lbs. (with full can)
- Material: dielectric resin
 - ASTM D149 tested to 221 kV/in
- The Stinger® Hornet passed a Proximity High Voltage Withstand test to 280kV

Stinger® Fluids:

- All Stinger® Fluids have passed ASTM 3065D for non-flammability when applied using the Stinger® Hornet

Warranty Information

The Stinger® Hornet is warranted for three years from the date of purchase with a factory warranty. This warranty applies to parts and labor for any defects that are corrected in our shop when the product has been returned for repair. Pass through warranties provided where applicable.

Parts Diagram



	Part Number:	Description:	Quantity:
1	Stgr-Hornet	Stinger® Hornet with Can Cover and nozzle	1
2	Stgr-31010LY	Keyfob Transmitters with Lanyard	2
3	Stgr-30040	Stinger® Hornet hot stick Extension	1
4	Stgr-7000 ***	GoPro® Camera***	1
5	Stgr-30030	Mount for GoPro® Camera ***	1
6	Stgr-Aerosol 1FR	1FR Penetrant (Patent No. 10,689,591) Not included in Stinger® Hornet Kit	0
7	Stgr-Aerosol 2NP	2NP Cleaner Not included in Stinger® Hornet Kit	0
8	Stgr-Aerosol 3PAO	3PAO Lubricant Not included in Stinger® Hornet Kit	0
9	Stgr-8100, Stgr-8200	Battery box with 6- 9 volt batteries	1
10	Stgr-1353	Two spare nozzles included in kit	2

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Questions?

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