



Semi-Automatic Cartridge-Filling Gun

OWNER'S MANUAL

www.fiftyshot.com

Start Here

Thank you for choosing FiftyShot for your cartridge filling needs. Your support is important to us and we value your business. Before using your new FiftyShot please read this Quick Setup Guide and register your warranty TODAY as there is a time limit to activate.



Activate your warranty today*! Scan the QR code or visit: www.fiftyshot.com/warranty

*30 day window to activate warranty



Please call or email us anytime for support.

Phone: 916-287-0144

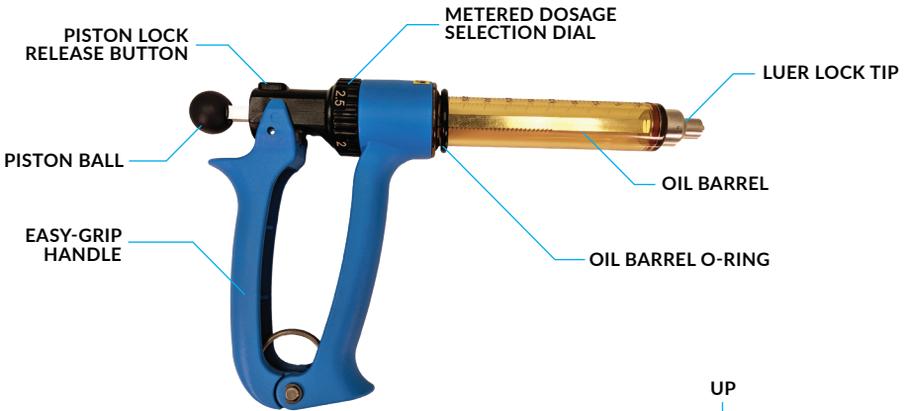
Email: info@fiftyshot.com

Read Time: 5 min

1 **Unpack Your FiftyShot and Check its Components**

Includes:

- Control Unit
- Heat Barrel
- Gun
- Power Cord
- Accessory Pack (Fill needles, luer lock cap, luer lock coupler, spare piston o-ring, spare oil barrel indexing o-ring)



2 Setup & Operation

CONTROL UNIT AND HEAT BARREL

1. Attach power cord to the back of the control unit.
2. Attach the blue heat barrel cord to the back of the control unit.
3. Turn on the power switch located on the back of the control unit.
4. Press "Set" button.
5. Press UP or DOWN buttons until the desired temperature is displayed.
6. Press "Rst" button to lock in temperature.
7. Heat barrel will now maintain temperature.

OIL BARREL AND GUN

1. Preheat oil in a separate device to desired temperature to reduce viscosity.
2. Set cartridge fill volume by adjusting the dial on the back of the gun.
3. Press the "Lock Release" button then pull back the piston.
4. Unscrew oil barrel from gun.
5. Attach black luer lock cap to oil barrel tip.
6. Fill oil barrel by pouring in preheated oil to the fill line.
7. Gently screw oil barrel back on gun, being careful not to cross thread barrel, with the tip facing down to prevent spillage.
8. Point oil barrel up so air bubble rises to luer lock tip.
9. Remove luer lock cap and screw on desired needle.
10. Point the needle up at a 45 degree angle over an oil vessel and discharge gun to remove any air in the oil barrel.

FILLING CARTRIDGES

1. Insert the needle into the cartridge between the center post and glass until needle tip touches bottom of the cartridge.
2. Discharge the oil by squeezing gun handle until "click" is heard.
3. Depending on the oil viscosity it can take between 2.5 - 5.5 seconds to fully discharge the oil.
4. Once fully discharged remove the needle and "cut" the oil from the needle tip on the inside glass rim and immediately move to the next cartridge.

CARTRIDGE FILLING TIPS / POINTERS

- Adjust temperature as needed for proper viscosity.
- Find your rhythm. The discharges will be consistent in both volume and timing once your rhythm is identified.
- Learning curve. The first time you use your FiftyShot there will be a learning curve as you identify the proper "rhythm". Learning curve is typically about 10 cartridges.
- To prevent oil from stringing between cartridges learn to cut the oil on the inside of the cartridge.

3 Clean Up

Clean up after each use, preferably while warm to prevent oil lock in the piston.

1. Turn off the FiftyShot.
2. Remove the heat barrel.
3. Discharge any remaining oil.
4. Submerge fill needle into isopropyl or ethanol alcohol and draw 10-20ml into barrel.
5. Tilt gun vertical and draw air into remaining space.
6. Cover needle with finger and shake syringe until no residual oil is visible.
7. Discharge alcohol and repeat if necessary.
8. Repeat with light detergent to remove any residue.
9. Rinse with water.
10. Air dry
11. Wipe down gun, cord and control unit as needed with alcohol then rag with a little detergent.
12. Wipe down silicone cord and silicone heat barrel with armor all.
13. For storage it is recommended to wipe a thin film of MCT or vegetable oil on piston o-ring.

4 Product Safety Guide

WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in serious injury or death.

- Do not disassemble or modify the unit. This may result in a fire, electrical shock or device failure
- Do not use device in a bathtub, shower, pool or in or around liquids. This may result in a fire, electrical shock or device failure.
- Use device with a GFI outlet

CAUTION

Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injuries.

- Heat Barrel is hot. Wear gloves
- Oil being discharged may be hot. Wear safety goggles.

IMPORTANT

Indicates a potentially hazardous situation which, if not avoided, could result in damage to product.

- Do not leave device exposed to sunlight or near open flames or heater with extremely high temperatures.
- Do not use or store the device in locations with high humidity

5 Programming / Re-Programming

PROGRAMMING

The FiftyShot comes programmed at 138f. This is a good starting point, but this number should be adjusted as needed to reduce or increase viscosity. The lowest workable temperature is preferred.

TO ADJUST TEMPERATURE:

1. Press "Set" button.
2. Press UP or DOWN buttons until desired temperature is displayed.
3. Press "Rst" button to lock in temperature.
4. Heat barrel will now maintain temperature.

FACTORY RESET:

If a factory reset is ever required, follow these steps.

1. Hold / \ + \ / until "y5" is displayed.
2. Press SET
3. Adjust to desired temperature (ie:138)
4. Press RST
5. Hold SET
6. Display Shows: "HC"
7. Press SET
8. Press ^ until "H" is displayed
9. Press SET
10. Press ^ until "d" is displayed
11. Press SET
12. Press v until "1" is displayed
13. Press SET
14. Press v until "Pt" is displayed
15. Press SET
16. Press v until "0" is displayed
17. Press SET
18. Press RST

Please do not adjust the following parameters: LS, HS and CA

FACTORY SETTINGS:

LS: -40 (Lowest Set Limit)
HS: 230 (Highest Set Limit)
CA: 0 (Calibration)

ERROR CODES:

"HHH": Measured temperature is higher than HS (highest set limit)

Solution: Re-program

"LLL": Measured temperature is lower than LS (lowest set limit)

Solution: Re-program

"- - -": Poor connection to heat barrel

Solution: Disconnect and reconnect heat barrel plug.

6 Troubleshooting

1. Why is oil dripping from my needle?

This can be caused by:

- Air in oil barrel.

Solution: Remove air by tilting needle and discharging air.
(Refer to “Oil Barrel and Gun Setup” step 8)

- Large temperature differential between oil placed in oil barrel and programmed temperature causing rapid heating. Warm oil takes up more volume than cool oil so the oil is displaced through the path of least resistance, the needle.

Solution: Preheat oil to same temperature as filling temperature.

- You haven’t found your rhythm. As a liquid heats, it expands. Your rhythm is to discharge oil, cut oil on glass, move to next cartridge, repeat. This rhythm prevents pressure building up within the oil barrel and pushing oil out of the needle prematurely.

Solution: Practice your timing.

2. Why does my 0.5ml cartridge not weigh 0.5 grams?

The FiftyShot is accurate in measuring and discharging liquid volume (ml) with a variance of less than 1%. However, cannot measure in weight (gr) because liquid density is a variable. So one gram of liquid requires a slightly different volume with every batch, therefore cannot be pre-calibrated for weight.

3. Why does my screen show dashes instead of the temperature?

This indicates the computer is not receiving data from the heat barrel. Please verify a secure connection at the blue plug.

4. Why is my heat barrel not heating?

Please verify the heat barrel is properly connected to the control unit via blue plug. Please perform a factory reset (see pg 6)

5. What size needle should I use?

The largest needle that fits between your center post and glass easily. 16g is common.

6. Why am I getting oil “stringing” between cartridges?

This is typically caused by pulling the needle out before it is fully discharged.

It may also be caused by technique. The proper technique is to fully discharge oil, pull needle out and “cut” the tip of the needle on the inside rim of the glass. This will ensure no oil is pulled out and strung across to the next cartridge. Technique and rhythm are very important for efficient use of the FiftyShot.

7. How should I preheat my oil?

There are several ways to preheat your oil. To name a few 1) heated mixing plate 2) hot water bath 3) dry bath or 4) microwave. You can check www.fiftyshot.com or call our sales staff for tips and to purchase equipment.



Your new FiftyShot comes with a one-year warranty and live customer support. Warranty must be registered within 30 days of purchase.

Register Today:

www.fiftyshot.com/warranty



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