



INSTRUCTION MANUAL

**For 08-0661 and 08-0719
Soter Fueling System™ Receivers
For Stihl® Chainsaws**

Motion Pro Soter Fueling System™

The Motion Pro Soter Fueling System™ requires correct installation of the components for safe use and function. This manual will identify the steps needed for installation and use of the system. For more information about installing or servicing the Soter Fueling System™ please see the full manual provided with each component.

motionpro.com/c/soter-fueling-system



Soter Fueling System™

U.S. Patent 10,618,797 | U.S. Patent 10,259,700

SFS RECEIVERS:



08-0661 SFS Receiver



08-0719 SFS Receiver

SFS PROBES:

08-0680 SFS Probe

*not included



08-0662 SFS Probe

*not included



08-0738 SFS Probe

*not included



Portable fuel container
*not included

Scepter: FR1G101 (1 gallon)
FR1G201 (2 gallon)
FR1G501 (5 gallon)



MSR® Style 30 oz.
fuel bottle
*not included



2-Stroke PreMix
cans 32 oz. or
1 gallon style
*not included

SERVICE TOOLS:



Bar tool (scrench)
*not included



08-0713 Soter Probe
Service tool *not included

COMPATIBILITY:

Chain Saw Models, Fitment:

08-0661 Receiver – Replaces ¼ turn cap on Stihl® MS250, MS251, MS271, MS280, MS291, MS311, MS362, MS391, MS400, MS441C, MS460, MS461, MS462, MS500, MS661, MS880, MS881

08-0719 Receiver – Replaces threaded cap on Stihl® MS660

RESOURCES:

Access documents and video resources online:
visit motionpro.com/c/soter-fueling-system for more information



Use smartphone
camera to scan

WARNING: Please carefully read all instructions for the installation and use of the SFS Receiver before installing or using. Improper installation or use of this product could result in property damage, harm to others, great bodily injury or death. Do not depress plunger on an SFS Receiver installed on a gas tank without use of SFS Probe. Doing so could result in geysering (spraying out) of gasoline and could result in property damage, fire, severe burns, harm to others, great bodily injury or death. **WEAR SAFETY GLASSES AT ALL TIMES WHEN USING, INSTALLING, OR REMOVING THIS PRODUCT.**

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STEP 1: Receiver Installation

WARNING: Wear safety glasses and protective gloves at all times when using, installing, or removing this product.

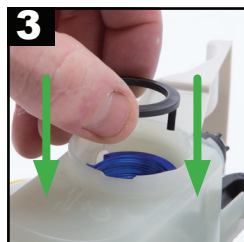
08-0661 Installation

1. Remove blue lower adaptor and black locking ring from the 08-0661 receiver assembly. Insert the lower adaptor into the neck of the fuel tank, taking care to properly align its three cogs with corresponding features in fuel tank.

2. With the lower adaptor in place, rotate clockwise until it stops (approximately $\frac{1}{8}$ turn). The three openings for the locking ring will now be exposed.

3. Lower the black locking ring into the three corresponding features in the blue lower adaptor. Ensure that it seats fully in place.

4. With the blue adaptor and black locking ring in place, lower the 08-0661 Receiver assembly, with o-ring and dust cover installed, into the fuel tank opening.

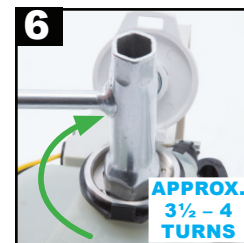
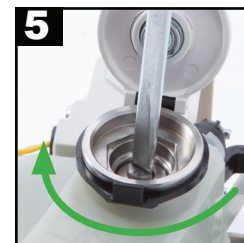


Step 1 continued, next page... →

STEP 1: Receiver Installation

5–6. Ensure proper thread alignment and gently hand fasten the 08-0661 Receiver into place. Carefully fasten the receiver clockwise using the screwdriver end of the bar tool in the receiver plunger slot. To fasten completely, engage the large hex end of the bar tool into the hex opening in the Receiver. Complete fastening is typically achieved in 3.5–4 turns total.

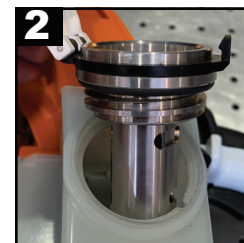
IMPORTANT: DO NOT MISALIGN OR CROSS-THREAD RECEIVER DURING INSTALLATION. DAMAGE OR INJURY MAY OCCUR IF THE COMPONENT IS NOT FULLY INSTALLED. DO NOT OVERTIGHTEN.



08-0719 Installation

1. Remove stock cap and clean sealing surface of fuel tank.

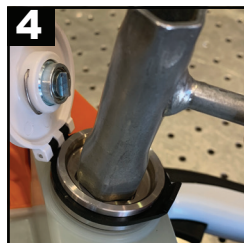
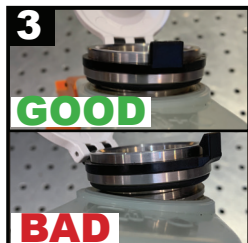
2. Insert SFS Receiver into tank, ensure proper alignment of the threads.



Step 1 continued, next page... →



STEP 1: Receiver Installation

3. Important: DO NOT CROSS-THREAD.
4. Fasten using the large hex end of the bar tool.



STEP 2: Receiver Locking And Unlocking Procedures

1. The dust cover on the Receiver protects from impact and debris, but additionally includes an integrated locking mechanism for the Receiver.

ROTATE CLOCKWISE TO LOCK  AND COUNTERCLOCKWISE TO UNLOCK  RECEIVER.

LOCKED POSITION

2a. Alignment indicators and plunger slot shown in alignment. This signifies that the receiver is **LOCKED** and cannot be used for an SFS fuel transfer until it is returned to the unlock position.



STEP 2: Receiver Locking And Unlocking Procedures

UNLOCKED POSITION

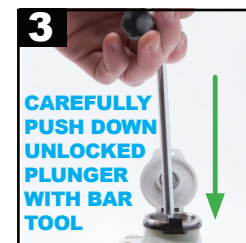
2b. Alignment indicators are located on the interior of the Receiver. The plunger (center) slot is NOT aligned with the indicator marks, signifying that the Receiver is **UNLOCKED** and ready for fuel transfer using an SFS Probe.



3. TRADITIONAL REFUELING -

When a SFS Probe is not available for use, the Receiver plunger can be locked in the open position to allow traditional refueling.

WARNING: Do not touch, depress, or attempt to open plunger when Receiver is in the unlocked position unless located minimum 100 feet from ignition source, and fuel in the fuel tank is not in a geysering state.



To lock open plunger, slowly and carefully push down unlocked plunger with a bar tool. When the plunger bottoms out, rotate clockwise approximately $\frac{1}{4}$ turn. After traditional refueling, rotate the plunger counter-clockwise approximately $\frac{1}{4}$ turn and allow plunger to release to the closed position under spring pressure.



Step 2 continued, next page... ➔

STEP 3: Fuel Transfer - Probe Installed

WARNING: Wear safety glasses at all times when using, installing, or removing this product.

1. To refuel with Soter Fueling System™, unlock Receiver and open/remove dust covers from both Probe and Receiver. Invert fuel container and place Probe in first step of Receiver, maintaining axial alignment.

2. Firmly and completely push Probe into Receiver while maintaining axial alignment. Complete fill will be achieved in 20 seconds or less on most chainsaws. After refueling, remove Probe from Receiver and return dust covers to their closed position. The Receiver may be locked as shown on pg. 6, step 2 (Fig2a) but is not required for operation.



STEP 4: Receiver Removal

08-0661 and 08-0719 Receiver Removal

WARNING: To avoid injury, you must follow these procedures to remove SFS Receiver from chainsaw gas tank:

1. Allow the equipment to sit for 45 minutes away from heat sources to allow the equipment to cool.
2. Take equipment to safe place at least 100 feet from nearest fire, sparks, or other source of ignition.
3. Put on safety glasses and protective gloves.
4. Install SFS Probe in good working condition on portable fuel container and insert into SFS Receiver and hold down for 15 seconds to bleed pressure out of equipment fuel tank.
5. Confirm pressure has been relieved in equipment gas tank as follows: With dust cap on, unlock SFS Receiver. Open dust cap. Use screwdriver blade to slowly and gently depress plunger in SFS Receiver a small amount (no more than 2 mm). If fuel comes out withdraw the screwdriver blade and allow receiver to close. Let equipment cool down for longer period of time and try bleeding pressure from gas tank again by inserting SFS Probe attached to portable fuel container. Repeat this process until no fuel comes out of SFS Receiver when plunger is depressed a small amount.

Warning: Never push down receiver fully without SFS Probe!

6. If SFS Receiver plunger can be depressed a small amount without fuel coming out then it is safe to proceed with removal of the SFS Receiver. A bar tool or appropriate size hex wrench that fits on inside of SFS Receiver is required, turn the Receiver counter clockwise and unscrew it from the Receiver adaptor in the fuel tank.

Step 4 continued, next page... ➔

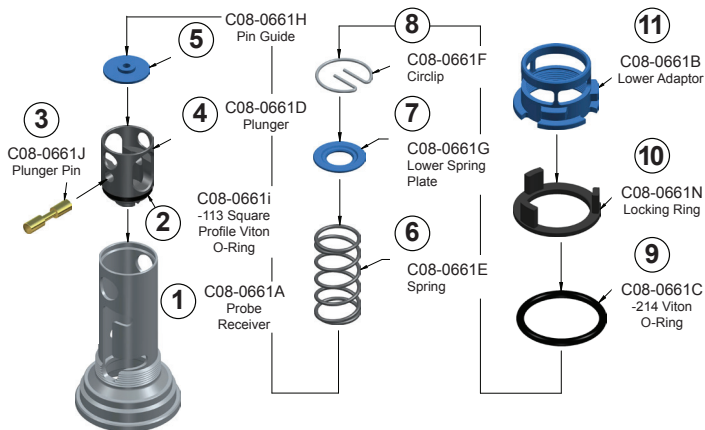
STEP 4: Receiver Removal

7. Move to step 8 for 08-0719 Receiver. For 08-0661 Receiver, remove locking ring from SFS Receiver tank adapter and remove tank adapter by turning it counter clockwise to align tabs on adapter with slots on gas tank.

8. Install stock gas cap on equipment gas tank to prevent fuel spills.

SERVICE Soter Fueling System™ Receiver

08-0661 SFS Receiver Components



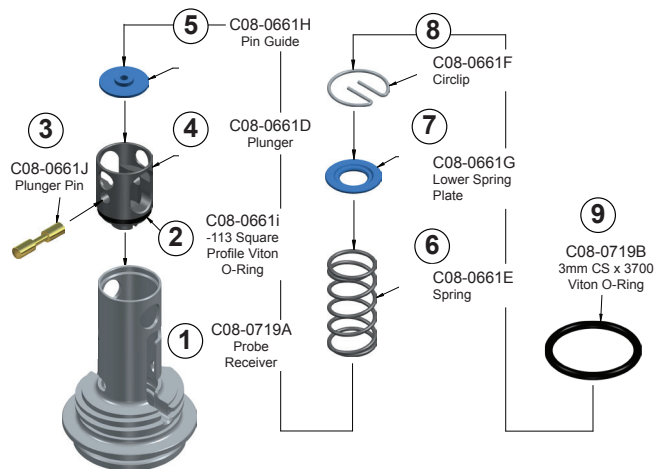
SERVICE Soter Fueling System™ Receiver

08-0661 and 08-0719 Receiver Service

WARNING: Read all direction for servicing; improper servicing could result in gasoline spill, property damage, great bodily injury or death; improper use could result in great bodily injury or death. Do not manually depress plunger without SFS probe! Doing so could cause gasoline to geyser out of receiver and cause property damage, great bodily injury or death.

WARNING: Wear safety glasses and protective gloves at all times when servicing Soter Fueling System Receiver.

08-0719 SFS Receiver Components



Service instructions, next page... →

SERVICE Soter Fueling System™ Receiver

Disassembly

Note: To identify the numbered component references below, see the 08-0661 & 08-0719 SFS Receiver Components diagram on pg. 11

1. On 08-0661, remove lower adaptor (11). Remove o-ring (9) and inspect for wear or damage. For part reference, use above diagram.

2. Using the screwdriver end of a bar tool, pry the tabs of the wire clip (8) to remove it from the groove in the SFS Receiver. The lower spring plate (7), spring (6), and pin guide (5) may now be removed from the assembly.

3. Remove plunger pin (3) and plunger (4). Clean all parts with contact or brake cleaner and compressed air. Inspect all components for any damage and replace if necessary.



SERVICE Soter Fueling System™ Receiver

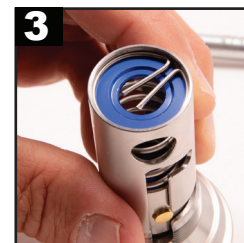
Assembly

Note: To identify the numbered component references below, see the 08-0661 & 08-0719 SFS Receiver Components diagram on pg. 11

1. Lubricate square-profile o-ring on plunger (4) with 2-stroke oil. Install plunger into the Receiver (1) and align the plunger pin hole with the slot as shown. Install the plunger pin (3) and pin guide (5). Make sure the pin guide is engaged with the undercut in the center of the plunger pin. This feature keeps the plunger pin in proper alignment during use.

2. Install the spring (6) and lower spring plate (7). **Note:** the smaller diameter shoulder goes against the bottom of the spring.

3. Compress the spring with your finger and install the wire clip (8). Make sure the wire clip is fully seated in the lower groove on the Receiver.





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