## **SAA Complete Upper Troubleshooting Guidelines**

Your SAA Complete Upper has been meticulously assembled, head spaced and test fired. Any issues can usually be traced back to WAMO: Weapon, Ammo, Magazine or Operator. The upper has not been cleaned after the test firing. Any excess lubrication should be removed before firing. You should inspect (all) firearms before firing them.

Remember the rules for safe firearm handling. Always keep the gun pointed in a safe direction. Always keep your finger off the trigger until ready to shoot. Always keep the gun unloaded until ready to use.

Some typical malfunctions are FTF (failure to feed) and FTE (failure to extract).

**Failure To Feed** is usually caused by the magazine (seating or a bad mag), the ammo, the lower (buffer tube/spring) or a combination. Each component may be barely in spec but when used together, "tolerance stacking" results. Tolerance stacking happens when one part that is barely in spec is combined with another part that is barely in spec. The resulting failure can be attributed to tolerance stacking.

First, the magazine my not be completely seated in the mag well. Lock the bolt back and insert the magazine fully. Pull down on the magazine to be sure it is locked into place. Release the bolt (using the bolt release) and allow the bolt to be locked into battery with just the force of the buffer spring. Do not ease the bolt forward (with the charging handle). Fire the rifle once, pause and fire it three times. If there are failures, test again with a different magazine. Bad magazines happen with bad feed lips, follower, spring or even mag body flaws. If there are still failures, test again with different ammo. For testing purposes, use only new factory ammo. Some reloaded (even factory reloaded) or "surplus" ammo may be out of specification. Both over and under pressure can cause FTF. Also, in some cases the lower may be the issue. Check to be sure you have the proper buffer tube and spring combination. We test and prove operation with a standard weight buffer (not an "H" or heavier).

Failure To Extract is usually an ammo issue. Again, use only new factory ammo for testing. In rare cases, the extractor in the bolt can fail. When this is the case it will usually not extract any cartridge. If the cartridge is stuck in the chamber and the extractor is not broken then the ammo is more likely over pressure. The case has expanded and has probably ruptured and will need to be removed by first removing the upper from the lower, bolt and charging handle and then removing the cartridge by pushing a rod down the muzzle or using a broken shell extractor (if the base/rim of the case has broken off while extracting).

**Failure to Eject** is usually caused by the bolt ejection pin but the cartridge casing may also be damaged by being over pressure or during reloading. Again, only use new factory ammo when testing.

Other failures like "stove piping" and double feeds are usually ammo related. Under powered ammo can cause double feeds and stove piping (not enough pressure to work the action correctly, causing various ejection and misfeed problems) and over powered ammo can over-cycle the action.

Your SAA Complete Upper has not been "broken in" and may need to have 100 or more rounds fired through it before it can accept "other" types of ammunition. This is not your mother's AR. Your SAA Complete Upper worked perfectly when it left our warehouse. Your mileage may vary. Please read and follow the above recommendations before calling customer service.

If your SAA Complete Upper is returned for re-testing please include at least three spent brass casings and complete the following:

Ammunition specifications:		Date:
Lower used:		Order Number:
Magazine(s) used:		Name:
Number of rounds fired:	Malfunction number and type (FTF, FTE	)
We will be calling you to discuss an number and the best time to call yo	y issues you may be having with your SAA Compl ou.	lete Upper. Please list a day time phone
Name:	Best time to call:	
Phone:	Time Zone:	