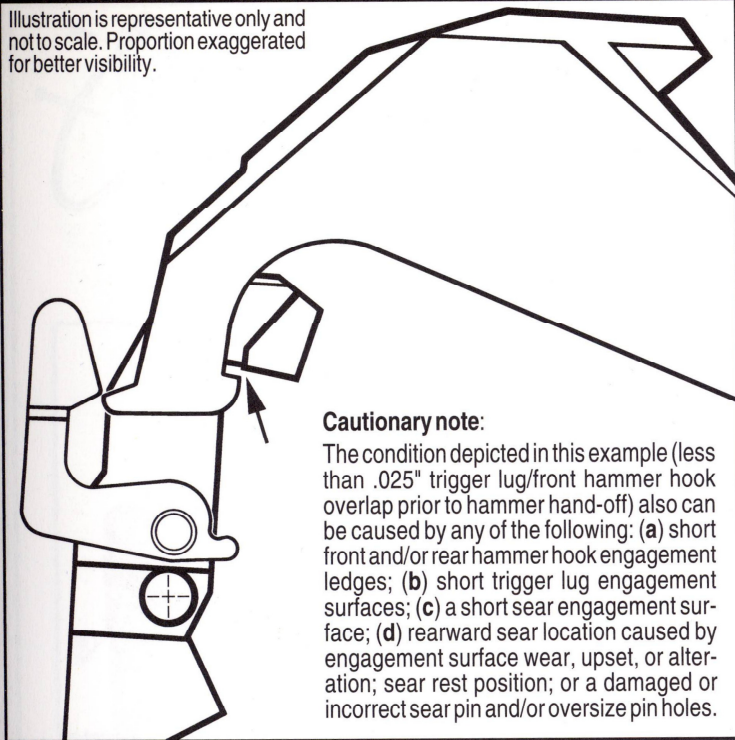


Illustration is representative only and not to scale. Proportion exaggerated for better visibility.

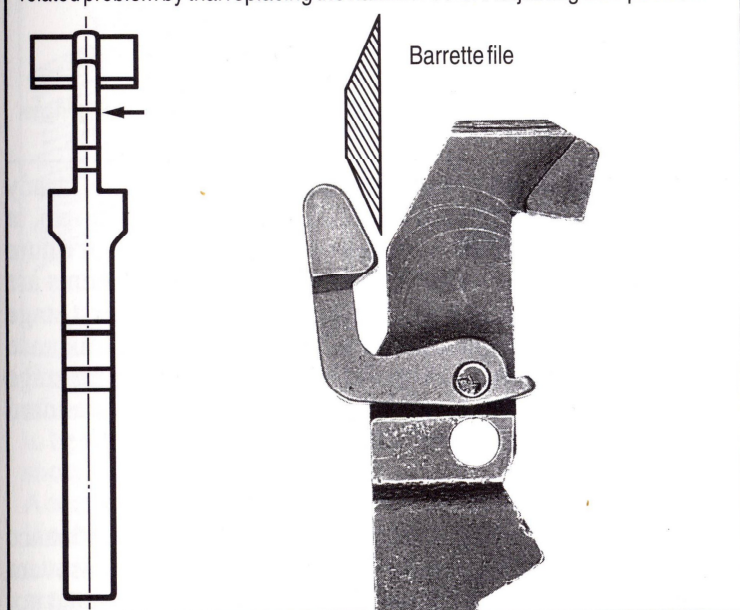


**Cautionary note:**

The condition depicted in this example (less than .025" trigger lug/front hammer hook overlap prior to hammer hand-off) also can be caused by any of the following: (a) short front and/or rear hammer hook engagement ledges; (b) short trigger lug engagement surfaces; (c) a short sear engagement surface; (d) rearward sear location caused by engagement surface wear, upset, or alteration; sear rest position; or a damaged or incorrect sear pin and/or oversize pin holes.

**Figure 187-** In the above example, rearward sear position causes hammer hand-off before the trigger lugs overtravel the front hammer hooks as far as they should. Rearward sear position acts to lighten trigger pull by reducing second stage trigger spring pressure and by providing greater sear breakaway clearance- but also increases the potential for sear failure to engage the hammer and for uncontrolled hammer release.

Sear position is adjusted forward in *tuned* and match conditioned M1 trigger groups for 3 reasons: (1) trigger pull is too light; (2) sear/rear hammer hook ledge engagement is minimal; or (3) trigger lug/front hammer hook engagement is minimal at the hammer hand-off point. See warning, at right. Rule out a hammer related problem by trial replacing the hammer before adjusting sear position.



**Figure 188-** Arrow indicates location of the sear stop surface on the back of an M1/M14 trigger that is adjusted to move the sear forward. Use a 4" barrette file and strip of #240 sandcloth to remove just enough material from the back of the trigger to: (a) return sear/rear hammer hook engagement and trigger lug/front hammer hook engagement at the hand-off point to within normal range or (b) return trigger pull to within specification when the hammer and hammer spring are both serviceable.

**M1 trigger pull problems and remedies**

See trigger pull check on page 164.

**Warning:** Because of the potential for uncontrolled fire and possible deadly injury, do not attempt to tune or match condition M1 trigger group parts unless fully qualified on M1/M14 trigger mechanisms. Limit work to parts inspection, replacement, and servicing.

**Reasons trigger pull may be too light:**

1. The hammer spring is weak or short.
2. The rear hammer hooks have been altered and are too short.
3. Sear position is too far to the rear.
4. The sear is excessively worn, surface upset, or has been altered.
5. Front hammer hook/trigger lug engagement has been reduced (i.e., the front hammer hooks and/or the trigger lug engagement surfaces have been altered and shortened).

Depending on the degree present, the above problems can also cause hammer follow through, doubling, and multiple round (automatic) firing.

**Reasons trigger pull may be heavy:**

1. Long or rough hammer hooks.
2. Uneven and/or rough trigger lugs.
3. Sear too far forward (typically caused by excessive stop surface adjustment).
4. Trigger pivot pin bent.
5. Bent/deformed trigger and/or sear.
6. Wrong hammer spring.
7. Deformed or damaged hammer spring and/or hammer spring housing.
8. Trigger housing bent or twisted.
9. Trigger drags/binds inside housing.
10. Hammer drags rough housing wall.
11. Trigger match conditioning work is incorrect or incomplete.

**Note:** Marksmanship unit type trigger lug alteration changes trigger/hammer geometry. Moving the sear forward after trigger lug alteration without fitting the rear hammer hooks can cause the sear to fail to engage or overengage. Overengagement can prevent sear release and hammer hand-off.

**Remedies for light trigger pull in issue grade M1 Rifles:**

1. Replace worn, altered, or damaged trigger group components with within specification U.S.G.I. parts.
2. Limit fitting of new parts to deburring and light bearing surface stoning to remove the phosphate coating and minimize drag: don't stone through the case.
3. Adjust the trigger sear stop surface to move the sear forward and increase hammer hook engagement as needed.