

USE YOUR HEADSPACE AND DO TIMING



Every year soldiers and M2 machine guns are hurt because machine gunners don't correctly headspace and time their M2s before firing. Bad headspacing and timing cause ruptured cartridges, which can lead to the M2 exploding.

So it's critical that every time before you fire or when you change the barrel that you headspace and time your M2.

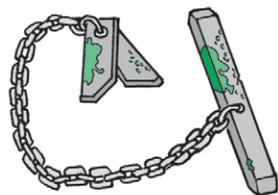
Pre-check Checks



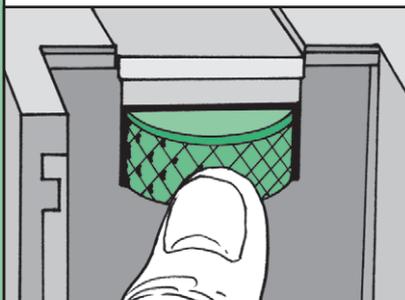
OF COURSE, IF YOUR M2 AND ITS GAUGES ARE IN BAD SHAPE YOU WON'T BE ABLE TO HEADSPACE AND TIME IT.

THAT'S WHY YOU NEED TO DO THESE CHECKS BEFORE YOU GO TO THE FIELD...

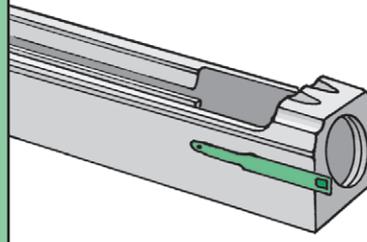
Gauges. If the headspace and timing gauges are bent, rusted or pitted, you can't accurately gauge, so tell your armorer. He can order new gauges with NSN 5250-00-535-1217.



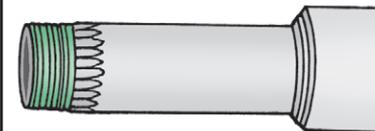
Timing nut. If the timing nut can be moved with one finger or it doesn't click as you move it, its spring is weak and it won't hold timing. Tell your armorer.



Barrel locking spring. If the spring can't hold the barrel in place, the barrel can turn during firing and headspace is lost. So test the spring by getting the correct headspace and then trying to unscrew the barrel. If the barrel turns, the spring is weak or loose. Tell your armorer.



Barrel and barrel extension threads. If the threads are chipped or burred, it will be difficult to screw in the barrel. What's worse, you may think you've screwed in the barrel, but you haven't, and that means bad headspace. Your armorer can usually stone chips and burrs smooth.



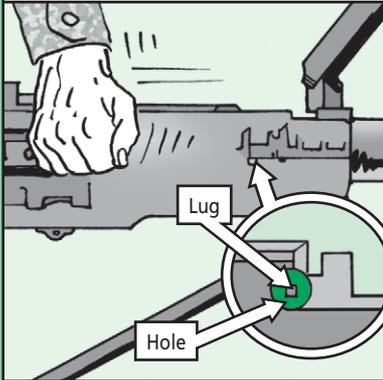
Check the barrel to make sure it's a lined barrel (one with grooves inside). Don't fire with an unlined barrel.

If everything checks out, your M2 is ready for headspacing and timing.

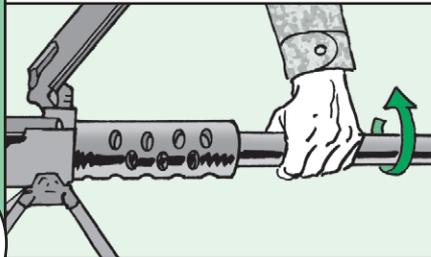
How to Headspace

Retract the charging handle before inserting the barrel. Then follow these steps:

1. Raise the cover all the way and retract the bolt so that the barrel locking lug aligns with the $\frac{3}{8}$ -in hole in the right side of the receiver.

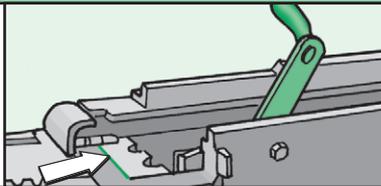


2. With the bolt retracted, screw the barrel completely into the barrel extension. Then unscrew the barrel two clicks. Allow the bolt to go forward. Try to turn the barrel. It shouldn't turn in either direction. If it does, something's wrong. Tell your armorer.



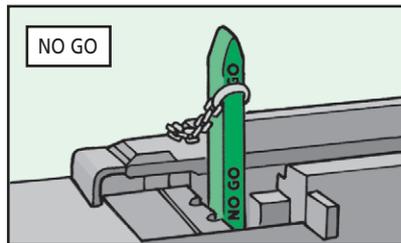
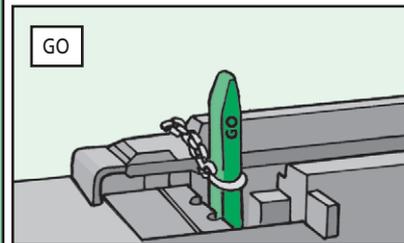
3. Charge the M2 and let the bolt go forward (but don't let it slam).

4. Retract the bolt until the barrel extension begins to separate from the trunnion block, but not more than $\frac{1}{16}$ inch. Hold the bolt in this position until the gauge check is complete. **Don't put anything between the barrel extension and trunnion block.**



5. Raise the cartridge extractor. Push in on the alignment guide to insert the gauge. (Apply slight pressure on the gauge.) Try to insert the GO end of the headspace gauge in the T-slot between the face of the bolt and the rear of the barrel all the way up to the ring. If the GO end goes in all the way to the ring, try to insert the NO GO end. If the NO GO end won't go in, headspace is good.

If the NO GO end does fit in the slot or the GO end doesn't, retract the bolt to align the barrel locking spring lug with the $\frac{3}{8}$ -in hole in the receiver.

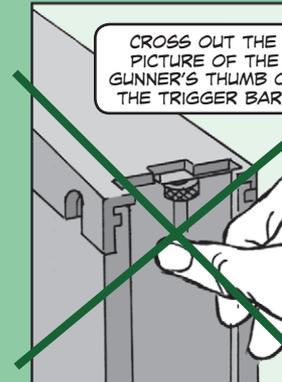


6. Screw the barrel **in** one click at a time if the NO GO end did fit or screw the barrel **out** one click at a time if the GO end didn't fit. Repeat steps 4 and 5 after each click until the GO end fits and the NO GO end doesn't. **Do not unscrew the barrel more than seven clicks.** If the M2 fails to meet the headspacing test, it's unsafe to fire.

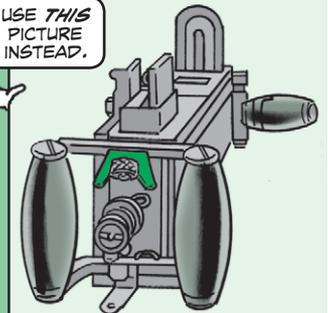


How to Time

The timing procedure in WP 0006 00-15 in TM 9-1005-213-10 has changed. Cross out "Attempt to fire the gun by pushing up on rear of trigger bar". This is replaced by "Reinstall the backplate and attempt to fire by depressing the trigger. Gun should not fire."



USE THIS PICTURE INSTEAD.

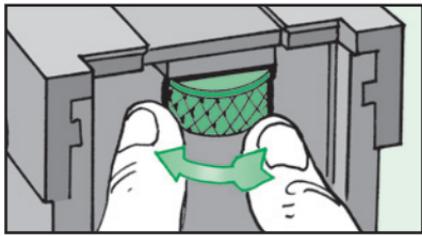


Never charge the gun with the back plate off. Do not stand directly behind the gun while removing backplate. The gun must be in single shot mode before removing backplate.

1. Raise the cover all the way. Do not hold the barrel while charging the weapon. Charge the weapon and allow the bolt to go forward (but not slam).
2. Retract the bolt just enough to insert the FIRE gauge with the beveled edge against the barrel notches.
3. Remove the backplate.



4. Turn the timing adjustment nut all the way to the left, but not completely off the timing stud.



5. Remove the FIRE gauge. Put the backplate back on. Insert the FIRE gauge and press the butterfly trigger. The M2 should not fire.

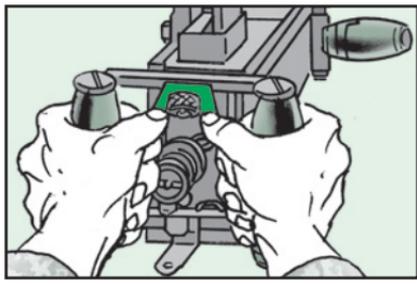
6. Remove the backplate and screw the timing nut to the right one click at a time. Reinstall the backplate. Insert the FIRE gauge and press on the butterfly trigger. Repeat this step until the M2 fires.



7. After the gun fires, remove the backplate and turn the timing nut to the right two more clicks. Reinstall the backplate, charge the M2 and let the bolt go forward without slamming.

8. Retract the bolt just enough to insert the NO FIRE gauge with the beveled edge against the barrel notches. Push on the butterfly trigger. The gun shouldn't fire.

9. Retract the bolt just enough to remove the NO FIRE gauge. Insert the FIRE gauge with the beveled edge against the barrel notches. Push on the butterfly trigger. The M2 should fire. Remove the gauge. You're done.



IF YOU HAVE ANY PROBLEMS, TELL YOUR ARMORER.

NEVER FIRE AN M2 THAT CAN'T BE HEADSPACED OR TIMED CORRECTLY.



There is now a laminated card available that contains the entire headspacing and timing procedure. Your TACOM logistics assistance representative can get you a copy. Or you can contact TACOM's at DSN 793-2108/(309) 782-2108 or email:

@us.army.mil

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