BARBER - PRESALE R 0107060

SAAMI TECHNICAL COMMITTEE MANUAL

ISSUED 10-5-78

VOLUME VII, CENTERFIRE RIFLE

REVISED

FAILURE-TO-FIRE

A failure of the firearm to discharge after the trigger has been pulled can be one of two types: 1) a complete misfire or, 2) a delayed fire.

A misfire is defined as a failure of the priming mixture to be ignited after the primer has been struck an adequate blow by a firing-pin or the failure of the initiated primer to ignite the powder.

A delayed fire is defined as any delay in firing of an abnormal duration. This category carries the implication that firing does eventually occur. The delay can be due to one or both of two recognized causes. These are: 1) Mechanical and, 2) Chemical.

1) MECHANICAL

An abnormal delay in firing may be caused by an imporperly functioning firing mechanism. Misuse, excessive dirt or residue from hardened gun oil, cleaning solvents, low temperatures or faulty assembly by the shooter can and have caused delays in firing-pin or hammer fall of several minutes and more. In these instances, a waiting period of even 2 to 5 minutes or more may not be enough to allow the mechanism to free itself and fire the cartridge. Extreme caution is recommended because just the act of starting to open the action or even placing it gently on the ground or against a tree may be sufficient to free the malfunction and cause the firing-pin to strike the primer, discharging the firearm.

2) CHEMICAL

An abnormal delay in firing may also be caused by the ammunition (hangfire). Intensive studies have produced no evidence to show that dry, properly manufactured and conditioned, commercially-loaded ammunition with non-mercuric, non-corrosive primers will produce delays in firing longer than 0.3 seconds (300 ms) duration. Delays in ignition, after the trigger has been pulled, of longer than 0.3 seconds have been produced under controlled conditions by saturating the cartridges with spray-type lubricants, or by storing cartridges in guns which are saturated with spray-type lubricants.

BARBER - PRESALE R 0107060

R2508048