

# D-Fender? What's that? Does it really enhance extraction?



By Jeff Chudwin, Chief of Police, Olympia Fields P.D.

The recent law enforcement movement to patrol rifles and carbines has seen a large number of the AR-15/ M-16 type firearms enter service. In twenty years of competition and training, I have observed more than a half a million rounds fired from these weapons and have seen a large number of malfunctions. One basic fault in the design of the AR-15/M-16 type weapon is the lack of extractor spring tension. Regardless of manufacturer, I have observed numerous extraction failures where the fired cartridge case prematurely releases off the bolt face prior to ejection. The fired case remains in the feedway and is jammed on top of a live round feeding from below causing a serious malfunction. To reduce the malfunction requires magazine removal, bolt lock, and feedway clearing, before the weapon can be returned to service.

The premature release of the fired case is caused by the extractor lip slipping out of the extractor groove and off the fired case head because of the lack of adequate extractor spring tension. To correct the extractor spring tension problem, Mack Gwinn and his partner, Jim Sullivan, have designed an ingenious add-on part. Sullivan was one of the original design team engineers that developed the Armalite AR-15 in the 1960's. Mack Gwinn was a SOG operator and team leader in Viet Nam and a user and student of the M-16 system. Combining their vast expertise, they came up with this simple solution. Shaped like a horseshoe with a bar across the open end, the D-Ring is slipped over the extractor spring and the parts reassembled. The entire installation takes about three minutes. The D-Ring multiplies the extractor tension by four times.

In three recent Patrol Rifle/Carbine schools I conducted, ninety officers fired well over 75,000 rounds of .223 ammo from a variety of AR-15's, M-16A1's, CAR-15's, and M-4's. Several new weapons immediately experienced extraction failure. The addition of the D-Ring virtually eliminated the problem. In one particular problem Colt M-4, we added both the D-Ring and a heavy-duty extractor spring to solve this problem. More than fifty officers installed the D-Rings and experienced no extraction failures. This type of performance is exceptional. Mack tells of an M-4 (14.5" barrel Military Carbine) they use as a test weapon that has 20,000 rounds fired using the same D-Ring without an extraction malfunction. After installing a D-Ring in my duty CAR-15, I noticed extremely consistent ejection with all fired casings falling within a small circle. I consider the D-Ring a must have addition to any AR-15 type rifle/carbine. The D-Ring should be a lifetime part if not lost or damaged in the cleaning process. If you fire more than 20-30,000 rounds you may need a replacement. At less than 15 bucks, it is the best deal available.