



September 22, 2000

## TECHNICAL NOTE 27: UPDATED AR-10 MAGAZINE ASSEMBLY PROCEDURE

**BACKGROUND:** Recently concluded tests have revealed that magazine performance is improved by assuring that magazine spring forces are focused at the rear of the magazine's follower. Further, follower movement is smoothed by "painting" the interior of the magazine box with teflon-bearing Solid Film Lubricant (available from ArmaLite).

### INSTRUCTIONS:

First, consider your magazines. If they work reliably (as is normal), don't change a thing.

If you wish to change them in accordance with ArmaLite's current practice, start by inserting a cartridge tip or other tool in the hole in the floorplate, and use it to pry the bent tab of the plate up remove to floorplate from the rear of the magazine. Remove the magazine spring and follower, taking care not to lose the bolt catch trip or its spring.

Degrease the magazine *thoroughly* with acetone or another good degreaser. This step is absolutely crucial. Spray the interior of the magazine shell with Solid Film Lubricant, paying particular attention to the front and rear surfaces and the guide ribs along the magazine's sides. Let the film cure overnight before assembling the magazine. Clean off overspray on the outside of the magazine with Acetone.

Incidentally, this painting process provides excellent rust protection. It can be used on the magazine's exterior as well, although it will rub off over time.

Insert the bolt catch plunger spring and the plunger into the hole in the follower, with the beveled plunger face to the rear and down. Press the plunger into the follower and insert the follower into the magazine box, but do not push the follower to the full up position. Place the follower spring in the magazine box so that the topmost point so that it lies in the slot across the follower and retains the bolt catch trip. Push the entire spring into the box, allowing the follower to rise to the top. The plunger pops out as the follower is pushed to the top of the magazine box. Install the floorplate so that the bent tab snaps into the box. If the bolt catch trip pops out, the top turn of the magazine spring wasn't in proper position, so try again.

Solid Film Lubricant was used as the finish on almost all M-16 rifle magazines. It can easily be used to refinish those magazines to look like new. Simply clean the old surface with acetone, paint, and let dry overnight.