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FALSE BREECH FACE ID'S

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Key Word: Breech Face Phrase-"Family characteristics" on the breech face could mistakenly be considered individual characteristics and called a "match".

Most major laboratories have had an influx of inexpensive semiautomatic firearms submitted for analysis; Lorcin Firearms, Phoenix Firearms (formally Raven), Davis Industries and Hi-Point Firearms to name a few. Recently a homicide detective brought in two 9mm model L9, Lorcin semiautomatic pistols to be test fired. Both were purchased at the same time and were in like new "condition. These particular guns (#011634 & #011696) were fired and the test shots intercompared. What I observed on the breech faces of both guns troubled me. Either because of the heavy black "paint" that adhered to the breech face or some other mechanism, a match could be made between the two firearms based **only** on breech face markings. Only by further examining the sidewall and extractor individual characteristics, could the two guns be separated.

Mr. Dennis Smith, Production Supervisor of Lorcin Engineering, was contacted and—stated that the breech faces are stamped for the model L9, 9mm semiautomatic pistol. These stamped breech faces receive no further grinding/machining on the breech face area prior to being inserted into the alloy slide and the entire firearm painted with an electrostatic black powder coat (paint). Mr. Smith said that this manufacturing process, at this time, does not apply to the .380 caliber semiautomatic pistols manufactured by Lorcin.

The stamped breech face in conjunction with the heavy paint, results in what Dr. Robert Levine from the Department of Laboratories, years ago coined as "family characteristics". This breech face condition was first reported by Peter Lardizabal, Jacksonville, Florida Crime Lab, AFTE Journal, January 1995, pp. 49, regarding H&K 9mm USP semiautomatic pistols. Those *impressed* marks are similar to the stamped ones seen on the two Lorcin 9mm semiautomatic pistols I examined.

In addition, two new 45 ACP Haskell semiautomatic pistols were obtained because of the heavy black paint and having a steel breech inserted into the slide during manufacturing, similar in nature to the Lorcins. The markings were bland, but due more to the heavy paint not the manufacturing process that consists of each breech face being **ground** after insertion into the slide. This manufacturing process also pertains to the 9mm Hi-Point semiautomatic pistols as well. But the addition of "paint" on the breech face, instead of what in the past has been normally bare steel, could lead to erroneous results. Distinguished AFTE member Gaylan Warren has made the observation that the breech face impression on guns with the painted breech faces can change considerably shot-to-shot due to the paint wearing/chipping off.

The danger with all of this, in case it hasn't hit you as yet, is that an examiner could **miscall** an identification based **only** on breech face markings, especially on model L9, 9mm Lorcin semiautomatic pistols. Examiners familiar with these type of breech face markings should insure their call by examining the extractor and sidewall markings as well as the breech face

For those agencies utilizing <u>Drug Fire</u> and <u>Bullet Proof</u> this information should be taken into account and weighed when viewing an image on screen.

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Photo I



Photo 2

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