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Precision manufactured solutions that turn the world...

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Federal Supply Classifications
3484/J010/L010/1005/AC51/AC52/AC53/AC54/AC55*

BPM Heavy Buffer Specifications/Usage

For proper function /reliability of SBR type weapons utilizing suppressors, Heavier buffers can be used to reduce bolt speed in weapons showing extraction /ejection issue, from increased bolt speed, as a result of gas operating pressures increasing with use of suppressors. This is common if a compact design is used –with minimal expansion chamber properties. This also has even driven the suppressor manufacturing industry to develop /design specific suppressor baffles, with flow thru technology, (OSS Inc.) to help reduce that problematic increase in bolt speed, from suppression of host weapon in a SBR /carbine length gas system configuration. Another factor in life span of SBR type weapon configuration is shorter barrel life, and shorter gas systems (i.e. port erosion– which wears at a higher rate) as well as shorter BCG life expectancy, relative to standard M4 /M16 configurations.

Example – Commercial carbine buffers for AR15 16” platforms are only 3.00 oz. vs 5.4 oz. of a standard H3 buffer, used in M4 service rifles to defeat bolt bounce, for reliable full auto function – in select fire weapons, and will not sufficiently slow the velocity of BCG for reliability during suppressor usage with industry standard port sizes, much less on weapons with considerable usage /age, and even slight port erosion/enlargement.(see photo)

This known port erosion can also increase pressures to a point of non-reliability in the system. Reduced maintenance intervals /increased maintenance cost to include replacement of barrels at earlier service intervals) is an accepted/standard trade off of Gas Impingement SBR type weapons platforms.

Example -Crane Weapons Lab /DOD/DOS deadlines the Mk18 (11.5” barrel length-carbine length gas system, port dia/size new= ???) at about 8000 rds. - under normal usage/training, and possibly earlier if an increase / acceleration in rate of fire, or an increase in bolt speed is experienced during life/issue of weapon system.

As discussed, this inevitable increase in bolt speed from combined port erosion, and suppressor usage, most commonly results in failure to extract/eject.

As is standard in the industry, training rate of fire, not training round count- can be an important, limiting factor in life expectancy of components.

H4/H4 Plus weight buffers can not only easily/correctly rectify issues with bolt over-speed in most suppressed SBR configurations, it will also add life to the system, and reliability, negating premature barrel replacement, relative to port erosion.

BPM Inc. Heavy Buffers are available for usage in suppressed AR/M4 Type "SBR" configurations, to include 11.5" barrel length / "Mk18" etc. type upper receivers.

Model	weight	price
H4	6.7 oz.	Dealer/FFL \$79.95
H4 plus	8.0 oz.	Dealer/FFL \$79.95

Respectfully-

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