



Eliminator/Tactical Compensator Selection Guide

This selection guide is designed to aid you in your decision of which JP Recoil Eliminator or JP Tactical Compensator is most appropriate for your application. All of our recoil eliminators and compensators are threaded, which means that if your muzzle is not factory threaded, you will need to have this work performed by a competent gunsmith in order to complete the installation. We have three different styles of device to choose from, some of which are designed with a specific application or firearm in mind, but all can be adapted to a wide range of firearms and calibers.

Original JP Recoil Eliminator – This ultimate recoil reducer is ideal for heavy recoil firearms, magnum cartridges or varmint applications where spotting your hits through the primary optic is a priority. These recoil eliminators will put you in Open Division at most 3-Gun events.

Standard JP Tactical Compensator – Also known as the Bennie Cooley signature series, this comp was designed to meet the rules for Limited/Tactical Division by limiting its outside dimension to 1" x 3". This is our smallest comp and is ideal for tactical/duty rifle applications or Limited/Tactical competition. It is by far the most efficient comp available in its class.

Large JP Tactical Compensator – This larger, heavier version of the Standard JP Tactical Compensator is designed for bull barrel applications. It is closer in effectiveness to the JP Recoil Eliminator due to its larger profile while retaining the cosmetics of the Tactical version. This model is not Limited/Tactical Division legal.

Once you decide on a model, the following information is required to find the best fit for your firearm:

- **Diameter of your barrel at the muzzle** - This measurement needs to be taken with care using a precision instrument such as a caliper or micrometer capable of a standard (thousandths of an inch) or metric (millimeters) readout; a tape measure or ruler is inadequate. If you cannot find one of our comps with the exact diameter to match your barrel, it is best to choose a larger model that is closest in size. A comp with a larger diameter than the barrel is cosmetically finer and allows for the option of tapering the comp to blend with the barrel.
- **Finish of your barrel** – Most, but not all of our models are available in either a black oxide finish or stainless steel.
- **Caliber of your firearm** - This is important because the final exit hole of the compensator needs to be large enough to accommodate the projectile passing through it. There are also certain thread patterns that are more appropriate for certain calibers. Most .223 AR rifles, for example, employ a 1/2" diameter thread, while the .308 AR rifles use a 5/8" diameter thread. This is to prevent inadvertently installing a .22 caliber comp on a .30 caliber rifle only to find out the hard way that the final exit hole is too small.
- **Muzzle threading** – If your muzzle is already threaded, you need to determine the particular thread pattern. A large number of military-style rifles and European bolt actions have factory-threaded muzzles. In some cases, we may have a compensator that will thread on with no modification necessary. Other times, a factory thread may need to be altered or an adaptor used to accommodate one of our models.



A NOTE ON PERCENTAGE OF RECOIL REDUCTION

A very common question we get is "How much recoil reduction can I expect?"

This is a question with no simple answer, as there is no ideal basis for comparison. Many factors contribute to the recoil impulse, and every one perceives that impulse differently. The type of firearm and action, weight and length of the barrel, caliber, weight of projectile, and powder charge are all of factors that need to be considered.

Understanding the basic principles of how compensators work is a good place to start. As the bullet exits the bore, there is a mass of expanding, high velocity gas exiting behind it. For every action there is an equal and opposite reaction, and the intense pressure and force of the escaping gas creates a rearward thrust that is transferred through the firearm and into the shooter as recoil. The weight and momentum of the projectile traveling down and exiting the bore is also responsible for that rearward thrust. Think of recoil in two parts, one being the recoil caused by the projectile, or "bullet recoil" and the other being caused by the exiting gas, or "gas recoil." There is nothing we can do to counter the effects of bullet recoil except to shoot a lighter bullet. Gas recoil, however, can be tamed, and this is where the compensator comes in. Compensators/muzzle brakes harness the energy of gas recoil and use it to the shooter's advantage by redirecting it.

Our JP Recoil Eliminators and Tactical Compensators have large baffle surfaces that allow the bullet, but not the gas, to pass through unmolested. As the gas impacts these baffles, it does so with such great force that it actually creates a forward thrust, counteracting the bullet recoil and stabilizing the whole platform. The bulk of the escaping gas is broken up and redirected out the sides and/or top of the compensator instead of adding to the recoil by exiting straight out the front. A cartridge like the .243 Winchester has so much gas recoil, being such a hot cartridge compared to its relatively lightweight projectile, that it becomes virtually recoilless with a good, efficient compensator like the JP Recoil Eliminator. The average reduction of recoil experienced with our Tactical Compensators and Recoil Eliminators is about 70%, but you may see more or less given your particular circumstances. When you consider the punishing recoil of a magnum rifle cartridge, it's easy to see how a JP Recoil Eliminator or Tactical Compensator will allow you to fire hundreds of rounds in a session without the recoil fatigue normally associated with such cartridges.

A NOTE ON INCREASED NOISE

Another common question is "How loud are your compensators?"

Compensators by their very nature redirect gasses toward bystanders and in some cases back toward the shooter. This results in a perception of increased noise. Regardless of whether or not each shot is actually louder, many of us know that shooting next to someone with a large muzzle brake can seem unusually percussive. Unfortunately, this is unavoidable, and as with many things, calls for a compromise. Compensators advertised as "quiet" will also be the least effective in reducing recoil. The best solution is still the use of quality hearing protection. **We at JP Enterprises strongly encourage the use of eye and ear protection every time you shoot.**



Part Number	O.D.	Thread	Color	Exit Hole	Maximum Caliber*
JPRE-2T	.600	1/2-28	BLACK OXIDE	.281	.358
JPRE-2	.750	1/2-28	BLACK OXIDE	.281	.358
JPRE-2S	.750	1/2-28	STAINLESS	.281	.358
JPRE-3	.750	9/16-28	BLACK OXIDE	.281	.358
JPRE-3S	.750	9/16-28	STAINLESS	.281	.416
JPRE-324	.750	5/8-24	BLACK OXIDE	.350	.416
JPRE-324S	.750	5/8-24	STAINLESS	.350	.416
JPRE-424S	.875	5/8-24	STAINLESS	.350	.416
JPRE-428	.875	5/8-28	BLACK OXIDE	.281	.416
JPRE-428S	.875	5/8-28	STAINLESS	.281	.416
JPRE-9	1.000	3/4-28	BLACK OXIDE	.281	.500
JPRE-9S	1.000	3/4-28	STAINLESS	.281	.500

* Exit hole must be .040" larger then caliber of barrel. See product instructions for more details.

Part Number	O.D.	Thread	Color	Exit Hole	Maximum Caliber*
JPTRE-2	.750	1/2-28	BLACK OXIDE	.281	.358
JPTRE-2S	.750	1/2-28	STAINLESS	.281	.358
JPTRE-3	.750	9/16-28	BLACK OXIDE	.281	.358
JPTRE-324	.750	5/8-24	BLACK OXIDE	.350	.416
JPTRE-324S	.750	5/8-24	STAINLESS	.350	.416
JPTRE-412	.875	1/2-28	BLACK OXIDE	.281	.358
JPTRE-412S	.875	1/2-28	STAINLESS	.281	.358
JPTRE-5.12S.875	.875	1/2-28	STAINLESS	.281	.358
JPTRE-5.12S.925	.925	1/2-28	STAINLESS	.281	.358
JPTRE-5.12B.925	.925	1/2-28	BLACK OXIDE	.281	.358
JPTRE-5.58S.875	.875	5/8-24	STAINLESS	.350	.416
JPTRE-5.58S.925	.925	5/8-24	STAINLESS	.350	.416
JPTRE-5.58B.925	.925	5/8-24	BLACK OXIDE	.350	.416

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