



HOWA RECOMMENDED BREAK-IN PROCEDURE

For the first ten shots we recommend using jacketed bullets with a nitro powder load (Most Factory Ammo). Clean the oil out of the barrel before each shot using a simple window cleaner (like Windex®) which will soak

the oil out of the pores. After firing each cartridge, use a good copper cleaner (one with ammonia) to remove the copper fouling from the barrel. We do not recommend anything with an abrasive in it since you are trying to seal the barrel, not keep it agitated.

After cleaning with bore cleaner, clean again with window cleaner after each shot. Use window cleaner because many bore cleaners use a petroleum base which you want to remove before firing the next shot. This will keep the carbon from building up in the barrel (oil left in the pores, when burned, turns to carbon).

To keep the temperature cool in the barrel, wait at least 5 minutes between break-in shots. The barrel must remain cool during the break-in procedure. If the barrel is allowed to heat up during the break-in, it will destroy the steel's ability to develop a home registration point, or memory. It will have a tendency

to make the barrel "walk" when it heats up in the future. We have all seen barrels that, as they heat up, start to shoot high and then "walk" to the right. This was caused by improperly breaking in the barrel (generally by sitting at a bench rest and shooting 20 rounds in 5 minutes or so). If you take a little time in the beginning and do it right, you will be much more pleased with the barrel in the future.

Look into the end of the barrel after firing a shot, and you will see a light copper-colored wash in the barrel. Remove this before firing the next shot. Somewhere during the procedure, around shot 6 or 7, it will be obvious that the copper color is no longer appearing in the barrel. Continue the window cleaner and bore cleaner applications through shot 10.

Following the initial ten shots, you then may shoot 2 rounds, cleaning between each pair of shots, for the next 10 shots. This is simply insuring that the burnishing process has been completed. In theory, you are closing the pores of the barrel metal that have been opened and exposed through the cutting and hand lapping procedures.



HOWA/HORNADY BALLISTIC RECOMMENDATIONS

VARMINT BULLET RECOMMENDATIONS

Caliber	EBL Length	Twist Rate	Recommended Bullet/Ammo
.243 Win.	20"/22"/24"	1 in 10"	75 GR.
.204 Ruger	22"/24"	1 in 12"	VX Ammo 32 GR.
.223 Rem.	20"/22"/24"	1 in 12"	VX Ammo 50 GR.
.22-250 Rem.	20"/22"/24"	1 in 12"	VX Ammo 55 GR.
.25-06	22"	1 in 10"	75 GR.
.308 Win.	24"	1 in 10"	100 GR.



HOWA/HORNADY BALLISTIC RECOMMENDATIONS

HUNTING BULLET RECOMMENDATIONS

Caliber	EBL Length	Twist Rate	Recommended Bullet/Ammo
.243 Win.	20"/22"/24"	1 in 10"	Custom 100 GR. BTSP
.308 Win.	20"	1 in 10"	Custom 150 GR. SST
.308 Win.	22"	1 in 10"	Custom 150 GR. BTSP
.308 Win.	24"	1 in 10"	Custom 100 GR.
7mm-08	20"	1 in 9.5"	Custom 139 GR. BTSP
.25-06	22"	1 in 10"	Custom 117 GR. SST
.270 Win.	22"	1 in 10"	Custom 130 GR. SST
.30-06	22"	1 in 10"	Custom 165 GR. SST
.300 Win. Mag.	24"	1 in 10"	Custom 180 GR. BTSP
338 Win. Mag.	24"	1 in 10"	Heavy Mag 225 GR. SP
7mm Rem. Mag.	24"	1 in 9.5"	Custom 162 GR. SST