Case Trim Length = 1.750

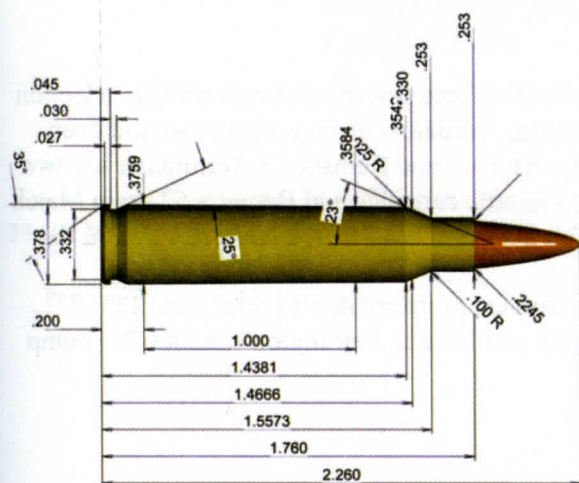**Muzzle velocity will increase (or decrease) by approximately 24 fps per inch from a standard 24" barrel.**

by Richard Mann

Lots of times, shooters like to argue and pontificate about the idea of owning only one rifle. Cartridges considered are typically .30 caliber or even larger. The thinking being; what if I have to shoot a really big animal. I guess this makes sense but very few of us actually shoot really big animals all that often. Whitetail deer are the most popular game animal in the world. Varmints and predators are maybe even more popular if you consider that in one day on a prairie dog town you will shoot more dogs than the number of deer you will shoot in a lifetime.

The .223 Remington is totally capable of taking deer at close to moderate ranges. The cartridge is exceptional on a dog town because recoil in even very light rifles is minimal enough that you can watch bullet impact. For the same reasons, this is also a great centerfire cartridge to start new shooters on. When I got out of the service, money was as hard to come by as a 1/2 inch group. I was raising my first son by myself and could only afford one gun and needed something I could hunt groundhogs and deer with. I also wanted a cartridge that was affordable to reload or purchase factory ammunition for. I picked up a Ruger 77 in .223 Remington and for a little over two years that was the only rifle I owned.

Money is not as tight as it used to be but I still own several rifles in .223 Remington. My favorite is a Smith & Wesson M&P 15T and when my second son was seven he used it to take his second deer. .223 ammunition costs a bit more today but it's still a good deal cheaper than larger calibers like the .243

Winchester and especially the .30-06. There is also an almost endless selection of factory loads suitable for varmints, predators, deer, competition and even personal protection. Hodgdon Benchmark and Ramshot X-Terminator are two of my favorite powders for this versatile cartridge and Berger's 52 grain Match bullet has shot exceptionally well in every .223 I've owned.

Here is a bit of 223 trivia most shooters probably don't know: The .223 Remington was first commercially available in Remington's model 760 pump rifle.

Barrel Length = 24"
COAL = 2.260"

*Optimal performance may be achieved in your rifle
at a different COAL. See page 148 for details.*

30 GR MATCH GRADE FB VARMINT
  G1 BC = 0.119
  Part # 22301 - 1 in 15" twist or faster

Powder	Start Load	Approx. Start Vel.	Max Load	Approx. Max Vel.	Approx. Fill Ratio
H4227	20.5	3663	22.6	3966	92%
RE-7	22.0	3632	24.4	3973	91%
IMR 4198	22.5	3615	25.0	3970	99%
H4198	22.5	3511	25.0	3869	99%
VIHT N120	23.0	3677	25.6	4027	99%
NORMA 200	24.0	3570	26.7	3969	97%
AA 2200	24.0	3473	26.8	3880	93%
RE-10X	24.0	3578	26.9	4007	98%
BENCHMARK	25.5	3460	28.3	3847	104%
H335	25.5	3436	28.5	3887	102%
RAM X-TERMINATOR	25.5	3515	28.6	3955	101%
AA 2230	27.0	3443	29.9	3875	102%

For bullet dimensional details, see page 239.

WARNING - APPROACH MAXIMUM LOADS WITH CAUTION AS ALL RIFLES AND
RELOADING TECHNIQUES WILL BE DIFFERENT.
Additional safety information can be found on page 8.

BERGER

Barrel Length = 24"
COAL = 2.260"

*Optimal performance may be achieved in your rifle
at a different COAL. See page 148 for details.*

40 GR MATCH GRADE FB VARMINT
G1 BC = 0.155
Part # 22303 - 1 in 15" twist or faster

Powder	Start Load	Approx. Start Vel.	Max Load	Approx. Max Vel.	Approx. Fill Ratio
IMR 4198	21.0	3255	23.3	3553	92%
RE-7	21.5	3394	23.9	3686	89%
VIHT N120	22.0	3454	24.0	3698	103%
RE-10X	22.5	3254	25.0	3589	91%
NORMA 200	22.5	3249	25.0	3581	91%
AA 2200	23.0	3219	25.8	3592	89%
BENCHMARK	24.5	3218	27.1	3549	100%
RAM X-TERMINATOR	24.5	3278	27.3	3641	96%
H335	26.0	3418	28.3	3735	102%
WIN 748	26.0	3171	29.0	3571	98%

For bullet dimensional details, see page 239.

WARNING - APPROACH MAXIMUM LOADS WITH CAUTION AS ALL RIFLES AND
RELOADING TECHNIQUES WILL BE DIFFERENT.
Additional safety information can be found on page 8.

BERGER

223 Remington
50 Grain

Barrel Length = 24"
COAL = 2.260"

*Optimal performance may be achieved in your rifle
at a different COAL. See page 148 for details.*

50 GR MATCH GRADE FB VARMINT
G1 BC = 0.196
Part # 22307 - 1 in 14" twist or faster

Powder	Start Load	Approx. Start Vel.	Max Load	Approx. Max Vel.	Approx. Fill Ratio
VIHT N120	20.0	3085	22.0	3313	98%
IMR 4198	20.5	3093	22.6	3343	92%
RE-10X	21.0	2996	23.5	3308	89%
NORMA 200	21.0	3074	23.5	3393	92%
VIHT N130	21.5	3046	24.0	3350	104%
AA 2015	22.5	3027	24.5	3374	103%
H322	22.5	3023	25.2	3364	95%
H4895	23.5	3017	26.0	3351	102%
RAMSHOT TAC	24.0	3038	26.7	3387	101%
IMR 4895	24.0	2958	26.8	3316	103%
H335	24.5	3016	27.2	3348	94%
WIN 748	24.5	3066	27.3	3440	103%

For bullet dimensional details, see page 239.

WARNING - APPROACH MAXIMUM LOADS WITH CAUTION AS ALL RIFLES AND
RELOADING TECHNIQUES WILL BE DIFFERENT.

Additional safety information can be found on page 8.

BERGER

223 Remington
52 Grain

Barrel Length = 24"
COAL = 2.260"

Optimal performance may be achieved in your rifle at a different COAL. See page 148 for details.

52 GR MATCH GRADE FB VARMINT
G1 BC = 0.197
Part # 22309 - 1 in 14" twist or faster

52 GR MATCH FB TARGET
G1 BC = 0.242
Part # 22408 - 1 in 14" twist or faster

Powder	Start Load	Approx. Start Vel.	Max Load	Approx. Max Vel.	Approx. Fill Ratio
IMR 4198	19.5	3023	22.0	3329	100%
NORMA 200	20.5	2992	23.0	3308	91%
RE-10X	20.5	2997	23.1	3329	100%
VIHT N130	20.5	2903	23.2	3234	101%
VIHT N133	22.0	2978	24.4	3270	102%
H322	22.0	3035	24.5	3361	103%
AA 2015	22.0	2949	24.6	3264	99%
BENCHMARK	22.5	2981	24.8	3269	103%
RE-12	23.0	2998	25.5	3306	102%
IMR 3031	23.0	2982	25.6	3314	101%
H335	23.5	3039	25.9	3344	97%

For bullet dimensional details, see page 239.

WARNING - APPROACH MAXIMUM LOADS WITH CAUTION AS ALL RIFLES AND RELOADING TECHNIQUES WILL BE DIFFERENT.

Additional safety information can be found on page 8.

BERGER

Barrel Length = 24"
COAL = 2.260"

*Optimal performance may be achieved in your rifle
at a different COAL. See page 148 for details.*

52 GR MATCH GRADE FB VARMINT
G1 BC = 0.197
Part # 22309 - 1 in 14" twist or faster

52 GR MATCH FB TARGET
G1 BC = 0.242
Part # 22408 - 1 in 14" twist or faster

Powder	Start Load	Approx. Start Vel.	Max Load	Approx. Max Vel.	Approx. Fill Ratio
AA 2230	23.5	2977	25.9	3295	98%
VARGET	23.5	2895	26.0	3216	101%
RAMSHOT TAC	23.5	2963	26.0	3283	99%
VIHT N135	23.5	2994	26.0	3315	104%
VIHT N140	23.5	2953	26.0	3268	103%
IMR 4064	23.5	2935	26.1	3275	102%
AA 2460	23.5	2923	26.4	3304	100%
IMR 4895	24.0	2948	26.5	3264	102%
H4895	24.0	2965	26.6	3268	102%
WIN 748	24.0	2992	26.8	3361	102%
BL-C(2)	25.0	2932	27.7	3263	96%

For bullet dimensional details, see page 239.

WARNING - APPROACH MAXIMUM LOADS WITH CAUTION AS ALL RIFLES AND
RELOADING TECHNIQUES WILL BE DIFFERENT.

Additional safety information can be found on page 8.

BERGER

223 Remington
55 Grain

Barrel Length = 24"
COAL = 2.260"

*Optimal performance may be achieved in your rifle
at a different COAL. See page 148 for details.*

55 GR MATCH GRADE FB VARMINT
G1 BC = 0.210
Part # 22311 - 1 in 14" twist or faster

55 GR MATCH FB TARGET
G1 BC = 0.262
Part # 22410 - 1 in 14" twist or faster

Powder	Start Load	Approx. Start Vel.	Max Load	Approx. Max Vel.	Approx. Fill Ratio
IMR 4198	19.0	2935	21.3	3213	98%
NORMA 200	20.0	2911	22.5	3221	90%
VIHT N130	20.5	2885	23.0	3184	101%
AA 2015	21.5	2958	23.7	3232	101%
VIHT N133	21.5	2901	23.9	3188	103%
H322	21.5	2956	24.0	3277	102%
BENCHMARK	21.5	2844	24.2	3178	101%
RE-12	22.5	2924	25.0	3227	101%
H335	23.0	2966	25.4	3267	96%
H4895	23.0	2938	25.5	3263	103%
IMR 4895	23.5	2915	25.5	3179	105%
VIHT N140	23.0	2883	25.8	3229	109%
WIN 748	23.5	2925	26.4	3301	101%
RAMSHOT TAC	24.0	2924	26.5	3222	97%
BL-C(2)	24.5	2904	27.4	3281	103%

For bullet dimensional details, see page 239.

WARNING - APPROACH MAXIMUM LOADS WITH CAUTION AS ALL RIFLES AND
RELOADING TECHNIQUES WILL BE DIFFERENT.

Additional safety information can be found on page 8.

BERGER

223 Remington
60 Grain

Barrel Length = 24"
COAL = 2.260"

*Optimal performance may be achieved in your rifle
at a different COAL. See page 148 for details.*

60 GR MATCH GRADE FB VARMINT
G1 BC = 0.278
Part # 22312 - 1 in 12" twist or faster

Powder	Start Load	Approx. Start Vel.	Max Load	Approx. Max Vel.	Approx. Fill Ratio
IMR 4198	18.5	2833	20.6	3079	97%
H322	20.5	2813	23.1	3137	100%
AA 2015	21.0	2790	23.3	3056	97%
BENCHMARK	21.0	2764	23.6	3078	101%
IMR 8208 XBR	21.5	2768	24.3	3115	102%
RE-12	21.5	2784	24.3	3115	100%
NORMA 201	22.0	2791	24.5	3110	101%
H4895	22.0	2802	24.7	3145	104%
H335	22.0	2827	24.7	3157	95%
IMR 4895	23.0	2848	25.0	3107	105%
VIHT N540	23.5	2857	25.3	3075	105%
WIN 748	23.0	2856	25.5	3172	100%
BL-C(2)	24.0	2841	26.6	3171	103%

For bullet dimensional details, see page 239.

WARNING - APPROACH MAXIMUM LOADS WITH CAUTION AS ALL RIFLES AND
RELOADING TECHNIQUES WILL BE DIFFERENT.

Additional safety information can be found on page 8.

BERGER

223 Remington
64 Grain

Barrel Length = 24"
COAL = 2.260"

Optimal performance may be achieved in your rifle
at a different COAL. See page 148 for details.

64 GR MATCH GRADE FB VARMINT
G1 BC = 0.294
Part # 22316 - 1 in 12" twist or faster

Powder	Start Load	Approx. Start Vel.	Max Load	Approx. Max Vel.	Approx. Fill Ratio
IMR 4198	18.0	2734	20.1	2974	95%
VIHT N130	19.5	2702	21.8	2962	99%
AA 2015	20.0	2721	22.4	3004	98%
VIHT N133	20.5	2725	22.7	2974	105%
H322	20.5	2784	22.7	3053	99%
RE-12	21.5	2753	23.7	3011	98%
IMR 8208 XBR	21.5	2746	23.8	3024	101%
NORMA 201	21.5	2709	24.0	3020	99%
H335	21.5	2747	24.1	3053	93%
H4895	22.0	2783	24.2	3056	102%
RAMSHOT TAC	22.0	2740	24.5	3041	97%
VIHT N140	22.0	2727	24.5	3020	106%
VARGET	22.5	2738	24.7	3036	108%
WIN 748	22.5	2776	25.0	3084	98%
BL-C(2)	23.5	2764	26.1	3086	101%

For bullet dimensional details, see page 239.

WARNING - APPROACH MAXIMUM LOADS WITH CAUTION AS ALL RIFLES AND
RELOADING TECHNIQUES WILL BE DIFFERENT.
Additional safety information can be found on page 8.

BERGER

223 Remington
70 Grain

Barrel Length = 24"
COAL = 2.260"

Optimal performance may be achieved in your rifle at a different COAL. See page 148 for details.

70 GR MATCH VLD TARGET
G1 BC = 0.371   *G7 BC = 0.190*
Part # 22418 - 1 in 9" twist or faster

We recommend using G7 BC to achieve the most accurate trajectory prediction.

Powder	Start Load	Approx. Start Vel.	Max Load	Approx. Max Vel.	Approx. Fill Ratio
H322	19.0	2604	21.5	2907	98%
VIHT N133	19.5	2606	21.6	2840	105%
BENCHMARK	19.5	2564	22.0	2857	99%
NORMA 202	20.5	2629	22.9	2915	103%
H4895	20.5	2615	23.0	2924	102%
IMR 8208 XBR	20.5	2637	23.0	2937	102%
H335	20.5	2635	23.0	2929	93%
AA 2230	20.5	2583	23.0	2890	95%
VIHT N140	21.0	2621	23.3	2887	105%
VARGET	21.0	2576	23.5	2879	108%
RAMSHOT TAC	21.0	2635	23.5	2934	97%
IMR 4895	21.5	2669	23.8	2957	105%
RE-15	21.5	2633	23.9	2931	106%
WIN 748	21.5	2674	23.9	2967	98%
VIHT N540	21.5	2616	24.0	2907	105%
AA 2520	21.5	2621	24.2	2953	104%
BL-C(2)	22.5	2671	24.8	2953	101%

For bullet dimensional details, see page 239.

WARNING - APPROACH MAXIMUM LOADS WITH CAUTION AS ALL RIFLES AND RELOADING TECHNIQUES WILL BE DIFFERENT.

Additional safety information can be found on page 8.

BERGER

223 Remington
73 Grain

Barrel Length = 24"
COAL = 2.260"

Optimal performance may be achieved in your rifle at a different COAL. See page 148 for details.

73 GR MATCH BT TARGET
G1 BC = 0.343   *G7 BC = 0.176*
Part # 22420 - 1 in 9" twist or faster

We recommend using G7 BC to achieve the most accurate trajectory prediction.

Powder	Start Load	Approx. Start Vel.	Max Load	Approx. Max Vel.	Approx. Fill Ratio
VIHT N133	19.0	2530	21.3	2783	104%
BENCHMARK	19.5	2548	21.7	2802	98%
IMR 8208 XBR	20.0	2563	22.4	2847	100%
NORMA 202	20.5	2615	22.7	2872	103%
H335	20.5	2620	22.7	2874	93%
H4895	20.5	2604	22.8	2883	102%
VIHT N140	20.5	2549	23.1	2845	105%
RAMSHOT TAC	20.5	2563	23.1	2869	96%
VARGET	21.0	2565	23.3	2840	107%
IMR 4895	21.0	2598	23.5	2906	105%
WIN 748	21.0	2603	23.6	2915	98%
RE-15	20.5	2501	23.7	2893	106%
AA 2520	21.5	2612	23.8	2889	103%
VIHT N540	21.5	2603	23.8	2866	105%
BL-C(2)	22.0	2601	24.5	2903	100%

For bullet dimensional details, see page 239.

WARNING - APPROACH MAXIMUM LOADS WITH CAUTION AS ALL RIFLES AND RELOADING TECHNIQUES WILL BE DIFFERENT.

Additional safety information can be found on page 8.

BERGER

223 Remington
75 Grain

Barrel Length = 24"
COAL = 2.260"

*Optimal performance may be achieved in your rifle
at a different COAL. See page 148 for details.*

75 GR MATCH VLD TARGET
G1 BC = 0.423   *G7 BC = 0.217*
Part # 22421 - 1 in 8" twist or faster

*We recommend using G7 BC to achieve the most
accurate trajectory prediction.*

Powder	Start Load	Approx. Start Vel.	Max Load	Approx. Max Vel.	Approx. Fill Ratio
VIHT N133	18.5	2485	20.8	2739	104%
IMR 8208 XBR	19.5	2522	21.8	2796	100%
NORMA 202	19.5	2514	22.0	2810	103%
H4895	20.0	2563	22.2	2833	102%
VIHT N140	20.0	2509	22.4	2784	105%
RAMSHOT TAC	20.0	2523	22.5	2820	97%
VARGET	20.5	2527	22.7	2791	108%
IMR 4895	20.5	2559	22.9	2858	105%
RE-15	20.5	2524	23.0	2833	106%
WIN 748	20.5	2564	23.0	2866	98%
VIHT N540	20.5	2507	23.1	2808	105%
AA 2520	20.0	2452	23.2	2842	103%
BL-C(2)	21.5	2566	23.9	2858	101%

For bullet dimensional details, see page 239.

WARNING - APPROACH MAXIMUM LOADS WITH CAUTION AS ALL RIFLES AND
RELOADING TECHNIQUES WILL BE DIFFERENT.

Additional safety information can be found on page 8.

223 Remington
77 Grain

Barrel Length = 24"
COAL = 2.260"

*Optimal performance may be achieved in your rifle
at a different COAL. See page 148 for details.*

77 GR MATCH OTM TACTICAL
G1 BC = 0.376   *G7 BC = 0.192*
Part # 22101 - 1 in 8" twist or faster

*We recommend using G7 BC to achieve the most
accurate trajectory prediction.*

Powder	Start Load	Approx. Start Vel.	Max Load	Approx. Max Vel.	Approx. Fill Ratio
VIHT N133	18.5	2460	20.7	2703	103%
IMR 8208 XBR	19.5	2503	21.8	2773	100%
NORMA 202	20.0	2555	22.0	2786	102%
H4895	20.0	2546	22.1	2799	101%
VIHT N140	20.0	2490	22.4	2761	104%
RAMSHOT TAC	20.0	2506	22.4	2786	96%
VARGET	20.0	2450	22.5	2746	106%
IMR 4895	20.0	2481	22.8	2824	104%
WIN 748	20.5	2547	22.9	2832	97%
RE-15	20.5	2508	23.0	2812	105%
AA 2520	20.5	2497	23.0	2796	102%
VIHT N540	20.5	2489	23.0	2773	104%

For bullet dimensional details, see page 239.

WARNING - APPROACH MAXIMUM LOADS WITH CAUTION AS ALL RIFLES AND
RELOADING TECHNIQUES WILL BE DIFFERENT.
Additional safety information can be found on page 8.

BERGER

223 Remington
80/80.5 Grain

Barrel Length = 24"
COAL = 2.260"

*Optimal performance may be achieved in your rifle
at a different COAL. See page 148 for details.*

80 GR MATCH VLD TARGET
G1 BC = 0.445   *G7 BC = 0.228*
Part # 22422 - 1 in 8" twist or faster

80.5 GR MATCH FULLBORE TARGET
G1 BC = 0.436   *G7 BC = 0.223*
Part # 22427 - 1 in 8" twist or faster

*We recommend using G7 BC to achieve the most
accurate trajectory prediction.*

Powder	Start Load	Approx. Start Vel.	Max Load	Approx. Max Vel.	Approx. Fill Ratio
VIHT N133	18.0	2406	20.3	2655	104%
IMR 8208 XBR	19.0	2449	21.3	2718	100%
NORMA 202	19.5	2501	21.5	2731	102%
H4895	19.5	2492	21.7	2757	102%
VIHT N140	19.5	2438	21.9	2707	105%
RAMSHOT TAC	19.5	2453	21.9	2732	96%
VARGET	20.0	2458	22.2	2718	107%
IMR 4895	20.0	2492	22.3	2772	104%
WIN 748	20.0	2495	22.4	2779	97%
RE-15	20.0	2458	22.5	2762	105%
AA 2520	20.0	2447	22.6	2756	103%
VIHT N540	20.0	2439	22.6	2733	105%
BL-C(2)	21.0	2501	23.3	2775	100%

For bullet dimensional details, see page 239.

WARNING - APPROACH MAXIMUM LOADS WITH CAUTION AS ALL RIFLES AND
RELOADING TECHNIQUES WILL BE DIFFERENT.
Additional safety information can be found on page 8.

BERGER

223 Remington
82 Grain

Barrel Length = 24"
COAL = 2.260"

*Optimal performance may be achieved in your rifle
at a different COAL. See page 148 for details.*

82 GR MATCH BT TARGET
G1 BC = 0.444   *G7 BC = 0.227*
Part # 22424 - 1 in 8" twist or faster

*We recommend using G7 BC to achieve the most
accurate trajectory prediction.*

Powder	Start Load	Approx. Start Vel.	Max Load	Approx. Max Vel.	Approx. Fill Ratio
VIHT N130	17.0	2362	19.1	2588	97%
H322	18.0	2459	19.9	2679	97%
VIHT N133	18.0	2399	20.0	2613	103%
RE-12	18.5	2392	20.9	2656	97%
NORMA 202	19.0	2417	21.1	2668	98%
IMR 8208 XBR	19.0	2446	21.1	2678	99%
H335	19.0	2443	21.2	2693	92%
H4895	19.0	2430	21.3	2705	101%
AA 2460	19.5	2423	21.6	2669	95%
RAMSHOT TAC	19.5	2451	21.6	2693	95%
WIN 748	20.0	2493	22.1	2740	97%
BL-C(2)	20.5	2442	22.9	2726	99%

For bullet dimensional details, see page 239.

WARNING - APPROACH MAXIMUM LOADS WITH CAUTION AS ALL RIFLES AND
RELOADING TECHNIQUES WILL BE DIFFERENT.

Additional safety information can be found on page 8.

BERGER

223 Remington
90 Grain

Barrel Length = 24"
COAL = 2.260"

*Optimal performance may be achieved in your rifle
at a different COAL. See page 148 for details.*

90 GR MATCH VLD TARGET
G1 BC = 0.551   *G7 BC = 0.281*
Part # 22423 - 1 in 7" twist or faster

90 GR MATCH BT LONG RANGE
TARGET
G1 BC = 0.512   *G7 BC = 0.262*
Part # 22426 - 1 in 7" twist or faster

*We recommend using G7 BC to achieve the most
accurate trajectory prediction.*

Powder	Start Load	Approx. Start Vel.	Max Load	Approx. Max Vel.	Approx. Fill Ratio
IMR 3031	17.5	2360	19.4	2580	105%
IMR 8208 XBR	18.0	2342	19.6	2527	99%
NORMA 202	17.5	2277	19.7	2529	101%
H4895	18.0	2330	20.0	2569	101%
VIHT N140	18.0	2272	20.2	2521	104%
RAMSHOT TAC	18.0	2293	20.2	2547	95%
VARGET	18.5	2302	20.4	2526	106%
IMR 4895	18.5	2336	20.6	2590	104%
WIN 748	18.5	2337	20.7	2595	97%
RE-15	18.5	2305	20.8	2582	105%
AA 2520	18.5	2293	20.9	2575	102%
VIHT N540	18.5	2284	20.9	2553	104%

For bullet dimensional details, see page 239.

WARNING - APPROACH MAXIMUM LOADS WITH CAUTION AS ALL RIFLES AND
RELOADING TECHNIQUES WILL BE DIFFERENT.

Additional safety information can be found on page 8.

BERGER