

HODGDON[®]
BASIC RELOADERS MANUAL 1999



HODGDON

Shotgun/Pistol Powders

Hodgdon shotgun and pistol powders give shooters uncompromising quality, consistent velocities and clean-burning performance. From 22s to 44 Magnums, 410 to 10 gauge, there's a powder to meet any need.



HODGDON

Spherical Rifle Powders

Hodgdon spherical powders are great all-round propellants for a variety of rifles. You'll not only enjoy consistently high performance, you'll also appreciate the consistent charge weights that Hodgdon spherical powders give you.





HODGDON *Extreme™ Rifle Powders*

Our exclusive line of extruded rifle powders —
Hodgdon Extreme™ — was developed to give
shooters consistent performance,
load after load, in even the most
extreme heat and cold.



HODGDON *New for 1999*





HODGDON

Smokeless Propellants

Powder	Type	Container Size
TITEWAD	Shotgun	14oz 4lb 8lb
CLAYS	Shotgun/Pistol	14oz 4lb 8lb
INTERNATIONAL	Shotgun	14oz 4lb 8lb
TITEGROUP	Pistol	1lb 4lb 8lb
HP-38	Pistol	1lb 4lb 8lb
UNIVERSAL	Shotgun/Pistol	1lb 4lb 8lb
HS-6	Shotgun/Pistol	1lb 8lb
HS-7	Shotgun/Pistol	1lb 8lb
H110	Shotgun/Pistol	1lb 8lb
LIL'GUN	Shotgun/Pistol	1lb 4lb 8lb
H4227	Pistol/Rifle	1lb 8lb
H4198	Rifle	1lb 8lb
H322	Rifle	1lb 8lb
H335	Rifle	1lb 8lb
H4895	Rifle	1lb 8lb
VARGET	Rifle	1lb 8lb
BL-C(2)	Rifle	1lb 8lb
H380	Rifle	1lb 8lb
H414	Rifle	1lb 8lb
H4350	Rifle	1lb 8lb
H4831	Rifle	1lb 8lb
H4831SC	Rifle	1lb 8lb
H1000	Rifle	1lb 8lb
H870	Rifle	1lb 8lb
H50BMG	Rifle	1lb 8lb

WARNING

Ballistic data shown in this manual was obtained in Hodgdon's laboratory under strictly controlled conditions.

Your reloads must contain the exact combinations listed in this manual. **NEVER EXCEED** charge recommendations in this manual.

Ballistic data varies considerably depending on many factors, including components used, how such components are assembled, the type of firearm used, and the reloading techniques and safety precautions utilized by the individual.

NEVER mix any two powders regardless of type, brand or source. **NEVER** substitute any smokeless powder for blackpowder or for Pyrodex®.

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The individual assumes the risk of safe loading practices. Failure to do so or violation of any of the above warnings could result in severe personal injury (including death) or gun damage to the user or bystanders.

USE THIS DATA WITH HODGDON BRAND POWDERS ONLY
Reduce data 10% to start and work up.
DO NOT EXCEED THE LOADS SHOWN IN THIS GUIDE



Charter Member

MISSION STATEMENT




Charter Member


Our mission is to provide quality propellants, other products, and services to sportsmen, governing units, and other businesses in a manner which enhances the quality of life for our stockholders, employees, customers, associates, and suppliers. In doing so, we will deal with integrity and honesty, reflecting that people are more important than dollars and that our purpose is to bring credit to our Lord Jesus Christ.

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HODGDON POWDER SHOTGUN USAGE

	TARGET				LIGHT FIELD				HEAVY FIELD						
	12 GA	20 GA	28 GA	410 BORE	12 GA	16 GA	20 GA	28 GA	410 BORE	10 GA	12 GA	16 GA	20 GA	28 GA	410 BORE
CLAYS	X				X										
TITEWAD	X				X										
INTERNATIONAL	X	X			X		X								
UNIVERSAL	X	X			X		X				X				
HS-6			X			X	X	X		X	X	X			
HS-7							X	X		X	X	X	X	X	
H110				X					X						X
LIL' GUN				X					X						X

HODGDON POWDER PISTOL USAGE

	TARGET	LIGHT DUTY	MEDIUM DUTY	MAGNUM
	CLAYS	X		
TITEGROUP	X	X		
UNIVERSAL	X	X	X	
HP-38	X	X	X	
HS-6		X	X	
HS-7			X	
H110			X	X
H4227			X	X
LIL' GUN			X	X

HODGDON POWDER RIFLE USAGE

	TARGET	SILHOUETTE	LIGHT	MEDIUM	MAGNUM	50 CAL.
	H4227			X		
LIL' GUN			X			
H4198	X		X			
H322	X	X	X	X		
H335	X	X	X	X		
H4895	X	X	X	X		
VARGET	X	X	X	X		
BL-C(2)	X	X	X	X		
H380		X		X	X	
H414		X		X	X	
H4350		X		X	X	
H450				X	X	
H4831				X	X	
H4831 SC				X	X	
H1000				X	X	
H870					X	X
H50BMG					X	X

SMOKELESS Pistol & Shotgun POWDERS

► EXTREME POWDERS

In Order of Approximate Burning Rate

TITEWAD™ Through advanced technology, Hodgdon Powder Co. has produced a superior flattened spherical shotgun powder. Unlike spherical propellants in the past, TITEWAD features low charge weights, mild muzzle report, minimum recoil and reduced residue for optimum ballistic performance. This outstanding propellant designed for 12 gauge only, meters superbly and is ideal for 7/8, 1 and 1 1/8 ounce loads. As the name implies, "a little goes a long way!"

CLAYS™ Introduced in January, 1992, CLAYS has "taken the clay target world by storm". It is the most clean burning, consistent 12 ga. 7/8 oz., 1 oz. and 1 1/8 oz. powder available today. The superb burning characteristics of this powder produce soft, smooth recoil, ultra clean burning, mild muzzle report, and excellent patterns. These features transfer directly to handgun applications where target shooting is the main goal. 45 ACP, 38 Special and 9mm are only a few of the cartridges where CLAYS provides "tack driving" target accuracy with flawless functioning.

INTERNATIONAL™ INTERNATIONAL is the second in the "CLAYS" series of powders. It is positioned in burning speed to accommodate 12 ga., 2 3/4" light, medium and heavy 1 1/8 oz. loads, with some very nice 1oz. listings. Also, it works splendidly in 20 ga., 7/8 oz. target and light field loads. As with CLAYS, clean burning and flawless functioning is the rule.

TITEGROUP™ As the name implies, this new spherical propellant was designed for accuracy. Because of the unique design, this powder provides flawless ignition with all types of primers including the lead-free versions. Unlike pistol powders of the past, powder position in large cases (45 Colt, 357 Magnum and others) has virtually no effect on velocity and performance. Cowboy Action, Bullseye and Combat Shooters should love this one! TITEGROUP has it all, low charge weight, clean burning, mild muzzle report and superb, uniform ballistics.

HP38™ HP38 is a spherical pistol powder that is great for low velocity and mid-range target loads in 38 Special, 44 Special and 45 ACP. This high energy powder provides economy in loading.

UNIVERSAL™ UNIVERSAL handles the broadest spectrum of cartridges for both pistol and shotgun. From the 25 ACP to the 44 Magnum, UNIVERSAL provides outstanding performance. In shotgun, it produces excellent loads in 28 ga. 3/4 oz., 20 ga. 7/8 oz., 16 ga. 1 oz., and even 12 ga. 1 1/4 oz. As with all the "CLAYS" series powders, clean burning and uniformity are part of its attributes.

HS-6™ HS-6 is a fine spherical propellant that has wide application in pistol and shotshell. In pistol, 9mm, 38 Super, 40 S&W and 10mm Auto are some of the cartridges where HS-6 provides top performance. In shotshell HS-6 yields excellent heavy field loadings in 10 ga., 12 ga., 16 ga., 20 ga., and even the efficient and effective 28 ga. HS-6 is truly an outstanding spherical propellant.

► **H4227** H4227 is the fastest of our Extreme Extruded rifle propellants. Because of its' burning speed, it doubles as a magnum pistol powder. Top applications are the 22 Hornet, 357 Maximum, 357 Magnum, 44 Magnum and the mighty 454 Casull. For stability under extreme conditions, H4227 is the top choice.

H110™ H110 is the spherical powder that screams "no wimps, please!" It delivers top velocities with top accuracy in the 44 Magnum, 454 Casull and the 475 Linebaugh. Silhouette shooters claim it is the most accurate 44 powder they have ever used. In addition, H110 is "the" choice for the miniscule 410 Bore shotgun. It handles all 2 1/2", 1/2 oz. loads, as well as all 11/16 oz. loads for the 3" version.

LIL'GUN™ The 410 BORE has long been difficult to load due to shortcomings in powder fit, metering, along with poor burning characteristics. Not any more! LIL'GUN was designed to fit, meter and perform flawlessly in the 410 BORE. No more spilled shot or bulged cases. In addition, LIL'GUN has many magnum pistol applications and is superb in the 22 Hornet.

SMOKELESS Rifle POWDERS

► EXTREME POWDERS

In Order of Approximate Burning Rate

► **H4198** This Extreme Extruded propellant has gone through some changes since its inception, all the time maintaining the same important burning speed of the past. The kernels were shortened for improved metering and necessary elements were added to make it extremely insensitive to hot/cold temperatures. H4198 is outstanding in cartridges like the 222 Remington, 444 Marlin and the 7.62 x 39.

► **H322™** This powder has won more benchrest matches than all other propellants combined. It provides match grade accuracy in small and medium capacity cartridges like the 223 Remington, 6mm PPC and the 7mm TCU. As a fine extruded powder, it flows through powder measures with superb accuracy.

SMOKLESS RIFLE POWDERS CONTINUED

H335™ H335 originated as a military powder, used for the 5.56 NATO, or 223 Remington as handloaders know it. Obviously, it sees endless use in the 222 Remington, 223 Remington and other small cartridges. In particular, prairie dog shooters will find this a favorite, as J.B. Hodgdon has for years!

▶ **H4895™** H4895 is a most versatile rifle powder. This member of the Extreme Extruded line is great for 17 Remington, 250-3000 Savage, 308 Winchester and 458 Winchester, to name just a few. It is amazingly accurate in every cartridge where it is listed in our data. It had its origin in the 30-06 as a military powder and was the first powder Bruce Hodgdon sold to the loading public.

▶ **VARGET™** The first of Hodgdon's revolutionary Extreme Extruded Powders, VARGET features small extruded grains for uniform metering, insensitivity to hot/cold temperatures and higher energy for improved velocities over other powders in its burning speed class. Easy ignition and clean burning characterize other features that translate into superb accuracy, higher scores and more clean, one shot kills. Outstanding performance and velocity can be obtained in such popular cartridges as the 223 Remington, 22-250 Remington, 308 Winchester, 30-06, 375 H&H and many more.

BL-C(2)™ BL-C(2) is a spherical powder that began as a military powder used in the 7.62 NATO, commonly known as the 308 Winchester. When it was first introduced to the handloader, benchrest shooters and other target shooters made it an instant success. BL-C(2) works extremely well in the 223 Remington, 17 Remington, 22 PPC and of course, the 308 Winchester, plus many more.

H380™ H380 was an unnamed spherical rifle propellant when the late Bruce Hodgdon first used it. When a 38.0 grain charge behind a 52 grain bullet gave one hole groups from his 22 caliber wildcat (now called the 22-250), he appropriately named the powder H380. H380 is also a superb performer in the 220 Swift, 243, 257 Roberts and other fine varmint cartridges.

H414™ This spherical powder has an extremely wide range of use. From the 22-250 Remington to the 375 H&H, it will give excellent results. It is simply ideal in the 30-06. As with all of our spherical powders, it delivers incredibly consistent charge weights through nearly any type of powder measure. H414 yields similar results to H4350 in most cartridges, although charge weights will vary.

▶ **H4350** This Extreme Extruded propellant is a burning speed that has been known to shooters for decades. During that time, Hodgdon has modernized H4350 by shortening the grains for improved metering and making it insensitive to hot/cold temperatures. H4350 is great in such cartridges as the 243 Winchester, 6mm Remington, 270 Winchester, 338 Winchester Magnum and many more. For magnums with light to moderate weight bullets, it can't be beat!

▶ **H4831™** It is probably safe to say more big game has been taken with H4831 than any other powder. Bruce Hodgdon was the first supplier to introduce this popular burning rate in 1950. Since that time it has become a favorite for cartridges like the 270 Winchester, 25-06 Remington, 280 Remington and 300 Winchester Magnum. As an Extreme Extruded propellant it shares the fine quality of insensitivity to hot/cold temperatures, as well as superb uniformity from lot to lot.

▶ **H4831SC™** Ballistically, this Extreme Extruded powder is the exact copy of H4831. Physically, it has a shorter grain size, therefore, the designation SC or short cut. The shorter, more compact kernels allow the powder to flow through powder measures more smoothly, helping to alleviate the constant cutting of granules. With the smoother flow characteristics comes more uniform charge weights, while the individual grains orient more compactly, creating better loading density.

▶ **H1000™** This very slow burning Extreme Extruded powder is perfect for highly overbored magnums like the 7mm Remington Magnum, 7mm STW and the 30-378 Weatherby. In addition, with heavy bullets, H1000 gives top velocity and performance in such cartridges as the 6mm-284, 257 Weatherby, 270 Winchester, and 300 Winchester Magnum. In a short period of time this powder has achieved considerable notoriety among long range match shooters.

H870™ This spherical powder is great for heavy bullets in big, overbore magnum loads. H870 is also used in the 50 caliber BMG and is the only surplus powder left in the canister line. Because it is inexpensive, it is frequently used in large capacity cases where economy is a major consideration.

▶ **H50BMG** As the name implies, this new generation Extreme Extruded rifle propellant is a clean burning powder designed expressly for the 50 caliber BMG cartridge. Because it shares the same technology as VARGET, H50BMG displays a high degree of thermal stability in temperature extremes.

Tests have conclusively proven that H50BMG yields very low extreme spreads in velocity and pressure. All this translates into small groups at extended ranges!

PROPERTIES OF SMOKELESS POWDER

Smokeless powders, or propellants, are essentially mixtures of chemicals designed to burn under controlled conditions at the proper rate to propel a projectile from a gun.

Smokeless powders are made in three forms:

1. Thin, circular flakes or wafers
2. Small cylinders
3. Small spheres

Single-base smokeless powders derive their main source of energy from nitrocellulose.

The energy released from double-base smokeless powders is derived from both nitrocellulose and nitroglycerin.

All smokeless powders are extremely flammable; by design, they are intended to burn rapidly and vigorously when ignited.

Oxygen from the air is not necessary for the combustion of smokeless powders since they contain sufficient built-in oxygen to burn completely, even in an enclosed space such as the chamber of a firearm.

In effect, ignition occurs when the powder granules are heated above their ignition temperature. This can occur by exposing powder to:

1. A flame such as a match or primer flash.
2. An electrical spark or the sparks from welding, grinding, etc.
3. Heat from an electric hot plate or a fire directed against or near a closed container even if the powder itself is not exposed to the flame.

When smokeless powder burns, a great deal of gas at high temperature is formed. If the powder is confined, this gas will create pressure in the surrounding structure. The rate of gas generation is such, however, that the pressure can be kept at a low level if sufficient space is available or if the gas can escape.

In this respect smokeless powder differs from blasting agents or high explosives such as dynamite or blasting gelatin, although smokeless powder may contain chemical ingredients common to some of these products.

High explosives such as dynamite are made to detonate, that is, to change from solid state to gaseous state with evolution of intense heat at such a rapid rate that shock waves are propagated through any medium in contact with them. Such shock waves exert pressure on anything they contact, and, as a matter of practical consideration, it is almost impossible to satisfactorily vent away the effects of a detonation involving any appreciable quantity of dynamite.

Smokeless powder differs considerably in its burning characteristics from common "blackpowder."

Blackpowder burns essentially at the same rate out in the open (unconfined) as when in a gun.

When ignited in an unconfined state, smokeless powder burns inefficiently with an orange-colored flame. It produces a considerable amount of light brown noxious smelling smoke. It leaves a residue of ash and partially burned powder. The flame is hot enough to cause severe burns.

The opposite is true when it burns under pressure as in a cartridge fired in a gun. Then it produces very little smoke, a small glow, and leaves very little or no residue. The burning rate of smokeless powder increases with increased pressure.

PROPERTIES OF SMOKELESS POWDER continued

If burning smokeless powder is confined, gas pressure will rise and eventually can cause the container to burst. Under such circumstances, the bursting of a strong container creates effects similar to an explosion.

For this reason, the Department of Transportation (formerly Interstate Commerce Commission) sets specifications for shipping containers for propellants and requires tests of loaded containers – under actual fire conditions – before approving them for use.

When smokeless powder in D.O.T. approved containers is ignited during such tests, container seams split open or lids pop off – to release gases and powder from confinement at low pressure.

HOW TO CHECK SMOKELESS POWDER FOR DETERIORATION

Although modern smokeless powders are basically free from deterioration under proper storage conditions, safe practices require a recognition of the signs of deterioration and its possible effects.

Powder deterioration can be checked by opening the cap on the container and smelling the contents. Powder undergoing deterioration has an irritating acidic odor. (Don't confuse this with common solvent odors such as alcohol, ether and acetone.)

Check to make certain that powder is not exposed to extreme heat as this may cause deterioration. Such exposure produces an acidity which accelerates further reaction and has been known, because of the heat generated by the reaction, to cause spontaneous combustion.

Never salvage powder from old cartridges and do not attempt to blend salvaged powder with new powder. Don't accumulate old powder stocks.

The best way to dispose of deteriorated smokeless powder is to burn it out in the open at an isolated location in small shallow piles (not over 1" deep). The quantity burned in any one pile should never exceed one pound. Use an ignition train of slow burning combustible material so that the person may retreat to a safe distance before powder is ignited. For more instructions call Hodgdon Powder.

CONSIDERATIONS FOR STORAGE OF SMOKELESS POWDER

Smokeless powder is intended to function by burning, so it must be protected against accidental exposure to flame, sparks or high temperatures.

For these reasons, it is desirable that storage enclosures be made of insulating materials to protect the powder from external heat sources.

Once smokeless powder begins to burn, it will normally continue to burn (and generate gas pressure) until it is consumed.

D.O.T. approved containers are constructed to open up at low internal pressures to avoid the effects normally produced by the rupture or bursting of a strong container.

Storage enclosures for smokeless powder should be constructed in a similar manner:

1. Of fire-resistant and heat-insulating materials to protect contents from external heat.
2. Sufficiently large to satisfactorily vent the gaseous products of combustion which would result if the quantity of smokeless powder within the enclosure accidentally ignited.

If a small, tightly enclosed storage enclosure is loaded to capacity with containers of smokeless powder, the walls of the enclosure will expand or move outwards to release the gas pressure – if the powder in storage is accidentally ignited.

Under such conditions, the effects of the release of gas pressure are similar or identical to the effects produced by an explosion.

CONSIDERATIONS FOR STORAGE OF SMOKELESS POWDER

Hence only the smallest practical quantities of smokeless powder should be kept in storage, and then in strict compliance with all applicable regulations and recommendations of the National Fire Protection Association.

RECOMMENDATIONS FOR STORAGE OF SMOKELESS POWDER

STORE IN A COOL, DRY PLACE. Be sure the storage area selected is free from any possible sources of excess heat and is isolated from open flame, furnaces, hot water heaters, etc. Do not store smokeless powder where it will be exposed to the sun's rays. Avoid storage in areas where mechanical or electrical equipment is in operation. Restrict from the storage areas heat or sparks which may result from improper, defective or overloaded electrical circuits.

DO NOT STORE SMOKELESS POWDER IN THE SAME AREA WITH SOLVENTS, FLAMMABLE GASES OR HIGHLY COMBUSTIBLE MATERIALS.

STORE ONLY IN DEPARTMENT OF TRANSPORTATION APPROVED CONTAINERS. Do not transfer the powder from an approved container into one which is not approved

DO NOT SMOKE IN AREAS WHERE POWDER IS STORED OR USED. Place appropriate "No Smoking" signs in these areas.

DO NOT SUBJECT THE STORAGE CABINETS TO CLOSE CONFINEMENT. STORAGE CABINETS SHOULD BE CONSTRUCTED OF INSULATING MATERIALS AND WITH A WEAK WALL, SEAMS OR JOINTS TO PROVIDE AN EASY MEANS OF SELF-VENTING.

DO NOT KEEP OLD OR SALVAGED POWDERS. Check old powders for deterioration regularly. Destroy deteriorated powders immediately.

OBEY ALL REGULATIONS REGARDING QUANTITY AND METHODS OF STORING. Do not store all your powders in one place. If you can, maintain separate storage locations. Many small containers are safer than one or more large containers.

KEEP YOUR STORAGE AND USE AREA CLEAN. Clean up spilled powder promptly. Make sure the surrounding area is free of trash or other readily combustible materials.

10-3 SMOKELESS PROPELLANTS

10-3.1 Quantities of smokeless propellants not exceeding 25 lb (11.3 kg), in shipping containers approved by the U.S. Department of Transportation, may be transported in a private vehicle.

10-3.2 Quantities of smokeless propellants exceeding 25 lb (11.3 kg) but not exceeding 50 lb (22.7 kg), transported in a private vehicle, shall be transported in a portable magazine having wood walls of at least 1 in. (25.4 mm) nominal thickness.

10-3.3 Transportation of more than 50 lb (22.7 kg) of smokeless propellants in a private vehicle is prohibited.

10-3.4 Commercial shipments of smokeless propellants in quantities not exceeding 100 lb (45.4 kg) are classified for transportation purposes as flammable solids when packaged according to U.S. Department of Transportation Hazardous Materials Regulations (Title 49, *Code of Federal Regulations*, Part 173.197a), and shall be transported accordingly.

10-3.5 Commercial shipments of smokeless propellants exceeding 100 lb (45.4 kg) or not packaged in accordance with the regulations cited in 10-3.4 shall be transported according to U.S. Department of Transportation regulations for Class B propellant explosives.

10-3 SMOKELESS PROPELLANTS continued

10-3.6 Smokeless propellants shall be stored in shipping containers specified by U.S. Department of Transportation Hazardous Materials Regulations.

10-3.7 Smokeless propellants intended for personal use in quantities not exceeding 20 lb (9.1 kg) may be stored in original containers in residences. Quantities exceeding 20 lb (9.1 kg), but not exceeding 50 lb (22.7 kg), may be stored in residences if kept in a wooden box or cabinet having walls of at least 1 in. (25.4 mm) nominal thickness.

10-3.8 Not more than 20 lb (9.1 kg) of smokeless propellants, in containers of 1 lb (0.45 kg) maximum capacity, shall be displayed in commercial establishments.

10-3.9 Commercial stocks of smokeless propellants shall be stored as follows:

- a) Quantities exceeding 20 lb (9.1 kg), but not exceeding 100 lb (45.4 kg), shall be stored in portable wooden boxes having walls of at least 1 in. (25.4 mm) thickness.
- b) Quantities exceeding 100 lb (45.4 kg), but not exceeding 800 lb (363 kg), shall be stored in nonportable storage cabinets having walls of at least 1 in (25.4 mm) thickness. Not more than 400 lb (181 kg) may be stored in any one cabinet and cabinets shall be separated by a distance of at least 25 ft (7.63 m) or by a fire partition having a fire resistance of at least 1 hour.
- c) Quantities exceeding 800 lb (363 kg), but not exceeding 5,000 lb (2268 kg), may be stored in a building if the following requirements are met:
 1. The warehouse or storage room shall not be accessible to unauthorized personnel.
 2. Smokeless propellant shall be stored in nonportable storage cabinets having wood walls at least 1 in. (25.4 mm) thick and having shelves with no more than 3 ft. (0.92 m) separation between shelves.
 3. No more than 400 lb. (181 kg) shall be stored in any one cabinet..
 4. Cabinets shall be located against walls of the storage room or warehouse with at least 40 ft (12.2 m) between cabinets.
 5. Separation between cabinets may be reduced to 20 ft (6.1 m) if barricades twice the height of the cabinets are attached to the wall, midway between each cabinet. The barricades shall extend at least 10 ft. (3 m) outward, shall be firmly attached to the wall, and shall be constructed of 1/4 in. (6.4 mm) boiler plate, 2 in. (51 mm) thick wood, brick, or concrete block.
 6. Smokeless propellant shall be separated from materials classified by the U.S. Department of Transportation as flammable liquids, flammable solids, and oxidizing materials by a distance of 25 ft. (7.63 m) or by a fire partition having a fire resistance of at least 1 hour.
 7. The building shall be protected by an automatic sprinkler system installed according to NFPA 13, *Standard for the Installation of Sprinkler Systems*.
- d) Smokeless propellants not stored according to (a), (b) and (c) above shall be stored in a Type 4 magazine constructed and located according to Chapter 6.

Reprinted from NFPA495-85, Standard for the Manufacture, Transportation, Storage and Use of Explosive Materials, © 1985, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the NFPA on the referenced subject, which is represented by the Standard in its entirety.

RIFLE DATA

The loads shown in this section should be followed just as they are printed. These loads are like recipes. The closer they are followed, the better the resultant load.

W A R N I N G

For all brands of powders use only the components shown. If the reloader makes any changes in components or gets new lot numbers, he should begin again with the starting loads and work up to maximum cautiously.

For those loads listed where a starting load is not shown, start 10% below the suggested maximum load and then approach maximums carefully, watching for any sign of pressure (difficult extraction, cratered and flattened or blown primers, and unusual recoil), **H110 Loads should not be reduced more than 3%.**

Reduce H110 Loads 3% and work up from there. H110 if

reduced too much will cause inconsistent ignition. In some cases it will lodge a bullet in the barrel, causing a hazardous situation (Barrel Obstruction). This may cause severe personal injury or death to users or bystanders. **DO NOT REDUCE H110 LOADS BY MORE THAN 3%.**

H4831SC has the same ballistic performance as H4831.

B R A N D S

BAR - Barnes
BER - Berger
BLX - Bull-X
FA - Freedom Arms
HDY - Hornady
NOS - Nosler
REM - Remington
SIE - Sierra
SFT - Swift
SPR - Speer
WIN - Winchester

P R I M E R S

LR - Large Rifle
LRM - Large Rifle Magnum
SR - Small Rifle
SRM - Small Rifle Magnum

D A T A

C - Compressed Powder Charge
PR - Primer
BBL - Barrel
COL - Cartridge Overall Length
REF - Reformed

B U L L E T S

A-Max - Hornady Match
BR - Bench Rest
BT - Ballistic Tip
FMC - Full Metal Case
FMJ - Full Metal Jacket
FMJBT - Full Metal Jacket Boat Tail
FN - Flat Nose
FP - Flat Point
FPJ - Full Plated Jacket
FS - Fail Safe
GC - Gas Check
GDHP - Gold Dot Hollow Point
GDSP - Gold Dot Soft Point
GS - Grand Slam
HB - Hollow Base
HC - Hollow Cavity
HP - Hollow Point
HPBT - Hollow Point Boat Tail
HSP - Hollow Soft Point
JFP - Jacketed Flat Point
JHC - Jacketed Hollow Cavity
JHP - Jacketed Hollow Point
JRN - Jacketed Round Nose
JSP - Jacketed Soft Point
JSWC - Jacketed Semi-Wadcutter
LBBWC - Lead Bevel Base Wadcutter
LFP - Lead Flat Point
LHBWC - Lead Hollow Base Wadcutter
LRN - Lead Round Nose
LSWC - Lead Semi-Wadcutter
MK - Match King
MT-SP - Mag Tip Soft Point
PSPCL - Pointed Soft Point "Core-Lokt"
RN - Round Nose
SB - Solid Base
SJ - Short Jacket
SP - Soft Point, Spitzer, Spire Point
SPBT - Soft Point Boat Tail
ST - Silvertip
TMJ - Totally Metal Jacket
UCHP - Uni-cor Hollow Point
WC - Wadcutter
X - X Bullet
XFB - X Flat Base
XBT - X Boat Tail
XBTC - X Boat Tail Coated

NEVER Exceed the Loads Listed in This Publication

RIFLE DATA

BULLET	POWDER	GR	VEL	CUP
17 REMINGTON				
BBL: 24"		CASE: REMINGTON		
		PR: REMINGTON 7 1/2		
25 GR. HDY HP COL: 2.150"				
H414	27.0	3989	48,300 CUP	
H380	26.0	3950	46,100 CUP	
VARGET	24.5	4123	50,800 CUP	
BL-C(2)	24.0	4051	49,000 CUP	
H335	21.0	3963	51,300 CUP	
H4895	23.0	4033	48,500 CUP	
H322	21.8	3921	49,700 CUP	
22 HORNET				
BBL: 24"		CASE: WINCHESTER		
		PR: WINCHESTER SR		
35 GR. HDY V-MAX COL: 1.725"				
H4198	11.5 C	2420	26,300 CUP	
H4227	11.6 C	2896	42,500 CUP	
H110	12.3	3060	41,400 CUP	
LIL'GUN	13.0	2842	24,000 CUP	
45 GR. HDY SP COL: 1.750"				
H4198	11.5 C	2400	32,000 CUP	
H4227	9.8	2484	42,000 CUP	
H110	10.4	2574	43,000 CUP	
LIL'GUN	13.0	2787	31,600 CUP	
222 REMINGTON				
BBL: 24"		CASE: WINCHESTER		
		PR: WINCHESTER SR		
40 GR. SIE SP COL: 2.125"				
H335	25.0	3371	44,600 CUP	
H4895	24.0 C	3133	34,200 CUP	
H322	23.0	3313	44,000 CUP	
H4198	21.4	3480	45,700 CUP	
H4227	15.0	3040	45,100 CUP	
50 GR. HDY SP COL: 2.130"				
VARGET	25.0 C	3114	40,600 CUP	
BL-C(2)	25.0	3000	38,600 CUP	
H335	23.6	3120	45,700 CUP	
H4895	23.8 C	3022	36,500 CUP	
H322	22.2	3079	43,200 CUP	
H4198	20.5	3160	44,200 CUP	
H4227	13.8	2668	44,000 CUP	
223 REMINGTON				
BBL: 24"		CASE: WINCHESTER		
		PR: WINCHESTER SR		
40 GR. NOS BT COL: 2.280"				
VARGET	28.0 C	3674	47,200 CUP	
BL-C(2)	28.5	3612	45,400 CUP	
H335	28.0	3572	44,600 CUP	
H4895	27.5 C	3573	44,500 CUP	
H322	25.5	3574	48,000 CUP	
H4198	22.5	3601	49,600 CUP	
50 GR. SPR SP COL: 2.210"				
VARGET	27.5 C	3383	44,800 CUP	
BL-C(2)	28.0	3428	47,100 CUP	
H335	26.0	3393	51,700 CUP	
H4895	27.5 C	3468	51,300 CUP	
H322	24.0	3301	49,300 CUP	

BULLET	POWDER	GR	VEL	CUP
H4198 21.5 3223 45,900 CUP				
55 GR. SPR SP COL: 2.200"				
VARGET	27.5 C	3384	49,700 CUP	
BL-C(2)	27.5	3313	48,500 CUP	
H335	25.3	3203	49,300 CUP	
H4895	26.0	3315	49,000 CUP	
H322	23.0	3106	48,900 CUP	
H4198	21.0	3150	47,600 CUP	
22 PPC				
BBL: 24"		CASE: SAKO (REF)		
		PR: REMINGTON 7 1/2		
50 GR. SPR SP COL: 2.065"				
VARGET	29.5	3408	48,200 CUP	
BL-C(2)	30.5	3316	47,000 CUP	
H335	28.0	3418	50,000 CUP	
H4895	28.0	3347	46,500 CUP	
H322	26.0	3385	48,000 CUP	
53 GR. HDY HP COL: 2.065"				
VARGET	28.5	3363	48,900 CUP	
BL-C(2)	30.5	3288	48,000 CUP	
H335	27.5	3344	49,000 CUP	
H4895	28.0	3321	49,000 CUP	
H322	26.0	3333	48,500 CUP	
22 BR REMINGTON				
BBL: 24"		CASE: REMINGTON (REF)		
		PR: REMINGTON 7 1/2		
50 GR. SPR SP COL: 1.945"				
VARGET	33.5	3624	44,600 CUP	
BL-C(2)	35.5	3649	49,000 CUP	
H335	32.0	3628	48,800 CUP	
H4895	32.0	3606	48,000 CUP	
H322	30.5	3637	50,000 CUP	
53 GR. HDY HP COL: 2.065"				
VARGET	33.0	3638	51,100 CUP	
BL-C(2)	35.0	3592	48,800 CUP	
H335	31.5	3587	49,200 CUP	
H4895	31.5	3566	49,000 CUP	
H322	30.0	3544	48,400 CUP	
22-250 REMINGTON				
BBL: 24"		CASE: WINCHESTER		
		PR: WINCHESTER LR		
40 GR. NOS BT COL: 2.350"				
H414	41.0	3933	47,100 CUP	
H380	41.0	3855	39,200 CUP	
VARGET	39.5	4135	51,100 CUP	
H4895	37.0	4060	48,700 CUP	
50 GR. SIE SP COL: 2.350"				
H4350	42.0	3579	48,900 CUP	
H414	40.0	3765	48,600 CUP	
H380	41.0	3742	45,300 CUP	
VARGET	37.5	3834	50,400 CUP	
BL-C(2)	34.5	3740	48,400 CUP	
H335	34.5	3753	48,700 CUP	
H4895	36.5	3827	50,200 CUP	
H322	32.0	3628	50,300 CUP	
55 GR. SPR SP COL: 2.350"				
H4350	39.0	3490	47,800 CUP	

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RIFLE DATA

BULLET	POWDER	GR	VEL	CUP
H414	39.0	3582	46,700	CUP
H380	41.0	3713	50,700	CUP
VARGET	36.5	3664	50,400	CUP
BL-C(2)	34.0	3606	49,600	CUP
H335	33.0	3589	51,100	CUP
H4895	35.5	3670	49,300	CUP
H322	30.0	3480	49,800	CUP

220 SWIFT CASE: WINCHESTER
BBL: 26" PR: WINCHESTER LR

40 GR. SIE HP			COL: 2.680"
H414	46.0	4213	51,600 CUP
H380	44.0	4124	50,000 CUP
VARGET	40.5	4113	49,800 CUP
H335	40.0	4158	53,100 CUP
H4895	40.0	4126	52,000 CUP

50 GR. HDY SP			COL: 2.680"
H414	44.0	3826	49,600 CUP
H380	43.5	3947	53,800 CUP
VARGET	36.0	3770	50,200 CUP
BL-C(2)	38.0	3888	51,000 CUP
H335	38.0	3860	52,000 CUP
H4895	38.0	3840	51,200 CUP

55 GR. HDY SP			COL: 2.680"
H4831	46.0	3616	46,600 CUP
H4350	42.0	3619	50,800 CUP
H414	44.0	3833	53,700 CUP
H380	42.5	3839	53,300 CUP
VARGET	36.0	3645	51,900 CUP
BL-C(2)	36.0	3682	49,900 CUP
H335	36.0	3696	50,400 CUP
H4895	37.0	3698	52,000 CUP

6MM PPC CASE: SAKO (REF)
BBL: 24" PR: REMINGTON 7 1/2

70 GR. NOS BT			COL: 2.100"
VARGET	29.0	3034	48,000 CUP
BL-C(2)	31.0	3012	47,500 CUP
H335	27.5	3033	48,500 CUP
H4895	28.0	3034	46,500 CUP
H322	26.5	3068	50,000 CUP
H4198	22.0	2839	50,400 CUP

75 GR. SPR HP			COL: 2.115"
VARGET	28.0	2906	47,000 CUP
BL-C(2)	30.5	2974	47,800 CUP
H335	27.0	2990	49,000 CUP
H4895	27.5	2981	48,500 CUP
H322	26.0	2974	49,500 CUP
H4198	21.0	2780	49,000 CUP

6MM BR REMINGTON CASE: REMINGTON
BBL: 24" PR: REMINGTON 7 1/2

70 GR. NOS BT			COL: 2.100"
VARGET	34.0	3342	49,400 CUP
BL-C(2)	35.0	3289	48,000 CUP
H335	31.0	3287	47,000 CUP
H4895	31.0	3188	47,000 CUP

BULLET	POWDER	GR	VEL	CUP
H322	30.0	3200	47,000	CUP
80 GR. SPR SP				COL: 2.115"
VARGET	32.5	3159	50,700	CUP
BL-C(2)	33.0	3089	47,500	CUP
H335	30.0	3090	48,000	CUP
H4895	30.0	3100	47,000	CUP
H322	28.0	3005	47,000	CUP

243 WINCHESTER CASE: WINCHESTER
BBL: 24" PR: WINCHESTER LR

70 GR. SPR HP			COL: 2.625"
H414	46.0	3568	49,800 CUP
H380	46.0	3567	48,900 CUP
VARGET	40.5	3574	50,100 CUP
BL-C(2)	39.0	3384	50,400 CUP
H4895	39.5	3477	49,200 CUP

80 GR. SIE BTSP			COL: 2.635"
H414	45.0	3404	50,100 CUP
H380	41.2	3223	50,300 CUP
VARGET	38.5	3355	50,300 CUP
BL-C(2)	38.5	3242	50,600 CUP
H4895	38.0	3307	50,100 CUP

100 GR. SPR BTSP			COL: 2.650"
H1000	47.0 C	3000	49,800 CUP
H4831	42.0	2924	50,100 CUP
H4350	40.0	2973	51,000 CUP
H414	40.0	2963	50,600 CUP
H380	36.0	2770	50,100 CUP
VARGET	33.7	2838	50,400 CUP
H4895	33.0	2818	50,100 CUP

6MM REMINGTON CASE: WINCHESTER
BBL: 24" PR: REMINGTON 9 1/2

70 GR. SIE HPBT			COL: 2.810"
H4350	50.5	3638	49,500 CUP
H414	48.5	3636	50,100 CUP
H380	46.5	3533	50,000 CUP
VARGET	42.0	3550	50,000 CUP
H4895	42.0	3588	49,500 CUP

80 GR. SPR SP			COL: 2.775"
H4831	51.0	3358	49,400 CUP
H4350	47.0	3337	48,700 CUP
H414	46.5	3381	49,300 CUP
H380	44.0	3247	49,500 CUP
VARGET	41.0	3379	50,600 CUP
H4895	39.5	3307	49,400 CUP

100 GR. SPR BT			COL: 2.775"
H1000	50.0	3080	50,200 CUP
H4831	46.0	3042	50,700 CUP
H4350	42.5	2999	50,100 CUP
H414	42.0	2991	50,800 CUP
VARGET	36.0	2933	50,200 CUP
H4895	35.0	2889	49,400 CUP

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RIFLE DATA

BULLET	POWDER	GR	VEL	CUP
25-20 WINCHESTER				
BBL: 24"		CASE: REMINGTON PR: WINCHESTER SR		
60 GR. HDY FP COL: 1.600"				
H322	15.0 C	1900	25,700 CUP	
H4198	14.2 C	2101	25,800 CUP	
H4227	10.2	1962	26,700 CUP	
H110	9.3	1931	26,600 CUP	
HS-7	7.0	1724	27,100 CUP	
25-35 WINCHESTER				
BBL: 20"		CASE: WINCHESTER PR: WINCHESTER LR		
60 GR. HDY SP COL: 2.305"				
BL-C(2)	30.0	2786		
H335	30.0	2792		
H4895	30.0	2729		
H4198	24.0	2717		
117 GR. HDY RN COL: 2.600"				
BL-C(2)	27.0	2188		
H335	27.0	2199		
H4895	27.0	2207		
H4198	20.0	2014		
250-3000 SAVAGE				
BBL: 26"		CASE: REMINGTON PR: REMINGTON 9 1/2		
75 GR. SIE HP COL: 2.450"				
H4350	42.0	3222		
H414	44.0	3460		
H380	42.0	3393		
BL-C(2)	38.0	3299		
H335	37.0	3258		
H4895	38.0	3380		
H322	34.0	3194		
H4198	30.0	3169		
87 GR. SPR SP COL: 2.450"				
H4350	41.0	3063		
H414	42.0	3297		
H380	41.0	3210		
BL-C(2)	36.0	3114		
H335	35.0	3075		
H4895	37.0	3208		
H322	32.0	3044		
100 GR. NOS PART COL: 2.500"				
H4831	42.0	2890		
H4350	40.0	2881		
H414	40.0	3102		
H380	38.0	2998		
BL-C(2)	34.0	2900		
H335	34.0	2921		
H4895	35.0	2988		
H322	29.0	2709		
257 ROBERTS				
BBL: 26"		CASE: REMINGTON PR: REMINGTON 9 1/2		
75 GR. HDY HP COL: 2.795"				
H4831	53.0	3307	37,500 CUP	
H4350	50.0	3422	44,000 CUP	

BULLET	POWDER	GR	VEL	CUP
H414	52.0	3555	45,300 CUP	
H380	48.0	3563	45,600 CUP	
VARGET	41.0	3453	43,700 CUP	
BL-C(2)	46.0	3531	46,700 CUP	
H335	46.0	3548	45,000 CUP	
H4895	44.0	3561	47,300 CUP	
90 GR. SIE HPBT COL: 2.775"				
H4831	52.0	3236	39,500 CUP	
H4350	46.0	3040	43,700 CUP	
H414	50.0	3368	44,400 CUP	
H380	47.0	3364	45,400 CUP	
VARGET	40.0	3269	44,900 CUP	
BL-C(2)	43.5	3231	45,000 CUP	
H335	43.0	3300	44,400 CUP	
H4895	42.0	3372	47,600 CUP	
100 GR. SPR SPBT COL: 2.770"				
H4831	49.0	3010	44,100 CUP	
H4350	45.0	2970	45,400 CUP	
H414	45.0	3098	44,500 CUP	
H380	44.0	3108	46,600 CUP	
VARGET	38.0	2981	44,900 CUP	
BL-C(2)	39.0	2958	45,400 CUP	
H335	39.0	3042	47,800 CUP	
H4895	38.0	2990	46,100 CUP	
25-06 REMINGTON				
BBL: 24"		CASE: REMINGTON PR: REMINGTON 9 1/2		
90 GR. SIE HPBT COL: 3.100"				
H1000	62.0 C	3330	47,500 CUP	
H4831	58.0	3481	50,400 CUP	
H4350	53.0	3370	50,700 CUP	
H414	51.0	3315	50,200 CUP	
VARGET	45.0	3312	50,400 CUP	
H4895	44.0	3257	51,000 CUP	
100 GR. NOS PART COL: 3.200"				
H1000	59.7 C	3212	50,700 CUP	
H4831	54.3	3172	51,400 CUP	
H4350	50.0	3155	51,500 CUP	
H414	47.0	3059	50,700 CUP	
VARGET	44.0	3125	51,400 CUP	
H4895	43.0	3072	51,000 CUP	
120 GR. SFT SP COL: 3.150"				
H1000	55.5	2902	50,600 CUP	
H4831	51.5	2856	51,200 CUP	
H4350	47.5	2816	50,900 CUP	
VARGET	41.0	2755	51,900 CUP	
H4895	40.0	2694	51,700 CUP	
257 WEATHERBY MAGNUM				
BBL: 26"		CASE: WEATHERBY PR: FEDERAL 215		
100 GR. NOS PART COL: 3.185"				
H870	80.0	3463	53,000 CUP	
H1000	71.0	3351	46,900 CUP	
H4831	68.0	3436	52,300 CUP	
H4350	62.0	3319	51,200 CUP	
120 GR. SPR SP COL: 3.170"				
H870	76.0	3240	53,200 CUP	

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RIFLE DATA

BULLET	POWDER	GR	VEL	CUP
H1000	68.0	3231	50,800	CUP
H4831	65.0	3220	51,500	CUP

260 REMINGTON CASE: REMINGTON
BBL: 24" PR: REMINGTON 9 1/2

95 GR. HDY V-MAX			COL: 2.780"
H4350	49.7	3284	58,100 PSI
H414	49.0	3313	58,600 PSI
H380	47.0	3262	59,500 PSI
VARGET	42.0	3244	58,500 PSI
BL-C(2)	43.5	3236	58,300 PSI
H335	38.3	3114	58,000 PSI
H4895	40.8	3225	58,500 PSI

120 GR. SPR SP			COL: 2.780"
H1000	51.0 C	2810	49,300 PSI
H4831	50.0 C	2954	59,200 PSI
H4350	46.5	2960	58,200 PSI
H414	45.5	2968	58,624 PSI
H380	43.0	2844	58,100 PSI
VARGET	39.0	2877	58,300 PSI
BL-C(2)	40.0	2840	58,900 PSI
H335	36.7	2755	58,600 PSI
H4895	38.0	2813	58,900 PSI

140 GR. NOS PART			COL: 2.780"
H1000	50.5	2730	57,000 PSI
H4831	45.7	2686	59,000 PSI
H4350	42.0	2677	58,800 PSI
H414	41.0	2656	58,800 PSI
H380	40.0	2594	58,900 PSI
VARGET	36.0	2578	59,400 PSI
BL-C(2)	36.6	2557	59,000 PSI
H4895	34.3	2517	58,400 PSI

6.5 X 55MM SWEDISH MAUSER CASE: WINCHESTER
BBL: 24" PR: WINCHESTER LR

120 GR. NOS BT			COL: 3.000"
H4831	49.5 C	2802	45,900 CUP
H4350	46.0	2792	45,800 CUP
H414	44.5	2783	46,000 CUP
H380	44.3	2784	46,000 CUP
VARGET	39.0	2812	45,300 CUP
H4895	37.8	2715	46,000 CUP

140 GR. SPR SP			COL: 3.030"
H1000	51.5 C	2651	46,000 CUP
H4831	47.0	2586	45,700 CUP
H4350	44.0	2617	45,700 CUP
H414	41.5	2565	45,600 CUP
H380	40.5	2520	45,100 CUP
VARGET	36.0	2528	46,000 CUP
H4895	35.8	2493	45,700 CUP

6.5MM REMINGTON MAGNUM CASE: REMINGTON
BBL: 26" PR: REMINGTON 9 1/2 M

100 GR. HDY SP			COL: 2.940"
H4831	60.0	3416	48,100 CUP

BULLET	POWDER	GR	VEL	CUP
H4350	55.0	3327	51,700	CUP
H414	56.0	3466	52,600	CUP
H380	54.0	3459	52,800	CUP
H4895	50.0	3475	52,200	CUP

120 GR. SPR SP			COL: 2.790"
H4831	59.0	3286	51,000 CUP
H4350	52.0	3080	51,200 CUP
H414	51.0	3099	51,700 CUP
H380	49.0	3059	50,900 CUP
H4895	46.0	3081	50,900 CUP

140 GR. NOS PART			COL: 2.790"
H4831	54.0	2943	51,400 CUP
H4350	49.0	2780	51,200 CUP
H414	46.0	2743	51,100 CUP
H380	44.0	2666	51,200 CUP
H4895	42.0	2752	49,200 CUP

264 WINCHESTER MAGNUM CASE: WINCHESTER
BBL: 26" PR: WINCHESTER LR

120 GR. SPR SP			COL: 3.300"
H1000	72.0	3185	49,000 CUP
H4831	65.0	3369	52,100 CUP
H4350	57.0	3190	52,900 CUP

140 GR. NOS PART			COL: 3.260"
H870	73.0	3163	54,200 CUP
H1000	68.0	3019	51,500 CUP
H4831	61.0	3065	52,000 CUP
H4350	53.0	2965	53,400 CUP

270 WINCHESTER CASE: WINCHESTER
BBL: 24" PR: WINCHESTER LR

130 GR. HDY SP			COL: 3.280"
H1000	64.0 C	3025	48,100 CUP
H4831	60.0 C	3019	51,000 CUP
H4350	54.3	3012	50,500 CUP
H414	53.5	3003	50,800 CUP
H380	49.8	2884	51,000 CUP
VARGET	46.0	2931	49,600 CUP
H4895	45.0	2922	51,000 CUP

140 GR. SFT SP			COL: 3.280"
H1000	63.0 C	2979	50,800 CUP
H4831	58.0 C	2888	50,100 CUP
H4350	52.0	2870	50,400 CUP
H414	48.9	2788	49,800 CUP
VARGET	43.7	2772	50,500 CUP
H4895	42.6	2768	50,600 CUP

150 GR. HDY SP			COL: 3.285"
H1000	59.0 C	2831	51,000 CUP
H4831	55.7	2804	51,200 CUP
H4350	49.0	2724	51,000 CUP
H414	48.0	2706	51,200 CUP

270 WEATHERBY MAGNUM CASE: WEATHERBY
BBL: 26" PR: CCI 250

130 GR. SPR SP			COL: 3.250"
H870	80.0	3214	
H1000	81.0	3259	

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RIFLE DATA

BULLET	POWDER	GR	VEL	CUP
H4831	70.0	3205		
H4350	66.0	3262		
150 GR. NOS PART COL: 3.250"				
H870	79.0	2943		
H1000	79.0	3132		
H4831	68.0	3057		
H4350	63.0	2986		

7-30 WATERS			CASE: FEDERAL	
BBL: 24"			PR: FEDERAL 210	
120 GR. NOS FP COL: 2.500"				
H4831	41.0	2561		
H4350	41.0	2724		
H414	42.0	2757		
H380	41.0	2735		
BL-C(2)	37.0	2701		
H335	34.0	2683		
H4895	34.0	2733		
H322	32.0	2687		

139 GR. HDY FP			CASE: FEDERAL	
BBL: 24"			PR: FEDERAL 210	
139 GR. HDY FP COL: 2.252"				
H4831	39.0	2384		
H4350	38.0	2418		
H414	38.0	2442		
H380	36.0	2396		
BL-C(2)	35.0	2373		
H335	32.0	2430		
H4895	31.0	2458		
H322	29.0	2342		

7MM-08 REMINGTON			CASE: REMINGTON	
BBL: 24"			PR: REMINGTON 9 1/2	
120 GR. NOS BT COL: 2.800"				
H4350	50.0 C	3039	44,600 CUP	
H414	49.0	3023	47,600 CUP	
H380	48.0	2977	43,400 CUP	
VARGET	45.0	3117	49,900 CUP	
BL-C(2)	46.5	3109	50,100 CUP	
H335	42.0	2984	49,400 CUP	
H4895	43.7	3085	49,700 CUP	

140 GR. SFT SP			CASE: REMINGTON	
BBL: 24"			PR: REMINGTON 9 1/2	
140 GR. SFT SP COL: 2.750"				
H4350	48.0 C	2868	49,800 CUP	
H414	46.0	2791	49,500 CUP	
H380	45.7	2775	49,400 CUP	
VARGET	42.2	2819	49,800 CUP	
BL-C(2)	42.5	2796	49,700 CUP	
H335	37.5	2647	49,800 CUP	
H4895	40.5	2769	49,700 CUP	

150 GR. SIE HPBT			CASE: REMINGTON	
BBL: 24"			PR: REMINGTON 9 1/2	
150 GR. SIE HPBT COL: 2.800"				
H4350	48.5 C	2823	50,300 CUP	
H414	46.5	2776	50,000 CUP	
H380	45.5	2748	49,900 CUP	
VARGET	41.3	2731	50,000 CUP	
BL-C(2)	41.5	2699	49,600 CUP	
H335	37.5	2605	49,900 CUP	
H4895	40.5	2723	50,000 CUP	

BULLET	POWDER	GR	VEL	CUP
7 X 57MM MAUSER				
BBL: 24"			CASE: WINCHESTER	
			PR: WINCHESTER LR	
120 GR. NOS BT COL: 3.000"				
H4831	52.5 C	2777	40,800 CUP	
H4350	51.0 C	2945	45,800 CUP	
H414	51.0	2938	45,600 CUP	
H380	47.5	2860	46,000 CUP	
VARGET	44.0	2979	46,000 CUP	
H4895	42.0	2859	45,400 CUP	

140 GR. NOS BT			CASE: WINCHESTER	
BBL: 24"			PR: WINCHESTER LR	
140 GR. NOS BT COL: 3.000"				
H4831	49.5 C	2719	46,000 CUP	
H4350	46.5	2682	46,000 CUP	
H414	47.0	2715	46,000 CUP	
H380	44.0	2614	46,000 CUP	
VARGET	37.7	2516	46,000 CUP	
H4895	37.5	2530	45,800 CUP	

168 GR. SIE HPBT			CASE: WINCHESTER	
BBL: 24"			PR: WINCHESTER LR	
168 GR. SIE HPBT COL: 3.000"				
H1000	52.0 C	2485	46,000 CUP	
H4831	46.0	2393	43,900 CUP	
H4350	42.5	2378	44,100 CUP	
H414	42.5	2378	45,000 CUP	
H380	39.5	2272	44,500 CUP	
VARGET	37.5	2404	45,500 CUP	
H4895	34.5	2211	42,600 CUP	

280 REMINGTON			CASE: REMINGTON	
BBL: 24"			PR: REMINGTON 9 1/2	
120 GR. BAR XFB COL: 3.200"				
H4831	62.0 C	3112	48,600 CUP	
H4350	56.0	3114	48,400 CUP	
H414	54.5	3085	48,100 CUP	
H380	51.0	2952	48,700 CUP	
VARGET	47.2	3032	47,600 CUP	
BL-C(2)	46.5	2908	48,000 CUP	
H4895	47.0	3020	48,300 CUP	

140 GR. NOS PART			CASE: REMINGTON	
BBL: 24"			PR: REMINGTON 9 1/2	
140 GR. NOS PART COL: 3.230"				
H4831	58.5	2927	48,500 CUP	
H4350	53.5	2918	48,500 CUP	
H414	51.0	2867	47,900 CUP	
VARGET	45.5	2838	48,100 CUP	
H4895	45.2	2830	48,400 CUP	

160 GR. SFT SP			CASE: REMINGTON	
BBL: 24"			PR: REMINGTON 9 1/2	
160 GR. SFT SP COL: 3.240"				
H1000	61.0 C	2714	47,500 CUP	
H4831	55.0	2660	49,500 CUP	
H4350	49.5	2610	48,900 CUP	
H414	47.5	2558	49,700 CUP	
VARGET	42.5	2555	49,300 CUP	
H4895	41.5	2535	49,500 CUP	

284 WINCHESTER			CASE: WINCHESTER	
BBL: 22"			PR: WINCHESTER LR	
120 GR. SPR SP COL: 2.800"				
H4831	59.0	3036		
H4350	56.0	3090		
H380	51.0	3023		
BL-C(2)	48.0	2934		

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RIFLE DATA

BULLET	POWDER	GR	VEL	CUP
H335	47.0	2922		
H4895	47.0	3104		
140 GR. SIE SP				COL: 2.800"
H4831	58.0	2954		
H4350	54.0	2957		
H380	48.0	2856		
H335	46.0	2869		
H4895	45.0	2847		
162 GR. HDY BTSP				COL: 2.905"
H870	63.0	2560		
H4831	57.0	2803		
H4350	52.0	2754		
H414	50.0	2794		
H380	46.0	2675		
BL-C(2)	46.5	2754	47,000 CUP	
H335	44.0	2686		
H4895	42.0	2641		

7MM REMINGTON MAGNUM CASE: WINCHESTER				
BBL: 24" PR: WINCHESTER LR				
140 GR. NOS PART				COL: 3.250"
H1000	70.0	3036	50,600 CUP	
H4831	64.0	2950	50,200 CUP	
H4350	59.0	2927	50,000 CUP	
H414	60.2	2967	49,300 CUP	
162 GR. HDY SPBT				COL: 3.290"
H870	80.0	2883	43,300 CUP	
H1000	70.0	2905	49,600 CUP	
H4831	64.0	2871	49,800 CUP	
H4350	58.0	2799	49,400 CUP	
175 GR. NOS PART				COL: 3.290"
H870	77.0	2782	46,300 CUP	
H1000	64.5	2692	50,400 CUP	
H4831	58.0	2660	50,200 CUP	
H4350	54.0	2617	51,400 CUP	

7MM WEATHERBY MAGNUM CASE: REMINGTON				
BBL: 24" PR: FEDERAL 215 M				
140 GR. SFT SP				COL: 3.250"
H1000	79.0 C	3273	49,900 CUP	
H4831	74.0	3258	54,000 CUP	
H4350	68.5	3248	54,000 CUP	
160 GR. BAR XFB				COL: 3.250"
H1000	75.0 C	2994	50,800 CUP	
H4831	70.0	2971	53,900 CUP	
H4350	65.0	2950	53,900 CUP	
175 GR. HDY SP				COL: 3.350"
H870	80.0	2843	44,300 CUP	
H1000	74.7 C	3022	54,000 CUP	
H4831	67.5	2895	53,400 CUP	
H4350	63.7	2899	53,600 CUP	

BULLET	POWDER	GR	VEL	CUP
7MM SHOOTING TIMES WESTERNER				
CASE: FEDERAL				
PR: FEDERAL 215				
BBL: 24"				
145 GR. SPR SP				COL: 3.565"
H1000	77.0	3120	52,100 CUP	
H4831	72.0	3063	52,300 CUP	
160 GR. SFT SP				COL: 3.565"
H50BMG	90.0 C	2970	46,600 CUP	
H5010	86.0 C	2877	45,700 CUP	
H870	90.0	3097	46,100 CUP	
H1000	80.7	3084	51,500 CUP	
H4831	74.0	3037	52,300 CUP	
175 GR. NOS PART				COL: 3.585"
H50BMG	89.0 C	2973	52,300 CUP	
H5010	85.0 C	2921	51,600 CUP	
H870	89.0	3059	51,800 CUP	
H1000	74.0	2944	51,900 CUP	

30 CARBINE CASE: WINCHESTER				
BBL: 20" PR: CCI 400				
85 GR. SIE RN				COL: 1.625"
H4227	15.5 C	2181	30,700 CUP	
H110	17.5	2458	34,800 CUP	
100 GR. SPR SP				COL: 1.625"
LIL'GUN	15.0	2132	28,300 CUP	
110 GR. HDY JRN				COL: 1.680"
H4227	14.5 C	2003	38,800 CUP	
H110	15.0	2106	36,500 CUP	
LIL'GUN	15.0	2064	29,800 CUP	

30-30 WINCHESTER CASE: WINCHESTER				
BBL: 24" PR: WINCHESTER LR				
150 GR. SIE FN				COL: 2.550"
VARGET	34.5	2349	36,200 CUP	
BL-C(2)	37.0	2358	33,900 CUP	
H335	33.0	2308	36,200 CUP	
H4895	34.0	2390	36,700 CUP	
H4198	24.0	2110	36,800 CUP	
170 GR. SIE FP				COL: 2.550"
VARGET	33.0	2168	36,500 CUP	
BL-C(2)	36.0	2227	34,700 CUP	
H335	30.5	2086	36,300 CUP	
H4895	30.5	2138	35,200 CUP	
H4198	22.5	1918	32,600 CUP	

30-40 KRAG CASE: WINCHESTER				
BBL: 24" PR: CCI 200				
150 GR. NOS PART				COL: 3.090"
H4831	49.0	2306		
H4350	49.0	2388		
H414	47.0	2531		
H380	44.0	2489		
BL-C(2)	37.0	2491		
H335	37.0	2508		
H4895	42.0	2575		
H322	40.0	2518		

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RIFLE DATA

BULLET	POWDER	GR	VEL	CUP
H4198		32.0	2366	
180 GR. SPR GS SP				COL: 3.090"
H4350		46.0	2110	
H414		43.0	2276	
H380		40.0	2182	
BL-C(2)		33.0	2006	
H335		34.0	2049	
H4895		38.0	2265	
H322		37.0	2250	

300 SAVAGE		CASE: REMINGTON	
BBL: 22"		PR: REMINGTON 9 1/2	
150 GR. NOS PART			COL: 2.520"
BL-C(2)	39.0	2574	
H335	39.0	2545	
H4895	40.0	2408	
180 GR. HDY SP			COL: 2.600"
BL-C(2)	35.0	2069	
H335	35.0	2074	
H4895	37.0	2130	

307 WINCHESTER		CASE: WINCHESTER	
BBL: 20"		PR: WINCHESTER LR	
150 GR. HDY RN			COL: 2.520"
H4831	49.0	2349	
H4350	48.0	2453	
H414	49.0	2562	
H380	48.0	2543	
BL-C(2)	46.0	2593	
H335	44.0	2590	
H4895	42.0	2604	
H322	41.0	2513	
180 GR. HDY RN			COL: 2.730"
H4831	47.0	2289	
H4350	47.0	2416	
H414	46.0	2470	
H380	45.0	2440	
BL-C(2)	43.0	2474	
H335	40.0	2417	
H4895	39.0	2373	
H322	37.0	2359	

308 WINCHESTER		CASE: WINCHESTER	
BBL: 24"		PR: FEDERAL 210M	
150 GR. NOS BT			COL: 2.800"
VARGET	47.0 C	2937	50,300 CUP
BL-C(2)	48.0	2839	50,000 CUP
H335	44.0	2787	51,200 CUP
H4895	45.5	2870	51,000 CUP
H322	40.0	2702	50,500 CUP
168 GR. SIE HPBT			COL: 2.800"
VARGET	46.0 C	2731	50,600 CUP
BL-C(2)	47.0	2754	50,200 CUP
H335	42.0	2631	49,300 CUP
H4895	43.5	2703	49,500 CUP
175 GR. SIE HPBT			COL: 2.800"
H414	49.0	2629	50,100 CUP

BULLET	POWDER	GR	VEL	CUP
VARGET	45.0 C	2690	48,600 CUP	
BL-C(2)	46.0	2706	50,300 CUP	
H335	41.3	2592	50,100 CUP	
H4895	42.7	2647	49,000 CUP	

30-06		CASE: WINCHESTER	
BBL: 24"		PR: WINCHESTER LR	
150 GR. NOS BT			COL: 3.250"
H4350	62.0 C	3068	48,400 CUP
H414	60.0	2992	48,600 CUP
H380	59.0	3005	45,900 CUP
VARGET	51.0	2975	50,100 CUP
BL-C(2)	54.0	2962	48,600 CUP
H335	51.5	2982	49,200 CUP
H4895	51.0	2976	48,500 CUP

165 GR. SIE SPBT		CASE: WINCHESTER	
		PR: WINCHESTER LR	
			COL: 3.300"
H4350	59.0	2938	49,400 CUP
H414	56.5	2877	49,700 CUP
H380	56.5	2892	50,000 CUP
VARGET	50.5	2873	49,700 CUP
BL-C(2)	51.0	2805	49,800 CUP
H335	47.0	2749	49,300 CUP
H4895	47.5	2782	49,000 CUP

180 GR. SIE SPBT		CASE: WINCHESTER	
		PR: WINCHESTER LR	
			COL: 3.300"
H4831	60.0	2710	44,300 CUP
H4350	57.5	2798	49,300 CUP
H414	55.5	2743	48,700 CUP
H380	53.0	2682	48,700 CUP
VARGET	47.0	2668	50,000 CUP
BL-C(2)	48.5	2634	48,100 CUP
H335	46.0	2621	49,200 CUP
H4895	46.0	2638	48,800 CUP

300 H & H MAGNUM		CASE: WINCHESTER	
BBL: 24"		PR: WINCHESTER LR	
150 GR. HDY SP			COL: 3.560"
H4831	78.0	3313	
H4350	71.0	3202	
H414	65.0	3247	

165 GR. NOS PART		CASE: WINCHESTER	
		PR: WINCHESTER LR	
			COL: 3.560"
H4831	77.0	3099	
H4350	69.0	3164	
H414	63.0	3046	

200 GR. SIE HPBT		CASE: WINCHESTER	
		PR: WINCHESTER LR	
			COL: 3.655"
H870	83.0	2779	
H4831	72.0	2932	
H4350	66.0	2909	
H414	56.0	2649	

300 WINCHESTER MAGNUM		CASE: WINCHESTER	
BBL: 24"		PR: WINCHESTER LR	
150 GR. SIE SP			COL: 3.340"
H1000	85.0 C	3255	52,200 CUP
H4831	78.0	3207	52,700 CUP
H4350	72.0	3205	52,500 CUP
H414	68.0	3145	52,500 CUP
H380	65.0	3031	52,200 CUP

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RIFLE DATA

BULLET	POWDER	GR	VEL	CUP
VARGET	60.0	3108	51,400 CUP	
H4895	61.0	3124	52,500 CUP	
180 GR. SPR MT-SP				COL: 3.285"
H870	89.0 C	2901	43,300 CUP	
H1000	81.0 C	3042	52,900 CUP	
H4831	73.0 C	2966	53,200 CUP	
H4350	67.0	2918	53,100 CUP	
H414	62.0	2845	52,300 CUP	
200 GR. NOS PART				COL: 3.340"
H870	85.0 C	2676	38,900 CUP	
H1000	79.0 C	2883	52,800 CUP	
H4831	72.0 C	2825	53,100 CUP	
H4350	66.0	2753	51,700 CUP	
300 WEATHERBY MAGNUM				CASE: REMINGTON
BBL: 24"				PR: FEDERAL 215 M
150 GR. BAR XBT				COL: 3.560"
H1000	88.0 C	3264	53,500 CUP	
H4831	79.0	3168	53,500 CUP	
H4350	72.5	3156	53,800 CUP	
H414	69.0	3099	53,800 CUP	
H380	67.0	3009	54,000 CUP	
VARGET	63.0	3142	54,300 CUP	
H4895	62.3	3098	53,400 CUP	
180 GR. WIN FS				COL: 3.560"
H1000	83.0 C	3111	54,600 CUP	
H4831	79.0	3013	54,600 CUP	
H4350	72.0	2974	54,600 CUP	
200 GR. SFT				COL: 3.510"
H1000	85.0 C	2963	53,400 CUP	
H4831	77.5	2869	52,900 CUP	
H4350	71.0	2866	54,300 CUP	
30-378 WEATHERBY				CASE: WEATHERBY
BBL: 26"				PR: FEDERAL 215 M
180 GR. SPR SPBT				COL: 3.600"
H50BMG	120.0C	3229	47,100 CUP	
H870	118.0	3333	46,700 CUP	
H1000	111.0	3412	54,300 CUP	
H4831	100.0	3301	54,500 CUP	
200 GR. BAR XFB				COL: 3.645"
H50BMG	117.0C	3227	54,800 CUP	
H5010	112.0C	3124	52,700 CUP	
H870	116.0	3206	52,000 CUP	
220 GR. NOS PART				COL: 3.600"
H50BMG	118.5C	3145	53,700 CUP	
H5010	114.0C	3071	51,900 CUP	
H870	116.0	3180	53,500 CUP	
H1000	104.0	3084	53,700 CUP	
7.62 X 39MM RUSSIAN				CASE: MIDWAY
BBL: 24"				PR: CCI 200
125 GR. SPR SP				COL: 2.150"
BL-C(2)	31.5	2349	38,800 CUP	
H335	31.5	2408	40,900 CUP	
H4895	29.0	2249	33,600 CUP	
H322	29.0	2323	35,400 CUP	

BULLET	POWDER	GR	VEL	CUP
H4198	26.5	2378	40,400 CUP	
150 GR. HDY SP				COL: 2.220"
BL-C(2)	29.5	2090	40,400 CUP	
H335	29.0	2132	42,500 CUP	
H4895	28.0	2154	39,300 CUP	
H322	28.5	2192	40,400 CUP	
H4198	24.5	2122	39,800 CUP	
303 BRITISH				CASE: REMINGTON
BBL: 24"				PR: FEDERAL 210
150 GR. HDY SP				COL: 3.035"
H4831	49.0	2295		
H4350	48.0	2501		
H414	48.0	2482		
H380	44.0	2443		
H335	48.0	2729		
H4895	42.0	2479		
180 GR. SIE SP				COL: 3.075"
H4831	47.0	2238		
H4350	46.0	2333		
H414	46.0	2304		
H380	42.0	2276		
H335	41.0	2323		
H4895	40.0	2295		
32 WINCHESTER SPECIAL				CASE: WINCHESTER
BBL: 20"				PR: CCI 200
170 GR. SPR FP				COL: 2.560"
BL-C(2)	32.0	1964		
H335	32.0	1960		
H4895	33.0	1941		
H4198	27.0	2168		
32-40 WINCHESTER				CASE: WINCHESTER
BBL: 24"				PR: REMINGTON 2 1/2
196 GR. HOCH				COL: 2.555"
H4227	13.0	1367	18,000 CUP	
H110	12.0	1376	19,200 CUP	
LIL'GUN	9.3	1237	19,600 CUP	
202 GR. POPE				COL: 2.555"
H4227	14.0	1376	15,900 CUP	
H110	13.0	1386	17,900 CUP	
LIL'GUN	9.5	1264	20,100 CUP	
204 GR. MILLER				COL: 2.555"
H4227	13.5	1367	16,300 CUP	
H110	13.0	1369	17,900 CUP	
LIL'GUN	10.8	1310	20,100 CUP	
8 X 57MM MAUSER				CASE: REMINGTON
BBL: 24"				PR: REMINGTON 9 1/2
150 GR. SIE SP				COL: 3.050"
H4831	57.0	2452		
H4350	54.0	2552		
H414	56.0	2773		
H380	54.0	2778		
BL-C(2)	46.0	2553		

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RIFLE DATA

BULLET	POWDER	GR	VEL	CUP
H335	49.0		2744	
H4895	50.0		2747	
H322	46.0		2726	
H4198	41.0		2848	
.....				
170 GR. SPR SP				COL: 2.890"
H4831	57.0		2418	
H4350	54.0		2507	
H414	53.0		2586	
H380	49.0		2509	
BL-C(2)	45.0		2421	
H335	46.0		2470	
H4895	46.0		2501	
H322	44.0		2555	

8MM REMINGTON MAGNUM				
CASE: REMINGTON		PR: REMINGTON 9 1/2 M		
BBL: 24"				
.....				
180 GR. BAR XFB				COL: 3.600"
H870	91.0		2939	
H4831	80.0		3024	
H4350	75.0		3007	
.....				
220 GR. HDY SP				COL: 3.600"
H870	90.0		2856	
H4831	78.0		2871	

338-06				
CASE: REMINGTON (REF)		PR: CCI 200		
BBL: 24"				
.....				
200 GR. BAR XFB				COL: 3.340"
H4350	65.0		2710	
H414	63.0		2802	
.....				
250 GR. SIE SPBT				COL: 3.340"
H4831	61.0		2408	
H4350	60.0		2569	
H414	60.0		2583	

338 WINCHESTER MAGNUM				
CASE: WINCHESTER		PR: WINCHESTER LRM		
BBL: 24"				
.....				
185 GR. BAR XBT				COL: 3.280"
H4831	74.0		2969	52,600 CUP
H4350	68.5		2971	51,600 CUP
H414	67.5		2946	52,000 CUP
H380	67.0		2943	52,700 CUP
VARGET	57.0		2841	52,400 CUP
H4895	58.5		2886	52,000 CUP
.....				
210 GR. NOS PART				COL: 3.280"
H4831	75.5 C		2888	52,300 CUP
H4350	70.0		2855	51,800 CUP
H414	67.0		2848	51,800 CUP
H380	66.0		2797	53,000 CUP
VARGET	58.5		2784	52,500 CUP
H4895	60.0		2788	53,000 CUP
.....				
250 GR. HDY SP				COL: 3.340"
H1000	76.0 C		2622	46,500 CUP
H4831	71.5 C		2655	52,300 CUP
H4350	67.5		2657	51,900 CUP
H414	65.0		2622	52,900 CUP

BULLET	POWDER	GR	VEL	CUP
340 WEATHERBY MAGNUM				
CASE: WEATHERBY		PR: FEDERAL 215		
BBL: 26"				
.....				
200 GR. SPR SP				COL: 3.560"
H4831	90.0		3040	
H4350	80.0		2994	
.....				
250 GR. SIE SPBT				COL: 3.560"
H870	92.0		2524	
H4831	83.0		2784	
H4350	76.0		2724	

357 MAGNUM (RIFLE)				
CASE: WINCHESTER		PR: WINCHESTER SPM		
BBL: 18.5"				
.....				
158 GR. HDY XTP				COL: 1.580"
H4227	16.0		1668	42,600 CUP
H110	16.7		1757	40,700 CUP
HS-6	9.5		1427	41,900 CUP
UNIVERSAL	6.3		1147	39,300 CUP
HP-38	6.9		1214	40,000 CUP
TITEGROUP	6.1		1184	41,900 CUP
.....				
180 GR. NOS PART				COL: 1.575"
H4227	13.7		1325	40,900 CUP
H110	13.5		1381	39,100 CUP

35 REMINGTON				
CASE: REMINGTON		PR: REMINGTON 9 1/2		
BBL: 24"				
.....				
180 GR. SPR FN				COL: 2.470"
VARGET	40.5		2196	32,500 CUP
BL-C(2)	43.0		2147	32,300 CUP
H335	37.5		2111	33,600 CUP
H4895	39.0		2232	33,100 CUP
H322	35.0		2104	33,100 CUP
H4198	32.0		2172	33,000 CUP
.....				
200 GR. HDY RN				COL: 2.510"
VARGET	39.5		2139	33,300 CUP
BL-C(2)	41.5		2011	31,700 CUP
H335	37.0		2048	33,200 CUP
H4895	38.5		2110	32,300 CUP
H322	33.8		1987	33,100 CUP
H4198	30.5		1999	31,700 CUP

356 WINCHESTER				
CASE: WINCHESTER		PR: WINCHESTER LR		
BBL: 20"				
.....				
200 GR. SIE RN				COL: 2.550"
BL-C(2)	50.0		2243	
H335	49.0		2269	
H4895	46.0		2338	
H322	44.0		2340	
H4198	40.0		2383	
.....				
250 GR. HDY RN				COL: 2.775"
BL-C(2)	48.0		2163	
H335	46.0		2151	
H4895	43.0		2128	
H322	41.0		2106	
H4198	37.0		2133	

NEVER Exceed the Loads Listed in This Publication

RIFLE DATA

BULLET	POWDER	GR	VEL	CUP
358 WINCHESTER CASE: WINCHESTER				
BBL: 26" PR: WINCHESTER LR				
220 GR. SPR FP COL: 2.565"				
	BL-C(2)	48.0	2461	
	H335	48.0	2464	
	H4198	41.0	2502	
250 GR. HDY RN COL: 2.775"				
	BL-C(2)	48.0	2374	
	H335	46.0	2299	
	H4198	39.0	2312	
35 WHELEN CASE: REMINGTON				
BBL: 24" PR: REMINGTON 9 1/2				
200 GR. SIE RN COL: 3.050"				
	H380	61.0	2602	45,000 CUP
	VARGET	57.0	2653	42,300 CUP
	BL-C(2)	63.0	2807	49,000 CUP
	H335	55.0	2684	50,000 CUP
	H4895	57.0	2689	49,000 CUP
	H322	56.0	2691	48,500 CUP
250 GR. HDY SP COL: 3.220"				
	H380	59.0	2416	44,500 CUP
	VARGET	55.0	2486	49,900 CUP
	BL-C(2)	59.0	2503	48,900 CUP
	H335	52.0	2404	50,000 CUP
	H4895	53.0	2455	50,000 CUP
	H322	52.0	2398	48,500 CUP
38-55 WINCHESTER CASE: WINCHESTER				
BBL: 24" PR: CCI 200				
255 GR. BAR JFP COL: 2.620"				
	H322	33.0	1830	28,200 CUP
	H4198	28.0	1788	26,700 CUP
375 WINCHESTER CASE: WINCHESTER				
BBL: 24" PR: WINCHESTER LR				
220 GR. HDY JFP COL: 2.500"				
	H322	38.5 C	2236	48,900 CUP
	H4198	34.0	2233	49,300 CUP
375 H&H MAGNUM CASE: WINCHESTER				
BBL: 24" PR: FEDERAL 215 M				
235 GR. SPR SP COL: 3.600"				
	H414	83.0	2749	42,600 CUP
	H380	81.0	2835	46,800 CUP
	VARGET	70.0	2819	51,200 CUP
	BL-C(2)	85.0	2964	47,100 CUP
	H335	74.0	2853	50,000 CUP
	H4895	74.0	2895	50,400 CUP
270 GR. WIN FS COL: 3.600"				
	H4350	83.0 C	2694	46,800 CUP
	H414	78.0	2576	45,500 CUP
	H380	78.0	2632	46,600 CUP
	VARGET	67.0	2620	51,600 CUP
	H4895	68.0	2624	50,500 CUP

BULLET	POWDER	GR	VEL	CUP
300 GR. SIE SPBT COL: 3.600"				
	H4350	81.5 C	2645	49,500 CUP
	H414	78.0	2548	46,800 CUP
	VARGET	62.0	2454	49,300 CUP
	H4895	65.0	2505	50,400 CUP
378 WEATHERBY MAGNUM CASE: WEATHERBY				
BBL: 26" PR: FEDERAL 215				
270 GR. HDY SP COL: 3.645"				
	H4831	115.0	3102	
	H4350	105.0	3091	
300 GR. NOS PART COL: 3.680"				
	H870	120.0	2620	
	H4831	112.0	2926	
	H4350	100.0	2940	
416 REMINGTON MAGNUM CASE: REMINGTON				
BBL: 24" PR: REMINGTON 9 1/2 M				
350 GR. SPR SP COL: 3.590"				
	VARGET	82.0	2622	52,400 CUP
	BL-C(2)	87.0	2580	44,700 CUP
	H335	82.0	2572	50,900 CUP
	H4895	80.0	2601	52,200 CUP
400 GR. HDY JRN COL: 3.560"				
	H4350	88.0 C	2395	46,400 CUP
	H380	84.0	2367	48,500 CUP
	VARGET	77.0	2407	53,000 CUP
	BL-C(2)	83.0	2420	50,500 CUP
	H4895	76.0	2391	53,300 CUP
44-40 WINCHESTER CASE: WINCHESTER				
BBL: 20" PR: WINCHESTER LP				
200 GR. LEAD RNFP COL: 1.600"				
	UNIVERSAL	7.3	1069	11,100 PSI
	HP-38	6.5	1020	12,400 PSI
	TITEGROUP	6.2	1117	12,900 PSI
	CLAYS	5.0	924	11,700 PSI
44 MAGNUM (RIFLE) CASE: WINCHESTER				
BBL: 20" PR: REMINGTON 2 1/2				
240 GR. NOS JHP COL: 1.600"				
	H4227	24.0	1778	36,100 CUP
	H110	24.0	1817	36,200 CUP
270 GR. SPR GDSP COL: 1.600"				
	H4227	22.5	1638	37,400 CUP
	H110	21.5	1637	37,700 CUP
300 GR. HDY XTP COL: 1.600"				
	H4227	20.0	1452	38,600 CUP
	H110	19.0	1473	38,800 CUP
444 MARLIN CASE: REMINGTON				
BBL: 24" PR: REMINGTON 9 1/2				
240 GR. SIE JHP COL: 2.535"				
	H335	56.0	2222	38,900 CUP
	H4895	53.0 C	2069	33,100 CUP
	H322	52.0 C	2185	35,900 CUP

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RIFLE DATA

BULLET	POWDER	GR	VEL	CUP
H4198	49.2 C	2499	42,100	CUP
265 GR. HDY JFP				COL: 2.550"
H335	56.0	2187	39,700	CUP
H4895	53.0 C	2080	34,800	CUP
H322	52.0 C	2164	38,300	CUP
H4198	47.0	2273	41,100	CUP
300 GR. SFT HP				COL: 2.620"
VARGET	50.0 C	1914	35,700	CUP
H335	52.0	2023	42,300	CUP
H4895	50.0 C	1931	35,600	CUP
H322	48.0	2038	42,600	CUP
H4198	42.5	2082	42,500	CUP

BULLET	POWDER	GR	VEL	CUP
H380	108.0	2483		
H4895	105.0	2478		
50 BROWNING MACHINE GUN				CASE: FNB
BBL: 45"				PR: CCI 35
655 GR. ADI FMJ				COL: 5.450"
H50BMG	248.0	3029		
750 GR. HDY A-MAX				COL: 5.450"
H50BMG	233.0	2800		
800 GR. BAR SOLID				COL: 5.450"
H50BMG	225.0	2725		

45-70 GOVERNMENT (TRAPDOOR RIFLE)
CASE: WINCHESTER
BBL: 24" PR: CCI 200

300 GR. SIE HP				COL: 2.525"
VARGET	63.0 C	2020	23,800	CUP
H335	63.5	2143	27,400	CUP
H4895	62.0 C	1974	21,000	CUP
H322	60.0	2142	28,000	CUP
H4198	55.0	2221	27,600	CUP
405 GR. CAST LFP				COL: 2.540"
VARGET	50.0	1718	20,900	CUP
H4895	48.0	1645	18,900	CUP
H4198	31.0	1459	17,100	CUP

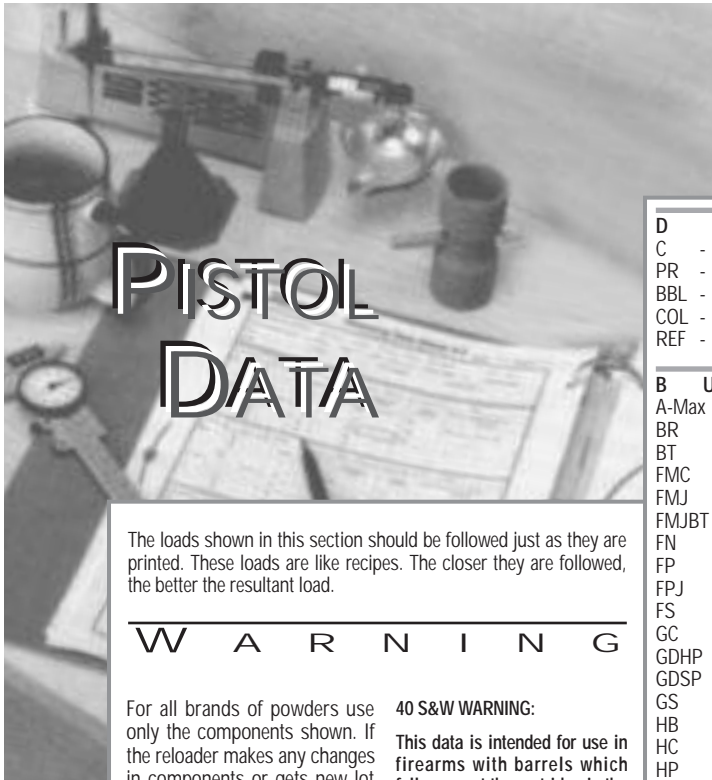
458 WINCHESTER MAGNUM CASE: WINCHESTER
BBL: 24" PR: CCI 250

350 GR. SPR SP				COL: 3.105"
H4895	80.0 C	2496	38,700	CUP
H322	80.0 C	2589	49,400	CUP
H4198	72.0	2548	51,600	CUP
400 GR. SFT SP				COL: 3.220"
VARGET	77.0 C	2310	38,800	CUP
H4895	77.0 C	2349	42,500	CUP
H322	76.0 C	2407	51,100	CUP
H4198	67.0	2323	51,000	CUP
500 GR. HDY JRN				COL: 3.310"
VARGET	74.0 C	2152	48,100	CUP
H335	75.5	2163	50,300	CUP
H4895	74.0 C	2161	50,300	CUP
H322	69.5 C	2109	52,000	CUP
H4198	58.5	1987	51,100	CUP

460 WEATHERBY MAGNUM CASE: WEATHERBY
BBL: 26" PR: FEDERAL 215

400 GR. BAR XFB				COL: 3.710"
H4831	127.0	2565		
H4350	118.0	2610		
H414	117.0	2640		
H380	110.0	2593		
H4895	107.0	2589		
500 GR. HDY JRN				COL: 3.710"
H4831	126.0	2469		
H4350	115.0	2508		
H414	116.0	2530		

NEVER Exceed the Loads Listed in This Publication



PISTOL DATA

The loads shown in this section should be followed just as they are printed. These loads are like recipes. The closer they are followed, the better the resultant load.

W A R N I N G

For all brands of powders use only the components shown. If the reloader makes any changes in components or gets new lot numbers, he should begin again with the starting loads and work up to maximum cautiously.

The loads shown here are at maximum. Reduce them by 10% and work up to the load that works best for you. **NEVER EXCEED THE LISTED LOADS.**

H110 Loads should not be reduced more than 3%. Reduce H110 Loads 3% and work up from there. H110 if reduced too much will cause inconsistent ignition. In some cases it will lodge a bullet in the barrel, causing a hazardous situation (Barrel Obstruction). This may cause severe personal injury or death to users or bystanders.

DO NOT REDUCE H110 LOADS BY MORE THAN 3%.

**NEVER Exceed
the Loads Listed in
This Publication**

40 S&W WARNING:

This data is intended for use in firearms with barrels which fully support the cartridge in the chamber. Use of this data in firearms which do not fully support the cartridge may result in bulged cases, ruptured cases, case head separation, or other condition which may result in damage to the firearm and/or result in injury or death of the shooter and/or bystanders.

B R A N D S

BAR Barnes
BER - Berger
BLX - Bull-X
FA - Freedom Arms
HDY - Hornady
NOS - Nosler
REM - Remington
SIE - Sierra
SFT - Swift
SPR - Speer
WIN - Winchester

P R I M E R S

LP - Large Pistol
LPM - Large Pistol Magnum
SP - Small Pistol
SPM - Small Pistol Magnum
CHED - Cheddite

D A T A

C - Compressed Powder Charge
PR - Primer
BBL - Barrel
COL - Cartridge Overall Length
REF - Reformed

B U L L E T S

A-Max - Hornady Match
BR - Bench Rest
BT - Ballistic Tip
FMC - Full Metal Case
FMJ - Full Metal Jacket
FMJBT - Full Metal Jacket Boat Tail
FN - Flat Nose
FP - Flat Point
FPJ - Full Plated Jacket
FS - Fail Safe
GC - Gas Check
GDHP - Gold Dot Hollow Point
GDSP - Gold Dot Soft Point
GS - Grand Slam
HB - Hollow Base
HC - Hollow Cavity
HP - Hollow Point
HPBT - Hollow Point Boat Tail
HSP - Hollow Soft Point
JFP - Jacketed Flat Point
JHC - Jacketed Hollow Cavity
JHP - Jacketed Hollow Point
JRN - Jacketed Round Nose
JSP - Jacketed Soft Point
JSWC - Jacketed Semi-Wadcutter
LBBWC - Lead Bevel Base Wadcutter
LFP - Lead Flat Point
LHBWC - Lead Hollow Base Wadcutter
LRN - Lead Round Nose
LSWC - Lead Semi-Wadcutter
MK - Match King
MT-SP - Mag Tip Soft Point
PSPCL - Pointed Soft Point "Core-Lokt"
RN - Round Nose
SB - Solid Base
SJ - Short Jacket
SP - Soft Point, Spitzer, Spire Point
SPBT - Soft Point Boat Tail
ST - Silvertip
TMJ - Totally Metal Jacket
UCHP - Uni-cor Hollow Point
WC - Wadcutter
X - X Bullet
XFB - X Flat Base
XBT - X Boat Tail
XBTC - X Boat Tail Coated

PISTOL DATA

BULLET	POWDER	GR	VEL	CUP	BULLET	POWDER	GR	VEL	CUP
223 REMINGTON					CASE: WINCHESTER				
BBL: 15"					PR: WINCHESTER SR				
40 GR. NOS BT					COL: 2.280"				
	VARGET	28.0 C	3069	47,200 CUP					
	BL-C(2)	28.5	2910	45,400 CUP					
	H335	28.0	3231	44,600 CUP					
	H4895	27.5 C	3060	44,500 CUP					
	H322	25.5	3087	48,000 CUP					
	H4198	22.5	3014	49,600 CUP					
50 GR. SPR SP					COL: 2.210"				
	VARGET	27.5 C	2959	44,800 CUP					
	BL-C(2)	28.0	2851	47,100 CUP					
	H335	26.0	2834	51,700 CUP					
	H4895	27.5 C	3024	51,300 CUP					
	H322	24.0	2740	49,300 CUP					
	H4198	21.5	2824	45,900 CUP					
55 GR. SPR SP					COL: 2.200"				
	VARGET	27.5 C	2972	49,700 CUP					
	BL-C(2)	27.5	2816	48,500 CUP					
	H335	25.3	2799	49,300 CUP					
	H4895	26.0	2880	49,000 CUP					
	H322	23.0	2638	48,900 CUP					
	H4198	21.0	2719	47,600 CUP					
25 ACP					CASE: WINCHESTER				
BBL: 2"					PR: FEDERAL 100M				
50 GR. SIE FMJ					COL: .900"				
	UNIVERSAL	1.4	751	16,600 CUP					
	HP-38	1.5	788	17,900 CUP					
	TITEGROUP	1.3	752	17,200 CUP					
7MM TCU					CASE: FEDERAL (REF)				
BBL: 14"					PR: FEDERAL 210				
120 GR. SPR SP					COL: 2.410"				
	BL-C(2)	28.0	2047						
	H335	27.0	2035						
	H4895	26.0	2020						
	H322	26.0	2117						
	H4198	23.0	2075						
	H4227	18.0	1914						
139 GR. HDY SP					COL: 2.625"				
	BL-C(2)	27.0	1979						
	H335	26.0	1946						
	H4895	25.0	2001						
	H322	24.0	1938						
	H4198	21.0	1904						
	H4227	16.5	1635						
7MM BR REMINGTON					CASE: REMINGTON				
BBL: 14"					PR: WINCHESTER SR				
120 GR. SIE SP					COL: 2.284"				
	BL-C(2)	32.0	2342						
	H335	31.0	2376						
	H4895	31.0	2363						
	H322	29.0	2323						
	H4198	24.5	2250						
139 GR. HDY SP					COL: 2.330"				
	BL-C(2)	30.5	2142						
	H335	29.0	2103						
7MM-08 REMINGTON					CASE: REMINGTON				
BBL: 15"					PR: REMINGTON 9 1/2				
100 GR. BAR XFB					COL: 2.650"				
	H380	49.0	2786	46,300 CUP					
	VARGET	45.7	2931	49,600 CUP					
	BL-C(2)	46.5	2873	50,000 CUP					
	H335	41.2	2752	49,700 CUP					
	H4895	45.0	2942	49,900 CUP					
139 GR. HDY SP					COL: 2.800"				
	H4350	50.0 C	2581	47,500 CUP					
	H414	47.0	2451	44,100 CUP					
	H380	47.0	2528	46,800 CUP					
	VARGET	43.5	2612	50,000 CUP					
	BL-C(2)	44.7	2572	49,900 CUP					
	H335	40.0	2425	49,400 CUP					
	H4895	42.5	2575	50,200 CUP					
162 GR. HDY A-MAX					COL: 2.875"				
	H4350	48.0 C	2472	49,800 CUP					
	H414	45.0	2388	44,500 CUP					
	H380	44.0	2369	45,800 CUP					
	VARGET	41.0	2468	49,800 CUP					
	H335	38.2	2338	50,100 CUP					
	H4895	39.5	2429	49,800 CUP					
30-30 WINCHESTER					CASE: WINCHESTER				
BBL: 14"					PR: WINCHESTER LR				
130 GR. SPR FP					COL: 2.540"				
	VARGET	36.0 C	2238	35,700 CUP					
	BL-C(2)	37.5	2101	32,800 CUP					
	H4895	35.0	2194	35,300 CUP					
150 GR. SIE FN					COL: 2.550"				
	VARGET	34.5	2119	36,200 CUP					
	BL-C(2)	37.0	2060	33,900 CUP					
	H4895	34.0	2116	36,700 CUP					
308 WINCHESTER					CASE: WINCHESTER				
BBL: 15"					PR: FEDERAL 210M				
130 GR. SPR HP					COL: 2.615"				
	VARGET	50.0 C	2847	50,400 CUP					
	BL-C(2)	51.5	2820	49,700 CUP					
	H335	46.0	2755	49,700 CUP					
	H4895	49.0 C	2831	50,100 CUP					
	H322	43.0	2664	49,800 CUP					
	H4198	37.0	2590	49,700 CUP					
150 GR. NOS BT					COL: 2.800"				
	VARGET	47.0 C	2675	50,300 CUP					
	BL-C(2)	48.0	2614	50,000 CUP					
	H335	44.0	2541	51,200 CUP					
	H4895	45.5	2649	51,000 CUP					
	H322	40.0	2471	50,500 CUP					
168 GR. SIE HPBT					COL: 2.800"				
	VARGET	46.0 C	2580	50,600 CUP					
	BL-C(2)	47.0	2531	50,200 CUP					
	H335	42.0	2406	49,300 CUP					
	H4895	43.5	2484	49,500 CUP					

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PISTOL DATA

BULLET	POWDER	GR	VEL	CUP
32 ACP				
BBL: 4"			CASE: WINCHESTER	
			PR: FEDERAL 100	
71 GR. SIE FMJ COL: .978"				
	UNIVERSAL	2.4	881	14,900 CUP
	HP-38	2.3	871	14,400 CUP
	TITEGROUP	2.2	910	14,800 CUP
	CLAYS	1.7	830	15,000 CUP
32 S&W LONG				
BBL: 5.32"			CASE: REMINGTON	
			PR: CCI 500	
85 GR. HDY JHP COL: 1.160"				
	UNIVERSAL	3.0	865	12,000 CUP
	HP-38	2.7	810	11,500 CUP
	TITEGROUP	2.4	819	11,300 CUP
90 GR. HDY LSWC COL: 1.850"				
	UNIVERSAL	2.7	844	10,200 CUP
	HP-38	2.4	831	11,300 CUP
	TITEGROUP	2.1	818	10,900 CUP
32 H&R MAGNUM				
BBL: 5"			CASE: FEDERAL	
			PR: FEDERAL 100	
85 GR. HDY HP COL: 1.290"				
	H4227	9.5	1151	21,000 CUP
	LIL'GUN	12.0	1263	16,800 CUP
	HS-6	5.6	1146	20,200 CUP
	UNIVERSAL	4.3	1123	19,000 CUP
	HP-38	3.8	1003	20,700 CUP
	TITEGROUP	3.7	1110	20,900 CUP
90 GR. SIE JHP COL: 1.340"				
	H4227	10.0	1079	17,000 CUP
	LIL'GUN	11.5	1227	18,000 CUP
	HS-6	6.0	1140	20,200 CUP
	UNIVERSAL	4.0	1072	20,000 CUP
	HP-38	4.0	1033	20,300 CUP
	TITEGROUP	3.6	1060	20,600 CUP
32-20 WINCHESTER				
BBL: 5.5"			CASE: REMINGTON	
			PR: WINCHESTER SP	
85 GR. HDY JHP COL: 1.550"				
	LIL'GUN	8.0	1102	15,700 CUP
	TITEGROUP	3.5	961	15,900 CUP
100 GR. REM JFP COL: 1.580"				
	LIL'GUN	7.5	1018	15,700 CUP
	TITEGROUP	3.5	908	16,000 CUP
380 AUTO				
BBL: 3.75"			CASE: REMINGTON	
			PR: CCI 500	
90 GR. HDY JHP COL: .955"				
	UNIVERSAL	3.6	955	15,700 CUP
	HP-38	3.5	957	15,400 CUP
	TITEGROUP	3.2	970	15,600 CUP
100 GR. HDY FMJ COL: .980"				
	UNIVERSAL	3.4	889	16,100 CUP
	HP-38	3.1	843	15,400 CUP
	TITEGROUP	3.0	912	14,700 CUP

BULLET	POWDER	GR	VEL	CUP
9MM LUGER				
BBL: 4"			CASE: WINCHESTER	
			PR: CCI 500	
115 GR. SPR GDHP COL: 1.125"				
	HS-6	7.0	1234	29,400 CUP
	UNIVERSAL	5.0	1149	31,200 CUP
	HP-38	5.1	1167	28,100 CUP
	TITEGROUP	4.8	1158	30,500 CUP
125 GR. SIE FMJ COL: 1.090"				
	HS-6	6.8	1169	27,100 CUP
	UNIVERSAL	4.9	1118	30,600 CUP
	HP-38	4.8	1088	28,800 CUP
	TITEGROUP	4.4	1136	30,600 CUP
147 GR. HDY XTP COL: 1.100"				
	HS-6	5.0	885	27,900 CUP
	UNIVERSAL	3.3	869	31,000 CUP
	TITEGROUP	3.6	929	27,500 CUP
38 SUPER AUTO				
BBL: 5"			CASE: REMINGTON	
			PR: REMINGTON 1 1/2	
115 GR. HDY XTP COL: 1.245"				
	HS-6	8.5	1314	31,500 CUP
	UNIVERSAL	5.5	1225	32,300 CUP
	HP-38	6.1	1261	32,700 CUP
	TITEGROUP	5.3	1208	31,800 CUP
125 GR. SIE FMJ COL: 1.275"				
	HS-6	8.3	1271	32,100 CUP
	UNIVERSAL	5.5	1179	32,300 CUP
	HP-38	5.7	1159	31,200 CUP
	TITEGROUP	5.0	1124	31,800 CUP
130 GR. SIE FMJ COL: 1.275"				
	HS-6	8.2	1231	32,500 CUP
	UNIVERSAL	5.3	1124	32,200 CUP
	HP-38	5.5	1134	31,200 CUP
	TITEGROUP	4.9	1116	31,000 CUP
135 GR. NOS IPSC COL: 1.265"				
	LIL'GUN	12.8	1357	32,400 CUP
38 SPECIAL				
BBL: 7.7"			CASE: WINCHESTER	
			PR: WINCHESTER SP	
125 GR. HDY XTP COL: 1.455"				
	HS-6	7.2	1048	16,600 CUP
	UNIVERSAL	5.2	1019	17,000 CUP
	HP-38	4.9	934	16,300 CUP
	TITEGROUP	4.6	1010	15,600 CUP
	CLAYS	3.9	937	16,100 CUP
140 GR. HDY XTP COL: 1.455"				
	HS-6	6.5	933	16,000 CUP
	UNIVERSAL	4.8	939	15,400 CUP
	HP-38	4.6	861	15,800 CUP
	TITEGROUP	4.2	919	15,800 CUP
	CLAYS	3.7	869	16,700 CUP
148 GR. HDY LHBWC COL: 1.160"				
	HS-6	5.2	943	14,300 CUP
	HP-38	4.0	956	15,900 CUP
	UNIVERSAL	3.8	940	15,600 CUP
	TITEGROUP	3.3	908	11,800 CUP
	CLAYS	2.5	836	13,200 CUP

NEVER Exceed the Loads Listed in This Publication

PISTOL DATA

BULLET	POWDER	GR	VEL	CUP
158 GR. HDY XTP COL: 1.455"				
H4227	10.0	864		15,500 CUP
HS-6	6.2	862		16,300 CUP
UNIVERSAL	4.4	778		16,200 CUP
HP-38	4.3	779		15,900 CUP
TITEGROUP	3.9	798		15,900 CUP
CLAYS	3.1	721		16,600 CUP

38 SPECIAL +P CASE: WINCHESTER
BBL: 7.7" PR: WINCHESTER SP

NOTE: Loads are for use in modern arms in good condition. These loads should not be used in small frame, or aluminum frame revolvers, nor are they intended for auto pistols.

125 GR. HDY XTP COL: 1.455"				
HS-6	7.8	1138		19,500 CUP
UNIVERSAL	5.4	1072		18,900 CUP
HP-38	5.3	1018		19,800 CUP
TITEGROUP	5.0	1069		18,700 CUP

140 GR. HDY XTP COL: 1.455"				
H4227	12.4	1121		19,400 CUP
HS-6	7.0	992		18,300 CUP
UNIVERSAL	5.1	1022		19,100 CUP
HP-38	4.9	892		18,600 CUP
TITEGROUP	4.6	984		19,300 CUP

158 GR. HDY XTP COL: 1.455"				
H4227	11.0	964		17,600 CUP
HS-6	6.6	926		18,700 CUP
UNIVERSAL	4.7	837		19,200 CUP
HP-38	4.6	807		18,100 CUP
TITEGROUP	4.3	905		19,300 CUP

357 SIG CASE: FEDERAL
BBL: 4" PR: WINCHESTER SP

124 GR. HDY XTP COL: 1.135"				
HS-6	9.0	1339		38,700 PSI
UNIVERSAL	5.8	1235		38,500 PSI

147 GR. HDY XTP COL: 1.140"				
HS-6	7.6	1173		36,600 PSI
UNIVERSAL	4.9	1062		36,300 PSI

357 MAGNUM CASE: WINCHESTER
BBL: 10" PR: WINCHESTER SPM

125 GR. HDY XTP COL: 1.590"				
H4227	20.0	1839		42,000 CUP
H110	22.0	1966		41,400 CUP
HS-6	10.9	1629		42,100 CUP
UNIVERSAL	7.6	1453		39,600 CUP
HP-38	8.5	1514		42,700 CUP
TITEGROUP	7.5	1497		41,200 CUP

146 GR. SPR JHP COL: 1.535"				
H4227	16.0	1566		42,700 CUP
H110	17.2	1691		42,600 CUP
HS-6	9.5	1461		41,800 CUP
UNIVERSAL	6.5	1261		39,900 CUP
HP-38	7.1	1330		42,200 CUP
TITEGROUP	6.6	1317		42,900 CUP

158 GR. HDY XTP COL: 1.580"				
H4227	16.0	1520		42,600 CUP

BULLET	POWDER	GR	VEL	CUP
H110	16.7	1591		40,700 CUP
LIL'GUN	18.0	1577		25,800 CUP
HS-6	9.5	1375		41,900 CUP
UNIVERSAL	6.3	1133		39,300 CUP
HP-38	6.9	1220		40,000 CUP
TITEGROUP	6.1	1229		41,900 CUP
180 GR. NOS PART COL: 1.575"				
H4227	13.7	1308		40,900 CUP
H110	13.5	1396		39,100 CUP
LIL'GUN	15.0	1422		34,500 CUP
TITEGROUP	5.5	1020		40,300 CUP

357 REMINGTON MAXIMUM
REMINGTON

BBL: 10" PR: REMINGTON 7 1/2

160 GR. HDY JTC SIL COL: 1.890"				
H4227	22.5	1814		
H110	24.0	1886		

180 GR. SPR TMJ SIL COL: 1.990"				
H4227	20.0	1645		
H110	21.0	1694		

35 REMINGTON CASE: REMINGTON
BBL: 14" PR: REMINGTON 9 1/2

180 GR. SPR FN COL: 2.470"				
VARGET	40.5	1998		32,500 CUP
BL-C(2)	43.0	1954		32,300 CUP
H335	37.5	1921		33,600 CUP
H4895	39.0	2031		33,100 CUP
H322	35.0	1915		33,100 CUP
H4198	32.0	1977		33,000 CUP

200 GR. HDY RN COL: 2.510"				
VARGET	39.5	1797		33,300 CUP
BL-C(2)	41.5	1689		31,700 CUP
H335	37.0	1720		33,200 CUP
H4895	38.5	1772		32,300 CUP
H322	33.8	1670		33,100 CUP
H4198	30.5	1680		31,700 CUP

9 X 18MM MAKAROV CASE: WINCHESTER
BBL: 4" PR: WINCHESTER SP

90 GR. SPR FP COL: .970"				
UNIVERSAL	3.9	1022		23,000 PSI
HP-38	4.0	1031		24,000 PSI
TITEGROUP	3.7	1053		22,900 PSI

95 GR. HDY XTP COL: .965"				
UNIVERSAL	4.0	1030		23,800 PSI
HP-38	3.8	990		24,000 PSI
TITEGROUP	3.6	1022		22,500 PSI

100 GR. SIE JFP COL: .970"				
UNIVERSAL	4.0	996		23,600 PSI
HP-38	3.8	969		23,500 PSI
TITEGROUP	3.7	1011		23,500 PSI

375 JDJ CASE: REMINGTON (REF)
BBL: 14" PR: FEDERAL 210M

200 GR. SIE FP COL: 2.750"				
H4895	52.0	2147		
H322	50.0	2077		

NEVER Exceed the Loads Listed in This Publication

PISTOL DATA

BULLET	POWDER	GR	VEL	CUP
300 GR. HDY RN COL: 2.970"				
H4895	46.0	1951		
H322	42.0	1773		

38-40 WINCHESTER		CASE: WINCHESTER		
BBL: 5.5"		PR: WINCHESTER LP		
180 GR. CAST LRNFP COL: 1.600"				
UNIVERSAL	7.5	955	11,900 PSI	
HP-38	6.8	934	13,500 PSI	
TITEGROUP	6.4	990	13,300 PSI	
CLAYS	5.5	889	13,500 PSI	

40 S&W		CASE: HORNADY		
BBL: 4"		PR: WINCHESTER SP		
WARNING: This data is intended for use in firearms with barrels which fully support the cartridge in the chamber. Use of this data in firearms which do not fully support the cartridge may result in bulged cases, ruptured cases, case head separation, or other condition which may result in damage to the firearm and/or result in injury or death of the shooter and/or bystanders.				

135 GR. NOS JHP COL: 1.125"				
HS-6	10.2	1321	33,600 PSI	
UNIVERSAL	7.5	1324	32,500 PSI	
HP-38	7.0	1244	33,100 PSI	
TITEGROUP	6.4	1251	33,200 PSI	
CLAYS	4.5	1071	32,900 PSI	

180 GR. HDY XTP COL: 1.125"				
HS-6	6.9	976	32,500 PSI	
UNIVERSAL	5.8	1046	33,400 PSI	
HP-38	5.0	947	32,900 PSI	
TITEGROUP	4.7	978	33,300 PSI	
CLAYS	3.5	847	34,300 PSI	

200 GR. HDY XTP COL: 1.125"				
HS-6	6.3	900	32,800 PSI	
UNIVERSAL	4.7	903	33,600 PSI	
HP-38	4.7	857	33,400 PSI	
TITEGROUP	3.8	822	31,700 PSI	

10MM AUTO		CASE: WINCHESTER		
BBL: 5"		PR: WINCHESTER LP		
180 GR. SIE JHC COL: 1.260"				
HS-6	9.4	1127	35,800 PSI	
UNIVERSAL	6.4	1122	32,200 PSI	
HP-38	5.8	1061	34,900 PSI	
TITEGROUP	6.0	1141	34,300 PSI	

200 GR. HDY FMJ COL: 1.260"				
HS-6	8.6	1089	35,900 PSI	
UNIVERSAL	5.9	1015	36,900 PSI	
HP-38	5.6	1011	35,700 PSI	
TITEGROUP	5.3	1024	36,100 PSI	

41 REMINGTON MAGNUM		CASE: REMINGTON		
BBL: 10.125"		PR: WINCHESTER LP		
170 GR. SIE JHC COL: 1.575"				
H4227	24.9	1745	35,600 CUP	
H110	26.5	1887	37,400 CUP	
HS-6	13.7	1597	37,200 CUP	
UNIVERSAL	10.3	1488	38,700 CUP	

BULLET	POWDER	GR	VEL	CUP
HP-38	9.8	1440	38,300 CUP	
TITEGROUP	9.2	1470	37,700 CUP	
220 GR. SPR JSP COL: 1.580"				
H4227	20.0	1433	37,500 CUP	
H110	20.0	1563	31,200 CUP	
LIL'GUN	20.5	1626	29,900 CUP	
HS-6	11.3	1271	36,700 CUP	
UNIVERSAL	8.5	1178	38,600 CUP	
HP-38	8.0	1125	36,700 CUP	
TITEGROUP	7.3	1127	33,700 CUP	

44 S&W SPECIAL		CASE: STARLINE		
BBL: 8"		PR: WINCHESTER LP		
185 GR. CAST LRNFP COL: 1.400"				
UNIVERSAL	6.4	1031	13,900 CUP	
HP-38	5.6	953	12,500 CUP	
TITEGROUP	5.5	1025	11,600 CUP	
CLAYS	4.2	930	13,200 CUP	

240 GR. CAST LSWC COL: 1.450"				
H4227	13.2	947	12,600 CUP	
HS-6	8.0	917	13,000 CUP	
UNIVERSAL	5.6	873	13,300 CUP	
HP-38	5.2	858	13,200 CUP	
TITEGROUP	4.8	862	13,100 CUP	
CLAYS	4.0	771	13,500 CUP	

44-40 WINCHESTER		CASE: WINCHESTER		
BBL: 6"		PR: WINCHESTER LP		
200 GR. CAST LRNFP COL: 1.600"				
UNIVERSAL	7.3	777	11,100 PSI	
HP-38	6.5	820	12,400 PSI	
TITEGROUP	6.2	901	12,900 PSI	
CLAYS	5.0	765	11,700 PSI	

44 REMINGTON MAGNUM		CASE: WINCHESTER		
BBL: 8.275"		PR: REMINGTON 2 1/2		
200 GR. NOS JHP COL: 1.600"				
H4227	27.0	1686	37,800 CUP	
H110	28.5	1806	37,800 CUP	
LIL'GUN	29.5	1794	36,200 CUP	
HS-6	16.7	1569	37,700 CUP	
UNIVERSAL	11.1	1398	38,300 CUP	
HP-38	11.9	1444	37,400 CUP	
TITEGROUP	10.8	1433	38,400 CUP	

240 GR. NOS JHP COL: 1.600"				
H4227	24.0	1458	36,100 CUP	
H110	24.0	1522	36,200 CUP	
LIL'GUN	24.5	1582	38,100 CUP	
HS-7	16.5	1394	38,200 CUP	
HS-6	15.1	1417	38,200 CUP	
UNIVERSAL	10.2	1246	38,200 CUP	
HP-38	11.0	1272	37,800 CUP	
TITEGROUP	10.0	1292	37,700 CUP	

300 GR. HDY XTP COL: 1.600"				
H4227	20.0	1312	38,600 CUP	
H110	19.0	1325	38,800 CUP	
LIL'GUN	17.7	1280	37,600 CUP	
HS-7	14.0	1214	37,300 CUP	
HS-6	13.0	1214	37,900 CUP	
UNIVERSAL	9.6	1113	38,200 CUP	

NEVER Exceed the Loads Listed in This Publication

PISTOL DATA

BULLET	POWDER	GR	VEL	CUP
HP-38	10.0	1149	38,100	CUP
TITEGROUP	9.6	1186	38,400	CUP

44 AUTO MAG CASE: FEDERAL (REF)
BBL: 6" PR: CCI 350

200 GR. HDY XTP			COL: 1.610"
H4227	26.0	1427	
H110	25.0	1485	
HS-7	17.0	1302	

240 GR. NOS HP			COL: 1.600"
H4227	21.0	1183	
H110	21.0	1241	

45 ACP CASE: WINCHESTER
BBL: 5" PR: FEDERAL 150

185 GR. HDY JSWC			COL: 1.195"
HS-6	9.5	996	16,800 CUP
UNIVERSAL	7.2	993	17,000 CUP
HP-38	5.9	906	15,800 CUP
TITEGROUP	5.5	956	17,000 CUP
CLAYS	4.9	981	17,400 CUP

200 GR. SPR JHP			COL: 1.155"
HS-6	9.0	948	16,400 CUP
UNIVERSAL	6.7	930	17,200 CUP
HP-38	5.9	906	16,700 CUP
TITEGROUP	5.2	884	16,900 CUP
CLAYS	4.3	785	17,700 CUP

230 GR. HDY FMJ FP			COL: 1.200"
HS-6	8.2	825	15,400 CUP
UNIVERSAL	6.0	853	16,900 CUP
HP-38	5.3	832	16,800 CUP
TITEGROUP	4.8	818	16,700 CUP
CLAYS	4.0	732	17,000 CUP

45 COLT CASE: WINCHESTER
BBL: 7.25" PR: WINCHESTER LP

200 GR. CAST LRNFP			COL: 1.600"
UNIVERSAL	8.8	1067	13,600 CUP
HP-38	8.0	1002	13,800 CUP
TITEGROUP	7.7	1050	12,700 CUP
CLAYS	5.9	931	13,100 CUP

260 GR. SPR GDHP			COL: 1.595"
HS-6	10.7	865	14,000 CUP
UNIVERSAL	8.0	813	14,000 CUP
HP-38	7.1	787	14,000 CUP
TITEGROUP	6.3	797	12,500 CUP

300 GR. SIE JFP			COL: 1.670"
HS-6	10.0	730	13,700 CUP
UNIVERSAL	7.3	700	13,700 CUP
TITEGROUP	5.8	682	12,900 CUP

45 WINCHESTER MAGNUM CASE: WINCHESTER

BBL: 5" PR: CCI 350

230 GR. HDY FMJ FP			COL: 1.555"
H4227	25.0	1259	29,400 CUP
H110	28.0	1410	29,000 CUP
HS-6	17.0	1296	36,600 CUP
HP-38	10.8	1191	37,100 CUP

BULLET	POWDER	GR	VEL	CUP
250 GR. NOS JHP				COL: 1.500"
H4227	24.0	1239	37,100	CUP
H110	26.0	1380	37,400	CUP
HS-6	15.4	1220	37,700	CUP
HP-38	9.8	1100	38,400	CUP

454 CASULL CASE: FREEDOM ARMS
BBL: 9.375" PR: WINCHESTER SR

260 GR. FA JFP			COL: 1.765"
H4227	33.0 C	1762	42,100 CUP
H110	36.0	1954	51,600 CUP
LIL'GUN	35.5	1895	37,900 CUP

260 GR. SPR JHP			COL: 1.675"
HS-6	16.8	1420	36,400 CUP
UNIVERSAL	11.5	1245	34,900 CUP
TITEGROUP	11.0	1270	35,900 CUP

300 GR. FA JFP			COL: 1.775"
H4227	31.0 C	1702	52,400 CUP
H110	30.0	1716	53,700 CUP
LIL'GUN	31.0	1746	45,900 CUP

475 LINEBAUGH CASE: STARLINE
BBL: 8" PR: WINCHESTER SR

385 GR. CAST LRNFP			COL: 1.810"
H4227	28.0	1456	51,100 PSI
H110	30.0	1566	55,000 PSI
LIL'GUN	29.0	1523	47,900 PSI
TITEGROUP	11.0	1130	51,700 PSI

50 ACTION EXPRESS CASE: SPEER
BBL: 6" PR: CCI 350

325 GR. SPR AE UCHP			COL: 1.575"
H4227	30.8	1294	
H110	32.5	1431	

500 LINEBAUGH CASE: STARLINE
BBL: 8" PR: CCI 350

400 GR. CAST LRNFP			COL: 1.760"
H4227	33.0	1358	32,400 PSI
H110	37.0	1553	42,200 PSI
LIL'GUN	37.5	1608	43,900 PSI

NEVER Exceed the Loads Listed in This Publication



SHOTSHELL DATA

LOADING DATA

F O R W A R D

There are many good handbooks available giving the basics of reloading and the beginner should study one or more of them before embarking upon his new hobby. We are assuming that the user of our data manual knows the mechanics of reloading and simply needs a supplement to help him find a good load using the components available to him.

By revising our shotshell data often, we hope to keep fairly well up-to-date with the rapidly changing array of components offered by today's consumer-oriented manufacturers.

**NEVER Exceed the Loads
Listed in This Publication**

W A R N I N G

Federal 209A primers and Winchester AATP primers are to be used only in the specific shotshell loads shown. **DO NOT** substitute different primers or other components when loading shotshells using this data.

Substitution of different components may cause dangerous and excessive pressures which could damage or destroy a firearm and cause serious personal injury or death to the user and or bystander.

Damascus barreled shotguns should **NOT** be used with any powder due to their weak construction. Barrel rupture may result in injury or death to the shooter and/or bystanders.

CHILLED SHOT TABLE

Weight Ounces	1/2	5/8	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 5/8	1 3/4	1 7/8	2	2 1/8	
Weight Grains	219	273	328	383	438	492	547	602	656	711	766	820	875	930	
Loads per Lb.	32	26	21	18	16	14	13	12	11	10	9	9	8	8	
Size	Dia In.	Approximate No. of Pellets per load													
BB	.18	25	31	38	44	50	56	63	69	75	81	88	94	100	106
2	.15	44	55	66	77	88	99	110	121	132	143	154	165	176	187
4	.13	68	85	102	119	136	153	170	187	204	221	238	255	272	289
5	.12	86	108	129	151	172	194	215	237	258	280	301	323	344	366
6	.11	112	139	167	195	223	251	279	307	335	362	390	418	446	474
7	.10	150	187	224	262	299	336	374	411	449	486	523	561	598	635
7 1/2	.095	173	216	259	302	345	388	431	474	518	561	604	647	690	733
8	.09	205	256	307	358	409	460	511	562	614	665	716	767	818	869
8 1/2	.085	240	300	360	420	480	540	600	660	720	780	840	900	960	1020
9	.08	293	366	439	512	585	658	731	804	878	951	1024	1097	1170	1243

REFERENCE TABLE

POWDER TABLE					
GRAINS PER LOAD	LOADS PER POUND	GRAINS PER LOAD	LOADS PER POUND	GRAINS PER LOAD	LOADS PER POUND
12	583	23	304	34	205
13	538	24	291	35	200
14	500	25	280	36	194
15	466	26	269	37	189
16	437	27	259	38	184
17	411	28	250	39	179
18	388	29	241	40	175
19	368	30	233	41	170
20	350	31	225	42	166
21	333	32	218	43	162
22	318	33	212		

SHOT CHART

Diameter in Inches

12 ● .05	9 ● .08	8 ● .09	7 1/2 ● .095	6 ● .11	5 ● .12	4 ● .13	2 ● .15	BB ● .18
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APPROXIMATE NUMBER OF PELLETS TO THE OUNCE

2360	600	405	345	220	170	135	90	50
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No. 4 Buck ● .24	No. 00 ● .33
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APPROXIMATE NUMBER TO THE POUND

340	130
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BUSHING CHARTS

LEE

BUSHING #	CLAYS	INTER*	UNIV**	HS6	HS7	H110*	TITWAD	LIL'GUN
.095	10.7	12.3	15.2	21.9	22.9	22.5	12.4	
.100	11.3	13.0	16.0	23.0	24.1	23.7	13.0	
.105	11.8	13.7	16.8	24.2	25.3	24.9	13.7	
.110	12.4	14.3	17.6	25.3	26.5	26.1	14.3	
.116	13.0	15.1	18.5	26.7	28.0	27.5	15.1	
.122	13.7	15.9	19.5	28.1	29.4	28.9	15.9	
.128	14.4	16.6	20.4	29.4	30.8	30.3	16.7	
.134	15.0	17.5	21.4	30.8	32.3	31.8	17.5	
.141	15.8	18.4	22.5	32.4	34.0	33.4	18.4	
.148	16.6	19.3	23.6	34.0	35.7	35.1	19.3	
.151	16.7	19.6	24.0				19.7	
.155	17.3	20.1	24.7	35.7	37.4	36.7	20.4	
.163	18.2	21.1	25.9	37.5	39.3	38.6	21.4	
.171	19.1	22.0	27.1	39.3	41.2	40.5	22.5	
.180	20.1	23.1	28.5	41.4	43.4	42.7	23.6	
.189	21.2	24.1	29.9	43.5	45.6	44.8		
.198	22.1	25.2	31.3	45.5	47.7	46.9	26.0	

HORNADY / SPOLAR

BUSHING NUMBERS								
GRS.	CLAYS	INTER*	UNIV**	HS6	HS7	H110*	TITWAD	LIL'GUN
11.0		333						
12.0		348						250
13.0		363	330			256		259
13.5								266
14.0		375	342			266		
15.0		390	354				384	
16.0	429	402	366				396	
16.5	435	408	372				402	
17.0	441	414	378	300			408	
17.4	447	417	384				414	
18.0	456	423	390	309			420	
18.5	462	429	393				426	
19.0	468	435	402	318	318		432	
19.4	474	438	405				435	
20.0	483	447	411	327	330		441	
20.6	489	453	417				450	
21.0	495	459	420	336	339		453	
21.5	501	465	423				459	
22.0	507	471	429	345	348		462	
22.5		477	432				468	
23.0		483	438	351	357		474	
23.5		489	441					
24.0		495	447	360	363		486	
24.5		501	450				489	
25.0		507	456	366	369		492	
26.0			468	375	378			
27.0			480	381	384			
28.0			489	387	390			
29.0			501	393	396			
30.0				402	405			
31.0				408	411			
32.0				414	417			
33.0				423	423			
34.0				429	429			
35.0				435	438			
36.0				441	444			
37.0				444	450			
38.0				450				

PONSNESS WARREN

BUSHING								
#	CLAYS	INTER*	UNIV**	HS6	HS7	H110*	TITWAD	LIL'GUN
1AX								12.0
2AX								12.7
3AX								13.1

PONSNESS WARREN continued

BUSHING								
#	CLAYS	INTER*	UNIV**	HS6	HS7	H110*	TITWAD	LIL'GUN
1A								13.7
2A								14.8
3A				15.3				15.6
A				16.8	17.1			17.5
B				17.6				18.2
C			12.5	18.5				18.8
C1			13.0	19.6	20.1			
D				13.2	20.4			21.0
D1		11.7	14.0	21.3	22.4			
E		13.1	15.7	23.5	24.2			
E1		13.7	16.2	24.0	24.7			
E2		14.4	17.2	26.1	26.5			14.7
F		15.2	18.1	27.5	28.5			15.6
F1		15.8	18.3	28.3	29.3			15.8
F2								16.4
F6		16.1	18.9					
G		17.1	20.2	31.2	32.3			17.4
G1		17.3	20.6	32.7	33.4			17.7
H	16.0	18.5	22.0	34.0	34.8			18.9
I	16.7	19.3	22.8	34.4	36.5			19.6
J	17.2	19.8	23.9	35.5	37.1			20.3
J1	17.6	20.3	24.5	36.9	38.8			21.0
K	17.8	20.6	24.8	37.1	39.0			21.3
L	18.7	21.6	25.7	39.5	41.1			22.2
M	19.7	22.5	26.8	41.2	42.8			23.4
N	20.8	23.7	28.2					25.2
O	21.0	24.0	28.5					
P	21.5	24.5						
Q	21.9	25.0						

MEC

BUSHING								
#	CLAYS	INTER*	UNIV**	HS6	HS7	H110*	TITWAD	LIL'GUN
7								11.9
8								12.5
9								12.9
10								13.4
11						13.5		
12								14.4
13								15.4
14								16.4
15				15.5				17.0
16				16.1	16.6			
17				17.9	18.4			
18			12.0	18.8	19.3			
19		10.8	12.9	19.8	20.4			
20		11.4	13.5	20.7	21.3			
21		11.8	14.0	21.6	22.3			
22		12.3	14.6	22.6	23.2			
23		12.9	15.5	23.7	24.4			13.3
24		13.3	16.0	24.7	25.4			13.9
25		14.3	16.8	25.8	26.6			14.5
26		14.6	17.4	26.8	27.7			15.2
27		15.5	18.3	27.9	28.9			15.8
28		16.0	18.9	28.9	29.9			16.2
29		16.6	19.1	30.3	31.2			16.9
30	14.6	17.1	20.2	31.2	32.3			17.6
31	15.2	17.7	21.1	32.6	33.6			18.3
32	15.9	18.3	21.7	33.6	34.7			19.0
33	16.3	19.1	22.7	35.0	36.2			19.7
34	16.9	19.9	23.4	36.2	37.4			20.4
35	17.5	20.6	24.4	37.8	38.9			21.4
36	18.2	21.2	25.2	39.0	40.1			22.2
37	18.9	21.9	26.0	40.4	41.5			23.0
38	19.4	22.6	26.7	41.1	42.4			23.4
39	20.1	23.4	27.6	43.0	44.4			24.0
38A	20.7	24.2	28.7	44.4	45.7			25.3
39A	21.4	25.1	29.7	46.2	47.4			
38	22.2	26.0						
39	22.8	26.9		47.6	50.3			

*International **Universal

WAD CHART

The following chart shows wads that may be substituted for current popular models as listed in the ensuing data.

WAA12:	WT12 Winchester, CB01118, CB1118-12, Black Magic, Blue Duster
WAA12SL:	CB1100-12. Green Duster, WAA12L (in 7/8 oz. loads only)
Federal 12SO:	CB2100-12
Federal 12S3:	CB2118-2
Remington Fig. 8:	CB3118-12
Windjammer:	CB4118-12
WAA20:	CB1078-20, Duster 20
WAA28:	CB1034-28
WAA41:	CB1050-41
Federal 410SC:	CB1050-41
Remington SP410:	CB1050-41

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Contact:

Executive Director
The NRA Foundation
11250 Waples Mill Road
Fairfax, VA 22030

SHOTSHELL DATA

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE*			
				Velocity is measured in feet per second (fps). Pressure is measured in Lead Units of Pressure (LUP) or in Pounds per Square Inch (PSI).			
10 GA., 3 1/2", FEDERAL PLASTIC SHELL WITH PAPER BASEWAD							
1165 fps							
2 oz	HS-6	CCI 209M	Rem. SP10+ 2-20 ga. .135 Card	40.0 gr / 9,900 PSI			
2 oz	HS-7	CCI 209M	Rem. SP10+ 2-20 ga. .135 Card	43.0 gr / 10,200 PSI			
2 1/4 oz	HS-7	Win. 209	Rem. SP10+ 1-20 ga. .135 Card	40.0 gr / 10,300 PSI			
10 GA., 3 1/2", REMINGTON PLASTIC SHELL WITH YELLOW PLASTIC BASEWAD							
1165 fps							
2 oz	HS-6	CCI 209M	3-20 ga. .135 Card	40.0 gr / 11,000 PSI			
2 oz	HS-7	CCI 209M	Rem. SP10+ 3-20 ga. .135 Card	43.0 gr / 11,000 PSI			
2 1/4 oz	HS-7	Win. 209	Rem. SP10+ 2-20 ga. .135 Card	40.0 gr / 10,800 PSI			
10 GA., 3 1/2", WINCHESTER POLYFORMED PLASTIC SHELL W/ PLASTIC BASEWAD							
1165 fps							
2 oz	HS-6	CCI 209M	Rem. SP10+ 2-20 ga. .135 Card	40.0 gr / 10,700 PSI			
2 oz	HS-7	CCI 209M	Rem. SP10+ 2-20 ga. .135 Card	42.5 gr / 10,600 PSI			
2 1/4 oz	HS-7	CCI 209M	Rem. SP10+ 1-20 ga. .135 Card	40.0 gr / 11,000 PSI			
12 GA., 2 3/4", FEDERAL GOLD MEDAL PLASTIC SHELLS							
				1250 fps	1300 fps	1350 fps	1400 fps
7/8 oz	Titewad	CCI 209SC	WAA12L	18.1 gr / 7,100 PSI	19.0 gr / 8,100 PSI	20.3 gr / 8,700 PSI	21.4 gr / 9,900 PSI
7/8 oz	Titewad	Fed. 209A	Fed. 12S0	19.5 gr / 6,400 PSI	20.5 gr / 7,500 PSI	21.6 gr / 8,800 PSI	22.7 gr / 9,800 PSI
7/8 oz	Titewad	Win. 209	WAA12L	18.4 gr / 6,800 PSI	19.3 gr / 7,400 PSI	20.6 gr / 8,700 PSI	21.9 gr / 9,300 PSI
7/8 oz	Clays	CCI 209SC	WAA12L	19.0 gr / 6,700 PSI	20.5 gr / 8,000 PSI	21.7 gr / 9,400 PSI	22.5 gr / 11,300 PSI
7/8 oz	Clays	Fed. 209A	WAA12L	19.2 gr / 7,400 PSI	20.0 gr / 8,000 PSI	21.5 gr / 9,700 PSI	22.5 gr / 11,500 PSI
7/8 oz	Clays	Win. 209	WAA12L	19.0 gr / 7,000 PSI	20.3 gr / 8,000 PSI	22.0 gr / 8,800 PSI	23.0 gr / 10,500 PSI
				1300 fps	1350 fps	1400 fps	1450 fps
7/8 oz	Internat'l	CCI 209SC	WAA12L	22.7 gr / 7,300 PSI	24.0 gr / 8,200 PSI	25.0 gr / 9,400 PSI	25.5 gr / 10,200 PSI
7/8 oz	Internat'l	Fed. 209A	WAA12L	22.3 gr / 7,500 PSI	23.2 gr / 8,300 PSI	24.5 gr / 9,300 PSI	25.7 gr / 10,000 PSI
7/8 oz	Internat'l	Win. 209	WAA12L	23.5 gr / 7,500 PSI	24.3 gr / 7,900 PSI	25.5 gr / 9,100 PSI	27.0 gr / 10,600 PSI
				1180 fps	1235 fps	1290 fps	1345 fps
1 oz	Titewad	CCI 209SC	Purple PC	—	18.7 gr / 8,100 PSI	20.2 gr / 9,200 PSI	21.7 gr / 10,500 PSI
1 oz	Titewad	Fed. 209A	Fed. 12S0	17.8 gr / 7,100 PSI	19.3 gr / 8,500 PSI	20.8 gr / 9,600 PSI	21.7 gr / 11,300 PSI
1 oz	Titewad	Win. 209	WAA12L	17.4 gr / 7,500 PSI	18.7 gr / 8,400 PSI	20.2 gr / 9,700 PSI	21.7 gr / 11,300 PSI

SHOTSHELL DATA

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE			
12 GA., 2 3/4", FEDERAL GOLD MEDAL PLASTIC SHELLS CONTINUED							
				1125 fps	1180 fps	1235 fps	1290 fps
1 oz	Clays	CCI 209	Purple PC	18.4 gr / 5,300 LUP	19.6 gr / 5,900 LUP	20.7 gr / 6,400 LUP	21.8 gr / 7,000 LUP
1 oz	Clays	CCI 209SC	Purple PC	—	18.0 gr / 6,600 PSI	19.0 gr / 8,000 PSI	20.0 gr / 9,300 PSI
1 oz	Clays	Fed. 209	Fed. 12S0	17.9 gr / 6,100 LUP	18.9 gr / 6,900 LUP	19.9 gr / 7,600 LUP	20.9 gr / 8,400 LUP
1 oz	Clays	Fed. 209A	Fed. 12S0	16.8 gr / 6,700 PSI	17.9 gr / 7,700 PSI	19.3 gr / 9,200 PSI	20.3 gr / 10,800 PSI
1 oz	Clays	Rem. 209P	Rem. TGT 12	18.2 gr / 5,900 LUP	19.2 gr / 6,300 LUP	20.2 gr / 6,800 LUP	21.2 gr / 7,300 LUP
1 oz	Clays	Win. AATP	WAA12SL	16.8 gr / 6,400 PSI	17.8 gr / 7,300 PSI	19.0 gr / 8,800 PSI	20.0 gr / 9,800 PSI
1 oz	Clays	Win. 209	WAA12SL	17.2 gr / 6,200 LUP	18.2 gr / 7,000 LUP	19.1 gr / 7,600 LUP	20.0 gr / 8,300 LUP
				1090 fps	1145 fps	1200 fps	1255 fps
1 1/8 oz	Titewad	CCI 209SC	Hor. Versalite	15.7 gr / 8,800 PSI	16.7 gr / 8,900 PSI	18.0 gr / 10,500 PSI	—
1 1/8 oz	Titewad	Fed. 209A	Fed. 12S3	16.3 gr / 8,300 PSI	17.3 gr / 8,900 PSI	18.8 gr / 10,300 PSI	—
1 1/8 oz	Titewad	Fio. 616	Fio. TL 1	15.7 gr / 8,900 PSI	16.7 gr / 9,800 PSI	18.0 gr / 11,000 PSI	—
1 1/8 oz	Titewad	Rem. 209P	Rem. Fig. 8	16.0 gr / 7,500 PSI	17.0 gr / 8,600 PSI	18.0 gr / 9,500 PSI	—
1 1/8 oz	Titewad	Win. 209	WAA12SL	16.5 gr / 7,900 PSI	17.5 gr / 9,100 PSI	18.2 gr / 9,800 PSI	—
1 1/8 oz	Clays	CCI 209	Hor. Versalite	17.3 gr / 6,500 LUP	18.5 gr / 7,300 LUP	19.7 gr / 8,100 LUP	—
1 1/8 oz	Clays	CCI 209SC	Hor. Versalite	16.0 gr / 7,500 PSI	17.0 gr / 7,900 PSI	18.2 gr / 10,400 PSI	—
1 1/8 oz	Clays	Fed. 209	Rem. Fig. 8	17.6 gr / 6,300 LUP	18.7 gr / 7,100 LUP	19.8 gr / 7,800 LUP	—
1 1/8 oz	Clays	Fed. 209	WAA12	17.2 gr / 6,600 LUP	18.5 gr / 7,300 LUP	19.8 gr / 8,000 LUP	—
1 1/8 oz	Clays	Fed. 209	Fed. 12S3	17.7 gr / 6,600 LUP	18.7 gr / 7,300 LUP	19.8 gr / 8,100 LUP	—
1 1/8 oz	Clays	Fed. 209A	Fed. 12S3	16.8 gr / 7,900 PSI	17.1 gr / 8,600 PSI	19.0 gr / 10,400 PSI	—
1 1/8 oz	Clays	Fed. 209A	Rem. Fig. 8	17.0 gr / 7,400 PSI	17.5 gr / 7,900 PSI	19.0 gr / 9,600 PSI	—
1 1/8 oz	Clays	Fed. 209A	WAA12	16.5 gr / 7,700 PSI	17.0 gr / 8,100 PSI	18.5 gr / 10,300 PSI	—
1 1/8 oz	Clays	Fio. 616	Fio. TL1	16.5 gr / 7,300 LUP	17.9 gr / 8,300 LUP	19.3 gr / 9,400 LUP	—
1 1/8 oz	Clays	Rem. 209P	Red PC	17.5 gr / 6,500 LUP	18.5 gr / 7,400 LUP	19.4 gr / 8,300 LUP	—
1 1/8 oz	Clays	Win. AATP	Windjammer	17.0 gr / 6,800 PSI	17.5 gr / 7,300 PSI	19.0 gr / 8,500 PSI	—
1 1/8 oz	Clays	Win. 209	Windjammer	17.3 gr / 6,300 LUP	18.3 gr / 7,200 LUP	19.4 gr / 8,100 LUP	—
1 1/8 oz	Internat'l	CCI 209	Hor. Versalite	—	20.4 gr / 6,900 LUP	22.5 gr / 7,300 LUP	24.2 gr / 8,700 LUP
1 1/8 oz	Internat'l	CCI 209M	Rem. TGT 12	19.5 gr / 6,800 LUP	20.0 gr / 7,000 LUP	20.6 gr / 7,800 LUP	22.5 gr / 8,600 LUP
1 1/8 oz	Internat'l	CCI 209SC	Hor. Versalite	—	19.0 gr / 7,300 PSI	20.5 gr / 8,100 PSI	21.5 gr / 10,300 PSI
1 1/8 oz	Internat'l	CCI 209SC	Rem. TGT 12	19.0 gr / 6,200 PSI	19.2 gr / 6,900 PSI	20.0 gr / 7,900 PSI	21.5 gr / 9,500 PSI
1 1/8 oz	Internat'l	Fed. 209	Fed. 12S3	—	21.3 gr / 6,800 LUP	22.5 gr / 7,400 LUP	23.7 gr / 8,100 LUP
1 1/8 oz	Internat'l	Fed. 209	Red PC	20.5 gr / 6,000 LUP	21.5 gr / 6,300 LUP	22.9 gr / 7,000 LUP	24.2 gr / 8,100 LUP
1 1/8 oz	Internat'l	Fed. 209	Windjammer	22.0 gr / 5,800 LUP	22.3 gr / 6,300 LUP	23.1 gr / 6,700 LUP	24.4 gr / 7,500 LUP
1 1/8 oz	Internat'l	Fed. 209A	Fed. 12S3	18.5 gr / 7,000 PSI	19.0 gr / 7,200 PSI	20.5 gr / 8,800 PSI	22.2 gr / 10,600 PSI
1 1/8 oz	Internat'l	Fed. 209A	Red PC	19.0 gr / 6,300 PSI	19.7 gr / 6,800 PSI	21.0 gr / 8,000 PSI	22.3 gr / 9,600 PSI
1 1/8 oz	Internat'l	Fed. 209A	Windjammer	19.0 gr / 6,200 PSI	19.5 gr / 6,500 PSI	20.8 gr / 8,000 PSI	22.5 gr / 9,200 PSI
1 1/8 oz	Internat'l	Fio. 616	Fio. TL1	19.2 gr / 6,800 LUP	19.7 gr / 7,300 LUP	21.1 gr / 8,100 LUP	22.5 gr / 9,200 LUP
1 1/8 oz	Internat'l	Win. AATP	WAA12SL	18.5 gr / 6,800 PSI	19.3 gr / 7,200 PSI	20.8 gr / 8,900 PSI	22.0 gr / 10,300 PSI
1 1/8 oz	Internat'l	Win. 209	WAA12SL	19.1 gr / 6,600 LUP	20.1 gr / 7,100 LUP	21.0 gr / 7,500 LUP	22.4 gr / 8,900 LUP
				1200 fps	1255 fps	1310 fps	
1 1/8 oz	Universal	CCI 209	Windjammer	25.2 gr / 7,300 PSI	26.5 gr / 8,200 PSI	28.0 gr / 8,800 PSI	
1 1/8 oz	Universal	CCI 209M	Hor. Versalite	23.0 gr / 8,400 PSI	24.2 gr / 9,400 PSI	25.3 gr / 10,300 PSI	
1 1/8 oz	Universal	CCI 209SC	Hor. Versalite	23.2 gr / 7,700 PSI	24.5 gr / 8,600 PSI	25.5 gr / 9,600 PSI	
1 1/8 oz	Universal	CCI 209SC	Windjammer	24.5 gr / 7,300 LUP	26.0 gr / 8,100 PSI	26.7 gr / 8,900 PSI	
1 1/8 oz	Universal	Fed. 209	Fed. 12S3	23.5 gr / 7,900 PSI	24.8 gr / 8,700 PSI	26.0 gr / 9,500 PSI	
1 1/8 oz	Universal	Fed. 209A	Fed. 12S3	23.0 gr / 8,700 PSI	24.4 gr / 9,600 PSI	25.7 gr / 10,500 PSI	

SHOTSHELL DATA

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE			
12 GA., 2 3/4", FEDERAL GOLD MEDAL PLASTIC SHELLS CONTINUED							
				1200 fps	1255 fps	1310 fps	
1 1/8 oz	Universal	Fio. 616	Fio. TL1	23.3 gr / 8,700 PSI	24.2 gr / 9,500 PSI	26.0 gr / 10,100 PSI	
1 1/8 oz	Universal	Win. 209	Rem. Fig. 8	24.0 gr / 8,000 PSI	25.0 gr / 8,700 PSI	26.8 gr / 9,500 PSI	
1 1/8 oz	Universal	Win. 209	WAA12	23.2 gr / 8,800 PSI	24.5 gr / 9,700 PSI	25.0 gr / 10,400 PSI	
				1220 fps	1330 fps		
1 1/4 oz	Universal	CCI 209SC	Fed. 12S4	24.0 gr / 9,500 PSI	—		
1 1/4 oz	Universal	CCI 209	Fed. 12S4	25.0 gr / 10,100 PSI	—		
1 1/4 oz	Universal	Fed. 209	Fed. 12S4	25.0 gr / 9,300 PSI	—		
1 1/4 oz	Universal	Fed. 209A	Fed. 12S4	23.3 gr / 10,400 PSI	—		
1 1/4 oz	Universal	Fio. 616	Rem. SP12	24.7 gr / 9,200 PSI	—		
1 1/4 oz	Universal	Win. 209	WAA12 F114	24.5 gr / 10,300 PSI	—		
1 1/4 oz	HS-6	Fed. 209	Fed. 12S4	32.0 gr / 9,700 LUP	35.0 gr / 10,400 LUP		
1 1/4 oz	HS-6	Win. 209	WAA12F114	32.0 gr / 9,600 LUP	34.5 gr / 10,100 LUP		
				1285 fps			
1 3/8 oz	HS-7	Fed. 209	Fed. 12S4	37.0 gr / 10,100 LUP			
1 3/8 oz	HS-7	Win. 209	WAA12R	36.5 gr / 10,100 LUP			
				1260 fps			
1 1/2 oz	HS-7	Fed. 209	Fed. 12S4	37.0 gr / 10,900 LUP			
1 1/2 oz	HS-7	Win. 209	WAA12R	37.0 gr / 10,900 LUP			
12 GA., 2 3/4", FEDERAL HI-POWER PLASTIC SHELLS W/ FIBER BASE WADS							
				1200 fps	1255 fps	1310 fps	
1 1/8 oz	Universal	Fed. 209A	Fed. 12S3	24.0 gr / 8,200 PSI	25.0 gr / 9,000 PSI	26.5 gr / 9,400 PSI	
1 1/8 oz	Universal	Win. 209	WAA12	24.0 gr / 8,300 PSI	25.0 gr / 8,700 PSI	26.5 gr / 9,700 PSI	
				1220 fps			
1 1/4 oz	Universal	CCI 209M	Rem. SP12	25.5 gr / 7,900 PSI			
1 1/4 oz	Universal	Fed. 209A	Fed. 12S4	24.0 gr / 10,300 PSI			
1 1/4 oz	Universal	Fio. 616	Fed. 12S4	26.0 gr / 8,900 PSI			
1 1/4 oz	Universal	Win. 209	WAA12 F114	25.5 gr / 9,400 PSI			
1 1/4 oz	Universal	Win. 209	Fed. 12S4	25.2 gr / 8,800 PSI			
12 GA., 2 3/4", FEDERAL PAPER SHELLS							
				1180 fps	1235 fps	1290 fps	1345 fps
1 oz	Titewad	CCI 209SC	Windjammer	17.2 gr / 6,900 PSI	19.1 gr / 8,300 PSI	20.1 gr / 8,900 PSI	21.5 gr / 10,200 PSI
1 oz	Titewad	Fed. 209A	Fed. 12S3	18.1 gr / 7,500 PSI	19.5 gr / 8,400 PSI	20.6 gr / 9,700 PSI	22.0 gr / 11,100 PSI
1 oz	Titewad	Rem. 209P	Rem. Fig. 8	17.9 gr / 7,000 PSI	19.2 gr / 8,000 PSI	20.5 gr / 9,000 PSI	21.9 gr / 10,300 PSI
1 oz	Titewad	Win. 209	WAA12	17.4 gr / 7,200 PSI	18.7 gr / 8,900 PSI	20.0 gr / 9,800 PSI	21.3 gr / 10,900 PSI
1 oz	Clays	CCI 209M	Purple PC	18.0 gr / 6,900 PSI	19.5 gr / 8,100 PSI	20.5 gr / 9,800 PSI	—
1 oz	Clays	Fed. 209A	Fed. 12S0	18.0 gr / 7,100 PSI	19.5 gr / 8,700 PSI	21.0 gr / 10,900 PSI	—
1 oz	Clays	Rem. 209P	Rem. TGT 12	18.5 gr / 6,000 PSI	20.0 gr / 6,400 PSI	22.0 gr / 7,700 PSI	—
1 oz	Clays	Win. 209	Windjammer	18.0 gr / 5,800 PSI	19.5 gr / 7,300 PSI	20.5 gr / 8,800 PSI	—
1 oz	Clays	Win. 209	WAA12SL	17.5 gr / 6,400 PSI	19.0 gr / 8,300 PSI	21.0 gr / 10,800 PSI	—
				1090 fps	1145 fps	1200 fps	1255 fps
1 1/8 oz	Titewad	CCI 209SC	WAA12F114	15.3 gr / 9,600 PSI	16.6 gr / 10,500 PSI	17.5 gr / 10,800 PSI	—
1 1/8 oz	Titewad	Fed. 209A	Fed. 12S4	16.2 gr / 9,000 PSI	17.2 gr / 9,600 PSI	18.4 gr / 10,800 PSI	—
1 1/8 oz	Titewad	Fio. 616	Hor. Versalite	16.0 gr / 8,000 PSI	17.0 gr / 9,100 PSI	18.4 gr / 10,500 PSI	—
1 1/8 oz	Titewad	WIN. 209	WAA12	16.4 gr / 7,500 PSI	17.4 gr / 8,400 PSI	18.8 gr / 10,000 PSI	—

SHOTSHELL DATA

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE			
12 GA., 2 3/4", FEDERAL PAPER SHELLS CONTINUED							
				1090 fps	1145 fps	1200 fps	1255 fps
1 1/8 oz	Clays	CCI 209M	Windjammer	17.0 gr / 7,000 PSI	18.0 gr / 8,100 PSI	19.0 gr / 9,200 PSI	—
1 1/8 oz	Clays	Fed. 209A	Fed. 12S3	17.0 gr / 7,400 PSI	18.0 gr / 8,700 PSI	19.5 gr / 10,500 PSI	—
1 1/8 oz	Clays	Fio. 616	Hor. Versalite	16.8 gr / 7,500 PSI	17.5 gr / 8,600 PSI	19.0 gr / 10,300 PSI	—
1 1/8 oz	Clays	Rem. 209P	Rem. Fig. 8	18.0 gr / 5,900 PSI	18.5 gr / 7,000 PSI	19.5 gr / 9,200 PSI	—
1 1/8 oz	Clays	Win. 209	WAA12	17.0 gr / 7,600 PSI	18.0 gr / 8,800 PSI	19.0 gr / 10,900 PSI	—
1 1/8 oz	Internat'l	CCI 209M	Red PC	—	21.2 gr / 7,000 LUP	21.9 gr / 7,500 LUP	22.8 gr / 8,800 LUP
1 1/8 oz	Internat'l	CCI 209M	Rem. Fig. 8	19.4 gr / 6,400 LUP	20.3 gr / 6,800 LUP	21.8 gr / 8,100 LUP	22.6 gr / 8,900 LUP
1 1/8 oz	Internat'l	Fed. 209	Fed. 12S4	20.2 gr / 6,400 LUP	20.8 gr / 6,700 LUP	22.4 gr / 7,900 LUP	23.6 gr / 8,700 LUP
1 1/8 oz	Internat'l	Fed. 209	Hor. Versalite	21.1 gr / 6,100 LUP	21.7 gr / 6,500 LUP	23.2 gr / 7,300 LUP	23.9 gr / 8,200 LUP
1 1/8 oz	Internat'l	Fed. 209	Windjammer	21.2 gr / 5,600 LUP	21.8 gr / 6,000 LUP	23.2 gr / 6,700 LUP	24.4 gr / 7,400 LUP
1 1/8 oz	Internat'l	Fed. 209A	Fed. 12S4	18.8 gr / 7,000 PSI	19.5 gr / 7,500 PSI	21.0 gr / 10,000 PSI	22.0 gr / 11,200 PSI
1 1/8 oz	Internat'l	Fio. 616	Fio. TL1	19.9 gr / 6,800 LUP	20.6 gr / 7,300 LUP	22.5 gr / 7,900 LUP	23.7 gr / 9,200 LUP
1 1/8 oz	Internat'l	Win. AATP	WAA12	19.5 gr / 6,300 PSI	19.9 gr / 6,700 PSI	21.5 gr / 8,200 PSI	23.0 gr / 9,900 PSI
1 1/8 oz	Internat'l	Win. 209	WAA12	20.0 gr / 6,400 LUP	20.6 gr / 7,000 LUP	21.6 gr / 7,500 LUP	23.2 gr / 8,600 LUP
12 GA., 2 3/4", FIOCCHI (PURPLE), VICTORY AND PMC PLASTIC SHELLS							
				1250 fps	1300 fps	1350 fps	1400 fps
7/8 oz	Titewad	CCI 209SC	Purple PC	18.5 gr / 7,500 PSI	19.5 gr / 8,100 PSI	21.0 gr / 8,800 PSI	21.8 gr / 9,500 PSI
7/8 oz	Titewad	Fed. 209A	Fed. 12S0	18.7 gr / 7,400 PSI	19.7 gr / 8,600 PSI	20.7 gr / 9,700 PSI	22.0 gr / 10,500 PSI
7/8 oz	Titewad	Fio. 616	Fed. 12S0	18.2 gr / 7,800 PSI	19.5 gr / 8,900 PSI	20.5 gr / 10,000 PSI	21.5 gr / 11,200 PSI
7/8 oz	Titewad	Win. 209	WAA12SL	18.4 gr / 7,500 PSI	19.5 gr / 8,400 PSI	20.6 gr / 9,300 PSI	21.5 gr / 10,000 PSI
				1200 fps	1250 fps	1300 fps	1350 fps
7/8 oz	Clays	CCI 209M	Purple PC	17.3 gr / 5,700 PSI	18.1 gr / 6,300 PSI	19.2 gr / 7,700 PSI	—
7/8 oz	Clays	CCI 209SC	WAA12SL	17.7 gr / 6,400 PSI	18.5 gr / 7,600 PSI	19.5 gr / 8,400 PSI	21.0 gr / 9,900 PSI
7/8 oz	Clays	Fed. 209A	Rem. TGT 12	16.5 gr / 6,400 PSI	17.7 gr / 7,300 PSI	18.7 gr / 7,400 PSI	—
7/8 oz	Clays	Fio. 616	Fed. 12S0	16.6 gr / 6,800 PSI	17.8 gr / 7,500 PSI	19.2 gr / 8,500 PSI	—
7/8 oz	Clays	Win. 209	WAA12SL	16.8 gr / 6,200 PSI	18.0 gr / 7,200 PSI	19.0 gr / 8,000 PSI	—
7/8 oz	Internat'l	CCI 209SC	WAA12SL	—	21.0 gr / 7,300 PSI	22.0 gr / 8,100 PSI	22.5 gr / 8,500 PSI
				1180 fps	1235 fps	1290 fps	1345 fps
1 oz	Titewad	CCI 209SC	Purple PC	17.0 gr / 7,500 PSI	18.8 gr / 8,600 PSI	20.2 gr / 9,600 PSI	21.5 gr / 11,100 PSI
1 oz	Titewad	Fed. 209A	Fed. 12S0	17.0 gr / 8,400 PSI	19.0 gr / 10,200 PSI	20.0 gr / 11,100 PSI	—
1 oz	Titewad	Fio. 616	Rem. Fig. 8	17.0 gr / 8,200 PSI	18.0 gr / 9,200 PSI	19.5 gr / 10,300 psi	—
1 oz	Titewad	Win. 209	WAA12SL	17.2 gr / 7,400 PSI	18.5 gr / 8,900 PSI	19.8 gr / 9,800 PSI	—
1 oz	Clays	CCI 209M	Purple PC	18.0 gr / 7,300 PSI	19.1 gr / 8,600 PSI	19.9 gr / 9,400 PSI	—
1 oz	Clays	CCI 209SC	WAA12SL	18.0 gr / 8,400 PSI	18.5 gr / 9,500 PSI	—	—
1 oz	Clays	Fed. 209A	Rem. TGT 12	17.5 gr / 7,600 PSI	18.5 gr / 8,600 PSI	19.7 gr / 9,700 PSI	—
1 oz	Clays	Win. 209	WAA12SL	17.1 gr / 7,800 PSI	18.5 gr / 9,200 PSI	19.3 gr / 10,600 PSI	—
1 oz	Internat'l	CCI 209M	Purple PC	19.6 gr / 6,400 PSI	20.5 gr / 7,000 PSI	21.6 gr / 8,200 PSI	—
1 oz	Internat'l	CCI 209SC	WAA12SL	19.5 gr / 7,100 PSI	21.5 gr / 7,900 PSI	22.5 gr / 9,400 PSI	—
1 oz	Internat'l	Fed. 209A	Rem. TGT 12	19.3 gr / 6,600 PSI	20.3 gr / 7,800 PSI	20.9 gr / 8,800 PSI	—
1 oz	Internat'l	Win. 209	WAA12SL	19.0 gr / 7,100 PSI	20.0 gr / 8,600 PSI	21.1 gr / 9,600 PSI	—
				1090 fps	1145 fps	1200 fps	1255 fps
1 1/8 oz	Titewad	CCI 209SC	Fio. TL1	16.0 gr / 9,400 PSI	16.8 gr / 10,300 PSI	18.3 gr / 10,700 PSI	—
1 1/8 oz	Titewad	Fed. 209A	Fed. 12S4	16.2 gr / 9,200 PSI	16.8 gr / 10,100 PSI	17.7 gr / 11,100 PSI	—
1 1/8 oz	Titewad	Fio. 616	Fio. TL1	15.3 gr / 9,300 PSI	16.4 gr / 10,500 PSI	17.7 gr / 11,400 PSI	—
1 1/8 oz	Titewad	Win. 209	WAA12	16.2 gr / 7,900 PSI	16.9 gr / 8,500 PSI	18.5 gr / 10,000 PSI	—

SHOTSHELL DATA

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE			
12 GA., 2 3/4", FIOCCHI (PURPLE), VICTORY AND PMC PLASTIC SHELLS CONTINUED							
				1090 fps	1145 fps	1200 fps	1255 fps
1 1/8 oz	Clays	CCI 209	Hor. Versalite	17.9 gr / 6,300 LUP	18.9 gr / 7,000 LUP	20.0 gr / 7,700 LUP	—
1 1/8 oz	Clays	CCI 209SC	Fio. TL1	16.8 gr / 8,300 PSI	18.0 gr / 8,900 PSI	—	—
1 1/8 oz	Clays	Fed. 209	Fed. 12S3	17.1 gr / 6,400 LUP	18.3 gr / 7,500 LUP	19.5 gr / 8,500 LUP	—
1 1/8 oz	Clays	Fed. 209A	Fed. 12S3	16.5 gr / 9,100 PSI	17.0 gr / 10,000 PSI	—	—
1 1/8 oz	Clays	Fio. 616	Fio. TL1	16.5 gr / 7,000 LUP	17.9 gr / 8,000 LUP	19.4 gr / 9,100 LUP	—
1 1/8 oz	Clays	Rem. 209P	Rem. Fig. 8	17.6 gr / 6,200 LUP	18.8 gr / 6,800 LUP	19.9 gr / 7,500 LUP	—
1 1/8 oz	Clays	Win. AATP	WAA12	16.2 gr / 8,800 PSI	17.0 gr / 9,300 PSI	—	—
1 1/8 oz	Clays	Win. 209	WAA12	16.3 gr / 6,800 LUP	17.6 gr / 8,000 LUP	18.9 gr / 9,200 LUP	—
1 1/8 oz	Internat'l	CCI 209M	Hor. Versalite	18.5 gr / 7,100 LUP	19.5 gr / 7,600 LUP	20.9 gr / 8,300 LUP	22.0 gr / 9,400 LUP
1 1/8 oz	Internat'l	CCI 209SC	Fio. TL1	19.0 gr / 7,400 PSI	20.0 gr / 8,500 PSI	21.0 gr / 9,400 PSI	—
1 1/8 oz	Internat'l	Fed. 209	Fed. 12S3	20.0 gr / 6,700 LUP	20.5 gr / 6,800 LUP	21.6 gr / 8,100 LUP	—
1 1/8 oz	Internat'l	Fed. 209A	Fio. TL1	18.0 gr / 7,800 PSI	18.5 gr / 8,300 PSI	20.0 gr / 10,400 PSI	—
1 1/8 oz	Internat'l	Fio. 616	Fio. TL1	19.3 gr / 7,400 LUP	20.3 gr / 7,700 LUP	21.0 gr / 8,300 LUP	22.6 gr / 9,900 LUP
1 1/8 oz	Internat'l	Win. AATP	WAA12	17.8 gr / 7,500 PSI	18.5 gr / 8,300 PSI	20.2 gr / 9,500 PSI	21.0 gr / 10,900 PSI
1 1/8 oz	Internat'l	Win. 209	WAA12	19.2 gr / 7,000 LUP	19.7 gr / 7,400 LUP	21.0 gr / 8,500 LUP	22.0 gr / 9,800 LUP
				1200 fps	1255 fps	1310 fps	
1 1/8 oz	Universal	Fio. 616	Fio. TL1	23.4 gr / 8,600 PSI	25.0 gr / 9,800 PSI	26.5 gr / 10,600 PSI	
1 1/8 oz	Universal	Win. 209	WAA12	23.3 gr / 9,100 PSI	24.0 gr / 9,600 PSI	25.0 gr / 10,800 PSI	
				1220 fps	1330 fps		
1 1/4 oz	Universal	Fed. 209	Rem. SP12	24.0 gr / 10,200 PSI	—		
1 1/4 oz	Universal	Fio. 616	WAA12F114	24.0 gr / 10,900 PSI	—		
1 1/4 oz	Universal	Win. 209	Rem. SP12	24.0 gr / 10,900 PSI	—		
1 1/4 oz	HS-6	Win. 209	Rem. R12H	—	35.0 gr / 9,200 LUP		
				1260 fps			
1 1/2 oz	HS-7	Fio. 616	WAA12R	39.0 gr / 10,800 LUP			
12 GA., 2 3/4", REMINGTON PREMIER, NITRO 27 AND STS PLASTIC SHELLS							
				1250 fps	1300 fps	1350 fps	1400 fps
7/8 oz	Titewad	CCI 209SC	WAA12SL	17.0 gr / 10,600 PSI	17.3 gr / 10,900 PSI	—	—
7/8 oz	Titewad	Fed. 209A	Fed. 12S0	18.2 gr / 8,000 PSI	19.1 gr / 8,900 PSI	20.3 gr / 9,700 PSI	21.6 gr / 11,100 PSI
7/8 oz	Titewad	Rem. 209P	Rem. TGT 12	17.4 gr / 8,200 PSI	18.7 gr / 9,100 PSI	19.8 gr / 9,500 PSI	21.0 gr / 10,500 PSI
7/8 oz	Titewad	Win. 209	WAA12L	17.3 gr / 8,300 PSI	18.6 gr / 9,200 PSI	19.8 gr / 10,600 PSI	21.1 gr / 11,300 PSI
				1200 fps	1250 fps	1300 fps	1350 fps
7/8 oz	Clays	CCI 209SC	Rem. TGT 12	18.0 gr / 7,000 PSI	18.8 gr / 7,900 PSI	19.5 gr / 8,900 PSI	20.5 gr / 9,900 PSI
7/8 oz	Clays	Fed. 209	Activ TG-30	16.5 gr / 7,000 PSI	17.5 gr / 8,500 PSI	19.0 gr / 9,200 PSI	—
7/8 oz	Clays	Fed. 209A	Activ TG-30	16.2 gr / 7,700 PSI	17.5 gr / 9,200 PSI	18.5 gr / 10,300 PSI	—
7/8 oz	Clays	Rem. 209P	Rem. TGT 12	16.4 gr / 6,300 PSI	17.5 gr / 7,100 PSI	18.9 gr / 7,400 PSI	—
7/8 oz	Clays	Rem. 209P	Fed. 12S0	16.0 gr / 7,500 PSI	17.2 gr / 8,200 PSI	18.8 gr / 9,100 PSI	—
7/8 oz	Clays	Rem. 209P	WAA12SL	—	18.0 gr / 8,400 PSI	19.5 gr / 10,200 PSI	—
7/8 oz	Clays	Win. AATP	WAA12SL	16.5 gr / 7,500 PSI	17.8 gr / 8,600 PSI	18.8 gr / 9,500 PSI	—
7/8 oz	Clays	Win. 209	WAA12SL	15.9 gr / 7,100 PSI	17.1 gr / 8,900 PSI	18.2 gr / 10,000 PSI	—
				1250 fps	1300 fps	1350 fps	1400 fps
7/8 oz	Internat'l	CCI 209SC	Rem. TGT 12	20.7 gr / 7,100 PSI	21.0 gr / 7,700 PSI	22.2 gr / 8,400 PSI	23.2 gr / 9,200 PSI
7/8 oz	Internat'l	Rem. 209P	WAA12SL	20.0 gr / 7,800 PSI	21.5 gr / 8,600 PSI	23.5 gr / 9,400 PSI	24.5 gr / 10,200 PSI
				1125 fps	1180 fps	1235 fps	1290 fps
1 oz	Titewad	CCI 209SC	Purple PC	—	16.9 gr / 8,300 PSI	18.2 gr / 9,500 PSI	19.6 gr / 10,600 PSI

SHOTSHELL DATA

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE			
12 GA., 2 3/4", REMINGTON PREMIER, NITRO 27 AND STS PLASTIC SHELLS CONTINUED							
				1125 fps	1180 fps	1235 fps	1290 fps
1 oz	Titewad	Fed. 209A	Fed. 12S0	16.2 gr / 7,500 PSI	17.2 gr / 7,900 PSI	18.5 gr / 10,000 PSI	19.7 gr / 11,200 PSI
1 oz	Titewad	Fio. 616	Windjammer	—	—	18.0 gr / 9,600 PSI	19.2 gr / 10,800 PSI
1 oz	Titewad	Rem. 209P	Rem. TGT 12	—	16.7 gr / 7,800 PSI	18.2 gr / 9,600 PSI	19.4 gr / 11,300 PSI
1 oz	Titewad	Win. 209	WAA12SL	15.5 gr / 7,900 PSI	16.5 gr / 8,900 PSI	18.0 gr / 11,000 PSI	—
1 oz	Clays	CCI 209	Purple PC	17.1 gr / 6,400 LUP	18.3 gr / 7,100 LUP	19.5 gr / 7,700 LUP	20.7 gr / 8,400 LUP
1 oz	Clays	CCI 209SC	Rem. TGT 12	15.7 gr / 6,900 LUP	17.8 gr / 8,100 LUP	18.8 gr / 9,900 LUP	20.5 gr / 11,100 LUP
1 oz	Clays	Fed. 209	Fed. 12S0	16.5 gr / 7,300 LUP	17.7 gr / 8,300 LUP	18.9 gr / 9,200 LUP	20.0 gr / 10,100 LUP
1 oz	Clays	Rem. 209P	Rem. TGT 12	16.8 gr / 6,600 LUP	17.9 gr / 7,400 LUP	18.9 gr / 8,100 LUP	19.9 gr / 8,800 LUP
1 oz	Clays	Win. AATP	WAA12SL	15.5 gr / 7,900 PSI	16.5 gr / 8,700 PSI	18.2 gr / 11,000 PSI	—
1 oz	Clays	Win. 209	WAA12SL	15.7 gr / 7,100 LUP	17.0 gr / 8,200 LUP	18.4 gr / 9,500 LUP	19.8 gr / 10,700 LUP
				1180 fps	1235 fps	1290 fps	1345 fps
1 oz	Internat'l	CCI 209	Purple PC	20.6 gr / 6,300 LUP	21.6 gr / 7,000 LUP	22.7 gr / 8,300 LUP	—
1 oz	Internat'l	CCI 209SC	Rem. TGT 12	19.5 gr / 6,800 PSI	20.8 gr / 7,800 PSI	22.2 gr / 9,300 PSI	22.8 gr / 10,300 PSI
1 oz	Internat'l	Fed. 209	Fed. 12S0	19.6 gr / 7,200 LUP	20.6 gr / 8,200 LUP	22.3 gr / 9,300 LUP	—
1 oz	Internat'l	Fed. 209A	Fed. 12S0	18.0 gr / 7,700 PSI	19.3 gr / 9,700 PSI	21.0 gr / 11,300 PSI	—
1 oz	Internat'l	Rem. 209P	Rem. TGT 12	20.2 gr / 6,800 LUP	20.9 gr / 7,700 LUP	21.4 gr / 8,900 LUP	—
1 oz	Internat'l	Win. AATP	WAA12SL	18.5 gr / 7,500 PSI	19.7 gr / 8,900 PSI	21.0 gr / 10,500 PSI	—
1 oz	Internat'l	Win. 209	WAA12SL	18.4 gr / 7,100 LUP	20.1 gr / 8,600 LUP	21.0 gr / 10,000 LUP	—
				1090 fps	1145 fps	1200 fps	1255 fps
1 1/8 oz	Titewad	CCI 209	Hor. Versalite	15.0 gr / 9,900 PSI	15.9 gr / 11,100 PSI	—	—
1 1/8 oz	Titewad	CCI 209SC	Red PC	15.4 gr / 9,100 PSI	16.5 gr / 10,300 PSI	—	—
1 1/8 oz	Titewad	Fed. 209A	Fed. 12S3	15.4 gr / 9,200 PSI	16.7 gr / 10,300 PSI	17.5 gr / 11,300 PSI	—
1 1/8 oz	Titewad	Rem. 209P	Rem. Fig 8	15.2 gr / 9,100 PSI	16.5 gr / 10,100 PSI	17.9 gr / 10,900 PSI	—
1 1/8 oz	Titewad	Win. 209	WAA12	15.4 gr / 8,700 PSI	16.7 gr / 10,000 PSI	17.9 gr / 11,400 PSI	—
1 1/8 oz	Clays	CCI 209	Windjammer	16.6 gr / 6,400 LUP	18.0 gr / 7,500 LUP	19.4 gr / 8,600 LUP	—
1 1/8 oz	Clays	CCI 209SC	Rem. Fig. 8	16.0 gr / 6,600 LUP	17.0 gr / 8,100 PSI	18.0 gr / 8,800 PSI	—
1 1/8 oz	Clays	Fed. 209	Red PC	16.3 gr / 7,000 LUP	17.8 gr / 8,100 LUP	19.3 gr / 9,200 LUP	—
1 1/8 oz	Clays	Fed. 209A	Red PC	15.8 gr / 8,900 PSI	16.6 gr / 10,200 PSI	18.0 gr / 11,300 PSI	—
1 1/8 oz	Clays	Fio. 616	Fio. FTWI	15.5 gr / 7,700 LUP	16.9 gr / 9,200 LUP	18.4 gr / 10,900 LUP	—
1 1/8 oz	Clays	Rem. 209P	Rem. Fig 8	16.9 gr / 6,900 LUP	18.0 gr / 7,900 LUP	19.2 gr / 9,000 LUP	—
1 1/8 oz	Clays	Rem. 209P	WAA12	16.6 gr / 7,700 LUP	17.7 gr / 9,000 LUP	18.8 gr / 10,300 LUP	—
1 1/8 oz	Clays	Rem. 209P	Fed. 12S3	16.4 gr / 7,600 LUP	17.6 gr / 8,600 LUP	18.8 gr / 9,600 LUP	—
1 1/8 oz	Clays	Win. AATP	Hor. Versalite	15.5 gr / 9,100 PSI	16.4 gr / 10,400 PSI	—	—
1 1/8 oz	Clays	Win. 209	Hor. Versalite	15.8 gr / 7,600 LUP	17.2 gr / 9,100 LUP	18.6 gr / 10,500 LUP	—
1 1/8 oz	Internat'l	CCI 209	Windjammer	19.2 gr / 6,100 LUP	19.8 gr / 6,500 LUP	21.2 gr / 7,500 LUP	22.3 gr / 8,300 LUP
1 1/8 oz	Internat'l	CCI 209SC	Rem. Fig. 8	18.0 gr / 7,200 PSI	19.0 gr / 7,900 PSI	20.3 gr / 9,300 PSI	22.0 gr / 10,300 PSI
1 1/8 oz	Internat'l	Fed. 209	Red PC	19.2 gr / 6,300 LUP	19.7 gr / 6,900 LUP	21.2 gr / 7,700 LUP	22.0 gr / 9,200 LUP
1 1/8 oz	Internat'l	Fio. 616	Fio. TL1	18.1 gr / 7,800 LUP	18.7 gr / 8,600 LUP	19.9 gr / 10,000 LUP	—
1 1/8 oz	Internat'l	Rem. 209P	Fed. 12S3	17.6 gr / 6,900 LUP	18.3 gr / 7,800 LUP	19.4 gr / 9,000 LUP	20.6 gr / 10,200 LUP
1 1/8 oz	Internat'l	Rem. 209P	WAA12	18.3 gr / 7,000 LUP	18.8 gr / 7,600 LUP	19.7 gr / 8,700 LUP	20.9 gr / 10,400 LUP
1 1/8 oz	Internat'l	Rem. 209P	Rem. Fig. 8	18.6 gr / 6,400 LUP	19.6 gr / 7,000 LUP	20.9 gr / 7,500 LUP	21.7 gr / 9,100 LUP
1 1/8 oz	Internat'l	Win. AATP	Hor. Versalite	17.2 gr / 8,100 PSI	17.8 gr / 9,300 PSI	19.0 gr / 10,200 PSI	—
1 1/8 oz	Internat'l	Win. 209	Hor. Versalite	17.8 gr / 6,900 LUP	18.4 gr / 7,800 LUP	19.5 gr / 9,100 LUP	20.6 gr / 10,400 LUP
				1200 fps	1255 fps	1310 fps	
1 1/8 oz	Universal	CCI 209	Windjammer	23.2 gr / 8,400 PSI	24.4 gr / 9,100 PSI	25.7 gr / 10,200 PSI	

SHOTSHELL DATA

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE			
12 GA., 2 3/4", REMINGTON PREMIER, NITRO 27 AND STS PLASTIC SHELLS CONTINUED							
				1200 fps	1255 fps	1310 fps	
1 1/8 oz	Universal	CCI 209M	Hor. Versalite	21.1 gr / 9,600 PSI	22.5 gr / 10,600 PSI	24.3 gr / 11,400 PSI	
1 1/8 oz	Universal	Fed. 209	Fed. 12S3	22.5 gr / 9,700 PSI	23.5 gr / 10,600 PSI	24.0 gr / 11,500 PSI	
1 1/8 oz	Universal	Fed. 209A	Fed. 12S3	21.7 gr / 10,200 PSI	22.7 gr / 11,000 PSI	—	
1 1/8 oz	Universal	Fio. 616	Fio. TL1	22.5 gr / 9,400 PSI	23.5 gr / 10,600 PSI	—	
1 1/8 oz	Universal	Win. 209	Rem. Fig. 8	22.5 gr / 8,900 PSI	23.7 gr / 9,900 PSI	25.0 gr / 10,800 PSI	
1 1/8 oz	Universal	Win. 209	WAA12	21.5 gr / 9,800 PSI	23.0 gr / 10,700 PSI	—	
				1220 fps	1330 fps		
1 1/4 oz	Universal	CCI 209	Rem. SP12	23.7 gr / 9,200 PSI	—		
1 1/4 oz	Universal	Fed. 209	Fed. 12S4	23.5 gr / 10,000 PSI	—		
1 1/4 oz	Universal	Fed. 209A	Rem. SP12	22.5 gr / 11,300 PSI	—		
1 1/4 oz	Universal	Rem.209P	Rem. SP12	24.0 gr / 9,600 PSI	—		
1 1/4 oz	Universal	Win. 209	WAA12F114	23.5 gr / 10,900 PSI	—		
1 1/4 oz	HS-6	Win. 209	WAA12F114	32.0 gr / 9,200 LUP	34.0 gr / 10,400 LUP		
1 1/4 oz	HS-6	Win. 209	Rem. R12H	32.0 gr / 9,100 LUP	34.0 gr / 10,200 LUP		
				1285 fps			
1 3/8 oz	HS-7	Win. 209	WAA12R	38.5 gr / 9,900 LUP			
1 3/8 oz	HS-7	Win. 209	Rem. R12H	38.0 gr / 10,100 LUP			
				1260 fps			
1 1/2 oz	HS-7	Fed. 209	Rem. R12H	36.0 gr / 10,600 LUP			
1 1/2 oz	HS-7	Win. 209	WAA12R	35.5 gr / 10,300 LUP			
12 GA., 2 3/4", WINCHESTER COMPRESSION-FORMED AA TYPE SHELLS							
				1250 fps	1300 fps	1350 fps	1400 fps
7/8 oz	Titewad	CCI 209SC	Rem. TGT 12	17.7 gr / 7,800 PSI	18.8 gr / 8,900 PSI	19.8 gr / 9,600 PSI	21.0 gr / 10,200 PSI
7/8 oz	Titewad	Fed. 209A	Fed. 12S0	18.5 gr / 7,800 PSI	19.7 gr / 8,800 PSI	20.8 gr / 10,200 PSI	21.7 gr / 10,700 PSI
7/8 oz	Titewad	Fio. 616	Rem. TGT 12	17.5 gr / 8,100 PSI	19.2 gr / 8,900 PSI	20.1 gr / 9,800 PSI	21.3 gr / 10,500 PSI
7/8 oz	Titewad	Win. 209	WAA12L	17.8 gr / 8,600 PSI	19.1 gr / 9,500 PSI	20.2 gr / 10,300 PSI	21.4 gr / 10,800 PSI
				1200 fps	1250 fps	1300 fps	1350 fps
7/8 oz	Clays	Fed. 209	Activ TG-30	17.6 gr / 7,000 LUP	18.7 gr / 7,500 LUP	20.5 gr / 7,900 LUP	—
7/8 oz	Clays	Fed. 209A	Activ TG-30	16.0 gr / 7,700 PSI	17.5 gr / 9,000 PSI	18.5 gr / 10,600 PSI	—
7/8 oz	Clays	Fed. 209A	WAA12L	—	18.0 gr / 8,400 PSI	19.1 gr / 9,300 PSI	20.5 gr / 10,800 PSI
7/8 oz	Clays	Fed. 209A	WAA12SL	—	18.0 gr / 8,500 PSI	19.0 gr / 9,700 PSI	—
7/8 oz	Clays	CCI 209M	Rem. TGT 12	16.5 gr / 7,100 PSI	17.5 gr / 7,800 PSI	18.5 gr / 8,900 PSI	—
7/8 oz	Clays	CCI 209SC	Rem. TGT 12	16.3 gr / 6,500 PSI	17.6 gr / 7,100 PSI	18.7 gr / 7,800 PSI	—
7/8 oz	Clays	Rem. 209P	Rem. TGT 12	18.2 gr / 6,000 LUP	18.9 gr / 6,800 LUP	—	—
7/8 oz	Clays	Win. 209	Fed. 12S0	17.1 gr / 7,400 PSI	18.0 gr / 8,000 PSI	20.0 gr / 10,700 PSI	—
7/8 oz	Clays	Win. 209	WAA12SL	16.9 gr / 7,100 LUP	18.1 gr / 7,400 LUP	19.7 gr / 8,400 LUP	—
7/8 oz	Clays	Win. 209	WAA12L	—	18.3 gr / 8,300 PSI	19.2 gr / 9,400 PSI	20.5 gr / 10,000 PSI
7/8 oz	Clays	Win. AATP	WAA12SL	16.5 gr / 7,500 PSI	17.8 gr / 8,400 PSI	19.0 gr / 9,600 PSI	—
				1250 fps	1300 fps	1350 fps	1400 fps
7/8 oz	Internat'l	Fed. 209A	WAA12SL	20.0 gr / 7,800 PSI	21.0 gr / 8,600 PSI	22.0 gr / 9,500 PSI	—
7/8 oz	Internat'l	Win. 209	WAA12SL	20.5 gr / 7,900 PSI	21.0 gr / 8,600 PSI	21.5 gr / 9,100 PSI	22.5 gr / 10,200 PSI
				1125 fps	1180 fps	1235 fps	1290 fps
1 oz	Titewad	CCI 209SC	Purple PC	15.5 gr / 7,400 PSI	17.0 gr / 7,700 PSI	18.5 gr / 9,100 PSI	20.0 gr / 10,200 PSI
1 oz	Titewad	Fed. 209A	Fed. 12S0	16.0 gr / 8,200 PSI	17.2 gr / 9,000 PSI	18.6 gr / 10,400 PSI	—

SHOTSHELL DATA

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE			
12 GA., 2 3/4", WINCHESTER COMPRESSION-FORMED AA TYPE SHELLS CONTINUED							
				1125 fps	1180 fps	1235 fps	1290 fps
1 oz	Titewad	Fio. 616	Windjammer	—	16.6 gr / 8,300 PSI	18.2 gr / 9,600 PSI	19.5 gr / 10,700 PSI
1 oz	Titewad	Rem. 209P	Rem. TGT 12	15.9 gr / 6,900 PSI	16.8 gr / 7,800 PSI	18.4 gr / 8,900 PSI	20.2 gr / 10,600 PSI
1 oz.	Titewad	Win. 209	WAA12SL	15.6 gr / 8,300 PSI	16.5 gr / 9,800 PSI	18.1 gr / 10,700 PSI	—
1 oz	Clays	CCI 209	Rem. TGT 12	16.6 gr / 6,700 LUP	17.7 gr / 7,700 LUP	18.7 gr / 8,500 LUP	19.8 gr / 9,500 LUP
1 oz	Clays	CCI 209SC	Rem. TGT 12	15.2 gr / 6,400 PSI	16.6 gr / 7,500 PSI	17.5 gr / 9,700 PSI	19.2 gr / 11,000 PSI
1 oz	Clays	Rem. 209P	Purple PC	17.6 gr / 6,400 LUP	18.6 gr / 6,800 LUP	19.5 gr / 7,200 LUP	20.5 gr / 7,600 LUP
1 oz	Clays	Win. AATP	WAA12SL	15.6 gr / 7,500 PSI	16.9 gr / 9,300 PSI	18.2 gr / 10,900 PSI	—
1 oz.	Clays	Win. 209	WAA12SL	16.0 gr / 7,400 LUP	17.2 gr / 8,300 LUP	18.5 gr / 9,200 LUP	19.8 gr / 10,200 LUP
				1180 fps	1235 fps	1290 fps	1345 fps
1 oz	Internat'l	CCI 209	WAA12SL	19.2 gr / 6,700 LUP	20.6 gr / 7,500 LUP	22.3 gr / 8,800 LUP	—
1 oz	Internat'l	CCI 209SC	WAA12SL	19.0 gr / 7,400 PSI	20.0 gr / 8,600 PSI	21.0 gr / 10,000 PSI	—
1 oz	Internat'l	Fed. 209	Purple PC	20.6 gr / 6,000 LUP	22.2 gr / 6,900 LUP	23.2 gr / 7,400 LUP	—
1 oz	Internat'l	Fed. 209A	Purple PC	19.2 gr / 7,000 PSI	20.6 gr / 7,900 PSI	21.7 gr / 9,600 PSI	—
1 oz	Internat'l	Rem. 209P	Rem. TGT 12	20.8 gr / 5,900 LUP	21.5 gr / 7,100 LUP	22.3 gr / 7,800 LUP	—
1 oz	Internat'l	Win. AATP	WAA12SL	18.2 gr / 7,400 PSI	20.0 gr / 9,000 PSI	—	—
1 oz.	Internat'l	Win. 209	WAA12SL	18.9 gr / 6,900 LUP	20.4 gr / 8,300 LUP	21.3 gr / 8,900 LUP	—
				1090 fps	1145 fps	1200 fps	1255 fps
1 1/8 oz	Titewad	CCI 209SC	Windjammer	15.3 gr / 8,600 PSI	16.6 gr / 9,400 PSI	17.8 gr / 10,900 PSI	—
1 1/8 oz	Titewad	CCI 209	Hor. Versalite	15.3 gr / 10,200 PSI	16.6 gr / 10,700 PSI	17.0 gr / 11,400 PSI	—
1 1/8 oz	Titewad	Fed. 209A	Fed. 12S3	15.5 gr / 9,900 PSI	16.8 gr / 10,800 PSI	—	—
1 1/8 oz	Titewad	Fio. 616	Fio. TL1	15.5 gr / 10,300 PSI	16.6 gr / 11,000 PSI	—	—
1 1/8 oz	Titewad	Rem. 209P	Rem. Fig. 8	15.7 gr / 8,500 PSI	16.8 gr / 9,300 PSI	18.3 gr / 10,400 PSI	—
1 1/8 oz	Titewad	Win. 209	CB3118-12-AR	15.2 gr / 9,300 PSI	16.3 gr / 10,700 PSI	17.7 gr / 11,400 PSI	—
1 1/8 oz	Titewad	Win. 209	WAA12	15.2 gr / 9,500 PSI	16.5 gr / 10,400 PSI	17.8 gr / 11,100 PSI	—
1 1/8 oz	Clays	CCI 209	Fed. 12S3	16.2 gr / 7,200 LUP	17.6 gr / 8,700 LUP	19.0 gr / 10,100 LUP	—
1 1/8 oz	Clays	Fed. 209	Windjammer	17.2 gr / 6,800 LUP	18.4 gr / 7,500 LUP	19.6 gr / 8,200 LUP	—
1 1/8 oz	Clays	Fed. 209A	WAA12	15.0 gr / 9,700 PSI	16.0 gr / 10,800 PSI	—	—
1 1/8 oz	Clays	Fio. 209	Fio. TL-1	16.5 gr / 8,600 LUP	17.6 gr / 9,500 LUP	18.8 gr / 10,600 LUP	—
1 1/8 oz	Clays	Rem. 209P	Red PC	17.1 gr / 7,200 LUP	18.4 gr / 7,800 LUP	19.6 gr / 8,400 LUP	—
1 1/8 oz	Clays	Win. 209	WAA12	16.1 gr / 7,700 LUP	17.3 gr / 8,800 LUP	18.2 gr / 9,800 LUP	—
1 1/8 oz	Clays	Win. 209	Rem. Fig. 8	16.0 gr / 7,700 LUP	17.0 gr / 8,500 LUP	18.1 gr / 9,400 LUP	—
1 1/8 oz	Clays	Win. 209	Hor. Versalite	16.4 gr / 8,300 LUP	17.6 gr / 9,400 LUP	18.8 gr / 10,600 LUP	—
1 1/8 oz	Internat'l	CCI 209	Fed. 12S3	—	19.2 gr / 7,900 LUP	20.0 gr / 8,300 LUP	21.6 gr / 10,200 LUP
1 1/8 oz	Internat'l	CCI 209SC	Fed. 12S3	—	18.5 gr / 8,400 PSI	19.5 gr / 10,300 PSI	20.3 gr / 11,200 PSI
1 1/8 oz	Internat'l	Fed. 209	Windjammer	18.6 gr / 6,200 LUP	19.7 gr / 6,500 LUP	21.1 gr / 7,100 LUP	22.1 gr / 8,200 LUP
1 1/8 oz	Internat'l	Fed. 209A	Windjammer	17.4 gr / 6,900 PSI	18.0 gr / 7,700 PSI	19.5 gr / 9,500 PSI	21.3 gr / 11,200 PSI
1 1/8 oz	Internat'l	Fio. 616	Fio. TL-1	18.2 gr / 7,300 LUP	18.8 gr / 7,700 LUP	20.0 gr / 9,100 LUP	21.5 gr / 10,600 LUP
1 1/8 oz	Internat'l	Rem. 209P	Rem. Fig. 8	—	20.1 gr / 6,300 LUP	21.1 gr / 7,700 LUP	22.1 gr / 8,000 LUP
1 1/8 oz	Internat'l	Win. AATP	Red PC	17.3 gr / 7,600 PSI	17.7 gr / 8,400 PSI	20.0 gr / 9,800 PSI	20.9 gr / 10,700 PSI
1 1/8 oz	Internat'l	Win. AATP	WAA12	17.0 gr / 8,700 PSI	17.5 gr / 9,400 PSI	18.5 gr / 11,000 PSI	—
1 1/8 oz	Internat'l	Win. 209	WAA12	17.6 gr / 7,400 LUP	18.1 gr / 8,300 LUP	19.2 gr / 9,600 LUP	21.3 gr / 10,800 LUP
1 1/8 oz	Internat'l	Win. 209	Red PC	18.3 gr / 6,800 LUP	18.9 gr / 7,200 LUP	20.2 gr / 8,300 LUP	21.3 gr / 9,700 LUP
1 1/8 oz	Internat'l	Win. 209	Hor. Versalite	17.4 gr / 7,900 LUP	18.1 gr / 8,600 LUP	19.2 gr / 9,800 LUP	—
				1200 fps	1255 fps	1310 fps	
1 1/8 oz	Universal	CCI 209	Windjammer	23.3 gr / 8,000 PSI	24.3 gr / 9,300 PSI	—	

SHOTSHELL DATA

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE		
12 GA., 2 3/4", WINCHESTER COMPRESSION-FORMED AA TYPE SHELLS CONTINUED						
				1200 fps	1255 fps	1310 fps
1 1/8 oz	Universal	CCI 209M	Hor. Versalite	22.0 gr / 9,900 PSI	23.0 gr / 10,700 PSI	—
1 1/8 oz	Universal	CCI 209SC	Hor. Versalite	22.3 gr / 8,800 PSI	23.5 gr / 9,400 PSI	—
1 1/8 oz	Universal	CCI 209SC	Windjammer	22.4 gr / 8,200 PSI	24.0 gr / 9,000 PSI	24.4 gr / 9,800 PSI
1 1/8 oz	Universal	Fed. 209	Fed. 12S3	22.7 gr / 8,900 PSI	23.8 gr / 10,000 PSI	—
1 1/8 oz	Universal	Fed. 209A	WAA12	21.5 gr / 9,600 PSI	22.8 gr / 10,700 PSI	23.6 gr / 11,300 PSI
1 1/8 oz	Universal	Fio. 616	Fio. TL1	22.5 gr / 9,900 PSI	23.3 gr / 10,900 PSI	—
1 1/8 oz	Universal	Win. 209	Rem. Fig. 8	22.5 gr / 9,000 PSI	23.5 gr / 10,000 PSI	24.5 gr / 10,700 PSI
1 1/8 oz	Universal	Win. 209	WAA12	22.0 gr / 10,000 PSI	22.7 gr / 10,600 PSI	—
				1220 fps	1330 fps	
1 1/4 oz	Universal	CCI 209	WAA12 F114	23.5 gr / 10,000 PSI	—	
1 1/4 oz	Universal	CCI 209SC	WAA12 F114	22.0 gr / 10,700 PSI	—	
1 1/4 oz	Universal	Fed. 209	Fed. 12S4	23.5 gr / 10,200 PSI	—	
1 1/4 oz	Universal	Fio. 616	Rem. SP12	24.5 gr / 9,600 PSI	—	
1 1/4 oz	Universal	Win. 209	WAA12 F114	23.0 gr / 10,900 PSI	—	
1 1/4 oz	HS-6	Win. 209	WAA12F114	30.0 gr / 8,800 LUP	33.0 gr / 10,500 LUP	
1 1/4 oz	HS-6	Win. 209	Rem. R12H	31.5 gr / 9,000 LUP	35.0 gr / 10,600 LUP	
1 1/4 oz	HS-6	Win. 209	Fed. 12C1	32.0 gr / 8,700 LUP	35.0 gr / 10,400 LUP	
				1285 fps		
1 3/8 oz	HS-7	Fed. 209	WAA12R	35.5 gr / 10,400 LUP		
1 3/8 oz	HS-7	Fed. 209	Rem. RP12	35.5 gr / 10,200 LUP		
1 3/8 oz	HS-7	Win. 209	WAA12R	35.5 gr / 10,300 LUP		
				1260 fps		
1 1/2 oz	HS-7	Win. 209	WAA12R	36.5 gr / 10,400 LUP		
1 1/2 oz	HS-7	Win. 209	Rem. RP12	36.5 gr / 9,900 LUP		
12 GA., 2 3/4", WINCHESTER POLYFORMED PLASTIC GAME SHELLS (PLASTIC BASEWAD)						
				1200 fps	1255 fps	1310 fps
1 1/8 oz	Universal	CCI 209M	Windjammer	24.5 gr / 8,000 PSI	25.8 gr / 8,600 PSI	26.2 gr / 9,600 PSI
1 1/8 oz	Universal	CCI 209SC	Windjammer	25.0 gr / 6,800 PSI	26.5 gr / 7,200 PSI	27.5 gr / 7,900 PSI
1 1/8 oz	Universal	Fed. 209A	Rem. Fig. 8	24.0 gr / 8,000 PSI	24.8 gr / 8,900 PSI	26.0 gr / 9,400 PSI
1 1/8 oz	Universal	Win. 209	WAA12	24.0 gr / 7,900 PSI	25.3 gr / 9,000 PSI	26.0 gr / 10,100 PSI
12 GA., 3", REMINGTON-PETERS PLASTIC GAME SHELLS						
				1295 fps		
1 3/8 oz	HS-6	Rem. 209P	WAA12	36.0 gr / 9,900 LUP		
1 3/8 oz	HS-6	Rem. 209P	Rem. R12L	37.0 gr / 9,400 LUP		
				1140 fps		
1 7/8 oz	HS-7	Rem. 209P	WAA12R	36.0 gr / 10,800 LUP		
1 7/8 oz	HS-7	Rem. 209P	Rem. RP12	36.0 gr / 10,700 LUP		
12 GA., 3", WINCHESTER COMPRESSION-FORMED SUPER-X TYPE SHELLS						
				1295 fps		
1 3/8 oz	HS-6	Fed. 209	Rem. R12L	35.0 gr / 9,400 LUP		
1 3/8 oz	HS-6	Win. 209	WAA12	35.5 gr / 9,400 LUP		
				1205 fps		
1 5/8 oz	HS-7	Win. 209	WAA12	36.0 gr / 10,400 LUP		

SHOTSHELL DATA

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE		
12 GA., 3", WINCHESTER COMPRESSION-FORMED SUPER-X TYPE SHELLS CONTINUED						
1205 fps						
1 5/8 oz	HS-7	Win. 209	Rem. R12H	36.0 gr / 10,200 LUP		
1100 fps						
1 7/8 oz	HS-7	Fed. 209	Rem. RP12	34.0 gr / 10,400 LUP		
1 7/8 oz	HS-7	Win. 209	WAA12R	33.5 gr / 10,600 LUP		
16 GA., 2 3/4", FEDERAL HI POWER PLASTIC PAPER BASE WAD SHELLS						
1165 fps 1220 fps 1275 fps						
1 oz	Universal	CCI 209M	Activ G-28	21.5 gr / 7,500 PSI	22.5 gr / 8,200 PSI	24.2 gr / 9,000 PSI
1 oz	Universal	Fed. 209A	BP G/BP	21.0 gr / 7,400 PSI	22.0 gr / 8,200 PSI	23.5 gr / 9,200 PSI
1 oz	Universal	Win. 209	WAA16	20.7 gr / 7,600 PSI	22.3 gr / 8,200 PSI	23.5 gr / 8,900 PSI
16 GA., 2 3/4", REMINGTON SP PLASTIC SHELLS						
1165 fps 1220 fps 1275 fps						
1 oz	Universal	CCI 209M	BP G/BP	19.5 gr / 8,400 PSI	20.5 gr / 9,600 PSI	21.5 gr / 10,300 PSI
1 oz	Universal	Win. 209	REM. SP16	18.5 gr / 8,800 PSI	19.8 gr / 9,900 PSI	20.5 gr / 10,400 PSI
1 oz	Universal	Win. 209	WAA16	18.5 gr / 9,000 PSI	19.5 gr / 9,900 PSI	20.5 gr / 10,400 PSI
16 GA., 2 3/4", WINCHESTER COMPRESSION-FORMED SHELLS						
1165 fps 1220 fps 1275 fps						
1 oz	Universal	Win. 209	Activ G-28	19.0 gr / 8,800 PSI	20.3 gr / 9,700 PSI	21.5 gr / 10,600 PSI
1 oz	Universal	Win. 209	BP G/BP	19.5 gr / 9,100 PSI	20.0 gr / 10,000 PSI	21.0 gr / 10,700 PSI
1 oz	Universal	Win. 209	WAA16	19.0 gr / 9,200 PSI	20.0 gr / 10,300 PSI	20.7 gr / 11,000 PSI
1 oz	HS-6	CCI 209	WAA16	23.5 gr / 8,200 LUP	24.5 gr / 8,800 LUP	—
1 oz	HS-6	Fed. 209	WAA16	22.5 gr / 8,600 LUP	24.0 gr / 9,400 LUP	—
1 oz	HS-6	Win. 209	WAA16	23.0 gr / 8,500 LUP	24.0 gr / 9,300 LUP	—
1 oz	HS-7	CCI 209	WAA16	25.0 gr / 8,200 LUP	26.5 gr / 9,100 LUP	—
1 oz	HS-7	Fed. 209	WAA16	25.0 gr / 8,400 LUP	26.0 gr / 9,200 LUP	—
1 oz	HS-7	Win. 209	WAA16	25.0 gr / 8,400 LUP	26.5 gr / 9,100 LUP	—
1185 fps 1240 fps						
1 1/8 oz	HS-6	Fed. 209	WAA16	24.0 gr / 10,400 LUP	—	—
1 1/8 oz	HS-6	Fed. 209	Rem. SP16	26.5 gr / 8,500 LUP	27.5 gr / 9,300 LUP	—
1 1/8 oz	HS-6	Win. 209	WAA16	24.5 gr / 10,600 LUP	—	—
1 1/8 oz	HS-6	Win. 209	Rem. SP16	26.5 gr / 8,600 LUP	27.5 gr / 9,400 LUP	—
1 1/8 oz	HS-7	Fed. 209	WAA16	25.5 gr / 10,000 LUP	26.5 gr / 10,600 LUP	—
1 1/8 oz	HS-7	Win. 209	WAA16	26.0 gr / 10,100 LUP	27.0 gr / 10,700 LUP	—
20 GA., 2 3/4", FEDERAL PLASTIC TARGET SHELLS						
1200 fps 1225 fps 1250 fps						
7/8 oz	Internat1	CCI 209SC	Fed. 20S1	15.0 gr / 11,100 PSI	15.6 gr / 11,800 PSI	—
7/8 oz	Internat1	CCI 209SC	Hor. Versalite	15.2 gr / 11,000 PSI	15.8 gr / 11,500 PSI	—
7/8 oz	Internat1	CCI 209SC	PC20	14.7 gr / 10,400 PSI	—	—
7/8 oz	Internat1	CCI 209SC	Rem. RXP20	14.5 gr / 10,000 PSI	15.5 gr / 10,700 PSI	—
7/8 oz	Internat1	CCI 209SC	WAA20F1	14.7 gr / 10,300 PSI	15.3 gr / 11,600 PSI	—
7/8 oz	Internat1	CCI 209SC	Windjammer	15.0 gr / 10,700 PSI	15.5 gr / 11,800 PSI	—
7/8 oz	Internat1	Fed. 209A	Fed. 20S1	14.5 gr / 11,500 PSI	—	—
7/8 oz	Internat1	Fed. 209A	Hor. Versalite	14.7 gr / 11,600 PSI	—	—
7/8 oz	Internat1	Fed. 209A	Rem. RXP20	14.7 gr / 11,100 PSI	—	—

SHOTSHELL DATA

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE		
20 GA., 2 3/4", FEDERAL PLASTIC TARGET SHELLS CONTINUED						
				1200 fps	1225 fps	1250 fps
7/8 oz	Internat'l	Fed. 209A	WAA20F1	14.5 gr / 11,500 PSI	—	—
7/8 oz	Internat'l	Fed. 209A	Windjammer	14.5 gr / 11,300 PSI	14.9 gr / 12,000 PSI	—
7/8 oz	Internat'l	Rem. 209P	Fed. 20S1	15.3 gr / 10,700 PSI	—	—
7/8 oz	Internat'l	Rem. 209P	Hor. Versalite	15.5 gr / 10,200 PSI	16.0 gr / 11,600 PSI	—
7/8 oz	Internat'l	Rem. 209P	WAA20F1	15.0 gr / 10,200 PSI	15.5 gr / 11,300 PSI	16.0 gr / 11,500 PSI
7/8 oz	Internat'l	Rem. 209P	Windjammer	15.3 gr / 10,700 PSI	16.0 gr / 11,400 PSI	—
7/8 oz	Internat'l	Win. 209	Fed. 20S1	14.6 gr / 11,400 PSI	—	—
7/8 oz	Internat'l	Win. 209	Hor. Versalite	14.6 gr / 11,000 PSI	—	—
7/8 oz	Internat'l	Win. 209	PC20	15.0 gr / 11,200 PSI	—	—
7/8 oz	Internat'l	Win. 209	Rem. RXP20	14.7 gr / 10,200 PSI	15.3 gr / 11,300 PSI	—
7/8 oz	Internat'l	Win. 209	WAA20F1	14.5 gr / 10,500 PSI	15.1 gr / 11,500 PSI	—
7/8 oz	Internat'l	Win. 209	Windjammer	14.5 gr / 10,800 PSI	—	—
7/8 oz	Universal	CCI 209SC	Fed. 20S1	17.0 gr / 9,500 PSI	17.6 gr / 10,100 PSI	—
7/8 oz	Universal	CCI 209SC	Hor. Versalite	17.1 gr / 9,300 PSI	17.5 gr / 9,800 PSI	18.0 gr / 10,200 PSI
7/8 oz	Universal	CCI 209SC	PC20	17.5 gr / 9,500 PSI	—	—
7/8 oz	Universal	CCI 209SC	Rem. RXP20	17.5 gr / 9,000 PSI	18.0 gr / 9,800 PSI	18.0 gr / 10,000 PSI
7/8 oz	Universal	CCI 209SC	WAA20F1	17.2 gr / 9,200 PSI	17.7 gr / 9,500 PSI	18.0 gr / 10,000 PSI
7/8 oz	Universal	CCI 209SC	Windjammer	17.0 gr / 9,500 PSI	17.6 gr / 9,800 PSI	18.2 gr / 10,300 PSI
7/8 oz	Universal	Fed. 209A	Fed. 20S1	16.7 gr / 10,000 PSI	17.0 gr / 10,700 PSI	—
7/8 oz	Universal	Fed. 209A	Hor. Versalite	17.0 gr / 9,900 PSI	17.5 gr / 10,700 PSI	18.0 gr / 11,200 PSI
7/8 oz	Universal	Fed. 209A	PC20	17.0 gr / 10,000 PSI	—	—
7/8 oz	Universal	Fed. 209A	Rem. RXP20	17.0 gr / 9,800 PSI	17.7 gr / 10,200 PSI	18.0 gr / 10,400 PSI
7/8 oz	Universal	Fed. 209A	WAA20F1	17.0 gr / 10,100 PSI	17.5 gr / 10,500 PSI	17.8 gr / 10,800 PSI
7/8 oz	Universal	Fed. 209A	Windjammer	17.0 gr / 9,600 PSI	17.5 gr / 10,300 PSI	18.0 gr / 10,800 PSI
7/8 oz	Universal	Rem. 209P	Fed. 20S1	18.0 gr / 9,300 PSI	—	—
7/8 oz	Universal	Rem. 209P	Hor. Versalite	17.8 gr / 8,800 PSI	18.6 gr / 9,500 PSI	19.2 gr / 9,700 PSI
7/8 oz	Universal	Rem. 209P	Rem. RXP20	18.5 gr / 8,400 PSI	19.0 gr / 9,100 PSI	—
7/8 oz	Universal	Rem. 209P	WAA20F1	17.8 gr / 8,700 PSI	18.3 gr / 9,500 PSI	—
7/8 oz	Universal	Rem. 209P	Windjammer	18.0 gr / 8,900 PSI	18.5 gr / 9,400 PSI	—
7/8 oz	Universal	Win. 209	Fed. 20S1	17.4 gr / 9,600 PSI	18.0 gr / 10,300 PSI	—
7/8 oz	Universal	Win. 209	Hor. Versalite	17.0 gr / 9,600 PSI	17.5 gr / 10,100 PSI	18.0 gr / 10,300 PSI
7/8 oz	Universal	Win. 209	PC20	17.5 gr / 9,400 PSI	—	—
7/8 oz	Universal	Win. 209	Rem. RXP20	17.5 gr / 9,300 PSI	18.2 gr / 9,800 PSI	—
7/8 oz	Universal	Win. 209	WAA20	17.0 gr / 9,300 PSI	17.5 gr / 9,900 PSI	18.0 gr / 10,200 PSI
7/8 oz	Universal	Win. 209	WAA20F1	17.0 gr / 10,000 PSI	17.4 gr / 10,200 PSI	17.9 gr / 10,400 PSI
7/8 oz	Universal	Win. 209	Windjammer	17.5 gr / 9,200 PSI	18.2 gr / 9,900 PSI	18.5 gr / 10,400 PSI
				1165 fps	1220 fps	1250 fps
1 oz	HS-6	CCI 209M	WAA20F1	21.5 gr / 9,800 PSI	23.0 gr / 11,200 PSI	—
1 oz	HS-6	CCI 209M	REM SP20	21.3 gr / 10,000 PSI	22.5 gr / 10,800 PSI	—
1 oz	HS-6	Fed. 209A	REM SP20	21.0 gr / 10,100 PSI	22.5 gr / 11,300 PSI	—
1 oz	HS-6	Fed. 209A	WAA20F1	21.0 gr / 9,700 PSI	22.5 gr / 11,200 PSI	—
1 oz	HS-6	Win. 209	REM SP20	21.5 gr / 9,900 PSI	23.0 gr / 10,900 PSI	24.0 gr / 11,700 PSI
1 oz	HS-6	Win. 209	WAA20F1	21.5 gr / 10,100 PSI	23.0 gr / 11,700 PSI	—
20 GA., 2 3/4", FIOCCHI PLASTIC TARGET SHELLS (LOW BASE WAD)						
				1200 fps	1225 fps	1250 fps
7/8 oz	Internat'l	Fio. 616	Fed. 20S1	14.6 gr / 11,800 PSI	—	—

SHOT SHELL DATA

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE		
20 GA., 2 3/4", FIOCCHI PLASTIC TARGET SHELLS (LOW BASE WAD) CONTINUED						
				1200 fps	1225 fps	1250 fps
7/8 oz	Internat'l	Fio. 616	Hor. Versalite	14.8 gr / 11,400 PSI	—	—
7/8 oz	Internat'l	Fio. 616	PC20	14.8 gr / 11,000 PSI	—	—
7/8 oz	Internat'l	Fio. 616	Rem. RXP 20	15.0 gr / 10,700 PSI	—	—
7/8 oz	Internat'l	Fio. 616	WAA20	14.8 gr / 11,700 PSI	—	—
7/8 oz	Internat'l	Fio. 616	Windjammer	15.0 gr / 12,000 PSI	—	—
7/8 oz	Universal	Fio. 616	Fed. 20S1	16.6 gr / 9,800 PSI	17.0 gr / 10,600 PSI	—
7/8 oz	Universal	Fio. 616	Hor. Versalite	17.2 gr / 9,300 PSI	17.6 gr / 10,600 PSI	17.9 gr / 10,900 PSI
7/8 oz	Universal	Fio. 616	PC20	17.0 gr / 9,800 PSI	—	—
7/8 oz	Universal	Fio. 616	Rem. RXP 20	17.3 gr / 9,100 PSI	18.0 gr / 9,800 PSI	—
7/8 oz	Universal	Fio. 616	WAA20	17.0 gr / 9,300 PSI	17.6 gr / 9,800 PSI	18.0 gr / 10,000 PSI
7/8 oz	Universal	Fio. 616	Windjammer	17.5 gr / 9,400 PSI	17.8 gr / 9,900 PSI	18.0 gr / 10,200 PSI
7/8 oz	Universal	Ched. 209	Fed. 20S1	17.5 gr / 9,400 PSI	18.0 gr / 9,300 PSI	—
7/8 oz	Universal	Ched. 209	Rem. RXP 20	18.5 gr / 8,700 PSI	—	—
7/8 oz	Universal	Ched. 209	WAA20	18.0 gr / 9,000 PSI	—	—
20 GA., 2 3/4", REMINGTON RXP, PREMIER AND STS PLASTIC SHELLS						
				1150 fps	1200 fps	1250 fps
3/4 oz	Internat'l	CCI 209M	PC20	12.2 gr / 9,400 PSI	13.0 gr / 10,800 PSI	—
3/4 oz	Internat'l	CCI 209M	WAA20	12.0 gr / 9,200 PSI	13.1 gr / 10,700 PSI	—
3/4 oz	Internat'l	Rem. 209P	PC20	12.5 gr / 8,400 PSI	13.7 gr / 9,500 PSI	—
3/4 oz	Internat'l	Rem. 209P	WAA20	12.5 gr / 8,600 PSI	13.6 gr / 10,600 PSI	—
3/4 oz	Internat'l	Win. 209	PC20	12.5 gr / 9,000 PSI	13.2 gr / 10,200 PSI	14.2 gr / 11,800 PSI
3/4 oz	Internat'l	Win. 209	WAA20	12.0 gr / 9,000 PSI	13.2 gr / 10,400 PSI	—
				1200 fps	1225fps	1250 fps
7/8 oz	Internat'l	CCI 209	Hor. Versalite	14.0 gr / 11,400 PSI	—	—
7/8 oz	Internat'l	Fed. 209	Windjammer	14.0 gr / 11,800 PSI	—	—
7/8 oz	Internat'l	Rem. 209P	RXP20	14.0 gr / 10,700 PSI	—	—
7/8 oz	Internat'l	Win. 209	PC20	14.0 gr / 11,000 PSI	—	—
7/8 oz	Internat'l	Win. 209	WAA20	14.0 gr / 11,900 PSI	—	—
7/8 oz	Universal	CCI 209SC	Fed. 20S1	15.2 gr / 10,700 PSI	15.6 gr / 11,500 PSI	—
7/8 oz	Universal	CCI 209SC	Hor. Versalite	15.6 gr / 11,000 PSI	16.1 gr / 11,400 PSI	—
7/8 oz	Universal	CCI 209SC	Rem. RXP 20	15.5 gr / 10,400 PSI	16.0 gr / 11,000 PSI	16.4 gr / 11,300 PSI
7/8 oz	Universal	CCI 209SC	WAA20F1	15.4 gr / 10,700 PSI	15.9 gr / 10,900 PSI	16.2 gr / 11,900 PSI
7/8 oz	Universal	CCI 209SC	Windjammer	15.4 gr / 10,700 PSI	15.8 gr / 11,400 PSI	—
7/8 oz	Universal	Fed. 209A	Fed. 20S1	15.0 gr / 11,900 PSI	—	—
7/8 oz	Universal	Fed. 209A	Hor. Versalite	15.2 gr / 11,400 PSI	15.5 gr / 12,000 PSI	—
7/8 oz	Universal	Fed. 209A	Rem. RXP 20	15.4 gr / 10,700 PSI	15.9 gr / 11,300 PSI	—
7/8 oz	Universal	Fed. 209A	WAA20F1	15.0 gr / 11,200 PSI	15.5 gr / 12,000 PSI	—
7/8 oz	Universal	Rem. 209P	Fed. 20S1	16.0 gr / 10,700 PSI	16.2 gr / 11,100 PSI	16.5 gr / 11,400 PSI
7/8 oz	Universal	Rem. 209P	Hor. Versalite	16.0 gr / 10,200 PSI	16.5 gr / 10,900 PSI	17.0 gr / 11,700 PSI
7/8 oz	Universal	Rem. 209P	Rem. RXP 20	15.8 gr / 9,900 PSI	16.7 gr / 10,700 PSI	—
7/8 oz	Universal	Rem. 209P	WAA20F1	15.6 gr / 10,500 PSI	16.0 gr / 11,000 PSI	16.5 gr / 11,200 PSI
7/8 oz	Universal	Rem. 209P	Windjammer	16.0 gr / 10,600 PSI	16.5 gr / 11,200 PSI	—
7/8 oz	Universal	Win. 209	Fed. 20S1	15.5 gr / 10,800 PSI	16.0 gr / 11,500 PSI	—
7/8 oz	Universal	Win. 209	Hor. Versalite	16.0 gr / 10,800 PSI	16.5 gr / 11,900 PSI	—
7/8 oz	Universal	Win. 209	Rem. RXP 20	16.0 gr / 10,400 PSI	16.7 gr / 11,400 PSI	—

SHOTSHELL DATA

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE		
20 GA., 2 3/4", REMINGTON RXP, PREMIER AND STS PLASTIC SHELLS CONTINUED						
				1200 fps	1225fps	1250 fps
7/8 oz	Universal	Win. 209	Windjammer	16.0 gr / 10,800 PSI	16.5 gr / 11,500 PSI	—
				1165 fps	1220 fps	
1 oz	HS-6	CCI 209	Rem. SP 20	20.5 gr / 11,500 PSI	—	
1 oz	HS-6	CCI 209	WAA20F1	20.5 gr / 11,900 PSI	—	
1 oz	HS-6	CCI 209	Windjammer	19.6 gr / 11,200 PSI	—	
1 oz	HS-6	CCI 209M	Fed. 20S1	19.5 gr / 11,600 PSI	—	
1 oz	HS-6	CCI 209M	WAA20F1	19.7 gr / 11,300 PSI	—	
1 oz	HS-6	Fed. 209A	Rem. SP 20	19.5 gr / 11,400 PSI	—	
1 oz	HS-6	Fed. 209A	WAA20F1	19.5 gr / 11,100 PSI	—	
1 oz	HS-6	Rem. 209P	Fed. 20S1	20.0 gr / 10,900 PSI	—	
1 oz	HS-6	Rem. 209P	WAA20F1	20.4 gr / 10,900 PSI	21.6 gr / 11,700 PSI	
1 oz	HS-6	Rem. 209P	Windjammer	20.8 gr / 10,900 PSI	—	
1 oz	HS-6	Win. 209	Fed. 20S1	19.7 gr / 11,500 PSI	—	
1 oz	HS-6	Win. 209	Rem. SP 20	20.0 gr / 11,200 PSI	—	
1 oz	HS-6	Win. 209	WAA20F1	20.3 gr / 11,200 PSI	—	
1 oz	HS-6	Win. 209	Windjammer	20.0 gr / 11,200 PSI	—	
1 oz	HS-7	Rem. 209P	Rem. SP20	23.0 gr / 9,800 LUP	25.0 gr / 10,800 LUP	
				1150 fps		
1 1/8 oz	HS-7	Rem. 209P	Rem. RP20	23.5 gr / 11,000 LUP		
20 GA., 2 3/4", WINCHESTER COMPRESSION-FORMED AA TYPE SHELLS						
				1150 fps	1200 fps	1250 fps
3/4 oz	Internat'l	CCI 209M	Fio. 20	12.2 gr / 9,700 PSI	13.0 gr / 10,800 PSI	—
3/4oz	Internat'l	CCI 209M	PC20	12.3 gr / 10,200 PSI	13.1 gr / 11,900 PSI	—
3/4oz	Internat'l	CCI 209M	WAA20	12.1 gr / 10,100 PSI	12.7 gr / 11,500 PSI	—
3/4oz	Internat'l	Rem. 209P	Fio. 20	12.8 gr / 8,100 PSI	13.8 gr / 10,200 PSI	14.5 gr / 10,900 PSI
3/4oz	Internat'l	Rem. 209P	PC20	12.5 gr / 9,000 PSI	14.0 gr / 10,900 PSI	—
3/4oz	Internat'l	Rem. 209P	WAA20	12.1 gr / 9,000 PSI	13.2 gr / 10,500 PSI	—
3/4oz	Internat'l	Win. 209	Fio. 20	12.3 gr / 9,000 PSI	12.9 gr / 10,500 PSI	14.0 gr / 11,800 PSI
3/4oz	Internat'l	Win. 209	PC20	12.2 gr / 10,400 PSI	13.0 gr / 11,300 PSI	—
3/4oz	Internat'l	Win. 209	WAA20	12.0 gr / 10,100 PSI	13.0 gr / 11,700 PSI	—
				1200 fps		
7/8 oz	Internat'l	CCI 209	Hor. Versalite	14.0 gr / 11,000 PSI		
7/8 oz	Internat'l	Rem. 209P	Rem. RXP20	14.0 gr / 10,800 PSI		
7/8 oz	Internat'l	Win. 209	PC20	14.0 gr / 11,200 PSI		
7/8 oz	Internat'l	Win. 209	WAA20	14.0 gr / 11,800 PSI		
7/8 oz	Universal	CCI 209SC	Fed. 20S1	14.6 gr / 11,800 PSI		
7/8 oz	Universal	CCI 209SC	Hor. Versalite	15.5 gr / 11,700 PSI		
7/8 oz	Universal	CCI 209SC	PC20	15.5 gr / 11,600 PSI		
7/8 oz	Universal	CCI 209SC	Rem. RXP20	15.3 gr / 11,100 PSI		
7/8 oz	Universal	CCI 209SC	WAA20F1	15.1 gr / 11,600 PSI		
7/8 oz	Universal	CCI 209SC	Windjammer	15.5 gr / 11,900 PSI		
7/8 oz	Universal	Fed. 209A	Fed. 20S1	14.3 gr / 12,000 PSI		
7/8 oz	Universal	Fed. 209A	Hor. Versalite	14.8 gr / 11,700 PSI		
7/8 oz	Universal	Fed. 209A	PC20	14.7 gr / 11,900 PSI		
7/8 oz	Universal	Fed. 209A	Rem. RXP20	14.8 gr / 11,400 PSI		

SHOTSHELL DATA

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE		
20 GA., 2 3/4", WINCHESTER COMPRESSION-FORMED AA TYPE SHELLS CONTINUED						
1200 fps						
7/8 oz	Universal	Fed. 209A	WAA20F1	14.6 gr / 12,000 PSI		
7/8 oz	Universal	Fed. 209A	Windjammer	15.8 gr / 11,700 PSI		
7/8 oz	Universal	Rem. 209P	Fed. 20S1	15.3 gr / 11,500 PSI		
7/8 oz	Universal	Rem. 209P	Hor. Versalite	16.0 gr / 11,400 PSI		
7/8 oz	Universal	Rem. 209P	PC20	15.5 gr / 11,100 PSI		
7/8 oz	Universal	Rem. 209P	Rem. RXP20	15.8 gr / 9,800 PSI		
7/8 oz	Universal	Rem. 209P	WAA20F1	15.3 gr / 11,600 PSI		
7/8 oz	Universal	Rem. 209P	Windjammer	16.0 gr / 11,700 PSI		
7/8 oz	Universal	Win. 209	Fed. 20S1	14.7 gr / 12,000 PSI		
7/8 oz	Universal	Win. 209	Hor. Versalite	15.0 gr / 11,600 PSI		
7/8 oz	Universal	Win. 209	Rem. RXP20	15.0 gr / 11,000 PSI		
7/8 oz	Universal	Win. 209	Windjammer	15.0 gr / 11,800 PSI		
7/8 oz	Universal	Win. 209	WAA20	15.5 gr / 10,200 PSI		
1165 fps 1220 fps 1250 fps						
1 oz	HS-6	Rem. 209P	Rem. SP20	19.8 gr / 11,900 PSI	—	—
1 oz	HS-6	Rem. 209P	WAA20F1	19.5 gr / 11,800 PSI	—	—
1 oz	HS-6	Win. 209	WAA20F1	21.5 gr / 10,000 LUP	22.5 gr / 10,900 LUP	—
1 oz	HS-6	Win. 209	Rem. SP20	23.0 gr / 10,100 LUP	24.0 gr / 10,800 LUP	—
1 oz	HS-7	Win. 209	WAA20F1	23.5 gr / 9,200 LUP	24.5 gr / 10,100 LUP	25.5 gr / 10,800 LUP
1 oz	HS-7	Win. 209	Rem. SP20	23.5 gr / 9,400 LUP	24.5 gr / 10,600 LUP	—
1175 fps						
1 1/8 oz	HS-7	Rem. 209P	Rem. RP20	24.5 gr / 10,600 LUP		
1 1/8 oz	HS-7	Win. 209	Rem. RP20	24.5 gr / 10,300 LUP		
20 GA., 3", WINCHESTER COMPRESSION-FORMED SUPER-X TYPE SHELLS						
1220 fps						
1 1/8 oz	HS-7	Rem. 209P	WAA20	27.0 gr / 11,200 LUP		
1 1/8 oz	HS-7	Win. 209	WAA20	27.0 gr / 11,100 LUP		
1135 fps						
1 1/4 oz	HS-7	Rem. 209P	WAA20	24.0 gr / 11,000 LUP		
1 1/4 oz	HS-7	Win. 209	WAA20	24.0 gr / 10,900 LUP		
28 GA., 2 3/4", FEDERAL PLASTIC TARGET SHELLS						
1200 fps 1225 fps 1250 fps						
3/4 oz	Universal	CCI 209SC	Fed. 28S1	14.3 gr / 10,600 PSI	15.1 gr / 11,400 PSI	15.3 gr / 11,800 PSI
3/4 oz	Universal	CCI 209SC	Rem. PT28	14.5 gr / 10,000 PSI	15.0 gr / 10,900 PSI	15.5 gr / 11,100 PSI
3/4 oz	Universal	Fed. 209A	Rem. PT28	14.2 gr / 11,400 PSI	—	—
3/4 oz	Universal	Win. 209	Fed. 28S1	14.5 gr / 10,700 PSI	15.0 gr / 11,500 PSI	15.5 gr / 12,400 PSI
3/4 oz	Universal	Win. 209	PC28	14.8 gr / 10,700 PSI	15.2 gr / 11,300 PSI	15.6 gr / 11,900 PSI
3/4 oz	Universal	Win. 209	Rem. PT28	14.5 gr / 10,200 PSI	15.2 gr / 10,900 PSI	15.8 gr / 11,700 PSI
13/16 oz	Universal	CCI 209SC	Fed. 28S1	14.9 gr / 12,100 PSI	—	—
13/16 oz	Universal	CCI 209SC	PC28	15.0 gr / 12,400 PSI	—	—
13/16 oz	Universal	CCI 209SC	Rem. PT28	15.1 gr / 11,100 PSI	—	—
13/16 oz	Universal	Win. 209	Fed. 28S1	14.9 gr / 12,300 PSI	—	—
13/16 oz	Universal	Win. 209	PC28	14.9 gr / 12,000 PSI	—	—

SHOTSHELL DATA

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE		
28 GA., 2 3/4", FEDERAL PLASTIC TARGET SHELLS CONTINUED						
				1200 fps	1225 fps	1250 fps
13/16 oz	Universal	Win. 209	Rem. PT28	14.9 gr / 11,600 PSI	—	—
7/8oz	HS-7	Rem. 209P	Rem. PT28	19.5 gr / 10,900 PSI	—	—
7/8 oz	HS-7	Win. 209	PC28	19.2 gr / 10,700 PSI	—	—
28 GA., 2 3/4", FIOCCHI PLASTIC TARGET SHELLS						
				1200 fps	1225 fps	1250 fps
3/4 oz	Universal	Fio. 616	Fed. 28S1	14.3 gr / 11,200 PSI	14.6 gr / 11,800 PSI	15.0 gr / 12,300 PSI
3/4 oz	Universal	Fio. 616	PC28	14.2 gr / 10,900 PSI	14.8 gr / 11,300 PSI	15.2 gr / 11,800 PSI
3/4 oz	Universal	Fio. 616	Rem. PT28	14.2 gr / 10,600 PSI	14.8 gr / 11,000 PSI	15.1 gr / 11,900 PSI
13/16 oz	Universal	Fio. 616	Fed. 28S1	14.5 gr / 12,400 PSI	—	—
13/16 oz	Universal	Fio. 616	PC28	14.5 gr / 12,100 PSI	—	—
13/16 oz	Universal	Fio. 616	Rem. PT28	15.0 gr / 11,900 PSI	—	—
7/8 oz	HS-7	Rem. 209P	PC28	19.0 gr / 10,100 PSI	—	—
7/8 oz	HS-7	Win. 209	Rem. PT28	19.5 gr / 11,100 PSI	—	—
28 GA., 2 3/4", REMINGTON STS PLASTIC SHELLS						
				1200 fps		
3/4 oz	Universal	CCI 209SC	PC28	13.6 gr / 12,200 PSI		
3/4 oz	Universal	CCI 209SC	Rem. PT28	13.8 gr / 12,100 PSI		
3/4 oz	Universal	CCI 209SC	WAA28	13.8 gr / 11,600 PSI		
3/4 oz	Universal	Fed. 209A	WAA28	13.5 gr / 12,200 PSI		
3/4 oz	Universal	Rem. 209P	PC28	13.6 gr / 12,000 PSI		
3/4 oz	Universal	Rem. 209P	Rem. PT28	13.8 gr / 12,000 PSI		
3/4 oz	Universal	Rem. 209P	WAA28	13.9 gr / 11,700 PSI		
3/4 oz	Universal	Win. 209	PC28	13.5 gr / 12,400 PSI		
3/4 oz	Universal	Win. 209	Rem. PT28	13.8 gr / 12,100 PSI		
3/4 oz	Universal	Win. 209	WAA28	13.8 gr / 11,500 PSI		
3/4 oz	HS-6	CCI 209SC	Rem. PT28	17.0 gr / 10,900 PSI		
3/4 oz	HS-6	CCI 209SC	WAA28	17.0 gr / 10,300 PSI		
3/4 oz	HS-6	Fed. 209A	Rem. PT28	16.7 gr / 11,700 PSI		
3/4 oz	HS-6	Fed. 209A	WAA28	16.7 gr / 11,000 PSI		
3/4 oz	HS-6	Rem. 209P	Rem. PT28	17.1 gr / 11,000 PSI		
3/4 oz	HS-6	Rem. 209P	WAA28	17.1 gr / 10,400 PSI		
3/4 oz	HS-6	Win. 209	Rem. PT28	17.0 gr / 11,500 PSI		
3/4 oz	HS-6	Win. 209	WAA28	17.0 gr / 10,700 PSI		
28 GA., 2 3/4", REMINGTON PREMIER UNIBODY SHELLS						
				1200 fps		
3/4 oz	Universal	CCI 209	PC28	14.0 gr / 10,000 PSI		
3/4 oz	Universal	Rem. 209P	Rem. PT28	14.3 gr / 10,200 PSI		
3/4 oz	Universal	Win. 209	Fed. 28S1	14.0 gr / 11,400 PSI		
3/4 oz	Universal	Win. 209	WAA28	13.8 gr / 10,600 PSI		
28 GA., 2 3/4", REMINGTON PLASTIC TARGET SHELLS						
				1200 fps		
3/4 oz	Universal	Rem. 209P	Rem. PT28	13.8 gr / 11,600 PSI		
3/4 oz	Universal	Win. 209	PC28	13.7 gr / 10,900 PSI		

SHOTSHELL DATA

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE		
28 GA., 2 3/4", WINCHESTER AA PLASTIC SHELLS						
				1200 fps	1225 fps	1250 fps
3/4 oz	Universal	CCI 209SC	PC28	13.0 gr / 12,000 PSI	—	—
3/4 oz	Universal	CCI 209SC	Rem. PT28	13.2 gr / 12,200 PSI	—	—
3/4 oz	Universal	CCI 209SC	WAA28	13.0 gr / 12,400 PSI	—	—
3/4 oz	Universal	Rem. 209P	Rem. PT28	13.2 gr / 11,900 PSI	—	—
3/4 oz	Universal	Win. 209	WAA28	13.0 gr / 10,800 PSI	—	—
3/4 oz	Universal	Win. 209	PC28	13.2 gr / 11,900 PSI	—	—
3/4 oz	HS-6	CCI 209SC	WAA28	16.6 gr / 11,500 PSI	—	—
3/4 oz	HS-6	Rem. 209P	PC28	16.4 gr / 12,400 PSI	—	—
3/4 oz	HS-6	Rem. 209P	WAA28	17.1 gr / 10,900 PSI	17.5 gr / 11,800 PSI	17.8 gr / 12,100 PSI
3/4 oz	HS-6	Win. 209	Rem. PT28	16.7 gr / 12,000 PSI	—	—
3/4 oz	HS-6	Win. 209	WAA28	17.1 gr / 10,900 PSI	17.5 gr / 11,600 PSI	17.9 gr / 12,300 PSI
410 BORE, 2 1/2", FEDERAL TARGET SHELLS						
				1200 fps		
1/2 oz	LIL'GUN	CCI 209SC	Fed. 410SC	12.9 gr / 11,800 PSI		
1/2 oz	LIL'GUN	CCI 209SC	Rem. SP410	12.8 gr / 11,400 PSI		
1/2 oz	LIL'GUN	CCI 209SC	WAA41	12.8 gr / 11,700 PSI		
1/2 oz	LIL'GUN	Fed. 209A	Fed. 410SC	12.9 gr / 11,800 PSI		
1/2 oz	LIL'GUN	Fed. 209A	Rem. SP410	13.0 gr / 11,700 PSI		
1/2 oz	LIL'GUN	Fed. 209A	WAA41	13.0 gr / 11,100 PSI		
1/2 oz	LIL'GUN	Rem. 209P	Fed. 410SC	13.0 gr / 11,000 PSI		
1/2 oz	LIL'GUN	Rem. 209P	Rem. SP410	13.1 gr / 11,200 PSI		
1/2 oz	LIL'GUN	Rem. 209P	WAA41	13.1 gr / 10,800 PSI		
1/2 oz	LIL'GUN	Win. 209	Fed. 410SC	12.9 gr / 11,600 PSI		
1/2 oz	LIL'GUN	Win. 209	Orange PC	12.8 gr / 11,500 PSI		
1/2 oz	LIL'GUN	Win. 209	Rem. SP410	12.8 gr / 11,700 PSI		
1/2 oz	LIL'GUN	Win. 209	WAA41	12.8 gr / 11,700 PSI		
1/2 oz	H110	Fed. 209A	Fed. 410SC	15.0 gr / 10,200 PSI		
1/2 oz	H110	Fed. 209A	Orange PC	15.5 gr / 8,500 PSI		
1/2 oz	H110	Win. 209	Orange PC	15.5 gr / 8,400 PSI		
1/2 oz	H110	Win. 209	WAA41	15.0 gr / 9,700 PSI		
410 BORE, 2 1/2", REMINGTON-PETERS "SP" PLASTIC SHELLS						
				1200 fps		
1/2 oz	LIL'GUN	Rem. 209P	Rem. SP410	13.0 gr / 10,900 PSI		
1/2 oz	LIL'GUN	Rem. 209P	WAA41	13.1 gr / 10,200 PSI		
1/2 oz	LIL'GUN	Win. 209	Rem. SP410	12.7 gr / 11,700 PSI		
1/2 oz	LIL'GUN	Win. 209	WAA41	12.8 gr / 11,600 PSI		
1/2 oz	H110	Rem. 209P	Rem. SP410	15.0 gr / 9,400 PSI		
1/2 oz	H110	Rem. 209P	Fed. 410SC	15.0 gr / 9,500 PSI		
1/2 oz	H110	Rem. 209P	Orange PC	16.5 gr / 7,000 PSI		
410 BORE, 2 1/2", REMINGTON-PETERS "STS" PLASTIC SHELLS						
				1200 fps		
1/2 oz	LIL'GUN	CCI 209SC	Fed. 410SC	12.9 gr / 11,800 PSI		
1/2 oz	LIL'GUN	CCI 209SC	Orange PC	13.0 gr / 11,300 PSI		
1/2 oz	LIL'GUN	CCI 209SC	Rem. SP410	12.9 gr / 11,600 PSI		

SHOTSHELL DATA

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE
410 BORE, 2 1/2", REMINGTON-PETERS "STS" PLASTIC SHELLS CONTINUED				
1200 fps				
1/2 oz	LIL'GUN	CCI 209SC	WAA41	12.8 gr / 11,300 PSI
1/2 oz	LIL'GUN	Fed. 209A	Fed. 410SC	12.9 gr / 11,600 PSI
1/2 oz	LIL'GUN	Fed. 209A	Orange PC	13.1 gr / 11,000 PSI
1/2 oz	LIL'GUN	Fed. 209A	Rem. SP410	12.9 gr / 10,900 PSI
1/2 oz	LIL'GUN	Fed. 209A	WAA41	12.9 gr / 11,200 PSI
1/2 oz	LIL'GUN	Rem. 209P	Fed. 410SC	13.0 gr / 11,000 PSI
1/2 oz	LIL'GUN	Rem. 209P	Orange PC	13.3 gr / 10,400 PSI
1/2 oz	LIL'GUN	Rem. 209P	Rem. SP410	13.2 gr / 10,800 PSI
1/2 oz	LIL'GUN	Rem. 209P	WAA41	13.0 gr / 10,600 PSI
1/2 oz	LIL'GUN	Win. 209	Fed. 410SC	12.6 gr / 11,800 PSI
1/2 oz	LIL'GUN	Win. 209	Orange PC	12.9 gr / 11,100 PSI
1/2 oz	LIL'GUN	Win. 209	Rem. SP410	12.6 gr / 11,600 PSI
1/2 oz	LIL'GUN	Win. 209	WAA41	12.9 gr / 11,500 PSI
1/2 oz	H110	Fed. 209A	Fed. 410SC	14.2 gr / 10,600 PSI
1/2 oz	H110	Rem. 209P	Fed. 410SC	14.7 gr / 9,600 PSI
1/2 oz	H110	Rem. 209P	Orange PC	15.2 gr / 9,300 PSI
1/2 oz	H110	Rem. 209P	Rem. SP410	14.8 gr / 8,900 PSI
1/2 oz	H110	Win. 209	WAA41	14.0 gr / 10,000 PSI
410 BORE, 2 1/2", WINCHESTER COMPRESSION-FORMED AA PLASTIC SHELLS				
1200 fps				
1/2 oz	LIL'GUN	CCI 209SC	Fed. 410SC	11.9 gr / 12,300 PSI
1/2 oz	LIL'GUN	CCI 209SC	Orange PC	12.4 gr / 11,800 PSI
1/2 oz	LIL'GUN	CCI 209SC	Rem. SP410	12.3 gr / 12,000 PSI
1/2 oz	LIL'GUN	CCI 209SC	WAA41	12.3 gr / 12,000 PSI
1/2 oz	LIL'GUN	Fed. 209A	Fed. 410SC	12.2 gr / 12,400 PSI
1/2 oz	LIL'GUN	Fed. 209A	Orange PC	12.6 gr / 11,700 PSI
1/2 oz	LIL'GUN	Fed. 209A	Rem. SP410	12.6 gr / 11,800 PSI
1/2 oz	LIL'GUN	Fed. 209A	WAA41	12.6 gr / 11,500 PSI
1/2 oz	LIL'GUN	Rem. 209P	Fed. 410SC	12.5 gr / 12,400 PSI
1/2 oz	LIL'GUN	Rem. 209P	Orange PC	12.5 gr / 11,100 PSI
1/2 oz	LIL'GUN	Rem. 209P	Rem. SP410	12.6 gr / 11,500 PSI
1/2 oz	LIL'GUN	Rem. 209P	WAA41	12.5 gr / 11,700 PSI
1/2 oz	LIL'GUN	Win. 209	Fed. 410SC	12.0 gr / 12,400 PSI
1/2 oz	LIL'GUN	Win. 209	Orange PC	12.5 gr / 11,600 PSI
1/2 oz	LIL'GUN	Win. 209	Rem. SP410	12.5 gr / 12,200 PSI
1/2 oz	LIL'GUN	Win. 209	WAA41	12.2 gr / 12,300 PSI
1/2 oz	H110	Win. 209	WAA41	14.0 gr / 9,900 LUP
1/2 oz	H110	Win. 209	Fed. 410SC	14.0 gr / 9,100 LUP
1/2 oz	H110	Fed. 209A	Orange PC	15.0 gr / 9,000 PSI
1/2 oz	H110	Win. 209	Orange PC	14.0 gr / 9,500 PSI
410 BORE, 3", FEDERAL PLASTIC GAME SHELLS				
1135 fps				
11/16 oz	LIL'GUN	Fed. 209A	Fed. 410SC	13.0 gr / 13,400 PSI
11/16 oz	LIL'GUN	Fed. 209A	WAA41	13.0 gr / 12,400 PSI
11/16 oz	LIL'GUN	Rem. 209P	Rem. SP410	13.1 gr / 12,900 PSI

SHOTSHELL DATA

SHOT	POWDER	PRIMER	WAD	CHARGE/PRESSURE	
410 BORE, 3", FEDERAL PLASTIC GAME SHELLS CONTINUED					
1135 fps					
11/16 oz	LIL'GUN	Win. 209	Fed. 410SC	12.9 gr / 13,500 PSI	
11/16 oz	LIL'GUN	Win. 209	WAA41	12.8 gr / 12,900 PSI	
11/16 oz	H110	Fed. 209A	Fed. 410SC	14.9 gr / 12,300 PSI	
11/16 oz	H110	Win. 209	WAA41	15.0 gr / 11,800 PSI	
410 BORE, 3", REMINGTON "SP" PLASTIC SHELLS					
1135 fps					
11/16 oz	LIL'GUN	Rem. 209P	Rem. SP410	12.8 gr / 12,900 PSI	
11/16 oz	LIL'GUN	Win. 209	WAA41	12.7 gr / 13,500 PSI	
11/16 oz	H110	Rem. 209P	Rem. SP410	15.0 gr / 11,800 PSI	
11/16 oz	H110	Win. 209	WAA41	14.5 gr / 12,800 PSI	
410 BORE, 3", WINCHESTER COMPRESSION-FORMED PLASTIC SHELLS					
1100 fps 1135 fps					
11/16 oz	LIL'GUN	CCI 209	Orange PC	12.2 gr / 13,300 PSI	—
11/16 oz	LIL'GUN	CCI 209	WAA41	11.6 gr / 13,400 PSI	—
11/16 oz	LIL'GUN	Rem. 209P	Orange PC	12.3 gr / 13,500 PSI	—
11/16 oz	LIL'GUN	Rem. 209P	Rem. SP410	12.0 gr / 13,300 PSI	—
11/16 oz	LIL'GUN	Rem. 209P	WAA41	11.8 gr / 13,500 PSI	—
11/16 oz	H110	Fed. 209A	Fed. 410SC	—	14.1 gr / 13,400 PSI
11/16 oz	H110	Rem. 209P	Rem. SP410	—	14.3 gr / 12,500 PSI
11/16 oz	H110	Win. 209	WAA41	—	13.5 gr / 10,900 PSI



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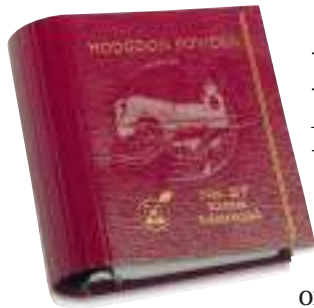
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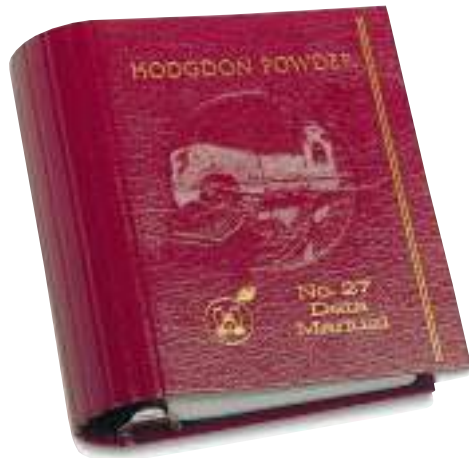


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