



Jack found the full size and stock shape ideal for off hand shooting. He has a background of competitive shooting, much of it with air rifles. His comments and input were very helpful.

# WALTHER'S LGV AIR RIFLES SMOOTH OPERATORS

German firearm manufacturer Walther, sometimes referred to as “Carl Walther” was founded in 1886, initially making hunting and target rifles.

Pistols were added to the product range in the early 1900's and by 1938 the Walther P38 was good enough to replace the P-08 Luger as the preferred sidearm for the German military. Pistols became the mainstay of production but Walther retained its involvement with hunting and target rifles, adding target pistols and air powered models to their range. Target models dominate Walther's current rifle production, but the company continues to produce quality sporters for the recreational shooter.

The Walther LGV air rifles for this review by GUNS Australia, are designed for club level competition or recreational use. A synthetic stocked LGV Challenger Ultra represents the .177" (4.5mm) calibre, and an LGV Master model in .22" (5.5mm).

Walther has introduced a number of significant innovations in the development and manufacturing of firearms, and is currently among the leading group of innovative target arms manufacturers. One of its developments was the LGV model air rifle of 1964, which incorporated a barrel locking system to enable a break barrel spring powered air rifle to shoot with accuracy similar to a fixed barrel rifle. Almost 50 years later, a new version, designated LGV 2012 now has reduced vibration and noise as well as a rotating piston added to the well proven barrel lock system.

These advances are achieved by reducing metal to metal impact and sliding contact, major causes of vibration and noise in spring powered rifles. Walther replaced metal components, where possible, with lighter and softer non-metallic synthetics, which absorb rather than transmit vibration. For example, traditional metal to metal clearance or contact is replaced with “zero-play fit” for the cocking rod, made possible by mounting it in synthetic material. The piston glides on lightweight synthetic rings inside the cylinder also with “zero-play” fit to avoid metal to metal contact. Reduced vibration and the resulting reduction in noise promotes more pleasant shooting, smoother cycling and most importantly, improved accuracy.

Other positive features of the LGV power plant are the rotating piston and the piston cushioning system. Normal operation of a compression coil spring, as we have in most air rifles, includes forces that induce some rotation at the free end of the coil with respect to the fixed end. The LGV's Rotary Piston is free to turn with the end of the spring and thus eliminates the friction typically generated between the rebounding spring and a conventional non-rotating piston.

Stopping the forward travel of the piston, while the spring is still in compression, normally introduces significant shock load and creates the “forward recoil” peculiar to

spring piston air rifles. To limit this effect, the LGV porting ensures that some air will remain trapped to cushion the piston at the end of its travel. This reduces vibration, helps accuracy and protects the scope.

There are a number of manufacturers offering various vibration and recoil minimisation mechanisms on spring piston rifles to improve accuracy. Some of these are very effective in achieving the accuracy gain but generally at the expense of complex and weighty mechanisms. Walther has combined a clever set of features in the new LGV rifles that retain the wonderful simplicity and relative lightness of the break barrel, spring-piston design and yet achieve accuracy comparable to its more complex and heavier competitors. Walther has gone a step further in its development by producing a spring powered gun that is noticeably quieter. The harsh mechanical noises of the typical “springer” are replaced by much softer sounds in the LGV.

In principle, the power plant of the highly refined LGV is a conventional spring powered break-barrel action. Auto safety is the modern norm for any action where a trigger release during the loading process could potentially harm the user or the rifle. This applies to all direct loading spring powered rifles, both fixed and break barrel types.

Walther realised the initial annoyance this



The Challenger Ultra with scope fitted, represents the typical modern spring-piston air rifle.



The LGV rifles are well suited for scope use. Scopes improve target recognition and aiming precision immensely for most people

necessary feature can cause for those not used to safeties, e.g. target shooters, and located the slide switch controlling the safety in an ideal, ambidextrous position near the thumb of the trigger hand. The mechanical source of power in the gun, the mainspring, is made of "valve spring wire". Walther claims that this spring will have an extremely long life and it will not fatigue if it stays cocked for a long time. This may sound like a fanciful statement to those of us who have pulled out kinked, bent, broken and collapsed springs from air rifles, but springs, like everything else, are not created equal. A car engine's valve spring, during its lifetime will do a few hundred million compression-rebound cycles, it can stay compressed for a year or more during storage and then continue to perform when the engine is re-started. Yes, a well-made spring of top quality material can last the life of the airgun and the Walther spring sounds like it will do just that.

LGV rifles have a two stage trigger, showing their European and competition heritage. There is also a significant "free travel"

movement under a very light spring tension related to the automatic safety. Adjusting the first stage screw out, resulted in a long first stage and an indistinct release point. This indistinct second stage is presumably the "sluggish" release that the Walther literature refers to in the statement, "the let off point can be set from sluggish to crisp".

Adjusting the first stage screw to minimum setting will result in a much more predictable release. The trigger release weight is also adjustable, down to a very light pull. This is a very good trigger for an air rifle, and the combination of adjustments available should keep most shooters happy. The trigger assembly's finger lever component is made of plastic with threaded metal inserts for the adjustment screws. Plastic triggers are an accepted form of weight saving on air rifles, but for the entrenched traditionalist, the accompanying Walther booklet advertises an accessory called a "tuning trigger", made of metal which permits adjustment of both the trigger weight and first stage travel".

Both barrels are carbon steel, 400mm long, 16mm diameter, microgroove rifled and threaded 1/2" X 20 UNF for attachments. Barrel and other steel surfaces are well-finished and blued, aluminium components, used where possible to save weight, have a matte black finish.

The .177 calibre Challenger Ultra barrel has an aluminium barrel weight

and a large knurled aluminium nut to protect the thread and the crowned muzzle. The nut matches the barrel weight for neat appearance. A steel hood protects the front bead of the Truglo fibre optic sights and the rear sight is adjustable. The upmarket Master has a more elegant looking barrel and competition quality sights. A tunnel front sight, with replaceable steel inserts, is mounted on dovetail grooves. The rear sight is basically the same aluminium micrometer adjustable unit as on the Challenger, minus the Truglo fibres. It uses the square notch sight blade typical of traditional target rifles. The knurled nut protecting the thread and muzzle is made of steel and matches the barrel diameter.

Stocks share overall dimensions, general shape, a 370mm trigger pull and ambidextrous design. There are also significant differences. The Challenger's black synthetic stock is 0.4kg lighter. It has effective moulded gripping surfaces, called "Ultra HI-GRIP" on the fore end and pistol grip.

The unbranded butt pad on the Challenger does nothing to enhance Walther's good name. It is oversize all around, (accentuated by a step-down groove on the end of the stock). The material looks like compressible foam but feels rather unfriendly, more like hard plastic.

The trigger guard is part of the moulded stock unit, practical but not pretty. Overall,



ABOVE LEFT: The .177 Challenger Ultra shot well with the heavy pointed Kodiak Match pellets. Target placed at 30 metres shows an outstanding tree shot, and a typical five shot group.

LEFT: For the LGV Master, a three shot group was appropriate, as the .22 is considered a hunting calibre. Shot from 30 metres, the group size indicates excellent hunting accuracy.

ABOVE: The aluminium barrel weight on the Challenger Ultra is firmly attached and carries the front sight. Designed to aid accuracy by limiting barrel vibration, it is also helpful when cocking the rifle.

the plastic stock is effective to use. It will tolerate bumps and scratches better than timber and make the price more affordable. A stained beech stock gives the Master a classy, traditional look without the cost of walnut. It is nicely laser checked, but on the grip only.

A well fitted Italian made recoil pad, whose combination of firmness and traction felt just right, completes the relatively plain but pleasant lines of the stock.

From the start of the shooting sessions the LGV's began to form favourable impressions. Both rifles had a solid, almost indestructible look and feel about them. Stocks are well proportioned for the average shooter and comb height suited both open sight and scope use.

Cocking the rifles gave the first impression of smoothness and quietness, no spring sounds at all. When firing, the sharp mechanical noises are gone, replaced by much softer, lower frequency sounds.

The Walther LGV's were easily the smoothest and quietest spring-piston rifles ever used by this shooter. Their shooting performance was similarly very good. Using a six power scope and pellets known to perform well, the rifles were shot on two different days, outdoors at a distance of 30 metres. The LGV Challenger Ultra immediately shot a very tight group of three, followed by a good five shot group. The pellets used were the very reliable Beeman Kodiak Match, weighing 10.6gn. The .22 calibre LGV Master did not like the pointed pellets offered and shot best with Beeman H&N Match wadcutters weighing 13.5gn. A typical pellet in the .177 Challenger will produce about 900fps and the .22 Master develops near 600fps, depending on pellet weight. Finding the right pellets can make a huge difference in air rifle accuracy.

It is an important task for the owner of a new air rifle to shoot likely pellets under the best possible conditions at realistic distances. This is the only way to check the accuracy of the rifle and pellet combination. It is wise to buy pellets in small quantities until they prove to be accurate in your rifle.

Walther LGV rifles are available in five models, each one offering a choice of .177 or .22 calibre. Their external dimensions are the same, but the weight differs, synthetic stock versions are 3.8kg and timber stocked versions 4.2kg. The supplied open sights also vary, the Truglo fibre optics may suit the eyes of the older shooter, whereas the younger shooter, interested in club competition should choose the more precise all metal sights. Very good photos and technical de-



The LGV's cock in the traditional manner but only after the barrel lock lever is released.

tails are available for the full range of models on the distributor's website, [www.frontierarms.com.au](http://www.frontierarms.com.au).

Walther has taken the metal spring-piston air rifle to a new level of technical refinement. The company considers that its improved metal spring design can be more than competitive against the concurrently used gas spring. After 20 odd years of gas spring use in air rifles, the initial hype, based on the misleading statement "a compressed gas is a perfect spring", has given way to the practical reality that both springs have their strengths and weaknesses. It seems that metal springs, air springs and pre-compressed air will coexist to propel air rifle pellets for the foreseeable future. There is no best or better propulsion system for all situations.

The Walther LGV is the kind of air rifle that most shooters will find a pleasure to use. It does not just shoot pellets, it does it with a high degree of refinement and class. It has a smooth and uniform cocking action and a quiet, shock free firing cycle. The LGV 2012 series will please those who do a lot of shooting and want their shooting to be an enjoyable pastime. Both rifles are in the adequate power range where cocking effort and recoil are easy to manage and good accuracy is readily achieved. Further advantages of under-stressed mechanicals are a long service life and smooth firing. The classy looking timber stocked LGV Master model in .22 is for the traditionalist. Its quality open sights can be used for target or informal practise. Alternately the rifle can be fitted with a scope for effective hunting. The more modern appearance and lower price of the synthetic stocked LGV Challenger Ultra in .177 cal. may be more attractive to the younger shooter. It is also suitable for recreational shooting, hunting or pest destruction. 🔫

## SPECS

### LGV AIR RIFLE

**Manufacturer:**  
Walther

**Operation**  
Break Barrel single loading

**Power**  
Steel Spring-Piston

**Barrel**  
400mm blued steel

**Length**  
110cm

**Trigger**  
Two stage Adjustable

**Scope**  
Receiver grooved for scope mounts

### LGV CHALLENGER ULTRA

**Calibre**  
.177 / 4.5mm

**Stock**  
Synthetic

**Sights**  
Open, Truglo fibre optic

**Weight**  
3.8kg

**Price**  
\$TBA

### LGV MASTER

**Calibre**  
.22 / 5.5mm

**Stock**  
Beech, Walnut stained

**Sights**  
Open, Tunnel front

**Weight**  
4.2kg

**Price**  
\$TBA