

TRIUMPH SPITFIRE – 50TH ANNIVERSARY YEAR

Definitely Not A Bomb

BY - TERENCE MCKILLEN

The Triumph Spitfire was first introduced at the Earls Court Motor Show, London, in October, 1962. It provided Triumph with a small two-seat sports car to complement the larger TR4 roadster and was designed to compete directly against the existing and already successful Austin Healey Sprite and MG Midget. There is no question that the Spitfire was an outstanding success when measured against its sales achievement over its rivals and from its record breaking eighteen year production run.

The ten day long 1962 show occurred over one of the the most eventful periods in modern history - the Cuban Missile Crisis - when the world came to the brink of nuclear war. The fate of millions hinged upon the ability of two men, U.S. President John F. Kennedy and Soviet Premier Nikita Khrushchev, to reach a compromise. Fortunately they did, and on a lighter vein, in the same month, "Dr. No", the first James Bond film, premiered in UK cinemas and The Beatles released their single "Love Me Do".

Italian designer Giovanni Michelotti who had already designed the successful Triumph Herald saloon, was commissioned in the late 1950s to produce a small roadster based on the Herald power plant

and platform. Triumph went to great lengths to ensure the Spitfire was a better car than the rival Sprite/Midget.¹ There was more legroom, wind down windows rather than side screens, a wider cockpit, storage space behind the seats, space for an overdrive unit, an opening boot (trunk), sleek body styling and ease of maintenance due to the large forward hinging bonnet (hood), which included the wheel arches, giving full access to the engine and front suspension, similar in concept to that of the E-Type Jaguar.

At the beginning of the 1960s, Standard-



1974 Mk IV Spitfire - the forward hinging hood included the wheel arches giving full access to the engine and front suspension

Triumph found itself once again in financial difficulties, and unable to put the new car into production. It was not until after the merger with Leyland was completed that funding became available and the car finally launched. Prior to adopting the "Spitfire" name, the development project was referred internally at Triumph as "the Bomb."² During its 18-year production run, the Spitfire underwent several updates in engine and mechanical components and a couple of major changes to body styling. Five models were developed as the Spitfire 4 (or Mark I), Mark II,



Mark III, Mark IV and 1500 (sometimes informally called the Mark V). Although not marketed as Spitfires, Triumph also developed a fast-back coupé variant which appeared from 1966 to 1973 as the GT6 in Mark I, Mark II and Mark III models.

The Michelotti prototype styling carried over to the initial production car with



Early 1960s Mk I Spitfire

very little change, although the full-width rear bumper was dropped in favour of two part-bumpers curving round each corner, with over riders. Although the mechanicals were basically stock Herald, consideration was initially given to building the body panels in fibre glass rather than pressed steel. The engine was the 1,147 cc 4-cylinder with a pushrod OHV cylinder

head and two valves per cylinder fed by twin SU carburettors. The rack and pinion steering and coil-and-wishbone front suspension and the single transverse-leaf swing axle at the back came from the Herald, although the latter ended up being the most controversial part of the car and its Achilles Heel. As with the Herald and Vitesse models, the rear wheels would tuck in and cause violent over steer if pushed too hard. The Spitfire was given a completely welded body, attached to the frame by just twelve bolts rather than separately bolting the body panels to the frame.³ The Herald chassis was shortened by 8.5" (216mm) and the outer rails and the rear outriggers were removed. Structural outer sills were used to stiffen the body tub. The windshield and frame came from the TR4.

The Spitfire was marketed as an inexpensive small sports car with a very basic level of trim which just about extended to include rubber mats. The early cars were referred to as the "Spitfire 4" (for the 4-cylinder engine, later also known as the Mark I), not to be confused with the later Spitfire Mark IV. In UK specification the in-line four produced 63 bhp (47 kW) at 5750 rpm, and 67 ft·lb (91 N·m) of torque at 3500 rpm. This gave a top speed of 92 mph (148 km/h), and it would achieve 0 to 60 mph (97 km/h)

in 17.3 seconds. Average fuel consumption was 31 mpg. For 1964 an overdrive option was added to the 4-speed manual gearbox to give more relaxed cruising. Wire wheels and a hard top were also available.⁴

In early 1965, the Spitfire Mark II was launched to maintain Triumph's edge over its BMC rivals following the introduction in 1964 of the improved Sprite and Midget



1963 Spitfire 4 (Mk I)

models. The new Spitfire was very similar to the Mark I but featured a more highly tuned engine, including a revised camshaft, a water-cooled intake manifold, and tubular exhaust manifold, which increased power to 67 bhp (50 kW) at 6000 rpm. The coil-spring clutch was replaced with a Borg and Beck diaphragm spring clutch. The exterior trim was modified with a new grille and badges. The interior trim was improved with redesigned seats and by covering most of the exposed surfaces with rubber cloth. The original moulded rubber floor coverings were replaced with moulded carpets.

Top speed was claimed to be 96 mph (154 km/h) and its 0-60 mph time was 15.5 seconds. The factory claimed that at highway speeds (70 mph (110 km/h)) the car achieved 38.1 miles per imperial gallon (7.41 L/100 km; 31.7 mpgUS).

In early 1967, the Mark III was introduced providing the first major facelift for the Spitfire. The front bumper was raised in response to new U.S. crash impact regulations. The front end looked somewhat different despite much of the bonnet pressing being carried over. The rear lost the over riders from the bumper, but gained reversing lights as standard and the interior received a wood-veneer instrument panel. For most of the Mark III range, the instrument cluster remained centre-mounted (as in the Mark I and Mark II) so as to facilitate both right-hand and left-hand drive versions. Other changes included larger front brake callipers, a larger 15-inch steering wheel, as used on the TR4, a wood-veneer instrument panel, better seats, and a change over from positive to negative grounding for the electrical circuitry.

Model name	Engine	Year	Number built
Triumph Spitfire 4 (Mark 1)	1147 cc inline 4	Oct 1962 – Dec 1964	45,753
Triumph Spitfire 4 Mark 2	1147 cc inline 4	Dec 1964 – Jan 1967	37,409
Triumph Spitfire Mark 3	1296 cc inline 4	Jan 1967– Dec 1970	65,320
Triumph Spitfire Mark 4	1296 cc inline 4	Nov 1970 – Dec 1974	70,021
Triumph Spitfire 1500	1493 cc inline 4	Dec 1974 – Aug 1980	95,829

Table from Wikipedia (http://en.wikipedia.org/wiki/Triumph_Spitfire)

The 1147 cc engine was replaced with a bored-out 1296 cc unit (the bore increasing from 69.3 mm (2.73 in) to 73.7 mm (2.90 in), stroke retained at 76 mm (3.0 in)), as fitted on contemporary Triumph Herald 13/60 and Triumph 1300 saloons. In SU twin-carburettor form, the engine put out a claimed 75 bhp (56 kW), and 75 ft·lb (102 N·m) of torque at 4000 rpm, and made the Mark III a notably more agile car. Popular options continued to include wire wheels, a hard top and a Laycock overdrive. The Mark III achieved 60 mph (97 km/h) in 14.5 seconds, and reaching a top speed of 95 mph (153 km/h). Average fuel consumption was improved slightly at 33mpg.⁵ By 1969, export models had to be changed to comply with new U.S. safety/emission regulations. The changes included a slight decrease in horsepower (68 bhp) due to emissions controls.

The Mark IV was introduced after the 1970 Earls Court motor show, becoming a 1971 model for the North American market. It comprised an almost complete re-skin executed by Michelotti. It featured a re-designed cut-off rear end based on the Triumph Stag design, giving it a strong family resemblance to other contemporary Michelotti-designed Triumph models including the Stag, the 2000/2500 and Dolomite/1300 saloons and allowing for new and larger tail lights. The lines of the front end were improved with a new bonnet and removal of the weld lines on top of the wings. Recessed door handles were fitted. The interior was also improved: a full-width dashboard was provided, putting the instruments in front of the driver rather than over the centre console. It was initially black plastic, but was replaced by a wooden one in 1973.

The engine continued at 1296 cc, but in 1973 was modified with larger con rods and big-end bearings to rationalize production with the six-cylinder engines being used in the TR6. Although the quoted power output of the Mark IV (63 bhp) appeared to be less than the earlier models (75 bhp), it was not detuned, but rather the numbers reflected a change in the method of measuring power output, which for the Mk IV was recorded according to the DIN system.⁶

The Mk IV Spitfire was somewhat slower than the Mk III due to it being heavier and came with a taller final drive (3.89:1 as opposed to 4.11:1) to improve fuel economy. A new gearbox, inherited from the Toledo, came with synchromesh on all gears. Peak power was recorded at 63 bhp (47 kW) at 6000 rpm, and the peak torque was 69 ft·lb (94 N·m) at 3500 rpm. The overall weight increased to 1,717 lb (779 kg) and the 0 to 60 mph (97 km/h) time was 16.2 seconds with the top speed of 90 mph (140 km/h). The overall fuel economy dipped to 32 mpg.

A UK Registered 1973 Mk IV Spitfire



By far the most significant change, however, was to the rear suspension, which was de-cambered and redesigned to eliminate the over steering tendencies of the original swing-axle design. The GT6 and Vitesse had already been modified by this time, finally resulting in safe and progressive handling. Triumph also introduced a new detachable hardtop design.⁷

The Spitfire 1500 was introduced to the North American market in 1973 in order to recapture some of the torque and power lost to emission controls on the 1296 cc, but was only introduced to the non-U.S. market in 1975, when it was quickly labelled by the public as the Spitfire Mk V. Torque was improved 20% by increasing the cylinder stroke to 87.5 mm (3.44 in). Some engine problems were encountered

through the continued use of three main bearings for the crankshaft. While the rest of the world saw 1500s with a compression ratio of 8:1, the compression of the North American model was reduced to 7.5:1 and fitted with a single Zenith-Stromberg carburettor to allow the use of lower octane unleaded fuel. After adding a catalytic converter and an exhaust gas recirculating system, the engine only delivered 53 bhp (40 kW) with a 0-60 time of 14.3 seconds. The notable exception to this was the 1976 onwards model year, where the compression ratio was raised to 9:1.

The North American Spitfire 1500 is easily identified by the big plastic over-riders and reflectors on the front and back wings



In the UK models, the 9:1 compression ratio, less restrictive emissions control equipment and the Type HS2 SU carburetors replaced with larger Type HS4 models, led to the most powerful variant of the Spitfire producing 71 bhp (53 kW) at 5500 rpm, and 82 ft·lb (111 N·m) of torque at 3000 rpm. Top speed was 100 mph (160 km/h), and 0 to 60 mph (97 km/h) was reached in 13.2 seconds. Fuel economy

was reduced to 29 mpg.⁸

The North American market Spitfire 1500 is easily identified by the big plastic over-riders and wing mounted reflectors. The US specification models up to 1978 still had chrome bumpers, but on the 1979 and 1980 models these were replaced by black rubber bumpers with built-in over-riders. Chassis extensions were also fitted under the boot to support the bumpers. The Spitfire proved very popular in North America with total sales of more than 45,000 cars, making the Spitfire an important member of the Triumph export range.⁹

Detail improvements continued to be made throughout the life of the 1500, and included reclining seats with chequered brushed nylon centre panels and head restraints, introduced for UK domestic market cars early in 1977 along with a new set of column stalk operated minor controls (as fitted to the TR7) replacing the old dashboard mounted knobs and switches. Also added for the model's final years were a wood dash, hazard flashers and an electric screen washer. Options such as the hard top, tonneau cover, map light and overdrive continued to be popular, but wire wheels ceased to be available.

It is reported that Triumph planned to keep the Spitfire in production until 1982, however the last Spitfire rolled off the assembly line at Canley in August 1980, shortly before the factory closed and one year after the demise of the MG Midget. Over the 18-year manufacturing run 314,332 Spitfires were built plus a further 40,926 GT6s with the majority of the total production being exported outside the UK, mainly to the U.S., although the Spitfire also proved to be very popular in Europe. Like its WW2 namesake, the Spitfire turned out to be one of Triumph's resounding success stories. **BCD**

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¹<http://www.ridedrive.co.uk/classic-triumph-spitfire.htm>

²Triumph Cars – the Complete Story, Robson, G. & Langworth, R., 1979-2004, MRP Publishing, ISBN 1 899870 72 5

³<http://www.triumphspitfire.nl/spithistory.html>

⁴http://en.wikipedia.org/wiki/Triumph_Spitfire

⁵http://en.wikipedia.org/wiki/Triumph_Spitfire

⁶http://en.wikipedia.org/wiki/Triumph_Spitfire

⁷<http://www.ridedrive.co.uk/classic-triumph-spitfire.htm>

⁸http://en.wikipedia.org/wiki/Triumph_Spitfire

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Join a club

Toronto Triumph Club & British Car Day

BY GLEN DONALDSON



The Toronto Triumph Club was founded in October 1982 when Bill & Nancy Gray (Of Gray Tool fame) gathered a small and very enthusiastic group, for a meeting in T.O. They had done this by spreading the word and leaving notes on car windshields, sticking flyers up in repair shops etc. - long before the Internet and Crackberries. The original concept of the club was a source of fun and fellowship - for social outings and drives. Plus the exchange of information and parts, as well as recommending shops for getting repairs done properly. The president of British Leyland Canada had even approached the new TTC to see if they could help move some new old parts stock.

The TTC grew on the strength and enthusiasm of its members and their desire to get out and have fun and use their old British sports cars. "All to Preserve and Drive the Triumph" has been our Club's motto, because the hard working people who built our cars back in England, built them for driving and sporting pleasure.

The TTC and its members continued to build many events with their enthusiasm - Spring Fling, The Canadian Classic and of course British Car Day - now in its 28th year. The Father of the TTC's first British Car Day is none other than our own Harold McQueen - an original owner of a 1960 TR3A. The first few years of British Car Day saw us gathering at the McQueen homestead in Kendal, Ontario - where every September about 125 to 150 British Cars would gather for a picnic, car games and fresh roasted corn.

In 1988 a brave group of TTC Members headed by Stu Beatty, now of Belleville - grew BCD into a bigger venue and took us to Bronte Creek Provincial Park - and the rest as they say is history and we now enjoy over 1,000 cars per show, at what has become the largest North American, one-day, British Car show. Congrats to those who religiously pack up and make the pilgrimage to Bronte in September - without you we could not stage such a grand event.

Website: www.TorontoTriumph.com