

Buying Guide - Standard Flying 12 1935 -1939

(see separate guide for Post-War Standard 12)

Introduction

This is one of a series of buyers guides on Standard cars

The intended audience is someone who is looking at a prospective purchase.

This guide does not cover looking for all the usual issues when buying any car such as oil pressure, lack of compression, oil in water, noises, rattles, do the electrics work etc, etc, since it assumes all those normal checks will also be done. The guide is intended to identify the good and bad points of the Flying 12 model in particular. This is issue 1, so may be updated over time.

Commission Numbers

To be found under the bonnet on a plate on the bulkhead (firewall)

Oct 35 A12S 400001 - 404000 (last, Nov 1936)

Sept 36 12AL D1 - 9995

12A E1 - 122

July 37 12BL DB1 - 11951

12B E123 - 138

July 38 12CB DB11952 - 13000

12C DC1 - 8823

Background and Model History

The First Standard Flying 12 was introduced for the Motor Show in October 1935 but was offered alongside the earlier 12Hp "upright" model for the first year. We now call this car a "Heavy 12" but its correct title is the 12AS. The car was sophisticated, quiet and well mannered. Standard soon realised that performance was quite poor, as the car was overbodied and indeed overpriced for its engine capacity.(1609cc)

Within a year the factory had developed a replacement, today we call it the Light 12. This was smaller and lighter than the earlier car and came with a cheaper price ticket. This was the model 12AL, which could also be specified with a 10Hp engine in a model called the Flying 10.

Both of the above models used a "vertical" radiator grille similar to earlier Standards

The next model, the 12BL, was a development, to include the famous "Waterfall" grille and arrived in July 1937. Subsequently the car was developed for the 1939 model year, where it became a "notchback", the model 12CB. The final version, also in model year 1939, and called the 12C, received Independent Front Suspension, IFS, and sold alongside the conventional model until the outbreak of war.

All the above are saloons. In addition, 2 door Drophead Coupé versions were produced on the 12AL and the 12C chassis. These are very rare.

Chassis Description :

All 12AS cars have separate chassis with C Section side rails and cruciform bracing in the centre of the car. There are ladder rails at the rear near the petrol tank and in front of the engine. The chassis is underslung at rear. Solid axles front and rear with multi-leaf semi-elliptical springs in each corner. Rear axle with conventional differential and half shafts. Propshaft with front and rear Hardy Spicer universal joints

Later cars are all smaller and lighter than the 12AS. They dispensed with the chassis side rails but retained the cruciform centre section. Strengthening was instead provided by the sill side members integral in the body under the doors. This helped with substantial weight saving. The last model 12Cs provided IFS with a substantial transverse spring. This model had a camber adjustment which was deleted in post-war cars as it caused excessive tyre wear. Apart from this issue the chassis are robustly built and have no particular weaknesses. The Club's Spares Store has a good stock of wishbones and shackle pins etc for the IFS model

The 12C also had the benefit of automatic chassis lubrication

Engine:

All models were fitted with a Standard designed and built four-cylinder side valve engine of 1608cc sited North-South, of conventional design. It comprised an iron block with aluminium cylinder head. Cylinder sizes were 69.5 x 106mm. The car was fed usually by a Solex 30FAI downdraught carburettor. The valves were operated directly by a camshaft in the block turned by a Reynolds chain from the crankwheel. A distributor shaft was also gear driven off the centre of the camshaft, the distributor being situated at the top of the shaft on the engine's head while the other end of the shaft turned the oil pump in the sump. Water circulation was achieved by a water pump mounted on the front of the engine, driven by a fanbelt which also turned the dynamo.

The engine is robustly built with no particular weak points, with the exception of the aluminium head which can be very difficult to remove if it has been on the car a long time.

Clutch and Gearbox.

Conventional Borg and Beck dry clutch drives a four speed and reverse gearbox of Standards own design, mounted on the back of the engine by means of a bell-housing. Synchromesh is provided on the top three gears. The clutch was lever operated. The gearchange should be light and precise. No particular weak points

Steering

Early cars use Burman Douglas Steering boxes, but the later 12C cars use Marles boxes. The Burman Douglas boxes in particular suffer from wear in the steering nut and pin. Replacement nuts are sometimes available and these easily remove about 50% of the wear in the box, but further improvement requires a costly rebuild of the box.. The Marles box is lighter in use and lasts much longer than the earlier type. Due to mounting differences, the later box can not be substituted in earlier cars

Ignition and Electrics

Lucas 12volt system with a battery under bonnet on the left (nearside) bulkhead. Starter mounted alongside engine throws bendix dog into flywheel. Mechanical solenoid mounted on end of starter is operated on earlier cars by a piano wire from the dash. On later cars, the starter is operated by a solenoid. Separate sidelights and headlights at front, a dipping solenoid extinguishes offside light when operating on dipped beam. (see warning notes) Single rear light and stop light were original fitment. Trafficators fitted in centre pillars

Brakes, Wheels and Tyres

All cars have cable or rod operated Bendix Brakes operating on all four wheels. The centre mounted handbrake also acts on all four wheels. The cars have developed a reputation for poor braking, particularly in later life. In all cases this can be remedied by ensuring that new linings are fitted and that all brakes are correctly and accurately adjusted according to specific instructions available. The 12AL and 12BL cars, which are the ones with rods, also require regular replacement of the joints and relays to remove ovality. The Club can supply a CD with instructions on how to correctly adjust these brakes.

Wheels are the pressed steel type with 3-stud fixing and are shod with 17" tyres, easily available but pricey.

Body Construction

The body tub has separate, bolted on, front inner and outer wings and separate rear outer wings. All other body panels are welded together.

Mechanicals.

Fortunately, the prospects are quite bright. The cars were over-engineered and very robust. Engine, gearboxes and transmissions are virtually unbustable unless they have done very high mileages. A high mileage car may be burning quite a lot of oil but still running fine. Many mechanical items are usually available from Club stores though it may be necessary to accept good second-hand spares in non-critical applications

Interior

Whilst it would be good to find a car with a nice interior, chances are that it may be worn. All the materials required to restore the interior are available for DIY use. Professional retrimms however, can be very expensive, so always get a number of quotes from reputable restorers and inspect examples of their work

Other potential weak points

Woodrot: Front floor kick-panels driver and passenger side.

Rustspots: Sills and door bottoms are the most easily attacked, followed by inner wings at the front and rear, then floor and boot corners. In bad cases the outer wing edges will rot as will the panel joints between the inner and outer wings and between the inner wings and the chassis.

Unfortunately, no new panels are available and second-hand ones may have suffered as above. The moral is look for a car with as good bodywork as possible. Sills have a tricky double curvature, but apart from them a good metal worker should be able to repair or replicate panels

Headlights

Originally designed to operate on one light only when dipped. The other headlight has a solenoid operated dipping mechanism in the headlight shell. Ideally this dipping mechanism should be replicated on the other headlight to achieve double dipping. This will require a relay in the operating circuit as the dip switch is not designed to carry sufficient current. Alternatively double filament bulbs should be used, this requiring another lighting circuit.

Tail lights/stop lights

Original fitment was only one of each. The wiring can be simply extended to and a duplicate light fitted on the nearside, if that has not already been done

Sunroofs

All saloons have a sunroof, and these should be checked for leaks. Staining on the headlining is an obvious clue. The most common cause is holes in one or more of the four drainpipes extending from the corners. Make sure that the drain tubes are not blocked and that the rubber tubes under the wings are not perished or missing. A good way to clear the drains is to use a curtain wire to push out the debris. If leaking, the drains are relatively easily remedied in themselves but require the disturbance and replacement of the headlining to get at them.

Further Information

The Standard Motor Club has a number of "Fellow Owners" and a Comprehensive Spares Scheme for its members. For more information go to www.standardmotorclub.org

Please note that this buyer's guide only highlights certain facts and is not exhaustive. If you intend to buy a Standard car, whether as a running vehicle or a restoration project, always ensure that it is inspected by a qualified person before driving it on the road.

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