



The Dorset Austin Seven Club
A member of the Austin Seven Clubs Association (A7CA)

Brief Technical Sheet

In conjunction with GM Seven Services

The Dorset Austin 7 Club was formed in 1976 as a club for Austin 7 owners and people with an interest in Austin Sevens. Shortly afterwards club members Gary Munn and Glyn Llewellyn started a small business repairing and maintaining club members' cars under the name of Munwellyns, later to become GM Seven Services.

Models

Mechanically the Austin 7 has remained much the same over its production period 1923 to 1939 and listed below are some of its principal updates:

1923 Chummy, originally magneto ignition, 19" wheels

1928 Coil ignition fitted

1930 Box Saloon coupled brakes, 3-speed gearbox, short wheelbase chassis (6' 3")

1931 Box Saloon long wheel base chassis (6' 9")

1932 Box Saloon engine with forward facing starter and 4-speed 'crash' gearbox

1933 4-speed synchromesh gearbox introduced (3rd and top only)

1934 Ruby with low frame chassis, 17" wheels, synchromesh gearbox on 2nd, 3rd. and top.

1936 Ruby 3-Bearing engine with 14 mm spark plugs, Girling brakes

Registering your Seven:

If your car does not have a modern V5C registration document then contact the club's registrar (Phil Whitter 01425- 475558) who will take you through the process of registration.

Road Tax is free but the cars need to be taxed in the usual way with MOT and insurance. If the car is to be off the road it needs to be 'SORN-ed'. A form V890 is available from the Post Office and needs to be updated every 12 months.

Lubrication:

Engine: SAE 30 or often used today 20/50 non detergent such as Morris Goldfilm 20/50. The standard engine takes 4 pints of oil.

Oil Pressure: On starting from cold, the pressure may go off the scale. This is normal except when running hot (see warning below). Normal hot running will be between 1 and 5 psi.

Gearbox: SAE 30 or often used today 20/50 non detergent the same as the engine.

3 speed gearbox takes $\frac{2}{3}$ pint. Test depth with engine dipstick through gearbox filler hole.

4 speed gearbox takes just over a pint. The combined filler/level plug is accessed via a small plate on the passenger floor.

Back axle: Very early cars use a mixture of grease and oil. Others use SAE 140 gear oil (EP140 – not 'hypo'). Capacity approx 1 pint but don't over-fill. Fill through the combined filler/level plug - use of an oil can helps. Ensure oil is getting past the crown wheel teeth and into the axle.

Grease points: (See lubrication chart at end). Use normal 'multi-purpose grease' in a grease gun.

Petrol: All A7s were designed to run on un-leaded petrol. Use standard Unleaded 95 RON. Modern Unleaded contains ethanol which has been proved both to damage metal parts of the fuel system and to absorb water. The club recommends the additive Ethanolmate (available through the club at cost or via *Flexolite* tel: 01722-712829. See the club's website (www.da7c.co.uk) for further details)

Tyre pressures: Most people use 22 psi front and 24-26 psi rear, although tyres may vary. If you experience wandering try a slightly higher pressure in the rear tyres.

Ignition: The firing order is 1-3-4-2 clockwise when viewed from the top of the distributor. There are two types of plug: 14 mm (normal looking ones) and the fatter 18 mm. Most people use NGK B6HS (or, a slightly hotter B5HS) or Champion L86C for 14 mm; and NGK A6 or Champion D16 for 18 mm. These are obtainable from The Seven Workshop.

Spark plug gap: 18 thou in.

Points gap: 12 thou in.

There are two types of distributor: manual advance (on the steering wheel) or automatic advance.

Ignition timing: manual distributor: points open at $1\frac{1}{2}$ " BTDC measured on the top of the flywheel.

Automatic distributor: points open at TDC on flywheel.

Tappets: Set the tappets to 6 thou in. when cold. They can be set in pairs when the symmetrically opposite tappets are at their highest.

Antifreeze: the capacity of the cooling system is 9 pints. Normal antifreeze (glycol ethylene - old fashioned Bluecol)) can be used at 25%, i.e. about 2 pints. Leave antifreeze in all year to restrict corrosion.

Service Intervals: Before every run check water, engine oil and tyres. Check gearbox and rear axle oil levels once every 3 months. Do a full service twice a year irrespective of mileage but if you do high mileages, grease and change engine oil every 1000 miles.

Tax/Insurance/MOT:

Austin Sevens are tax (road fund license) exempt but still require an annual application for a zero charge.

Austin Sevens are MOT exempt but the club recommends an "annual safety check" either at a participating MOT station or GM Seven Services. Should there be an insurance claim, the roadworthiness of the car may be put in question.

There are two main players in classic car insurance:

RH Specialist Insurance 01277-206911 (the official A7CA's insurers and give an excellent service including free breakdown cover)

Footman James 0845-4586790

In both cases, club membership is a requirement of insurance.

Wheels and Tyres: Wheels come in two basic sizes – 19" and 17" depending on the model of A7.

Wheels can be re-built or just straightened by Nick Mouat (Workshop 5, The Business Park, Sarson Lane

Amport, Andover, SP11 8DY. Tel: 07717 570814). Tyres are cross-ply and need inner tubes and wheel tapes. The basic tyres are 4.00 x 17 or 4.50 x 17 and 3.50 x 19. New tyres are still being made and can be purchased from Vintage Tyres at Beaulieu (01590-612261) or from The Blockley Tyre Company (01386-701717).

Brakes: New brake linings can be obtained from Seven Workshop. You will need to specify the width exactly – either 1” or 1¼” and whether Girling or not. (Girling linings have their rivets in pairs, others’ rivets are staggered.) Ask for ‘soft’ linings. They can be re-lined locally by GM Autos.

Changing Gear: Even with synchromesh (and this is not on all gears or even in all gearboxes – see model details above), it is normal to ‘double de-clutch’ when changing gear in an Austin 7. When you are changing gear, pause in neutral between gears and let the clutch in for a second or so, speed the engine up with the accelerator when changing down, or allow the engine to lose speed for changing up, then declutch again before moving the gear lever into the next gear position. It is often surprising how long it takes for the revs to fall when changing up but it pays to be patient before selecting a higher gear.

Books: No actual workshop manual was ever produced by Austin’s but there is an excellent, modern publication: “The Austin Seven Manual” by Doug Woodrow from Mercury Vintage Services tel: 01945-430058 or e-mail: woodrow@mercuryvintage.freemove.co.uk. The other ‘must’ is known colloquially as ‘The Green Bible’ but, more correctly as “The Austin Seven Companion”, a collection of technical papers over many years available from The Seven Workshop (01692-407507 e-mail: info@theaustinsevenworkshop.com) A very informative Austin Seven handbook is still reproduced from The Pitman’s Motorist Library – “The Book of the Austin Seven & Eight” - and copies of the original A7 handbook can still be found at autojumbles. The “Austin Seven Source Book” is a definitive guide to all A7 models. The club has a wide selection of useful material – ring librarian Len on 01425-639277.

General tips

- Remember your Austin 7 will always require much more frequent checks on fluid levels and lubrication than your modern car!
- Never allow your dynamo to charge over 10 amps (8 amps early cars)
- Get to know your oil gauge. If the pressure rises dramatically when hot you have a blockage. Stop immediately and get it sorted. Try cleaning out the oil jets behind the oil filler tube with a piece of thin wire as a first, roadside fix.
- Regularly change your engine oil (1000 miles or 6-monthly). Austin 7s do not have an oil filter as we know it, just a gauze to stop larger bits and pieces from circulating.
- Brake lights and flashing indicators are becoming more and more advisable in modern traffic situations. The club can give advice on the best way to ‘upgrade’ your Seven.
- Try not to be a nuisance on the road, do try and keep up with traffic and most of us try to avoid motorways. Remember we do not want our ‘Babies’ taken off the road by beaurocrats.
- The club has a book library available most club nights - have a read up.
- The club’s website (www.da7c.co.uk) has a wealth of technical articles as do other A7 clubs.
- If you look after your car it should give you many happy years of motoring!

Useful Contacts:

SERVICES: the club produces a booklet called ‘The Green Guide’ which lists local firms that members have found to be useful. The A7CA also produces a booklet called ‘The Red Cross Spares & Services Directory’ but on a national scale. Club members Gary Munn and Glyn Llewellyn run a small business servicing and repairing A7s: 01202-683848(Poole) and 01425-613080 (New Milton).

MOTs: Austin Sevens are MOT exempt but the club recommends an “annual safety check” either at a participating MOT station or GM Seven Services. Should there be an insurance claim, the roadworthiness of the car may be put in question. Depending where you live, members will be able to recommend a local ‘sympathetic’ MOT station. The club promotes responsible ownership and driving of our cars and would not encourage sloppy or dangerous maintenance.

SPARES: Suppliers include:

The Seven Workshop (01692-407507 website: www.theaustinsevenworkshop.com)

John Barlow (0115-9224926)

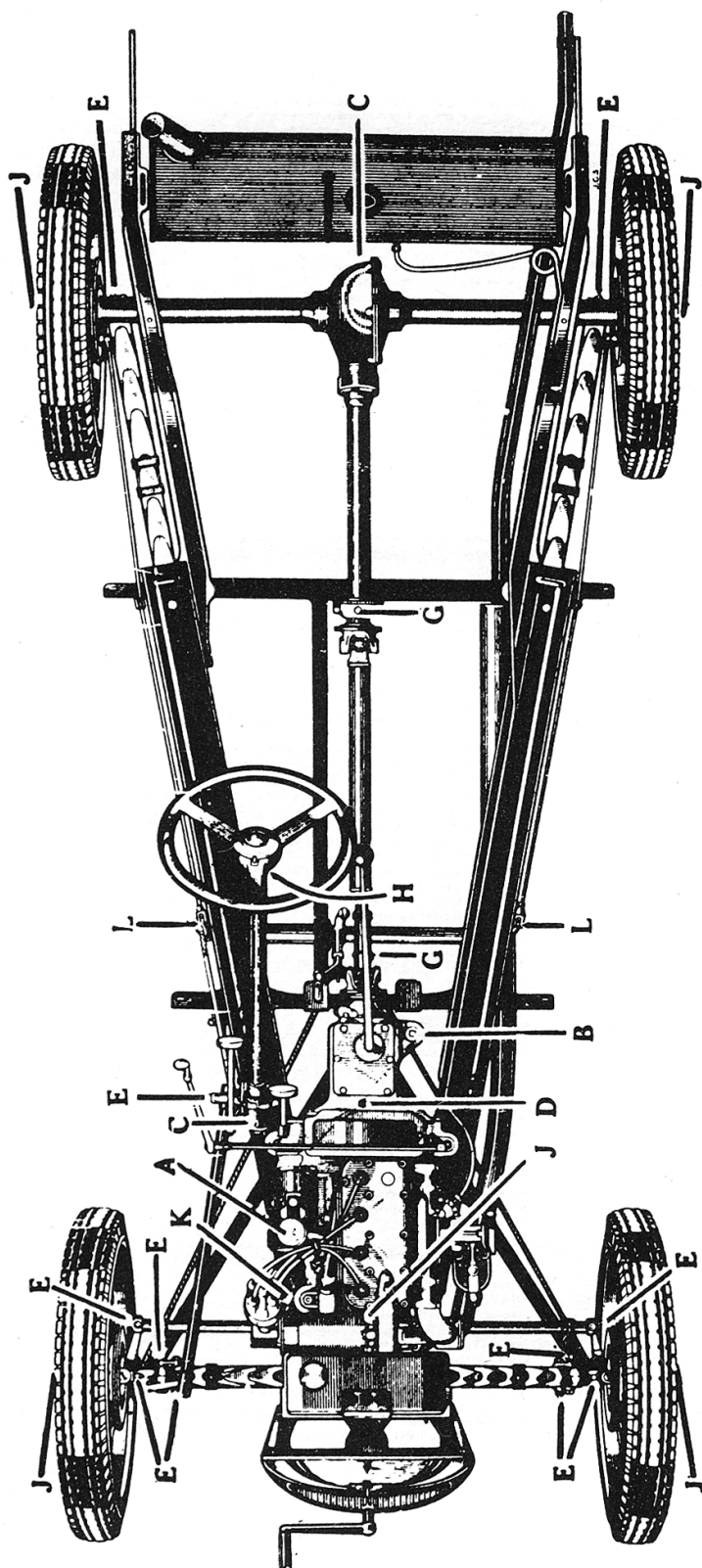
Holmesdale Sevens (01359 221838)

David Cochrane (01788 522033)

The A7CA has a full list of A7 parts & service providers on www.a7ca.org.

Austin Seven Lubrication Chart - 1938

(For 1938 models but will suffice for general lubrication of all models)



A. Crankcase, Replenish to full mark on dip-stick DAILY.

B. Gearbox. Replenish MONTHLY.

C. Rear Axle and Steering Box. Replenish MONTHLY —Special Oil.

D. Clutch withdrawal sleeve Oil WEEKLY.

E. Steering Cross Tube (2), Steering Side Tube (2), Swivel axles (2), Spring bushes (6). Grease WEEKLY.

G. Torque tube, front end, Propeller shaft, splined end. Grease MONTHLY.

H. Top of steering column. Oil MONTHLY.

J. Hubs and Fan bearing. Grease MONTHLY.

K. Distributor. Oil sparingly every 1000 miles.

L. Brake and throttle control joints, and brake pedal shaft. Oil WEEKLY.

Austin Seven Lubrication Chart – 1932 Models

