## LONDON VINTAGE TAXI ASSOCIATION

## **FX4 AUTHENTICITY GUIDE**

Produced by Bill Munro June 2007





## CONTENTS

- 1 ABOUT THIS GUIDE
- 2 MANN AND OVERTON A BRIEF HISTORY
- 3 A HISTORY OF THE FX4
- 4 THE FIRST AUSTIN FX4 MODELS: 1958-1968
- 5 THE 'NEW SHAPE': 1968-1982, WITH AUSTIN ENGINES
- 6 CARBODIES AND LTI CABS WITH ROVER ENGINES
- 7 THE LTI FAIRWAY AND FAIRWAY DRIVER
- 8 APPENDIX 1: BADGES, COLOURS AND TRIM
- 9 APPENDIX 2: TAXIMETERS
- 10 APPENDIX 3: WHEELCHAIR ACCESSIBILITY
- 11 APPENDIX 4: PUTNAM ACCESSORIES
- 12 APPENDIX 5: VEHICLE REGISTRATION NUMBERS IN GREAT BRITAIN

## ACKNOWLEDGEMENTS

Some of the information in the FX4 Guide comes from FX4 brochures and workshop manuals, some from vehicle owners and restorers and some from the experiences of owners and drivers, both in the trade and enthusiasts, and discussions with cab trade members, Carbodies and LTI engineers and executives. These include Jack Everitt, Peter James, Grant Lockhart, Bill Lucas, Ed Osmond, Stuart Pessok, Jevon Thorpe, Geoff Trotter, Roger Ward, Barry Widdowson, and the late Peter Wildgoose.

Grateful thanks are due also to the following LVTA members: Stephen Dimmock, Hans Dooren, Chris Forteath, Basil Fisanick, John Freeston, Murray Jackson, Mal Smith and Graham Waite for their assistance in producing the Guide

## ABOUT THIS GUIDE

These days, the most popular type of cab owned by members of the LVTA is the Austin (later Carbodies and LTI) FX4. As amateur enthusiasts, most club members have never driven a cab, FX4 or otherwise, for a living. Those of us in the trade who do, have come to realise that much of the knowledge of the various models of FX4 we have acquired and take for granted is not shared by our 'unlicensed' fellow members. Highlighting this disparity, those members, many of whom are in the USA, have related horrific stories of being sold vehicles that bore no relation to what the vendor said they were, were a lash-up of different models or were in such appalling condition that they were little more than junk.

Another important factor is that there are very strictly applied laws in the USA and Canada regarding the age of imported vehicles. No vehicle under 25 years old may be imported into the USA or, currently, under 15 years old into Canada that does not comply with those countries' strict safety and emission laws. Vehicles under these ages have been imported using bogus documentation, but when the authorities have discovered them, they have seized them and crushed them, regardless of whether the owner was responsible for the original offence. If a potential buyer had sufficient information to judge the age of a cab then he or she would be far less likely to find themselves in such a predicament, so it was clear to us as a club that something had to be done to help.

The starting point of the Guide was an article produced back in April 1996 by the then LVTA newsletter editor, Peter Wheatley, comprising of a list of the modifications made to the FX4 that were approved by the Public Carriage Office during the cab's first twenty years of production. From the middle of 2006 I began gathering further information, adding to it notes we thought the FX4 enthusiast might find useful and, as is the nature of these things I'd soon collected quite a bit of information, which I assembled into what I began to call the 'FX4 Authenticity Guide'. The next question was, 'what to do with it?' If it was printed in the newsletter bit by bit, members might mislay some chapters and have only part of the whole work. The idea of assembling it into a handbook was a possibility, but that would entail laying out capital that might only be recouped over a protracted period. Another option was to put it on the website, but as some members are not on line. In the end the best option was to put it on CD-ROM. That way we could copy to order, minimising outlay, and virtually everybody either has a computer or knows somebody who has one.

It is important to state that The Guide refers only to models that were first licensed in London. Provincial FX4s may differ in many respects from PCO-approved versions: for instance, most, if not all pre-1987 provincial FX4s had ten-leaf rear springs to cope with the extra weight of a fifth passenger. Some had a passenger seat alongside the driver, some had meters fitted to the dashboard and many were fitted with a metal grille over, or instead of the partition glass. Although we would be delighted to see anyone restore and maintain an FX4 in any one of its many provincial guises we are, after all the *London* Vintage Taxi Association, so we decided in this instance to stick to what we know best.

What we would like to make clear from the outset is that the Guide is NOT a dictate on how anyone's FX4 should look. If an owner wants to add non-original or non-standard parts to their cab, or modify it to any extent then that, within the law of the country in which they live is entirely their privilege.

Bill Munro, Surrey, England 2007

## HOW TO USE THE GUIDE

Using the Guide is simple. It begins with two histories: one of Mann and Overton, the dealers without whom the FX4 would not exist, and a short history of the FX4 itself. Following this are four sections, representing four distinct stages of FX4 production. Each section begins by setting out the specification of the cab when it first appeared, followed by a list of the modifications made to the cab during its production run. The lists are followed by appendices on badges, colours and trim, taximeters, wheelchair accessibility, Putnam accessories and UK number plates.

The stages of production are:

- 1) The first FX4 models (1958-1968) with a 2.2-litre Austin diesel engine and later an optional Austin petrol engine
- 2) The 'New Shape', (1968-1982) that featured a new taillights and a redesigned interior fitted from 1971 to 1982 with a 2.5-litre diesel and, from 1974 altered to comply with European vehicle safety regulations.
- 3) Models with Land Rover engines, (1982-1989) which carried the Carbodies and the LTI name.
- 4) The Fairway series (1989-1997)

NOTE: where the expressions 'offside' and 'nearside' are used in this guide, they refer to right-hand drive vehicles, i. e. 'offside' to the driver's right hand and 'nearside' to the left.

## SOME POINTS TO WATCH OUT FOR ON AN OLD FX4

Although the list shows what was on a particular model of cab when it first left Mann and Overton, changes were often made to cabs during their working life either to execute cost-effective repairs or to upgrade them to the owners' satisfaction. For instance, doors with window seals and chrome window surrounds may have been fitted to a pre-1968 cab to replace rusted or damaged originals. Pre-1968 cabs fitted with replacement bonnets may have had the later, flush bonnet badge fitted or no badge at all. Also, during the 1980's, if a cab built before the introduction of the FX4R had such a serious front end smash as to need a new bonnet, it may have received an FX4R item with its characteristic small front blisters as it was the only type then available. The same principle applies to pre-Fairway models fitted with Fairway grilles.

Some drivetrain changes may also have been made: for instance, the London General Cab Company replaced the unsuitable DG auto 'boxes on a small number of early FX4s with Land Rover gearboxes. It is highly unlikely that any of these survive but the DG 'box in most, if not all early automatic cabs was replaced with the Austin manual gearbox after it became available in 1961.

However, major body or mechanical changes to a cab would have been uneconomical. For instance, doors with push-button handles would not have been fitted to pre-1974 cabs and, with the exception of wheelchair conversions, certainly Fairway doors with their characteristic swanneck hinges, full 90-degree opening and plastic exterior handles would not have been fitted to a pre-1989 model, unless it was a wheelchair conversion. Neither, for similar reasons would the S-Plus or Fairway moulded plastic dash be fitted to an earlier cab and no cab built before the FX4R of late 1982 would have been retro-fitted with pendant pedals. So if you've been offered a cab that the vendor says is pre-1982 but has these later features, be very suspicious. And be wary of any cab with a red-painted Austin-type diesel engine, a steel dashboard, full servo brakes with pendant pedals and auto 'box with floor change if it is advertised as anything but an FX4Q.

## 1. MANN AND OVERTON - A BRIEF HISTORY

"Without Mann and Overton, there would not now be the London taxi, nor the London cab trade as we know it." It would be hard to argue with this statement, made by retired Chief Inspecting Officer of the Public Carriage Office, Jack Everitt when interviewed in 1996. The firm of Mann and Overton's, as they were known prior to 1935 were a driving force in procuring purpose-built cabs for London from as far back as 1910. Car dealers since 1898, John Mann and Tom Overton began selling Richard-Brasier cabs in London in 1905, but it was their involvement in 1906 with another French make, Unic that would set them on the course as the most important taxicab dealers in the capital. In 1910, they commissioned Unic's to make a cab specifically to comply with the controversial Conditions of Fitness, which had been in force for just four years, but were so strict they would, in common with a refusal of the Home Secretary to increase fares and thus ensure a decent return on fleet owners' investment, reduce the number of makers producing cabs to a mere handful. By the outbreak of the Great War, there was just one make, Unic and by 1915 supplies of that had dried up completely as the French motor industry geared up for the production of munitions.

Despite the introduction in 1919 of a new make, the Beardmore, which would dominate the London market throughout most of the 1920's, Mann and Overton continued to sell a modified version of the pre-war Unic, but by 1926 its high price and its antiquity consigned it to history. Mann and Overton's had to find a replacement. They had been selling Austin 12/4 cabs in Manchester, but the introduction of new Conditions of Fitness in 1928 convinced Tom Overton's brother Will, now in charge of the firm, that the Austin could be modified to meet the new regulations. He persuaded Sir Herbert Austin to make modified chassis to comply with the Conditions of Fitness and the resultant cab, the Austin 12/4 HL ('High Lot') was introduced in 1930. Austin, however would only supply the body, so Mann and Overton's enlisted several coachbuilders, including Jones, Goode and Cooper, Dyer and Holton and Vincents of Reading. Austin was able to make the chassis in the quantities required at a highly competitive price and keep up a reliable supply of spares and by 1931 the Austin was the biggest selling cab in London. Success grew on success and the Austin would dominate the trade in the 1930's as Beardmore had done in the 1920's and Unic had done in the 1900's.

In mid-1940, several months after the outbreak of war, production of the now elderly Austin 12/4 ceased. When peace resumed, Austin's big rival, Nuffield had a new cab, the Oxford ready and got it onto the market by late 1947. Austin had supplied Mann and Overton with a new chassis in 1945, which proved to be inadequate for the job. They completely redesigned it by 1947 and fitted it with a 1.8-litre ohy petrol engine. Although all pre-war cabs had coachbuilt bodies, the state of the motor industry demanded that the new cab had a pressed steel body. However, because they needed all their production capacity for private car production, Austin could not supply such a body, but during WWII they had been doing business with a Coventry coachbuilder, Carbodies who could make an all-steel body and mount it on the chassis for an economical price. The new cab, the FX3 would be funded three ways: fifty percent of the money would come from Mann and Overton, twenty-five percent from Austin and twenty-five percent from Carbodies. The FX3 had a 2.2-litre version of the FX2's petrol engine and was introduced in November 1948. Despite its high price and heavy petrol consumption, it would go on, thanks to the introduction of a new diesel engine to be every bit as successful as the 12/4, putting Austin and Mann and Overton back into the number one spot. The FX3 was scheduled to have a production life of ten years, so in 1956 planning began on its replacement, the FX4.

#### A HISTORY OF THE FX4

Commissioned as a replacement for the Austin FX3, the FX4 was the third and final initiative between Mann and Overton and Austin and the second between these two and the cab's builder, Carbodies Ltd of Coventry as independent concerns. The FX4's development began in 1956 and although it had a projected production run of ten years, it would remain in production for thirty-nine years and become one of the world's most recognisable motor vehicles. Its life, however would be dogged by controversy, uncertainty and above all a chronic shortage of development money. The massive financial problems encountered in the late 1960's and 1970's within Austin's parent company, British Leyland were a major reason why the cab was not replaced sooner, but the reason why so few improvements were made up to 1982 was due to Mann and Overton's aversion to spending anything not required by the PCO, by legal requirements or by a change in the availability of component parts. They even would resist financing some changes that would make the cab cheaper to build.

Although conventional by contemporary motor industry standards, the FX4 represented a major step forward in London cab design. It was the first in production to have four doors, automatic transmission as standard, independent front suspension and a full-width body with no running boards. In short, it was a modern vehicle, unlike the antiquated designs previously on offer. But at its introduction in the summer of 1958, a group of London cab trade proprietors brought in to examine it were scathing about what they saw. They thought it over-large, over-weight and over-expensive and when they finally bought it, they were to be even more disappointed. That is if they could get any, as the tooling for the body was so badly designed that very few came off the production line during the first year and a considerable amount of money had to be invested in redesigned tooling.

The trade had asked for an automatic transmission, because they found that replacing clutches was expensive. They soon wished they hadn't, as the Borg-Warner transmission, designed to cope with big American petrol engines was a total mismatch for the diesel engine. Its top gear lock-up transmitted the torsional vibrations of the diesel straight to the linings of the bands, wearing them out in no time at all. Nor did older cabmen have any idea how to drive a cab with an automatic gearbox. At red traffic lights, they would put the 'box into neutral and when the lights turned green, rev the engine and slam the 'box into drive, causing it unprecedented damage. A manual transmission was soon acquired from the new Austin Gypsy 4x4 and models with this gearbox were bought almost exclusively. A petrol engine was also fitted later, but this was at the request of the hire car and funeral trade, who required something more dignified in the FL2 hire car version than the knock of a commercial diesel.

Nevertheless, there was little competition for the FX4 and its shortcomings were, for the most part begrudgingly accepted in the light of the cab's serviceability and availability. All that was on offer was the beautifully built but old-fashioned Beardmore Mk7 and the largely unloved fibreglass Winchester.

By the mid 1960's it was time to think about a replacement, but BMC, Austin's parent company Austin was embroiled in merger talks with, at first Jaguar and later Leyland. Both went ahead, the first resulting in British Motor Holdings Ltd and the second, in the unwieldy leviathan that was British Leyland. Although they had subsidised their part of the FX4's development out of their advertising budget, British Leyland was not of a mind to consider providing much funding for such a low volume vehicle. They offered a conversion based on their latest van. Carbodies rejected it out of hand even before the trade saw it and replaced it with an updated FX4. In 1971, as part of British Leyland belated rationalisation of its many factories, Carbodies acquired the

FX4 chassis manufacturing plant. Later in the same year a larger, 2.5 diesel engine was introduced in the cab.

The BSA Group, Britain's largest motorcycle manufacturer and Carbodies owner since 1954 collapsed in 1973 and was acquired by Manganese Bronze Holdings, who were BSA's main competitors the British motorcycle industry. As part of the take-over, MBH inherited the Triumph Meriden motorcycle plant and, in pursuing a rationalisation plan, attempted to close it. However, they encountered bitter opposition to the proposal by the unions and a sit-in by the workforce and the subsequent formation of a workers' co-operative, which resulted in crippled output and dreadful product quality and a hiatus in sales caused by a dispute over who actually owned the end products, MBH or the co-operative. This deprived MBH of funds that might have been able to set aside to develop a new cab. Mann and Overton, Austin and Carbodies had no choice but to continue with the outdated FX4, now the only cab available in London since the demise of Winchester in 1973 and the failure of the original Metrocab to go into production. Nevertheless, the trade was clamouring for a new model. Carbodies were disheartened by the attitude of Mann and Overton, who refused to sanction any development they considered an unnecessary expense, despite the huge profits they were making thanks to the rampant inflation of the time, let alone consider funding a new cab. In addition to these problems, Carbodies, who had until now produced all manner of motor vehicle bodies from Ford Zephyr convertibles to Triumph 2000 estates were now facing the likelihood of having to rely solely on the FX4 for survival. As a solution they attempted to produce a new cab, the FX5 but it was scrapped in 1979 due to unacceptably high costs.

By 1982 Austin had lost all interest in the FX4. Carbodies acquired the rights to the vehicle but when the Austin engine was sold to India they were forced to replace it with the unsuitable Land Rover diesel. This model, the FX4R was considered the worst FX4 made. Alongside the FX4R Carbodies began development of another new model, the Range Rover-based CR6. Unhappy with poor progress, falling profits and a deterioration in Rover's co-operation over the CR6, MBH installed new management at Carbodies who in 1986, scrapped the CR6 and put all their resources into making the best job they could of the FX4.

1986 would prove a seminal year for MBH. They bought Mann and Overton, a move that brought their entire taxicab making interests in-house and removed all unwarranted obstacles to the funding of improvements. The new company was called London Taxis International (LTI). To improve the reliability of the FX4, LTI's first step was to install the new 2.5-litre Land Rover engine. The new model, the FX4S, had problems enough of its own but it was a step in the right direction. The FX4S was followed by the FX4S-Plus, with a new five-seat interior and further improved reliability. LTI had a major scare in 1987 with the introduction of a competitor, the Metrocab, but in 1989 they introduced the Nissan-engined Fairway, acknowledged as the best ever version of the FX4, which firmly re-established them in the top spot. However, LTI had already begun gradual development of a long-overdue replacement of the FX4. They started by developing the running gear, which comprised new front disc brakes and new front suspension, which were installed in the last version of the FX4, the Fairway Driver of 1993. The FX4 was at last replaced in October 1997, the final model being given the index number R1 PFX (RIP FX) and sent to the National Motor Museum at Beaulieu, Hampshire. It was replaced by the new model LTI had been developing since 1987, the TXI.

## THE FIRST AUSTIN FX4 MODELS: 1958-1968

The first FX4 prototype, VLW 431 was put on trial with London cab proprietors Levy's of Kings Cross in June, 1958 and the model was released to the trade at the Commercial Motor Exhibition at London's Earl's Court in November 1958. It was the first production London taxi to have a fully enclosed body with four doors and the first to have an automatic transmission as standard equipment.



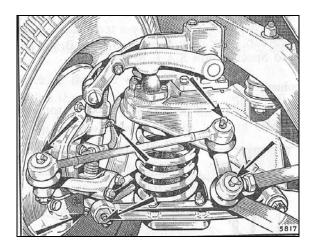
The London General Cab Company's first Austin FX4. Note the badges and door handles and the absence of chrome trim around the door windows (photo- Andrew Hall collection)

#### GENERAL DESCRIPTION

BODY: Six-light, all-steel body with four doors. Bolt-on front wings, fully detachable for ease of repair. Plywood panels inset into the floor of the passenger compartment to allow for inspection of the upper surfaces of the chassis. Short boot lid retaining cables to prevent the boot lid from opening to a near-horizontal position.

ENGINE AND TRANSMISSION: 2.2-litre Austin 4-cylinder type 22E ohv water-cooled diesel with in-line injector pump. Unpressurised cooling system. Oil-bath air cleaner with fabric venturi hose. Rod-operated throttle. 3-speed Borg-Warner DG150M automatic transmission as standard.

CHASSIS AND RUNNING GEAR: Separate, channel-section steel chassis, X-braced. Independent front suspension with coil springs and lever arm shock absorbers acting as upper suspension arms. Separate kingpins and fulcrum pins. Worm and nut steering box. Live rear axle with hypoid drive. Nine-leaf semi-elliptical springs with lever arm shock absorbers. Drum brakes all round, twin leading shoe on front, all manually adjustable. Dual-circuit hydraulic operation with parallel master cylinders mounted under the floor and cylindrical steel fluid reservoir with separate, concentric chambers. Rod operated handbrake with chromium-plated lever.



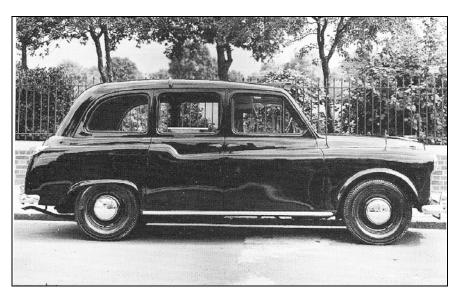
The FX4 front suspension, fitted from 1958 to early 1992. The arrows point to the grease nipples

UNDER BONNET: Twin 6v batteries mounted to rear of each inner wing. 'Package protection' for LHD, including indentation on both footwells to clear steering column. Simple rod-type bonnet prop (first 650 cabs). Telescopic type later. (Rod type continued to be fitted in bonnet frame in successive models) Hot water tap for heater mounted on cylinder head. No soundproofing fitted.



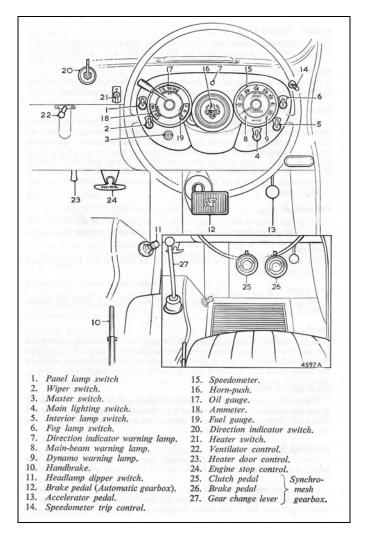
*Under the bonnet: note the twin batteries the airbrushed-in telescopic bonnet prop and the original rod-type prop. (brochure illustration)* 

BODY FITTINGS AND EXTERIOR TRIM: Limpet-type flashing indicator lights fitted to roof. Combined stop/tail lights with red lens and integral reflector, triangular in profile. Chromium plated sidelights mounted on top of inner front wings. Short, straight exterior door handles. Painted trim on external door window surrounds. Constant-balance windows on all four doors. Fixed front quarter lights. No weather strip fitted to door windows. Full width aluminium window pulls. Darkened 'purdah' glass in rear window. Number plate light mounted below number plate. 'Austin' name in script on boot lid. Vertical chromium plated mascot on bonnet with Austin coat of arms in plastic badge. Mesh grille with separate thick chrome surround and centrally mounted 'Austin' badge. Single chrome Lucas fog lamp fitted as standard on nearside of valance. 'For hire' sign fitted with amber glass lens with legend cut out of black steel plate.





The first FX4 prototype, showing all the original external fittings (photos- Carbodies collection)



INSTRUMENTS, CONTROLS AND DRIVER'S COMPARTMENT FITTINGS: Instrument panel with two dials; speedometer on right, composite instrument with oil pressure and fuel gauges, ammeter, charging light and indicator warning light on left. Black vacuum operated self-cancelling indicator switch mounted in centre of dashboard. Column gearchange lever shrouded in pressed steel binnacle with illuminated indicator panel. Black Bakelite two-spoke steering wheel with painted alloy centre horn push. Headlight dipswitch mounted on floor. Engine stop control mounted under dashboard adjacent to driver's left knee. Body colour paint around front door windows and on dash. Plastic moulding on inside of windscreen pillars extending to cover the join between the dash and the pillars. Fresh air vent on scuttle operated by lever in centre of dashboard. Direction of heated air controlled by spring loaded flap under centre of dash. Two amber 'door open' warning lights mounted in full-width board above windscreen on driver's side. Driver's seat adjustable for height and fore-and-aft position. Black rubber floor mats. Mann and Overton commission plate mounted on front face of partition, near to meter mounting bracket. NOTE- the commission plate is NOT the chassis or body number. It has no significance with regard to the vehicle registration or its legal identity

REAR INTERIOR FITTINGS AND TRIM: Light tan paint around interior of rear windows. Brown leather seat facings, brown Rexine seat edges and moulded, one-piece brown plastic door and trim panels. Fare table mounted in glass-fronted frame on partition between tip-up seats. Brown rubber floor mat. Passenger compartment heater fitted under rear seat with heater pipes running under vehicle. Passenger heater switch located on offside C-pillar. Circular aperture in partition glass. Circular ashtrays fitted in passenger doors



Early interiors were finished in brown vinyl with leather seat facings. (1967 models had vinyl seat facings in brown and body-colour paint around the windows) Note the location of the cab number, (identical to that on the plate on the boot lid) the and the plastic sign above it that reads: The number of this cab is'. The rectangular plate above the fare table (an optional extra) reads 'Please sit well back in your seat for safety and comfort.' This is the early type. Carbodies produced a sign with the same message, post-1982 with their own 'CBC' logo. Adverts were screwed to the seat bases. They were usually fitted by fleet proprietors, but some owner-drivers took them as they protected the seat backs from passengers' dirty feet. Payment for them was minimal, paid on an annual basis (photo- Basil Fisanick)

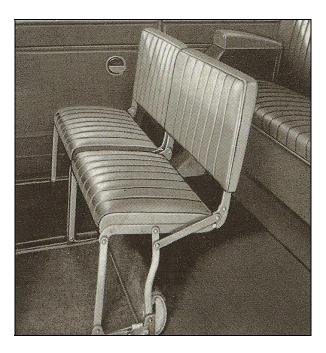
EXTRA EQUIPMENT: Second fog light. Extra-cost colour options included Cardinal Red and white.

Notes: production problems between late 1958 to early 1959 caused delays in delivery. Early examples had roof pressed in one piece. Hardly any coloured cabs sold.

## FL2 HIRE CAR

This model was introduced at same time, but with the following differences: sliding glass partition, forward-facing occasional seats, front bucket passenger seat, twin sun visors, clear glass in back window. Folding stays for the boot lid. Number plate fixed to hinged plate so as to be read with the boot fully open at near-horizontal position. No 'for hire' sign on the roof.

NOTES: with the introduction of the petrol engine a higher-ratio, 4.8:1 differential was fitted to both petrol and diesel models



Forward-facing tip-up seats were just one of the differences between the FX4 and the FL2 (brochure illustration)

## **MODIFICATIONS FROM 1960 TO 1967**

April 1960 circular speaking aperture in partition replaced by 4-inch wide centrally

mounted vertical sliding panel. Simpler type of grille with no separate chrome surround. One-piece roof pressing changed to three-piece assembly

Sept 1960 new longer, cranked exterior door handles fitted.

Nov 1960 instrument panel changed from one-piece to three-piece with separate

water temperature gauge fitted to centre piece. Left-hand composite instrument includes fuel, oil pressure and ammeter. Indicator warning light

moved to dash near indicator switch

Notes: there were different arrangements of the ancillary instruments, depending on what Lucas were making at the time. See diagrams of

controls and instruments, figs 1 and 2

Oct 1961 introduction of optional 4-speed manual gearbox with synchromesh on

second, third and top gears with centre floor change and hydraulic clutch. Type 22K Austin diesel supplied with manual gearbox. Curved extension to luggage platform partition added to protect gear lever. Additional pedal

mounted on under-floor pedal shaft operates clutch master cylinder

Notes: very high, almost total take-up for manual 'box. Binnacle for

automatic gearchange lever retained on manual models

August 1962 clinch-type doors fitted

October 1962 injector pump changed to DPA rotary type. 2.2 litre 4-cylinder petrol

engine offered. (Manual gearbox only) Higher-ratio, 4.8: final drive fitted to petrol cabs and hire cars. Petrol cabs fitted with external fuel stop

protruding through aperture in offside front wing

Notes: very few petrol cabs were sold in London- the option was introduced primarily for FL2's to cater for limousine, private hire and

funeral trade customers

March 1963 bonnet safety catch modified. Driver's seat belt anchorages fitted. Grille

badge replaced by 'Austin' script with black painted steel backing, mounted to the upper right hand side of grille (as viewed from front).

1964 (B) Borg-Warner BW35 automatic transmission replaces DG150M.

Notes: no gearbox oil cooler was fitted to FX4's with the BW35 transmission. (One was not needed for the DG150M as it was air-cooled) Limited take-up of auto option: engine underpowered for 'box and 'box too small for engine, resulting in unreliability and poor performance and fuel

consumption

1965 (C) Horn push changed to black Bakelite with Austin coat of arms and chrome

surround

1966 (D) Driver's lap-and-diagonal seat belt (manually adjustable) fitted as standard.

Bonnet safety catch modified to a rocking type concealed behind lower

edge of bonnet

Notes: three different types of bonnet catch shown in parts book for year

sealed beam headlight units replace separate bulbs. Paint colour around interior of rear window glass changed from light tan to body colour. New

boot lid pressing with number plate light above number plate. All seat facings, including driver's seat changed to vinyl. Stainless steel window finishers replace painted metal. Vertical bonnet crest replaced by flatmounted circular badge bearing Austin coat of arms. Binnacle for

automatic gearchange lever no longer fitted to manual models. Plastic moulding on inside of windscreen pillars no longer fitted

Late 1968 (G)

sidelights incorporated into headlights. Plunger-type windscreen washers fitted as standard. Closed crankcase breather fitted

Notes: W. H. Cook and Sons of West London bought a fleet of petrol cabs and converted them to run on LPG. The spare wheel was moved to the luggage platform to make room for the gas tank in the boot. Following a hike in the duty on LPG in the early 1970's all were sold off and Cooks went out of business

## THE 'NEW SHAPE': 1968-1982, WITH AUSTIN ENGINES

In October 1968 a revised model, known in trade as 'new shape', was introduced in part as a substitute for an entirely new model and in part to address some of the complaints the trade had been making about the cab. The body, chassis, engine, transmission options and running gear were the same as the final version of the previous model, except for the following differences:



The 'New Shape' FX4- note the absence of the limpet indicators and the new rubber sill cappings. (photo-Mal Smith collection)



A 1970 FX4. Note the taillights, new for 1968. Note also that the original rubber sill cappings have been replaced by stainless steel items. The rubber ones were prone to cracking and were replaced by the later items when sills were replaced. Rubber cappings are now unobtainable. (photo- Murray Jackson)

BODY FITTINGS AND EXTERIOR TRIM: Roof-mounted limpet indicators replaced by taillights sourced from BMC 1100/1300 MkII with indicators incorporated. Front indicators fitted, mounted below headlights on front face of inner wing. Repeater indicators mounted on front wings. Clear glass rear window. Full-width window pulls replaced by shorter items. Weather strips fitted to all door windows. 'For Hire' legend in roof light changed to amber plastic lens with 'Taxi' legend printed in black. Alloy & rubber trim strip on sills replaced by solid rubber with ribbed finish. 'Leyland' symbol fixed to each front wing. Bonnet release and safety catch release changed to two flat steel levers.



The most significant external changes to the model are shown here: the clear glass back window, the new lights and, on closer inspection the shorter window pulls (photo-Murray Jackson)

UNDER BONNET: Scuttle and internal wings reshaped to eliminate rusting under batteries. Soundproofing fitted under bonnet. Indentation in top of nearside footwell to clear steering column on LHD drive models no longer included.



The post-1967 2.2 engine compartment. Note the three fluid reservoirs: one for the clutch and two for each of the brake circuits. Originally, two 6v batteries, wired in series were fitted, but were replaced with the same new, cheaper and lighter plastic 12v batteries that were fitted to the later 2.5 litre model (photo-Murray Jackson)

INSTRUMENTS, CONTROLS AND DRIVER'S COMPARTMENT FITTINGS: Partition raked back, sliding glass from FL2 fitted. Soundproofing fitted on platform floor and over transmission tunnel. Interior rear-view mirror fitted to top of dashboard. Starter motor operated directly by key. New frame for driver's seat, allowing rake as well as fore-and-aft and height adjustment. Driver's seat cushion trimmed in leather once more.



The third instrument, fitted in 1960 is evident in this picture, as is the low-level interior mirror. The partition glass has been removed (photo-Murray Jackson)



There are subtle differences between the interior of the 2.5 litre model and the 2.2. note the black pressed steel handbrake lever and the red and white sticker on the dashboard, advising that first gear must be engaged from rest. This preserved example has the driver's seat from a post-1974 cab, identified by the widely spaced pleats (photo-Bill Munro)

REAR INTERIOR FITTINGS AND TRIM: All seats and interior panels finished in black. Passenger heater relocated from under back seat to a position behind driver's seat, with exit air vents located at base of centre partition. Rear heater pipes running inside driver's compartment. Fare table mounted between tip-up seats behind clear plastic sheet. 'Leyland' symbol fixed to centre of passenger side of bulkhead above partition. Rubber floor mat in rear now grey, although of similar pattern as before. Grey vinyl 'tiger-stripe' headlining. Leather door check straps replaced by synthetic fabric

NOTES: the interior mirror was fitted to the top of the dash to prevent a lady passenger thinking that the driver might be able to look at her legs- *this is not a joke!* Some owner-drivers fitted soundproofing to older cabs.



The interior of the post-1967 cabs finished in black, with a grey floor mat and a different pattern headlining. (photo-Murray Jackson)



The partition of the post-1967 models was angled back to give more legroom for the driver. Also the passenger heater was moved to behind the driver's seat, with it air vents located between the tip-up seats. Note: the plastic plate that reads 'The number of this cab is' is missing (photo-Murray Jackson)

## MODIFICATIONS MADE BETWEEN 1971 AND 1982

Jan 1971 (J)

stainless steel sill finishers replace solid rubber.

Oct 1971 (K)

new 2.5 litre diesel engine, Austin-type 25V, painted black with oil filler at rear of pressed steel rocker cover. Pressurised cooling system with separate expansion tank. 12v negative earth electrics with alternator and single 12v battery. Higher ratio rear axle from FL2. Single gimbal-type fresh air vent by driver's right knee (first year only). Rubberised safety block covering ends of the door handles fitted to front doors. Black painted pressed steel handbrake lever.

Notes: all 2.2 litre FX4s still in service had twin 6v batteries replaced by the lighter and much cheaper single 12v battery (located on offside) but retained positive earth and dynamo. Slightly better take-up of auto gearbox option, thanks to more powerful engine, although manual version still the more popular.

Oct 1973 (M)

Petrol engine discontinued.

Notes: when Britain joined the European Economic Community, all British-made motor vehicles became subject to EEC vehicle safety and emission regulations. The 2.2-litre Austin petrol engine did not meet these rules. The FX4 and FL2 were the only vehicles to which it was fitted and rather than spend money to make it comply, British Leyland scrapped it.

Apr 1974 (M)

new version conforming to European vehicle safety regulations: steering crash link, steering column lock with integral, manually operated engine stop. Burst-proof door locks with chromium-plated push-button exterior handles. Interior passenger door handles moved to centre of doors with full-width grab handles. Rear seat cushion re-profiled with lower portion of seat at rear with wider pleats and a one-piece front part. Stelvatite instrument panel with plastic hood, incorporating two amber 'door open' warning lights and green indicator warning light. New steering wheel with rubberised plastic centre boss. Indicators operated by self-cancelling stalk on steering column with headlight flasher and horn push incorporated. Opening front quarterlights. High-level rear view mirror. New colours, including aconite and blackcurrant added to Cardinal red and white. Notes: take-up of colour options still very low.

Feb 1976 (P)

window locks fitted.

Late 1976 (R)

FL2 discontinued.

Notes: 'dry' brake light switch fitted for brief period. Original hydraulic pressure type reinstated after approximately 18 months.

Early 1977 (R)

composite rubber overriders replace chromium-plated steel. Heated rear window offered as option. Heater control moved to driver's compartment. Low brake fluid warning light with built-in bulb tester fitted to instrument panel.

Aug 1977 (S)

driver's door mirror and nearside rectangular wing mirror replace twin circular wing mirrors. Heated rear window becomes standard fitting Notes: twin rectangular "Transit" wing mirrors an optional extra

Jan 1978 (S)

interior passenger door handle guards in clear plastic fitted. Austin script badge replaced on grille and boot lid by rectangular chromium-plated badge bearing Austin name in black capital letters. New colours offered, including bright blue, brown and grass green.

Notes: still very little take-up for colour options. Slightly better take-up of automatic 'box

Late 1979 (V)

brake servo fitted, operating on front brakes only. Brake vacuum pump mounted on welded steel bracket on front nearside of engine, belt-driven from front pulley. Water trap fitted to fuel filter. Telescopic bonnet prop replaced by steel rod located in pressed steel frame.

Late 1980 (W)

Notes: electric window for platform door approved as aftermarket option.

Borg-Warner BW65 automatic box replaces BW35 Two-spec

Borg-Warner BW65 automatic box replaces BW35. Two-speed windscreen wipers fitted. Sun roofs and vinyl roofs approved. Three trim options offered: FL (Fleetline- the basic cab) HL (Highline) with vinyl roof and HLS (Highline Special) with vinyl roof and sunroof. New colours, Midnight Blue and Sherwood Green added to Cardinal red and white. Personal radios approved. Optional rear fog lights, hung below bumper and MGB-type square reversing lights, operated manually fitted to rear quarter panels offered.

Notes: The FX4 was now the only vehicle produced by Carbodies. The company introduced the new trim options to maximise profits. Personal radios were a dealer-fitted or aftermarket option, but had to have pre-set tuning and were only allowed to be located in a roof console with a fixed aerial fitted to the 'for hire' sign. Tape players were not permitted. Colour and trim options and auto 'boxes became more popular: the majority of cabs were by now bought by mushers seeking some creature comforts and individuality.

May 1982 (X)

Carbodies acquires intellectual rights to FX4 and begins manufacture in own name. Austin badges replaced by single square black plastic 'Carbodies' item on nearside of bootlid. Austin 'A' script no longer stamped on hubcaps.

Notes: manufacturing faults in a batch of Austin diesel engines during 1982 caused them to seize up in use. Another batch, understood to be originally for military use, were painted bright blue and diverted to Carbodies for installation in a short run of cabs until the problem was resolved.



From 1971 to early 1974, this large rubber boss was fitted to the front doors to prevent the door handles from catching in the clothes of passers-by or departing passengers (photo-Bill Munro)



From mid-1974, in compliance with new European safety legislation, these push-button door handles were fitted. They operated burst-proof door locks (photo- Murray Jackson)

# CARBODIES AND LTI CABS WITH ROVER ENGINES CARBODIES FX4R

When British Leyland sold the 2.5-litre Austin diesel engine to an Indian motor manufacturer, Carbodies sourced the Land Rover diesel engine for the FX4, mating it to both the Borg-Warner BW65 automatic gearbox and the Rover SD1 five-speed manual. The new model, the FX4R was introduced in October 1982. The body and interior fittings were the same as the final version of the model fitted with Austin engines.



Only its badges identified the FX4R from its FX4 predecessor (photo- Bill Munro

ENGINE AND TRANSMISSION: 2.28-litre Land Rover diesel engine, optional 2.28-litre Land Rover petrol engine. Option of 5-speed Rover manual gearbox with synchromesh on all forward gears with hydraulically operated diaphragm clutch or 3-speed Borg-Warner BW65 automatic transmission. (Note: separate oil coolers for automatic transmissions were fitted by some gearbox specialists following a repair or replacement, as a condition of their warranty.)

Notes: Very little take-up of petrol engine. One single model with 2-litre BL O-Series ohc petrol engine, two with diesel automatics with overdrive and one Land Rover petrol automatic with overdrive were made.

CHASSIS AND RUNNING GEAR: As per Carbodies FX4 but with servo-assisted drum brakes on all wheels and option of power-assisted steering.

Notes: Although the FX4R had poor acceleration, it had a much higher top speed and at such speeds its brakes were more liable to fade. The London Cab Company produced its own 'Loncab' ventilated brake drums, which it sold as accessory items. These reduced the fade and eliminated the FX4's characteristic brake squeal.

UNDER BONNET: Brake servo with single tandem master cylinder for brakes and clutch master cylinder (manual gearbox only) mounted on rectangular steel box over driver's footwell. Brake servo pump on steel bracket mounted on nearside front of engine, belt-driven from front. Commission plate located in engine compartment.

BODY FITTINGS AND EXTERIOR TRIM: Carbodies badge on grille and on offside of boot lid, 'FX4R' badge on nearside of boot lid. Trim options of FL, HL and HLS carried over from FX4

INSTRUMENTS, CONTROLS AND DRIVER'S COMPARTMENT FITTINGS: Pendant pedals (see *UNDER BONNET*) Power-assisted steering optional, (standard on HLS). 14-inch (355mm) two-spoke steering wheel for PAS models. Spring loaded return on engine stop.

NOTES: PCO refused to pass PAS until oil leaks on first models had been cured. This model was prone to overheating. The aftermarket fitting of a Kenlowe electric fan was approved by the PCO but not acknowledged by Mann and Overton, who maintained that the radiator was adequate for its job. A bleeper to give an audible warning when a passenger door was open was available as an aftermarket option.

REAR INTERIOR TRIM: as per Carbodies FX4.

## **MODIFICATIONS FROM 1982-1985**

- Oct '83 (A) motion locks fitted to all doors. PAS standard on all models from mid-year Notes: motion locks operate when the vehicle is moving faster than walking pace or when the driver's foot is placed on the brake pedal. This is to prevent the doors from being opened from the inside when the vehicle is in motion or for the driver to prevent someone from leaving the cab.
- Late '84 (B) new type plastic corrosion-free front indicators with screw-fit lens fitted.

  Notes: this type of indicator was retro-fitted to many earlier cabs, usually as accident replacement items when stock of older type ran out.

## LONDON LIMOUSINE

Introduced in October 1982 (Y) this was an attempt to increase sales by entering the private and corporate limousine market. The mechanical specifications were the same as the FX4R, but the re-introduction of the petrol engine was particularly for this vehicle. Bespoke trim options include leather seats and wood door cappings

## **CARBODIES FX4Q**

(Note- although the FX4Q was not fitted with a Rover engine, it is included in this section as it is a contemporary with the FX4R and shared many of its components)

The FX4Q was introduced in October 1983 as a means of giving the trade an alternative to the poor-selling FX4R. It was said by the factory to be rebuilt from older FX4s but was only given the legal identity of scrapped Austin cabs. It had a completely new chassis and body and many reconditioned mechanical components. Apart from the engine, its specification was identical to the FX4R automatic.

Notes: as the radiator fitted to the FX4Q's was designed for the engine, the cab did not suffer from overheating.

## **GENERAL DESCRIPTION**

ENGINE AND TRANSMISSION: 2.5 litre Kalaskai diesel, painted red, built in India from ex-Austin machine tools. 3-speed Borg-Warner BW65 automatic transmission with floor change as standard.

Notes: the Kalaskai diesel engine was poorly made. Also the cab used a number of reconditioned major components, including the rear axle and as a result was not as reliable as its predecessor. Nevertheless, most problems were sorted out at the expense of the cabs' proprietors and, considering how low the mileage of a preserved cab might be in comparison to a working cab, an FX4Q should not be turned down simply because it had not been as reliable in service as other FX4 models. The FX4Q was discontinued with the introduction of the FX4S.

## LONDON TAXIS INTERNATIONAL FX4S

Introduced in 1986 (D). The FX4S was the first cab to carry the LTI name.

GENERAL DESCRIPTION

BODY: as per FX4R.

ENGINE AND TRANSMISSION: 2.5-litre Land Rover diesel engine with injector pump mounted on offside of engine, driven by enclosed toothed rubber belt. Servo pump fitted to offside of block of diesel engine version, driven from camshaft. Option of 2.28 Land Rover petrol engine. (Vacuum for servo taken from inlet manifold) Transmission options carried over from FX4R.

Notes: Very little if any take-up of petrol engine in cabs.

CHASSIS AND RUNNING GEAR: Full servo brakes. PAS as standard.

UNDER BONNET: Electric fuel cut-off switch mounted on pedal box under bonnet.

Notes: The FX4S was as prone to overheating as the FX4R and many of these were also fitted with Kenlowe fans.

BODY FITTINGS AND EXTERIOR TRIM: LTI badge on grille and boot lid. Black painted rolled steel bumpers with rubber end caps and rubber inserts. Silver painted wheels. Moulded plastic draught excluders fitted to sills. Draught-proofing strip fitted to bottom of doors. Rear seat belts fitted. High-level brake light, mounted on rear parcel shelf.

INSTRUMENTS, CONTROLS AND DRIVER'S COMPARTMENT FITTINGS: No separate engine stop on diesel models- engine stopped by turning key. Rocker-type dashboard switches replace toggle switches. Indicators operated by stalk on left hand side of steering column. Matching stalk for 3-speed wipers on opposite side with function for electrically operated windscreen washers.

REAR INTERIOR TRIM: as per FX4R.

EXTRA EQUIPMENT: Colour and trim options carried over from FX4R.

## FX4W WHEELCHAIR CONVERSION

Introduced March 1986. Full wheelchair accessible conversion for new or existing FX4s consisting of sliding partition and ramps, lifting rear seat cushion, full securing devices and 180-degree nearside rear door opening facility.

NOTES: discontinued in 1989 with introduction of Fairway.

## LONDON TAXIS INTERNATIONAL FX4S-PLUS

GENERAL Introduced in September 1987 (E) as the next step in the gradual improvement of the FX4 to make it more saleable outside London. LTI strenuously denied it was produced in response to the Metrocab, maintaining it was under long development before the Metrocab's announcement.

BODY: as per FX4S with modifications listed below.



The FX4S-Plus is easily identified externally by its silver wheels, black bumpers and additional badge on the grille. This preserved example has the number plate mounting from a Fairway Driver, a common modification, made when the straps that held the plate below the bumper on all previous models became damaged. (photo- Murray Jackson)

ENGINE AND TRANSMISSION: Engine and manual transmission as per FX4S. Borg-Warner BW40 automatic transmission replaces BW65.



The FX4S-Plus had a larger radiator, fitted with an oil cooler for the transmission. Note the fuel cut-off switch on the pedal box in the top left hand corner and the larger radiator (photo- Murray Jackson)

CHASSIS AND RUNNING GEAR: telescopic shock absorbers and carbon fibre composite single-leaf springs at rear. Larger radiator, with integral oil cooler on models with automatic transmission.

BODY FITTINGS AND EXTERIOR TRIM: Red strip on rubber bumper inserts. Black finish on door mirrors.



The S-Plus featured black door mirrors(photo- Murray Jackson)

INSTRUMENTS, CONTROLS AND DRIVER'S COMPARTMENT FITTINGS: moulded headlining covered in tweed print grey vinyl. New moulded grey plastic dashboard with push-button switches for front and rear interior lights, heated rear window and rear fog lamp in central panel in dashboard. Cubby hole in nearside of dashboard. Storage compartment in centre console for automatic model. Mounting for radio/cassette and twin speakers. Roof-mounted console with clock and optional location for meter. Four-function windscreen wipers operated by stalk on right hand side of steering column. Side/headlight switch mounted on steering column. Meter switch and instrument panel light switch mounted at knee level on dashboard. Switches for driver's two-speed heater fan and on-off switch for rear heater.



The moulded grey plastic dash on the FX4S-Plus was a major change over its predecessors. Not only did it look smarter, but it cut out a lot of the draughts that came from under the bonnet. The instrument binnacle came from an Austin Metro (photo- Murray Jackson)

REAR INTERIOR TRIM AND FITTINGS: Completely redesigned interior, finished in grey with new, moulded door and trim panels. Five-passenger capacity. Low level door-operated courtesy lights. New grey tweed-print vinyl headlining. Two switches for rear heater: on/off and fan speed.



The grey interior of the rear matches that of the driver's compartment. The rear seat was widened to accommodate three passengers. The grab handles are coloured red to aid the visually-impaired (photo-Murray Jackson)

EXTRA EQUIPMENT: Trim options: FL: basic cab in black. HLS: vinyl roof, tilting sunshine roof, front carpets, velour trim in passenger compartment, electrically operated nearside front window, chrome side strips and clock as standard. Personal radio mounted in dashboard with twin front speakers (max. output 4w per channel). Cassette player approved. All equipment standard on HLS (except velour trim) could be ordered for FL. Electrically operated driver's window available for both versions at extra cost. Colour options include midnight blue, rattan beige, royal burgundy, ermine white, carmine red, city grey and black.

# THE LTI FAIRWAY AND FAIRWAY DRIVER LONDON TAXIS INTERNATIONAL FAIRWAY

GENERAL: Introduced in February 1989, the Fairway was the first cab from LTI to feature wheelchair accessibility as standard. It was considered at the time to be the best version of the FX4 yet produced. Its engine was smooth, quiet, powerful and extremely reliable with many examples exceeding 300,000 miles (480,000km) with no significant signs of wear. In addition the build quality of the cab had improved greatly and, with exceptions in certain years (e. g. 1990 H) the rust proofing proved to be superior (although not comprehensively effective) to that of previous models. The automatic transmission was virtually bombproof, although the seals on the Pierburg valve fitted to later models wore out and caused the gear changes to 'hang'.

BODY: as per Carbodies FX4S-Plus but with doors opening on swan-neck hinges to full 90-degrees. Dog-leg partition to allow for wheelchair passengers to be carried adjacent to nearside cricket seat.



A very early Fairway, a 'Silver', with the standard vinyl roof and sun roof (photo- Chris Forteath)

ENGINE AND TRANSMISSION: 2.7 litre Nissan TD27 4-cylinder ohv engine. Cast iron block with cross-flow cylinder head. Full servo brakes, servo pump driven from back of alternator. Option of 4-speed automatic transmission or 5-speed manual gearbox with synchromesh on all forward gears and hydraulically operated diaphragm clutch.

CHASSIS AND RUNNING GEAR: As per Carbodies FX4S-Plus.

BODY FITTINGS AND EXTERIOR TRIM: Slightly enlarged windscreen. New fine-mesh grille with distinct vertical centre strip. Fixed front quarterlights Black plastic exterior door handles, all fully lockable. Matt black metal boot lid handle. Central locking with facility to lock doors from inside and optional remote locking. Electrically adjustable door mirrors with control switch on roof console.

TRIM OPTIONS: Bronze: basic cab- finished in black, black Stelvatite finish to driver's side of partition and rubber mats in front. Silver: electrically operated platform door window, vinyl roof, sliding sunshine roof with darkened Perspex wind deflector, carpets on driver's side of partition

and on floor, side mouldings. Extra cost options: alternative colours, Velour trim, driver's air-con. Gold: radio/cassette player included, padded console lid, carpeted trim to inside of front doors, rear seat headrests, mud flaps, walnut rim to door cappings front and rear, locking filler cap, colour options. Extra cost options: intercom, driver's side air con, velour trim. Colour options: diamond white, cardinal red (a lighter shade than the previously offered) midnight blue, burgundy, Sherwood green, storm grey. Fairway name in distinct script on the nearside of bootlid. Chrome-effect plastic badge with black letters on the offside of bootlid, either: '2.7 Bronze' '2.7 Silver' or '2.7 Gold'

INSTRUMENTS, CONTROLS AND DRIVER'S COMPARTMENT FITTINGS: as per S-Plus with addition of warning lights for overdrive, (Automatic only). Fuel filter and heater plugs. Fuel cut-off switch on centre console.

REAR INTERIOR FITTINGS AND TRIM: Interior carried over from S-Plus with addition of full wheelchair accessibility, incorporating fixed dog-leg partition with fastening strap, locked by electrically operated lock. Horizontally sliding window in partition directly behind driver with aperture towards the centre of the cab. Fare table mounted on inside of offside passenger door. Seat belt for wheelchair passenger. rear seat Lifts in one piece to allow wheelchair to turn.



The interior of a 'Silver'. The headrests, standard on the 'Gold' model are optional extras. All the grab handles are red to assist visually impaired passengers. Note the swan-neck door hinges, which enable the doors to be opened to 90 degrees and make full use of the door aperture (photo- Chris Forteath)

NOTES: Composite springs on most Fairways changed to single-leaf steel springs during working life. Chromium plated bumper blades offered as an optional extra around 1990 but with few takers

ADDITIONAL EQUIPMENT: Pair of light alloy wheelchair ramps. Removable low step. Wheelchair securing strap. Wheelchair passenger seatbelt extension

NOTES: Wheelchair ramps, securing straps and wheelchair passenger seatbelt extension had to be kept with the cab the whole time it was licensed and had to be presented with the cab at overhaul. Absence of the ramps, straps or submitting the cab with ramps from another vehicle would result in a 'stop note' and the proprietor would be penalised.

## SERIES 4- 1989-1997: LTI FAIRWAY AND FAIRWAY DRIVER

## MODIFICATIONS FROM 1989 TO 1993

Late '89 (G) internal bonnet release fitted

Oct '92 (J) Zeus non-vented front disc brakes offered as dealer-fitted optional extra on new

**Fairways** 

NOTES: Some older Fairways retro-fitted with Zeus disc brake conversion

## LONDON TAXIS INTERNATIONAL FAIRWAY DRIVER

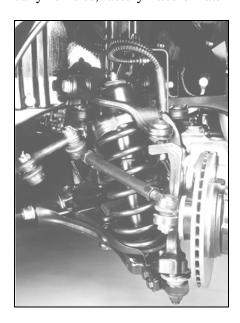
GENERAL: Introduced February 1993 fitted with modern front suspension with ball joints, four-pot vented disc brakes on the front and larger rear drums.



The Fairway Driver, showing the new grille and domed hubcaps ((LTI/'Taxi' Newspaper)

BODY: as per Fairway.

CHASSIS AND RUNNING GEAR: new wishbone front suspension with coil springs and concentric telescopic shock absorbers. Ball joints top and bottom. New GKN rear axle. Composite springs on early models, single-leaf steel springs with additional helper spring fitted later. Vented disc brakes with four-pot callipers on front, wider drums on rear with self-adjusting shoes. Cable-operated handbrake. Deep-dish, six-nut wheels. Steering damper (retro-fitted to early vehicles, factory fitted on later vehicles).



The Fairway Driver's front suspension and ventilated disc brakes (ITI/'Tavi' November) UNDER BONNET: reshaped scuttle, housing new brake servo. New, straighter crash link in steering column.

BODY FITTINGS AND EXTERIOR TRIM: New extruded mesh grille. Silver, domed plastic trims. Chromium-effect 'Bronze' 'Silver' and 'Gold' badges discontinued. Weweler air suspension (on rear only) offered as extra-cost option.

TRIM OPTIONS: Bronze: basic cab- finished in black, black Stelvatite finish to driver's side of partition and rubber mats in front. Silver: electrically operated platform door window, vinyl roof, sliding sunshine roof with darkened Perspex wind deflector, carpets on driver's side of partition and on floor, side mouldings. Extra cost options: alternative colours, Velour trim, driver's air-con. Gold: radio/cassette player included, padded console lid, carpeted trim to inside of front doors, rear seat headrests, mud flaps, walnut rim to door cappings front and rear, locking filler cap, colour options. Extra cost options: intercom, driver's side air con, velour trim. Colour options: diamond white, cardinal red (a lighter shade than previously offered) midnight blue, burgundy, Sherwood green, storm grey. Fairway name in distinct script on the nearside of bootlid.

INSTRUMENTS, CONTROLS AND DRIVER'S COMPARTMENT FITTINGS: Moulded dashboard and instrument panel carried over from S-Plus with addition of warning lights for overdrive, (automatic only) fuel filter and heater plugs. Interior inherited from S-Plus with addition of full wheelchair accessibility, incorporating fixed dog-leg partition with fastening strap, locked by electrically operated lock, lifting rear seat to allow wheelchair to turn. NOTES: passenger intercom fitted as an optional extra

REAR INTERIOR TRIM: Swivel seat, grab handles and edges of seats in red to aid partially sighted passengers. New partition with sliding part moved to nearside, above luggage platform.

ADDITIONAL EQUIPMENT: Pair of light alloy wheelchair ramps. Removable low step. Wheelchair securing strap. Wheelchair passenger seatbelt extension

NOTES: Wheelchair ramps, securing straps, low step and wheelchair passenger seatbelt extension had to be kept with the cab the whole time it was licensed and had to be presented with the cab at overhaul. Absence of the ramps, straps or low step or submitting the cab with ramps from another vehicle would result in a 'stop note' and the proprietor would be penalised.







Top left: the Fairway Driver with wheelchair ramps in place. The original Fairway's equipment is identical

Top right: the swivel seat and low step

Left: the wheelchair ramps, low step and wheelchair restraining strap and wheelchair passenger's seat belt extension, stowed in the boot

## LONDON TAXIS INTERNATIONAL FAIRWAY DRIVER 95

GENERAL: Introduced March 1995. 50-50 split rear seat with new design material. Sliding part of partition incorporated in nearside of partition with driver's side locking facility. Clear polycarbonate window on dog-leg part of partition (safety glass elsewhere). Both front windows electrically operated. Electric rear windows a dealer-fit option. Chrome side mouldings no longer fitted.

Note: different special editions offered, e. g. Advantage. These were trim options: the mechanical specification remained the same as original Driver 95. Additional colour, silver.

NOTES: Composite springs on most Fairways were changed to single-leaf steel springs during working life. Chrome bumpers offered as an optional extra around 1990 but with few takers. Almost all the composite springs fitted to early Fairway Drivers were changed to steel leaf springs during working life. The new-type partition flap was not liked as it created a draft around the driver's neck. Many cabs were retro-fitted with a sliding partition (see Fairway Driver 95, below). Very low take-up for Weweler air suspension. LTI continued to offer limousine versions of the Fairway to special order, mostly for export

## LONDON TAXIS INTERNATIONAL FAIRWAY DRIVER PLUS

GENERAL Introduced 1996. Hatch in division glass to facilitate payment from inside cab. NOTES: hatch was unpopular as it caused draughts around the driver's neck. Most were replaced with the sliding partition from the original Driver.

#### THE END

The final Fairway Driver was produced in November 1997. It was sent to Britain's National Motor Museum, Beaulieu, Hampshire

## APPENDIX 1: BADGES, COLOURS, BRIGHTWORK AND TRIM BADGES

Never in its lifetime was the FX4 fitted with the Austin 'Flying A' bonnet mascot or the 'Austin of England' script. These items were only carried by Austin's post-war range of passenger cars and trucks and were discontinued with the introduction of the 'Farina' models in 1958/59. Only those badges and mascots described in the chronological lists of modifications were fitted by the factory.

## WHEELS AND WHEEL TRIMS

Until 1985, the FX4 came from the factory with body-coloured wheels. Some fleet proprietors painted their cabs' wheels in their own colours, e. g. the London General's cabs' wheels were gold, Overstrand's were silver and Cowlin's were blue. Some proprietors added a coach line to the cab and/or the fleet name in a small transfer to the passenger doors. Mushers would never paint the wheels of their cabs in a different colour from the body, although some added a coach line and, very occasionally their initials. Some mushers painted a second colour to the lower part, or the part between the swage line and the waistline of their FX4 but this was very rare. A chromium rubbing strip fitted to the front wing, the front doors and part of the rear doors was originally fitted on the FL2. It was at first available for the FX4 at extra cost, but later included in higher-spec trim options such as the HLS and Fairway Silver. (See specific notes for each model)

Hubcaps of Austin cabs had a script letter 'A' pressed in the centre. Carbodies hubcaps were plain. For most of the FX4's life, two types of accessory wheel trim were available from M & O: the 'Rimbellisher', a chrome ring that bolted to the rim and the 'Turbo', a flat alloy trim with small radial louvres that clipped under the hubcap and covered the entire painted part of the wheel. A new type of wheel trim, consisting of a trim ring, partially painted matt black with elongated, rectangular slots became available in the early 1990s. The standard type of wheel trim for the Fairway Driver was domed and silver-painted. An alternative type with a chrome effect finish became available later. At first, the fixings of Fairway Driver wheel trims were not adequate and were consequently they were lost. Some were replaced by later, TXI type trims or by a simple drum-shaped disc that fitted over the wheel nuts.







Above, left: the 'Turbo provided an easy-to-clean wheel trim, but of not fitted properly could rattle most annoyingly. (photo- Bill Munro)

Above, centre: Although quite expensive, the 'Rimbellisher was considered by many to be the smartest accessory wheel trim for the FX4 (photo-Bill Munro)

Above, right: one of the two types of wheel trim available during the lifetime of the original Fairway (photo- Chris Forteath)

## **BUMPER AND OVERRIDERS**

Prior to 1977, all FX4s were fitted with chromium plated steel bumpers and overriders. From 1977, black rubberised plastic overriders replaced the original chromium-plated items because the press tools for the original overriders had worn out and Carbodies considered the cost of new tools to be prohibitive as a new model, the FX5 was under development. By 1985 the tools for the bumpers had worn out too, so simple black rolled steel bumpers with rubberised plastic end caps were produced, originally as an interim measure as at the time the FX4 was to be replaced by the CR6. After the CR6 was scrapped, the black bumpers continued to be fitted until the end of production in November 1997.





Above, left: chrome bumpers and overriders were fitted to every model up to 1977. From 1977 to 1986, rubber overriders were fitted

Above, right: from 1986, rolled steel bumpers with plastic end caps were fitted (both photos-Murray Jackson)

## COLOURED CABS AND ACCESSORIES

Very few coloured cabs were sold prior to the late 1970s as cabmen preferred the anonymity of black and fleet proprietors found it expedient to have one single colour of paint in the workshop. In 1980, the introduction of lease-purchase with its low initial deposit brought the purchase of new cabs within reach of a lot more cabmen and often they added accessories onto their cabs, writing the cost into the finance. Thus many cabs were bought in a wider variety of colours and with vinyl roofs, sunroofs, electric platform door windows and personal radios. After the Fairway was introduced, various accessories became available, including wood door cappings and wood-trimmed steering wheels. There are number of dealers selling second-hand, reconditioned cabs to the trade, some of whom offer 'dress-up' equipment as an incentive. One such firm is Ascott Cabs of Bermondsey. From the mid-1990's they offered the 'Tower' version of the Fairway, which could be had with various dress-up items such as chromium-plated bumper blades, a black plastic radiator grille insert, wood cappings to the doors, wood-trimmed steering wheel and the addition of a vinyl roof and sunshine roof if none were fitted as original. These cabs carried a small 'Tower' sticker on the bootlid featuring an outline drawing of Tower Bridge.

## NUMBER PLATES AND MOUNTINGS

FX4 front number plates were bolted to a stamped steel plate hung on two steel straps from the bumper bracket. Prior to 1968, the number plates made for Mann and Overton's cabs carried white plastic numbers. Plates with stamped, silver numbers were never fitted. In 1995 a new type of moulded plastic front number plate mounting, screwed to the front face of the bumper was introduced. Virtually all pre-'95 Fairways were retro-fitted with the new number plate mountings



The number plate mounting that was introduced on the Fairway 95, retro-fitted to a 1989 Fairway (photo-Chris Forteath)

## **APPENDIX 2: TAXIMETERS**

From the beginning, FX4s were fitted with electro-mechanical taximeters. FX4 were not fitted with mechanical, flag-type meters. Three models of electro-mechanical meter were fitted: the small and the large Geecen and the Halda. They were mounted on a stout steel bracket bolted to the nearside B-post above the luggage platform and carried an illuminated 'for hire/hired' sign (the latter function indicated by a set of blue lights on a Geecen meter and a blue-green light on a Halda) angled towards the pavement. The functions of earlier electro-mechanical meters of both makes were set by rotating a mechanical 'key'. The functions of a later Geecen meters were selected by a button, whilst later Halda meters used a plunger.





Left: the 'large' Geecen meter. Right: an early electro-mechanical Halda meter, fitted here to a Mk3 Winchester. Not the 'key' on the right, that operates the functions. Later models used a plunger

From around 1979, electronic meters were introduced, the first make being the Cavalier, with its large, pale grey casing with distinctive rounded corners. Lucas (formerly Geecen) and Halda soon introduced their own electronic meters, which had smaller steel casings but the location of the meter remained in the same position until the introduction of the Metrocab and the FX4S-Plus. Smaller, slimmer meters were introduced in the late 1980s for mounting on the top of the dashboard or in the roof binnacle. With these, a separate illuminated 'for hire/hired' sign was mounted on the B-post in the position originally taken by the meter. In the 1990's models with steel dashboards that were still in service had the newer, slimline meters mounted relocated on the dash as the older, larger meters were phased out.

Almost all taximeters in London were, and still are supplied on an annual rental-basis. Very few London proprietors own their own meters. Rented meters are changed immediately prior to overhaul. At overhaul the PCO used to take the cab on a short road test to check the meter's accuracy and then installed new seals over the meter securing screw and over the screw holding the meter drive 'claw' to the gearbox. Today, the road test is omitted but the seals are still fitted. Originally the meter seals were lead, hammered into place with a punch with the date cast into it. Until very recently, electronic meters were fitted with plastic seals with the date moulded into the face. The colour of the seal corresponded with the tariff in operation. Now that the tariff is changed by inserting a card, a coloured light corresponding to the tariff is displayed on the face of the meter.

## APPENDIX 3: WHEELCHAIR ACCESSIBILITY

The move to make all purpose-built London taxis wheelchair-accessible began in 1982, although it was not until 1987 the first cab to include such a facility as standard, the Metrocab was introduced. In the mean time, Carbodies Sales and Service, a division of Carbodies of Coventry offered the FX4W wheelchair conversion on existing and new cabs. This featured a partition that slid forward to accommodate the wheelchair. It was available as an extra-cost option on new cabs until the end of production of the FX4S-Plus. The Disability Discrimination act of 1996 decreed all London's cabs must be wheelchair accessible by December 31 1999. Most of the cabs on the road then were Fairways, Metrocabs and TX1's, all of which were wheelchair-accessible. However, a few older cabs remained and conversions with fixed partitions were fitted by Taxi Access Ltd. and other companies to give them a few years' extra life. Most that were converted were FX4S or S-Plus models but some FX4s, FX4Qs and FX4Rs underwent conversion.



The FX4W wheelchair conversion was an aftermarket operation. The partition slid forward when a wheelchair passenger was carried. Note how the passenger door opens 180 degrees. It was fixed open by a plastic clip (photo- LTI/'Taxi' Newspaper)





Above, left: the dog-leg partition of the post-1999 wheelchair conversion, carried out on a 1988 FX4S-Plus

Above right: on a post-1999 wheelchair conversion, the original door hinges were replaced by the swan neck hinges from the Fairway (both photos-Murray Jackson)

## **APPENDIX 4: PUTNAM ACCESSORIES**

In the late 1970's and 1980's, James Putnam ran a shop in Goswell Road, Islington, from were he sold a number of useful accessories for the FX4. His biggest selling product was the Putnam Seat. There were two versions, the 'Contour' and the 'Orthopaedic'. Both had black velour facings, but the 'Orthopaedic' also had a firm lumbar support. These were built around the original frame and were sold on an exchange basis: you took your old seat into James and in return for it and £55 he fitted a new seat, bolting it onto the adjustable frame of your cab in the main road outside his shop, regardless of the queues of traffic waiting at the lights at The Angel. He also made the Putnam Box, a wide, deep steel container for holding map books etc., that mounted on the luggage partition. Its wide lid was padded and doubled as an armrest. Less commercially successful were replacement black door trim panels in GRP, which needed some trimming to make them fit. The more comfortable seat and the storage compartments incorporated into the FX4s-Plus and Fairway obviated the need for Putnam's products.

## APPENDIX 5: VEHICLE REGISTRATION NUMBERS IN GREAT BRITAIN

British vehicle registration numbers are officially known as 'index marks'. They are issued by the British government via its transport agency, the Department of Transport, formerly known as the Ministry of Transport and are issued for the life of the vehicle. Originally, registration years ran from January 1 to December 31 but this was changed in 1967 to run from August 1 to July 31.

## THE PLATES

Motor vehicles registered in the UK are required to carry an index mark on the front and the rear of the vehicle. (Motorcycles need only carry a plate at the rear) The plates must be of a horizontal rectangular shape with the figures in one line or of squarer proportions with the figures in two rows. (The latter type, where fitted, is usually carried on the rear of a vehicle, an exception being early Land Rovers) At first the plates were required to be painted black, with the figures in white or silver. In 1968 new reflective number plates were introduced, white to the front and yellow to the rear with black figures of an identical type to the original plates. Optional at first, these plates became compulsory from 1973. Early types used separate black plastic figures or numbers stamped into the plate, whilst later types used figures sealed into wipe-clean plates. Many vehicle owners, including cab proprietors chose to replace the black and white plates with the new reflective ones.

## HOW THE NUMBERS ARE DECIDED UPON

The Department, as the did Ministry before it allocates batches of letters to local government licensing authorities who, via vehicle dealers and distributors allocate a unique set of numbers to every new vehicle presented for registration. Each authority is allocated its own specific letters for a given year, so a vehicle can be, (in theory and generally in practice) traced to the town and the year where it was first sold. However, cherished (i. e. personalised) index marks may be transferred between vehicles.

When UK vehicle licensing was introduced in 1903, local authorities were given the task of licensing vehicles and each was allocated a single letter, to which it added up to three numbers. As the number of motor vehicles increased, two letters were allocated for each index mark, followed by up to four numbers. Different combinations of letters and numbers were gradually introduced in various parts of the country, with any one of several different combinations used by different licensing authorities at any one time. From 1933, a system of three letters followed by three numbers was introduced and gradually adopted by most licensing authorities. In 1953 a further system with the order of the letters and numbers reversed was allocated to a small number of authorities and, like the previous system gradually rolled out across most of Great Britain, with the exception of the London County Council, (LCC). A system of four-numbers followed by two letters was introduced in 1954, although it did not come into widespread use until at least 1959 and was not issued at all to the LCC, which continued to be allocated three-letter, three number marks.

## AN INTEGRATED SYSTEM FOR GREAT BRITAIN, 1963-2001

In 1963, a new single, national system was introduced, consisting of three letters, followed by up to three numbers and a year-related suffix, the first being, naturally, the letter 'A'. The first of these were allocated to the LCC, who gave them to a selected number of vehicle distributors. Mann and Overton were not amongst this group and continued to allocate the three-number, three letter marks the LCC had issued to them since 1960. In January 1964, the suffix letter 'B' was allocated and throughout the year the system was rolled out across the country, replacing entirely the preceding types. The London distributors not included in the original allocation, including Mann and Overton had to wait their turn to be allocated the new index marks. Thus early 1964 FX4's would have a 2- or 3-number, 3-letter, registration, e. g. 414 GUC and later '64

#### **FX4 AUTHENTICITY GUIDE**

cabs would have the suffix letter, e. g. BGC 4243B. On January 1, 1965, all local authorities began issuing the new marks, which carried the he suffix letter 'C' and would continue until 1983, when the final letter, "Y' was issued The letters I, O, U and Z were omitted from the list to avoid confusing them with numbers, whilst Q was reserved for non-age related plates.

In 1967, as mentioned before the system was changed so that registration years ran from August 1 to July 31. Thus 'E' was issued from January 1 to July 31 1967 and 'F' was issued from August 1 1967 to July 31 1968. From August 1 1983 the letters and numbers were reversed, showing a year-related prefix, e. g. A547 TJD. This scheme continued until March 1998 (the latter part of the 'R' period) when a new scheme was introduced that was changed twice yearly until 'Y' was reached at the end of February 2001. From then on, a system was introduced and is still in use. It consists of two letters, representing the licensing authority, followed by two numbers to indicate the year of registration, followed by three letters unique to the vehicle.

(Note- none of these registration schemes were adopted in Northern Ireland, the Channel Islands or the Isle of Man)

## CHERISHED INDEX MARKS

'Cherished', i. e. personalised index marks have been permitted on cabs for many years and, in keeping with UK law one may be transferred from one vehicle to another, with the proviso that if it is derived from an age-related plate it is not fitted to a vehicle older than the plate. Thus if anyone who buys an old cab and has difficulty tracing the number, it is possible that originally it may have had a 'cherished' number when new that have was transferred when the cab was sold.

Dear member of the London Vintage Taxi Association. (LVTA),

You just received the CDRom ® on the subject of your interest.

This CDRom (.pdf) is made up from information gathered by the LVTA for archive purposes and made available for it's members.

This CDRom is solely made up and distributed for your PRIVATE use.

This CDROm may not be duplicated a/o distributed in any way.

It is as it comes; the LVTA cannot be held liable in any way for any damages which may occur a/o may be caused by using the CDRom a/o its information.

If information concerns LTI information, let it be noted:-

London Taxi International (LTI) has acknowledged that the LVTA may reproduce this information contained in manuals, etc. onto CDRoms with their statement that the LVTA is not acting on their behalf in doing this, nor that the LVTA is in any way their agent or the official representative for the LTI or the Taxi. They (LTI) are in no way responsible for the CD or the information it contains. The correspondence on this matter is kept in the LVTA records.

We wish you good use with this information and as a result "Happy Motoring".

The LVTA will keep working on creating a good archive, in order to keep this information available for future generations.

If you possess <u>any</u> material related to the London Taxicab which you can hand in to the LVTA-archive, originals or copies, we would be very pleased to hear from you. (hansdoo@planet.nl)

## Copyright LVTA©1998 (onwards)

This cdrom can be read by using Acrobat Reader (download is free).