

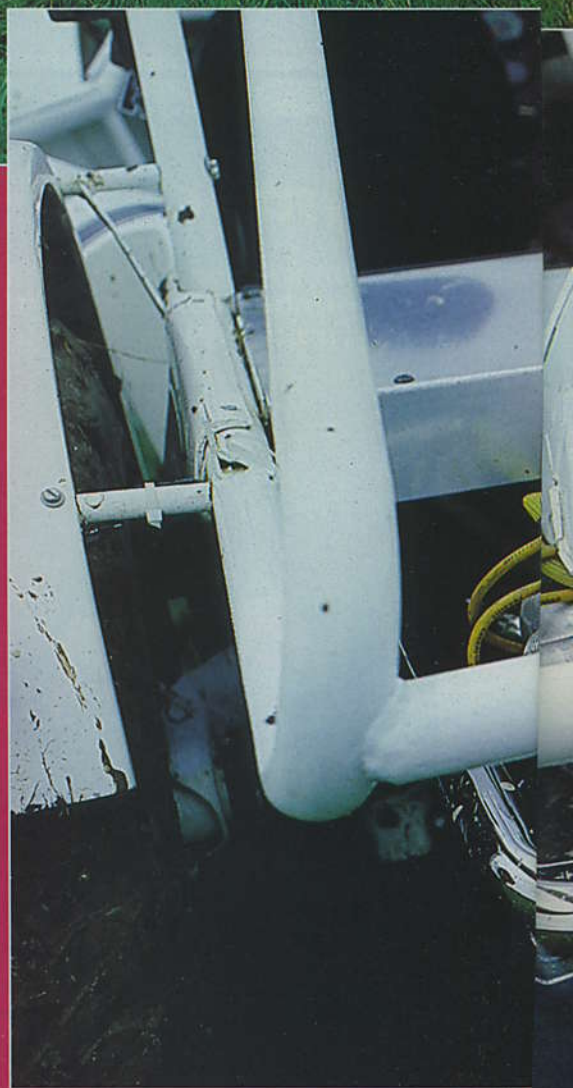


# FAMILY FUGITIVE

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Gone are the days when the UVA Fugitives were strict one or two-seaters only. The new F4 demonstrator means that you can now cover four people in mud all at the same time!

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Everyone seems to know about the UVA range of Fugitives. The basic shape of each variation in the line-up is widely recognised and many regard it as one of those outrageous possibilities offered by the kit car market, although few road-users seem to take the plunge and build up the car for everyday use! Yes! Everyday use! Perhaps it's because you never see them with weather gear in place and therefore assume that they're totally impractical, perhaps it's because your friendly insurance dealer scowls at you when you utter such blasphemy as F33 or even mid-mounted Rover V8. However, there is a way around all that.

Not all of the Fugitives are out and out sprinters like the F33 Can Am. In fact, the basis of the Fugitive range, the F2/F4 model, is anything but a high risk racer in standard trim. We heard on the grapevine that Alan Arnold at UVA had prepared a Fugitive F4 (2+2) demonstrator, so we just had to check out the sociable Fugie at the Newbury premises of the much hallowed Unique Vehicle and Accessory Company. Could it be that the image of the Fugitive sand rail was on the point of attaining middle age? Is there, at last, that definitive excuse available to justify the purchase of true individuality to the other half? The answer is undoubtedly yes. If the pure two-seater configuration of the Fugitives has prevented you from making that significant decision in the past, it's now time to squeeze out of that armchair and

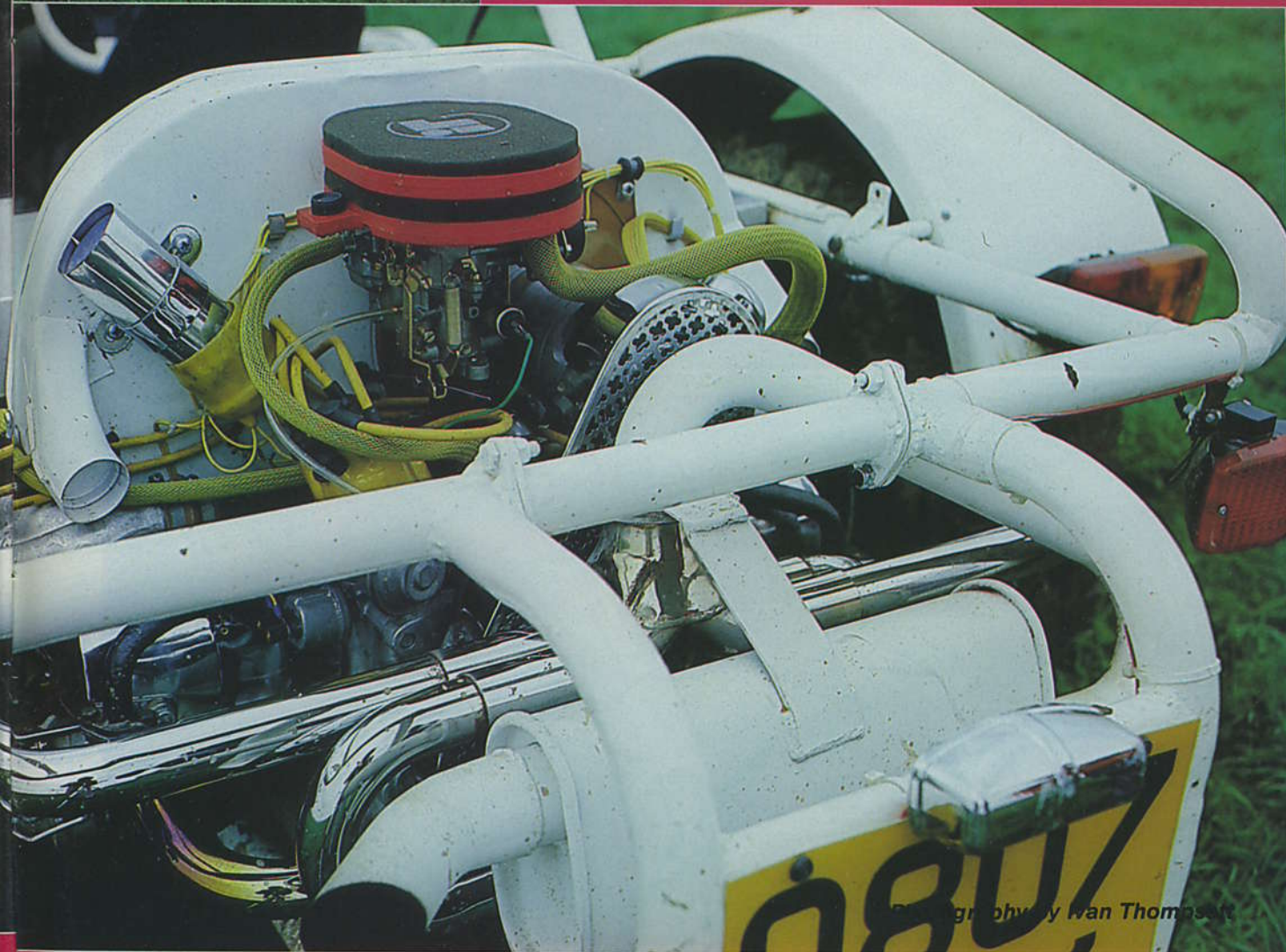
rush down to UVA for a test drive.

As an added incentive for our visit, Alan had promised us a viewing of his much talked about slide show. Not a sordid collection of snaps from his days in the armed forces but a photographically enhanced journey through the build-up of a Fugitive 2. Being self-confessed doubters of anything VW Beetle, we thought that it would be more than a trifle entertaining to raise a few of the well tried and tested anti-VW propaganda questions, just to see how Alan would get around them.

Having downed a very welcome cup of coffee upstairs in the UVA office, we laughed, perhaps a little sarcastically, when Alan invited us to step outside and get frozen in the Fugie 4. Actually, we found out that he was deadly serious. He donned a motorcycle type one piece waterproof, on top of which he pulled on a quilted jacket. Hmm, looks like the car won't be fitted with weather gear. We followed Alan as he drove the 1300 cc VW-powered F4 out of Newbury and towards the Ridgeway, which is a public green-laning route amidst rolling hills, mainly given over to pasture.

With the Fugitive, resplendent in white gel coat with parallel diagonal striping, positioned for photography before we ritually covered it in muck, Alan took the opportunity to point out a few of the more favourable aspects of the very versatile four-seater version. In the case of the

*Tractable VW power makes the F4 a good value family green-laner.*



Photography by Ian Thompson



# WHEELSPIN





demonstrator, a basic rear bench seat had been fitted. This still gave ample storage space if there were no more than two occupants in the car and actually permitted two adults of average build to be seated without ridiculous contortion – although we hasten to add that the rear bench seat is not a habitable confine for serious travelling and the heads of adult-sized passengers are above the level of the roll cage. The bench seat option should be regarded as the one for the shorter passenger.

The true four-seater, fitted with four UVA bucket seats, is designed in such a way that the rear passengers are sitting lower down either side of the VW transaxle, and not on a level with the top of it. Alternatively, the rear space available for seating can be built into a very generous and accessible load carrying area if the car remains a two-seater. The rear-mounted standard VW 1300 cc engine – attached in the same way as it is to the donor vehicle – had been treated to a very effective smartening up, with the fan housing, after-market air filter and the exhaust sytems being the main attention gatherers.

The eye-catching appearance of the Fugie can be put down to many factors. At first glance, it looks like something that's escaped from Santa Pod Raceway. When you peer a little closer, the next objects to come to the onlooker's attention are the enormous-looking on/off road tyres, with Norseman printed all over them. These are rather high profile items, fitting 15" diameter x 8" wide rear wheels and 14" diameter x 7" wide front wheels. Following behind the F4, the effect of these wheels is plain to see – a minimum ground clearance of nine inches!

More for reasons of self-indulgence than anything else, we got Alan to give us a little practical demonstration of how to do it in the dirt. A night of rain had made the green lane impassable for anything but rough terrain vehicles and the only traffic on it consisted of tractors. Alan warmed up the dub-dub four before hammering it into action along the Ridgeway. A very impressive little show of driving that was. The car turned immediately from pure white to organic black, and Alan was transformed from a nattily dressed company man into something from the Black Lagoon – wearing shades, of course!

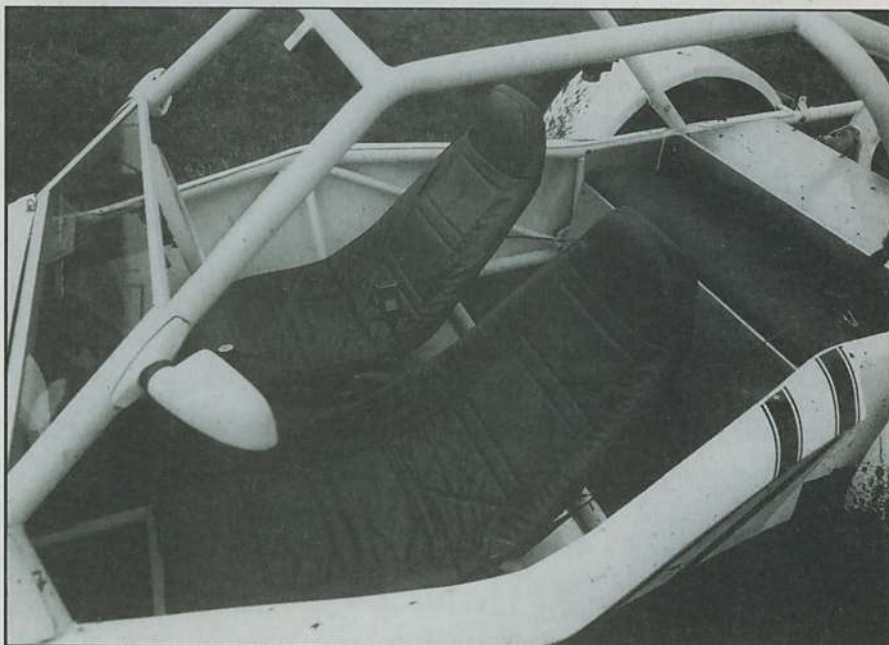
Oh well, Monty's go. Without enormous experience in driving purpose-built all-terrain vehicles of any description, the editor was a little concerned at damaging a company demonstrator; that's something that really loses cred for the average hack... As a matter of fact, it's one of those things that requires minimal expertise, not a breakneck degree of forward motion and can be real fun if you're prepared to get a face full of assorted bio-degradables! The modest 40ish bhp from the VW flat four engine isn't up to much when fitted to the donor, but its superb spread of torque make it an admirably tractable motor for mud-plugging in some fairly dire conditions. The benefit of those Norseman tyres is obvious when they're used in the capacity for which they were designed. When you steer the average rear wheel drive

production car in mud as deep as that, you generally carry on in a straight line. The faster you go, the straighter the line. With the correct tyres, the car actually heads in the direction you point it, much to the disbelief of the inexperienced off-roader.

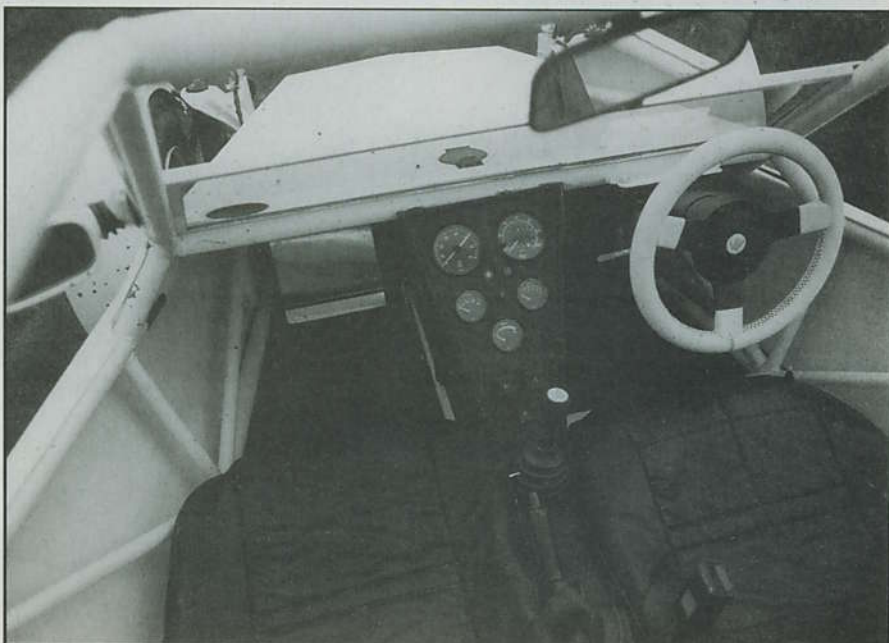
That ground clearance is entirely necessary. Approaching potholes which would simply write off most road-going cars, the involuntary apprehensive wince is completely unwarranted. The F4 sails down into the dip and out the other side – and you haven't even left an exhaust system behind. The laid-back seating position, typical of all Fugitives, is no handicap to energetic steering efforts, although your lap does tend to become the resting place for many a startled earthworm. Having quickly adapted to the excellent, purpose-built UVA pedal box,

the driver can soon control the car without recourse to *visual* checks of the controls. The gearchange mechanism, being merely a shortened Beetle item, works very well and is in an excellent position. Feedback from the steering is surprisingly mild and controllable. No need for massive biceps and steel wristguards to guide the lightweight F4 over the rough.

When things start to get really bogged down, the low-down VW torque comes into its own and the Fugie extracts itself from the very deepest ruts with no recourse to high rpm wheel-spinning. A lot like a tractor in principle, really. The large overall diameter of the rear wheels just rolls you out over the bumps at a comfortably slow rotation, minimising the risk of getting further bogged down. As Alan has explained, perhaps the best part of off-roading is that you can have some



*Above: the UVA bucket seats give the driver and front passenger a reclined seating aspect. Mud tends to collect in your lap! Below: the central dash pod accepts either the VDO gauges or the original Beetle equipment. Carpet? Who needs it?*





very lively entertainment without first having to master the art of illegal speeds. Thirty mph on sticky terrain can be just as exhilarating as sixty or seventy down the country lanes in a road car.

It's also rather therapeutic. Given a road car with enough torque to spin the rear wheels at will, the driver (or should we say *most* drivers?) will be unwilling ever to spin the wheels for fear of being renamed *Complete Wally* by friends and public alike. Out there on the green lane, where no-one's watching your antics, the secret wheelspin fancier can really live a little at the controls of the Fugie – and not create a public hazard in the act! Of no little interest is it to drive a car which can be thrown around sideways and then be willingly corrected. If we're not too far from the truth, we would suppose that it's a damn good way to find out what a rear wheel drive car is like to master when the rear end drifts out. It's much better to learn how to react, or rather how not to over-react, on the rough rather than on the Staines High Street one way system.

It can only be regarded as an extra bonus when the road manners of the Fugie 4 turn out to be excellent. Driving back from the Ridgeway, the F4 obviously displayed the straight line performance limits of the standard VW power source. Add to that the fact that the rather large overall diameter of the rear wheels caused noticeable overgearing (despite the weight loss when compared to the donor) and we are left with a car that is far from stunning but a fair bit more spritely than the VW. However, once you've stoked the Fugie up to a respectable top end, the excellent road manners of the car come into their own. At first glance, the sight of those disparately proportioned tyres would tend to give the onlooker the impression that this is not a car which would lend itself to energetic road use. Wrong. There is very little tendency to oversteer or understeer and when you reach breakaway point, the Fugie is willing to get you back on course with a minimum of fuss.

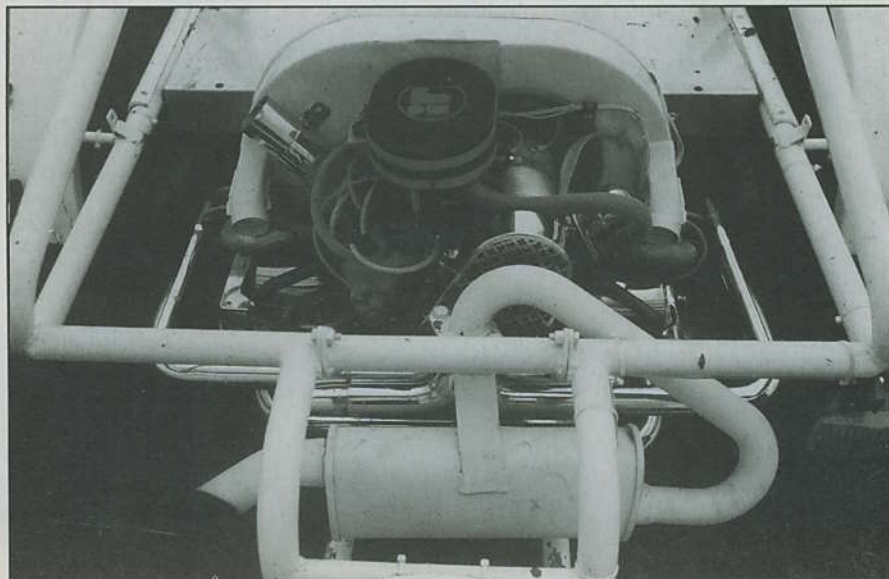
Overall, the on-road and off-road tests

were a very satisfying experience for a car of such low budget requirements. The structure of the VW suspension is agriculturally solid and, of course, the floorpan doesn't rear its ugly head anywhere in the Fugitive range. However, the test car did not pass with flying colours. The short off-roading session caused the rear demise off the front nearside cycle wing and also the disconnection of the rear nearside light cluster wires, prone to damage from dirt thrown up by the rear tyre. An added annoyance was the tendency for both front mudguards to contact rather too heavily with the bodywork on either lock. This may have been due to experimental wider fittings for the cycle wings. Hopefully, this can be circumvented without having to widen the complete VW front torsion tubes etc.

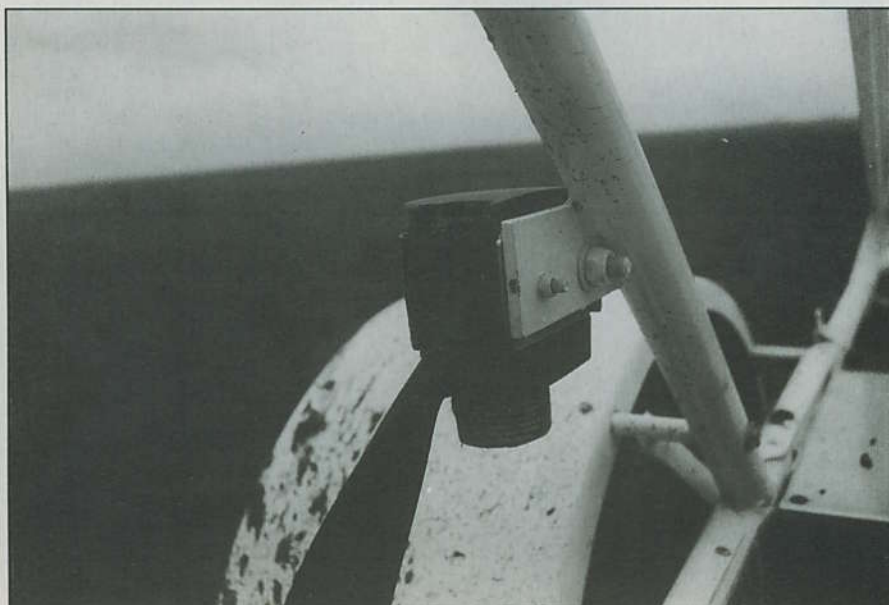
Having returned to the Argents Mere High Technology Park after a warming lunch at a local hostelry, we were treated to the slide show which explains the conceptual stages of building a Fugitive F2. Everything pertaining to chassis, running gear, wiring and general rules of construction of the F2 remains the same for the F4, apart from the use of rear seats. Straight into the nitty gritty, with some of the earlier slides showing the Beetle donor's different configurations of rear suspension. The most commonly found type is called the swing-axle assembly, which can be identified by the characteristic rear wheel 'tuck-in' on or near full bump, when the half-shafts pivoting *only* at their gearbox ends give the rear wheels that exaggerated angular stance. The more desirable type, found on the Super Beetles, is the IRS or double-jointed assembly. This allows the half-shafts to pivot at the wheel *and* gearbox ends, resulting in a much reduced camber change. There is little doubt that the latter is the best type to use for all round on and off-road requirements. All damping is via telescopic shock absorbers and all springing is via transverse torsion bars running inside tubes.

Most people ordering one of the Fugies will want the pre-welded chassis provided in any one of three stages of kit, stage three being the most comprehensive at around £2020.84 inclusive of VAT and stage one being the most basic at around £1310.57. To your chassis, UVA will weld the complete rear torsion assembly from the donor Beetle. This you will have removed from the hapless donor by way of a large hack saw. It's heavy gauge tubular steel and as such has not collected a reputation for rust damage. All open ends are closed off at the factory before the chassis is released and the torsion housing in its new home is braced by no less than ten pick-up points on the F4 chassis. The chassis is constructed in round section ERW tubular steel, 14 gauge, and of 1" and 1½" diameter. The very purposeful chassis is, of course, distinguished by its integral, full length roll cage.

The technical content of the slide show is enough to take up the rest of the pages in this issue, so we must unfortunately be rather selective in choosing the more relevant details to relay. Next on the



Above: standard Beetle 1300 cc boxer engine has been treated to some 'visual tuning' and remains smooth, quiet and surprisingly tractable, especially at low rpm. Below: the very butch upper seatbelt mount leaves little to chance.





agenda for the builder is the fitment, with rivets, of the flat alloy pre-cut floorpan. This is facilitated by turning the chassis upside down and marking the locations of the appropriate chassis tubes before drilling out and riveting. Bear in mind that the GRP side panels are sandwiched between the floor and the outer chassis rails to improve waterproofing.

The complete twin-tube Beetle front suspension, whether of kingpin or ball-joint type, can be clamped directly to the front of the UVA chassis via specially made clamps. These grip the torsion tubes nearer their extremities for extra rigidity in off-road conditions. Remembering that the F2/F4 series can be built for off-road racing, on/off road general use or fast road use, certain

adjustments may need to be carried out to the Beetle suspension set-up. A whole tome of possible embellishments is applicable to off-road racing, no mods are necessary for the on/off-road type and a lowering of the front suspension is required for sports road use, along with the incorporation of bump-steer compensators up front (ball-joint front suspension). All these mods are either carried out by UVA or they can give you the best advice about carrying out certain of them yourself, depending on your capability.

The Beetle transaxle mounts back onto its original cradle and the engine is suspended from the bell-housing bolts as per normal. Obviously, there are many different engines to be fitted to the

transaxle via special UVA adaptor kits. Typical examples are the Ford Kent and CVH units, the Alfa boxers and the VW watercooled fours. Check out the full list from UVA, it makes very interesting reading indeed.

Wiring can be supplied by UVA, or you can adapt the Beetle loom to its new home, if you can keep the modifications to length neat and waterproof. Even the basic Beetle instrumentation can be used in the Fugie's centre pod dash. More often than not, builders opt for the UVA loom and the VDO instruments which are correctly calibrated for the special UVA alloy 7½ gallon tank and the overall diameter of the front wheel/tyre combination you have chosen etc.

As far as safety is concerned, you must take a few steps listed by UVA as necessary. Firstly, the Beetle front and rear brake slave cylinders must be swapped around. They're a standard fit but the front slaves have larger bores, which come in handy at the rear to compensate for the large overall rolling diameter of the Fugie's wheel/tyre combination. New copper brake pipes are supplied in all stages of kit. You can opt to keep the original Beetle pedal box but the UVA item is far superior in ergonomic terms.

The factory will have to lengthen the standard VW steering column and will also shorten the VW gearchange rod. These are jobs quickly carried out and to a commendably high standard. UVA bucket seats in GRP can be covered with off-the-shelf tailor-made padding and an after-market small steering wheel is all that's needed to finish off the driving environment to the driver's taste. Carpets? Wot? Well, we didn't actually ask if they were available. Perhaps they are. Still, not many Fugie buyers are that interested in 'reduction of interior noise levels' or 'essential refinements'. The whole car spells out functional exhilaration in big, bold letters and you can take it or leave it. In fact, there are some concessions to comfort in the form of a full toughened glass screen, and even a soft top.

Well, we've only managed to scratch the surface – and the F2/F4 are designated as low budget quality fun cars. The factory estimates that you can build up a good F4 for around £2100, though if you were going to opt for the time-saving stage three kit, we think you might end up nearer the £2500 mark, which still isn't a lot to pay for what could be regarded as the most indestructible car around. If you're tinkering with the idea of doing something outrageous with that Beetle before it starts costing you a lot of money to maintain, book up for the UVA build seminar relating to the model in which you're interested. As far as we know, the F2/F4 seminars are happening on the 20th of February, the 16th of April and the 18th of June. They start at 9.45 am and cost £10, refundable on the purchase of a kit. Either way, if it convinces you to buy a Fugie or to scrap the whole notion, it's worth the money in savings made. Contact the UVA Co Ltd, Argents Mere High Technology Park, Hambridge Lane, Newbury, Berkshire RG14 5TU. Tel: 0635 33888. Literature for the F2/F4 range costs £1.50.



*Above: even the editor can act as if he's an off-road specialist, without mega-bhp needed for extreme fun. Below: the Fugie 4 in its element – it's very useable on the Queen's highway as well. 1600 cc power would be preferable, though.*

