

From the Cradle

**Graham Stewart continues his quest to transform a wrecked Yamaha 350LC
The rebuilt motor has already been bolted into the new Hejira frame**

The first part of the Hejira-YPVS saga ended, as all good soaps do, in mid-air. As you may recall, the bare metal frame was being triumphantly held aloft by its maker, Hejira's Derek Chittenden. Since then Derek has been extremely busy making all the various bits and pieces fit together properly and, more importantly, work as intended.

Meanwhile, I concerned myself with organising the cosmetics; Cetra had expressed a preference for a purple and pink colour scheme, with the proviso that "it mustn't be girlie pink." Curiously enough, you don't find many colour charts with a shade of pink labelled as 'Not Girlie' . . . Early on in the proceedings I had unwittingly made life difficult for myself by getting the F2 dualseat re-covered in a raucously loud hue of Dayglo Pink. It was one of those seemingly inconsequential little decisions, made on a whim, that echo down the ages. If I had known at the outset the degree of time, trouble, aggravation and expense that decision would cause me, it would have been re-covered in Boring Black. The problems started when I tried to get the frame powder-coated to match . . .

How was I to know that of all the colours I could have chosen, fluorescent pink was probably the one guaranteed to give me the biggest headache? For starters, the pink pigment has a higher susceptibility to

fade than most. Also, it seemed particularly difficult to get powder in fluorescent pink. Even if we could, we then had to find some pink paint to match the powder and the seat. Life was getting very complicated.

I found a firm called Glowbug who manufacture fluorescent powders and wet paints and could supply them in relatively small quantities. One of their standard colours (Red 20) was an almost perfect match to That Damn Seat. I rang up Glowbug's Mike Martindill to ask what quantities of powder and paint he recommended for the job and placed my order. Meanwhile, my mind turned to the problems of non-standard bodywork.

Derek was supplying the rear mudguard, but that still left the fairing, sidepanels and front mudguard to find. Cet wanted a twin-headlamp fairing, partly because she likes the looks and partly because she wanted better lights than the poxy item on the original F2. Eventually we tracked down a nice-looking, twin headlamp job in Powerbronze's catalogue, originally intended for a 125. As the finished bike was going to look and be, considerably smaller than a stock 350, this seemed a good idea. Powerbronze confirmed that other punters had fitted this fairing to YPVS's without hassle. The fitted lights were 5.75in Cibi Z-beams, arguably the best headlights available.



le to the Rave (Part Two)

into a lightweight, low seat, rider-friendly machine for his 5ft 2 in girlfriend.
ame with its all-new rear monoshock suspension. Now read on . . .

One of my early mistakes had been to throw away the damaged sidepanels I'd pulled off the wrecker. It would have been much easier to repair and/or modify them than to start completely afresh. In fact, the prospect of doing this galvanised me into getting hold of some damaged sidepanels from an F2. Talk about re-inventing the wheel . . .

The bare metal frame was handed over to the powder-coating firm and I returned a week later with high hopes, only to have them immediately dashed. Even at first glance, it was clear that things weren't right. Close inspection revealed very variable density of the coating, with the base white coat clearly visible in places (Glowbug differ from most other manufacturers of fluorescent powders, in that they use a 'two-pack' process with a white base coat which is baked on first, followed by a fluorescent top coat. This is supposed to give a stronger fluorescent effect). Whatever the technicalities, I wasn't satisfied with it.

Glowbug's Mike Martindill recommended White Seal, a firm with wide experience in applying fluorescent finishes *and* coating motorcycle frames. But when I telephoned them, they expressed a worrying degree of caution regarding fluorescent powders in general. They explained, it was all down to the skill and technique of the operator applying the

stuff. Applying a perfectly even coat to a complex structure like a motorcycle frame is horribly difficult. Using 'straight' powders, a slight variation in coating density is unnoticeable. With fluorescents, the slightest variation in coating density is immediately and painfully obvious.

It took a visit to White Seal's premises in Chatham to finally make me see the foolishness of my ways. Bernard Jacks (the manager) and Laura (one of their most experienced operators) between them convinced me that I really should stop banging my head against a Dayglo Pink wall and give the whole fluorescent frame idea a miss. They agreed that they could probably improve on the existing finish, but if they couldn't, I would have to bear the cost. I think what finally convinced me was the sight of a bin full of reject, fluorescent pink, motocross handlebars . . .

So here we were, back to square one. The frame would need to be stripped of all the old powder and then shot-blasted, etch primed and recoated. In the end I decided to take it back to the coaters who had applied the fluorescent powder, as I knew the quality of work they could produce in 'straight' colours. Cap in hand and humble pie in mouth, I now had to concede that boring old gloss Black was the best choice after all. The paint man, Roger Murphy, was very good about it;

What a difference one year and £7000 makes. The original salvage wreck on the left cost £750 but Graham sold £550-worth of its bits before spending another £7000 on this immaculate conversion.

he only mentioned the word 'vindicated' twice.

I delivered the frame, subframe and swingarm to Epoxy Powder Coaters at midday on a Saturday in its 'patchy pink' state. When I collected it six days later, it had metamorphosed into hunky high-gloss Black and looked a treat. Well, if it's good enough for Kenny Roberts . . .

With the frame safely strapped into the passenger seat, I turned round to it and snarled "So kid, are ya ready to meet your Maker?" "Oh No!" it cried, piteously. "Oh Yes!" I growled, heartlessly, and floored the accelerator . . . Yes folks, it was time for the final buildup. Me and the frame were on our way back to Hejira.

It was six weeks before I saw the bike again but Derek had been busy beaver away and the transformation was almost complete. The bike looked well 'ard with a butch black frame, black and silver

Astralites and chunky aluminium engine plates. It almost seemed a shame to put a fairing on it. The rear end had all the suspension and brake linkages in place and working, but the front end was looking problematic. Clearance between the forks and the front wheel appeared marginal even without a mudguard, mainly because we were using YPVS fork yokes. A YPVS runs a 100/80 front tyre on a 2.15in rim; we are running a 120/60 front tyre on a 3.5in rim. The front forks (35mm Marzocchis) looked rather spindly compared to the rest of the bike, although Derek seemed confident they would be OK. Also, there was no way that the (normally) top-yoke-mounted, ignition switch would fit, because it fouled the main front fairing mounting. Derek took it all with serene confidence. "Yes, I'll have to do something about that . . ."

And I'm sure he would have, but at this point I made an Executive Decision and spent some Executive Dosh on a pair of TZR250 forks. These have a crucial extra 6mm wheel to fork clearance, meatier 39mm legs, and a method of mudguard mounting which doesn't rely on fork leg lugs. On the TZR250 (and the YPVS) the mudguard is rivetted to what Yamaha laughingly refer to as a fork brace; an aluminium stamping that has all the structural integrity of a soggy cornflake packet. I replaced it with a cast item, three times the thickness and reassuringly rigid.

It never ceases to amaze me how the Japanese so readily spoil the ship for a ha'porth of tar; Derek was incredulous when he saw the size of a TZR/YPVS wheel spindle — 12mm, would you believe? What is the point of hefty 39mm forks with a poxy little 12mm wheel spindle? Needless to say, Derek uprated the spindle to a 16mm item — a big improvement. The limiting factor was the speedo drive mechanism; to remove any more metal ran the risk of the whole thing collapsing. The fork legs also had to be bored out to take the larger spindle but we reckoned the standard TZR spring rate was about ideal, since the Hejira 350LC was now down to the weight of a TZR250. Just to make it all look right, the fork legs and yokes were powder-coated black, satin finish rather than gloss.

There was still a mass of detail work to be completed. Like the front caliper and disc mounting, fitting the YPVS locking tank cap to the Hejira alloy tank, making brackets to fit the fairing and YPVS side-panels, rejigging the front end to fit the TZR forks and (deep breath) *all* the wiring, electrical and associated bracketry stuff. Then we could paint it, register it and lordy, lordy . . . actually ride it.

It was a fortnight or so later before I pitched up again at Hejira's and wheeled the bike out for some photographs. I also took the opportunity to sit on it.

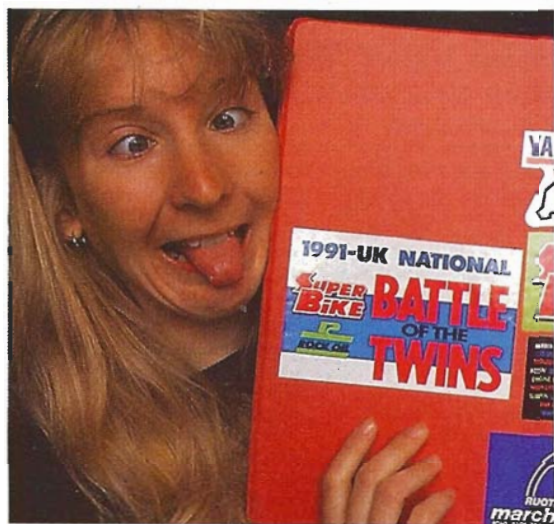
I have to say that at first it felt just right. Legs comfortably akimbo and plates of meat planted securely on the deck, I practised the age-old art of suspension testing by bouncing on the seat. Spring rate? Nicely compliant, but pleasantly firm. Damping? Lovely — that controlled return after compression that indicates spot-on rebound rate.

It was at this point that I suddenly experienced a sense of *deja vu*; hadn't Cet's old YPVS felt rather like this? The seat height felt very similar, the suspension slightly tauter. The only giveaway was how light the Hejira bike felt. That and the fluorescent pink tank and seat, of course. It was all very well for the bike to feel right for me, but wasn't the bike's *raison d'être* that it should fit Cet? Hadn't one of the aims of this exercise been to make the seat height lower than normal? Hadn't Cet repeatedly complained about rear suspension which never exhibited any 'give' when she



Top: before the paintjob and front end mods. Middle; the Powerbronze Lynx twin-headlight fairing. Bottom: the TZR forks with bigger spindle, ISR four-piston caliper and 320mm disc





Above: left is Cetra, the 5ft 2in girl who forsook fame, fortune, a Hejira 350LC with her name on it, and its creator. Right: is 5ft 6in Margaret modelling the bike's low seat.

Below: precisely positioned footpeg and rear brake linkage. Plus the Spax monoshock. Ride height and spring/damping rates are adjustable over a huge range



sat on a bike? Had we really come so far, just to wind up at square one? And to twist the knife in the wound, it also suddenly dawned on me that the TZR250 forks had the caliper mounting carriers on the right-hand fork leg, whereas the ISR caliper was defiantly left-handed.

The seat only needed to be about 30-40mm lower, but every inch was vitally important. While I was in a panic, Derek calmly assured me that the ride height was widely adjustable by varying the length of the bottom suspension links, and that there really wasn't a problem at all. The actual ride height could be adjusted over an enormous range in a matter of moments. Modifying the spring rate was an equally easy matter to deal with.

The caliper problem was solved by the simple expedient of telephoning those helpful chaps at Hobbsport, importers of ISR tackle, and telling them my troubles. They agreed to exchange a RH caliper for my LH one with a cash adjustment according to condition. My caliper, while unused, turned out to be a fairly early example with old-style pistons. These would have to be replaced, and since the caliper couldn't be resold as new, I accepted Hobbsport's trade-in offer of £70.

Hejira have a very high opinion of ISR calipers; they run one on the front of a racing 600cc single and say the stopping power from just a single disc is phenomenal. They look superb too, as well they might, being machined from solid billet and then polished to a satin gloss finish.

While Derek was expertly wielding a large mallet and several litres of superglue, completing the finishing touches, I was trying to make sure no hitches occurred at the painting stage. We'd decided to have 'Hejira' signwritten on the fairing, while the tank would just have Yamaha's crossed tuning forks emblem, and the side panels would carry a YPVS transfer and the legend '351'. Before the Ducatisti lynch mob arrive, I must point out in my defence that a) the actual engine capacity is 350.2cc (because of the rebore) and b) the bike's front brake master cylinder began its life on an 851. And my Dad was stationed in Italy during the war. So there.

The bike was painted by Mike Cresswell, a man who wields a mean spraygun. He works at Caddick's bodyshop, which is conveniently located right next door to my humble abode. On their recommendation, I met then hired Bob Harvey, a local signwriter and graphic artist, who executed the well-neat logos that adorn the bike's flanks. One of the things that greatly encouraged me was that both Mike and Bob are motorcycling enthusiasts. To have people who are both skillful and enthusiastic on your side is good news in spades. Their work was impeccable. Absolutely A-1.

And so the great day dawned . . . the day when the result of more than a year's effort would be wheeled

out of Derek's workshop and brought back to Stafford. As soon as I saw the bike, it was obvious that Derek had spent yet more time and effort on it. The fairing looked as if it had been designed around the bike, and all the components that had given Derek so much grief (clocks, water tank, power valve gizmos, indicators, sidestand etc) were present, correct and bore evidence of professional fitting. All doubts about the front end were swept away in admiration at the way everything fitted and looked 'just so'. And the detail touches told of its racing origins; rubber-mounted components in abundance, spiral anti-chafe plastic wrapped around brake lines, twin fuel taps with a connector pipe between the carbs, Nylock nuts on everything — the list went on and on.

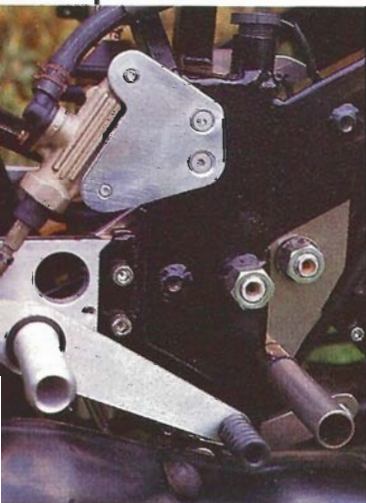
From a colour-matching point of view, the bike was a dog's breakfast; two-tone blue front mudguard, black fairing, pink seat and tank, white and red LH side panel, black and red RH side panel and red centre tail section. But that wouldn't be a problem for much longer. Bright and early the next morning I was round at Caddick's, busily taking of all the bodywork that Derek had spent so much time fitting. Next stop was Wylie and Holland's palatial emporium in Wellington, where the bike had been booked in for the equivalent of a PDI.

As usual, I had underestimated what needed to be done. Our Ron spent about 30 seconds in close study of the bike and proceeded to reel off a list of things I had overlooked. But Our Ron is nothing if not a consummate spannerman. After six hours of furious activity, the bike was ready, running sweetly and fully plumbed, wired and cabled.

The chosen paint was Dogsbollox Purple metallic (it goes under the more prosaic name of Blue Purple Metallic . . .) My only reservation was that a combination of metallic and fluorescent paint could be a tad OTT. Mike suggested that instead of a metallic finish I might care to try a pearlescent, which should give a more subtle effect. He mixed up an egg cupful, and straight away it was obvious that my search was over. It looked so good, I nearly drank it.

It was time for the nitty-gritty details. What design would you like, sir? Do you want a stripe on the side panels? How wide? How do you want the tank painting? Is the fairing going to have any pink on it? Where do you want the transfers? Then there were problems getting the primer-stopper to cure on top of the fluorescent pink powder that still remained on the tank. I left Mike masking up the side panels, fairing and tank at half past seven on Saturday night, and headed for the pub. It was finished by 2pm Sunday afternoon.

I wheeled the bike into my living room. It was one of the family now. Besides, it's a tradition that LCs past and present spend at least some time in the house.



HEJIRA 351LC — COSTS AND CONTACTS

Supplier	Item	Price
Bridge Street M/C's G. Horsman, Bolton	Salvage Yamaha RD350 F2	£750.00
	Clocks, switchgear, radiator, R/H footrest & brake assy, indicators, pipes, clutch lever	£175.00
G. Horsman, Bolton	Power valve bits, oil pump, carb bits, air filter element	£20.00
Wylie & Holland M/C's	Rebore & pistons, allen screw set, studs, fit oil pump & power valve parts, check engine	£161.62
P & P Seating B'ham	Re-cover & reprofile dualseat	£38.00
Wylie & Holland M/C's	Ign key, rear caliper seal kit	£20.00
M & P Accessories	Pair Michelin Hi-Sport Radials	£146.98
Wylie & Holland M/C's	New ignition switch & keys	£42.00
Colin Carey	ISR 4-pot caliper & 320mm disc	£180.00
Hejira Racing Dev's	Frame kit (details below)	
	Frame kit with special rear subframe & dualseat mounting, side stand, pillion footrests etc.	£1312.68
	Braided brake hoses	£34.50
	Astralite Wheels 3.5 x 17 and 4.5 x 17	£431.25
	Rear Mudguard	£22.86
	Front Brembo master cylinder (s/h)	£88.94
	Fork conversion to Hejira frame	£28.75
	Brake plates	£33.72
	Rear Brembo disc	£85.85
	Rear master cylinder rod & bearing	£7.25
	Rear torque rod with bearings	£23.57
	Petrol tank with taps	£172.50
	Spax monoshock c/w spring	£190.90
	Additional labour	£172.50
	Hejira total	£2605.27
Powerbronze	LYNX twin headlight fairing	£250.50
Jim Matthews, Crich	TZR250 speedo drive unit	£5.00
C. G. Chell, Stafford	TZR250 handlebar grips	£12.47
Glowbug Ltd	Fluorescent Red 20 powder/paint	£201.51
MainFrame, Stoke	TZR250 fork yokes	£40.00
Epoxy Powder Coatings	Frame, s/arm subframe coating	£111.62
Jim Matthews, Crich	Pair TZR250 fork legs, RD350F2 side panels, TZR250 fork brace	£165.00
C. G. Chell, Stafford	TZR250 fork oil & dust seals	£38.44
Epoxy Powder Coatings	Fork yokes/legs powder coating	£15.00
Central Breakers	TZR250 front mudguard	£20.00
Hobbsport, Totnes	Exchange R/H ISR caliper	£148.05
Hejira Racing Dev's	Buildup costs	£1645.00
Bob Harvey	Hejira 351 graphics	£50.00
Wylie & Holland M/C's	PDI, service, chain, fit loom	£192.52
Dream Machine	Tuning fork/YFVS transfers	£12.05
R. J. & A. Chadwick, Stafford	Prepare & spray fairing, tank, side panels & mudguard	£411.25
Total cost		£7457.28
Less items sold from "damaged repairable"		-£550.00
Actual Cost		£6907.28

Seat covering:

Salvage 'Damaged Repairable'
motorcycles & spares

Importers of ISR brakes etc

'LYNX' Twin-headlight fairing

Engine repairs, Yamaha spares, cups
of tea and jovial banter

Powder coating of frame, swinging arm,
subframe, fork legs and yokes

Supply of epoxy/polyester powder and
wet paint in fluorescent colours

Preparation and painting of fairing,
tank, side panels and front mudguard

Signwriting and Custom Graphics

What can I say? Everything else, including
vast amounts of buildup work

P & P Seating,
429 The Meadow,
Kitts Green,
Birmingham,
B33 0DZ.
021-784-4001
Bridge Street Motorcycles,
Bridge Street,
Holloway Bank,
Wednesbury,
West Midlands,
WS10 0AW.
021-502-3958
Hobbsport,
Broomborough Lodge,
Plymouth Road,
TOTNES,
Devon.
TQ9 5LH
0803 864303
Powerbronze Ltd.,
44 Brook Lane,
Ferring,
Worthing,
W. Sussex,
BN12 5JD
0903-507300
Wylie & Holland M/C's,
Wrekin Road,
Wellington,
Telford,
Shropshire.
TF1 1QZ.
0952-248868

Roger Murphy,
Epoxy Powder Coating Ltd.,
215 Tyburn Road,
Birmingham
B24 8NB
021-328-2145
Mike Martindill,
Glowbug Ltd.,
Wilbet Cottage,
Witham Road,
Black Notley,
Essex,
CM7 8NG
0376 552418
R.J. & A. Caddick Ltd.,
Alexandra Road,
Stafford
ST17 4DA.
0785 51568
Bob Harvey,
1 Marlborough Close
Great Haywood
Nr Stafford
0889-882759

Derek Chittenden,
Hejira Racing Developments,
Manor Farm,
Gawcott,
Nr Buckingham,
Buckinghamshire,
MK18 4JF.
0280-812152
0280-822143
0280-824949 (Fax)

Notes

This is (to the best of my knowledge) a complete list, unlike some "guesstimate" figures I have seen for other bikes. Derek's bill was rather higher than normal, due to my insistence on a dualseat (which needed a special subframe), special tank etc., and because he did all the build-up work. The costs would've been considerably lower if I'd done any of the work which I didn't cos I'm a lazy git. Each job is costed on its own merits. And it's still bloody cheap for a handmade motorcycle.

Have I got an understanding girlfriend or what?

Err . . . Well, I have something of a confession to make here. You see, Cetra and I split up a little while back and I didn't have the heart to tell you. At the time, the bike was three-quarters finished, so . . .

So, what started out as a present for my girlfriend has ended up as a present for myself. The costs escalated way beyond my original reckoning (as did the time and effort involved) but I succeeded in achieving all my design goals — a lower seat height, less weight, much improved manoeuvrability thanks to good ergonomic positioning of bars, pegs, and the centre of

gravity, which is lower and much further forward than before. It really is one slim and compact machine. I guess I'll have to take it to the TT now unless another 5ft 2in women steps into my life (sob, sob).

My thanks go to everybody involved with the project, especially to Ron and Mike and my overdraft account manager. But most of all, to Derek Chittenden. The man is an absolute marvel. A consummate engineer blessed with towering patience. He turned a wreck into a horny as hell, low and lightweight street racer. From the cradle to the rave indeed.

Graham Stewart