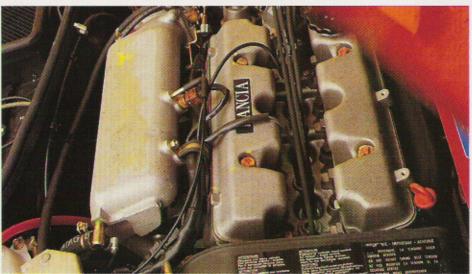
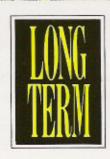
integrale's build quality proved better than we expected. Engine still improving but tracking problems not yet ironed out









Lancia Delta HF Integrale

Our Integrale's performance has improved with age but in 27,000 miles it's been through one clutch, three dealers and more front tyres than Michael Harvey has had hot dinners



OUR 26,887-MILE-OLD INTEGRALE IS going better than ever — literally. Not for this car the soggy middle age of many small performance cars giving their all in the bloom of youth before fading like some teenage tennis tearaway. Instead it remains as stupendously quick as when it arrived back in the gloom of December 1988.

What makes that all the more amazing, and we'll come to performance details later, is that this small bundle of fun is playing in the major league — we've even compared it to a Ferrari Testarossa (27 July 1988). I've had personal experience of small hatches burning out before their time, and none had the 2-litre turbocharged intercooled, and four-wheel drive spec of the Lancia.

There are a few reservations, certainly, but Integrale motoring comes with the highest recommendation from us.

Our former technical editor had the pleasure of the racing-red Lancia HF Delta Integrale for its first 20,000 miles. It arrived with few teething problems (the turbo boost gauge worked only intermittently and a door rattled) from Lancia in Italy with left-hand

We were contacted by various operations keen to switch the wheel over to the right, but we declined. Most UK conversions involve fitting the steering rack from the Prisma which, at 3.8 turns from one lock to another, hasn't got the Wilkinson Sword sharpness of the original's 2.8 turns. Besides, we thought, it would be interesting to put to the test the insurance companies claim that lhd is dangerous enough to warrant a 15 per cent premium. That we can now say is poppycock—Ihd has never interfered with the safe driving of the car.

There were other mechanical problems in those first 6000-odd miles, the most alarming of which was a broken gear linkage — easily repaired — and a faulty oil pressure gauge. At the time we started to wonder if the Lancia was going to prove yet another fast Italian car that couldn't stand the heat. Thankfully our concern was unjustified.

Another early problem discovered and apparently corrected has come back to haunt the car again and again — the tracking.

The Integrale's inability to keep both its front wheels pointing in the same direction, with the desired toe-in and camber intact, is our biggest reservation about the car. I've got a file of letters from fellow Integrale drivers all complaining of the same problem, and it is an issue we plan to deal with in full later. On the grounds of what we've dug up so far, it will make for some interesting reading.

The tracking problem manifests itself on the inside of the front Michelin MXV2s. The first fronts wore close to the metal after just over 6000 miles. The tracking was found to be wrong — there was far too little toe-in — by Ivor Hill in Wimbledon, one of three Lancia dealers which has worked on the car.

With new fronts the car was transformed. In the last long term test (19 April 1989) we wrote how the change had "honed the steering to a razor edge that added a new dimension to the car's already outstanding.

Thanks to its four-wheel drive, terrific chassis and razor-sharp steering, the Integrale offers inspired handling ability



◀ levels of grip traction and performance."

That honeymoon lasted until the car went for its 18,000-mile service, with the fronts 12,000-miles old and the rears having gone the distance. By then the car was tramlining, falling off the road camber and pulling to the left under hard braking.

The front set-up has fallen out of true again, and was fixed before we replaced all the rubber at a cost of £368. But it wasn't to last, for that next set of fronts wore through to their skeletons after just 3466 miles. That's rubber alone at 5p a mile.

As Ivor Hill, no longer in the Lancia dealer network, could not find a spot in its service schedule, we took the car elsewhere to have the tracking problem thoroughly investigated. We took the car to Len Street in Chelsea, a decision we've come to regret.

Len Street fixed the tracking although when we took the car to Lancia headquarters later, there was still some room for modifications. What happened at Len Street has already been documented in Running Report (16 May) but, in short, an over-zealous valet man managed to fill the whole of the interior with engine protection wax. Two new seats and two further valets were required before the car was properly clean again.

WHAT IT COST		
Price new	13	6.995
Price now £2	20,995 (16-valve n	nodel)
Estimated trade-in value	£1	2,000
FUEL/OIL (cost for 26,887 miles)		
gal 1407.6 4-star/Supergreen (£1.94	/gal) £27	30.74
14 litres 15W50 oil (4.00/litre)	£	56.00
Total	£27	86.74
TYRES		
Cost £92 each		
6× new front	£5.	52.00
2× new rear	£13	84.00
Life front - 40% worn	£	73,60
rear — 10% worn	£	18.40

SERVICE AND REPAIR RECORD

Faults on delivery: Turbo boost gauge not working, n/s door difficult to close, front tracking not adjusted.

Date	Cost
16 Dec 1988	FOC
23 Feb 1989	£54.14
12 Dec 1989	£64.50
10 May 1990	£72.20
	23 Feb 1989 12 Dec 1989

REPAIRS

Total

Replace gear linkage bolt	
correct front tracking	£62.10
Adjust front tracking	£167.04
Replace clutch	£651.05
EXTRAORDINARY ITEMS	
Replace broken quarter light	£69.32

Repair body damage

ANNUAL STANDING COSTS	
Road Tax	£100
Insurance premium*	458

(18 months, estimated) TOTAL RUNNING COSTS

(18 months, ex-depreciation)	£5521.77

COSTS PER MILE

DEPRECIATION

(including Road Tax and insurance)
20.5p
(including Road Tax, insurance and depreciation)
*To put all our cars on equal footing for insurance costs, the figure given in a typical quotation for a good-risk driver, with a clean record, and car garaged in
Oxfordshire, a middle-risk area. Full no-claims discount has been deducted. Source: Quotel Motor Insurance
Service.

SPECIFICATION

ENGINE

Transverse, front, permanent four-wheel drive. **Head/block** al. alloy/cast iron. 4 cylinders in line **Bore** 87mm, stroke 90mm

Capacity 1995cc

Valve goar dohc, 2 valves per cylinder. Compression ratio 8 to 1. Ignition and fuel Mapped Weber/Marelli breaker-less Electronic ignition and Multi-point fuel injection management system. Garrett T3 turbocharger with intercooler, boost pressure 14psi.

Max power 185hp (PS-DIN) (136kW ISO) at 5300 rpm Max torque 224lb ft (303 Nm) at 3500rpm

TRANSMISSION

£828.00

£320.85

£5000

Gear	Ratio	mph/1000rpm
Top	0.928	23.4
4th	1.133	19.2
3rd	1.518	14.3
2nd	2.235	9.7
1st	3.500	6.2
Final drive: 3.11.		

Epicyclic centre differential with viscous coupling lock. Torsen rear differential.

SUSPENSION

Front, independent, MacPherson struts, lower wishbones, telescopic dampers, anti-roll bar.

Roar, independent, MacPherson struts, transverse linkage, telescopic dampers, anti-roll bar.

STEERING

Rack and pinion, power assisted, 2.8 turns lock to lock.

BRAKES

Front 11.2in (284mm) dia ventilated discs. Rear 8.9in (227mm) dia discs.

WHEELS

Cast aluminium alloy 6ins rims. 195/55 VR15 Michelin MXV tyres.

DIMENSIONS

Length 153.5ins (3900mm), width 66.9ins (1700mm), height 54.3ins (1380mm), wheelbase 97.6ins (2480mm), track, F/R 56.1/55.5in (1426/1406mm), weight 2793lb.

PERFORMANCE

	The second second		141	
Gear	mph	rpm	mph	rpm
Top (mean)	132	5400	128	5450
(best)	133	-	130	5550
4th	124	6500	124	6500
3rd	93	6500	93	6500
2nd	63	6500	63	6500
1st	40	6500	40	6500

RT

Standing 1/4-mile: LT 16.6secs, 91mph RT 14.8secs, 90mph

Standing km: LT 28.6secs, 113mph RT 27.9secs, 110mph

ACCELERATION

True	Time			
mph	se	mph		
- Table 1	LT	RT	RT	
30	2.5	2.1	32	
40	3.7	3.3	41	
50	5.2	4.7	52	
60	6.8	6.4	63	
70	9.3	8.9	76	
80	11.8	11.4	86	
90	15.1	14.7	91	
100	20.1	19.5	106	
110	26.0	26.3	118	
120	35.8	_		

IN EACH GEAR

	Top	p 4th		3rd	2nd	
mph	LT	RT	LT	RT	LT	RT
10-30	-	-	-	-	7.5	8.1
20-40	13.1	14.3	9.6	10.2	6.1	5.9
30-50	11.6	13.2	8.1	8.4	4.9	4.5
40-60	10.6	11.4	6.6	6.6	4.0	3.8
50-70	8.7	8.7	5.5	5.5	3.9	3.7
60-80	7.3	7.3	5.5	5.6	4.5	4.5
70-90	7.7	8.2	6.2	6.6	5.6	6.0
80-100	9.2	9.9	7.5	7.8	_	_
90-110	11.5	12.9	9.8	11.3	-	-
100-120	_	-	15.4	20.2	-	-

RT denotes performance figures for Lancia Integrale tested in *Autocar* of 10 February 1988.

FUEL CONSUMPTION Overall mpg:

Average LT 19.6mpg Best/Worst LT 23.1/15.2mpg Average RT 17.6mpg Len Street fixed the seats as quickly as it could, but there was more bad news to come.

Further modifications from Lancia have seemed to cure the problem, which is not just pushing up the running cost of the tyres, but the unwarranted adjustments, too. Alas, although the handling is as good as ever, the evidence of the tyres, again wearing unevenly on the insides, is that it's far from over yet.

The last major event in the car's history happened in May when the clutch was replaced. The ever-worsening slip had taken the edge off the car's performance and was

rapidly deteriorating.

Len Street still had the re-upholstered seats to fit, so we opted to have the new clutch fitted there. Having collected the car, carried out the 24,000-mile service and fitted the repaired seats, it was returned with the news that there was nothing wrong with the clutch. Both the (now departed) service manager and the managing director drove the Integrale and told us the clutch was fine.

If that clutch wasn't losing grip, I was losing my mind and sure enough, a few miles later, the clutch expired altogether. Len Street gave it a new one but we didn't get to try it until days after the original return date.

Was it worth the wait? The new clutch transformed the car's performance, just as the solution to the tracking problem had transformed the handling. It's a fact borne out by the figures we took at just over 26,000 miles at Millbrook Proving Ground.

In the sprint times, there's no loss since we first took figures, when the car was spanking new. The Lancia's not easy to get moving quickly, a heavy right foot is required to stop it bogging down after an initial quick getaway. The damp conditions of that first test might well have helped the car to break

its phenomenal traction.

Where it does show is in the in-gear times, which is this car's real forte. It's half a second quicker from 50mph to 70mph now, its 5.5secs time 0.3secs quicker than a Countach's. It will now reach 90mph from 70mph in just 5.6secs, whereas it used to take 5.8, and it's also quicker flat out. This is the first Integrale we've ever had that will reach more than 130mph, clocking a best top speed of 133mph and a mean of 132.

Its running costs have gone up, too, a result of that clutch and the car's neverending appetite for tyres. At the long term test, we reckoned about 16.6p for every heart-racing mile but that's now climbed to a whopping 20.5p, which is bordering on the unacceptable. However the slow down in the car's depreciation means the all-in running costs have actually dropped. The asking price for an Integrale like ours is £12,000 or thereabouts, which means a loss of just under £5000 from the original £16,995 asking price.

We honestly didn't expect the car to be this good this long, but it is and in some ways it's improved. You can't buy a new eight-valve car now because the pressure from the Japanese in the World Rally Championship has forced Lancia to homologate a 16-valve car. It costs nearly £21,000, which makes a secondhand Integrale eight-valve like ours a very tempting offer. We know it's still sound although we worry about the tyres. If you're toying with buying one, forget the new car, put £9000 back in your pocket and buy a secondhand one. Ours, I'm pleased to tell you, is not for sale.

Interior suffered an engine waxing during overzealous valet and needed seats replacing. Lefthand drive was never a problem

