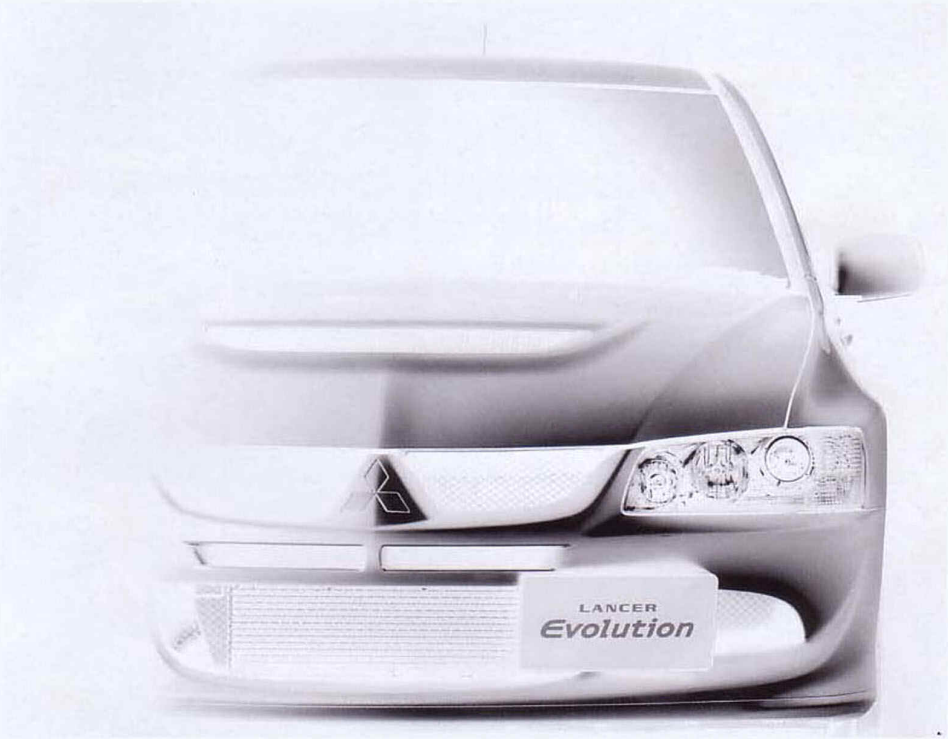
The Ultimate Mitsubishi Lancer Evolution Buyers Guide



Written by B.Smith (c) 2001, 2002, 2003 www.lancer-evo.net

© Copyright 2001. 2002, 2003 www.lancer-evo.net

Written by B.Smith © Copyright 2001, 2002, 2003 www.lancer-evo.net
ICQ: 173162505 | webmaster@lancer-evo.net
Last update: 26th February 2003 [22:21]

Table of Contents

Introduction **4**
About the Evo **5**
What else is there on the market that matches the Evo? 5
History of the Evolution 6
1992 Evolution 6
1994 Evolution II 7
1995 Evolution III 8
1966 Evolution IV 9
1998 Evolution V 10
1999 Evolution VI 11
2000 Evolution VI TME Edition 12
2001 Evolution VII 13
2002 Evo VII GT-A 15
2003 Evo VIII 16
Technical Specification 18
Available colors 19
Evo Model Types 20
Chassis Numbers and Model Number 21
So, what are the differences between the GSR and RS? 21
Technical 21
Cosmetic 21
Before you buy!! **22**
Standard or Modified 22
Imports 22
112mph restriction removed 22
Speedometer and Odometer converted 23
Rear Foglight fitted 23
Has the car been undersealed? 23
What should I look for, Import or UK? 23
Feeding Time! 24
Current Prices [as of February 2003] 25
Insurance 26
Running Costs 26

Warranty 28
Where can I find an Evo advertised For Sale? 29
Inspecting the vehicle 29
The Owner 30
Bodywork 30
Paint runs 30
Over spray 30
Panel Alignment 31
Strongly Recommended! 31
Interior 31
Electrics 31
Dashboard 31
Seats/doors/lining 32
Smelly Climate Control 33
The Engine 33
Fuel Cuts 33
Noisy Tappets 34
Rusted Wastegate Actuator 34
Overflowing Expansion Tank 34
Idle Speed Control Valve 34
Transmission [diffs and gearbox] 35
Front Helical LSD Bolt Failure 35
Worn Gearbox Output Shaft Bearings 35
Baulking Gear change/hard to select gears 35
Squawking Rear Axle [AYC equipped cars only] 36
Slipping Clutch 36
Suspension 36
Front Strut top mount 36
Anti-Roll Bar Bushes/Drop Links 37
Uneven Tyre Wear 37
Brakes 37
Warped Discs 37
Flaking Caliper Lacquer / Brown Calipers [Evo V onwards] 37
Seized Brakes 37
Service History 38
Documents and Receipts 38
Once you have taken the plunge.. 38

© Copyright 2001. 2002, 2003 www.lancer-evo.net

Introduction

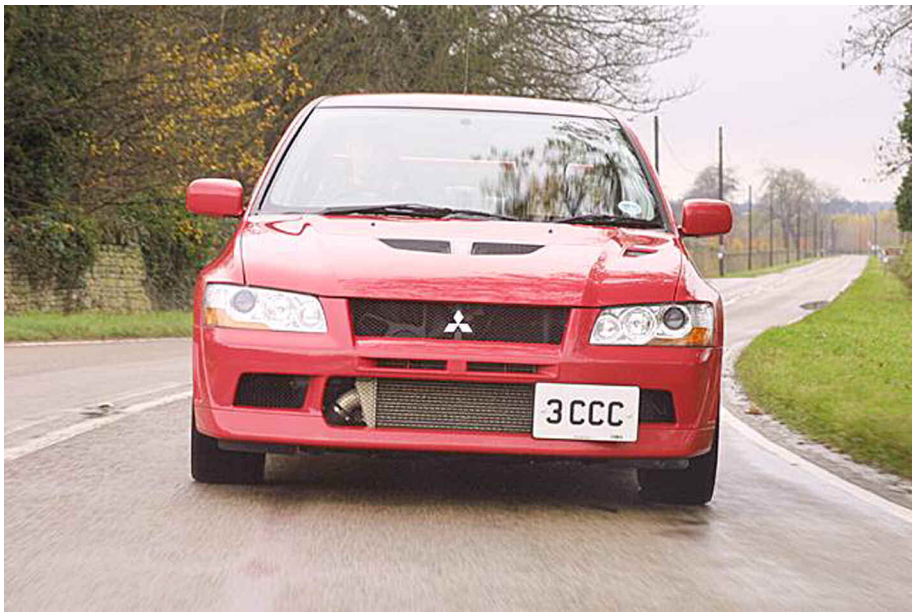
Before I finally bought my Evo IV GSR I had a great interest in the Lancer Evo as well as other Japanese Performance cars. Astounded by the performance, handling and the looks, I started a website dedicated to the Lancer Evolution: www.lancer-evo.net back in August 2001.

Before I started the website I owned a 1993 Nissan Sunny/Pulsar GTI-R. I decided to sell the GTI-R in the September of 2001 due to my newfound love of the Evo.

I looked at three or four Evo's from then before finally parting with my hard earned cash in May 2002. The other cars I looked at were either shabby examples, poorly looked after or had had a rather over enthusiastic owner. This guide will hopefully help you establish the difference between a good clean Evo and a complete dog. Owning a bad example could turn an enjoyable experience into a nightmare.

After looking at various other buyers guides out there [MLR – www.lancerregister.com and of course the Evo VI buyers guide written by Richard Morris] I have decided to go that one step further and combine all the info I have found on the net or learned through various forums/mailing lists. And the end result? This buyer's guide which will cover EVERY Evo model from the 1992 Evo I right through to the new Evo VIII. It will also cover both the GSR and RS.

There have been some major changes to this buyer's guide since the first version was released in June 2002. A special thanks to Andy Fox for giving me some valuable information on the Evo VI RSX and for spotting some mistakes! ☺



© Copyright 2001. 2002, 2003 www.lancer-evo.net

About the Evo

So what exactly is the Lancer Evolution?

The Evo is the critically acclaimed AWD turbocharged sedan with a mad 276bhp [limited, real figure between 285 and 300bhp] engine. Its one of the most sought after performance cars on the road today and has picked up a cult following.

0-60 appears in around 5.0 seconds [every model, some figures show around 4.4, this figure is possible but you want your clutch to last more than a week don't you?] and the top speed is anything between 143 and 160mph.

First developed back in 1992 to match rally homologation rules the Evo has been developed and perfected over 11 years. Wherever you go the Evo will spark a response! Love it or hate it, you can't ignore it!

The two most common options of car are the GSR and the RS. The GSR is the more refined of the two and thus, more popular. It has all the extras you would find in any saloon car such as climate control, electric windows, electric mirrors and alloy wheels.

The RS is a stripped out lightweight "ready to race" edition. No matter what car you go for, you won't be disappointed. This section should tell you everything you need to know about each Evo model.

Although the Evo is breathtaking car that can get a dead man's pulse racing, there are some bad examples out there. Again, that's where this Buyers Guide will come in handy. Read through this and providing you follow it religiously you should end up with a clean car. [But, I am not help responsible if you don't ☺]

What else is there on the market that matches the Evo?

There are some alternatives to the Evo. The most common is the Subaru Impreza. It has been widely publicized that the rivalry between the Evo and Impreza Sti is nothing short of bitter.

The Impreza is a cheaper option to the Evo and it's a great car as is the Nissan Sunny GTI-R and the Toyota Celica GT4. I have never driven a GT4 so I can't give my opinion. I have played with a few GT4's and I must say that it is the slowest of the 4 cars due to its weight.

The Impreza WRX has become a common car [the new XR3i as some Evo owners call it ☺] due to its mass production and cheap running costs for an AWD performance car. All in all a superb drivers car, but just too common on the UK roads for my taste.

The last Nissan Sunny GTI-R was produced in December 1994 after four years of production. Just 5,000 were produced and it has become an extremely popular performance car in the UK over the last 3 years. It's 227bhp power plant can easily be tuned to produce 280bhp by raising the boost pressure from the standard 0.7bar to 1.0bar and adding an aftermarket exhaust system and air filter. 0-60 appears in 5.4 seconds and it has a top speed of 144mph. For £6000 you can't go wrong! Just beware of the pistons, as they are incredibly weak when running over standard boost.

© Copyright 2001. 2002, 2003 www.lancer-evo.net

History of the Evolution

The Evolution model Lancer was first produced in 1992 and is still going strong today with the arrival of the Evo VIII. The first Evolution [1992 Evo] was built to meet the homologation requirement of 2500 production cars being built in order for the car to be used in competitive rallying. As each model came along it improved. Roughly 9-10bhp was added to each Evo model until it reached the Japanese production car limit of 276 with the 1996 Evo IV. Here is the history of each Evo model:

1992 Evolution

The Evolution model was introduced to enhance the Lancer's image through rallying. Ironically, the guys at Subaru were thinking the same thing with their new car - the Impreza. Subaru had been using Legacy for a few seasons, but the Impreza [launched in November 1992] proves a far more suitable vehicle in the highly competitive WRC. Mitsubishi's answer to the Impreza came a fraction earlier, announced on 7 September, and with sales starting from 19 October 1992.

Kenjiro Shinozuka, Kenneth Eriksson, and Iwao Kimata [Mitsubishi's old rally chief] were involved with the car's development. Shinozuka said "If one describes the fighting potential of a works rally car as 100%, then a good production car would usually rank around 50%. This Lancer rates easily over 60% - it is so fast, and never runs off its desired line, not even a fraction of an inch. Its handling really inspires confidence. It defines a new era in rallying"

Kimata added "A good car shouldn't always be a wild beast. It should flatter the driver's ability, whatever his level, and faithfully carry out his every command. We didn't need a multitude of modern control systems to establish this bond between man and machine - we simply had to polish the existing technology we already had on hand at Mitsubishi, gained through over decades in the field of Motorsport".

The Lancer Evolution has a lightweight body, it displayed a remarkable power to weight ratio of 199bhp/ton [GSR Model]. A minimum 2500 were required in order to qualify for Group A rallying, but, at the time, the management wasn't sure if 2500 pure Motorsport machines [RS Model] would sell, so a GSR grade was introduced as well to ensure the homologation limit would be met. Officially known as the Lancer GSR Evolution [Type CD9A-SNGF], the more civilized model was priced at 2,738,000 Yen. The "LanEvo"; certainly did its job of increasing the Lancer's popularity; all 2500 cars were sold out after just three days, so another 2500 had to be built to keep up with demand. The body was light, compact, and strong. Reinforced in strategic areas, it had 20% better torsional rigidity than the standard models, and the front/rear balance was also better through the use of an aluminium bonnet, which featured air intake/outlet ducts [the louvers on the bonnet in the bonnet were for hot air extraction]. There was a large aperture in the front mask for improving cooling, and a large rear spoiler [incorporating a high mount rear brake light] for increased downforce.

The engine was basically a modified Galant VR-4 unit - the cyclone 2000 DOHC 16v Intercooler Turbo [4G63]. Bore and stroke measurements of 85x88mm gave a cubic capacity of 1997cc; combined with a large capacity intercooler, a new lightweight crankshaft, new pistons and con-rods, new injectors, revised port shapes in the head, sodium filled valves, and a hike in the compression ratio [raised from 7.8 to 8.5:1], it delivered 247bhp at 6000rpm and 227lb/ft of torque at 3000rpm.

Reduced internal friction gave better throttle response, especially at high revs. There was a large bore exhaust system, used to drive the TD05H-16G-7 turbo [the "7" meaning the diameter of the turbine nozzle], which featured an Inconel turbo [a mixture of nickel, chrome and iron with a trace of carbon]; twin pipes exited from the rear. Because of the harsh environment in which the car would be used, an oil cooler was specified as standard.

© Copyright 2001. 2002, 2003 www.lancer-evo.net

Naturally, in view of the Evolution's sole purpose, an automatic transmission was not even an option. Instead, the Evolution came with a close-ratio gearbox; the standard final drive was

5.443:1. An uprated clutch was employed, along with a double-cone synchro on second. A viscous-coupled centre differential was used on the full-time 4WD system, with LSD at the rear - both items were borrowed from the VR-4.

The suspension was based on that of the standard Lancer GSR but uprated, and given pillow-ball bushings instead of rubber ones at the back. Anti-roll bars were employed at both ends.

However, the ride was deliberately not too hard for normal road use. Ventilated discs were specified up front [with two-pot calipers], while solid discs were used at the back; four wheel

ABS came as standard. The GSR had 15”; alloy wheels shod with 195/55VR15 Michelin XGT tyres; fairly narrow, admittedly, but there was a distinct problem clearing the wheel arches with fatter rubber.

Standard Lancer Evolution equipment included halogen headlights, air conditioning, Recaro bucket seats [in black fabric with grey inserts] power-assisted steering with a tilt-adjustable

column and three spoke Momo leather leather-trimmed steering wheel [plus leather gearknob], full instruments including a 9000rpm tachometer, redlined at 7000rpm, a drivers footrest, electric windows [with bronze tinted glass], remote control door mirrors, a six-speaker stereo radio/cassette, digital clock, remote boot and fuel door releases, an illuminated ignition key cylinder, rear wash/wipe [unusual on a 4-door saloon], and remote central locking.

Maker options included a front LSD, an electric tilt/slide sunroof and Cibie foglights [in white], while dealers were able to offer heavy duty mudguards, a front strut brace, auxiliary gauges

and a centre console-mounted kneepad. At 1170kg, the Lancer Evolution RS was 70kg lighter than the GSR, as it was missing ABS, air conditioning, most of the electrical goodies, the rear wash/wipe, and various trim pieces. The Recaro seats were replaced by basic items, a mechanical rear LSD was employed in place of the viscous one fitted to the GSR, and it came with steel wheels instead of alloys.

1994 Evolution II

The Lancer Evolution II was announced at the end of December 1993, with GSR [Type CE9A-SNGF] and RS [Type CE9A-SNDF] grades going on sale from the middle of January 1994. A total of 5000 cars were made available from the outset this time, as sales had been brisk on the original model; the GSR version was priced at 2,898,000 Yen. The new model was just as popular as the original and the entire Evolution II run had been sold by April. So what, were the differences?

There was a deeper front airdam, and a base was to the rear spoiler [with the word "Evolution II" stamped into it]. Rear foglights were fitted on the GSR in place of the red trim on earlier models, although the RS had black garnish pieces to match the area around the number plate.

The vehicles length at 4310mm was the same as the first Evolution model, as was the width [1695mm]. However, the height at 1420mm was 25mm more than the original Evolution model and, more importantly, it had a wider track and longer wheelbase. The track was increased by 15mm at the front and 10mm at the rear. The original Evolution had been the

© Copyright 2001. 2002, 2003 www.lancer-evo.net

same as the production versions [1450mm and 1460mm]. Meanwhile, the wheelbase at 2510mm, was 10mm longer than the original Evolution, as the front wheel centres were moved forward; combined with bigger tyres, this led to modified wheel arches, which were substantially deeper inside.

The engine was the same 4G63 unit with an 8.5:1 compression ratio. The turbo was the same as the original Evo, but an increase in boost pressure, a better, freer-flowing exhaust system, and more lift in the valves meant an increase in power output by 10bhp [to 257bhp]. Torque output remained unchanged [228lb/ft]. At the same time, an air-cooled oil cooler was adopted. The transmission had changes to first and second on the close-ratio gearbox [now 2.750 on first and 1.684 on second]. All the other ratios and final-drive remained the same, although third and fourth gained double-cone synchronizers; the clutch plate material was also of a higher quality. At the back, the LSD was now a 1.5way mechanism unit on both RS and GSR models.

The suspension geometry was subtly revised, with stronger mounting points. The lower arm at the front was now forged for added strength, the front anti-roll bar diameter was reduced from 23mm to 16mm, while the spring rate was increased. Fatter 205/60 HR15 tyres on OZ five-spoke aluminium were now standard fare on the GSR, while the same rubber came on steel wheels for the RS model. Combined with the suspension changes, this helped to improve cornering. There were also new brake pads, and the steering ratio was changed [from 16 to 14.8] to make it quicker along with the power steering pump.

Inside it had the same Momo steering wheel as that used on the original Evolution, and this also found its way onto the Evolution VII GSR and RS. There were, however, new, deeper, Recaro bucket seats, for the GSR, trimmed in all-black. Equipment levels were much the same as before, although there were improvements in the audio and central locking systems, and air conditioning came with CFC-free refrigerant. Weighing in at 10kg more than its predecessor, torsional rigidity was said to be up 30%.

"The Lancer Evolution II is extremely quick, felt safe and easy to handle, unlike some of its contemporaries in the supercar class, which often left the driver with sweaty palms. The fact that the Lancer was just as enjoyable at slower speeds, and even around town, was another interesting observation" - CarGraphic Magazines' Yasushi Kabata [May 1994].

1995 Evolution III

Carrying the same CE9A codes as its predecessor, the Evolution III was launched in January 1995, and went on sale from 10 February. A total of 7000 were made available, with the GSR model priced at 2,968.000 Yen on the home market, although a few were exported.

New pistons gave an increase in compression ratio [from 8.5:1 to 9.0:1] and brought the extra 9bhp, taking maximum power to 266bhp at 6250rpm, torque output remained at 228lb/ft. The turbocharger [TD05H-16G6-7] and exhaust system also received attention to give better response, while two water spray jets were employed on the intercooler instead of just one.

Gearbox ratios were the same, but the final drive was now fractionally higher at 5.358:1. Wheels and tyres were carried over from the Evolution II, but there were more changes for the body. Indeed, all the aerodynamic appendages were modified slightly. There was a new front airdam with cooling ducts for the brakes and transfer box, and a taller rear spoiler incorporating a high mount brake light in the base. As a result, the "Evolution" status symbol was relegated to a small badge placed on the right-hand side of the bootlid. However, lift was said to be -0.01 and, in any case, "Evolution III" was now stamped into the side skirts.

© Copyright 2001. 2002, 2003 www.lancer-evo.net

A new "Speed 3" Momo three-spoke steering wheel was adopted on the GSR [the RS kept the old "Cobra II" item], and there was a new gearknob. Seat materials were changed on both models, although the seats were basically the same; Recaros on the GSR, but now trimmed in "Genesis" fabric. The gauges still had black faces. Equipment levels and dimensions remained the same, but weight increased by another 10kg; the GSR now weighed in at 1260kg, while the 2,378,000 Yen RS was listed at 1190kg.

Car Graphic magazine compared the Evolution III with the latest Impreza WRX Type RA STi. Despite the Evolution III being close to the self-imposed Japanese production car limit of 276bhp, the Subaru now had the upper hand on power and torque output, yet still had a price advantage on the GSR. However, the Mitsubishi was still the fastest, recording a 0-60mph time of 4.9 seconds [0.4 seconds faster than the Impreza]. The two ultimately battled neck and neck in the WRC and the showrooms.

1966 Evolution IV

Announced on 30 July 1996, the all-new Evolution IV eventually went on sale 23 August 1996. Given the CN9A-SNGF code for the GSR and CN9A-SNDF code for the RS, the Evolution IV's development was based on Mitsubishi's WRC experience. Due to the demands of the Motorsport people, even the styling was based on efficiency rather than cosmetics. There was a new front bumper [with an integrated grille] and front airdam [with built-in large diameter PIAA foglights], revised side skirts and rear valance, and a bigger rear spoiler with a delta-shaped wicker, or base; there was also a large air outlet in the aluminium bonnet.

The overall length was up by 20mm over the Evolution III and the width and height were 5m less, and the wheelbase remained the same [2510mm]. The front track was increased by 5mm, while that at the rear stayed the same. Thus both were now 1470mm. The body was sine 45% stronger than that of the standard Lancers, while extensive additional spot welding, and reinforcements around the scuttle, suspension and towers and upper frame; the RS also gained a front tower brace plus additional front cross member.

The 4G63 turbo engine was basically the same, although there were many important differences compared to earlier Evolutions. The compression ration was lowered slightly from 9.0:1 to 8:8.1, yet power and torque were drastically increased. This was primarily achieved by adopting a new, twin-scroll turbocharger [TD05HR-16G6-9T] and a 15% larger capacity intercooler, although there were a number of other modifications too. The cylinder head and lower part of the block were made thinner to reduce weight. The head covered different camshafts [a red rocker cover became a feature at this time incidentally], whilst the black housed, lighter, forged pistons. Between the two was a stainless steel instead of carbon headgasket.

There was a bigger radiator, a lighter flywheel, straighter intake tracts, and a secondary air injection system on the exhaust manifold to reduce exhaust gas interference and kept the turbo spinning hard, even at low revs, thereby reducing lag [this used to be on the rally versions only]. One big bore exhaust pipe exited from the back now, instead of the twin pipes as found on the earlier Evolution models. Power was now quoted at the Japanese limit of 276bhp at 6500rpm, while maximum power output went up to 260lb/ft at 3000rpm. The engine was still transverse, but mounted 180 degrees opposite to that of the Evolution III which, much of the annoyance of the competitions specialists, meant accommodating a larger transfer box - it was bigger, heavier and more expensive to produce.

A new W5M51 gearbox with shorter shift strokes was employed, coming with revised ratios [still close], plus the option of a "low" and "high" final drive on the RS. The GSR was listed with 2.785 on first, 1.950 on second, 1.407 on third, 1.031 on fourth and 0.761 on top, while RS had the same bottom two ratios, but a closer 1.444 on third, 1.096 on fourth and 0.825 on fifth. The final-drive was 4.529:1 on the GSR and RS "high" option or 4.875 on the RS's "low" specification.

© Copyright 2001. 2002, 2003 www.lancer-evo.net

A new feature was the AYC [active yaw control system] rear differential, which used electronics to hydraulically give more torque to the outside wheels, and less to the inside one to improve cornering. The GSR came with AYC at the rear, a viscous-coupled centre differential with a 50/50 split, and a helical front LSD; the RS's rear LSD was a 1.5 way mechanical type, while the torque-sensing helical front was listed as an option.

There was a multi-link rear suspension, and a revised geometry up front to give a lower roll centre; anti-roll bar diameters were 23mm up front and 21mm at the back. Brake fell was enhanced through the use of bigger ventilated discs on the GSR - 294mm at the rear - possible because of the move to 6.5Jx16 OZ 12 spoke alloys with 205/50/VR16 tyres. Interestingly, the rear discs incorporated a small drum for a more efficient handbrake. ABS was standard, although the RS - still built to order - ran on 6.5Jx15 steel rims shod with HR-rated rubber, and had the small diameter brakes carried over from the Evo III; the 16" wheel and tyre combination was an option on the RS. In fact, there were five RS set packages; AYC, 16" wheels and tyres, bigger brakes, a front helical LSD, and a close-ratio gearbox with a "high" final drive for circuit use.

Inside, the front seats were full Recaro buckets, trimmed in a buckskin-type material. There was a similar but new Momo steering wheel and a leather gearknob. Dual dualbags came as part of the GSR package, but not on the RS, as this had a different steering wheel. White-faced gauges were adopted at this point, with an LCD trip and odometer. Equipment levels were basically the same, with several detail differences. There was a green tint on the glass, and the 6-speaker stereo went into the options list. Heated door mirrors were also listed as an option, and a Ralliart sports kit was available from September. The GSR was listed at 2,998,000 Yen. Production planners called for 6000 to be built, including the basic RS, which was 500,000 Yen cheaper. Of these, a total of 107 were exported officially.

Excellent press coverage helped sales and the first 6000 machines went quickly [in just three days in fact], so another 3000 were built in September. Ultimately the ratio was about 90% GSR and 10% RS. With Mitsubishi UK hoping to sell the model, a few made their way to the UK. One such car [P66 MRE], was tested by Complete Car in its May 1997 issue. It stated: "Almost certainly the most refined and usable homologation special ever made, the Evolution IV perhaps lacks the extrovert buzz suggested by its appearance, but there's no doubting its massive dynamic and performance capabilities".

1998 Evolution V

Visitors to the 1997 Tokyo Show got a sneak preview of the Lancer Evolution V. Although it still had 276bhp, there was a substantial increase in torque output, and it's attractive 17", aluminium alloy wheels concealed powerful Brembo brakes. Press material handed out at the event said that it would be available in the spring, whetting the appetite of Motorsport enthusiasts everywhere. Ultimately announced on 6 January 1998, sales began three weeks later.

The aluminium bonnet design was revised for better heat dissipation, and the same lightweight material was adopted for the flared front wings [the rear fender size was increased via wheel arch blisters]. There were new front and rear bumpers, a different airdam, modified side and rear skirts, a four-position rear spoiler with a delta shaped wicker and aluminium wing.

As for the leading dimensions, while the height [1415mm] and wheelbase [2510mm] remained the same as the Evolution IV, the length was now 4350mm, which was an increase of 20mm and the width was increased by 80mm, taking it to 1770mm overall. The track measurements were also wider at 1510mm at the front and 1505mm at the back. The bigger car followed the trend started by the World Rally Car regulations, although the Evolution V still managed to just keep within the Group A regulations. The engine was basically the same,

© Copyright 2001. 2002, 2003 www.lancer-evo.net

with 8.8:1 compression ratio retained. However, there was a modified twin-scroll turbocharger [TD05HR-16G6-10.5T] and intercooler, new lightweight pistons, and the radiator and oil cooler capacities were increased. Torque was enhanced somewhat by these changes over the Evolution IV - now listed at 275lb/ft at 3000rpm.

Gear ratios were carried over from the Evolution IV [including the options on RS], but the synchromesh and swift linkage was made stronger, topped with a smaller gearknob trimmed in black leather with red stitching [actually, a number of road tests mentioned the better gearshift]. The innovative AYC system continued on the GSR, matched with a helical LSD up front. There was a longer lower arm on the front suspension, made from forged aluminium alloy, and the inverted front struts were given longer strokes. Mountings were changed at the rear to give the car its wider track, while revising the geometry at the back end gave a lower roll centre, thus enhancing road holding and vehicle response during cornering. In addition, the steering rack location was altered, along with the knuckle joint location, in order to give more linear response in corners, while a new pump was adopted, allowing the engineers to remove the power steering oil cooler to save weight.

Tyres were now 225/45 ZR17 on OZ alloys - although 7.5J x 17, they were nonetheless of similar design to those fitted on the Evolution IV. As a a result, the front gained four-pot calipers [formerly 2-pot] and bigger 320mm diameter discs, while two-pot calipers were employed at the rear, again with larger 300mm diameter discs. Brakes were made by Brembo, with ABS coming as standard on the GSR. Inside, the Recaro bucket seats were employed, the Momo leather-trimmed steering wheel was carried over, as were the white faced gauges. Dual airbags were again a part of the GSR package.

Carrying the CP9A-SNGF the GSR was priced at 3,248,000 Yen. The interior was trimmed in black with grey inserts. The basic RS model carried the CP9A-SNDF, was available at 2,598,000 Yen. Still, running on 15" wheels and tyres, it required the old braking system. It weighed in at 1260kg, instead of the 1360kg for the GSR, although weight could be reduced further on the RS by opting for the thinner gauge body, or by asking for a car minus the aerodynamic appendages. RS packages were basically the same, although the optional wheel and tyre combinations were naturally bigger, in line with the standard GSR fitment, and a crossmember support bar was added each time the larger wheels and tyres were specified. Dealer options included red "Ralliart" or dark silver "Evolution V" mudflaps, a turbo boost gauge, centre console kneepads, front and rear strut bars, an uprated suspension kit, a sports exhaust, navigation system, and various badges.

1999 Evolution VI

As Autocar put it: "It is less than a year since the Lancer Evolution V scalped Subaru's hottest Impreza and became the most astonishing saloon car we had ever driven. But the constant need to homologate new cars for rallying means that Mitsubishi has had to go back to its corporate shed and attempt the unthinkable; make the Evo V better". Announced in January 1999 [sales started at the end of that month], weights and dimensions for the Evolution VI were the same as those of the Evolution V.

The engine and gearbox were basically carried over [although there were a few subtle modifications and a new sump was adopted]. There were new OZ wheels, but they wore the same rubber, while the RS version continued on 15" rims. In reality, the main changes centred around revised aerodynamic appendages in order for the car to comply with the latest WRC regulations. The Evo VI featured a new front bumper with integrated grille [to meet the 1999 FIA regulations], seperate oil and brake cooling ducts [the oil cooler duct was on the offside only, just ahead of the wheel], smaller foglights, and an offset number plate to increase airflow to radiators; the front indicators were now clear.

© Copyright 2001. 2002, 2003 www.lancer-evo.net

Moving around the vehicle, the old side skirts were retained, but there was a new, smaller rear spoiler with twin blades [it was made smaller to comply with FIA guidelines]; beneath the spoiler, the rear light cluster garnish had gone. More spot wealding and special adhesives were employed to further strengthen the body, with stronger front shock mounting points. The front and rear suspension underwent subtle revisions, with a lower roll centre, and an increased stroke and more forged aluminium parts for the rear. However, the Evolution V suspension could still be specified on the RS for those who entered gymkhana-type events. As for the engine, a larger air intake hose was fitted, and there was better breathing on the turbocharger [the GSR turbo was the same, but the RS used a TD05HRA-16G6-10.5T unit with a more responsive titanium-aluminium alloy turbine blade.

A bigger oil cooler gave 23% better heat dissipation; the cooling system was also modified, and the lightweight pistons now incorporated oil cooling channels. A twin-plate clutch was listed as an option for the RS [an hydraulically operated, single-plate unit was the norm], while the AYC was improved via rally experience. The Brembo brakes [standard on the GSR, optional on the RS] were carried over from the Evolution V, although revised caliper shapes helped to increase strength. Ventilated at both front and back, the diameters were 320mm and 300mm. The interior was basically the same, although the Recaro seats were now black with blue inserts, with blue stitching on the familiar Momo steering wheel, the leather trimmed gearknob and gaiter. Blue faced gauges featuring white markings continued the theme. Dealer options included PIAA foglights [not built in any more], mudflaps, headlamp trim, a carbonfibre rear wing and a carbonfibre oil cooler outlet duct garnish. The spare key came on a presentation plaque - quite novel.

The GSR model was priced at 3,248,000 Yen and the RS model at 2,598,000 Yen. A total of 7000 Evolution VI's were built. Autocar commented: "The world's greatest point to point missile just got better. Nothing can touch it across country, yet it's as practical as any other four door saloon. Simply awesome". In June 1999, the Lancer Evolution VI limited edition was announced. This featured a number of Ralliart components, including an air suction and intercooler pipe set, a high performance air filter, sports exhaust and radiator and oil filler caps. The limited edition was sold through a small number of dealers in the Kanto [Tokyo Bay] area only; available in both GSR and RS guises. Retail price was just 100,000 Yen more than the standard Evolution VI, which represented quite a saving if an enthusiast tried to buy the parts separately from the aftermarket spares catalogue. The "Zero Fighter" was another Ralliart special as was the Extreme.

2000 Evolution VI TME Edition

The 1998 Tokyo Show saw the debut of the Evolution VI Tommi Makinen Edition. Officially announced at the end of the year, it was introduced to celebrate Makinen's four consecutive World Championship for Drivers titles, and is sometimes referred to as the Evolution 6.5.

Nationwide sales began on 8 January 2000. At the time of the Tokyo launch, Makinen said "It is a great honor for me to have my name on this car. I have spent so many hours behind the wheel of a Lancer, helping to develop certain areas where my input was of use to the engineers. It is not only highly efficient, but easy to control and fun to drive, too. It is a very well-balanced package, and one that I hope will take me to many more victories in the World Rally Championship".

Engine and transmission options were carried over, along with the gear ratios on the five-speed box. However, the high response titanium-aluminium alloy turbine blades were now specified on the GSR's turbocharger [Type TD05HRA-15GK2-10.5T] as well, combined with a smaller diameter compressor wheel; the RS kept its old turbo, with the new one as an option. In addition, there was a new exhaust with a big bore tailpipe. Ultimately, the engine provided lots of torque in the low to mid-range, the Evolution VI TME modifications bringing in the maximum torque 250rpm lower down the rev-band.

© Copyright 2001. 2002, 2003 www.lancer-evo.net

Easily distinguishable by its redesigned, aggressive looking front bumper / airdam. The Tommi Makinen Edition rode 10mm lower than the Evolution VI, as the GSR came with the tarmac suspension settings [an option on the RS]. A front tower bar was standard on all cars, including the GSR, while the steering ratio was quicker than that of the earlier Evolutions.

White Enkei 17" alloys [the same as those used on the works Group A cars] came as part of the GSR package, and could be bought as an option for the RS grade. Combined with the so-called Special Color package [available on the Passion Red GSR as a 20,000 Yen option], the exterior could be mode to resemble an authentic WRC machine. Inside, although the style of the interior and its components was carried over, there were now black-faced gauges with red numbers and calibrations, and red stitching graced the Momo leather trimmed steering wheel, gearknob and gaiter. The cockpit remained predominantly black, but the Recaro seats had red fabric inserts and a "T.Makinen" logo on the GSR, while the RS had a strict Evolution VI interior with blue inserts.

Chassis codes were the same as those used for the Evolution VI, although the GSR based Special color package carried the SNGF2 designation. Weights were also the same as was the fuel tank capacity, which remained at 11 imperial gallons/50 litres, although the shape of the tank was changed slightly to stop petrol moving around so much during extreme cornering.

The GSR was at 3,278,000 Yen, whilst the RS was slightly cheaper at 2,598,000 Yen. A lucky 2500 buyers received a resin scale model mounted on a wooden plaque, while dealer options included front foglights [PIAA], and HID headlights from the Cibie concern.

2001 Evolution VII

Mitsubishi issued the following press release on 26 January 2001: *"Mitsubishi Motors Corporation announces that the Lancer Evolution VII sophisticated 4WD sports sedan will go sale at Galant and Car Plaza dealer showrooms throughout Japan on Saturday 3 February 2001"*.

A high performance 4WD sports sedan, Lancer Evolution VII delivers mainstream Motorsport's capabilities into the hands of the enthusiast driver. Derived from the Lancer Cedia series that debuted in May 2000 after a full model change, Evolution VII is powered by Mitsubishi's well-proven two-litre intercooler-turbocharged engine [4G63].

Refined and spirited exterior styling that combines superior aerodynamic and engine and brake cooling performance with an appearance that becomes a sophisticated new-age 4WD sports sedan. Improvements to the inline four cylinder 4G63 two litre intercooler turbocharged engine concentrated on boosting medium range torque and have produced class-topping maximum of 276bhp at 6500rpm and 282lb/ft of torque at 3500rpm.

Changes include improvements to the turbocharger; the use of an uprated intercooler; a redesign of the intake piping; a 20% reduction in intake resistance, and the use of a three-nozzle intercooler spray with a manual override switch. Internal weight in the upper engine has been reduced through the replacement of aluminium rocker covers with a magnesium, and the use of hollow camshafts. Back pressure in the exhaust system has been reduced through the use of a spherical joint for the front exhaust pipe and a straighter exhaust pipe. The fitting of a variable back pressure valve in the main muffler provides better noise reduction at low engine speeds and lower back pressure at high speeds. Resistance to corrosion and strength have been improved with the use of stainless steel in all exhaust pipes.

A newly developed Active Centre Differential [ACD] brings better handling response and traction to the Evolution VII. Integrated control of the ACD and the Active Yaw Control [AYC] handling enhancement system brings superior acceleration and handling characteristics.

© Copyright 2001. 2002, 2003 www.lancer-evo.net

Replacing the viscous coupling type with an electronically controlled multi-plate clutch differential, the ACD effectively regulates slippage in the 50:50 torque split centre differential from free to lock-up to match driving conditions. Control is further optimised with a three-way selector that enables the driver to override the automatic system and choose between Tarmac, Gravel or snow modes for different surface conditions [Standard on GSR, factory fitted option on the RS].

The Evolution VII carries the latest version of Mitsubishi's sports ABS system, which incorporates Electronic Braking Force Distribution, to the Brembo brakes [which were used on the Evolution V and VI]. Braking force is controlled independently at each wheel to realise improved stability and steering response under braking when turning. Torsional stiffness is 50% greater than the Evolution VI. This is the result of the use of additional reinforcements and welding, particularly at the joins, to complement extensive weight reduction throughout the body framework.

The Evolution VII uses the five-speed manual transmission of its predecessor, uprated for the increased engine torque. Improvements include the use of stronger materials, for some of the gears. In addition, a lower first gear ratios gives better acceleration from a standing start, while a higher fifth gear ratio enhances comfort and fuel efficiency at higher speeds. Other changes in the Evolution VII contributing to superior transmission of drive torque and durability include an uprated clutch cover clamp load, and the use of larger clutch discs and flywheel to handle greater engine torque. Fatter 235/45/ZR17 tyres replace the 225/45/ZR17 tyres used on the Evolution VI, brining a further improvement to grip under high G cornering. Wider rim, mesh-styled 8Jx17 wheels replace the 7.5Jx17 wheels used on the Evolution VI.

Wrapped in refined and dynamic exterior lines that become a sophisticated 4WD sports sedan and that realise significant improvements in aerodynamic and cooling performance. Major contributing elements include; an aluminium engine hood with optimally located heat extraction outlets and NACA cooling ducts; an oversize front grille-integral bumper with side slots that reduce drag while improving cooling efficiency; a large undercover for the engine compartment; front and rear blister type fender flares that meld seamlessly into the body lines; large airdams under the front bumper and at the sides, and a rear deck spoiler with a variable angel of attack.

Housing the auxiliary lights, the multi-lamp headlight units provide superior beam distribution and light intensity, giving a better field of view and making for safer driving at night. The headlight design also adds to the Evolution VII's intrepid and formidable looks. Xeon discharge type headlights and foglamps are available as a factory option. Lighting at the rear is provided by classy three-lamp combination units using clear lenses.

With Recaro bucket seats [dealer options on the RS] and a new Momo three-spoke leather-trim steering wheel [again, factory option on the RS], leather-trimmed shift lever knob and handbrake grip complement the off-black interior. Housing five dials and gauges each with its own silver bezel, the function orientated instrument panel further adds to the sporty flavour of the interior. On the GSR trim level, an ACD mode indicator shows the driver at a glance which mode the centre differential is operating in.

The GSR [CT9A-SNGFZ] was priced at 2,998,000 Yen; the RS [CT9A-SNDFZ] at 2,518,000 Yen.

© Copyright 2001. 2002, 2003 www.lancer-evo.net

2002 Evo VII GT-A

Announced on the 29th January 2002, the Lancer Evolution VII GT-A was announced - the first Evo to have automatic transmission. Talk of a semi-automatic Evo had been circulating the industry since the latter part of 2001, and it wasn't really a shock as it was the way most manufacturers were going.

Based on the GSR, but with a more sophisticated, as opposed to aggressive look, it was the brainchild of the marketing people. Nonetheless, Inagaki-san stated that he would like to see an automatic gearbox for his rally cars one day, as soon as technology allowed a suitable transmission, and it was certainly an interesting development in the Lancer's history.

The air outlet and NACA duct on the bonnet, plus the inlet in the centre of the upper part of the front bumper, were removed, while the number plate moved to a central position. At the back, the standard spoiler was reduced in size and redesigned to incorporate an LED high mount brake light, although it was possible to fit the original spoiler or specify a car without a spoiler at all, according to the buyers wishes. Discharge headlights/foglights came as part of the GT-A package, while the indicators and rear combination lamps were given clear lenses.

The interior was subtly different from that of the original Evolution VII GSR, in that it featured a blue finish on the dashboard inserts, white gauges were used once again. The gearlever surround and the power window switch panels, plus there was chrome finish on the air conditioning controls and door handles. Electrically adjustable leather trimmed Recaro seats were available as an option.

The 4G63 engine was retained, although given a new turbocharger with a smaller nozzle diameter for better response. In line with the adoption for better response. In line with the adoption of an automatic transmission, it was detuned slightly to give a maximum 272bhp @ 6500rpm, with 253lb/ft of torque being developed at 3000rpm. The gearbox was a five speed INVECS II "sports mode" unit, incidentally, with a traditional centre tunnel mounted shift and steering wheel paddles; the first time this arrangement had ever been used on a Mitsubishi road car.

While the drivetrain from the GSR was carried over [with AYC, ACD and sports ABS included], the body was further strengthened and given a number of measures to reduce NVH and enhance refinement. The steering ratio, suspension settings and anti-roll bar diameters were also revised to fit in with the new model's sophisticated image, and the tyres made slightly narrower [now listed at 255/45]. The attractive wheels were retained, however, although given a shiny finish instead of matt silver. Limited to just 2000 units, only one grade was available priced at 3,300,000 Yen.

© Copyright 2001. 2002, 2003 www.lancer-evo.net

2003 Evo VIII

Mitsubishi Motors Corporation announced the launch of the Lancer Evolution VIII sports sedan in Japan on January 29. Features include a high-performance 2-liter intercooler-turbocharged engine, a 6-speed close-ratio gearbox and MMC's advanced all-wheel traction control system. Available in three trim levels, the Evolution VIII GSR is priced at 3,298,000 Yen, the RS 5-speed manual transmission model at 2,740,000 Yen and RS 6-speed gearbox model at 3,160,000 Yen. Mitsubishi are targeting sales of 5,000 [half that of the Evolution VII].

A 6-speed close-ratio gearbox that maximally extracts the engine's class-topping maxima of 276bhp and 289lb/ft of torque. The addition of Super Active Yaw Control to the race-proved Active Center Differential in Mitsubishi's all-wheel traction control system realises significant improvements in cornering and traction performance. [Standard on GSR, factory-fitted option on RS models]. Improved aerodynamic performance with the use of a new-design oversize front bumper, engine undercover and the first all-carbon rear spoiler on a 4-door production sedan.

Evolution VIII presents a more aggressive exterior design that incorporates the new Mitsubishi's design identity in the front grille and sees improvements in aerodynamic and cooling performance. Stamping the new design identity on the front visage is the pyramid-shape element in the center of the grill that locates the silver Mitsubishi 3-diamond logo, the apex of which provides the origin for a ridge line that flows seamlessly into the engine hood. Intercooler efficiency has been boosted with a 10% enlargement of the mid-bumper air intake. The engine oil cooler air intake located under the right end of the bumper has been redesigned as a duct to promote a smoother flow of air and improve oil cooler performance.

The new design engine undercover generates significantly more downforce and features a new diffuser that directs cooling air over the drivetrain. The new model retains the brake cooling air ducts fitted on its predecessor. The rear spoiler uses carbon fiber-reinforced plastic for both horizontal and vertical components - a world-first on a 4-door production sedan. Exploiting to the full the low mass, high strength and rigidity properties of CFRP, the aerofoils are slimmer and optimized in section. The spoiler generates significantly more downforce than its predecessor without incurring any extra drag penalties.

Evolution VIII uses an off-black color scheme and the strategic placement of dark titanium-finish panels to create a sporty interior space that fully complements the vehicle's character and supports sports driving requirements. Dashboard ornamentation is finished in blue to coordinate with the seat upholstery. The dark titanium-finish center panel accommodates 2DIN and 1DIN audio systems on GSR and RS trim levels respectively. The race-serious instrument panel locates the tachometer in the center and uses the same full-scale 270kph speedometer as fitted to the recently launched North America market Evolution VIII, the first Evolution model to be offered on that market. The shifter features a smaller spherical design that enhances operability.On 6-speed close-ratio gearbox models, the shift gate plate is embellished with the Evolution logo made from the same CFRP material as the rear spoiler. Recaro bucket seats use slim-line bolsters and a lustrous blue knit fabric with a distinctive dimple-finish.

Evolution VIII is powered by an improved version of the 2-liter in-line 4-cylinder 16-valve DOHC twin-scroll turbocharger-with-intercooler 4G63 engine that develops class-topping maxima of 276bhp @ 6500rpm. Optimisation of turbocharging characteristics has produced

© Copyright 2001. 2002, 2003 www.lancer-evo.net

class-topping maximum torque of 289lb/ft of torque @ 3500rpm and even gutsier torque in the flat 3000rpm-to-5000rpm band. To match the higher torque, cooling performance has been improved by uprating the water pump capacity and by enlarging the water passages in the turbocharger.

Engine durability and reliability have also been improved by uprating the aluminum pistons and forged steel con rods. Detail changes have reduced total engine weight by 2.5kg [models with air conditioning]. Use of lighter valve springs and valve spring tensioners has lowered the moment of inertia of, and with less load on the springs reduced friction in, the valvetrain.

Evolution VIII models use the same fuel tanks as fitted to the North America market series. At 55 liters, the GSR gets a 7-liter increase to extend its cruising range; while at 50 liters,

the RS gets just 2 liters more in view of weight and motorsport minimum range considerations.

Evolution VIII uses a 6-speed close-ratio gearbox [standard on the GSR] to maximally utilize the engine's outstanding power and torque characteristics. With the motorsport competitor in mind, the RS comes with a 5-speed manual gearbox as standard and is available with a 6-speed gearbox/17-inch wheel combination package as a factory-fitted option. The ratios on the 6-speed gearbox have been carefully chosen to extract every ounce of torque from the engine: 1st for acceleration from rest; 2nd to 5th for seamless shifting and response; while 6th supports an increase in top speed. The ratios also enable Evolution VIII to return 10-15 mpg urban mileage test, a slight improvement over the Evolution VII. The 6-speed gearbox employs a pull-ring mechanism to prevent accidental selection of reverse. For Evolution VIII, 5-speed RS models now come standard with the super-close ratio gearbox offered as an option on its predecessor, with uprated durability and stiffness to match the increased torque.

Since its introduction, Mitsubishi's All-Wheel Control system - comprising ACD, AYC and Sports ABS - has elevated Evolution's traction and dynamic performance to new levels. Debuting on Evolution VIII, the new Super AYC now brings further and significant improvements to that performance. Super AYC uses a planetary gear differential in place of the bevel gear type in the current AYC to double the amount of torque it can transfer between the rear wheels. This enables Super AYC to boost both cornering and traction performance. The RS comes with ACD only. The ACD unit gives priority to drive traction, with its operating modes [Tarmac/Gravel/Snow] tuned for the requirements of rally, gymkhana and dirt and snow trials.

The new model uses the same brakes as its predecessor: Brembo 17-inch ventilated discs with 4-piston calipers at the front and 16-inch ventilated discs with 2-piston calipers at the rear. Evolution VIII also retains Mitsubishi's Sports ABS, which uses a steering wheel angle sensor to detect steering inputs. The computer uses this information to regulate braking force at each wheel independently and improve handling behavior under braking. The system also incorporates Mitsubishi's EBD [Electronic Brake Force Distribution] system which optimally apportions braking force between front and rear wheels for different road surface and vehicle load conditions to deliver predictable and consistent stopping performance.

To improve handling stability and perceived driving quality, Evolution VIII's body has been made stronger and stiffer in a program pinpointing those areas giving the largest gain in strength for the smallest increase in weight. The upper and lower body join, a major factor in overall torsional stiffness, has been strengthened with the addition of large reinforcements to inner and outer panels at the bottom of the center pillar. Body panel joins have been strengthened with the addition of reinforcements at the top of the front strut tower and on

© Copyright 2001. 2002, 2003 www.lancer-evo.net

the upper and side surfaces of the rear wheel house, and by increasing the number of spot welding points. Suspension mounting stiffness has also been uprated by strengthening the mid-section of the strut tower bar and its point of attachment to the body.

Complementing the stiffer body, detail optimisation of Evolution VIII's MacPherson strut front and multi-link rear suspension results in better on the limit handling stability and perceived

driving quality over the full performance range. GSR and 6-speed gearbox RS models retain Evolution VII's ADVAN A046 model 235/45ZR17 tires, which use a high-grip compound and are built with a very stiff carcass The GSR and 6-speed gearbox RS models ride on ENKEI 6-spoke 17-inch alloy wheels. The spun-rim construction of the wheels cuts the weight of a set of wheels by 3.2kg and this reduction in unsprung weight contributes directly to improved dynamic performance. The 5-speed manual gearbox RS retains the 205/65R15 94H tires and 15-inch steel road wheels of its predecessor. The GSR's 17-inch alloy wheels and 235/45ZR17 tires are available as a factory-fitted option.

Evolution VIII achieves further advances in weight reduction over VII, particularly in the front end, upper body and the unsprung weight - areas that contribute most to handling stability.

For similar equipment levels and fuel load, the new GSR comes in at virtually the same weight as its predecessor despite the 10kg increase ensuing from the introduction of the 6-speed transmission. Serving as the base model for competition use, the 5-speed gearbox RS model also features further reductions in weight as the result of rationalizing the equipment and sound insulation specifications. For similar equipment levels and fuel load, the new RS weighs in 20kg lighter than its predecessor.

All Evolution VIII models come standard with a vehicle immobiliser system that requires the use of a pre-coded key to start the engine.

© Copyright 2001. 2002, 2003 www.lancer-evo.net

Technical Specification

Below are some technical details for the Evolution models:

	Evo	Evo II	Evo III	Evo IV	Evo V	Evo VI	VI TME	Evo VII	VII GTA	Evo VIII
Production	10/92	01/94	01/95	08/96	01/98	01/99	01/00	03/01	01/02	01/03
No Made	5000	5000	7000	9000	6000	7000	5000	10000	2000	5000
Length	4310	4310	4330	4330	4350	4350	4350	4455	4455	4455
Width	1695	1695	1695	1690	1770	1770	1770	1770	1770	1770
Height	1395	1420	1420	1415	1415	1415	1405	1450	1450	1450
Wheelbase	2500	2510	2510	2510	2510	2510	2510	2625	2625	2625
Weight GSR	1240	1250	1260	1260	1360	1360	1360	1400	1480	1380
Weight RS	1170	1180	1190	1190	1260	1260	1260	1320	NA	1300
Engine Type	CD9A	CE9A	CE9A	CN9A	CP9A	CP9A	CP9A	CT9A	CT9A	Unknown
Engine Size	1997	1997	1997	1997.5	1998.6	1998.6	1998.6	1998.6	1998.6	1998.6
Compression	8.5:1	8.5:1	9.0:1	8.8:1	8.8:1	8.8:1	8.8:1	8.8:1	8.8:1	8.8:1
Transmission	5 Speed	5 Speed	5 Speed	5 Speed	5 Speed	5 Speed	5 Speed	5 Speed	6 Speed	6 Speed
AYC [GSR]	X	X	X	√	√	√	√	√	√	√
Power	247	257	266	276	276	276	276	276	272	276
Torque	288	228	228	260	275	275	275	282	253	289
0-60mph	5.1	5.0	4.9	4.8	4.8	4.8	4.8	4.7	5.5	4.5
0-100mph	13.7	13.5	13.3	12.9	12.9	12.9	12.9	12.7	13.8	12.5
Top Speed	143	147	149	150	155	155	155	155	155	160
Fuel Cons.	21	21	22	23	24	24	24	24	25	24

Available colors

Each Evo GSR model is available in a number of colors. Shown below are the official color names and which color is available for each model [RS is available in Scotia White only].

	Evo	Evo II	Evo III	Evo IV	Evo V	Evo VI	VI TME	Evo VII	VII GTA	Evo VIII
Amethyst Black Pearl								√		
Canal Blue							√		√	
Dandelion Yellow			√		√			√		√
French Blue								√		
Issel Blue	√	√		√		√				
Izen Gray Pearl								√		
Lance Blue						√				√
Light Gold [met]									√	
Palma Red	√	√	√	√	√			√		√
Passion Red							√			
Pyrenees Black Pearl	√	√	√	√	√	√	√		√	√
Satellite Silver	√	√	√	√	√	√	√	√	√	√
Scotia White	√	√	√	√	√	√	√	√	√	√
Wine Red [met]									√	

© Copyright 2001. 2002, 2003 www.lancer-evo.net

Evo Model Types

Confused by all the talk about GSR, RS, and Extreme etc? Read ahead to find out exactly what the differences are between each model.

Ok, the Evolution I to IV has just the standard two models; The GSR and RS.

There are some other models for the Evo V, VI and VII. I won't cover them in this Buyers Guide but here is some basic information on these extra special Evo's:

Type	Model	Description
Evo V	RS450	The RS450 is a Ralliart tuned Evo V RS. They reckon it produces 450bhp at whopping 2.2 bar! 0-100 appears in just 8.8 seconds. A psychotic car! Ralliart also reckon 0-60 will appear in under 4 seconds. The original price tag was £44,000! Rare as rocking horse shit! I have never seen one in the flesh.
Evo VI	RS2	Currently I have no information on the RSX. Can anyone help? Email me.
Evo VI	RS Sprint	The **Evo VI RS Sprint** is a Ralliart tuned Evo VI RS that produces a healthy 320bhp. A superb track car.
Evo VI	Zero Fighter	The **Evo VI Zero Fighter** is a Japanese import only and is a ballistic car. It is the basic GSR model but with the same modifications as the Evo VI Extreme.
Evo VI	RSX	It doesn't have AYC or ABS or climate control but it does have electric windows and mirrors and has aircon. It has upgraded Recaro SR seats with more thigh support than the standard GSR. It has the standard GSR gearbox but also has the Torsen front diff It has a big 16G titanium turbo. This is the same turbo as the GSR but with a titanium shaft and turbo wheel and it isn't the same as the small titanium unit used on the Makinen editions. Some of the RSX's have had ARP conrod bolts put in but even Ralliart can't tell you which ones have and which ones haven't!!! It also has a modified ECU to take account of the fact that there is no ABS and AYC. As a result of all this it weighs 1280 kgs which is approximately 80kgs less than the GSR. Due to the lighter weight it is supposedly slightly quicker to 60 but you're only talking tenths of seconds. – Thanks to Andy Fox for this info.
Evo VI	Extreme	Now, the **Extreme** is the ultimate Evo. 350bhp and 380lb/ft of torque, 0-60 in 4 seconds flat. Original price was £41000. A few cosmetic changes, white and red colour-coding. The real deal! Not for the faint-hearted. Head of tuning at **Ralliart UK Toney Cox** stated that you would need a serious motorbike to keep with the Extreme. I can believe him!
Evo VI	GSR TME	The **Tommi Makinen Edition** is a slightly tuned Evo VI GSR. It boasts a different paint scheme, Titanium Turbocharger, slightly different front bumper for better air intake. The interior has a Tommi Makinen logo embroided into the seats. The suspension is a bit tougher and lower for better road holding. It has white 17" rims that really suit the car. Overall, a stunning looking car with a huge road presence. Insurance companies may try to tell you that the Tommi Makinen edition is an import. That is incorrect. They are an official UK car. It has been mentioned that an Evo VI TME RS is available. I haven't seen one anywhere. Anyone care to add some info? Email me.
Evo VII	RS Sprint	The **Evo VII RS Sprint** is a Ralliart tuned Evo VI RS that produces a healthy 320bhp. A superb track car.
Evo VII	Extreme S	Same as the Evo VI but is available in more colors.
Evo VII	FQ-300	Ralliart tuned Evo VII GSR. The **FQ-300** stands for "f*****g quick 300". 305bhp and 300lb/ft of torque. Stainless steel exhaust and aftermarket filter are the only modifications. FQ-300 on the side of the rear spoiler looks the business. Price new is £31,495. The FQ-300 has had some fantastic reviews from Evo magazine and a few websites.

© Copyright 2001. 2002, 2003 www.lancer-evo.net

Chassis Numbers and Model Number

Each Evolution model had a different 4-digit start of the chassis number [the V and VI were the same, CP9A]. There is also a model number for the Evo. To identify what is a GSR model and what is an RS model the model number will start with the following:

GSR = SNGF and the **RS = SNDF**

The engine type for all Evo's is **4G63**.

So, what are the differences between the GSR and RS?

Technical

- The Evo I to III RS and GSR both have the same gearbox. The later Evo's are different. The GSR box has longer gearing; the RS has closer gearing for better acceleration. But top speed is around 125mph. 0-60 is going to be a fraction faster than the GSR times.
- The RS Model hasn't got ABS, AYC and the car is between 70kg and 100kg lighter.
- The RS [Evo IV onwards] had the option of a twin plate clutch.

Cosmetic

- The RS has black door handles and wing mirrors.
- The RS has no rear wiper.
- The RS has no front fog lamps [for the models that have them, the bumper is the same though].
- Sometimes the wheels are 15" steels [it was option to have GSR wheels].
- The RS has no Climate Control, electric windows or mirrors; the seats are slightly different [more bucket like].
- The RS is available in Scotia White only.

The images below show the cosmetic differences:

GSR Model [Model shown: Evo VII]

RS Model [Model shown: Evo VII]

The GSR is the more refined of the two. It has all the extras you would find in any saloon car such as climate control, electric windows, electric mirrors, Alloy wheels etc.

THE RS seats are more like the traditional bucket seats used in competition cars. Rally teams don't want climate control, nice seats, alloy wheels, ABS etc. as they would just have to ditch it all and replace it for high specification rally items or lose most of the equipment completely to save weight.

The RS is a cheaper car, so if you were thinking of using the Evo a few times a month for a blast and for track days then the RS would seem a better option. But, if you are planning on

© Copyright 2001. 2002, 2003 www.lancer-evo.net

driving the car frequently and like your luxuries then don't even consider the RS. See **Current Prices** for more details of pricing.

From the Evo VI onwards there is also an RS2 version that sits in the middle ground between the RS and GSR but is basically an RS with some added GSR equipment.

The RS and RS2 is also available in LHD, the GSR is available in RHD only.

Before you buy!!

There are some important things to consider before you start looking for an Evo. They are listed in the following sections:

Standard or Modified

Do you want a car that is already been modified to produce more power? Or would you feel more comfortable buying a completely standard car and doing a few minor modifications yourself?

I decided to buy standard and carry out the modifications myself. I feel that you don't know too much about the car if it has had a lot of bolt on goodies. But, it is totally your choice!

However, there are certain modifications you may want to keep clear of:

There are the obvious things such as "Motorsport" or "Pioneer" stickers, no seriously, as stated further down [**Inspecting the vehicle**] fuel cuts are a bad sign, an aftermarket fuel-cut defencer is a good reason to just walk-away too. I have been reliably informed that these can cause problems with the Evo.

The Evo IV to VI will hit fuel cut at just under 1.3 bar [19 Psi] the VII hits it at 1.5 bar [22 Psi], a standard Evo engine can take this boost pressure with standard internals as long as the fuelling has been adjusted to compensate for this rise in boost pressure.

If a boost upgrade [ECU or electronic controller are better options] has been fitted and the fuelling hasn't been reconfigured correctly for this increase in boost pressure the engine may start "pinking" or "detonating". In the end, the engine will go pop, usually the pistons or the bottom end. With this increase in boost pressure it is known practice to use cable ties around the turbo hoses to stop the hoses expanding. This is another sign that all may not be well.

Uprated forged pistons can be fitted to withstand higher boost pressures, but it is recommended that the car has had uprated rods and bolts fitted.

Brake upgrades are a good extra as this can be a costly upgrade; most cars you view may have an aftermarket air filter and stainless exhaust system. This is no reason to get worried. Also, if the car has a strut brace there is a chance that it could be factory fitted.

A large bill for an engine upgrade can be a bad sign, as it may not have been looked after, thus causing the engine to go pop. The Evo engine is extremely well made and can easily be tweaked to produce a healthy 320bhp. So, if an engine has gone pop it could mean that someone was running far too much boost and didn't look after the car. Good enough reason to walk away. There are plenty more out there so don't let the cash burn a hole in your pocket.

Imports

All Evolution's from the 1992 Evo I to the 1998 Evo V are imports. Some Evolution VI's and VII's are official UK imports through Ralliart UK but they are STILL imports. Don't let anyone tell you different. All Evo's should have the following alterations to make them UK road legal:

112mph restriction removed

The 112mph [180kph] restriction should be removed. Give the car a blast along an open road to check this out. If it hasn't been removed the car will "bounce" off 112mph. Costs around

£100 to correct so maybe you could use this is a bargaining point or demand that it be fixed at no extra cost to you.

Speedometer and Odometer converted

Has the Speedometer and odometer been converted to read in mph? To be UK road legal this MUST be done. Usually with the Evo this converted at the same time as the 112mph restriction so check this out!

Rear Foglight fitted

A rear Foglight has to be fitted for the car to pass an SVA/MOT. Japanese cars don't have rear fogs so a lot of them get fitted to the bumper. Is it a professional job or has "Dave" round the MOT center fitted it on the day of the MOT? Check the wiring under the car and make sure it is correctly insulated and fixed to the body.

Has the car been undersealed?

The roads in Japan aren't covered in grit and crap like our roads. This is mainly due to their climate and weather being drastically different. Because of this the cars imported from Japan aren't undersealed like UK production road cars. During the winter in the UK all sorts of grit is laid down on our roads. Unfortunately this stuff corrodes cars fast! Especially when they aren't properly undersealed.

If the Evo you are looking at hasn't been undersealed since it has been in the UK and hasn't seen a winter yet I suggest you use this fact as a haggling point. To get the car Undersealed it is going to cost you around **£150**.

Have the tyres been changed?

Again, due to the roads in Japan not having grit laid the tyres aren't suitable for the UK roads. Change them immediately for a decent set of UK tyres as you will find that they don't grip our roads too well when driving hard. Cost anywhere between £350 and £700 for decent tyres [Dependant on model].

What should I look for, Import or UK?

There is in fact no such thing as a UK Evolution! Any car officially supplied by Ralliart UK from new is classed as a UK supplied car. All Evolution models were built on the same production line in Japan and they are all built for the Japanese market.

To the best of my knowledge the only cars to be officially supplied from new by Ralliart UK are the Evo VI, Evo VI TME, Evo VII, Evo VII GT-A and the news Evo VIII.

Don't let any owner/salesperson tell you that there are differences between the UK supplied cars and the imports. As stated above; they all came from the same factory!

If you are buying an imported vehicle (not supplied by Ralliart UK) then make sure the insurance quote you have is for an imported vehicle and not a UK supplied car as some insurance companies add upto 40% onto your premium! [Only applies to the Evo VI onwards]

My insurance on my GTI-R went from £1100 to £1800 when I told them it was a Pulsar [Japanese name for the Sunny]. When I asked for an explanation all I got was a load of bull:

- The parts are more expensive [load of crap]
- It is faster than the UK car [only when using 100Ron fuel]
- It has got air-conditioning. The UK hasn't [so what?]

The car must have the alterations mentioned in the **Import** section.

If you are planning on buying an import straight from Japan ensure you use a reputable sourcing company.

© Copyright 2001. 2002, 2003 www.lancer-evo.net

For advice on this matter go to www.lancerregister.com or join the Mitsubishi Lancer Mailing list: http://groups.yahoo.com/group/evo/

When any car is imported from Japan it is given an import grade dependant on the quality of the car. They range from 1-5.

Grade	Description
5	As new, delivery miles on the clock
4.5	Exceptional condition, usually a car that is 1-3 years old
4	A few panels affected by minor paint blemishes, but overall condition good
3.5	Two panels affected by paint blemishes and minor panel work required
3.0	Rough overall condition with numerous blemishes on several panels and work required
2.5	Rough panels and paint all round. Rust evident
2.0	Some serious panel damage and the car barely legal
1.5	At the absolute limit, think X Reg Escort for sale for £80 as a non-runner!
1	Non-runner, needs major attention

Feeding Time!

Don't expect more than 23-24mpg out of any standard Evo. Even if you don't take the car over 3,000rpm you still won't get above 25mpg. But then again, you aren't really buying an Evo for its fuel economy now are you? ☺.

On an enthusiastic blast expect economy to drop between the mid to low teens.

If you choose to tune your car then expect a loss in fuel economy. The Evo fuel tank is pathetically small. This is due to a large [50+ liters] full tank of petrol weighing a lot and thus, weighing the car down. Expect to be filling your car up every 180-220 miles. [The Evo VII GT-A has a slightly large fuel tank]

It costs me around £33.00 to fill up my car [roughly £4.00 a gallon] with 98 RON Optimax. Why I am on the subject of higher RON fuel. Do not use standard 95 RON fuel! It will cause detonation and running problems as all Evo's [apart from certain cars that have been remapped for 95 RON fuel, which in turn will reduce power] are setup to run on 100 RON fuel, which is used in Japan [we get the shitty 95 Ron fuel ☹].

When you are looking at a vehicle ask the previous owner/sales person if they know what fuel it has been run on. If they answer "standard Jet Fuel" then walk away.

Here is a list of the more reliable UK fuel suppliers [not Jet!]:

RON Rating	Fuel type	Outlet	Result
95 RON	Unleaded	Tesco | Esso | BP | Shell	May cause detonation
97 RON	Super Unleaded	Esso | BP | Shell	Great, much better than 95 RON
98 RON	SUL Optimax	Shell	The best fuel in the UK

© Copyright 2001. 2002, 2003 www.lancer-evo.net

Current Prices [as of February 2003]

The current prices for the Evo listed below are for a standard car. Prices are taken from various sources including www.autotrader.co.uk, www.lancerregister.com and other Evolution sites. Unfortunately the Evolution model Lancer is not listed in the Parkers used car price guide or on their website [www.parkers.co.uk] so there is no price guide. ☹

Year / Model	Price [GBP]
1992 Evolution GSR	£5500 - £6800
1992 Evolution RS	£4800 - £6000
1994 Evolution II GSR	£7200 - £8500
1994 Evolution II RS	£6200 - £7900
1995 Evolution III GSR	£8100 - £8700
1995 Evolution III RS	£8200 - £9100
1996 Evolution IV GSR	£11000 - £13000
1996 Evolution IV RS	£10000 - £11500
1998 Evolution V GSR	£13500 - £15000
1998 Evolution V RS	£12500 - £14000
1999 Evolution VI GSR	£15500 - £17000
1999 Evolution VI RS	£15000 - £16500
2000 Evolution VI Tommi Makinen Edition	£19500 - £21000
2001 Evolution VII GSR	£22000 - £24000
2001 Evolution VII RS	£21000 - £22000
2002 Evolution VII GT-A	£21000 - £22000
2003 Evolution VIII GSR	£26000 - £27000
2003 Evolution VIII RS	£23000 - £24000

© Copyright 2001. 2002, 2003 www.lancer-evo.net

Insurance

BEWARE! The current grouping for the Evo's is between 19-20. And **ALL** insurance companies will want a Cat 1 Alarm/Immoboliser fitted. Some insurance companies offer further reductions for a tracker. There was already a tracker fitted to my car, it costs me £480 for three years subscription. If the car didn't have a tracker fitted when I bought the car it would have cost me over £600 to get one fitted.

If you are buying a car from a trader that has just imported the car there is a good chance that the car hasn't got any security what so ever. It is a known fact that car crime is not a problem in Japan. Unfortunately it is over here, keep your new pride and joy away from prying eyes by garaging your car where possible. A decent CAT 1 alarm system is going to cost you at least £300. Another haggling point if the car you are viewing hasn't got a decent alarm. Here are the details of my insurance for a rough guide:

Driver:	24 year old Operations Manager, no additional drivers, 3 points
NCB:	4 years
License Held:	5 years
Accidents in 5 Years:	None
Location:	Ashford, Kent
Car:	Evo IV GSR
Color:	Scotia White
Modifications:	HKS Super Dragger Exhaust, Blitz Induction Kit
Security:	CAT 1 Alarm and Immoboliser, Tracker
Stored:	Locked Garage
Premium:	£1512 fully comprehensive with £300 access, 4000 Miles a year limit.

Running Costs

The Evo is an expensive toy to own. It has to be well looked after to enjoy to its full potential. Here is a list of service prices for the Evo IV-VI. Contact you're nearest Mitsubishi Dealer for my details [logon to my site, http://www.lancer-evo.net, you will find a dealer locator on there!]

1,000 Miles Service

1 Hour Labour	£45.00
4.5 Litres Engine Oil (semi synthetic)	£20.70
Oil Filter	£6.56
Sump Plug Washer	£0.41
Sub-Total	£72.67
VAT (17.5%)	£12.71
TOTAL	**£85.38**

4,500 Miles Service

2 Hours Labour	£90.00
Active Yaw Control Oil	£13.98
4.5 Litres Engine Oil (fully synthetic)	£33.75
Oil Filter	£6.56
Sump Plug Washer	£0.41
Screenwash	£1.76
Brake Cleaner	£2.82
Sub-Total	£149.28
VAT (17.5%)	£26.12
TOTAL	**£175.40**

© Copyright 2001. 2002, 2003 www.lancer-evo.net

9,000 Miles Service

2.5 Hours Labour	£112.50
Active Yaw Control Oil	£13.98
4.5 Litres Engine Oil (fully synthetic)	£33.75
Oil Filter	£6.56
Sump Plug Washer	£0.41
Brake Cleaner	£2.82
Sub-Total	£171.78
VAT (17.5%)	£30.06
TOTAL	**£201.84**

18,000 Miles Service

3 Hours Labour	£135.00
Active Yaw Control Oil	£13.98
4.5 Litres Engine Oil (fully synthetic)	£33.75
Oil Filter	£6.56
Sump Plug Washer	£0.41
Screenwash	£1.76
Brake Cleaner	£2.82
Brake Fluid	£3.89
Air Filter	£19.90
Antifreeze	£10.62
Sub-Total	£228.69
VAT (17.5%)	£40.02
TOTAL	**£268.71**

45,000 Miles Service

6.6 Hours Labour	£297.00
Active Yaw Control Oil	£13.98
4.5 Litres Engine Oil (fully synthetic)	£33.75
Oil Filter	£6.56
Sump Plug Washer	£0.41
Screenwash	£1.76
Brake Cleaner	£2.82
Brake Fluid	£3.89
Air Filter	£19.90
Antifreeze	£10.62
Timing Belt	£70.29
Balancer Belt	£14.30
Plugs	£60.88
Sub-Total	£536.16
VAT (17.5%)	£93.83
TOTAL	**£629.99**

Always use a Ralliart approved dealer with Evo knowledge to service your car, as Evo's are extremely complicated. To service an Evo with AYC, a Mitsubishi diagnostic tool known as **MUT-II** is required. Without this kit the AYC cannot be serviced. It is also an option to use a respected tuner to service your car. Most tuners out there have had extensive experience with the Evo and have all the equipment necessary to carry out the servicing correctly.

As you can see from the figures above the Evo is not cheap to service. I don't drive my Evo everyday so I would only be looking at 2 minor services a year. If you were looking to own an Evo and drive it 60 miles a day then you are looking at some major cash being spent out on servicing alone, let alone the fuel bill!

© Copyright 2001. 2002, 2003 www.lancer-evo.net

It is also a must that you change the oil every 3000 miles. Mitsubishi will charge you around £85 for this. Fully synthetic oil should really be used after the 1000-mile service.

To source parts for any Evo through a genuine Mitsubishi dealer you will need the chassis number. For the Evo IV the chassis number starts with CN9A. Without this number they will not be able to help you, or they won't help you.

The Evo is also known for eating tyres [especially if you like to drive it hard] and warping brake discs if you brake hard frequently. Both of these items aren't cheap so always bear that in mind before purchasing. For a decent set of uprated brake discs and pads for an Evo IV-VI you are looking at around £400.

The Evo I can be picked up for under £7000 now, it's a very fast and stable car and for under £7000 you can't grumble. But, the truth is that it is just as expensive as a brand new Evo VIII to own. So don't think that because the car is £7000 then it's going to be a cheap owning experience. No matter what, the Evo is an expensive toy!

Some would even argue the earlier Evo's are more expensive to own than the next generation Evo's [IV-VIII] as parts are a rarity.

I had first hand experience of this when I first started looking at purchasing a Nissan Sunny GTI-R. Young guys had bought them for under £6000 as they are a fast little car and at half the price of a decent Subaru/Evo/Cosworth, it seems a bargain. Major mistake as the Nissan is more expensive to run than the Evo! You wouldn't see more than 18mpg out of the Nissan, servicing is expensive [annual service is £440], the clutch change is around a grand and can it can go at any given moment [especially when running over standard power.]

All in all, an expensive car to own. **Be warned**; do not buy an Evo unless you are fully aware of the running cost and the attention it needs. If you have a demanding partner then think twice!

Driving any performance car at high speed when the car hasn't been looked after, is due a service and has mechanical problems doesn't only put you at risk, but other road users. Think before you buy! I can't stress this enough.

Owning an Evo and coming unstuck with repairs can be an unhappy experience and a financial mere if you are trying to sell it on due to the expensive running costs. Sit down, do the sums! It's going to be an expensive experience no matter how often you drive it. Insurance alone is going to cost most of us out there around £1000 a year. You have been warned.

Warranty

If you are buying an Evo that is Ralliart supplied within the last **three** years then there should still be some warranty remaining. Modifications will void the warranty unless carried out by Ralliart [very common is the Ralliart Stage 1 conversion to 300bhp]

If you are buying an older car from a dealer and they offer a warranty make sure it is reputable. Ask to see the paperwork, as most warranty companies won't pay out for anything. As said MANY MANY times before, avoid **Warranty Holdings** at all costs. It isn't worth paper it's written on.

I am not saying that the Evo is an unreliable car by any means. Look after it and service it and it will be a joy. A warranty is just piece of mind as you have no idea what sort of life it had before you owned it or when it was used in Japan.

© Copyright 2001. 2002, 2003 www.lancer-evo.net

Where can I find an Evo advertised For Sale?

The chances of finding an advert for an Evo in your local newsagents is like winning the lottery without a ticket. If you join the Mitsubishi Lancer Register Forum there is a FOR SALE/WANTED section. http://www.lancerregister.com/bbs/index.php

Autotrader/Top Marques regularly have a few Evo's for sale too.

Visit www.autotrader.co.uk for both. This allows you to choose how far you want to travel to look at a car, what color etc. A very good site for sourcing a car.

If you join the Evo Mailing list you could post a message stating what sort of car you are after. Or email me [webmaster@lancer-evo.net] and I will post a message for you.

To join the Evo mailing list go to: http://groups.yahoo.com/group/evo/

There are various magazines such as Banzai and Japanese Performance that have a For Sale section at the back. Avoid Evo's for sale in the back of Max Power or Fast Car for obvious reasons. But then again, you won't be reading that crap will you? ☺

Inspecting the vehicle

This section will cover most aspects of inspecting an Evo. If you think something should be added then please email me.

TIP – Drive a reasonably average car such as a Corsa or a Peugeot 306 and then drive the Evo. It's a fair way of testing the performance. If you have just driven to inspect this Evo in another Evo or an Impreza/GTI-R then you will think that the Evo was fast, but not a big jump from what you came in. Trust me, it works. When you get back in the Corsa you will really appreciate the Evo! I drive a Corsa 1.4 SRI all week [well, 6 miles a day to the local train station and to the supermarket] and when I do my 50 miles at the weekend in the Evo it feels amazing. You can really appreciate it!

TIP – Always to view the car in daylight. It's really hard to see the car at night. Dents, scratches etc are hidden in darkness.

TIP – When you first arrive at the showroom/owners hours discretely place your hand on the bonnet to see if the car has been warmed up or not. He may have just been out in it or he may be trying to hide something that only becomes apparent from a cold start.

© Copyright 2001. 2002, 2003 www.lancer-evo.net

The Owner

One of the most important things to think about when viewing a car is the owner or salesperson. What are they like? Here is a list of a few things to consider, trust nobody! Remember, your giving over your hard-earned cash.

- Do they thrash the car when it's still cold?
- Do they let the turbo warm up/cool down?
- The area in which they live. Is it a bit undesirable?
- Do they reply "donna mate" to any simple questions?
- Do they state, " My mate Dave serviced it"?

If you can answer "yes" to any of these questions then walk away!

Bodywork

The Japanese have a different mentality to us Brits. They take extra care of their engines and overlook their bodywork. The quality of most body repair centers is nothing short of terrible.

Are there stone chips on the paintwork? It seems certain paints on the Evo's are more vulnerable to chipping than others. The front of the Evo's are very upright to allow for the intercooler and therefore it's more prone to stone chips than other saloon cars. The Evo V introduced rear arch extensions due to the wider track and unfortunately, these also do suffer from stone chips due to stones being thrown up from the front wheels. Clearly it is a good idea to keep on top of the stone chips by using a 'touch up' paint stick. Also consider 'chip sticks' which are solid colored polish sticks, which do much the same thing accept not as permanent, good for a quick fix. For protecting the rear arch extensions then fitting front mud flaps can help deflect the stones back onto the road. It is also worth considering preventing the stone chips in the first place by fitting clear plastic protection film on the vulnerable areas.

There is another known problem with Evo. Paint being worn under the boot lid.

This is caused to the boot lid flexing/moving due to the rear wing. The rubber 'bump' stops under the boot lid eventually rub away the paintwork and can eventually lead to rust spots appearing. There are a few fixes you can employ. You can rub some petroleum jelly, or similar lubricant, onto the spot to prevent further wear but this will eventually wash off. You can also place some cloth tape over the spot or, probably the neatness solution, is to fit some clear plastic stickers on the spots.

There are also some other things to look closely at:

Paint runs

As stated above always view the car in daylight. Paint runs are easy to spot, usually a few lines with a "blob" at the end of the run. If the car has got a few paint runs bear in mind that the whole panel will need to be re sprayed. Costly. And then you know that the car has been in an accident or some sort.

Over spray

Again, if evident it always points towards an accident. Look on the plastic trims around the windows/windscreen as when you are spraying panels you cover the windows [obviously], the Japanese don't tend to take much care so a few bits of over spray end up on the window seals.

© Copyright 2001. 2002, 2003 www.lancer-evo.net

Panel Alignment

See if panels match up correctly, larger or smaller gaps than normal are a dead giveaway, do all doors and the boot/bonnet open and shut easily? Do all the lights fit flush with the rest of the car? If the owner says the car hasn't had an accident in the UK, that doesn't mean it didn't have one in Japan. Bear that in mind.

Strongly Recommended!

I strongly recommend you visit http://www.hpicheck.com to do a full HPI check on the car. £35.95 is the current price. Well worth it if you are considering spending £6000 to £30,000 on an Evo.

Interior

A lot of people overlook the interior in the Evo. I personally like it; I made sure that the car I bought had an immaculate interior. Follow this section carefully; it covers a hell of a lot.

Electrics

Does the following work correctly:

- All four electric window controls [GSR only]
- All window driver window controls including child window lock [GSR only]
- Electric mirrors fold in and adjust properly [GSR only]
- All lights including the added rear fog light [you would be surprised]
- Climate Control [GSR only]
- Climate Control screen [Evo IV onwards and GSR only]
- Sunroof controls [option on some cars]

The Stereo should be a UK stereo and receives an FM radio signal ok. From the Evo IV onwards the GSR models were fitted with a rear window glass antenna for the radio [the top 2 'lines' across the rear window glass, separate from the window demister]. This antenna has a booster amplifier that is required to get a good reception. The booster amplifier requires a 12-volt feed to work but often this has been disconnected. This is an easy fix but just another problem needing attention. Visit www.lancerregister.com for a guide to how to fix this small problem.

Another known Evo problem is if the engine and all electrical items suddenly die briefly and then return, or it may die completely. It will, more likely, occur at low or idle revs or when going over bumpy ground or when turning on a high drain electrical item (Climate control or headlights etc). This is not to be confused with the engine revs and headlights dropping/dimming slightly when the A/C comes on, as that is normal. This is usually is caused by either corroded earth connection of the clamps on the battery being over tightened. Ensure there is a gap big enough to fit a screwdriver head between the two legs.

Dashboard

The dashboard is plastic and should have no damage including scuffs and splits. If there is a section turn off it usually means that a previous owner had a nodding dog or a boost gauge fitted [probably the latter].

The dashboard has had to come off at some point to fit the speed derestrictor, check to make sure it has been put back together properly. Missing screws are common.

Check to see if the lights on the dash work, when you start the car all the lights should go off apart from the Battery and Oil. These should go off within a few seconds.

If a light stays on a while and then goes off then it usually means there is something wrong.

© Copyright 2001. 2002, 2003 www.lancer-evo.net

If the AYC, ABS, Oil light stays on this could mean problems; all these things could potentially cost you some cash. Bear that in mind before making a decision. If you are in any doubt consult a knowledgeable mechanic.

It is a common problem for the ABS light to flicker on and off.

Check that the intercooler spray button works! This is a known problem for the later Evo's.

The Evo IV onwards had dual airbag, check the light on the dash. One car I looked at, the airbag light was permanently on. This made me raise some questions about the cars history.

One known problem with the Evo is the fuel gauge not reading correctly [jumping from ¼ to ¾]. The Evo's fuel tank is divided into two halves due to the propshaft and rear differential location. The tank has a connection between the two halves however; it can take a while for the fuel level to balance out after a blast. This causes the unpredictable readings. A standard Evo should complete about 200 miles to a tank of petrol. If your gauge is reading totally out then contact your Ralliart approved Mitsubishi dealer to get it checked out. Until then, refill the car every 200 miles just to make sure.

TIP - There is approximately 10 litres of fuel left in the tank when the low fuel light is illuminated. I recommend you do not take that as gospel. Do not allow the tank to get too low as particles that settle to the bottom of the tank can be drawn into the fuel system leading to poor performance.

Seats/doors/lining

The seats used in the Evo are made by Recaro. They are extremely rare and cost a packet to replace. Make sure the seats are in good condition, they stain easily and a difficult to clean. Check to make sure both the passenger and drivers seat slide on the runners ok and don't have any play. They should be solid in the runners.

Great as the Recaro's are there is one problem. The recline adjustment on the seat gradually slips back over a period of time. This is a known problem with Recaro seats fitted to the Evo's and most other performance cars. The recline adjustment clamp doesn't secure itself correctly which leads to gradual slippage backwards and therefore readjustment every few days.

There is a fix for it from Recaro that requires the fitting of a replacement base frame. If you have an 'official' Ralliart car then the fix can be arranged if the car is still under warranty, ask your Mitsubishi/Ralliart dealer to contact Darren Hughes at Mitsubishi UK and the replacement parts can be arranged to be fitted. For non official cars or cars outside of the warranty then contact Recaro UK directly to arrange for the parts to be delivered, the car owner will have to arrange fitting.

You can contact Recaro in the UK on +44 (0) 1926 484111.

Recaro UK Ltd.,
Unit F7,
Holly Farm Business Park,
Honiley,
Warwickshire,
CV8 1NP.

If the owner/sales person says the car has done only 15k miles then the interior should be mint. The outside of the seats shouldn't be worn; the driver's mat shouldn't have marks where heel of the driver has dug into it. These are all signs that the car has done a few miles.

Is there any sign of a smoker owning the car? Look in the ashtray for any burn marks and have a smell of the roof lining. If it reeks of cigarettes then you know that at some point in its life it's had a smoker in it. Another dead giveaway is if the lining has changed color slightly towards the front of the car.

© Copyright 2001. 2002, 2003 www.lancer-evo.net

Smelly Climate Control

A horrible smell when the Climate Control is turned on, often smelling of rotting fish or stale urine. Nice!

The smell is due to the Air Conditioning Evaporator surface becoming contaminated with dust and debris. This eventually starts to smell if it becomes wet due the condensation from the Evaporator and cannot dry out. The main reason for the Evaporator not drying out is the drain hole becoming blocked. Its an easy fix, visit www.lancerregister.com for a guide to fixing this horrible problem.

The Engine

The engines used in the Evo are built the usual Japanese bulletproof standard. But they only remain bulletproof if they are looked after. Failure to service the engine at the set Mitsubishi/Ralliart intervals means problems.

Here is a list of known problems with the Evo and some important information which will assist you in finding a car with a clean engine, not a dog with engine problems.

Fuel Cuts

A very sudden de-acceleration due to the fuel being cut to the injectors, similar to your foot slipping off the accelerator except it will recover almost immediately. It occurs if over boost is detected while accelerating hard (common at roughly 4000rpm in 2nd, 3rd or 4th gear but possible at other rpm and gears). Also it is more common if the outside air temperature is colder as the charge temp will be lower and therefore denser.

Fuel Cuts are the Engine Management's way of stopping serious over boost situations occurring. Instead of detecting the actual boost pressure the ECU [Electronic Control Unit] uses information from the Air Flow meter to work out the boost pressure. The ECU will cut the fuel at roughly 1.3 bar boost pressure [19 psi] on the Evo VI [approximately 1.5 bar on the Evo VII and VIII] but the specific cut point is dependant on atmospheric conditions at the time so it will not be the same from car to car. Fuel cuts are more likely to occur in winter, as the air is colder and therefore denser. Early Evo models may have a lower cut point that is in relation to their standard boost pressure level setting. Fuel cuts commonly occur after fitting an upgraded aftermarket induction kit and/or exhaust due to the increased airflow they create but fuel cuts have occurred on standard cars before. It is also possible for fuel cuts to occur due to a faulty Wastegate Actuator but it is not that common.

Do not live with fuel cuts! The sudden cutting of the fuel sends a shock through the engine and drivetrain, which in itself can be harmful. You can temporarily 'drive around' fuel cuts by avoiding using full acceleration or if very worried keeping below 4000rpm at all times [as if you were running in the engine]. The cure for fuel cuts depend on what is causing it and also what you intend to do with your car. If you believe the over boost is due to any upgraded parts that have been fitted then the boost level can be dropped fairly easily by a manual alteration to the Boost Control system, although dropping the boost obviously partially defeats the object of fitting performance parts. If you intend to modify your car further then you will require an upgrade to the Engine Management to either eliminate the cut point or 'work around' it. It is not recommended that you use a 'Fuel Cut Defenser' as they tell the ECU that the fuel cut point has not been reached by electronically reducing the air flow signal and this can lead to a lean mixture as the ECU will reduce the fuelling to suit. If you are having problems with fuel cuts then consult a Ralliart approved dealer of an experienced tuner.

© Copyright 2001. 2002, 2003 www.lancer-evo.net

Noisy Tappets

A noticeable 'ticking' noise from the top of the engine. Usually appears when starting the engine from cold but can persist:

The noise is caused by air being trapped in the Lash Adjuster (Hydraulic Tappet). Normally the high-pressure chamber in the Lash Adjuster should contain oil but due to various reasons (listed below) the oil drains away leaving only air present. This causes the adjuster to become compressed. The compressed adjuster does not take up the clearance between the roller rocker and the cam lobe correctly when the valve is opening meaning a 'ticking' can be heard. It may take a short period for the air to be expelled after starting the engine so some 'ticking' noise is acceptable however, if the noise lasts for a long period or doesn't go away at all then there maybe a problem.

Air can be trapped in the adjuster due to several reasons that are listed below:

- Incorrect grade of oil used (too thin or thick).
- Old oil (debris in the oil may block an adjuster).
- If the car is stood for a long period or if it is stood on an incline (the oil will drain from the adjusters).
- Over filling the engine with oil (if the oil level reaches the crank it may churn air into the oil that will migrate to the lash adjusters).

Rusted Wastegate Actuator

Lack of boost or excessive boost levels with possible fuel cuts. It can be intermittent or erratic:

The location of the Wastegate Actuator and angle of the actuator arm promotes water entering the Actuator diaphragm assembly. This can lead to early failure of the actuator due to rust build up. Early symptoms maybe hard to spot without a Boost Gauge fitted.
The only cure is to fit a new Actuator. The fitting of an aftermarket actuator of different design should prevent any further problems.

A new wastegate actuator for the Evo is **£200** + plus fitting.

Overflowing Expansion Tank

Coolant leaks out around the Expansion tank filler cap:

This is a very common problem and really is a quirk rather than a fault. It will occur after a period of hard driving after the coolant has been topped up or changed. The cap does not seal very effectively and coolant can leak out around it rather than go down the drainpipe. The correct coolant level, when cold, is approximately 10mm-20mm above the 'Min' level. If the coolant continually drops below the minimum point and doesn't settle at a specific level then it could indicate a coolant leak somewhere in the system and will require further checks.

Idle Speed Control Valve

Unstable idle and possible stalling or higher than normal idle speed especially when the engine loading changes (e.g. when fans or A/C comes on):

Unstable idle is possibly due to deterioration of the Idle Speed Control Valve stepper motor. The motor controls a valve that allows air around the throttle butterfly to maintain a steady engine speed at idle, if the motor does not work correctly then the idle speed cannot be maintained. Note that if unstable idle occurs and the car has been fitted with a vent to air blow off valve then this is the likely to be the problem.

A replacement for any Evo model shouldn't cost more than **£300**.

© Copyright 2001. 2002, 2003 www.lancer-evo.net

Transmission [diffs and gearbox]

The following section covers what most would say is the most complex region of the Lancer Evolution.

If you unsure of anything when inspecting this part of the vehicle seek advice from a qualified mechanic or a Ralliart approved Mitsubishi dealer.

Front Helical LSD Bolt Failure

A regular 'clunking' noise from the front with every rotation of the wheel but only on full or partial lock. It will 'clunk' all the time on lock regardless of suspension travel. It can affect the left, right or both sides.

This is a problem with the factory fitted Front Helical [Torsen] Limited Slip Differential. The Helical LSD is standard fitment on RSII's, optional on the RS and although they were never supposed to be fitted, some crept onto the GSR models when the production line ran out of normal open type diffs. The 'clunking' noise occurs because the bolts securing the two halves of the diff start to break or come loose. The 'clunk' happens on full or partial lock as that is when the diff is under the most strain due to torque transfer. Generally no damage will be caused to the diff unless it is left for a long period time before it is repaired.

This could cost upto **£500** to get repaired.

Worn Gearbox Output Shaft Bearings

A whine from the transmission that rises steadily with road speed. It may be difficult to hear below 30mph-40mph. The noise will persist no matter what gear you are in [or neutral] or whether the clutch is depressed or not. It will usually appear after the car has covered between 18,000 to 26,000 miles but possibly earlier.

There have been numerous cases of gearbox bearings wearing prematurely. This is due to the preload on the Input Shaft being incorrectly set in the factory which leads to extra stress on the bearings and eventually failure due to wear. This only seems to be a problem on some Evo VI gearboxes. Bear in mind that to remove gearbox, strip and replace all six gearbox bearings and refit gearbox costs between **£850-£1150** inclusive of all charges.

Baulking Gear change/hard to select gears

1st, 2nd and Reverse are hard to select.

This is another quirk rather than a fault or problem. First, Second and Reverse gears can be hard to select when the gearbox is cold. After a few changes the shift should respond better and be completely free when warm. To ease initial gear selections try selecting Third before First or Reverse. If the problem persists when the gearbox has warmed then it could indicate a clutch, gearbox or a gearbox-mounting problem. Initially try changing the gearbox oil for good quality fully synthetic oil as it can improve the shifting.

© Copyright 2001. 2002, 2003 www.lancer-evo.net

Squawking Rear Axle [AYC equipped cars only]

Squawking' from the AYC diff on tight, low speed corners.

A 'squawking' from the rear diff on AYC equipped cars usually means that there are some wear particles trapped between the clutch plates. When you corner and the plates are pressed together the trapped particles cause the plates to 'squawk'.

The system will need to be bled, preferably using the MUT-II diagnostic tool at a Mitsubishi dealership. If you have an Evo IV or V and the problem persists then it could be that the diff is permanently damaged due to a faulty AYC ECU.

There is a product recall that affects certain numbers of Evo IV & V GSR models due to a faulty AYC ECU (Active Yaw Control Electronic Control Unit). It has been found that due to incorrect AYC ECU programming that the clutches that control the torque transfer can remain engaged on starting the engine. This can lead to premature wear and eventual failure of the AYC. Under the recall the faulty AYC ECU's are required to be replaced with correctly programmed versions.

The cars affected are the Evo IV and V GSR's built between December 20th 1996 and July 17th 1998. To find out if you need to take further action or how to proceed then contact you're nearest Mitsubishi dealership or Colt Car Company Customer Services quoting the car's VIN/Chassis number. The VIN/Chassis number appears on the VIN plate or on the engine bulkhead and will start with CN9A [Evo IV] or CP9A [Evo V] followed by 7 digits.

The new AYC ECU takes 30 minutes to fit and you **will not be charged** for its replacement. You can identify a replaced, correctly programmed AYC ECU, as it will have a 5mm black dot stuck on the serial number label.

Your nearest Mitsubishi dealership can be found on www.lancer-evo.net [my site] or alternatively Colt Car Company UK can be contacted on +44 [0] 1285 655777 or by fax: +44 [0] 1285 658026

Slipping Clutch

Select 4th gear and accelerate hard from low revs [1500-2000rpm] and the engine should speed should pick up slowly without any clutch slippage. Ifthere are signs of a worn clutch then walk away. Mitsubishi quote around **£800** including parts and labor for fitting a standard clutch [although you are better off with an aftermarket item that can take more power and torque].

Suspension

There are only a few things to look out for with the standard Evo suspension [apart from the usual suspension checks to see if the shocks/springs are in working order]. If you wish to add anything to this section then please do not hesitate to contact me. You will be credited of course.

Webmaster@lancer-evo.net

Front Strut top mount

A regular knocking noise can be heard from the front on turning. Similar to a CV joint problem although the knocking noise will be dependent on suspension travel.

The problem is associated with the front strut top mounts drying out or being inadequately lubricated. Again, bear in mind that a replacement could cost you around **£300**.

Anti-Roll Bar Bushes/Drop Links

A rattle from the front [one side or both] mainly over light to medium-rough roads.
The Anti-Roll bar bushes and the drop links do suffer from wear, as on most cars, but the Evo's do seem to get more abuse though!

Uneven Tyre Wear

If the tyres have worn unevenly then it's a sure bet that the suspension has been setup incorrectly or it is faulty. If you are unsure seek advice from a Ralliart approved Mitsubishi dealer.

Brakes

Some would say that this is one of the Evo's main weak points. Although the Evo V onwards employed 4-pot Brembo brakes for the front the Evo still manages to warp discs. The Evo inspires massive amounts of driver confidence when driven hard, so the brakes have to fantastic to compliment the car when driven hard.. They just don't do the job! Under normal driving they more than cope. Read on..

Warped Discs

Front discs warping which shows up as judder felt through the steering wheel and/or pedal under braking. Usually the first signs appear under high speed braking i.e. 100mph down through to 70mph.

The front disc warping on the Evo VI/TME is a well-known problem [my Evo IV GSR warps them badly!]. Some cars have never warped their discs yet others seem prone to the problem. Warping can happen within a few thousand miles and often reoccurs when the discs are replaced, or skimmed, and in most cases it makes no difference how you treat the brakes with even careful owners eventually reporting problems. Unfortunately, the only definite way of curing the warping is to fit an aftermarket caliper and disc kit such as the popular AP 4 or 6-pot kit, anything else and warping may possibly reappear. Bad news is that this could cost between **£1800 - £3000.**

Flaking Caliper Lacquer / Brown Calipers [Evo V onwards]

Caliper lacquer flaked off leaving a dull finish or the calipers can turn brown or a darker red.

The lacquer on the Brembo calipers can be very easily chipped, and once chipped, the lacquer can peel away showing the paint underneath which then appears very dull. This usually only occurs due to poor handling of the calipers when changing discs etc.

The Brembo calipers turning a dark shade of red or brown is due to the calipers continually overheating which can occur after prolonged periods of long hard braking when using aggressive pads. Once the calipers have turned brown they stay brown!

Seized Brakes

If the car owner/salesperson has left standing for a period [overnight even] then the brakes can become locked on and it makes it difficult to first pull away [a loud thud is heard]. It is nothing to worry about; this is not a fault, rather an effect if the car is left overnight with wet brakes. The front and rear discs rust onto the pads and the rear handbrake drum also rusts onto the shoes. The main problem is the rear drum/shoes, as they have a larger contact area than the discs/pads and can rust fairly solid in a short space of time. The problem usually occurs after washing a car and then leaving it overnight without drying out the brakes although it has been known for simple condensation or overnight rain to cause the same results.

© Copyright 2001. 2002, 2003 www.lancer-evo.net

Service History

It is important to find an Evo with a good service history. If you are buying a car that has just recently been imported ask to see the logbook from Japan. Even it is in Japanese you should still be able to see if certain services have been carried out. Ask the dealer if he has serviced the car since it has come into his possession. If you feel the car needs a service demand that the car has one before you part with any cash. And don't just take his word for it! Ask to see the paperwork!

A car without any service history is a No No. Just walk! It is not worth the hassle and the car will become a financial burden. There are plenty more good examples out there. Stay patient.

I looked at 12 Sunny GTI-R's before parting with my cash. It's a lot of money to be spending on a car if you aren't 100% sure it's the car that you are after. Just walk. I cannot stress this enough. As shown in the Running Costs section, the Evo HAS to be serviced at regular intervals and looked after well.

Documents and Receipts

There should be plenty of paperwork that will need close inspection:

- Vehicle Registration Document
- SVA Certificate [import paperwork]
- MOT Certificates
- Warranty Certificates
- Proof or Alarm/Immoboliser fitting [and tracker if applicable]
- Mitsubishi Service Book
- Receipts for aftermarket parts supply and fitting

TIP- Check the cars mileage on this paperwork and see if it tallies up with the figure on the odometer. If at the time of the last MOT 4 months ago the car had done 32,000 miles and now it has done 32,110 and the tyres show evidence of doing 2,000 miles since the MOT you know that the odometer has been rewound.

As stated earlier, I strongly recommend you carry out a HPI check on the vehicle before even putting your deposit down. Visit http://www.hpicheck.com. £35.95 is the current price.

Once you have taken the plunge..

Congratulations! You now own one of the most phenomenal cars on this planet!

There are some things I strongly recommend though:

- Service the car at regular intervals. See my website or the "Running Costs" section of this buyers guide for more information
- Join the MLR. Go to www.lancerregister.com for more details.
- If possible join the MLR forum and the Evo Mailing list.

  http://www.lancerregister.com/bbs/index.php
  http://groups.yahoo.com/group/evo/
- Download the Evo manual from www.lancer-evo.net, these pages will become your Evo Bible!
- Use only 97 or 98 Ron fuel to feed her. Crappy 95 Ron will cause detonation.
- Get a decent alarm fitted and keep it in a locked garage when possible.
- Have fun, drive sensibly and to your limits, and always wear a seatbelt!

© Copyright 2001. 2002, 2003 www.lancer-evo.net