

# HUNTER MODEL AUTO CLUB INC

## -GEARBOX-

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SPOTTED IN NEW ZEALAND - A CLASSIC JAGUAR MARK IX.

**----- JULY 2022 -----**



**PLACEGETTERS FOR THE JUNE MODEL COMP - ABOVE : FIRST PLACE** - Pieter's Racing Car Transporters. **NEXT PAGE : SECOND PLACE** - Ben's Valiant Pacer, FC Holden and Ford Falcon. **THIRD PLACE** - Ken's three Holdens.



**Above** – Not all entries are winners, however, I thought this Bedford Railway trucks entry by Mark in May was another excellent effort and, as Editor, I thought I'd throw it into this Gearbox. *TP*.

# HUNTER MODEL AUTO CLUB INCORPORATED

## Minutes of Club Meeting Held at Edgeworth Sport and Rec Club on 14 June 2022

**Meeting Opened: 7.30 pm**

**Members Present: 18      Apologies: 4      Visitors: 1**

**Previous Minutes:** Moved: Ernie Williams    Seconded: Mark Jenkins    “That the May 2022 Club Minutes be accepted”.    Carried.

**Treasurer’s Report:** The Treasurer reported that the Club funds stand at \$1,651.49 which includes \$175.00 for Toy Fair tables.

Moved: David Standen    Seconded: Paul Campbell    “That the Treasurer’s Report be accepted”  
Carried.

### **Correspondence:**

#### **Inwards:**

- i) Australian Red Cross – Request for donation.
- ii) Maz Woolley (MAR Online) – Offering a free listing in the club page of MAR Online.
- iii) Dennis Mitchell (SMAC) – Thanks for informative Gearbox and advice that Toy Fair is at new venue – ***Epping Creative Centre, 26 Stanley Road Epping.***
- iv) Ian Hind (WAMCC) – Thank you for Special Edition Gearbox. Appreciated the article on Stanley Steamer.
- v) Elaine Rowan (Richmond Vale Railway) – Invitation to display at Family Fun Fest on 24 & 25 September 2022.
- vi) WAMCC – May 2022 “Showcase” Magazine from Perth WA.
- vii) SHMAC – June 2022 “Wheel Nuts” Magazine from South Hants England.
- viii) CDMC – Summer 2022 “Wheelspin” Magazine from Coventry England.
- ix) WMTC – June 2022 “Wessex Smalltalk” Magazine from Wessex England.
- x) SMAC – May 2022 “Think Small” Magazine from Sydney NSW.
- xi) Barry Lloyd (WMTC) – Thank you for Regular and Special Edition Gearboxes. Advice of brief history of their Club and activities undertaken.

#### **Outwards:**

- i) Prospective Stallholders – Invitation to Register for 2022 Hunter Toy and Hobby Fair.
  - ii) Club Members – Reminder email for June “Virtual” Model Competition.
  - iii) Elaine Rowan (Richmond Vale Railway) – Acceptance for invitation to display at Family Fun Fest on 24 & 25 September 2022.
  - iv) Barry Lloyd (WMTC) – Brief history of our Club and activities we undertake.
- Moved: Mark Jenkins    Seconded: Ben Wing    “That the Correspondence be accepted”.    Carried.

#### **Matters Arising:**

- i) Hunter Toy and Hobby Fair – Registrations have been sent out to prospective stallholders and a number have already been returned with payment for tables. A flyer has been prepared and was circulated at the meeting.
- ii) Singleton Army Infantry Museum Visit – This was held on Sunday 15 May 2022. Morning tea was partaken at the Lone Pine Café on arrival, followed by the self-guided tour at 10am. Afterwards we travelled a short distance to the Parkview Café, Singleton for lunch. An enjoyable day was had by those who attended.
- iii) Christmas in July Dinner – Members decided to hold this next meeting as the Club Restaurant will now be open to cater for us. Meals are to be ordered off the standard menu at the Restaurant. Drinks to be ordered at the Bar. Arrangements on the night will be like that of last year, whereby our Dinner will be held in the Auditorium (our usual meeting place). *Cont. next page...*

*Cont.....*

The Dinner will commence earlier than usual at 6.30 pm for 7.00pm to allow time to finalise arrangements for the Toy Fair, also both Model Competitions will be held on the night.

iv) Show Us Ya Slotz Visit – This will be held on Sunday 26 June 2022 starting at 10.00am (Address being 12 Industrial Crescent, Lemon Tree Passage).

v) Show Us Ya Slotz Model Display – This is planned for Sunday 28 August 2022. More details to be provided next meeting.

#### **General Business:**

i) Return Visit to Fighter World - This venue is currently closed and upon reopening will be contacted to arrange possible dates for a proposed Club visit.

ii) Proposed William IV Cruise – This is planned for later in the year, when the weather is hopefully more pleasant.

iii) Inside Model Display at Mortels, Thornton – This is arranged for Sunday 10 July 2022 between 9.00am and 1.30pm. Space for three (3) tables is available. Paul and Trevor will be in attendance. Anyone else wishing to attend should contact Paul.

iv) Club Shirts – Members' orders are to be placed with Brian Fairhurst.

v) Club Caps and Jackets – Brian Fairhurst is to investigate the procurement of these items with Club name/logo and report back on prices.

vi) Members' Models For Sale Table – It was agreed to re-introduce this table at each meeting to allow members an outlet to sell/trade any of their models to other members at each meeting.

vii) Newcastle Model Autosports & Hobbies – This shop has relocated to Shop 10 Hilltop Plaza 228 Pacific Highway, Charlestown.

viii) Diecast Plus Newcastle – This shop is relocating to 1/141 Maitland Road, Mayfield.

#### **Model Competitions:**

“Actual” Model Competition: “Open” – Qualified\*\*

1 <sup>st</sup> .....	Pieter Zeeman .....	Racing Car Transporters.....	39 Points
2 <sup>nd</sup> .....	Ben Wing.....	XY Falcon, FC Holden and Valiant Pacer.....	16 Points
3 <sup>rd</sup> .....	Ken McGregor .....	Holdens.....	13 Points

\*\* Any number of vehicles and combination of scales are allowed, provided that the allotted points do not exceed 6 for the display. 1/18 Scale (or bigger size) .....3 Points, 1/24 Scale (or smaller than 1/18 scale but bigger than 1/42 Scale) ....2 Points and 1/42 Scale (or smaller size) ....1 Point.

“Virtual” Model Competition: “Open” – Any scale up to three (3) models and ONE PHOTO ONLY.

1 <sup>st</sup> .....	Terry Payne .....	Hot Rod Days.....	18 Points
2 <sup>nd</sup> .....	Matt Campbell.....	Corgi Euclid Crawler Tractor.....	15 Points
3 <sup>rd</sup> .....	Bill Kenchington.....	Police Vehicles.....	13 Points

**Next Meeting: Tuesday 12 July 2022 at the earlier time 6.30pm for 7.00pm at Edgeworth Sport and Rec Club.**

***(This will be our Christmas in July Dinner Meeting with wives, partners, and guests most welcome)***

**Next “Actual” Model Category - July: “Railway Related Vehicle”** - Any scale up to three (3) models

**Next “Virtual” Model Category - July: “Pre WW2-Vehicle”** – Any scale one (1) model only and ONE PHOTO ONLY.

**Meeting Closed: 8.10pm**

**1963 HA VAUXHALL VIVA – Another 1960's car – Cheap to run, pleasant to drive.**

The HA Vauxhall Viva, released in Britain in 1963 became their first small Vauxhall model manufactured since WW2. It was a much needed model for the British General Motors Division to compete against the Ford Anglia, Triumph Herald and Morris Minor. The Viva came with a 1057cc or 64.5 cubic inch four cylinder engine that developed 44bhp or 32kw in power and was rear-wheel driven through a four speed manual gearbox with a top speed of almost 80mph or nearly 125 kph. The Viva shared parts with the Opel Kadett, yet its design with the sharp crimped lines over the rear guards and a spacious interior for such a small sedan, was all Vauxhall's design. *Autocar* magazine said, 'The exceptionally light controls make the Viva outstandingly easy to drive....As a family car choice for inexpensive motoring, it offers also above average roominess for the price.'

A bit of Vauxhall history from my 'Cars we loved in the 60's' book said that their plant at Luton, at peak operation at the time, could not be expanded as the Government would only sanction new factories in areas of high unemployment. Both Ford and Triumph had complied with these directions for the production of the Anglia and Herald in new dockland factories. Unemployment occurred through the downturn in the local iron works and other dockside industries at Ellesmere Port in Cheshire and Vauxhall followed with a new plant there. It was here that the Viva production commenced in 1964, though when demand increased, some were still made at Luton. The British version of the HA Viva ceased production in 1966 with well over 300,000 leaving the English factories. Interestingly, it was produced in a Van form from 1964 as a 'Bedford' and remained in production till 1983 unchanged and in constant use by the British Post Office and Telephones department. In later years Luton closed down its sedan manufacturing part of the division and today the Ellesmere Port is where Vauxhall Astra sedans are made.

My first memory of the HA Vauxhall Viva was seeing it as a Police car in NSW when I was still in High School and I have to admit thinking they looked like a full size version of Japanese tin-plate toy cars. My understanding is that, though driven by General Duty Police, they were also used by General Traffic Officers for point duty, School Lecturing and other traffic related duty. They were not used for enforcement duty as that was covered by the Special Traffic Patrol or STP [Today's HWP] using Triumph 650cc motorcycles and a small number of high-speed V8 sedans such as the Studebaker Lark of this era. The NSW Police replaced the Vauxhall Viva with the Mini 850 for most General Traffic, Warrants and Summons duties and had the Morris Cooper 'S' being operated by the STP alongside a number of Rambler V8 sedans that had replaced the Studebaker.



*The above pics* are of *Silas* brand 1:43 scale resin models of the HA Vauxhall Viva. They appear to be excellent models and produced in France, though quite expensive. Each of these would set you back A\$200 plus landed. The old English manufactured *Dinky* by Meccano models had them in 1:43 scale diecast, but are hard to find in other than play worn condition today. *Trackside* made the HA Viva in the 'HO' railway gauge of 1:87 scale. *Terry*.

## -SUNSHINE, BEACHES AND THE MINI MOKE-



In his book *'Cars we loved in the 60's'* Giles Chapman quoted the following from a motoring magazine, *'Driving through the back streets of Kensington in the pouring rain in the Moke must rate, as an activity, very low on anyone's fun index.'* However, Giles is talking about the British experience because over 90% of the 14,500 Mini Mokes produced in England from 1964 till 1968 were exported to *'Sun spots'* around the world. They were mainly used as beachside taxis or hotel courtesy cars in hot countries according to Giles. But as we know, they were also produced in Australia *[See lead-in pic]* as well as in Portugal. It is thought that around 26,000 Mokes were made in Australia from 1966 till 1981 with about 10,000 being turned out in Portugal from 1980 till 1993.

Many would remember the Moke in Australia, which was originally sold as a Morris Mini Moke, though from 1973, it became known as a Leyland Moke. I'm not sure they could be called famous, but our very on the ball member, Bill, reminded me that they were modelled for the James Bond collection in 1:43 scale. They had actually appeared in many of the movies and Roger Moore drove a Moke in *'Live and Let Die'*. *See next pics, courtesy of Bill K.*



The *Moke*, a word which is an antiquated term for donkey, has an interesting history according to Giles Chapman and he wrote, *'Odd, really, that a vehicle intended to be dropped into enemy territory and then used as a nimble cross-country troop-carrier should, instead, finish up a rolling symbol of holiday freedom.'*

Almost immediately after he had designed his *'Mini'* under the Austin Seven and Morris Mini Minor names, Alec Issigonis, set about designing a military version of the Mini. By the late 1950's, the British Army were considering using small lightweight runabouts that could be carried by air and dropped into a war zone. So, in a way, Issigonis's ideas were both pure genius and at the same time, possibly commercially viable, but the outcomes were both good and bad.

The Moke was a product that Issigonis felt could also take at least a modest share of the military vehicle market from Land Rover, even though Issigonis had failed previously during WW2 when working for Nuffield, having produced the *'Guppy.'* So, in having designed the Mini, he next intended to produce military prototypes that shared the Mini's front wheel drive, transverse mounted 848cc engine and mechanicals, and with a robust body shell. His initial prototypes were completed by 1959.

Part of his genius was that each vehicle was designed so that they could be stacked on top of each other with their windscreens folded flat, and the wheels sitting on the mudguards of the vehicle underneath it. This would allow numerous 'stacked' Mokes to be bundled into military transport planes or even carried by a helicopter, a consideration that the British Army had requested of any potential manufacturer of a lightweight runabout. Check out the Mini Moke profile and you can easily picture Issigonis's design cues that clearly became a smart idea as he also intended that they could be parachuted in stacks into combat zones.

In his mind, Issigonis had designed the Moke so that upon retrieval, four soldiers could drive off, yet was light enough that those same soldiers could pick it up by its cylindrical bumper bars and carry it from an area not suitable for driving, particularly if ground clearance was inadequate. Moke prototypes had a larger engine than the Mini, being of 948cc capacity, and the 'tub' type body was strengthened structurally by welding the bench seat to the floor. That was the good part. However, the problem was the Moke's low clearance and ten inch Mini Minor wheels, and being coupled with front wheel drive only capabilities, meant the Moke struggled in any rough terrain. **One of the prototypes next pic.** *Check out the lack of the storage bins along the sides of the tub body which were added to the civilian version of the Moke.*



At the end of the day it was fine to suggest that four soldiers could then lift and carry the Moke out of rough terrain, but the problem was exacerbated by the fact that the Moke may have had to carry heavy equipment such as weaponry, and it would become too heavy to be a practical proposition. The British Ministry of Defence declined to accept the Moke for military use and continued to use Land Rover products. That was the bad part.

But every cloud has a silver lining. With BMC failing to have the Moke taken on board by the Army, and as an example of '*waste not, want not,*' BMC and Issigonis decided in 1963 to build a civilian version of the Moke which could be ideal in Britain for agricultural and commercial use. It was launched in 1964 as a low cost utility vehicle, yet it would ultimately become famous as a type of 'beach buggy' with a cult following in many sunny tourist countries, even if a part of the Moke's success came from the growing reputation of the little Mini Minors.

The British built Mokes were turned out at first in the Morris factory in Oxford before being moved to BMC's Longbridge, Birmingham factory. They had the Mini's 27kw transverse mounted 848 cc engine, though it was modified to use low octane petrol, and basically, were built on the same structure as the standard Mini including the same small ten inch rims. However, rather than staying with the military prototype tub, Issigonis added a pontoon type box section down each side of the tub to function as storage lockers. The first series of Mokes were only available in one colour, a dark green and it had a single driver's seat and single wiper and so, being classified as a commercial vehicle, did not attract a purchase tax. Passenger seats, grab handles, heater, windscreen washers and a removable canvas top were options available separately from a dealer, but the owner had to fit the equipment themselves.

In 1967, the Moke had two windscreen wipers fitted as standard with other changes such as having the horn button and headlight switch fitted as part of the indicator stalk on the steering column and white was added as an alternate colour. However, Government Departments are pretty astute and re-classified the Moke as a passenger vehicle and they were soon taxed accordingly. This is said to have reduced the sales numbers almost immediately.



***Bills 1:43 scale diecast model of the Austin badged Mini Moke by Vitesse.***

The Moke we saw in [Australia](#) started production at BMC's Zetland plant in Sydney in 1966 as the Morris Mini Moke. Though almost identical in looks to the British version, the Australian Moke had strengthening to the gusset plates, corner points and other strategic locations to ensure the Moke would stand up to our harsh rural roads. A 998cc engine was used instead of the 848cc unit in the British models and the suspension was raised slightly with a sump guard fitted as well. The British Moke seats were changed to a canvas padded steel framed type and it was fitted with a parcel shelf, a heater and two wipers.

Out here, the Moke was classified as a utility vehicle which gave registered primary producer's an advantage of not having to pay sales tax on any Moke purchased. Even though the suspension had been raised, it was still considered too low and in 1968 the Moke had 13 inch rims fitted and a widening of the front track with a further update to the suspension giving it eight and a half inches of ground clearance. A change to a low ratio differential gave better mobility over rough country and on the beach. The improved versions were given good reviews by motoring journalists and shortly after, the Mark II Moke was introduced. It was now fitted with a 1098cc engine and had improved engine cooling and upgraded brakes to suit the more powerful engine. As well, the metal wheel arch body sections were extended to compensate for the slightly wider track, as well as an all synchromesh gearbox and larger light panels being added.

The Moke was rebadged as a BMC Moke in 1970 and by the mid 1970's, over a third of Mokes produced in Australia were actually being exported. From 1971 till 1973, BMC turned out what some called the 'Export Moke' which became the 'Californian' Moke and was fitted with a 1275cc engine. It had larger wheel arch extensions with the turn signal lights fitted front and back on that part of the body as well as twin wing mirrors and mud flaps. It also had two speed wipers, a reversing light, a spare wheel cover as an option and redesigned bumper bars front and back and similar in style to small 'roo' bars. It was never exported to the U.S due to their safety regulations and the 1275 engine was dropped due to pollution issues at the end of the Californian Moke run. Not long after, the 1098cc engine was also dropped as an option for the same reason, so all Mokes had the 998cc engine that had always been used on the standard level of Moke.

In 1972 it had a name change again to Leyland Moke and with the closure of the Zetland factory, production of the Moke was transferred in 1974 to the Pressed Metal Corporation in Enfield. A utility Moke was added to the range in 1974 with a small 4cwt load capacity and in 1977, the 'Californian' Moke was re-introduced for Australia only and using the 1275cc engine that now complied with emission rules. In 1979 Leyland made changes to the Moke with its final upgrade, but the writing was on the wall and Australian production ceased in 1981.

Leyland had decided to produce the Moke in Portugal in a British Leyland Portugal company manufacturing factory that had been made redundant before production ceased in Australia. Labour costs, as well as transport costs to targeted overseas markets, would have been lower than in Australia. They exported the Moke in CKD kits from Australia to Portugal initially, before moving all production equipment over there to continue manufacture of the Portuguese Moke in 1983 under Austin Rover Portugal. Poor management and labour unrest led to the Portuguese subcontracting company that produced the bodies, becoming bankrupt. Production ceased in 1989.

Austin Rover sold off the whole Moke operation to Cagiva, the Italian motor cycle manufacturer in 1990. They only produced around 1500 units up to 1992 in Portugal using Rover supplied drive train and mechanicals. They did not carry on production in Italy as originally planned and that was the demise of the Moke. *Terry.*

## *-THE OTHER PETER BROCK -*



*Going back through some old Gearbox articles I found this article from 2010. Oddly, only five minutes prior to opening up my Gearbox files, I was reading an old motoring magazine article on our Australian Peter Brock's outstanding motor racing career that included nine Bathurst 1000 endurance race wins and nine Sandown 500 touring car race wins. He was killed competing in the Targa West Rally in Western Australia on September 8, 2006 and I will never forget receiving a phone call the next day from an old workmate telling me the news. I was in London at the time and it was certainly a very sad day. However, this short story is a re-hash about the other Peter Brock.*

Most motoring enthusiasts know of Carroll Shelby, American racing car driver, Maestro of Ford racing and Mustang fame. You all know of the late, great, 9 times Bathurst winning Peter Brock. However, another 'Peter Brock' is also famous, but in American racing circles. He is the designer of the Shelby AC Cobra Daytona pictured above. Ironically, it was in a Daytona coupe replica that our Peter Brock met his death near Perth in a 2006 Targa West Rally crash. Believe it or not, on the 6th of September it will be four years. **[16 years for 2022 – TP]** Sadly, time flies. Maybe we should have a Peter Brock theme at our September meeting. Food for thought fellow club members!

Anyway, in the early 1960's, Carroll Shelby, in an effort to beat the Ferrari domination of the GT class in the FIA world championships, built the Shelby AC Cobra based on the British AC roadster, though it was already 10 years old. Initially, it was fitted with a 260 cubic inch Ford V8 motor, though was quickly replaced by a 'hot' 289 cubic inch Fairlane V8 motor developed on the quiet by Ford Racing. It was a winning vehicle in the US in 1963 with six victories out of seven races, pulverising both the Ferraris and the Corvettes. BUT .....the world scene would be different with high speed tracks not suited to the boxy shaped Cobra. Shelby sought help from a talented former General Motors designer, Peter Brock, to shape a new body for the AC chassis. At the time, Peter actually worked for Shelby at his 'School of High Performance Driving.'

Amazingly, Brock used technical papers from a German, circulated in 1919, which could be related to the effects of a 'cut off' rear end for the body shape. With no wind tunnels and mostly by eye, he drew up an aerodynamic, low drag coupe body for the AC chassis. It was sensational and won the GT class at Le Mans in 1964 where they were fourth overall against the cream of the world racing teams. In Europe in 1965, they won nearly every race to gain the European GT manufacturers title, a first for an American maker. The funny thing is that only six were ever built, five in Italy and one in the US. Each one was a little different in shape due to being hand-built. However, Ford and Shelby then abandoned the Daytona coupe and went straight to the Ford GT40 program for their future racing plans.

Today, the few genuine Peter Brock designed Daytona coupes in existence have fetched close to US \$2 million at auction. One recently went for US \$ 7.2 million. **[Again, in 2010]** Not bad considering Ford sold them off for roughly US \$5000 when changing over to the GT40 programme. *Terry.*

## THE BLUE RIBBON OF ITALIAN SPORTS CARS – THE ISO RIVOLTA



The **lead-in pics** are my **NEO** brand 1:43 scale resin model of an ISO Rivolta, and I believe is the **Blue Ribbon** of 1960's Italian Sports cars styling. One thing, I can recommend NEO resin models in 1:43 scale for their excellent detailing and range of exceptional European autos as well as some North American marques.

When dusting off some of my models, I couldn't help but admire the detailing in all of my NEO models and I reckon that the Rivolta is still amongst the prettiest Italian GT or 2+2 sports cars from the 60's. It hit the market in 1963 and ISO went on to produce 797 Rivolta GTs up till 1970 and, though it rated a story many years ago in **Gearbox**, I felt it time to give it another go, and this time, with pics of my model.



The ISO Rivolta is like an elite American athlete stepping out in a snappy Italian suit being an exceptional blending of Italian sports car design powered by an American engine, a Chevrolet small block V8. The auto maker was the Italian company **ISO Autoveicoli S.P.A.** owned at the time by Renzo Rivolta who was born in Milan in 1908, the son of a wealthy industrialist in the woollen textile industry. He purchased a small firm in Genoa, **Isothermo**, that manufactured refrigerators and heaters and was able to keep it functioning during WW2, even though most Italian industries would end up ruined by the conflict. He moved the company to avoid damage from the Allies drive through Italy and, after the war with the so-called 'scooter boom,' started building small motor scooters and mopeds called a '**Thermos**,' and later renamed as an ISO.

It seems that Italy required low-cost mobility rather than provisions immediately following the war. In the meantime, another boom had started in Europe, the 'mini-car boom' which was soon dominated by Messerschmitt. Another Milanese gent, Ermenegildo Preti who was an aeronautical engineer, wanted an even smaller mini-car and hit on the idea of having a single front entry hinged door for access, rather than side doors. He approached Rivolta, struck up a deal, and in 1953, even though Fiat had tried to scuttle the project, had the little Isetta up and running very successfully and it became known as a bubble car. The Isetta was very popular and BMW ultimately bought the license, as well as the whole Isetta manufacturing set-up in 1954. The licencing deal led Renzo Rivolta to be able to establish his business of producing the sports cars that he would become famous for, such as the ISO Rivolta and Grifo.

In the early 1960s, Renzo, who loved driving powerful Italian sports cars, was never satisfied with the end products of makers like Ferrari, especially with their engines. He decided to re-launch his auto making ambition and started on a programme to produce a two-door, 2 + 2 GT type sports car. Nearby, Giotto Bizzarrini, an automotive engineer and former Alfa test driver, left Ferrari after a dispute. He then joined up with ISO's chief engineer, Peirluigi Raggi, a former aircraft engineer, to develop a light, but very rigid box-section-type chassis for a 2 + 2 that would have an all-independent coil-spring suspension with a De Dion rear end attached and with four-wheel disc brakes. As it turned out, Raggi had led the development of the Isetta with Ermenegildo Preti, so it was almost the same family at ISO again.

Renzo now turned to the coachbuilder Nuccio Bertone and his chief designer, the famous Giorgetto Giugiaro, to design the 2 + 2 body destined to be the Rivolta. There is no need to describe the result as it can be seen quite well in the NEO model pics. Everything was falling into place as in 1963, Chevrolet introduced a 300hp [223kw] version of their 327 cubic inch [5.3litre] small-block V8 engine and it was this power plant, tuned to 340 and later 350hp, that was selected for the Rivolta and was produced till 1970 with nearly 800 models leaving the factory including export to North America.

Renzo passed away in 1966, and the company was taken over by his Son, Piero. ISO next went on to produce the ISO Grifo, also designed through Bertone and it became even more successful. They made other models over time but ceased operations in 1974. Piero is now based in the U.S.A. and is the CEO of Renzo Yachts in Florida. This company designs and manufactures exceptionally high-end luxury vessels.

To finish this story, *Petrolicious* wrote, 'The combination of the 300hp V8 and the robust gearbox resulted in highway cruising speeds at incredibly low revs, with the burbling American V8 providing the foreign soundtrack for the Italian GT. 340 and 350hp engines, five-speed manuals and three-speed automatic gearboxes, sunroofs and air-conditioning—there were plenty of ways to configure your Rivolta.' Terry.

## Iso RIVOLTA

**Handsome, fast and satisfying to drive, the Rivolta proved to be reliable in service, unlike many handbuilt exotics. It is also a genuinely comfortable and practical four-seater.**

**Corvette engine**  
Using a reliable and cheap-to-source V8 engine from General Motors was a masterstroke by Renzo Rivolta. It allowed him to charge much less for what was still an exotic Italian GT car.

**Wire-wheel option**  
The standard wheel specification is a humble perforated steel disc with a chrome hub trim. Much more alluring is the wire-wheel option.

**Giugiaro styling**  
A very young Giorgetto Giugiaro was responsible for the strikingly well-proportioned bodywork. It shared many design elements with other Giugiaro designs of the time—namely the British Gordon Keeble GT—but established its own character.

**Four-seater cabin**  
A key component of the Rivolta's Grand Touring status is an unusually spacious cabin for four adults. Comfort levels could be enhanced by specifying leather seats and air conditioning.

**Bizzarrini-designed suspension**  
One of the Rivolta's most attractive aspects is its suspension, which adopted state-of-the-art racing principles. Former Ferrari employee Bizzarrini was responsible for its design.

**Choice of transmissions**  
The transmission specification was very flexible, allowing a choice between sporty and comfort-oriented settings. U.S. customers were catered to by a GM Powerglide automatic transmission.

### Specifications

**1964 Iso Rivolta IR-340**

**ENGINE**

Type: V8  
Construction: Cast-iron block and head  
Valve gear: Two valves per cylinder  
Ignition: by electric coil with distributor and spark  
Bore and stroke: 4.20 in. x 3.25 in.  
Displacement: 327 cu. in.  
Compression ratio: 11.5:1  
Induction system: Single Carburettor  
Fuel injection system:  
Maximum power: 340 hp at 4,000 rpm  
Maximum torque: 281 lb-ft at 3,000 rpm

**TRANSMISSION**

Manual  
Automatic

**BODY/CHASSIS**

Construction: steel and aluminum  
Body: coupe body in steel and aluminum

**SPECIAL FEATURES**

Five-spoke alloy wheels  
Air vents in the front fenders are both functional and attractive.

Distinctive hooded headlights have a stand alone recessed grill.

**RUNNING GEAR**

Steering: Recirculating ball  
Front suspension: MacPherson with coil springs, torsion bars, shock absorbers and anti-roll bar  
Rear suspension: De Dion axle with coil springs, torsion bars, shock absorbers and anti-roll bar  
Brakes: Discs (front and rear)  
Wheels: Steel or wire (15" x 4.5")  
Tires: 185 VR7

**DIMENSIONS**

Length: 171 in.      Width: 66.5 in.  
Height: 50.5 in.      Wheelbase: 100.5 in.  
Track: 55.5 in. (front and rear)  
Weight: 3,344 lbs.



## **-MARKS LNER J50-**



I found an old Lima J50 in a railway shop junk bin and paid \$15 for it. There was no chassis just the plastic superstructure. I put it in a drawer with the thought that one day I will fix it. As some of you may know, I have a love for all things Tri-ang. So when a Davy Crockett locomotive came my way I bought it. *See next pic.* The chassis and motor were in good condition but the locomotive superstructure was very poor and broken. This looked like, with a small amount of effort, I could bring the LNER J50 back to life. [*'Davy Crockett' produced by Tri-ang, was a 2-6-0 type Transcontinental 'Old Timer' style steam train, but was a fictional model designed for children. Ed.*]



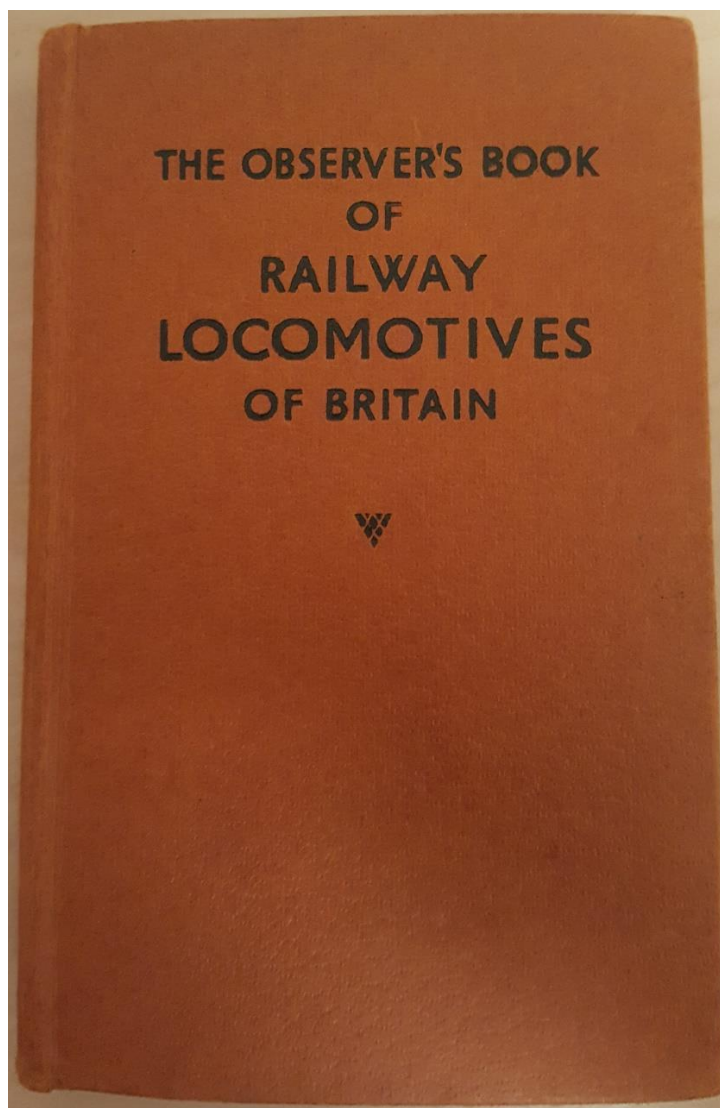
*Above -Tri-ang Davy Crockett in very play worn condition.*



The Davy Crockett chassis has been cut down to a 0-6-0 and brass brackets have been made for the locomotive to be mounted on the chassis. The wheels still need to be painted black. *Above pic.*

The J50 was a workhorse that came out in the days of GNR. [*Great Northern Railway*] They went on through grouping with LNER [*London North Eastern Railway*] and into nationalization with British Rail. Their main task was freight and shunting. They were occasionally used for passenger trains. The water tanks on the sides are sloped at the front to give better vision for the driver.

The gap in the tanks between the front drive wheels and the second made for easy access for oiling and maintenance. These interesting looking tank engines did not make it to preservation. Tank locomotives were so common that a lot were cut up without any thought for the future generations to look at. This seems short sighted now but it would be like me saying to you today would you stop a 2002 Kia Rio with over 300,000km going for scrap?



'J-50' CLASS 0-6-0T

68890-68991

<p><i>Origin:</i> G.N.R.  <i>Introduced:</i> 1922.  <i>Driving Wheel:</i> 4 ft. 8 in.  <i>Length:</i> 33 ft.  <i>Weight:</i> 57 tons (approx.).  <i>Water Capacity:</i> 1,520 gals.  <i>Designer:</i> Sir Nigel Gresley.</p>	<p><i>Purpose:</i> Freight and Shunting.  <i>Cylinders (2):</i> 18½ in. x 26 in.  <i>Boiler Pressure:</i> 175 lb. sq. in.  <i>Tractive Effort:</i> 23,625 lb.  <i>Coal Capacity:</i> 4 tons 16 cwt.  <i>Power Classification:</i> 4-F.  <i>Route Availability:</i> 6.</p>
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**Additional Identification Features:** Side-tanks with flat top sloping down at front end. Chimney of medium height. Rather high dome central between chimney and cab. Two Ross "Pop" safety-valves between dome and cab front

**Number Series:** 68890 to 68991.

**Historical Notes:** Some of this class were rebuilt from earlier engines built between 1913 and 1919, whilst others introduced in 1926 had minor differences from the 1922 design. Those introduced in 1937 (Nos. 68978 to 68991) were fitted with larger bunkers. Nos. 68890 to 68899 ("J-50/1") weighing 56 tons 6 cwt., and 68900 to 68919 ("J-50/2") were rebuilt from "J-51" class between 1929 and 1935.

**Location:** A large number are to be found at Hornsey. These work over the Metropolitan widened lines with transfer freight traffic to South London. The rest are scattered over the Eastern and North Eastern Regions, a fair number being at Ardsley. Nos. 68952 to 68958 are in the Scottish Region in the Glasgow Area.

**Observer book entry on the J50.**

These books were printed from 1937 until 2003 they covered a wide range of subjects and over 800 titles were released. They are a must for anyone looking for information on a specific subject. Like your smartphone they fit in your pocket and give you all the information you need at a glance. The only difference is you pay for the book once and it doesn't need charging. *Mark Jenkins.*

# POPULAR MODELLING SCALES

<b>SCALE</b>	<b>1 Inch =</b>	<b>1 Scale foot = (Inches - Decimals)</b>	<b>1 Scale Metre =</b>	<b>Prevalent models in this scale</b>
1/4	4"	3" - 3"	250 mm	Flying models, steam trains.
1/8	8"	1 ½" - 1.5"	125 mm	Diecast cars, motor cycles, steam trains.
1/12	1'	1" - 1"	83.3 mm	Cars, figures, motor cycles.
1/16	1'4"	¾" - .75"	62.5 mm	Cars, trucks, motorcycles, armour.
1/18	1'6"	2/3" - .67"	55.56 mm	Cars, trucks, figures.
1/20	1'8"	19/32" - .6"	50.00 mm	Cars.
1/22.5	1'10½"	17/32" - .53"	44.4 mm	`G' scale trains.
1/24	2'	½" - .5"	41.7 mm	Cars, trucks, large scale planes.
1/25	2'1"	15/32" - .48"	40 mm	Cars, trucks.
1/32	2'8"	3/8" - .375"	31.25 mm	`No 1' scale trains. Aircraft, boats, cars, figures.
1/35	2'11"	11/32" - .343"	28.57 mm	Armour, boats, figures, diorama structures.
1/43	3'7"	9/32" - .279"	23.25 mm	Cars, trucks.
1/48	4'	¼" - .25"	20.83 mm	Aircraft, armour, cars, trucks, `0' scale trains.
1/64	5'4"	3/16" - .187"	15.62 mm	Aircraft, `S' scale trains, cars, trucks.
1/72	6'	11/64" - .167"	13.88 mm	Aircraft, armour, associated military vehicles, boats.
1/76	6'4"	5/32" - .158"	13.16 mm	Armour, `00' scale trains, buses, trucks.
1/87	7'3"	9/64" - .138"	11.49 mm	Armour, `HO' scale trains, varied motor vehicles.
1/96	8'	1/8" - .125"	10.42 mm	1/8" scale ships, aircraft.
1/100	8'4"	- .120"	10 mm	Aircraft.
1/125	10'5"	- .096"	8 mm	Aircraft.
1/144	12'	- .083"	6.94 mm	Aircraft, ships.
1/160	13'4"	- .075"	6.25 mm	`N' scale trains.
1/192	16'	1/16" - .062"	5.21 mm	1/16" scale ships.
1/200	16'8"	- .06"	5 mm	Aircraft, ships.
1/220	18'4"	- .054"	4.54 mm	`Z' scale trains.
1/350	29'2"	1/32" - .034"	2.86 mm	Ships.
1/700	58'4"	1/64" - .017"	1.43 mm	Ships.
1/720	60'	- .016"	1.38 mm	Ships.