

Bare chassis at rolling stage. The Jerobee ancestry is easily recognisable.

GROUP 12~ EVERYMAN'S CAR.

"The Group-12 car is designed for a fixed class of racing which is low in cost and where all cars are equal. It is ideal not only for the newcomer to r/c cars but also for the average person who wants to spend more time on the track and less in the pits repairing. It is an ideal car for club racing."

GROUP 12 is the outcome of a consortium of four leading American manufacturers to provide a car which is competitive and standard so that there is no question of modifying it when racing in the specific Group-12 class. Parts are provided by Bo-Link, Parma, Jerobee and Associated. In our case Bob Rule of Bo-Link has sent me his kit of parts. It is NOT intended for the pro factory backed racer, or the man with lots of money and wants to win regardless of cost or the man with access to fancy machinery to make exotic parts to gain an edge on the competition. Which I take it includes most of us for the Group 12 class!

Basis of the car is the well tried and proven Jerobee moulded chassis, stout enough originally to carry an ic engine for the popular American 1/12th glow plug engined class from which all electric car racing may be said to derive. Bob Rule indeed was one of the founder members/instigators. This chassis includes moulded in plummer blocks for the rear axle and electric motor fixing, plus moulded in rear bodyshell support. Front axle kingpin bearings are also moulded in.

Initial work therefore, is only to attach the sprung kingpins which carry the stub axles and steering arms. Front wheels supplied with tyres ready trued and glued are slipped on and retained with circlips. Wheels of course are bushed so that there is none of that bush wear which bedevilled some of the earlier electric cars. Rear wheels, again in t & g condition are fitted via rear hubs with two knurled allen socket screws — here the Associated interest appears. These are like those in the RC12E.

The plastic spur gear is screwed on to driving rear wheel making sure it is attached with the countersunk holes outward so that fixing screws bed down. It will still be a slightly loose fit when these are tightened but instructions make it clear this is intended to provide a better mesh with the small gear on motor. Motor shaft is splined so that this must be tapped on, supporting the other end of the shaft on something solid. Do not push it on too far, only enough to mate squarely with the plastic gear. Allen screw can then be tightened to lock it even more firmly in place.

The rear plummer blocks are bushed with oilite bearings and I ran a ¼ in reamer

Radio plate with Ni-cad packs in place. No marks expected for neatness of soldering! through to get a good easy running fit with the ¼ in rear axle. In my case small alloy spacer tubes were provided to stand off the rear wheels. In some cases washers may be included for the same purpose. I remember in my original Jerobee using a short length of a BIC ballpoint pen for this purpose!

A Kydex front bumper plate is provided and this can be screwed in place. The plastic support posts can be fitted. I always pre-screw them with the posts in a machine vice and the screws lubricated with a little Vaseline (petroleum jelly) which is the best lubricant for plastics. This way they are not so difficult to screw in and risk of driver slipping is reduced (I learnt the hard way and have scars to show for it). There are three of these and they are fixed with the thicker ends upwards. Front body (metal) can be fitted at same time, and retaining clips slipped into the posts before they are mislaid.

Now comes the most interesting (difficult?) part of the job. Ni-cads provided have to be soldered up into two three cell packs joined by a connector across the radio plate. As the sketch shows they are connected head to tail, that is plus (+) to minus (-) with the jumpers provided. Exslot racers will recognise them as parts of car wipers which collect current from the track. As such they are the very best conductors available to minimise any possible power loss through resistive wire connections - not that this could amount to very much. I always use a fairly heavy iron for this sort of a job so that actual time of contact is minimal. Too light an iron as used, say, for wiring up a pc board makes the work harder and may not even avoid overheating cells.

A nice touch here is the provision of suitable plugs and sockets to connect up with motor, speed controller and so on. They are foolproof once assembled correctly and can be plugged in wrong way round. Good advice is given that cells should be strapped on to radio plate in their proper order before soldering begins with the cable ties and double sided servo tape provided. This certainly eases the job.

Radio plate is already cut out with a hole for the servo which accomodates most medium sized servos. Other ready made holes take on/off receiver switch and there is even a hole for the aerial, socket and tube for which is also provided.

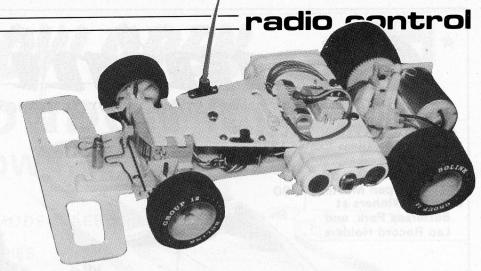


Fixing brackets for the ceramic resistor are included, again with holes drilled in plate to locate it. Wiper arm has button in place but will need to have connecting lead soldered on it and then wrapped round with thread or tape for extra security. It only remains then to secure servo in its place. If readymade hole only allows edges of servo fixing lips to rest on plate take small scraps of plastic and make two fixing bars that can be screwed in place more conveniently where there is material to take small selftappers.

Steering servo at the front is laid flat on its side and raised slightly on a scrap of plastic sheet or plywood so that the connecting rod provided can be fitted to its control disc without fouling the steering linkage. Since it is provided I must assume it is part of the standard Group-12 package

and should be used.

You will notice slots each side of the radio plate. I also have two spare cable ties and imagine the servo could be strapped to the radio plate here instead of my method of packing it up to suit the need. This was what I did — and do — with my original Jerobee outfit on almost the same design of chassis, though I prefer to fit the ball-

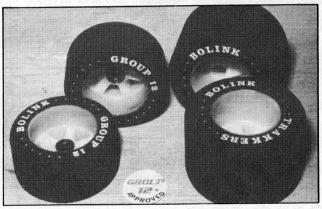


All put together and ready to go. Note that steering servo is attached to chassis supported on a thin wooden block, not strapped to plate.

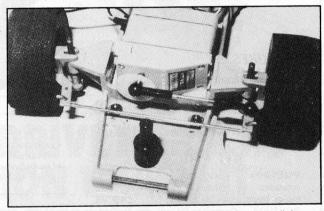
and-socket connection offered by Micro-Mold. I include a picture of this — if you are racing strict Group-12 rules you may prefer it.

The two large holes in radio plate are for the cable tie to hold receiver in place. There is room for my Futaba M receiver

and loads of room for the smaller Medallion, but you will have to lift up radio plate (unscrew three screws) to change frequency. The smaller Medallion would sit on top — though here you must open the receiver case to get at the crystal so there is not much in it.



There is no need to fear super standardisation. There are many afternative tyre set-ups clearly marked "Group 12 approved."



Jerobee chassis using Micro-Mold ball and socket type linkage to steering. Has worked well under very heavy conditions.

TO 3 PIN GREEN WIRE

TO 2 PIN RESISTOR PLUG

RESISTOR PLUG RED WIRE

TO 2 PIN RESISTOR PLUG

WIPER ARM (85)

SHAKER PLATE(26)

FRONT SHAKER PLATE

MOUNTING HOLE

BRAKE

RESISTOR

BAND

SPEED CONTROL

RESISTOR (84)

ANTENNA HOLE

FIG. (18)

TOP VIEW

BATTERY PACK

JUMPER WIRE

TO 3 PIN

GREEN WIRE

ANTERY PACK

JUMPER WIRE

TO 3 PIN

GREEN WIRE

TO 3 PIN

GREEN WIRE

SATTERY PACK

JUMPER WIRE

TO 3 PIN

GREEN WIRE

SATTERY PACK

JUMPER WIRE

TO 3 PIN

GREEN WIRE

SATTERY PACK

SHORT RED

SHAKER PLATERY

SHORT

Diagram makes wiring up very simple. Foolproof connectors are supplied – just tollow the colours. Even the on-off hole fits!

A nice little packet of odds and ends includes charging cord, sundry screws, aerial tube and other useful items. Tube is coiled but a few minutes before an electric fire softens it enough to straighten it out.

I cheated rather with the body, using an elegant Schkee that Jerobee's Don McKay had sent me some time ago; the one provided was an Elfin Can Am or you may have the ever popular Porsche. I would have liked to fit one of Bo-Link's Volkswagen Polo bodies (my own personal car) but it would have meant a lot of alterations including extending the body posts so have left till later. Front body post by the way is metal and retaining clip goes into a slot therein. I prefer it to go through the post and have cross-drilled a hole in the slot for greater security.

Altogether I am enchanted with the thought and thoroughness that has gone into Group-12 and would not hesitate to recommend it to any beginner who has not yet got ideas of fame and glory and will be content with trouble free fun and racing at club level. I expect my young 'destruction squad' will do their best to prove that they can break anything over the holiday.