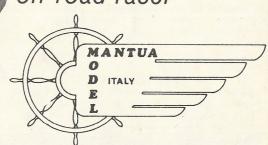
Track Test



Good performance and robust construction with this 2 wheel drive 1/8 I.C. power off-road racer

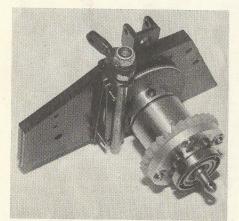
MODEL CARS



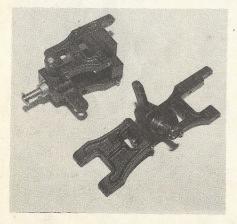
WITH ALL THE aura surrounding four wheel drive 1/8th scale Off-Road racers, it is all too easy to forget that there are many excellent cars still being developed in the 2 wheel drive

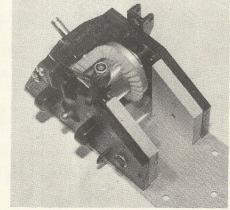
Mantua's 'Nevada cross' comes into this latter category with an Italian manufacturing pedigree that in many respects can only be claimed to be over shadowed by that other Italian R/C car builder S.G. Mantua have been in the R/C car kit business for some years now, supplementing their mainly marine modelling ranges with



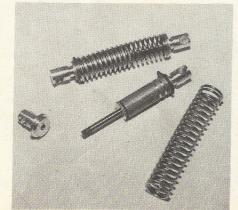


Above: differential housing carries the brake disc. Note nylon bevel gear. Below: front wishbones fitted to steering pivot block.





Above: completed drive train ready for engine fitting. Below: dampers and springs during



excellent products for track and offroad use for both electric and I.C.

This Track Test describes the top of the line 'Nevada Cross' which is supplied with steel geared differential, fuel tank, R/C linkages, roll bar, and oil filled dampers in addition to the usual rolling chassis components. Extensive use is made of glass filled plastic mouldings which are robust and well made, the major component readily visible under this heading is the R/C equipment crate which houses all the R/C components and is sealed with nicely fitting moulded lids. No silencer is included but U.K. Importer Jack Williams can supply suitable manifolds for a wide range of engines, plus a suitable tuned pipe

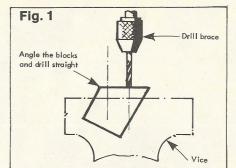
How did it go Together?

With two very minor exceptions assembly was very straightforward. Parts are grouped in numbered subassembly packs keyed to illustrated double page sections in the (Italian language) instruction manual. Pictures are clear and although some beginners might feel a little lost I felt that the pictures spoke a thousand words. Those 'minor exceptions' were in the area of damper mounting and fitting. Dampers need to be assembled, an easy task, but the tiny pieces of silicone fuel tube supplied

as mounting bushes defied all my efforts to fit properly. Once the little pieces of tube were fitted into the mounting eyes of the dampers I could not persuade the fixing bolts to go through them without pushing them out. Smaller tubing overcame the problem. Difficulty number two was actually fixing the front dampers to the car, it is necessary to shave down the front suspension mounting moulding with a sharp knife in order to push the lower pivot pin far enough through the mounting hole to fit the dampers.

All of the suspension parts are manufactured from injection mouldings, the suspension featuring twin, unequal length, wishbones with cantilevered inboard coil springs over dampers, the rear is a swinging arm system. Very substantial drive shafts extend to form the rear wheel spindles, drive from the differential is via a ball and pin. Do lubricate the wheel bearings differential mounting ball races and grease the drive couplings as you assemble the drive

I chose to fit an Irvine 20ABC CAR engine to the 'Nevada' and with the metal shoed clutch and mini brass flywheel supplied needed to use both spacer washers and trim 5mm from the threaded section of the crankshaft. A metal cased needle



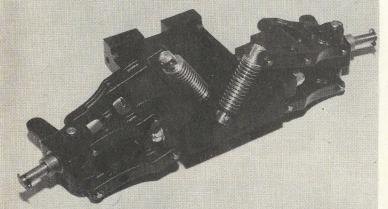
roller bearing is used in the clutch and once the clutch bell is slipped onto the spindle, a steel starter cone locks on which also adds necessary flywheel weight. The engine blocks are steeply angled and have to be drilled and tapped for the engine fitting (see Fig. 1). Although I consider it very much a second best system, it is possible to use self tapping screws to fit the motor but I would thoroughly recommend the purchase of a suitable tap for cutting the thread. Once you have taps and dies for thread cutting you will wonder how you ever did without them.

The simplest silencing system of all with this style of car is to fit the standard aircraft type silencer to the motor but upside down so that the exhause points to the rear. Mantua's O.P.S. exhaust manifold will fit the

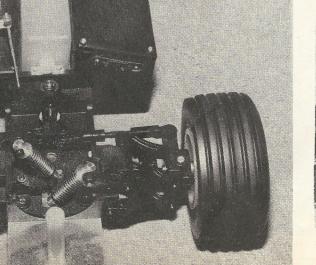
Irvine providing the fixing holes are elongated slightly which will enable a tuned pipe style silencer to be fitted running towards the front of the car.

Attention now turns to fitting the R/C equipment into the substantial injection moulded, assymmetric crate supplied. The compartment intended for servo installation is deeper with an angled top but as luck would have it, the particular R/C system I intended to fit incorporated a larger than usual battery pack, which unfortunately would not fit inside the crate and still allow the lid to close down. By turning the crate round I finished up with an enormous space for receiver and battery but a section too shallow to enclose the large Futaba 17m servos I wished to fit. Checking other equipment alongside the crate it was obvious that these problems were of my own making for using standard sized battery pack and servos everything fitted as it was intended too. Undaunted I thought through the problem and came up with the solution that can be seen in the accompanying photographs which still looks neat and tidy but is only possible using the aircraft style silencer. R/C mounting fittings are included in the kit along with the necessary pushrods but not the 'overiders' that I always use, the system catered for, uses the full stick travel to operate brakes and throttle whereas I find cars impossible to drive without the centering springs on the throttle stick. Brake and throttle overiders were soon fitted and the whole control system checked out.

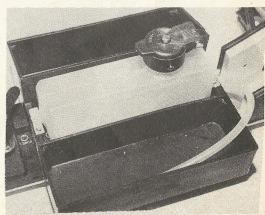
A vacuum formed white ABS bodyshell and necessary attachments is included in the kit and was soon trimmed up, painted and fitted, leaving only the fuel tank to be assembled and installed, this final item is a flip-top unit with an internal baffle. Careful trimming of the moulding is needed in the region of the tank neck so that the sealing 'O' ring fits properly.



Left: front suspension is assembly later bolted to chassis. Below: fully assembled front end note cross over cantilevered dampers Below right: R/C equipment crate holds fuel tank in centre bay.



Continued overleaf . .



Track Test

Running the 'Nevada Cross'

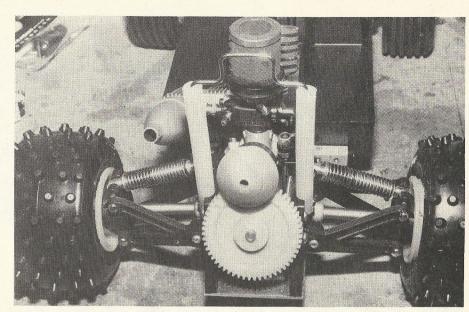
First thing to remember is to couple up the starter the opposite way round to usual! The direct drive cone start method is much easier for a novice to cope with than the rubber ring friction driving against the flywheel. However, once the engine is running, the urge to open the throttle and go is almost irresistable but I do like to check the whole car over with the engine running up on blocks, which also gives me a chance to set up the carburretor properly.

Checks finally completed and away she goes.

The 'Nevada' Cross has a short wheelbase and with the provision of a differential turning circle is good even at speed. Ride is a little bouncy and I would like to see slightly softer springs but light weight and bags of power from the *Irvine* makes this a fine car to drive. Although the front bumper is of round section and incorporates a rubber mount, prospective competition drivers should note that metal bumpers are specifically prohibited by National and International rules.

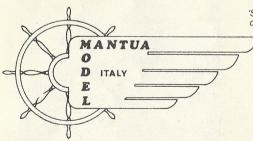
This model is solidly built, the parts are good quality and it handles well. If the Italian connection appeals, this one is an ideal way into two wheel drive class racing.

UK importer: Jack Williams Ltd., Eastwood, Beverley Road, Walkington, North Humberside, HO17 8RP. Price: £69.95.



Above: suspension assembled and engine in place. Rear suspension is swinging arm with ball and pin universal joints inboard.





Below: the bare essentials note the R/C equipment installation, see text for why's and wherefore's!



Below: throttle override system can be seen here. Air filter is Irvine's own type fitted to Irvine 20 ABC.



