



# TOYTOWN MECHANICS

This is no Noddy vehicle, it's a DIY Series Land Rover replica for kids of all ages to enjoy – with a pretty decent electric motor too *part One*

"I'M NOT all that good with woodwork." That's the phrase that started it. As soon as the Toylander 1 was launched in 2003 the drawings were immediately converted to

CAD and the ability to overcome the need to actually cut out wood was achieved by getting a CNC house to do that bit. Toylander 2 is also now available as cut

panels or a complete body tub. Collecting the body is not only possible but cheaper too, also you get to see the finished article, take pictures, drink tea and pick our brains.

As we're now a fully fledged kit car business, the crew at **LRM** suggested we show you how it's done. So we did – and gave it the registration number LRM 10 to help **LRM** celebrate their 10th anniversary.

Above you'll see the before and after shots but here's the step-by-step of putting one together from the completed body tub stage:

**Pictures 1 and 2** Support the body tub; mark out and drill all wiring and mounting holes for speed control, wires, dash access, charger socket, rear lamp wires, throttle and battery hold down strap. Cut the grille to shape, drill and countersink all





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holes both sides. Fettle grille cut edges. Add grille to silver paint group.

**Picture 3** Clean and undercoat all steelwork in kit including the hinges from ancillary pack and windscreen hinges plus handrail from detail set. Fettle and Deburr everything to remove spatter or sharp edge, countersink all holes. Trim bonnet hinges and dummy plates to length, fettle all top edges of hinges, this not only helps paint adhesion but, more importantly, it also reduces risk of damage to skin or clothes. Clean down with thinners according to your intended painting method. Make some painting hooks from wire. Undercoat all steelwork; we used Halfords grey undercoat in rattle cans. Separate items to be finished in silver, black or body colour. Complete items in black. Usually all the running gear.

**assembly begins**

**Picture 4** Gently round over the edge of the bulkhead to allow the hinges to sit flush to the sides then fit the windscreen hinges using them as the initial drilling guide. Having drilled your mounting holes, drill the hinge body out to 8mm, the coach

heads will then pull into the hinge frame – hold fast and the bolt heads will fit flush. Return hinges to silver paint line up and paint all silver items.

**Picture 5** Fit the rear axle as per the manual instructions. There's a wealth of info in here; it's not called a build manual for nothing.

**Picture 6** Fit your choice of front axle. The new swing axle option is the one chosen here; it acts like traction control, helping to keep the two rear wheels in ground contact more than the standard or suspension alternatives.

**Picture 7** Mount the steering column, loosely at this stage.

**Picture 8** Set up the stub axles to the straight ahead position and lock them by nipping up the bolts.

**Picture 9** Adjust and final mount the column, which uses the axle body as a steering stop. Fit the steering wheel.

**Picture 10** Complete the steering setup. Note: it is particularly important to follow

the guide as estimating it will result in unequal lock.

**Picture 11** Brakes next: fit the brake material last and don't forget the clips.

**Picture 12** Motor, or in our case motors, are next in line to fit. Don't be too hasty to drill the mounting holes, use clamps at first. Once the chain is cut to length, line up the chain and then work out the average position for the mounting slots. Trim the motor mount bolts to give more access to body mount bolts. The slots provide adjustment for chain stretch later. Nuts on top please. Drill axles for split pin forming the inner stop position and sets chain alignment. When drilling the sprocket position on the motor shaft, make sure the motor is covered; any swarf ingress will damage the windings; make sure it is supported under the sprocket and at the outer end or you will break the drill bit. This is one of the very few jobs where a spare pair of hands helps. Fit roll pin to sprocket. Hold front and rear wheels on with Jubilee clips until painting is complete. You have a rolling vehicle.

Next month: We'll get the painted body back and tackle the electrics. **LRM**



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