THIRTIES TOUGH

Keith Mallinson describes how he made an old-time truck with a thirties feel for his small son

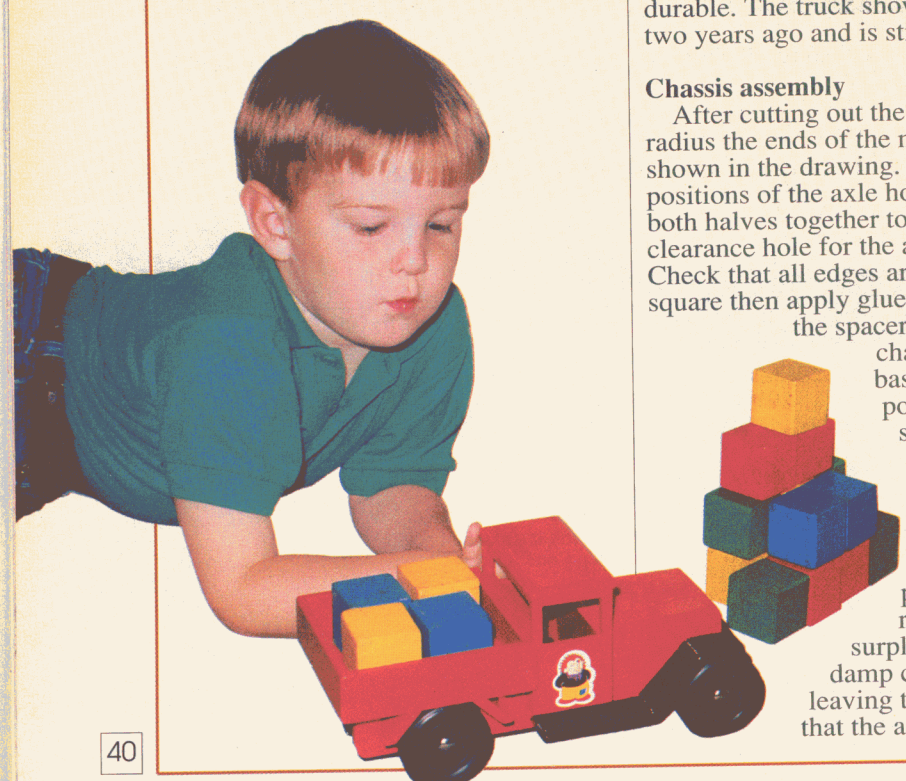
THIS truck was designed as a tough, easily constructed plaything which has the look and feel of a scale model. Based on 1930's styling, the model was designed around the 50mm diameter wheels which I had spare. Wheels and axles of various sizes, however, are widely available at good model shops.

For safety, no nails or screws have been used, all joints are glued with Evo-Stik wood adhesive. MDF was used thus avoiding splinters, and it also has a fine texture giving strength and a smooth surface for finishing.

This is an ideal project for a circular saw as very little finishing is required to the cut edges, but MDF is also easily cut with hand tools and a good finish can be obtained.

The truck was built in a series of sub-assemblies working on a baseboard of Contiplas which is flat and simple to keep clean. The finished parts were first offered up dry to ensure a good fit.

I found that cramping was unnecessary during gluing, thus allowing me time to position accurately all the parts whilst only applying hand pressure. The resulting joints have proved to be strong and durable. The truck shown was built two years ago and is still intact.



Chassis assembly

After cutting out the components, radius the ends of the main chassis as shown in the drawing. Mark the positions of the axle holes and hold both halves together to drill a clearance hole for the axle diameter. Check that all edges are smooth and square then apply glue to the ends of the spacers. Assemble the chassis on the baseboard positioning the spacers as shown. Check for squareness and adjust as necessary. Apply light pressure, and remove any surplus glue with a damp cloth before leaving to dry. Make sure that the assembly doesn't stick to the baseboard.

Truck back

Apply glue to each long edge of the floor and place on the baseboard. Now position the sides and apply glue to the bottom and edges of the end parts. Ensure that all parts are correctly positioned and apply pressure. Remove any surplus glue and leave the assembly to set.

The cab

Glue the ceiling and carefully position it centrally on the roof part. The roof radius can be formed when this is set. Apply glue to the side edges of the cab rear end bulkhead, and position with the doors on the baseboard. Apply glue to the ceiling cut-outs and position it onto the doors. Check the position of all components and again wipe away surplus adhesive.

The bonnet

Apply glue to the top edge of the bonnet sides and stand it on the baseboard. Position the bonnet top. Glue the ends of the bonnet and sides and position the grille.

Check the position of the components and glue. When dry, form the chamfers on the top of the bonnet.

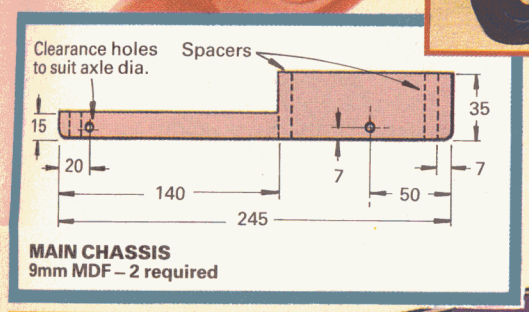
The final assembly

Prior to assembly sand all the parts with fine sandpaper to remove any sharp corners and dry glue. Any small faults may be filled if required. With the chassis on the baseboard, apply glue to all joining surfaces and position the cab centrally. Next position the bonnet; this should line up with side edges of the chassis. Remove surplus glue.

Finally glue the truck back in position taking care to centralise it with the cab. When the glue is dry re-check the finish and sandpaper as necessary.

Temporarily position the axles and wheels and mark around the wheels for the position of the mudguards.

TRUCK



MAIN CHASSIS
9mm MDF – 2 required

CAB

Bulkhead	1 off	85 x 42 x 6mm	MDF
Rear	1 off	85 x 45 x 6mm	MDF
Ceiling	1 off	85 x 50 x 6mm	MDF
Roof	1 off	100 x 55 x 6mm	MDF
Door	2 off	75 x 50 x 6mm	MDF
Front/rear fillets	2 off	73 x 6 x 6mm	MDF
Side fillets	2 off	38 x 6 x 6mm	MDF

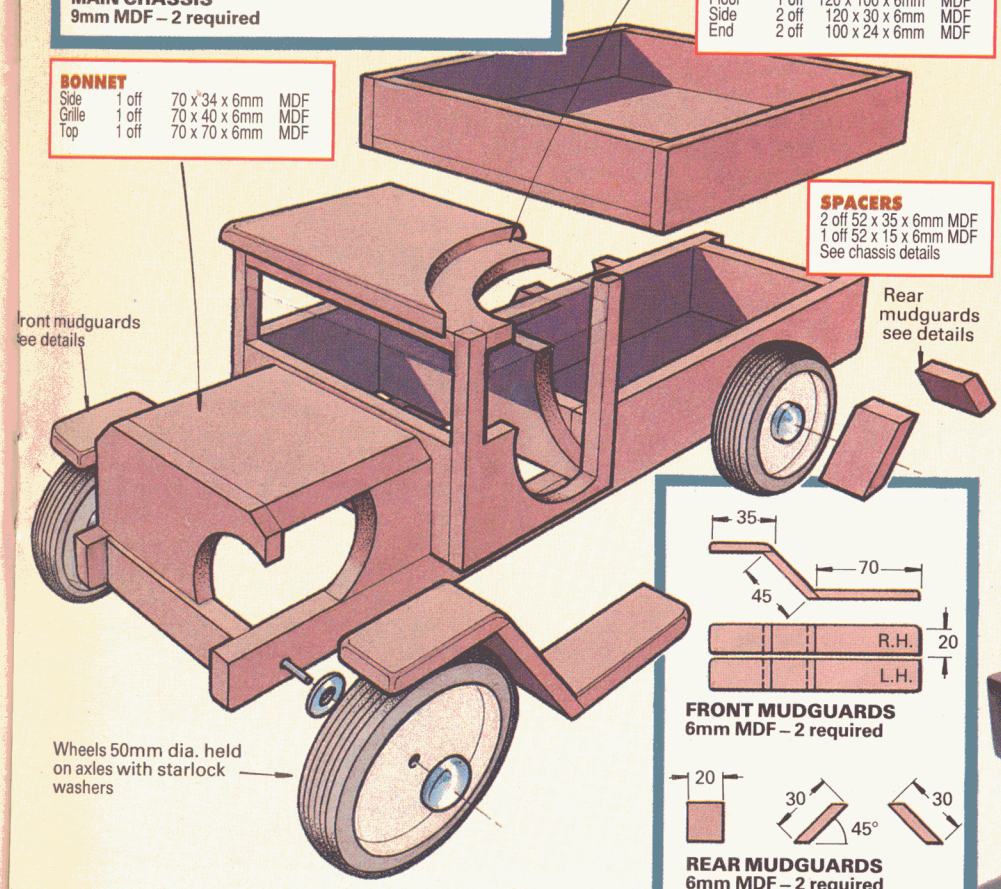
TRUCK BACK

Floor	1 off	120 x 100 x 6mm	MDF
Side	2 off	120 x 30 x 6mm	MDF
End	2 off	100 x 24 x 6mm	MDF

BONNET

Side	1 off	70 x 34 x 6mm	MDF
Grille	1 off	70 x 40 x 6mm	MDF
Top	1 off	70 x 70 x 6mm	MDF

SPACERS
2 off 52 x 35 x 6mm MDF
1 off 52 x 15 x 6mm MDF
See chassis details



FRONT MUDGUARDS
6mm MDF – 2 required

REAR MUDGUARDS
6mm MDF – 2 required

Remove the axles and wheels, and place the mudguards in position 'dry'. Mark the position of each component allowing a 2mm gap between the wheel and mudguard. Stand the truck on its side, and block it up as necessary to make it level. Glue the mudguard parts in the marked positions, remove surplus glue and leave to set. Repeat for other side. When ready, sand prior to painting.

The truck was painted using Humbrol gloss enamel and was customised using stickers and lettering for a personal numberplate. Front lights were drawn on in permanent black felt tip pen.

Fitting the wheels

The final job, when you are satisfied with the painting, is to fit the wheels. Position the wheels and axles temporarily with washers between them and the chassis to give a running clearance. Adjust the axle length to allow 3mm to protrude each side of the wheels, and remove any burrs. The wheels are held onto the axles using 'Starlock' washers'; these are fasteners to suit the diameter of the axle which will push firmly onto axle but will not pull off, thus firmly locating the wheels. Do ensure that the wheels, axle and washers are correct before fitting Starlock washers as they cannot be removed once in position.

Finally stand back and admire your work before handing it over to a young driver for testing.