Multi Truck

Working with bits and pieces, Alan Scholes created this charming toy which is colourful educational and above all, fun. Take a bit of time for yourself and treat the kids to a real winner.

COMMERCIALLY made toys today owe far more to the manufacturer's wish to make big money than they do to the needs or preferences of children. Years ago before the radio-controlled nightmares, speaking dolls, and armour suited space warriors with all their menace and aggression, children played in blissful ignorance with rag dolls, yo-yos, wooden steam engines and all the colourful paraphernalia of inexpensive low technology. Much of that magic world is fast fading away along with toffee apples, liquorice pipes, ginger beer and jelly babies; but hope is at hand. With a few offcuts of plywood, pins and glue, paintpots, Perspex and lolly sticks we can re-create just some of that innocent fun with this colourful, and entertaining toy.

Hopefully, part of that fun will be shared by the many grandads, dads and uncles who will be beavering away in the workshop. There is after all a great deal of pleasure in making things for others, especially if it involves a self indulgent jaunt down memory lane.

Your arrival down memory lane will be confirmed by the cost of the project. Ply offcuts can usually be obtained by sweet smiles or wheedling tones, paint and panel pins for pennies, although commercially made wheels may require the use of your wallet if all else fails.

Armed with all the necessary bits and pieces all you need is a flat surface such as a kitchen table, if you don't have a workshop, and a fretsaw, hammer, drill and sandpaper. A bandsaw would be extremely handy but not essential.

Framework

Basically this is a very simple project consisting of a cab and chassis onto which any of the four bodies may be mounted. This is of course exactly the way real life vehicle manufacturers work and thus gives us some idea of the many different types of bodies the toy could be made to take. Other suggestions might be a petrol tanker, concrete mixer, fire engine, brick lorry or whatever.

Obviously the cab and chassis need to be made up first and all the necessary dimensional information is contained in the drawings.

More difficult

The crane is probably the most demanding version to make but after you have completed one or two of the other bodies you will be an old hand at it!

CAB AND CHASSIS

The exploded drawing shows all the basic components of the cab and chassis. The two main chassis members are made up as one piece and cut down the middle. The inner slots for the cross members can be cut when the piece is divided. The holes for the outriders (in the crane version) can be drilled on assembly. Assembly of the cab is straightforward but remember to paint the insides of the cab walls before fixing. Similarly you should remember not to paint the cab floor to allow the steering column to be glued in position.

Cardboard templates are useful for shaping the windows and the windscreen itself is made up from ⅛in. Perspex sheet.

At the rear of the truck bed two holes are drilled to facilitate the fitting of the various bodies, and their positions will have to be taken into account when making the bodies up for fitting.

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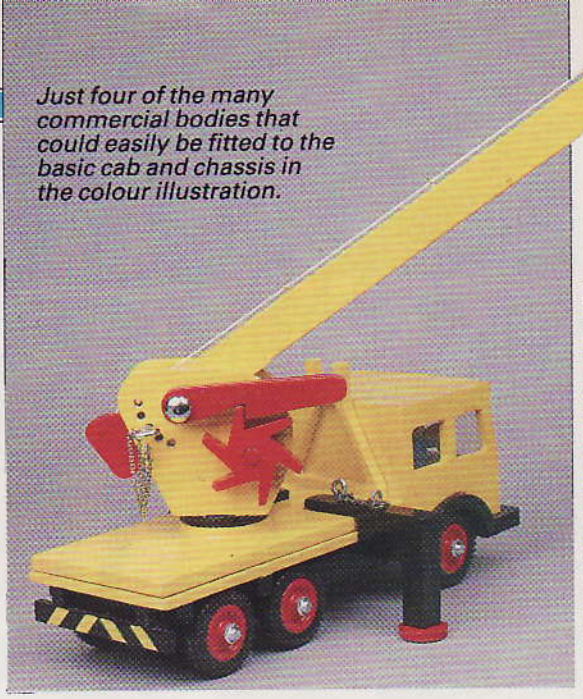
Just four of the many commercial bodies that could easily be fitted to the basic cab and chassis in the colour illustration.



Roof 4½"x3⅞"x1¼"
Lipping 4½"x⅜"x¼"

Truck bed
12 1/16"x4½"x¼" thick

Cab back
4"x2½"x¼" thick

4"x1¼"x⅛" thick

1"

2⅜" centres

Holes
5/16" dia.

Cab walls
3⅞"x4"x¼" thick

Seat and back
2¾"x1"x⅛" thick
4"x1"x⅛ thick

6⅜" centres

Perspex windscreen
4"x2 5/16"x⅛" thick

4"x2"x½" thick

Wheels 2" dia.
with push-on
hub caps

Bonnet
4½"x1½"x½" thick

Bumper
5"x¾"x⅜" thick

DRIVER

Arms
from
electric
cable

Ply legs
⅛" thick

Dowel
2⅜"x⅝"
dia.

4"x1⅛"x¼" thick

Mudguards
4"x1½"x¼" thick

4"x1⅞"x½" thick

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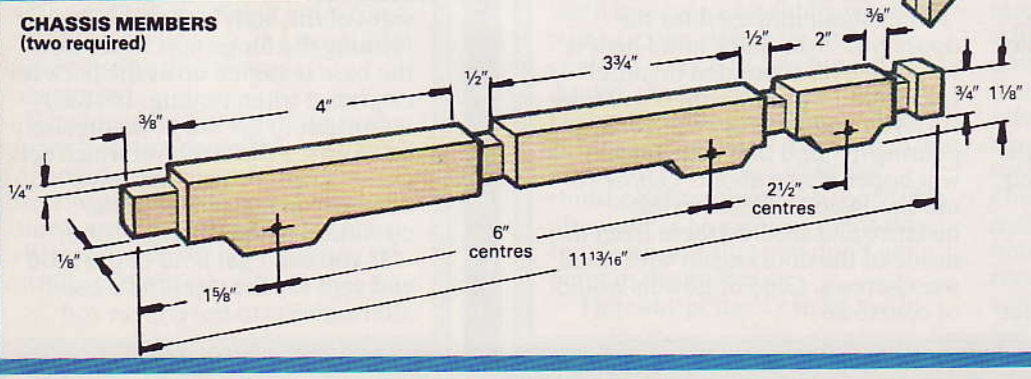
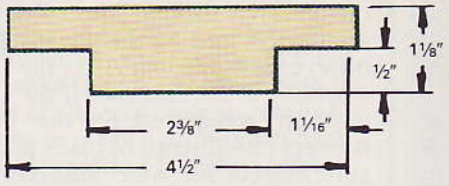
CHASSIS MEMBERS
(two required)





End members ⅜" thick
Inner members ½" thick

CROSS MEMBERS
(two required)

Multi Truck

CONTINUED

Garbage truck

Tipper

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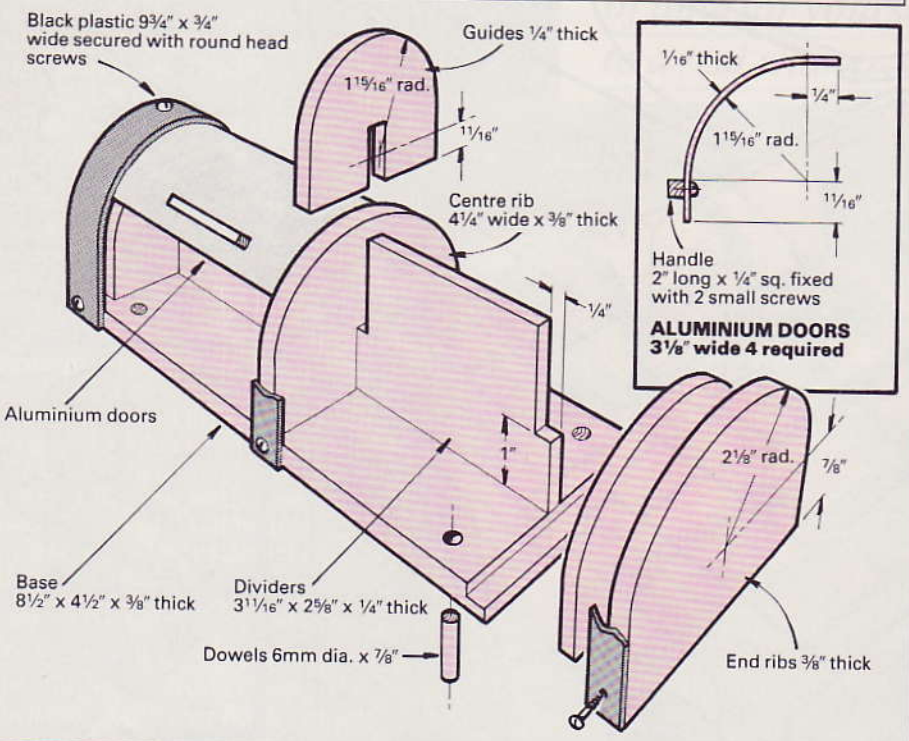
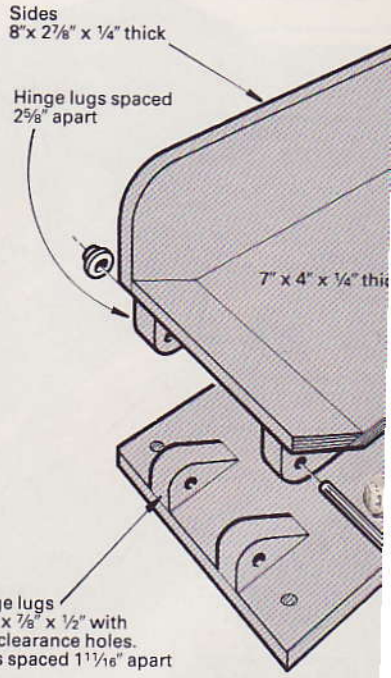




GARBAGE TRUCK

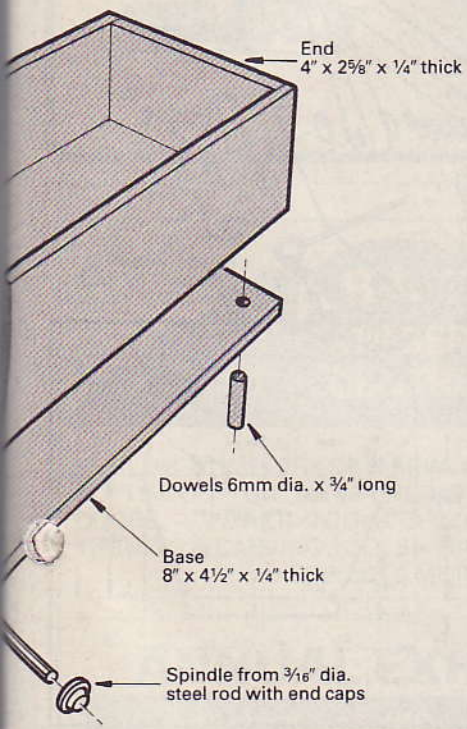
A bandsaw would come in handy here but patience and hand methods will suffice. Dimensional accuracy in making the ribs will pay off so care is needed. After the assembly of the carcase a little ingenuity is required. For the runners I used strips of black plastic guttering cut 3in. wide and secured with round-headed woodscrews. You could easily steam bend wooden laths for this both as a challenge and an introduction to steam bending if you are unfamiliar with it; it would be a bit like making Shaker boxes.

The aluminium used for the doors was 1/16in. thick and I bent it to shape over a wooden mandrel (an old rolling pin would do). Make sure you take off any rough edges bearing in mind that little fingers will hopefully be about. I chose to use hardwood handles in this instance and secured them from the inside of the doors again with small woodscrews. Glue or dowels would of course do.

TIPPER

Once again a bandsaw would be handy for cutting the curves on the sides of the body and also for forming the hinge lugs. Note how the base is angled up at the back fo clearance when tipping. It's fairly important to get the holes precisel lined up for the steel rod which act as the hinge, or you may have difficulty in fitting it or in the operation of the tipping action.

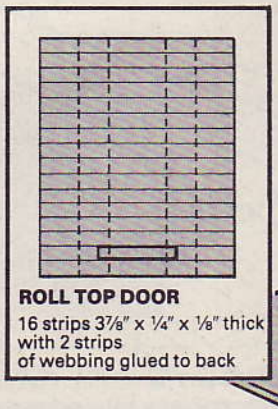
If you can't get hold of the little end caps for the steel rod a good alternative is to use copper rod

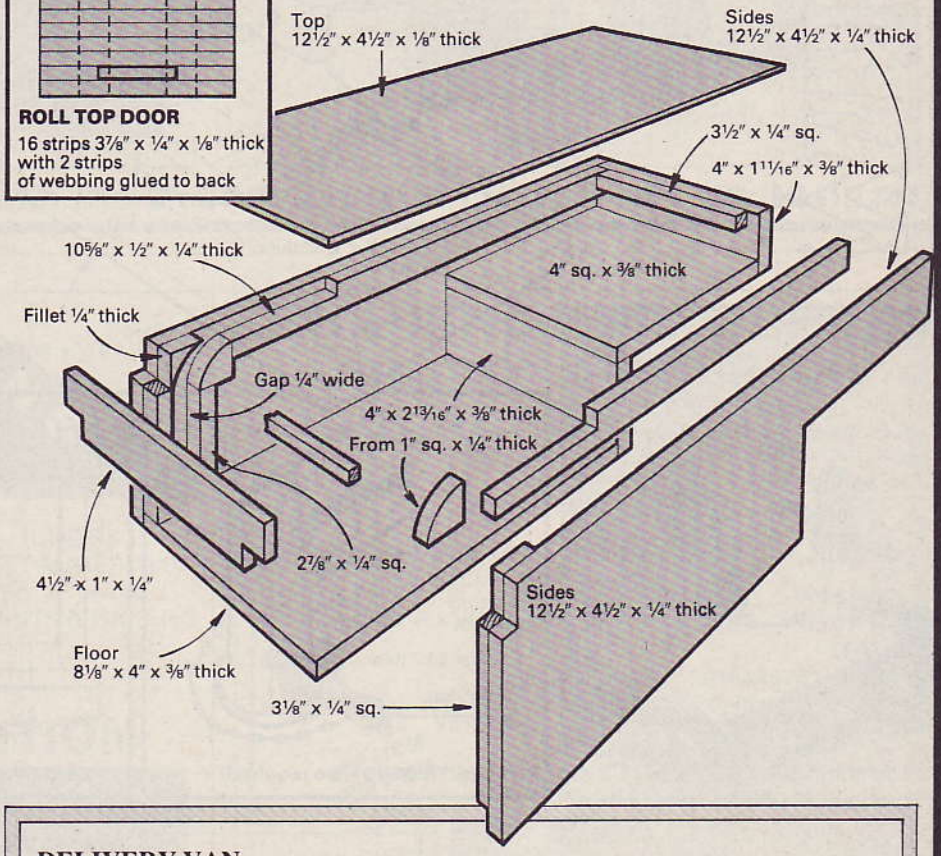


which is quite soft and pein over the ends after fitting small steel washers. Drill the fixing holes for attaching the body to the truck bed before fitting the tipping mechanism.

The hinge lugs which fit onto the tipper base are dowelled and glued for additional strength which is particularly necessary to avoid any lateral movement which may occur when the body of the truck is in the raised position.

Delivery van





DELIVERY VAN

The delivery van body is very simple to make for the most part but it does get a bit fiddly when it comes to the sliding door (you could of course fit two hinged doors). Assuming you are going to make the sliding version be sure to get the guides equal and correct and above all remember to fit the shutter before fixing the roof. This also applies to painting the inside but do ensure that you don't get paint in the guides.

The shutter itself can be made from old lolly sticks stuck onto two strips of webbing rather like the tambour on a roll-top desk. Although the sliding shutter is a nice touch it's also the sort of thing that small fingers can break with no effort at all so another alternative may be to make a drop-down back such as is used on furniture lorries. Once again remember to drill the mating holes for the body to locate onto the truck bed before fitting the roof. This type of body is ideal for signwriting.

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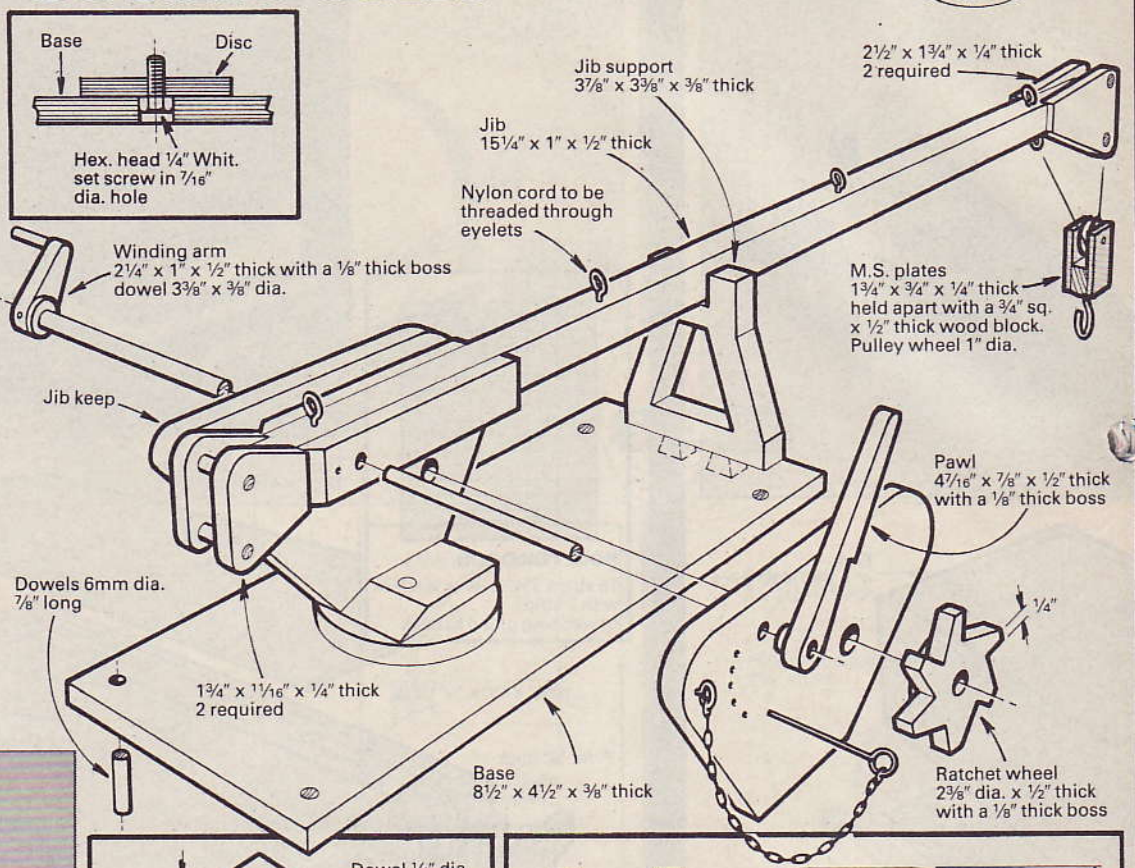
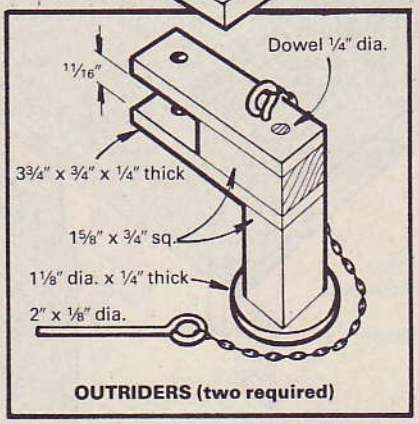
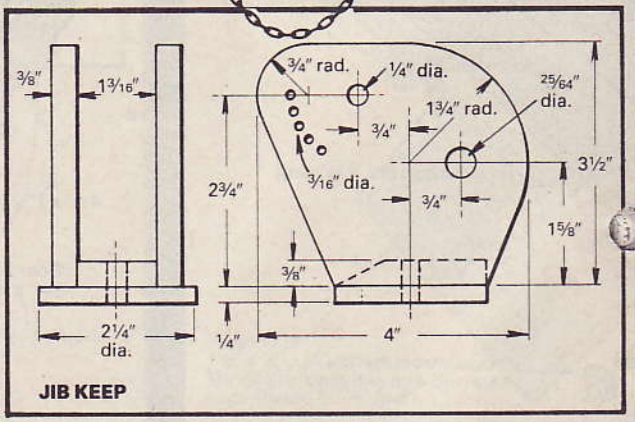
Crane unit

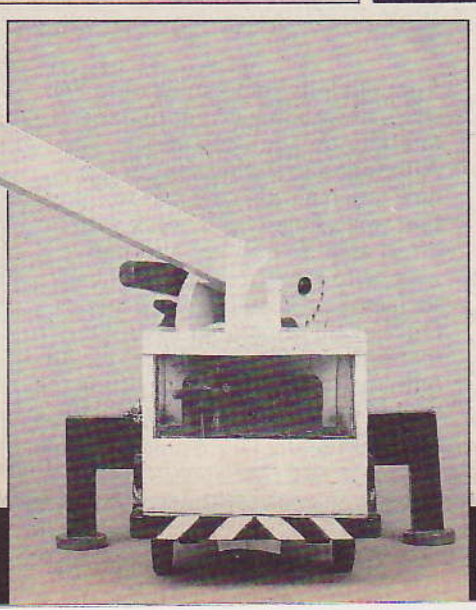




OUTRIDERS (two required)



JIB KEEP



CRANE UNIT

The crane is probably the most complex of the body types shown here but it's still a fairly straightforward exercise. Cut out the pieces as shown in the drawing. Assemble the base unit i.e. the base, jib support, disc and ¼in. bolt. Assemble the jib keep and the jib and try the jib locating pin in all positions, then fit the pawl on the jib pin. When you are happy with all of this fit the winding arm and ratchet wheel to the keep. Now rig up the nylon cord to the winding shaft using a clove hitch and a spot of glue to keep it in position. Feed the cord around the rear of the jib, through the eyelets over the front of the jib and around the 1in. diameter pulley. Secure it to the eyelet under the jib and again add a spot of glue. The locating pin for the jib positions can be cut from an old gate hook or something similar and this is attached to a small chain to prevent it from getting lost. The same applies to the pins used on the outriders.