

Insert the wheels into the holes in the side-piece, and place the second side-piece in position, locating the wheels in the holes in this piece. Simply by holding the second side-piece in position, check that the wheels revolve freely. If they do not, then remove the wheels and sand down each end until they do. When the wheels revolve freely, glue the second side-piece in position. When the glue has dried, mark and drill a $\frac{3}{8}$ in (10mm) hole in the centre of the top to a depth of $\frac{1}{2}$ in (12mm).

DIAGRAM 5 (see next page)

Turret. Cut the piece of timber for the turret (3) and chamfer all edges to leave a $\frac{3}{8}$ in (10mm) surface. On the

top of the turret in the centre, drill a $\frac{3}{8}$ in (10mm) hole right through the timber. Ensure the hole is drilled vertically.

On the front of the turret in the centre and $\frac{5}{8}$ in (15mm) from the top, drill another $\frac{1}{2}$ in (12mm) hole to a depth of $\frac{1}{2}$ in (12mm) to house the barrel (4). Cut the piece of dowel for the barrel to length and glue this into the position in the hole.

DIAGRAM 6

With the hole saw, cut out the disc (5). This will have a $\frac{3}{8}$ in (10mm) hole in the centre. Cut the pivot dowel (6) to length and glue it into the hole in the disc. Ensure that the

TANK

All aspiring soldiers, girls and boys, will want to possess and drive their own tank just as much as their own car. Making this one is not as complicated as one might think.

DIAGRAM 1

Main body. Make the main body of the tank from the five pieces of timber (1). On one of these pieces, mark out the shape of the tank. Clamp all five pieces together with two G clamps (US. 'C' clamps) and cut out the shape.

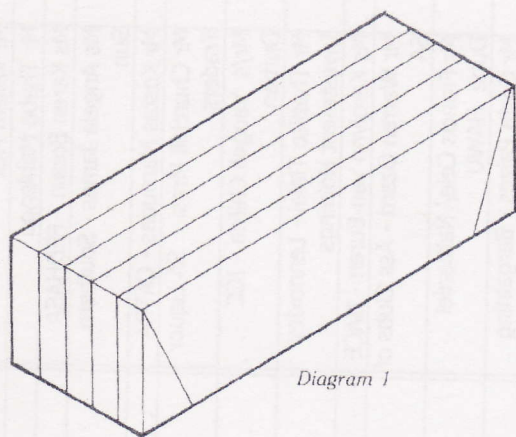


Diagram 1

DIAGRAM 2

Remove the two outside pieces and glue the middle three pieces together. Mark and cut out the recesses for the three wheels (2).

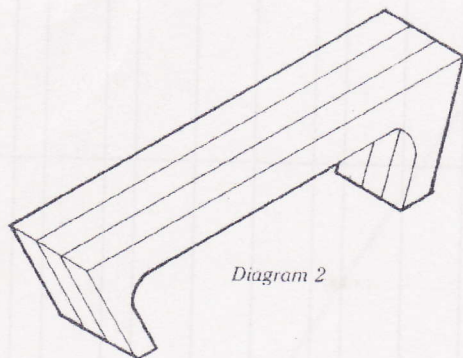


Diagram 2

DIAGRAM 3

On the two outside pieces mark out the holes for the wheels. Drill the holes 1in (25mm) in diameter and to a depth of 1/2in (12mm) with a twist bit.

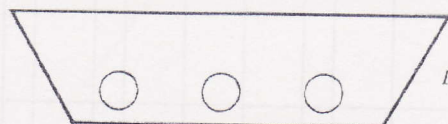


Diagram 3

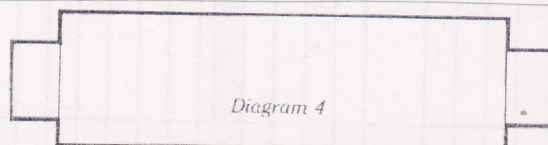


Diagram 4

DIAGRAM 4

Glue one of the outside pieces to the three centre pieces in line with the shape. Take the three pieces of dowel for the wheels (2) and with the hole saw reduce the ends of each dowel to 1in (25mm) and to a depth of 5/8in (15mm). Cut away the outside waste with a tenon saw.

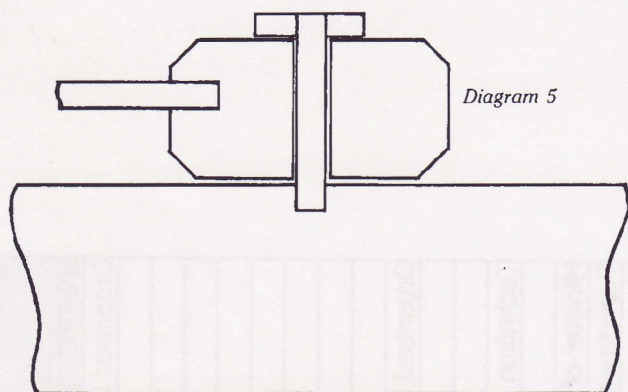


Diagram 5

end of the dowel is flush with the top of the disc.

Put a dab of glue in the bottom of the hole in the main body and place the turret in position over it. Insert the pivot dowel and disc through the turret and into the hole in the main body. Ensure the turret revolves freely.

Cut the eight plywood discs (7), and glue them in position on the body sides. Sand down and paint to colours of your choice.

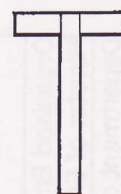


Diagram 6

MATERIALS FOR TANK

1. Main Body, timber: $12 \times 3 \times \frac{1}{8}$ in (300 × 75 × 22mm)
2. Wheels (3), dowel: $3\frac{3}{8} \times 1\frac{1}{4}$ in diameter (97 × 45mm)
3. Turret (1), timber: $4 \times 3 \times 2$ in (100 × 75 × 50mm)
4. Barrel (1), dowel: $5\frac{1}{2} \times \frac{1}{2}$ in diameter (140 × 12mm)
5. Turret disc (1), timber: $1\frac{1}{2}$ diameter × $\frac{3}{8}$ in (37 × 10mm)
6. Pivot dowel, dowel: $2\frac{1}{2} \times \frac{3}{8}$ in diameter (62 × 10mm)
7. Side discs, plywood: $1\frac{3}{4}$ diameter × $\frac{3}{16}$ in (45 × 4mm)

