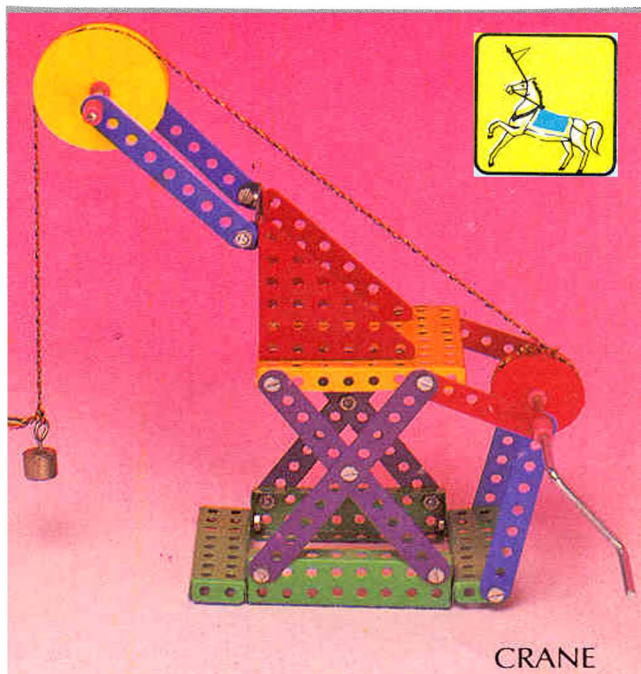


Pulleys, yellow/light red; the Sleeves & Screwdriver Handle, pink; and the strands of the Cord are multicoloured. All the colours are very intense.

**Models.** The Leaflet is 43\*27cm, folded into four, with 14 models plus a Church on the front, and one large colour photo of each. The models are now named which is a help, and the first is a Temple & the last a Bridge. 5 from the earlier Leaflet are included, changed a little in some cases, and the new ones are a little more down to earth including 2 Cranes (with the Weight used instead of a hook, as below), two Cradles, & a Swing. None of the OSN 6 models are included so we may never know what they represent. The horse logo above the Crane is on the Box and the Leaflet.



**YOUNG ENGINEER** Another small Set in a large box, but this time the parts have obviously been inspired by MECCANO and include some which were introduced comparatively recently. On the box is 'Transport series' and instructions are provided for the main model, a reasonable looking Motorcycle, and 5 others.

The Set was made in 1997 by Natraj Plastic Industries, Mahim, Mumbai - 400 016, and was (is?) marketed by Olympia Marketing again, at exactly the same address as that given for METAMECH (Mumbai is the Indian name for Bombay).

The Box is 36\*19½\*3½cm and the yellow lid is nearly covered by colour photos of all 6 models, with the PIYU logo, above, in one corner. The parts are in a light grey moulded plastic tray with a recess for each main part, and in depth all are well under half that of the box. The N&B are in a yellow card box, 5½\*4½\*1½cm (left), and the small rubber parts are in a similar one. A space in the centre of the tray that isn't used for parts is filled by 9cm long stick-on of the Motorcycle model.

**The Parts.** • **DATA** (in mm) **STRIP** (5-hole NS): •hole pitch/dia, 12.7/4.2; •width, 8.9; thickness, .65; •large radius ends. **BOSS:** none. **THREAD:** 5/32" BSW. **AXLE DIA:** 4.01. **DP (Mod):** N/A. **NUT:** hex 7.6 A/F; **BOLT:** CH 5.9 Ø; both iridescent steel.

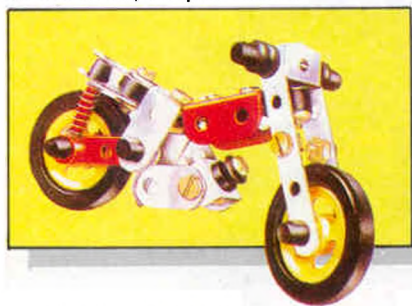
The parts are described below and are like MECCANO unless otherwise stated. The quantities found in the Set are given in curly brackets. NS; (d)r; y; h; k; Q mean Narrow

Strip; (dark) red; yellow; white; black; BZP.

- 2, 3, & 5h NS {2Q; 2y, 2dr; 2y, 2dr, 2h}. Unlike the 5h, the 2 & 3h have fully rounded ends.
- From the 3h NS: a Double Bracket {1Q}; a 45° 2\*1h Bracket {1Q}. From the 5h NS: a 2h deep Double Bracket {1Q}; a 1\*3\*1h DAS {3dr}.
- A Flat Bracket {1Q}. A 45°, 2\*1h Bracket {1y}. A 2\*2h Corner Bracket {1Q}. A 2h long 1\*1\*1h Channel Girder {1r}.
- A 3-Spoke 1" Loose Pulley, bore 4.2mm, very similar to the MECCANO one but in a softer plastic {2y}. A Tyre to fit, plastic with no tread and a near square section, 37mm o.d. {2k}. A 28mm 3-Spoke Wheel, like the Pulley but with a rounded rim, and a push fit (4.0mm bore) on the Axles {4k}.
- Axles: 24,32,40mm with slightly domed ends (1 of each, Q); 76mm with sheared ends slightly rounded {2Q}.
- A plastic 4mm Ø Spring Strut and Spring, M120e, {2r, 2Q}. A plastic Spacer (4k). A rubber Pulley, M23c, {7k}. A rubber Axle Cap, slightly smaller than M59a and softer, so not so liable to split {12k}.
- The Nut is pressed {23}, and the Bolts are 7,13,19mm u/h. {18,3,3} There's also one RH BZP Bolt, 25mm u/h. One 'unlikely' part is an 8mm Washer, 16mm o.d {1Q}. Its use is explained later. The black Spanner is the MECCANO square pattern except that the end jaws have been widened to take the hex Nuts (the centre hole is still ¼"). The L-shaped Screwdriver is made of 3.5mm BZP rod with the blade 85mm long and the arm 25mm.

The parts are accurately made except that one or two of the 90° bends are way out, and the moulding is a little untidy. The paint finish is adequate but not as good as the powder coating used in the first 3 Sets; the BZP is excellent. As with other sets the parts are held in place in their recesses in the tray by Sellotape over them, and a little paint was lost when this was peeled off. Doing so also left a sticky residue which could be softened but not removed by the usual solvents.

The **Model Sheet** is 322\*272mm deep, folded into 3, with 1 model on each panel, and no text of any sort, not even the name of the Set. However the Axles & Bolts are shown full-size and identified in the step by step instructions. 12 steps are shown for the Motorcycle but 3 at most for the other, simpler models



The Motorcycle (above) is a fair looking model though quite difficult to make because not all the parts needed are in the Set, and ways of using unused parts had to be found. In particular there were none of the standard Washers needed for spacing the front wheel, no 10mm Bolts, and the longest (BZP) Bolt (not shown on the Model Sheet) had to be used instead of the Axle specified. But when finished I thought it a better model than the little STEEL TEC one (see 12/323). The other models, a Cart, an Aeroplane, & 3 Buggies/Racers don't look much to me but they are easier to make, and there were enough parts over, including N&B, to considerably improve the Go-Kart I built.

The final assembly stage for it (above) shows a Rubber Washer held by a Bolt, with the Large Washer pushed into its groove, free to turn as a pretend steering wheel.

