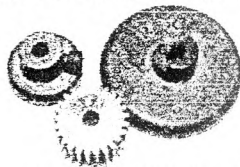


Some SWEDISH SYSTEMS Staffan Kjellin has kindly sent what is known about three hitherto unknown Swedish sets, and more details, manuals, and parts from the two major Swedish systems, MEKANIK & TEKNIK.



REX The oldest Swedish system is REX, and the label from a box lid, probably a No.3A, is shown above. The original measures 32*12cm, and the lid is the same length but 21cm wide. The label is printed B&W on pale yellow, and the text says Swedish Made, and talks of 200 models from a series of outfits, including linking sets. BYGGLÅDAN means constructional sets. From the spelling of the words,



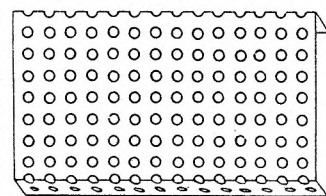
it is thought to date from before WW1. The only known parts (left) are a 25t Pinion, and a Large & Small Contrate. They are marked REX and are cast, from a zinc alloy perhaps.

A friend of Staffan has told him that sets from the 1920s were marked MÄRKLIN-REX and that the parts looked like MÄRKLIN. How far the original system was a copy of MECCANO isn't known but the model on the Label is almost identical with the Tower Bridge that was included in MECCANO manuals as a No.6 model from 1911 through 1923. The only difference I can spot is that the far left Flanged Plate has lost one hole in height. The Plates on the ground by the girl don't look like MECCANO or MÄRKLIN.

KONSTRUKTÖREN For this 'new' TRIX look-alike I've the cover or title page of a manual, 210*144mm deep, with on it: Modellbok, the name, & N:o 10, the number of the Set no doubt. On other pages are a short introduction, the illustrated parts and set contents.

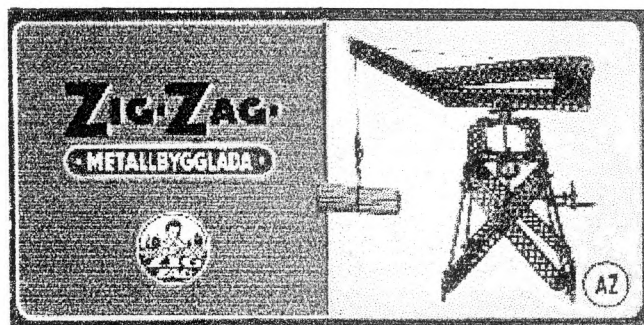
All the common TRIX constructional parts (from UK

Units A,B,C) are shown plus the Flanged Plate (right), with an extra row of holes along the bends. There are also a few minor variations: the Spanner has no holes; the TRIX 87mm Spindle is listed as 85mm long, and is shown with much longer threaded ends; and the diameter of the Large Wheel Disc is given as 48mm Ø (not 49). Otherwise all the dimensions correspond. The Hook is the round pattern. The Bolt is listed as 7.5mm and is shown roundheaded; the Nut a small hexagon.



The 24 different parts are numbered from 1 to 47. The Set has 161 parts including 40 Bolts & 50 Nuts. The contents are roughly the same as Units A+B+C, with a few extra parts including one Flanged Plate, more Bolts, but fewer Nuts, and only 2 Large Discs, the number in the appropriate TRIX Unit prewar.

ZIG-ZAG A wooden system of this name had perforated strips held together by dowels. Quite elaborate models of a Motorcycle & Rider, a Travelling Tower Crane, & a Tramcar can be seen in a small picture of a box lid with N:o 28 on it. The makers also sold a metal ZIG-ZAG system with TRIX-like parts, and some can just be seen in the Crane on the box lid below. The left panel is red, and the right cream; in the righthand bottom corner is AZ or possibly A2. A small photo of a dealer's cabinet shows a wooden box with a lift-out tray; Tyres can be seen, probably in 2 sizes, and 2 Gears or Sprockets. Some parts look silver and others have a blue look to them, but that may be the light.



TEKNIK Most of the parts of this system in the 1960s are clearly shown in MCS, and though some of them are similar to MECCANO, mostly they are distinctive variants. Many Plates are flanged on one side only, and this allows flexibility in using the parts to best effect, and ease of assembly without the need for too many Brackets. TEKNIK parts and models are characterised by a certain delicate appearance arising from the variety of small Plates in the system, the range of rather light colours used, and the thin metal of the Plates and Gears. The practicality of the Gears may be questioned but the other parts, though light, aren't flimsy.

On the history, Staffan wrote that TEKNIK was made by a company called C.G.Stjernqvist Mekaniska Verkstad, principal Carl Gustav Stjernqvist (1900-1993). [If I've understood correctly, the Gustaf W. Jonsson mentioned in MCS was the extra part distributor.] Production started in 1936 with one size of set, a #2. In 1939-40 a new factory was built at Huddinge (Stockholm) and soon Sets 0-5 were available. In the early 1950s, perhaps 1953, Sets 6 & 7 were introduced, together with a number of new parts including A/Gs. Most of the parts were renumbered at that time. In the late 1950s, or 1960, two larger sizes of Rubber Tyre (supplied by Värnamo Gummifabrik) were added and included in Sets 5-7. The Sets were also enlarged slightly with 870 parts in the #7. The factory closed in 1970 and by that time 1 million sets had been sold, including exports to, for example, the U.S.A., Canada & Australia.

This account is mainly based on the following: • Parts

from Staffan and those in another large lot. • Two manuals kindly donated by Jim Gamble - one for Set III, that I'll call 'early-1940s', has parts not seen in later manuals, and the other, for Sets 2-4, from the 'mid-1940s', has later parts but is not in the format used subsequently. • Another manual, kindly given by Ray Weston, is for Sets 2-5 and dates from before the parts were renumbered - it will be called the 'late 1940s'. • A 'mid-1950s' manual in English, for Sets 2-7, from the time after the No.6 & 7 Sets were introduced but before the advent of the large Tyres. Also an English language Model Leaflet for a No.1 Outfit which may well date from the same time. • A manual (as in MCS) for Sets 1-7, almost certainly from the system's final phase, which I'll call the '1960s'. • A brochure from 1964 that shows the sets, and an identical one but with prices including tax (inkl. oms. skatt), and 1969 typed on it.

Apart from the Brochures none of the dates above are certain; they are my guesses within the framework provided by Staffan's history, to allow easy identification of the different manuals.

THE PARTS Both lots of parts contained a number not among the 90 in MCS, and they are mentioned below in curly brackets. Staffan wrote that some, the Plates for instance, have never been seen in unused sets, but may have been available loose, especially at the Stockholm factory. However, as will be seen, many of them are obsolete parts and one or two from my lot may be 'foreigners'. I'm suspi-

cious of the 28mm gold Pulley, the larger Worm, and the larger Hook. Parts are generally like MECCANO unless otherwise stated.

- **DATA** (in mm) **STRIP** (11-hole): •hole pitch/dia, 12.7/4.2; •width, 12.1-12.2; thickness, .78; •end: *. **BOSS**: •o/d, 9.0*; •i/d, 4.1; •brassed steel*; •double tapped. **THREAD**: $\frac{5}{32}$ " BSW. **AXLE** Ø: 4.00. **DP (Mod)**: 34 (.75). **NUT**: sq 6.4 A/F; **BOLT**: cheesehead* 5.9 Ø*; both brass steel. *see below.

- The **ends of Strips**, Brackets, etc are usually nearly fully rounded but are sometimes finished with a larger radius of between 7 & 8mm. There is usually less metal than normal outside the end holes, typically 2½-3mm, but sometimes less than 2mm.

- **Bosses** are typically 8mm deep, a few are brass, and a few are larger in diameter, as noted below. Peening is level with the face, or nearly so.

- **Strips** with 2,3,5,7,11,15,17,21,27 holes. The 2h Strip is a **Flat Bracket** with one 8½mm slotted hole. Some other lengths up to 7h have one end hole slotted, or sometimes both, with 8½ or 6½mm slots. All the 3h Strips seen have a 6½mm slot at one end. Most Strips are between .7 & .8mm thick, but short ones can be down to .5mm, and long ones up to 1.1mm. {Strips with 4,6,10 & 13 holes are known.}

- **DAS**: 1*3*1, 1*5*1, 2*3*2, 2*5*2h. Some of the 2*5*2 have 6½mm slotted end holes in the base. Also **Bossed DAS** - the 1st & 3rd above with an 'outside' boss at the centre hole.

- **A/Gs** with 5,7,11,17,27 holes. Corners have medium rounding and slots are 7mm o/a.

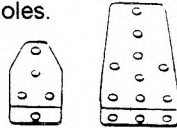
- **2-Flange Plates**: 5*5,7,11h, flanged along their long sides, with 7½mm slots in the flanges and the outside rows of the top. {A 3*5h with reversed flanges on the long sides, is shown later as the base of the Motor. All round holes.}

- **1-Flange Plates**: 3*3,5,11h, & 2*3,5,7,11h with the flange on the underlined side. All holes round, and made of thin, .5mm, steel. {Also 3*2,4,10h & 2*4,6h.}

- **Perforated Plates**: 3*5,7,11h; 4*5h; & (not seen) 5*11h, 7*17h. Again thin steel is used. {Also 3*4h & 4*6h}

All the Plates above have slightly rounded corners and only 2½-3mm of metal outside the outer holes.

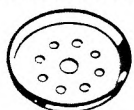
- Two unusual **Trunnions** (right): one 3h high with one central hole in the base, or, later, 3 holes at ¼" pitch; and one 5h high with a 3h base.



- **Brackets**. **Angle Bracket** made from the 2h Strip. **Reversed A/B** with a 6½mm slot. {1" **Rev. A/B** with a 9½mm slot.} **2*1h A/B** with a 6½mm slot in foot, and the same but the top hole slotted instead, as M12b. {3*1h A/B with a 9½mm slot in the foot.} **2h high Double Brackets**, one made from a 5h Strip, and another wider (19mm) & deeper, made from a 5h 3" Strip.

- **Pulleys** 23, 45 & 60mm Ø. The larger two have 8 face holes and 10.5mm Ø bosses. Black rubber **Tyres** for these with diagonal side to centre tread and **TEKNIK** moulded into the sides. A 14mm Ø turned brass **Loose Pulley**. {29mm **Pulley**, and a 28mm painted gold, the only part seen so finished - it looks like the other **TEKNIK** Pulleys except for a shallow groove where the V starts. Both these types have brass bosses. Also **Loose Pulleys**, similar to the 14mm, but steel, brass plated, 13 & 15mm Ø.}

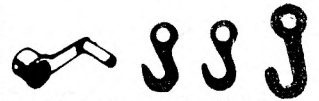
- **Pulley Discs**. 45 & 60mm Ø, from the Pulleys above, with an 8mm Ø centre hole. 17mm Ø (mine are 18mm) with a normal centre hole. {27mm Ø with no face holes; 37mm Ø with 6 face holes at 9mm radius; and a 30mm **Wheel Disc** which is the centre of the 37mm Pulley Disc.}



Also listed is the 52mm Ø **Wheel Flange** (Glidhjul) left, which appears to be flanged at 90° and is used as a steady for the slew motion of Cranes, etc.

- A 38mm **Bush Wheel** with 4 holes and 4 radial slots, 8mm long, in the disc. 2 & 3h long **Single Arm Cranks**, and 3 & 5h **Double Arm Cranks**, with no slotted holes in any of them. A **Pawl**, and a 15t **Ratchet Wheel**, 17mm Ø and 2mm thick. A **Collar** similar to the boss but 7mm deep.

The **Handle Crank** opposite with a 13*4mm Ø handle at 20mm radius. **Hooks** (right):

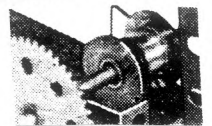


two almost identical, 21mm o/a, with holes that will take a Bolt but not a Rod, & a 28mm one that will take a Rod.

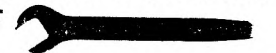
- An 18t **Pinion**, 14mm Ø with a 4mm wide face; solid brass, or brass plated steel with a separate boss. A 51t **Gear Wheel**, 38mm Ø, to mesh with the Pinion at 2h centres. It has 8 holes in the disc and is made of steel only .6mm thick. 3 **Bevels** (I'll call them) - gears with the rim formed at 45° - 18,38,65mm o.d. with 24,51,84t. All are made of similar thin steel, and the two largest are pierced with 8 holes. The 84 tooth has a boss of 11.0mm Ø. As well as meshing as bevels they can run with the other gears as spurs or contrates. A **Toothed Segment** (below), a curved strip of .8mm steel, with 29 teeth on the outside; 4 make a circle of 3" pcd, with 116t. Two types of **Worm**, one brass, 13.65mm o.d., 19.3 mm long o/a, & the other brass plated steel with a longer boss, 13.95mm o.d., & 20.9mm long. Both have 5½-6 turns of thread.



- **Axles** 300,200,115,85,60,30mm long. {The only one I have is 68mm long, with cleanly sheared ends.} A **Threaded Pin**, 25mm long o/a with 8mm of thread, and no shoulder. **Crank Handles** listed as 60 & 110mm. The ones to hand are 50mm o/a with a 15mm long handle offset about 13mm, sharp bends, and sheared ends. {A 16mm **Pivot Bolt** with 6mm of thread and a neat, unslotted, 6mm Ø head.} All these parts are nicely nicked. A 50mm **Screwed Rod** is listed. Another part not seen is the **Winding Drum** above - in a model, also above, it looks to be about ¾" Ø & perhaps a little wider than that.



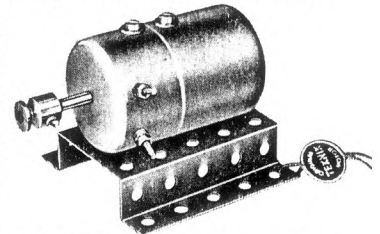
- The **Bolts** are listed as 5.5, 15, & 25mm. The 5.5 & 15 have neat heads, 3mm deep, and the 25mm has a round-head 7mm Ø. {Also seen a 13mm, and a roundheaded 36mm.} The **Set Screw** has a tiny cheesehead, typically 5mm Ø; it is listed as 5mm but the ones seen are less than 4mm u/h. **Washers** are a thin 10mm Ø and a 19mm like M38d. A wire **Screwdriver** is shown, and the **Spanner** is flat with a 4mm hole in the middle instead of the normal square opening. {The **Span'driver** opposite, 70mm o/a.}



- **Colours**. Parts are often found painted in various colours, and sometimes in all the colours used - blue, red, green, & silver. A few seen are different colours on their top & bottom surfaces. 3h Strips, small Brackets up to the 1*3*1 DAS, and other small parts, are often nickel, and a few of them are also known with a dull zinc-like plating. The sets are more consistent and commonly Strips are blue, A/Gs red, Plates red, green and silver, Pulleys red, Pulley Discs green, and Gears silver.

- The parts are well made and finished but, as might be expected the silver paint is easily marked, and the coloured paints flakes off fairly readily.

- A 4-12v **Motor** (below) was sold as an accessory. In an English language leaflet printed in Sweden it is explained that the terminals are on the side, and that the motor could be unbolted from the base and built into a model using the same bolts, or the ones on top. Staffan wrote that it was a disaster - he was given one at Xmas 1960 and it barely lasted into the New Year.



The '**Early 1940s**' The 'early-1940s' manual described overleaf has no covers but otherwise looks complete. It is unusual in the crosshatched lettering used for the name, and the Roman 3, presumably the Set No. There's a clear photo of each of the 45 models, but unlike most later manuals no parts list is provided for them, and no mention

is made of any other outfits or linking sets. Equally nothing to indicate the range of parts is included.

SUMMARY OF MANUAL •Name: TEKNIK III •No details of maker, dates, or Ref Nos. •Page size: 235*155mm deep. •No. of pages: 12 unnumbered exc missing covers. •Language: Swedish. •Printing: half-tones of models. •No Parts List or Set Contents. •Sets covered: No. III. •No. of models: 45. •Name, Page No. of first & last model: TRUCK,2; FLAKVAGN,12. (no Model Nos.) •Other notes: •The manual probably had covers, the



first page is shown above. •The printer is given on the bottom of p12: TRYCKERIAKTIEBOLAGET BJÖRKMANS EFTR, KUNGL. HOFLEVERANTÖR.

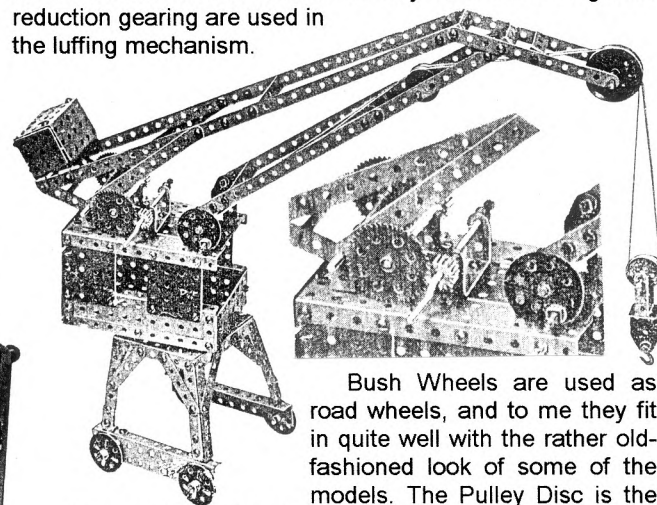
Three parts, which are not in later manuals, stand out in the models, and they can be seen in those below. The Pulley Discs are different in section with a distinct tyre shape around the rim, and they are used in pairs to form a pulley, or singly as a 'half' road wheel, often held by Nuts on Screwed Rods used as axles. They are on all the road vehicles instead of the Bush Wheels used later. The other parts are a 2*4h Triangular Plate with no holes along the hypotenuse, and the 3*2h 1-Flange Plate, flanged on a 2h side, which has already been mentioned as a non-1960s part. Two of the Triangular Plates are butted together to make the top of Lorry bonnets, and the 1-Flange Plate forms the radiator. Later the two Trunnions were used instead of these two parts. The Triangular Plate is widely used in the models and it's rather surprising that it was dropped.

Other parts that can be seen in the models are: 1-Flange Plates 2*4, 2*6, 2*10, 3*4, & 3*10h, with the

flanged side underlined as before; Perforated Plates 3*4, 3*6, 3*10, & 4*6h; 2,3,4,6,7, & 10h Strips; 1*4*1 & 2*4*2 DAS; Brackets: 1*2, 1*3, & 2*1*2h; a Washer of about 20mm Ø, & a small Pulley Disc of perhaps 15mm Ø. A few of the small Plates are also shown with none but the perimeter holes, the 3*4h for example and the 2*4h 1-Flange Plate made from it. Many of the parts are 4 or 6 holes wide or long with no centre hole, and most are among the 'non-standard' parts noted earlier.

A wide range of models are included, although the emphasis is towards wheeled vehicles, mostly Lorries. None have any mechanical features, steering for example, but some at least are well proportioned and perhaps rather better than average in appearance.

The 'Mid 1940s' The covers of the manual from this period, for Sets 2-4, are missing too but all the inside pages are intact. The name is in a different typeface, the photos of the models are smaller, darker, and less clear, and again there is no overall Parts List, nor one for any of the models. There is though mention of linking sets 2K & 3K. At the time it's likely that the largest set was the No.4 because on the last page the Crane below is shown which needs the parts from two such outfits. It won't be very clear but 2 stages of reduction gearing are used in the luffing mechanism.

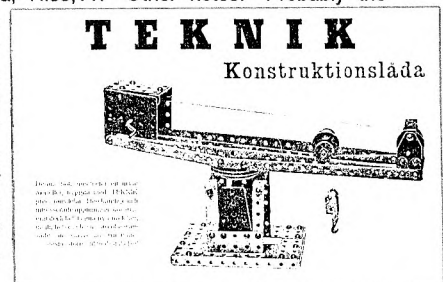


Bush Wheels are used as road wheels, and to me they fit in quite well with the rather old-fashioned look of some of the models. The Pulley Disc is the

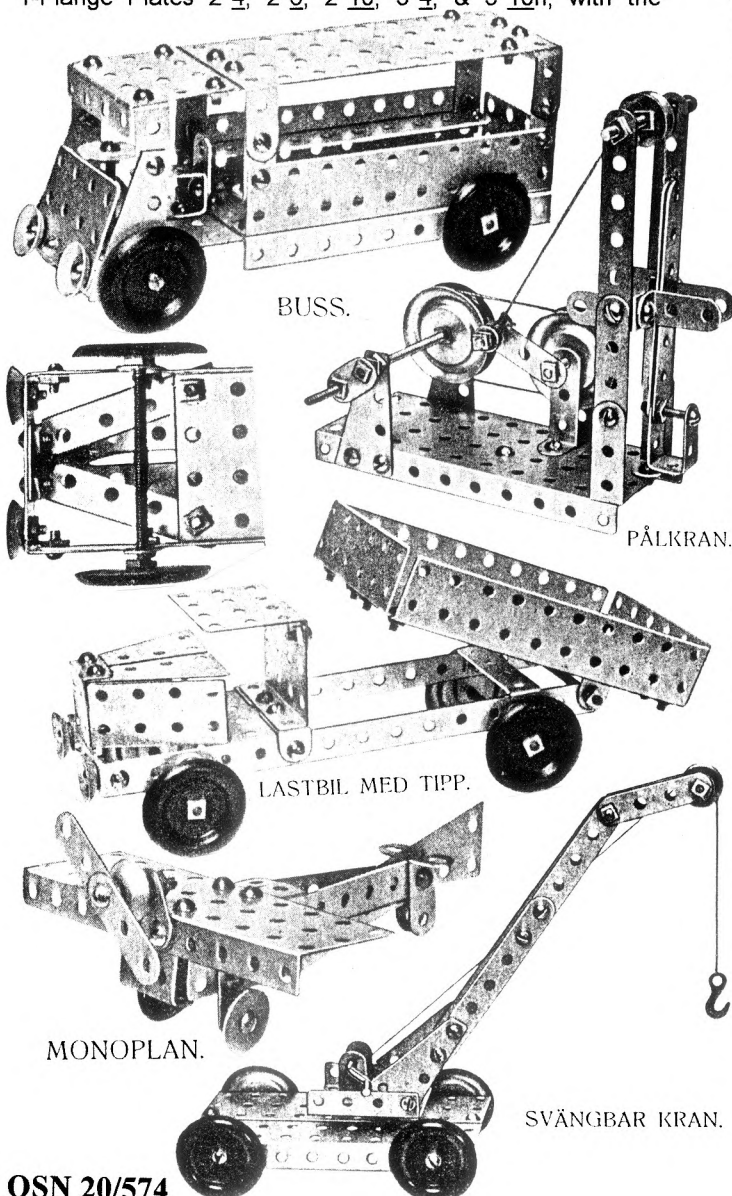
later 8h type without the 'tyre', and in some models it is shown without the holes. The Trunnions serve as the bonnet top and radiator and this role may perhaps have driven their design. Even more fundamental, the 4h wide Plates are replaced by 5h wide ones and the 6h wide ones have gone completely. 11h long Plates, and an 11h Strip, supplant the 10h ones. 3 & 5h wide DAS replaces the 1*4*1h. No 4 or 6h Strips can be seen. Someone had seen the advantage of having parts with a centre hole. At this stage nearly all the parts of the next, late-1940s, period, can be seen except the 26h Strip, the 2h deep DAS, the 7h long Plates, the Bevel Gear, and the Toothed Segment.

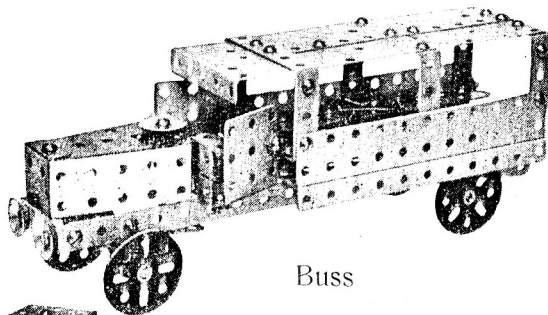
SUMMARY OF MANUAL •Name: TEKNIK •No details of maker, dates or Ref Nos. •Page size: 227*153mm deep. •No. of pages: 16 + (missing) covers. •Language: Swedish. •Printing: half-tones of models. •No Parts List or Set Contents. •Sets covered: 2,3,4. •No. of models for each set: 26,14,14. •Name, Page No. of first & last model of each set (no Model Nos.): 2: Sulky,2; Lastbil,7. 3: Stampmaskin,8; Arbetande gungbräde,11. 4: Mekanisk schaktskopa; Hiss,11. •Other notes: •Probably the covers are missing & opposite the first inside page, with the

No.4 Löpkran from p14 on it. •The multi-jib Crane above, made from two No.4 Sets, is on p12. •On the last page is the name of the printer, BJÖRKMANS EFTR.

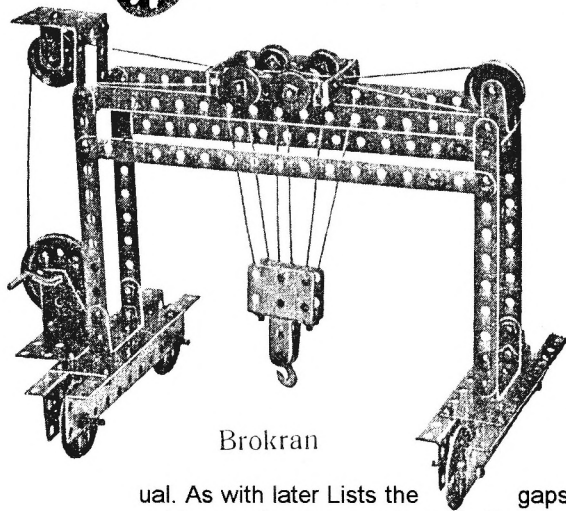


All the models are new although a number of the





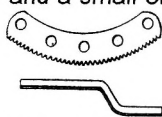
Buss



Brokran

ual. As with later Lists the gaps are because different types of parts start from 1, 21, 41, 51, etc. So the system at this stage was much simpler than the final 1960s product, with its over 90 parts.

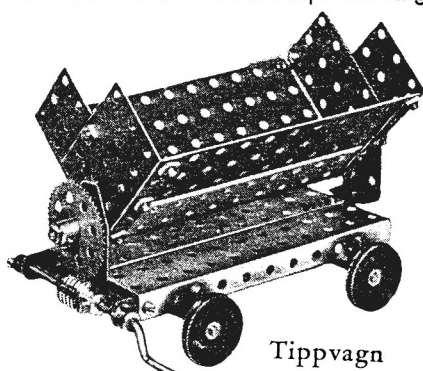
The Strips in the two are the same and so are the 1-Flange Plates, DAS, and Brackets, but there are no A/Gs or 2-Flange Plates. The two largest Perforated Plates are not listed. The 3 Pulley Discs are there, & the 45 & 60mm ones



than the large and small Bevels are present, but the Segment (left) is shown with all round holes. There are only 3 Axles,

60, 80, & 100mm, and the longer Crank Handle is 80mm instead of 110. The bends are shown as above. The same Spanner is illustrated but there's the Span'driver already mentioned instead of the later Screwdriver. All the Bolts other than the shortest are shown with round heads. Other parts not listed are Tyres, the Pawl & Ratchet Wheel, the Winding Drum, the Wheel Flange, Threaded Pin, Cranks, DAS, and the Handle Crank.

The Manual is for Sets 2-5 and has bright, attractive, coloured covers showing models and a boy wearing a collar and tie. No reference is made in it to any other outfits or to linking sets. A small halftone of each model is provided and a list of the parts needed to build it - just about adequate provided you didn't try the large models first. Quite a few of the models were in the 'mid-1940s' manual, but many had been changed or were new, although of a similar nature. One new model was a Jeep. The largest No.5 models only



Tippvagn

smaller ones are not greatly changed. Some for the No.4 Set are a little larger than any before, and the range of subjects is larger too, with a Chair-o-Planes ride for instance, and a Pit Head Gear. Mechanical features are limited to cord drives, & reductions using the Pinion and Gear Wheel. Two of the models are shown on the left.

The 'Late 1940s'

56 parts, numbered from 1 to 126, are included in the Illustrated Parts List in the 'late-1940s' Man-

SUMMARY OF MANUAL •Name: TEKNIK •Details of maker: none. •Dates &/or Ref Nos: none. •Page size: 231*159mm deep. •No. of pages: 12+covers. •Language: Swedish. •Printing: halftones of models, solid colour covers on yellow ground. •Page No. of Parts List & highest PN: IBC,126 [Illustrations on p12 & IBC]. •Sets covered: 2-5. •No. of models for each set: 11,8,8,8. •Name, Page No. of first & last model of each set (no Model Nos.): 2: Vagn,1; Bär-gningsbil,3. 3: Lyft-kran,4; Väderkvarn,5. 4: Bärningskran,6; Slänggunga,8. 5: Loko-motiv,9; Karusell,11. •Other notes: • Intro on inside front cover. • NVIUNDS LITO STNIN (some N's may be M's or W's) on back cover.



The 1950s The Parts List in the 1950s Manual shows the newly introduced A/Gs, and the only other differences compared to the final 1960s phase (as shown in MCS, and described earlier) are: • No 45 & 60mm Tyres. • No 18mm Bevel. • No 2" Screwed Rod, but a 2" Bolt instead.

Sets 1-7 and 2A-6A are listed on the back cover of the Manual, together with the number of parts and the box size for each. Oddly the number of parts in the 'A' Sets doesn't correspond to the differences between the main sets, and this is particularly marked for the smaller ones. Thus the No.2 & 3 have 121 & 151 parts, and a 2A has 60. Also listed is the 4-12v Motor. The cover illustration (below) is the same as the one in MCS except for the 'Handbook for building models with' along the top; the box shown open is probably the No.6 of this period.

SUMMARY OF MANUAL •Name: TEKNIK •Details of maker: none. •Dates &/or Ref Nos: none. •Page size: 296*208mm deep. •No. of pages: 24+covers. •Language: English. •Printing: halftones of models,



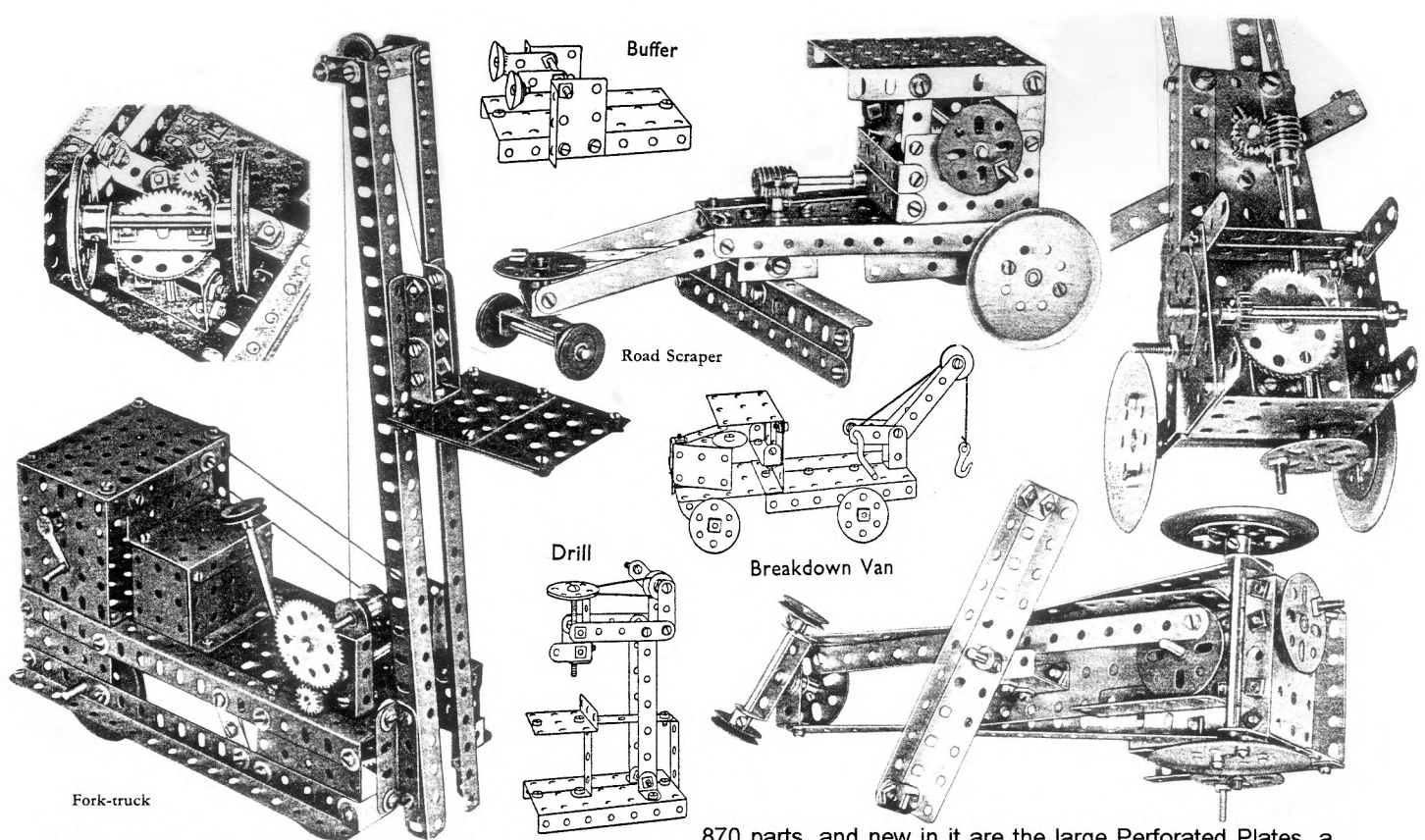
colour cover as in MCS, solid colours on blue/white ground. •Page No. of Parts List & highest PN: IBC,0149. •Sets covered: 2-7. •No. of models for each set: 15,8,8,7,5,3. •Name,

Page No. of first & last model of each set (no Model Nos.): 2: Wool-winder,2; Grinding Machine,6. 3: Mech-anical Shovel,7; Road Scraper,9. 4: Slewing Crane,10; Elevator,12. 5: Dockside Crane,13; Merry-go-round,16. 6: Dockside Crane,17; Lifting-platform for Motorcars,20. 7: Fork-truck,21; Turret Crane,24. •Other notes: the range of sets is on the back cover; Printed in Sweden, & the printer, Tryckeri AB Björkmans Eft, are on p24.

Of the 9 small models on the cover, 7 are from the Set 2-5 ones in the Manual, except that some have Rubber Tyres on 23mm Pulleys instead of the Bush Wheels shown in the Manual models. The 6-Wheel Lorry, is from the 'late-1940s' manual, and a 3-Wheel Cart isn't in any of the manuals seen.

New is a page showing lock-nutting, and standard constructions. The presentation of the models remains similar but the photos are much larger & clearer, and auxiliary views are provided for a few, and some words of explanation in one case. Some of the models for Sets 2-5 are from the 'late-1940s' manual but most are new or significantly revised, and cover a slightly wider range of subjects.

The No.6 & 7 models include several nice looking Cranes and the 2 models overleaf. Gears are used quite widely in all the models, and a 3/4-circle of the Gear Segments can be seen in a Pile Driver. Although the Tyre for the 23mm Pulley is included in the Illustrated Parts, and is shown in the Set on the cover, and in the page of Standard



Constructions, it is only used in one (No.6) model.

Probably from this period, an English language (Printed in Sweden) Model Leaflet for No.1 models. It is 502*156mm deep, folded into 4, & on the front is the 'mid-1940s' Gantry Crane shown earlier. There are line drawings of 41 models and all the main parts can be seen in the 3 above. The wheels are 6h Wheel Discs not included in the larger Sets.

The 1960s The range of parts in this final phase is that shown in MCS and described earlier. The sets are Nos.0-7, with linking sets 1a-6a, and the Tyre/Wheel Set 'G-H'. The Motor is unchanged. No official Set Contents are available but two 1964 Parts Order Forms to hand have the quantities for the No.6 & 6A typed in, & the 1964/69 Leaflets show photos of most of the sets, with the box sizes, price & number of parts for each. These details are also of the back cover of the 1960s manual. The No.1 has the same number of parts as in the 1950s, the others a few more, with 870 in the No.7, 16 extra. Again the numbers of parts in the linking sets don't tally, by about 10 or so in most cases. The box sizes are the same except for Sets 1-3 & 6A. All the box lids are similar to the one left, and a manual, with the MCS cover, is shown by all the sets except the No.0.



The No.0 has 93 parts including 2x 2*7h 1-Flange Plates, some smaller Plates and short Strips; 4 of the 30mm 6-hole Wheel Discs and 2x 45mm 6-hole, non-standard, Pulleys Discs; Brackets, a Hook, and a Short Crank Handle. This Set seems to be broadly equivalent to the 1950s No.1. The No.1 has the same number of parts (including about 15 N&B) but doesn't follow on from the No.0. It has 1-Flange Plates up to 11h long, and 2 each of Bush Wheels & Small Pulleys with Tyres replace the 4 Wheel Discs. Extra in the No.2 are 11h Strips, Trunnions, and 2 more Small Pulleys/Tyres. The No.3 has 170 parts and boasts 15h Strips and 2x 60mm Pulley Discs. The No.4 (233 parts) includes a Pinion & Gear Wheel, and a Pawl & Ratchet Wheel, while in No.5 are 2x 27h A/Gs, 2x 45mm Pulleys with Tyres, and more gears including a Small Bevel, a Worm, & 2 Toothed Segments. Extra in the No.6 (466 parts in 2 layers, including about 97 N&B) are 2x 27h Strips, 2x 27h & 8 other A/Gs, 2x 60mm Pulleys & Tyres, 1 each of the 2-Flange Plates, 2 more Toothed Segments and 1 each of the two larger Bevels. The No.7 has 3 layers with

870 parts, and new in it are the large Perforated Plates, a Wheel Flange, and 2 more of the 45mm Pulleys with Tyres. In all it contains 6x 27h & 22 other A/Gs, 13 Gears, and about 220 N&B. The G-H Set isn't illustrated but has 80 parts and cost 20% of the No.7.

The presentation in the manual is identical to the 1950s one, and the cover is the one in MCS. Most of the small manual models now have small Pulleys & Tyres as road wheels instead of Bush Wheels, and though this is an improvement in some cases, they are too small for some models and don't really look well with the unchanged, pre-war look Lorries. The larger Tyres though are just right for the No.6 & 7 models.

A number of the 1950s 2-5 models are included though many have been improved, and in most cases a different photo is used. Some are shown for a smaller set than before. Many are new models and while they are perfectly respectable, none look modern, due no doubt to the lack of any curved or curveable Plates. No TEKNIK models requires any part to be bent, apart from a few Angle Brackets.

Most of the No.6 & 7 models are new or improved, and most look well, witness the Fork Lift Truck and Mechanical Shovel shown in MCS. At the top of the next page two No.6 models - I made the Shovel and it looked and worked well when finished, though the controls weren't very convenient to use. Raising the bucket arm using the Toothed Segment was entirely satisfactory, rather to my surprise, but the steering was sloppy with the (about right) overall gearing achieved with a step-up in the first stage, followed by a large reduction using a Worm.

I also made one of the simple Lorries shown earlier, elaborated slightly to match the one on the manual cover. The parts all fitted together easily, partly due to the lack of metal outside the edge holes of the Plates. This does give gaps between many adjacent parts, but, as with holes in a regular pattern, they don't stand in the finished model.

SUMMARY OF MANUAL [Details not given are as before] •Language: Swedish. •Page No. of Illustrated Parts List & highest PN: 25 (IBC), 0149. [No Set Contents] •Sets covered: 1-7. •No. of models for each set: 7,8,8,7,6,4,3. •Name, Page No. of first & last model of each set [no Model Nos.]: 1: SEMAFOR,2; KÄRRA,3. 2:TRAKTOR,4; LASTBIL,6. 3: GRÄVSKOPA,7; BÄRGNINGSBIL,9. 4: JEEP,10; MASTKRAN,12. 5: HAMMARKRAN,13; KARUSEL,16. 6: VÄGSKRAPA,17; PÅLKRAN,20. 7: GAFFELTRUCK,21; TORNKRAN,24. •Other notes: •The printer, TR.AB BJÖCKMANS EFFTR, is on p24. •Jonsson AB on p25 is a source of extra parts. •The range of sets is on the back cover.

each of the 19 models, all copied directly from MECCANO manuals, with just the building instructions reference numbers removed, but in some cases not all the lines that linked them to the parts in the model. The models (with the MECCANO name in brackets) run from COCHECITO (Kiddie Kar) to FUNICULAR (Telpher Span), and were probably taken from the 1954-61 manuals. No set is specified for any of them but in the MECCANO manuals 5 were No.1 models, 5 No.2, and 3 were from each of Sets 3-5. They are not in that Set order but the smaller models are generally shown first. C3 & C4 are blank.

REMARKS The parts, though not wonderfully finished, and with a few of their holes a little out of line, nevertheless look perfectly usable. But they are a strange selection for a small set – why for example 2 Flanged Plates, and why include 13h Strips if the models are to be MECCANO copies. And why 3h long DAS when the 5h long type is much more common in MECCANO.

The lack of a centre hole in the Plates, presumably to save

on tooling, would be one difficulty in trying to build the models, but what rules out most of them, even the small ones, is the lack of a Bush Wheel – I suppose the Wheel Disc with an Axle Stop on either side might be adequate in some cases but it's doubtful. In the absence of 5h long DAS, and without several more A/Bs, the Double Brackets would have to be used instead, or with the 3h DAS perhaps. Many of the models would also require Plates to be curved which, given their thickness, would be quite impracticable.

Even accepting the above, most of the small manual models look more or less unsuitable for the parts in the Set – one still has a Magic Motor driving it - but I haven't checked to see if a better selection could have been made. The No.1 models are: Kiddie Kar, Letter Balance, Stamping Mill, Railway Breakdown Crane, & Tricycle Van; the No.2's: Milk Delivery Wagon, Mechanical Hacksaw, Chariot and Driver, Autogiro, & Drilling Machine.

MECA: S3

OSN 39/1178

Snippets. Two Early Swedish TEKNIK Sets

The First Set. The Lid The Tradera (Swedish Ebay) photo right shows it to be different to the type most commonly found, see 20/572. The maker, CEGS LEKSAKSTEKNIK (= toy manufacturer), HUDDINGE, along the bottom is no doubt an allied company to the one given in OSN 20.

The Parts The colour scheme is much simpler than the multicolours used later. **The parts** are all of the early type with the small Triangular Plate, 4 & 6h Strips, and Plates in lengths with an even number of holes. Also most of the Plates are not fully perforated and this is a clear pointer to the Set being earlier than any of those in OSN 20. The Road Wheel cum Pulley Disk is the type seen in the early-1940s manual described in 20/574, but not in later editions.

The Manual It has a similar cover to the one in 20/574 one except that Handbok replaces Modellbok at the top. The models on the Set's lid are among those in the early-1940s manual except that the Plates in the latter are fully perforated, and the Plane has a tail skid instead of a Wheel.

The Second Set. The Lid is of the same basic design but it is printed on pale yellow board and the models, though similar, are not the same. It also has a '1' in a circle in the triangular space over the bottom right model.

The Parts Of the few remaining, the Strips & Plates are all of the later type, an odd number of holes long, and the Plates are fully perforated. These, plus some Brackets, are all painted the silver used in the later colour scheme. Also in the Set, a few parts that look like KONSTRUKTÖREN (see 38/1146) including two grey painted wooden Wheels.

There was no **manual** with the Set but the models on the lid, a Plane (slightly different to the one on the first lid) and a Lorry with Trailer, are both in the early-1940s manual but not in the later ones.

Dates The First Set. From OSN 20, the Huddinge factory was set up in 1939-40. The parts in the Set are not fully perforated and therefore predate the early-1940s manual. Thus the set would be from the few years between 1939 and the early 1940s.

The Second Set. From the parts it was later than the first but most likely came soon afterwards, and it may well correspond to the 'early-1940s' manual. The models on the lid are in said manual but are not in the mid- and late-1940s



editions described in OSN 20, nor in the 20/576 1950s No.1 model leaflet. Also other Tradera lots show sets with the new 1950s lid, multicoloured parts, and either the mid-1940s or the late-1940s manuals.

Range of Sets. If the models on the lids were from the largest outfit of the time, the first set was probably the only one then produced, and hence perhaps the absence of a set number on the lid. As already mentioned the models on the second lid are in the early-1940s manual and as this was labelled 'III' perhaps 3 sets were made at that stage. Then perhaps 4 were available by the mid-1940s, witness the OSN 20 mid-1940s 2-4 manual, and 5 by the late-1940s, given the late-1940s 2-5 edition.

In all the above it should be remembered that the dates of the manuals are largely unconfirmed.

TEKNIK [2]: S1

OSN 39/1178