

9.2 Wharf Crane

Dockland provides many fascinating subjects for the Meccano builder and chief among these are the numerous types of crane, large and small, to be seen in any up-to-date and well-equipped port. One of these cranes forms the prototype of the attractive model illustrated with detail constructional plans in this Leaflet. This is one of several types of Wharf Crane, a feature of which is its long slender jib pivoted to a swivelling superstructure mounted on a tall tower. The radius of operation of this particular type of crane is relatively small but, on the other hand, bulky and heavy loads can be raised and lowered through a considerable vertical distance. This is particularly necessary in loading and unloading large ocean-going vessels at quaysides, where it is necessary to be able to clear the hull and superstructure of the ship, which itself may be rising and falling through as much as 20 ft., according to the state of the tide. Such Wharf Cranes are usually of the travelling type and run on rails laid along the quay or wharf side.

In this Meccano model Wharf Crane the power for operating the load-hoisting mechanism is provided by an Meccano E15R Electric Motor housed with the load-hoisting and jib-elevating mechanism in the operator's cab. The cabin itself is mounted on ball bearings and slewing is carried out manually by a simple system of gearing from a handwheel located at the top of the tower structure.

How to use this leaflet

The constructional details of the model shown in this Leaflet are explained entirely by means of half-tone illustrations and line drawings. Once the 'knack' of reading the drawings has been acquired assembly of the model will be found quite straightforward and simple to carry out.

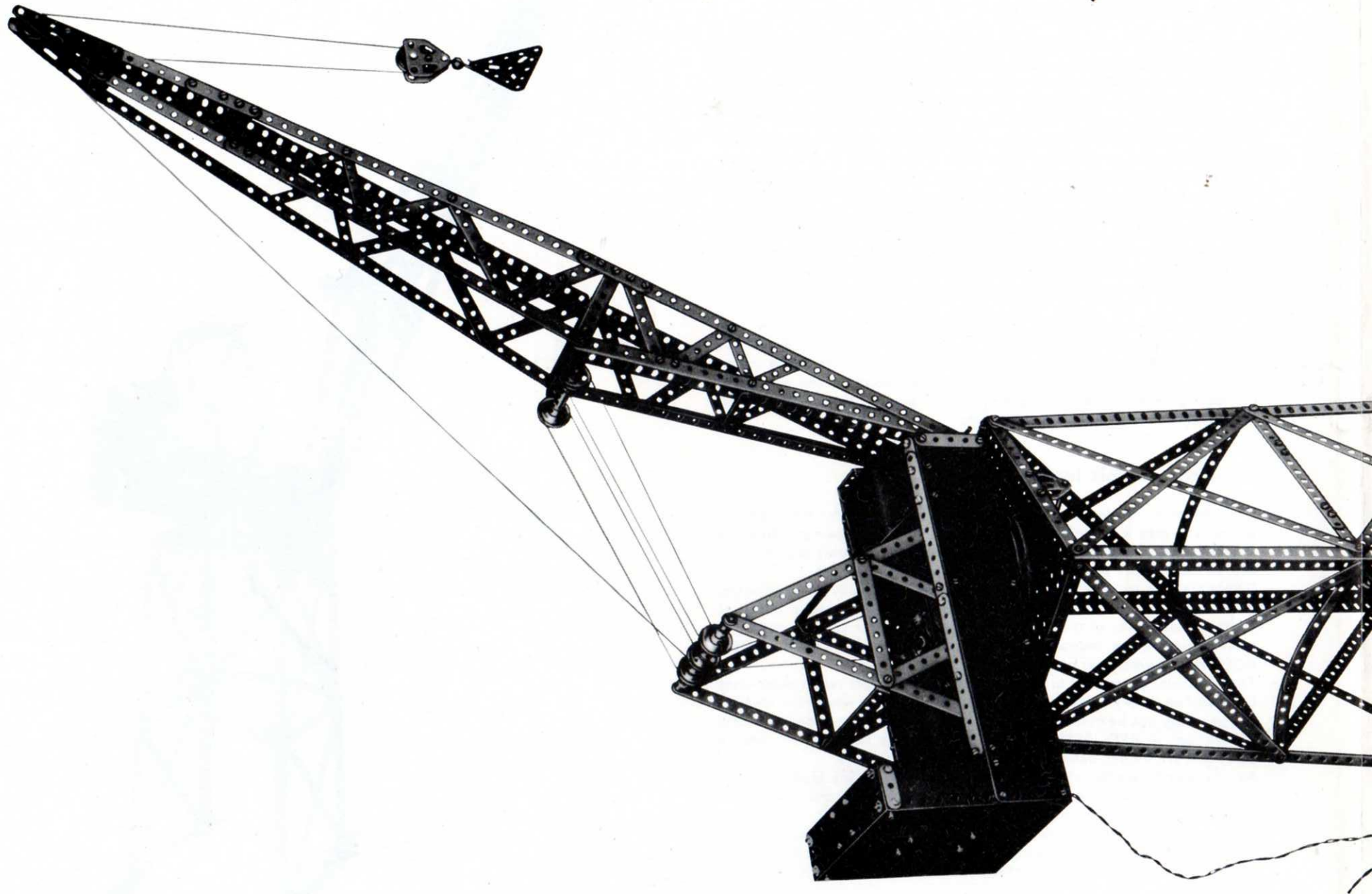
Before starting to build the model it is advisable to study all the illustrations carefully so as to get a good idea of its various sections. Points at which various units of the model are bolted together to form the complete structure are indicated in the drawings by RED DOTS or RED BOLTHEADS whenever possible.

The particular parts used in the assembly of the model can in most cases be identified simply by looking at the illustrations, but where the identity of a part may not be quite clear, its Part Number is printed on the model illustrations in RED. RED DOTTED pointer lines are used to indicate parts that are hidden behind other parts of the structure.

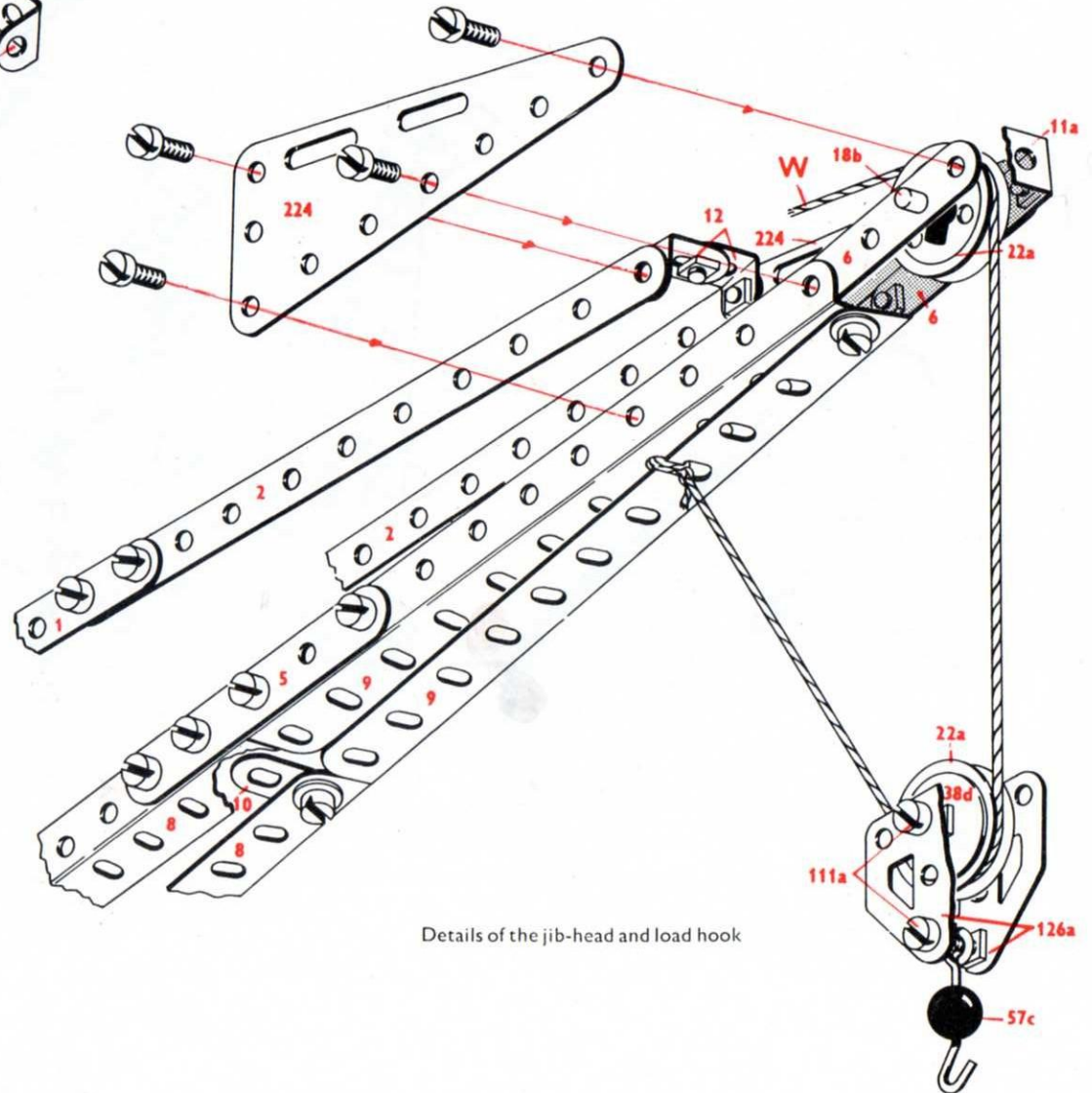
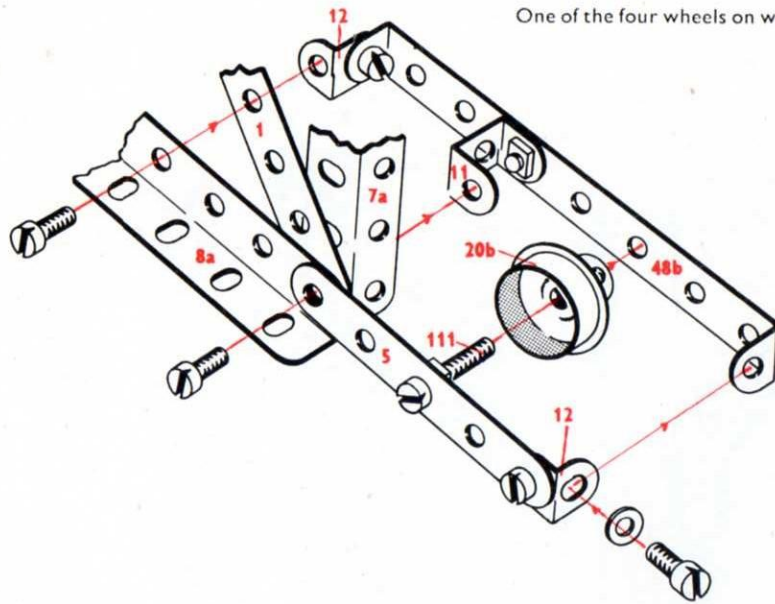
As a further help a list of the parts required to build the model is given in this Leaflet. In this list the catalogue numbers of the parts are printed in RED and the quantity of each part in BLACK.

In models fitted with a driving Motor the particular type of Motor is indicated by one of the following Code Marks: M1 = Magic Clockwork Motor; M2 = No. 1 Clockwork Motor; M3 = Meccano Electric Motor.

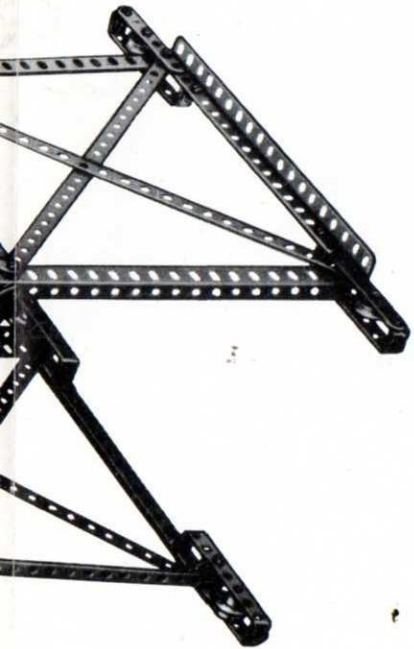




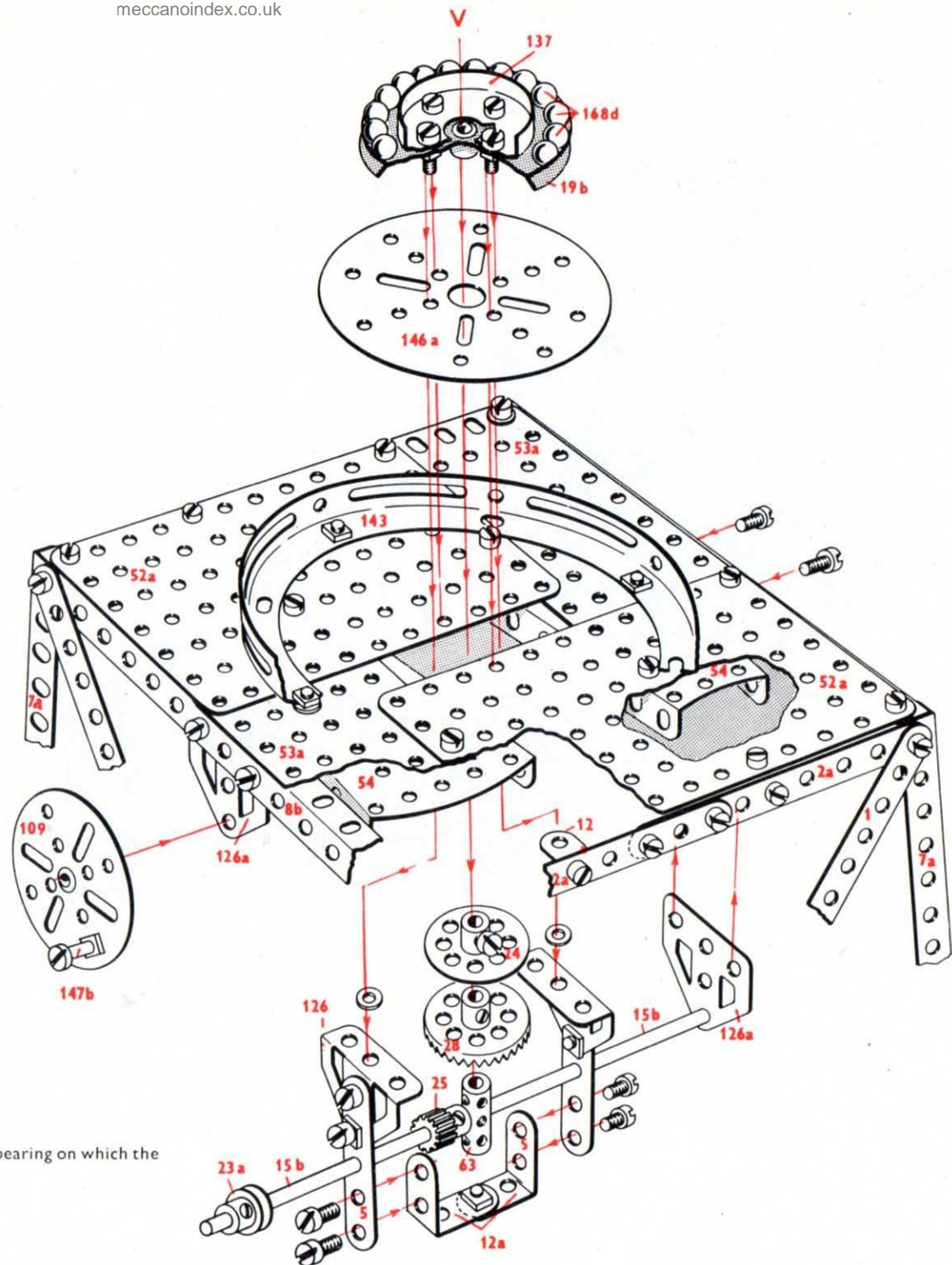
One of the four wheels on which the Crane travels



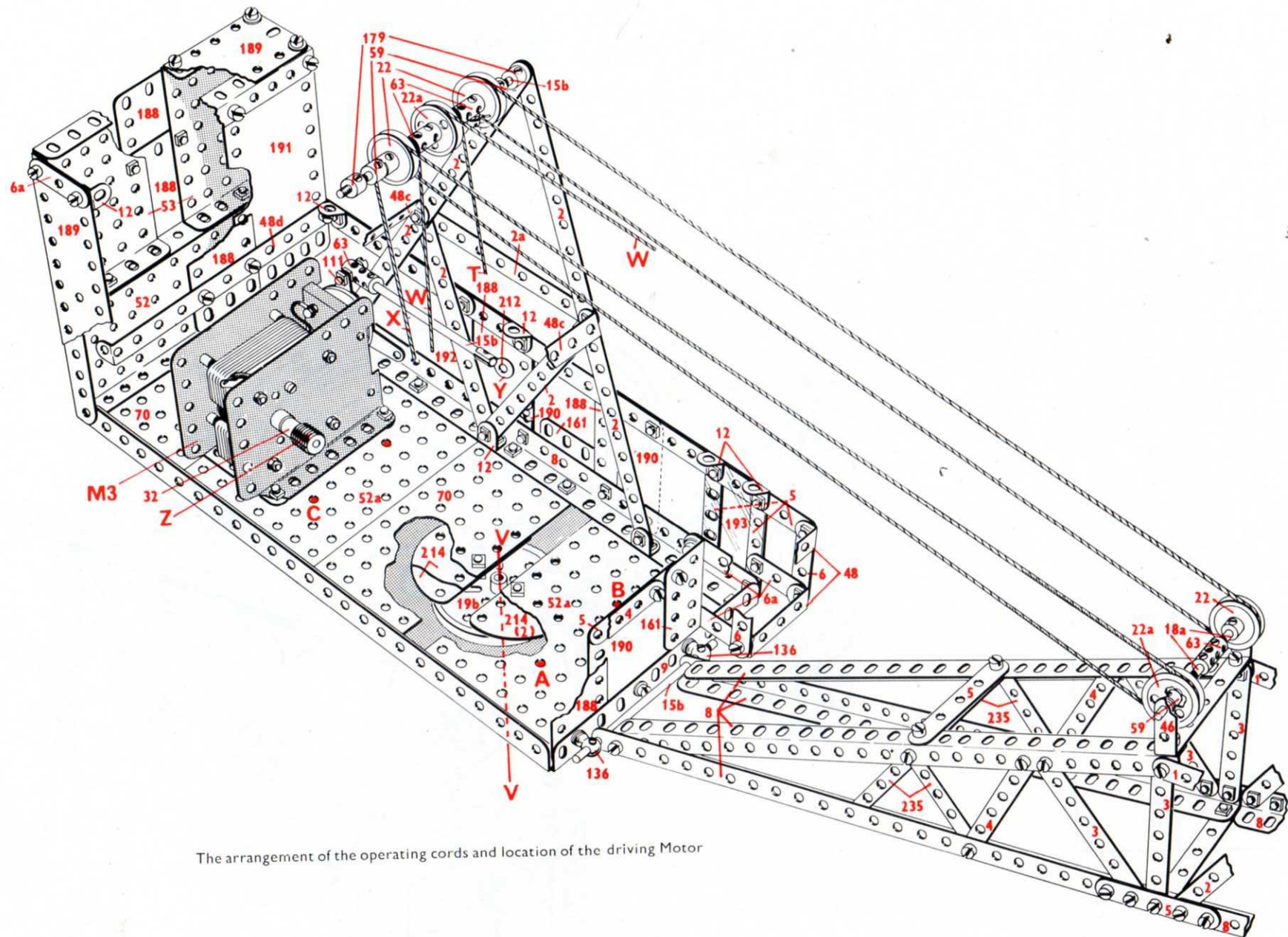
Details of the jib-head and load hook



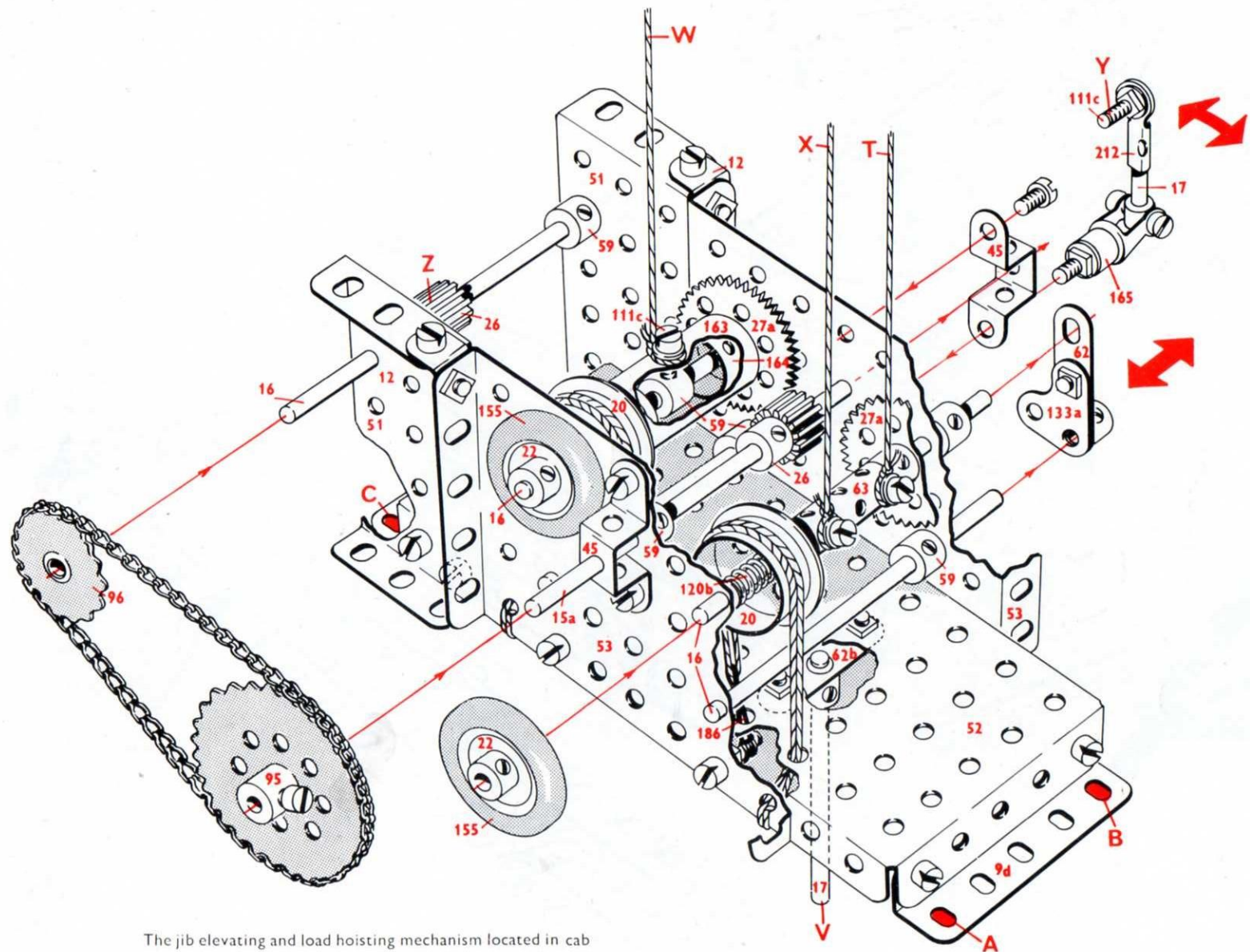
14 -	1	2 -	51
4 -	1b	2 -	52
23 -	2	4 -	52a
6 -	2a	4 -	53
6 -	3	2 -	53a
7 -	4	2 -	54
23 -	5	1 -	57c
4 -	6	9 -	59
5 -	6a	2 -	62
4 -	7a	6 -	63
8 -	8	2 -	70
2 -	8a	4 -	89
4 -	9	1 -	94
2 -	9d	1 -	95
3 -	10	1 -	96
4 -	11	1 -	109
1 -	11a	5 -	111
29 -	12	6 -	111a
2 -	12a	3 -	111c
1 -	13a	2 -	120b
1 -	15a	2 -	126
2 -	15b	4 -	126a
4 -	16	2 -	133a
2 -	17	2 -	136
4 -	18a	1 -	137
2 -	18b	1 -	143
2 -	19b	1 -	146a
2 -	20	1 -	147b
4 -	20b	2 -	155
5 -	22	2 -	161
4 -	22a	1 -	163
1 -	23a	2 -	164
2 -	24	1 -	165
1 -	25	21 -	168d
2 -	26	2 -	179
2 -	27a	2 -	186
1 -	28	6 -	188
1 -	32	3 -	189
2 -	35	3 -	190
297 -	37a	4 -	191
288 -	37b	2 -	192
28 -	38	1 -	197
2 -	40	2 -	212
2 -	45	4 -	214
1 -	46	4 -	215
2 -	48	6 -	235
4 -	48b	2 -	235a
2 -	48c		



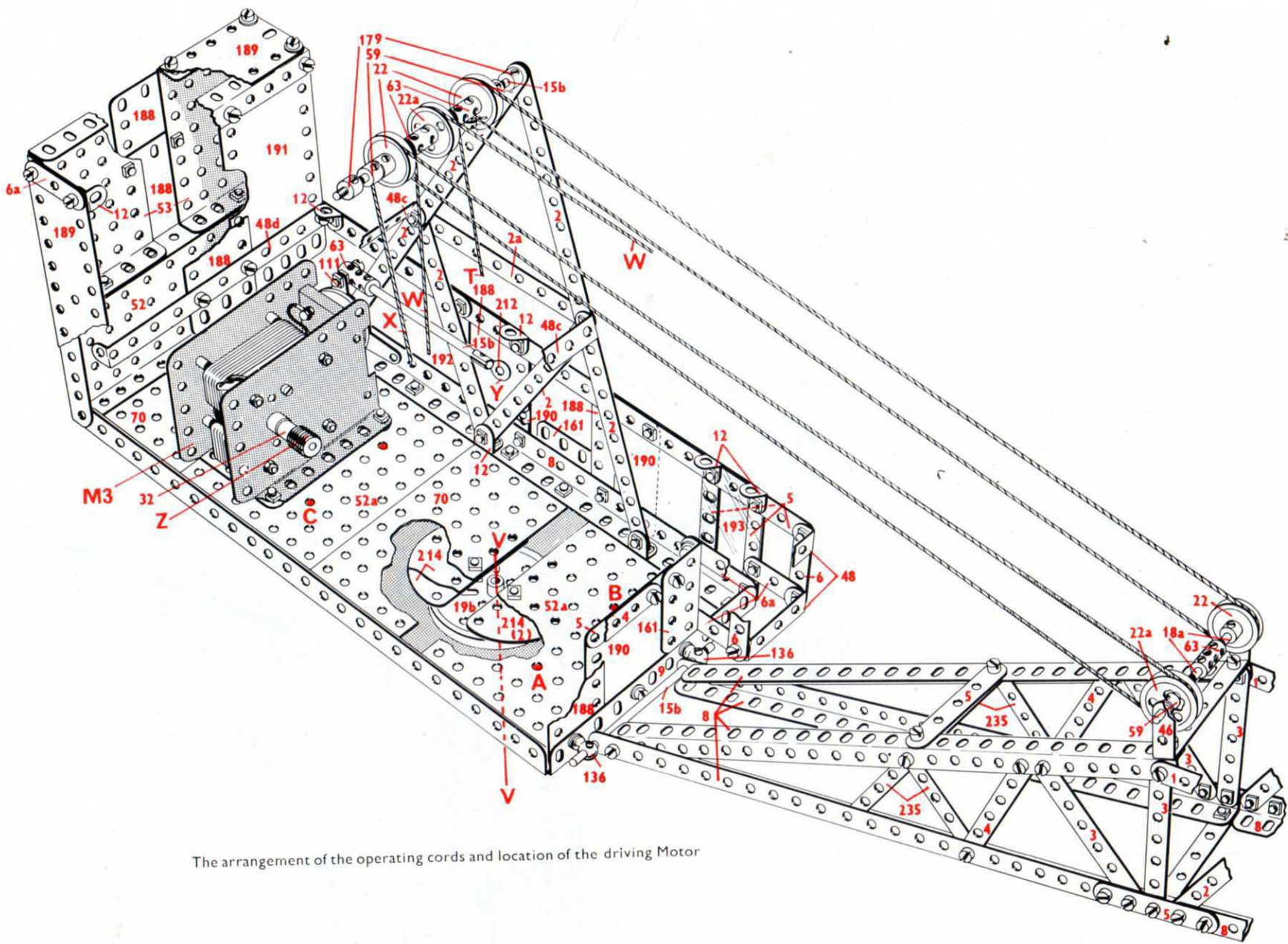
The top of the tower showing the ball bearing on which the superstructure swivels



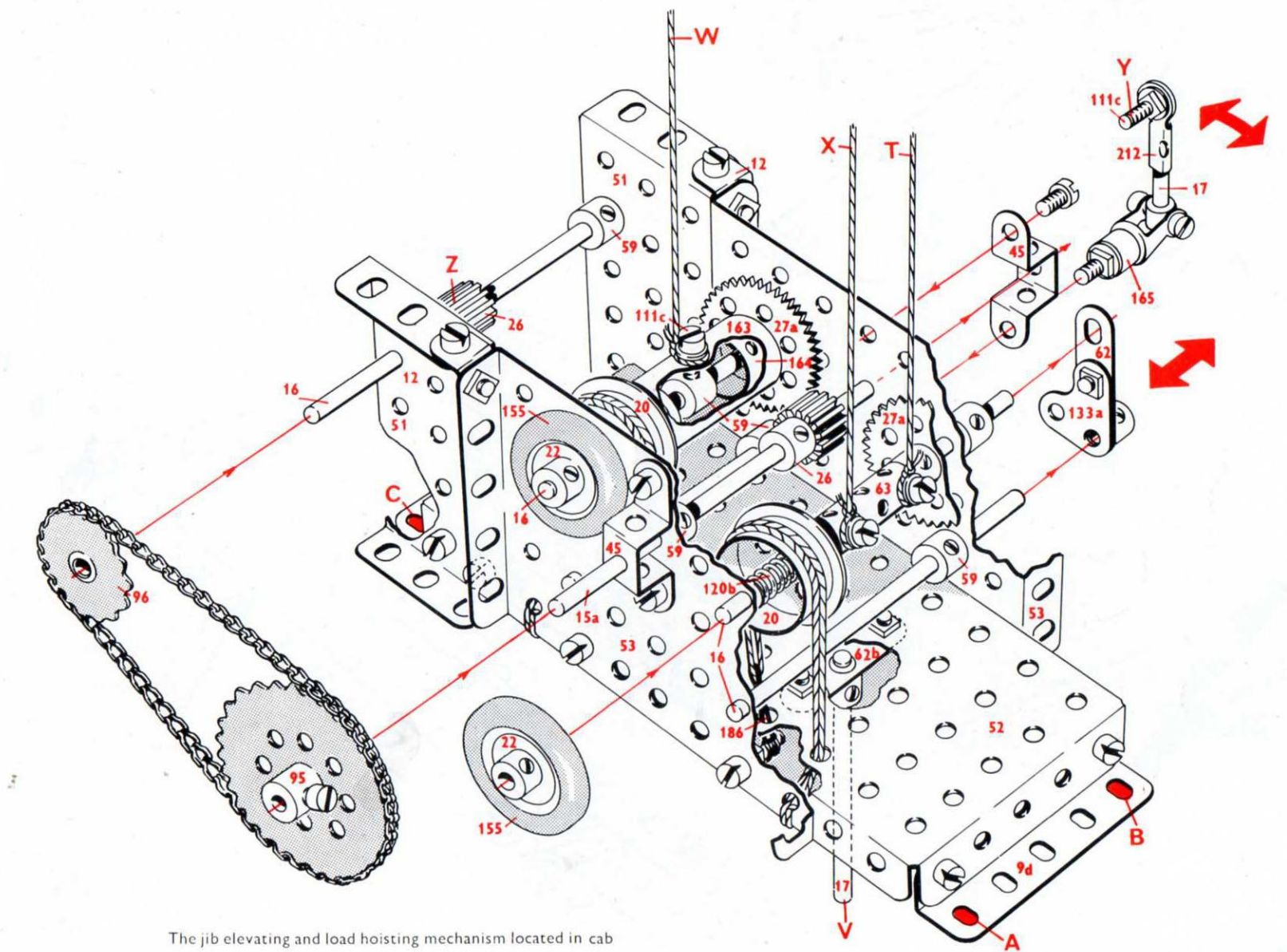
The arrangement of the operating cords and location of the driving Motor



The jib elevating and load hoisting mechanism located in cab



The arrangement of the operating cords and location of the driving Motor



The jib elevating and load hoisting mechanism located in cab

9.2 Wharf Crane

Dockland provides many fascinating subjects for the Meccano builder and chief among these are the numerous types of crane, large and small, to be seen in any up-to-date and well-equipped port. One of these cranes forms the prototype of the attractive model illustrated with detail constructional plans in this Leaflet. This is one of several types of Wharf Crane, a feature of which is its long slender jib pivoted to a swivelling superstructure mounted on a tall tower. The radius of operation of this particular type of crane is relatively small but, on the other hand, bulky and heavy loads can be raised and lowered through a considerable vertical distance. This is particularly necessary in loading and unloading large ocean-going vessels at quaysides, where it is necessary to be able to clear the hull and superstructure of the ship, which itself may be rising and falling through as much as 20 ft., according to the state of the tide. Such Wharf Cranes are usually of the travelling type and run on rails laid along the quay or wharf side.

In this Meccano model Wharf Crane the power for operating the load-hoisting mechanism is provided by an Meccano E15R Electric Motor housed with the load-hoisting and jib-elevating mechanism in the operator's cab. The cabin itself is mounted on ball bearings and slewing is carried out manually by a simple system of gearing from a handwheel located at the top of the tower structure.

How to use this leaflet

The constructional details of the model shown in this Leaflet are explained entirely by means of half-tone illustrations and line drawings. Once the 'knack' of reading the drawings has been acquired assembly of the model will be found quite straightforward and simple to carry out.

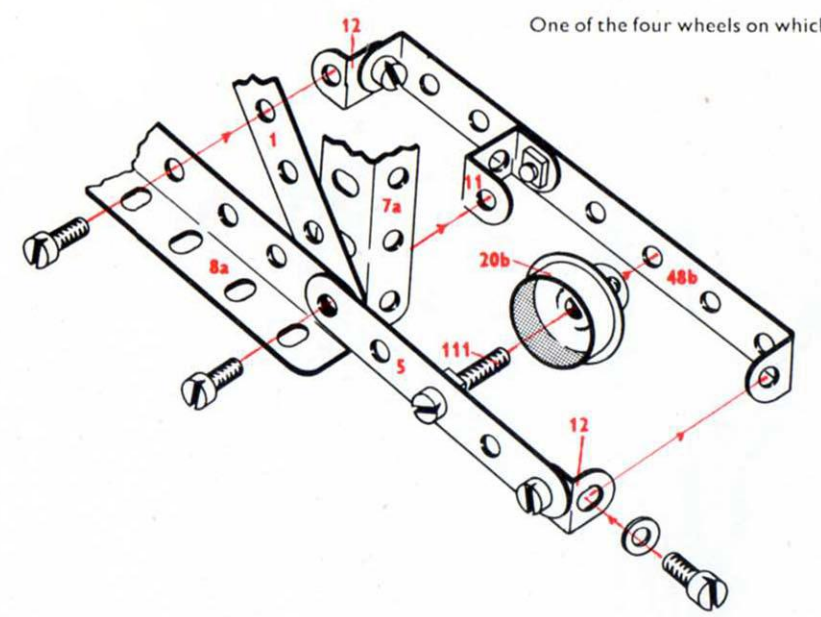
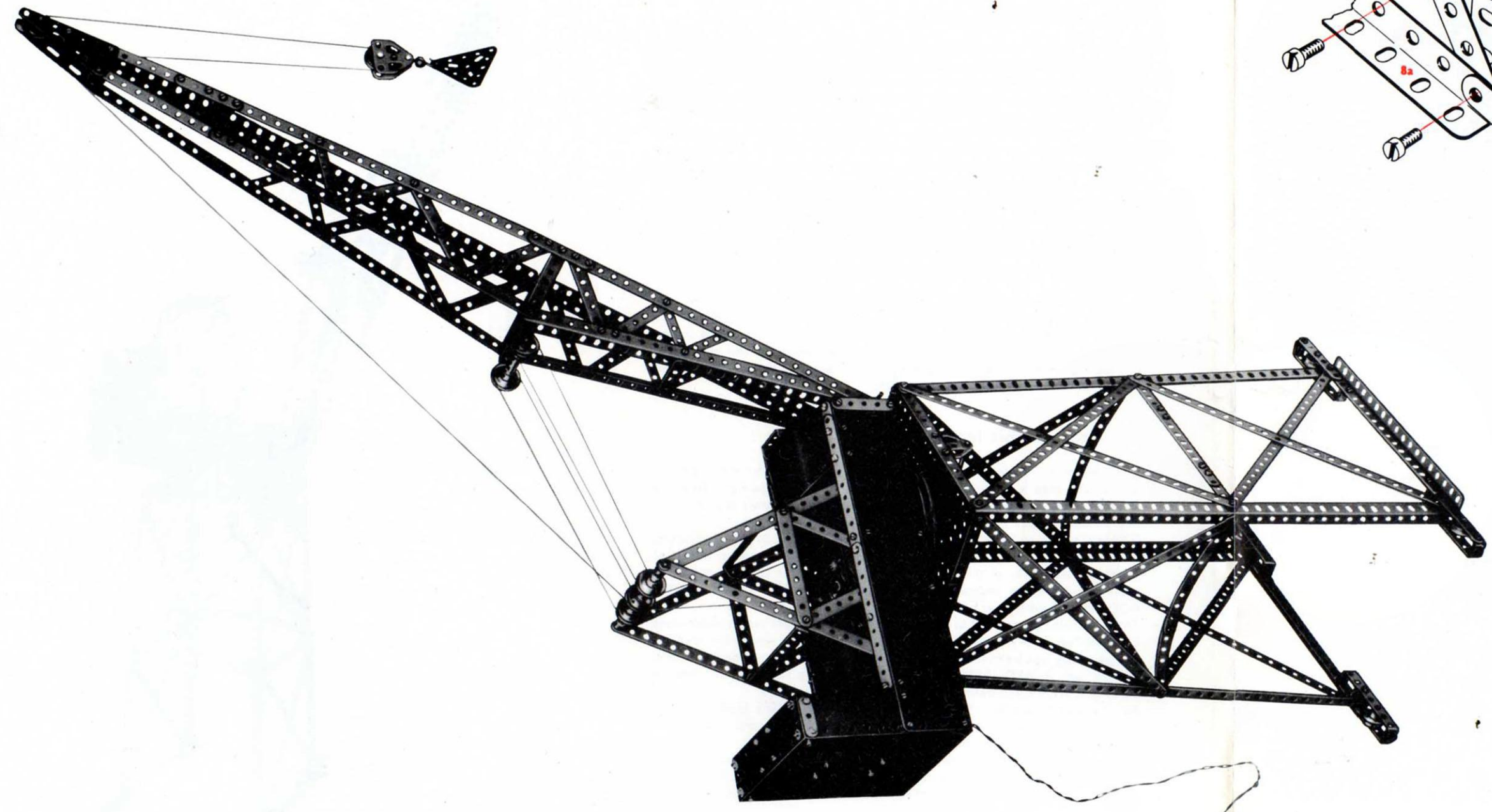
Before starting to build the model it is advisable to study all the illustrations carefully so as to get a good idea of its various sections. Points at which various units of the model are bolted together to form the complete structure are indicated in the drawings by RED DOTS or RED BOLTHEADS whenever possible.

The particular parts used in the assembly of the model can in most cases be identified simply by looking at the illustrations, but where the identity of a part may not be quite clear, its Part Number is printed on the model illustrations in RED. RED DOTTED pointer lines are used to indicate parts that are hidden behind other parts of the structure.

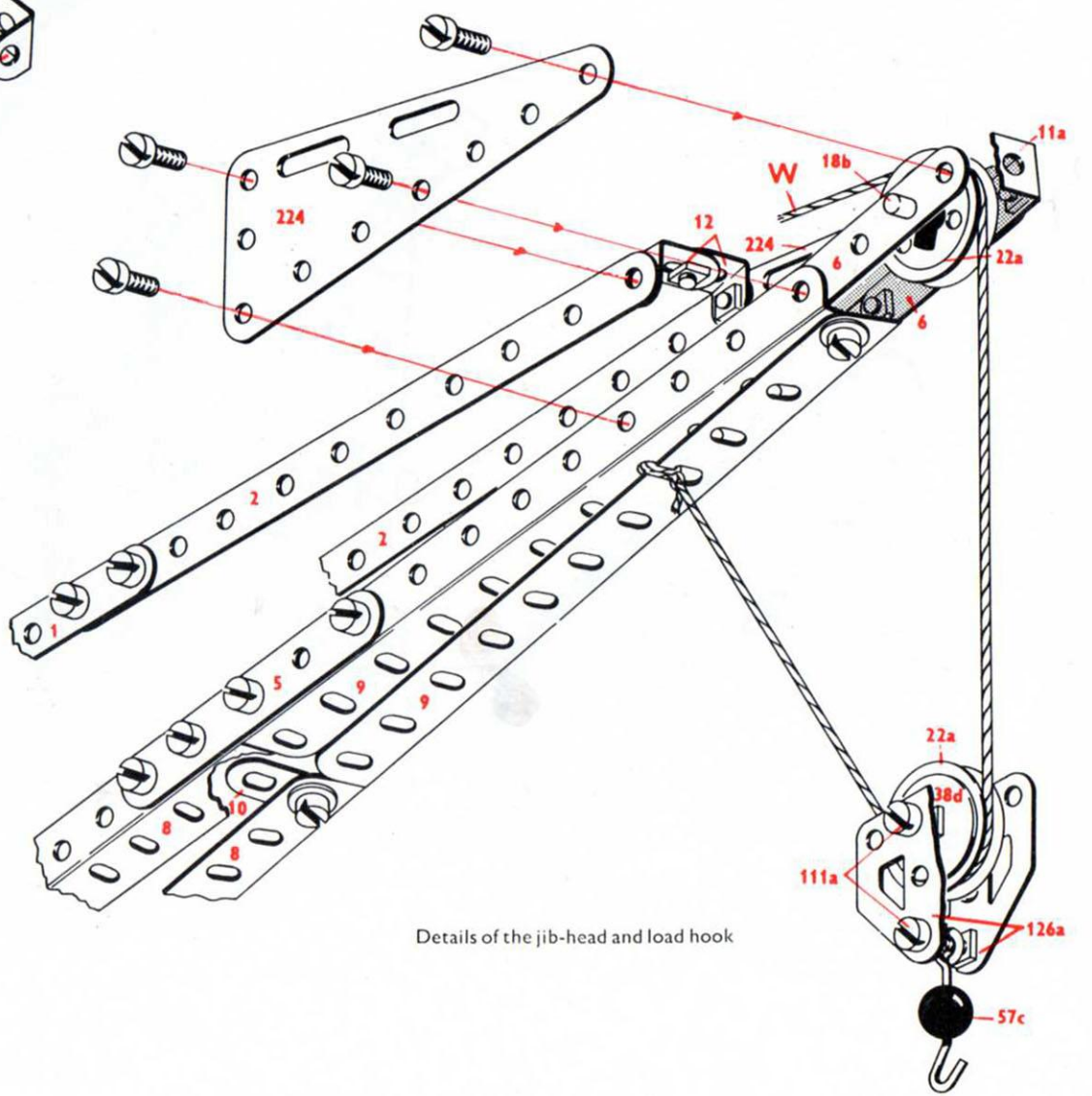
As a further help a list of the parts required to build the model is given in this Leaflet. In this list the catalogue numbers of the parts are printed in RED and the quantity of each part in BLACK.

In models fitted with a driving Motor the particular type of Motor is indicated by one of the following Code Marks: M1 = Magic Clockwork Motor; M2 = No. 1 Clockwork Motor; M3 = Meccano Electric Motor.





One of the four wheels on which the Crane travels



Details of the jib-head and load hook

14 -	1	2 -	51
4 -	1b	2 -	52
23 -	2	4 -	52a
6 -	2a	4 -	53
6 -	3	2 -	53a
7 -	4	2 -	54
23 -	5	1 -	57c
4 -	6	9 -	59
5 -	6a	2 -	62
4 -	7a	6 -	63
8 -	8	2 -	70
2 -	8a	4 -	89
4 -	9	1 -	94
2 -	9d	1 -	95
3 -	10	1 -	96
4 -	11	1 -	109
1 -	11a	5 -	111
29 -	12	6 -	111a
2 -	12a	3 -	111c
1 -	13a	2 -	120b
1 -	15a	2 -	126
2 -	15b	4 -	126a
4 -	16	2 -	133a
2 -	17	2 -	136
4 -	18a	1 -	137
2 -	18b	1 -	143
2 -	19b	1 -	146a
2 -	20	1 -	147b
4 -	20b	2 -	155
5 -	22	2 -	161
4 -	22a	1 -	163
1 -	23a	2 -	164
2 -	24	1 -	165
1 -	25	21 -	168d
2 -	26	2 -	179
2 -	27a	2 -	186
1 -	28	6 -	188
1 -	32	3 -	189
2 -	35	3 -	190
297 -	37a	4 -	191
288 -	37b	2 -	192
28 -	38	1 -	197
2 -	40	2 -	212
2 -	45	4 -	214
1 -	46	4 -	215
2 -	48	6 -	235
4 -	48b	2 -	235a
2 -	48c		

The top of the tower showing the ball bearing on which the superstructure swivels

