

# OO Gauge OHLE Product Guide & Assembly Instructions



**OHLE PRODUCT GUIDE - OO Gauge**

|                         |   |                         |
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**OHLE Structure (Incl. Bases)** +

**Choose Registration Arms** +

**Add extra Detail**



Mono-Boom Anchor Portal  
(Adjustable Span up to 4 tracks)  
with Magnetic Bases

+



**SET E1-2**

Structure Extension Kit  
(if you want to span  
more than 4 tracks)



**SET E1-3 / E1-4**

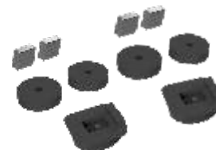
Registration Arms (Left/Right)  
(for use without wires)

or



**SET E1-5 / E1-6**

Magnetic Registration  
Arms (Left/Right)  
(for use with Peco Wires)



**SET E1-8**

Additional Magnetic  
Base Kit



**SET E5-3**

Track Impedance Unit



**SET E5-9**

LWR Expansion Joints



**SET E5-7**

APC Magnets



**SET E1-7**

Wire Tensioners



**SET E5-4**

Red Bonds



**SET E5-8**

Insulators



**SET E5-5**

Pantograph Inspection  
Equipment





## Select Mast (incl. Base) +

## Choose Registration Arms



## Add extra Detail

### SET E2-1

Series 1 OHLE Mast  
95mm Arm  
with Magnetic Base



### SET E2-2

Series 1 OHLE Mast  
115mm Arm  
with Magnetic Base



### SET E2-5

Series 1 OHLE Mast  
115mm Arm  
for Platforms  
with Magnetic Base



### SET E2-9 / E2-10

Registration Arms (Left/Right)  
(for use without wires)

or



### SET E2-12 / E2-13

Magnetic Registration  
Arms (Left/Right)  
(for use with Peco Wires)



### SET E2-6

Additional Magnetic  
Base Kit



### SET E5-3

Track Impedance Unit



### SET E5-9

LWR Expansion Joints



### SET E5-7

APC Magnets



### SET E2-7

Wire Tensioners  
& Conductor  
Wire Mount



### SET E5-4

Red Bonds



### SET E5-8

Insulators



### SET E5-5

Pantograph Inspection  
Equipment

*Future  
Release*  
**SET E2-8**  
Transformer



*Select Single Insulated Cantilever Mast (incl. Base)*



*Add extra Detail*



## SET E3-1

Series 1 SIC Mast  
Inner Type (76mm) with  
Registration Arm  
(for use without wires)  
with Magnetic Base



## SET E3-3

Series 1 SIC Mast  
Inner Type (76mm) with  
Magnetic Registration Arm  
(for use with Peco wires)  
with Magnetic Base

or



## SET E3-2

Series 1 SIC Mast  
Outer Type (66mm) with  
Registration Arm  
(for use without wires)  
with Magnetic Base



## SET E3-4

Series 1 SIC Mast  
Outer Type (66mm) with  
Magnetic Registration Arm  
(for use with Peco wires)  
with Magnetic Base



## SET E5-7

APC Magnets



## SET E5-4

Red Bonds



## SET E2-6

Additional Magnetic  
Base Kit



## SET E5-8

Insulators



## SET E5-3

Track Impedance Unit



## SET E5-9

LWR Expansion Joints



## Select Mast (incl. Base)

## Choose Registration Arms

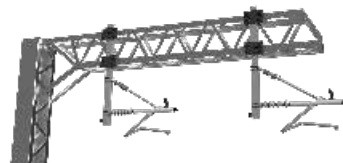


## Add extra Detail



### SET E4-1

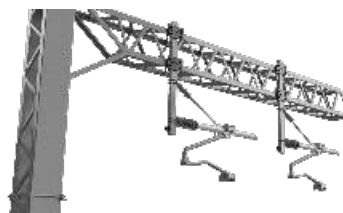
Series 2 OHLE Mast  
100mm Arm  
with Magnetic Base



### SET E4-4 / E4-5

Registration Arms (Left/Right)  
(for use without wires)

or



### SET E4-6 / E4-7

Magnetic Registration  
Arms (Left/Right)  
(for use with Peco Wires)



### SET E4-2

Series 2 OHLE Mast  
130mm Arm  
with Magnetic Base



### SET E4-3

Series 2 OHLE Mast  
130mm Arm for Platforms  
with Magnetic Base



### SET E4-9

Additional Magnetic  
Base Kit



### SET E5-7

APC Magnets



### SET E5-4

Red Bonds



### SET E5-3

Track Impedance Unit



### SET E4-8

Wire Tensioners



### SET E5-8

Insulators



### SET E4-10

Conductor Wire Mounts



### SET E5-9

LWR Expansion Joints



### SET E5-5

Pantograph Inspection  
Equipment

*Future  
Release*

### SET E5-6

Mast with Transformer





## Select Mast kit (incl. Bases)



### SET E6-1

I-Beam Mast  
for 2-Track 170mm Span  
with Magnetic Bases



### SET E6-2

I-Beam Tall Mast  
for 2 Track  
130mm Span  
with Magnetic Bases



### SET E6-3

I-Beam Platform  
Mast for 2-Track  
170mm Span  
with Magnetic Bases



### SET E6-4

DC I-Beam  
Viaduct Mast  
with Magnetic Bases



### SET E6-5

I-Beam Top Braced Mast  
for 4-Track 230mm Span  
with Magnetic Bases



### SET E6-6

I-Beam Supported Mast (3)  
for 2+2 Track 170mm Spans  
with Magnetic Bases



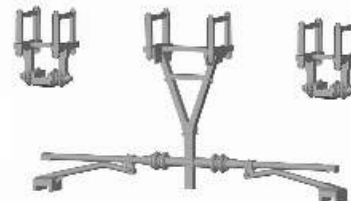
## Registration Arms



### SET E6-11

Single Magnetic Registration Arms (2)  
& 2 Catenary Wire Supports  
(for use with Peco wires)

or



### SET E6-12

Double Magnetic Registration Arm  
& 2 Catenary Wire Supports  
(for use with Peco wires)



### SET E5-8

Insulators



## Additional Parts



### SET E4-9

Additional Magnetic  
Base Kit



### SET E6-13

Additional Viaduct Mast  
Magnetic Base Kit  
(Spares for E6-4)



### SET E6-10

30 & 60mm Span Beams  
Extension piece  
(Use with E6 SETS)



### SET E6-16

Alternative Span Beams  
for 145mm Viaducts  
(use with SET E6-4)



### SET E6-17

Single Track Alternative  
Span Beams  
(Use with SETS E6-1, E6-2, E6-3 & E6-5)



# 1500v DC OHLE (I-Beam Type)

# SET E6

PLEASE REFER TO THE WEBSITE  
FOR FULL PRODUCT DETAILS  
[www.westhillwagonworks.co.uk](http://www.westhillwagonworks.co.uk)

## Select Cantilever Mast kit (Incl. Bases)

+

## Registration Arms

+

## Additional Parts

### SET E6-7

I-Beam Mast  
Single Track Cantilever  
with Magnetic Base



### SET E6-8

I-Beam Tall Mast  
Single Track Cantilever  
with Magnetic Base



### SET E6-9

I-Beam Masts - 2-Track  
for Wire Mounted Registration  
Arms, with Magnetic Bases



### NOTE

Sets E6-7 and E6-8  
are each supplied with  
a Magnetic type  
Registration Arm



### SET E4-9

Additional Magnetic  
Base Kit



### SET E5-8

Insulators

### SET E6-15

I-Beam Wire Mounted Registration  
Arms & Tall Catenary Wire Support Set  
Magnetic Type - for kit E6-9  
(for use with Peco Wires)





## Select Mast kit (Incl. Bases)



## Registration Arms



## Additional Parts



### SET E7-01

Lattice Slim Type Masts  
for 2-Track 130mm Span  
with Magnetic Bases



### SET E7-03

Lattice Type Double Mast  
with 2 Single Cantilever Spans  
with Magnetic Base



### SET E7-02

Lattice Type Masts  
for 4-Track 230mm Span  
with Magnetic Bases



### SET E7-05

Lattice Type Masts  
for Platforms 190mm Span  
with Magnetic Bases



### SET E7-06

Lattice Type Double Sided Mast  
for Platforms with Magnetic Base



### SET E7-10

Single Magnetic Registration Arms (2)  
& 2 Catenary Wire Supports  
(for use with Peco wires)

or



### SET E7-11

Double Magnetic Registration Arm  
& 2 Catenary Wire Supports  
(for use with Peco wires)



### SET E4-9

Additional Magnetic  
Base Kit



### SET E5-8

Insulators



### SET E7-12

Lattice Type  
Additional 2-Track &  
Cantilever Spans



### SET E7-16

Lattice Type  
100mm Extension Span



# 1500v DC OHLE (Lattice Type)

## SET E7

PLEASE REFER TO THE WEBSITE  
FOR FULL PRODUCT DETAILS  
[www.westhillwagonworks.co.uk](http://www.westhillwagonworks.co.uk)

## Select Mast kit (Incl. Bases)



### SET E7-04

Lattice Type Masts  
2-Track 130mm Span  
for Wire Supported Registration Arms  
with Magnetic Bases



## Registration Arms



### SET E7-17

Single Magnetic Wire Supported  
Registration Arms (2)  
& 2 Catenary Wire Supports for  
fitting to kit E7-4  
(for use with Peco wires)



## Additional Parts



### SET E4-9

Additional Magnetic  
Base Kit



### SET E7-12

Lattice Type  
Additional 2-Track &  
Cantilever Spans



### SET E5-8

Insulators



### SET E7-16

Lattice Type  
100mm Extension Span

### SET E7-18

Lattice Type  
45mm Extension Spans



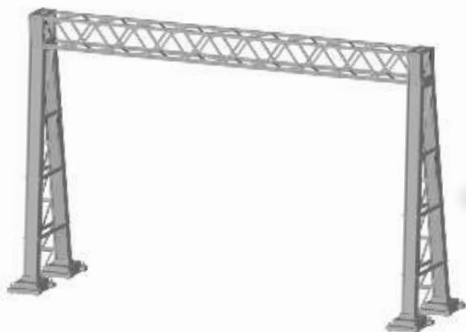
**Select Mast kit (Incl. Bases)**



**Registration Arms**

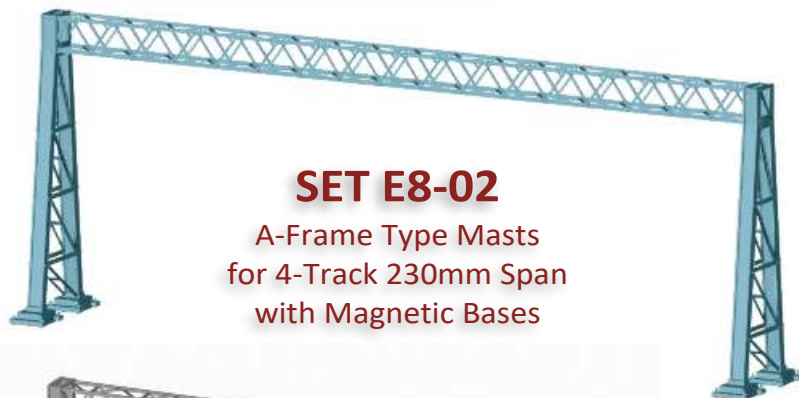


**Additional Parts**



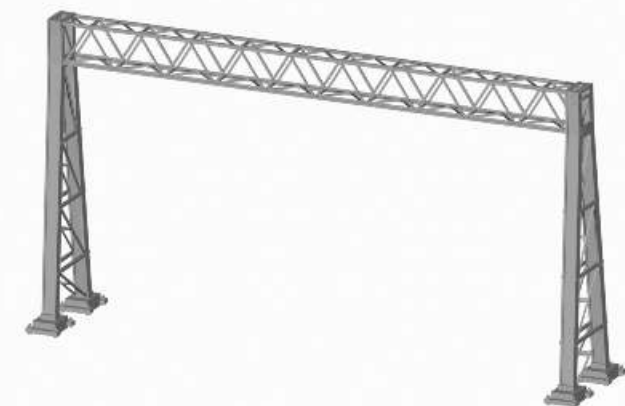
## SET E8-01

A-Frame Type Masts  
for 2-Track 130mm Span  
with Magnetic Bases



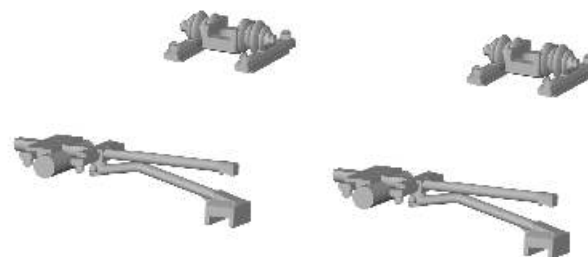
## SET E8-02

A-Frame Type Masts  
for 4-Track 230mm Span  
with Magnetic Bases



## SET E8-03

A-Frame Type Masts  
Taller Type for 3-Track 180mm  
Span with Magnetic Bases



## SET E8-10

Single Magnetic Registration Arms (2)  
& 2 Catenary Wire Supports  
(for use with Peco wires)



## SET E4-9

Additional Magnetic  
Base Kit



## SET E5-8

Insulators



# 1500v DC OHLE (A-Frame Mast Type) SET E8

PLEASE REFER TO THE WEBSITE  
FOR FULL PRODUCT DETAILS  
[www.westhillwagonworks.co.uk](http://www.westhillwagonworks.co.uk)



*Select Mast kit (Incl. Bases)*



*Additional Parts*



## SET E13-01

Southern Region 750 DC Type Masts  
3 x Cantilever Structures  
with Magnetic Bases



## SET E4-9

Additional Magnetic  
Base Kit



## SET E5-8

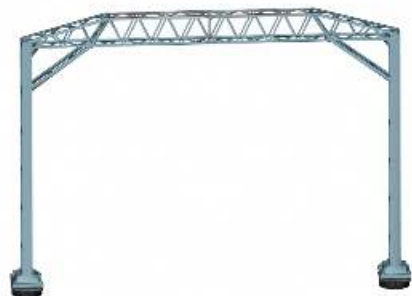
Insulators



# Southern Region Type 750v DC OHLE SET E13

PLEASE REFER TO THE WEBSITE  
FOR FULL PRODUCT DETAILS  
[www.westhillwagonworks.co.uk](http://www.westhillwagonworks.co.uk)

## Select Mast kit (incl. Bases)



### SET E16-1

Type A Slope Top Masts  
for 2-Track 130mm Span  
with Magnetic Bases



### SET E16-2

Type A Slope Top Masts  
for 4-Track 230mm Span  
with Magnetic Bases

### SET E16-3

Type A Platform Slope Top Masts  
for 2-Track 190mm Span  
with Magnetic Bases

*Future  
Release*



## Registration Arms



## Additional Parts



### SET E16-6

Type A Magnetic Registration Arms (2)  
& Catenary Wire Supports (2)  
(for use with Peco wires)



### SET E16-7

Type A Return Current Wire Supports  
Set of 6, 2 single, 2 double, 2 side



### SET E4-9

Additional Magnetic  
Base Kit

### SET E5-8

Insulators



### SET E16-8

100mm Extension Span  
For Type A Structures  
(Also fits Type B, C and E Structures)



### SET E5-7

APC Magnets



### SET E5-4

Red Bonds



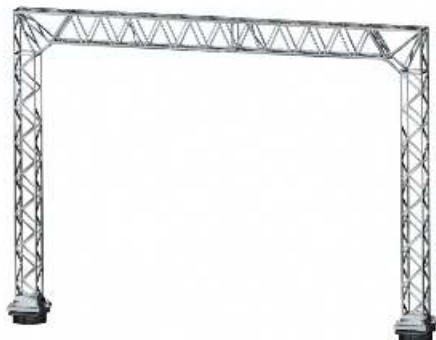
*Select Mast kit (incl. Bases)*

+

*Registration Arms*

+

*Additional Parts*



## SET E16-11

Type B Lattice Masts  
for 2-Track 130mm Span  
with Magnetic Bases



## SET E16-6

Type A Magnetic Registration Arms (2)  
& Catenary Wire Supports (2)  
(for use with Peco wires)



## SET E4-9

Additional Magnetic  
Base Kit

## SET E5-8

Insulators



## SET E16-12

Type B Lattice Masts  
for 4-Track 230mm Span  
with Magnetic Bases



## SET E16-8

100mm Extension Span  
For Type B Structures  
(Also fits Type A, C and E Structures)



## SET E16-7

Type A Return Current Wire Supports  
Set of 6, 2 single, 2 double, 2 side



## SET E5-5

Pantograph Inspection  
Equipment



## SET E5-3

Track Impedance Unit

## SET E16-13

Type B Platform Lattice Masts  
for 2-Track 190mm Span  
with Magnetic Bases

*Future  
Release*





**Select Mast kit (incl. Bases)**



**Registration Arms**



**Additional Parts**

## SET E16-21

Type C Tall Masts  
for 2-Track 130mm Span  
with Magnetic Bases

*Future  
Releases*

## SET E16-22

Type C Tall Masts  
for 4-Track 230mm Span  
with Magnetic Bases



## SET E16-23

Type C Tall Platform Masts  
for 2-Track 190mm Span  
with Magnetic Bases



## SET E16-26

Type C Magnetic Combined Registration Arms  
& Catenary Wire Supports (2)  
(for use with Peco wires)



## SET E16-24

Type C Tall Platform  
Double Sided Mast  
with Magnetic Base



## SET E16-7

Type A Return Current Wire Supports  
Set of 6, 2 single, 2 double, 2 side



## SET E4-9

Additional Magnetic  
Base Kit

## SET E5-8

Insulators



## SET E16-8

100mm Extension Span  
For Type C Structures  
(Also fits Type A, B and E Structures)



## SET E5-9

LWR Expansion Joints



## SET E5-7

APC Magnets



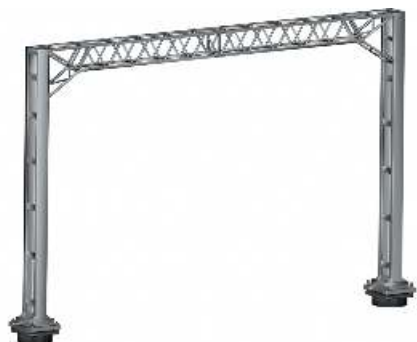
**Select Mast kit (incl. Bases)**

+

**Registration Arms**

+

**Additional Parts**



## SET E16-31

Type D Low Masts  
for 2-Track 130mm Span  
with Magnetic Bases

## SET E16-32

*Future  
Release*

Type D Low Masts  
for 4-Track 230mm Span  
with Magnetic Bases



## SET E16-33

Type D Low Platform Masts  
for 2-Track 190mm Span  
with Magnetic Bases



## SET E16-36

Type D Magnetic Registration Arms (2)  
& Catenary Wire Supports (2)  
(for use with Peco wires)



## SET E16-34

Type D Low Platform  
Double Sided Mast  
with Magnetic Base



## SET E16-37

Type D Return Current Wire Supports  
Set of 6, 2 single, 2 double, 2 side



## SET E4-9

Additional Magnetic  
Base Kit

## SET E5-8

Insulators



## SET E5-3

Track Impedance Unit



## SET E5-7

APC Magnets



*Select Mast kit (incl. Bases)*

+

*Registration Arms*

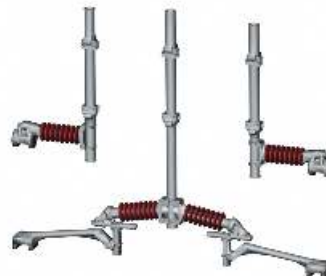
+

*Additional Parts*



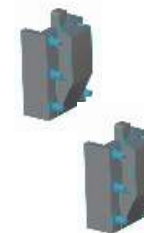
## SET E16-51

Type E Viaduct Masts  
for 110mm Width  
with Magnetic Bases



## SET E16-56

Type E Magnetic Double Registration Arm  
& Catenary Wire Supports (2)  
(for use with Peco wires)



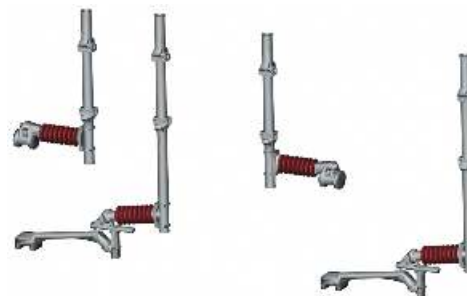
## SET E6-13

Additional Viaduct Mast  
Magnetic Base Kit (2)  
(Spares for E16-51 / 52)



## SET E16-52

Type E Viaduct Masts  
for 145mm Width  
with Magnetic Bases



## SET E16-6

Type A Magnetic Registration Arms (2)  
& Catenary Wire Supports (2)  
(for use with Peco wires)

## SET E5-8

Insulators



## SET E16-8

100mm Extension Span  
For Type E Structures  
(Also fits Type A, B and C Structures)



## SET E16-7

Type A Return Current Wire Supports  
Set of 6, 2 single, 2 double, 2 side



# Mk1 OHLE (Type E - for Viaducts)

# SET E16 - E

PLEASE REFER TO THE WEBSITE  
FOR FULL PRODUCT DETAILS  
[www.westhillwagonworks.co.uk](http://www.westhillwagonworks.co.uk)



*Select Mast kit (incl. Bases)*

+

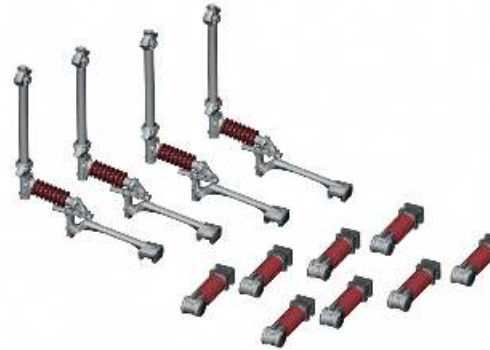
*Registration Arms*

+

*Additional Parts*



**SET E16-61**  
Type F Anchor Portal  
for 4-Track 230mm Span  
with Magnetic Bases



**SET E16-66**  
Type F Magnetic Registration Arms (4)  
& Wire Anchors (8)  
(for use with Peco wires)



**SET E4-9**  
Additional Magnetic  
Base Kit



**SET E5-8**  
Insulators



## Mk1 OHLE (Type F - Anchor Portal)

## SET **E16 - F**

PLEASE REFER TO THE WEBSITE  
FOR FULL PRODUCT DETAILS  
[www.westhillwagonworks.co.uk](http://www.westhillwagonworks.co.uk)

*Select Mast kit (incl. Bases)*

+

*Registration Arms*

+

*Additional Parts*



**SET E16-71**  
Type G I-Beam Masts  
for 2-Track 170mm Span  
with Magnetic Bases



**SET E16-76**  
Type G Magnetic Registration Arms (2)  
& Catenary Wire Supports (2)  
(for use with Peco wires)



**SET E4-9**  
Additional Magnetic  
Base Kit



**SET E5-8**  
Insulators



**SET E16-77**  
100mm Extension Spans (2)  
for Type G Structures



Regarding the spacing of OHLE masts along your track; the real railway mast spacing can be vary between about 20metres and 70metres which equates to 260 to 920mm in OO Gauge.

In general mast spacing is likely to be closer together at junctions and on sharper curves.

The Peco wires are available in the following lengths 200mm, 260mm, 340mm, 380mm and 500mm, so if you are fitting wires then it makes sense to space your masts to suit the Peco wire lengths.

Mast Spacer Tools  
are available



**SET E5-10**  
Mast Spacer Tool  
Set

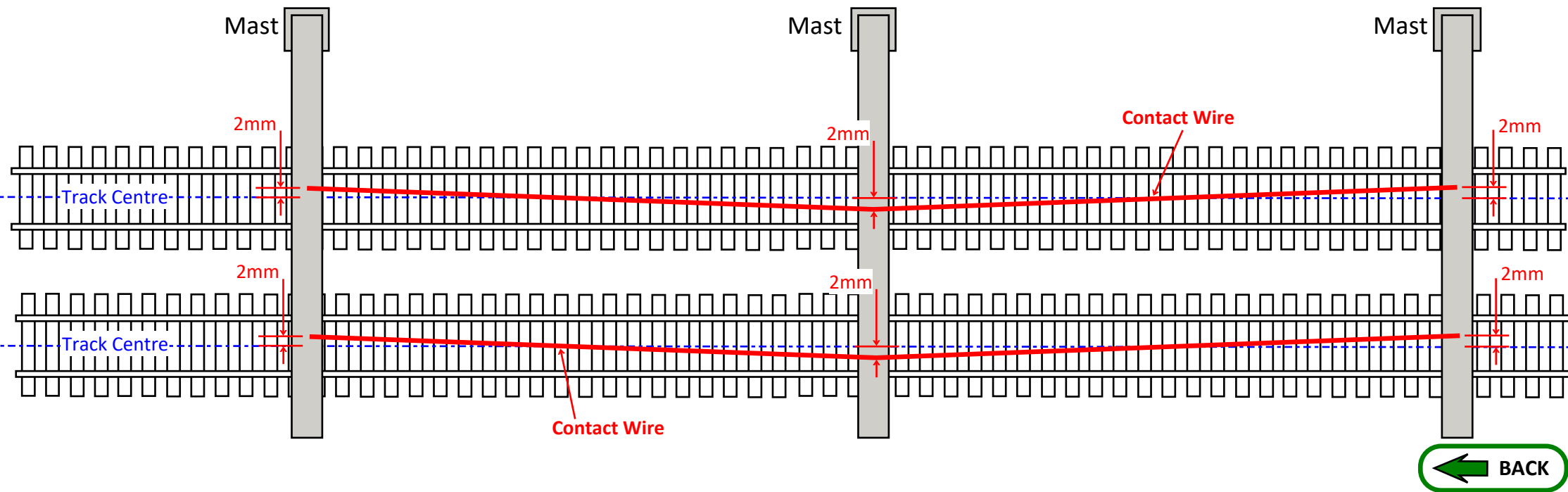
(Includes 200, 260, 300  
and 360mm Spacers)



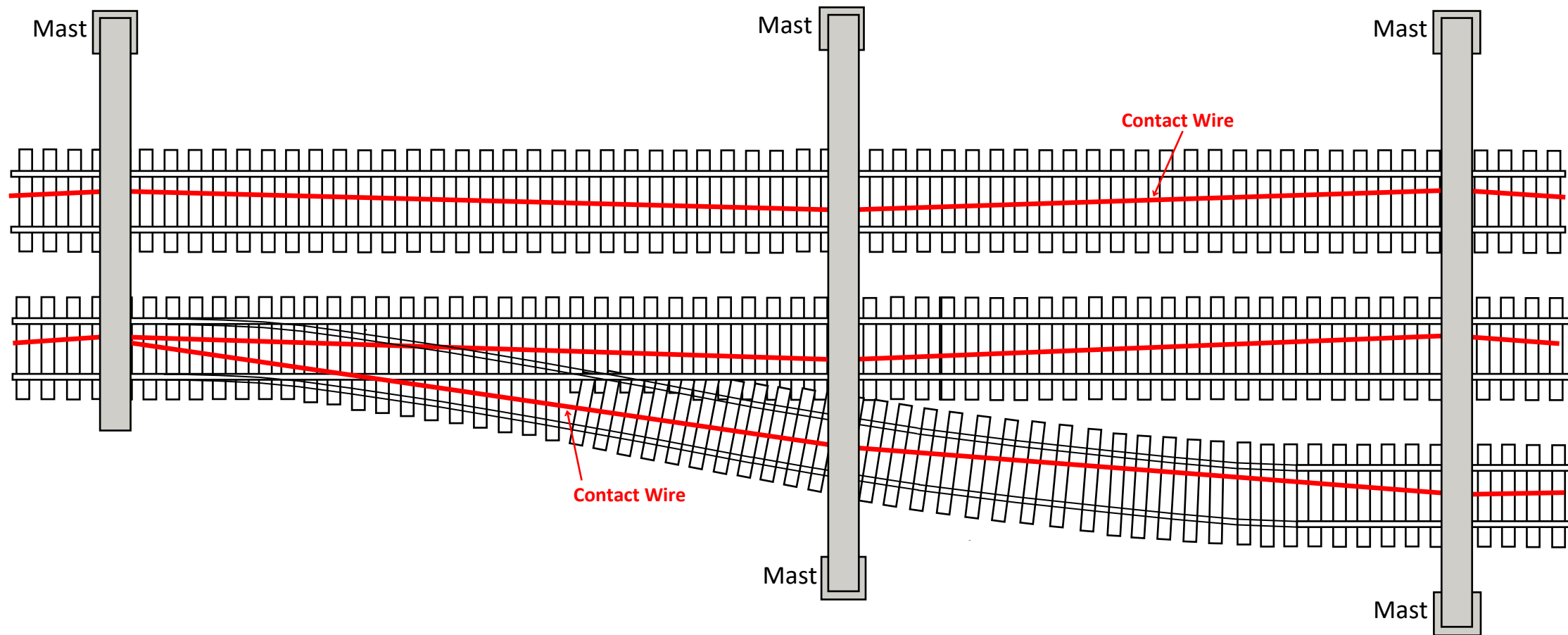


## OHLE Wire Stagger

On the real railway the contact wire is staggered so that the current collection pantograph on the train wears evenly. When installing the registration arms they should be positioned such that the contact wire has a stagger of 2mm either side of the track centre line when looking from above.



## OHLE at Junctions



## Fitting the Magnets to the Masts and Mast Bases



1 Mast, 2 Magnets, 1 Base  
2 Spacers



Apply a little glue into the  
hole in the bottom of  
the Mast



Glue one magnet into the  
Mast



The Base can be attached  
on to your layout using  
glue, a screw or a track pin.  
Add spacers to raise base  
height if desired



Attach the base to the  
desired location on top of  
the board beside the track.  
Ensure there is enough  
clearance for trains to pass



Apply glue to the hole in  
the base; only in the hole  
not on the top face of the  
base



Put the second magnet  
onto the first one that you  
glued into the Mast



Stand the Mast in position  
on the base and allow the  
glue to dry



Check the two magnets are  
securely glued in place by  
carefully lifting the Mast





## Fitting the Magnets to the Registration Arms

1



Magnetic Registration Arm & Catenary Wire Support Kits are supplied with Magnets + a couple of spares Magnets

2



Use fine pointed metal tweezers to hold the magnet. Use a cocktail stick to apply a very small spot of glue into the cup in the Registration Arm or Catenary Wire Support

3



Carefully align the magnet with the cup and gently squeeze into place until the magnet is fully home

4



Attach the registration Arms and Catenary Wire Supports to the Mast Structures as shown in the respective section of this guide

Magnetic Registration Arms and Catenary Wire Support kits are intended for use with Peco type OHLE wires

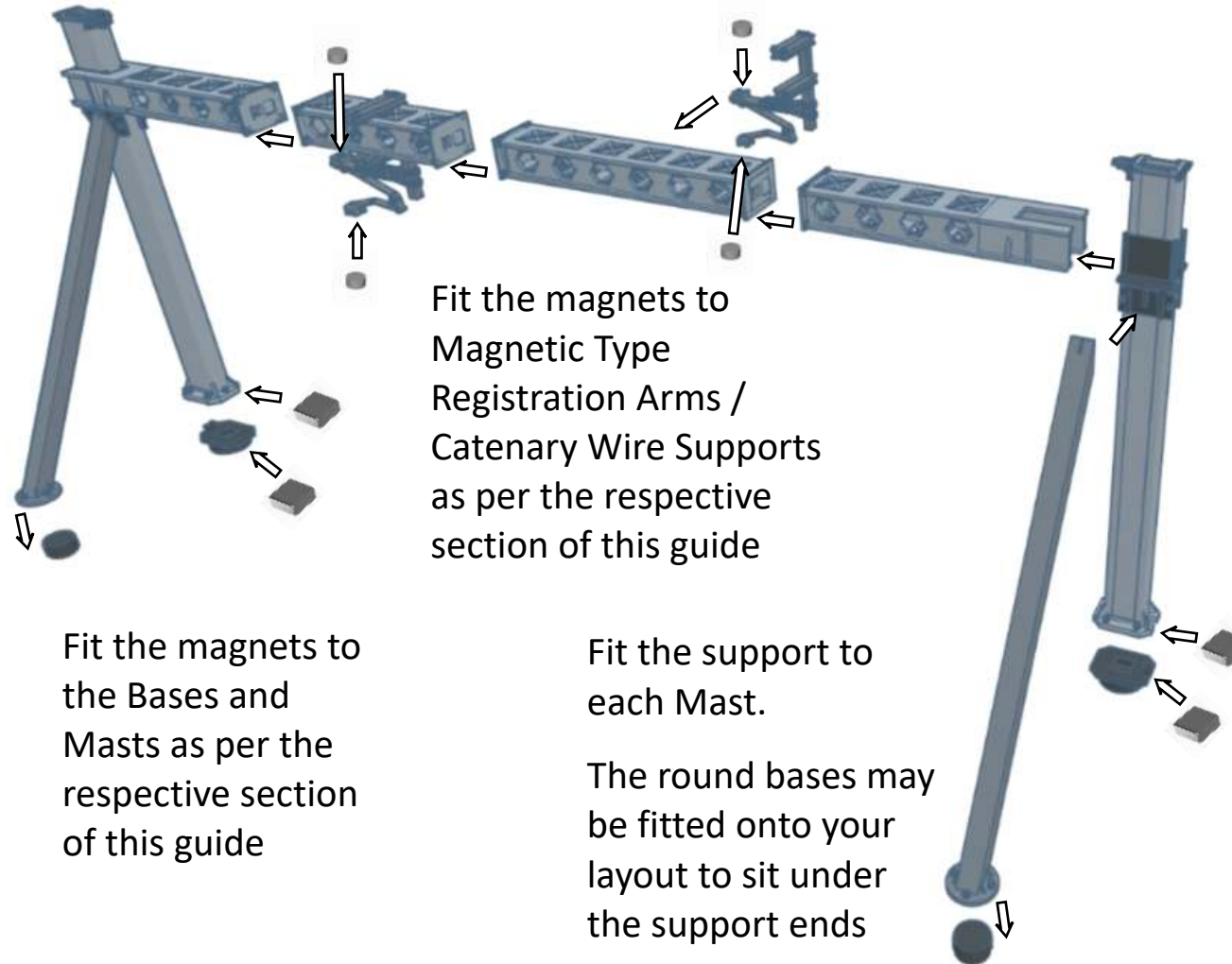


## Assembly of SET E1 - Mono-Boom Anchor Portal (E1-1, E1-2, E1-3, E1-4, E1-5, E1-6)

Fit the span sections together as shown, secure with a little glue.

Ensure the span sections are aligned and straight.

Span extension sections are fitted in the same manner



Fit the Masts into the outer span sections as shown, secure with a little glue.

Ensure the Masts are vertical

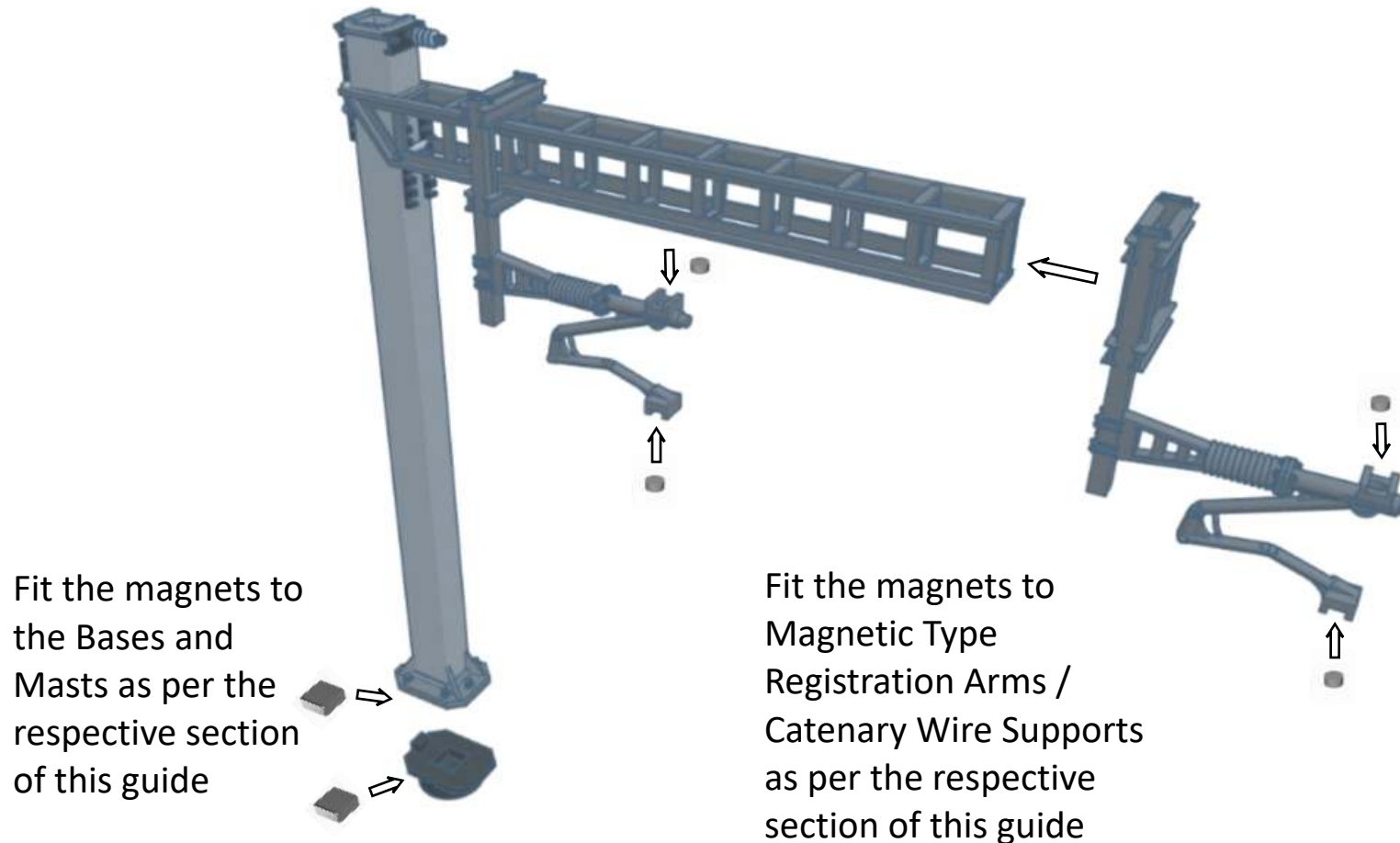
Once the structure is positioned on the layout, slide the Registration Arms / Catenary Wire Supports onto the Structure. A small spot of glue may be required to hold them in place

Fit the support to each Mast.

The round bases may be fitted onto your layout to sit under the support ends



## Assembly of SET E2 - Series 1 Cantilever (E2-1, E2-2, E2-5, E2-9, E2-10, E2-12, E2-13)



Once the structure is positioned on the layout, slide the Registration Arms / Catenary Wire Supports onto the Mast. A small spot of glue may be required to hold them in place

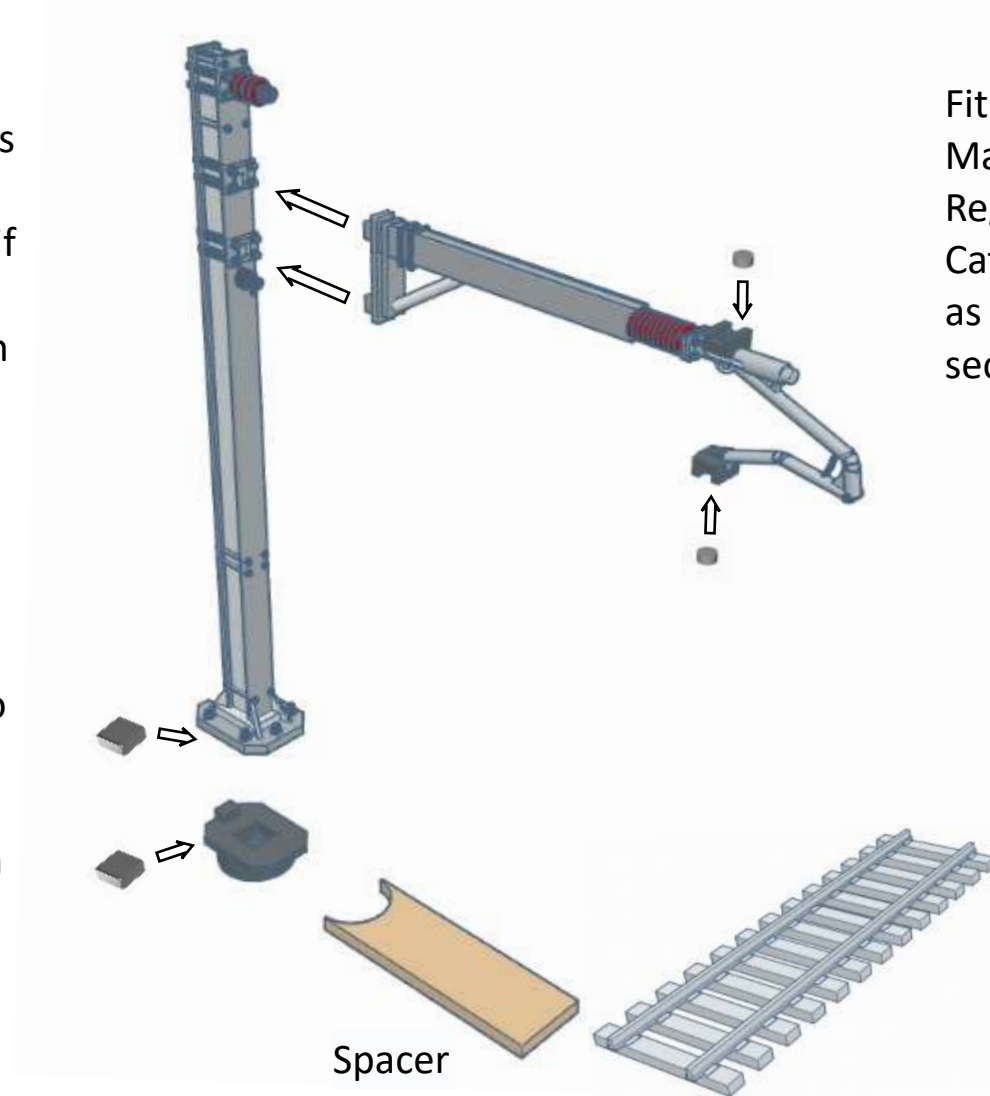




## Assembly of SET E3 - Series 1 SIC Masts (E3-1, E3-2, E3-3, E3-4)

Fit the Cantilever part to the Mast as shown; this is a push-fit.  
A very small spot glue can be used if desired.  
Ensure the Cantilever is aligned with the Mast

Fit the magnets to the Bases and Masts as per the respective section of this guide

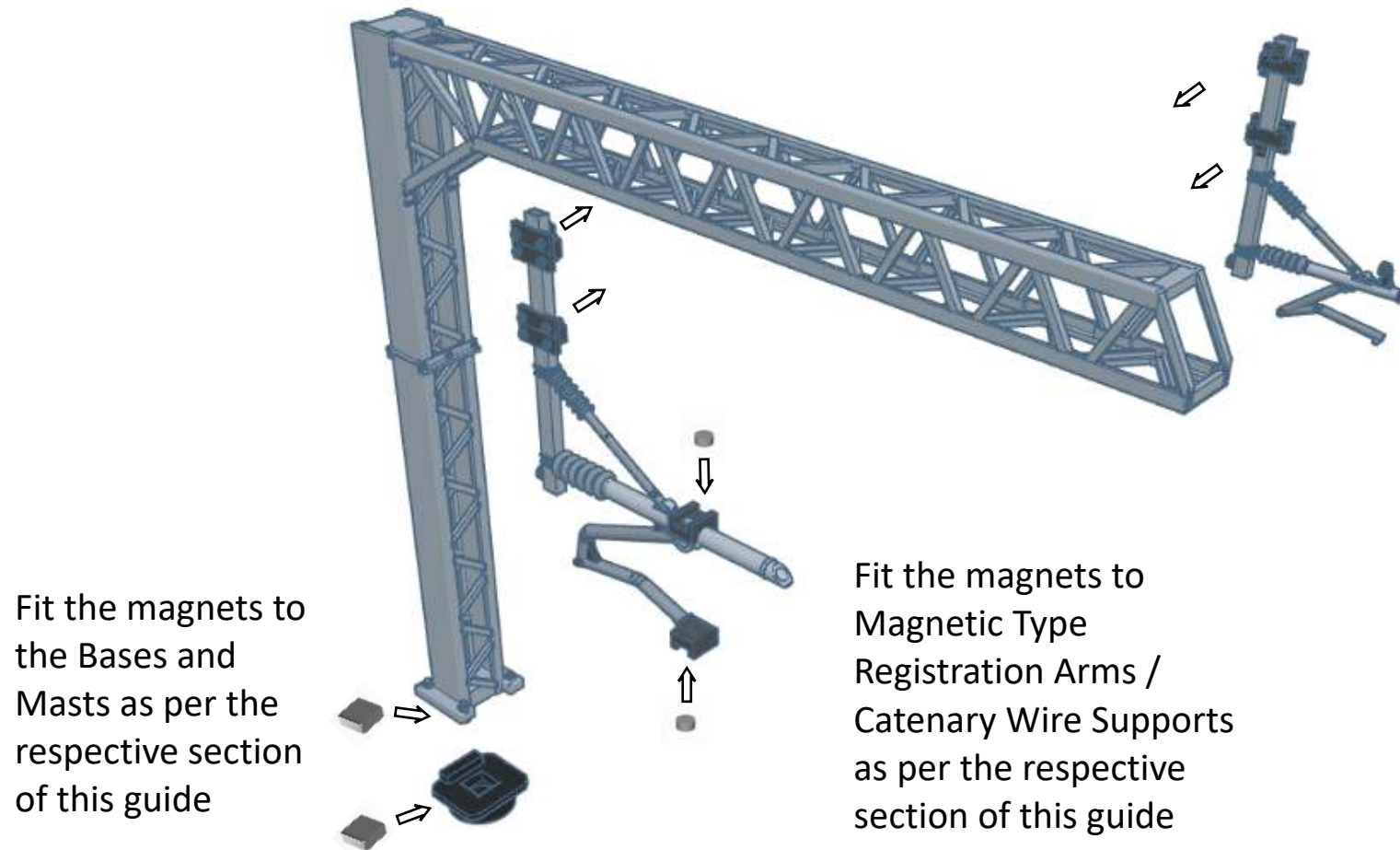


Fit the magnets to Magnetic Type Registration Arms / Catenary Wire Supports as per the respective section of this guide

The spacer tool provided can be used to ensure the mast is the correct distance away from the track



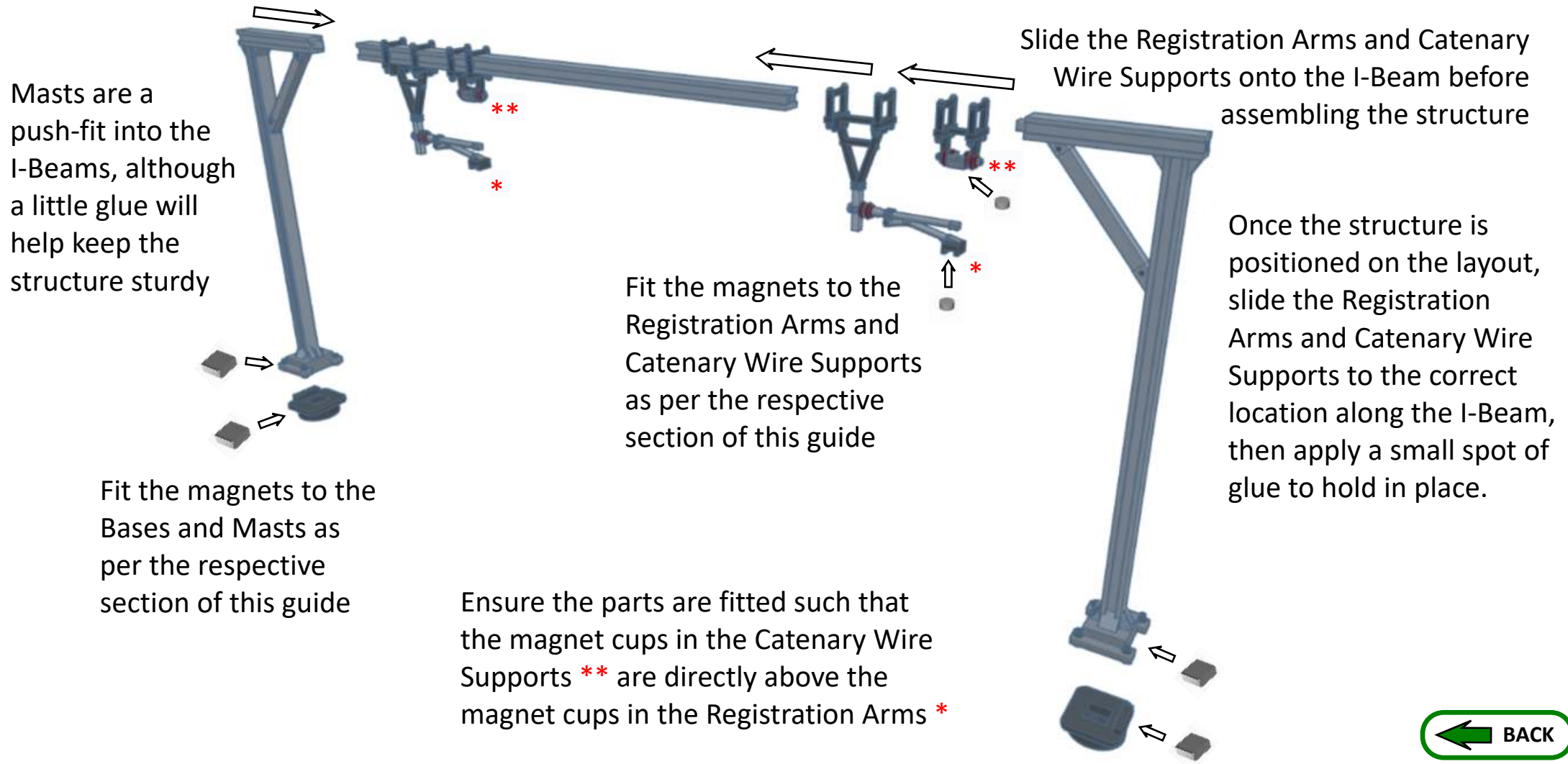
## Assembly of SET E4 - Series 2 Cantilever (E4-1, E4-2, E4-3, E4-4, E4-5, E4-6, E4-7)



Once the structure is positioned on the layout, clip the Registration Arms / Catenary Wire Supports onto the side of the Mast. A small spot of glue may be required to hold them in place.



## Assembly of SET E6 - 1500vDC I-Beam Masts (E6-1, E6-2, E6-3, E6-5 &amp; E6-6)





## Assembly of SET E6-4 - 1500vDC I-Beam Viaduct Masts E6-4)

Masts are a push-fit into the I-Beam, although a little glue will help keep the structure sturdy

Fit the magnets to the Bases and Masts as per the respective section of this guide

Note, for the Viaduct E6-4 Masts and Bases the Magnets sit vertical as shown (not flat)

Once the magnets are fitted to the Bases, these can be glued to the side of your Viaduct

Fit the magnets to the Registration Arms and Catenary Wire Supports as per the respective section of this guide

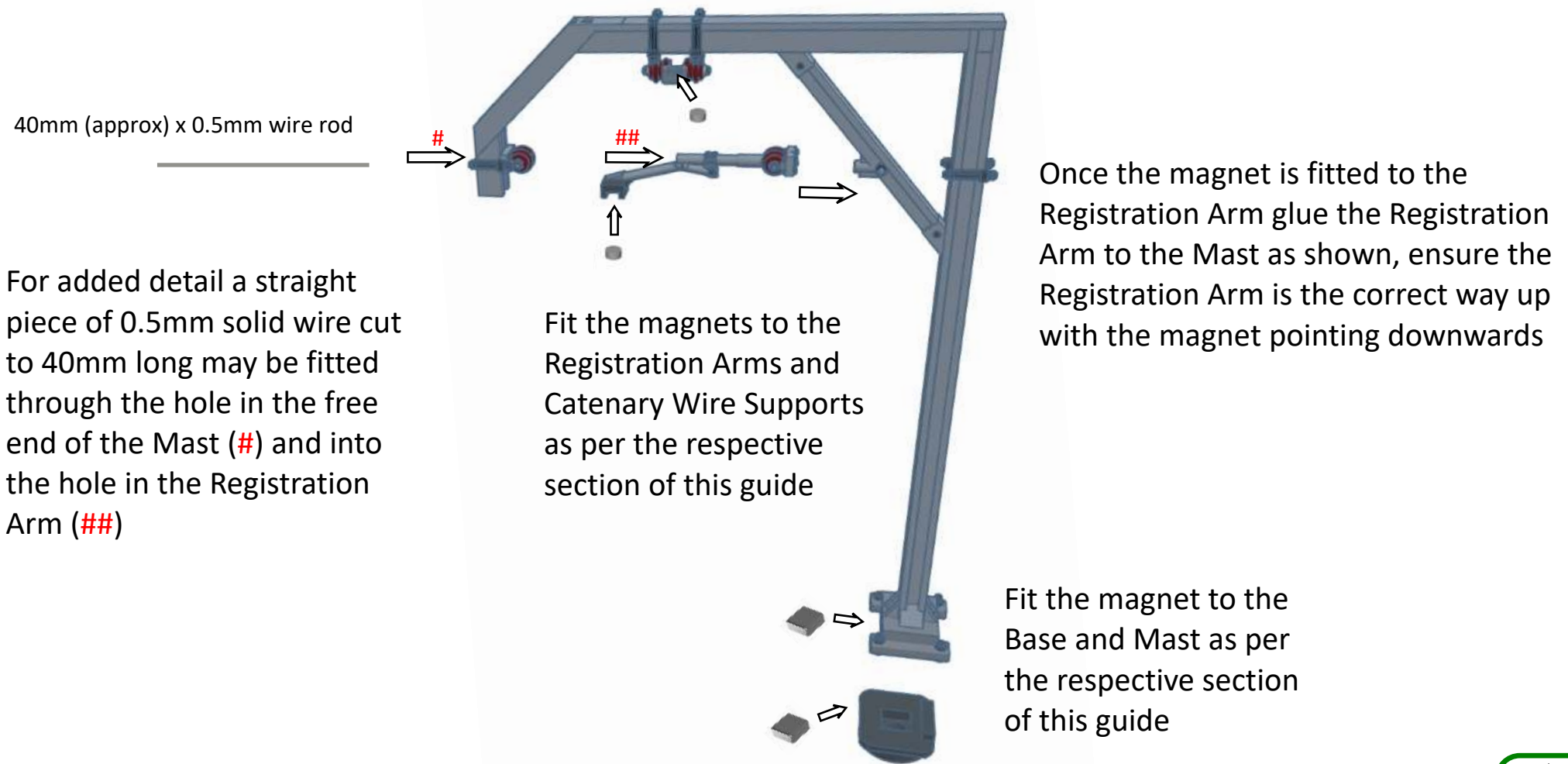
Slide the Registration Arms and Catenary Wire Supports onto the I-Beam before assembling the structure

Once the structure is positioned on the layout, slide the Registration Arms and Catenary Wire Supports to the correct location along the I-Beam, then apply a small spot of glue to hold in place.

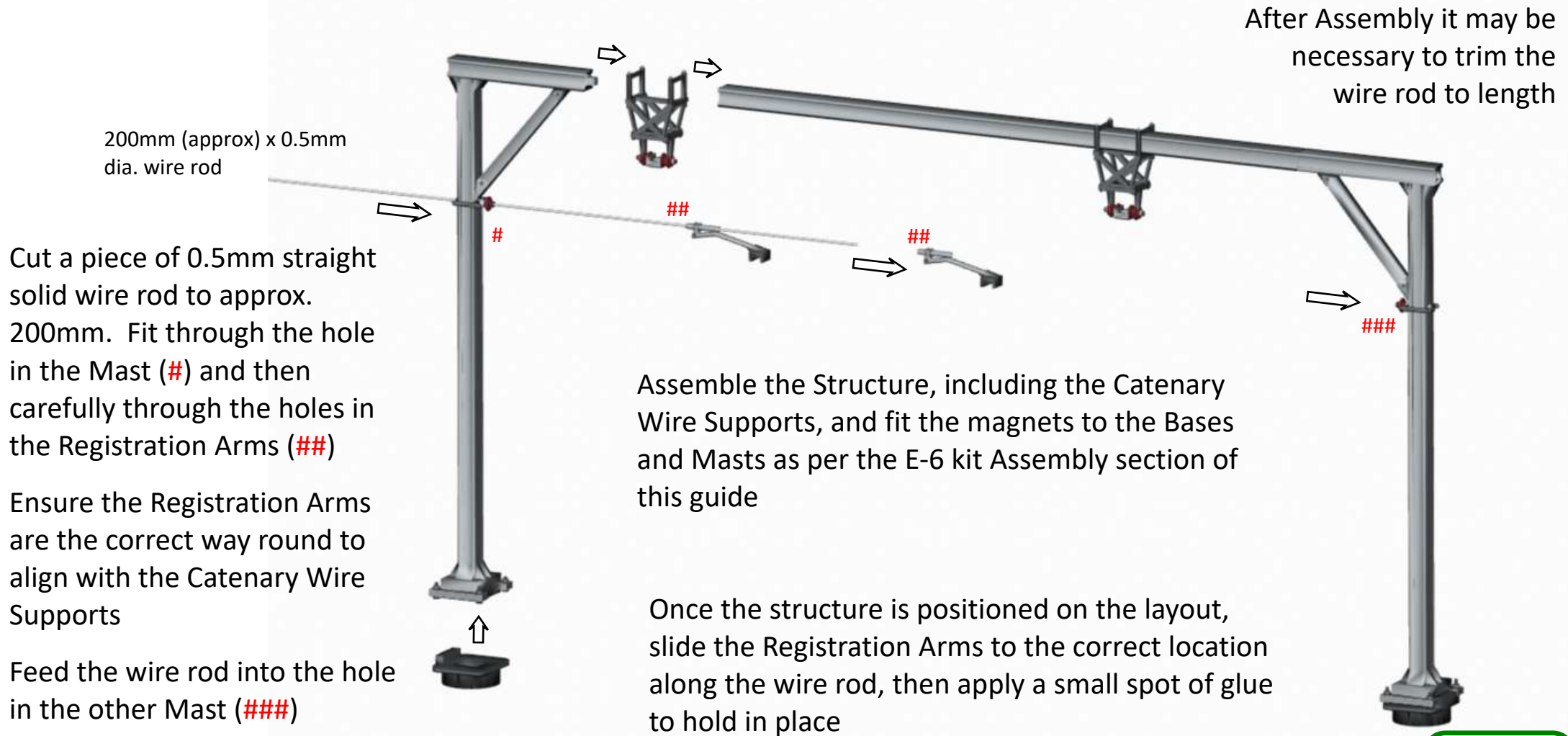
Ensure the parts are fitted such that the magnet cups in the Catenary Wire Supports \*\* are directly above the magnet cups in the Registration Arms \*



## Assembly of SET E6-7 / E6-8 - 1500vDC I-Beam Single Track Cantilever Masts



## Assembly of SET E6-9 - 1500vDC I-Beam Mast kit for Wire Mounted Reg. Arms

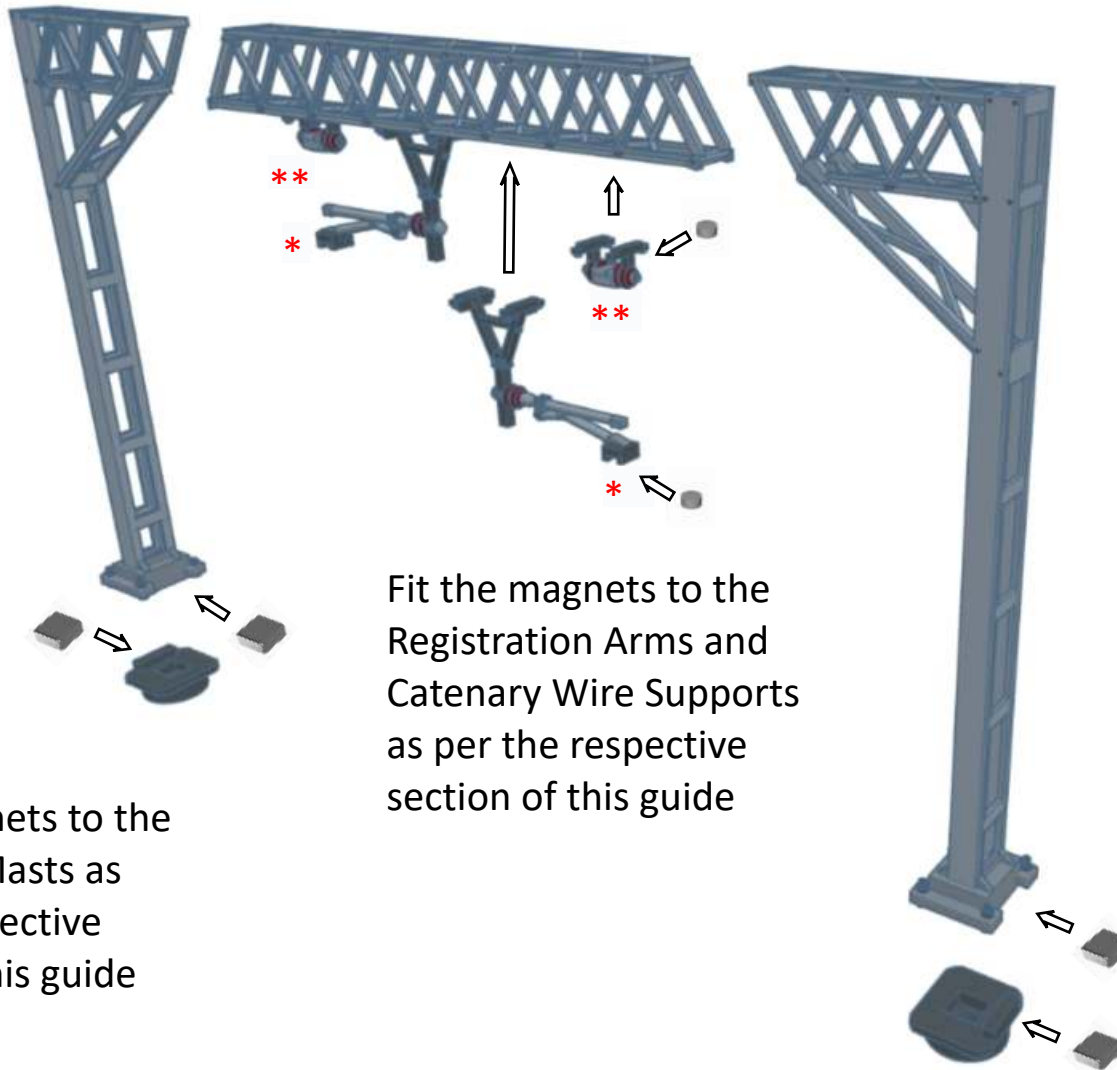
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## Assembly of SET E7 - 1500vDC Lattice Type Masts (E7-1, E7-2 & E7-3)

The Span has small lugs that slot into each Mast, a little glue is required to keep the structure sturdy.

Ensure the Masts are vertical and the top of the Span aligns with the top of the Masts before the glue sets

Fit the magnets to the Bases and Masts as per the respective section of this guide



Fit the magnets to the Registration Arms and Catenary Wire Supports as per the respective section of this guide

Once the structure is positioned on the layout, attach the Registration Arms and the Catenary Wire Supports to the underside of the Span at the correct location along the Span with a small spot of glue to hold them in place

Ensure the parts are fitted such that the magnet cups in the Catenary Wire Supports \*\* are directly above the magnet cups in the Registration Arms \*





## Assembly of SET E7-4 - 1500vDC Lattice Type Masts for Wire Mounted Reg. Arms

150mm (approx) x 0.5mm  
dia. wire rod

Cut a piece of 0.5mm straight  
solid wire rod to approx.  
150mm. Fit through the hole  
in the Mast (#) and then  
carefully through the holes in  
the Registration Arms (##)

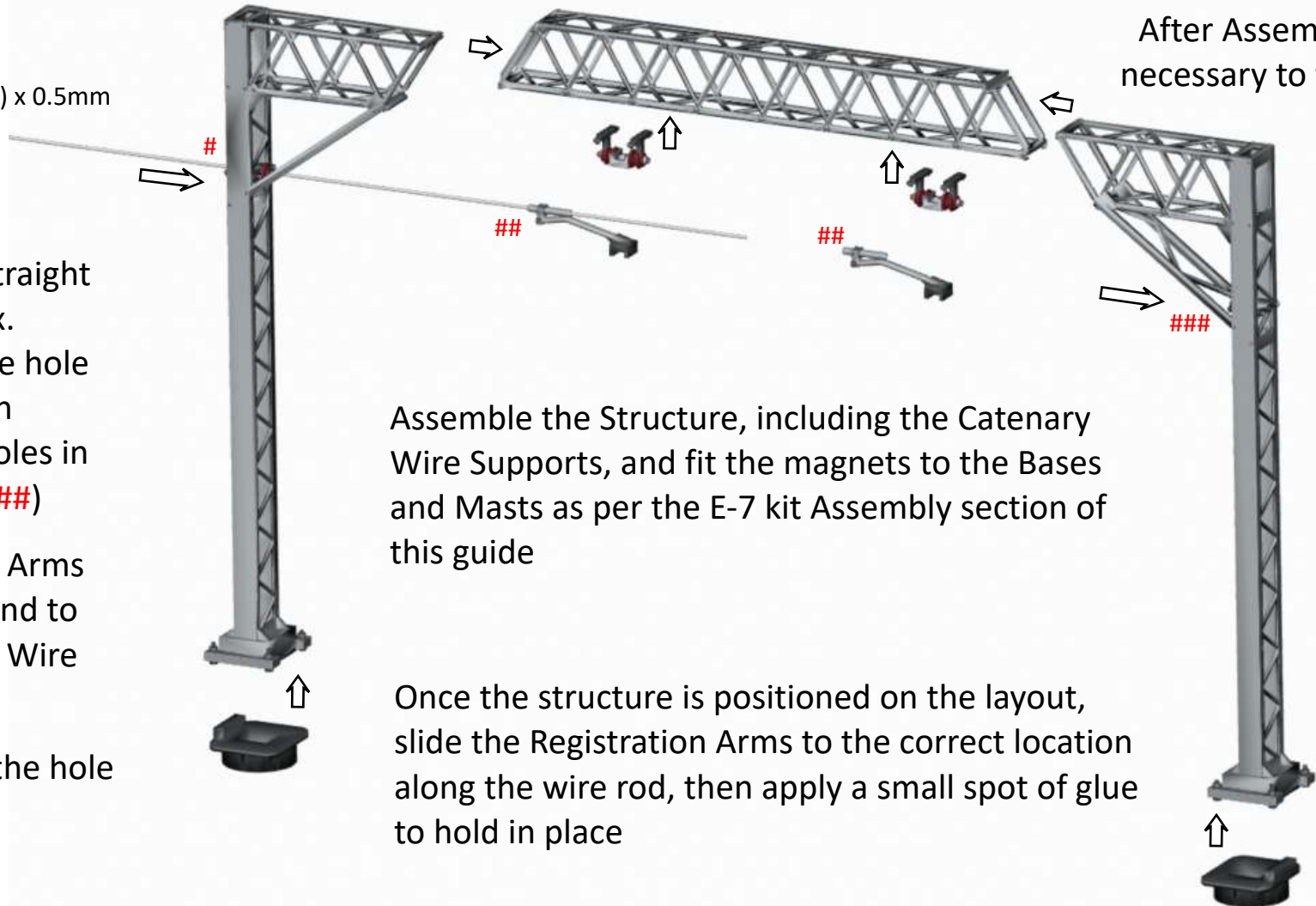
Ensure the Registration Arms  
are the correct way round to  
align with the Catenary Wire  
Supports

Feed the wire rod into the hole  
in the other Mast (###)

After Assembly it may be  
necessary to trim the wire  
rod to length

Assemble the Structure, including the Catenary  
Wire Supports, and fit the magnets to the Bases  
and Masts as per the E-7 kit Assembly section of  
this guide

Once the structure is positioned on the layout,  
slide the Registration Arms to the correct location  
along the wire rod, then apply a small spot of glue  
to hold in place



## Assembly of SET E8 - 1500vDC A-Frame Masts (E8-1, E8-2, E8-3)

The Span slots into each Mast, a little glue is required to keep the structure sturdy.

Ensure the Masts are vertical before the glue sets

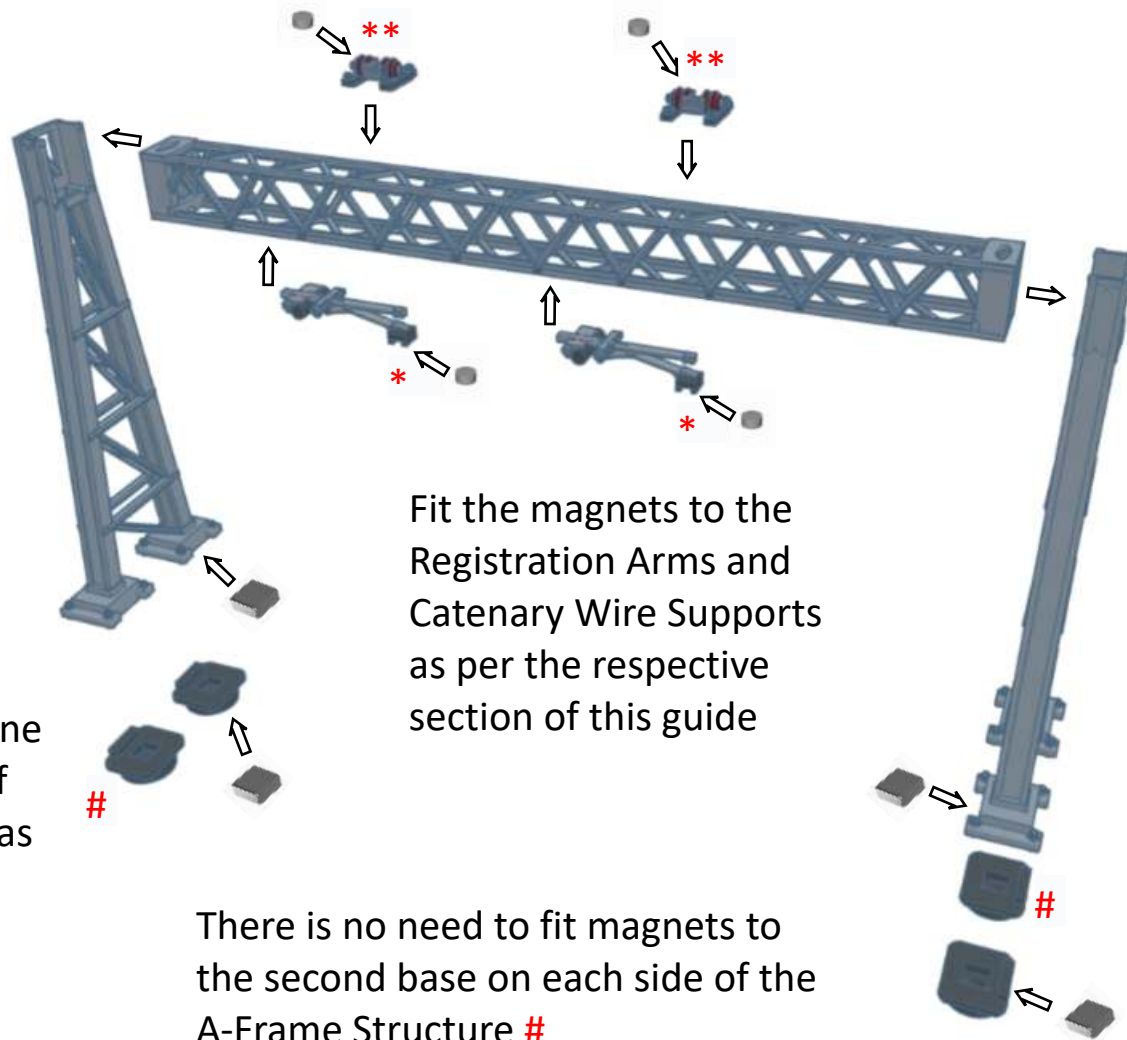
Fit the magnets to one Base and one side of each A-Frame Mast as per the respective section of this guide

There is no need to fit magnets to the second base on each side of the A-Frame Structure #

Fit the magnets to the Registration Arms and Catenary Wire Supports as per the respective section of this guide

Once the structure is positioned on the layout, attach the Registration Arms below the Span, and the Catenary Wire Supports above the Span at the correct location along the Span with a small spot of glue to hold them in place

Ensure the parts are fitted such that the magnet cups in the Catenary Wire Supports \*\* are directly above the magnet cups in the Registration Arms \*



## Assembly of SET E13 - Southern Region 750v DC Single Cantilever Masts (E13-1)

Assemble the three parts of the mast and arm as shown. Ensure the bottom of the mast is at right angles to the arm.

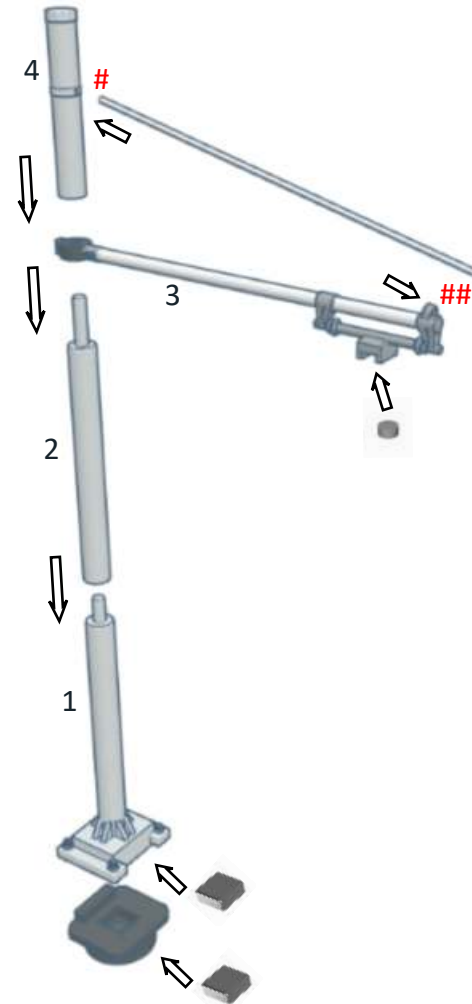
Secure parts together with a very small spot of glue.

Cut a piece of 0.5mm straight solid wire rod to exactly 57mm.

Fit one end into the hole in the Mast (#) and then carefully clip the other end into the hole in the top/end of the Registration Arm (##)

Ensure the Mast and Arm are at right angles and secure the wire rod with a very small spot of glue at each end.

Fit the magnet to the Base and Mast as per the respective section of this guide



Fit the magnet to the Registration Arm as per the respective section of this guide

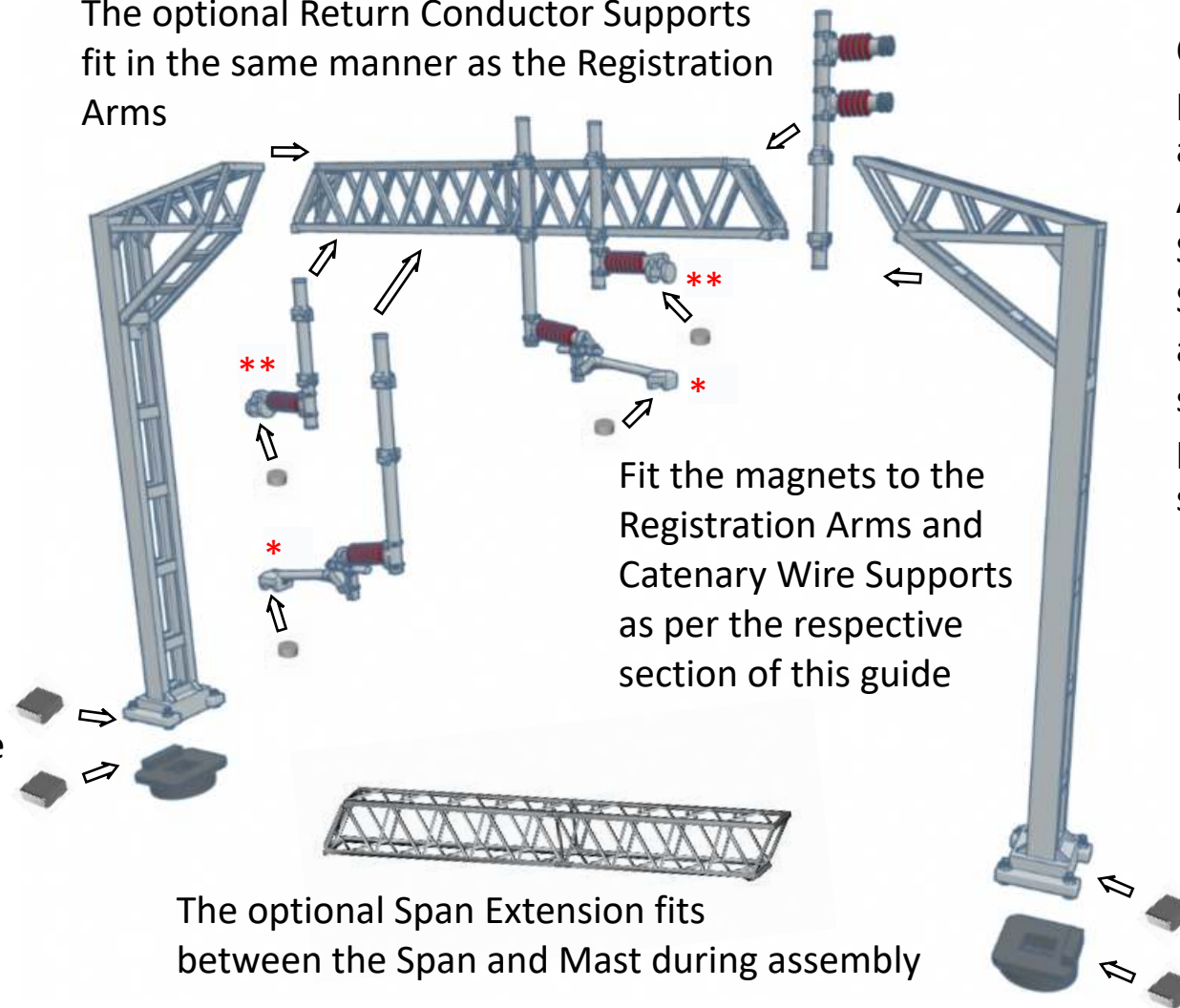


## Assembly of SET E16 Type A - Slope Tope Mast (E16-1, E16-2, E16-6, E16-7 &amp; E16-8)

The Span has small lugs that slot into each Mast, a little glue is required to keep the structure sturdy. Ensure the Masts are vertical and the top of the Span aligns with the top of the Masts before the glue sets

The optional Return Conductor Supports fit in the same manner as the Registration Arms

Fit the magnets to the Bases and Masts as per the respective section of this guide



Once the structure is positioned on the layout, attach the Registration Arms and the Catenary Wire Supports to the side of the Span at the correct location along the Span with a small spot of glue to hold them in place on the side of the span

Ensure the parts are fitted such that the magnet cups in the Catenary Wire Supports \*\* are directly above the magnet cups in the Registration Arms \*



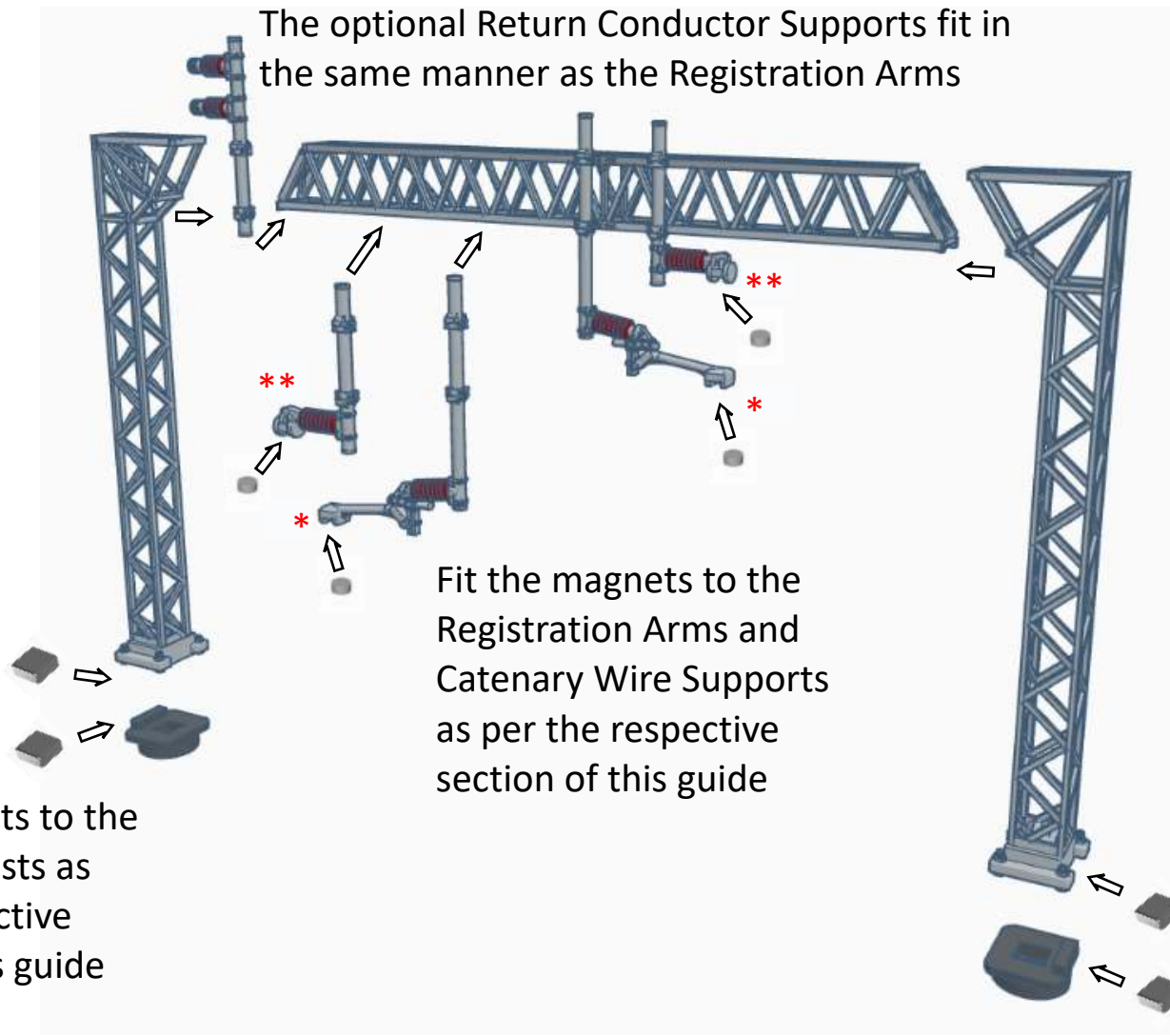


## Assembly of SET E16 Type B - Lattice Masts (E16-11, E16-12, E16-6, E16-7, E16-8)

The Span has small lugs that slot into each Mast, a little glue is required to keep the structure sturdy.

Ensure the Masts are vertical and the top of the Span aligns with the top of the Masts before the glue sets

Fit the magnets to the Bases and Masts as per the respective section of this guide



Once the structure is positioned on the layout, attach the Registration Arms and the Catenary Wire Supports to the side of the Span at the correct location along the Span with a small spot of glue to hold them in place on the side of the span

Ensure the parts are fitted such that the magnet cups in the Catenary Wire Supports \*\* are directly above the magnet cups in the Registration Arms \*



## Assembly of SET E16 Type C - Tall Mast Structure (E16-23, E16-24, E16-26, E6-8)

The Span has small lugs that slot into each Mast, a little glue is required to keep the structure sturdy.

Ensure the Masts are vertical and the top of the Span aligns with the top of the Masts before the glue sets

Fit the magnets to the Bases and Masts as per the respective section of this guide

The optional Return Conductor Supports fit to the side of the span

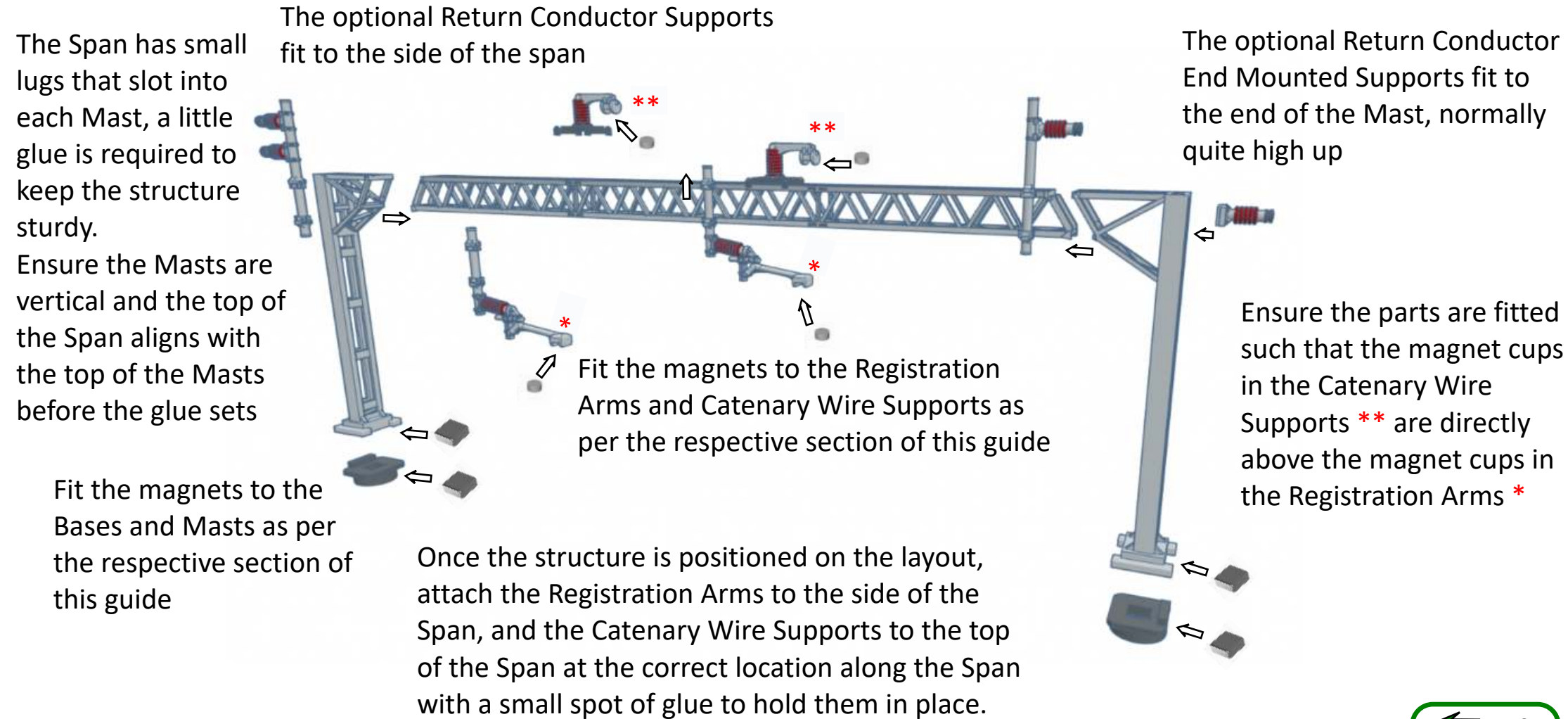
The optional Return Conductor Side Mounted Supports fit to the side of the Mast, normally quite

Once the structure is positioned on the layout, attach the Registration Arms and the Catenary Wire Supports to the underside of the Span at the correct location along the Span with a small spot of glue to hold them in place on the underside of the span

Fit the magnets to the Registration Arms and Catenary Wire Supports as per the respective section of this guide



## Assembly of SET E16 Type D - Low Structure (E16-31, E16-33, E16-34, E16-36, E16-37)



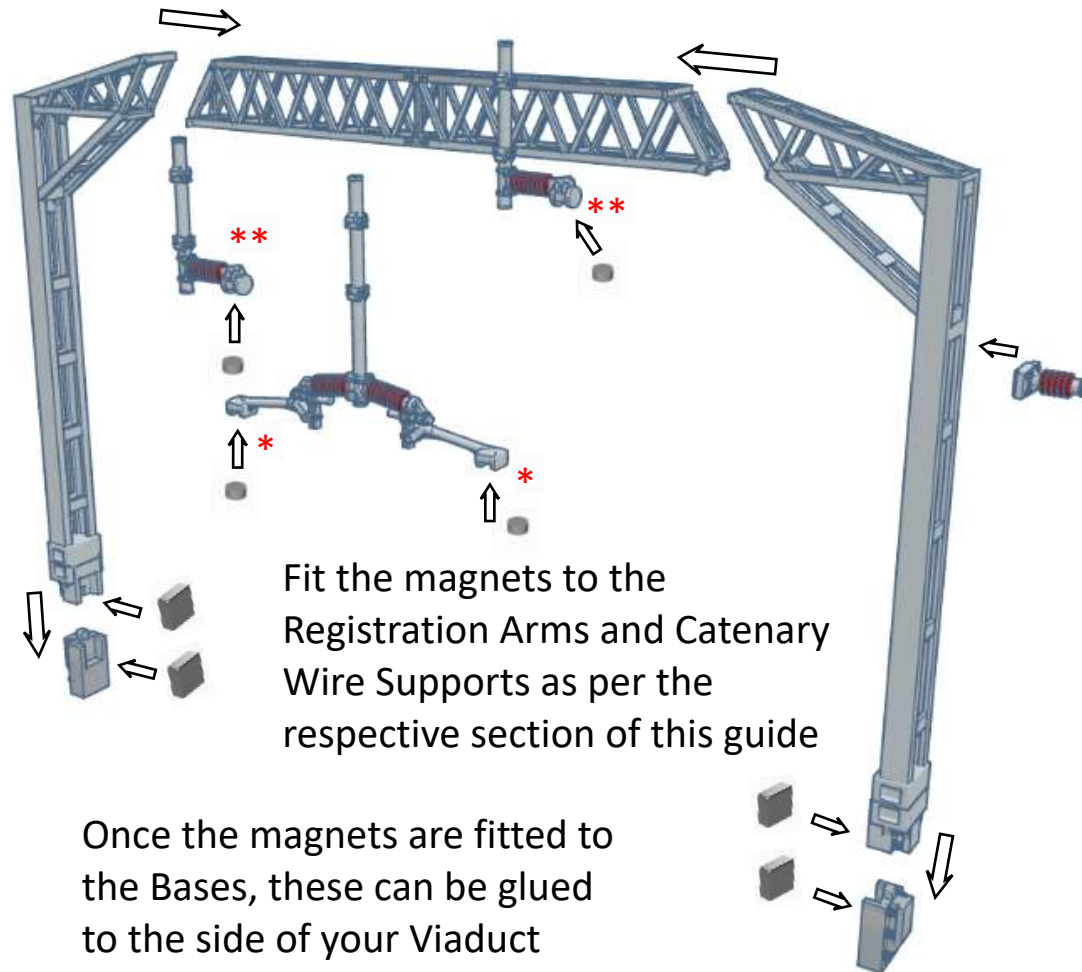


## Assembly of SET E16 Type E - Viaduct Structure (E16-51, E16-52, E16-56, E16-8)

The Span has small lugs that slot into each Mast, a little glue is required to keep the structure sturdy. Ensure the Masts are vertical and the top of the Span aligns with the top of the Masts before the glue sets

Fit the magnets to the Bases and Masts as per the respective section of this guide

Note, for the Viaduct Masts and Bases the Magnets sit vertical as shown (not flat)



The optional Return Conductor Side Mounted Supports fit to the side of the Mast, normally quite

Fit the magnets to the Registration Arms and Catenary Wire Supports as per the respective section of this guide

Ensure the parts are fitted such that the magnet cups in the Catenary Wire Supports \*\* are directly above the magnet cups in the Registration Arms \*

Once the magnets are fitted to the Bases, these can be glued to the side of your Viaduct





## Assembly of SET E16 Type F - Anchor Portal (E16-61, E16-62, E16-66, E16-67)

The two Span sections slot together then into each Mast, a little glue is required to keep the structure sturdy.

Ensure the 'V' frame at the Span ends matches the Mast 'V' frame and ensure the Masts are vertical before the glue sets

Fit the magnets to one Base and one side of each A-Frame Mast as per the respective section of this guide

Optional Span Extension fits between two Span parts during assembly

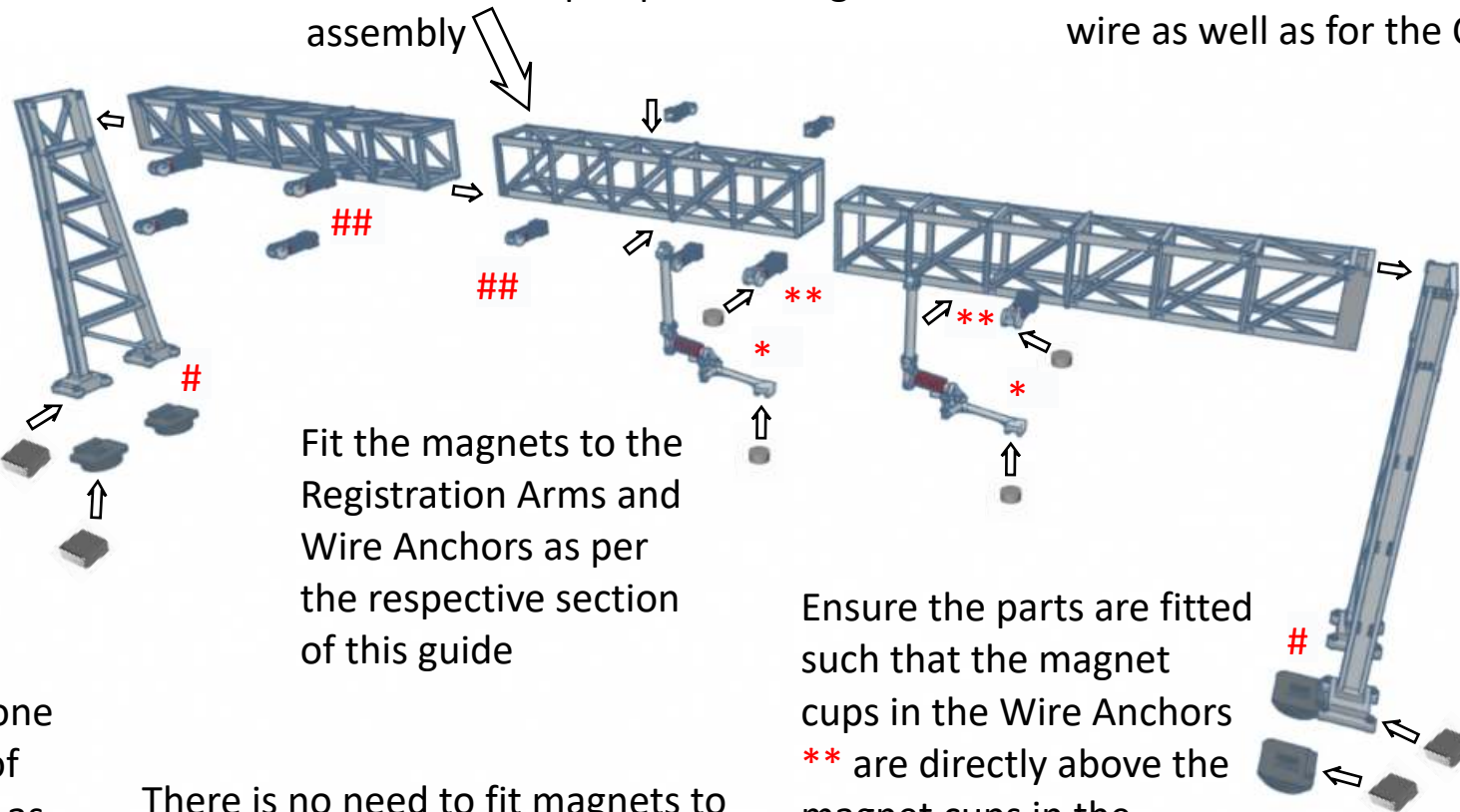
For Line End Structures, Wire Anchors are used in place of the Reg Arms for the contact wire as well as for the Catenary Wire ##

Once the structure is positioned on the layout, attach the Registration Arms to the side of the Span, and the Wire Anchors slot onto the Span at the correct location along the Span with a small spot of glue to hold them in place

Fit the magnets to the Registration Arms and Wire Anchors as per the respective section of this guide

There is no need to fit magnets to the second base on each side of the A-Frame Structure #

Ensure the parts are fitted such that the magnet cups in the Wire Anchors \*\* are directly above the magnet cups in the Registration Arms \*



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## Assembly of SET E16 Type G - I-Beam Structure (E16-71, E16-76, E16-77)

Masts are a push-fit into the I-Beams, although a little glue will help keep the structure sturdy

Fit the magnets to the Bases and Masts as per the respective section of this guide

Fit the magnets to the Registration Arms and Catenary Wire Supports as per the respective section of this guide

The optional Span Extension fits between the Span and Mast during assembly

Once the structure is positioned on the layout, attach the Registration Arms and the Catenary Wire Supports to the underside of the Span at the correct location along the Span with a small spot of glue to hold them in place on the underside of the span

