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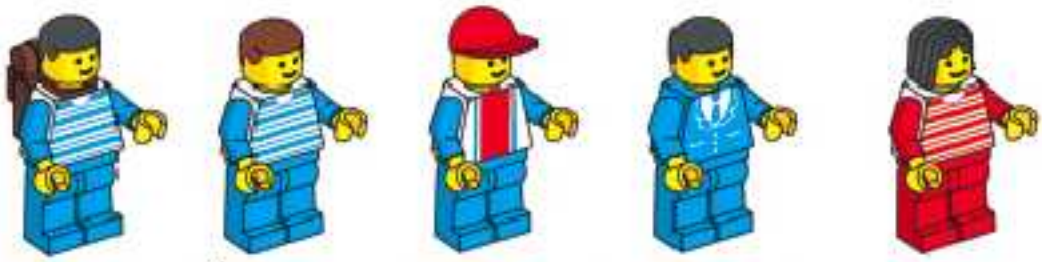

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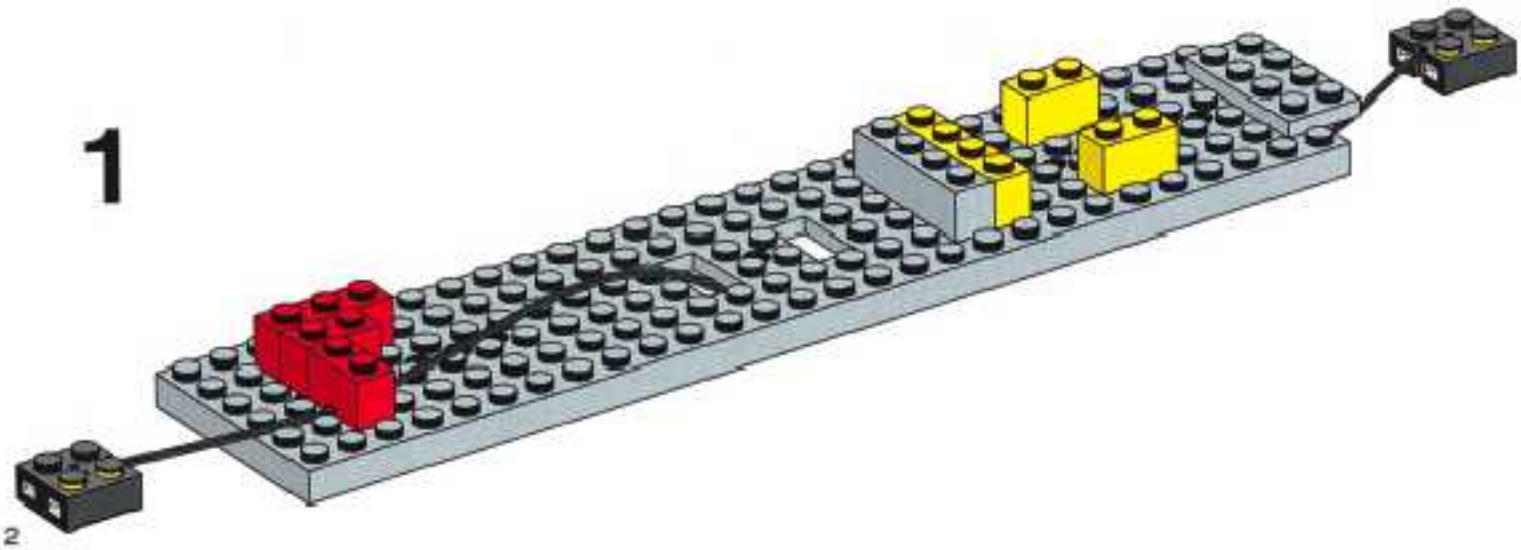

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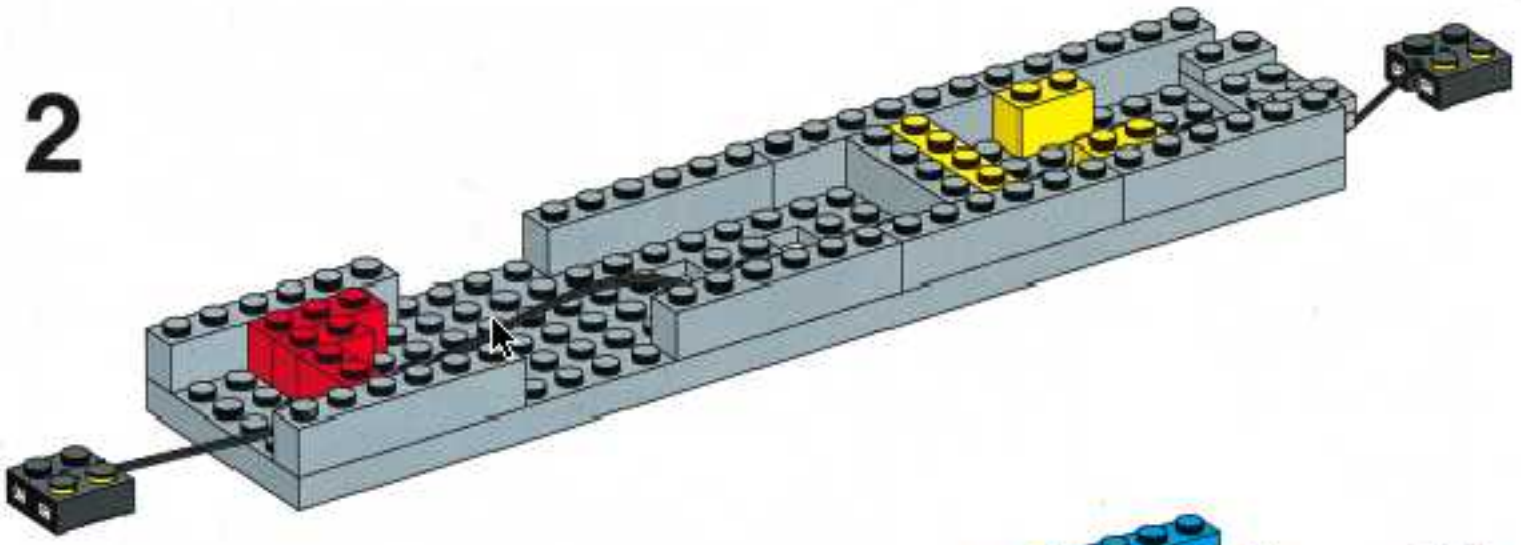

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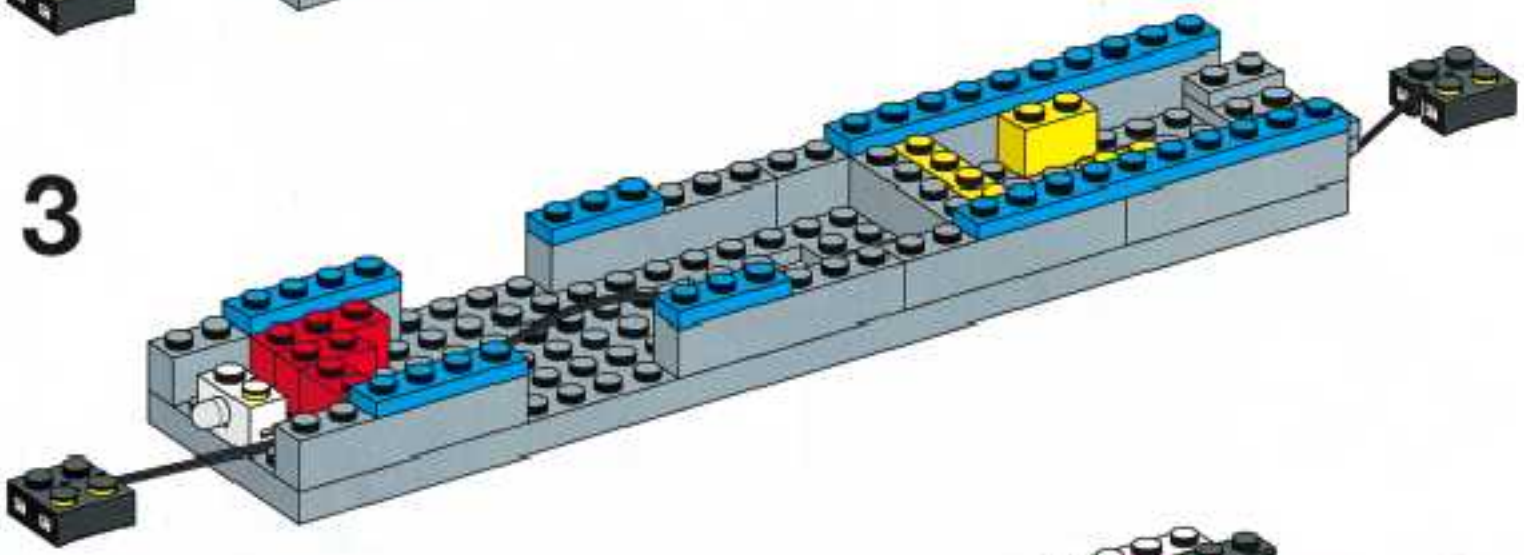

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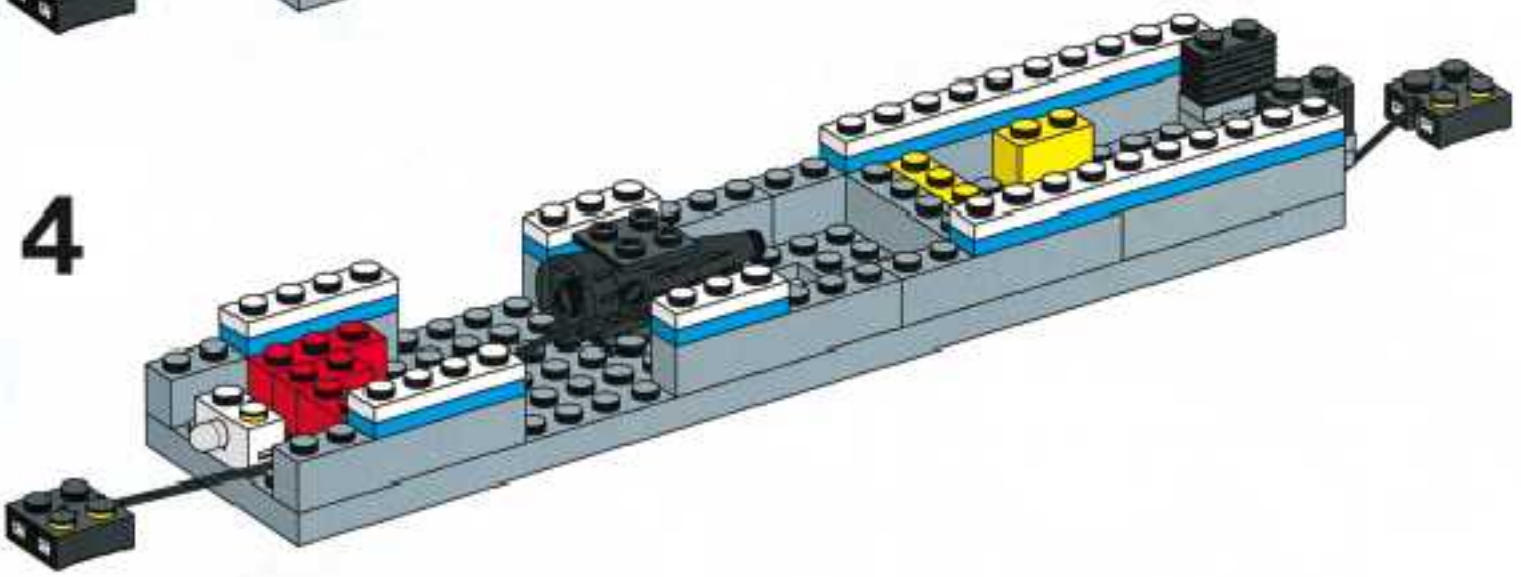

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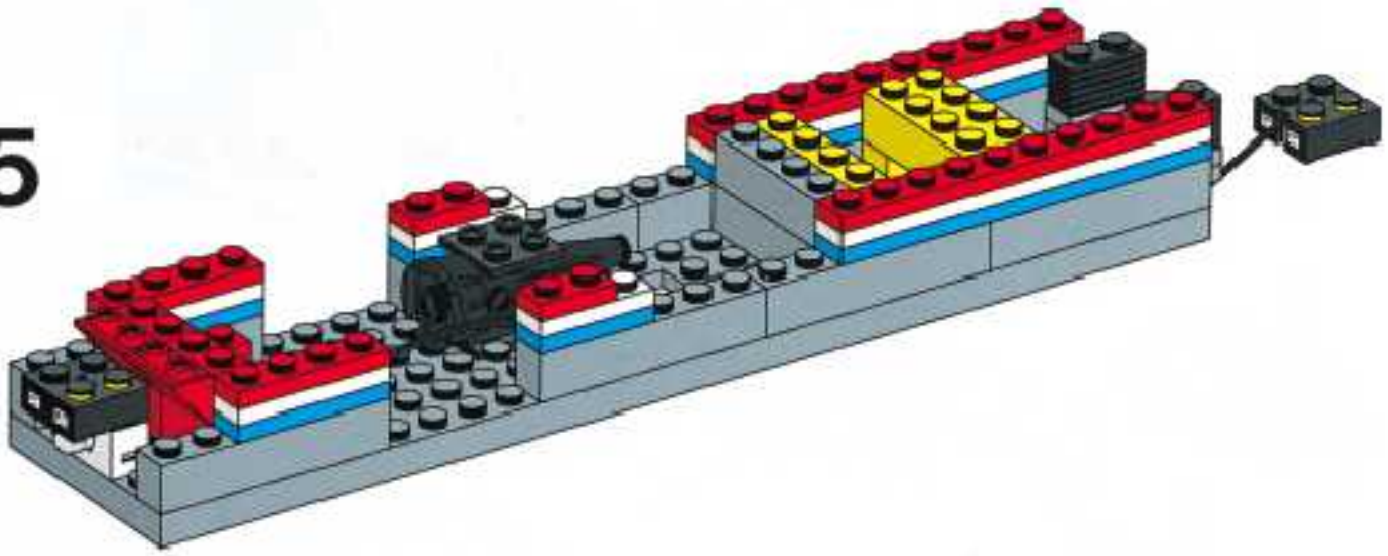

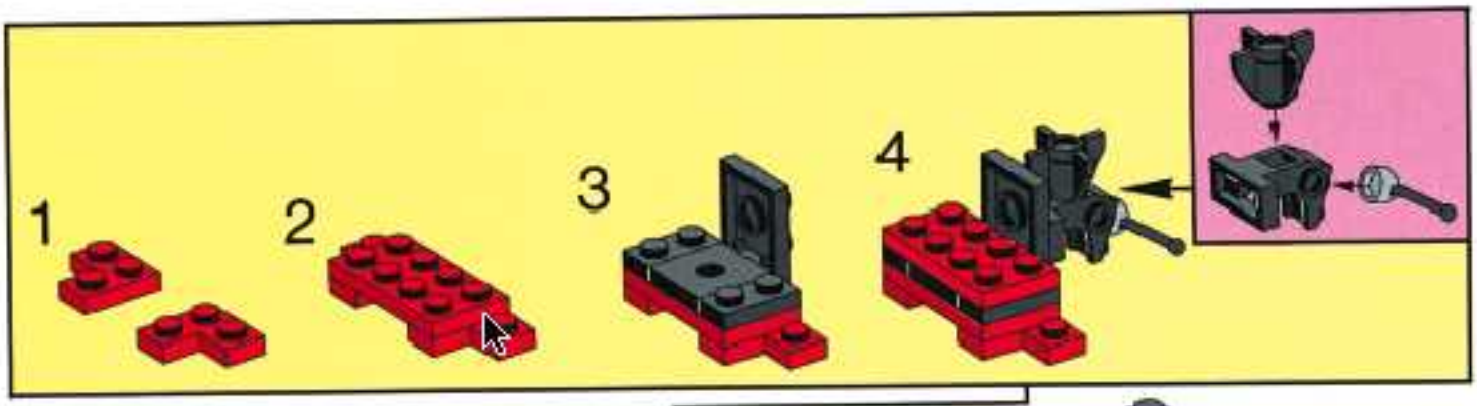

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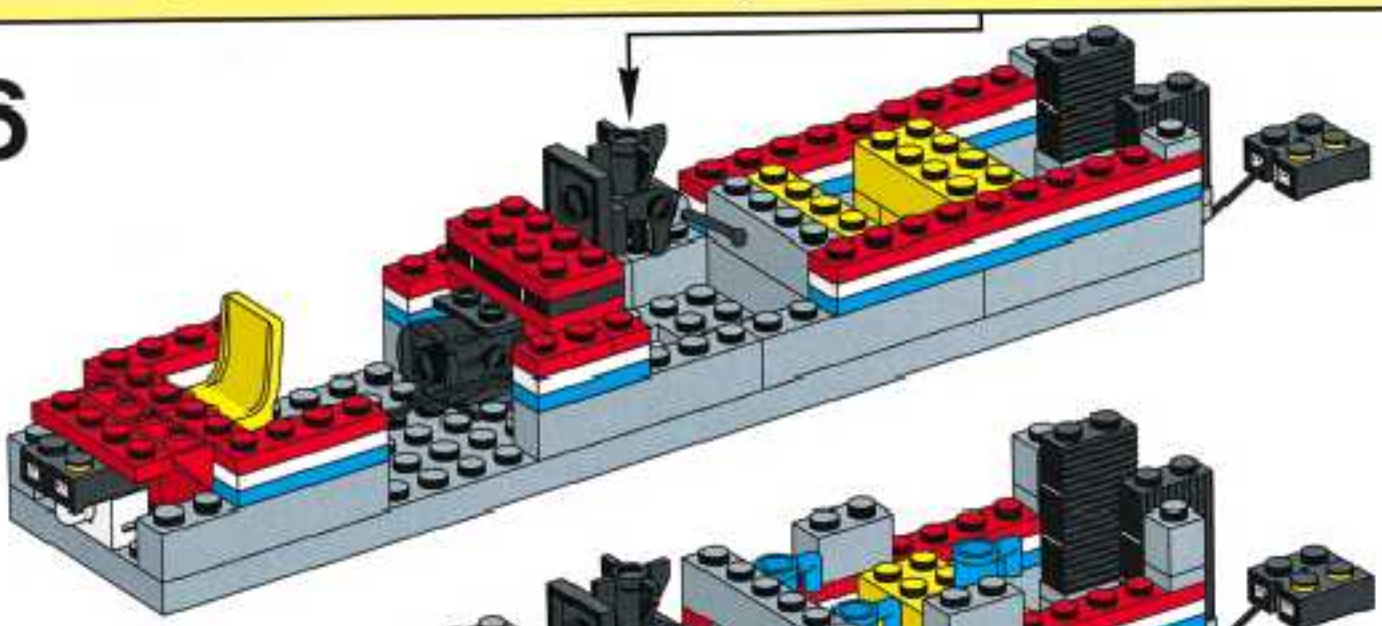

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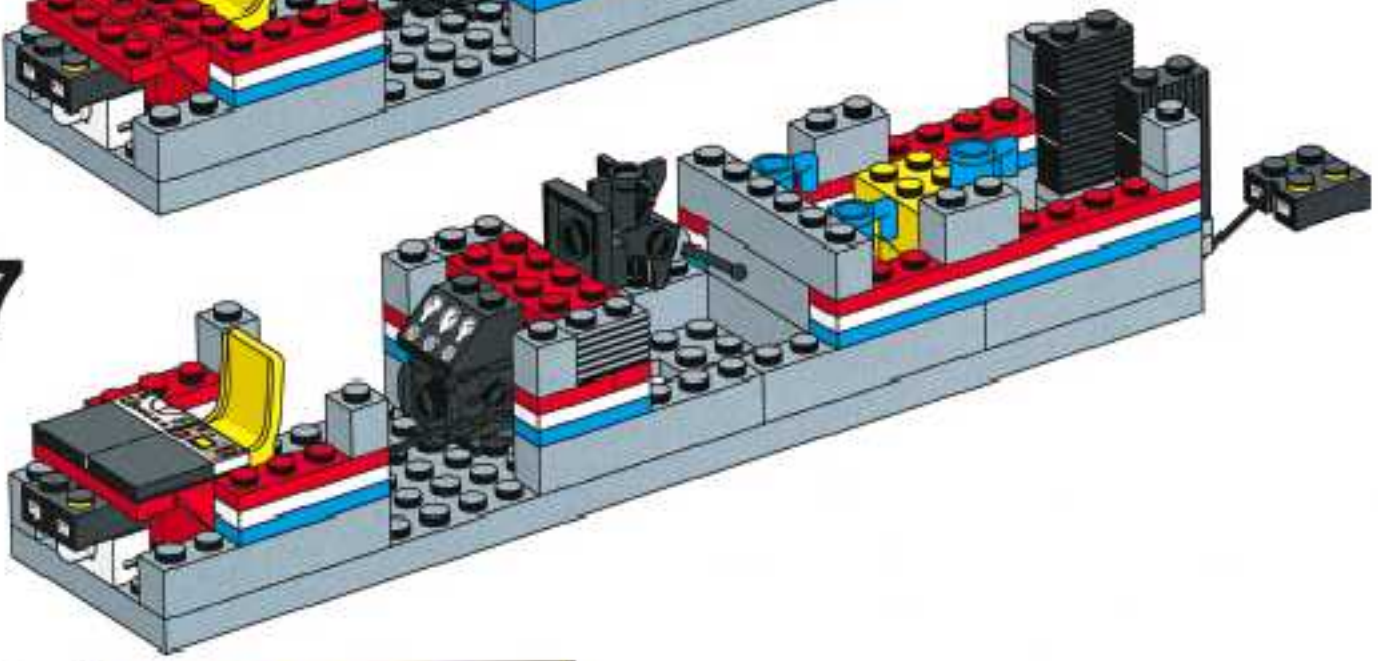

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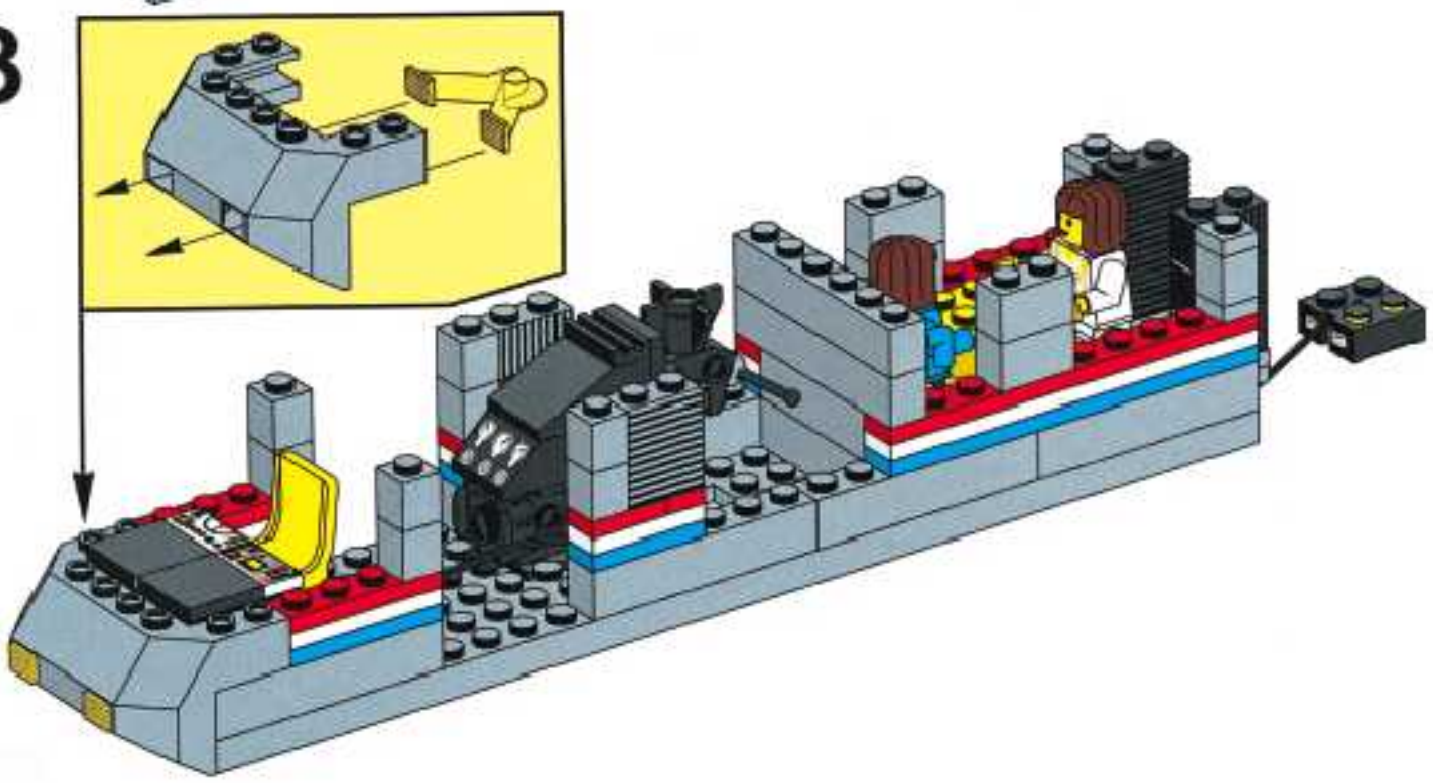

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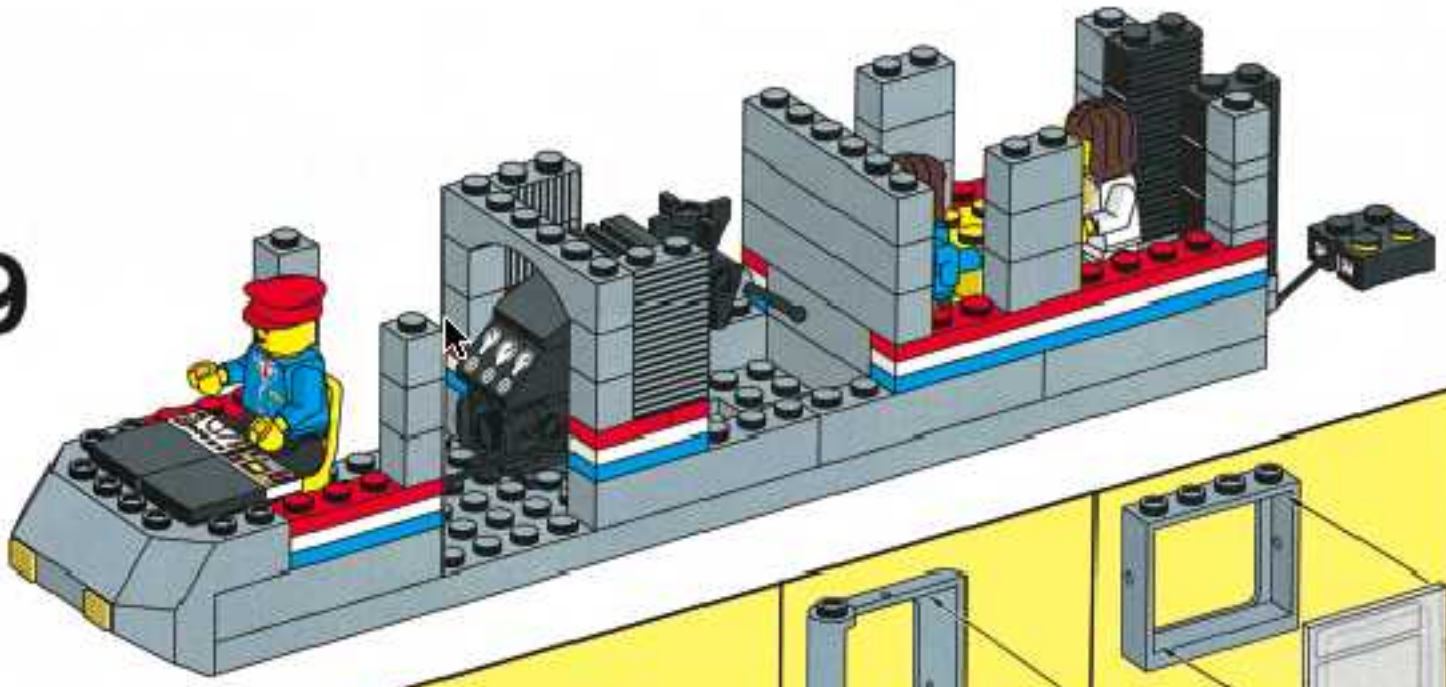

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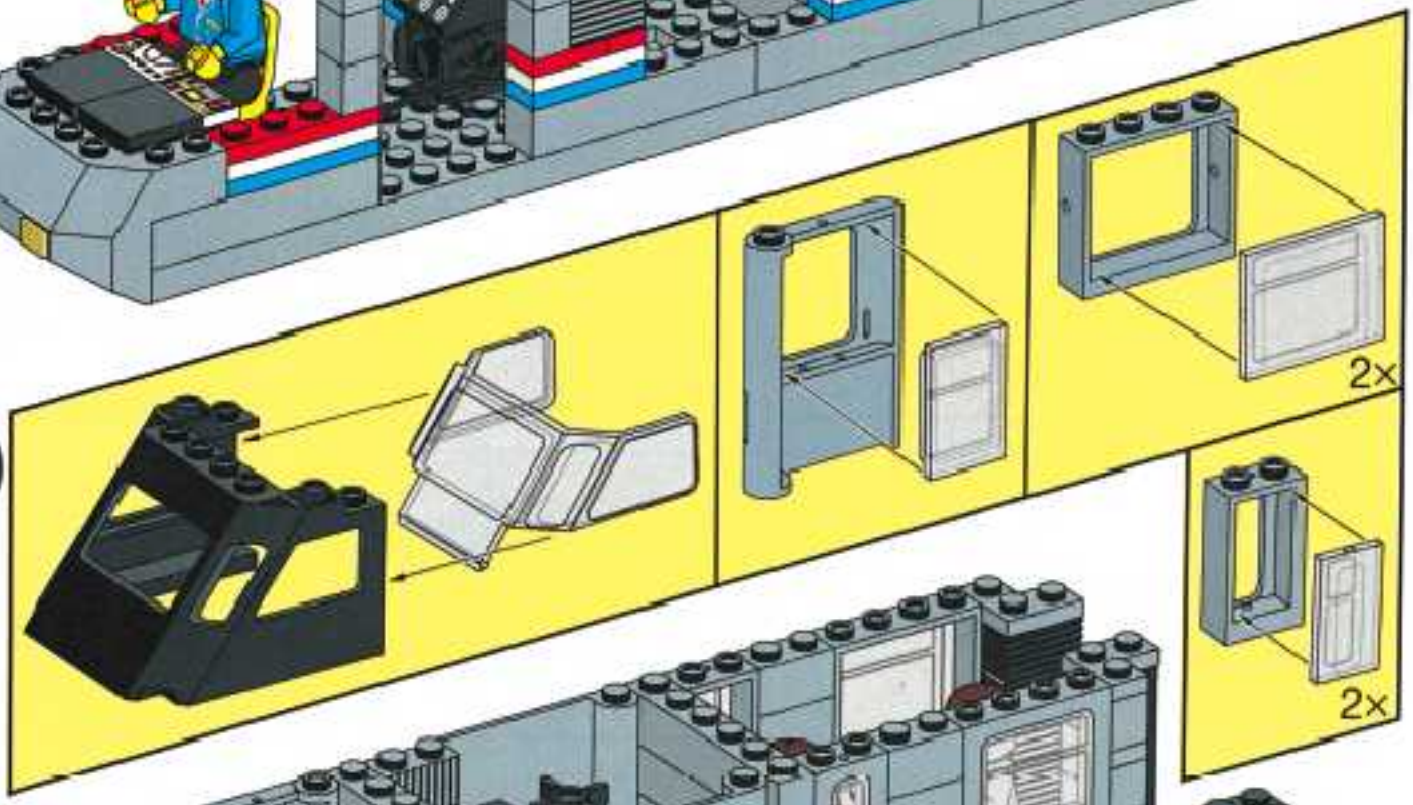

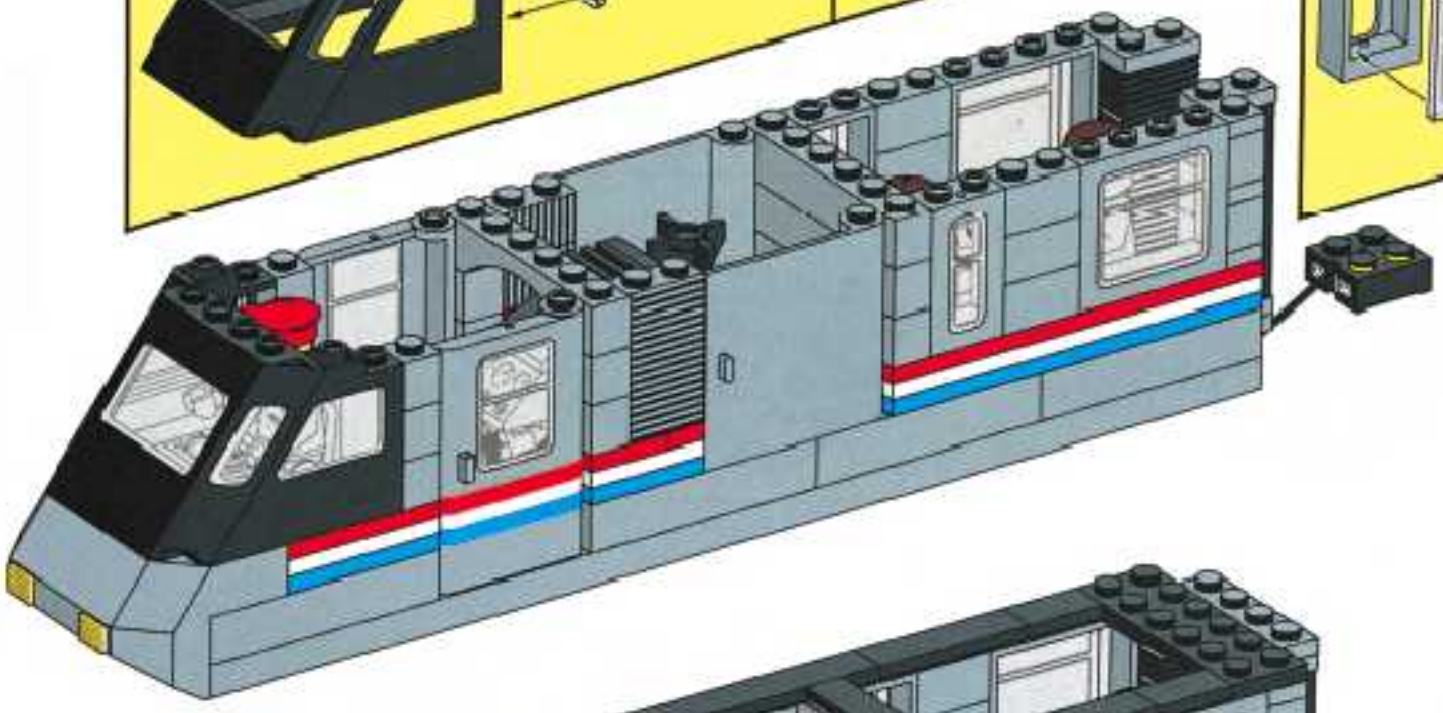

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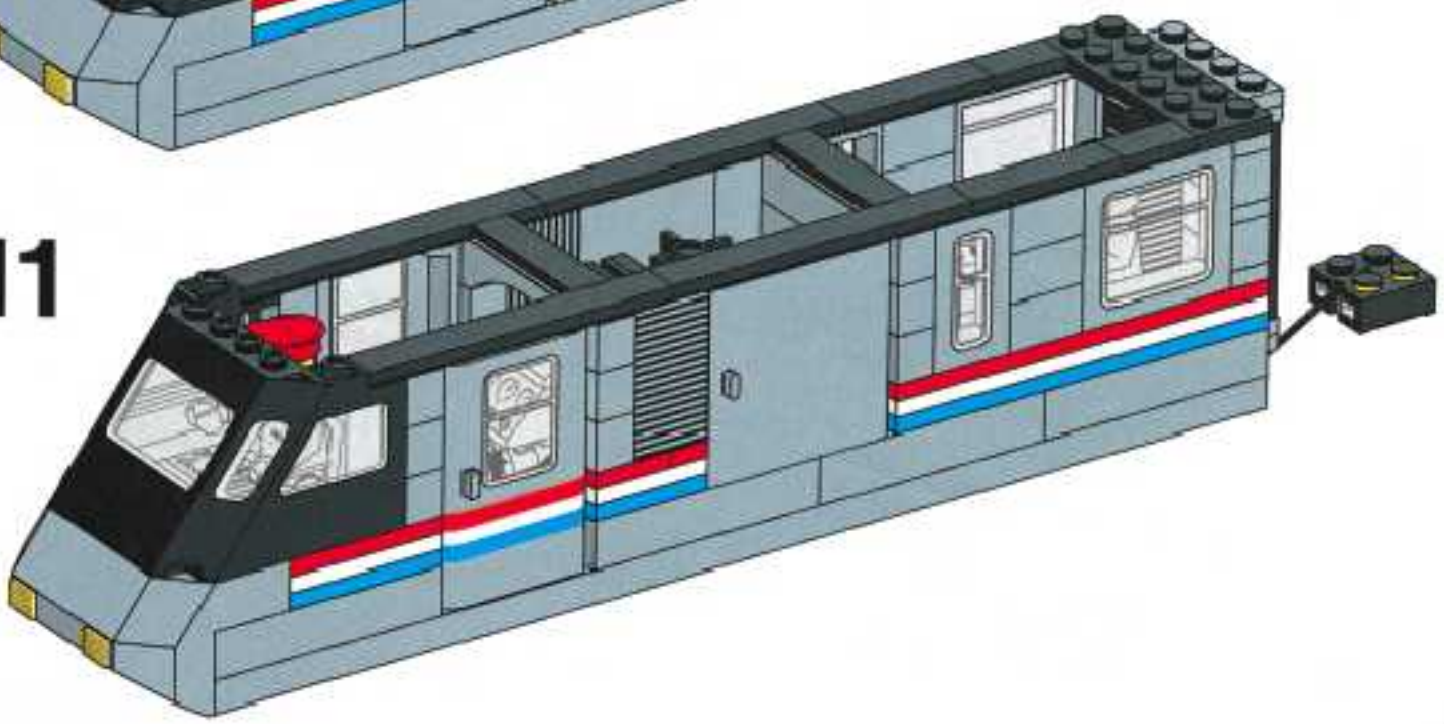

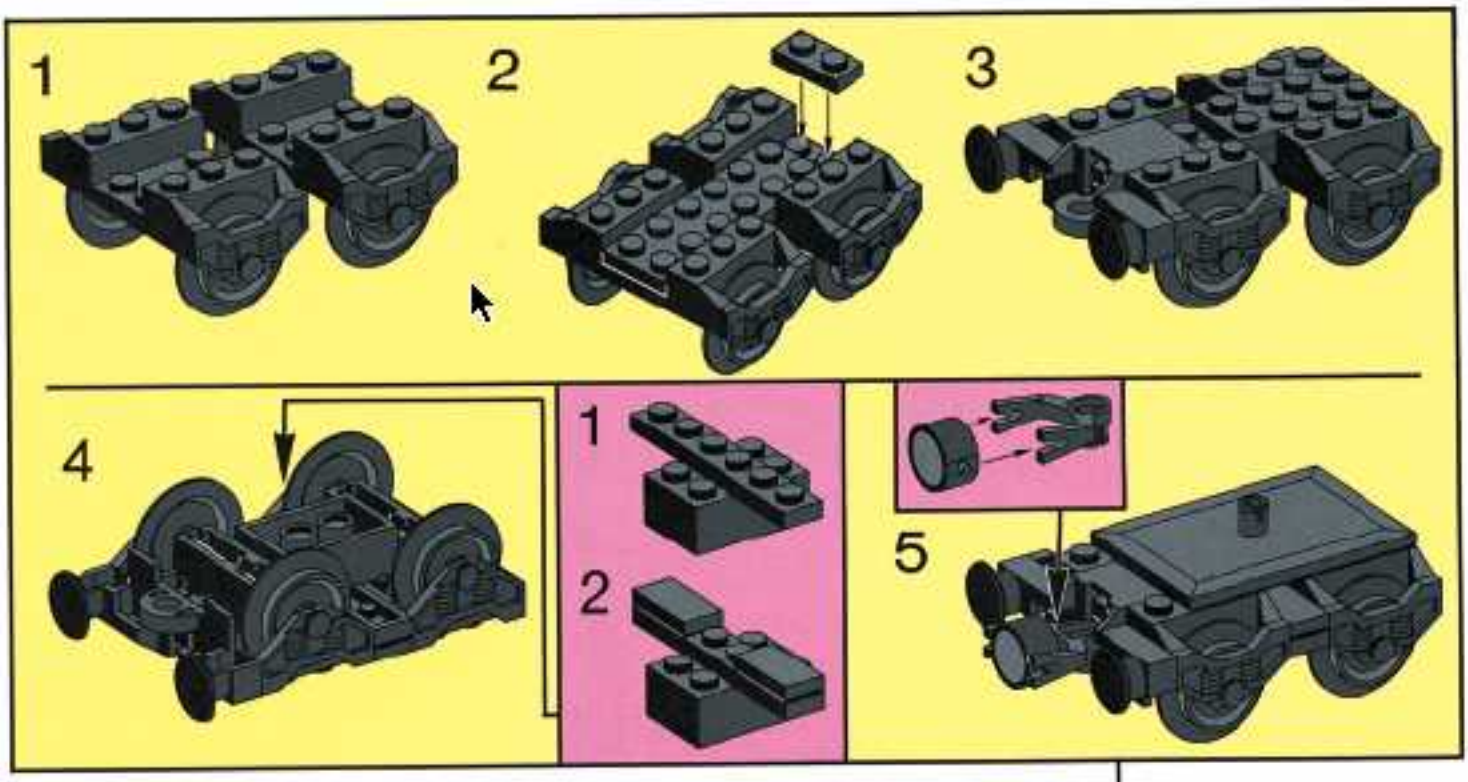

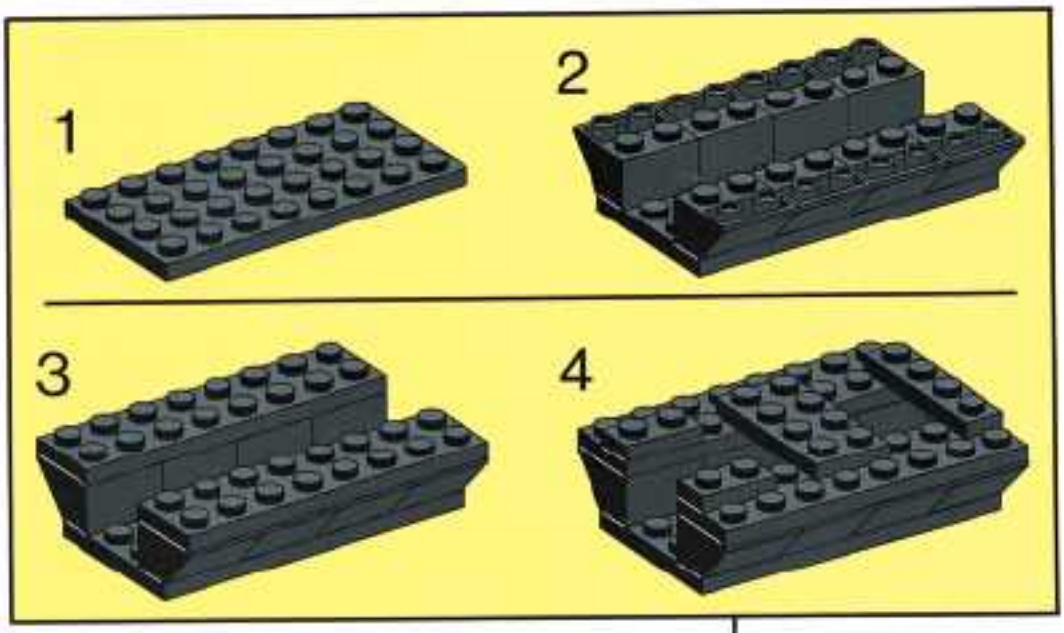

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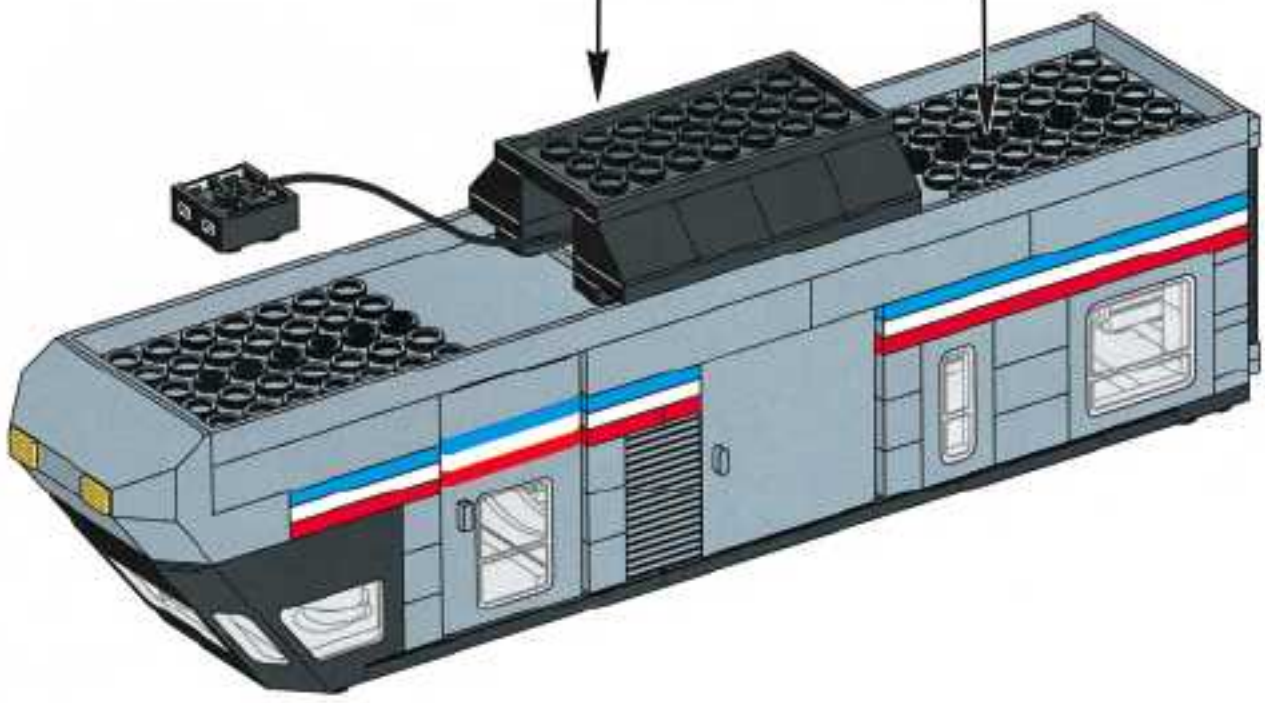

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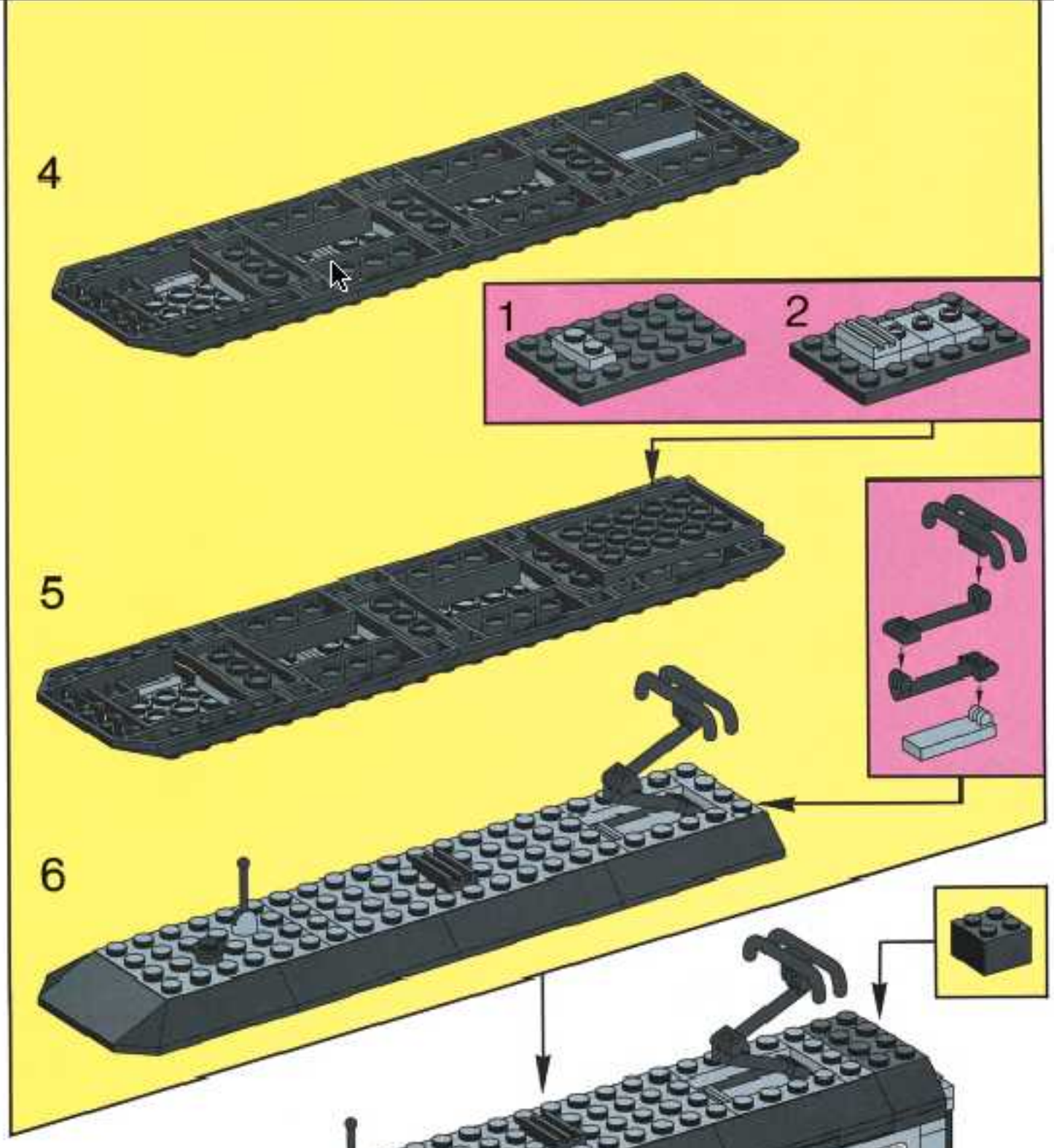
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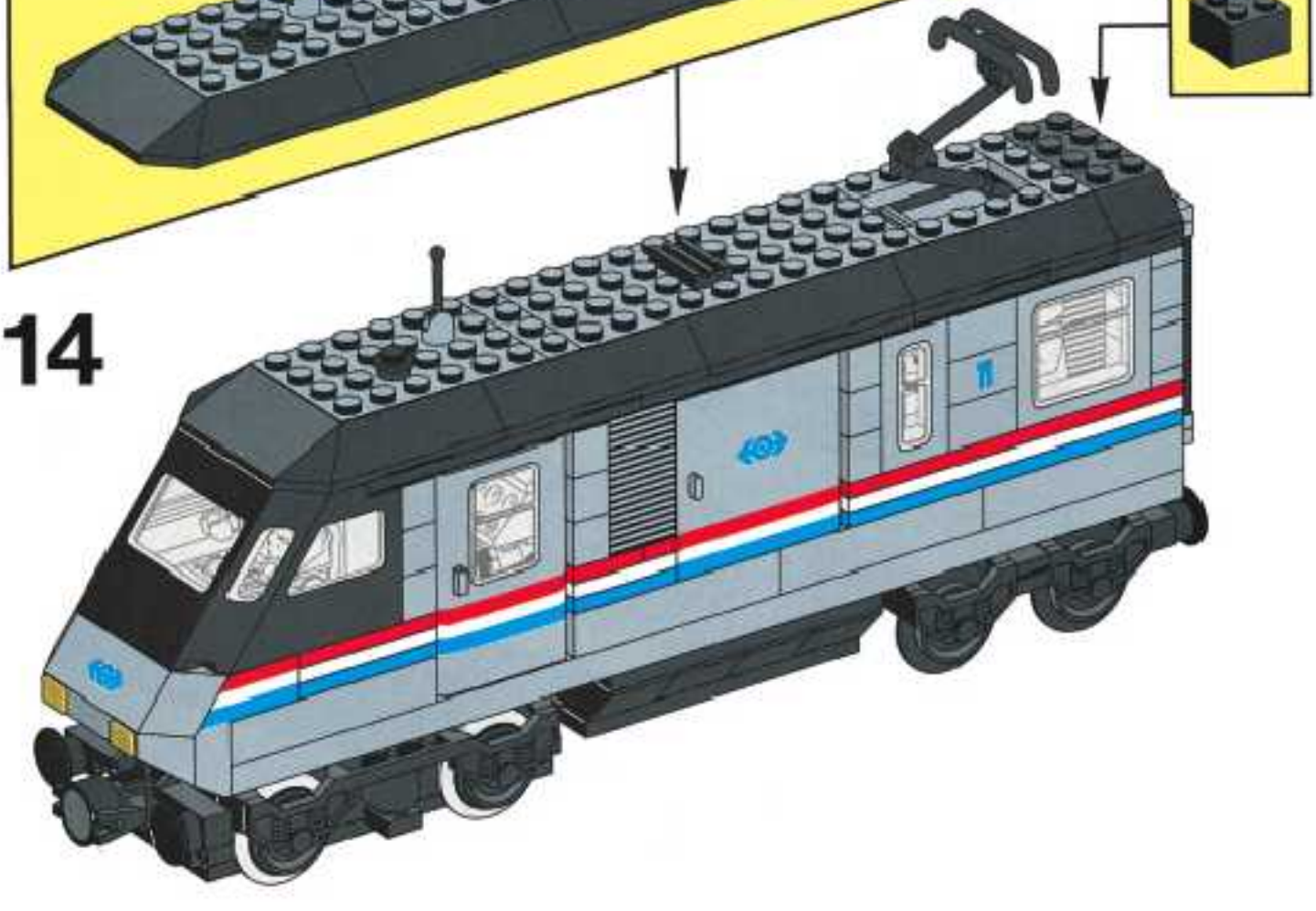
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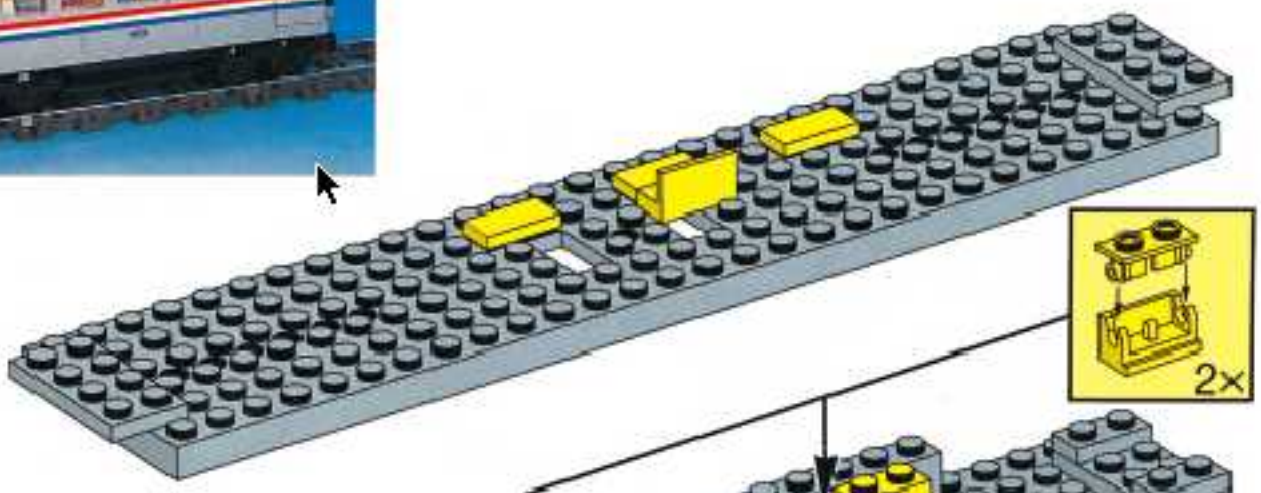

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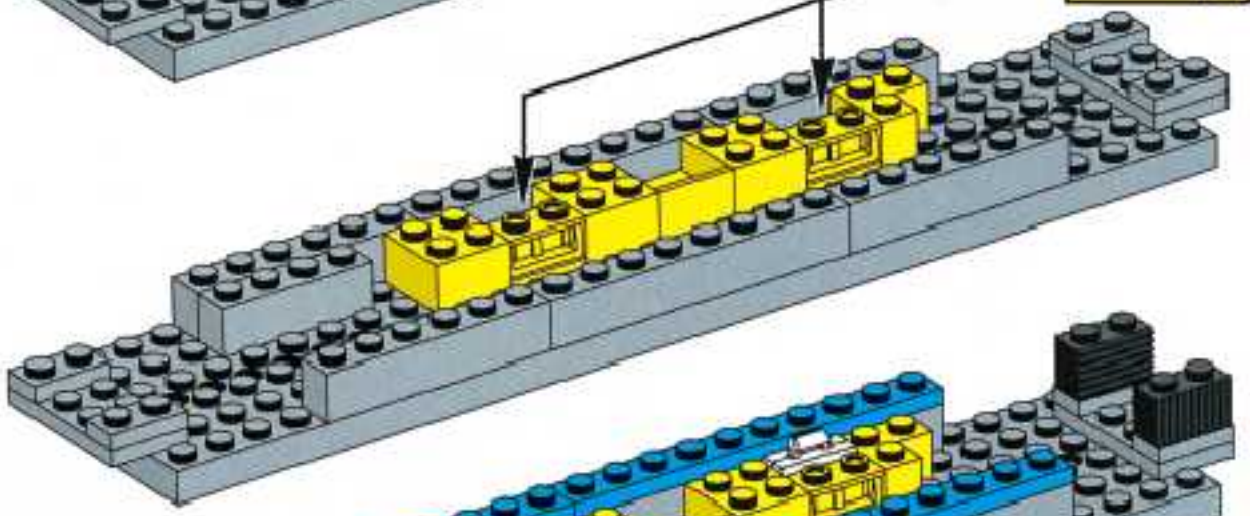

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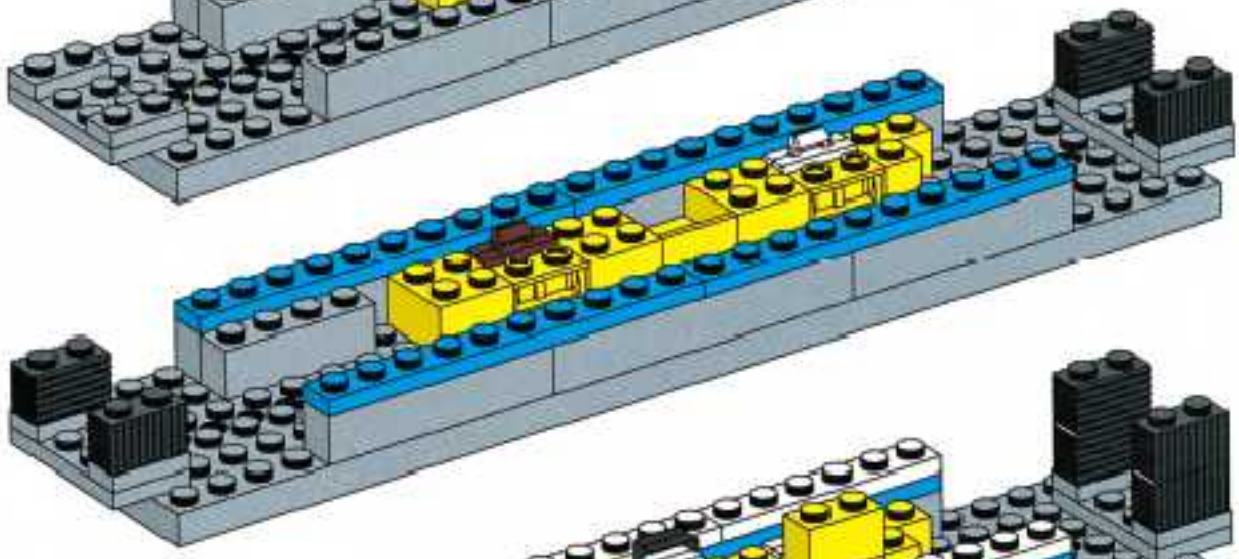

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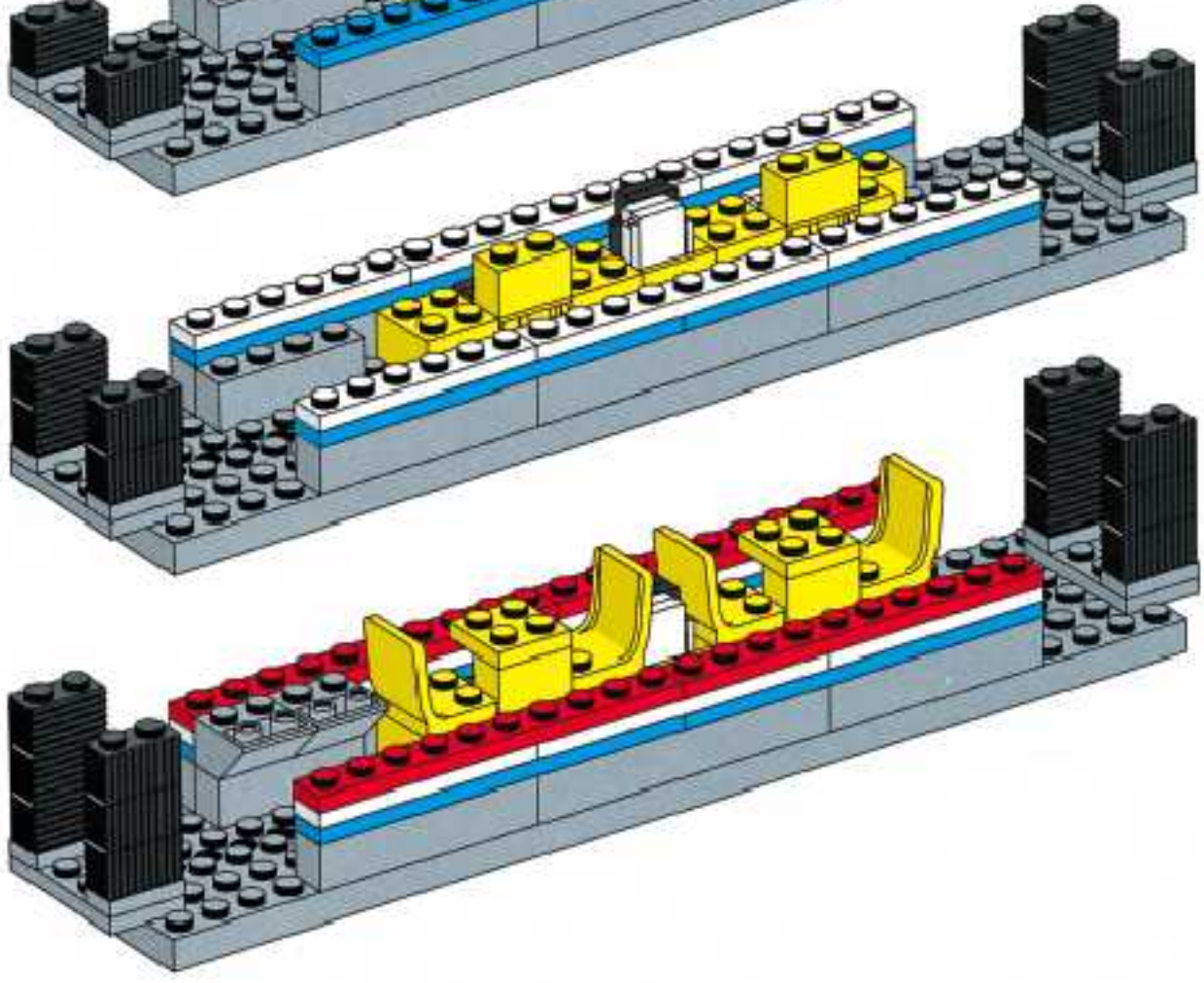

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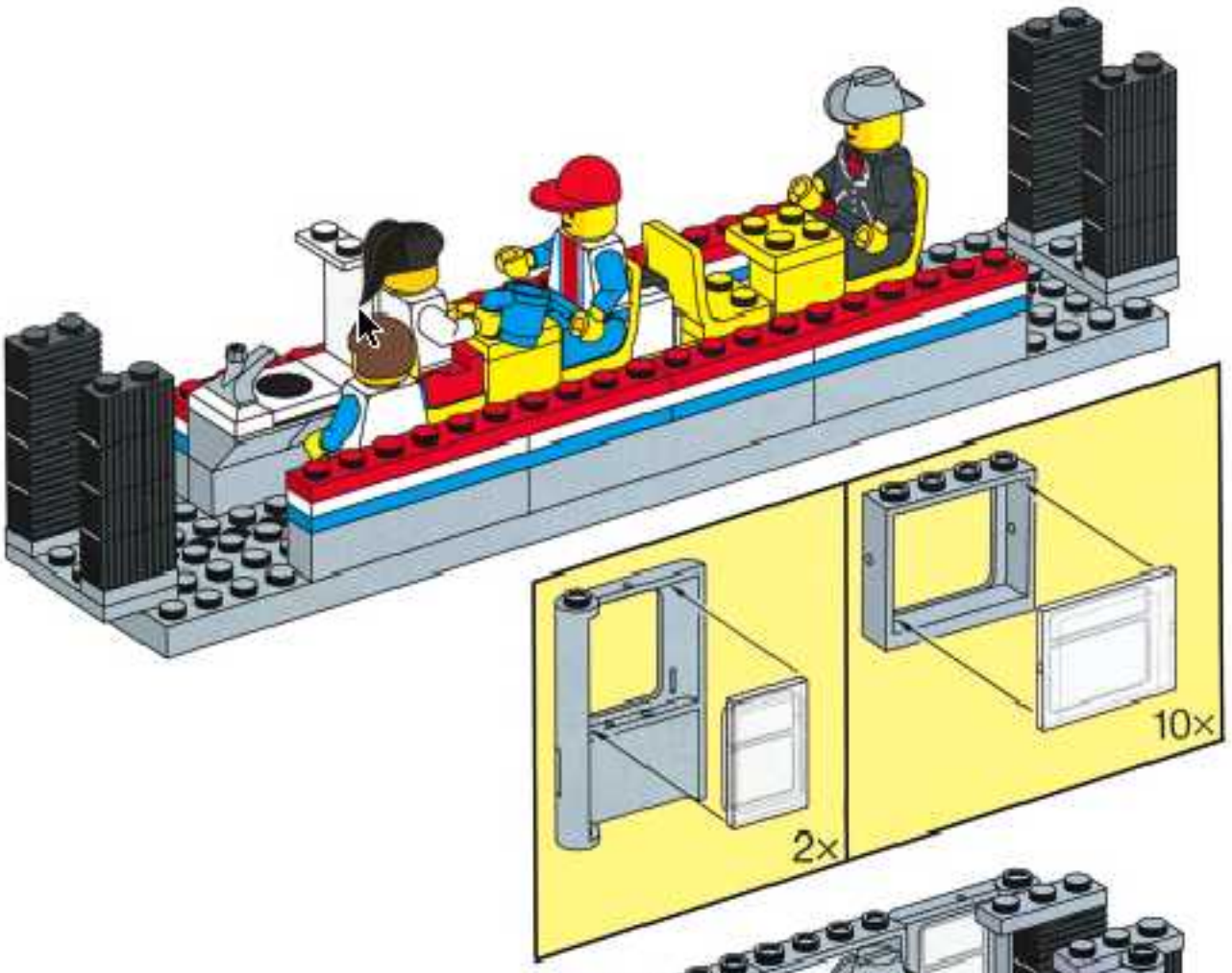

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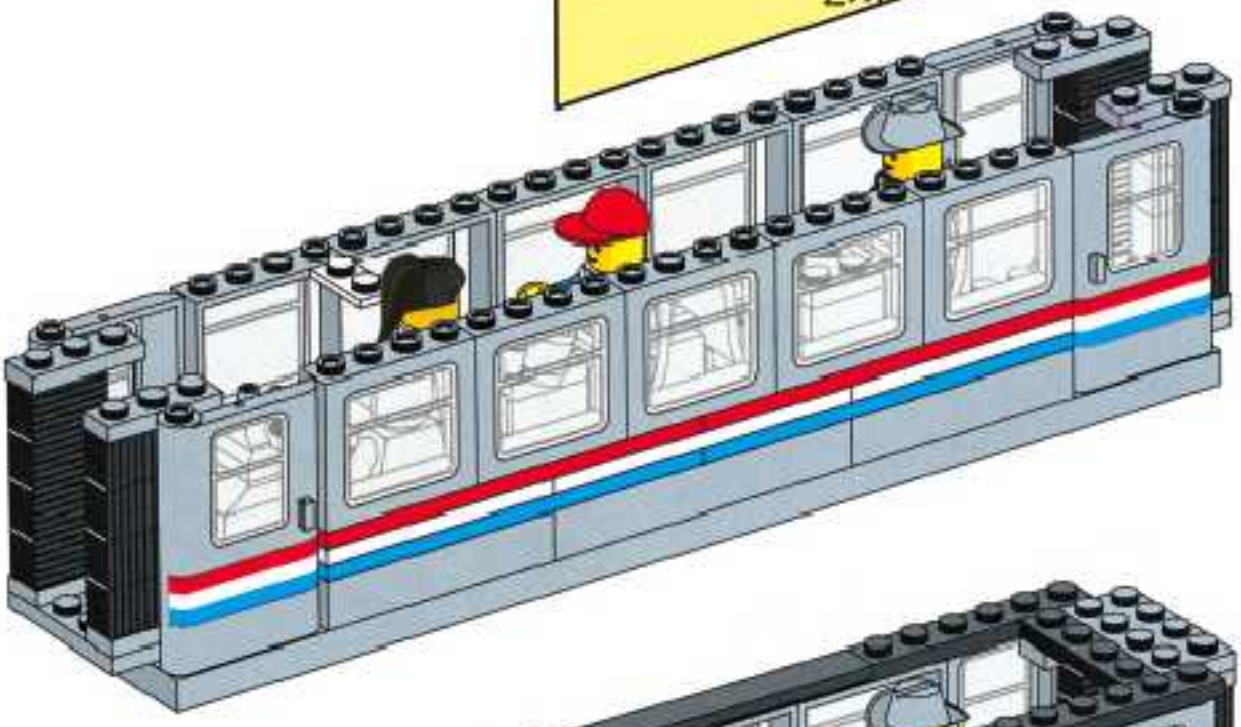

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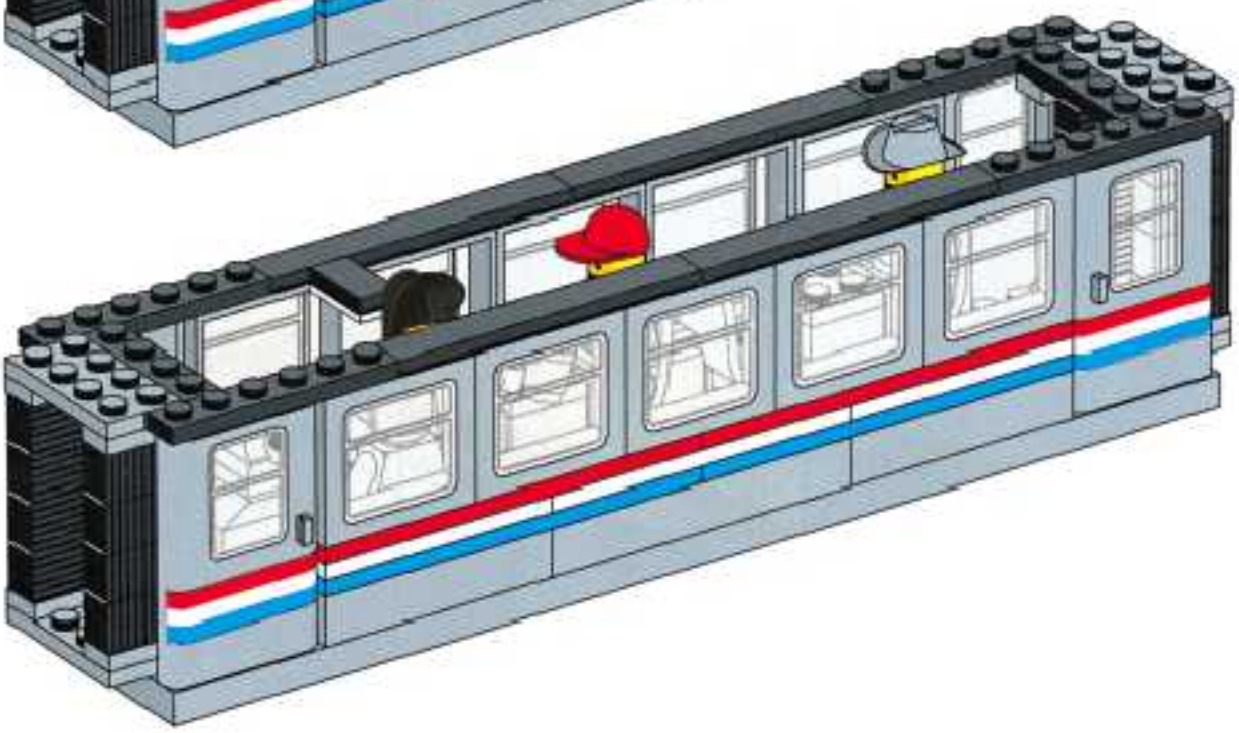

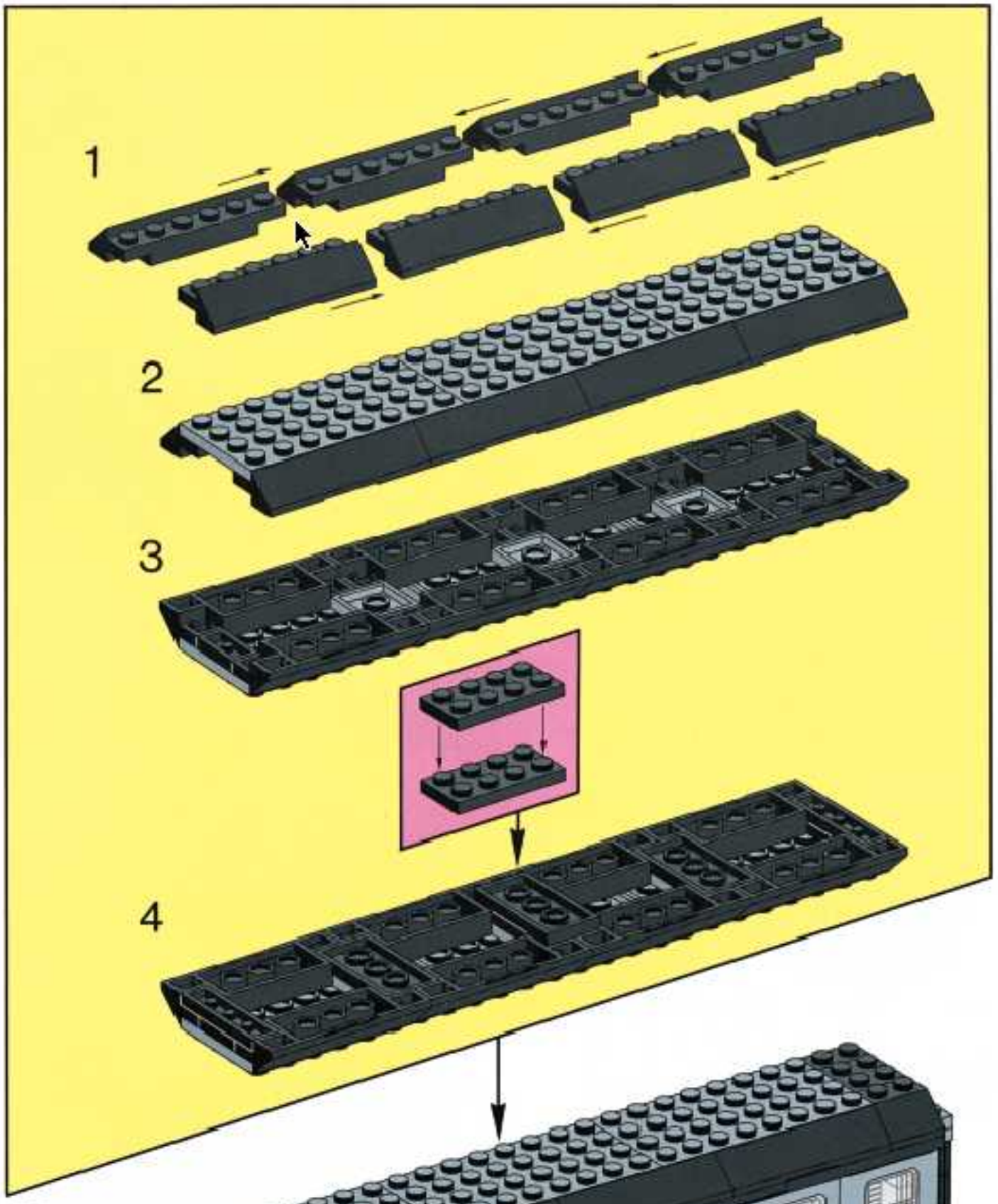

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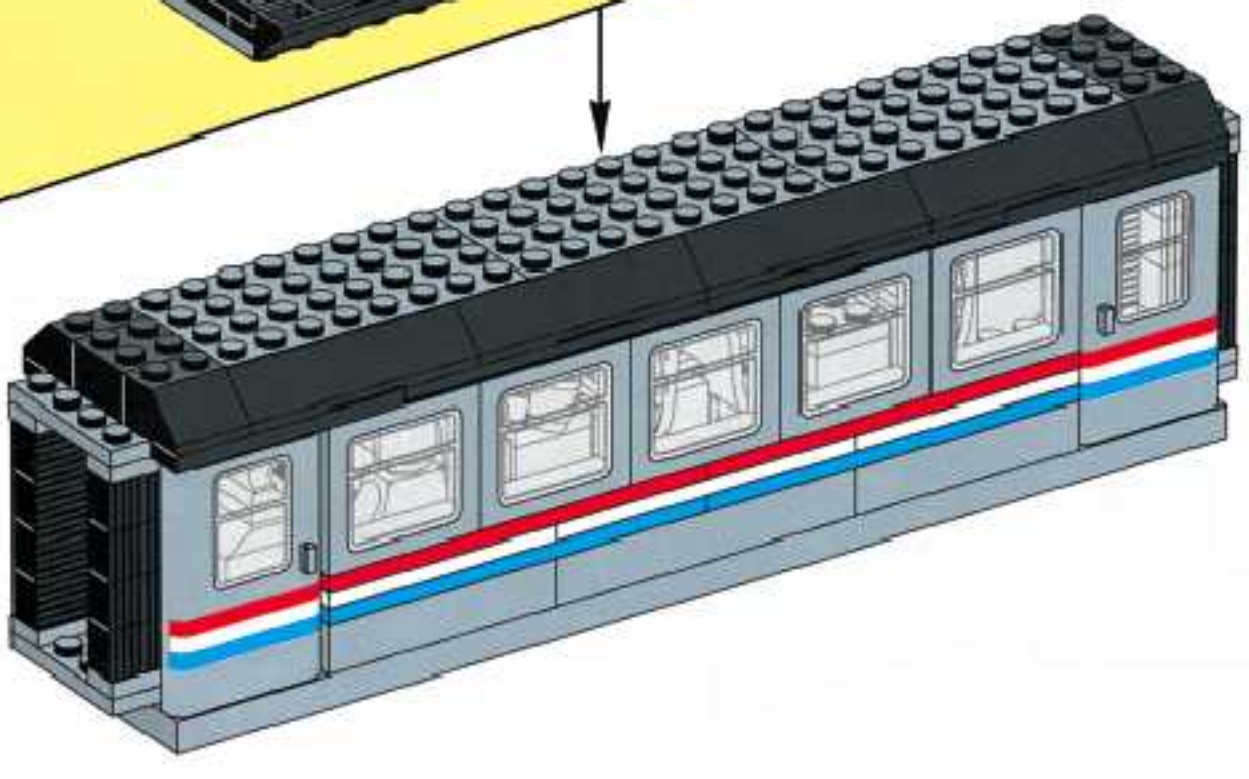

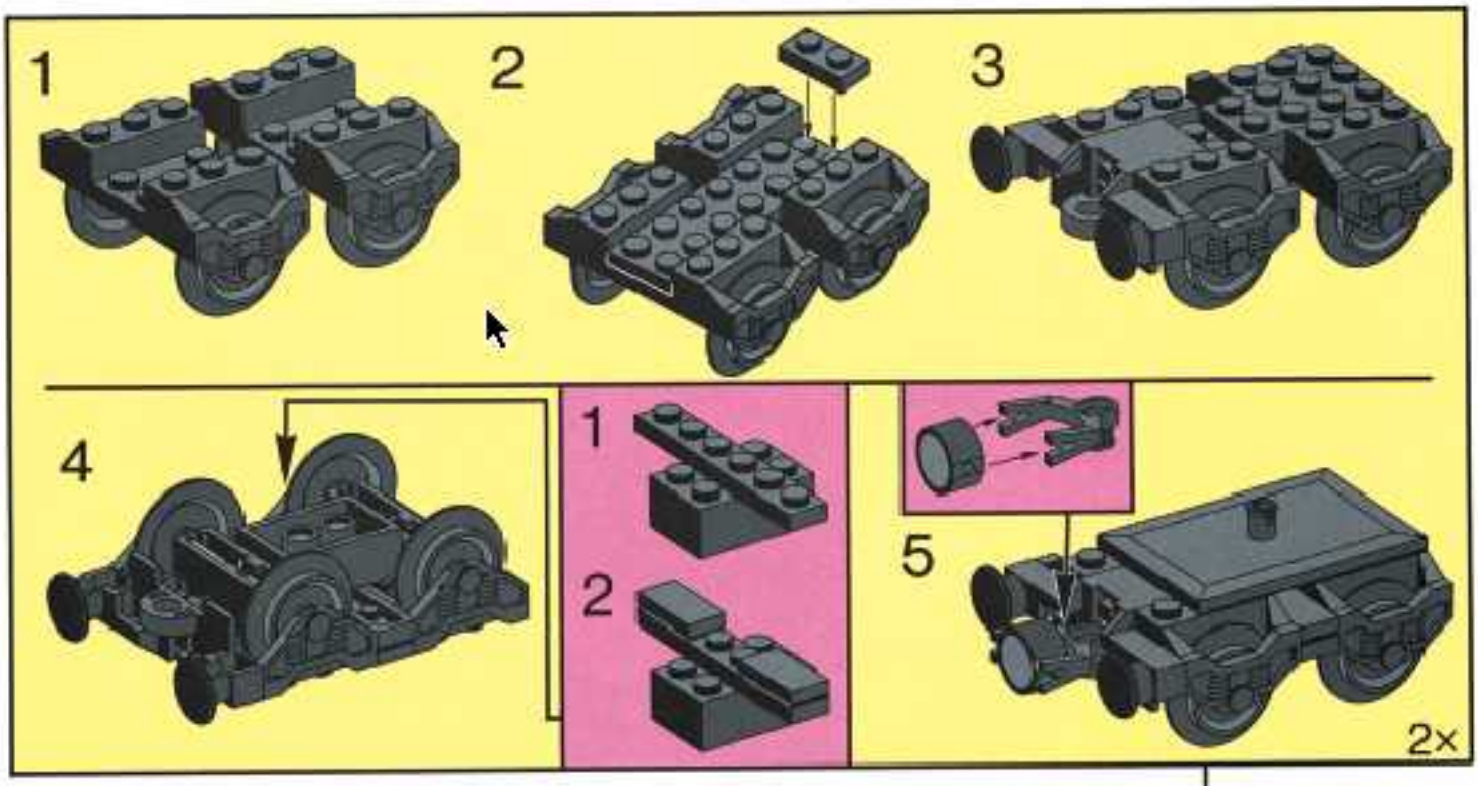

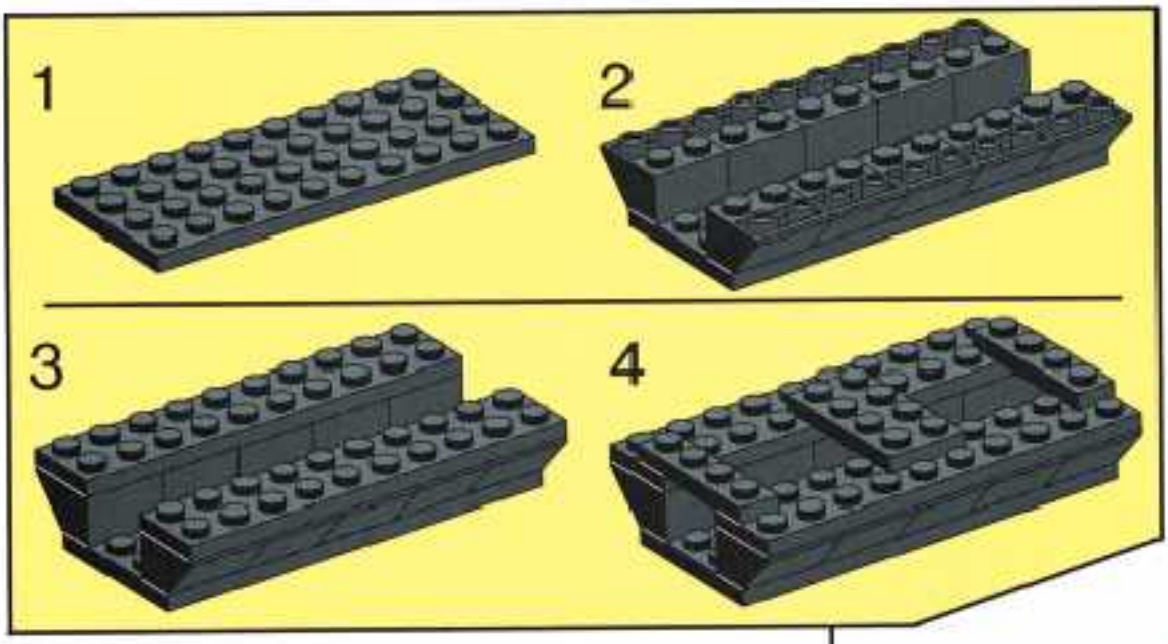

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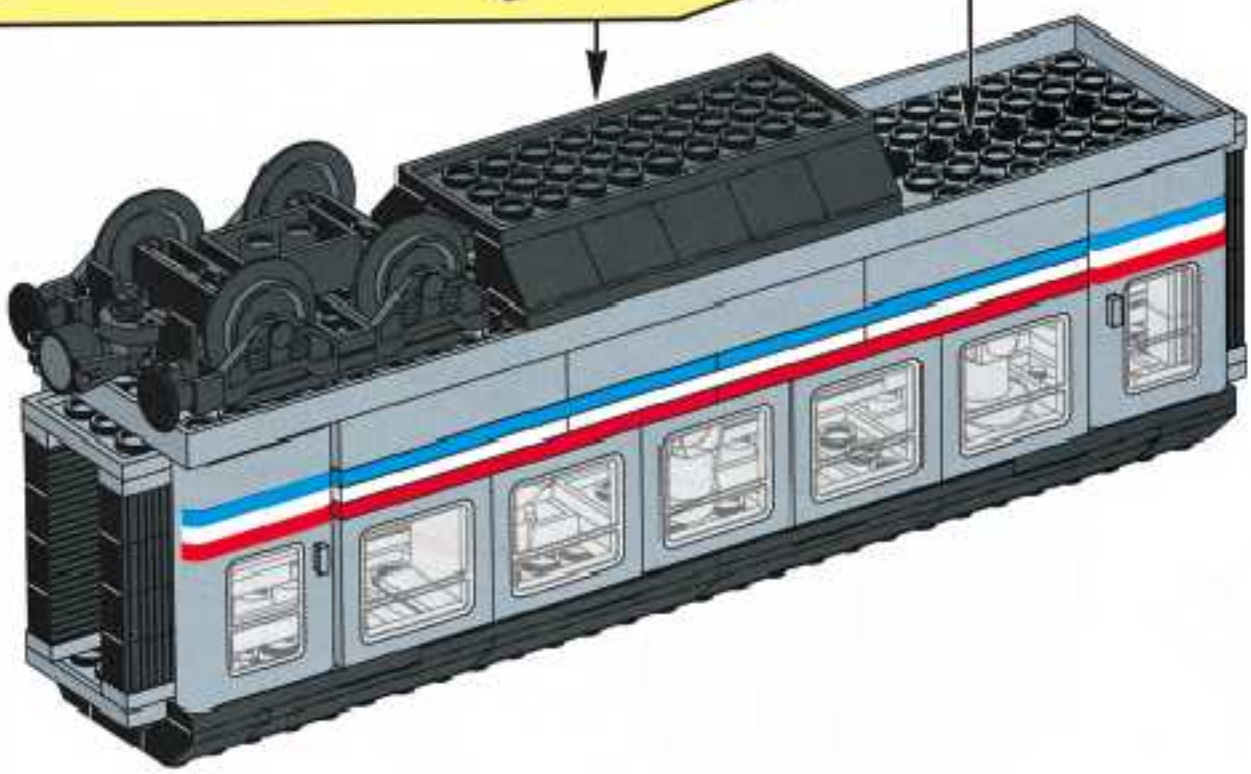

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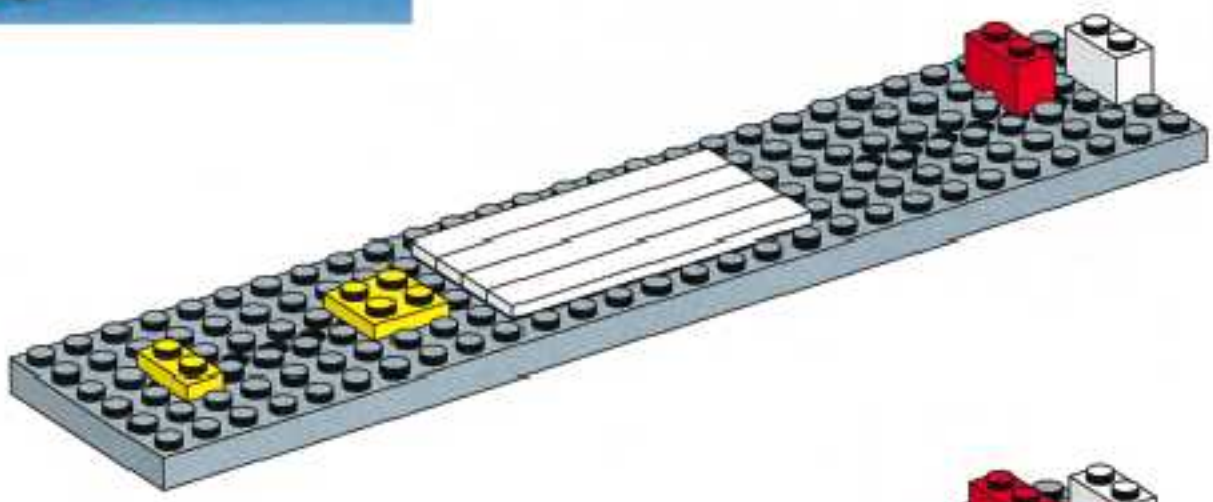

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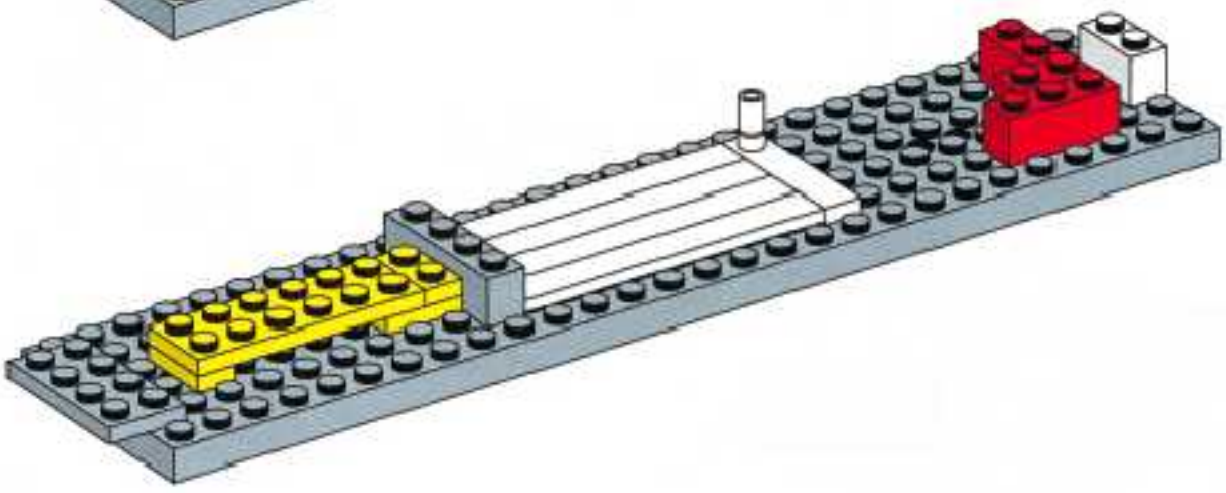

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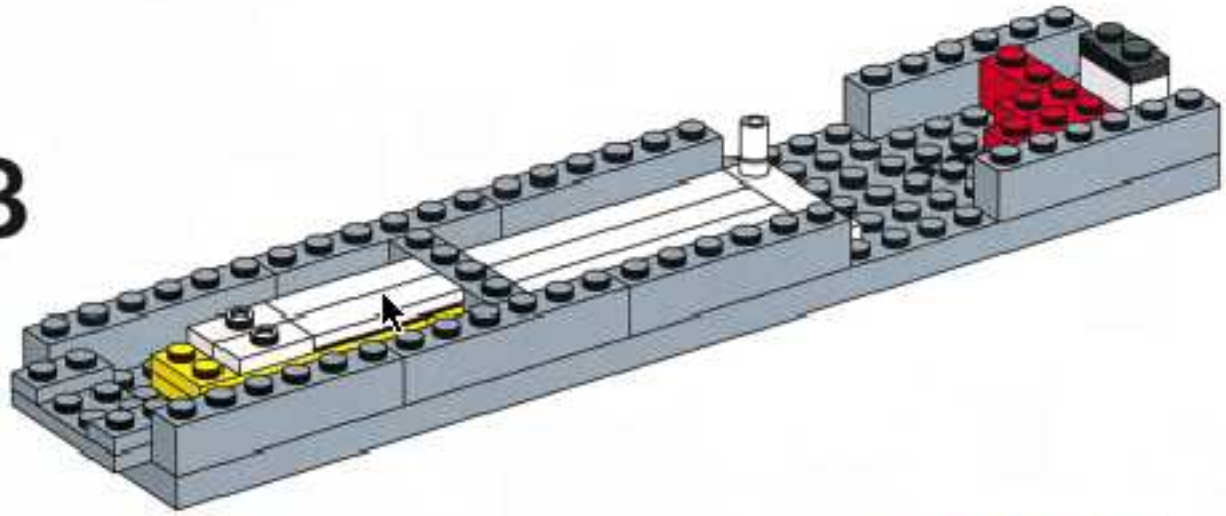

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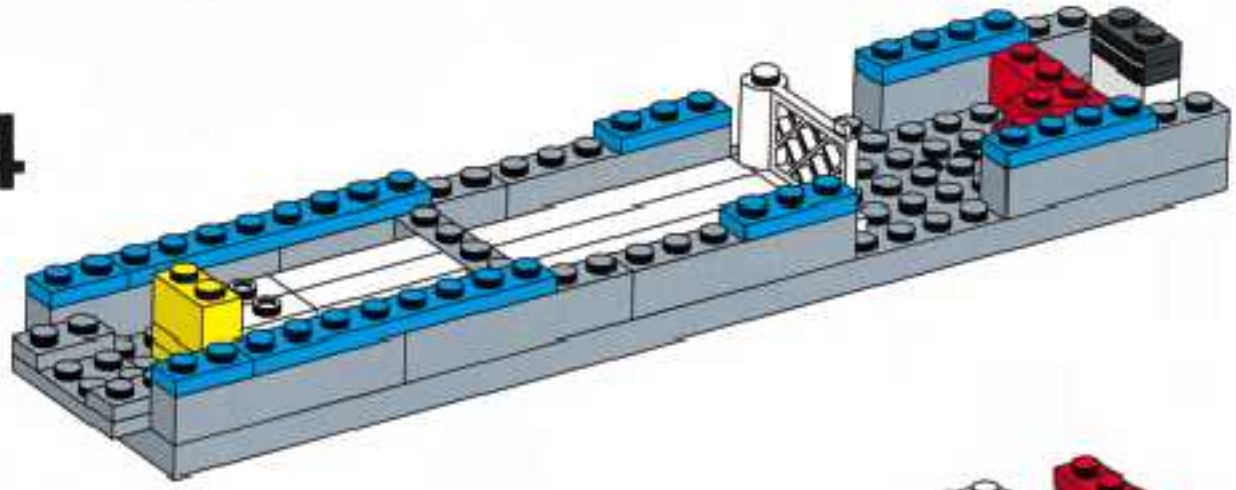

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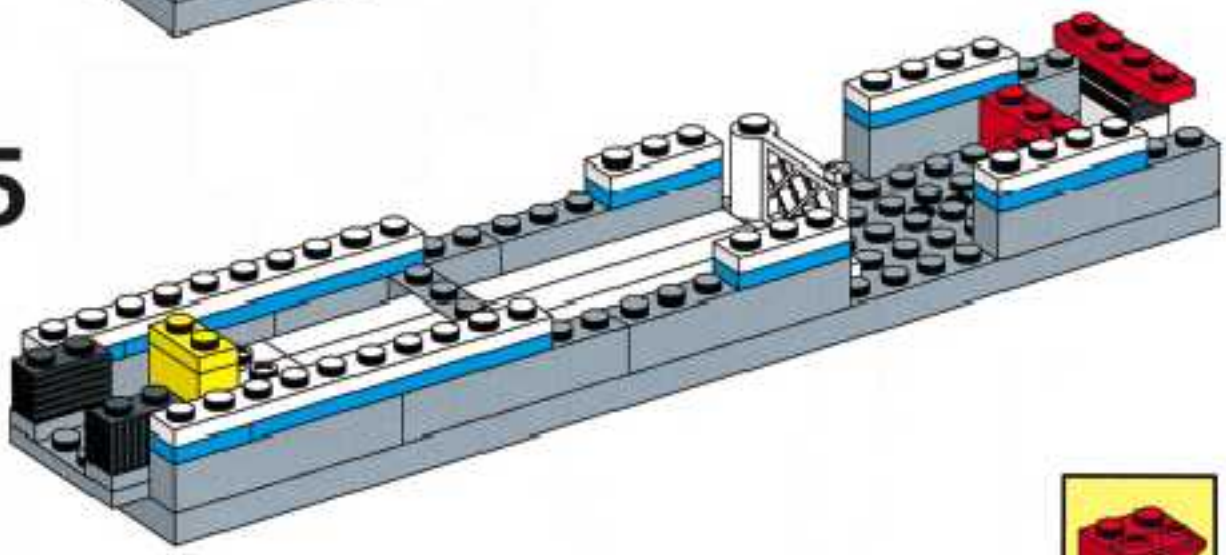

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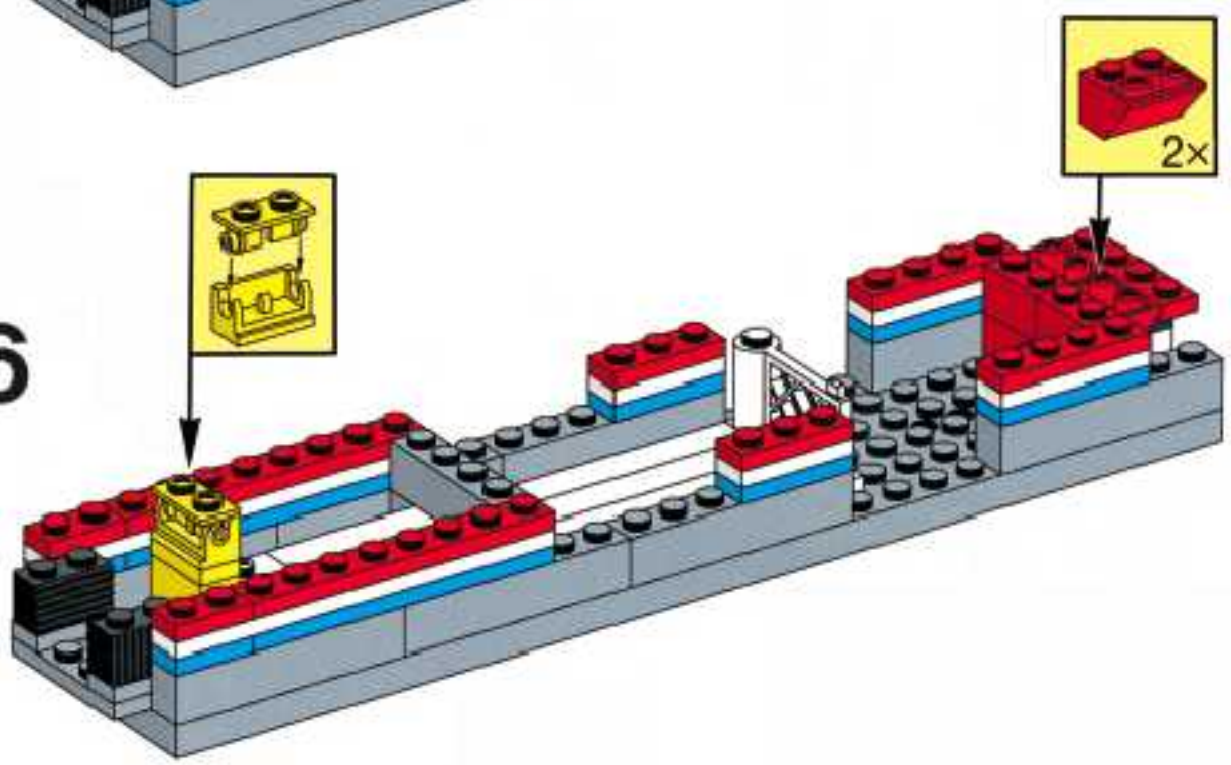

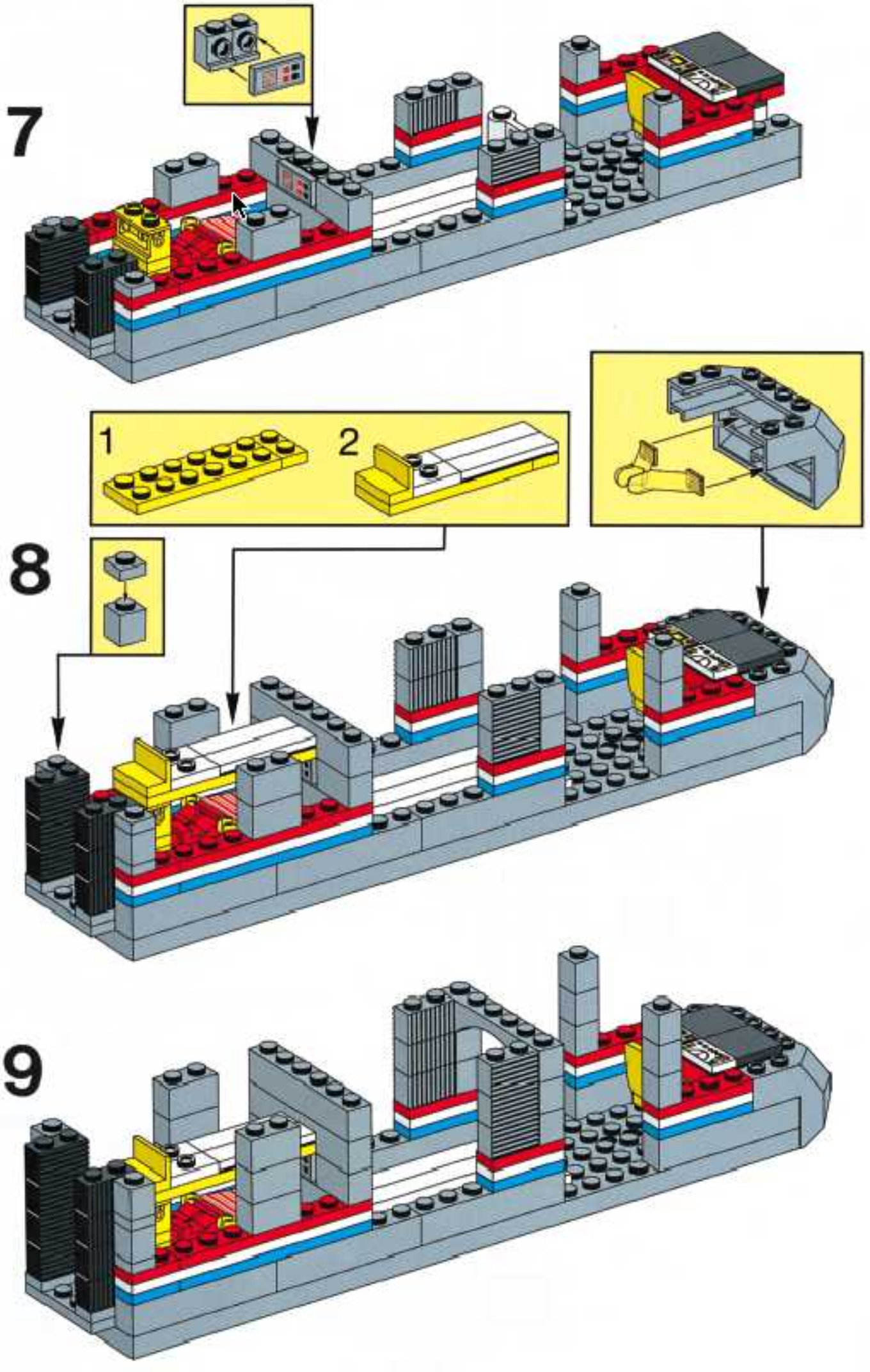
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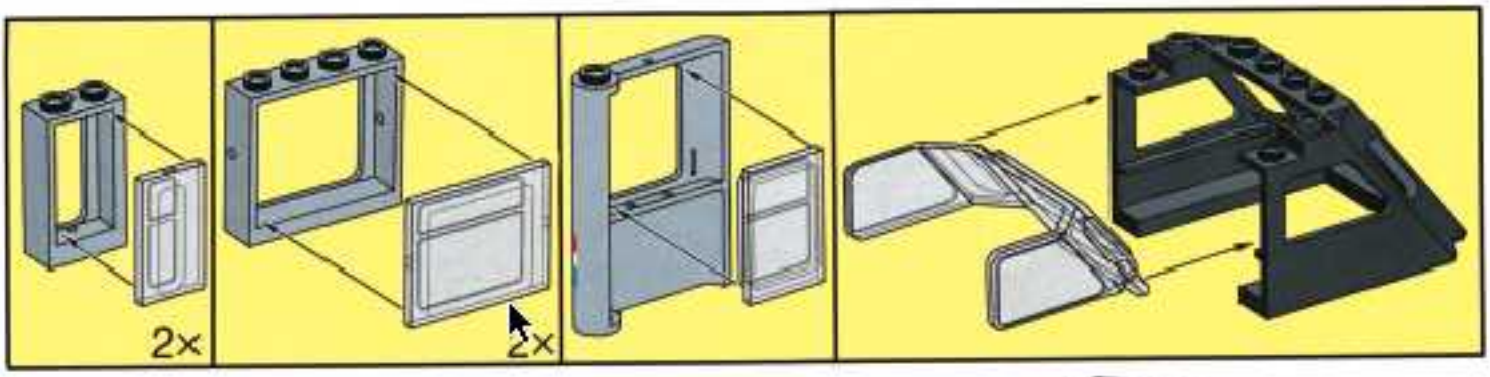

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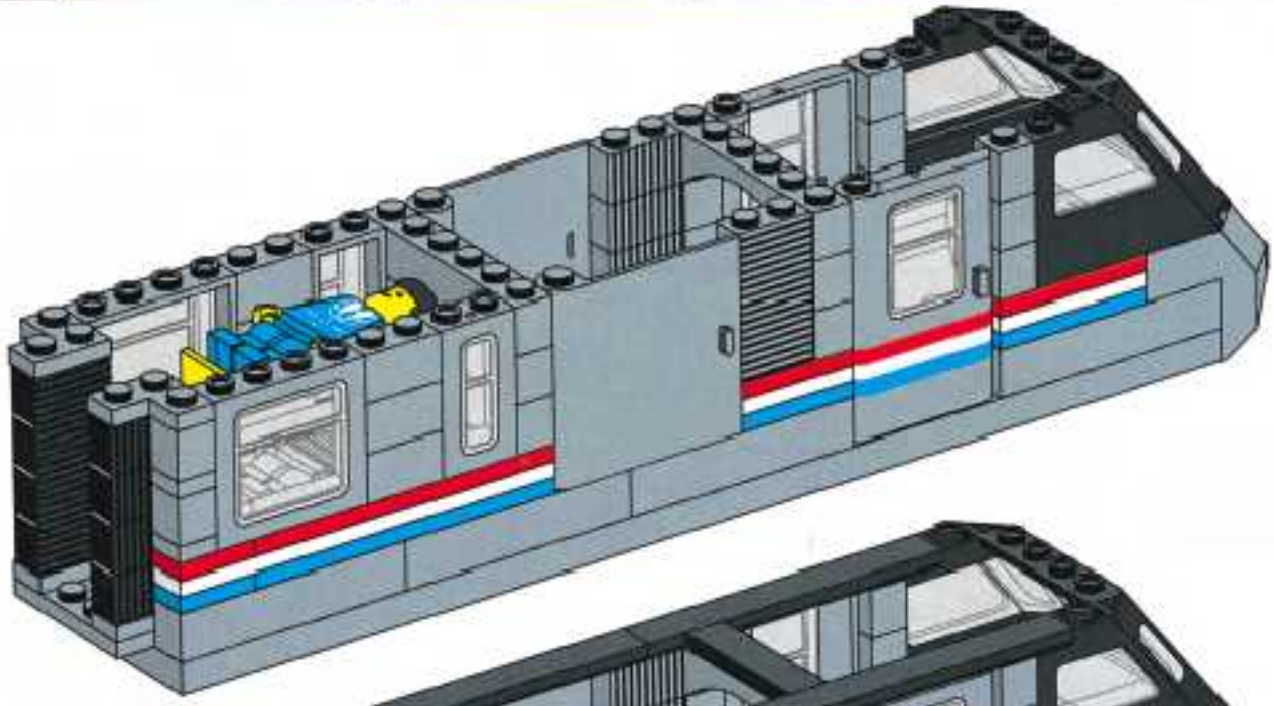

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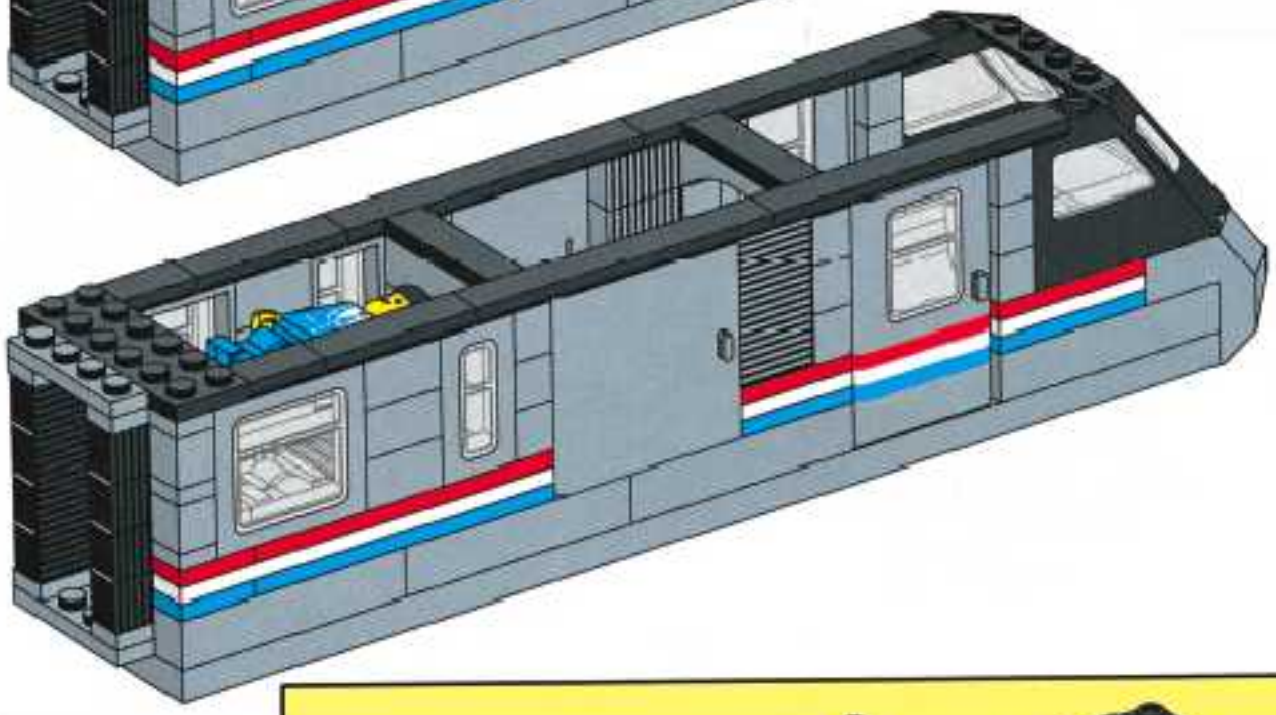

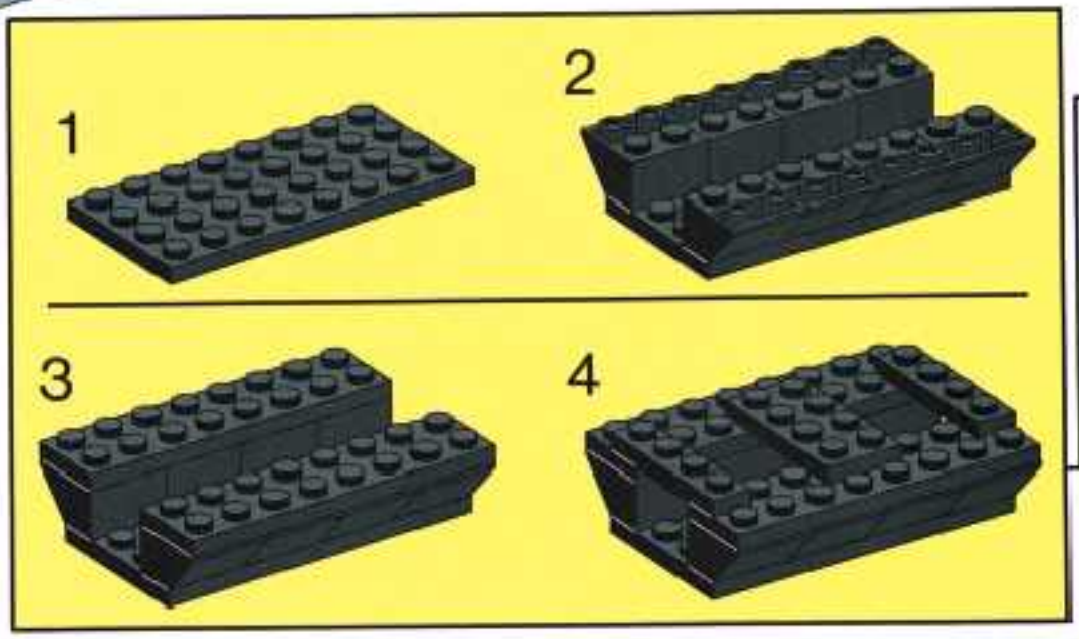

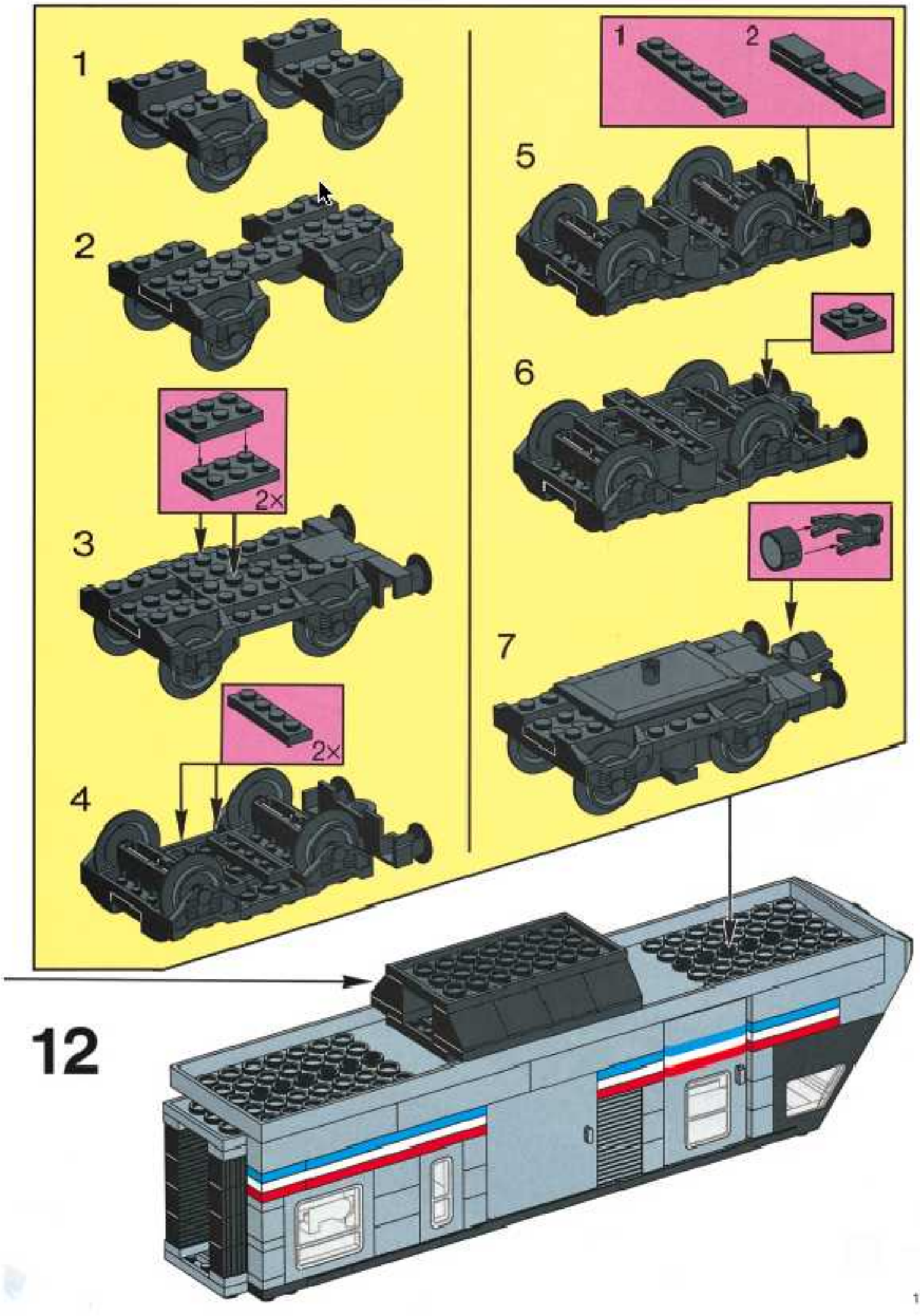

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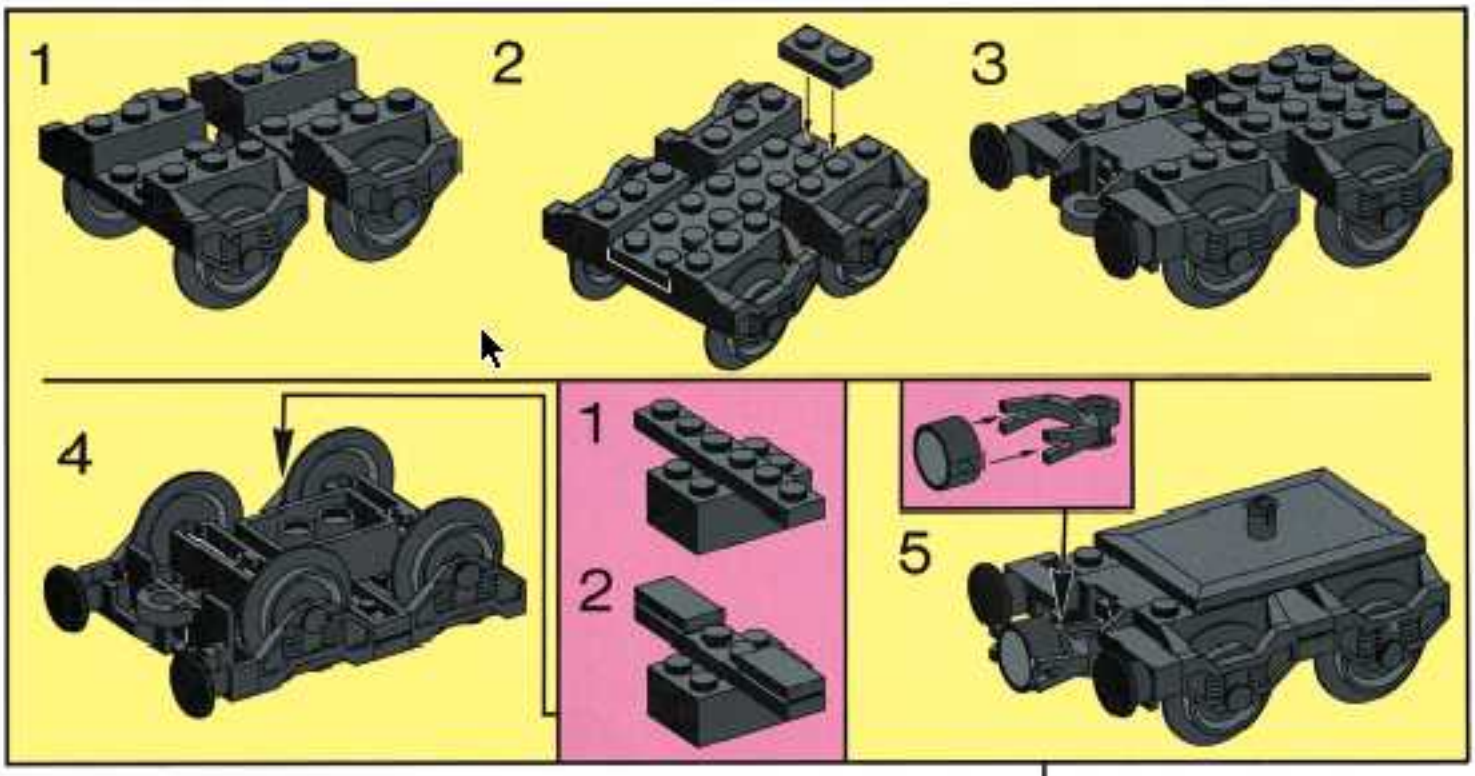

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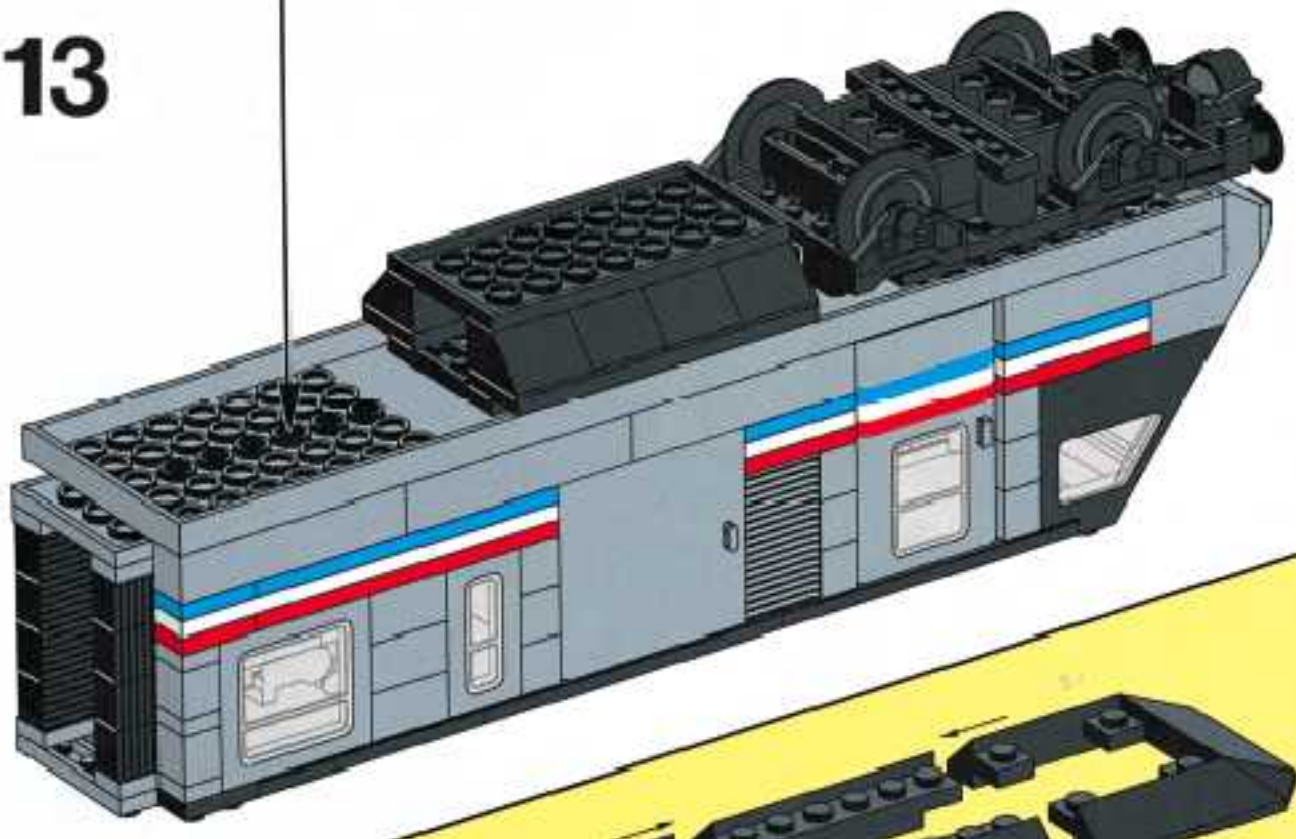

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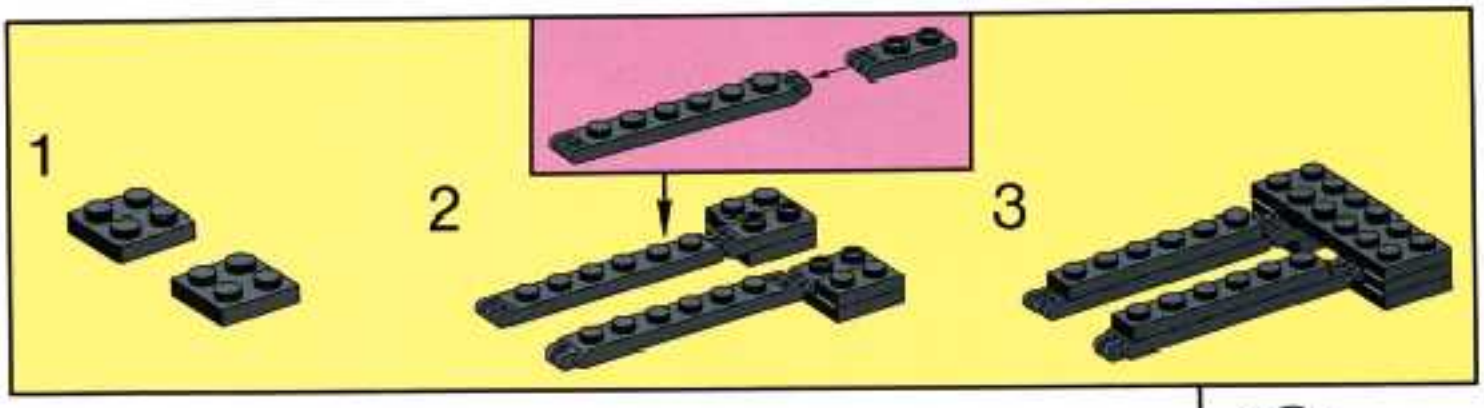

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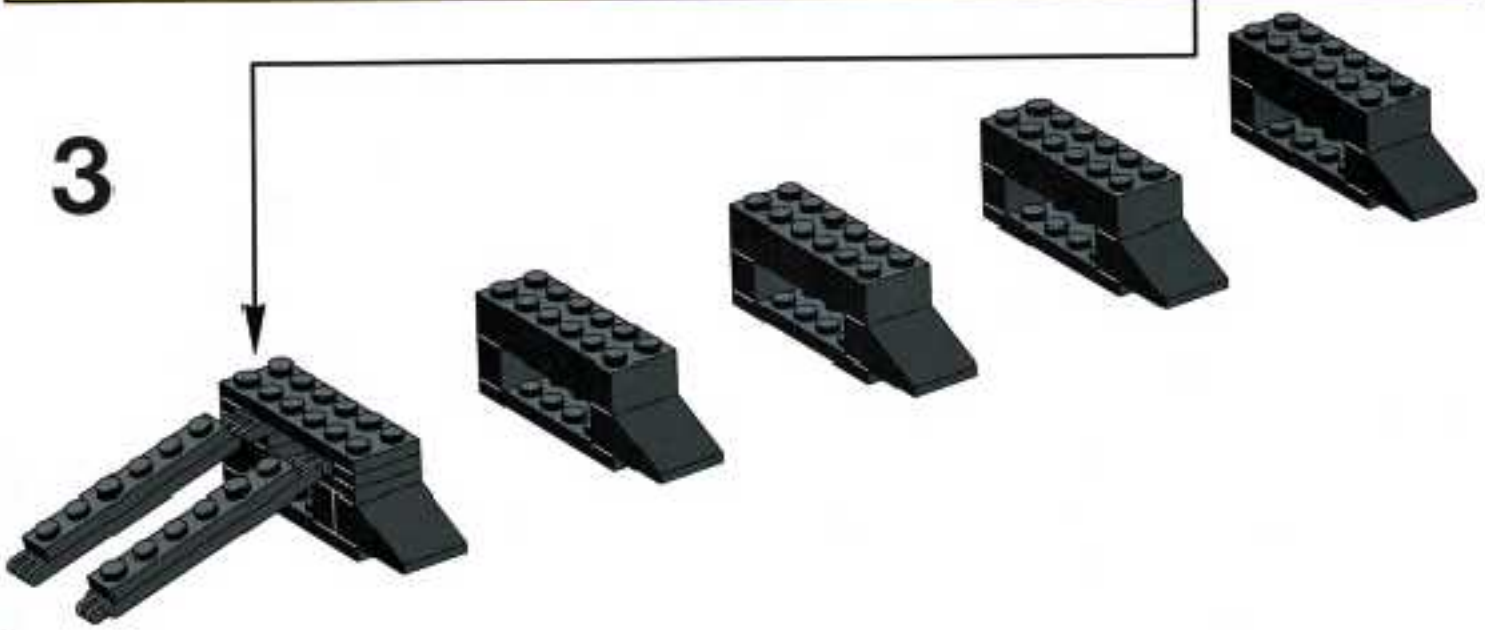

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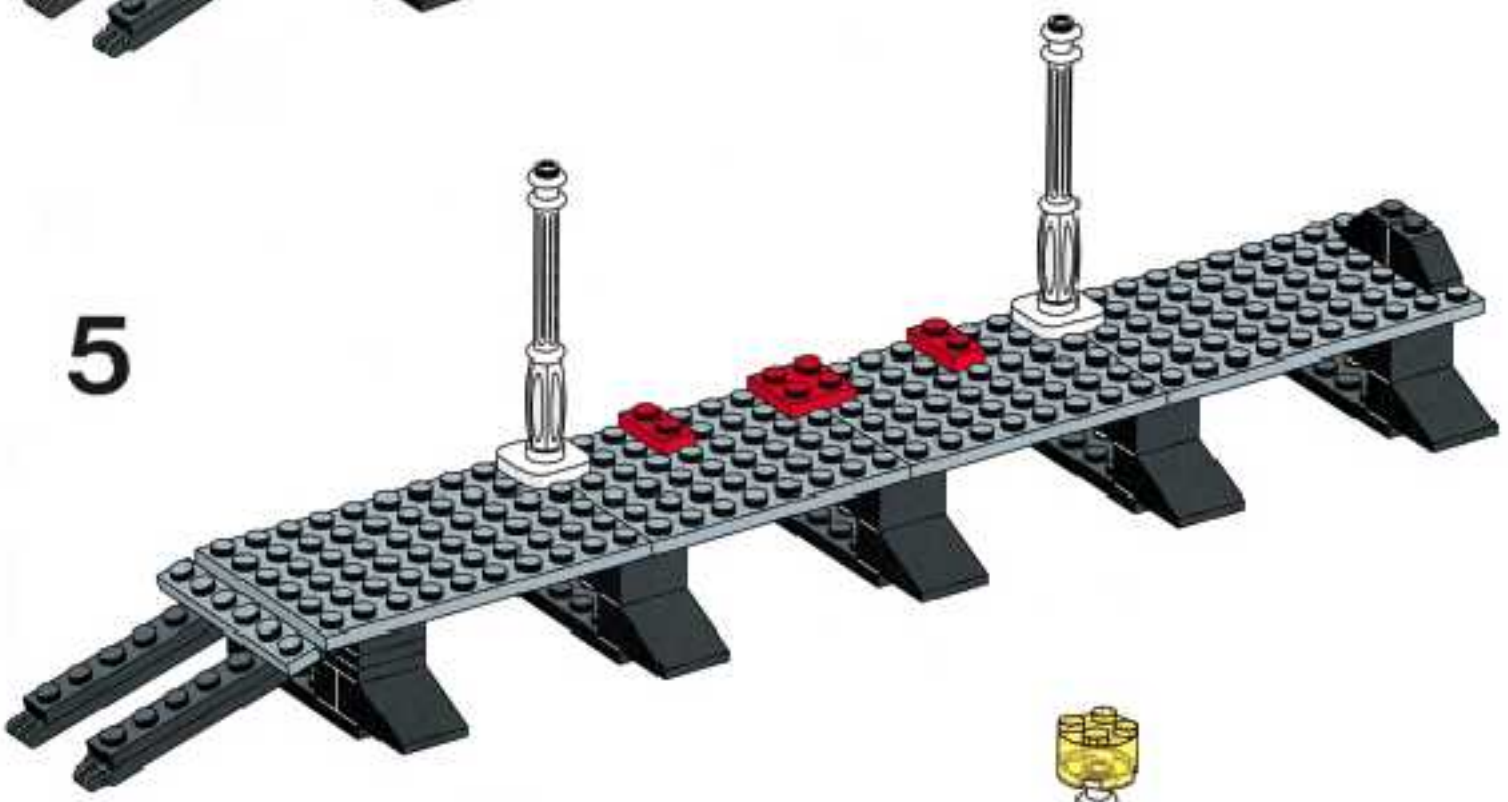

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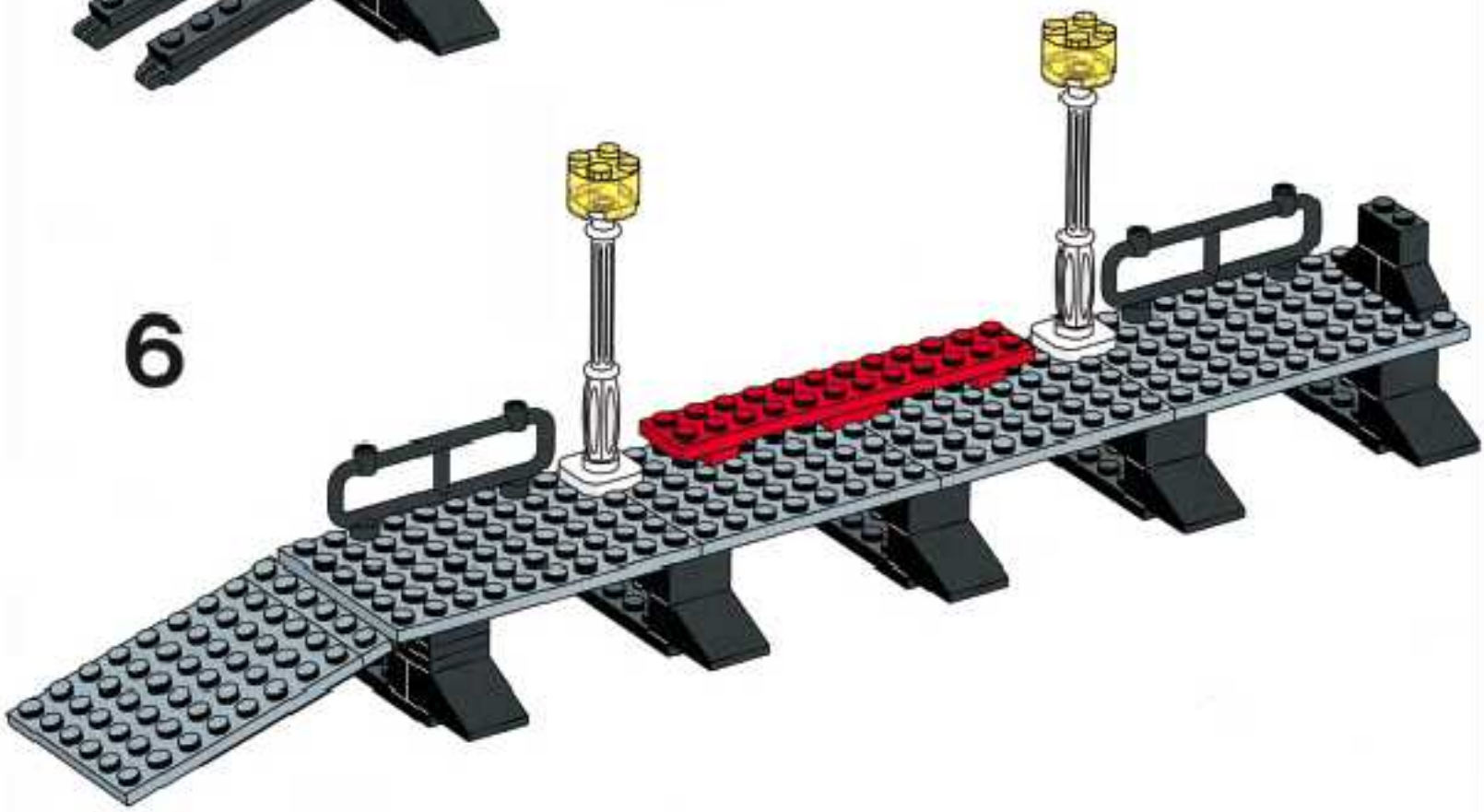

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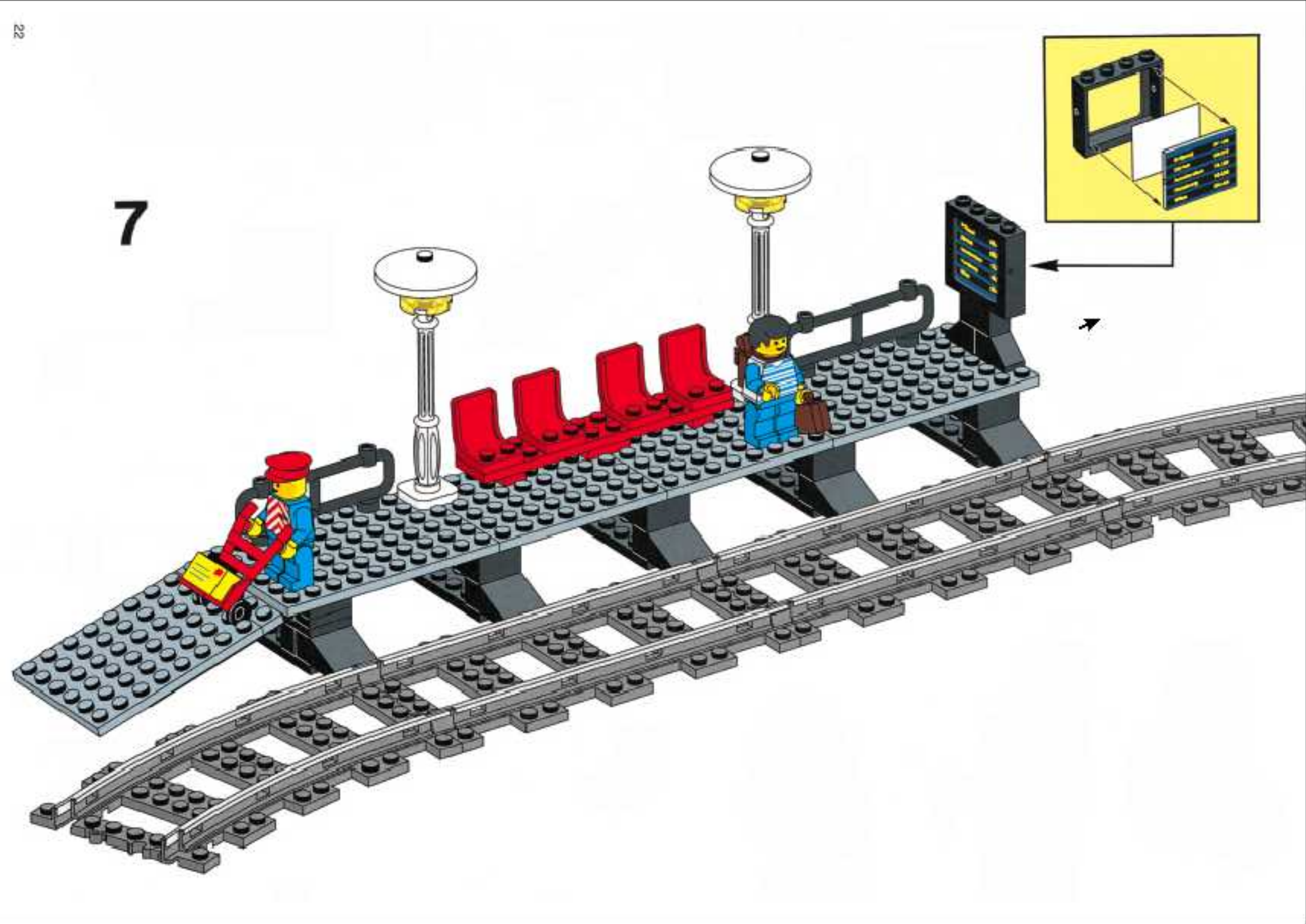

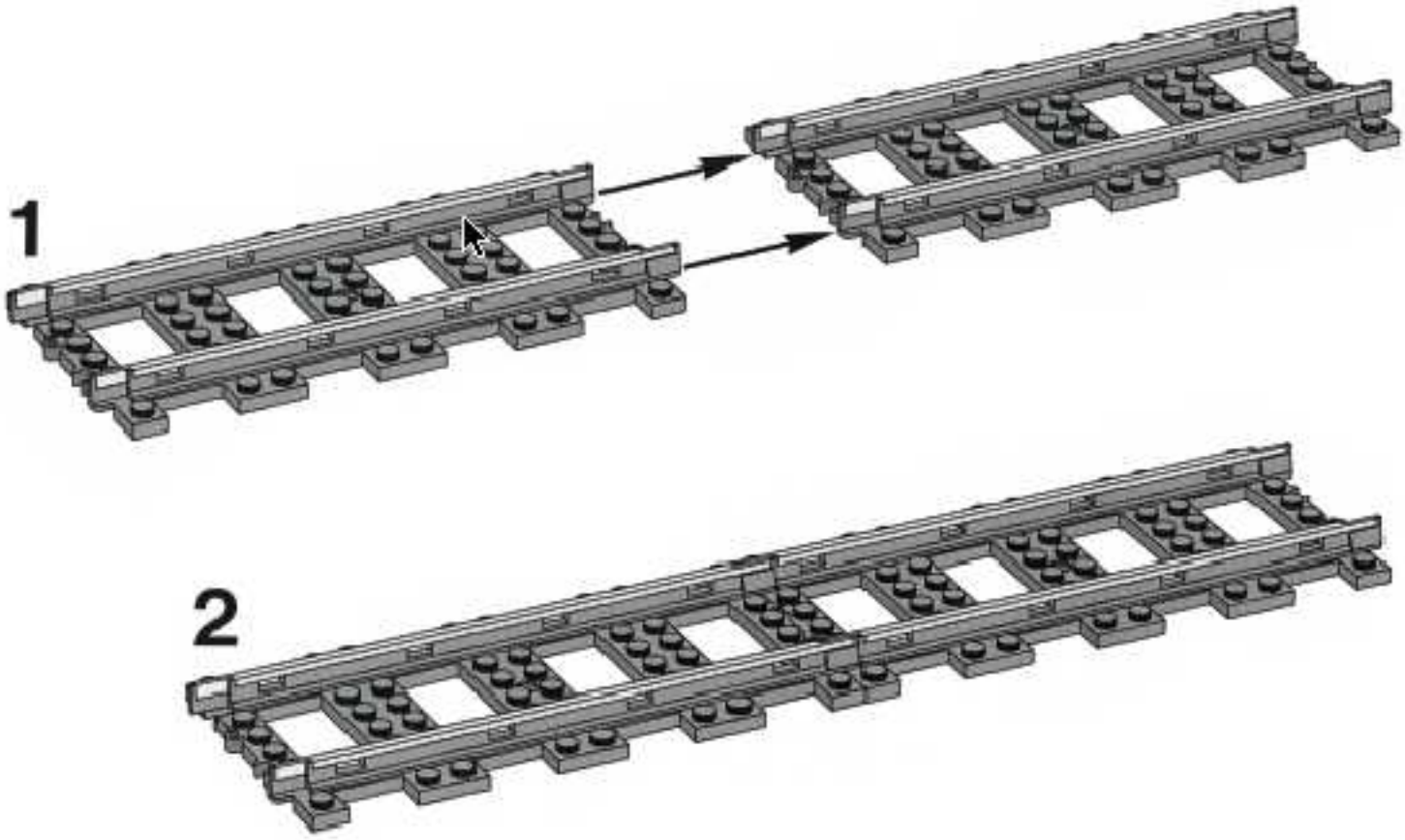
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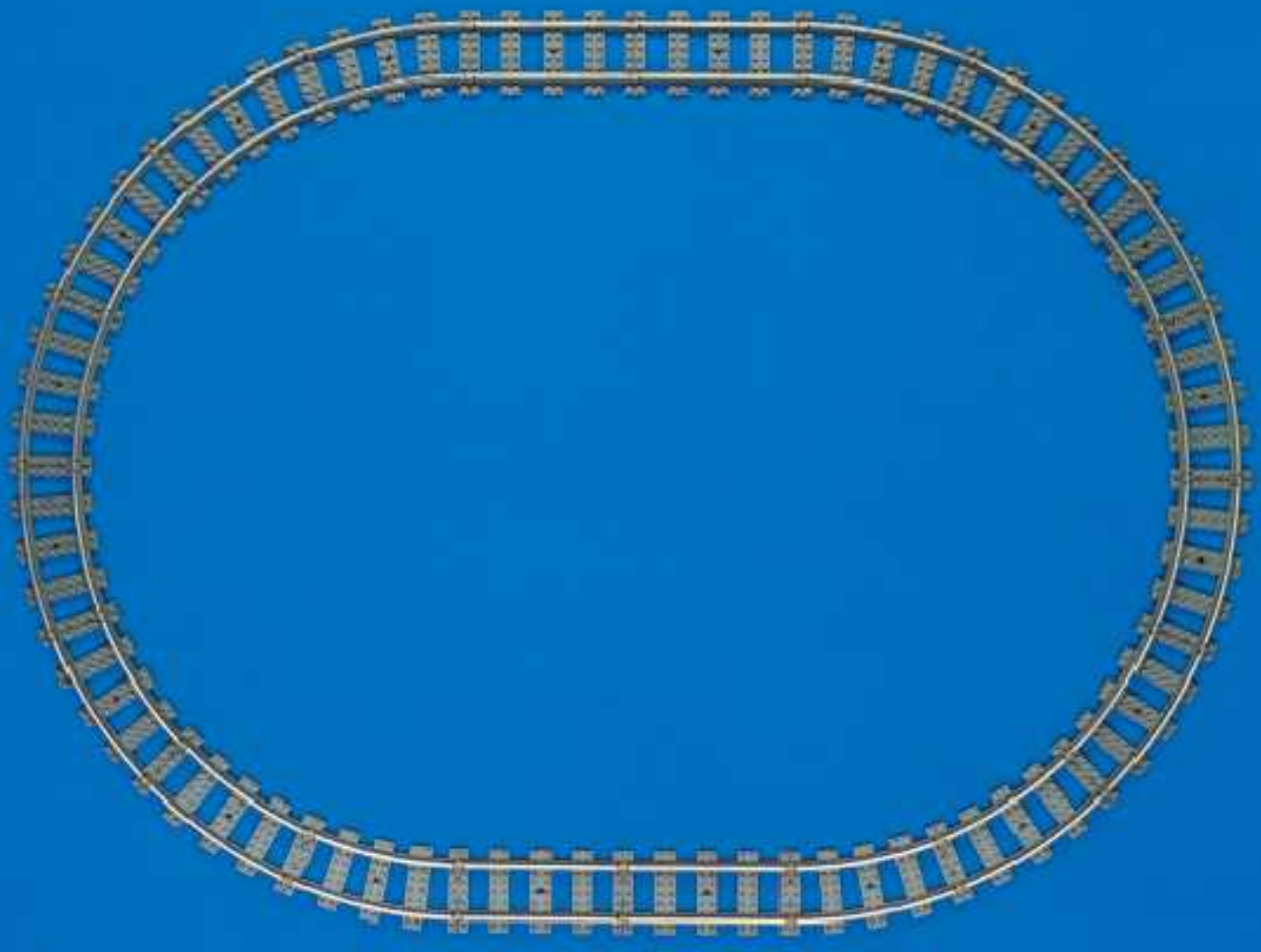

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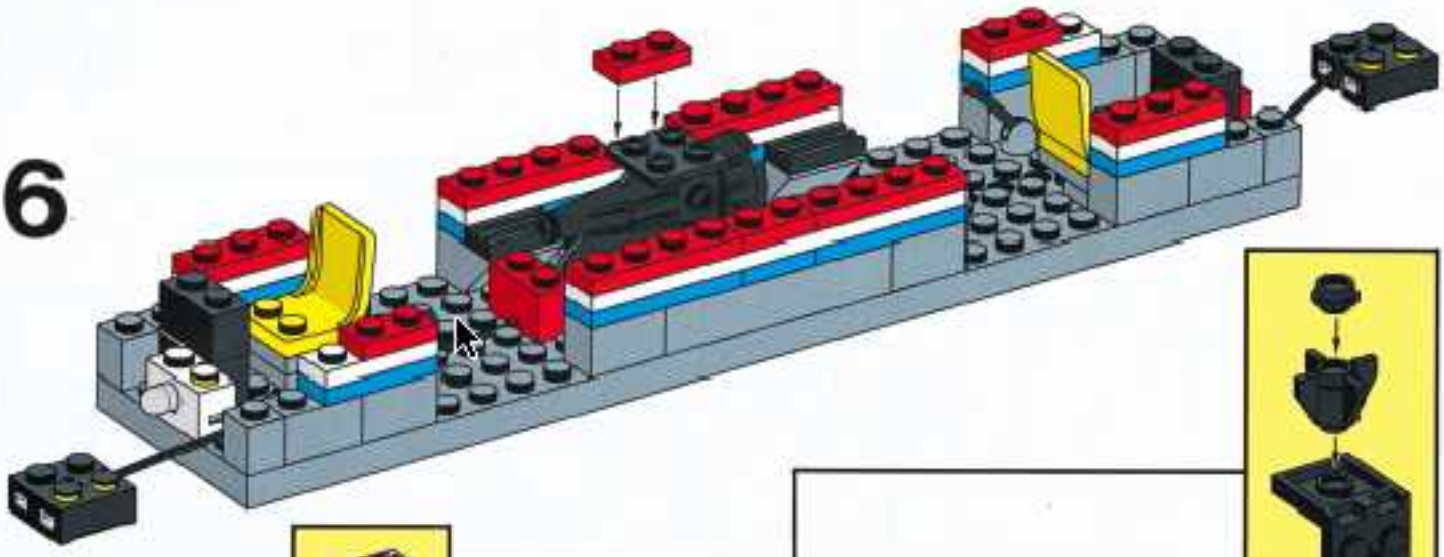

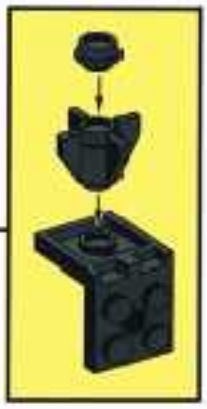

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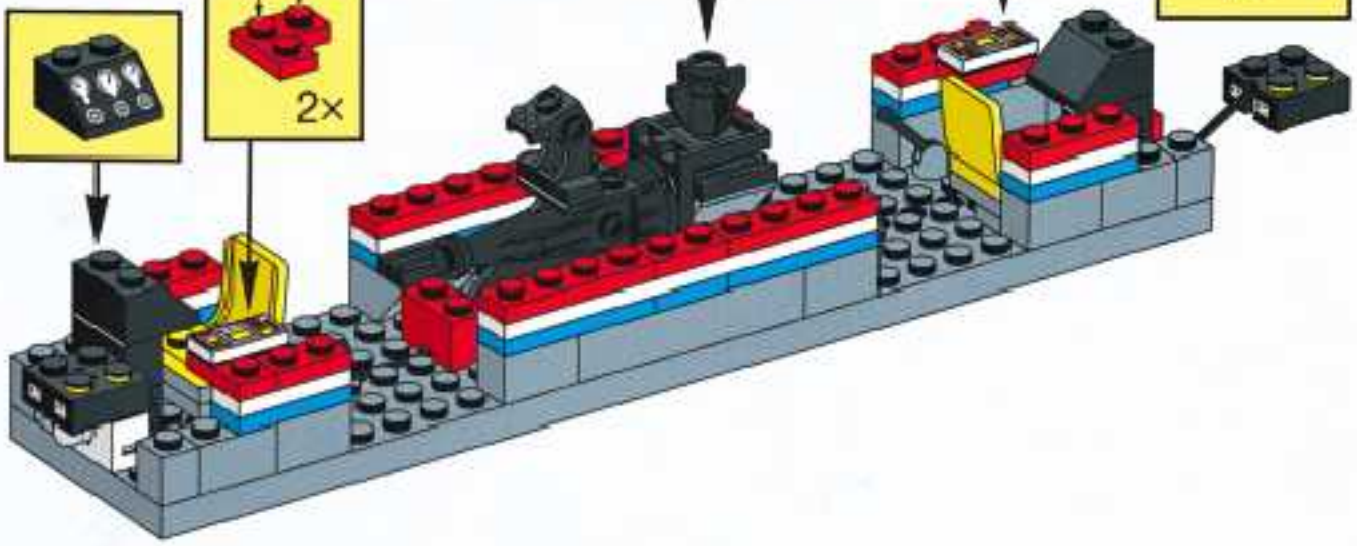

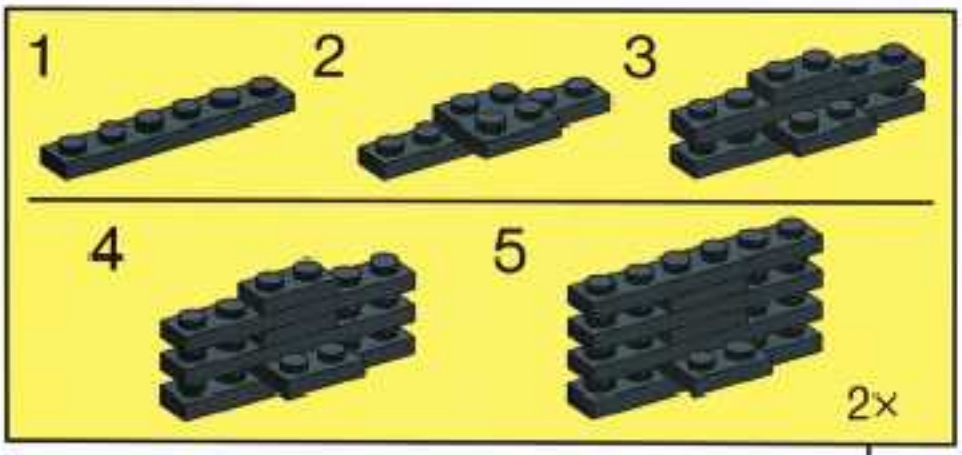

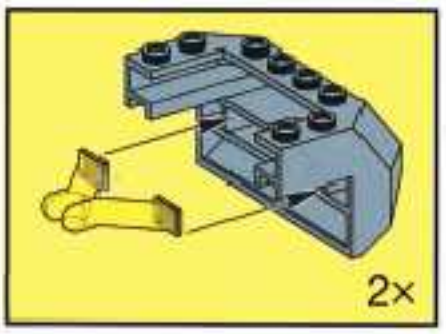

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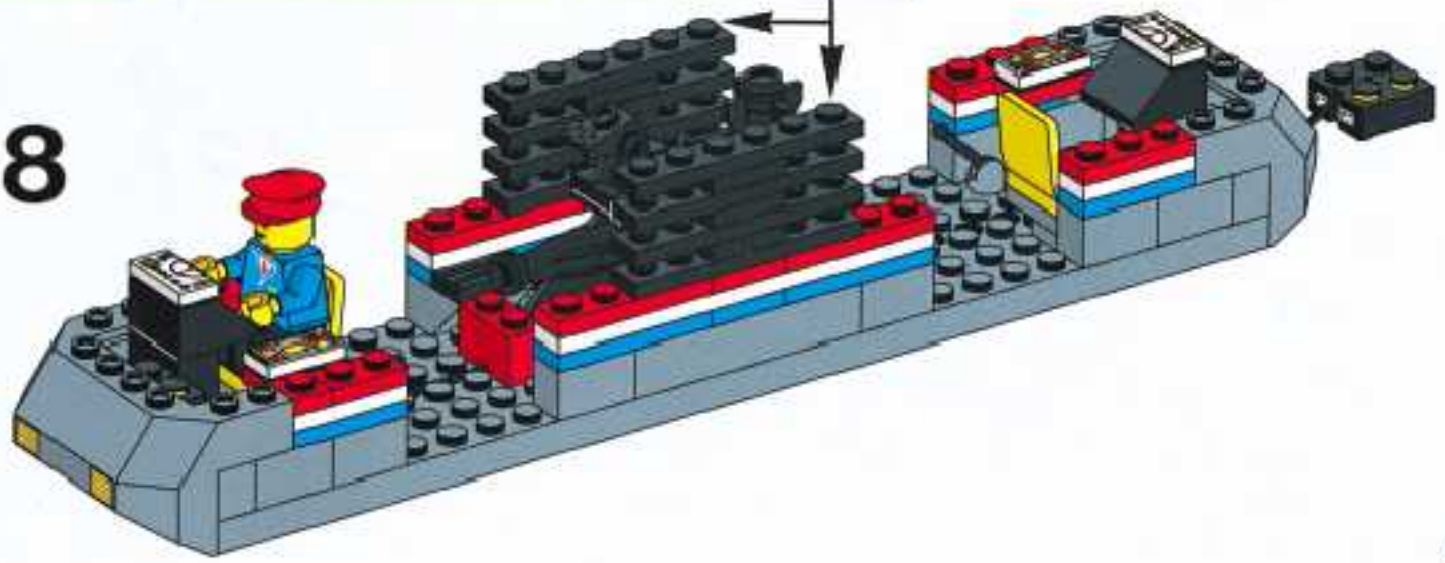

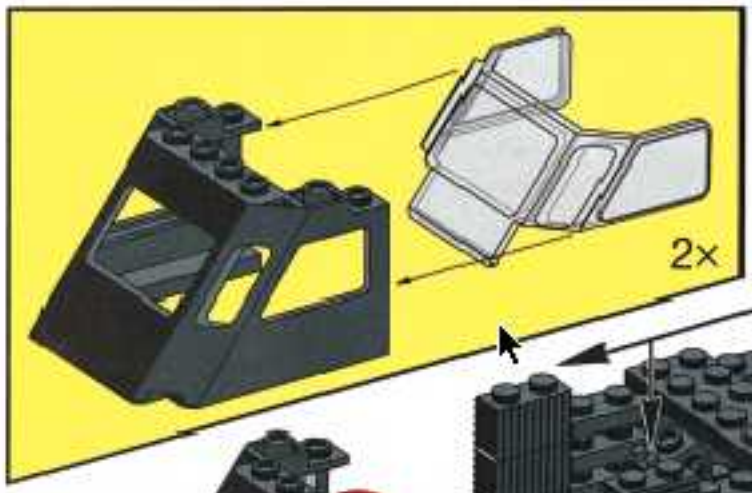

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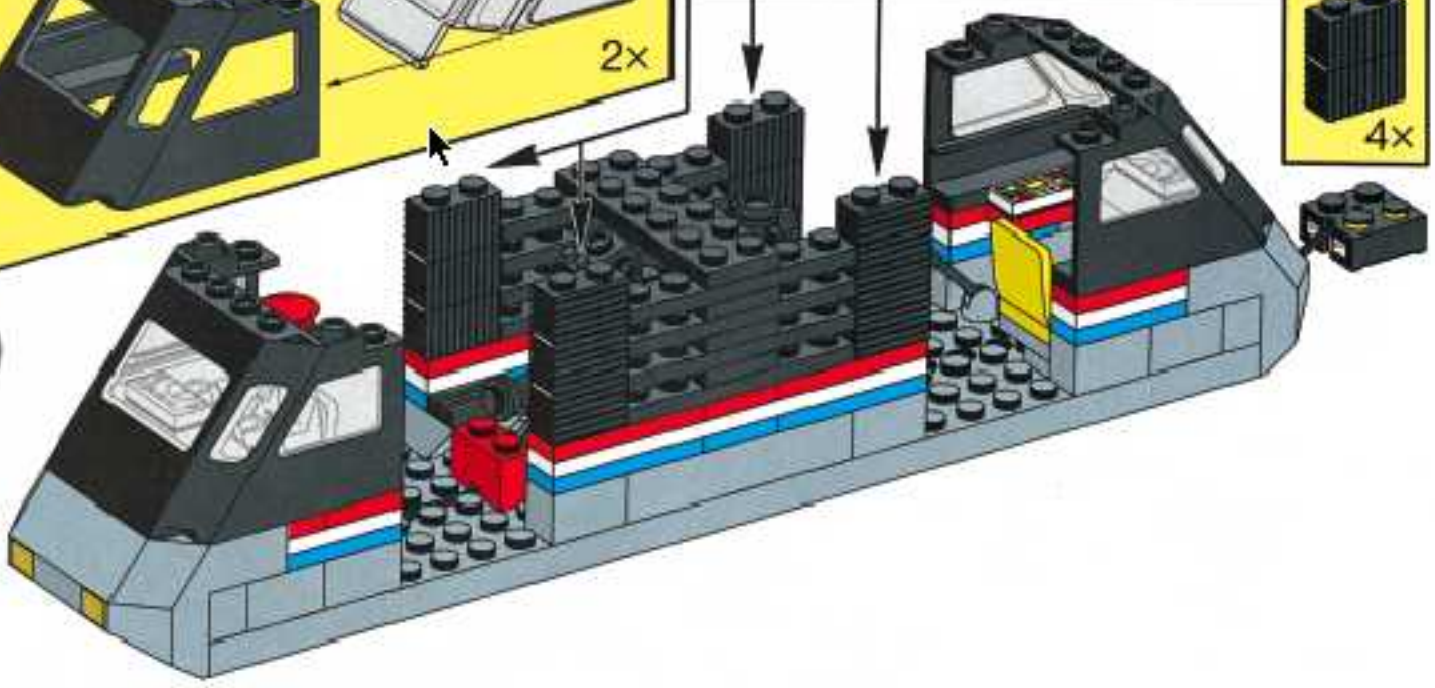

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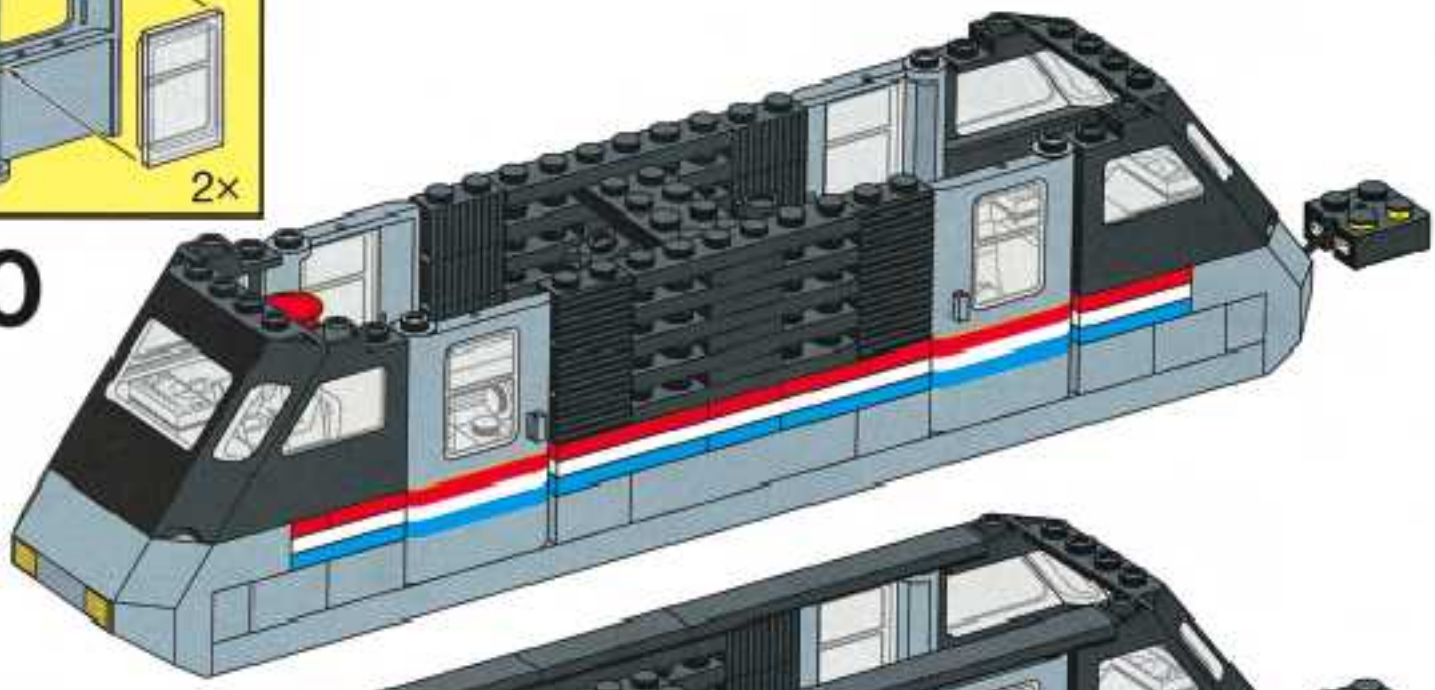

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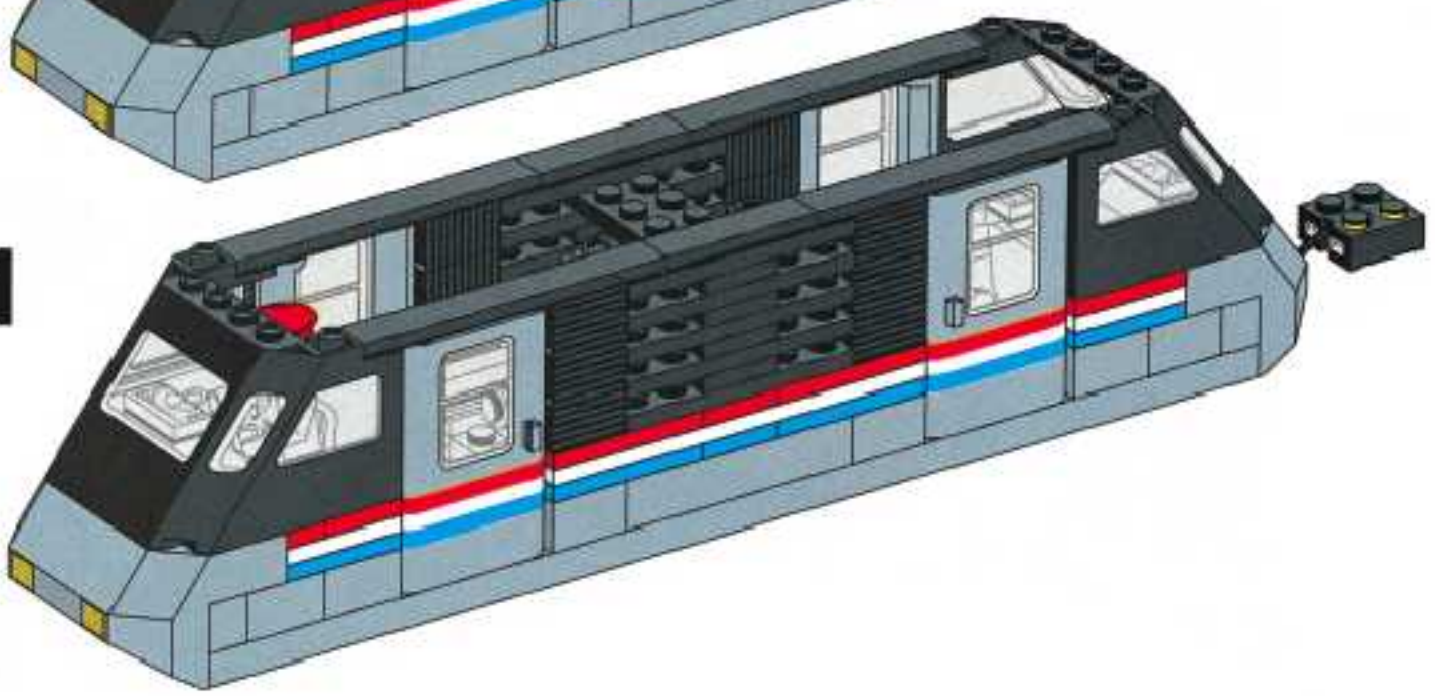

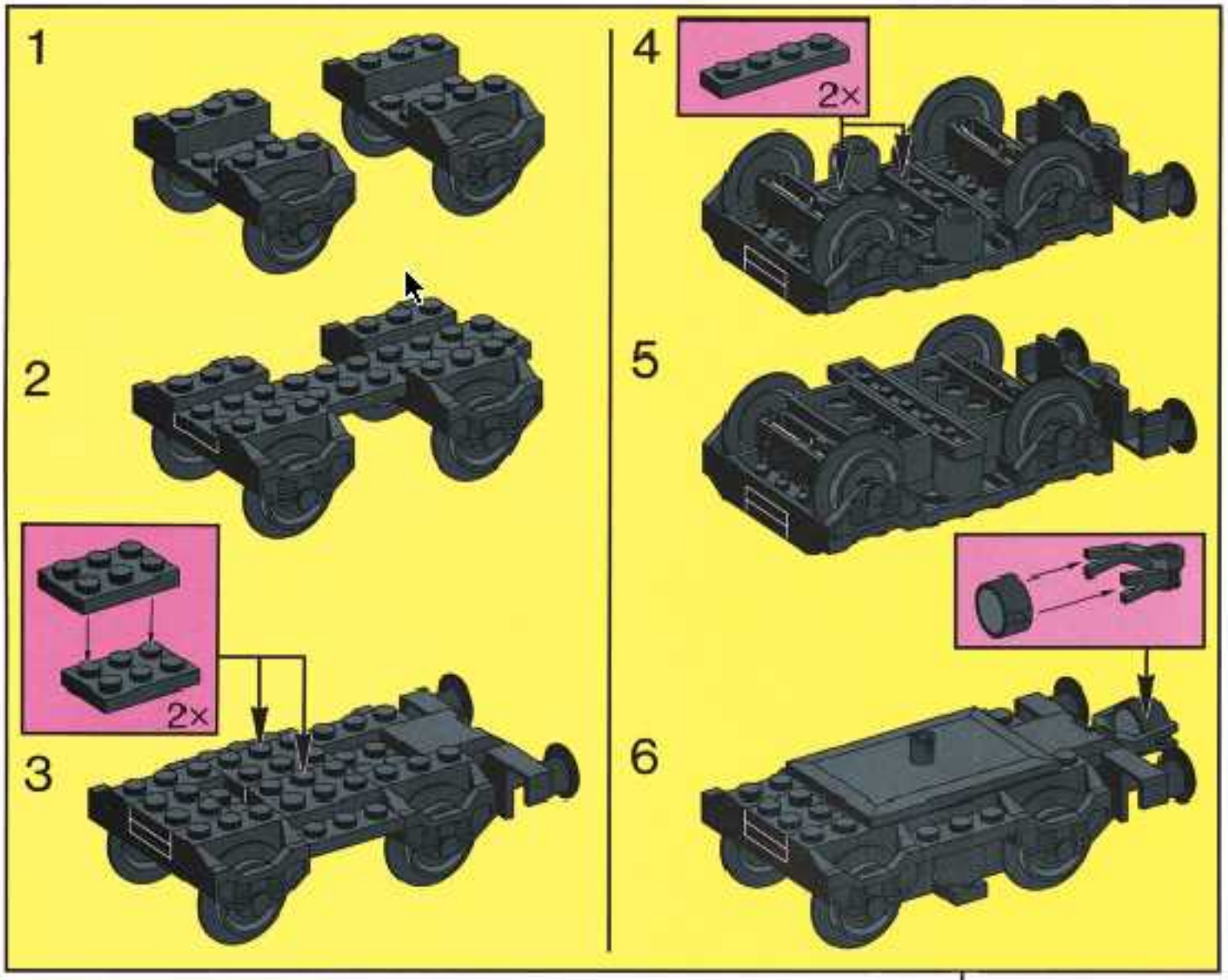

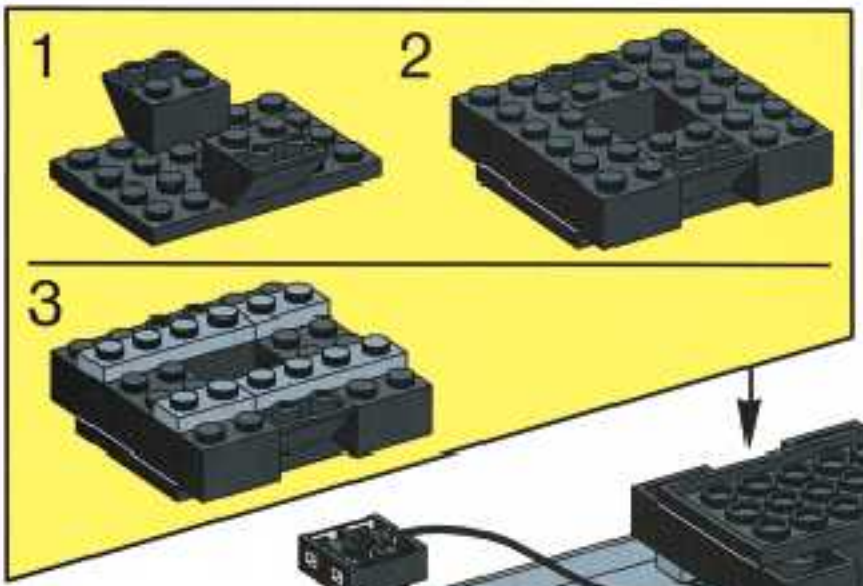

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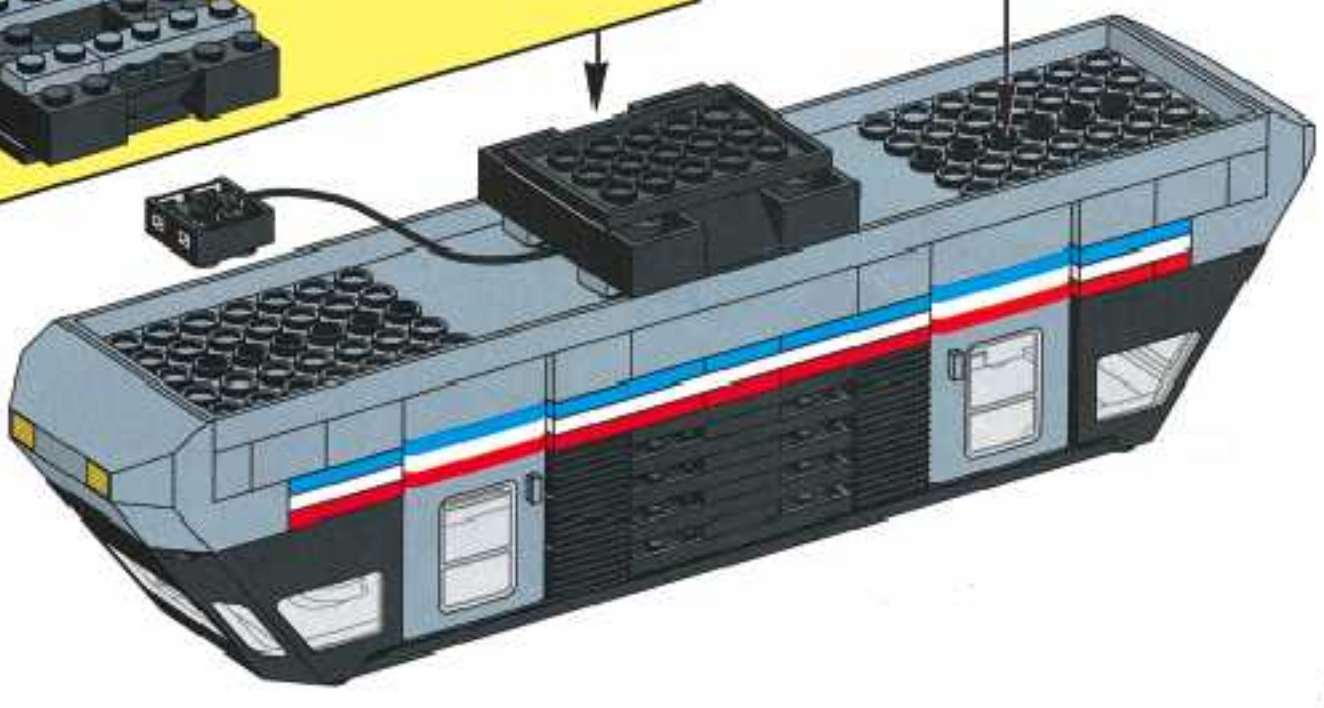

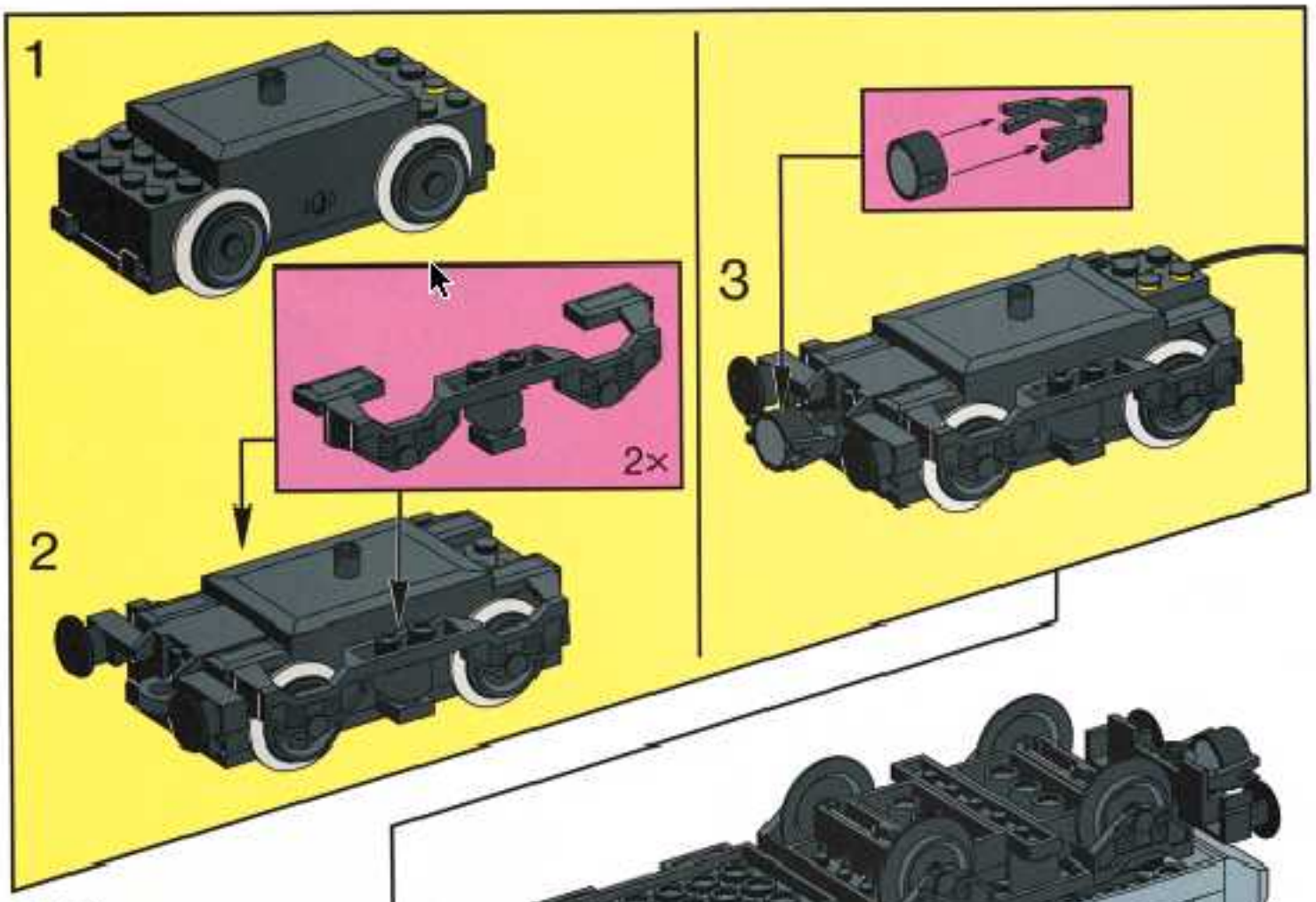

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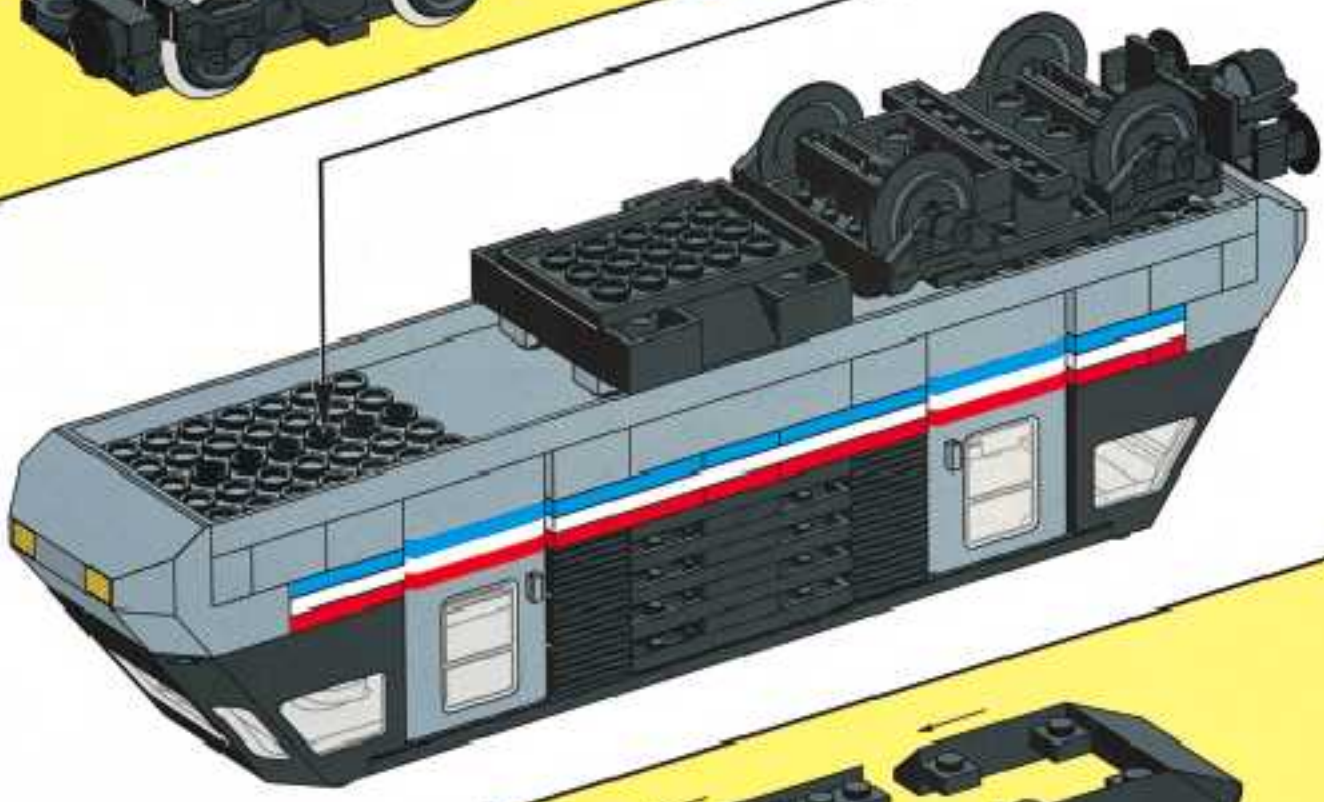

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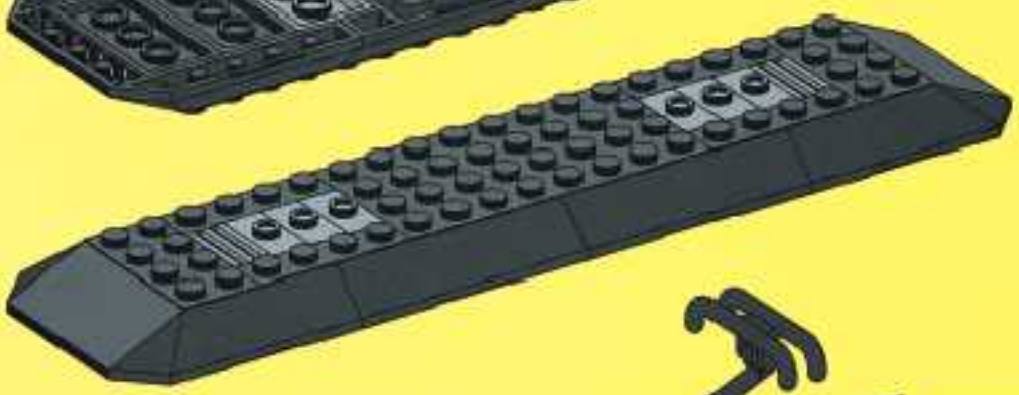

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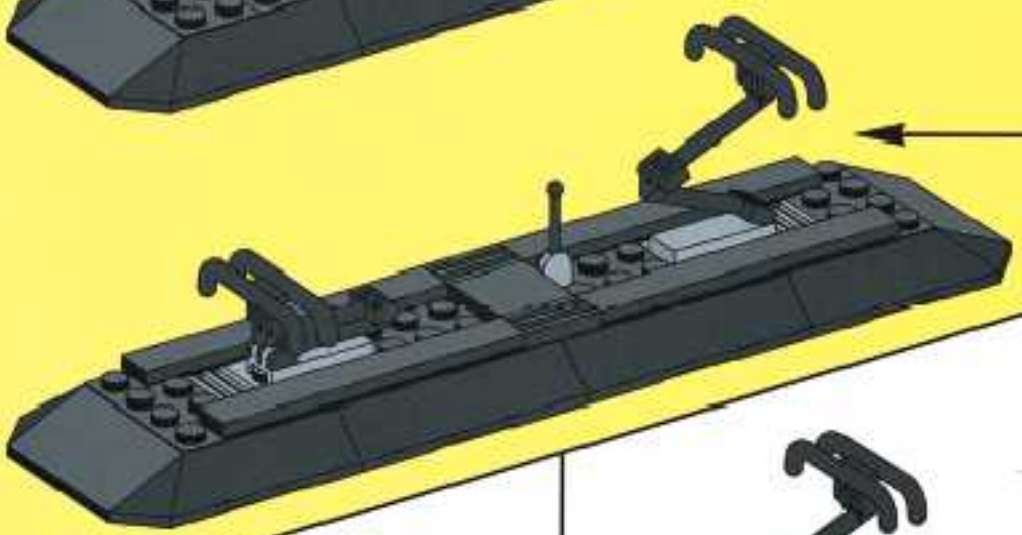

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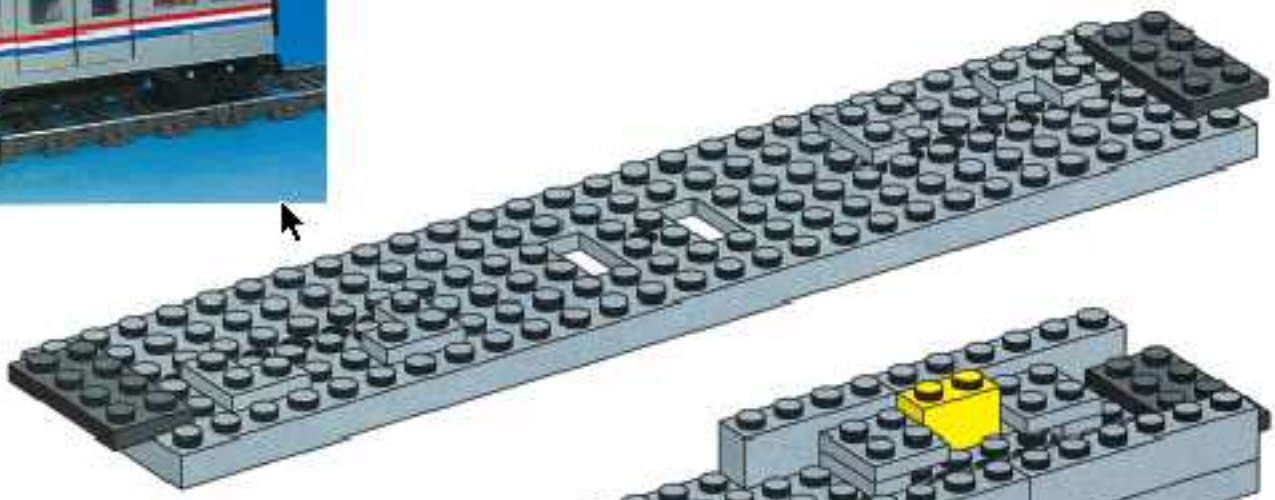

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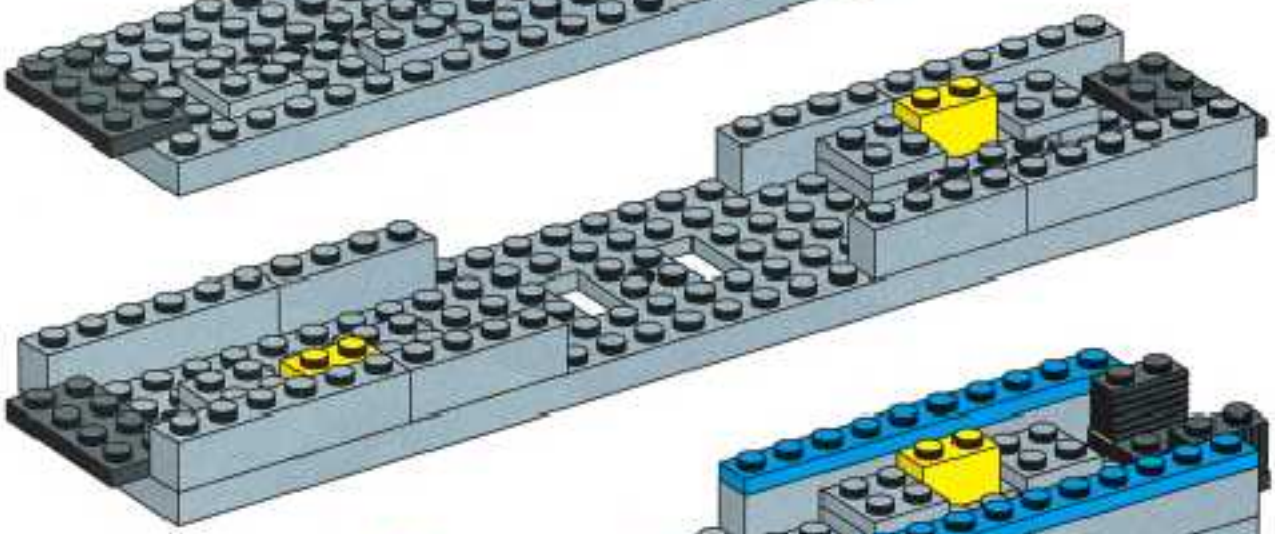

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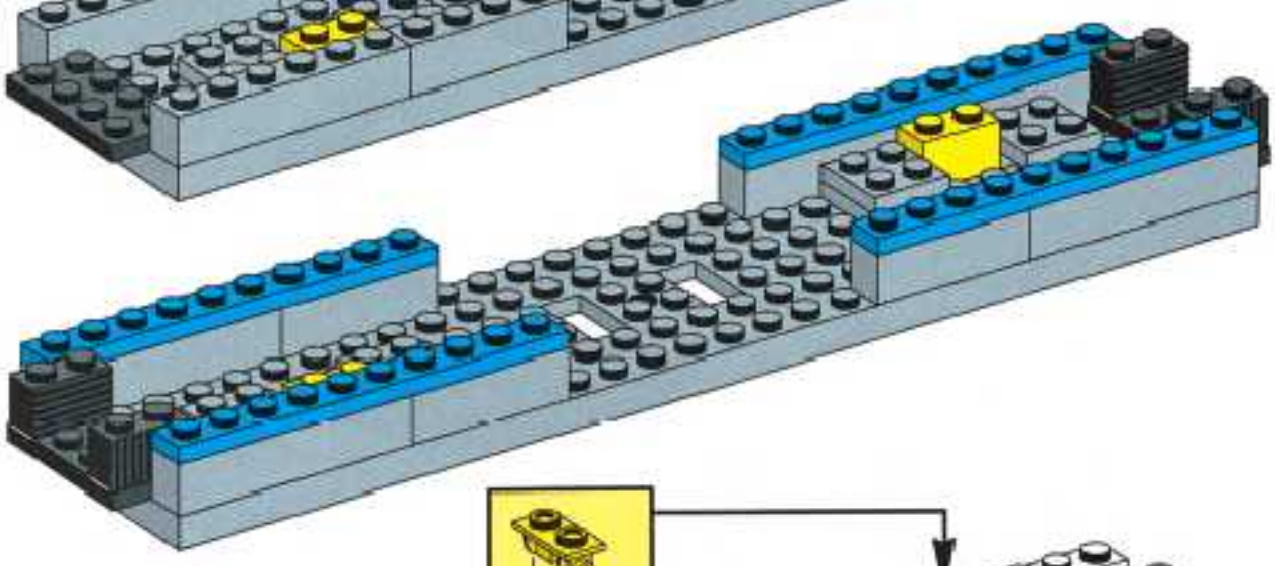

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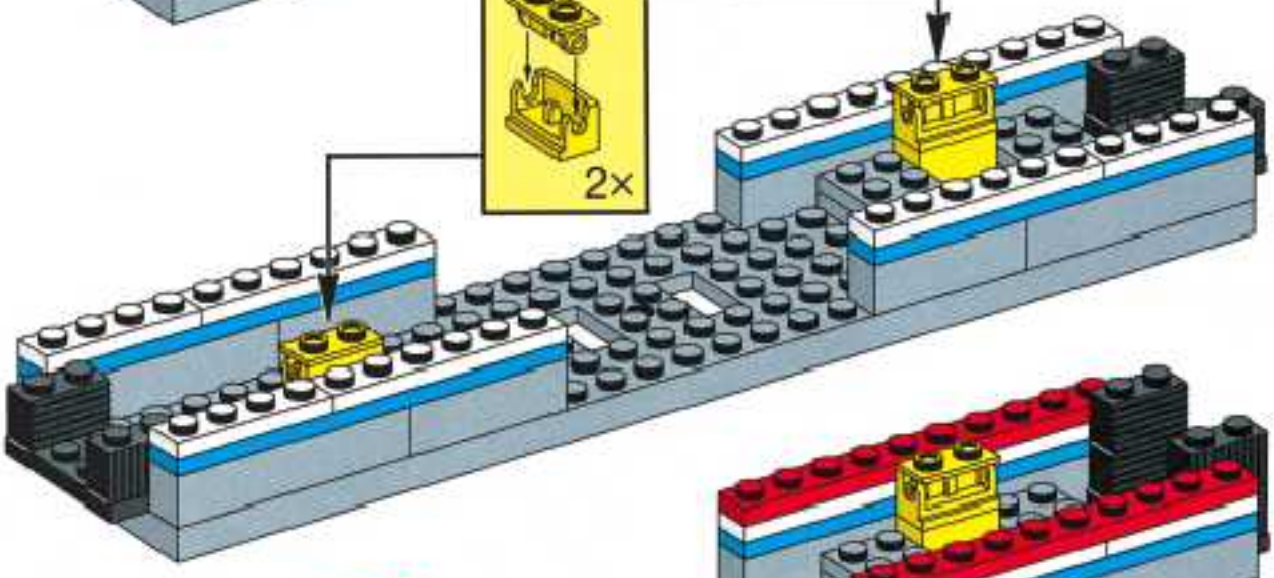

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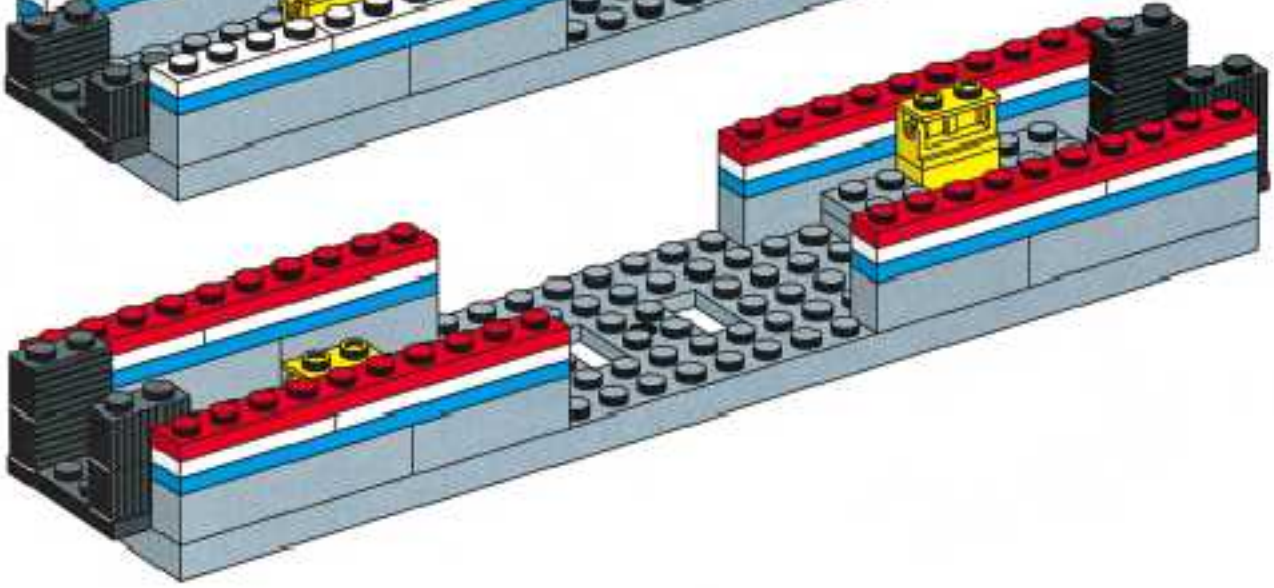

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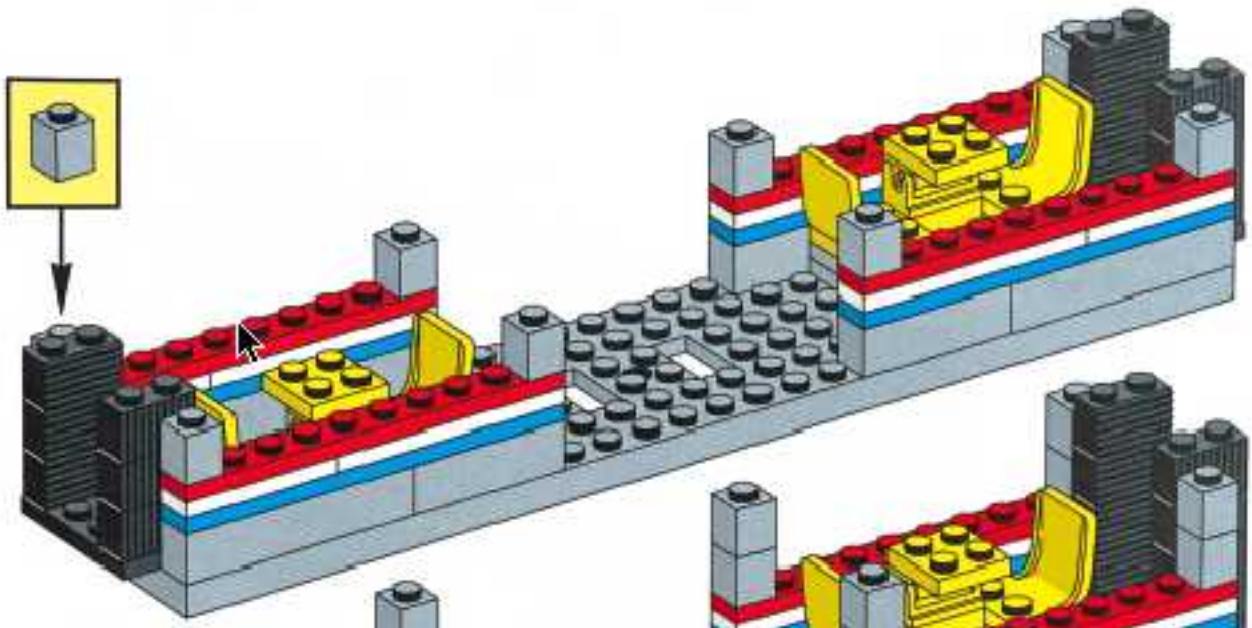

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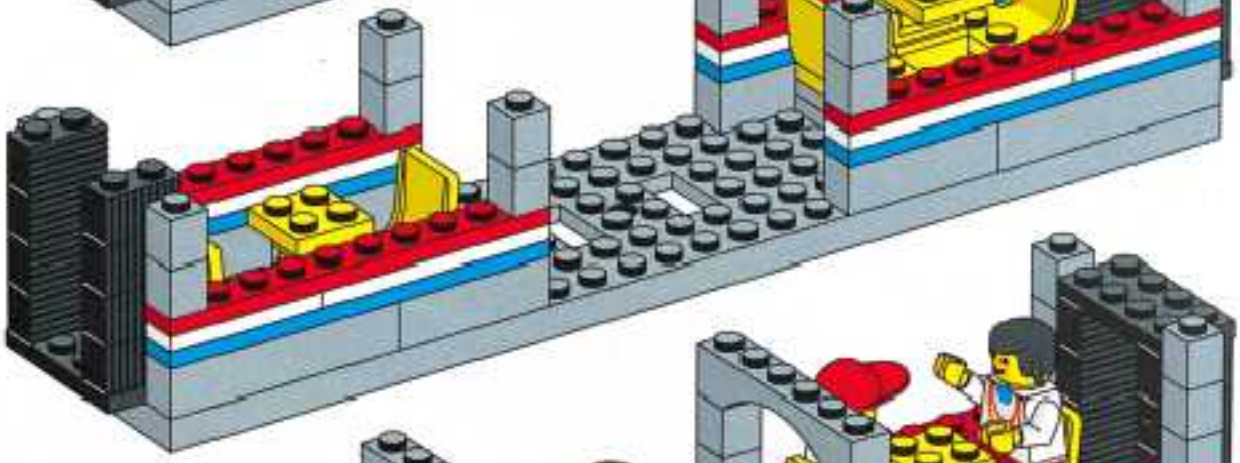

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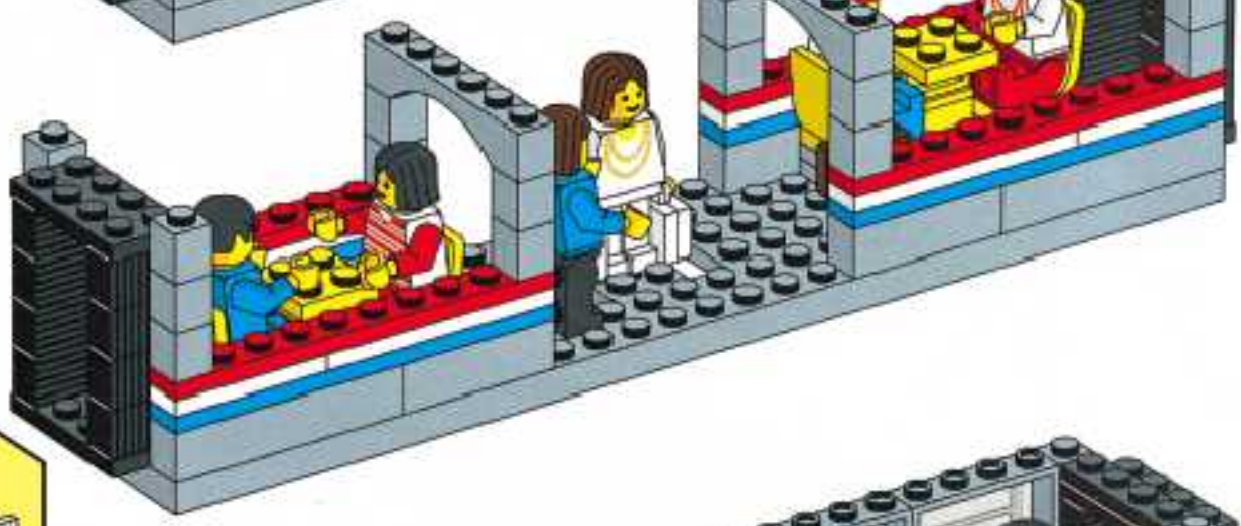

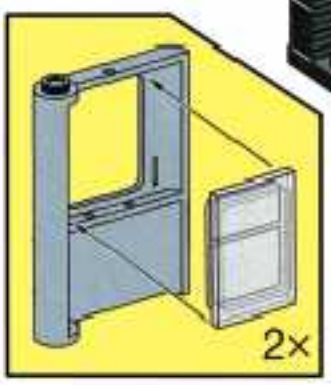

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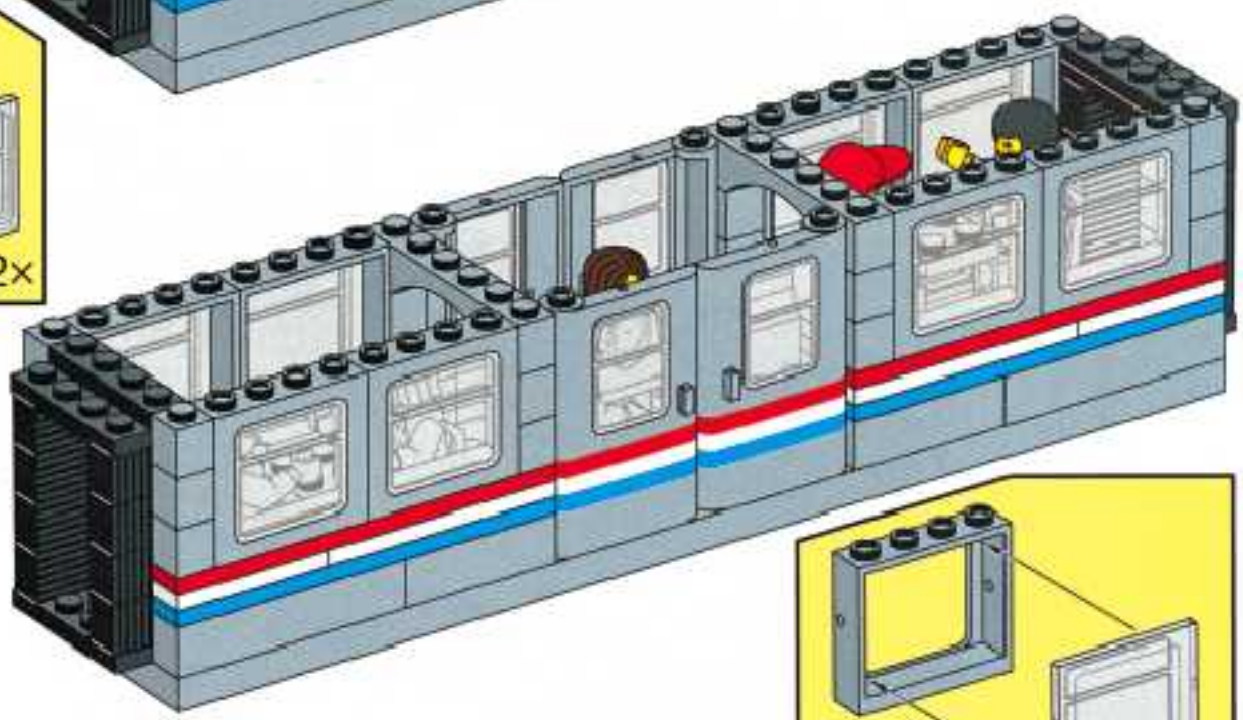

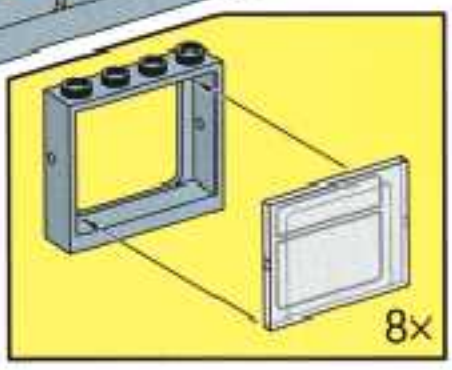

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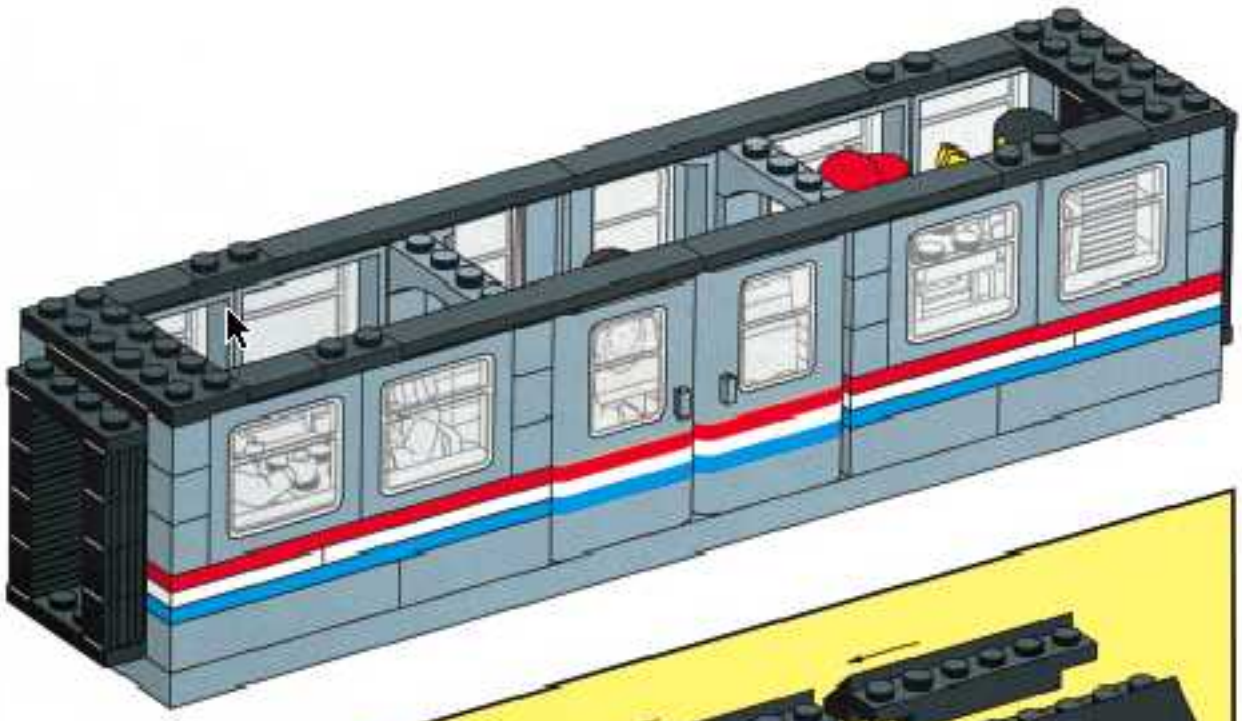

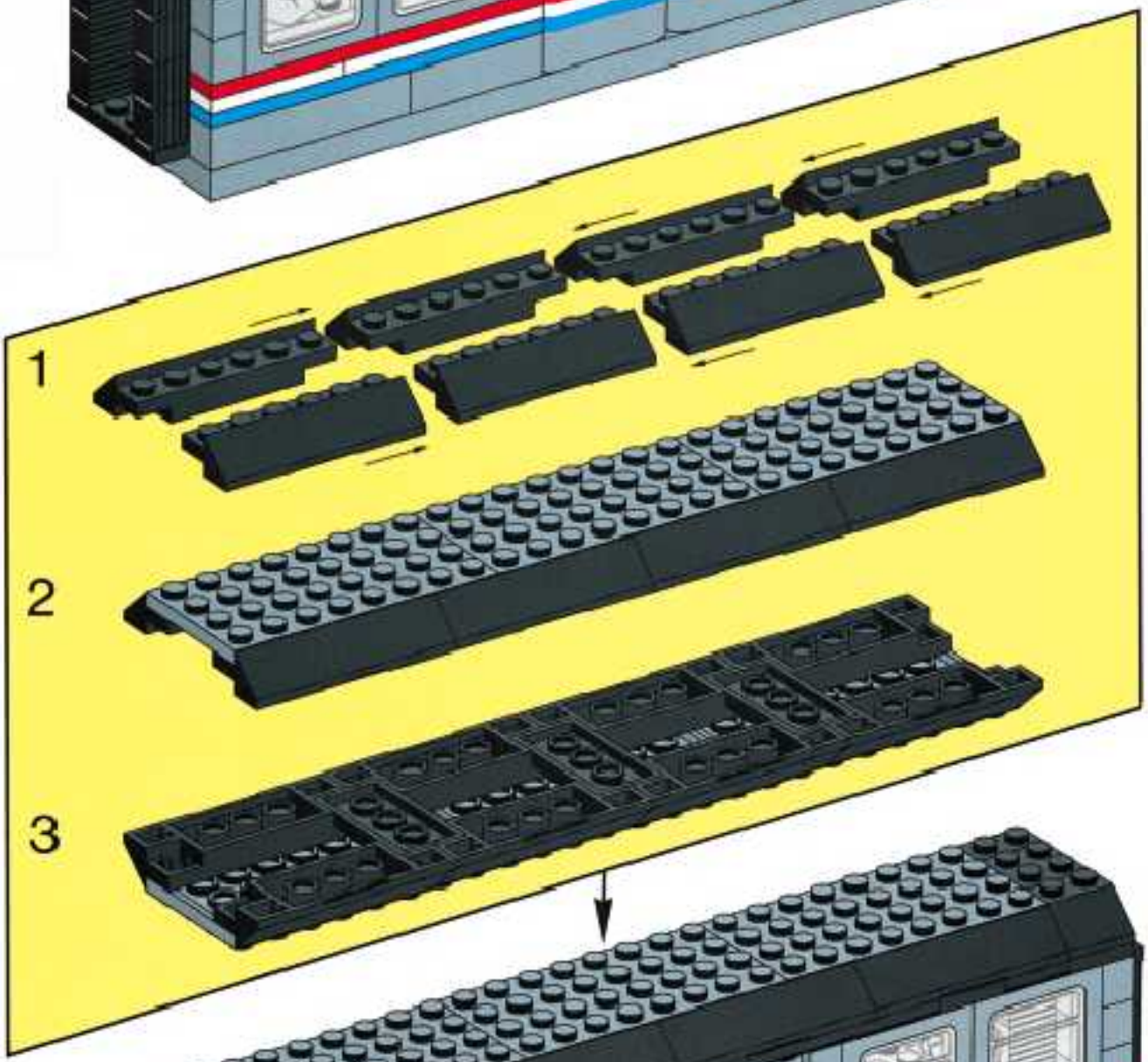

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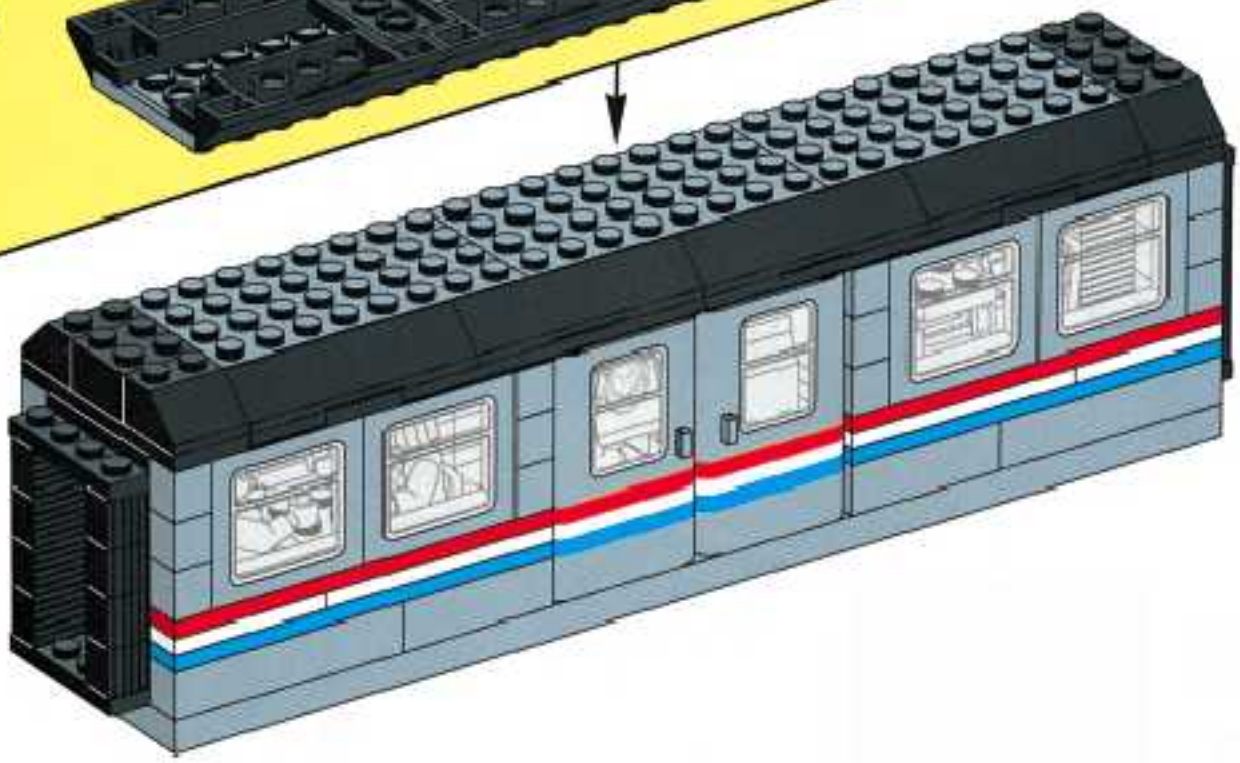

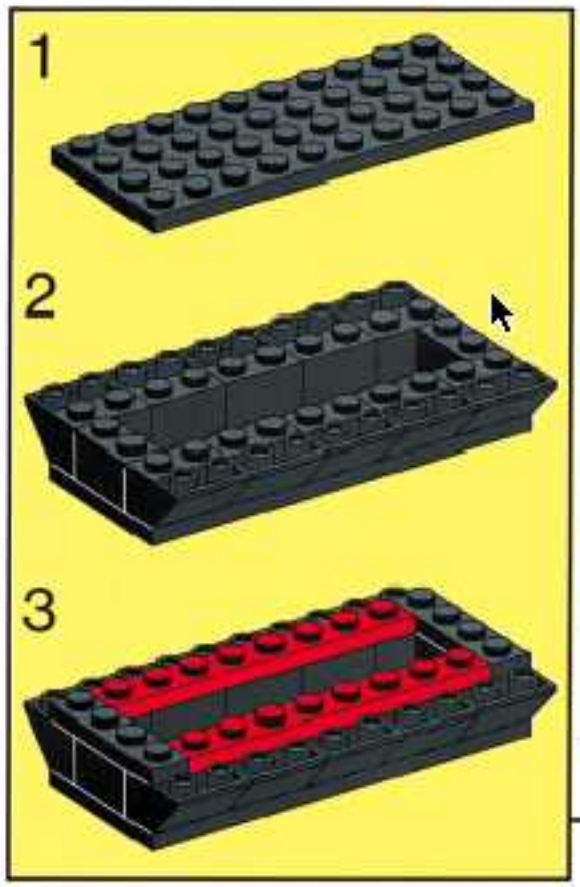

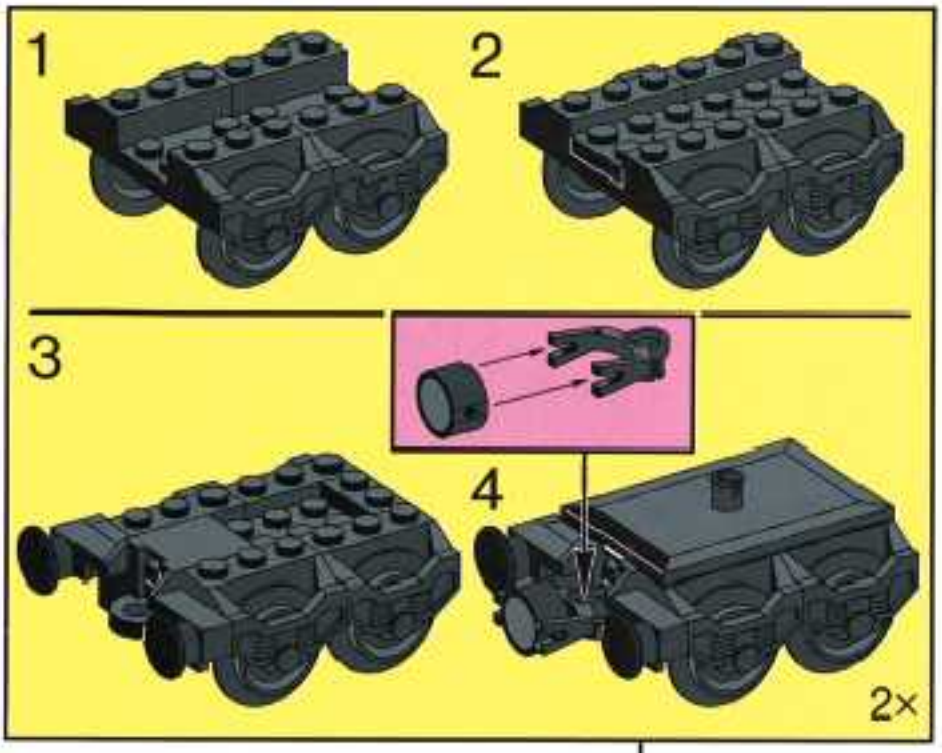

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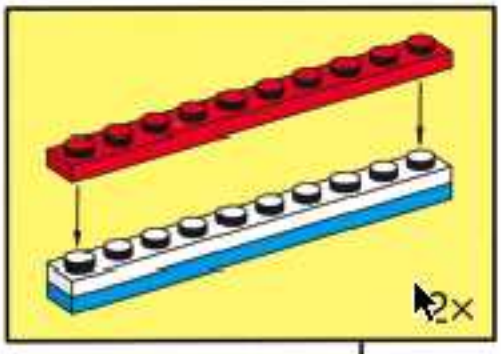

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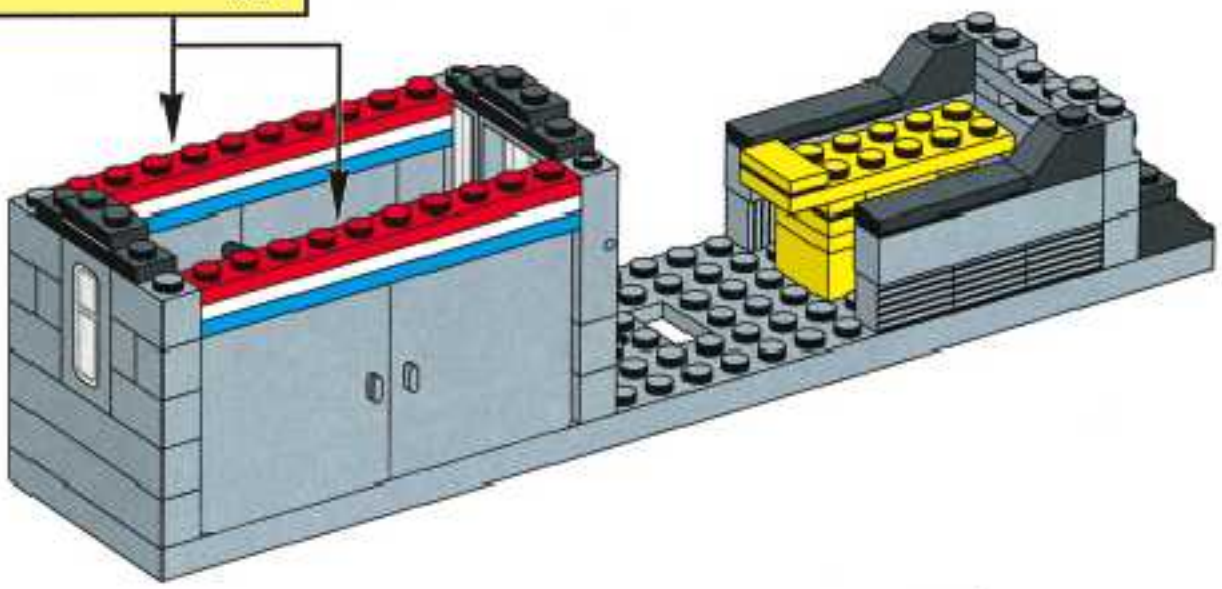

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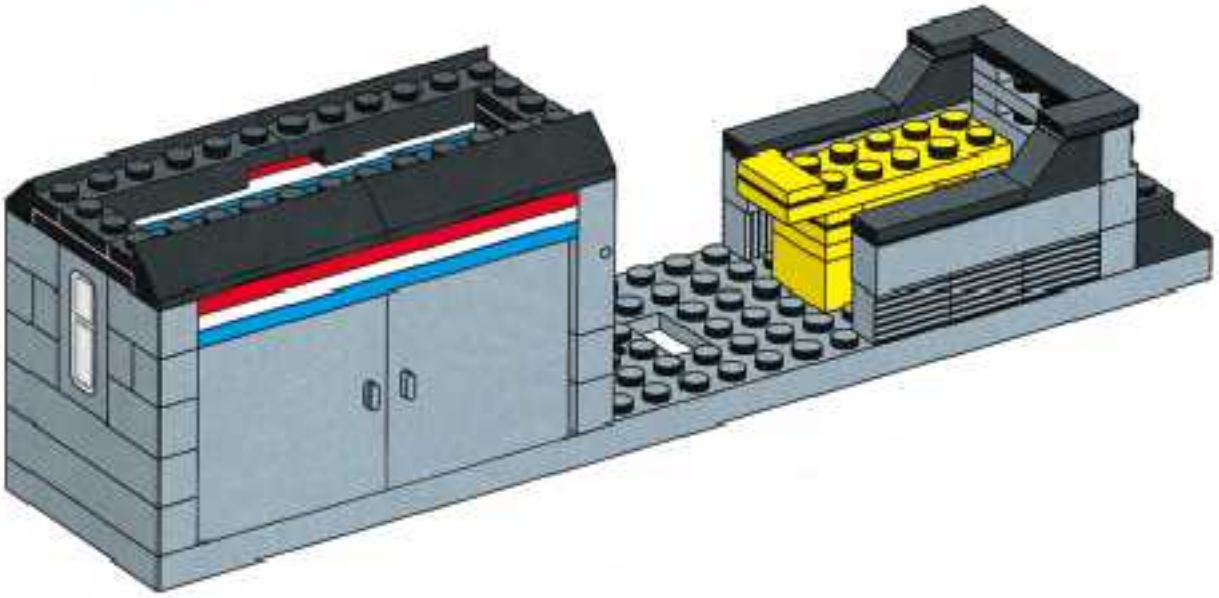

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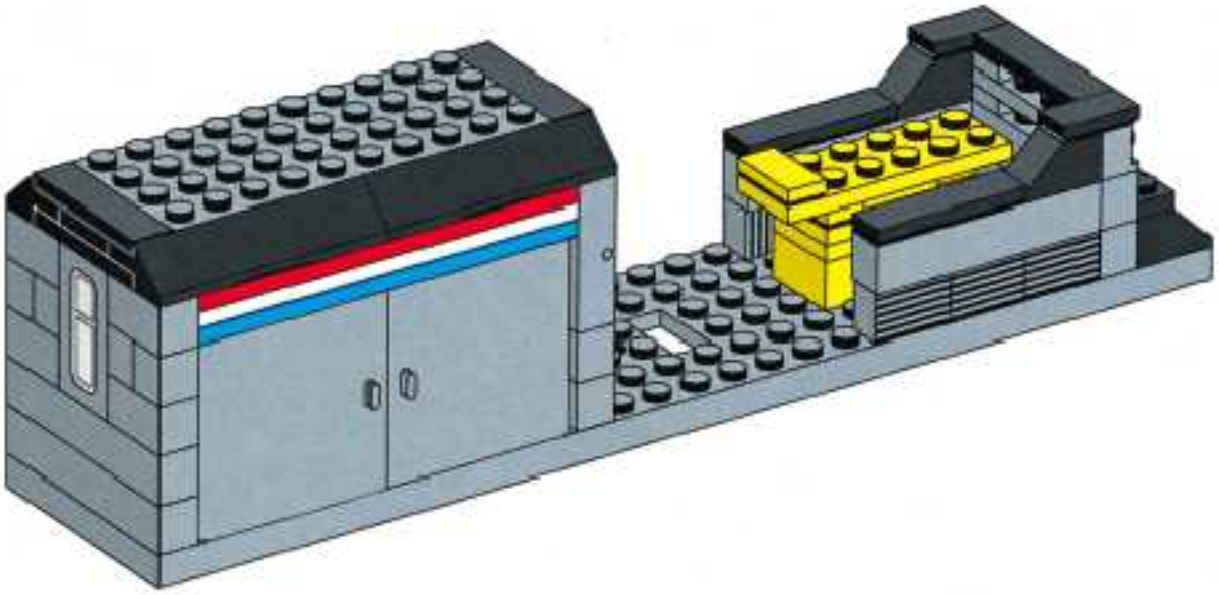

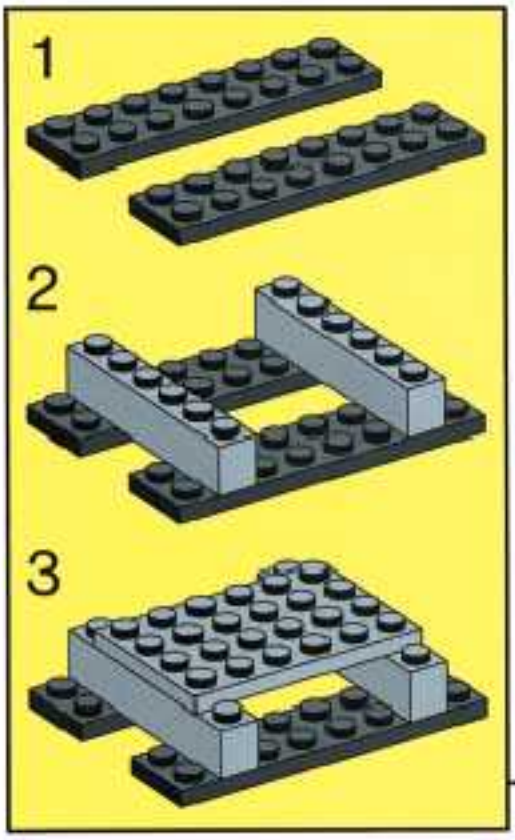

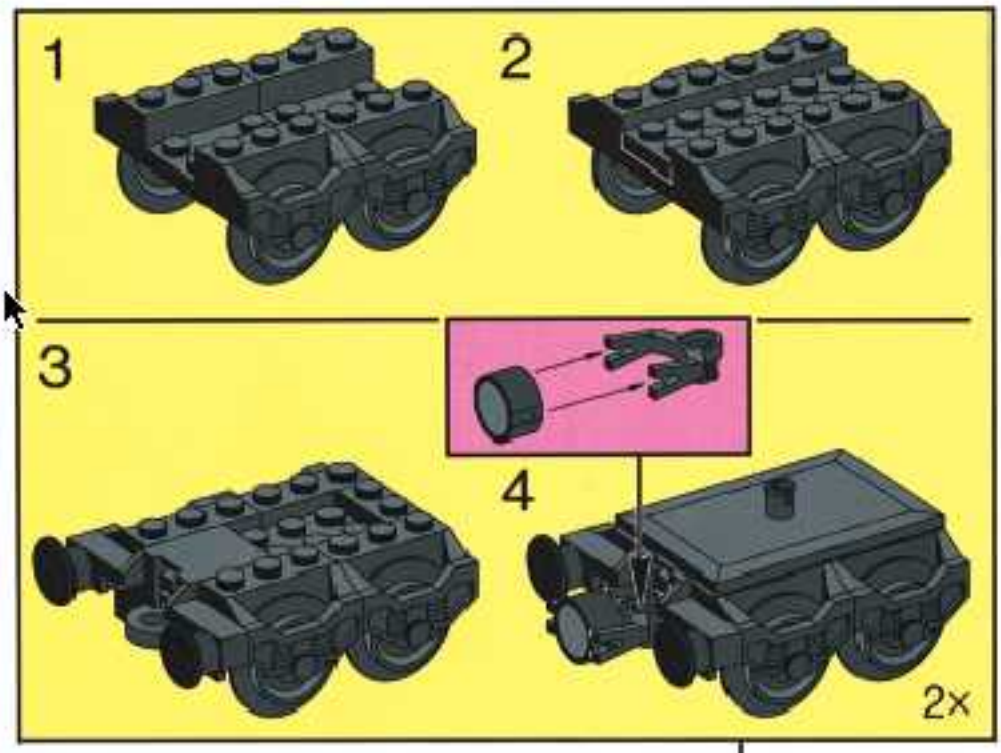

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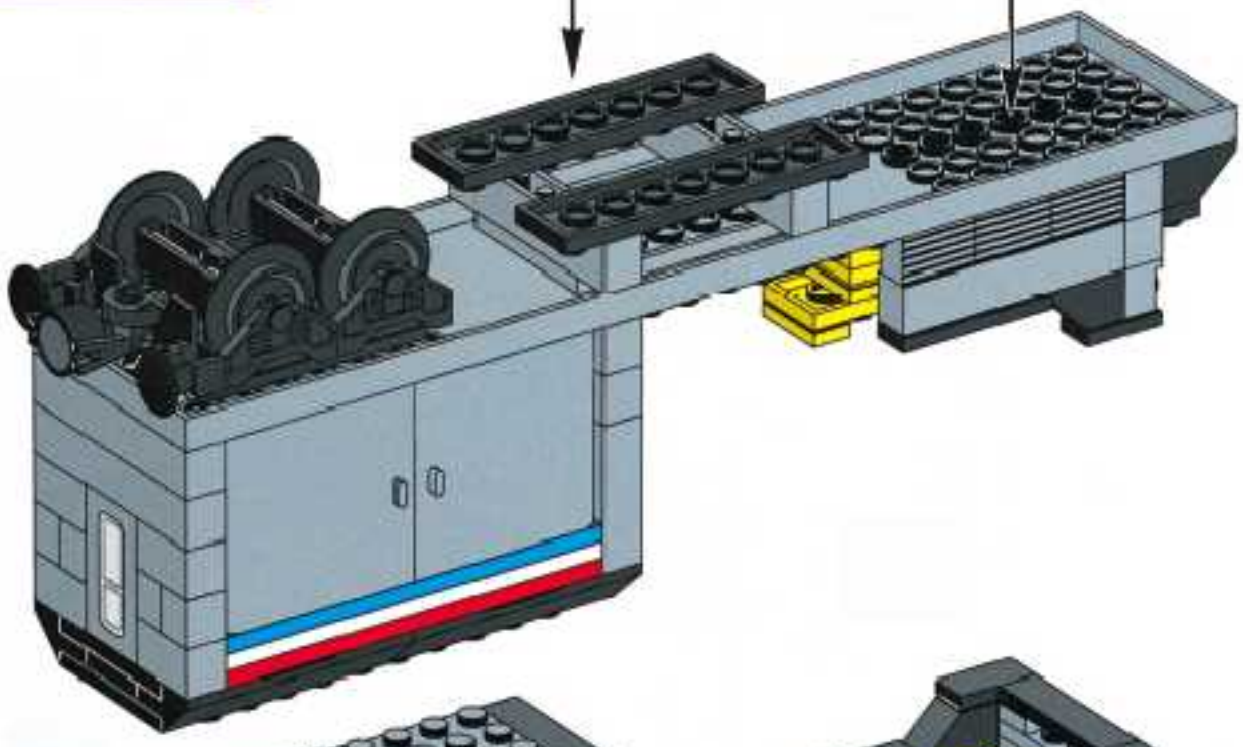

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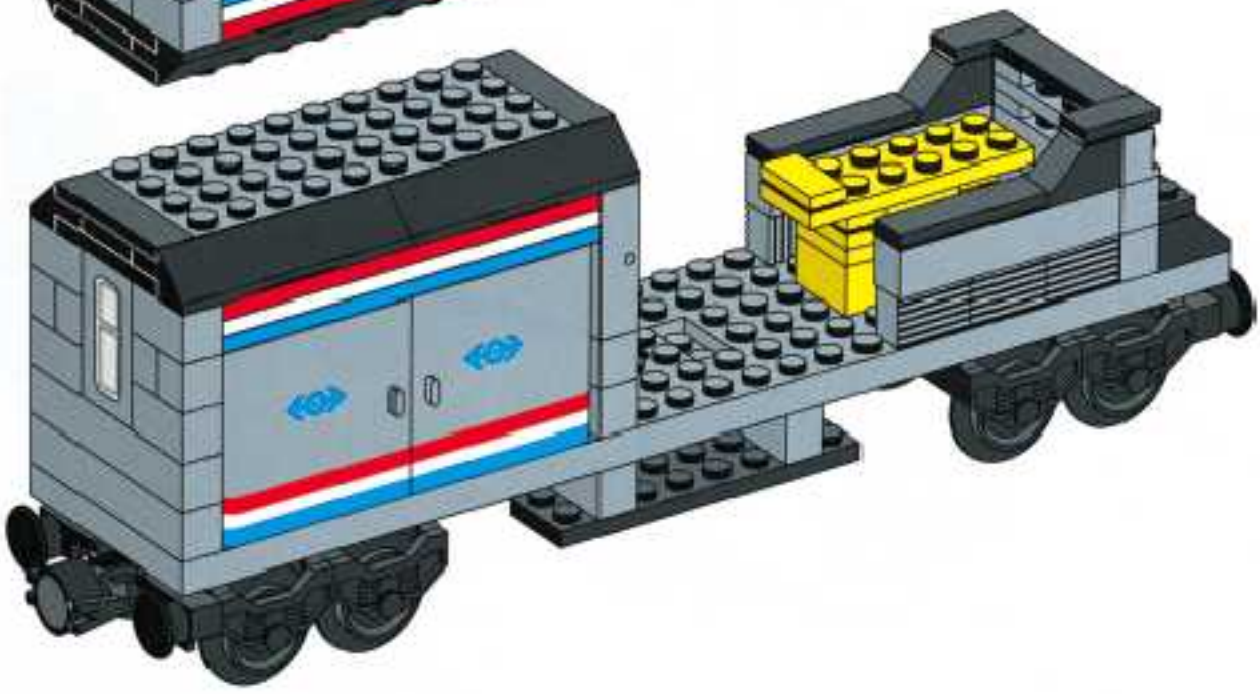

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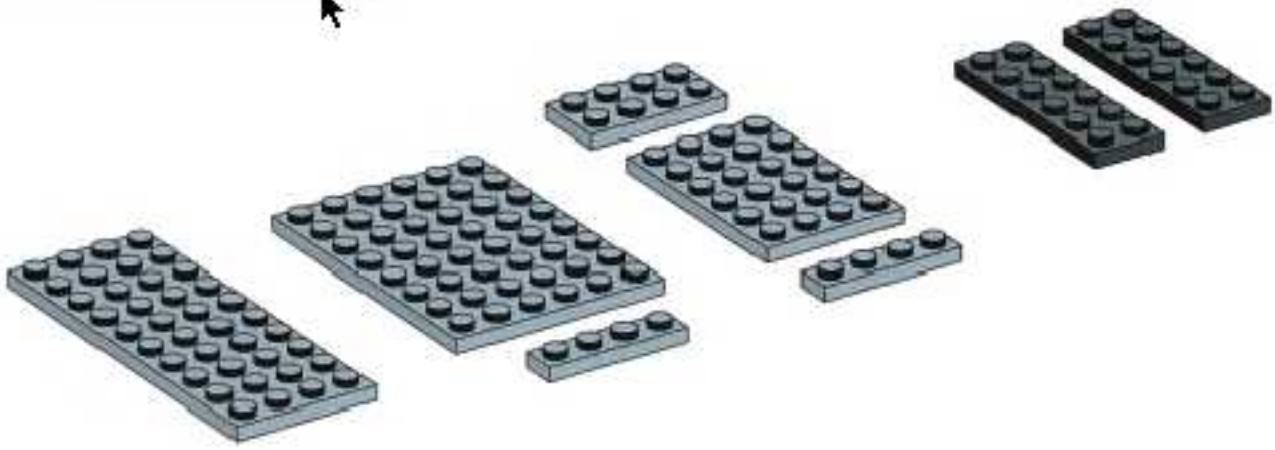

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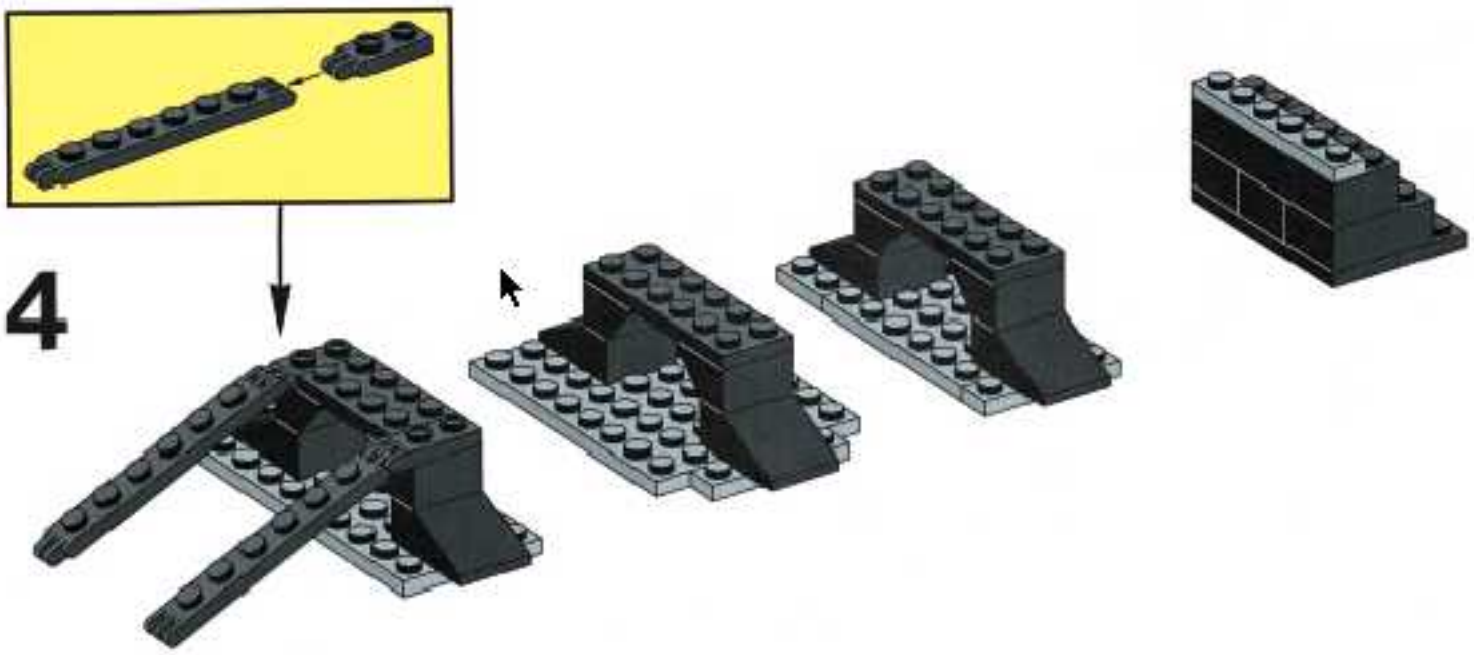

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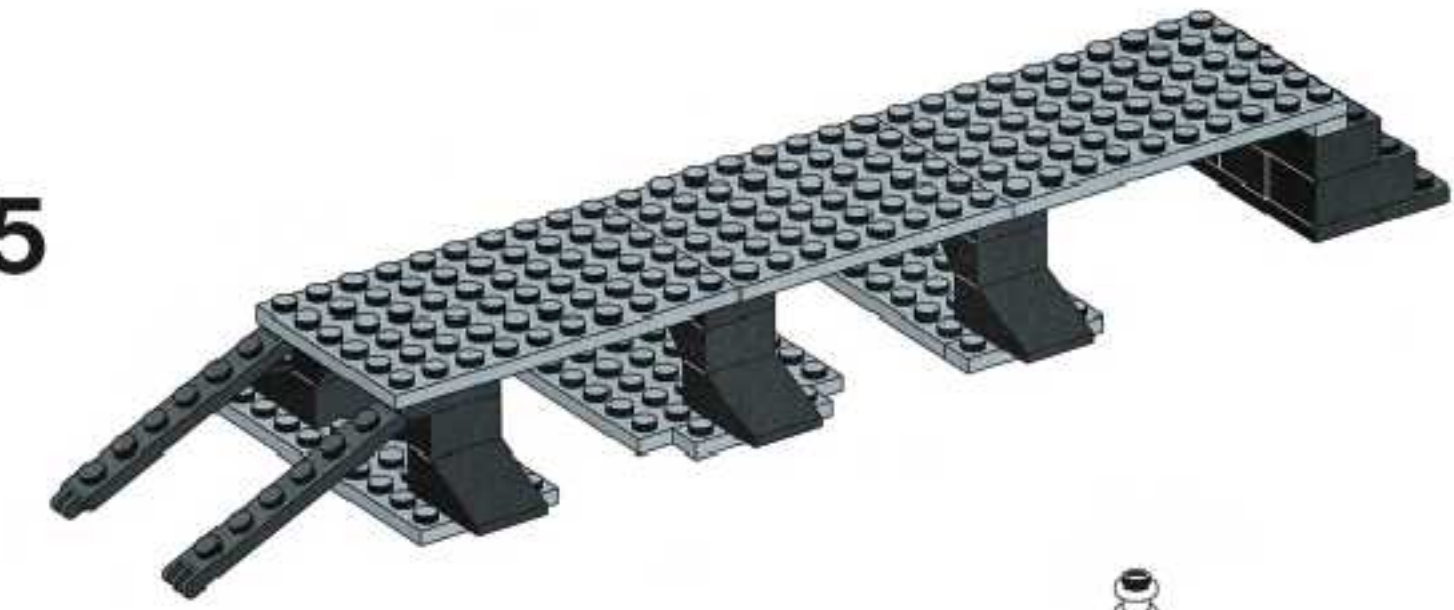

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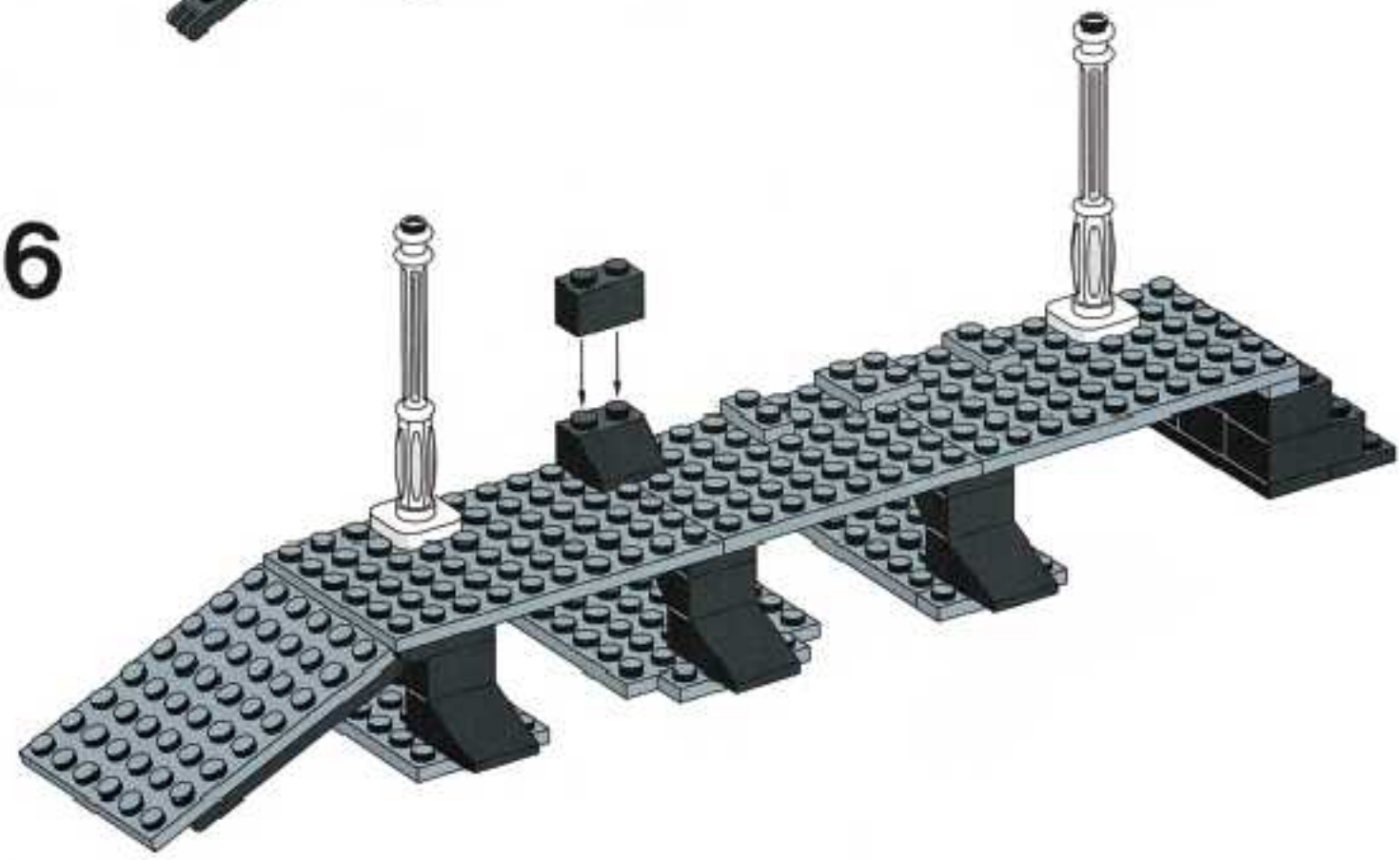

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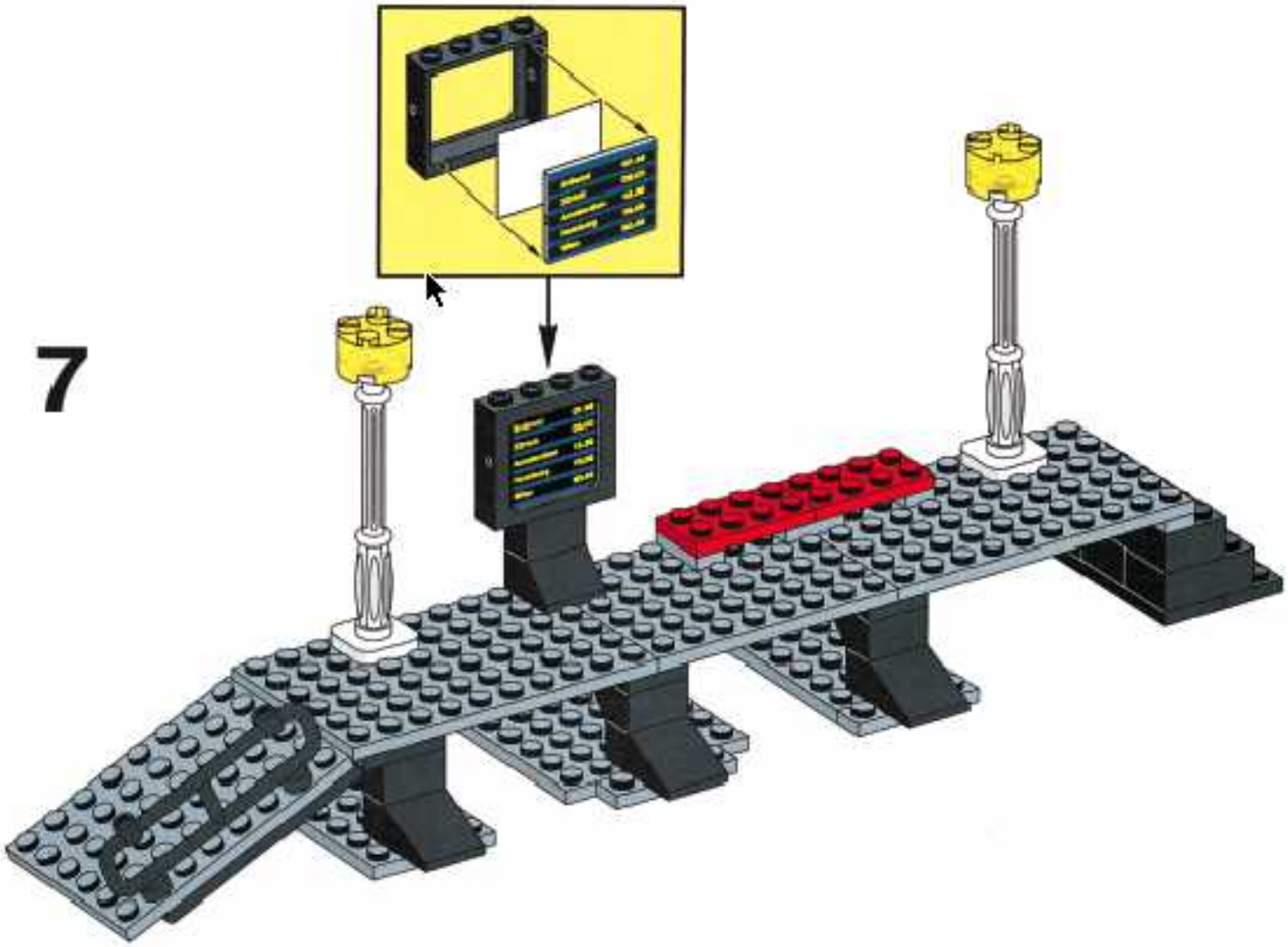

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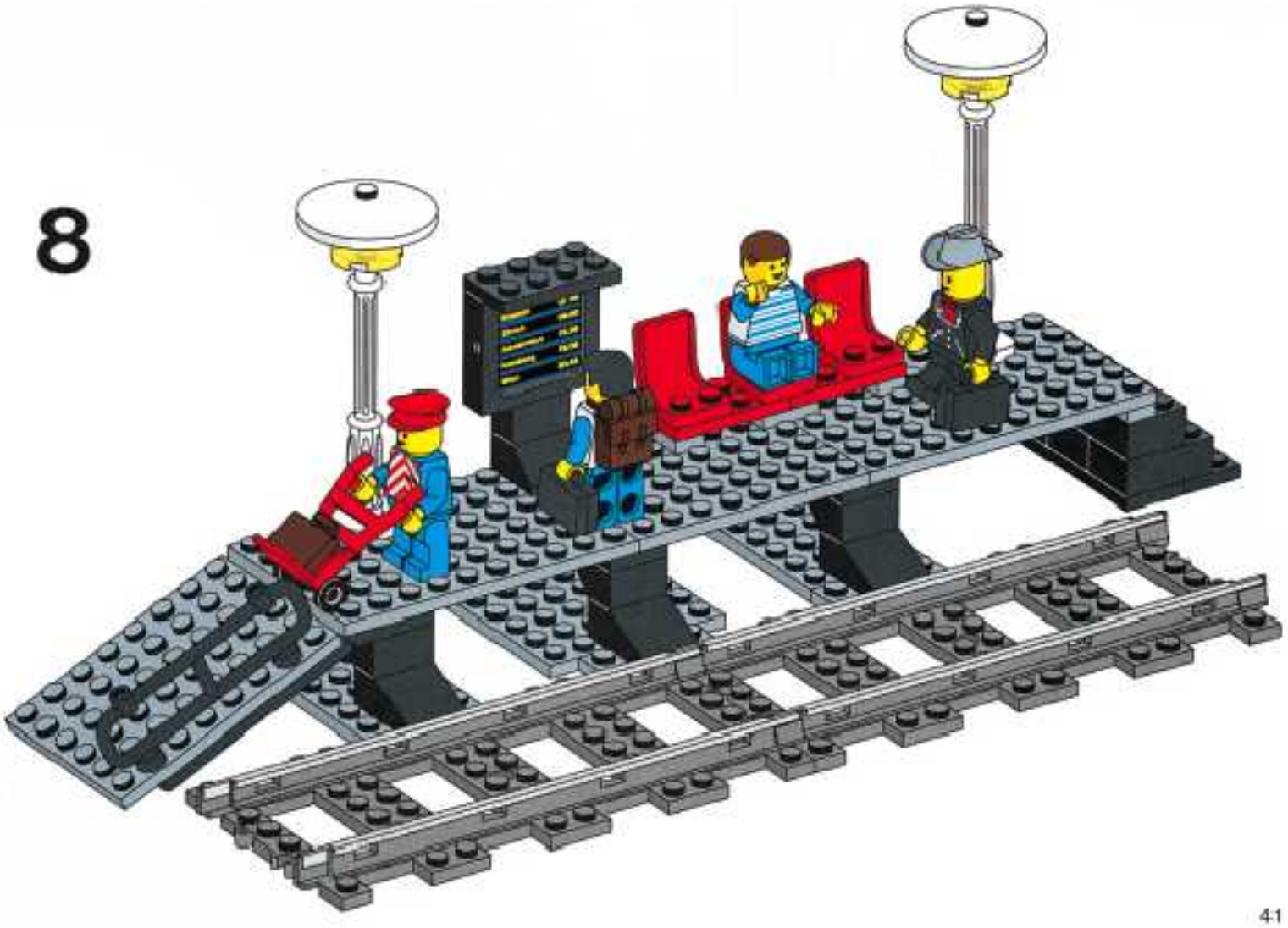
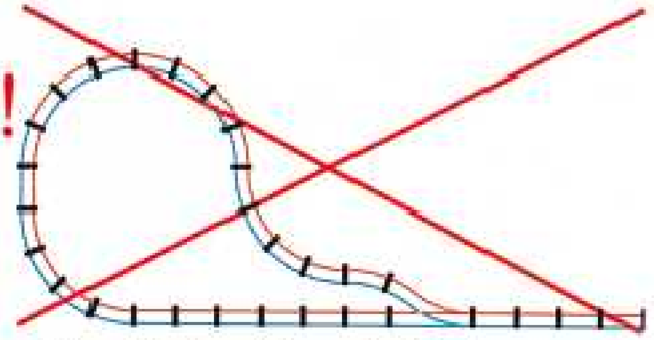
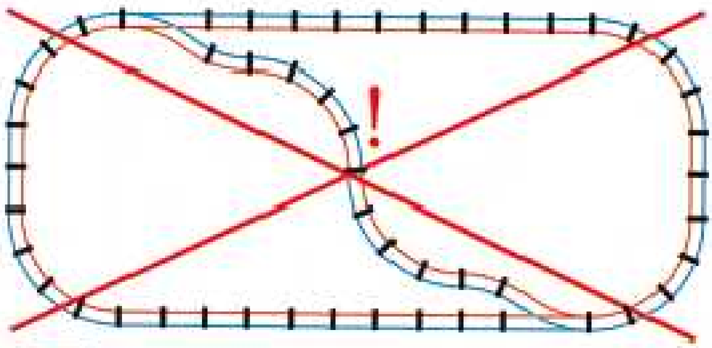






Einige Gleispläne, z.B. die oben abgebildeten, verursachen einen Kurzschluß. Wenn die Gleise kurzgeschlossen sind, schaltet sich die grüne Kontrolleuchte des LEGO Fahrreglers aus, bzw. leuchtet nur sehr schwach. Der Zug kann dann nicht fahren.
Du kannst leicht feststellen, ob Dein Schienenkreis kurzgeschlossen ist, indem Du mit zwei verschiedenen Farben an der äußeren bzw. inneren Schiene entlang fährst. Treffen beide Farben auf derselben Schiene zusammen, ist das Schienennetz kurzgeschlossen.

Alcuni elementi del circuito ferroviario 9 Volt possono causare un corto circuito (vedi illustrazioni a fondo pagina). In caso di corto circuito, la luce verde su regolatore di velocità (speed regulator) è spenta o molto debole e il treno non parte.
E' possibile accertare in quale punto avviene il corto circuito facendo in modo che due colori diversi, corrispondenti rispettivamente al binario esterno e a quello interno. Si avrà il corto circuito se i due colori si incontrano sullo stesso lato.

Certains circuits de train 9 V peuvent provoquer un court-circuit – comme ceux montrés ici, par exemple.
En cas de court-circuit, le témoin lumineux vert sur le régulateur de vitesse sera éteint ou très faible et le train ne roulera pas. Pour vérifier qu'un circuit peut fonctionner, dessinez votre réseau en prenant deux couleurs différentes pour le rail intérieur et le rail extérieur. Il y aura court-circuit si les deux couleurs se rejoignent sur le même côté.

Sommige opstellingen van 9 Volt spoorbanen kunnen kortsluiting veroorzaken, bijvoorbeeld de hier afgebeelde. Als de baan kortgesloten is, brandt het groene lampje op de stuureenheid (snelheidsregelaar) niet, of slechts zeer zwak, en de trein kan niet rijden.
Je kunt zelf controleren waar de rails kortsluiten door met twee verschillende kleuren de buitenste en de binnenste rail te volgen. Als de twee kleuren elkaar ergens ontmoeten, is de baan kortgesloten.

Algunas instalaciones de vías para trenes de 9V producen cortocircuitos, como por ejemplo las que aquí se muestran. Si se produce un cortocircuito en la instalación, la lámpara verde de la unidad de regulación de velocidad estará apagada o tendrá una luz muy tenue, por lo que el tren no podrá funcionar.
Tú mismo puedes controlar dónde se produce el cortocircuito, dejando que dos distintas sigan la línea exterior e interior de las vías. Allí donde los dos colores se unen es donde se produce el cortocircuito.

Nogle opbygninger af 9V togbaner vil forårsage kortslutning, f.eks. de, der er vist her. Hvis banen er kortsluttet, er den grønne lampe på reguleringsenheden slukket, eller vil lyse meget svagt, og toget kan ikke køre.
Du kan selv kontrollere hvor din baneopbygning kortslutter ved at lade 2 forskellige farver følge hhv. den yderste og inderste sporskinne. Hvis de to farver mødes på samme side, kortslutter banen.

Short circuiting will result from some lay-outs of the 9V railway tracks, e.g. those shown here. If the track has short circuited, the green lamp on the speed regulator will be off or very weak, and the train will not run.
You can check for short circuiting of your track lay-out by allowing two different colours to follow the outer and inner rails. The track will short circuit if the two colours meet on the same side.

Eräät 9V junaratojen rakennelmat aiheuttavat oikosulun, esimerkiksi sellaiset, jotka tässä on kuvattu. Jos radalle syntyy oikosulku, ei säätölaitteen (speed regulator) vihreä lamppu palä tai se on hyvin himmeä, eikä juna kulje.
Voit itse tarkistaa oikosulun syntypaikan. Seuraa kahdella eri värillä ulompaa ja sisempää kiskoa. Jos nämä kaksi väriä kohtaavat samalla kiskolla, on rata oikosulussa.

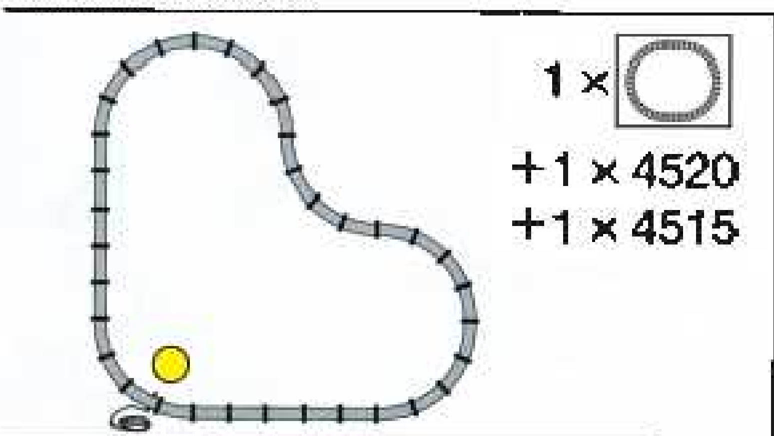
En del sammensättningar av 9V-bananläggningar kan förorsaka kortslutning, t.ex. sådana som visas här. Om banan får kortslutning, slocknar gröna lampan på manöverenheten (speed regulator) eller också lyser den endast mycket svagt. Tåget kan då inte köra.
Du kan själv se hur din banläggning kortsluter genom att låta två olika färger följa den yttersta resp. den innersta rälsen. Om de två färgerna möts på samma sida uppstår kortslutning på banan.

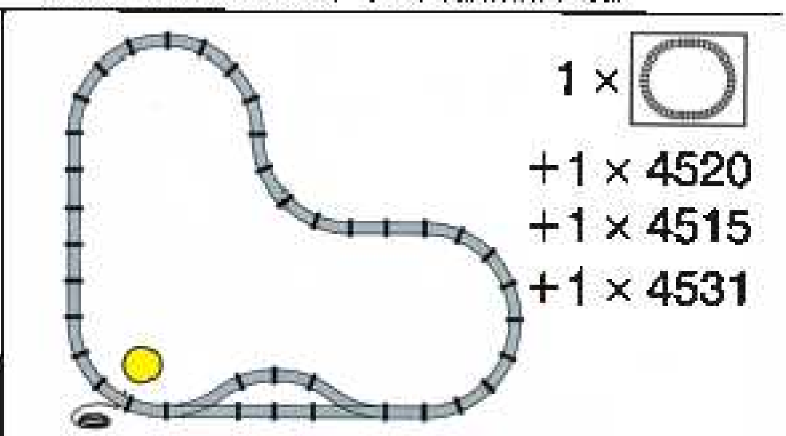
Algumas construções de vias férreas de 9V poderão causar curto-circuitos, p.ex., as que se mostram aqui. Se a via sofrer um curto-circuito, a lâmpada verde da unidade reguladora (speed regulator) apagará ou brilhará com menos força, e o comboio não poderá andar.
Você mesmo pode controlar o local de curto-circuitos na sua própria via, deixando 2 cores diferentes seguir o trilho exterior e interior, respectivamente. Se as duas cores se encontrarem no mesmo lado, a via sofrerá um curto-circuito.

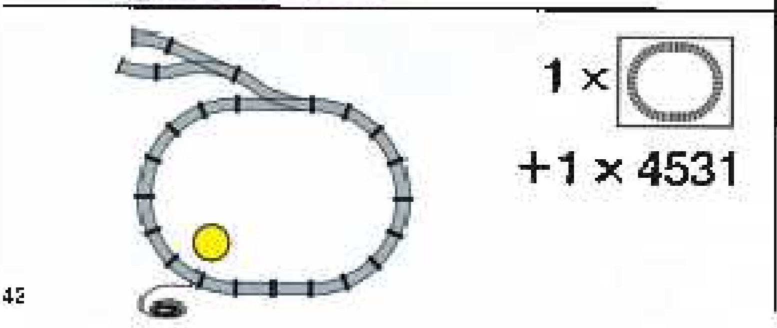
Μερικές διατάξεις των γραμμών του ηλεκτρικού τρένου προκαλούν βραχυκύκλωμα, όπως η διάταξη που φαίνεται στο σχέδιο. Όταν οι γραμμές βραχυκυκλώνουν, το πράσινο φωτάκι στο ρυθμιστή ταχύτητας (speed regulator) θα σβήσει ή θα είναι πολύ αδύνατο και το τρένο δεν θα τρέξει.
Μπορείς να ελέγξεις μόνος σου αν οι γραμμές βραχυκυκλώνουν χρησιμοποιώντας δυο διαφορετικά χρώματα για την εσωτερική και την εξωτερική ράγα. Αν τα δυο χρώματα συναντηθούν στην ίδια πλευρά, τότε οι γραμμές βραχυκυκλώνουν.

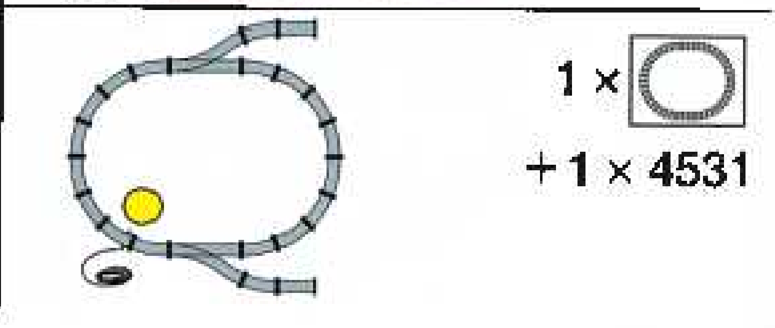
レールのレイアウトのしかたにより、電流の回路がショートする場合があります。たとえば図のようなレイアウトをした場合、ショートしてしまいます。これは、ポイントの接続のしかたが誤っているためです。回路がショートした時は、スピードレギュレーターの緑色のライトが消えるか、弱くなり、列車は走りません。

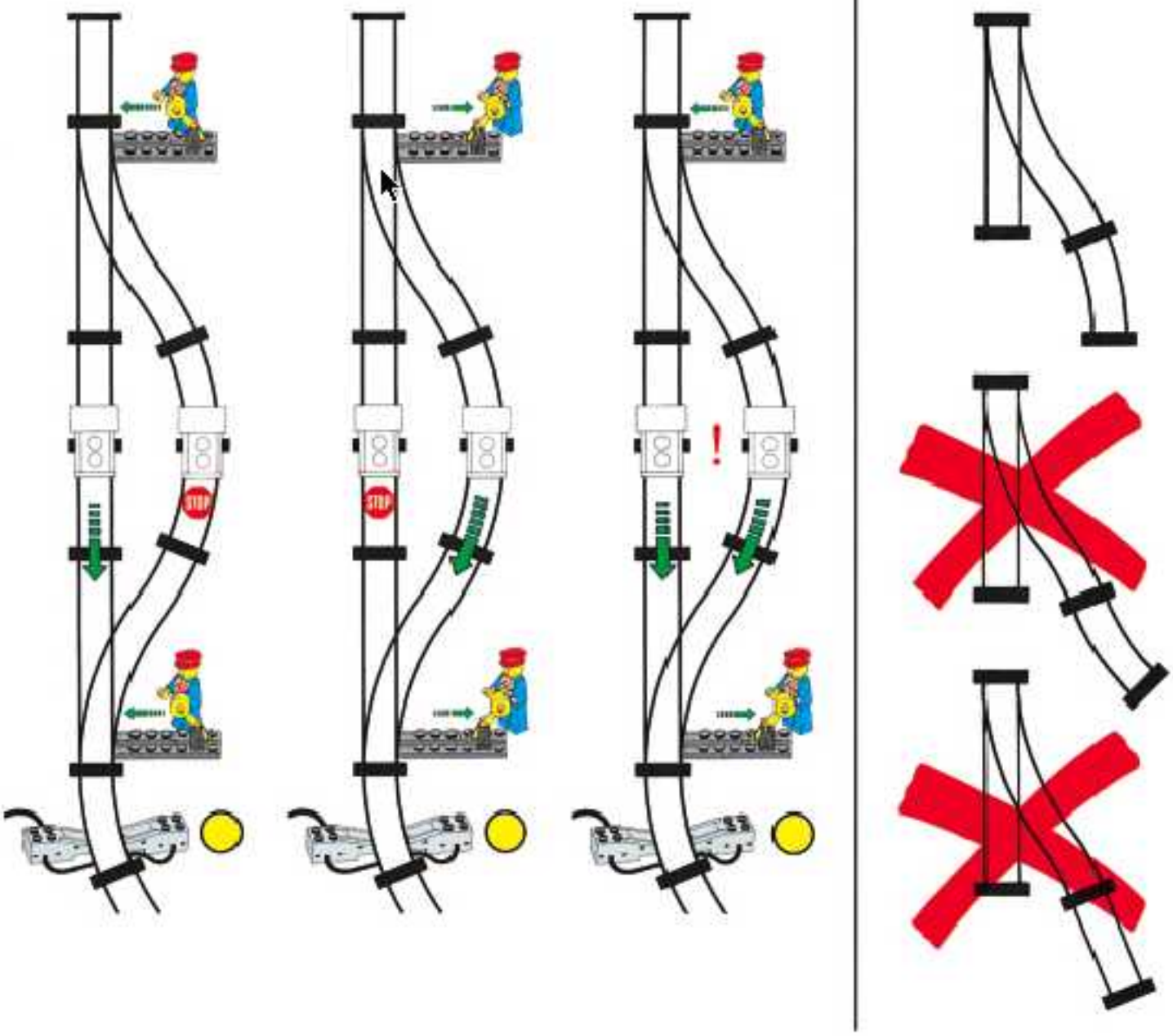
[illegible]

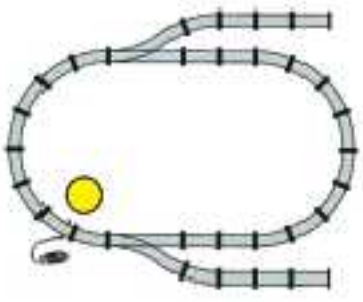












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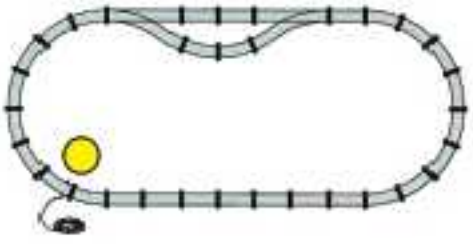

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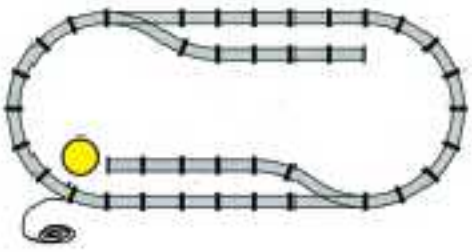

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