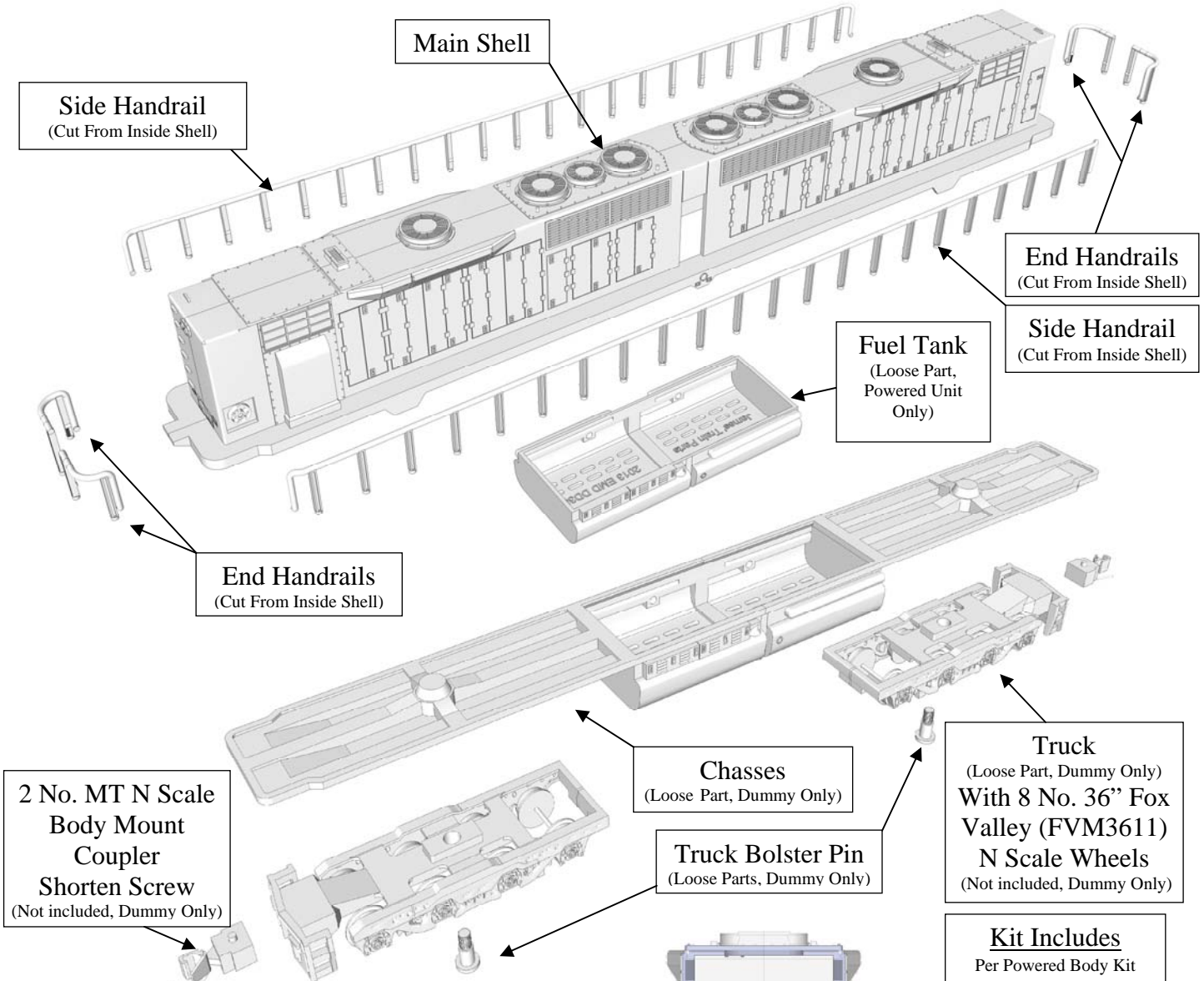


# EMD DD35 Powered & Dummy Units

## Assembly Instructions



2 No. MT N Scale Body Mount Coupler Shorten Screw  
(Not included, Dummy Only)

Truck  
(Loose Part, Dummy Only)  
With 8 No. 36" Fox Valley (FVM3611) N Scale Wheels  
(Not included, Dummy Only)

Note: Carefully cut handrails from inside shell before removing the wax residue. Use new or very sharp craft knife. The 1<sup>st</sup> 1mm of material on each post is not required. The handrails are soft and brittle just after printing.

Truck  
(Loose Part, Dummy Only)  
With 8 No. 36" Fox Valley (FVM3611) N Scale Wheels  
(Not included, Dummy Only)

### Kit Includes

Per Powered Body Kit

- 1. Main Body
- 1. Fuel Tank
- 2. Side Handrails  
(Fixed inside main body)
- 4. End Handrails  
(Fixed inside main body)

### Per Dummy Body Kit

- 1. Main Body
- 1. Chassis
- 2. Side Handrails  
(Fixed inside main body)
- 4. End Handrails  
(Fixed inside main body)
- 2. Trucks
- 2. Truck Bolster Pins

<http://www.shapeways.com/shops/JamesTrainParts>  
<http://www.jamestrainparts.wordpress.com>  
Email: Jamestrainparts@yahoo.co.uk

# DD35 Powered Unit

## Chassis Modification Instructions

This unit uses a modified Bachmann 4<sup>th</sup> generation DD40AX (DCC version). Carefully spread the shell with your fingers and pull up to remove it from the chassis. Pull the fuel tank down and it should also pull off.



Unscrew and remove the circuit board. (two screws), and the screw holding the front light. Keep the screws! The motor wires will need to be unsoldered from the underside of the board.



Remove the 3 Screws holding the chassis together and separate the two halves. The two motors can now be removed from the chassis. It's best to mark them with arrows to denote top and front or rear. The smaller of the two fly wheels will need to be cut off each motor. (This is the fly wheel without the black shaft connection on the end).



Next the two chassis halves need to be shortened. 24mm (0.944") needs to be removed from the centre of each half. Mark the area to be removed, start by centring the area around the middle screw hole.

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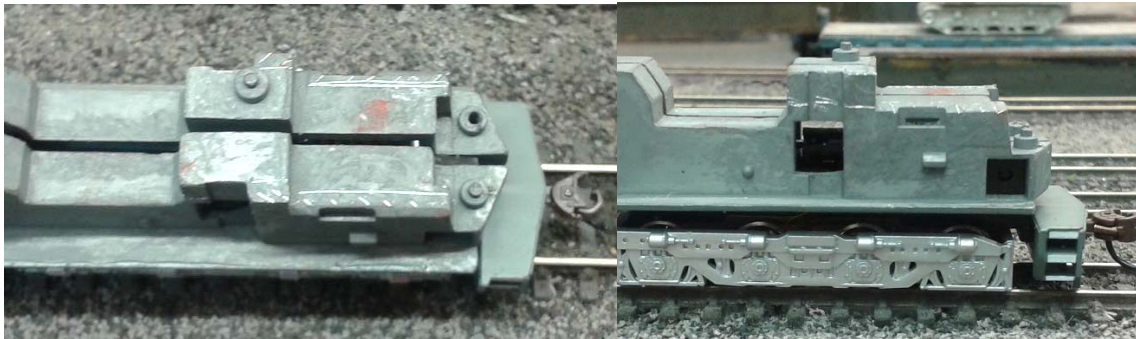
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Once you have marked both side and checked that it is correct cut the centre part of each frame out with a hacksaw. You can cut them both at the same time if the end bolts are used minus the black plastic isolating washer to hold the halves together.

Because the DD35 does not have a cab you will also need to thin the cab end of the DD40AX chassis. The cab area needs to be cut flush with the main part of the chassis as marked below.



If you want to keep this as a DCC locomotive you will also need to remove the up stand in the cab area to make room for the chip as shown above right. When finished the cab area should look like this.

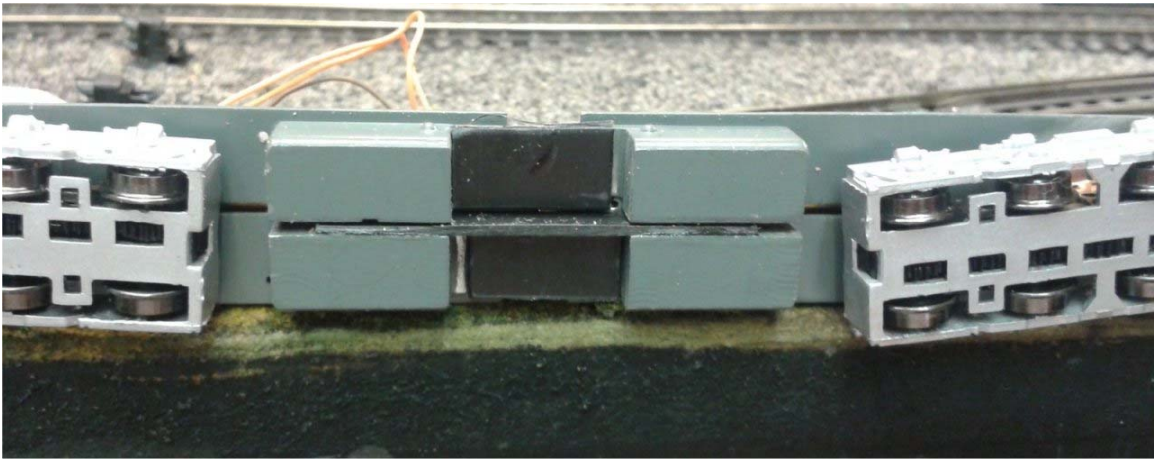


Cut two pieces of plastic to join the front and rear chassis parts together. These will be hidden in the fuel tank. See photo below. Lay the parts on their side on a smooth surface to glue these together, so they are perfectly aligned. Superglue works well.

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Reassemble the two frame halves ensuring the two motors are fitted correctly and remembering to use the plastic isolating washers. Before fully tightening the screws, cut a piece of plastic/styrene the same thickness as the gap between the chassis halves in to a 'H' shape. The size will need to be measured after you have made your cuts and test fitted the 4 parts of the chassis together.



Using a strong glue, fix the 'H' shape to only one side, as you may need to disassemble the chassis for maintenance. If the chassis is for DC only, the two brown wires need to be attached to the right hand side of the chassis, the orange to the left. Also jumper wires need to run from the front to the back halves. Remember those screws? One hole needs to be drilled somewhere on the rear right chassis part and another screw found for that.

For DCC, install a decoder of your choice where the cab used to be, brown motor wires to orange decoder wire, orange motor wires to decoder grey wire. Red decoder wire to front & back right hand parts of chassis (screws), black decoder wire to front & back left hand parts of chassis (screws). If you wish to add lights, there is plenty of room.

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Once complete the Chassis should look like this.



The shell should slip over the chassis and clip into place. The new fuel tank should also shape on in the same way.



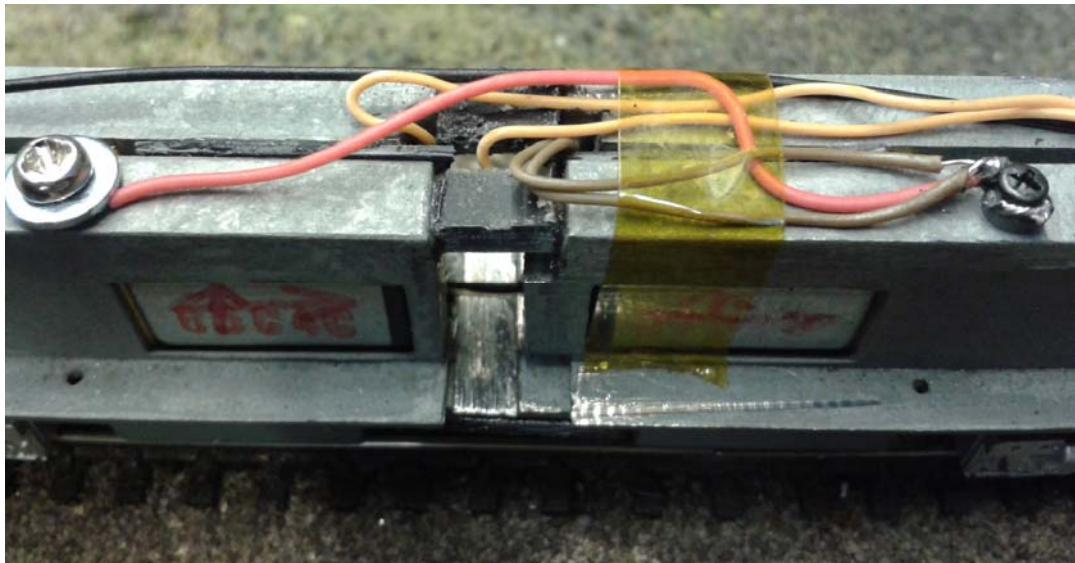
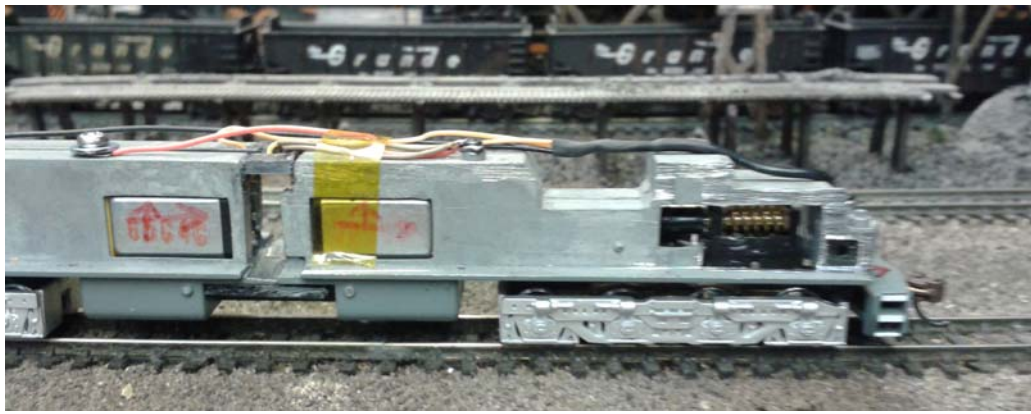
If you are feeling BRAVE, you can cut out the passageway through the chassis as in the photos on the next page. This was done before the four chassis parts were re-assembled. Using the body as a guide, cut down as far as the running board 3.5mm from each side. The plastic “spine” will now be in two parts, one at the top, one at the bottom, and two small “jumpers” were glued in the gap at the top (see 2<sup>nd</sup> photo).

This chassis was DC and you can see the screws and the right hand jumper wire.

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