

SDLoco9 & 14 Resin body - Victorian Railways T 320-346 & T413. Requires Atlas VO1000 loco to complete, available separately.



T337 rests between duties at Dynon loco depot - note the yellow handrails. Photo courtesy of Mark Bau's website



September 1983 sees T327 just a few months away from being converted into P17. Photo courtesy of Mark Bau's website

Basic history: The T class was the largest diesel class of the Victorian Railways and was built by Clyde's Granville workshops over 13 years from 1955 to 1968. Therefore, there are 5 versions but the group is commonly called the 3 versions of "Flat Top", "High Nose" and "Low Nose". They were purchased to serve the state's branch lines and to replace the ageing K's and the newly arrived J class steam locos. As the branch lines closed rapidly, they were then seen in all manner of workings with mainline locos, a job they did very well. When required the venerable "Flattie" could be seen hauling lesser slower country trains around the state. The wheat season would see them lashed together with others of the class and usually, a big engine would be the lead loco.

With the arrival of larger locos in the form of G's and the aging B class being rejuvenated into the A-class most of the fleet was scrapped or withdrawn by the mid-1980s with some surviving into preservation or conversions into the P class which altered their appearance radically. They kept their Blue & Gold Victorian Railways paint scheme throughout their life except for noted exceptions of T334 (Ozride: pink) and T342 (APM yellow). T413 ex Portland Cement Company D1 class is the only T class fitted with dynamic brakes. The noticeable feature is the cooling grids on the short end.

 Reference photos:
 http://www.victorianrailways.net/motive%20power/t320_346.html
 http://www.pjv101.net/index.html

 Train Hobby T class 1st series 'Flat Top' profile book
 Frain Hobby T class 1st series 'Flat Top' profile book

Tools needed are small files, sanding sticks, glues (Super and PVA), paint, weathering powders, pliers etc. **Mech:** Atlas VO1000 loco and a TCS VO 1000 DCC decoder for DCC operation

Short Hood:



- 1. Horns 3D printed (2 pieces) these are best glued in just before painting as they are fragile, the small horn is glued into the LH dimple once drilled out and the trumpet points towards the long hood. The larger one is glued into the other hole and points towards the short nose.
- Using PVA, glue the 3D printed light housing into the recess matching its shape on both noses 2.
- Using PVA, glue the 3D-printed maker lights into each of the small rectangular depressions below the nose headlight. The 3 light faces away from the centre of the nose

Long Hood:

- Using PVA and a SpiritDesign fine line glue dispenser, run a bead of PVA sparingly around each of the smaller grill work 4. openings and then lay the laser etched grill work into the slight recess
- Repeat for the larger rooftop grill work paying attention to the sides as it folds down to the shape of the Mansard ends

Atlas VO 1000 disassembly and modifications:

Chassis Mechanism: Pay attention to the disassembly, as you need to be able to put it back together later on. Use your phone camera to take sequence shots as a visual aid for later reference

- 1. First, remove the shell by squeezing it on either side of the locomotive and gently rocking it back and forth until it slips off the frame
- 2. Mark the cab end in relation to the photo below. There are two chassis types by Atlas. The black anodised and die-cast grey unit is fitted with a DCC decoder
- 3. Remove the 2 screws securing the chassis sides and using a screwdriver inserted in between the frames at the screw points gently prize sides apart a bit and remove the original light board. If converting to DCC the light board is not needed



- 4. Unclip fuel tank sides by pulling them straight towards you, wiggling it a bit side to side. Try not to break the two tabs that hold it to the chassis half
- 5 Remove phosphor bronze pickup rails
- Remove the motor, its cradle and associated universals and bushes, and the bogies 6
- 7. Re-assemble the two bare chassis halves with the screws and nuts
- 8. File each side down in the coloured area by about 0.5mm to 0.75mm. Test fit the chassis in the body from time to time

File the areas marked with red as per instructions



This area here is easier to file down using a Dremel fitted with a stone or drum cylinder-sanding unit approximately 6mm wide.

Bogies:

LHS

- Gently pull the keeper plate and sides, which is one unit from the bogie. You may need to insert a small screwdriver in the 1. clips holding the parts together opposite where the gears are showing through the baseplate. The alternative is to cover the area where the gears are to stop plastic filings and crud from entering the gear towers as you file the sides down. Pay attention to the orientation of the phosphor bronze pickups in the bogies
- On each of the bogie side frames, file flat the axle boxes and other details until the side frame is one flat surface 2.
- 3. Glue a side frame 3D print to each bogie side frame face. Make sure that they don't sit too low in relation to the sides when viewing the bogies/frames on a bit of track

Chassis Mechanism re-assembly:

- 1. Using any notes or phone /camera shots, reassemble the chassis with bogies and DCC decoder board installation
- There are 2 battery boxes/fuel tank 3D parts. The knobs on the back correspond to the holes in the diecast chassis. The 2. battery box should point to the cab end
- Note Kapton tape is not needed as this is a resin body not brass as the photo shows from previous kits' finished chassis 3.



Completed anodized black chassis with Kapton tape and TCS DCC decoder installed for the brass model. Note weathered bogies and fuel tank.

Handrails: several very flexible laser-cut handrails have been provided. Lightly sand the laser meniscus from the edges whilst still trapped within the holder sheet using 240-400 grit white sandpaper. Drill holes where dimples are located on the body and glue using Super Glue. The nose handrails should be fashioned using a SpiritDesign 'Wedge' and 0.3mm wire provided. These are glued into place using PVA. The large long-end handrail can be attached after painting

Painting:

front

Steam Era diesel blue: Cab roof, loco shell, exhaust stack depending on the era. Black: Underframe, bogies, fuel tanks, battery boxes. Silver: Exhaust stack depending on the era, fuel sight gauges, central side window pillar depending on the era. Red: Horn trumpet ends depending on the era. Steam Era diesel yellow: handrails depending on the era, nose face and the long hood face ends as per prototype photos

Decals:

The chevrons and stripes are the highest quality decals on the market and have been especially screen printed for Spirit Design to match Steam Era Diesel Yellow. In addition, they feature a unique border fractionally wider than the artwork work. This means you can cut away from the decal and when soaking off, only the artwork with the small clear border will come away.

The paper number plates are best trimmed as close as possible to their respective white edges and applied to the loco using Microscale clear water-based topcoats as this acts as a glue as well as allowing you to put a water-based topcoat over an existing enamel or water-based VR Royal Blue

Dummy chassis:

- 1. Glue (P1) fuel tank and bogie alignment piece to (P2) using the scribed line as a guide
- 2. Using 2 toothpicks as a guide, glue (P3) to the other side of the assembly made in step 6 paying attention to which end the cab end is
- 3. Glue the fuel tank/battery box 3D print to (P1) making sure the battery box is facing the cab end



Bogies:

Using the screws provided insert the bogies into the chassis and add a drop of glue or nail polish to the screw ends to stop them from unwinding

Handrails: several very flexible laser-cut handrails have been provided. Lightly sand the laser meniscus from the edges whilst still trapped within the holder sheet using 240-400 grit white sandpaper. Drill holes where dimples are located on the body and glue using Super Glue. The nose handrails should be fashioned using a SpiritDesign 'Wedge' and 0.3mm wire provided. These are glued into place using PVA. The large long-end handrail can be attached after painting

Couplers:

- 1. Test fit the chassis into the body and open out the coupler access in the pilot enough so that a 1015 Microtrains coupler can be pushed from the front into its final position on the loco
- Drill 0.8mm holes for the coupler screws and attach the couplers which will then lock the body to the mechanism, if using the dummy chassis use PVA to glue it to the underside of the loco walkway