

TE1A STEAM TRACTION ENGINE KIT ASSEMBLY INSTRUCTION

Before you begin it is best to read the Mamod instruction sheet but ignoring the Wagon Assembly info. Then take a quick scroll through these pages so you know how they will help you.

You can call me on 0777 552 1452 if you get stuck.

Off we go.....

Take the Firebox and the Chrome Cowl and assemble together. You can spread the Firebox sides to allow the Cowl to fit down into the four corners. If you don't do that you won't be able to assemble them together.

Not like this: look at the bottom position

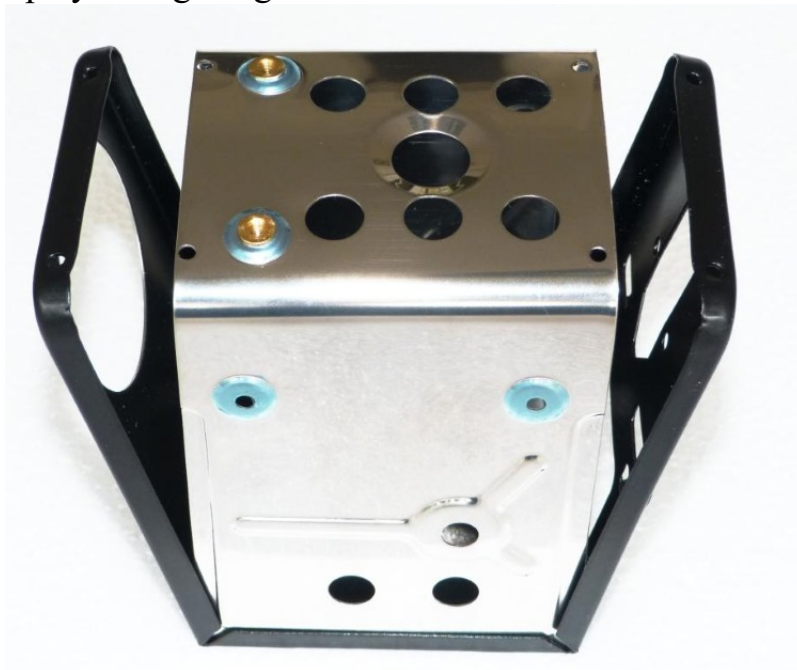


But like this: nicely uniform at the bottom



See what I mean?

Squeeze the two sides closed (a hard squeeze) up against the Cowl. The brass screws need now to be inserted into the four holes. Do this by diagonally fitting them into the holes and not on one side first. It helps to have a bradawl/drill bit/rivet to pop into one hole on each side to line it all up. If not, you may struggle to insert the brass screws. Splayed to get a good fit.

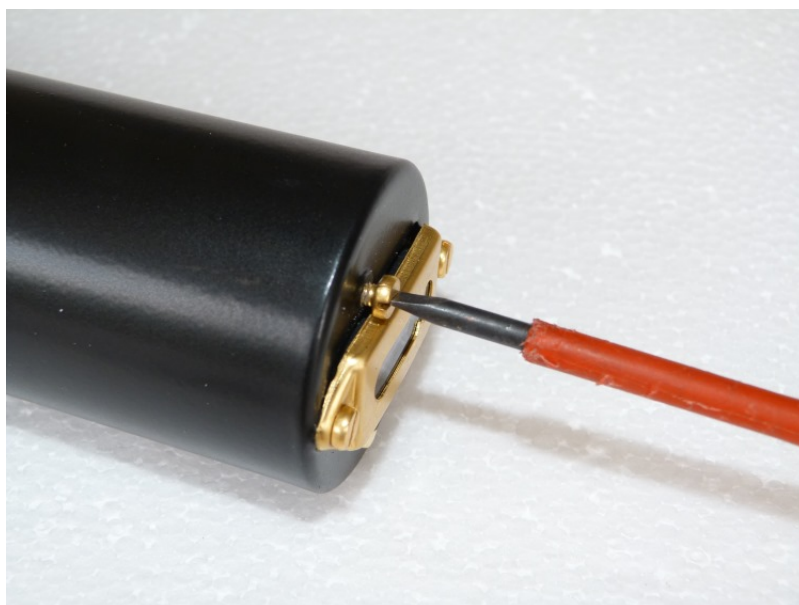


Now the brass nuts can be offered up to each screw. Use a finger and a screw driver.

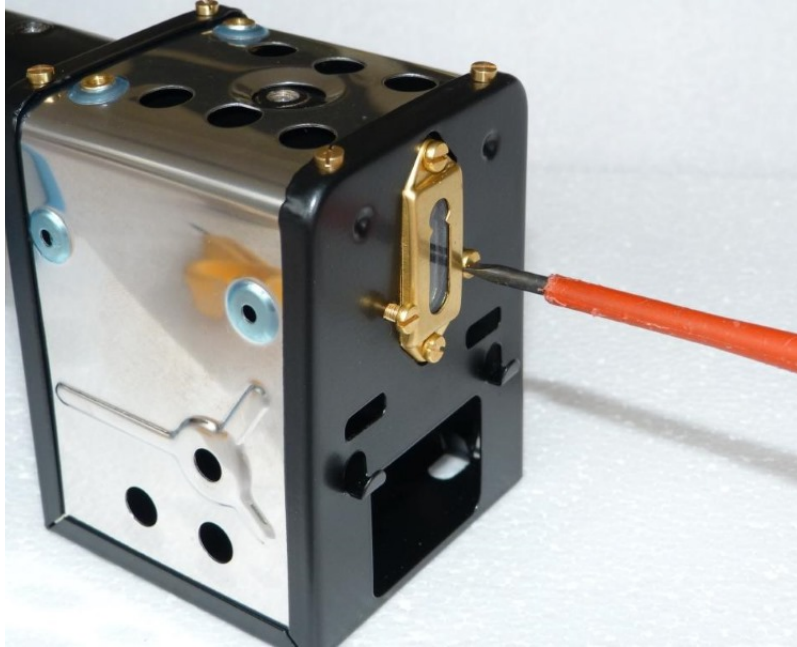


Boiler time.

Remove these two brass screws from the Boiler



Then feed the Boiler into the Firebox assembly so that its Water Level brass surround fits neatly into the shaped hole on the other face. Now use the two brass screws to secure it to the Firebox. Don't scratch it by allowing your screwdriver to slip – **be gentle.**



It's taking shape now.



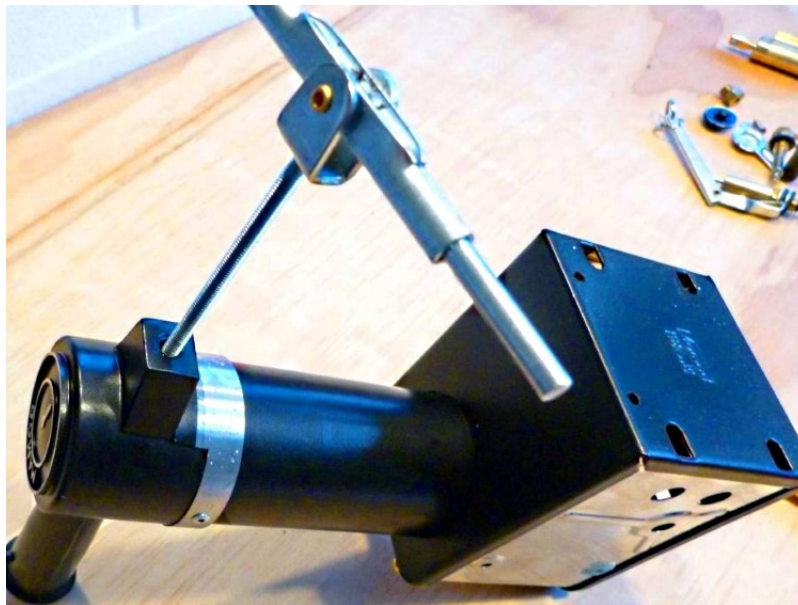
Front Wheels Time:

Take the square nut and place on top of coiled spring.
Assemble both into the box shape which is at the bottom of the Smoke Box.

The nut must be above the spring (with the engine the right way up) and then the Front Forks are screwed into them and then immediately through the threaded hole. As you screw in the Forks the nut will eventually get drawn down to tighten the steering.

The above task is a little fiddly.

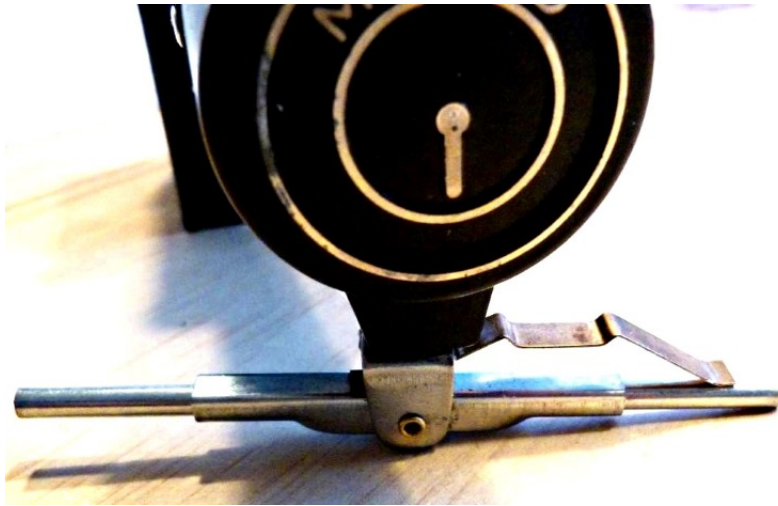
With that ready, assemble the Front Forks assembly up through the Smoke Box/Chimney assembly.



Screw the Forks assembly until it is in contact with the Smoke Box base.

The Mamod instruction sheet for the above section is wrongly described.

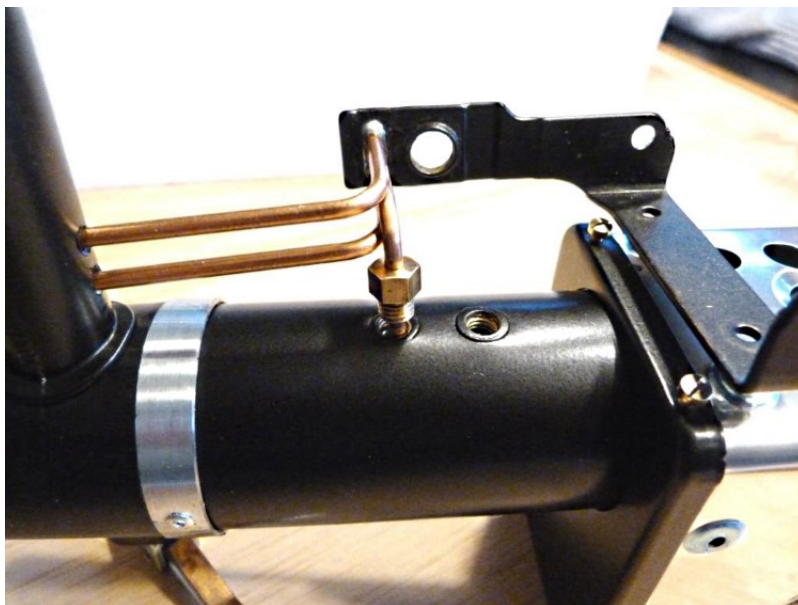
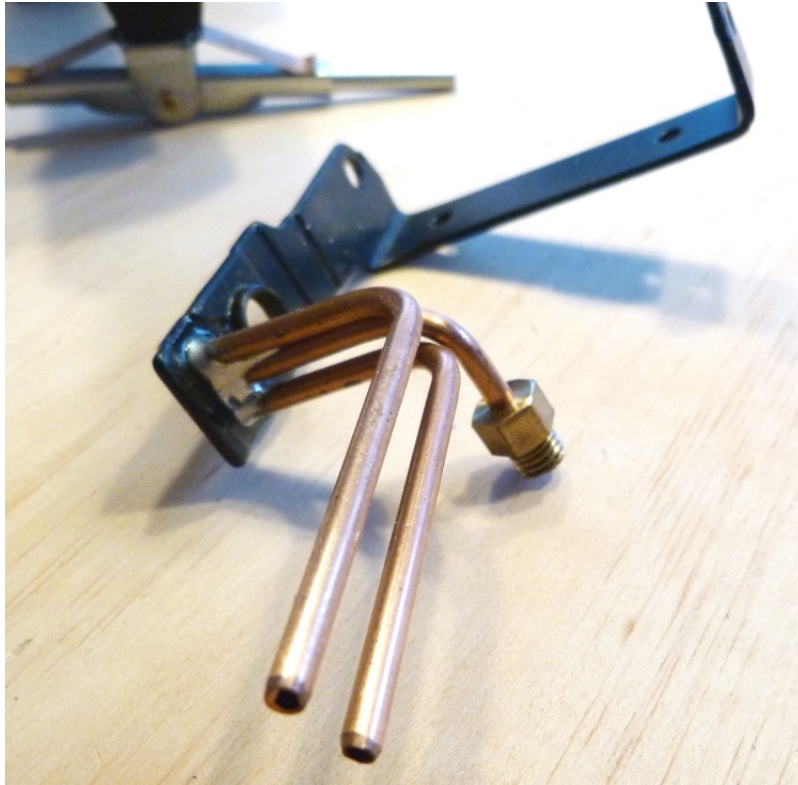
Find the Copper Leaf Spring. Fit it onto the Forks axle like this:
Push through to centralise.



Now do this:

Pick up the Engine Face Mounting Bracket (bit of a mouthful) and do what you see from the following pictures.

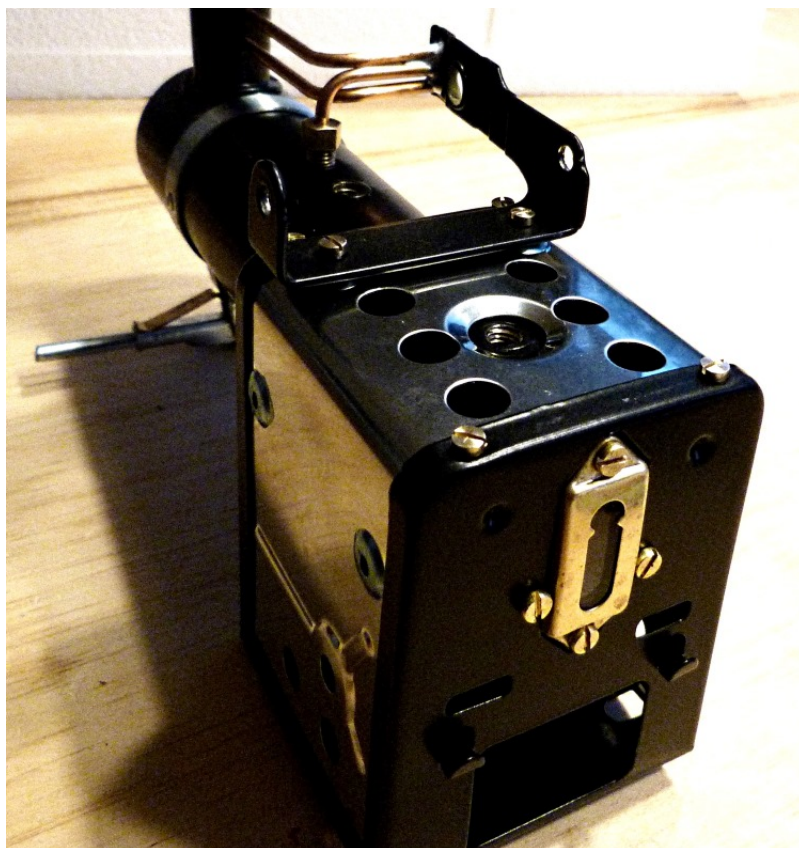




You may have to “persuade” this Engine Face Mounting Bracket to get the two pipes, the boiler pipe and the two holes all lined up. Use your muscles – gently.



Screw down onto the two pre-fitted nuts.



Then it will look like this. Coming along nicely.

It's best to put a drop of washing up liquid on the pipe end to allow an easy non-damaging fit.

When you finally tighten the hexagonal nut on the boiler steam pipe do so only enough to stop any steam leak and not to bolt down hard. Easy does it.

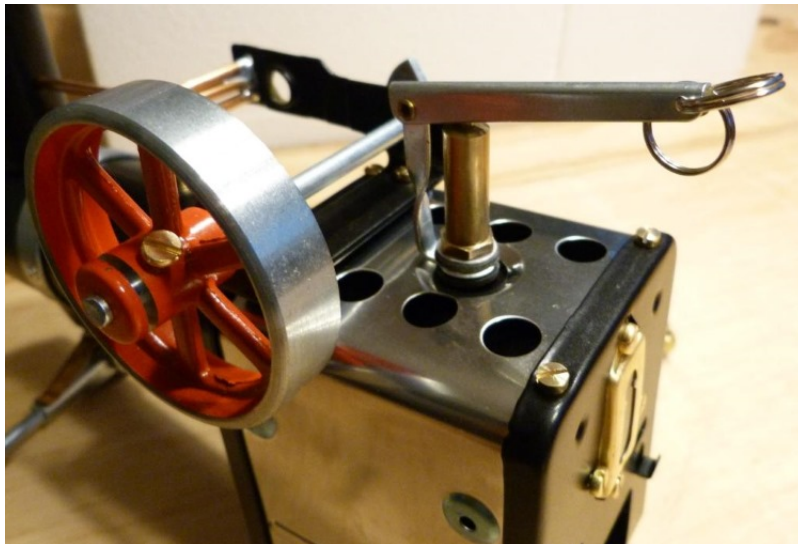
Get the Crankshaft and do this:



Don't forget the brass spacer, and then fit the Flywheel and tighten the brass securing screw.

The Mamod instruction refers to a grub screw. The brass screw now replaces that.

Assemble the whistle by gently turning the hexagonal whistle body.



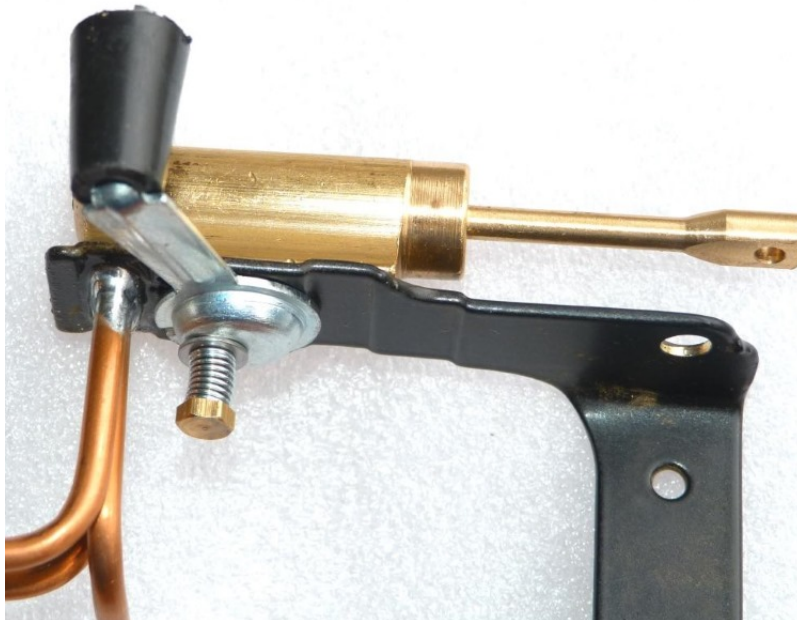
You are now about to perform the most awkward part of this assembly.



When you are sweating to align the Piston/Cylinder assembly make a supreme effort not to let the Trunnion Screw etc. suddenly ping off into the ether. It happened to me and so it can happen to you. Try to make sure any fly-off ends up in your lap. **A life saving tip!**



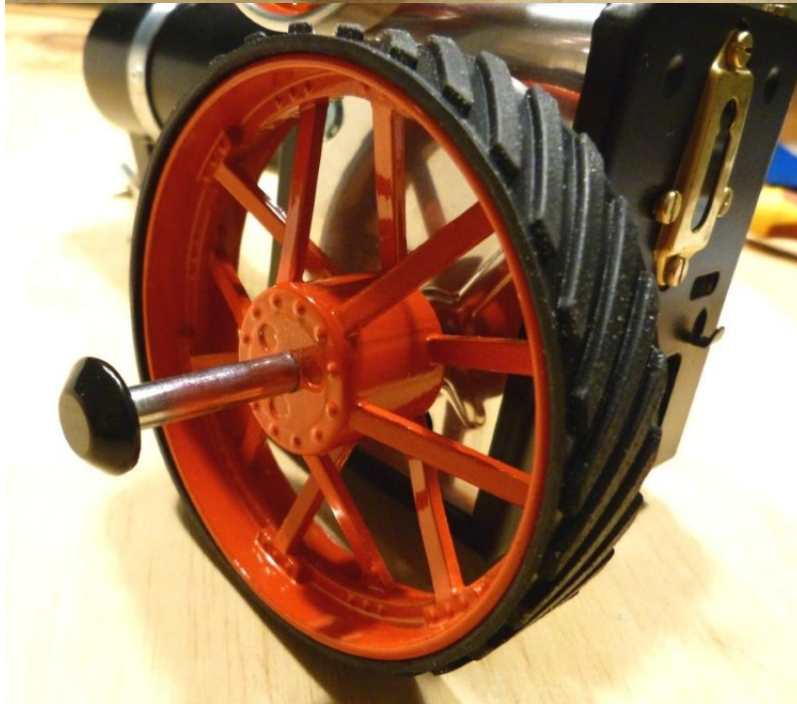
This is what you are aiming at on the engine.



Getting excited now?

The final furlong

Fit the wheels onto the front and back.



Fit the black Hub Cap onto one end of the rear axle, insert through the Cowl axle hole and then fit the other wheel and Hub Cap (bit of a hard push).

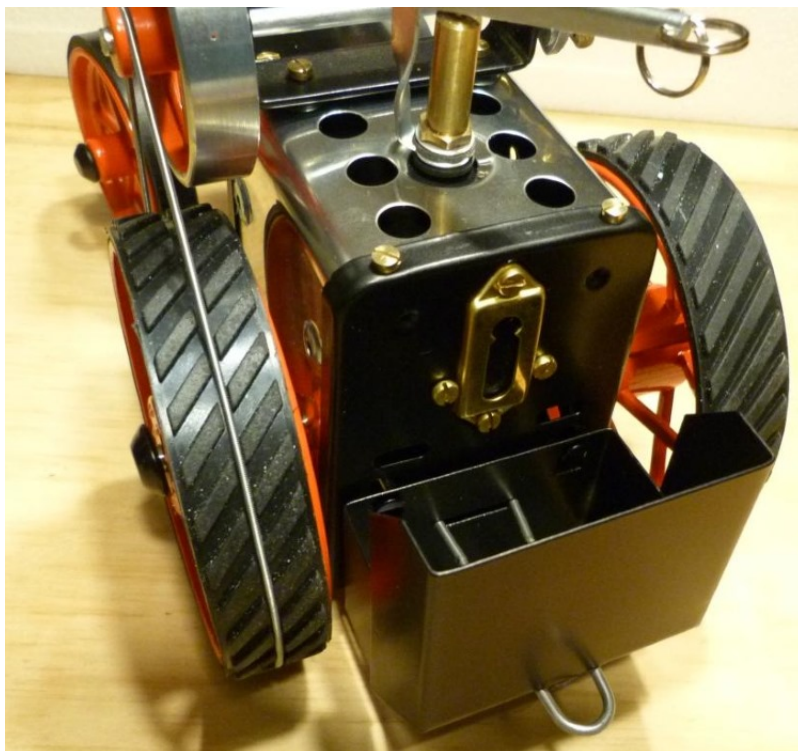
Fit the front wheels and hub caps.



You are just about finished.

Fit the Burner Tray and Scuttle to the back of the engine. You may have to be aggressive(!) to get the Burner Tray handle through the Scuttle slots.

You can fit the black handle onto the end now – if you want to.



Screw the Safety Valve into the boiler top. This is the hole for the water.

When you are ready for the Drive Band, that can be fitted. Last job!

Now you can place the engine on a level surface, and set about getting it running.

1. Remove the Drive Band.
2. Remove the Safety Valve.
3. Remove the Burner Tray.
4. Pour warm water into the Safety Valve hole no more than the maximum level as indicated by the Water Level gauge and replace Safety Valve.
5. Oil Piston/Cylinder including into the Cylinder barrel plus the Crankshaft.
6. Put two solid Fuel Tablets into the Burner Tray and ignite.
7. Place the burning tray fully under the boiler. Wait about 2 mins.
8. Push the Forward/Reverse Lever in the direction you want it to run and flick the Flywheel in that direction and off it will go!
9. Refit Drive Band for self propelled action.
10. Bench run time is about 7 minutes.

Written based on actual assembly.

Happy steaming!

If you need help please call me on 0777 552 1452.

Trevor Allingham

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