

Brian the Public Domain Engine – Crochet Pattern

by Kate Solly, author of *The Paradise Heights Miniature Railway Bust-Up*



INTRODUCTION

Meet Brian the Public Domain Engine! He can be made in many colours.

My latest novel, *The Paradise Heights Miniature Railway Bust-Up*, is all about trains and crafters. I decided to celebrate its publication by designing my very own crocheted locomotive.

I've developed a habit of building my crochet over a cardboard skeleton, using little cartons and rolls. The benefit of this is that it holds its shape nicely and gives clean lines and edges. The drawback is that it limits its washability. You could complete this project without the skeleton, it would just be a bit pudgier.

Writing this pattern has given me a newfound respect for pattern designers. I was camping by the beach when I took most of these photos. They are very amateur, but I hope you still find them helpful.

While I'm not a professional crochet designer, I *am* a professional author. I would just love it if you gave my novels a try. The audiobook versions are a perfect accompaniment to an afternoon's hooking.

This is an intermediate-level pattern. You will need some experience of crochet to complete this.

At the end of this document, I've included an abbreviated version of the crochet parts of the pattern without the photos. This can be handy if you need a ready reference.

Important safety instruction: This is not appropriate to be used as a toy for small children. The finished product contains small parts that can become choking hazards. This is intended as an ornament and is not a toy.

Disclaimer: I'm happy for you to sell the products you make but you can't reproduce the pattern on your own site or sell the pattern.

This part isn't crochet instruction. This part is life instruction: It's possible you are making this locomotive as a present for somebody who is *really* into trains. It is possible that, after many hours hooking and sewing and fiddling about with toilet rolls, the person who receives this gift will enumerate, in detail, all of the ways this train differs from a *proper* LNER Class A3 4472 steam locomotive. This might sound like fault-finding to you. Indeed, this might sound like fault-finding to anyone listening to the conversation. But I would suggest that talking about a special interest is a way to connect. Choose to see this response as enthusiasm and not complaint. Anyway, if it gets too much, you could say,

'Proper steam locomotives aren't usually constructed out of yarn either, but here we all are, I guess!'

STITCHES USED

Abbreviations: (US terms)

ch – chain

dc – double crochet

hdc – half double crochet

sc – single crochet

sl st – slip stitch

st(s) – stitch(es)

inc – increase (2 stiches in same stitch)

dec – decrease

ea – each

Dc turning stitch: I use a special method for the beginning of my dc rows. It's customary to use a starting chain here, but I find this 'turning stitch' provides a neater, straighter edge. Try it and see what you think.

Instructions: Sc into 1st st of row. Then insert hook into the stem of this sc and complete another sc. You end up with a stitch that looks a lot like a dc and counts as your first dc. Continue row as normal.

MATERIALS REQUIRED

- blue yarn (can substitute for another colour according to preference)
- black yarn
- grey yarn
- red yarn (a small amount)
- DK acrylic yarn (I used this because I'm cheap and it comes in lots of colours. You could also use cotton or bamboo.)
- 3 mm crochet hook
- polyfill stuffing

- beans or rice in small plastic bags (you could use also stuffing pellets)
- scrap fabric (I recommend using an old sock)
- black felt board
- hot glue gun
- large buttons
- tapestry needle
- 2 x matching plastic bottle caps
- cardboard roll/tube (I used a toilet roll)
- small cardboard box (I used a teabag box)

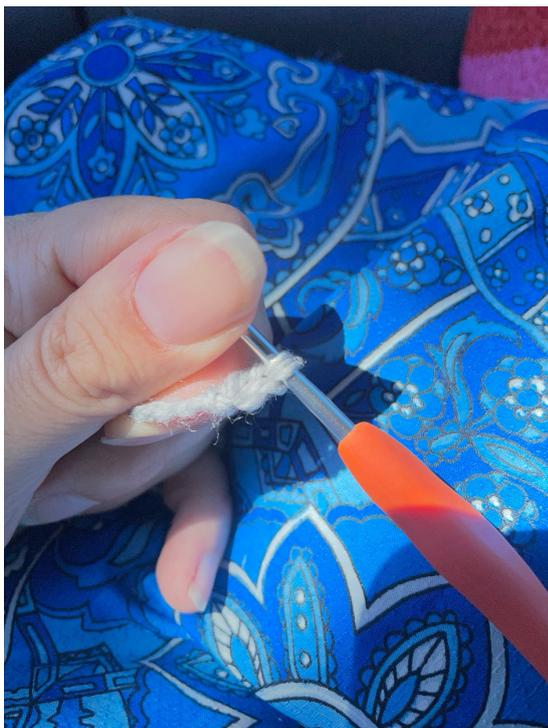
INSTRUCTIONS

FACE

Using grey yarn.

Notes:

- We are starting with the 'face' of the train and working this circle in half double crochet (hdc) stitches. This will become the front of the boiler.
- This piece is worked in continuous rounds. Do not join unless stated.
- Stitch counts are listed in parentheses at the end of each round.
- When making crochet circles, I like to distribute my increases around, to give the circle a proper curve. If you stack your increases on top of each other, you end up with hexagons (or heptagon, in this case).
- When instructed to work in the 'back bar' (third loop) of hdc, this refers to the horizontal loop behind the top two loops of the stitch.



Ch 2.



Round 1: 7 hdc in 2nd chain from hook. Crochet over tail. (7)



Round 2: 2 hdc in each stitch around. Pull tail tight to close centre. (14)



Round 3: 2 hdc in first stitch, hdc in 2nd around. (21)

(Don't worry about that bit of black yarn. I'm using it as a stitch marker.)



Round 4: Hdc in next 2 sts, inc in next st. (28)



The circle should now be big enough to cover the front of the tube.

Check your sizing. If your circle isn't big enough to fit the top of your cardboard roll, add another round with an increase (Hdc in next 3 sts, inc in next st).

If it's far too big, you may need to undo a round.

TIP: I don't know if toilet rolls give you the ick, but I find them quite useful. Especially if they don't have glue and ESPECIALLY if they don't have (ugh!) perfume. If you don't like toilet rolls, you could use the roll from foil or sandwich wrap, cut to size, or you could be like 'Love, Megan' when she makes Christmas bon-bons with 'some rolled card stock'.



Embroidering the Face (Optional)

Now is a good time to embroider the face onto your engine. You can leave out this step if you'd like. You could also wait till later to do this if you're in the car on a long drive and have no yarn needle with you, but I recommend you do it now if you can. It's just easier.

It might seem to make sense to put eyes at the top of the circle, but that always ends up looking a little wrong. Whenever I do faces, I make sure the eyes are halfway down the circle, sometimes lower. It's important, when constructing a smiling, anthropomorphic locomotive engine out of yarn, that you keep things *realistic*. You can use safety eyes if you like. In the past, I've used a bullion stitch for my eyes, but I find that with too much love, these eyes eventually unravel, which is never a good look. These days, I make eyes from three or four short straight stitches, not too tight.

Eyes

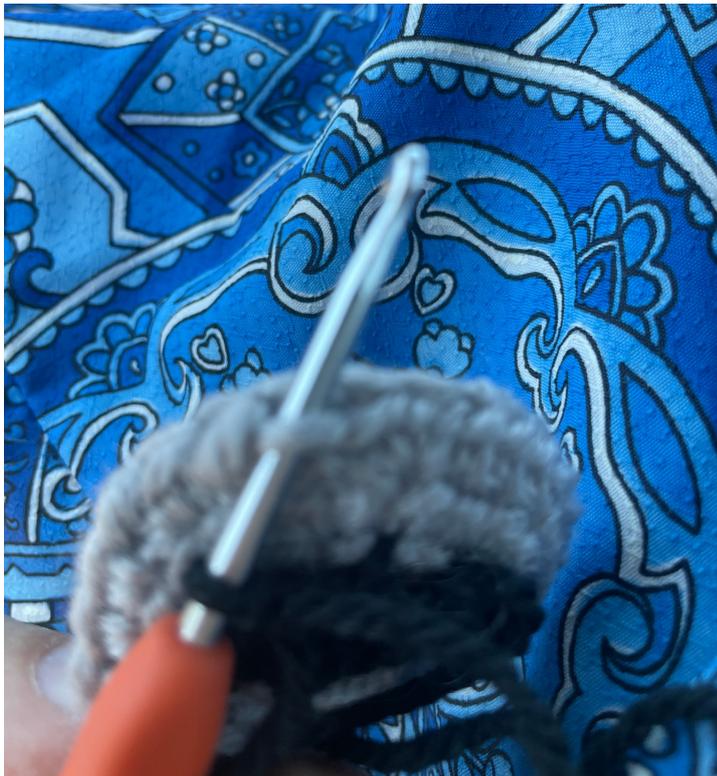
Position the eyes approximately halfway down the circle (or slightly lower)
Embroider each eye using 3–4 short straight stitches. Do not pull too tight.



Mouth

Make a loose straight stitch in a gentle curve, shaping the loose stitch into a smile shape. Bring the needle up so that it pierces *through* the yarn at the curve of the smile. Bring it back down a little to the side of this and pierce through the yarn again. You're kind of anchoring the smile in place here. Don't pull too tight. Fasten off and you're done!





BOILER

Black section:

Using black yarn.

This yarn will be worked in the back bar (third loop) of each hdc stitch from Round 4 of your work. These are the loops you only get when doing hdc's. So you've got your regular front two, and then look behind and there is a third loop. Work into this loop. This creates a ridge and allows the work to turn downward to form the sides of the cylinder.

Begin at the **bottom** of the face (Brian's chin). This will ensure that the wonky part is hidden under the train and the colour change is less visible.



Round 5: 1 sc in ea st around, working in back bar of hdc. (28)



Rounds 6–11: 1 sc in ea st around. (28)

Round 12: 1 hdc in ea st around. Fasten off. (28)

TIP: I find that working into the back bar provides you with a nice little ridge at the base of your cylinder and allows for an abrupt change in direction from working the flat circle to working the straight sides. This is a technique often used for crochet baskets, but I use it here a couple of times for the same effect.



Blue section:

Using blue yarn.

Notes:

- There are probably lots of ways to make a neat colour change, but this section will be hidden, so you can afford to be a little bit wonky.
- Join new colours at the base of the cylinder (use the face as a guide so the colour change sits underneath).
- Work in continuous rounds unless otherwise stated.

- When instructed to work in the back bar (third loop) of hdc, this refers to the horizontal loop behind the top two loops.

Change to blue yarn, joining at the base of the cylinder. Work the first round in the back bar loops of the hdc (the ones closest to the inside of your cylinder.)



Round 13: 1 sc in ea st around, working in back bar of hdc. (28)



Rounds 14–17: 1 sc in ea st around. (28)



Round 18: 1 hdc in ea st around. (28)

Repeat rounds 13–18 once more.

- Always work the first sc round of each section in the back bar of the previous hdc round to create a raised ridge.
- After completing the repeat, work 1 final round of sc in the back bar of hdc to create the last ridge.

Check the cylinder fully covers your cardboard tube.

Add additional sc rounds if needed.
Fasten off, leaving a long tail for sewing.



(PS. Don't crochet and drive.)

Stripes:

The stripes are made by working stitches into the raised ridges that you have created with your hdc rounds.

Using red yarn:

1. Attach yarn to any ridge using a sl st.
2. Work 1 sc into each ridge loop around.
3. Fasten off.

Repeat for each ridge.



CAB

Notes:

- This cab is made to fit a small cardboard tea box (or similar). you have a different box that suits the train but is a different size, you may need to adjust the pattern. You may need to adjust anyway, according to stitch tension.
- You are making four panels: two of each size.
- Panels are worked flat from bottom to top.
- Starting chain = panel width.
- Number of rows = panel height.
- Do not crochet over starting tails – they will come in handy later on (plus you can hide them easily afterwards on the inside of the train).
- End panels on a sc row for strength.



I work the panels in alternating rows of sc and dc. You could definitely do this purely in rows of sc. It's just that I find that super boring. And I like the look of the alternating rows.

TIP: I use a special method for the beginning of my dc rows. It's customary to use a starting chain here, but I find this 'turning stitch' provides a neater, straighter edge. Try it and see what you think.

Instead of ch-3 turning chain:

1. Sc in first st.

2. Insert hook into the vertical stem of that sc and complete another sc.

This counts as your first dc and creates a straighter edge.



Panel A (Make 2)

Ch 16.

Row 1: Sc in 2nd ch from hook and in ea ch across to end of row. (15)

Row 2: Dc turning stitch in first stitch, dc in each st across to end of row. (15)

Row 3: Ch 1, turn. Sc in ea st across. (15)

Repeat Rows 2–3 four more times (or until the panel reaches the top of the box), ending on a sc row.

Fasten off.

Panel B (Make 2)

Ch 15.

Row 1: Sc in second ch from hook and in ea ch across. (14)

Row 2: Dc turning stitch, dc in ea st across. (14)

Row 3: Ch 1, turn. Sc in ea st across. (14)

Repeat Rows 2–3 four more times (or until the panel reaches the top of the box), ending on a sc row.

Fasten off.

FUNNEL (CHIMNEY)

Using black yarn. Work in continuous rounds.

Like with the boiler, we are going to shape the work by working into the back bar loops of the hdc. Don't let that bit of blue yarn confuse you. I'm using it as a stitch marker, so I know when it's the end of the round.



Round 1

6 sc in 2nd ch from hook. Do not join. (6)

Round 2

Inc in each st around. (12)

Round 3

(Sc in next st, inc in next st) around. (18)



Round 4

(Hdc in next st, 2 hdc in 2nd st, hdc in next st) around. (24)



Round 5

Sc in ea st around, working in back bar of hdc. (24)

Rounds 6–7

Sc in ea st around. (24)



Round 8

(Sc in next 2 sts, dec in next) around. (18)

Round 9

(Sc in next 2 sts, dec in next) 4 times, sc in last two 2 sts. (14)

Rounds 10–12

Sc in ea st around. (14)

Fasten off, leaving a long tail for sewing.

ROOF

Using black yarn. Ch 33.



Row 1: Sc in 2nd ch from hook and in ea ch across. (32)

Row 2: Dc turning stitch, dc in ea st across. (32)

Row 3: Ch 1, turn. Sc in ea st across. (32)

Repeat Rows 2–3 six times.

Fasten off.

ASSEMBLY

Propping up the roof

You might find this next part a little strange. I wanted to create something to prop the roof of the train up. I could have fiddled around with cardboard, but that just seemed too complicated. What I wanted was a little cushion to push the roof up a bit. I originally thought I'd get two scraps of fabric and do it that way, but when I was looking at my rags and fabric scraps, I noticed some worn-out socks. I have a lot of these. If I used the toe of an old (clean) sock, I could have a ready-made pocket and would only need to attach it and sew up the open end.



Window

So, this thought was already bananas. But THEN I thought 'What if I use the other part of the sock to provide a matching applique window?' Which brings us to now. This is a really cute sock, but it has a big hole in the heel and is definitely unmatched. It's time to thank it for its

service and chop it to pieces. In case you are wondering, those are cartoon sloths drinking coffee.

I'm not going to include instructions for the applique windows. They are a bonus extra and this is a crochet pattern, not a sewing pattern. My sewing methods are questionable at the best of times. I will say that I cut a piece of an old Christmas card to the right size and folded the fabric around it. That's how I got the shape right. It's so difficult to get sock fabric to do what you want it to do!

I would also recommend adding the window **BEFORE** you sew everything else together – in exactly the way I *didn't*. It would have been much easier for me if I had!

Putting it all together

You might need to clear the table and gather all your things to get this part done. Don't put it off. It's a lot, but you can do it. Don't abandon the project for months with poor Brian in bits waiting to be filled and glued and sewn together. Just power through. Even if it takes more than one session. Get it done. I've broken this into three sessions to make it easy for you. And some of those sessions could be broken into smaller sessions, but I'll leave that part up to you. Because I know it's a lot.

Session 1 – Sewing & Stuffing

You will need:

- stuffing (polyfill)
- weighted filling (rice, beans or pellets in sealed/snaplock bags)
- yarn needle

I like for my stuffed crochet toys and ornaments to have a bit of heft to them. I often use dried beans for this, but in this case I decided to use rice. I also used snaplock bags to contain the rice so that Brian doesn't get eaten by creatures at some point in the future.

1. Stuff your cylinder and tea box with a combination of polyfill and your weighted filling (beans/rice/silicone pellets).
2. Sew the walls of your cab cover together using matching yarn. I used the tails of the crocheted panels to help anchor my thread when tying on and off. Instead of tying a knot at the end of my sewing yarn, I tied the end to the loose tail. It just made my life easier.
3. Stuff the chimney with polyfill and sew it onto the boiler. Get your crochet hook and poke into the top of the chimney to pull out a small 'puff' of polyfill to look like smoke (I know!).

4. Sew the boiler onto the cab. Use the long tail that you left on the end of the boiler to do this. (No stress if you forgot to leave a tail. Just sew it on using a bit of matching yarn and tapestry needle).
5. Have a cup of tea.



Session 2 – Roof Support (Optional Cushion)

You will need:

- sock
- stuffing (polyfill)
- pins
- needle and thread (not yarn)
- yarn needle



1. Pin the sock end to the top of the cab, on top of the lid of your little tea box (you can see in the photo that I did this step before sewing the boiler to the cab. The order doesn't matter.) If you want to make things really neat, put the opening of the sock on the side of the train (rather than the front or back). That way any messy stitching can be covered by the roof.
2. Tuck the raw edge of the fabric (the bit you cut) inside the sock until it lines up with the fourth edge. You could even iron the sock if you were feeling keen, but I did not.
3. Sew the toe of your sock end to three sides of your cab. Stuff with some polyfill and sew the last end closed, attaching it to the fourth end.
4. Sew the roof onto the cab. You can do this with a tapestry needle and matching yarn if you prefer.

Session 3 – Base & Wheels

You will need:

- felt board (base)
- 2 x plastic caps (for height)
- 4 x large buttons (back wheels)
- 4 x small buttons (front wheels)

- hot glue gun
1. Cut the felt board to size. You really just want it to be a rectangle matching the length and width of your engine, although it can be slightly smaller. I just eyeballed it, but feel free to get out a ruler and pencil. Round off the corners slightly.

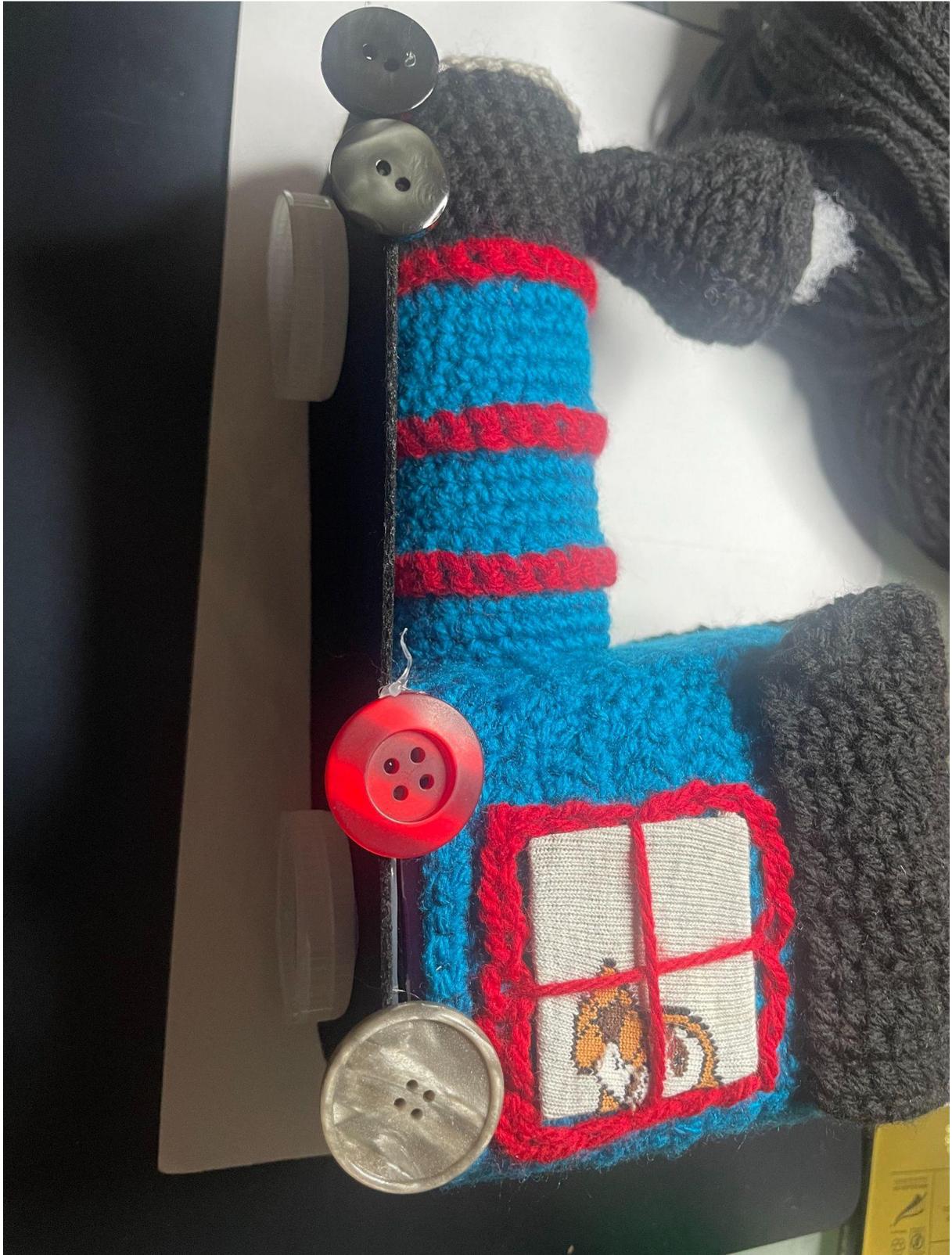


2. Glue the engine to the board. Allow to dry.
3. Glue the plastic caps to the underside of the board. These raise the height of the engine and allow you to attach wheels. Allow to dry.



4. Glue buttons to the side of the engine and felt board. I recommend not getting overenthusiastic in your glue application. Don't, for example, put so much hot glue onto your button that you burn the side of your finger and drop the button onto your bare leg and have to jump fully clothed into a cold shower and end up branding your leg with a button scar. I don't care if this makes you twins with Taylor Swift, who also has a hot-glue-gun scar on her leg. It's not worth it. Don't do it.

And now, you're done! You could consider adding other features, such as a dome, cow-catcher, buffer, etc, but I decided to stop here. Sit back and admire your creation. Make yourself another cup of tea. Read a chapter of a good book (HINT HINT).



Short Instructions (no photos and less chat)

I know I can get chatty. Here's your ready reference 'jump to recipe' section of the pattern.

FACE

Using grey yarn. Ch 2.

Round 1: 7 hdc in 2nd chain from hook. Crochet over tail. (7)

Round 2: 2 hdc in each stitch around. Pull tail tight to close centre. (14)

Round 3: 2 hdc in first stitch, hdc in 2nd around. (21)

Round 4: Hdc in next 2 sts, inc in next st. (28)

Embroidering the face:

Using black yarn.

Eyes

Position the eyes approximately halfway down the circle (or slightly lower)

Embroider each eye using 3–4 short straight stitches. Do not pull too tight.

Mouth

Create a loose straight stitch in a gentle curve. Anchor the curve by bringing the needle up at the centre of the smile and back down slightly to one side to secure the shape. Fasten off.

BOILER

Black section:

Using black yarn.

Round 5: 1 sc in ea st around, working in back bar of hdc. (28)

Rounds 6–11: 1 sc in ea st around. (28)

Round 12: 1 hdc in ea st around. Fasten off. (28)

Blue section:

Using blue yarn.

Round 13: 1 sc in ea st around, working in back bar of hdc. (28)

Rounds 14–17: 1 sc in ea st around. (28)

Round 18: 1 hdc in ea st around. (28)

Repeat rounds 13–18 once more.

- Always work the first sc round of each section in the back bar of the previous hdc round to create a raised ridge.
- After completing the repeat, work 1 final round of sc in the back bar of hdc to create the last ridge.

Check the cylinder fully covers your cardboard tube.

Add additional sc rounds if needed.

Fasten off, leaving a long tail for sewing.

Stripes:

Using red yarn

4. Attach yarn to any ridge using a sl st.
5. Work 1 sc into each ridge loop around.
6. Fasten off.

Repeat for each ridge.

CAB

Panel A (Make 2)

Ch 16.

Row 1: Sc in 2nd ch from hook and in ea ch across to end of row. (15)

Row 2: Dc turning stitch in first stitch, dc in each st across to end of row. (15)

Row 3: Ch 1, turn. Sc in ea st across. (15)

Repeat Rows 2–3 four more times (or until the panel reaches the top of the box), ending on a sc row.

Fasten off.

Panel B (Make 2)

Ch 15.

Row 1: Sc in second ch from hook and in ea ch across. (14)

Row 2: Dc turning stitch, dc in ea st across. (14)

Row 3: Ch 1, turn. Sc in ea st across. (14)

Repeat Rows 2–3 four more times (or until the panel reaches the top of the box), ending on a sc row.

Fasten off.

FUNNEL (Chimney)

Round 1

6 sc in 2nd ch from hook. Do not join. (6)

Round 2

Inc in each st around. (12)

Round 3

(Sc in next st, inc in next st) around. (18)

Round 4

(Hdc in next st, 2 hdc in 2nd st, hdc in next st) around. (24)

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Rounds 6–7

Sc in ea st around. (24)

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Round 9

(Sc in next 2 sts, dec in next) 4 times, sc in last two 2 sts. (14)

Rounds 10–12

Sc in ea st around. (14)

Fasten off, leaving a long tail for sewing.

ROOF

Using black yarn. Ch 33.

Row 1: Sc in 2nd ch from hook and in ea ch across. (32)

Row 2: Dc turning stitch, dc in ea st across. (32)

Row 3: Ch 1, turn. Sc in ea st across. (32)

Repeat Rows 2–3 six times.

Fasten off.

ASSEMBLY

Session 1 – Sewing & Stuffing

You will need:

- stuffing (polyfill)
- weighted filling (rice, beans or pellets in sealed bags)

- yarn needle
1. Stuff the boiler and cab box with polyfill and weighted filling.
 2. Sew cab panels together to form a sleeve.
 3. Stuff chimney and sew to boiler.
 4. Sew boiler to cab using the long tail.

Session 2 – Roof Support (Optional Cushion)

You may create something to prop up the roof of the train.

You will need:

- sock
 - stuffing (polyfill)
 - pins
 - needle and thread (not yarn)
 - yarn needle
1. Attach fabric (such as a sock toe) to top of cab.
 2. Stuff lightly with polyfill.
 3. Sew closed.
 4. Sew roof onto cab.

Session 3 – Base & Wheels

You will need:

- felt board (base)
 - 2 x plastic caps (for height)
 - 4 x large buttons (wheels)
 - 4 x small buttons (details)
 - hot glue gun
1. Cut felt base slightly smaller than engine footprint.
 2. Glue engine to base.
 3. Glue plastic caps underneath for height.
 4. Glue buttons onto sides as wheels and details.

Allow glue to cool fully before handling.