



# How to refill Brother HL-2130, HL-2132 cartridges

Suitable for cartridge code TN-2100 and starter cartridge (arrives with new machine) in HL-2130 and HL-2132 Series printers.

Before use, familiarise yourself with the safety information on pages 4 and 5.

Take maximum precaution when using a screwdriver as a lever: consider safety and protection of eyes and hands from sudden slippage or unexpected freeing of the tool. Only to be used by a competent risk-aware adult. Not to be used by children. Consider doing the refill on top of sheets of old newspaper in case of accidental spills.

## Ignore "Toner low" message

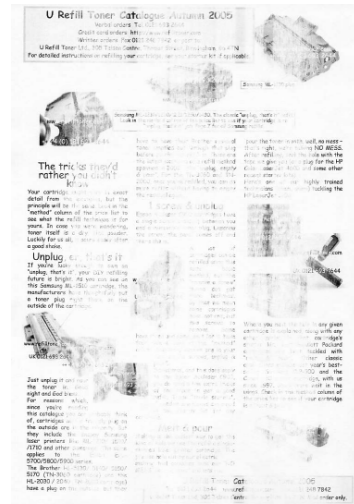
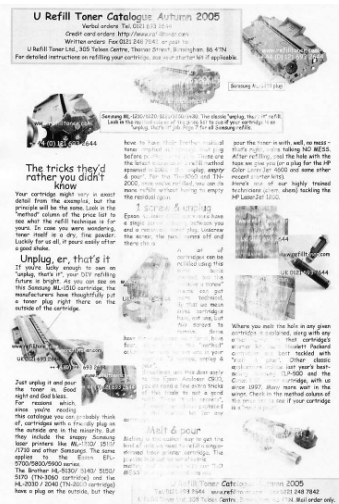
## Set printer into Continue mode at "Replace toner" message

At "Replace toner" message shown below, the machine will refuse to print and the toner LED will be on steady (i.e. not flashing)



This refusal to print (stop mode) is just the printer's default setting. To continue printing simply press the **Go** button on the printer panel **seven** times. Full details can be found on page 76 of the User Guide.

Now, just keep printing until you get fade out from actual lack of toner powder in the cartridge: then refill it. Typical fade-out due to lack of toner develops **progressively** as shown in these three prints.



As you can see, the faded area gets wider and more pronounced with each print, but even on the last very faded page, the print at the edges is still the same blackness as on the first print. If you take out the cartridge and give it a shake at this point, perfect print will return for a few more prints – but then the fade out will return again. This pattern of progressively widening fade out bands which can be temporarily cured by shaking is the hallmark of true toner exhaustion.



## How to refill it

Note: you must first take the whole drum unit out of the printer, then take the toner cartridge out of the drum unit by pressing a light green coloured lock-lever.

1) Find end of cartridge where sticker covers plug. Tear off or cut off sticker



- 2) Slide tip of 3mm screwdriver between lip of plug and protruded hole wall as shown
- 3) Upend screwdriver and slide all the way down side of plug (10mm, half an inch). If screwdriver doesn't go in at least as far as plug depth, any damage will be worse.
- 4) Lever out plug
- 5) Shake unopened bottle vigorously for 5 seconds.
- 6) Open toner bottle and screw on spout
- 7) To avoid leakage of micro fine toner, wrap any kind of tape around join between spout and bottle: selotape, brown parcel tape, gaffa tape etc.
- 8) Hold cartridge at 45 degree angle with one hand. Use other hand for bottle



- 9) Keeping bottle horizontal, put spout into hole and bring cartridge and bottle up to vertical position
- 10) Wait for a count of 10 for toner to flow in
- 11) Return cartridge to 45 degrees. Rotate bottle down to horizontal and disengage from cartridge
- 12) Shake bottle with finger firmly over end of spout
- 13) Repeat "shake and pour" until no toner left in bottle
- 14) Clean around hole and interior surfaces with swab. Allow alcohol to evaporate. Put plug back in, roughly marrying up slightly damaged surface of plug to slightly damaged interior of hole.

Note: Potentially damaged parts of plug are uppermost and so less likely to leak if you followed our instructions. However, occasionally check your plug for leaks. If there are any, clean and seal with bathroom sealant or rubber based glue like Copydex.



## Alternative reset method

During our extensive lab testing of this product we successfully refilled both a starter and bought cartridge four times each using the "press go seven times" method as described on page 1. On every occasion, we were able to run until fade out and then do another refill, each time the printer remained in the Continue mode. However, manufacturers can build slightly different behaviours into different production runs, so just in case "press go seven times" doesn't work for you, use the "reset/prime" method as shown on the rest of this page.

## After refill of "starter cartridge", prime printer with bought cartridge

The new machine arrives with a so-called "starter cartridge". It differs from the cartridges you can subsequently buy. Its end panel is different, it bears the letters "TN" on top (rather than the TN-2010 product code) and it lacks the reset wheel needed to get the machine to accept a cartridge.

### When machine refuses to print, you can .....

Install a bought cartridge with the reset wheel in "loaded" position, allow machine to initialise, but then swap it for your refilled starter cartridge. A new original cartridge straight from the box will already have the reset wheel in the "loaded" position. Once a bought cartridge has been inside a printer, its reset wheel will be in the "fired" position, but it can be used to prime the machine again and again by "loading" it as described below.

Or, of course, you might want to "load" a bought cartridge because you want to print with the bought cartridge itself after refilling it.

## How to "load" a bought cartridge

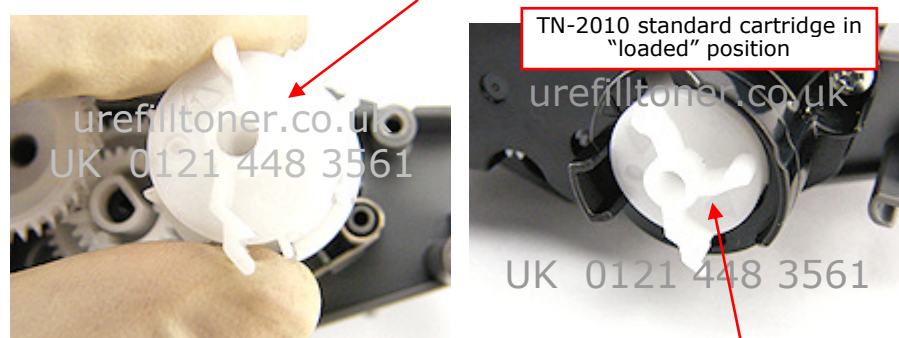
### Starter cartridge



- 1) Take out 2 screws
- 2) Gently separate end plate and reset wheel from cartridge. Avoid displacing cogs, which are free to drop off. Replace immediately if one does drop off
- 3) Sometimes wheel stays on post next to spring. Sometimes, you'll find it's on the inside of the end plate. If on post, take it off to reveal post. Rear view of wheel flange and same area being positioned on post



- 4) Put wheel back onto post in this position



- 5) Replace and screw on end plate with 2 screws
- 6) Check that white reset wheel is in "loaded" position as shown



## Three refills, and maybe then some

How many refills can you expect before some kind of "wear and tear" comes into play with a particular cartridge?

If you've delved into our website, you might know that we "put our corporate neck on the chopping block and say that the rule of thumb is **three refills, and maybe then some**".

As far as problems due to "wear and tear" go, the TN-2010 is an "and then some" cartridge.

Of course, some cartridges inexplicably give up the ghost early, probably due to small manufacturing imperfections. Others perform above and beyond the call of duty.

## Clean corona wire to cure black and grey vertical streaks

Be aware that this machine uses a drum unit – DR-2200 - which is independent of the toner cartridge and has its own maintenance cycle.

We found that regular cleaning of the corona wire was necessary to cure black and grey vertical streaks down the page from time to time. See pages 85 and 86 of the PDF User Guide to see how to clean the corona wire.

## Safety Data Brother HL-2130 type toner

**Take maximum precaution when using a screwdriver as a lever: consider safety and protection of eyes and hands from sudden slippage or unexpected freeing of the tool.**

**Only to be used by a competent risk-aware adult. Not to be used by children. Avoid inhalation of product. Avoid eye and skin contact. Do not ingest. Avoid sources of ignition while pouring and at all times.**

### 1 Identification of the substance and the company

Product name	Brother HL-2130 type refill toner
Part no.	BR2130BOT
Supplier	U Refill Toner Ltd. Contact details as per page header

### 2 Hazards identification

Classification	Not believed to be classified as hazardous according to OSHA CFR 1910.1200 or EU Directive 1999/45/EC, as amended.
Acute health effects	
Skin contact	Unlikely to cause skin irritation
Eye contact	May cause irritation
Inhalation	Irritation to respiratory tract if exposed to large amounts of toner dust
Ingestion	Unlikely when used as intended. Acute oral toxicity is believed to be low
Potential health effects	
Routes of exposure	Skin contact, eye contact and inhalation. Ingestion unlikely.
Chronic health effects	Prolonged inhalation of excessive amounts of any dust may cause lung damage
Carcinogenicity	Carbon black is classified by IARC as group 2B (possible human carcinogen). Carbon black in this preparation, due to its bound form, is not believed to present this risk.

### 3 First aid measures

Inhalation	Move person to fresh air. If breathing is difficult, obtain medical assistance
Eye contact	Flush with plenty of low pressure water for at least 15 minutes. Do not rub eyes. Remove contact lenses to ensure thorough flushing.
Skin	Wash with water, obtain medical attention if ill effects occur
Ingestion	Rinse out mouth with water. Drink one or two glasses of water. If large quantity swallowed seek medical advice

### 4 Fire fighting measures

Hazardous combustion products	Carbon monoxide and carbon dioxide
Extinguishing media	Water, dry chemical, carbon dioxide or foam
Special fire fighting procedures	Avoid inhalation of smoke. A self contained breathing apparatus and suitable protective clothing should be worn.
Unusual fire & explosion hazards	Toner is a combustible powder; formation of an explosive dust-air mixture is possible. Avoid all ignition sources if toner has been dispersed in air.

### 5 Accidental release measures

Spill/leak procedure	Sweep up or vacuum spilled toner and transfer into sealable waste container. Sweep slowly to minimize generation of dust. If vacuum is used, the motor must be rated as dust tight and safely applicable to the vacuuming of toner dust. Residue can be removed with soap and cold water. Garments may be washed or dry-cleaned after removal of loose toner.
Environmental precautions	Do not flush into surface water or sanitary sewer systems. Dispose of waste material in accordance with all applicable laws.

### 6 Handling and storage

Handling	Keep containers closed when not in use. Handle and open containers with care. Use with adequate ventilation. Avoid inhalation of dust and contact with skin and eyes. Keep away from sources of heat, sparks and open flames.
Storage	Store at room temperature in the original container. Keep container tightly closed and dry. Do not store with strong oxidizers.

### 7 Exposure controls and personal protection

UK exposure guidelines	WEL: 10mg/m <sup>3</sup> (inhalable dust), 3mg/m <sup>3</sup> (respirable dust)
Personal protective equipment	
Eye / face	Wear dust resistant safety goggles if there is danger of eye contact
Hands / skin	Wear protective gloves
Respiratory protection	Wear approved respirator for dust when exposure exceeds permissible limits
Additional measures	Use in a well ventilated area. Use engineering controls to reduce air contaminants to permissible limits. Wash hands after use.

### 8 Toxicological information

Oral toxicity	Tests on toners have indicated there is no evidence of acute oral toxicity. Not classified for acute oral toxicity according to EU Directive 67/458/EEC and 1999/45/EC
Inhalation toxicity	No data
Eye irritation	Not classified as irritant according to OSHA HCS and EU 67/548/EEC as amended



Sensitization	Not classified as sensitizer according to OSHA HCS and EU 67/548/EEC as amended
Chronic toxicity	No data
Carcinogenicity	Carbon black is classified as a group 2B by IARC, but carbon black is present only in bound form in this preparation.
Mutagenicity	Negative (AMES test)
Reproductive toxicity	Not classified as toxic according to EU 67/548/EEC as amended

### 9 Ecological information

Not tested for ecological effects
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### 10 Disposal considerations

Collect into tightly sealed containers. Dispose of waste in accordance with all local laws. Do not throw in open fires in order to prevent risk of dust explosion.
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### 11 Transport information

General	Not regulated
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### 12 Other information

Labelling EU 67/458/EEC	
R & S phrases	Not required
Hazard symbol	Not required

**Notice.** All safety information is given to help facilitate the safe use of this product and is based on information obtained from the manufacturer. This information is believed to be correct, but does not purport to be all-inclusive and shall only be used as a guide. U Refill Toner Ltd makes no warranty, express or implied, as to the accuracy or completeness of this information. It is the user's responsibility to determine the suitability of this information for the adoption of necessary safety precautions and / or compliance with local laws and regulations.

All information offered is believed to be true and is offered for consideration in good faith. However, U Refill Toner Ltd gives no warranties, neither explicit nor implicit as to the completeness or accuracy of any information offered nor the ultimate safety of refilling toner cartridges in any manner described or suggested nor the ultimate safety or hazardousness of products supplied by U Refill Toner Ltd. The onus is on the purchaser to evaluate all possible risk, including the possible incompleteness or inaccuracy of currently available information, and by proceeding to use the refill product or products, the purchaser thereby assumes all risk of peril or injury howsoever arising.

If you the purchaser decide not to go ahead with refilling for whatever reason, simply return the product or products to U Refill Toner Ltd and we will cheerfully refund your money. Your statutory rights are unaffected.



### **Refills by you ... thanks to you .....**

Thanks for refilling the toner cartridges in your printer. We invented "do-it-yourself" toner refills in 1992, "melt & pour" in 1996 and put "unplug & pour" into internet-speak in 2002. We've never tried to patent or otherwise restrict the use of these ideas.

If you liked our product, please recommend us to friends and colleagues. We've survived for over 20 years – fighting giant corporations that dwarf us – thanks to your custom and recommendation. No one here takes that, or you, for granted.

U Refill Toner. Now needed more than ever. Now refined more than ever.

- ✓ more than halve the cost
- ✓ halve CO<sub>2</sub>
- ✓ defend your consumer choices and right to reuse



*Original and largest selling  
do-it-yourself toner refill*

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