How to refill TN-3130 or TN-3170 cartridge (HL-5240)

HL-5240, HL-5250DN, HL-5270DN laser printers and multi-function machines MFC-8860DN and DCP-8065DN. Check the code on your cartridge to confirm you have the right refill kit.

Take maximum precautions when using a screwdriver as a lever: consider protection of eyes.

Before use, familiarise yourself with the safety information on pages 3 and 4.

Hard message – block sensors – fade out – shake – fade out - *refill*

As you print with an original cartridge, you'll find that the machine has some messages it wants to give you. By "hard", we mean the message is accompanied by the machine refusing to print. Do what we say in response to the messages and you'll get around an extra 1,000 prints out of your original cartridge for nothing. But in any case you need to follow our lead and completely "bleed" the original toner out of the cartridge before refilling.

Message	What to do
Toner status low, toner light blinking, status light on	Nothing. Keep printing.
Toner life end status, toner light on (yellow) and status light on (red). Machine refuses to print.	Block up two cartridge sensor windows as described in the section below. Carry on printing until you see copies actually start to fade out due to physical lack of toner (could be as many as 1,000 copies) Take cartridge out and give it a shake. Put it back in, and again, carry on printing until copies are fading out (just a few copies). Now refill it.

Straight after the refill, you might get 10 or 20 pages with a slight "background grey" effect. This is due to unavoidable mixing of slight amounts of original toner with the refill.

Now that you've blocked the sensors on the cartridge, you won't get the hard message again. Just watch out for fade-out of the print due to lack of toner. You can refill for a second time at the first sign of fade out because our toner will mix OK with itself.

Note that other problems with machines, drum kits and cartridges can give the appearance of print fading out. These rare things can look similar to physical lack of toner, but they're not. So if you've got a faint print problem that isn't cured by adding more toner, then it's something else that a refill can't solve.

How to block the sensors

Do this when you get the "hard" message that stops you from printing (see section above).

1. The cartridge comes out of the machine still connected to the drum cradle: release cartridge with mauve coloured lever.
2. While working with cartridge, avoid touching or contaminating developer roller.
3. At toner plug end of cartridge, there's a label over toner plug, but for now we're interested in recessed plug.

4. Carefully fill up recessed plug with sealant. If necessary, flatten off sealant with screwdriver. Make sure sealant doesn't stick out beyond profile of cartridge.
5. There's a similar recessed plug partially covered at opposite end of cartridge. Fill recess with sealant, going in under flap. Again, smooth off excess sealant with screwdriver if necessary. Make sure you don't glue up the cog mechanism.

6. Turn machine off and wait 10 seconds.
7. Put cartridge back in machine and turn machine back on. Hard message will disappear.
8. Carry on printing until print actually starts to fade from page. **You can expect up to 1,000 more prints.**
9. When you first notice print fade-out, take cartridge out and shake.
10. Put cartridge back in and carry on printing until fade out happens again. Now refill.

Note: if you're refilling a cartridge for the second time (with our toner), you can refill at the first sign of fade out. Also note that you won't get a hard message with a cartridge whose sensors have already been blocked – it'll just run until fade out.

How to get more toner in

11. As mentioned, a label covers toner plug: rip or cut it off
12. .Use 3mm screwdriver to gently prise out plug. Try to avoid damage to plug.

13. Smear sealant over part of plug affected by levering.
14. Screw spout onto bottle and wrap tape around neck to avoid all leakage of toner (parcel tape works best).
15. Hold cartridge at 45 degree angle with one hand. Use other hand for bottle.
16. Hold finger firmly over end of spout, shake bottle for 10 seconds, approach spout to hole and gently jam in an far as you can. Slowly bring the cartridge and bottle to vertical position.

17. Wait 2 minutes (120 seconds).
18. Keeping spout in and over hole, rotate bottle down to below horizontal.
19. Repeat shake/jam/wait until you can feel there's no toner in bottle when shaken.
20. Put plug back in, lining up sealant area with any corresponding damage on cartridge aperture.
21. Wipe any stray toner from around the plug with the swab.
22. End.

After the cartridge has been back in the machine for a day, take it out and check there's nothing leaking from the plug. If there is, clean off excess toner and seal with sealant.

How many times can I refill

You'll see that besides a toner cartridge, this machine uses a separate drum (part number DR-3100). This has its own maintenance cycle which isn't affected by whether or not you refill the toner cartridges. See your manual for more details – search "drum".

The fact that the drum is separate makes the toner cartridges more robust for refilling because the drum is about the most delicate thing in a laser printer.

We easily got three trouble-free refills from toner cartridges and you can probably expect more.

Eventually, however, we expect toner cartridges will malfunction due to developer roller or doctor blade deterioration. The symptom will normally be discrete, narrow vertical fade out lines (not like the more nebulous toner fade-out symptoms). To check, replace cartridge with a new original and check the symptoms.

Safety Data Brother TN-3130 type toner

Not to be used by children. Avoid inhalation of product. Avoid eye and skin contact. Do not ingest. Take maximum precautions when using a screwdriver as a lever: consider protection of eyes.

1 Identification of the substance and the company

Product name	Brother TN-3130 type toner bottle
Part no.	BRTN3130BOT
Supplier	U Refill Toner Ltd. Contact details as per page header

2 Composition / information on ingredients

Composition comments	Contains no materials classified as hazardous under EC criteria.

3 Hazards identification

Product is a fine powder. Treat as nuisance dust.

4 First aid measures

Inhalation	Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.
Ingestion	Immediately rinse mouth and provide fresh air. Get medical attention if any discomfort continues.
Skin	Remove affected person from source of contamination. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.
Eyes	Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eyelids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

5 Fire fighting measures

Extinguishing media	Use extinguishing media appropriate to surrounding fire.
Special fire fighting procedures	Avoid breathing fire vapours
Unusual fire & explosion hazards	Dust may form explosive mixture with air. Generates massive smoke during fire. Fire causes formation of toxic gases.

6 Accidental release measures

Personal precautions during spill	Avoid breathing dust.
Spill cleanup methods	Avoid generation and spreading of dust. Shovel into dry containers. Cover and move the containers. Flush the area with water. Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into closed container.

7 Handling and storage

Usage precautions	Use mechanical ventilation in case of handling which causes formation of dust
Storage precautions	Keep in cool, dry, ventilated storage and closed containers. Keep in original container.
Storage criteria	Unspecified storage

8 Exposure controls and personal protection

Protective equipment	Gloves and eye protection
Process control measures	Use engineering controls to reduce are contamination to permissible exposure level
Ventilation	No specific ventilation requirements noted, but forced ventilation may still be required if air contamination exceeds acceptable level.
Respirators	No specific recommendation made, but protection against nuisance dust must be used when the general level exceeds 10 mg/m3. Wear respirator if there is dust formation.
Protective gloves	Use protective gloves
Eye protection	Wear dust resistant safety goggles where there is danger of eye contact
Other protection	Use engineering controls to reduce air contamination to permissible exposure level. Wear dust masks in dusty areas. Wear appropriate clothing to prevent reasonably probable skin contact.
Hygienic work routines	Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet.

9 Physical and chemical properties

Appearance	Powder, dust
Solubility	Insoluble in water.

10 Stability and reactivity

Stability	No particular stability concerns
Conditions to avoid	Avoid heat, flames and other sources of ignition
Hazardous polymerisation	Will not polymerise
Hazardous decomposition products	Fire creates: Toxic gases/vapours/fumes of: Carbon dioxide (CO2), Carbon monoxide (CO), PAH (polycyclic aromatic hydrocarbons)

11 Toxicological information

Health warnings	Dust may irritate respiratory system. This chemical may cause skin/eye irritation

12 Ecological information

Environmental hazards	Not regarded as dangerous for the environment

13 Disposal considerations

Disposal methods	Powder to be collected, sealed tightly in bags and disposed on approved landfills. Dispose of in accordance with Local Authority requirements.

14 Transport information

General	Not regulated

15 Regulatory information

Risk phrases	Product is a fine powder. Treat as nuisance dust.
Safety phrases	Not classified
UK regulatory references	Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (CHIP 3), S.I.

	2002 No. 1689
EC directives	Dangerous Preparations Directive 1999/45 and its amendments
Guidance notes	Occupational Exposure Limits EH40. Introduction to local exhaust ventilation HS(G)37 "Dust: general principles of protection." EH44(rev). 1997. ISBN: 0-7176-1435-2. "Gravimetric methods for sampling and gravimetric analysis of respirable and total inhalable dust" MDHS14/3. 3130. ISBN: 0-7176-1749-1.

16 Other information

Information sources	Dangerous Properties of Industrial Materials Report, N. Sax et.al.
Revision date	Revision 2, 26-03-2003
Revision no. replaces SDS issued	Revision 1, 10 September 1999.

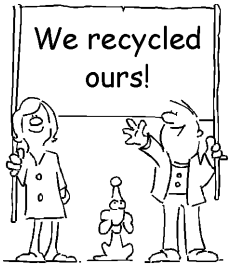
Notice. All safety information is given to help facilitate the safe use of this product and is based on information obtained from the manufacturer. This information is believed to be correct, but does not purport to be all-inclusive and shall only be used as a guide. U Refill Toner Ltd makes no warranty, 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.

Please, tell three people what you've done

OK, we admit it. This is our begging act. Have you saved money by using our DIY kit? Did you feel a touch of pride as your cartridge *did* print again? Maybe you found some environmental satisfaction? Or perhaps you feel it should be refilled "because it's there".



We sincerely hope we've helped float your boat in some way. And if so, then please help our voice in the wilderness and tell at least three people about what you did with your empty cartridge.

We all know a lot of people: at work, in the family and in clubs and groups. Why not make a point of telling just three of those people about what you did with your empty cartridge? Even if they don't have printers themselves, they probably know people that do.

Why not copy these instructions and FAX them to three work contacts? Why not make some photocopies and give them to people that you know use computers? Why not broadcast an email to your email pals?

The phrase "carbon footprint" hadn't been coined in 1992 when we started selling our trend-bucking "guerrilla re-cycling" products. Making ***just*** toner produces less C02 than making the toner plus the whole structure of a cartridge to put it in.

We're asking for your support to create a kind of benign chain-reaction effect. Yes, we stand to make money from that, but we believe that the battle to reduce CO2 output does have to be commercialised. That's to say, when the capacity of individuals to make voluntary self-sacrifice reaches a limit, what will take up the slack? In the same way that carbon big-foot companies need money to keep doing what they do, so does a carbon twinkle-toes.

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_2
- ✓ defend your consumer choices and right to reuse

URefillToner.co.uk

Original and largest selling do-it-yourself toner refill