

Dealing with Waste Toner & Non-Genuine Toner during servicing

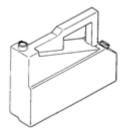
A Safe System of Work For Service Engineers

Handling Waste Toner

The following procedures have been designed to cater for the safe service handling needs of every type of waste toner container throughout the Canon range of copiers CLC/NP / GP / iR / iRC / iRADV/iRDVC

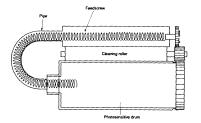
These can be divided into five different types and "best practice" methods will be described separately for each type.

Type 1 -Bottle



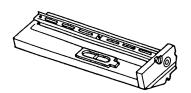
Plastic bottle containers supplied as an integral part of the product and service part replaceable.

<u>Type 2 – Photosensitive Drum Container</u>



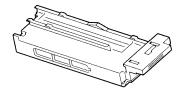
The photosensitive drum within the drum unit serves as the container itself, all waste toner is confined within the cylinder.

Type 3 - Drum Unit Containers with Small Access Stopper



A void behind a small diameter photosensitive drum is used to confine all waste toner within the drum unit, and accessible via a small nylon stopper.

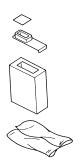
Type 4 - Drum Unit Containers with Large Access Stopper/Cover



As with type 3, except the access stopper is larger or the top cover of this drum unit is removable.

Type 5 - User Replaceable Containers (Non-Service Handling)

Disposable containers supplied to the customer along with appropriate handling instruction for the user to seal and dispose of as and when required.



Identified Best Practice for

Emptying Waste Toner Containers

<u>Type 1</u>

All Type 1 containers incorporate a screw cap on a large hole port for emptying purposes, some have a smaller inlet hole which will serve as a breather to allow air displacement when inverted during emptying.

This container should be checked regularly (P.M. interval) and emptied as necessary before it becomes <u>half</u> full, using the following methods:-

Method with breather hole

- Step 1 Remove screw cap from large hole, then cover the small breather hole with a safe wipe secured with an elastic band (this will prevent 'blow back').
- Step 2 Secure the open end of the special waste bag over the large hole with an elastic band. Ensure the bag is secured and that a good seal is achieved.
- Step 3 With the bottom of the bag supported on a flat surface, carefully invert the bottle until all contents have transferred into the waste bag.
- Step 4 With the bottle in the upright position, carefully remove the waste bag allowing the elastic band to close the neck of the bag instantaneously. The waste bag can now be knotted at the neck and prepared for disposal.

N.B. there should be no need to use a second bag for extra security since the bag material has a leak-proof characteristic, however, double bagging is recommended for quantities exceeding 1,000 grams or where there is any reason to doubt bag integrity.

Step 5 Remove the safe wipe and re-fit the container to the machine.

Method without Breather hole :

- 1. Secure the Screw Cap to the bottle then agitate the bottle several times until the toner moves into its liquid state .
- 2. Perform from Step 2 to 4 above.

<u> Type 2</u>

All drum cylinder waste containers of this type incorporate a blind hole at one end, through which the toner will be extracted.

<u>Method</u>

- Step 1 Remove the drum cylinder from the drum unit taking care not to spill any of its contents.
- Step 2 Place the open end of special waste bag over the open hole end of drum cylinder and secure in place at least halfway up the length of the cylinder with an elastic band.
- Step 3 With the bottom of the bag supported on a flat surface carefully invert the drum and with minimal vigour agitate the cylinder until all contents have transferred into the waste bag.
- Step 4 With the drum cylinder returned to a horizontal position, carefully remove the waste bag allowing the elastic band to close the neck of the bag instantaneously. The waste bag can now be knotted at the neck and prepared for disposal.

N.B. there should be no need to use a second bag for extra security since the bag material has a leak-proof characteristic, however, double bagging is recommended for quantities exceeding 1,000 grams or where there is any reason to doubt bag integrity.

<u> Type 3</u>

Due to the position and small sized opening in this type, it is not recommended that manual emptying into any kind of bag be attempted. However, vacuuming is recommended as follows:-

Special Tools Required

- A suitable vacuum cleaner (for definition of <u>suitable</u> see your Health & Safety Guide 7.6.2)
- A plastic nozzle for use with above vacuum cleaner which meets the following specification:
 - i. At least 150mm in length and
 - ii. A maximum external diameter of 15mm.
 - iii. Characteristics = flexible.

N.B.

These are available for the CONVAC Vacuum.

<u>Method</u>

- Step 1 Holding this unit with the stopper in the upright position, remove the stopper taking care not to disturb the contents unduly given that it may be quite full.
- Step 2 With the vacuum switched on gradually slide the special nozzle in through the access hole towards one end of the unit, then slowly withdraw it and slide back in towards the opposite end of the unit. There should be no need for excessive agitation or repetition of these actions.
- Step 3 When the waste contents are fully removed the stopper can be replaced. Ensure stopper is securely fitted.

<u>Type 4</u>

Due to the position of the opening in this type it is not recommended that manual emptying into any kind of bag be attempted. However, vacuuming is recommended using much the same method as Type 3 with the following exceptions:-

- Apart from the access hole and stopper being larger, the top of this unit may be removable (2 or 4 screws) one or both of these factors may negate the need for the special nozzle.
- If the top of this unit <u>is</u> removed care must be taken to employ a steady vacuuming operation using a conventional plastic nozzle to avoid excessive movement/disturbance of the waste toner contents.
- 'Emergency Emptying Method' If type 3 & 4 drum units are to be emptied without the use of a vacuum, extreme care should be taken. A suitable plastic bag should be held tightly around the drum unit, encompassing the access hole. The unit should then be gently shaken to remove the waste toner, depending upon the design of the unit some toner will contaminate the drum. If this occurs the excess can be removed with the use of a brush (not a blower brush). This method will also leave toner on the unit which again will require cleaning. For Health and Safety reasons this method should only be used in extreme circumstances as the risk from toner dust contamination the air and the risk of a serious spillage is greatly increased.

<u>Type 5</u>

As stated earlier, these types have been designed for user disposal and as such may well never require 'service handling'. However, should the need arise the handling instruction found with the container packages should be closely followed. This may differ slightly product to product.

Disposal Instructions

Once the waste has been prepared for disposal ensure it is

- Sealed in waste bag
- Contained within drum unit types 3 and 4 and being replaced.

Or

• Sealed in a waste toner receptacle.

It can now be safely disposed of in accordance with local authority stipulations. Due to local variances and waste type definitions this must first be checked with the customer, before using their disposal facilities.

Non-Genuine Toner & Partner Sub-contracted Service Work:

If non-Canon toner is encountered during the service work when attending a partner customer's site through our sub-contracting process, the following is applied:

- No work which involves cleaning up or disturbance of loose toner, such that would cause toner to become a visible cloud suspended in air. All cleaning/removal of toner contamination would be left for a subsequent service visit by the contracting partner.
- Any machine parts/assemblies stained by toner residue will not be cleaned by means of abrasion (the usual method), if the staining affects the performance of said parts/assemblies they will be replaced. Where parts are unavailable (especially where these are not listed as durables) the work will be left unfinished; any return to fit will need to be scheduled by the contracting partner.
- No work will be performed to any part of assemblies which contain toner (i.e. drum cleaning and development assemblies), if any work is required whether it needs diagnostic, adjustment, clean or part fit - the whole assembly will be replaced with new and in the case of developer - these will be restarted with genuine Canon starter/toner and charged back to the contracting partner at invoice price.
- If Canon genuine toner is required for the resolution of any service work as described in points above, we will ask the contracting partner to order and supply to the customer.

Further Support:

Where an engineer is unsure how to progress this situation, over and above the practical guidelines set out above; all required guidance/support is available from the Field Service Specialist Duty desk.

Additionally if you do come across a partner device that has non-Canon toner in use, please provide the following information.

Toner manufacturer: Siebel reference No: Technical Issue: Resolution Description: