



**Material efficiency Requirements:
Disassembly for repair or reuse purposes
Weight range of specified critical raw materials**

IBM FlashSystem 5015 product MTMs: 4680-2P2, 4680-2P4, 4680-12H, 4680-24H, 4680-92H

Product information for return and recycling can be found at:

- [Product recycling programs](#)

Complete product information for repair or reuse of components can be found on the IBM Knowledge Center web site at:

- [IBM Storage FlashSystem 5000 - IBM Documentation](#)

Examples of System documentation includes (each is a hotlink to the document):

- [Preparing to remove and replace parts](#)
Before you remove and replace parts, you must be aware of all safety issues.
- [Replacing a node canister](#)
To replace a faulty node canister with a new one received from CRU or FRU stock, use this procedure. When replacing a node canister, aim to maximize drive and system availability by maintaining one online node in the control enclosure containing the faulty node canister. If you cannot maintain at least one node canister online in the system, then you might need to follow the system recovery procedure after replacing the faulty node canister.
- [Replacing an expansion canister](#)
You can replace a faulty expansion canister with a new one received from CRU / FRU stock.
- [Replacing an SFP transceiver](#)
When a failure occurs on an optical link, the SFP transceiver in the port that provides the link might need to be replaced. To replace a faulty SFP transceiver with a new one received from CRU or FRU stock, use this procedure.
- [Replacing a power supply unit](#)
You can replace either of the two hot-swap redundant power supplies in an enclosure. These redundant power supplies operate in parallel; one continues to power the node canister if the other fails.
- [Replacing the battery in a node canister](#)
To replace a faulty battery with a new one received from CRU / FRU stock, use this procedure.

- [Replacing a CMOS battery](#)
The complementary metal-oxide semiconductor (CMOS) battery is a coin-shaped power cell that is mounted inside a node canister. It is used to keep the system time when there is no power to the node canister. The lithium battery must be handled correctly to avoid possible danger. If you replace the battery, you must adhere to all safety instructions.
- [Replacing a 2.5-inch drive](#)
You can remove and replace a faulty 2.5-inch drive with a new one received from stock.
- [Replacing a 3.5-inch drive](#)
You can replace a faulty 3.5-inch drive with a new one received from stock.
- [Replacing enclosure end caps](#)
You can remove and replace enclosure end caps.
- [Replacing an expansion enclosure attachment SAS cable](#)
To replace a faulty expansion enclosure attachment SAS cable with a new one received from CRU / FRU stock, use this procedure.
- [Replacing the support rails](#)
You can replace faulty support rails with new ones that are received from customer-replaceable unit (CRU) or field-replaceable unit (FRU) stock.
- [Replacing a control enclosure midplane](#)
A control enclosure midplane assembly must be replaced only by a trained service provider.
- [Replacing an expansion enclosure midplane](#)
To replace a faulty expansion enclosure midplane assembly with a new one received from CRU / FRU stock, use this procedure.
- [Replacing the enclosure midplane of a powered off enclosure](#)
You can replace the midplane of an enclosure that is currently not online to a system. The midplane assembly must be replaced only by a trained service provider.
- [Replacing a node canister memory module](#)
You can replace a faulty node canister memory module with a new one received from CRU / FRU stock.
- [Replacing a host interface adapter](#)
To replace a faulty host interface adapter with a new one received from CRU / FRU stock, use this procedure.
- [Replacing host interface adapters in two control enclosures concurrently](#)
It is possible to reconfigure one node canister of each control enclosure at the same time. During the procedure, both I/O groups (control enclosures) are online with no redundancy, but the total maintenance period is reduced.
- [Replacing parts: 5U expansion enclosure](#)
You can replace parts in a 2072-92G, 2072-F92 (5U) expansion enclosure if they were removed as part of a service procedure or during the initial installation.

Cobalt in batteries	Less than 5 grams	5 grams to 25 grams	Above 25 grams
	None reported	None reported	None reported
Neodymium in Hard Disk Drives	Less than 5 grams	5 grams to 25 grams	Above 25 grams
	x	x	

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