

*Removing and replacing external  
cables*

**IBM**



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# Removing and replacing the external HMC cable in the 9008-22L, 9009-22A, or 9223-22H

Find information about removing and replacing the external HMC cable in the 9008-22L, 9009-22A, or 9223-22H.

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## Preparing the system to remove and replace the external HMC cable

To prepare the system to remove and replace the external HMC cable, complete the steps in this procedure.

### Procedure

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## Removing the external HMC cable from the 9008-22L, 9009-22A, or 9223-22H

To remove the external HMC cable, complete the steps in this procedure.

### Procedure

1. Attach the electrostatic discharge (ESD) wrist strap. The ESD wrist strap must be connected to an unpainted metal surface until the service procedure is completed, and if applicable, until the service access cover is replaced.

#### Attention:

- Attach an electrostatic discharge (ESD) wrist strap to the front ESD jack, to the rear ESD jack, or to an unpainted metal surface of your hardware to prevent the electrostatic discharge from damaging your hardware.
  - When you use an ESD wrist strap, follow all electrical safety procedures. An ESD wrist strap is used for static control. It does not increase or decrease your risk of receiving electric shock when using or working on electrical equipment.
  - If you do not have an ESD wrist strap, just prior to removing the product from ESD packaging and installing or replacing hardware, touch an unpainted metal surface of the system for a minimum of 5 seconds. If at any point in this service process you move away from the system, it is important to again discharge yourself by touching an unpainted metal surface for at least 5 seconds before you continue with the service process.
2. Disconnect the HMC cable indicated in the **FRU Location** field in the upper left of this page. See Figure 1.

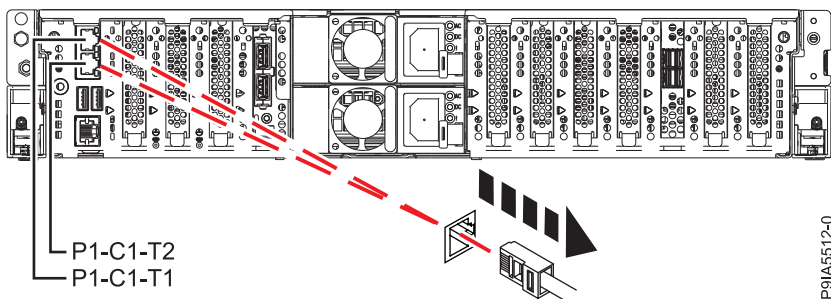


Figure 1. Removing an HMC cable

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## Replacing the external HMC cable in the 9008-22L, 9009-22A, or 9223-22H

To replace the external HMC cable, complete the steps in this procedure.

### Procedure

1. Ensure that you have the electrostatic discharge (ESD) wrist strap on and that the ESD clip is plugged into a ground jack or connected to an unpainted metal surface. If not, do so now.
2. Connect the HMC cable indicated in the **FRU Location** field in the upper left of this page. See Figure 2.

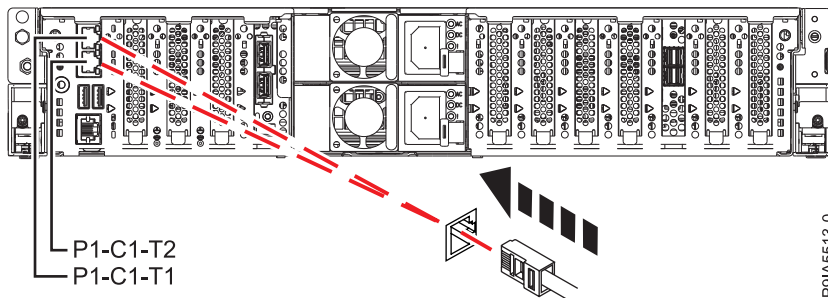


Figure 2. Replacing an HMC cable

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## Preparing the system for operation after removing and replacing the external HMC cable

To prepare the system for operation after removing and replacing the external HMC cable, complete the steps in this procedure.

### Procedure

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## Removing and replacing the external serial cable in the 9008-22L, 9009-22A, or 9223-22H

Find information about removing and replacing the external serial cable in the 9008-22L, 9009-22A, or 9223-22H.

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### Preparing the system to remove and replace the external serial cable

To prepare the system to remove and replace the external serial cable, complete the steps in this procedure.

#### Procedure

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### Removing the external serial cable from the 9008-22L, 9009-22A, or 9223-22H

To remove the external serial cable, complete the steps in this procedure.

#### Procedure

1. Attach the electrostatic discharge (ESD) wrist strap. The ESD wrist strap must be connected to an unpainted metal surface until the service procedure is completed, and if applicable, until the service access cover is replaced.

##### Attention:

- Attach an electrostatic discharge (ESD) wrist strap to the front ESD jack, to the rear ESD jack, or to an unpainted metal surface of your hardware to prevent the electrostatic discharge from damaging your hardware.
  - When you use an ESD wrist strap, follow all electrical safety procedures. An ESD wrist strap is used for static control. It does not increase or decrease your risk of receiving electric shock when using or working on electrical equipment.
  - If you do not have an ESD wrist strap, just prior to removing the product from ESD packaging and installing or replacing hardware, touch an unpainted metal surface of the system for a minimum of 5 seconds. If at any point in this service process you move away from the system, it is important to again discharge yourself by touching an unpainted metal surface for at least 5 seconds before you continue with the service process.
2. Disconnect the serial cable indicated in the **FRU Location** field in the upper left of this page. See Figure 3.

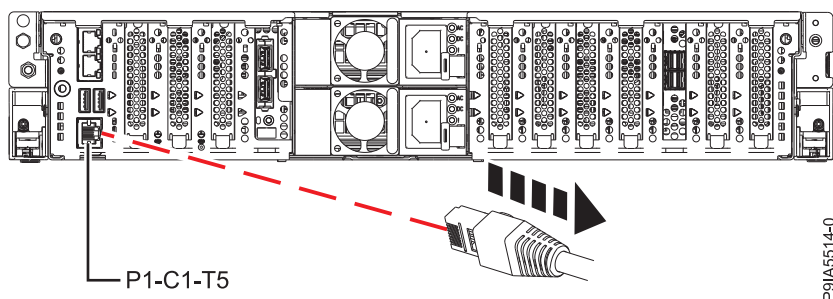


Figure 3. Removing the serial cable

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## Replacing the external serial cable in the 9008-22L, 9009-22A, or 9223-22H

To replace the external serial cable, complete the steps in this procedure.

### Procedure

1. Ensure that you have the electrostatic discharge (ESD) wrist strap on and that the ESD clip is plugged into a ground jack or connected to an unpainted metal surface. If not, do so now.
2. Connect the serial cable indicated in the **FRU Location** field in the upper left of this page. See Figure 4.

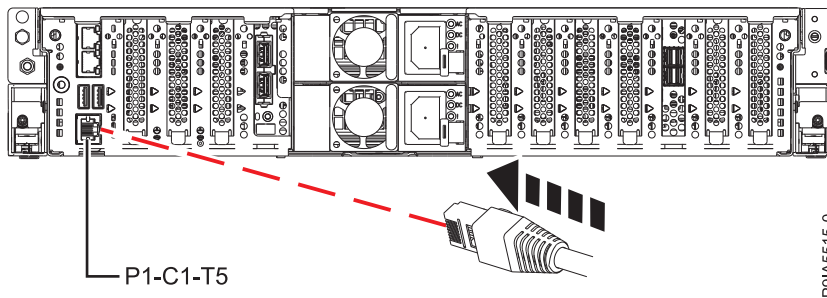


Figure 4. Replacing the serial cable

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## Preparing the system for operation after removing and replacing the external serial cable

To prepare the system for operation after removing and replacing the external serial cable, complete the steps in this procedure.

### Procedure



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## Removing and replacing the external USB cable in the 9008-22L, 9009-22A, or 9223-22H

Find information about removing and replacing the external USB cable in the 9008-22L, 9009-22A, or 9223-22H.

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### Preparing the system to remove and replace the external USB cable

To prepare the system to remove and replace the external USB cable, complete the steps in this procedure.

#### Procedure

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### Removing the external USB cable from the 9008-22L, 9009-22A, or 9223-22H

To remove the external USB cable, complete the steps in this procedure.

#### Procedure

1. Attach the electrostatic discharge (ESD) wrist strap. The ESD wrist strap must be connected to an unpainted metal surface until the service procedure is completed, and if applicable, until the service access cover is replaced.

##### Attention:

- Attach an electrostatic discharge (ESD) wrist strap to the front ESD jack, to the rear ESD jack, or to an unpainted metal surface of your hardware to prevent the electrostatic discharge from damaging your hardware.
  - When you use an ESD wrist strap, follow all electrical safety procedures. An ESD wrist strap is used for static control. It does not increase or decrease your risk of receiving electric shock when using or working on electrical equipment.
  - If you do not have an ESD wrist strap, just prior to removing the product from ESD packaging and installing or replacing hardware, touch an unpainted metal surface of the system for a minimum of 5 seconds. If at any point in this service process you move away from the system, it is important to again discharge yourself by touching an unpainted metal surface for at least 5 seconds before you continue with the service process.
2. Disconnect the USB cable indicated in the **FRU Location** field in the upper left of this page. See Figure 5.

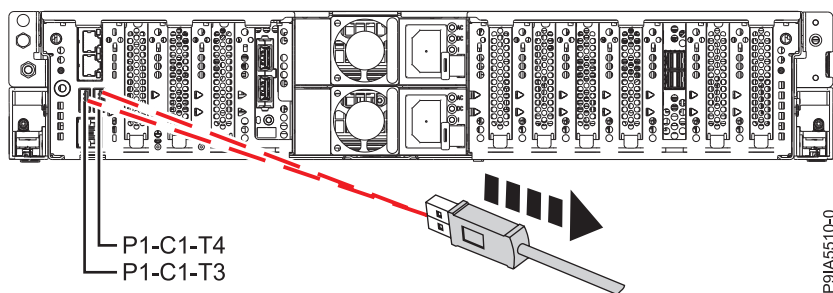


Figure 5. Removing a USB cable

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## Replacing the external USB cable in the 9008-22L, 9009-22A, or 9223-22H

To replace the external USB cable, complete the steps in this procedure.

### Procedure

1. Ensure that you have the electrostatic discharge (ESD) wrist strap on and that the ESD clip is plugged into a ground jack or connected to an unpainted metal surface. If not, do so now.
2. Connect the USB cable indicated in the **FRU Location** field in the upper left of this page. See Figure 6.

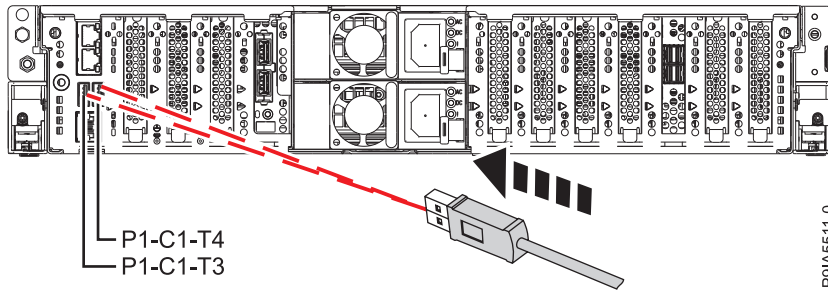


Figure 6. Replacing a USB cable

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## Preparing the system for operation after removing and replacing the external USB cable

To prepare the system for operation after removing and replacing the external USB cable, complete the steps in this procedure.

### Procedure