



MTS SYSTEMS CORPORATION



Initiating Corrective Action for SAFETY Situations

Training Presentation
2014-August

be certain.

Purpose and Content

- » **The purpose of this training is to inform persons to:**
 - Be aware of safety situations requiring Corrective Action
 - Quickly initiate Corrective Action Requests

- » **Content of the training**
 - Recognize the Situations (overview and examples)
 - The Importance of a Timely Corrective Action Request
 - Responsibility for Submitting a Request for Corrective Action
 - How to Submit a Request for Corrective Action
 - Test Q&A

Recognize the Situations (overview)

When you are aware of these,
submit for Corrective Action;

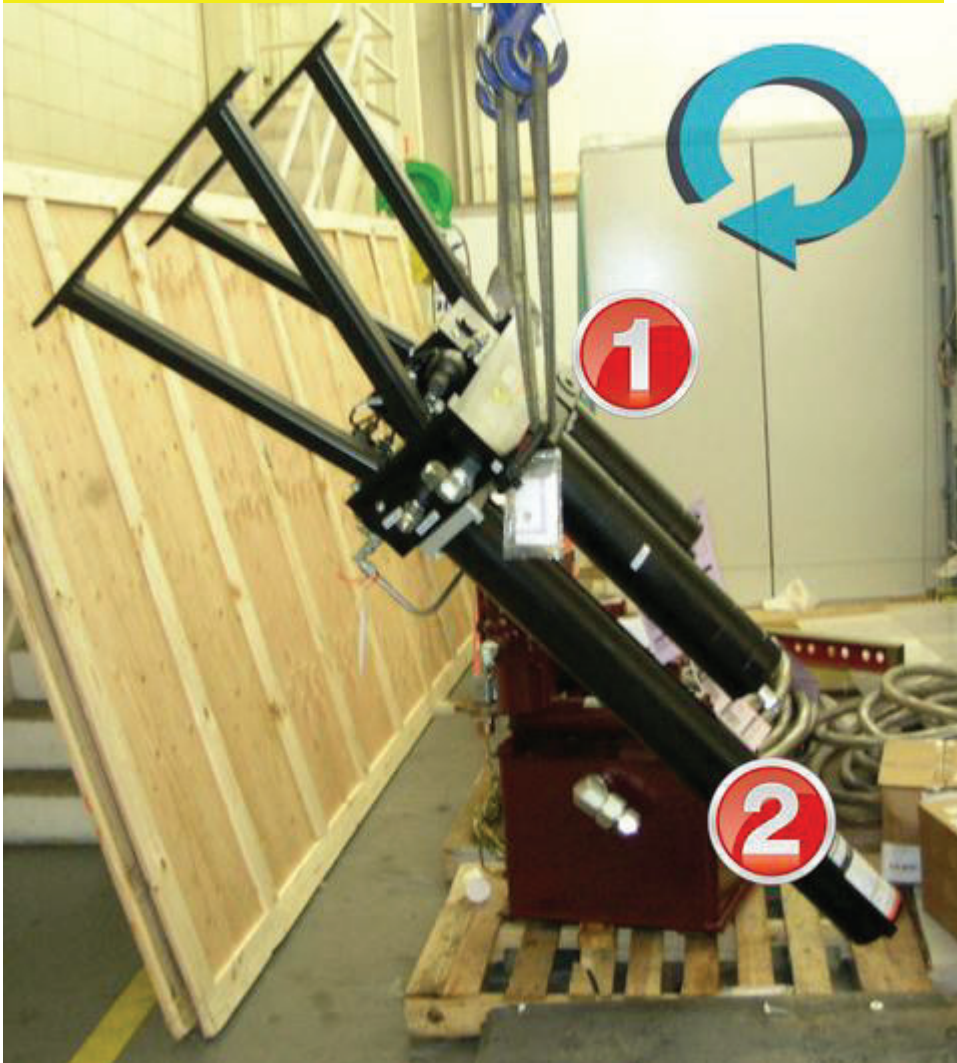
- » *Unsafe events*
- » *Accidents*
- » *Incidents*
- » *Near misses*
- » *Noncompliance to safety requirements*

Situations may involve the
following;

- » *People*
- » *Property (Equipment/
Facility/ Specimen Damage)*
- » *Environment*
- » *and Legal*

Recognize the Situations (Example 1)

Near Miss during a lift – Unbalanced Load



- » **The Hazards**
 - Tipping over during operation or transportation
- » **The Potential consequences**
 - Crushing or trapping of personnel
- » **The Causes – Design Controls**
 - 1 Lift ring locations are not suitable to be used alone
 - 2 Top heavy accumulator / manifold assembly has no additional means for safe lifting

Recognize the Situations (Example 2)

Observe that a switch did not disconnect power

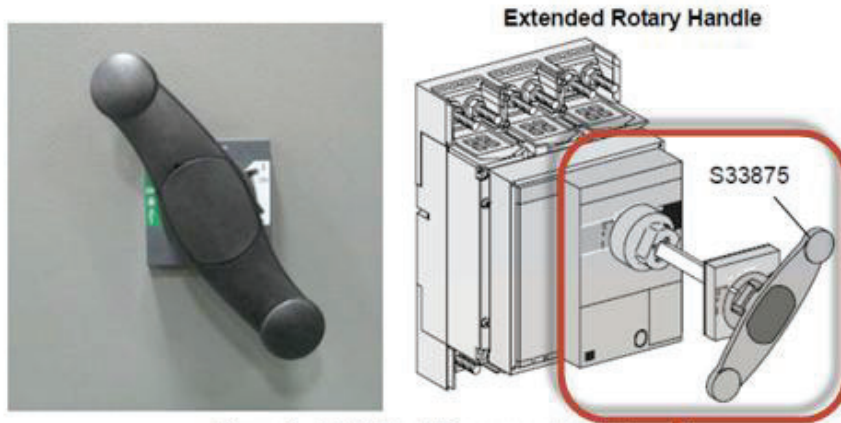


Figure 1 – HPU Panel Disconnect Switch

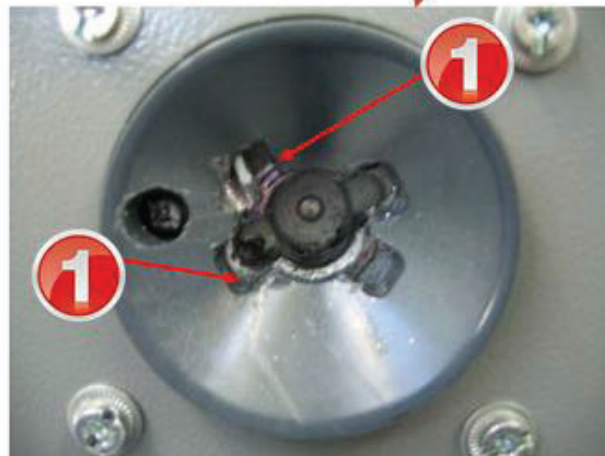


Figure 2 – Damaged Extended rotary handle mechanism

» **The Hazards**

- Power is not disconnected when switch is used
- Persons may be exposed to energized circuit

» **The Potential consequences**

- Shock during maintenance operations
- Unexpected start-up damaging equipment or releasing oil

» **The Causes – Manufacturing Controls**

- 1 Excessive axial force during assembly damages the mechanism
- No test to assure function

Recognize the Situations (Example 3)

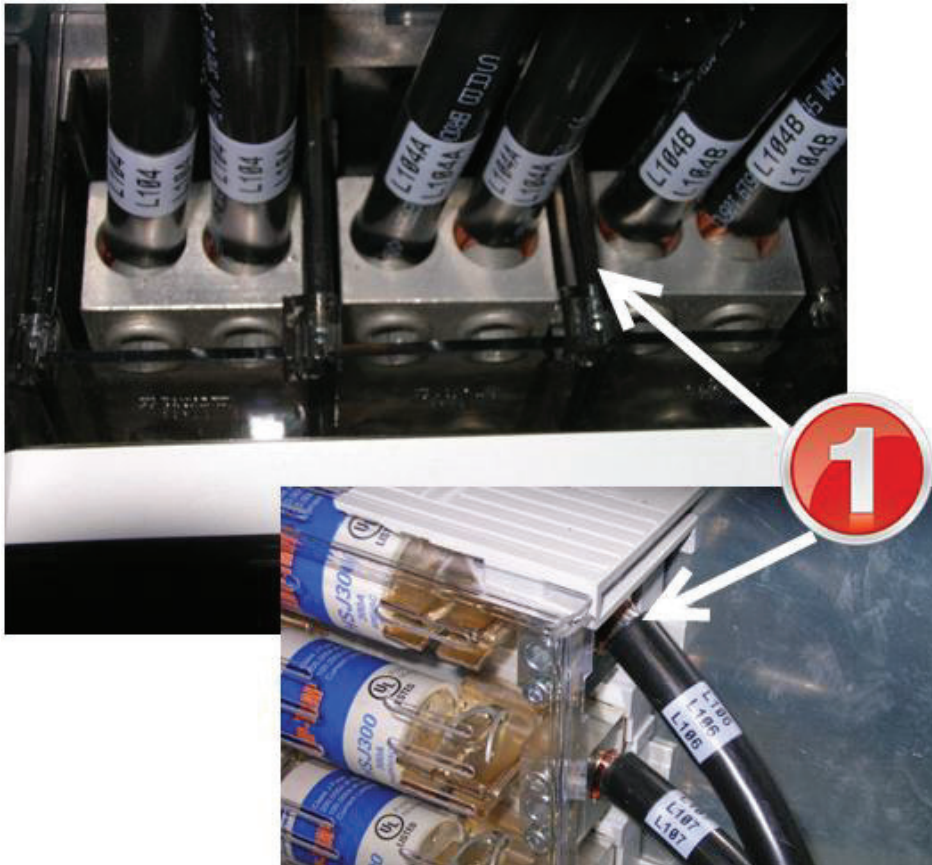
Receive a PRODUCT SAFETY NOTICE from a Supplier



- » **The Hazards**
 - The circuit breaker may fail to trip when an overload occurs
- » **The Potential consequences**
 - Fire
 - Damage to equipment
- » **The Causes** – Supplier Design Controls
 - Design validation of internal breaker materials

Recognize the Situations (Example 4)

Observe an inadequate guarding for shock hazard



» **The Hazards**

- In electrical enclosures, electrical components at hazardous voltage are “finger” accessible

» **The Potential consequences**

- Electric shock

» **The Causes** – Design Controls

- 1 Design validation of guarding materials to EN 60204-1

Recognize the Situations (Example 5)

Observe a rotating equipment hazard



- » **The Hazards**
 - Rotating shaft / coupling
 - Kinetic energy
- » **The Potential consequences**
 - Entanglement with / drawing-into rotating parts
- » **The Causes** – Design Controls
 - 1 Absence of guarding materials at the coupling

The importance of a timely request

The Corrective Action Process helps our customers and our organization.

- » Importance, Urgency and Escalation are built into the process
- » A Defined Sequence with Roles and Responsibilities is built into the process
- » The Required Records result from using the process

Responsibility for Submitting a Corrective Action Request

Submitting the request is a crucial trigger. Let the process help you.

- » Who is responsible for submitting a request for Corrective Action?**
 - The person who recognizes there is a safety situation or has the potential to be a safety situation**

How to Submit a Request

From the MTS Intranet (intranet.mts.com)

» Navigate to the Corrective Action System (CAS)

» From the CAS Click <Add>

» Complete the form

