



POLICY AND PROCEDURE MANUAL  
DUKE UNIVERSITY HEALTH SYSTEM



Clinical Engineering Policy CE-013

Work Request System

POLICY:

All work performed by the department of Clinical Engineering will be documented. The technician will use the Work Order Management Database to document this work.

PURPOSE:

To document work performed and to describe minimal standards for completion of work requests.

PROCEDURE:

The following fields should be completed where applicable:

CE Number—Corrective, Preventive, New Equipment, Electrical Safety work requests (with the exception of some loaner, rental and evaluation equipment and equipment excluded from inventory tagging) should have Asset inventory information already entered into the inventory database.

Entering the CE Number

If the CE Number is not active, a work cannot be created. An Operations Manager or Team Leader can reactivate the asset.

Entering the CE Number

Once entered, the other information related to the asset will be automatically filled in.

Work Order Type—the technician should select the appropriate work request type from the available work request types listed below. (Please note: the work request type defaults to “Corrective”) The technician shall use the work request type best suited to the work to be performed. The technician should contact the Operations Manager if they cannot determine the proper work order type. The work order types and their definitions are listed below:

**Corrective** - A work order for repair or corrective action to a device or system. In most cases this equipment will have a CE Number.

**Preventive** - A work order scheduled to perform procedures which “prevent” or minimize unscheduled maintenance. Sometimes this work order type is used to verify and document an equipment output which is critical to patient care.

**Electrical Safety - ESI**

**Safety Tests and Inspections** - A work order which documents an electrical safety testing procedure. (See Electrical Safety Policy CE-005) With the exception of rental, evaluation or short-term loaner equipment, a CE Number should be attached to this work request type.

**Acceptance**—a work order used for the initial inspection of equipment supported by Clinical Engineering. A CE number should be attached to this work order.

**Hazard/ Recalls/ Incident/ Alerts**—a work order of this type should be used for device incidents or device recalls.

**Rounds**—a work order used for documenting technician time spent visiting customer locations; generally used for contacting customer representatives to determine customer needs or for specifically monitoring problem equipment or systems.

**Project**—a work order not related to maintenance actions to equipment, but to a specific task or group of tasks. An installation of a system or the preparation for installation of a system could be examples of a project.

**Training**—a work order used to document formal or informal training time. This work order type should be used to document manufacturer training schools, in-service education, etc. Staff meeting time is documented with a training work order type.

**Administrative Duties**—a work order for documenting clerical time not included with another work order. In most cases, clerical time should be included within another work order. For example, the clerical time required for a corrective action should be included within the corrective work order. Time spent completing an Initial Inspection document or documents should be related to a New Equipment work order.



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Requester Name - The contact name should be entered.

Requester Phone Number - The contact phone number should be entered.

Requester Pager

Requester E-mail

Requester Comments – This field is used for describing the equipment problem as noted by the customer and/or for describing the problem as found by the technician. If there are multiple problems with a piece of equipment, the technician can briefly list the problems noted. (NOTE: the technician should document the CE Number, manufacturer, model # and device type in the description field if a CE Number cannot be attached, i.e. a CE Number has not yet been entered into the asset inventory module. If the equipment will not have a CE Number, such as in the case of a rental or evaluation unit, the technician should document the serial number, manufacturer, model # and device type in the description field.

Assignment – This is a required field. The technician must assign themselves. This is critical for tracking and location of work orders from the database.

Time charges – All labor time must be charged to the work order. Multiple time charges and resources are charged here. The technician should select the appropriate date(s) to accurately reflect the date(s) of maintenance. As time charges are added, time charges completion comments will be appended to the work order completion comments.

Materials – Capturing the true cost to date of an asset is imperative. It assists in equipment replacement justification. All material used must be added to the work order.

Status Code— This field is for defining the status type. These codes should be changes as the work order goes from creation to completion The following status codes are available:

| <u>Status</u> | <u>Sub Status</u>         |
|---------------|---------------------------|
| Active        | Could Not Locate          |
| Active        | Escalated Priority        |
| Active        | Failed Initial Inspection |
| Active        | Failed PM                 |
| Active        | On Hold                   |
| Active        | Issued, being worked on   |
| Active        | Called in Vendor          |
| Active        | Awaiting Parts            |
| Active        | Parts Received            |
| Active        | Ready to Issue            |
| Active        | Service                   |
| Active        | Shipped to Vendor         |
| Cancel        | No Changes Allowed        |
| Close         | No Changes Allowed        |
| Complete      | Changes Allowed           |
| Pending       | Back Order                |
| Pending       | Pending Customer Decision |
| Pending       | Could Not Locate          |
| Pending       | OEM Contracted Repair     |
| Pending       | Pending Request           |



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Priority Code - A priority code should be selected which best describes the priority of the request. A Team Leader or Manager should be contacted if a priority code can not be determined.

- URGENT Valid emergency repair request. This code should be used when the failure to respond to the request would jeopardize the health and safety of a patient or if the day to day operation of a patient care area would be significantly hindered.
- ROUTINE Completed at first opportunity. Most work requests will fall into this category.
- DEFERRED Completed as opportunity permits. This priority code should be used when the work request is deferred by the customer.

Work Order Type---the technician should select the appropriate work order type from the available work order types listed below. (Please note: the work order type defaults to “Corrective”)The technician shall use the work order type best suited to the work to be performed. The technician should contact the Operations Manager or Technical Support Manager if they cannot determine the proper work order type. The work order types and their definitions are listed below:

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**Problem Code**—the problem code should be selected from the problem code list below. The problem code should identify the primary problem. Secondary or multiple problems can be described in the description field, if necessary. The problem codes are listed below:

**PROBLEM CODE TABLE**

| Problem Code | Problem Description             | Complaint / Finding   |
|--------------|---------------------------------|---|
| A01          | A01 – Incident Report           | Incident Reporting  |
| A02          | A02-Operator Error, operation   | Equipment delivered to shop not because unit malfunctioned but because the operator misunderstood how the unit functioned.      |
| A03          | A03-Operator Error, abuse       | Equipment abuse   |
| A04          | A04-Operator Error, Induced     | Equipment malfunctioned due to operator causing a problem. Example: the user spilled coffee on a monitor and then turned it on. |
| A05          | A05-Physical Damage             | Equipment physically damaged; no eyewitness account of cause is available.  |
| A06          | A06-Acceptable Wear-Failure     | Equipment malfunctioned due to normal wear and tear. Example: O-rings have deteriorated on a anesthesia machine but             |
| A07          | A07-Component Failure           | Equipment malfunctioned due to an electronic or mechanical component failure.   |
| A08          | A08-Display Problem             | Equipment has a display problem.  |
| A09          | A09-Fluid Contamination/Spill   | Fluid has leaked into or onto the equipment.  |
| A10          | A10-Found on PM                 | A problem was noted while doing a PM procedure.   |
| A11          | A11-Frayed/Exposed Wire/Cord    | A wire or cord is exposed. This might also pertain to non-bare wire where shielding has been pulled back.                       |
| A49          | A49-Could Not Locate            | PM Could not locate   |
| A50          | A50-Low Dead Battery            | A low or dead battery has been noted.   |
| A51          | A51-Safety Hazard Found         | A safety or hazard issue was found  |
| A52          | A52-Fluid/ Contamination/ Spill | A contaminate either liquid or other was found  |
| A53          | A53-Needs Update/Modification   | The equipment requires a hardware or software modification.   |

*(Note: A status code should be chosen so as to provide the most accurate representation of the work performed.)*



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Repair Code—A repair code should be selected from the repair code list below. The repair code should describe the primary repair action. Secondary or multiple repair actions can be described in the repair description field if necessary.

**REPAIR CODE TABLE**

| Repair Code | Description                          | Repair Activity   |
|-------------|--------------------------------------|---|
| B01         | B01-Equip. Not Found                 | This code should be used when a piece of equipment can not be located for a PM procedure. Please see the CNL policy for complete details. |
| B02         | B02-Install/Reinstall Software       | Self-explanatory.   |
| B03         | B03-Overhaul/ Rebuild/ Remanufacture | Self-explanatory.   |
| B04         | B04-Remove from Service              | The equipment is removed from clinical service. In this situation, the device may be available to be placed back in service.              |
| B05         | B05-Returned for Exchange            | The equipment is sent back to the OEM or Vendor and a replacement is provided in its place.   |
| B06         | B06-Minor Repair, Electronic         | Self-explanatory.   |
| B07         | B07-Magor Repair, Electronic         | Self-explanatory.   |
| B08         | B08- Minor repair, Mechanical        | Self-explanatory.   |
| B09         | B09-Magor Repair, Mechanical         | Self-explanatory.   |
| B10         | B10-Reset/ Reboot/ Reinitialize      | Self-explanatory.   |
| B11         | B11-Calibrated, Adjusted             | Self-explanatory.   |
| B12         | B12-Cleaned                          | Self-explanatory.   |
| B13         | B13-Lubricated                       | Self-explanatory.   |
| B14         | B14-Operator Training/ In-service    | The technician provided training to an operator or the technician attended an operator training session.                                  |
| B15         | B15-Updated/ Modified/ Reconfigured  | Self-explanatory.   |
| B16         | B16-Incident Evaluation Complete     | Self-explanatory.   |
| B19         | B19-Could Not Duplicate              | A problem or complaint was described when the equipment was presented and the technician could not duplicate it.                          |

**Work Order Completion**

Completion Date – This date must be entered for the DTR report to be accurate.

Completion Comments – All work must be documented. Accurate, detailed comments are required. Time charges comments will be appended to this field.

Work Order Status – Upon completion, the work order final status should be changed to complete.



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