Electronic Work Instructions and Standard Operating Procedures (SOPs) - Example
EWI/SOP Use Case

Workflow
Manual Diesel Generator Test

Check Generator Oil Level

Check Cooling System Level

Check Battery Water

Check Pump Status

Start Generator

Complete Generator Checklist

Return Generator to Normal Operation

Process Visibility!
Workflow
“an End-User Perspective”
**Task: Manual Diesel Generator Test**

1. **Check Oil Level**
   - Check oil level

2. **Check Cooling System Level**
   - Check cooling system level

3. **Check Battery Water**
   - Check battery water

4. **Check Pump Status**
   - Check pump status

5. **Start Generator**
   - Start generator

6. **Complete Generator Checklist**
   - Complete generator checklist

7. **Return Generator To Normal Operation**
   - Return generator to normal operation

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**Oil Level Check**

1. Remove dipstick and visually inspect level.
2. If level is **below** the fill line, add oil (select oil viscosity based on current temperature – see linked doc: "Gen Oil Viscosity")

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**Is Oil Level Above Fill Line?**

- Yes
- No
9.2 Selecting the Proper Engine Oil
Use engine oil specifically designed for diesel engine use with the proper viscosity based on the anticipated ambient temperature (refer to the chart below).

Oil Viscosity and Temperature

CAUTION
- Use API class CG grade or higher engine oil.
### Task: Manual Diesel Generator Test

**Title:** Manual Diesel Generator Test

#### Task Steps

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#### Documents

1. Battery
2. Electric Battery Charger
3. Ignition Switch
4. Fuel Gauge Muffler
5. Water Temperature Sender
6. Water Temperature Sender (Located under Thermostat Cover)
7. Engine Oil Filter
8. Coolant Recovery Bottle
9. Lubricant Oil Cap
10. Mechanical Fuel Pump
11. Fuel Filter (Positioning: Visible, Lever)
12. Starter Motor
13. Air Cleaner
14. Alternating Current Generator

#### Diagram

*Figure 1-2: Generator Set - Top Cover Removed*
Task: Manual Diesel Generator Test

Task Steps:
- Check Oil Level
- Check Cooling System Level
- Check Battery Water
- Check Pump Status
- Start Generator
- Complete Generator Check
- Return Generator to Normal

This task step is not waiting for manual input.
Task: Manual Diesel Generator Test

.confirmation

Confirm that ALL pumps are shut down

Are pumps OFF?

- YES
- NO

If pumps are running, indicated by their green color, do the following:
1. Go to iFIX and open the operator display called WF_Pumps.grf
2. For any pump that is GREEN, click the pushbutton below the pump
3. When prompted, select the button to stop the pump.
Task Steps

Check Oil Level
- WFTraining
- proficy

Check Cooling System Level
- WFTraining
- proficy

Check Battery Water
- WFTraining
- proficy

Check Pump Status
- WFTraining
- proficy

Start Generator
- Connect Breaker From MCC ...

Complete Generator Check...
- proficy

Return Generator To Nor...
- proficy

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Disconnect Main Breaker on MCC Panel

Main Breaker Disconnected?
### Task: Manual Diesel Generator Test

<table>
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<tr>
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<tr>
<td>Check Oil Level</td>
<td>Manual Diesel Generator Test</td>
<td>0 D: 00 H: 07 M: 52 S</td>
<td>(none)</td>
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</table>
Task Steps

- Check Oil Level
- Check Cooling System Level
- Check Battery Water
- Check Pump Status
- Start Generator

Complete Generator Checklist

Performing By: WFTraining

Documents

- Generator Outside
- Generator Spaces
- Generator Inside
Task: Manual Diesel Generator Test

Task Steps

Check Oil Level
- WFT raining: proficy

Check Cooling System Level
- WFT raining: proficy

Check Battery Water
- WFT raining: proficy

Check Pump Status
- WFT raining: proficy

Start Generator
- WFT raining: proficy

Complete Generator Checklist
- WFT raining: proficy

Return Generator To Normal Operation
- Re-connecting main breaker...

Did you re-connect the main breaker switch?
- Yes
- No

Main Breaker Switch
Task: Manual Diesel Generator Test

Task Steps:
- Check Oil Level
  - WFTraining: proficiency
- Check Cooling System Level
  - WFTraining: proficiency
- Check Battery Water
  - WFTraining: proficiency
- Check Pump Status
  - WFTraining: proficiency
- Start Generator
  - WFTraining: proficiency
- Complete Generator Checklist
  - WFTraining: proficiency
- Return Generator To Normal Operation
  - Wait for transfer switch to activate...

Transfer Switch

Did the transfer switch activate?
- YES
- NO
Task: Manual Diesel Generator Test

Task Steps
- Check Oil Level
  - WFTraining: proficy
- Check Cooling System Level
  - WFTraining: proficy
- Check Battery Water
  - WFTraining: proficy
- Check Pump Status
  - WFTraining: proficy
- Start Generator
  - WFTraining: proficy
- Complete Generator Checklist
  - WFTraining: proficy
- Return Generator To Normal Operation

Input:
- Are all settings back to normal?
  - Yes
  - No
- User ID:
  - User ID
- Password:
  - Password

Diesel Generator Test Complete

Generator Outside
Generator Spaces
Generator Inside

Zoom: 1.0X