

Topic Skills Practice Cover Sheet

Unit Name:	UEEEL0005 Develop and connect electrical control circuits
Topic Title:	Remote STOP-START control and electrical interlocking

Skill Practice Number:	2.2
Skill Practice Name:	Select control devices – STOP-START and interlocking

Learner Name:	
Learner ID:	
College/Campus:	
Group:	

Results	
Planning:	
Carryout:	
Completion:	
Overall Results:	
Comments:	

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UEEEL0005 Develop and connect electrical control circuits

KE-UEEEL0005 Knowledge Evidence

Topic: 2. Remote STOP-START control and electrical interlocking

Skills Practice 2.2: Select control devices – STOP-START and interlocking

Task:

To select control devices from manufacturer's catalogues to suit given applications.

Objectives:

At the completion of this skills practice, you should be able to:

- Select stop-start stations for a given application.
- Select electrical interlocking equipment for a given application.
- Select mechanical interlocking equipment for a given application.

1. Planning the Skills Practice

1.1 Equipment: <ul style="list-style-type: none">• Manufacturer's catalogue	1.2 Suggested Materials: <ul style="list-style-type: none">• AS/NZS 1102• AS/NZS 3000	1.3 Miscellaneous Items: <ul style="list-style-type: none">• Pens / pencils
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1.4 Risk Assessment

Risk assessment procedure:

- Identify any hazards that may exist with this skills practice below
- List the supervision level you will be working under - Direct (D), General (G) or Broad (B)
- List the risk classification – High Risk (H), Medium Risk (M) or Low Risk (L)
- List the control measures required for each identified hazard that you need to implement.

Hazard/s Identified	Supervision Level (D, G or B)	Risk Classification (H, M or L)	Control Measure/s

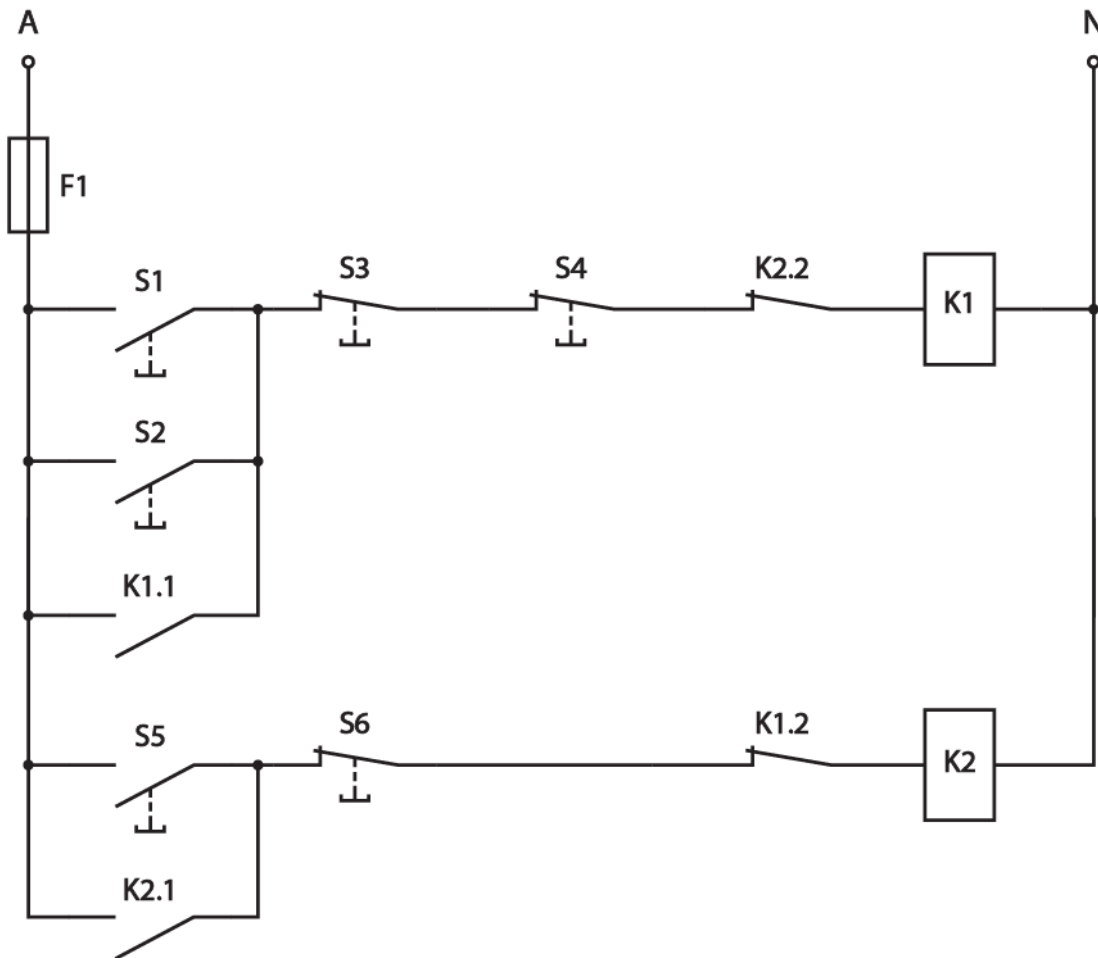
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2. Carrying Out the Skills Practice

Procedures:

2.1 Select control equipment

2.1.1 Select suitable control equipment for the following electrically interlocked control circuit:



Relay K1 requires one local and one remote STOP-START station, and relay K2 requires one local STOP-START station. The two local stations are to be surface mounted on a brick surface. The remote station is to be suspended from a jack chain and must only be operable by authorized personnel.

The two relays are to be mounted on a DIN rail in a control panel, and are to be mechanically and electrically interlocked.

2.1.2 Record the details of the STOP-START stations you have selected in the following tables:

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Local STOP-START Station 1 (S1, S3)

Manufacturer:	_____
Part No:	_____
Voltage Rating:	_____
Current Rating:	_____
Pushbuttons:	_____
Contacts:	_____
Protection:	_____
Enclosure:	_____
Description:	_____

Local STOP-START Station 2 (S5, S6)

Manufacturer:	_____
Part No:	_____
Voltage Rating:	_____
Current Rating:	_____
Pushbuttons:	_____
Contacts:	_____
Protection:	_____
Enclosure:	_____
Description:	_____

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Remote STOP-START Station (S2, S4)	
Manufacturer:	_____
Part No:	_____
Voltage Rating:	_____
Current Rating:	_____
Pushbuttons:	_____
Contacts:	_____
Protection:	_____
Enclosure:	_____
Description:	_____

2.1.3 Record the details of the relays you have selected in the following tables:




Relay Selection - K1	
Manufacturer:	_____
Part No:	_____
Voltage Rating:	_____
Current Rating:	_____
N/O Contacts:	_____
N/C Contacts:	_____
Description:	_____

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Relay Selection – K2	
Manufacturer:	_____
Part No:	_____
Voltage Rating:	_____
Current Rating:	_____
N/O Contacts:	_____
N/C Contacts:	_____
Description:	_____ _____ _____ _____

2.1.4 Record the details of the mechanical interlocking device you have selected in the following table:

Mechanical Interlocking Device	
Manufacturer:	_____
Part No:	_____
Description:	_____ _____ _____ _____

	 Feedback Have your teacher/trainer check your work	Teacher/Trainer Initials and Date _____	
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3. Completing the Skills Practice

Return all tools and equipment to their correct places and clean the work area.
Answer the following questions using your results and observations from the skills practice.

1. List the components that make up a STOP-START station.

2. What is the purpose of electrical interlocking?

3. Describe a typical application for mechanical interlocking.

	 Feedback	Have your teacher/trainer check your work	Teacher/Trainer Initials and Date	