



Sample Hybrid Storyboard – Draft B

Articulated Trucks

Module Two: Basic Operating Procedures

This Storyboard was originally 139 slides in length. There is no continuity between slides.

General Notes to SMEs

- We will be using a 3D model of the articulated truck for the feature walk-around and many of the other images. Placeholders from videos are used for this first draft storyboard.
- The NOTE, WARNING, AND CAUTION symbols as well as the “person icon” are also placeholders from a stock image site. We will either create our own images or purchase these images for use in the courses.



NOTE TO Graphic Artist:

These icons are comps from iStockphotos and would be a small fee if we want to use them. I also found another icon site that appears to have free similar icons even for commercial use:

<http://icons.mysitemyway.com/terms-of-use/>.

Or, let's make suitable images for these icons.

Module Enabling Objectives

The following is a list of the Enabling Objectives used in this module. The objectives are shown in correct sequence.

SME

- **Please approve the following list of objectives.**
- **Select ONE of the following EOs for a Knowledge Check.**

1. Explain how to claim an articulated truck.
2. Describe the steps involved in doing a walk-around inspection of an articulated truck.
3. Describe the basic safety precautions prior to operating an articulated truck.
4. Describe how to adjust the seat positions in the articulated truck.
5. Describe the steps involved in the engine start-up procedure.
6. **Explain how to do a park brake test.**
7. Explain how to do a service brake test.
8. Explain how to do a secondary steering test.
9. Describe the transmission controls in the articulated truck.
10. Describe how to slow or retard the articulated truck.
11. Describe how to safely stop the articulated truck.
12. Describe the steps involved in the machine park and shut-down procedure.

Module Two: Basic Operating Procedures

This module covers the basic operating procedures for articulated trucks.

These basic procedures and techniques help you become a safer and more productive operator and help to keep your machine running reliably.

On successful completion of this module you will be able to:

- Explain how to claim an articulated truck.
- Describe the steps involved in doing a walk-around inspection of an articulated truck.
- Describe the basic safety precautions prior to operating an articulated truck.
- Describe how to adjust the seat positions in the articulated truck.
- Describe the steps involved in the engine start-up procedure.
- Explain how to do a park brake, service brake, and secondary steering test.
- Describe the transmission controls in the articulated truck.
- Describe how to slow or retard the articulated truck as well as how to safely stop the articulated truck.
- Describe the steps involved in the machine park and shut-down procedure.



Claim the Truck

The first thing you need to do before starting a walk around inspection and operating the truck is to claim the truck.

This practice ensures that only one person is in charge of the vehicle and helps to prevent accidents or injuries.

To claim the truck:

- Follow all Approaching Equipment Procedures.
- Place your lunch kit or other personal item on the left side cab entry steps.
- Check that the park brake is applied and ensure the transmission gear selector is in neutral.

WARNING: IF A LUNCH KIT OR OTHER ITEM IS FOUND, BACK AWAY FROM THE MACHINE AND CAREFULLY CHECK THE AREA FOR PERSONNEL.



NOTE: this will be done from the 3d model. This image is from the YouTube video for reference purposes only.
I doctored a lunch bag image: lunchbag.jpg

The Walk-around Check Procedure

Overview

The purpose of the walk-around is to ensure the truck is ready and safe for production operations. The check is carried out on the ground and from inside the operator's cab.

Prerequisites

The walk-around check must be performed by the qualified operator designated to use the equipment prior to operation and at the end of the shift. A mid-shift (lunch break or lube/service break) check is also recommended.



The Walk-around Check Procedure

Precautions

- In sub zero weather the truck may be left running continuously to maintain operating temperature and to avoid trouble re-starting.
- Ensure you wear all appropriate PPE.
- Check articulation area from a distance if the machine is running. Serious injury or death could result from crushing in the articulation area.
- Serious injury from moving components or accessories could result.
- Hot surfaces may cause burns to skin or clothing.
- Battery fumes and diesel fuel are flammable. Do not smoke while performing the walk-around check!
- Watch for slipping hazards—ground conditions change constantly (snow, ice, mud, and water are very slippery).



The Walk-around Check Procedure



Intro 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

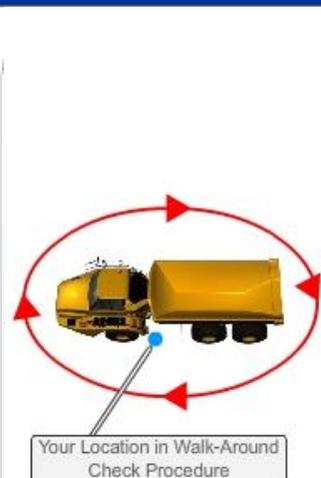
Follow these steps for the Shell Albion Sands standard walk-around check procedure for articulated trucks. Inform your Team Leader if any machine problems are found during walk-around checks. The Team Leader will arrange for maintenance, as required .

Click each number above to see the step-by-step walk-around check procedure.

Graphic Artist: Use large image of truck on this Intro slide (it should not have dust around it as if it's in motion).

Programmer: Make each tab highlight as learner clicks through them. Underline is shown for storyboard purposes only.

The Walk-around Check Procedure



Intro 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

1. Follow all Approaching Equipment Procedures.
2. PLACE lunch kit or other personal item onto LEFT cab access ladder to claim machine.
3. Then, go up to the cab and check if it is in Neutral and the park brake is applied.
4. Start at the articulation area and walk CLOCKWISE around the truck.



WARNING: IF YOU FIND A LUNCH KIT OR OTHER PERSONAL ITEMS, BACK AWAY FROM THE MACHINE AND CAREFULLY CHECK THE AREA FOR PERSONNEL.

Graphic Artist: Small image of truck with person icon standing in place where check takes place (as shown). Add WARNING icon to text area and wrap text around it.

Programmer: Circle the small image with an arrow in the clockwise direction synched with audio. Then, fade the clockwise arrow back so it's only a dim "path" the person icon will travel around on.

The Walk-around Check Procedure

As you have seen, the walk-around check procedure contains a number of steps. Use the checklist to help you.

Remember these important points:

- Place your lunch bag or other personal item on the LEFT cab access to claim the machine.
- Do the check CLOCKWISE around the machine.
- CHECK all components for damage, debris, proper levels, and function.
- Be careful: some areas may be hot.



Programmer: Circle the image with an arrow in the clockwise direction synched with audio. Please smooth out the arrow nicely. Then, fade the clockwise arrow back so it's only a dim "path" the person icon will travel around on.

Basic Safety Precautions

You must always be aware of basic safety precautions prior to operating the articulated truck.

First, read your truck's **Operation and Maintenance Manual**, located behind the driver's seat. Pay particular attention to safety warnings and instructions.

Become familiar with warnings in the manual and on the truck before you start the machine.



Basic Safety Precautions

Always use three points of contact when mounting or dismounting machines.

Never climb up the stairs without holding the rails and never jump down off the truck.



Let's start this screen from about this distance and then zoom in towards the stairs and place the three numbers, one on each rail and one on the step.

Start-up Procedure

Overview

The purpose of the start-up procedure is to make sure that you and every other operator start up the trucks properly and safely.

Use this procedure every time the truck needs to be started.

Prerequisites

A competent operator designated to use the equipment must perform the start up procedure.

The competent operator will be adequately qualified, suitably trained, and with sufficient experience to safely perform the task.



Start-up Procedure

Precautions

- In sub zero weather the truck may run continuously to maintain operating temperature and to avoid trouble in re-starting.
- Ensure you wear all appropriate PPE.
- Overuse of ether starting aid may cause engine damage.
- Ether is flammable and explosive if it comes in contact with an ignition source.



Module Conclusion

This module provided you with basic operating procedures and techniques for the articulated trucks.

This will help you to become a safer and more productive operator and help keep your machine running reliably.

Here are some of the key points covered in this module:

- Claim your truck by placing a lunch kit on the left side cab entry steps.
- Do a clockwise walk-around inspection before operating the truck to check for damage, debris, proper operating levels, and functionality.
- Make sure you read the Operation and Maintenance Manual prior to operating any machine.
- Adjust the seat position so that you can comfortably reach the pedals and all controls.
- Follow the proper start-up and park/shut-down procedures every time you operate the truck.
- Perform a park brake , service brake, and secondary steering test prior to operating the truck.
- Use the transmission and retarder controls while operating the truck as appropriate for the conditions.



Test Question

Click the correct answer. When you have finished, click "submit".

How do you claim an articulated truck?

- Put your lunch kit or other personal item on the left side cab entry steps.
- Hang a "Do Not Use" tag on the right side door handle.
- Start doing a walk-around inspection and the truck is claimed.
- Make a radio announcement as you approach the truck that states your ID number, the truck location, and your intention to claim it.

Submit



TQ Template 4. Use MC template in the LCMS, Randomize the position of the distracters and solutions when the question is entered into the LCMS.

Test Question

Select True or False.

Perform the walk-around inspection in a **counter-clockwise** pattern around the truck.

True

False

Submit



TQ Template 7 – Use true/false template in the LCMS.

Feedback: Perform the walk-around inspection in a **clockwise** pattern around the truck.

Test Question

Click the correct answer. When you have finished, click "submit".

What is your main purpose in doing a walk-around inspection?

- To check all components for damage, debris, proper levels, and function.
- To make sure there is nobody else in or around the truck.
- To ensure there are no objects in the path of the truck.
- To get some exercise before starting a long day of work sitting in the truck.

Submit



TQ Template 4. Use MC template in the LCMS, Randomize the position of the distracters and solutions when the question is entered into the LCMS.

Test Question

Click the correct answer. When you have finished, click "submit".

Before operating any machine, what are you required to do in order to be aware of basic safety precautions?

- Read and understand the Operation and Maintenance Manual for the machine.
- Ride with another operator and watch what they do.
- Sign the checklist that states you have completed this course.

Submit



TQ Template 4. Use MC template in the LCMS, Randomize the position of the distracters and solutions when the question is entered into the LCMS.

Test Question

Click the correct answer. When you have finished, click “submit”.

How many points of contact must you use when mounting or dismounting the truck?

- Three
- Two
- Four
- Whatever you want

Submit



TQ Template 4. Use MC template in the LCMS, Randomize the position of the distracters and solutions when the question is entered into the LCMS.

Test Question

When you have finished, click "submit".

Drag the labels identifying the seat adjustments controls to the correct spot on the images.

Seat Suspension

Arm Rest Position

Lumbar Adjustment

Fore/Aft Lever

Foot-rest Lever

Backrest Angle

Seat Dampening



Five empty rectangular boxes for labeling the seat adjustments.

Submit



Test Question

When you have finished, click "submit".

Drag the labels identifying the seat adjustments controls to the correct spot on the images.



Arm Rest Position



Foot-rest Lever



Lumbar Adjustment

Backrest Angle

Fore/Aft Lever

Seat Dampening

Seat Suspension

Submit



Test Question

When you have finished, click “submit”.

What are the steps involved in the engine start-up procedure? Select the correct answer from the drop-down lists to complete the following sentences.

1. ENSURE the (battery, power, articulation) disconnect switch is on.
2. ENSURE transmission is in (neutral, drive, park).
3. ENSURE parking brake is (on, off).
4. TURN the ignition key to the (on, off, start) position.
5. ALLOW (VIMS, EMS, Team Leader) to do a self-check.
6. SOUND the horn and WAIT (10, 20, five) seconds before starting the engine.

Submit



Drag and Drop or Image Select Test Question Template

Drop-down fill-in-the-blank template.

Test Question

Select True or False.

When you perform a parking brake test, only a very slight movement of the truck is allowed.

True

False

Submit



TQ Template 7 – Use true/false template in the LCMS.

Feedback: When you perform a parking brake test, NO movement of the truck is allowed.

Test Question

Select True or False.

To perform a service brake test, rev the engine speed to 1200 RPM for 20 seconds while the service brake is applied and the transmission is in first speed forward.

True

False

Submit



TQ Template 7 – Use true/false template in the LCMS.

Feedback: To perform a service brake test, rev the engine speed to 1200 RPM for NO LONGER THAN 10 seconds while the service brake is applied and the transmission is in first speed forward.

Test Question

When you have finished, click “submit”.

Click the image to select the correct answer.

Which switch do you press to perform the secondary steering test after you have turned the key to the ON position?



Submit



Drag and Drop or Image Select Test Question Template

Correct hotspot area is circled in red.

Test Question

What are the types of transmission controls on the articulated truck?

Drag the correct types at right to the descriptions below. When you have finished, click “submit”.

Push to move the transmission control lever to the desired position.

Push to stay in the gear that is currently engaged.

Push when you want to restrict your speed.

Press transmission hold in reverse to activate.

Gear Selection

Gear Lock

Transmission Hold

Neutral Lock

Speed Limiter

2nd Reverse Gear

High Gear Limit

Reverse Activator

Submit



Test Question

What are the types of transmission controls on the articulated truck?

Drag the correct types at right to the descriptions below. When you have finished, click “submit”.

Push to move the transmission control lever to the desired position.	Neutral Lock	Gear Selection
Push to stay in the gear that is currently engaged.	Transmission Hold	Gear Lock
Push when you want to restrict your speed.	High Gear Limit	
Press transmission hold in reverse to activate.	2nd Reverse Gear	Speed Limiter
		Reverse Activator

Submit



Test Question

Click the correct answer. When you have finished, click “submit”.

How do you slow the truck when on a downgrade?

- Use the retarder control and release the accelerator pedal.
- Use the service brake to bring the speed of the truck down.
- Pull the parking switch partway up.
- Switch into a lower gear.

Submit



TQ Template 4. Use MC template in the LCMS, Randomize the position of the distracters and solutions when the question is entered into the LCMS.

Test Question

Click the correct answer. When you have finished, click "submit".

To safely stop the articulated truck:

- Use the service brake under five KPH.
- Use the retarder under five KPH.
- Use the retarder and then apply the service brake at 25 KPH.
- Use the service brake and then switch the retarder control to Stage 2 at ten KPH.

Submit



TQ Template 4. Use MC template in the LCMS, Randomize the position of the distracters and solutions when the question is entered into the LCMS.

Test Question

Put the steps involved in the machine park and shut-down procedure in the correct order by dragging the numbers at right to the correct description below. **When you have finished, click "submit".**

- | | | |
|--------------------------|--|----|
| <input type="checkbox"/> | TRAVEL to a dry, level and safe area. | 1 |
| <input type="checkbox"/> | DECREASE speed. | 2 |
| <input type="checkbox"/> | APPLY the parking brake. | 3 |
| <input type="checkbox"/> | SHIFT transmission into Neutral once the machine is stopped. | 4 |
| <input type="checkbox"/> | APPLY the service brake to stop machine. | 5 |
| <input type="checkbox"/> | TURN the battery disconnect switch to OFF. | 6 |
| <input type="checkbox"/> | TURN OFF all lights if shutting the machine down. | 7 |
| <input type="checkbox"/> | STOP the engine. Turn the key "OFF" | 8 |
| <input type="checkbox"/> | IDLE the engine for 5 minutes, prior to shutting engine off. | 9 |
| <input type="checkbox"/> | COMPLETE a post shift walk around. | 10 |

[Submit](#)

Test Question

Put the steps involved in the machine park and shut-down procedure in the correct order by dragging the numbers at right to the correct description below. **When you have finished, click "submit".**

<input type="text" value="1"/>	TRAVEL to a dry, level and safe area.	<input type="text"/>
<input type="text" value="2"/>	DECREASE speed.	<input type="text"/>
<input type="text" value="5"/>	APPLY the parking brake.	<input type="text"/>
<input type="text" value="4"/>	SHIFT transmission into Neutral once the machine is stopped.	<input type="text"/>
<input type="text" value="3"/>	APPLY the service brake to stop machine.	<input type="text"/>
<input type="text" value="9"/>	TURN the battery disconnect switch to OFF.	<input type="text"/>
<input type="text" value="7"/>	TURN OFF all lights if shutting the machine down.	<input type="text"/>
<input type="text" value="8"/>	STOP the engine. Turn the key "OFF"	<input type="text"/>
<input type="text" value="6"/>	IDLE the engine for 5 minutes, prior to shutting engine off.	<input type="text"/>
<input type="text" value="10"/>	COMPLETE a post shift walk around.	<input type="text"/>

Submit 