

<b>Company Name:</b>	<b>Equipment/Job Identification:</b> Shuttle Car Operator <b>Type of Equipment:</b> Joy 10SC-32 Shuttle Car <b>Make:</b> <b>Model:</b> <b>Year:</b> <b>Use:</b>
<b>Mine Name:</b>	
<b>Date of Analysis:</b>	

### Pre-Assessment

- List pre-requisites here

### Duty 1: Start-of-Shift Activities

Learner will explain the importance of the start-of-shift activities. The learner will explain each job step, why they are conducted, any associated risk, and how to implement appropriate controls. Start-of-shift activities include the following job steps:

Job Steps	Importance Narrative (Consider Safety, Production, Maintenance)	Importance Ranking	Satisfactory or Needs Work	Procedures/Risk Resolution/ Notes/Comments
		1=Important 2=Very Important 3=Critical		
Check in/tag in	If something happens in the mine rescuers may not know you are in the mine	2		
Change clothes		1		
Get CSE SR-100	This rescuer could save your life in case of a fire or explosion	3		
<ul style="list-style-type: none"> <li>• Check indicators</li> </ul>	This rescuer could save your life in case of a fire or explosion	3		
<ul style="list-style-type: none"> <li>• Conduct visual examination</li> </ul>	This rescuer could save your life in case of a fire or explosion	3		Seal and dents
Obtain PPE	Prevent personal injury	2		Metacarpal gloves, safety glasses, hearing protection, metatarsal safety shoes, leather boots strongly recommended, respirator, reflective material on clothing, hard hat, cap lamp
Get radio		1		

Job Steps	Importance Narrative (Consider Safety, Production, Maintenance)	Importance Ranking	Satisfactory or Needs Work	Procedures/Risk Resolution/Notes/Comments
		1=Important 2=Very Important 3=Critical		
<ul style="list-style-type: none"> <li>Conduct function test</li> </ul>		1		
Obtain tools		1		Hammer, nails and spads, utility knife, channel locs
Meet with foreman	Get necessary work instructions, plan for mining	2		
<ul style="list-style-type: none"> <li>Discuss section activities</li> </ul>	Get necessary work instructions, plan for mining Allows you to prepare yourself for shift activities, be it safety or production	2		Supplies, condition of section, cutting sequence, condition of shuttle car, maintenance needed on shuttle car
<ul style="list-style-type: none"> <li>Attend safety talk</li> </ul>	Get your mind on safety activities for the day	2		
<ul style="list-style-type: none"> <li>Discuss roof control plan</li> </ul>	Necessary review of roof bolting practices and materials needed; conditions change daily	2		Bolted/unbolted area
Enter the mine				
<ul style="list-style-type: none"> <li>Get on mantrip</li> </ul>		1		Ensure mantrip has been pre-oped
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>Put on safety glasses</li> </ul> </li> </ul>	Prevent eye injuries	2		
<ul style="list-style-type: none"> <li>Ensure clearance is granted (track mines only)</li> </ul>	Prevent head-on collision	3		

## Duty 2: Conduct Examinations

Learner will demonstrate how to conduct safe and thorough work place and travel way examinations. Learner will also explain the job duties, why they are conducted, any associated risk, and how to implement appropriate controls. Thorough work place and travel way examinations include the following job steps:

Job Steps	Importance Narrative (Consider Safety, Production, Maintenance)	Importance Ranking	Satisfactory or Needs Work	Procedures/Risk Resolution/Notes/Comments
		1=Important 2=Very Important 3=Critical		
Exit mantrip		1		

Job Steps	Importance Narrative (Consider Safety, Production, Maintenance)	Importance Ranking	Satisfactory or Needs Work	Procedures/Risk Resolution/ Notes/Comments
		1=Important 2=Very Important 3=Critical		
Conduct work place examination	Prevents personal injury by recognizing hazards and taking corrective action	3		
<ul style="list-style-type: none"> <li>• Observe for mobile equipment</li> </ul>		1		
<ul style="list-style-type: none"> <li>• Check for bad top</li> </ul>	Prevents personal injury from hazardous roof conditions Even small pieces of rock can cause serious injury	2		Check for cracks, loose rock, taking on weight, water
<ul style="list-style-type: none"> <li>• Check for loose ribs</li> </ul>	Prevents personal injury from hazardous rib conditions Even small pieces of rock can cause serious injury	2		Check for cracks, brows and sloughage
<ul style="list-style-type: none"> <li>• Look for uneven bottom</li> </ul>		1		Ledges and potholes Check for slip/trip hazards while walking
<ul style="list-style-type: none"> <li>• Check ventilation</li> </ul>	Prevent accumulations of gas; may prevent an explosion; eliminate health hazards of respirable dust	3		Check fly pads and line curtains
<ul style="list-style-type: none"> <li>• Check for damaged bolts</li> </ul>	Unsafe to travel under unsupported top; prevent personal injury	2		
<ul style="list-style-type: none"> <li>• Visually inspect shuttle car cable (power off) <ul style="list-style-type: none"> <li>○ Check condition of splices</li> <li>○ Check for cuts/nicks</li> <li>○ Check for deformities in cable</li> <li>○ Check for torn jacket</li> <li>○ Check the anchor</li> <li>○ Ensure cable is hung properly from anchor to power center</li> </ul> </li> </ul>	Eliminate electrical shock and prevents unnecessary delay	3		
	Eliminate electrical shock and prevents unnecessary delay	3		
	Eliminate electrical shock and prevents unnecessary delay	3		
	Eliminate electrical shock and prevents unnecessary delay	3		
	Prevents damage to cable	3		Make sure main breaker on car is off and tagged out in operator's deck
	Eliminates potential damage to cable and prevents unnecessary delay	2		
<ul style="list-style-type: none"> <li>• Examine tail piece and feeder <ul style="list-style-type: none"> <li>○ Check for spillage</li> </ul> </li> </ul>		1		
		1		

Job Steps	Importance Narrative (Consider Safety, Production, Maintenance)	Importance Ranking	Satisfactory or Needs Work	Procedures/Risk Resolution/Notes/Comments
		1=Important 2=Very Important 3=Critical		
o Check spill boards		1		
o Check for slipping/tripping hazards		1		
o Check guarding		1		Tail roller, couplings
o Check gob switch		1		Location, function
o Check area around tailpiece for spillage		1		
o Check box check at tail piece		1		
o Check for water on the belt		1		
• Correct and/or report any unsafe conditions	Don't set a trap for somebody else; make sure unsafe conditions are corrected	3		
• Start belt		1		
• Start feeder		1		
Conduct travel way examination	These entries will be traveled routinely throughout the day; prevents personal injury	3		You may see hazards walking travelway that you wouldn't see riding
• Check for unsupported top	Prevents personal injury from hazardous roof conditions Even small pieces of rock can cause serious injury	2		Rounded corners, missing bolts, unbolted areas
• Check for bad top	Prevents personal injury from hazardous roof conditions Even small pieces of rock can cause serious injury	2		Check for cracks, loose rock, taking on weight, water
• Check for loose ribs	Prevents personal injury from hazardous roof conditions Even small pieces of rock can cause serious injury	2		Cracks, brows, sloughage
• Look for uneven bottom		1		Check for ledges, potholes, rocks in and on roadway Check for slip/trip hazards while walking

Job Steps	Importance Narrative (Consider Safety, Production, Maintenance)	Importance Ranking	Satisfactory or Needs Work	Procedures/Risk Resolution/Notes/Comments
		1=Important 2=Very Important 3=Critical		
<ul style="list-style-type: none"> <li>Check for cable locations and slack</li> </ul>		1		Miner, roof bolter
<ul style="list-style-type: none"> <li>Check fly pads before tramming through</li> </ul>	Prevent equipment collisions and maintains ventilation	2		
<ul style="list-style-type: none"> <li>Check for damaged bolts</li> </ul>	Unsafe to travel under unsupported top; prevent personal injury	2		
<ul style="list-style-type: none"> <li>Correct and/or report any unsafe conditions</li> </ul>	Don't set a trap for somebody else; make sure unsafe conditions are corrected	3		

### Duty 3: Control Functions

Learner will demonstrate how to safely operate the 10SC-32 Joy Shuttle Car controls in a non-production setting. Learner will also explain the controls, what they operate and how they function. Safe operation of the 10SC-32 Joy Shuttle Car controls includes the following:

Job Steps	Importance Narrative (Consider Safety, Production, Maintenance)	Importance Ranking	Satisfactory or Needs Work	Procedures/Risk Resolution/Notes/Comments
		1=Important 2=Very Important 3=Critical		
Stay in deck at all times while testing deck controls	Prevent crushing injuries due to unexpected movement	3		Give trainee adequate time to learn and practice these controls Use picture of deck controls to train
Demonstrate panic bar	Most important safety device on the machine – this stops all hydraulic functions and sets park brake	3		Push to shut the machine down Activates two different controls (Electric switch and Hydraulic valve)
Start the pump motor		1		
Demonstrate the pump tram speed switch		1		
<ul style="list-style-type: none"> <li>Rotate to the start position</li> </ul>		1		Spring loaded to center to “high tram on”
<ul style="list-style-type: none"> <li>Manually select tram speed</li> </ul>		1		High, medium, slow speeds or “pump off” position

Job Steps	Importance Narrative (Consider Safety, Production, Maintenance)	Importance Ranking	Satisfactory or Needs Work	Procedures/Risk Resolution/Notes/Comments
		1=Important 2=Very Important 3=Critical		
Demonstrate directional switch function		1		Rotational switch forward/backward
Demonstrate the tram pedal function	Ensure pedal is not sticking	2		Will automatically center to stop
Demonstrate foot brake function	Ensure pedal is not sticking	2		
Demonstrate park brake palm valve function		1		
<ul style="list-style-type: none"> <li>Press palm valve and pump lever to 500/600 psi to disengage brake</li> </ul>		1		
Demonstrate the manual park brake release	In case of an emergency, this is the only means of moving machine	2		
Demonstrate boom function		1		Up and down lever (hydraulic valve)
Demonstrate steering function		1		Hydraulic lever
Demonstrate conveyor motor snap switch function	Prevents spillage due to the requirement that this switch must be pushed to the "off" position; improper use of this function could result in loss of productivity	2		At start, spring loaded to the "on" position
Demonstrate light switch function		1		
Demonstrate audible alarm function		1		
Explain fire suppression system activation		1		Pull pin, push plunger
Demonstrate seatbelt usage		1		Explain need for usage Refer to tramping procedures
Demonstrate counter function		1		
Demonstrate cable reel diversion valve located in cable reel compartment		1		Releases the cable reel to pull cable off
<ul style="list-style-type: none"> <li>Ensure park brake is set or shuttle car is blocked against motion</li> </ul>	Prevent crushing injuries; zero potential for unexpected movement	3		
Demonstrate pump compartment controls		1		
<ul style="list-style-type: none"> <li>Demonstrate oil fill valve</li> </ul>		1		
<ul style="list-style-type: none"> <li>Demonstrate body jacks diversion valve</li> </ul>		1		Two position valve (on/off)
Show and explain offside fire suppression activator function		1		

Job Steps	Importance Narrative (Consider Safety, Production, Maintenance)	Importance Ranking	Satisfactory or Needs Work	Procedures/Risk Resolution/Notes/Comments
		1=Important 2=Very Important 3=Critical		
Demonstrate body jack valve bank functions located at operators side of tram motor		1		
<ul style="list-style-type: none"> <li>Demonstrate four valves (up, down for each jack)</li> </ul>		1		
Demonstrate panel box controls		1		
<ul style="list-style-type: none"> <li>Demonstrate conveyor forward/reverse switch</li> </ul>		1		
<ul style="list-style-type: none"> <li>Demonstrate main machine breaker</li> </ul>		1		
<ul style="list-style-type: none"> <li>Demonstrate traction breaker</li> </ul>		1		
<ul style="list-style-type: none"> <li>Demonstrate control breaker</li> </ul>		1		Breaks 110 voltage

#### Duty 4: Pre-op on Shuttle Car – Power off

Learner will demonstrate how to conduct a safe and thorough pre-operational inspection on the 10SC-32 Joy Shuttle Car with the machine powered off. Learner will also explain the job duties, why they are conducted, any associated risk, and how to implement appropriate controls. A safe and thorough pre-operational inspection on the 10SC-32 Joy Shuttle Car with the machine powered off includes the following job steps:

Job Steps	Importance Narrative (Consider Safety, Production, Maintenance)	Importance Ranking	Satisfactory or Needs Work	Procedures/Risk Resolution/Notes/Comments
		1=Important 2=Very Important 3=Critical		
Start at shive wheel		1		
<ul style="list-style-type: none"> <li>Check shive wheel for material build up <ul style="list-style-type: none"> <li>Clean as needed</li> </ul> </li> </ul>		1		
<ul style="list-style-type: none"> <li>Check to see if shive wheel turns</li> </ul>		1		
<ul style="list-style-type: none"> <li>Grease the shive wheels</li> </ul>		1		Obtain grease gun from feeder

Job Steps	Importance Narrative (Consider Safety, Production, Maintenance)	Importance Ranking	Satisfactory or Needs Work	Procedures/Risk Resolution/Notes/Comments
		1=Important 2=Very Important 3=Critical		
Check cable compartment	Prevent cable damage and unnecessary delays of shuttle car	2		
• Check for material build up	Prevent cable damage and unnecessary delays of shuttle car	2		
○ Clean as needed	Prevent cable damage and unnecessary delays of shuttle car	2		
• Check level wind	Prevent cable damage and unnecessary delays of shuttle car	2		
○ Assure cable is spooling evenly	Prevent cable damage and unnecessary delays of shuttle car	2		
• Check the diversion valve for on position		1		
• Check drive chain for oiler operation		1		
• Check cable slack on reel		1		Slack may need to be added or removed
• Check for oil leaks		1		
Check wheel units		1		
• Check to ensure wheels bolts are in place and tight	Easier to tighten bolts than to replace wheel unit	2		Wheel units will be checked as they are encountered
• Check for oil leaks		1		
• Check tire condition		1		
• Check tie rods		1		
• Check for material build up		1		
○ Remove rocks, mud and other debris by barring or water, if available		1		
• Check body lift jacks to ensure they are in up position		1		
Check pump compartment		1		
• Check for oil leaks		1		
• Check two diversion valves to ensure they are off		1		Oil fill valve Body jacks
• Check filter for leaks		1		
• Check for material buildup		1		
○ Clean as needed		1		



Job Steps	Importance Narrative (Consider Safety, Production, Maintenance)	Importance Ranking	Satisfactory or Needs Work	Procedures/Risk Resolution/ Notes/Comments
		1=Important 2=Very Important 3=Critical		
Check tram motor (right)		1		
• Check for material buildup		1		
○ Clean as needed		1		
• Check for leaks		1		
• Check fire suppression activator		1		Do not activate
• Check wet brakes		1		Hydraulic leaks
Grease tail shaft and grease manifold (right)		1		3 to 4 pumps See lube diagram
Conduct visual exam of chain from load end of shuttle car		1		
Check lights	Damaged lights are an explosion hazard	2		Check to see if lights are missing or damaged
Check tram motor (left)		1		
• Check for material buildup		1		
○ Clean as needed		1		
• Check for leaks		1		
• Check fire suppression activator		1		Do not activate
• Check wet brakes		1		Hydraulic leaks
Grease tail shaft (left)		1		
Examine body lift jacks valve bank		1		Should be in off position
Examine main contactor panel		1		
• Visually check packing glands		1		
• Check loose or missing bolts		1		
• Check lead seals		1		
• Check rub rail for damage		1		
• Ensure panel is secure		1		
• Ensure breakers are in the on position		1		
• Check for material buildup		1		
○ Clean as necessary		1		
Grease two manifolds		1		3 to 4 pumps See lube diagram
Examine operator's compartment		1		
• Check material build up		1		Clean as necessary
• Check for oil leaks		1		
• Check bell		1		

Job Steps	Importance Narrative (Consider Safety, Production, Maintenance)	Importance Ranking	Satisfactory or Needs Work	Procedures/Risk Resolution/Notes/Comments
		1=Important 2=Very Important 3=Critical		
• Check slate bar		1		
• Check fire suppression button		1		
• Check shuttle car counters or chalk		1		
• Check mechanical function of brake pedal, tram pedal and panic bar	These are safety devices meant to protect you	2		
• Check the manual brake release	May be needed to move the car in an emergency situation	2		If necessary to check from outside deck area, car must be chocked/angled against rib
o Hold in palm valve and pump the lever to check		1		
• Check condition of seat and seatbelt		1		
• Check canopy bolts	Could prevent personal injury due to canopy falling on a person	2		Present and tight
• Check screen between compartment and conveyor chain	Prevents coal or rock from entering operator compartment	2		Ensure it is there and clean
Check conveyor motor		1		
• Check for oil leaks		1		
• Check for buildup of debris		1		
• Check conduit and packing gland		1		
Visually examine lights for damage	Damaged lights are an explosion hazard	2		Check to see if lights are missing or damaged

## Duty 5: Pre-op on Shuttle Car – Power on

Learner will demonstrate how to conduct a safe and thorough pre-operational inspection on the 10SC-32 Joy Shuttle Car with the machine powered on. Learner will also explain the job duties, why they are conducted, any associated risk, and how to implement appropriate controls. A safe and thorough pre-operational inspection on the 10SC-32 Joy Shuttle Car with the machine powered on includes the following job steps:

Job Steps	Importance Narrative (Consider Safety, Production, Maintenance)	Importance Ranking	Satisfactory or Needs Work	Procedures/Risk Resolution/ Notes/Comments
		1=Important 2=Very Important 3=Critical		
Conduct following power on pre-op checks				These are all functional tests and all components should start and stop at design
<ul style="list-style-type: none"> <li>Check lights</li> </ul>		1		1 light out – report 2 lights out on same end – shut down
<ul style="list-style-type: none"> <li>Turn pump on</li> </ul>		1		
<ul style="list-style-type: none"> <li>Turn pump off with panic bar</li> </ul>	A malfunctioning panic bar could result in serious injury or fatality	3		
<ul style="list-style-type: none"> <li>Check start/stop speed control</li> </ul>		1		If tram speeds are not functioning properly, report immediately If you only have high tram speed, don't operate car (could damage internal electrical components)
<ul style="list-style-type: none"> <li>Check park brakes</li> </ul>	Unexpected movement of equipment has caused many fatal accidents	3		Check park brake first ; Service brake next
<ul style="list-style-type: none"> <li>Check steering</li> </ul>	If you can't steer properly, you could cause unnecessary delays, damage to cable and personal injury	2		Steering defects are normally considered out of service criteria
<ul style="list-style-type: none"> <li>Check forward and reverse switch and tram function</li> </ul>		1		
<ul style="list-style-type: none"> <li>Check conveyor chain on/off switch</li> </ul>		1		
<ul style="list-style-type: none"> <li>Check boom raise/lower lever</li> </ul>		1		
<ul style="list-style-type: none"> <li>Look for cable pick up</li> </ul>	Can cause personal injury as a result of electrocution from damaged cable and production delays from shuttle car down in roadway	2		

## Duty 6: Tramming

Learner will demonstrate how to safely and productively tram the Joy 10SC-32 Shuttle Car. Learner will also explain the job duties, why they are conducted, any associated risk, and how to implement appropriate controls. Safe and productive tramming of the Joy 10SC-32 Shuttle Car includes the following job steps:

Job Steps	Importance Narrative (Consider Safety, Production, Maintenance)	Importance Ranking	Satisfactory or Needs Work	Procedures/Risk Resolution/ Notes/Comments
		1=Important 2=Very Important 3=Critical		
Put seatbelt on	Not wearing seatbelt could result in personal injury due to jostling around, back injuries, neck injuries, arm and elbow injuries	2		
Keep all body parts within the deck compartment	Prevent personal injury (crushing, amputations, broken bones)	3		
Clear persons out of shuttle car Red Zone	Prevent serious or fatal injuries to persons (pinch, run over, crushing injuries, etc.)	3		
Set directional switch	If set incorrectly, you could move in opposite direction unexpectedly	2		
Sound audible alarm before tramming (voice or bell)	Prevent serious or fatal injuries to persons (pinch, run over, crushing injuries, etc.)	3		Serves as a warning to persons in area
Start pump		1		
Adjust tram speed using tram dial	Maintain better control of shuttle car based on roadway conditions	2		See Duty on Controls
Release park brake		1		
<ul style="list-style-type: none"> <li>Push button in (palm valve)</li> </ul>		1		
<ul style="list-style-type: none"> <li>Check brake pressure</li> </ul>	If you don't have the brake pressure, the car won't move	2		Pressure should be around 500/600 psi Brake pressure should increase to aprx. 1200 psi after steering is activated
<ul style="list-style-type: none"> <li>Check steering</li> </ul>		1		Move wheels to right and left
Turn lights on in direction of travel	Helps you see ahead and others see you	2		Always face direction of travel
Listen for anchor/slap	Can cause personal injury as a result of electrocution from damaged cable and production delays from shuttle car down in roadway	2		
Depress tram pedal		1		

Job Steps	Importance Narrative (Consider Safety, Production, Maintenance)	Importance Ranking	Satisfactory or Needs Work	Procedures/Risk Resolution/ Notes/Comments
		1=Important 2=Very Important 3=Critical		
Keep car centered in roadway	Prevent damage to cable/equipment/persons; Keep materials out of deck from rib	2		
<ul style="list-style-type: none"> <li>Use the first row of bolts off the rib to judge the positioning of car</li> </ul>	Prevent damage to cable/equipment/persons; Keep materials out of deck from rib	2		This row of bolts should line up with your shoulder
<ul style="list-style-type: none"> <li>Use existing tire tracks to judge position of car</li> </ul>	Prevent damage to cable/equipment/persons; Keep materials out of deck from rib	2		
Make a turn traveling inby	Prevent damage to cable/equipment/persons; Keep materials out of deck from rib	2		Steering is controlled by a hydraulic valve. As long as valve is open, the wheels will make a maximum turn
<ul style="list-style-type: none"> <li>Line up front tires with break corners and turn wheels left or right as hard as possible</li> </ul>	Prevent damage to cable/equipment/persons; Keep materials out of deck from rib	2		Be careful not to over-steer
Make a turn traveling outby				
<ul style="list-style-type: none"> <li>Line up boom end tires with break corners and turn wheels left or right as hard as possible</li> </ul>	Prevent damage to cable/equipment/persons; Keep materials out of deck from rib	2		
Observe for persons and obstructions in travel ways	Prevent personal injury and injury to others	3		Refer to Shuttle Car Red Zone Policy
<ul style="list-style-type: none"> <li>Ring bell or flash lights</li> </ul>	Prevent personal injury and injury to others	3		Refer to Shuttle Car Red Zone Policy
<ul style="list-style-type: none"> <li>Stop (if necessary)</li> </ul>	Prevent personal injury and injury to others	3		Refer to Shuttle Car Red Zone Policy
<ul style="list-style-type: none"> <li>Stop car for persons on offside of shuttle car</li> </ul>	Prevent personal injury and injury to others	3		Refer to Shuttle Car Red Zone Policy
Traveling through ventilation controls/fly pads/curtains				
<ul style="list-style-type: none"> <li>Slow down</li> </ul>	Prevent personal injury and injury to others	3		
<ul style="list-style-type: none"> <li>Sound audible alarm</li> </ul>	Prevent personal injury and injury to others	3		This alarm should be given well in advance of traveling through control/fly pads/curtains
<ul style="list-style-type: none"> <li>Flash lights</li> </ul>	Prevent personal injury and injury to others	3		

Job Steps	Importance Narrative (Consider Safety, Production, Maintenance)	Importance Ranking	Satisfactory or Needs Work	Procedures/Risk Resolution/Notes/Comments
		1=Important 2=Very Important 3=Critical		
<ul style="list-style-type: none"> <li>Replace any damaged ventilation controls</li> </ul>	Prevent possible explosion, eliminates health hazard from respirable dust	3		
Operate at speed under which you can maintain control of the car	Not having machine under control could result in personal injury due to jostling around, back injuries, neck injuries, arm and elbow injuries, injury to others and damage to equipment	3		Road conditions (water, mud) Experience
Be aware of other equipment and cables in travel ways	Prevent equipment damage and unnecessary delays	2		Switch out points, scoop movement roof bolter cable in low coal, miner cable

### Duty 7: Loading

Learner will demonstrate how to safely and productively load materials using the Joy 10SC-32 Shuttle Car. Learner will also explain the job duties, why they are conducted, any associated risk, and how to implement appropriate controls. Safe and productive loading of materials using the Joy 10SC-32 Shuttle Car includes the following job steps:

Job Steps	Importance Narrative (Consider Safety, Production, Maintenance)	Importance Ranking	Satisfactory or Needs Work	Procedures/Risk Resolution/Notes/Comments
		1=Important 2=Very Important 3=Critical		
Tram to continuous miner		1		See tramming procedures
At the miner, hold car over to the left rib	Prevent injury to miner operator and cable damage	3		Avoid miner cable and operator
<ul style="list-style-type: none"> <li>Always maintain a safe line of retreat for the miner operator</li> </ul>	Allow safe retreat for miner operator due to adverse roof conditions	3		
Center the car (as much as possible) under boom	Prevents spillage and increases productivity	2		
<ul style="list-style-type: none"> <li>Turn shuttle car wheels toward miner operator while loading (sitting under the boom)</li> </ul>	Eliminates possibility of hitting miner operator when leaving area	3		

Job Steps	Importance Narrative (Consider Safety, Production, Maintenance)	Importance Ranking	Satisfactory or Needs Work	Procedures/Risk Resolution/Notes/Comments
		1=Important 2=Very Important 3=Critical		
<ul style="list-style-type: none"> <li>Observe roof over miner operator for loose roof or ribs/Red Zones</li> </ul>	Prevents roof and rib fall injuries to miner operator	3		Car operator has a better view of roof conditions than miner operator
<ul style="list-style-type: none"> <li>Do not bump back of miner</li> </ul>		1		
<ul style="list-style-type: none"> <li>Maintain communication with miner operator</li> </ul>	Good communications improve production and prevents injuries	3		
<ul style="list-style-type: none"> <li>Ensure miner operator is not near the load end of the shuttle car during loading</li> </ul>	Prevent injury to miner operator	2		Rocks can slide off the car and strike miner operator The area directly in front of the load end of the shuttle car is where miner operator could most likely be struck by rocks
<ul style="list-style-type: none"> <li>Change the direction of your lights</li> </ul>	Keep lights out of miner operator's vision	2		
Watch the tail boom of the miner and as coal builds up, run the chain to load car as evenly as possible without overloading/spilling	Doing this job correctly saves on clean-up and increases productivity	2		
Stop loading coal within a foot of the end of boom	Doing this job correctly saves on clean-up and increases productivity	2		
<ul style="list-style-type: none"> <li>Use the outby end of deck compartment as a guide</li> </ul>	Doing this job correctly saves on clean-up and increases productivity	2		
<ul style="list-style-type: none"> <li>Listen for spillage</li> </ul>	Doing this job correctly saves on clean-up and increases productivity	2		
Observe for miner operator signal when car is loaded		1		Miner operator will flag you
Observe second row of fully intact roof bolts	Prevent personal injury due to roof falls	3		Never travel under unsupported top Refer to roof control plan Could result in disciplinary action
Ring bell	Prevent personal injury and injury to others	3		Refer to Shuttle Car Red Zone Policy
Tram to feeder		1		
Be aware of other car switch out points and scoop activity	Prevent personal injury, injury to others, equipment damage, collisions	3		

## Duty 8: Dumping

Learner will demonstrate how to safely and productively dump materials using the Joy 10SC-32 Shuttle Car. Learner will also explain the job duties, why they are conducted, any associated risk, and how to implement appropriate controls. Safe and productive dumping of materials using the Joy 10SC032 Shuttle Car includes the following job steps:

Job Steps	Importance Narrative (Consider Safety, Production, Maintenance)	Importance Ranking	Satisfactory or Needs Work	Procedures/Risk Resolution/ Notes/Comments
		1=Important 2=Very Important 3=Critical		
Look for any activity around feeder	Prevent personal injury, injury to others, equipment damage, collisions	3		Scoops cleaning, maintenance activities, people using phone
Slow down	Prevent personal injury, injury to others, equipment damage, collisions	3		Allows for reaction time
Raise boom (aprx.. a foot)		1		
Center car on feeder		1		
<ul style="list-style-type: none"> <li>Position boom so coal drops in center of feeder</li> </ul>		1		
<ul style="list-style-type: none"> <li>Use reflectors to center car on feeder</li> </ul>		1		
Make sure feeder is on prior to dumping		1		
Dump load		1		
Raise boom as coal load is dumped		1		Prevents spillage
<ul style="list-style-type: none"> <li>Slow down dumping when discharging rock to allow the crusher ample processing time</li> </ul>	Prevents downtime, maintenance costs	2		This will break shear pins, possibly chains, unnecessary wear on crusher bits, crusher and chain flights
Report excessive spillage to supervisor		1		Shuttle car gobbled out
Turn lights in direction travel	So you can see and others can see you	2		
Sound audible alarm	Prevent personal injury and injury to others	3		Bell or voice
Pull off the feeder		1		
<ul style="list-style-type: none"> <li>Look and listen for unusual sounds, smells in the feeder area</li> </ul>		1		Hydraulic leaks, dust, belt operations
Lower boom	Prevents damage to cable	2		
Return to continuous miner		1		See tramming procedures



## Duty 9: End-of-shift activities

Learner will demonstrate how to conduct safe and thorough end-of-shift activities. Learner will also explain the job duties, why they are conducted, any associated risk, and how to implement appropriate controls. Safe and thorough end-of-shift activities include the following job steps:

Job Steps	Importance Narrative (Consider Safety, Production, Maintenance)	Importance Ranking	Satisfactory or Needs Work	Procedures/Risk Resolution/Notes/Comments
		1=Important 2=Very Important 3=Critical		
Ensure car is empty		1		
Park car at the feeder		1		Never park within 15' of fly pads
Turn wheels toward rib	Prevents unexpected movement	2		
Clean out deck compartment		1		
Clean spillage off sides of car		1		
Ensure slate bar is left on car		1		
Kick breaker on feeder		1		
Kick breaker on car		1		
Check ventilation controls/fly pads/curtains	Prevents accumulations of gases	2		
Check tail piece for spillage	Possible source or fire	2		Unattended, belt still running
Report any maintenance problems/clean up needed, etc. to supervisor/electrician	Don't set a trap for another person	3		
Walk to mantrip		1		Look for tripping and stumbling hazards and correct as needed

## Duty 10: Unusual Situations, Emergencies, Non-routine duties

Learner will discuss, explain and demonstrate when necessary, proper procedures for dealing with non-routine tasks or unusual or emergency situations associated with the operation of the Joy 10SC-32 Shuttle Car. Learner will also explain the job duties, why they are conducted, any associated risk, and how to implement appropriate controls. Procedures for dealing with non-routine tasks, unusual or emergency situations include the following job steps:

Job Steps	Importance Narrative (Consider Safety, Production, Maintenance)	Importance Ranking	Satisfactory or Needs Work	Procedures/Risk Resolution/Notes/Comments
		1=Important 2=Very Important 3=Critical		
Fire	Prevent personal injury, damage to equipment, loss of production	3		Refer to fire-fighting and emergency evacuation plan
<ul style="list-style-type: none"> <li>• #1 Shuttle Car               <ul style="list-style-type: none"> <li>○ Assists miner operator in gathering water line and fighting fire</li> </ul> </li> </ul>				
<ul style="list-style-type: none"> <li>• #2 Shuttle Car               <ul style="list-style-type: none"> <li>○ Mans phone and communicates with outside person</li> </ul> </li> </ul>				
Loss of brakes	Prevent personal injury, injury to others and damage to equipment	3		
<ul style="list-style-type: none"> <li>• Stay in your seat</li> <li>• Steer into rib</li> <li>• Hit panic bar</li> </ul>				
Show escapeways	Everyone is responsible to know their escapeways and evacuation procedures	3		
Assist with mechanical repairs	Prevent person injury and injury to others Many fatalities occur during maintenance and non-routine tasks	3		Communications are key to safety in non-routine and/or unusual situations Repeat commands to make sure they are clear SLAM (Stop, Look, Analyze and Manage) the task