# **Start-Up & Shutdown Procedures**



#### Inspector \_\_\_\_\_

Evaluator\_

### **MOUNTING AND DISMOUNTING**

- Mount or dismount the machine only at locations that have steps and/or handholds. Before you mount the machine, clean and Inspect the steps and handholds. Make all necessary repairs.
- Always face the machine whenever you get on or off the machine.
- Maintain three-point contact with the steps and with the handholds. (Three-point contact can be 2 feet and 1 hand or 1 foot and 2 hands).
- DO NOT mount or dismount a moving machine. Never jump off the machine. Do not carry tools or supplies when you try to mount the machine or when you try to dismount the machine.

Was procedure step completed properly?	$\checkmark$	Evaluator Comments
BEFORE STARTING THE MACHINE		
Inspect the condition of the seat belt and mounting hardware Regardless of appearance, replace the seat belt after three years of use		
Adjust the seat so that full pedal travel can be achieved with the operator's back against the back of the seat		
Make sure the machine is equipped with a lighting system that is adequate for the job conditions Make sure all machine lights are working properly		
Before you start the engine and before you move the machine, make sure that no one is underneath the machine, around the machine, or on the machine		
STARTING THE MACHINE		
Turn the battery disconnect switch ON (if equipped)		
Adjust seat, adjust mirrors, fasten seat belt		
Lower armrests		
Move the engine speed control knob to low idle		
Make sure all implements are grounded		
Move all hydraulic controls into NEUTRAL		
Ensure all personnel are clear of machine		
Sound horn		
Turn the key start switch to ON		
On machines with Standard Display wait for the cold starting aid alert indicator light to go out		
On machines with Advanced Display wait for the LCD display to load the Welcome screen		
Turn the key start switch to START and crank engine		

#### **MACHINE WARM-UP**

Disengage parking brake	
Allow machine to warm up (per time required in 0&MM)	
Run engine at half throttle	
Hold work tool joystick control in TILT BACK for 30 seconds and release for 30 seconds; hold work tool joystick in DUMP for 30 second and release for 30 seconds; continue procedure for 3 minutes	
Move machine slowly to an open area and repeat above step while moving machine back and forth for 3 m (10 ft)	
Check gauges and alert indicators frequently	



Was procedure step completed properly?	$\checkmark$	Evaluator Comments
MOVING THE MACHINE		
Make sure area is clear		
Sound horn before moving machine per site rules		
Disengage parking brake		
Raise all lowered work tools and attachments		
Smoothly move the speed and direction control for the desired direction and speed		
Move slowly while moving ahead		
Lower lift arms fully and tilt back work tool to keep work tool off of the ground		
Carry work tools low to the ground		

Park machine on smooth, level area	
Move joysticks slowly to NEUTRAL position to stop the machine	
Move engine speed control knob to LOW IDLE position	
Operate the engine for 5 minutes at low idle with no load	
Lower the loader arms and tilt the linkage so work tool rests firmly on the ground	
Move the hydraulic controls to NEUTRAL position	
Turn the engine start switch key to OFF position and remove the key	
Utilize correct delayed engine shutdown procedure if equipped Note: Overriding delayed engine shutdown may reduce engine & machine system component life Use for emergency situations only	
Turn battery disconnect switch to OFF	
Do not turn off the battery disconnect switch until the "wait to disconnect" lamp has turned off. If the switch is turned off when the indicator lamp is illuminated the Diesel Exhaust Fluid (DEF) system will not purge the DEF. If the DEF does not purge, DEF could freeze and damage the pump and lines (if equipped).	
Dismount machine using 3-point contact	
If parking for extended period: block tires, remove disconnect switch key and install vandalism guards (if equipped)	
Conduct post-operation walk-around inspection	

## NOTES:

Inspected by: \_\_\_\_

\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_



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