

Start-Up & Shutdown Procedures (HC)

120K-160K, (120K-160K)



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?	√	Evaluator Comments
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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

Remove the frame lock pin and wheel lean locking bolt (if equipped)		
Turn the battery disconnect switch ON		
Adjust seat for proper height and pedal reach		
Adjust the control pod height and adjust the control pod fore/aft position (if equipped)		
Inspect, adjust mirrors		
Adjust steering wheel/steering column (if equipped)		
Inspect, adjust, and fasten seat belt		
Ensure all implements are grounded		
Ensure the parking brake is engaged		
Move the implement control levers into HOLD		
Move the transmission control lever to NEUTRAL		
Ensure all personnel are clear of machine, sound horn		
Turn engine start switch to the ON position		
Observe monitoring system self-diagnostic test, add fluids if necessary		
Turn the key start switch to START, crank engine and release when engine starts		

MACHINE WARM-UP

Allow machine to warm up (per O&MM)		
Engage and disengage implement controls		
Cycle all hydraulic controls to allow warm oil to circulate through all hydraulic cylinders and all hydraulic lines		
Move machine forward and backward several meters (yards) to warm-up power train oil		
Operate under a light load until the systems reach normal operating temperatures		
Check gauges, indicators, and action light frequently		



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MOVING THE MACHINE

Make sure area is clear by sounding horn and waiting 3-5 seconds before moving machine		
Raise all lowered implements		
Depress the service brake pedal		
Engage the transmission modulator pedal		
Release the parking brake		
Move the transmission control to desired direction and gear		
Release the service brake pedal, check for proper direction		
Release transmission modulator pedal		
Push down on accelerator		

MACHINE SHUT DOWN

Park machine on smooth, level area		
Apply the service brake to stop the machine		
Apply the transmission modulator control (inching pedal) to stop the machine (12M, 120M, 140M, 160M, 14M, 16M)		
Move the transmission control lever to NEUTRAL		
Move the throttle control to the LOW IDLE position		
Engage the parking brake		
Lower all equipment to the ground and activate any control locks		
Run at LOW IDLE for 5 minutes to allow the engine to cool		
Turn key start switch to OFF and remove 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 remove disconnect switch key and install vandalism guards (if equipped)		
Drain water from air tank (if equipped)		
Conduct post-operation walkaround inspection		

NOTES:

Inspected by: _____ Date: _____ Time: _____

