# Start-Up & Shutdown Procedures 637K-657G

## 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.

<table>
<thead>
<tr>
<th>Was procedure step completed properly?</th>
<th>√</th>
<th>Evaluator Comments</th>
</tr>
</thead>
</table>

### BEFORE STARTING THE MACHINE

- Inspect the condition of the seat belt and mounting hardware
- 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 TRACTOR ENGINE

- Turn the TRACTOR battery disconnect switch ON (if equipped)
- Turn the SCRAPER battery disconnect switch ON (if equipped)
- Adjust seat for proper height and pedal reach
- Inspect, adjust, and fasten seat belt
- Inspect, adjust mirrors
- Move transmission control to NEUTRAL position
- Unlock steering column, move to desired position, lock steering column
- Engage the parking brake control, verify parking brake is engaged
- Move joystick control to HOLD position
- Move all implement controls to NEUTRAL or OFF position
- Ensure all personnel are clear of machine, sound horn
- If temperature of the intake air is below 0 °C (32 °F), the coolant temperature switch will cause ether to be automatically injected into the engine
- Turn engine start switch to the ON position
- Observe monitoring system self test to determine if modules and outputs are operating properly
- Turn the key start switch to START, crank engine and release when engine starts

### STARTING THE SCRAPER ENGINE

- To start the scraper engine from the operator compartment:
  - Follow steps above for “STARTING THE TRACTOR ENGINE”
  - Press the scraper engine start button
- To start the scraper engine from the scraper control:
  - Follow steps above for “STARTING THE TRACTOR ENGINE”
  - Press the scraper engine start button in the operator compartment
- While the key is in the ON position push unlock/start button (from scraper control) prior to or along with scraper engine start button, release button when engine starts
Start-Up & Shutdown Procedures 637K-657G

<table>
<thead>
<tr>
<th>Was procedure step completed properly?</th>
<th>√</th>
<th>Evaluator Comments</th>
</tr>
</thead>
</table>

### MACHINE WARM-UP

- When engine is cold, operate at low idle for at least 5 minutes (per O&MM)
- Cycle all controls to allow warm oil to circulate through all hydraulic cylinders and lines
- Run engine at less than one-third throttle, and slowly move the control lever to lift attachment
- Initially, lift the control lever for a few centimeters (inches), lower the attachment slowly
- Continue the sequence: raising, lowering, extending, and retracting
- Release brake, move equipment forward/backward for several meters (yards) for several minutes
- To reduce total warm up time, start exercising entire machine before completing hydraulic warm up time
- Operate under a light load until the systems reach normal operating temperatures
- Check gauges and indicators frequently

### MOVING THE MACHINE

- Make sure area is clear by sounding horn and waiting 3-5 seconds before moving machine
- Raise bowl to pass over any obstacles
- Depress the service brake pedal
- Release the parking brake
- Move the transmission control to desired direction and appropriate gear speed
- Activate cushion hitch
- Release the service brake control
- Depress throttle pedal(s) to achieve desired engine speed
<table>
<thead>
<tr>
<th>Was procedure step completed properly?</th>
<th>✓</th>
<th>Evaluator Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MACHINE SHUT DOWN</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Park machine on smooth, level area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apply service brakes to stop machine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Move transmission to NEUTRAL position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Move throttle control to LOW IDLE position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turn off cushion-hitch and lower bail (if equipped)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engage the parking brake</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower all hydraulic implements, apply slight downward pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Run engine at low idle for 5 minutes to allow engine to cool</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turn key start switch to OFF and remove key</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilize correct delayed engine shutdown procedure if equipped</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note: Overriding delayed engine shutdown may reduce engine &amp; machine system component life</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use for emergency situations only</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turn battery disconnect switch to OFF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>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).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dismount machine using 3-point contact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If parking for extended period remove battery disconnect key and lock all vandalism covers and compartments (if equipped)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduct post-operation walk-around inspection</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:**

Inspected by: _______________________________ Date: __________________________ Time: __________________________