## Start-Up and Shut Down Procedures – Motor Graders

### Operator/Inspector ______________________ Date ______________ Time ______________

<table>
<thead>
<tr>
<th>Serial Number</th>
<th>Machine Hours</th>
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### Was procedure step completed properly? ✓ Evaluator Comments

For more information, please refer to the Operation and Maintenance Manual or any other applicable manuals and instructions for this product. If you have questions, please contact your local Caterpillar dealer.

### STARTING THE MACHINE…

- Perform walk around inspection
- Mount the machine using 3 points of contact
- Turn the battery disconnect switch to ON
- Fasten seat belt
- Make sure all implements are grounded
- Engage the parking brake
- Move the attachment control levers into HOLD
- Make sure all personnel are clear of the machine
- Turn the key start switch to ON
- Perform start-up test on EMS
- Turn the key start switch to START…Crank engine

### MACHINE WARM-UP…

- Allow machine to warm-up for 5 minutes as low idle
- Engage and disengage attachment controls
- Cycle all controls to allow warm oil to circulate through all cylinders and lines
- Check gauges and action lights frequently
- Perform second part of EMS start-up test

### MOVING THE MACHINE…

- Make sure are is clear of personnel and obstructions
- Raise all lowered implements
- Depress service brake pedal
- Release parking brake
- Move transmission control to desired direction and gear
- Release service brake pedal, check for proper operation
- Release transmission modulator pedal
- Push down on accelerator

### MACHINE SHUT DOWN…

- Park machine on smooth, level area
- Set the parking brake
- Lower and lock all hydraulic implements
- Allow engine to run at LOW IDLE for 5 minutes
- Turn key start switch to OFF and remove key
- Dismount machine using 3-point contact
- Conduct post-operation walkaround inspection
- Turn battery disconnect switch to OFF

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