

SAFETY.CAT.COM™

D8T TRACK-TYPE TRACTOR

Maintenance Intervals

Excerpted from Operation & Maintenance Manual (SEBU7763-03)

i02877581

Maintenance Interval Schedule

SMCS Code: 7000

Ensure that all safety information, warnings, and instructions are read and understood before any operation or any maintenance procedures are performed.

The user is responsible for the performance of maintenance, including all adjustments, the use of proper lubricants, fluids, filters, and the replacement of components due to normal wear and aging. Failure to adhere to proper maintenance intervals and procedures may result in diminished performance of the product and/or accelerated wear of components.

Use mileage, fuel consumption, service hours, or calendar time, WHICH EVER OCCURS FIRST, in order to determine the maintenance intervals. Products that operate in severe operating conditions may require more frequent maintenance.

Note: Before each consecutive interval is performed, all maintenance from the previous interval must be performed.

When Required

Battery, Battery Cable or Battery Disconnect Switch - Replace	133
Bottom Guard (Power) - Clean	134
Cooler Cores and A/C Condenser - Clean	138
Cutting Edges and End Bits - Inspect/Replace ...	148
Engine Air Filter Primary and/or Secondary Element - Clean/Replace	149
Engine Air Precleaner - Clean	151
Equalizer Bar Center Pin - Measure	160
Equalizer Bar End Pins - Measure	161
Ether Starting Aid Cylinder - Replace	161
Front Idler Position - Check	166
Fuel System - Prime	168
Fuses and Circuit Breakers - Replace/Reset	173
High Intensity Discharge Lamp (HID) - Replace ..	174
Hydraulic System Filter Screens - Clean	175
Oil Filter - Inspect	182
Power Train Scavenge Screen - Clean	185
Radiator Pressure Cap - Clean/Replace	190
Ripper Tip and Shank Protector - Inspect/Replace	192
Torque Converter Scavenge Screen - Clean	195
Winch Wire Rope - Install	201
Window Washer Reservoir - Fill	201
Window Wipers - Inspect/Replace	202
Windows - Clean	202

Every 10 Service Hours or Daily

Backup Alarm - Test	132
Braking System - Test	135

Cab Filter (Fresh Air) - Clean/Inspect/Replace ...	136
Cooling System Coolant Level - Check	146
Engine Oil Level - Check	154
Fuel System Primary Filter (Water Separator) - Drain	170
Fuel Tank Water and Sediment - Drain	173
Horn - Test	175
Hydraulic System Oil Level - Check	180
Indicators and Gauges - Test	181
Pivot Shaft Oil Level - Check	183
Power Train System Oil Level - Check	188
Seat Belt - Inspect	193
Walk-Around Inspection	199

Every 50 Service Hours

Bulldozer Tilt Brace and Tilt Cylinders - Lubricate	135
Cab Filter (Recirculation) - Clean/Inspect/Replace	137
Lift Cylinder Yoke Bearings - Lubricate	182
Ripper Linkage and Cylinder Bearings - Lubricate	192
Track Pins - Inspect	197

Every 250 Service Hours

Belt - Inspect/Adjust/Replace	133
Engine Oil Sample - Obtain	155
Engine Oil and Filter - Change	156
Equalizer Bar End Pins Oil Level - Check	160
Final Drive Oil Level - Check	163
Track - Check/Adjust	195
Winch Fairlead Rollers - Lubricate	199
Winch Oil Level - Check	199

Initial 500 Hours (for New Systems, Refilled Systems, and Converted Systems)

Cooling System Coolant Sample (Level 2) - Obtain	142
Electronic Unit Injector - Inspect/Adjust	149
Engine Valve Lash - Check/Adjust	159
Engine Valve Rotators - Inspect	159
Winch Oil and Breather - Change/Clean	200

Every 500 Service Hours

Engine Crankcase Breather - Clean	151
Engine Oil and Filter - Change	156
Final Drive Oil Sample - Obtain	163
Fuel System Primary Filter - Clean/Replace	169
Fuel System Secondary Filter - Replace	171
Fuel Tank Cap Filter and Strainer - Replace/Clean	172
Hydraulic System Oil Filters - Replace	179
Hydraulic System Oil Sample - Obtain	181
Power Train Breather - Clean	184
Power Train Oil Filters - Replace	184
Power Train System Oil Sample - Obtain	189
Recoil Spring Compartment Oil Level - Check ...	191
Steering Charge Filter - Replace	194

Every 1000 Service Hours or 6 Months

Battery - Inspect	132
Power Train System Oil And Screens - Change/Clean	186
Rollover Protective Structure (ROPS) - Inspect ..	193
Winch Oil and Breather - Change/Clean	200

Every 2000 Service Hours or 1 Year

Engine Mounts and Equalizer Bar - Inspect	152
Final Drive Oil - Change	162
Final Drive Seal Guard Packing - Replace	164
Hydraulic System Oil - Change	176
Hydraulic System Oil Filter (Pilot) - Replace	178
Radiator Guard Pin Joint - Inspect	190
Track Roller Frame - Inspect	198
Track Roller Frame Guides - Inspect	198

Every Year

Cooling System Coolant Sample (Level 2) - Obtain	142
Engine Air Filter Primary and/or Secondary Element - Clean/Replace	149
Refrigerant Dryer - Replace	192

**Every 3 Years After Date of Installation or
Every 5 Years After Date of Manufacture**

Seat Belt - Replace	194
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Every 4000 Service Hours

Electronic Unit Injector - Inspect/Adjust	149
Engine Valve Lash - Check/Adjust	159
Engine Valve Rotators - Inspect	159

Every 6000 Service Hours or 3 Years

Cooling System Coolant Extender (ELC) - Add ..	145
Cooling System Water Temperature Regulator - Replace	148

Every 12 000 Service Hours or 6 Years

Cooling System Coolant (ELC) - Change	143
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Backup Alarm - Test

SMCS Code: 7406-081

In order to test the alarm for proper functioning, turn the engine start switch to the ON position.

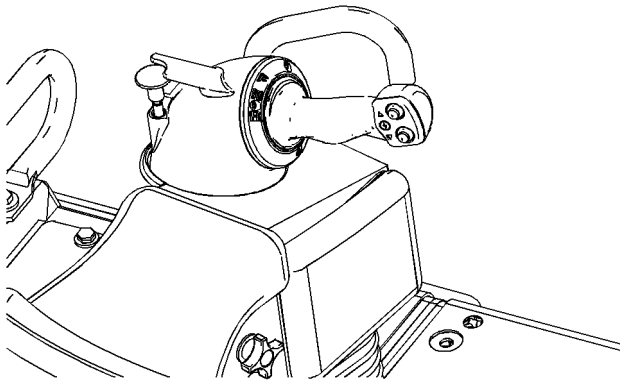


Illustration 187

g01017699

Apply the service brake. Release the parking brake. Move the transmission direction selector to the REVERSE position.

The backup alarm should start to sound immediately. The backup alarm will continue to sound until the transmission gear selector is moved to the NEUTRAL position or to the FORWARD position.

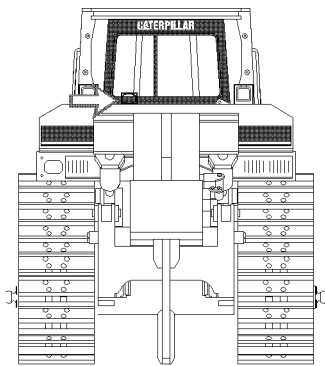


Illustration 188

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The backup alarm is on the rear of the machine.

The nonadjustable backup alarm is set at the appropriate sound level when the machine is shipped from the factory.

Battery - Inspect

SMCS Code: 1401-040

Battery Inspect

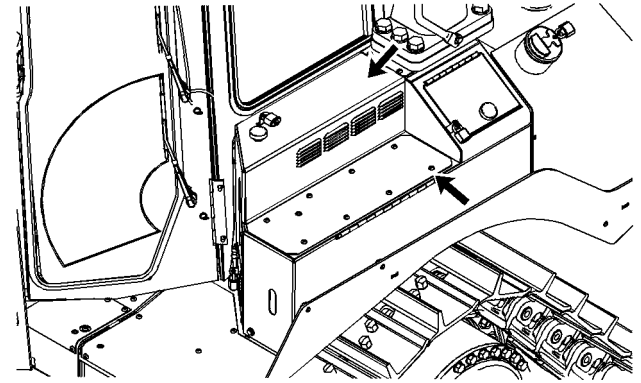


Illustration 189

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1. Open the battery access covers. The battery access covers are located on the left side of the machine outside the operator compartment.

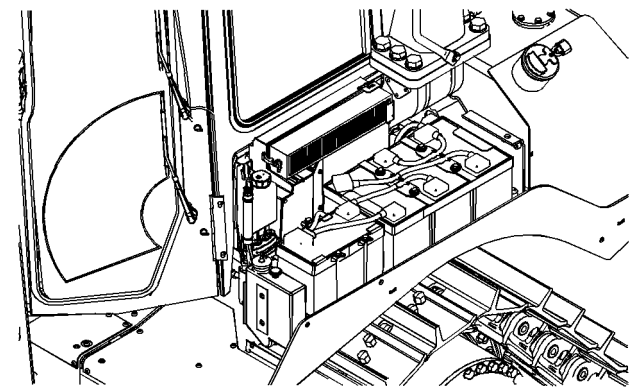


Illustration 190

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2. Tighten the battery retainers. Clean the top of the batteries with a clean cloth. Keep the terminals clean and coated with petroleum jelly. Install the terminal covers after you coat the terminals.
3. Close the battery access covers.

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Battery, Battery Cable or Battery Disconnect Switch - Replace

SMCS Code: 1401-510; 1402-510; 1411-510

1. Turn the engine start switch key to the OFF position. Turn all of the switches to the OFF position.
2. Turn the battery disconnect switch to the OFF position. Remove the key.
3. Disconnect the battery cable at the battery disconnect switch. The battery disconnect switch is inside the left engine access door.
4. Disconnect the negative battery cable at the battery.
5. Replace the disconnect switch, the battery cables, or the batteries, as required.
6. Connect the negative battery cable at the battery.
7. Connect the negative battery cable at the battery disconnect switch.
8. Install the key and turn the battery disconnect switch to the ON position.

Inspect

1. Park the machine on level ground. Lower the dozer blade to the ground. Move the transmission control to the NEUTRAL position and engage the parking brake. Shut off the engine.
2. Turn the battery disconnect switch to the OFF position.
3. Open the engine access doors on the right side.

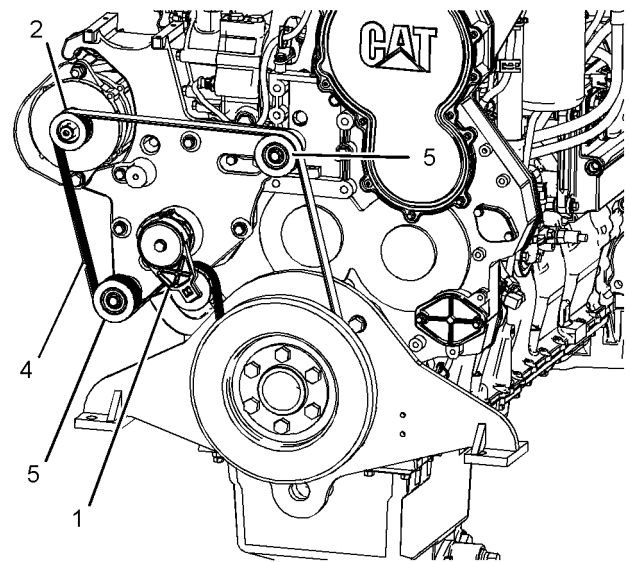


Illustration 191

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Battery Recycle

Always recycle a battery. Never discard a battery.

Always return used batteries to one of the following locations:

- A battery supplier
- An authorized battery collection facility
- Recycling facility

i02229215

Belt - Inspect/Adjust/Replace

SMCS Code: 1357-025; 1357-040; 1357-510

Your engine is equipped with a serpentine belt that drives the alternator and the air conditioner compressor, if equipped.

This engine is equipped with a belt tightener that automatically adjusts the belt to the correct tension.

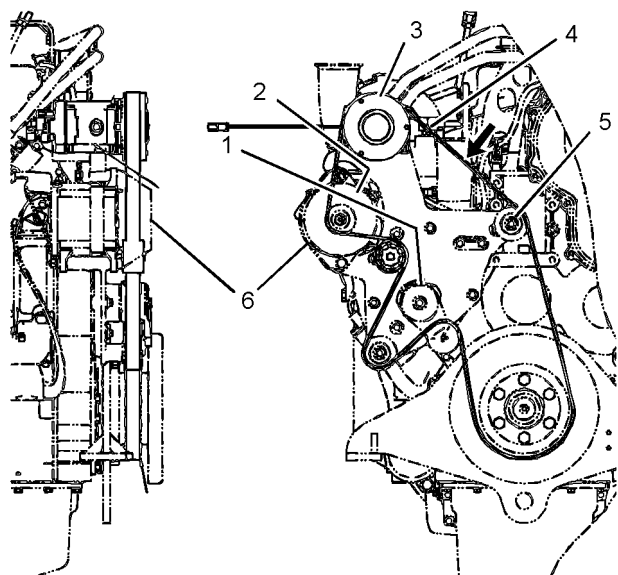


Illustration 192

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Front and left side view

- (1) Belt tensioner
- (2) Alternator (reference only)
- (3) Air conditioner compressor (reference only)
- (4) Serpentine belt
- (5) Idler pulley (reference only)
- (6) Alternator guard (reference only)

4. Inspect the condition of serpentine belt (4). Replace the serpentine belt if excessive wear or cracking has occurred. Wear due to belt slippage indicates that the belt tensioner possibly needs to be replaced.
5. Close the engine access doors.
6. Turn the battery disconnect switch to the ON position.

Replace

1. Park the machine on level ground. Lower the dozer blade to the ground. Move the transmission control to the NEUTRAL position and engage the parking brake. Shut off the engine.
2. Turn the battery disconnect switch to the OFF position.
3. Open the engine access doors.
4. Turn belt tensioner (1) in order to release the tension from the belt with a square drive.
5. Remove the belt.
6. Install the new belt.
7. Close the engine access doors.

8. Turn the battery disconnect switch to the ON position.

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Bottom Guard (Power) - Clean

SMCS Code: 7153-070

NOTICE

Do not operate the machine with the guard in the lowered position. Damage to the machine or actuator could result.

WARNING

The guard is heavy. Personal injury or death may result from being struck by or trapped under the guard. Do not allow anyone to work near or under the machine when the guard is being raised or lowered.

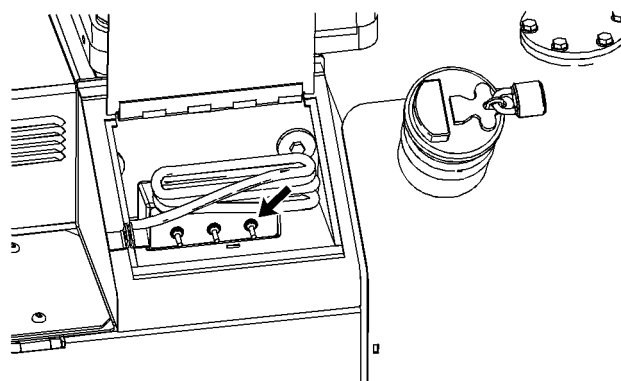


Illustration 193

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The power guard control is located in a compartment on the left fender in front of the fuel tank.

The power guard control opens the bottom guards for easier access during cleaning.

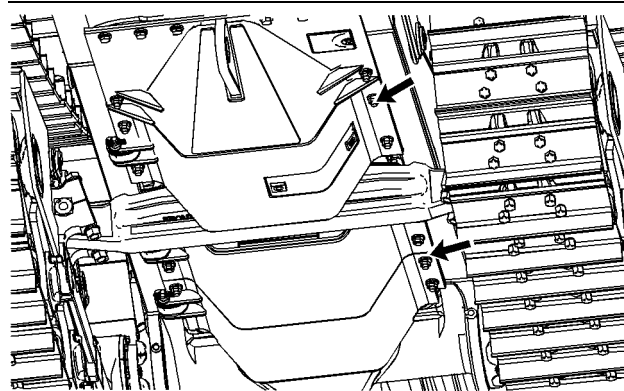


Illustration 194

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NOTICE

Do not activate switches for power guard control without removing the bolts from the guard. Damage to the actuator could result.

1. Position a jack under the bottom guard in order to lower the guard. The head of the jack should not be touching the guard.
2. Remove the bolts from the bottom guard and move switch (1) downward in order to lower the guard.

If the guard lowers completely onto the jack, it is possible that the actuator has failed. Use the jack to support the guard and lower the guard to the ground.

3. If the guard remains supported above the jack, remove the jack.
4. Lower the guard to the lowest position.
5. Remove all foreign debris from the underside of the engine compartment.
6. Move the switch upward in order to raise the guard.
7. Position the jack under the guard prior to replacing the bolts. The head of the jack should not be touching the guard.
8. Install the bolts.

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Braking System - Test

SMCS Code: 4100-081; 4267-081

WARNING

If the machine moves during the test, reduce the engine speed immediately, and engage the parking brake.

If the machine moved while testing the brakes, consult your Caterpillar dealer for brake inspection and repair. Damaged brakes must be repaired before returning the machine to operation.

Note: The machine can drive through the brakes in first gear.

Make sure that the area around the machine is clear of personnel and clear of obstacles.

Test the brakes on a dry, level surface.

Fasten the seat belt before you test the brakes.

1. Start the engine.
2. Raise all attachments.

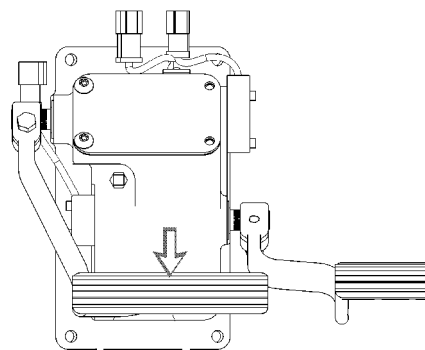


Illustration 195

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3. Depress the brake pedal.
4. Release the parking brake.
5. While the brake pedal is depressed, move the directional control to the SECOND SPEED FORWARD position.
6. Gradually increase the engine speed to full load speed. The machine should not move.
7. Move the directional control to the NEUTRAL position.
8. Reduce the engine speed to LOW IDLE. Engage the parking brake. Lower all attachments to the ground. Apply a slight down pressure. Stop the engine.

NOTICE

If the machine moved while testing the brakes, contact your Caterpillar dealer. Have the dealer inspect and, if necessary, repair the service brake before returning the machine to operation.

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Bulldozer Tilt Brace and Tilt Cylinders - Lubricate

SMCS Code: 5104-086; 6050-086; 6074-086

Lubricate the two fittings with CAT multipurpose type grease with molybdenum disulfide (MPGM).