Utility Vehicle
2200
2200S
2300

Bobcat®

Service Manual

S/N A59Z11001 & ABOVE (2200 DIESEL)
S/N A5KR11001 & ABOVE (2200 DIESEL) HOM.
S/N A59Y11001 & ABOVE (2200 GASOLINE)
S/N A5A111001 & ABOVE (2200S DIESEL)
S/N A5A011001 & ABOVE (2200S GASOLINE)
S/N A59W11001 & ABOVE (2300 DIESEL)



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WIRING DIAGRAM

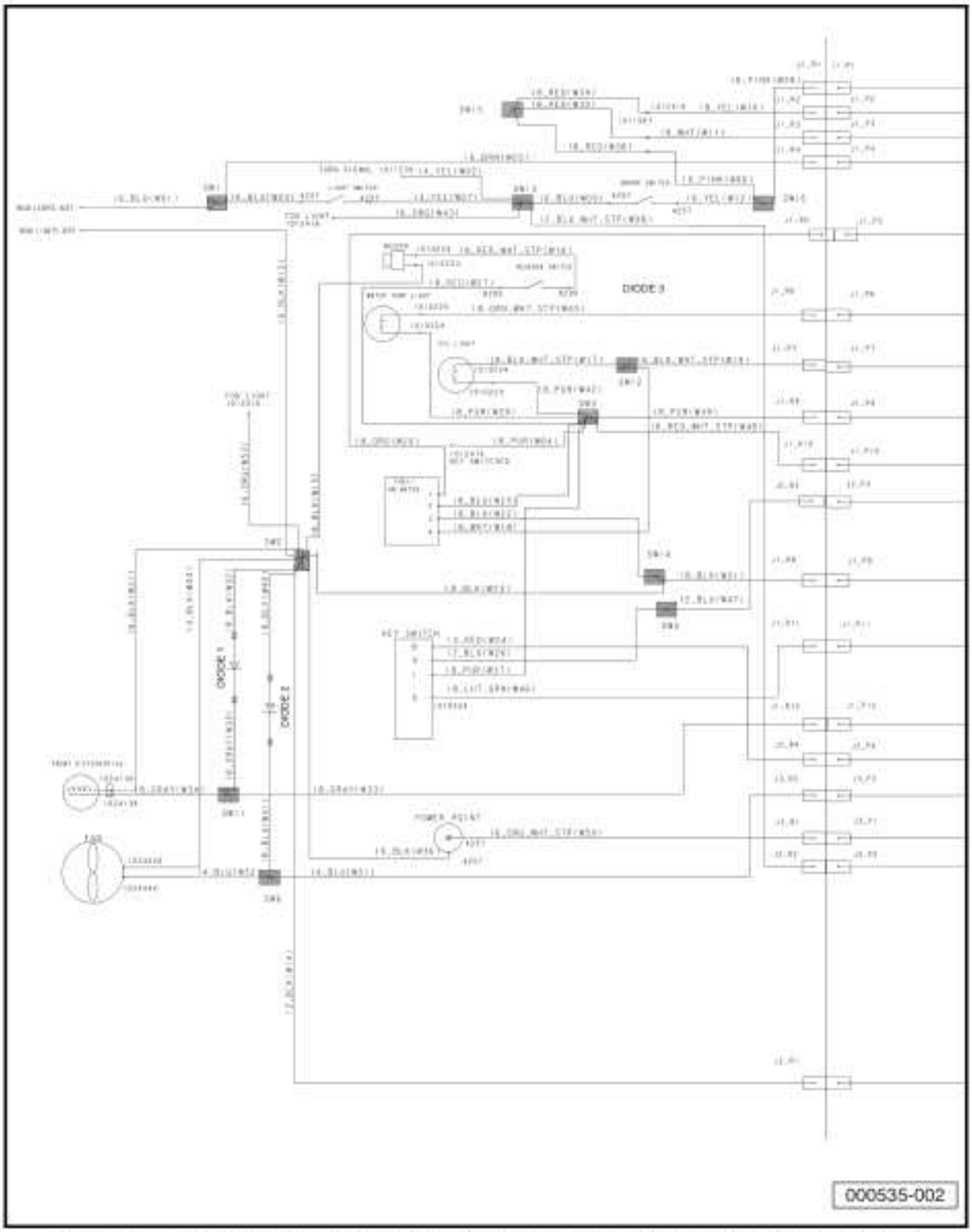


Figure 11c-1 Wiring Diagram (2 Piece Harness) for Diesel Bobcat 2200 and 2200S Vehicles (Front)

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2. Inspect the rollers (10) and weights (11). There should be no noticeable wear. If the rollers or weights are worn, scratched, or damaged, replace them.
   2.1. Remove the bolts (12) and flex locknuts (13) that secure the rollers (10) to the spider (6) and the weights (11) to the moveable sheave (14).
   2.2. Install new rollers and weights with bolts and flex locknuts.

Drive Clutch Assembly

NOTE: *The drive clutch components are marked with an X to assist in correct reassembly. It is important to note the location of the X on the components and be sure to align the X's when assembling the drive clutch.*

1. Place the moveable sheave (14) and spider (6) onto the fixed sheave (15). Note the location of the X so the remaining components with an X can be aligned.
2. Use a spider removal tool (CCI P/N 102607501) to tighten the moveable sheave and spider to 225 ft-lb (305 N·m).
3. Install the spring (5) onto the shaft.
4. Install the cover (4) onto the shaft.
5. Align the plate that has holes in the cover with arrows on the same side. Pull the moveable sheave upward and start threading the bolts with washers into holes. **See following NOTE.**

NOTE: *Keep the cover as square to the post as possible to minimize wear between the post and cover.*

6. Use a crisscross pattern to continue tightening the hardware.
7. Tighten the bolts to 120 in-lb (14 N·m).

Drive Clutch Installation

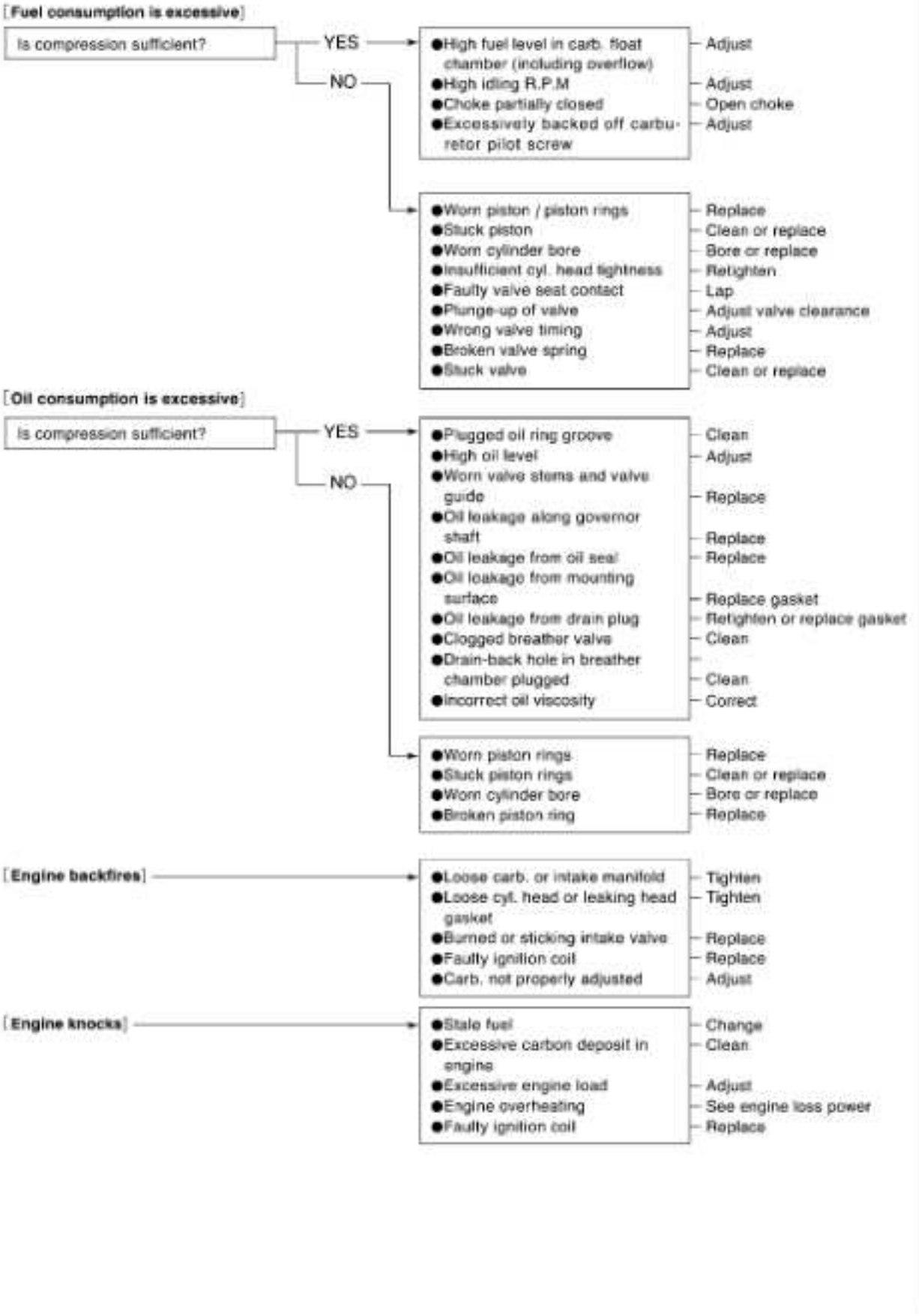
1. Turn the key switch OFF and remove the key. Set the park brake. Place the Forward/Reverse handle in NEUTRAL.
2. Disconnect the battery cables as instructed. **See WARNING "To avoid unintentionally starting..." in General Warning, Section 1, Page 1-2.**
3. Disconnect the spark plug wires. **See WARNING "To avoid unintentionally starting..." in General Warning, Section 1, Page 1-2.**
4. Place the drive clutch assembly on the crankshaft taper.
5. Install the mounting washer and retaining bolt. Tighten the hardware to 39 ft-lb (53 N·m).
6. Install the drive belt as instructed. **See Drive Belt Installation on page 13b-31.**
7. Install the clutch outer cover and tighten the bolts to 72 in-lb (8.0 N·m).
8. Secure the top air filter hose (outlet) to the filter canister. **See following NOTE.**

NOTE: *Ensure the hose contacts the canister and the clamp is installed tightly between the port bead and canister.*

9. Connect the spark plug wires.
10. Connect the battery cables, positive (+) cable first, and tighten the hardware to 144 in-lb (16 N·m). Coat terminals with Battery Terminal Protector Spray (CCI P/N 1014305).
11. Drive the vehicle and check for proper operation.

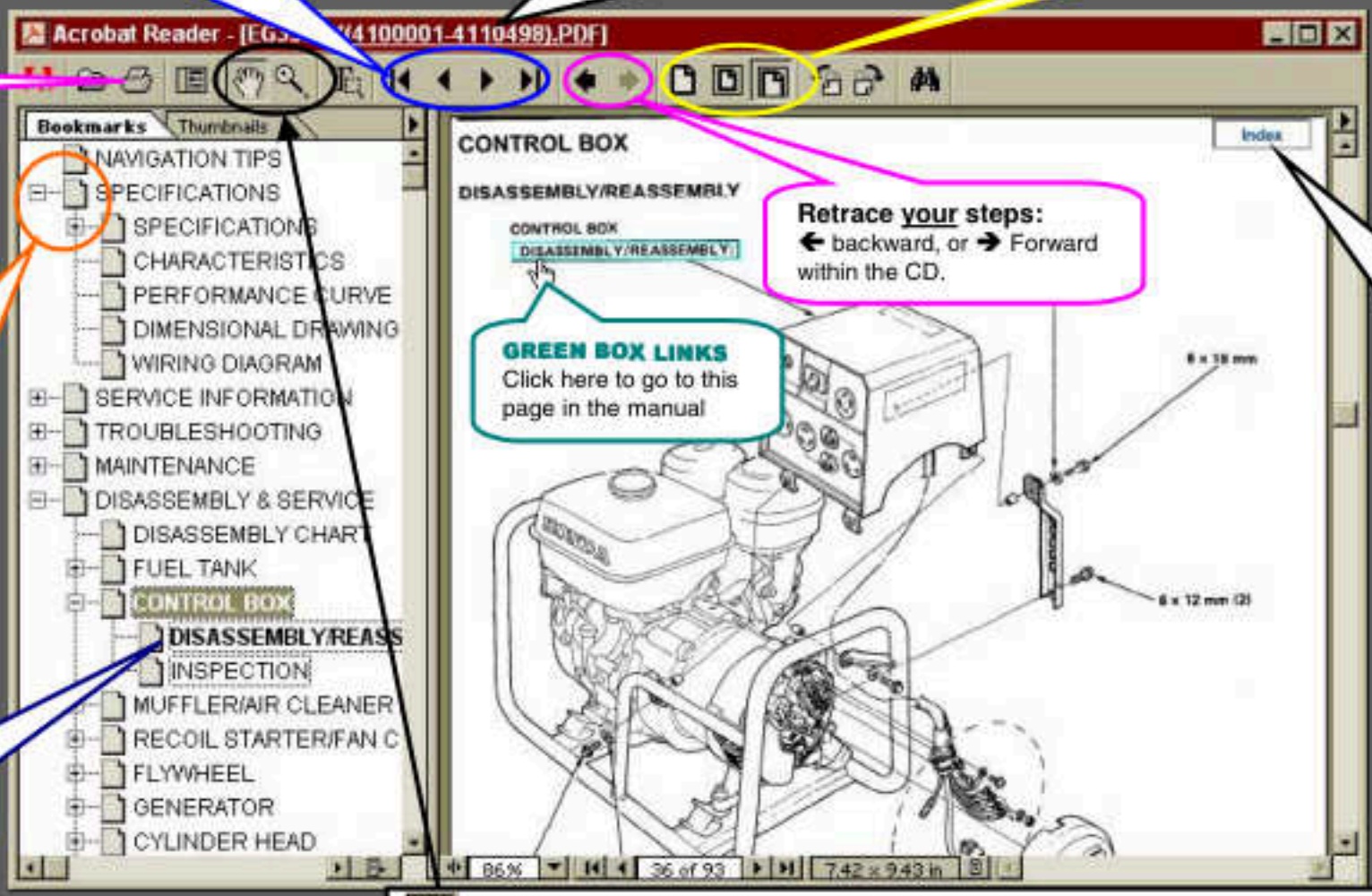
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Engine Troubleshooting Guide



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Figure 17-16 Install Roller Thrust Bearing

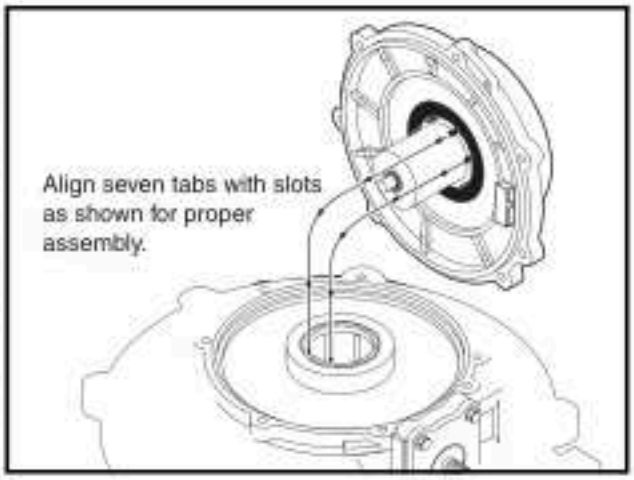


Figure 17-17 Align Armature Plate Tabs and Ring Gear Bearing Cage Slots



Figure 17-18 Install Cover and Torque Bolts

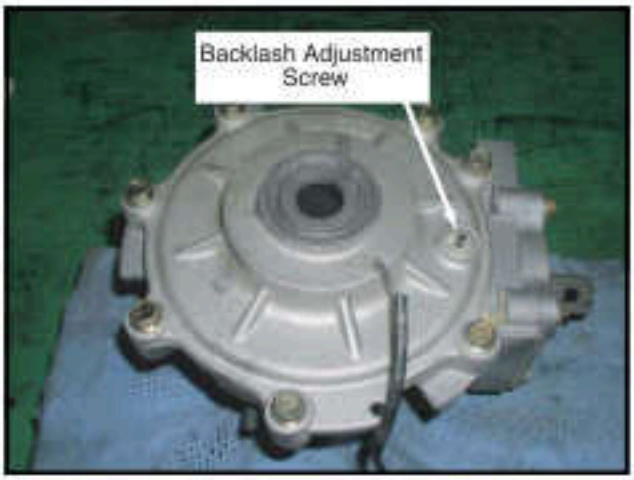


Figure 17-19 Backlash Adjustment Set Screw

Backlash Adjustment

1. Locate the backlash adjustment set screw on the right front, coil side, of the differential **(Figure 17-19, Page 17-7)**.
2. Use a 3/32-inch Allen wrench and turn the screw clockwise until it stops (do not apply torque).

NOTE: *When the screw stops, the splined shaft of the pinion gear should not be movable by hand in either direction.*

3. Turn the Allen wrench and set screw counterclockwise slowly while turning the pinion gear shaft clockwise. Continue this process until the pinion gear shaft can rotate four complete turns freely and without any tight spots.

NOTE: *The set screw should only have to be turned 1/4 to 1/2 of a full turn from its stop position to achieve the proper backlash set.*

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