CATERPILLAR®

Service Manual

Models
TL642C
TL943C

S/N THG00150 & After
S/N THL00150 & After
S/N THH00150 & After
S/N SXH00150 & After

31200794

Revised
July 11, 2014

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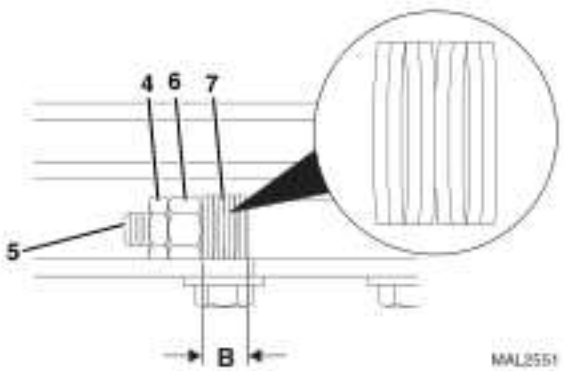
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9. Tighten the retract chain adjustment nut (**6**) until the belleville washers (**7**) become fully compressed to dimension "B" 0.712-0.725 in (18,1-18,4 mm). Do Not Overtighten.
10. Install and temporarily tighten the retract chain lock nut (**4**).
11. Start the machine and at low idle, fully extend and retract the boom three times. Verify boom is fully retracted and level. Shut machine Off.
12. Recheck the Belleville washers (**7**) to verify they are fully compressed to dimension "B" 0.712-0.725 in (18,1-18,4 mm). If required, re-tighten the retract chain adjustment nut (**6**) until dimension "B" is obtained.

Note: *If dimension "B" requires adjustment, continue to step 13. If dimension "B" does NOT require adjustment, continue to step 14.*

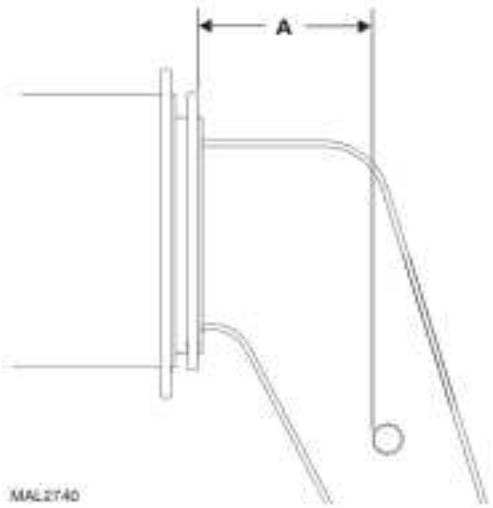
13. Start the machine and at low idle, fully extend and retract the boom three times. Verify boom is fully retracted and level. Shut machine Off.
14. Verify dimension "A" 11.500-11.812 in (292,1- 300,0 mm). Verify dimension "C" is not less than 2.850 in (72,4 mm).

Note: *Re-adjust boom if dimensions "A" & "C" are not met. Contact the local CAT Dealer if the procedure cannot be obtained.*

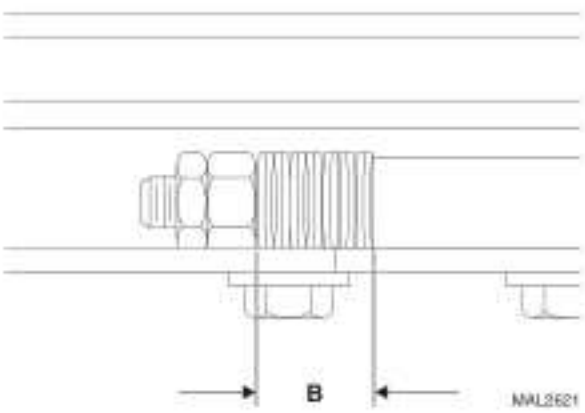
15. Loosen the retract chain lock nut and the extend chain lock nut and apply Loctite® 242™.
16. Torque each retract chain lock nut (**4**) and extend chain lock nut (**1**) without adding any additional spring load. Torque each lock nut to 100 lb-ft (135 Nm).

3.8.3 Chain Tension Inspection—TL943C

1. Park machine on level ground. Place transmission control lever in (N) NEUTRAL, engage parking brake and level boom.
2. Place a Do Not Operate Tag on both ignition key switch and steering wheel.
3. Extend the boom 4-5 ft (1,2-1,5 m), then fully retract the boom. Verify boom is level.
4. Measure the following three dimensions; A, B & C.



5. At the boom head, verify dimension "A" is between 17.000-17.312 in (421,8-439,7 mm).



6. At the bottom front of the boom, verify dimension "B" is 1.500-1.512 in (38,1-38,4 mm) of the washer stack on the retract chain clevis.

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7.2 ENGINE SERIAL NUMBER

The serial number is stamped on top of the engine. Information contained in the serial number is required in correspondence with the engine manufacturer.

7.3 SPECIFICATIONS AND MAINTENANCE INFORMATION

For engine, coolant and oil specifications, and maintenance information, refer to Section 2, "General Information and Specifications."

Refer to Section 9.16, "Engine Diagnostic and Event Codes," for diagnostic codes and descriptions.

Detailed engine service instructions are provided in the following publications:

TL642C - THG00150 & After

- Full Service Manual (Not Available at Publication)
- Operation & Maintenance Manual (P/N SEBU8727)
- Specifications (P/N UENR0619)
- System Operation Testing and Adjusting (P/N UENR0620)
- Disassembly and Assembly (Not Available at Publication)
- Parts Manual (Not Available at Publication)
- Schematic - Electrical (Not Available at Publication)
- Troubleshooting (P/N UENR0611)

TL642C - THL00150 & After

- Full Service Manual (KENR6217)
- Operation & Maintenance Manual (P/N SEBU8180-01)
- Specifications (P/N RENR9961-01)
- System Operation Testing and Adjusting (P/N RENR9965)
- Disassembly and Assembly (KENR6216-01)
- Parts Manual (Not Available at Publication)
- Schematic - Electrical (RENR9964-02)
- Troubleshooting (P/N SENR9969-05)

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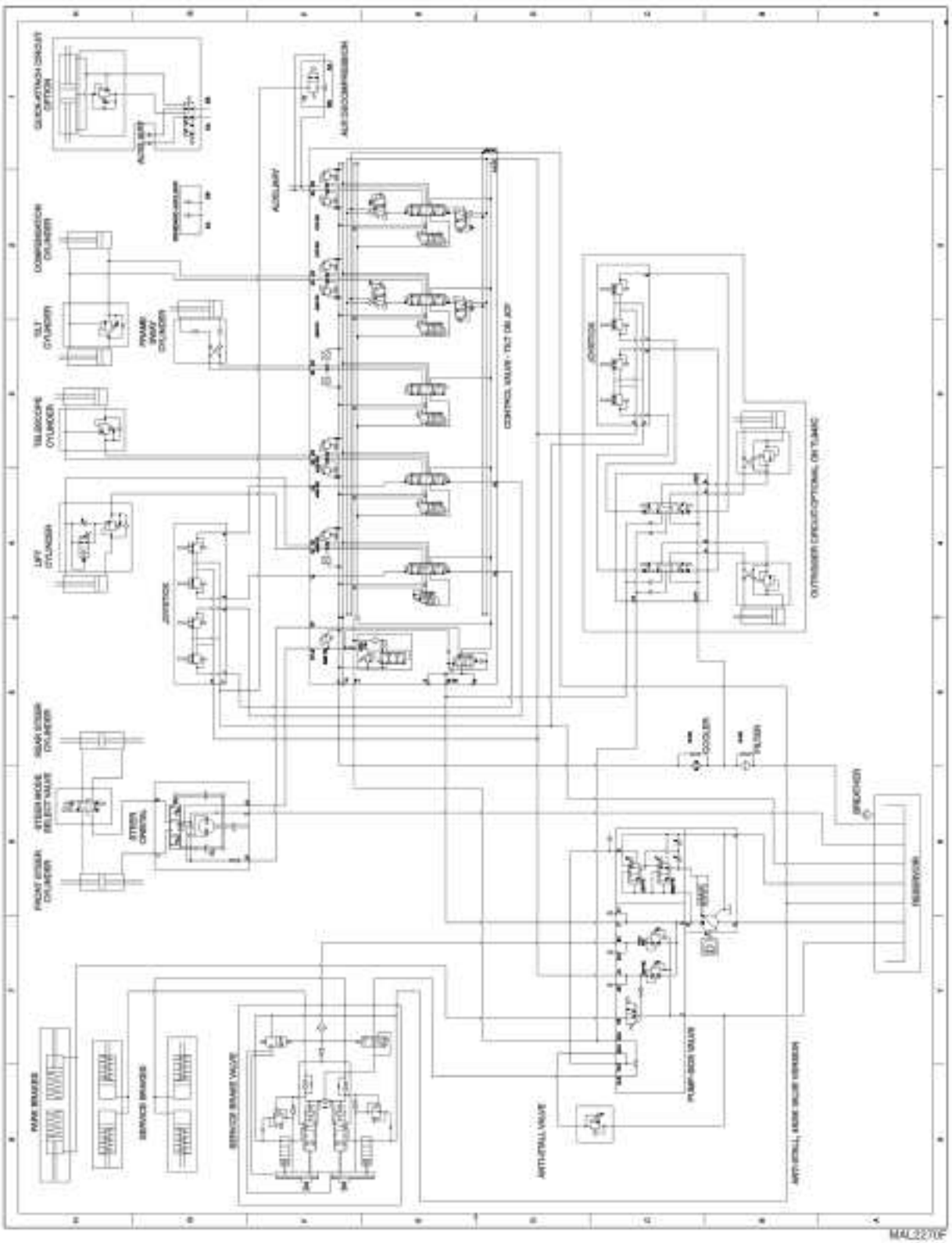
- Full Service Manual (Not Available at Publication)
- Operation & Maintenance Manual (P/N SEBU8727)
- Specifications (P/N UENR0619)
- System Operation Testing and Adjusting (P/N UENR0620)
- Disassembly and Assembly (Not Available at Publication)
- Parts Manual (Not Available at Publication)
- Schematic - Electrical (Not Available at Publication)
- Troubleshooting (P/N UENR0611)

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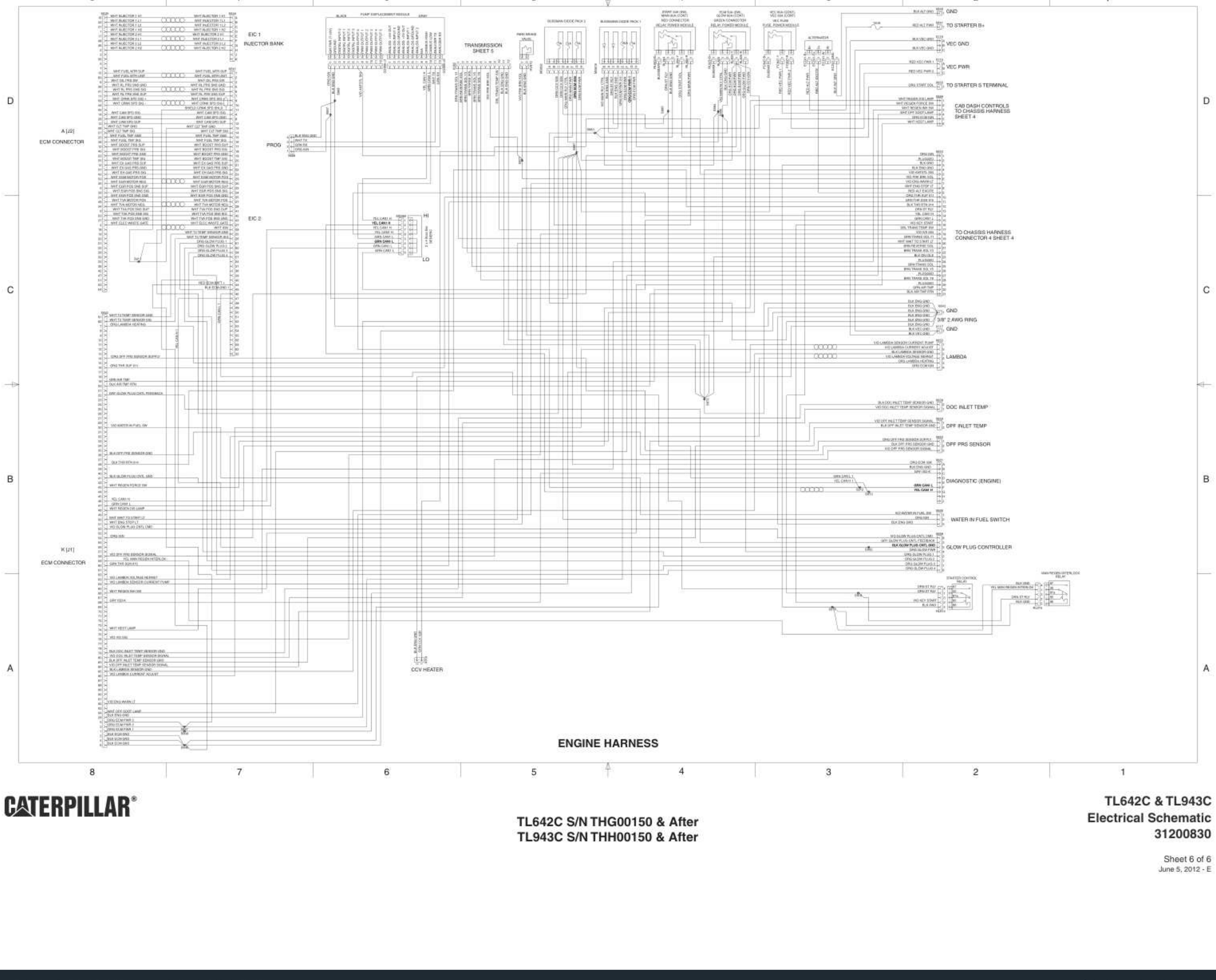
- Full Service Manual (Not Available at Publication)
- Operation & Maintenance Manual (P/N SEBU8180-01)
- Specifications (P/N RENR9961)
- System Operation Testing and Adjusting (P/N RENR9965)
- Disassembly and Assembly (P/N KENR6216-01)
- Parts Manual (Not Available at Publication)
- Schematic - Electrical (P/N RENR9964-02)
- Troubleshooting (P/N SENR9969-05)

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8.4.4 Hydraulic Schematic - TL943C



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