

TRANSMISSION CONTROL VALVE

Disassembly

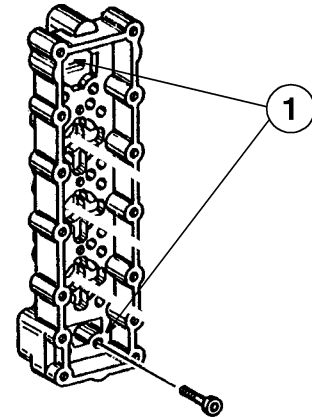
1. Put locator marks on the distribution plate (5), refer to Figure 2.
2. Put locator marks on the covers (22 and 23), housings (1 and 14), and the harness (20) with the housing (14) and cover (23), refer to Figure 3.

NOTE: Make a note of the two distribution plate nscrews (6) that were secured using Loctite. They should be near the temperature sensor, refer to Figure 2.

3. Remove the screws (6) which fasten the distribution plate (5) to the transmission control valve (7), refer to Figure 2.
4. Remove the distribution plate (5), housing gasket (4), valve plate (2), and housing gasket (1).
5. Remove the clamp (24), refer to Figure 3.
6. Remove the screws (15) which fasten the cover (23) to the housing (14).
7. Remove the cover (23) and the gasket (21).
8. Remove the screws (15) which fasten the cover (22) to the housing (14).
9. Remove the cover (22) and gasket (21).
10. Tag and disconnect the harness (20) from the housing (14).
11. Remove the screws (19) and the locating plates (18) which fasten the pressure regulators (16) to the housing (14). Remove the pressure regulators (16).

NOTE: The housing (14) is under a spring preload. Use adjusting screws to hold the springs down.

12. Remove two screws (15) from opposite corners of the housing (14), refer to Figure 2.
13. Install the adjusting screws in the holes where screws were removed, see Figure 1.



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1. ADJUSTING SCREW LOCATIONS

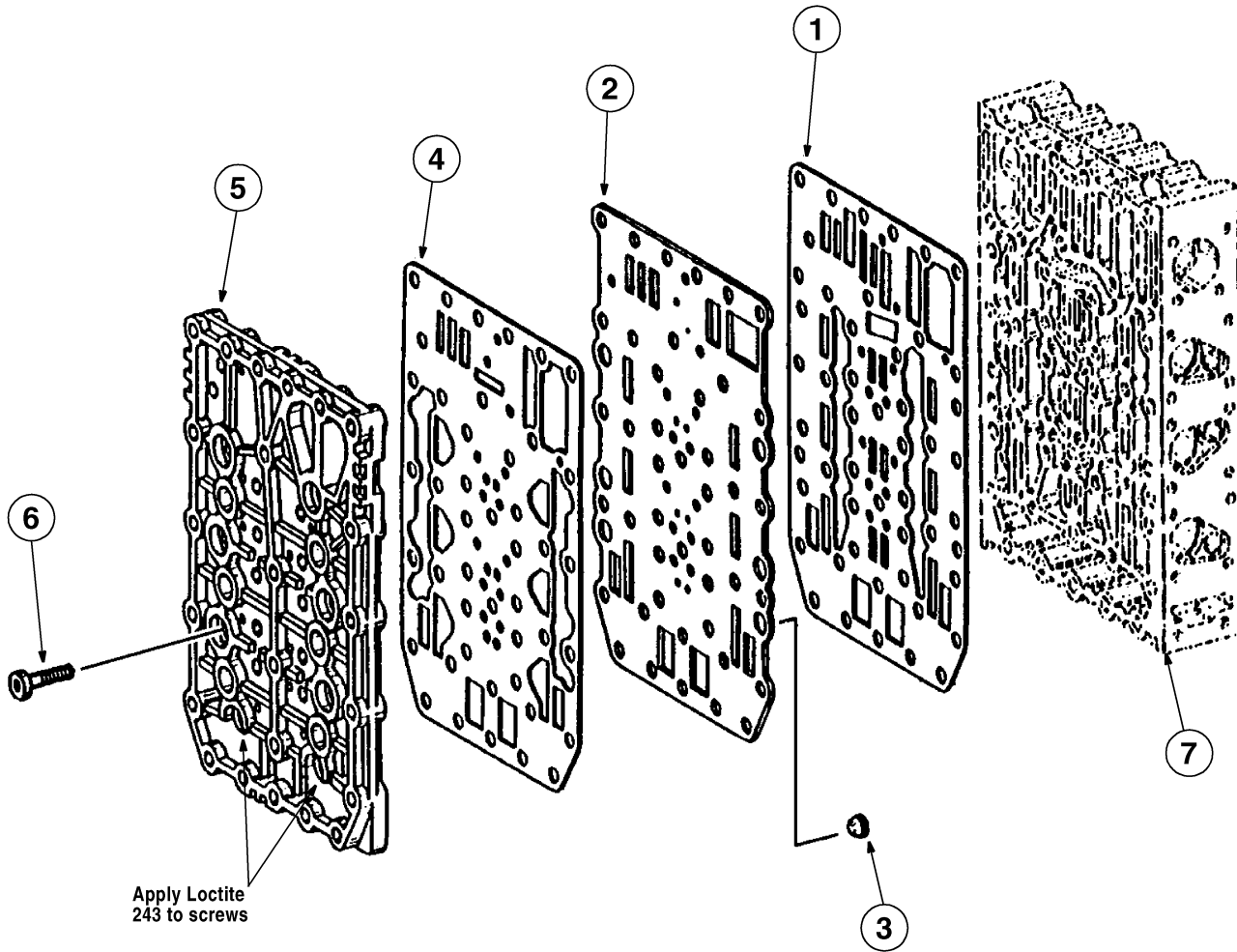
Figure 1. ADJUSTING SCREW LOCATIONS

14. Remove the remaining screws (15) from the housing (14), refer to Figure 3.
15. Loosen the adjusting screws to release spring tension and remove the housing (14) and gasket (13).
16. Remove the pistons (5,7, and 9) and springs (6, 8, and 10) from the housing (1).
17. Repeat steps 11 through 15 for the other side of the housing (1).
18. Remove the pistons (5,7, and 11) and springs (6 and 12) from the housing (1).

Inspection

1. Clean all metal parts in cleaning solvent.
2. Install new O-rings (17) on all pressure regulators (16) which were removed, refer to Figure 3.
3. Discard the gaskets (21) for the covers (22 and 23).
4. Discard the gaskets (13) for the housings (14).

NOTE: Apply Loctite only to the screws mounted in the areas shown on this illustration.

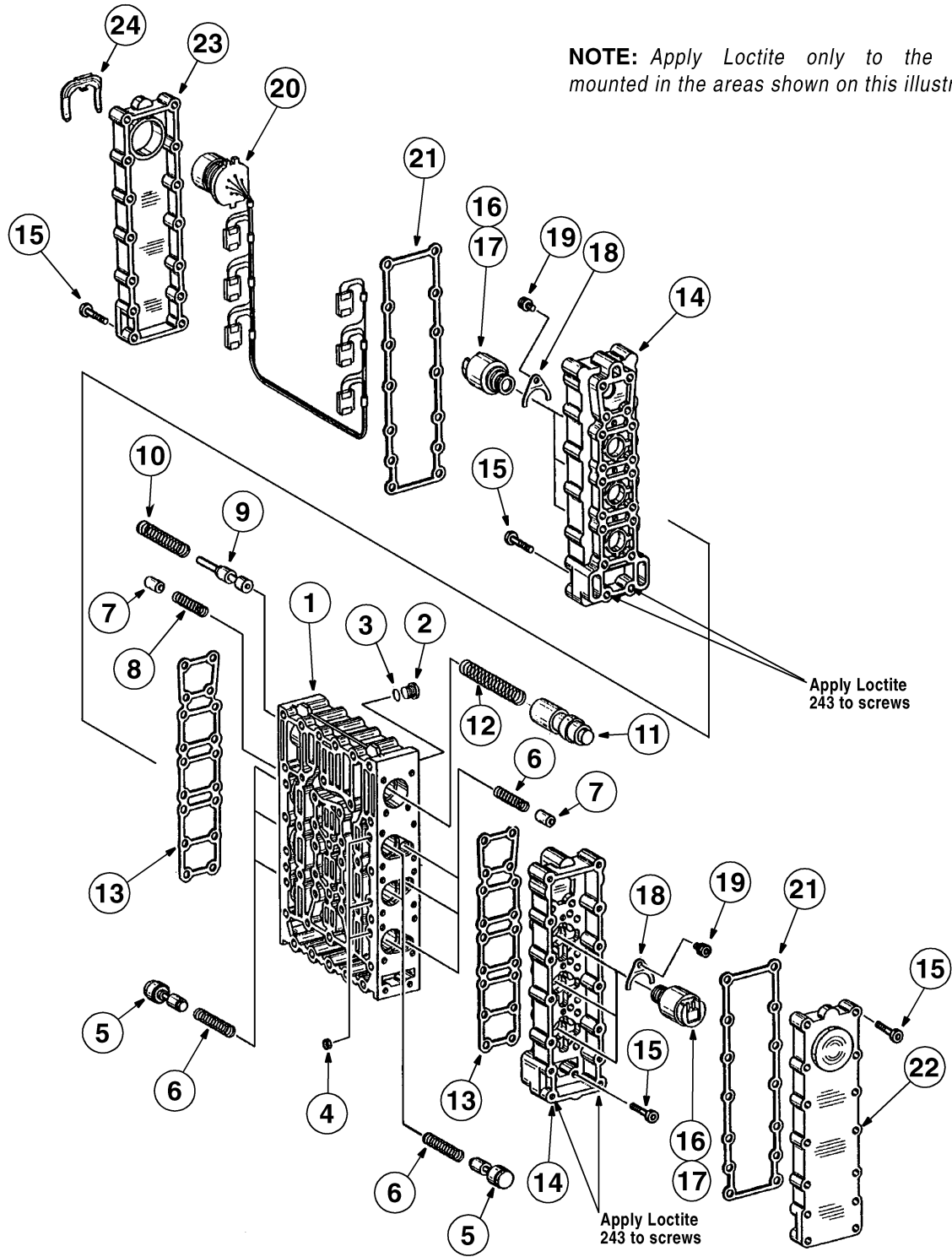


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- | | | |
|-------------------|-----------------------|-------------------------------|
| 1. HOUSING GASKET | 4. HOUSING GASKET | 7. TRANSMISSION CONTROL VALVE |
| 2. VALVE PLATE | 5. DISTRIBUTION PLATE | |
| 3. FILTER SCREEN | 6. SCREW | |

Figure 2. TRANSMISSION CONTROL VALVE PLATES AND GASKETS

NOTE: Apply Loctite only to the screws mounted in the areas shown on this illustration.



- | | | | |
|------------|------------|------------------------|-------------|
| 1. HOUSING | 7. PISTON | 13. GASKET | 19. SCREW |
| 2. PLUG | 8. SPRING | 14. HOUSING | 20. HARNESS |
| 3. O-RING | 9. PISTON | 15. SCREW | 21. GASKET |
| 4. ORIFICE | 10. SPRING | 16. PRESSURE REGULATOR | 22. COVER |
| 5. PISTON | 11. PISTON | 17. O-RING | 23. COVER |
| 6. SPRING | 12. SPRING | 18. LOCATING PLATE | 24. CLAMP |

Figure 3. TRANSMISSION CONTROL VALVE

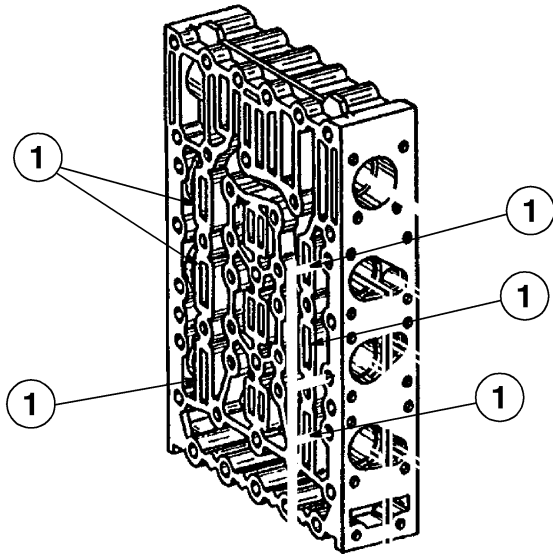
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5. Inspect the springs (6, 8 10 and 12). Use new springs as necessary.
6. Inspect the pistons (5, 7, 9 and 11) for damage or wear. Use new parts as necessary.
7. Inspect the housings (1 and 14) for cracks, corrosion, and wear. Inspect the bores for wear. Use a new housings as necessary.

Assembly

NOTE: For assembly, start with the end of the housing (1) that the harness (20) is connected to.

1. Install the pistons (5, 7, and 9) and springs (6, 8, and 10) into the housing (1).
2. Use plastic stops, or 5.0 mm diameter cylindrical pins, to preload the pistons (5) and springs (6), refer to Figure 3.
3. Place the plastic stops at the positions shown in Figure 4.



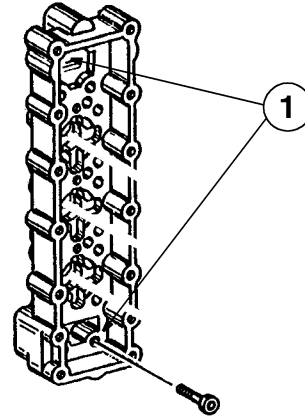
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1. PLASTIC STOP LOCATIONS

Figure 4. PLASTIC STOP LOCATIONS

4. Install the gasket (13) and the housing (14) on the housing (1), refer to Figure 3.

5. Install the adjusting screws in opposite corners of the cover, refer to Figure 5.



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2. ADJUSTING SCREW LOCATIONS

Figure 5. ADJUSTING SCREW LOCATIONS

6. Apply Loctite 234 to screws as shown in Figure 3. Install the screws (15) in the remaining holes to fasten the housing (14) to the housing (1). Tighten the screws to 5.5 Nm (4 pound-feet).
7. Remove the two adjusting screws and plastic stops, or cylindrical pins, and install remaining screws (15). Tighten screws (15) to 5.5 Nm (4 pound-feet).
8. Install the pressure regulators (16), locating plates (18) and screws (19) to the housing (14).
9. Make sure the locating plates (18) are installed with the nose (bump) down. Tighten screws (19) to 5.5 Nm (4 pound-feet).
10. For the other side of the housing (1), install the pistons (5, 7 and 11) and springs (6, 10 and 12) into the housing (1). Repeat steps 2 through 9.
11. Install the wiring harness (20) on the housing (14).
12. Install the gasket (21), cover (23), and clamp (24).