

PREVOST

Warranty Bulletin

95-38

Date: **November 1995**
 Section: **07**
 Subject: **SHIELDS FOR TRANSMISSION'S HARNESSES**
 Application:

Model	VIN
XL Series coaches equipped with a "World" transmission Model Year: 1994 - 1995 - 1996	2P9L33409R1001820 up to 2PCL33498T1025736 incl.
H3-41 or H3-45 Series coaches equipped with a "World" transmission Model Year: 1994 - 1995 - 1996	2P9H33495R1001012 up to 2PCH33411T1011385 incl.

DESCRIPTION

Two shields and a new way to attach the "World" transmission sensors' harness has been developed. The purpose of this modification is to prevent transmission electrical problems caused by the weight exerted par snow and ice accumulation on sensors' harness. In order to prevent this inconvenience, it is important to modify the above-mentioned vehicles accordingly.

MATERIAL

Item	Part No.	Description	Quantity	
			Without retarder	With retarder
1	071034	Bracket	1	1
2	504637	Cable tie 14 1/2" (37 cm)	18	18
3	502549	Hexagonal head bolt M10 x 35 mm	2	2
4	502644	Flat washer (10 mm x 30 mm)	2	2
5	500680	Hexagonal nut M10 x 1.5	2	2
6	061025	Bracket	2	1
7	500574	Phillips head screw #10-24 x 1 1/4"	7	5
8	500470	Lock washer	7	5
9	500786	Hexagonal nut #10-24	12	9
10	560484	Retaining clip (754-16-2-10)	4	4
11	560480	Retaining clip (754-8-2-8)	3	3
12	071030	Bracket	1	1
13	060025	Retaining clip	1	1
14	061129	Bracket	1	1
15	560479	Retaining clip (754-6-2-8)	4	2
16	071029	Retaining clip holder	1	1
17	5001036	Phillips head screw M4-0.7 x 10 mm	3	3
18	500468	Flat washer (1/4" x 1 1/4")	2	2
19	071028	Shield	1	1

20 a	560912	Retaining clip (754-20-2-10)	4	-
20 b	504458	Retaining clip (754-26-2-10)	-	4
21	071027	Shield	1	1

Note: Material can be obtained through regular channels.

PROCEDURE

Warning: Park vehicle safely over a repair pit, apply parking brake, stop engine and set battery master switch(es) to the 'OFF' position prior to working on the vehicle.

1. From underneath vehicle, remove the engine splash guard located on the radiator side.
2. Remove and discard all brackets, retaining clips and cable ties retaining both hydraulic hoses, except the bracket (and its two retaining clips) used to retain hoses to converter housing.
3. Locate the output speed sensor mounted on the transmission rear end, remove bolt retaining output speed sensor bracket, position bracket (1) over output speed sensor bracket (refer to **Figure 2** for transmission provided with a retarder and to **Figure 1** for transmission without a retarder) then reinstall bolt. Attach output speed sensor harness to new bracket (1) using a cable tie (2).

Caution: The output speed sensor bracket must be mounted in between rear end housing and new bracket (1).

Note: Depending on if transmission is provided with a retarder or not, the new bracket (1) is positioned differently.

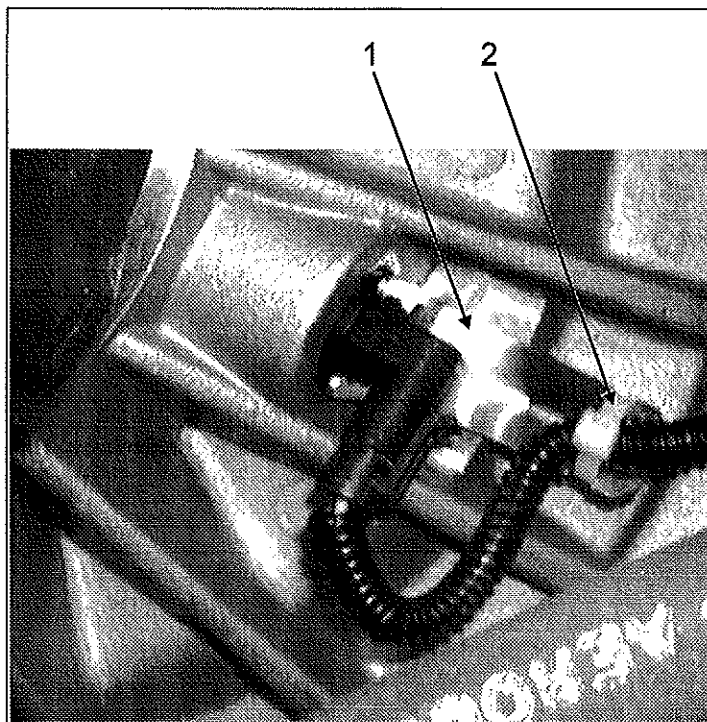


FIG. 1 - WITHOUT A RETARDER

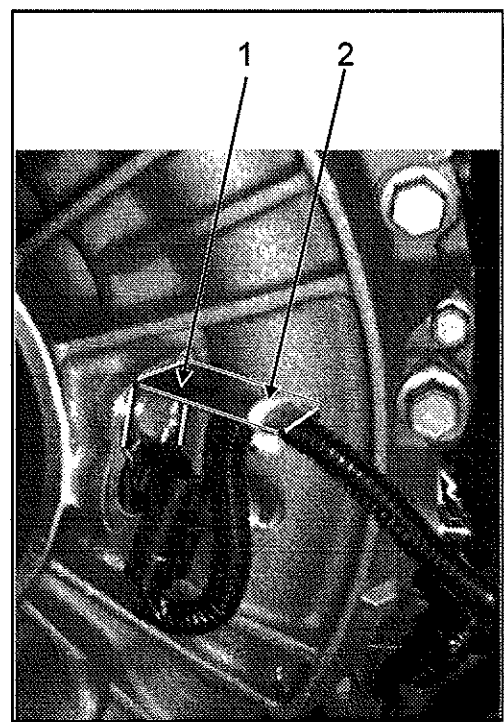


FIG. 2 - WITH A RETARDER

The following steps 4 to 8 inclusively apply only on transmissions provided with the second generation of transmission main harness (effective from S-424 for "XL" series vehicles and from S-119 for "H3" series vehicles). Parts required to perform following steps 4 to 8 will remain unused on transmissions with first generation of main harness.

4. Unscrew transmission main harness connector, separate connectors, remove nut and washer retaining main harness connector to its mounting bracket, then pull main connector out of bracket. Keep nut and washer.
5. Remove the two bolts retaining the main harness connector bracket, then discard bracket.
6. Install bracket (6) on transmission housing lug (from underside) using bolt (3), washer (4) and nut (5) (**Figure 3**). Secure main harness to bracket using retaining clip (10), screw (7), lock washer (8) and nut (9).
7. Secure transmission sensors' harness with main harness using retaining clips (10 and 11), screw (7), lock washer (8) and nut (9) (**Figure 4**).

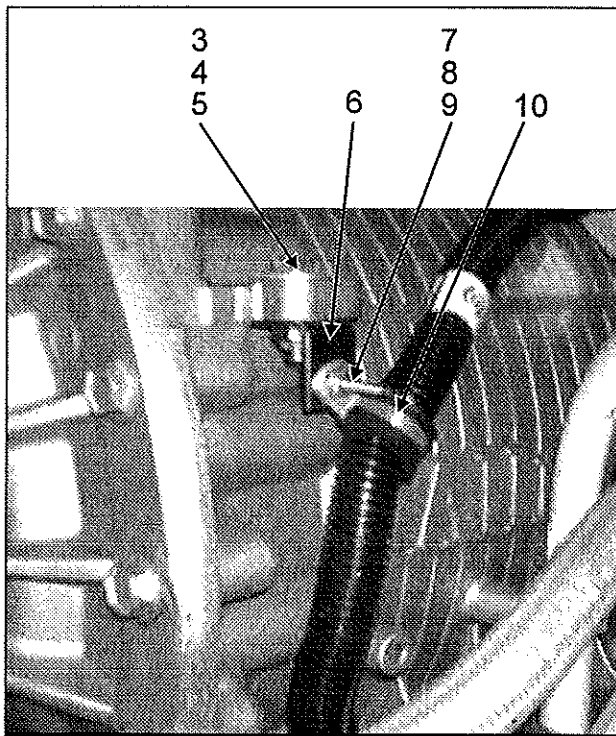


FIGURE 3

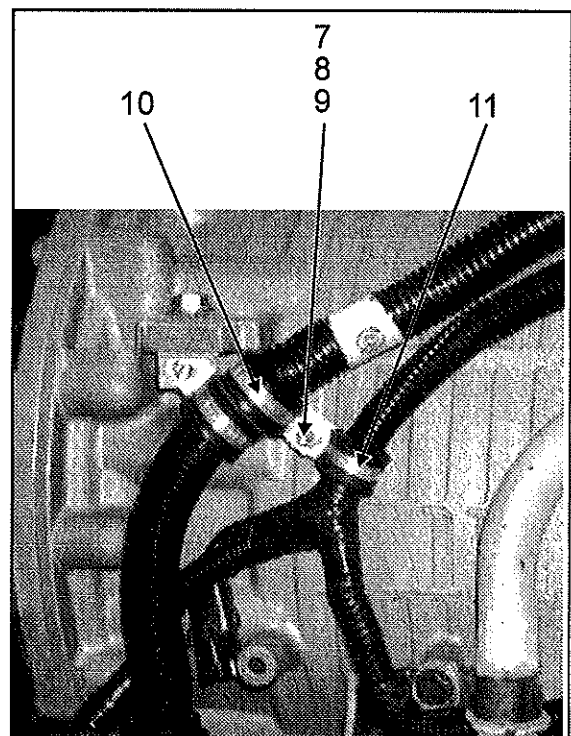


FIGURE 4

8. Install bracket (12) on the other transmission housing lug using bolt (3), washer (4) and nut (5). See **Figure 5**. Insert transmission main harness connector in bracket (12) then secure using existing nut and washer. Screw main harness connectors.
9. Secure transmission sensors' harness to oil filler pipe using retaining clips (11 and 10), screw (7), lock washer (8) and nut (9).
10. Attach transmission sensors' harness to transmission housing using retaining clip (13) (**Figure 6**). The retaining clip (13) is fastened with the one used to retain oil filler pipe.
11. Install retaining clip (10) on oil filler pipe using screw (7) and nut (9). The retaining clip screw will be used further in this bulletin to retain the transmission harnesses' shield.

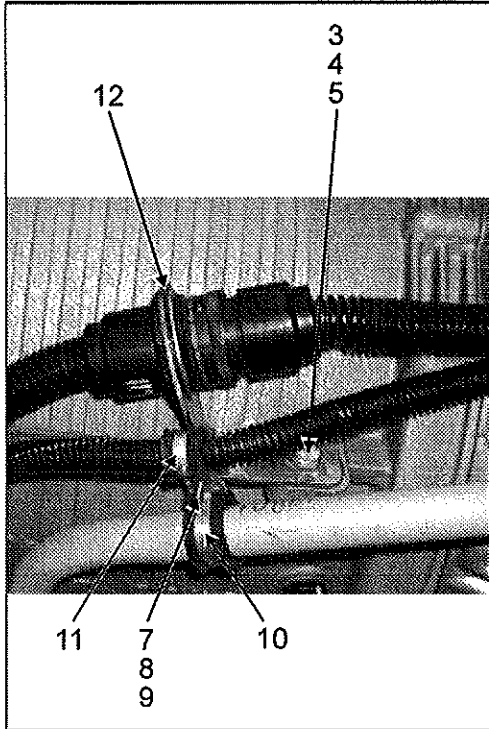


FIGURE 5

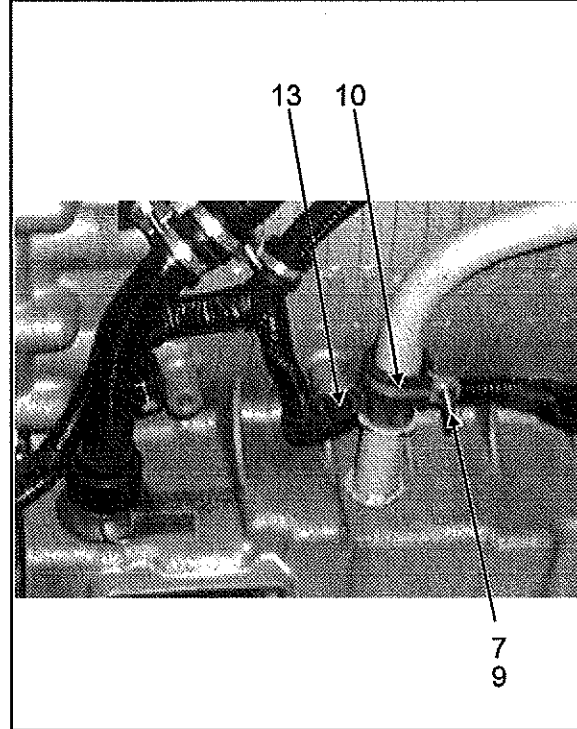


FIGURE 6

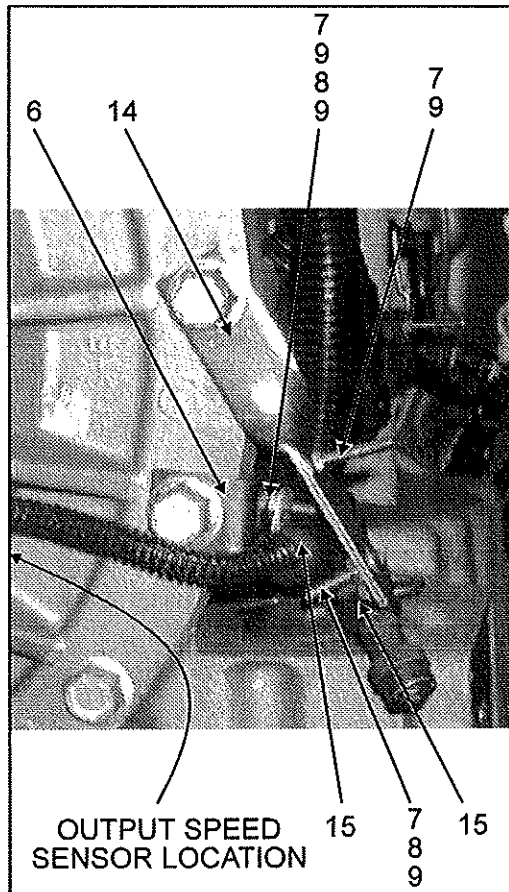


FIGURE 7

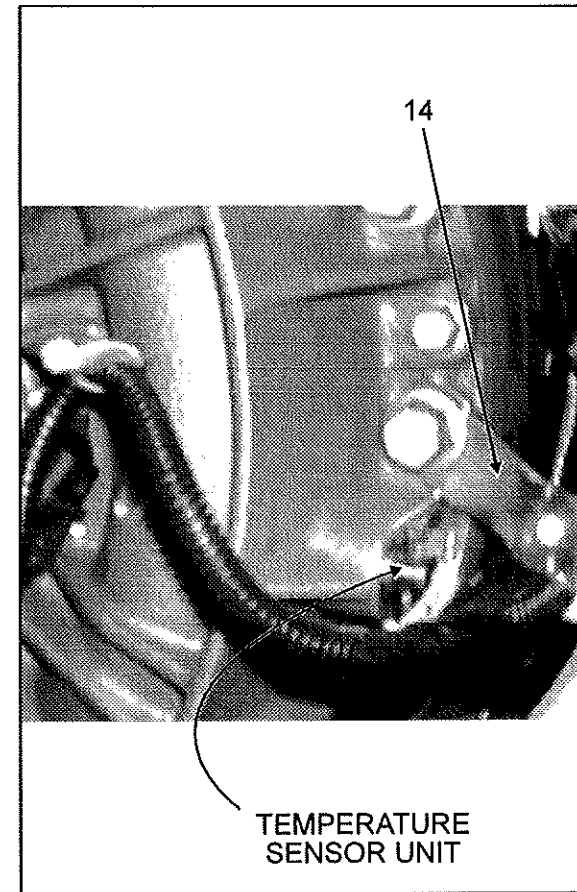


FIGURE 8

Note: The following steps 12 and 13 do not apply on transmissions provided with a retarder.

12. Install screw (7) and nut (9) on bracket (6) then fasten this bracket on transmission rear end as illustrated in **Figure 7**. Attach output speed sensor harness to bracket using retaining clip (15), lock washer (8) and nut (9).
13. Fasten bracket (14) on transmission rear end, just above the one installed in previous step 12, then install screw (7) and nut (9). The screw (7) will be used further in this bulletin to retain the transmission harnesses' shield. Secure retarder solenoid harness to bracket (14) using retaining clip (15), screw (7), lock washer (8) and nut (9).

Note: The following step 14 applies only on transmissions provided with a retarder.

14. Fasten bracket (14) on retarder housing using bolt located just above retarder temperature sensor unit (**Figure 8**), then install screw (7) and nut (9). The screw (7) will be used further in this bulletin to retain the transmission harnesses' shield. Secure output speed sensor and retarder solenoid harnesses to bracket (14) using cable ties (not shown).
15. Remove bolt retaining engine speed sensor bracket, position retaining clip holder (16) over engine speed sensor bracket, then reinstall bolt (**Figure 9**). Do not tighten.

Caution: The engine speed sensor bracket must be mounted in between transmission housing and retaining clip holder (16).

16. Remove bolt retaining turbine speed sensor bracket, position retaining clip holder (16) over turbine speed sensor bracket, reinstall bolt, then tighten adequately. The engine speed sensor bracket's retaining bolt can now be tightened adequately.

Caution: The turbine speed sensor bracket must be mounted in between transmission housing and retaining clip holder (16).

Note: The transmission sensors' harness should be routed in between oil filler pipe and transmission housing, if not, disconnect engine and turbine speed sensor connectors, position harness adequately then reconnect connectors.

17. Attach sensors' harness to retaining clip holder using retaining clips (15 and 11) and screws (17).
18. Secure turbine speed sensor harness to retaining clip holder using a cable tie (not shown).

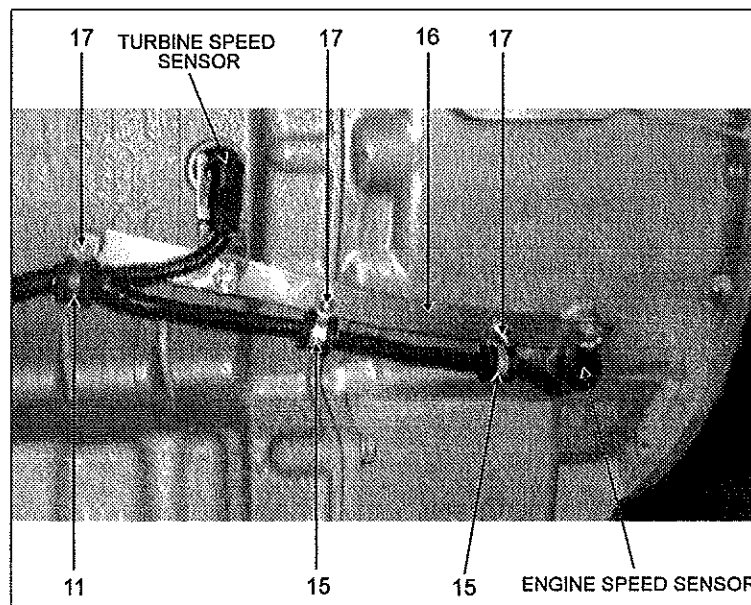


FIGURE 9

19. Unscrew and remove large bolt retaining hydraulic hoses' bracket to converter housing. Retain bolt.
20. Slide transmission harnesses' shield (19) behind both hydraulic hoses, fit shield through retaining clip screw installed in previous step 11 and through bracket screw installed in previous step 13 (step 14 for vehicle with a retarder) (**Figure 10**).
21. Secure shield to screws using washers (18) and nuts (9).
22. Attach transmission harnesses' shield using cable ties (2).

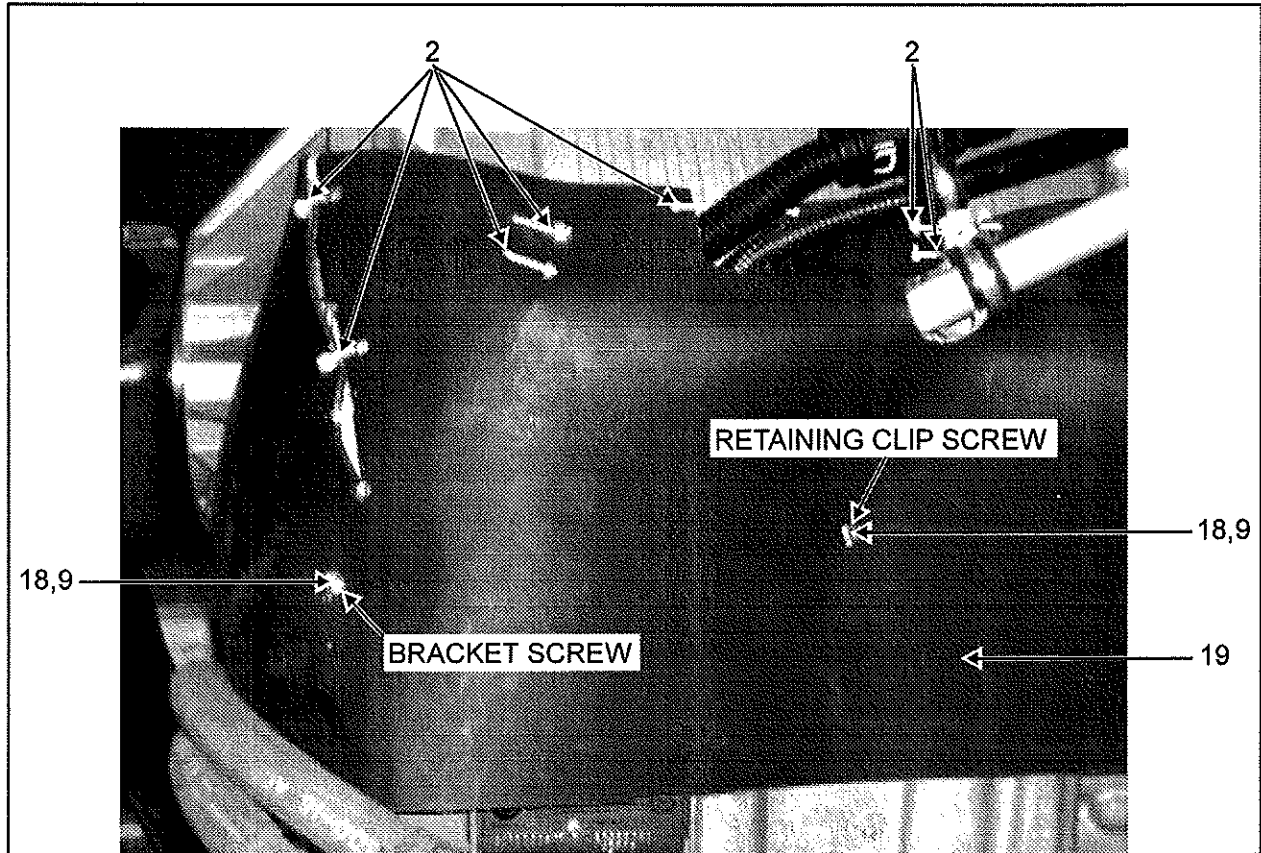


FIGURE 10

23. Reinstall hydraulic hoses' bracket to converter housing taking care to position shield in between converter housing and bracket (**Figure 11**).
24. Secure shield to converter housing using cable tie (2).
25. Secure hydraulic hoses with retaining clips (20), lock washer (8) and nut (9) using retaining clip screw installed in previous step 11.
26. Secure hydraulic hoses with retaining clips (20), lock washer (8) and nut (9) using bracket screw installed in previous step 13 (step 14 for vehicles with a retarder) (**Figure 12**).
27. Attach shield to hydraulic hoses using cable ties (2).

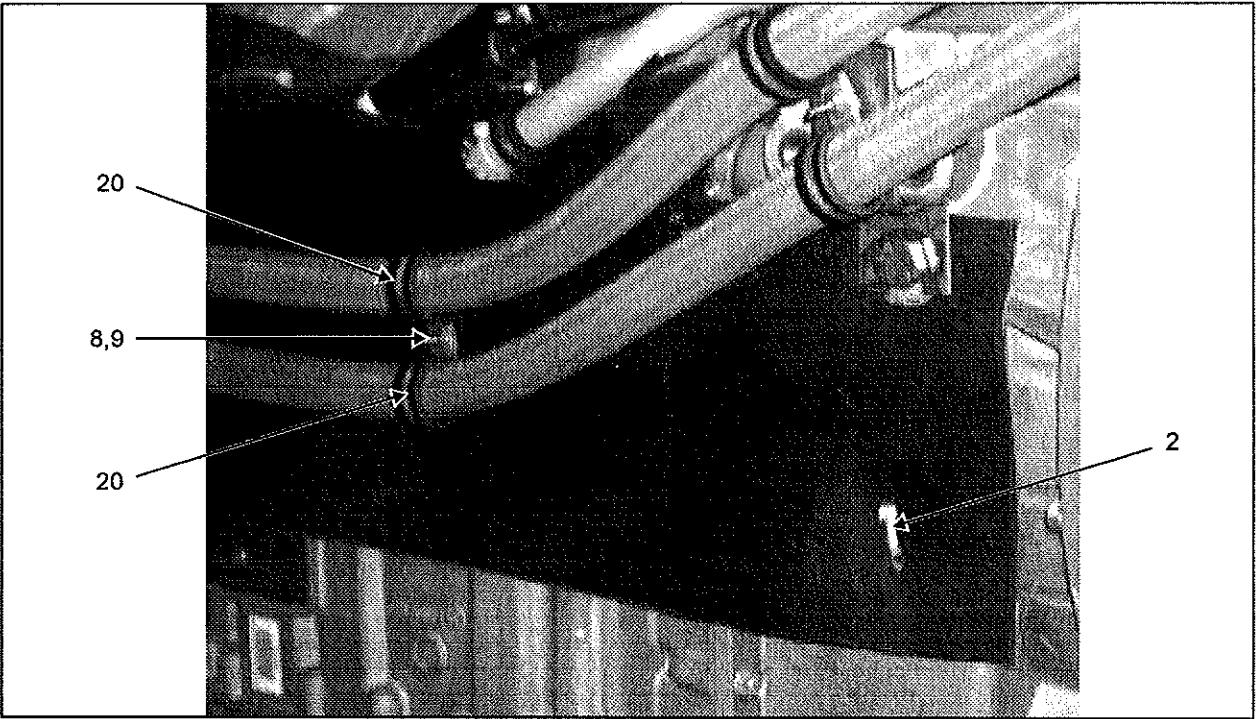


FIGURE 11

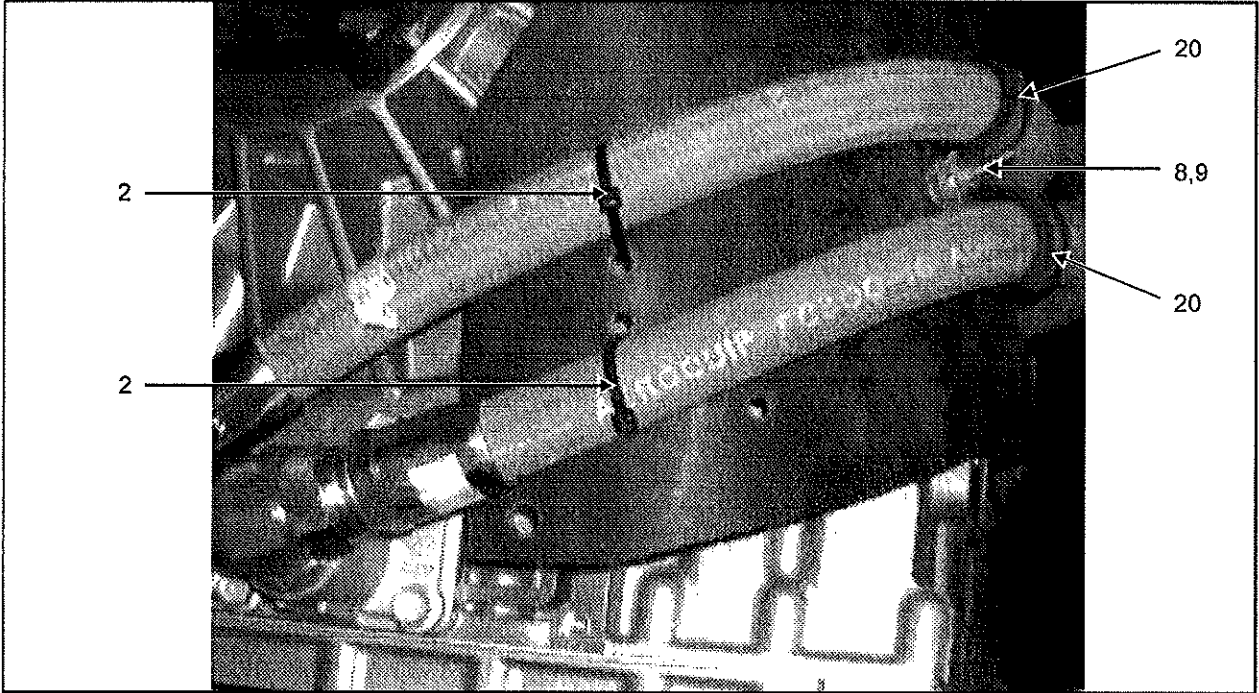


FIGURE 12

28. Position shield (21) over the section of hydraulic hoses located at rear end of transmission then secure with 3 cable ties (2) (Figure 13).

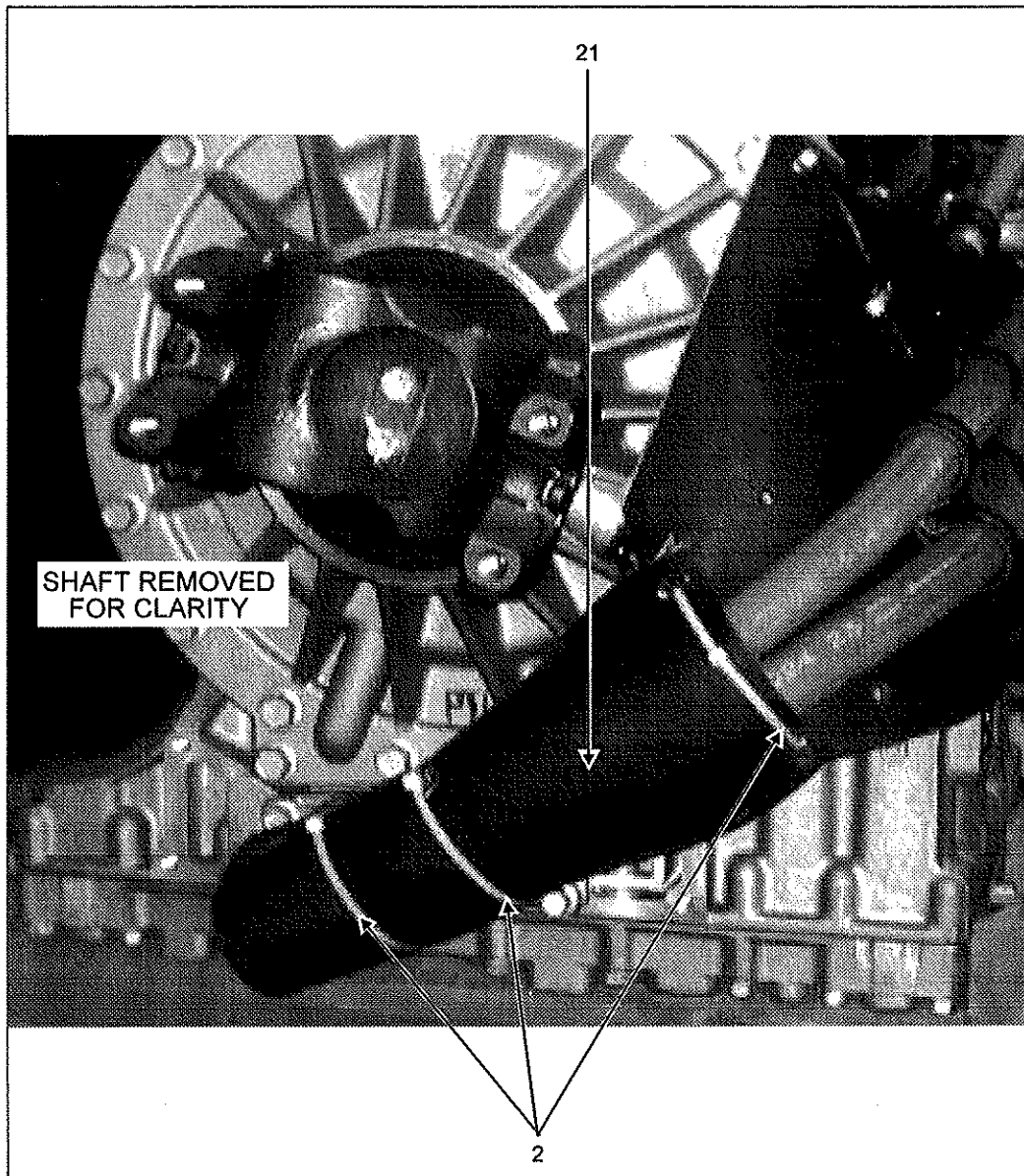


FIGURE 13

29. Reinstall the engine splash guard.

WARRANTY

This modification is covered by the manufacturer's normal warranty. We will reimburse you the parts and three hours (3.0) of labor upon receipt of a completed A.F.A. form on which you must specify as per "Warranty Bulletin 95-38".

Expiration date: November 1996