Technical Service BULLETIN

October 27, 2000

Title:

WATER LEAK FIELD-FIX REPAIR INSTRUCTIONS

Models:

'97 - '04 Tacoma

BO026-00

TSB Revision Notice:

- January 12, 2005: Applicable Vehicles has been updated to include 2004 model year.
- August 25, 2003: VIN and Applicable Model Information has changed, and repair procedure has been expanded and clarified.
- October 27, 2000: This TSB updates BO016–98 dated June 12, 1998. BO16–98 is now obsolete and should be discarded.

Previous versions of this TSB should be discarded.

Introduction

Use the following field–fix procedures if water is present on the floor carpeting and it can be confirmed that the water is leaking into the cab from either the upper cowl or side cowl seam, or moisture barrier behind the door trim panel.

Applicable Vehicles

• 1997 – 2004 model year Tacoma vehicles.

Required Materials

MATERIALS	MANUFACTURER'S PART NUMBER	QTY
Kent Acrysol™ (24 oz. aerosol can)	60170	1
Kent Leak-Chek™ (24 oz. aerosol can)	50087	1
Kent 12" Extension Tube (for aerosol can)	90175	1
Kent High Tech™ Clear Seam Sealer (11 oz. cartridge)	10195	1
Kent Leak Trace™ Powder (optional)	20165	1
Kent Seal–N–Calk™ gray strip caulk sealer (optional)	10315	1
Kent Seal–N–Calk™ black strip caulk sealer (optional)	10310	1

NOTE:

Parts can be obtained from the local Kent™ representative or from Kent™ nationally at 1–800–654–6333.

Warranty Information

OP CODE	DESCRIPTION	TIME	OPN	T1	T2
BD8008	R & R Wiper Arms, Plastic Cowl Cover and Wiper Motor (Cowl Area Seam Sealer Leakage)	2.0	55700-04200		
BD8009	R & R R/F Fender (Side Seam Sealer Leakage)	2.0	53701–04140	66	55
BD8010	R & R Door Trim Panel (Door Moisture Barrier Sealer Leakage)	0.8	67831–04020		

Applicable Warranty*:

This repair is covered under the Toyota Basic Warranty. This warranty is in effect for 36 months or 36,000 miles, whichever occurs first, from the vehicle's in-service date.

^{*} Warranty application is limited to correction of a problem based upon a customer's specific complaint.

Repair Procedure

1. Remove Wiper Arms, Plastic Cowl Cover and Wiper Motor (store wiper links up against bottom of windshield).

NOTE:

Mark wiper arm linkage attached to wiper motor and wiper motor splined shaft prior to removing the 12 mm retaining nut.

2. Spray Acrysol™ under entire lip of 1/2" pinch weld and wipe dry with a clean paper towel.

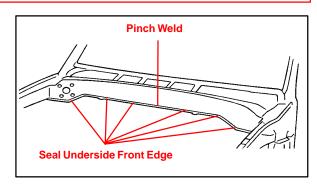
FOLLOW DIRECTIONS ON SIDE OF CAN CAREFULLY.

Dry open seam with compressed air prior to applying sealer.

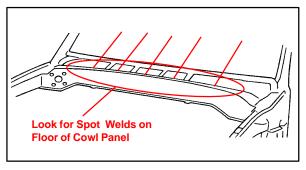
NOTE:

Do not use a red shop towel to wipe surfaces because shop towels are contaminated with silicone.

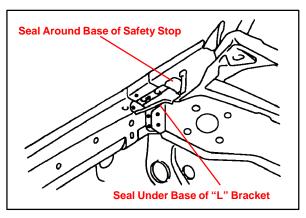
 Apply a small bead of Kent High TechTM Clear Seam Sealer to underside front edge of the pinch weld from fender to fender as shown.



4. Apply Kent High TechTM Clear Seam Sealer on <u>all</u> spot welds located on the floor of cowl panel.



5. Apply Kent High TechTM Clear Seam Sealer around outside base of hood safety stops, and seal outside corner, under the "L" bracket as shown.



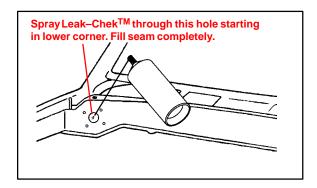
Repair Procedure (Continued)

- 6. Mask-off wiper motor opening.
- 7. Attach Kent™ 12" extension tube (P/N 90175) to the nozzle on the can of **Leak–Chek**™ (P/N 50087).

NOTE:

Direct Leak–Chek[™] spray material approximately 1 inch above seam. Spray force is very strong – make several test passes before actually spraying material into seam.

- 8. Spray **Leak–Chek**[™] through the wiper motor opening.
 - Spray material inside upper cowl, beginning in lower corner, and continuing toward the centerline of vehicle.
 - Remove wand from the wiper motor opening and insert it into larger cowl openings on the right hand side. Continue spraying material along entire seam until seam is filled from R/F fender to L/F fender area.

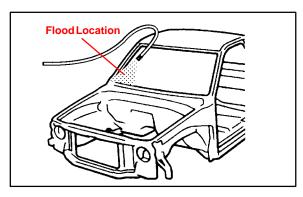


Spray **Leak–Chek**™ into seam a total of 3 times, allowing **Leak–Chek**™ to flash dry for 30–45 minutes between applications. (Drying time increases as outside temperature decreases.)

After final application of Leak-Chek™
has been allowed to dry for
approximately one hour, flood area
with water for 5–10 minutes.

NOTE:

Hold garden hose at top right front corner of windshield and point hose downward toward lower right hand corner of windshield as shown.



- 10. Check inside cab behind Heater/Air Conditioner box for evidence of water leakage during water leak check.
- 11. Carefully inspect "T" joint on right and left sides (close to heater motor box, and brake booster) for evidence of water leaks.
- 12. If no leaks are found, *cowl area leak repair is complete*. Reinstall wiper motor, cowl trim panel, wiper arms, and hood.

Wiper Arm Torque: 20 N·m (205 kgf·cm, 15 ft·lbf)

If water leaks are still present and are coming in from the cowl area, *remove right front fender* and proceed as follows:

13. Seal around entire perimeter of "L" bracket with Kent High TechTM Clear Seam Sealer (see drawing on page 2 for location of "L" bracket).

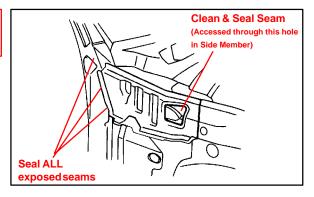
Repair Procedure (Continued) 14. Using a flashlight, look through the 2" x 3" rectangular hole on side of vertical cowl panel and locate vertical seam that connects side of cowl to front cowl.

If seam is not sealed properly, clean vertical and horizontal seam area with Acrysol™ cleaner. Use an air hose to dry all seams before applying sealer.

NOTE:

Hole is located behind fender.

- 15. Attach a 12 to 18 inch length of plastic tubing to tip of Kent High TechTM Clear Seam Sealer.
- 16. Seal entire vertical joint with High–Tech™ clear seam sealer. Allow sealer to dry according to instructions on tube.



NOTE:

Seams are inside boxed area and accessed through the square hole as shown.

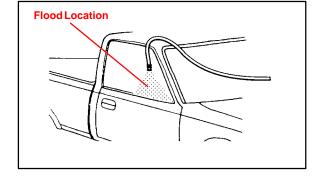
17. Flood cowl area with water to confirm that there are no cowl seam leaks into cab.

If water leaks are still present and there are no cowl area seam leaks, reinstall front fender and inspect for water entry along lower edge of interior door trim panel; then proceed as follows:

- 18. Remove door trim panel.
- Flood R/F door glass area (spray water at door glass, belt–molding area).
- 20. Inspect sealer between plastic sheeting (moisture barrier) and metal door panel for voids/skips in sealer.

If there are voids/skips between the plastic sheet and the door panel, it will need to be resealed.

- A. Using a heat gun, heat the butyl tape securing the plastic sheet to make removal easier.
- B. Use Kent Acrysol to clean the door panel and plastic sheet.



NOTE:

- Follow the directions provided by the cleaning agent.
- To ensure proper sealing of the plastic sheeting, it is important that the door panel and plastic sheeting is extremely clean.

Repair Procedure (Continued)

- C. Use 3M 8.0 mm butyl tape (P/N 08610) to reattach the plastic sheet to the door panel. Make sure there is a continuos solid bead sealing the plastic sheet to the door panel.
- 21. Inspect drain—back holes (small slits in metal door panel, near bottom of sealer) to determine if holes are covered by sealer material.

If sealer covers drain—back holes (small slits in metal door panel) carefully pull up a portion of plastic sheet, clean out drain—back holes and reinstall plastic sheet against metal door panel. Confirm that there are no voids between sealer and plastic sheet and between sealer and metal door panel.

- 22. Flood all areas with water to confirm that there are no leaks into cab area.
- 23. If no leaks are present, reinstall door trim panel.