

Ratting Out Rodent Damage in Automobiles

One morning, the insured stepped into her vehicle (Figure 1) but unfortunately it would not start. The vehicle had been parked in the driveway on a typical fall evening in the Upper Midwest. The mechanics at the neighborhood garage informed the insured that electrical wiring was damaged, requiring \$2,000 in repairs.

Figures 2 and 3 show photographs of typical damage to wiring harnesses and wire insulation. Several wires showed evidence of severe chafing, yet no surfaces were found nearby to cause the chafing.

A number of wires were stripped of insulation in 5-to-7-inch lengths. Several areas showing teeth marks confirmed the existence of rodents in the engine compartment. It appears that the rodents chewed through the insulation, causing an electrical malfunction that disabled the onboard computer and other electrical components.

It has been known in the automotive industry that rodents eat automotive insulation.

Apparently the rodents may be attracted to waxes that are part of the formulation of the polymer insulation. With the insulation removed from the wiring, electrical faults can occur, damaging electronic components or possibly causing an electrical fault that develops into a fire. Usually these types of losses occur in the fall when the rodents are searching for shelter in anticipation of the upcoming winter. An automobile parked outside is



Figure 1

usually a good candidate for a rodent habitat because of easier access and relative warmth in the vehicle when compared to the out-of-doors.

Figure 4 is a view of an automobile that was severely damaged from a fire that started after having been driven for about an hour.

Figure 5 is a view of the engine compartment.

Several pyrolyzed pine cones were noted throughout the engine compartment as indicated by the arrow. Rodents had started a nest in the vicinity of the exhaust manifold. High temperatures ignited combustible debris such as dried grass, pine cones and leaves. Many times the rodent nest will appear in less than a few days, causing a sudden and unantic-

ipated problem.

Rodent damage can be a cause of a variety of vehicle malfunctions. In some instances it is possible for combustible rodent debris to be consumed in a fire leaving no evidence as to the cause of the fire. On the other hand, signs of rodent activity may be apparent and may suggest the cause of the loss as evidenced by these case studies. ▲

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Figure 2

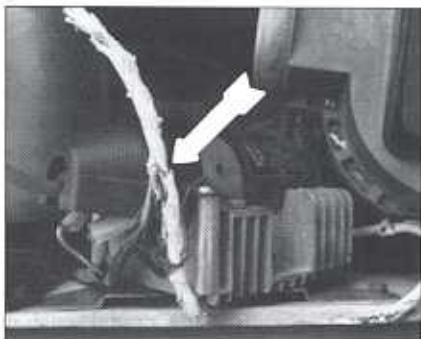


Figure 3



Figure 4



Figure 5