

# BULLETIN

## Customer



### Weather Hazards and Your Transmission

Winter is here and that requires some special attention to one's car to avoid costly repairs associated with inclement weather. Winter precautions and preventive maintenance vary geographically, however, one potential problem common to a wide range of regions is flooding.

No major component of your car can survive indefinitely with the introduction of water into its internal components. All three of the major mechanical components (the engine, transmission and differential) must be 'vented'. In other words, they must have a vent opening to atmospheric pressure to relieve internal pressures. The 'down-side' to this is that under certain conditions outside elements such as water can be introduced which will ultimately have adverse and sometimes catastrophic effects.

The introduction of a limited amount of water into the engine or differential for a relatively short period of time does not necessarily spell disaster. On the other hand, even a cup of water in an automatic transmission almost always results in serious failure and major repair bills. The reason for this is the friction surfaces (band and clutch linings) are adhered to their metal counterparts with a water soluble adhesive. When water contacts these linings and adhesives, the friction surfaces deteriorate in a very short time. The result is metal-to-metal application of certain components. This condition always means serious damage to the transmission assembly. To avoid this type of trouble, steer clear of deep puddles.

Should you park your car, only to return to find that it



is submerged in 16 inches of water or more, do not attempt to start or operate the vehicle. At that point you may have a good chance of avoiding a big repair bill. Call for a tow vehicle! Have it taken to competent transmission specialists.

They will evaluate the damage, if any. If you're fortunate, draining and servicing the transmission may be all that is necessary. If you are not so lucky, in many cases depending on the circumstances, your auto insurance coverage may cover part, if not all, of the damage. A transmission professional will be pleased to supply the technical information to your insurance carrier to register a claim.

For off-road vehicles which are likely to be subjected regularly to deep water driving conditions, there are additional precautions that can be taken. Your local [ATRA Member](#) will be pleased to discuss those options with you.

