

# Appendices

## Appendix C: Root Cause Analysis - 5 Whys

**5 Whys** is a simple and useful tool for drilling down to root causes, and simply involves asking the question why until the fundamental reason for failure is disclosed.

The following example demonstrates the process:

- My car will not start (the problem)
- **Why?** - The battery is dead. (first why)
- **Why?** - The alternator is not functioning. (second why)
- **Why?** - The alternator belt has broken. (third why)
- **Why?** - The alternator belt was well beyond its useful service life and has never been replaced. (fourth why)
- **Why?** - I have not been maintaining my car according to the recommended service schedule. (fifth why, a root cause)
- **Why?** - Replacement parts are not available because of the extreme age of my vehicle. (sixth why, optional footnote)