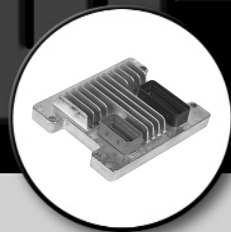


# CARDONE ProTech

Supporting Today's Professional Technician



## 10 Step Driveability Test

**Application:** All Electronic Computer Controlled Vehicles

**Problem:** Drivability problems continue after ECM replacement.

**Cause:** 80% of drivability problems are engine related.

**Solution:** Before condemning the replacement ECM, check for computer codes and correct any indicated problems, then perform this 10 Step Driveability Check list.

- Check List:**
- 1. Check vehicle and all ECM grounds using voltage drop test method (see ProTech PT 77-0008).
  - 2. No-load battery voltage should be 12.46 to 12.66 volts.
  - 3. Cranking voltage must be 9.5 volts or higher.
  - 4. Charging voltage from 13.2 to 14.7 and charge current within 10 amps of related alternator output.
  - 5. Check distributor primary and secondary voltage at idle and 2500 RPM.
  - 6. Check base and advance timing at idle and 2500 RPM.
  - 7. Vacuum level and volume at idle and 2500 RPM.
  - 8. Fuel pressure and volume at idle and under load.
  - 9. O2 sensor switching at idle and 2500 RPM.
  - 10. Check manufacturer's Technical Service Bulletins for revised ECM, updated PROM(GM), or related components.

For other ProTech publications, visit [www.cardone.com](http://www.cardone.com)  
CARDONE Industries, Inc. • 5501 Whitaker Ave. • Philadelphia, PA 19124-1799