



**Technical Service
BULLETIN**

March 3, 2004

Title:
**JUMP STARTING VEHICLES EQUIPPED
WITH CRANK HOLD FEATURE**

Models:
**'03 (& Later) 4Runner, Land Cruiser,
Sequoia & Tundra**


**ELECTRICAL
EL003-04**

Introduction The Crank Hold System was introduced on applicable vehicles beginning with the 2003 model year for improved starting and starting system reliability.

The Engine Control Module (ECM, SAE term: Powertrain Control Module/PCM) controls the starter in vehicles equipped with the Crank Hold System. In the event of a discharged battery, follow the procedures listed in this bulletin.

- Applicable Vehicles**
- **2003 (and later) model year 4Runner, Land Cruiser, Sequoia and Tundra vehicles equipped with the Crank Hold System.**

**Required
SSTs**

SPECIAL SERVICE TOOLS (SSTs)	PART NUMBER	QUANTITY
Midtronics Battery Tester* 	00002-MP815-T	1

* Essential SST.

NOTE:
Additional SSTs may be ordered by calling SPX/OTC at 1-800-933-8335.

**Warranty
Information**

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
N/A	Not Applicable to Warranty	-	-	-	-



**Jump Start
Instruction**

This system requires higher battery voltage than a conventional starting system to operate. In addition to following the jump start procedures found in the applicable Owner's Manual, vehicles with a very low state of charge (below 6 volts) may require some extra steps to get started.

- Use very good quality jump cables or jump boxes.
- It is **necessary** to have the donor vehicle's engine running while jump starting.
- Extended connection time to a donor vehicle is sometimes necessary to bring the discharged battery up to a minimum required voltage.
- You will **NOT** be able to jump start a vehicle with a frozen battery.
- Vehicle batteries with a very low state of charge may require some charging before the vehicle will jump start.

NOTE:

Never jump start a vehicle with a frozen battery. This will put undue stress on the charging system once the vehicle is started. Bring the frozen battery into a warm building and charge after it has thawed out. Test battery with a Toyota Midtronics Battery Tester before returning to service.