

# COLLISION REPAIR INFORMATION

## FOR THE COLLISION REPAIR PROFESSIONAL

TITLE: ELECTRICALLY-DRIVEN A/C COMPRESSORS & SPECIAL LUBRICANT (ND-11)

SECTION: MECHANICAL - ELECTRICAL BULLETIN # 178

MODELS: ALL TOYOTA and LEXUS HYBRID MODELS 2004-

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**2004 and newer Toyota and Lexus Hybrid models are equipped with High-Voltage Three-Phase Alternating Current Air Conditioning Compressors, which have specific safety and service requirements.**

Electrically-driven A/C systems safety precautions, system operation, component replacement, service instructions, and unique system features and requirements are published in model-specific Repair Manuals that can be accessed through the Toyota Technical Information System (TIS) ([www.techinfo.toyota.com](http://www.techinfo.toyota.com)).

Collision Repair Professionals should be aware of the following system characteristics:

- Orange colored High-Voltage wiring is connected to electrically-driven A/C compressors (see photo below).
- Electrically-driven A/C compressors have no drive belt.
- Electrically-driven A/C compressors require special ND-11 lubricating oil.
- Underhood A/C system decal specifies use of ND-11 oil (see decal/label below).
- Use ONLY ND-11 lubricating oil because of its electrical insulating characteristics.
- Avoid oil cross-contamination during evacuation and refrigerant charging by using hoses designated for ND-11.
- Cross-contamination and the use of incorrect lubricating oil can set Diagnostic Trouble Codes (DTC), and cause damage to the electrically-driven compressor.



Electrically Driven A/C Compressor



Underhood A/C Decal

**PLEASE ROUTE THIS BULLETIN TO YOUR COLLISION REPAIR CENTER  
MANAGER AND COLLISION REPAIR TECHNICIANS**

