Air Conditioning System - Improved Component Inspection

Subject: Market Air Conditioning System - Improved Component Inspection
Service Category: Vehicle Interior
Section: Heating/Air Conditioning
Applicability: Toyota

APPLICABLE VEHICLES

<table>
<thead>
<tr>
<th>Year</th>
<th>Model</th>
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<tr>
<td>2016-2020</td>
<td>Mirai</td>
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<td>Land Cruiser</td>
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<tr>
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CONDITION

In certain cases of leaking air conditioning systems, the root cause of the leak is inadvertently overlooked, causing a repeat repair. To improve customer satisfaction and repair A/C system leaks in one dealer visit, Toyota has developed a set of guidelines for evaluating A/C system components.

Step 1: Identify Leak Area
Step 2: Inspect O-Ring (See pg. 2)
Step 3: Inspect A/C Pipe
Step 4: Inspect Mating Components
RECOMMENDATIONS

2) Inspect for O-ring Abnormality
- Remove the O-ring from pipe/component for inspection.
- Using a plastic pick tool to remove O-ring and prevent damage to mating part.

OK Part* - Line at middle of O-ring is straight with no deformation. No tears, or crushed areas. *O-rings should be replaced anytime they are removed from a pipe/component to prevent leaks and foreign material.

Twisted O-Ring – No Good Part
Line at middle of O-ring is not straight.

Cut/Dent/Crush – No Good Part
O-ring damaged by another component. Replace O-ring, proceed with A/C Pipe Inspection.

Foreign Material – No Good Part
O-ring contaminated by material outside A/C system. Replace O-ring, proceed with A/C Pipe inspection.

Step 2: Inspect O-Ring Complete

Step 3: Inspect A/C Pipe (Cont. to pg. 3)
3) - Inspect for A/C Pipe Abnormality

**OK Part** - Light scratching parallel with O-ring groove. This is caused by normal part processing. Pipe is ok to reuse.

**Damage – No Good Part**
Pipe is damaged due to deep scratching or gouge of base metal. Pipe replacement is recommended to prevent repeat repair.

**Foreign Material – OK Part**
Pipe has foreign material stuck to it. Material can be cleaned off using a non-metallic tool and the pipe is ok to be reused.

**Corrosion – No Good Part**
Pipe is damaged due to corrosion of base material. Pipe replacement is recommended to prevent repeat repair.

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Step 3: Inspect A/C Pipe Complete

Step 4: Inspect Mating Components (Cont. to pg. 4,5,6)
- 4a - Compressor Inspection – Pg.4
- 4b - Expansion Valve – Pg. 5
- 4c - Condenser Inspection – Pg.6
4a) - Inspect for A/C Compressor Abnormality

**OK Part** - Light scratching parallel with O-ring groove. This is caused by normal part processing. Compressor is ok to reuse.

**Damage – No Good Part**
Compressor seal bore is damaged due to deep scratching perpendicular to O-ring groove.

Compressor replacement is recommended to prevent repeat repair.

**Foreign Material – OK Part**
Compressor has foreign material stuck to seal bore.

Material can be **carefully** cleaned off using a non-metallic tool and the compressor is ok to be reused.
4b) - Inspect for Expansion Valve Abnormality

**OK Part** - Light scratching parallel with O-ring groove. This is caused by normal part processing. Expansion valve is ok to reuse.

**Damage – No Good Part**
Expansion valve seal bore is damaged due to deep scratching perpendicular to O-ring groove.

Expansion valve replacement is recommended to prevent repeat repair.

**Foreign Material – OK Part**
Expansion Valve has foreign material stuck to seal bore.

Material can be **carefully** cleaned off using a non-metallic tool and the expansion valve is ok to be reused.
4c) - Inspect for Condenser Abnormality

**OK Part** - Light scratching parallel with O-ring groove. This is caused by normal part processing. Condenser is ok to reuse.

**Damage** – No Good Part
Condenser seal bore is damaged due to deep scratching perpendicular to O-ring groove.

Condenser replacement is recommended to prevent repeat repair.

**Foreign Material** – OK Part
Condenser has foreign material stuck to seal bore.

Material can be carefully cleaned off using a non-metallic tool and the condenser is ok to be reused.

**Corrosion** – No Good Part
Seal bore is damaged due to corrosion of base material.

Condenser replacement is recommended to prevent repeat repair.
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Applicability

Market
USA

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