# 9. Lubrication

## 1. SYSTEM OIL STABILIZATION

Prior to opening the refrigerant system for repairs (except compressor seizure) the system must be stabilized for correct oil replenishment.

Follow these procedures:

- 1) Engine speed set to 1,500 rpm
- 2) A/C "ON"
- 3) Air source to recirculate
- 4) Blower in 4th or high speed position

• Make sure the air entering the evaporator is above 26.7°C (80°F).

• The discharge (high) side pressure must be above 588 kPa (6 kg/cm<sup>2</sup>, 85 psi).

5) Operate the A/C for 10 minutes.

### 2. SYSTEM DISCHARGE

Slowly, discharge the system starting with the high- pressure side until the pressure drops below 345 kPa (3.52 kg/cm<sup>2</sup>, 50 psi), then open the low-pressure side.

### 3. OIL REPLACEMENT (LHD MODEL)

After stabilization and discharge, replace the component, adding the appropriate amount of oil (ZXL100PG) to the new component before installation.

Evaporator	114 m $\ell$ (3.9 US fl oz, 4.0 lmp fl oz)	
Receiver drier	5 mℓ (0.2 US fl oz, 0.2 Imp fl oz)	
Condenser	2 mℓ (0.07 US fl oz, 0.07 Imp fl oz)	
Hose	1 mℓ (0.03 US fl oz, 0.04 Imp fl oz)	

If the compressor is replaced (after stabilization):

1) Drain and measure the oil from the original compressor. 2) Drain the oil from the replacement compressor and refill with the same amount that was drained from the original [20 m $\ell$  (0.7 US fl oz, 0.7 Imp fl oz) minimum]. Always use ZXL100PG for the replacement oil.

#### 4. OIL REPLACEMENT (RHD MODEL)

After stabilization and discharge, replace the component, adding the appropriate amount of oil (ND-OIL9) to the new component before installation.

Condition		Proper charging method	Amount of oil to be added mℓ (US fl oz, Imp fl oz)
Replacement of compressor		Remove all oil from new compressor and charge it with amount of oil shown in right column.	70 (2.4, 2.5)
Replacement of evaporator		—	70 (2.4, 2.5)
Replacement of receiver drier (Liquid tank)		Oil need not be added.	—
Replacement of condenser	There is no sign of leakage.	Oil need not be added.	—
	There is evidence of a large amount of oil leakage from condenser.	_	50 (1.7, 1.8)
Replacement of flexible hose or aluminum pipe	There is no sign of leakage.	Oil need not be added.	_
	There is evidence of a large amount of oil leakage.	_	50 (1.7, 1.8)
Gas leakage	There is no sign of leakage.	Oil need not be added.	_
	There is evidence of a large amount of oil leakage.	_	50 (1.7, 1.8)

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1) Drain and measure the oil from the original compressor. 2) Drain the oil from the replacement compressor and refill with the same amount that was drained from the original [20 m $\ell$  (0.7 US fl oz, 0.7 Imp fl oz) minimum]. Always use ND-OIL9 for the replacement oil.