

2020-03-04

E-Series	Model Description	Production Date
I01	i3	ALL

# **SITUATION**

The air conditioning no longer cools the vehicle. A vehicle test reveals one or both of the following faults stored in the IHX\_I1 Control Module:

- 801295 Heat Pump pressure-temperature sensor 2 after air condition compressor: pressure short to ground / open circuit
- 80112A Heat Pump pressure-temperature sensor 2 after air condition compressor: temperature - short to ground

# **CAUSE**

A short circuit at the temperature sensor due to aluminum particles in the high-pressure line.

# **CORRECTION**

If one or both faults above are stored, then replace **BOTH** the pressure sensor and the high-pressure pipe at the same time. The removed parts should be left assembled and sent back for warranty analysis.

## **PROCEDURE**

If a vehicle test reveals one or both of the following faults stored in the IHX 11 Control Module:

- 801295 Heat Pump pressure-temperature sensor 2 after air condition compressor: pressure short to ground / open circuit
- 80112A Heat Pump pressure-temperature sensor 2 after air condition compressor: temperature short to ground

Replace **BOTH** the pressure sensor and the high-pressure pipe at the same time.

- Replace the O ring at both ends of the new pipe
- If the retaining bolt is damaged at either end of the pipe, then replace the bolt(s) as needed

Follow Repair Instructions 65 53 and follow all safety precautions for working with:

- High Voltage Components
- · Air Conditioning Components
- Refrigerant Oil

## PARTS INFORMATION

For information on Air Conditioning Refrigerant R1234yf Introduction (for applicable 2017 Model Year vehicles), refer to SI B64 03 16 and B04 02 16.

Obtain and confirm the part numbers for your specific vehicle by entering the chassis number in either ETK or AIR which takes into account specific equipment and/or options.

Part Number	Description	Quantity
64 50 9 291 153	Pressure Pipe Rear	1

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And:		
64 53 9 306 477	Sensor high Pressure	1
And:		
64 53 9 284 018	Gasket ring (d=11 mm)	2
And, if needed:		
07 12 9 904 835	ISA Screw (M8x30)	Up to 2, if needed
And:		
83 19 2 221 349	R134 A Gas (1 oz. unit)	Qty As needed
Or:		
83 1 9 2 446 563	BMW Group R-1234YF - (10lb / 160oz) (1 oz. unit)	Qty As needed

Additionally, other small parts that are not specified above, such as one-time screws, nuts and seals, which must be replaced according to the ISTA repair instructions/ETK, must be selected from the Electronic Parts Catalogue according to the respective vehicle type and invoiced under the corresponding repair defect code.

# WARRANTY INFORMATION

Covered under the terms of the BMW New Vehicle Limited Warranty for Passenger Cars and Light Trucks.

Defect Code:	6453098000 Pressure switch/pressure sensor short	circuit
Labor Description Operation		Labor Allowance
00 00 006	Performing "vehicle test" (with vehicle diagnosis system – checking faults) (Main work)	Refer to AIR
Or:		
00 00 556	Performing "vehicle test" (with vehicle diagnosis system – checking faults) (Plus work)	Refer to AIR
And:		
61 21 528	Connect an approved battery charger/power supply (indicated in AIR as Charging battery)	Refer to AIR
Or:		
61 21 529	Connect an approved battery charger/power supply (indicated in AIR as "i3) (luggage compartment service cap removed)	Refer to AIR
And:		
64 50 510	Extract, evacuate and fill air conditioning system	Refer to AIR
And:		
64 99 000	Work Time to remove and replace the A/C high-pressure sensor and the corresponding A/C high-pressure line (pipe) (Temporary)	WT FRU as supported

If you are using a Main labor code for another repair, use the Plus code labor operation 00 00 556 instead of 00 00 006.

Refer to AIR for the corresponding flat rate unit (FRU) allowances.

Note: Work time (WT) labor code 64 99 000 will be updated to a standard flat rate labor operation code with specified FRU allowance shortly.

Work time labor operation code 64 99 000 is not considered a Main labor operation; however; it does require an individual punch time to support the FRU amount claimed and an explanation on the repair order and in the claim comments section.

# **Sublet – Bulk Materials (RO and Claim Comments Required)**

Sublet Code 4	reimbursement	Reimbursement for the repair-related bulk materials (excluding R134a Gas/ Refrigerant R1234yf, do not use the BMW part numbers for claim submission)
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Sublet reimbursement calculation for claiming the applicable repair-related bulk materials (BMW part numbers) is at the dealer net price amount for the quantities used plus your center's handling.

Enter this material cost in sublet and itemize the amount on the repair order and in claim comment section. Supporting Materials

picture as pdf B640120 REP 64 53.pdf

# AIR - Repair instruction Attachment to SI B64 01 20

BMW Group - AIR: 2020-02-20 / 10:10

Retailer: -/-Model: i3 (+ REX)

Vehicle identification number: WBY1Z4C56EVX63285

Development code: IO1 Model code: 1Z43 Lead type: 1Z43

## Repair instruction

# Removing and installing (replacing) intake pipe and pressure line for electric A/C compressor

6453... | REP-REP-RAI0164-6453X01 - V.3

64 53 ... Removing and installing (replacing) intake pipe and pressure line for electric A/C compressor

## Special tools required:

- 32 1 270
- 00 9 030



#### Warning!

#### High-voltage system - danger to life!

The following points must be strictly observed **prior to starting work**:

De-energise the high-voltage system.

Observe safety information for handling hybrid cars.



## Warning!

#### Danger of injury!

Refrigerant circuit is under high pressure!

Avoid contact with refrigerant and refrigerant oil.

Read and comply with safety information:

- · Handling refrigerant
- · Handling refrigerant oil



## Important!

In IO1, 2 different country-specific refrigerants and a new refrigerant oil are used.

Before carrying out repair work on refrigerant circuit, always determine which refrigerant is used in the vehicle!

Observe notes on refrigerant and refrigerant oil from 09/2013!



## Important!

## Risk of damage!

Only switch on air conditioning again once refrigerant circuit has been properly filled.

Read and comply with notes on compressor replacement!

Follow notes for opening and replacing parts in refrigerant circuit.

If Air conditioning is opened for more than 24 h:

Replace condenser for air conditioning.



## Necessary preliminary tasks:

- Drain off air conditioning system
- Remove electric A/C compressor
- Partly remove trim panel for cover on side member, right



## Important!

Seal openings or lines on compressor with special tool 32 1 270 to prevent escape of media and dirt contamination.



Tightening torque 64 53 6AZ.

Remove refrigerant line (2).

#### Installation note:

Renew sealing rings.

Use special tool 00 9 030 to mount sealing rings without damaging them.



Release screw (1).

Tightening torque 64 53 12AZ.

Release screw (2).

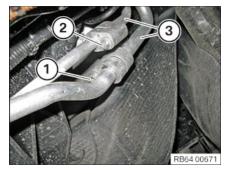
Tightening torque 64 53 13AZ.

Remove refrigerant lines (3).

## Installation note:

Renew sealing rings.

Use special tool 00 9 030 to mount sealing rings without damaging them.



Feed out refrigerant lines (1).





# After installation:

Evacuate and fill air conditioning system