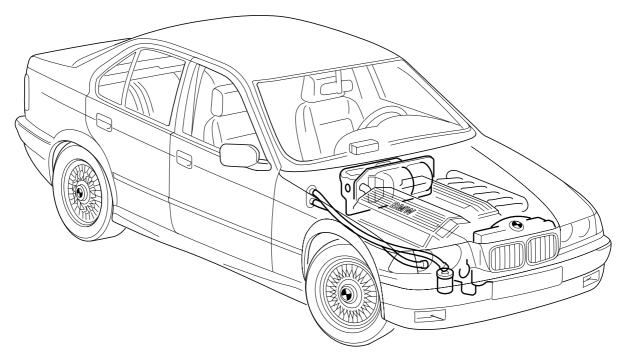


## Teile und Zubehör - Einbauanleitung



F 36 64 001 M

### BMW Parts and Accessories - Installation Instruction

Refrigerant conversion kit (from R12 to R134a)
BMW 3 Series (E30), (E36), BMW 5 Series (E28), (E34), BMW 6 Series (E24), BMW 7 Series (E23), (E32), BMW 8 Series (E31)

#### Refrigerant conversion kit (from R12 to R134a) BMW 3 Series (E30), (E36), BMW 5 Series (E28), (E34), BMW 6 Series (E24) BMW 7 Series (E23), (E32), BMW 8 Series (E31)

Only for use within the BMW dealer organisation. Specialist knowledge required.

Fitting time approx. 3.5 hours depending on the condition of and equipment in the car.

The fitting time quoted on the front cover does not include the time required for replacing the compressor, if necessary.

#### Safety precautions for handling refrigerant

Safety precautions must be observed for handling air conditioning systems in cars filled with the refrigerant R12 (trade name "Frigen") although this refrigerant is non-toxic, non-flammable and is not explosive when mixed with air. Refer to the appropriate points in the BMW repair instructions for this purpose.

All O rings on the connections which are undone for conversion purposes must be replaced with O rings which are suitable for use with R134a.

#### Deoil the air conditioning system with R12 refrigerant

If R12 is available, deoil the air conditioning system with it.

To remove the mineral oil and R12 from the refrigerant circulation system, the following work must be completed.

- 2.0 Extract the contents of the air conditioning system by suction
- 2.1 Evacuate the air conditioning system (5 minutes)
- 2.2 Fill the air conditioning system with R12 refrigerant (without oil)
- 2.3 Start the engine and switch on the air conditioning system for a maximum of 10 minutes

Repeat steps 2.0 - 2.3

2.4 Extract the contents of the air conditioning system by suction

# 2.1 <u>Deoil</u> the air conditioning system <u>without R12</u> refrigerant (see also TIS-HLI 642328000)

Remove the compressor, heat it and position it upside down so that the mineral oil can escape through the intake and outfeed connections. Whilst this is happening, turn the drive shaft several times by hand so that the remaining mineral oil can

escape. To prevent any deterioration in the cooling capacity it is important to allow as much mineral oil as possible to escape from the system. R12 mineral oil is not miscible with PAG oil and will hinder the heat exchange in the evaporator and condenser, thus leading to a reduction in cooling capacity.

### 3. Convert the air conditioning system

- 3.1 Replace the drier bottle
- 3.2 Replace the O rings on the connections you have undone
- 3.3 Replace the pressure switch

On cars with a Bosch compressor which has one of the following part numbers:

1 377 940	1 377 941	1 377 943
1 377 944	1 377 946	1 377 947
1 385 416	1 385 930	1 386 311

the compressor must be replaced by the Seiko-Seiki compressor, part number 64 52 8 363 550 and fastening parts.

#### E30, M3 only

Adjust the connections for the Seiko-Seiki compressor.

Required part numbers 64 52 8 379, 64 52 8 379 784

#### 3.4 Fit filling connectors

- Filling connector (marked red) for connection to the outfeed line
- b = Filling connector (marked blue) for connection to the intake line
- c = Outfeed line connector
- d = Intake line connector

Remove the protective cap (1).

Screw the filling connectors (a and b) from the conversion kit on to the connectors (c and d) on the refrigerant lines.

Screw the protective caps (2) onto the filling connectors (a and b).

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#### E32, E34

### Models with high/medium and low pressure switches

Cut the plug X125 off the main vehicle wiring harness.

Strip the ends of the cables and connect them as set out in the BMW repair instructions.

#### All models

Connect the plugs (1) **X126** and **X127** from the main vehicle wiring harness to the corresponding plugs of the same colours on the safety pressure switch.

### 4. Fill the air conditioning system (see BMW repair instructions)

If required, only oil which has been approved by BMW is to be used to fill the air conditioning compressor on cars built before 09/82 for air conditioning systems with R12.

The quantity of PAG oil is to be poured into the system regardless of the quantity of oil removed from it.

Compressors for R134a refrigerant (see information plate) are supplied ready filled with PAG oil (see model plate on compressor).

### 5. Check the air conditioning system for leaks

Check the air conditioning system for leaks as set out in the BMW repair instructions.

# 6. Test the function of the air conditioning system

Test the function of the air conditioning system as set out in the BMW repair instructions.

#### 7. Fit information plate (R134a)

Affix the appropriate information plate (R134a) as shown in the table below onto the information plate already in place (R12).

Quantity of 134a refrigerant to be inserted	Model	Existing information plate R12	New information plate R134a (retrofit)
900g	E30/E28M5 E28 td	1 381 958 1 380 981	8 363 254.9
1000g	E24/E36 E28/M10/M20	1 380 982 2 122 023	8 363 258.9
1100g	E23/E28 M30	1 380 983 1 380 984	8 363 256.9
1450g	E34 td	1 378 247	8 363 257.9
1550g	E31/E34/E32 without rear AC E24 with rear AC	1 380 728.9 1 382 614.9	8 363 255.9
1700g	E32 with rear AC	8 390 006.9	8 363 570.9

