

# Technical Bulletin



Model(s)	Year	Eng. Code	Trans. Code	VIN Range From	VIN Range To
Jetta (A5)	2005 - 2007	All	All	All	All
Passat, Passat Wagon	2006 - 2007	All	All	All	All
Rabbit, GTI	2006 - 2007	All	All	All	All
Eos	2007	All	All	All	All

## Condition

87 07 10 Aug. 23, 2007 2013314 Supersedes T. B. Group 87 number 07-08 dated July 26, 2007 Supersedes T. B. Group 87 number 07 03 dated Feb. 15, 2007 due to warranty table information change.

Air Conditioning Inoperative

Air conditioning does not cool, air conditioning compressor may seize.



Note:

Failure of compressor does not compromise driver visibility.  
Vehicles with Zelex/Valeo air conditioning compressors only.



Tip:

Zelex/Valeo compressor can be recognized by the pulley (illustration 1).

## Technical Background

Failure Mode Analysis:

There may be more than one concern with Zelex/Valeo air conditioning compressors that will render the air conditioning system inoperative:

1. The limiter (overload protection against seizing of the pulley), Part number 1K0820803 L and N, is broken or is missing (illustration 1, pos.1).
2. The compressor control valve, Part number 1K0820803 L and N, is restricted by metal particles and the compressor does not build up pressure.

## Production Solution

Final production countermeasure pending.

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## Service

### 1: Limiter Broken

Limiter broken, compressor shaft/center bolt does not rotate manually with engine OFF. Center bolt can be loosened with a wrench (Illustration 1, call out number 2).

As a result the compressor Part No. 1K0820803 with index L and N is not driven.

No fault is logged in the fault memory.

The compressor must be replaced, the refrigerant system flushed and AC system recharged.

**!** Note:

On all diesel engines a new Sanden compressor, Part No: 1K0820859 index "F" must be installed.

On the 2.0 L /147 kW gasoline engine a new Sanden compressor Part No: 1K0820859 index "F" must be installed.

On all other gasoline engines see Parts Dept. for the latest compressor listings and parts information.

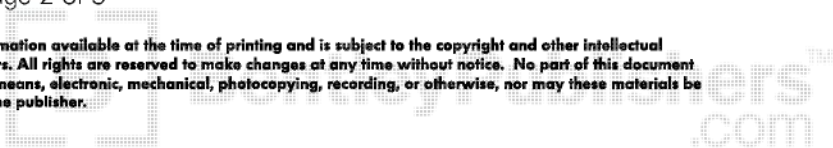
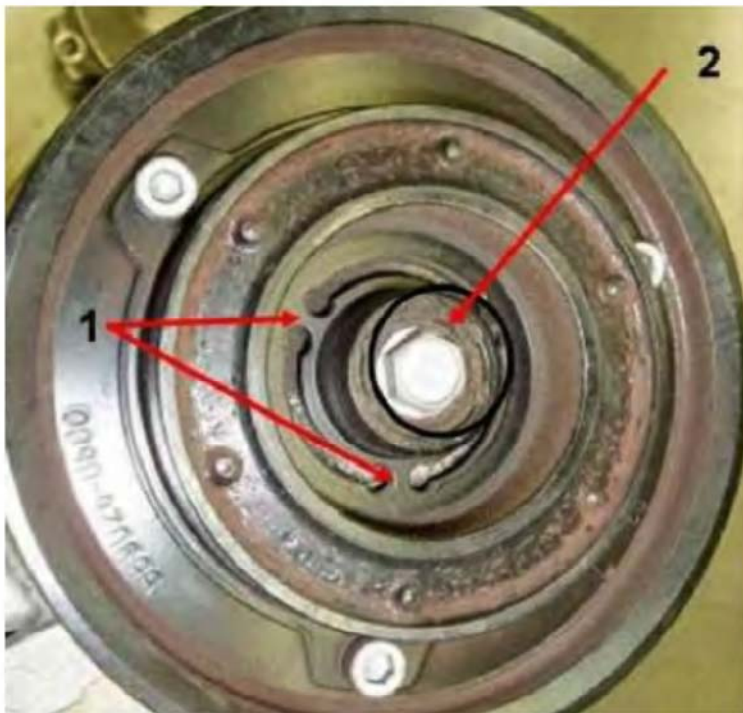
Flush the refrigerant system carefully following equipment instruction.

After flushing the refrigerant system install a new expansion valve and a new condenser.

**!** Note:

After flushing the system the refrigerant oil quantity does not need adjusting. All oil has been removed from the system.

Illustration 1



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## Procedure

1. Evacuate the refrigerant system with the AC service station, see Repair Manual Group 87, Refrigerant R134A Servicing in ElsaWeb, Working with the service station.
2. Flush complete AC circuit.
3. Install the air conditioning compressor with out compressor drive belt, see Repair Manual Group 87, Air Conditioner, A/C refrigerant system, servicing in ElsaWeb



### Tip:

In this case the system oil quantity is not adjusted, the oil has been removed during the flushing process.



### Note:

Replacement compressors come with a full system oil charge.

4. Turn the compressor 10 revolutions by hand, then install the compressor drive belt. (to avoid compressor damage, fluid surge), see Repair Manual Group 87, Ribbed belt pulley, removing and installing in ElsaWeb
  5. Replace expansion valve and the condenser, see Repair Manual Group 87, A/C refrigerant system, servicing in ElsaWeb
  6. Evacuate and recharge refrigerant system to the correct capacity with the AC service station, see Repair Manual Group 87, Refrigerant R134A Servicing, Working with the service station and Capacities in ElsaWeb.
- Operate the A/C system, see Repair Manual Group 87, Refrigerant R134A Servicing, Working with the service station, A/C system, operating after charging in ElsaWeb.

2: Control valve of the compressor is blocked by metal particles.

The compressor does not build up pressure, no DTCs stored in fault memory.

## Procedure



### Note:

The control valve is in the compressor housing and cannot be serviced separately, the compressor must be replaced.



### Tip:

As with service procedure 1 above, the refrigerant circuit must be flushed and the compressor, expansion valve and condenser must be replaced.



### Note:

On all diesel engines a new Sanden compressor Part No. 1K0820859 index "F" must be installed following procedures in process 1.

On the 2.0 L /147 kW gasoline engine a new Sanden compressor Part No. 1K0820859 index "F" must be installed.

On all other gasoline engines see ETKA for the latest parts information.

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## Procedure

1. The compressor, expansion valve and condenser must be replaced, and the refrigerant system flushed, see 1: Limiter Broken procedure above.



Note:

When replacing the compressor observe the running-in instructions and adjusting compressor oil quantity in ElsaWeb.

## Warranty

To determine if this procedure is covered under Warranty, always refer to the Warranty Policies and Procedures Manual	
Claim Type:	Use applicable Claim Type**
Part Identifier:	8734
Damage Code:	8734 15 ___ * 2
Labor Operation: Replace Compressor	8734XXXX = Claim appropriate SRTs for engine***
Labor Operation: Remove and Install Ribbed Belt	1372XXXX = Claim appropriate SRT for engine***
Labor Operation: Remove and Install Expansion Valve	8770XXXX = Claim appropriate SRT for vehicle***
Labor Operation: Remove and Install Condenser	8750XXXX = Claim appropriate SRT for vehicle***
Labor Operation: Evacuate and Recharge Refrigerant	87031700 = 50 TU
Labor Operation: Clean and Flush Air Conditioning System	87012950 = 110 TU
Diagnostic Time:	No Additional Diagnostic Time Allowed
Claim Comment: Input "As per Technical Bulletin 2013314" in comment section of Warranty Claim.	

\* Code per warranty vendor code policy.

\*\* Vehicle may be outside any Warranty in which case this Technical Bulletin is informational only.

\*\*\* To avoid "overlapping labor", refer to the Warranty Policy & Procedures Manual.

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## Required Parts and Tools



Tip:

Part number(s) are for reference only.

Description	Part No:	Quantity
Compressor (all, except 2.5L)	1K0820859F	1
Compressor (2.5L)	1K0820859G	1
Expansion Valve	See ETKA	1
Condenser	See ETKA	1

## Additional Information

All part and service references provided in this Technical Bulletin are subject to change and/or removal. Always check with your Parts Dept. and Repair Manuals for the latest information.