

Flushing Instructions



Prior to the Air Conditioning Compressor being installed, we recommend That you read, understand and follow these instructions.....

Using **MT4035** professional flush gun in conjunction with flushing fluid **MT3106-1**.

The failure of an air conditioning compressor can be the result of several factors...

- Lack of Lubrication
- System Contamination
- Excess System High Pressure
- Incorrect Application
- System Sealant added to refrigerant

Compressor Failure

When a compressor needs to be replaced, care should be given to diagnose the reason for failure. The replacement compressor will also fail rapidly if the original problem is not rectified.

To protect your **warranty** and the long-term function of your remanufactured compressor a correct professional diagnosis should be carried out on the vehicle's air conditioning system.

The expansion device must be replaced along with the receiver drier upon installation of a compressor. The system must be flushed. The system cooling fans must operate as designed by the vehicle manufacturer.

Recommended Flushing Procedure

Using **MT4035** professional flush gun in conjunction with flushing fluid **MT3106-1**.

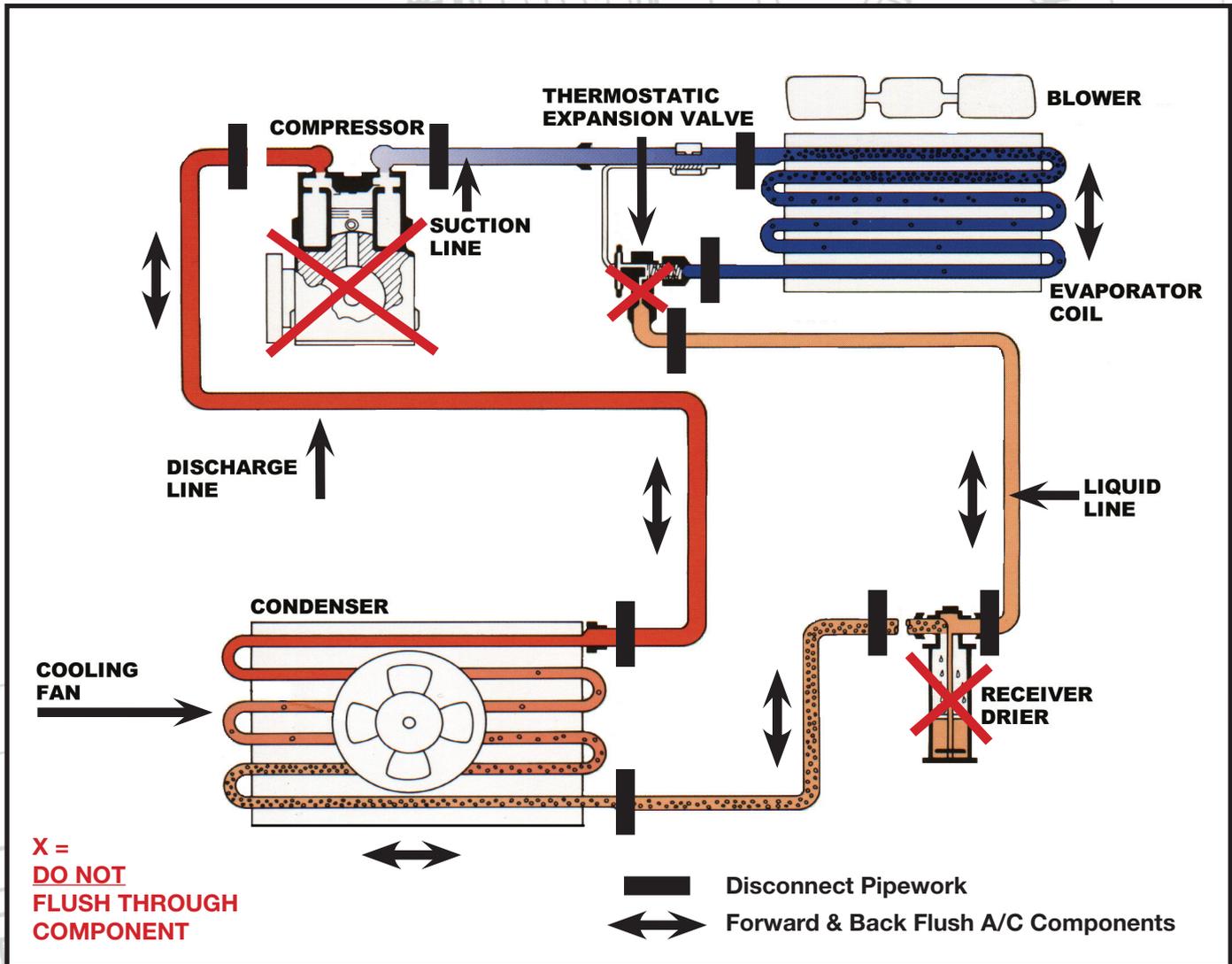
Note. Always wear safety goggles when working with a pressurised system.

Dispose of contaminated flushing fluid in accordance with your local Environment Agency Regulations.

Step by Step Instructions...

1. Recover refrigerant.
2. Do not flush the air conditioning system in a closed loop as this will flush debris around the system.
3. Prepare air conditioning system for flushing by disconnecting hoses from the Compressor, Condenser, Receiver Drier, Expansion Device and Evaporator.
4. Remove Compressor, Receiver Drier & Expansion Device –
DO NOT FLUSH THESE COMPONENTS – THEY MUST BE REPLACED
5. Fill flush gun with flushing fluid, part number **MT3106-1. (4 / 5 Litres will be Required)**
6. Connect clean dry compressed air or nitrogen to the flush gun **MT4035** (maximum pressure of 125psi)
Start flushing in this order: - Insert flush gun into the inlet of each component / line.
 - a.) Discharge pipe
 - b.) Condenser
 - c.) Condenser to Drier-liquid line
 - d.) Receiver Drier to Expansion Device-liquid line
 - e.) Evaporator
 - f.) Evaporator to Compressor-suction line.
7. Direct fluid in a forward direction and reverse direction (back-flush) until fluid leaving the component is clean and free. Catch the contaminated fluid in an appropriate container **MT4050** or a clean cloth.
Note; Should any components display a restriction then internal blockage may be evident. Replace the component / pipe with new, if in doubt or unsure contact our **Technical Help line +44 (0) 121 766 5006** For further advise, and advise us of which Motor Factor supplied our Compressor.
8. Care should be taken not to leave any excess flush fluid in the system components / pipes.
9. Remove excess flush fluid by blowing clean dry compressed air or nitrogen through system components. (Excluding compressor, drier and expansion device)
Please Note Some vehicle manufacturers require the replacement of the old condenser with a new condenser when repairing and servicing a heavily contaminated A/C system.
10. Reassemble the system, installing the Air Con Compressor, NEW Expansion Device and Receiver Drier.
11. Replace all system component connection 'O' rings.
12. Read Compressor Fitting Instructions and follow carefully, **CT0202** attached to Air Con Compressor.
13. The system must be in a LEAK FREE condition.
14. Recharge System with R134A adding correct PAG Oil qty, as per Vehicle Manufacturers weight specifications.

System Flushing Instructions



A/C System Flush Kit - MT4051

Complete Start Up Kit

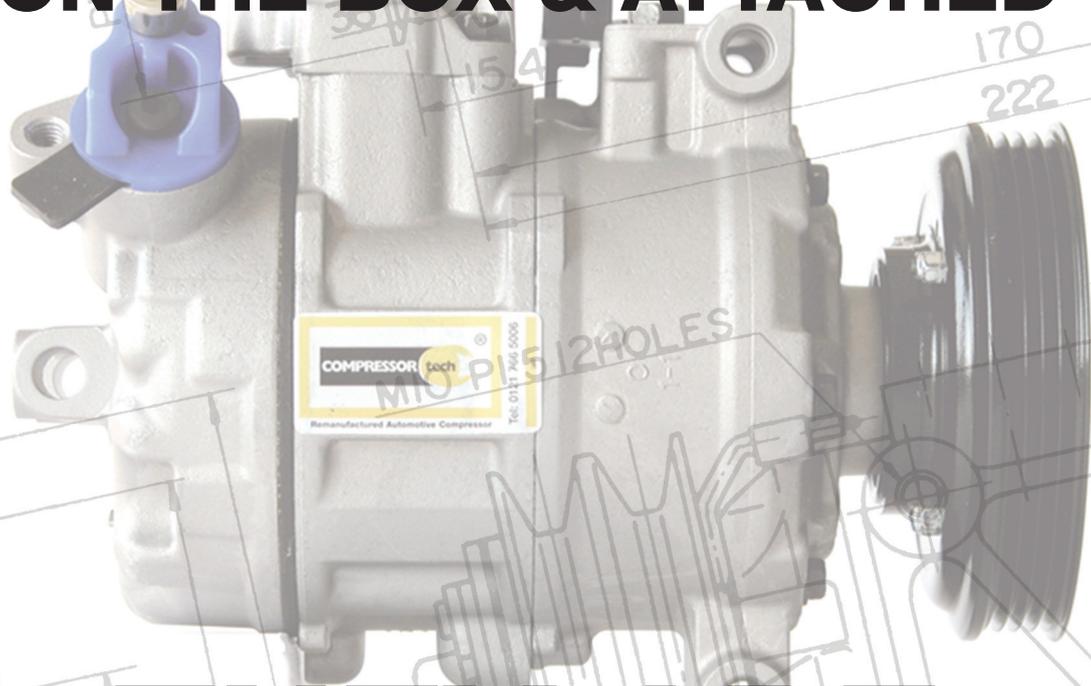


The logo for COMPRESSOR tech, featuring the word "COMPRESSOR" in a black box and "tech" in a yellow circle with a registered trademark symbol.

COMPRESSOR tech®

Remanufactured Automotive Compressors

PLEASE READ
THE FITTING INSTRUCTIONS
ON THE BOX & ATTACHED



THEY ARE
WRITTEN FOR
YOUR
BENEFIT

COMPRESSOR 

Remanufactured Automotive Compressors

NOTICE TO INSTALLER

COMPRESSOR INSTALLATION PROCEDURE

WHEN FITTING A NEW OR REMANUFACTURED COMPRESSOR UNIT YOU MUST...

- Please ensure the system has been flushed of any oil & debris, using an approved solvent based A/C Flushing Fluid.
Part Number MT3106-1
- Add the correct OEM PAG Oil – add 3 ounces in the suction side of the compressor and 5 ounces while system is under a 60-minute vacuum, through your A/C service station oil injection method.
- Turn the compressor by hand, at least 8 complete turns.
- Replace Filter Drier or Accumulator.
- Replace the Expansion Valve or Orifice Tube.
- Ensure that the system completes a minimum of 60 minutes evacuation after flushing at a minimum 30" of vacuum.
- Charge the A/C system with R134a Refrigerant ONLY to the vehicle manufacturers recommended charge weight.
- Using any other refrigerant blends is not acceptable.
- Warranty is automatically voided if Compressortech's QC, Temp & Logo Labels are or have been removed.

FAILURE TO COMPLY WITH THE ABOVE WILL INVALIDATE ANY WARRANTY.

What is the difference between Repaired, Reconditioned & Remanufactured?



The answer is quite simple.....

Repaired - with a repaired part the immediate problem gets solved while other wear & tear issues are not.

Reconditioned - is mainly repair with some minor replacement parts, cleaned to look like new from the outside.

Remanufactured - is when units are totally dismantled, and washed. After full inspection, new OE parts replace parts that have worn. After reassembling according to the high standards of OE production process a full test is conducted to ensure high quality of the product.

The Compressortech difference is that we Remanufacture and go one step further by including the unit test certificate in the box ready for delivery to the customer.



Remanufactured Automotive Compressors

COMPRESSOR FAILURE

When a compressor needs to be replaced, care should be given to diagnose the reason for failure.

The replacement compressor will also fail rapidly if the original problem is not rectified.

To protect your **warranty** and the long-term function of your Air Conditioning compressor a correct professional diagnosis should be carried out on the vehicle's air conditioning system.

The failure of an air conditioning compressor can be the result of several factors...

- Lack of Lubrication
- System Contamination
- Excess System High Pressure
- Incorrect Application
- System Sealant added to refrigerant

LACK OF LUBRICATION

the system oil mixes with the refrigerant and is distributed around the system by the refrigerant gas flow. Therefore, compressors rely totally on the refrigerant /oil returning to the compressor for lubrication. So if the system gets low on refrigerant, the compressor starts to suffer from oil starvation. As little as a 25% loss of refrigerant charge can start to damage the compressor.

When replacing system components it is imperative to add a measured amount of oil. (See manufacturer's recommendations). An air-conditioning system should contain a full charge of pure refrigerant and clean oil. Along with (1/4 oz UV Dye) for future possible leak detection. Anything else will cause compressor failure eventually, because of excess high pressure or loss of lubrication. We recommend that prior to installation of any compressor (new or remanufactured) the installer should: Drain the oil from the compressor and refill with the correct amount of the specified oil, normally approx 2-3-oz.

CONTAMINATION

Some common forms of contamination are:

- Desiccant from receiver driers breaking up
- Debris or dirt from previous compressor repair
- Incorrect specification oil
- Moisture

To remove any of the above the system must be flushed, the receiver drier and TXV (thermal expansion device) changed.



Remanufactured Automotive Compressors

EXCESS HIGH PRESSURE

Excess high pressure will put an undue strain on the compressor leading to breakage of internal parts. Some common reasons for excess pressure are:

- Insufficient condensing of gas
- Cooling fin blockage on condenser/radiator
- Failure of cooling fans, pressure switch or related wiring

System blockages, which can cause extremely, high-pressure to build up very quickly. High-pressure switches will help to protect the compressor but may not be enough to avoid some damage. Overcharging system with refrigerant. Care must be taken to ensure the correct amount of refrigerant is put in to the system. Contaminated or incorrect refrigerant. Never use any other type of gas than that of which the system was designed or converted for. This will be R134A.

INCORRECT APPLICATION

Incorrect application is unlikely to be a problem unless you are designing your own system or the compressor you have fitted is different from the original.

If the Compressor has failed internally, then the expansion device must be replaced along with the receiver drier upon installation of a compressor. The system must be flushed. The system cooling fans must be checked to make sure that they operate as designed by the vehicle manufacturer.

If the Compressor has failed externally, IE; bearing failure only,
Then replacement of the receiver drier is recommended along with the replacement compressor.

1. Reassemble the system, installing Reman Compressor, NEW Expansion Device and Receiver Drier.
2. Replace all system component connection 'O' rings.
3. Read Compressor Fitting Instructions and follow carefully, CT0202 attached to the Compressor.
4. The system must be in a LEAK FREE condition.
5. Recharge System with R134A to correct Vehicle Manufacturers weight specifications.

Please note some vehicle manufacturers recommend the replacement of the old condenser with a new condenser when repairing and servicing a heavily contaminated Air Con system.

If in doubt or unsure contact our Technical Help line +44 (0) 121 766 5006 for further advise.

Technical support E-mail; reman@compressortech.co.uk

THEY ARE WRITTEN FOR YOUR BENEFIT PLEASE READ THE FITTING INSTRUCTIONS ON THE BOX & ATTACHED

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