



**BOSCH**

Invented for life

Driven by

**AUTONOMY**



## **Air Conditioning Service for Experts**

AC service solutions for refrigerants R1234yf and R134a

# Bosch as a 360° partner

## Well Positioned for AC service

Air conditioning systems in vehicles need to be serviced regularly. Due to the ever-increasing complexity and variance of vehicle systems, workshops need extensive knowledge – and

technology that is adapted to their individual requirements and provides them with the best possible support in their daily business.

# Professional AC service

## In every way

In addition to AC service units and a comprehensive portfolio of accessories, our range of services also includes Bosch diagnostic solutions. The diagnostic software ESI[tronic] 2.0 Online works hand in hand with the diagnostic devices of the KTS series and enables a professional AC service that is well thought out down to the last detail.

No experience yet? With our internationally leading training courses, we make your workshop team fit for AC service. And because every professional air conditioning service also includes a filter change, we provide you with an extensive range of accessories and cabin filters.

**ESI[tronic] 2.0  
Online**

**Bosch  
Connected  
Repair**



Discover exactly the efficiency, precision, comfort, flexibility, automation and connectivity you need to ensure the profitability of your workshop in our air conditioning service offering.



# Air conditioning service for e-mobility

## Your future daily business

With the steadily growing number of hybrid and electric vehicles on the market, professional air conditioning service is also becoming increasingly important for workshops. This is because in these types of vehicle, the air conditioning system also has a key role in thermal management.



### Tap into e-dditional potential

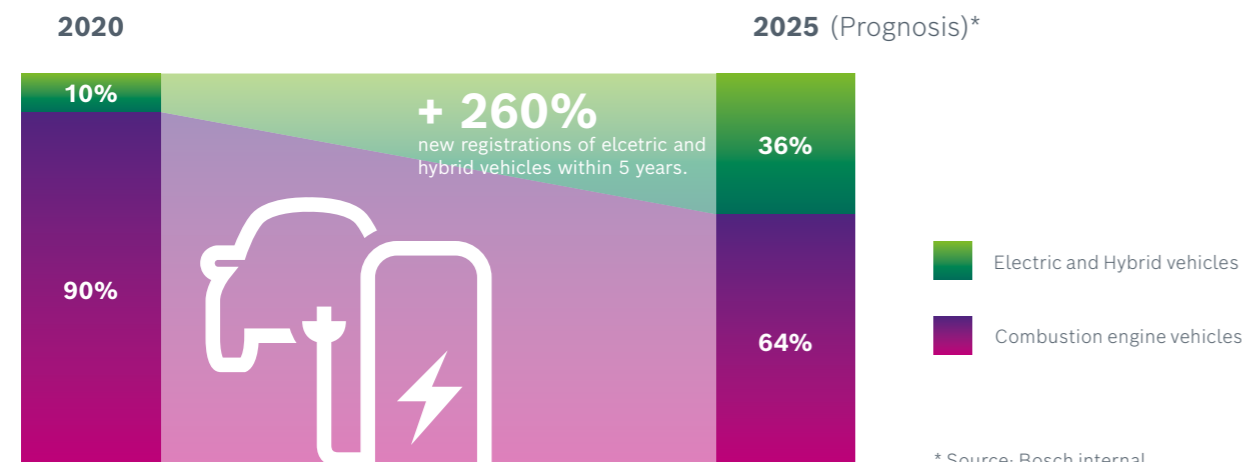
By cooling the battery, the air conditioning system supports effective charging processes and contributes significantly to the vehicle's performance and battery life. So regular AC service for e- and hybrid vehicles is no longer just for comfort, but also to preserve the value of the vehicle. In light of the developments in the vehicle market, this will become a natural part of your daily work in the near future.



Learn more about the Bosch intelligent thermal management.

<https://www.youtube.com/watch?v=Qck3zxWQZio>

### Prognosis New Registrations 2020 – 2025 (Passenger Cars / Light Commercial Vehicles)



\* Source: Bosch internal

# AC Portfolio

## Always the right choice for your needs

Air conditioning systems in vehicles require regular maintenance. The market potential for intelligent air conditioning service is therefore constantly increasing and is getting more and more important especially for hybrid and electrical vehicles. With its new ACS range, Bosch makes the maintenance operations of the AC R134a and R1234yf systems easier and more efficient. Product development

has been driven by Bosch and its expertise of years in the aftermarket together with a deep and wide analysis of the customers experience using our ACS units. From high-end, full featured units to more essential – with the right balance of performance and functionalities to cover all service tasks, the workshop is always equipped with the right ACS equipment.



### ACS 563 / ACS 553

#### The basic equipment for air conditioning service

A fully automatic unit with no manual valves resulting in easy operation and significant time-savings. The calibration of the tank is protected thanks to its position inside the cart. The electronically controlled air purge keeps the refrigerant in the inner tank free of air and non-condensable gases.

### ACS 663 / ACS 653

#### Standard unit for highly efficient air conditioning service

Deep recovery function with up to 99% recovery rate ensures higher performance and time savings. The powerful vacuum pump provides for a fast service also for larger systems and the integrated leak detection test with UV dye helps to find leakages quickly. Thanks to the intelligent oil management for PAG/POE oil, the workshop is prepared for the future without the need for manual bottle changes.

### ACS 763 / ACS 753

#### Fully automatic air conditioning service in perfection

On top of the highlights of the standard units the premium units offer a better overview and usability thanks to a large and swivelling display. Thanks to the integrated leak detection with N2/N2H2 kit, leakages can be located more accurately and faster. The sealed UV/oil bottles avoid air in the bottles, so no moisture can enter the system.

### ACS 863

#### Premium AC service with integrated refrigerant identifier

The refrigerant identifier checks the purity of the refrigerant R1234yf according to SAE and OE specifications.

# ACS 863

## Premium air conditioning service



R1234yf



**Fully automatic R1234yf service unit with integrated refrigerant detection – for the highest demands on service units for air conditioning systems in passenger cars and commercial vehicles.**

The ACS 863 is compatible with hybrid air conditioning systems and meets the specifications of German car manufacturers as well as SAE and European Union standards.

Thanks to high-precision measurement technology and integrated deep recovery function with up to 99 % recovery, the ACS 863 ensures highly professional and economical air conditioning service.

With fully automatic service functions and the elimination of manual valves, high-performance components, integrated refrigerant purity testing, leak detection and vacuum testing, and the ability to work networked with Bosch Connected Repair, the ACS 863 leaves nothing to be desired.



**Order number**

- ❄️ **ACS 863: SP00000162**
- ❄️ **ACS 863 (OE Version): SP00000167**

### Benefits at a glance

- ▶ **No contamination thanks to AC service with refrigerant purity check** by an integrated refrigerant identifier
- ▶ **Environment-friendly** with the deep recovery function recovering up to 99 %
- ▶ **Find leaks faster and perform a professional troubleshooting** by benefiting from the embedded leak detection and vacuum test
- ▶ **Future-proof and safe working** thanks to smart oil management preventing contamination of different oils with independent, hermetically sealed oil injection system
- ▶ **Excellent overview and usability** thanks to the large swiveling control panel and color display with innovative user interface



### Why is it important to check Refrigerant Purity?

Contamination could influence the performance of the car's AC system. Professional AC service should check the purity of the refrigerant. Causes damage to the AC system of the car – resulting in poor performance or further harm in the long term.

# ACS 763 and ACS 753

## Premium air conditioning service



R1234yf



R134a



**Fully automatic service units for R1234yf or R134a air conditioning systems in passenger cars and commercial vehicles meet the highest demands.**

ACS 763 and ACS 753 are compatible with hybrid air conditioning systems and are designed to provide time-saving professional service. They do not require manual valves, offer fully automatic service functions, high-performance components, leak detection and vacuum testing.

Thanks to high-precision measurement technology and Deep Recovery function, which recovers up to 99 % of the refrigerant, professional and economical AC service is guaranteed. In conjunction with Bosch Connected Repair, service results can be sent quickly and conveniently to other devices.



**Order number**

- ❄️ **ACS 763: SP00000163**
- ❄️ **ACS 753: SP00000160**

### Benefits at a glance

- ▶ **High performance with the deep recovery** function recovering up to 99 %
- ▶ **Find leaks faster and perform a professional troubleshooting** by benefiting from the embedded leak detection and vacuum test
- ▶ **Future-proof and safe working** thanks to smart oil management preventing contamination of different oils with independent, hermetically sealed oil injection system
- ▶ **Excellent overview and usability** thanks to the large swiveling control panel and color display with innovative user interface



### Did you know?

With Bosch Connected Repair **10 minutes** per vehicle can be saved during the repair process. It links software systems, workshop equipment and vehicle data in order to optimise workshop efficiency and workflows.

# ACS 663 and ACS 653

Standard unit for highly efficient air conditioning service



## The new standard in R1234yf and R134a air conditioning service units.

ACS 663 and ACS 653 combine service speed, operational flexibility, automation and connectivity – perfect for ensuring excellent maintenance and profitability for your workshop.

Our Allrounders are ideal for workshops with medium to high workloads in air conditioning service. With high-precision measurement technology and fully automatic service, the units enable efficient, convenient maintenance on air conditioning systems in passenger cars, commercial vehicles, hybrid or electric vehicles. The integrated deep recovery function ensures a recovery rate of up to 99 % – for maximum economy and more sustainability.

Both units perform all the following tasks fully automatically and without manual intervention. With powerful components and the integrated vacuum test, they are designed to "save time". With various retrofit kits, e.g. Wifi connection kit, refrigerant detection or leak detection kit N2/N2H2, ACS 663 and ACS 653 can be precisely adapted to individual workshop requirements.



- Order number**
- ACS 663:** SP00000171
  - ACS 663-P:** SP00000172
  - ACS 663-RI:** SP00000173
  - ACS 653:** SP00000174
  - ACS 653-P:** SP00000175

### Benefits at a glance

- ▶ **High performance** with the deep recovery function recovering up to 99 % of the refrigerant
- ▶ **Find leaks faster and perform a professional troubleshooting** by benefiting from the embedded vacuum test
- ▶ **Future-proof and safe working** thanks to smart oil management preventing contamination of different oils with independent, hermetically sealed oil injection system
- ▶ **Reduces risk of high pressure and keeps refrigerant free from non-condensable gas** thanks to the electronically controlled air purge system

### ! Did you know?

**Importance of managing PAG/POE**  
On electric and hybrid AC systems, the non-conductivity of compressor oil, mostly POEs or special PAGs, is mandatory to keep the system up and running from an electrical point of view. This can only be ensured if the right type of oil is charged and no cross-contamination of different types is present. From this perspective, all units are SAE J2843 or SAE J2788 compliant.

# Deep Recovery function

For high refrigerant recovery rates

Almost all vehicle manufacturers recommend specific service intervals for air conditioning systems. A/C service includes functional and visual inspection as well as refrigerant replacement. During the standard procedure, the compressor of the A/C service unit recovers the refrigerant and stores it at its own tank. In doing so, up to 95 % of

the refrigerant is recovered in several steps. It is released through the venting outlet of the vacuum pump during the vacuum phase. Due to this particular loss of refrigerant, resulting in an increased environmental impact and a time-consuming procedure, an optimised function was developed: Deep Recovery.



Figures depending on AC system specific configuration and operating conditions

## Bosch A/C service units with Deep Recovery

In a second recovery stage after the standard procedure, the vacuum pump extracts as much of the remaining refrigerant as possible. Depending on the A/C configuration and its operating conditions, this allows recovery of up to 99 % of the refrigerant. In the subsequent vacuum phase, only a very small amount of remaining refrigerant is released into the atmosphere. Especially in the case of expensive R1234yf refrigerant, this means a significant cost reduction.

Another advantage of Deep Recovery: the vacuum pump starts dehumidifying the air conditioning system as early as possible, during the refrigerant recovery. For workshops this means additional time savings when performing A/C services, significantly reducing any additionally required vacuum phase. A/C refilling can thus be started earlier.

## Recovering more refrigerant more effectively and protecting the environment

In this manner, the Bosch A/C service unit performs 2 phases (refrigerant recovery and A/C system vacuum) in one stage. Waiting times for pressure build-up are also reduced during Deep Recovery. Thanks to this resource-saving procedure, the loss of environmentally-hazardous refrigerant is minimized as well.

### ! Did you know?

**Protects the environment – Saves money due to the fact that two phases are covered in one operation.**



# ACS 563 and ACS 553

The right choice for standard routines



The right choice for standard routines on R1234yf or R134a AC systems.

The latest additions to the Bosch range of AC service units offer a good balance of price, performance and functionality, covering basic service tasks such as refrigerant recovery, recycling and refrigerant recharging.

Product design and development are focused on the essentials in the ACS 563 and ACS 553 – making them just right for standard service and maintenance tasks on passenger cars, commercial vehicles or hybrid and electric vehicles with R1234yf or R134a based AC systems.

The units are well suited for smaller workshops with a low workload in air conditioning service or as a second unit during the peak season in spring and summer. With their high-precision measurement technology and fully automatic service, the units enable efficient service work.



Order number

- ACS 563: SP00000151
- ACS 563-P: SP00000152
- ACS 553: SP00000148
- ACS 553-P: SP00000149

## Benefits at a glance

- ▶ **Reduction in service time** as all tasks are performed fully automatically
- ▶ **Reduces risk of high pressure and keep refrigerant free from non-condensable gas** thanks to the electronically controlled air purge system
- ▶ **Fits any needs** thank to several optionals retrofit kits
- ▶ **Guarantees safe working in workshop conditions** thanks to the metal frame which protects components such as the internal tank



Did you know?

### Importance of air purge electronic control

The automatic electronic purge of non-condensable gases does minimize high-pressure procedures preventing the recovery to be completed. The software control ensures that it runs at the right time, when the machine is in standby mode and air-refrigerant is separated and leads accurately thus to no refrigerant loss. The mixture of non-condensable gases and recycled refrigerant might have serious impact on the operating conditions, energy efficiency, and lifetime of the vehicle AC system compressor.

# ACS 810

Servicing larger AC systems



Fully automated air conditioning service for heavy-duty vehicles.

The ACS 810 is specifically designed to meet the requirements of buses and trucks as well as R134a-based heavy-duty air conditioning systems.

The unit automatically controls the recovery, recycling and refilling of refrigerant. 5-metre service hoses allow easy connection to the air conditioning systems. Thanks to the integrated 2-litre oil bottles for injection and oil recovery, the ACS 810 can hold a large volume of compressor lubricant.

During recovery, the dual fan provides excellent temperature control and constant refrigerant pressure. It also protects the internal components from overheating. The high-performance charging pump enables fast and comprehensive charging with refrigerant.

The ACS 810 guarantees professional air conditioning service for heavy trucks and buses and also has a printer for generating detailed reports.



Order number

- ACS 810: SP00000003

## Benefits at a glance

- ▶ **Reduction in service time** thanks to the powerful refrigerant charge pump
- ▶ **Fast vacuum for cleaning AC systems** thanks to the powerful vacuum pump
- ▶ **Comfortable working** as long service hoses are provided as standard (5 m)



Did you know?

### Importance of the deep vacuum pump

A good vacuum phase is not only required to properly support the refrigerant charging process but most of all to perfectly remove the humidity from the air conditioning system itself. Reason being, humidity in an AC system can have very negative impact through acids creation which can lead to compressor breakdown. A proper vacuuming phase has then positive effects on the cooling performances. That's the reason why all our units are equipped with high performance vacuum pumps.

# Technical Data

## ACS 863, ACS 763/ACS 753 and ACS 663/ACS 653

| Model            | ACS 863         | ACS 763 / ACS 753 | ACS 663 / ACS 653 |
|------------------|-----------------|-------------------|-------------------|
| Refrigerant Type | R1234yf         | R1234yf / R134a   | R1234yf / R134a   |
| Operating Mode   | Fully automatic | Fully automatic   | Fully automatic   |

| Functions                       |  |  |                                      |
|---------------------------------|--|--|--------------------------------------|
| Refrigerant Recovery            | Automatic                                      | Automatic                                      | Automatic                            |
| Recovery Performance            | Upt to 99 %                                    | Upt to 99 %                                    | Upt to 99 %                          |
| Refrigerant Identifier          | Yes  | Optional                                       | Optional                             |
| Waste Oil Recovery              | Automatic with electronic scale                | Automatic with electronic scale                | Automatic with electronic scale      |
| Vacuum                          | Automatic                                      | Automatic                                      | Automatic                            |
| Vacuum Leak Test                | Automatic                                      | Automatic                                      | Automatic                            |
| Pressure Leak Test (Pre-Charge) | Yes  | R1234yf: Yes<br>R1324a: No                     | R1234yf: Yes<br>R1324a: No           |
| Pressure Leak Test (N2 / N2H2)  | Yes  | Yes  | Optional                             |
| Hybrid AC System Ready          | Yes  | Yes  | Yes                                  |
| Oil Injection                   | PAG and POE<br>Automatic with electronic scale | PAG and POE<br>Automatic with electronic scale | PAG / POE<br>Automatic               |
| UV Dye Injection                | Automatic with electronic scale                | Automatic with electronic scale                | Automatic                            |
| Refrigerant Recharge            | Automatic with electronic scale                | Automatic with electronic scale                | Automatic with electronic scale      |
| Flushing Injection              | Optional                                       | Optional                                       | Optional                             |
| Embedded Printer                | Yes  | Yes  | ACS 663-RI<br>ACS 663-P<br>ACS 653-P |
| Air Purge System                | Automatic, Electronically controlled           | Automatic, Electronically controlled           | Automatic, Electronically controlled |

| Technical Specifications         |                                      |  |  |
|----------------------------------|--------------------------------------|--|--|
| HP & LP Panel Valves             | Valveless                            | Valveless                                    | Valveless                                    |
| HP & LP Pressure Gauges          | 100 mm Pulse free Class 1            | 100 mm Pulse free Class 1                    | 100 mm Pulse free Class 1                    |
| Tank Pressure Gauge              | Digital                              | Digital                                      | Digital                                      |
| Service Hoses Length             | 2.5 m (5 m Optional)                 | 2.5 m (5 m Optional)                         | 2.5 m (5 m Optional)                         |
| Display                          | 7" Color Display                     | 7" Color Display                             | 4,3" Color Display                           |
| Compressor                       | 1/4 HP                               | 1/4 HP                                       | 1/4 HP                                       |
| Vacuum Pump                      | 170 l/min (6 CFM)                    | 170 l/min (6 CFM)                            | 170 l/min (6 CFM)                            |
| Refrigerant Tank Capacity kg (l) | 19,5 kg<br>(22 l)                    | R1234yf: 19,5 Kg<br>R134a: 21,5 Kg<br>(22 l) | R1234yf: 19,5 Kg<br>R134a: 21,5 Kg<br>(22 l) |
| New Oil Bottles                  | 2 x 250 ml<br>(hermertically sealed) | 2 x 250 ml<br>(hermertically sealed)         | 2 x 250 ml                                   |
| Waste Oil Bottle                 | 1 x 250 ml                           | 1 x 250 ml                                   | 1 x 250 ml                                   |
| UV Dye Bottle                    | 1 x 250 ml<br>(hermertically sealed) | 1 x 250 ml<br>(hermertically sealed)         | 1 x 250 ml                                   |
| Dimensions (H x W x D)           | 105 x 75 x 77 cm                     | 105 x 75 x 77 cm                             | 105 x 75 x 77 cm                             |
| Weight                           | 112 kg                               | 112 kg                                       | 112 kg                                       |
| Power Supply                     | 230 V 50/60 Hz                       | 230 V 50/60 Hz                               | 230 V 50/60 Hz                               |

| Accessories                   |              |          |          |
|-------------------------------|--------------|----------|----------|
| Vehicle Database              | Yes          | Yes      | Yes      |
| Programmable User Database    | Yes          | Yes      | Yes      |
| AC System Performance Test    | Yes          | Yes      | Yes      |
| Vehicle Flushing Adapters Set | Optional kit | Optional | Optional |
| USB Port                      | Yes          | Yes      | Yes      |
| Wireless Connection           | Yes          | Yes      | Optional |
| Mobile App Connection         | Yes          | Yes      | Optional |

# Technical Data

## ACS 563/ACS 553 and ACS 810

| Model            | ACS 563 / ACS 553 | ACS 810   |
|------------------|-------------------|-----------|
| Refrigerant Type | R1234yf / R134a   | R134a     |
| Operating Mode   | Fully automatic   | Automatic |

| Functions                       |                                      |   |
|---------------------------------|--------------------------------------|---|
| Refrigerant Recovery            | Automatic                            | Automatic                                       |
| Recovery Performance            | Upt to 95 %                          | Upt to 95 %                                     |
| Refrigerant Identifier          | Optional (external)                  | No  |
| Waste Oil Recovery              | Automatic                            | Automatic                                       |
| Vacuum                          | Automatic                            | Automatic                                       |
| Vacuum Leak Test                | Automatic                            | Automatic                                       |
| Pressure Leak Test (Pre-Charge) | R1234yf: Yes<br>R1324a: No           | No  |
| Pressure Leak Test (N2 / N2H2)  | No                                   | No  |
| Hybrid AC System Ready          | Yes                                  | Yes   |
| Oil Injection                   | PAG / POE<br>Automatic               | Manual (via Keypad)                             |
| UV Dye Injection                | No                                   | No  |
| Refrigerant Recharge            | Automatic with electronic scale      | Automatic with electronic scale and Charge pump |
| Flushing Injection              | Optional                             | Optional  |
| Embedded Printer                | ACS 563-P<br>ACS 553-P               | Yes   |
| Air Purge System                | Automatic, Electronically controlled | Automatic                                       |

| Technical Specifications         |  |                                 |
|----------------------------------|--|---------------------------------|
| HP & LP Panel Valves             | Valveless                                  | 2                               |
| HP & LP Pressure Gauges          | 100 mm Pulse free Class 1                  | 80 mm Pulse free Class 1        |
| Tank Pressure Gauge              | No   | 40 mm                           |
| Service Hoses Length             | 2.5 m (5 m Optional)                       | 5 m (2.5 m extensions Optional) |
| Display                          | 4,3" Color Display                         | Backlit LCD                     |
| Compressor                       | 1/4 HP                                     | 1/2 HP                          |
| Vacuum Pump                      | 70 l/min (2.5 CFM)                         | 283 l/min (10 CFM)              |
| Refrigerant Tank Capacity kg (l) | R1234yf: 8,9 Kg<br>R134a: 9,8 Kg<br>(10 l) | 35 Kg<br>(40 l)                 |
| New Oil Bottles                  | 2 x 250 ml                                 | 1 x 2000 ml                     |
| Waste Oil Bottle                 | 1 x 250 ml                                 | 1 x 2000 ml                     |
| UV Dye Bottle                    | No   | No                              |
| Dimensions (H x W x D)           | 99 x 69 x 67 cm                            | 128 x 69 x 69 cm                |
| Weight                           | 74 kg                                      | 120 kg                          |
| Power Supply                     | 230 V 50/60 Hz                             | 230 V 50 Hz                     |

| Accessories                   |          |          |
|-------------------------------|----------|----------|
| Vehicle Database              | Yes      | Yes      |
| Programmable User Database    | Yes      | Yes      |
| AC System Performance Test    | Yes      | No       |
| Vehicle Flushing Adapters Set | Optional | Optional |
| USB Port                      | Yes      | No       |
| Wireless Connection           | Optional | No       |
| Mobile App Connection         | Optional | No       |

# The right equipment for your service

## Flushing and leak detection

Bosch offers a great variety of accessories for a comprehensive and professional AC service and maintenance. From standard routines such as recovery and recharge to solutions for complex troubleshooting and prepared for future technologies.



### Flushing as a best practice to regain AC systems efficiency:

Flushing removes all trace of lubricants, contaminated oil, refrigerant or carbon residuals from the system. The smallest particle of contamination causes loss of efficiency. It takes less than 1/10 of a teaspoon of debris (dirt) to completely restrict flow of refrigerant and oil in a vehicle's AC system. Cleanliness and proper flushing procedures are very important.



Learn how to easily flush the AC system with the new flushing kit from Bosch

<https://youtu.be/QmfSO800YXA>



### Troubleshooting via leak detection:

Thanks to the nitrogen kit from Bosch finding leakages in a vehicle's AC system is as effective as never before. Using a 5 % hydrogen / 95 % nitrogen tracer gas mix can help to locate leaks faster for repair of the AC system, without wasting refrigerant.



See yourself how efficient and effective leaks can be found when using Bosch's nitrogen kit.

[https://youtu.be/KcdCwTwwqF\\_c](https://youtu.be/KcdCwTwwqF_c)

# Selection of special accessories

## According to your individual needs

Thanks to its great variety of consumables such as oils for vacuum pumps or for electric and hybrid vehicles as well as further special accessories to prepare or upgrade the AC service units workshops can equip themselves according to their needs.

### Flushing Kit

Car manufacturers have been giving precise guidelines for all the procedures required after the replacement of an AC system component. The flushing kit for the AC service units has been developed in collaboration with the most important car manufacturers.



#### ACT1234

Flushing bottle with filter and connections kit to ensure the AC system is clean and free from any foreign debris that could cause blockages or oil/refrigerant flow restriction preventing the compressor from operating efficiently.

SP00101175



#### ACT1234-SFK

ACT1234 flushing kit with Universal Adapters Kit ACT2502-104.

SP00101176



#### ACT2502-104

Universal adapters kit to isolate AC system components for closed loop flushing. Suitable to most AC line ends to allow attachment of the flushing kit.

S P00100734



#### SP00101974

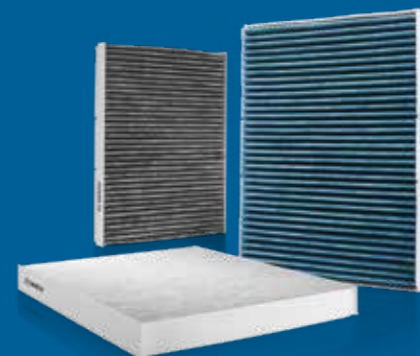
Professional adapters kit to help connecting the AC system components as much straightforward as possible. Consists of 15 different adapters.

SP00101974

|             |  |            |
|-------------|--|------------|
| ACT2600-185 | Extra Large Cone 34mm for Flushing Adapter | SP00101282 |
| ACT2602-273 | TXV Valve Bridge (VW Group)                | SP00101284 |
| ACT1800-460 | By-pass Filter Dryer (VW Group)            | SP00101283 |
| ACT2602-274 | TXV Valve Bridge S Class (Mercedes)        | SP00101285 |
| ACT2602-275 | TXV Valve Bridge C Class (Mercedes)        | SP00101286 |

### ! Did you know?

The the worst pollution can not be seen! Bosch recommends replacing the filter once a year or every 15,000 kilometers. Professional air conditioning service for workshop customers should always include replacing the cabin filter.





# Selection of special accessories

## Useful for your daily work

### Leak Detection

Finding leakages in the AC system is supported with a choice of solutions from Bosch. Bosch offers a broad range of equipment to pressurise and test the system to locate leaks swiftly and with ease.



**FLG820**  
Universal leak detector kit for R134a and R1234yf with pressure regulator, UNI4409 21,7x1/14" adapter for N2H2 bottle, connection hoses, R134a HP and R1234yf HP quick coupler. Included 2l N2H2 bottle.

- 📄 **SP00101945 (FLG820-IT)**
- 📄 **SP00101946 (FLG820-FR)**
- 📄 **SP00101947 (FLG820-DE)**
- 📄 **SP00101948 (FLG820-UK)**



**FLG720**  
Universal leak detector kit for R134a and R1234yf with pressure regulator, UNI4409 21,7x1/14" adapter for N2H2 bottle, connection hoses, R134a HP and R1234yf HP quick coupler.

- 📄 **SP00101991 (FLG720-IT)**
- 📄 **SP00101992 (FLG720-FR)**
- 📄 **SP00101993 (FLG720-DE)**
- 📄 **SP00101994 (FLG720-UK)**



**FLG220**  
Leak detector for H2 and refrigerants  
5ppm H2 concentration detection  
Heated semi-conductor sensor and micro-processor control for reliable digital signal processing  
Adjustable leak sensitivity level with 7 LED visual indicators

- 📄 **SP00101990**



**RA504075**  
N2 cylinders trolley with R134a kit including 0-38 bar pressure regulator with manometers and 2,5 mt service hose with R134a quick coupler.

- 📄 **SP01100360**



**RA504076**  
N2H2 cylinders trolley with R134a kit including 0-10 bar pressure regulator with manometers and 2,5 mt service hose with R134a quick coupler

- 📄 **SP00101196**



**ACT50yf**  
R1234yf HP Coupler + 1/4 SAE - 12MM adapter for RA504075/76

- 📄 **SP00101589**



**RA16286B**  
"Universal UV Dye 240 ml for R134a and R1234yf, for 32 applications, OEM approved, SAE certified, squeezable dosing bottle"

- 📄 **1692600144**



**SP00101018**  
Twister Oil/UV Injector for R-134a systems

- 📄 **SP00101018**



**SP00101465**  
R1234yf adapter for Twister Oil injector SP00101018

- 📄 **SP00101465**

|                    |   |                   |
|--------------------|---|-------------------|
| <b>ACT1234-NXX</b> | N2/N2H2 kit with add-on manifold and connections to enable the N2/N2H2 leak detection embedded function | <b>SP00101740</b> |
| <b>ACT1234-NIK</b> | N2H2 Installation kit with cylinder holder bracket with pressure regulator and connection hose          | <b>SP00101952</b> |

### Special tools and adapters



**SP00101973**  
Spring Lock Kit including most used spring lock tools suitable for several different AC system connections. Consist of 13 different adapters (Toyota, Audi, VW, Ford, OPEL)

- 📄 **SP00101973**



**RA161000**  
O-Ring Kit containing 10pcs x 25 o-ring types

- 📄 **SP0F210059**



**RA162000**  
Schrader Valves Kit containing 7 types + 1 remover tool

- 📄 **SP00101681**

|                   |  |                   |
|-------------------|--|-------------------|
| <b>SP00101700</b> | R1234yf HP Service Port Adapter - Service Port Extension | <b>SP00101700</b> |
| <b>ACT12688</b>   | R1234yf LP Service Port Adapter - Service Port Extension | <b>SP00101825</b> |
| <b>ACT12686</b>   | R134a HP Service Port Adapter - Service Port Extension   | <b>SP00101344</b> |
| <b>ACT12689</b>   | R134a LP Service Port Adapter - Service Port Extension   | <b>SP00101826</b> |
| <b>RA6050KIT</b>  | Bus and Heavy Duty service ports adapters                | <b>SP00101408</b> |
| <b>SP00101972</b> | Solenoid Valve Operating Magnet                          | <b>SP00101972</b> |

### Miscellaneous



**RA43230EU**  
-50°C to 150°C digital thermometer with +/- 1°C accuracy. Celsius/Fahrenheit, auto power off, one LR44 battery

- 📄 **SP00101824**



**1X34-7iCONV**  
Service kit to convert the unit refrigerant type from R134a to R1234yf. It includes yf service hoses and couplers, filter dryer, vacuum pump oil and tank adaptors.

- 📄 **SP00102091**



**STRPK\_134**  
Starter kit R134a containing O'Ring kit, UV Dye 240 ml, PAG 46 oil bottle 250 ml, UV lamp with glasses, safety goggles and gloves

- 📄 **SP00101416**



**STRPK\_1234YF**  
Starter kit R1234yf containing O'Ring kit, UV Dye 240 ml, PAG 46 oil bottle 250 ml, UV lamp with glasses, safety goggles and gloves

- 📄 **SP00101409**

|                    |   |                       |
|--------------------|---|-----------------------|
| <b>SP00101379</b>  | Wi-Fi USB Dongle for ACS xx3 units                        | <b>SP00101379</b>     |
| <b>AC3339</b>      | R1234yf and R134a DB update for ACS x63 and ACS x53 units | <b>in preparation</b> |
| <b>ACT1234-RIK</b> | R1234yf Refrigerant Identifier Kit                        | <b>SP00101951</b>     |
| <b>ACT1234-PIK</b> | Printer Installation kit for ACS xx3 units                | <b>SP00101953</b>     |

### Consumables

|                        |  |                   |
|------------------------|--|-------------------|
| <b>AZOIDRO 2.2 x 4</b> | Nitrogen/Hydrogen cylinder 2.2 lt (4 pieces)   | <b>SP00101996</b> |
| <b>AZOIDRO 1 x 6</b>   | Nitrogen/Hydrogen cylinder 1 lt (6 pieces)   | <b>SP00101997</b> |
| <b>5607069</b>         | Printer paper  | <b>SP00100087</b> |
| <b>5604052</b>         | Vacuum Pump Oil (1 bottle 600 ml)  | <b>SP00100086</b> |
| <b>5604052PACK</b>     | Vacuum Pump Oil (12 bottles 600 ml)  | <b>SP00100088</b> |
| <b>PAGRF100</b>        | PAG 100 Oil Bottle (250 ml) for R134a systems  | <b>SP00101034</b> |
| <b>PAGRF150</b>        | PAG 150 Oil Bottle (250 ml) for R134a systems  | <b>SP00101035</b> |
| <b>PAGRF46</b>         | PAG 46 Oil Bottle (250 ml) for R134a systems   | <b>SP00101036</b> |
| <b>PAGRF46yf</b>       | PAG 46 Oil Bottle (250 ml) for R1234yf systems   | <b>SP00101422</b> |
| <b>POERFOIL</b>        | POE Oil Bottle (250 ml) for Electrical and Hybrid systems for R134a (ISO 80)               | <b>SP00101586</b> |
| <b>POERFOILyf</b>      | POE Oil Bottle (250 ml) for Electrical and Hybrid systems for R1234yf (ISO 80)             | <b>SP00101827</b> |
| <b>PAGRFSD</b>         | PAG Oil Bottle (250 ml) for Electrical and Hybrid systems with SANDEN SPA2 (R134a/R1234yf) | <b>SP00101828</b> |
| <b>RA245VSK</b>        | R134a Service Hoses Extension: 2,44 m for ACS x11 and ACS 652                              | <b>SP00100075</b> |
| <b>RA500VSK</b>        | R134a Service Hoses Extension: 5 m for ACS x11 and ACS 652                                 | <b>SP01100358</b> |
| <b>1234-SH5</b>        | R1234yf 5 mt Service Hoses Kit for ACS xx3 unit  | <b>SP00101877</b> |
| <b>1x34-SH5</b>        | R134a 5 mt Service Hoses Kit for ACS xx3 unit  | <b>SP00101878</b> |



# Technical Support and Service Training

## Back-up for workshops

Even the most experienced technician may have questions when diagnosing complex cases. The technical support and service training sessions help technicians find the solution to various vehicle repair cases.



### Service and repair become easier and faster

In addition to classic hotline support, our experts provide subscribers with competent, live assistance via diagnostic offerings such as technical inquiry, remote diagnosis, and the Visual Connect Pro app. Benefit from our extensive industry knowledge in vehicle repair (passenger cars and commercial vehicles) and product support for Bosch workshop equipment.

### Service training

Today's vehicles are becoming increasingly complex and new technologies are challenging. That is why it is important to stay up to date and to deepen know-how. Workshops can choose from over 100 hands-on classroom training sessions and digital offerings on current topics. This is supplemented with online and live webcast training.

With Bosch service training, technicians learn to solve practical cases on commercially available automotive systems. The aim is to apply the newly acquired knowledge directly in their own workshop environment, thereby increasing productivity and reducing waiting times for customers.

### Benefits at a glance

- ▶ **Extensive competence** in vehicle systems technology from Bosch
- ▶ **Expertise in the mechanical and electrical systems** of all vehicle manufacturer brands
- ▶ **Fast problem solving**
- ▶ **Constant availability** of the latest information



For more information about and registration, visit the Automotive Campus.

[www.bosch-training-solutions.com](http://www.bosch-training-solutions.com)



# What drives you, drives us

Bosch technologies are used in most vehicles worldwide. People, and assuring their mobility, is what we are focused on.

Therefore, we have dedicated over 130 years of pioneering spirit and expertise in research and manufacturing to achieving this.

We provide the aftermarket and workshops worldwide with modern diagnostic and workshop equipment and a wide range of spare parts for passenger cars and commercial vehicles:

- ▶ Solutions for efficient and effective vehicle repairs
- ▶ Innovative workshop equipment and software
- ▶ One of the world's most comprehensive ranges of new and exchange parts
- ▶ Large network of wholesale customers, for quick and reliable parts supply
- ▶ Competent technical support
- ▶ Comprehensive educational and training offers
- ▶ Targeted sales and marketing support

Find out more at:  
[boschaftermarket.com](https://boschaftermarket.com)

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