

unicorn



refrigeration tools & equipment



AUTOMOTIVE CATALOGUE 2024



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SERVICE STATIONS

13519 Ariazone 5001 FA R134a

The Ariazone 5001FA (“Full Automatic”) features a refreshingly simple dashboard layout that makes it a pleasure to operate. Four arrows, a “start” and a “stop” button allow for a quick navigation through the menu in plain English (or – upon selection - several other languages+).

The menu is easy to view in the new LCD display.

Oil and UV management are organized through two electronic load cells (for oil) and a simple timer (for UV)

An on-board database allows the user to find proper charging weights and lubricant types for a wide range of vehicles. Obviously, this database can be augmented by manually adding user defined applications. Easily connects to a PC or laptop by means of a USB port. At the end of the service process, the complete procedure’s result is printed.

Ariazone equipment is exemplary in reliability, ease of maintenance and sturdy (metal) design.

TECHNICAL SPECIFICATIONS:

- Vacuum Pump: 72 liter/minute Two Stage (2.5 cfm)
- Recovery cylinder capacity: 20 kg R-134a
- Scale accuracy: 10 gr
- Pressure gauges: 68mm Class 1.0
- Used oil measurement: yes, scale
- Oil injection measurement: yes, scale
- UV injections: yes, timer
- Dimensions: 620 x 590 x 1090 mm
- Weight: 85 kg



Replacement parts/Accessories

Service hose blue, 180 cm.....	11824
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Quick coupling, R-134a, LP.....	11103
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Cylinder hose blue.....	10615
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2 x Filter	13256
Ester oil, 1 ltr.....	16601
Recovery tank, 27 ltr.....	11728
Recycle guard.....	11001
T-line vacuum pump oil, 1 ltr.....	12842
UV-Dye.....	13485
PAG FHD46 YF 250 ml.....	15344

SERVICE STATIONS

12471

Ariazone 5001 R134a

Conventional and therefore super reliable a/c service machine. Easy to use - using only four " arrow type" selector buttons.

Recovery - in a single pass recycling mode - the refrigerant passes through an oil separator and filter/drier - thus creating a " ready to re-use" refrigerant. In combination with the scale a reliable measurement of recovered refrigerant is realized.

Evacuation - a strong 2.5 cfm - dual stage vacuum pump dries the system and prepares it to receive the proper amount of refrigerant.

Charging - by simply selecting the quantity of refrigerant using the selector arrows, a proper charge is ensured.

Oil separation - a unique, internally heated oil separator allows for a sufficient oil separation.

Oil and Dye injection - separate oil and dye storage flasks allow for easy on-board charging of user selected quantities of oil and dye into the a/c system.

TECHNICAL SPECIFICATIONS:

- Vacuum Pump: 72 liter/minute Two Stage (2.5 cfm)
- Moisture indicator/ sight glass
- 5 micron main filter
- Recovery/ storage cylinder 27.2 liter
- Power: 240/ 50
- 10 amp service fuse
- Dimensions: 600 x 600 x 1,100 (lxwxh)
- Weight: 67 kg



Recovery, vacuum and recharge functions can be selected to run in a semi-automatic mode.

The equipment provides a warning signal when machine service comes due.

Replacement parts/Accessories

Service hose blue, 180 cm.....	11824
Service hose red, 180 cm.....	11819
Quick coupling, R-134a, LP.....	11103
Quick coupling, R-134a, HP.....	11102
Cylinder hose blue.....	10615
Cylinder hose red.....	10616
1 x Filter.....	13510
2 x Filter	13256
Ester oil, 1 ltr.....	16601
Recovery tank, 27 ltr.....	11728
Recycle guard.....	11001
T-line vacuum pump oil, 1 ltr.....	12842
UV-Dye.....	13485
PAG FHD46 YF 250 ml.....	15344

SERVICE STATIONS

17761

Ariazone 5001 R1234yf

The future is reliable! The proven technology of the Ariazone A/C service machines is available for the 1234YF refrigerant as well. The simple to use -semi automatic machine offers accuracy and reliability in recovery, recycling, evacuation, and re-charging of automotive a/c systems.

Obviously, the machine will allow the user to add oil or UV additive from on-board storage containers.

The system provides electronically controlled functions, whilst keeping the operator constantly informed and in full control.

This unit has been designed and build to be long lasting and with high level of reliability including maximum safety for the operator. The operator needs only to be responsible for the proper use and maintenance of the unit, in accordance with the manufacturer instructions found in this manual.

TECHNICAL SPECIFICATIONS:

- Refrigerant HFO-1234yf
- Scale resolution +/- 10 g
- Load cell 60kg with 150% overload capacity
- LP and HP gauges AI-D 68 mm kl.1.0
- Recovery cylinder . 12 kg
- Vacuum pump 115 l/min (4cfm), sparkless
- Dimensions 620 x 590 mm x1090
- Weight 78 kg
- Supply voltage 220-240VAC / 50-60Hz



Replacement parts/Accessories

Service hose blue, 180 cm.....	14194
Service hose red, 180 cm.....	14195
Quick coupling, R-1234yf, LP.....	18577
Quick coupling, R-1234yf HP.....	18578
Cylinder hose blue.....	10615
Cylinder hose red.....	10616
1 x Filter.....	13510
2 x Filter	13256
Ester oil, 1 ltr.....	12643
Recovery tank, 12 ltr.....	11727
Recycle guard 1234YF	16536
T-line vacuum pump oil, 1 ltr.....	12842
UV-Dye.....	13485
PAG FHD46 YF 250 ml.....	15344

SERVICE STATIONS

17762

Ariazone FA 5001 R1234yf

The Ariazone 5001FA (“Full Automatic”) features a refreshingly simple dashboard lay-out that makes it a pleasure to operate. Four arrows, a “start” and a “stop” button allow for a quick navigation through the menu in plain English (or – upon selection - several other languages+).

The menu is easy to view in the new LCD display. Oil and UV management are organized through two electronic load cells (for oil) and a simple timer (for UV)

An on-board database allows the user to find proper charging weights and lubricant types for a wide range of vehicles. Obviously, this database can be augmented by manually adding user defined applications. Easily connects to a PC or laptop by means of a USB port.

TECHNICAL SPECIFICATIONS:

- Vacuum Pump: 72 liter/minute Two Stage (2.5 cfm)
- Recovery cylinder capacity: 12 kg R1234yf
- Scale accuracy: 10 gr
- Pressure gauges: 68mm Class 1.0
- Used oil measurement: yes, scale
- Oil injection measurement: yes, scale
- UV injections: yes, timer
- Dimensions: 620 x 590 x 1090 mm
- Weight: 85 kg



Replacement parts/Accessories

Service hose blue, 300cm.....	13969
Service hose red, 300 cm.....	13404
Quick coupling, R-1234yf, LP.....	18577
Quick coupling, R-1234yf, HP.....	18578
Cylinder hose blue.....	10615
Cylinder hose red.....	10616
1 x Filter.....	13510
2 x Filter	13256
Ester oil, 1 ltr.....	16601
Recovery tank, 12 ltr.....	11727
Recycle guard 1234YF	16536
T-line vacuum pump oil, 1 ltr.....	12842
UV-Dye.....	13485
PAG FHD46 YF 250 ml.....	15344

SERVICE STATIONS

18499

Wigam optima+ r134a/r1234yf

With the 7" Touch Screen Display, OPTIMA can be set up according to one's own working habits. The OPTIMA enjoys a design concept that allows the maximum accuracy of the refrigerant quantity, in line with the industry standards and in full respect of the environment. The 3 independent scales with 1g resolution, managing Oils and Additives, allow to operate in a safe and reliable way on Hybrid and Full Electric Vehicles.

The unit is designed to be able to work with either R134a or R1234yf. With the appropriate completion kit, the OPTIMA can, through a retrofit operation, converted to the use with the other refrigerant.

TECHNICAL SPECIFICATIONS:

- Refrigerants R134a/R1234YF (retrofit)
- Recovery rate 300 g/min
- Recovery accuracy +/- 15g
- Recovery efficiency >99%
- Charge accuracy +/- 15g
- Pump swept volume 100 l/min
- Bottle capacity 10 kg
- Refrigerant scale resolution 5 g
- Oil/UV scale resolution 1 g
- Storage temperature -10 to +50°C
- Working ambient temperature 0 to +40°C
- Dimensions & weight (without packaging) 54 x 56 x 118 cm / 64 kg



Replacement parts/Accessories

Service hose blue, 300cm.....	13969
Service hose red, 300 cm.....	13404
Quick coupling, R-134a, LP.....	11103
Quick coupling, R-134a, HP.....	11102
Quick coupling, R-1234yf, LP.....	18577
Quick coupling, R-1234yf, HP.....	18578
Cylinder hose blue.....	10615
Cylinder hose red.....	10616
1 x Filter.....	13510
2 x Filter	13256
Ester oil, 1 ltr.....	16601
Recovery tank, 12,5 ltr.....	11727
Recycle guard.....	11001
Recycle guard 1234YF.....	16536
T-line vacuum pump oil, 1 ltr.....	12842
UV-Dye.....	15344

SERVICE STATIONS

19104 KLIMACHECK CO2 set

With the R744 Climate Service Kit from Klimacheck, A/C service can be performed cost-effectively and easily. Every workshop can enter the field of air conditioning service for CO2 air conditioning systems at low cost.

CO2 refrigerant can be blown off into the atmosphere. The refrigerant is therefore climate neutral. However, when servicing the A/C, strict safety rules must be observed to prevent inhaling too much CO2.

For filling the A/C system with the R744 Climate Service Set from Klimacheck, Klimacheck has developed cartridges with measured amounts of refrigerant for the below listed car brands and types. The cylinders can be exchanged.

- Audi Q4 etron / Audi Q4 Sportback with heat pump R744.
- Seat Cupra Born with heat pump R744.
- Skoda Enyaq with R744 heat pump
- Volkswagen ID3 / ID4 / ID5 / ID6 / ID Buzz with R744 heat pump
- Mercedes Benz W213 / W222 / C217 with R744 heat pump
- Konvekta air conditioning systems bus and train.



TECHNICAL SPECIFICATIONS:

- Refrigerant R744 (10kg bottles)
- Works in coop with your R134a service station.
- Two valve manifold with class 1, 1% oil filled gauges
- High pressure hoses operating pressure 200 bar
- LP and HP Quick couplers
- -Oil injector
- Sturdy case
- Oil drain bottle

Replacement parts/Accessories

Quick coupling, R-744 LP.....	18620
Quick coupling, R-744 HP.....	18621
Manifold and gauges.....	18416
R744 Cartridge Mercedes.....	19106
R744 Cartridge VW-MEB.....	19105



FLUSHING EQUIPMENT

14315
14316

Ekotez flushing machines

The Ekoflush K570 and the K560 flushing machines are fully automatic flushing apparatus to flush refrigerant circuits.

As a flushing agent, the Honeywell Solstice PF-C is used. The PF-C product is a specially developed product that resembles a refrigerant with very strong cleaning properties. It is HFO based thus with a low GWP number.

The flushing machine pulses the PF-C through the system, and upon return to the machine- any and all contaminants are separated and disposed of.

Depending on the grade of contamination, the PF-C may be reused many times; thus making the process affordable for critical systems.

TECHNICAL SPECIFICATIONS

570

- Larger cart type unit - suitable for larger systems.
- Suitable for systems up to 12-liter capacity
- Connections: 5/8"-UNF
- Power: 240/50
- 1,350 Watt (max)
- Dimensions: 570 x 605 x 950 mm
- Weight: 54 kg



TECHNICAL SPECIFICATIONS

560

- Portable unit for (for instance) rooftop applications
- Suitable for systems up to 5 liter capacity
- Connections: 7/16"-UNF
- Power: 240/50
- 1,100 Watt (max)
- Dimensions: 475x 260 x 490 mm
- Weight: 26 kg

FLUSHING EQUIPMENT

19278 Airsept A/C flushing machine

The Airsept AC Flushing machine features an innovative design that offers maximum contaminant extraction on the initial flush pass. AirSept’s Flush Machine set-up is OE approved because of the high quality and functionality.

The AirSept A/C Flush Machine offers forward and reverse flush modes with capability of switching on the fly, for deep cleaning heavily contaminated components. Helps shake embedded particulates loose for extraction.

Simply fill the machine with fresh solution, flip the valves to Filter/Flush Mode, then open the Air Control Valve to start the flush process.

The air flow management system maintains a consistent, effective flow while protecting A/C components from excess air pressure. The Air Purge Cycle bypasses the filter, which thus allows greater air flow for faster drying.

15-minute flush and 30-minute drying combine for a quick, efficient process.

AirSept’s A/C Flush Machine includes a built-in 2-stage compressed air filter. The filter traps moisture, particulates, oil, and other impurities down to five microns in size.



TECHNICAL SPECIFICATIONS

- Semi-automatic
- Powered by compressed air only
- Operating air pressure 55 PSI
- /3,8 Bar
- With air purge
- Hose diameter 0,375 inch
- Maximum operating temperature 121 Celcius
- Use with 40016 Airsept solvent
- Dimensions: 475x 260 x 490 mm
- Weight: 26 kg

Replacement parts/Accessories

Airsept Solvent.....19279



FLUSHING EQUIPMENT

16154 T line flushing kit KC5000

The refrigerant flushing kit is solely developed to flush automotive A/C systems. Designed for use with refrigerant R134a or R1234yf.

Flushing the refrigerant circuit with refrigerant is to remove oil and other foreign liquids from the A/C system.

With the electric heating belt the refrigerant in the cylinder can be heated up to 70°C. At 70°C the vapor pressure of R134a is around 20 bar. This extremely warm refrigerant gives a very good cleaning result. On the other side of the A/C system you connect an empty cylinder to collect the contaminated refrigerant.

By using a sightglass at the side of the receiver cylinder you are be able to observe the result of the flushing process. If the result of the flushing process is insufficient, because there is still contamination visible in the sightglass, the flushing process needs to be repeated.

After the flushing process, the refrigerant can be re-used, by utilizing the distillation process via the gas side of the receiver cylinder.

Because liquids, like oil, UV-Dye and other oil contaminations are heavier then refrigerant, the dirt collects at the bottom of the receiver cylinder. After evacuation, the dirt can be drained from the receiver cylinder and appropriately be disposed of.

Below you will find the list of delivered products. These are also available separately.



Replacement parts/Accessories	
Cylinder refrigerant 27.2 ltr. with Y-valve.....	11728
Sightglass Mini A/C 3/8"	16248
Heater Blanket RCH-10	13913
Hose 3/8 yellow 3/8 FF x 3/8 FF 0,20m	15607
Valve Ball 3/8" MF x 3/8" FF	12162
Hose 3/8 yellow 3/8 str. x 3/8 str. 2.00 mtr	14833
Cylinder Adaptor 3/8" SAE TB38/218.....	12185
-UR3-046 Adaptor ¼"f x 3/8"m	12456
Cap ¼" Brass	11677
Copper Flare Gasket ¼" 704-02-GC	11672
Retrofit Coupler HP ¼"	11979
Adapter UR2-64 3/8"Mf x ¼"Mf	14672



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FLUSHING EQUIPMENT

Adapters

Flush adapter set

Art. # 11101 - 1/4"

Art. # 16995 - 3/8"



Flushing an a/c system is an art - not a skill. It requires patience, thoughtfulness and ingenuity. Several newer a/c service machines offer a "flush function" in their menu. However, to actually flush often requires special adapters.

Unicorn offers various universal adapters and adapter sets, including the flush adapter set 1/4" or 3/8" in case.

The use of 3/8" connectors improves the flow, thus making flushing more efficient.



Flushing adapters



Art. # 12507

Flushing adapter (universal) RAC400 1/4"



Art. # 13216

Flushing adapter aluminum



Art. # 15621

Flushing adapter RK-6001



Art. # 15622

Flushing adapter RK-6002



Art. # 15623

Flushing adapter RK-6003



Art. 16896 Flushing adapter for female thread 3/4"-16 UNF-2A



Art.16897 Flushing adapter for female thread 7/8"-14 UNF-2A



Art. 16898 Flushing adapter for female thread 1"-14 UNF-2A



Art. # 16899 Flushing adapter 15,4mm



Art. # 16900 Flushing adapter 18,3mm



Art. # 16901 Flushing adapter 17,7mm and 11,8mm



Art. # 16902 Flushing adapter 28,4mm



Art. # 16903 Flushing adapter 13,8mm



Art. # 16904 Flushing adapter 16,7mm



Art.# 16905 Flushing adapter 16,4mm/13,2mm



Art. # 16906 Flushing adapter 14,7mm/11,9mm



Art. # 16907 Flushing adapter 14,4mm



Art. # 16908 Flushing adapter 20,7mm



Art. # 16909 Flushing adapter 16,8mm/13,6mm



Art. # 16910 Flushing adapter plate DENSO 10PA

SERVICE EQUIPMENT



RECOVERY MACHINE

15274 Recovery Unit Appion G5

Ultra-Fast, High Volume Refrigerant Recovery

At only 24 lbs, the industry-leading G5Twin 230 V is the smallest and lightest recovery machine capable of handling the tough demands of industrial/commercial refrigerant recovery - no job is too big for this little beast.

Designed for use with all common refrigerants, including R410A, the G5Twin pumps liquid and vapor without throttling. Featuring twin cylinders, twin condensers, a refrigerant-isolated crankcase and a turbine fan blasting over 700cfm of airflow for cool, durable, powerful operation.

Thanks to its compact size and powerful fan, very little refrigerant remains in the unit after usage. This G5Twin is therefore delivered without purge. The Appion G5Twin non-purge is UL certified and A2L compliant.



Replacement parts/Accessories
Megaflo hoses.....14977, 16176, 15322

TECHNICAL SPECIFICATIONS

- Compact and lightweight - Weighs only 24 lbs
- Twin Cylinders and Twin Condensers for ultra fast recovery
- 0.62 lbs/minute vapor and 10.36 lbs./minute of liquid
- Refrigerant-Isolated Crankcase - eliminating bearing contamination
- Up to 4X Faster Certified Recovery Rates compared to units in its class
- Automatic Liquid and Vapor Recovery - no throttling
- 7-inch 10-blade turbine fan @ 3000 rpm blasts over 700 cfm of cooling air over the twin heads and condensers
- Operates up to 50°F cooler for maximum reliability and speed even in high ambient conditions
- 230 V, 50Hz
- The Appion G5Twin non-purge is UL certified and A2L compliant.

VACUUM PUMP

13758

Vacuum pump Appion TEZ8

The Appion TEZ8 is a completely newly developed vacuum pump; Paying special attention to full flow through the pump.

The pump is consistently constructed on long service life and low flow resistance. The internal bores and connections are extra-large dimensioned. The omission of an internal non-return valve has a major effect on actual capacity. Special oil injection at the points where the oil is needed prevents the need for an oil bath, and also makes the non-return valve unnecessary.

Oil change can be done quickly by exchanging the special TEZOM oil cartridges. This can even happen during vacancy! Also, the quality of the oil is constantly visible in the transparent plastic cartridge; Pollution means replace.

A simple oil and particulate separator will cause dirt from the system into the pump, and no oil from the pump in the system (for example, power failure).

The internal - extra-large fan cools the pump with a small 17,000 liter fresh ambient air. This keeps the pump cool - even during prolonged pumping periods.

TECHNICAL SPECIFICATIONS

- Capacity 227 lpm @ 60 Hz
- Connections ¼" - 3/8" (2x) - ½"SAE
- Oil content 225 ml (cartridge)
- Dimensions TEZ8: 356 x 232 x 265
- Weight 14.5 kg 230V 50/60HZ



Replacement parts/Accessories

Appion TEZ8 Oil	15373
Megaflow hoses.....	14977,16176,15322

FEATURES:

- 2-stage baffle vacuum pump
- Ultimate vacuum < 20 microns
- Large cooling fan
- Lubricated bearings and baffles
- Compact construction
- External oil cartridge, alternate in seconds (even during operation)
- Oil separator with sieve in the suction side
- Oil cartridge and separator transparent
- Connection with 3 sizes
- Plastic housing



VACUUM PUMPS

18997 Economy vacuum pumps

We welcomed the Aitcool vacuum pumps range in our line-up, All vacuum pumps are of the dual stage design and are suitable for 110 as well as 220V.

The R32 pump features a spark free switch and an increased power cord. The pump has a high performance thermal and overload protector. It features an exhaust port for the oil-filter

TECHNICAL SPECIFICATIONS



Technical specifications				
Type		A-1240	A-1260	A-1280
Article		18997	17692	20435
Flow Rate	50Hz	3.5CFM 100L/min	5.0CFM 142L/min	7.0CFM 198L/min
	60Hz	4.0CFM 113L/min	6.0CFM 170L/min	8.0CFM 226L/min
Max vacuum	Partial Pressure	2x10 ⁻¹ Pa	2x10 ⁻¹ Pa	2x10 ⁻¹ Pa
	Total pressure	15Microns	15Microns	15Microns
Power		1/2HP	3/4HP	1HP
Port		1/4" & 3/8"SAE	1/4" & 3/8"SAE	1/4" & 3/8"SAE
Oil capacity		600ml	500ml	600ml
Dimensions		340x132x245	360x132x245	390x145x252
Weight		11kg	13.5kg	15kg



Technical specifications				
Type		A-1240SG-R32	A-1260SG-R32	A-1280SG-R32
Article		18413	18827	19332
Flow Rate	50Hz	3.5CFM 100L/min	5.0CFM 142L/min	7.0CFM 198L/min
	60Hz	4.0CFM 113L/min	6.0CFM 170L/min	8.0CFM 226L/min
Max vacuum	Partial Pressure	2x10 ⁻¹ Pa	2x10 ⁻¹ Pa	2x10 ⁻¹ Pa
	Total pressure	15Microns	15Microns	15Microns
Power		1/2HP	3/4HP	1HP
Port		1/4"SAE	1/4"SAE	1/4"SAE
Oil capacity		600ml	500ml	600ml
Dimensions		340x132x245	360x132x245	390x145x252
Weight		11kg	13.5kg	15kg

Replacement parts/Accessories
 Vacuum pump oil t-line.....12842
 Oil mist filter
 PVC transparent drain hose.....19181

ACCESSORIES

14756

Sight glass mini complete R134a

T-line A/C diagnosis mini complete with hoses and couplings (R-134a).

The T-line A/C diagnosis sight glass is a handy device for visualizing the refrigerant flow in operation.

By connecting the sturdy sight glass parallel to the refrigerant circuit, the the refrigerant circuit, the refrigerant and oil condition is visible to the naked eye.

The items in the set are also available as individual items,



18576

Sight glass mini complete R134a/R1234yf

The R134a/R1234yf version works in a similar way to the R134a version. The R134a/R1234yf version is completed with specific quick couplers and adapters.





ACCESSORIES

10680 Recycle guard ½” ACME

Too good to be true. Inject an additive into the a/c loop - run system and close all leaks!

Unfortunately, this has almost materialized in the industry in the past decade (about). A multitude of chemical manufacturers have come up with additives that will seal a leak without effort. Thus, add additive, runs the system and done. As opposed to an 8-hour R&R job.

However, this is not possible. To clarify, we need to make a distinction between the different leakstop additives.

we can distinguish two different categories:
 1. that only work on leaking o-rings or other "rubber" seals. These leaks stop additives are relatively harmless. They allow the older o-rings to swell somewhat and soften up a bit, which improves the sealing performance (temporarily).

2. that also seal leaks in metal parts. These leaks stop additives may - if used incorrectly or carelessly, cause damage.

Why?
 Leakstop additives usually work on the basis of activation by air and or moisture. Hence, when it comes in contact with air or moisture - it will "solidify" - and block the leak. In the manifold of any a/c service equipment there is plenty of moisture and air. Thus the sealant will edge in the manifold and block it. Repairs sometimes be so extensive that the machine is rendered a "total loss".

To protect your a/c service equipment, we recommend using the " Recycle Guard" pre-filter. This filter was specifically designed to filter out any leak stop chemicals - thus leaving the refrigerant entering you're a/c service equipment harmless. Saves headaches and money.



Replacement parts/Accessories	
Filterset.....	10681
Hose Acme x Acme.....	11912
Hose Acme x ¼”.....	10864
Hose ¼” x ¼”.....	11916

Note: Recycle guard ¼” SAE Flare - 11001



ACCESSORIES

Filters/dryers

11536	Universal pre-filter for portable recovery units 1/4" SAE, Type 032F		13945	Filter charging 5001 model 032-1/4 (Ariazone models), Type 032F	
11656	Filter/dryer 1/4" SAE, Type 162F		13946	Filter recovery 5001 meshing strainer	
11657	Filter/dryer 3/8" SAE, Type 163F		13947	Filter charging 5001 meshing strainer	
12082	Filter/dryer 1/4" SAE, Type 302F		17963	Filter dryer 1/2" SAE, Type FG-164	
11658	Filter/dryer 3/8" SAE, Type 303F		14941	Filter dryer 1/2", Type DML-164	
10369	Filter/dryer 1/2" DML, Type 304F		16770	Filter dryer Spin-On R1234YF/R134724	
15310	Filter/dryer O-ring solid core, Type 303OR		12908	Filter dryer FD565-02 AGO 428579M2	
10998	Filter/dryer 3/8" O-ring connection, Type 303OR		17326	Filter dryer Texa, Type 303 O-Ring	
11705	Filter/dryer 1/4" O-ring, Type 402OR		15943	Filter droger 052	
10492	Filter/dryer for Vulkan Speedmax		11659	Filter/dryer cartridge FGR-48, Type 048	
13944	Filter/dryer a/c service machines Spin On type (Robinar, Ecotecnics et c)		16832	Suction filter, Type FM085S	
13510	Filter/dryer for Ariazone 5001/601, 162-1/4", Type 162F-Ariazone		13048	Oil separator for the service station Ariazone 5001 with a 1/4" flare connection.	
16214	Filter/dryer for 6001		16033	Filter/dryer for ASC service stations	
13256	Filter recovery 5001 model 032-1/4, Type 032F		16034	Filter / dryer spin-on for EOK-twin service station	



ACCESSORIES

Quick couplers

18577
18578

Quick couplers R-1234YF
12mm



16184
16185

Quick coupler R-1234YF
including adapter



11271
11272

Quick coupler R-134a
1/4"SAE



11102
11103

Quick coupler R-134a
14mm



18621
18620

Quick coupler CO2/R744



18621
18620

Port extensions R134a



18621
18620

Port extensions 1234YF



ELECTRONIC LEAK DETECTION

18536

T-line 840 – Forming Gas

The D840 features durable electrolyte sensor technology

It is designed to detect halogen refrigerants and forming gas.

D840's unique digital leak size indicator removes any doubts

If a small leak needs to be repaired or not.

The digital display is independent of the audio alarm and sensitivity level

So the leak source can be accurately located.

- Unique numerical leak size indicator
- Detects all CFCs, HFCs, HCFCs and HFOs.
- Meets or exceeds the performance standards of EN14624
- Visual LED Leak Alert Near Sensor
- Low battery indicator
- Sound mute function
- CE certified
- Durable, stable sensor
- Numerical display Seven segment digital display (1 to 9)
- Detects forming gas (95% N₂/5% H₂)
- Automatic reset to ambient temperature
- Three adjustable sensitivity levels
- Fully mechanical pump
- Operates on four AA alkaline batteries
- Comfortable rubber handle



TECHNICAL SPECIFICATIONS

Compatible refrigerants			
Sensor	Forming gas and all CFCs, HFCs, HCFCs and HFO's		
Sensitivity (tested to meet EN 14624:2020)			
95% N ₂ /5% H ₂	95% N ₂ /5% H ₂ : 1 g/a		
R134a	R134a: 5 g/a		
R1234yf	R1234yf: 1 g/a		
Sensitivity tested to meet EN 14624:2020			
Minimum sensitivity threshold (fixed)	R134a	R1234yf	Forming gas
	5 g/a	1 g/a	1 g/a
Minimum sensitivity threshold (moving)	5 g/a	1 g/a	1 g/a
Recovery time	70 s	18 s	17.5 s
Minimum detection time (1 g/a)	Approximately one second		
Sensitivity threshold in polluted atmosphere	18 g/a	12 g/a	17 g/a
Response time	Instantaneous		
Warm-up time	<20 seconds		
Sensor life	+300 hours		
Power supply	Four AA alkaline batteries		
Battery life	4 hours, continuous		
Weight	0.7 kg (1.5 lbs)		
Calibration frequency	Annual check with calibrated leak standard		
Probe length	63 cm (27 inches)		

Replacement parts/Accessories

Sensor D840 leak detector.....18711



ELECTRONIC LEAK DETECTION

18535

T-Line D420 HFC-HFO-HCFC

The D420 features a powerful electrolyte sensor technology designed to meet more common and problematic HFC refrigerants such as R-134a, R-410A, R-404A, R-407A and R-507 in addition to the new refrigerants HFO-1234yf and all HCFCs (R-22) and CFCs (R-12) including SNAP approved hydrocarbon blends. D420 does not require rechargeable batteries.

- Detects all CFCs, HFCs, HCFCs and HFOs
- Certified design meets European standard EN14624
- Low battery indicator
- Sound mute function
- CE certified
- Durable, stable sensor
- Automatic calibration and reset to ambient temperature
- Three adjustable sensitivity levels
- Numerical display Seven segment digital display (1 to 9)
- Fully mechanical pump
- Operates on four AA alkaline batteries
- Comfortable rubber handle



TECHNICAL SPECIFICATIONS

Compatible refrigerants		
Sensor	All CFC's HFC's HCFC's and HFO's including R134 and 1234yf	
Sensitivity (tested to meet EN 14624:2020)		
R134a	R134a: 1 g/a	
R1234yf	R1234yf: 1 g/a	
Sensitivity tested to meet EN 14624:2020		
	R134a	R1234yf
Minimum sensitivity threshold (fixed)	1 g/a	1 g/a
Minimum sensitivity threshold (moving)	1 g/a	1 g/a
Recovery time	32 s	11 s
Minimum detection time (1 g/yr)	Approximately one second	
Sensitivity threshold in polluted atmosphere	12 g/a	12 g/a
Response time	Instantaneous	
Warm-up time	<20 seconds	
Sensor life	>300 hours	
Power supply	Four AA alkaline batteries	
Battery life	4 hours, continuous	
Weight	0.7 kg (1.5 lbs)	
Calibration frequency	Annual check with calibrated leak standard	
Probe length	43 cm (17 inches)	

Replacement parts/Accessories

Sensor D42013681



ELECTRONIC LEAK DETECTION

18537

T-Line D540

Unicorn D540 features a long-life heated sensor technology that is designed to detect all combustible gases including methane, propane, butane, acetylene, alcohol, and gasoline.

The unique digital leak size indicator takes the guesswork out of whether or not to repair a small leak. The digital display is independent from the audio alarm and sensitivity level, allowing the precise pinpointing of the leak source..

- Unique numeric leak size indicator
- Detects methane, propane, hydrogen, butane, acetylene, alcohol, gasoline and more
- Low battery indicator
- Audio mute function
- CE certified
- Long life, stable sensor
- Automatic calibration and reset to ambient
- Three adjustable sensitivity levels
- Uses four AA alkaline batteries
- Comfortable Santoprene grip



TECHNICAL SPECIFICATIONS

Compatible refrigerants	
H ₂ C Sensor	methane, propane, hydrogen, butane, acetylene, alcohol, gasoline and more
Sensitivity (tested to meet EN 14624-2020)	
R290	1 g/a R290
Minimum sensitivity threshold (fixed)	1 g/a minimum (R290)
Minimum sensitivity threshold (moving)	1 g/a minimum (R290)
Minimum detection time (1 g/y)	Approximately one second
Sensitivity threshold in polluted atmosphere	1 g/a
Recovery time	Approximately 45 seconds
Response time	Instantaneous
Warm-up time	<30 seconds
Sensor life	>300 hours
Power supply	Four AA alkaline batteries
Battery life	8 hours, continuous
Weight	0.7 kg (1.5 lbs)
Calibration frequency	Annual check with calibrated leak standard
Probe length	43 cm (17 inches)

Replacement parts/Accessories

Sensor	
D540.....	143
07	

MEASURING INSTRUMENTS



ELECTRONIC LEAK DETECTION

18629 Inficon D-TEK 3

As the first accurate, reliable, highly sensitive, cordless refrigerant leak detector, the original D-TEK revolutionized the field.

D-TEK 3 builds on the proven performance of D-TEK leak detectors with added features to help you get your job done faster. An easy-to-change sensor, quick charge lithium ion battery, and a new ergonomic design make D-TEK 3 a versatile tool for everyday RAC maintenance and repair. Plus, a new optional CO2 sensor gives you two instruments in one. Upgrade your toolbox with this accurate and reliable leak detector.

D-TEK 3 is designed with versatility in mind. Quickly and easily switch to one of the optional sensors to look for refrigerant, CO2, or even flammable refrigerant leaks!

- Low, Medium, High, and Super sensitivity settings
- Automatic and manual zero modes
- Rugged carrying case included
- Detects all CFCs, HCFCs, HFCs, HFOs, and blends (including A2Ls)
- Compatible with optional sensors for CO2 or flammable refrigerants
- Optional extra-long probe for hard-to-reach areas



TECHNICAL SPECIFICATIONS

Compatible refrigerants	
Refrigerant sensor	R22, R32, R134a, R404a, R407c, R410a, R422b, R448a, R449a, R452a/b, R454a/b, R507 (AZ50), R1234yf/ze and more
CO2 sensor	CO2 (R744)
Flammable refrigerant sensor	R290, R600a, R411a
Sensitivity (tested to EN14624 standard)	
R134a	0.04 oz./yr (1 g/yr)
R1234yf	0.02 oz./yr (0.5 g/yr)
R290	0.2 oz./yr (5 g/yr)
R744 (CO2)	0.07 oz./yr (2 g/yr)
Ammonia	0.1 oz./yr (3 g/yr)
Sensor life	Up to 2,000 hours
Power source	Lithium ion battery (rechargeable) Micro USB (can operate while charging)
Battery life	~10 hours
Weight 0.97 lb. (440 g)	~10 hours
Certifications	EN14624:2020 A2L certified CE, UKCA
Patents	Pat. US 11262296B2
Probe length (standard probe)	~17 in. (43 cm)

Replacement parts/Accessories
 Sensor.....18685
 Sensor tip.....17121
 IR sensor19084.

IDENTIFIER

16652
16653

Legend R1234YF/R134a analyzer

The Legend Series™ R-1234yf/R-134a Refrigerant Analyzer is a refrigerant identifier and analyzer for the past, present, and future. Service R-12, R-134a, and R-1234yf vehicles with one tool.

The Legend ID™ is a worldwide ready tool to meet the service needs of HFO-1234yf equipped vehicles. It is certified to the SAE J2912 standard and connects directly to SAE J2843 and J3030 AC Service machines that have an external analyzer USB port.

Comes complete with;

- R-1234yf and R-134a low side service couplers
- R-1234yf and R-134a cylinder adapters
- (2) R-1234yf sample hoses
- (2) R-134a sample hoses
- Charging adapter
- Custom fit storage case

TECHNICAL SPECIFICATIONS

- Measuring Range: 90-100% Pure Refrigerant for analyzed gases
- Accuracy: ±2%
- User Interface: Color LCD, Display Size: 5"
- Power: 90-264 VAC, 50-60 Hz
- Digital Communications: USB 2.0, Optional Bluetooth 2.0
- Operating Voltage: 2 VDC
- Ambient Temperature: 50 to 120°F (10 to 49°C)
- Humidity: 0-95% RH non-condensing
- Pressure: 30-500 psig (2 - 34 Bar)
- Altitude: 0 to 8,000' (2,440 m)
- Dimensions (L×W×H): 26.67×15.24×7.62
- Product Weight: 3.5 lbs.



- Sample Type: Vapor
- Printer: Integrated Thermal Printer (Optional)
- Refrigerant % Displayed: R-1234yf, R-134a, R-12, R-22, Hydrocarbons (HC), Unknown, Air
- Test Time: 90 seconds

Replacement parts/Accessories

¼" Flare (R-12) Fitting
Replacement R-134 a Hose
Replacement R1234YF hose
Replacement R1234YF Tank Adapter ...
Print paper



IDENTIFIER

13449
16639

T-line identifier
R1234YF MINI
R134A MINI

Economy type refrigerant identifier.
Provides PASS or NO PASS information only.
Dedicated to R-1234yf or R-134a

Power supplied by vehicle battery (12VDC)
via battery clamps. Purge and sampling via
manual pump action.

Even at a lower investment it is possible to
verify the refrigerant type.

TECHNICAL SPECIFICATIONS

- Weight 0.8 kg
- R1234yf only or R134a only
- Accuracy OK / Not OK at 95% R1234yf
- Power supply 12V
- Operating temperature -10 ° C to + 45 ° C

MEGAOHM METER

13207

Fieldpiece smg5

The Fieldpiece Digital Megohm Meter, model SMG5, is a compact standalone meter designed for checking HVAC compressor insulation. The SMG5 provides a 1000V voltage source, monitors current, and displays the resistance between the test points. Maximum current output is <1mA. It can be used to determine the condition of insulation from winding to ground in a motor, compressor, or transformer. Includes a case, alligator clip lead tip and leads with removable tips.



- TECHNICAL SPECIFICATIONS
- Predict compressor failure
- 1,000VDC voltage source
- Measure up to 2000 megohm
- Blackli LCD1234yf

VACUUM GAUGE

18625

Aitcool AVG2

The AVG2 has a long wireless range and can be operated on a smartphone.

The LCD display provides a comprehensive overview of vacuum conditions.

Audible and visual alarm for set vacuum.

You can arbitrarily switch between 3 kinds of working modes.

Comes in a very strong, impact resistant, durable rubber sleeve.



TECHNICAL SPECIFICATIONS

- Maximum overload pressure 500PSI
- Range 0-10000pa, 0-100.00mbar 0-75.000mmHg, 0-75000microns
- Resolution 1 micron (50 to 2000 microns), 100 microns (2001 to 10,000 microns)
- Refresh rate 0.5 seconds
- Accuracy $\pm(5\%$ of reading + 5 microns) within the reading of 50 to 1000 microns
- Temperature coefficient: 0.1 x (specified accuracy)/ °C (<18°C or >28°C)
- Operating temperature 0°C to 50°C at <75%RH

17570

Inficon pilot plus

Innovative filter protects sensor, eliminates need for cleaning Measures from atmosphere to 1 micron

Auto shut-off after 60 minutes

Pirani sensor for better accuracy

Large, easy-to-read LCD display



TECHNICAL SPECIFICATIONS

- Operates for 45 hours on one 9V battery
- Quick calibration specific to local pressure
- Displays in micron, Pascal, Torr or millibar
- Low battery indicator
- Plastic storage case included



VACUUM GAUGE

18691

Fieldpiece MG44INT

Like every piece of Fieldpiece hardware, the Wireless Vacuum Gauge (MG44) is built to make your work easier. It helps eliminate misleading measurements by allowing you to connect it at the system port – even those awkward, hard-to-reach spots. It's also housed in a rugged impact-case.



TECHNICAL SPECIFICATIONS

- Accuracy: $\pm(5\%$ of reading + 5 microns) at 25°C, 50 to 2000 microns
- Range and Units: 50 to 25000 microns of mercury (English), 6 to 3333 Pascals (Metric), 0.06 to 33.33 mBar (Metric), 50 to 25000 mTorr (Metric), 0.05 to 25 Torr (Metric, equivalent to mmHg)
- Best Resolution: 1 micron of mercury (below 2000 microns), 1 Pascal (below 250 Pascals), 0.001 mBar (below 2.5 mBar), 1 mTorr (below 2000 mTorr), 0.001 Torr (below 2.5 Torr, equivalent to mmHg)
- Battery Life: 40 hours typical alkaline
- Auto Power Off: 15 minutes default (APO adjustable)
- Wireless Range: 1000 feet (305 meters) line of sight. Obstructions affect distance.
- Radio Frequency: 2.4 GHz
- Water Resistance: IP54
- Operating Environment: (-10°C to 50°C at <75% RH
- Storage Temperature: -20°C to 60°C at <80% RH (with batteries removed)
- Weight: 300 g

17452

JB DV-22N

The improved DV-22N Digital Vacuum Gauge is an easy-to-use, compact vacuum gauge featuring a sleek new design with enhanced user settings and an extended range sensor.

Easy-to-read back-lit display

Improved response time for instantaneous vacuum reading

Audible and visual alarms when target vacuum level is achieved Measures in microns, psia, inHg, pascals, Torr, mTorr and mBar • Available with rugged carrying case as DV-24N



TECHNICAL SPECIFICATIONS

Vacuum Reading Range 100,000 to 10 microns

Working Temperature +0°C to 48.9°C

Power Supply Three AA batteries (included)

Shipping Weight 39 kg

9" length x 3.25" width x 1.5" depth

THERMOMETER

10553

T-line RT900

Simple and reliable. This t-line thermometer has a stainless steel temperature probe - making it suitable for air and liquid applications.

Large display refreshes every second.
Max/Min and Hold functions.

TECHNICAL SPECIFICATIONS

- Accuracy: $\pm 1^\circ\text{C}$ between -50°C and $+150^\circ\text{C}$, Beyond $\pm 2^\circ\text{C}$
- Range: -50°C to $+200^\circ\text{C}$
- Resolution: 0.1°C between -19.9°C and 199°C , otherwise 1°C
- Measuring interval: 1 second
- Power: 1.5V battery (AAA)
- Probe: 35 x 125 mm
- Dimensions: 65 x 97 x 20 mm (l x b x h)
- Weight: ~ 100 grams



17224

T-line infrared

The IR9-PEN thermometer is a non-contact infrared thermometer with circular laser

TECHNICAL SPECIFICATIONS

- Wavelength 8UM-14UM
- Measurement range $-33 \sim 500^\circ\text{C}$
- Accuracy $\pm 2.0\%$ / 2.0°C
- Operating temperature $0 \sim 50^\circ\text{C}$
- Response time (90%) 1 sec
- Power supply 1x AAA S



THERMOMETER

12482

Fieldpiece ST4 – dual temperature meter

TECHNICAL SPECIFICATIONS

- good in ambient conditions of 73°F ±9°F (23°C ±5°C), <75% relative humidity
- Display: 3.5 digit LCD, 2000 count
- Over range: "OL" or "-OL" is displayed
- Range: -58 to 2000°F (-50 to 1300°C)
- Resolution: 0.1°
- Accuracy:
- ±4°F @ -58 to 32°F
- ±(0.3%rdg +2°F) @ 32 to 1100°F
- ±(0.5%rdg +2°F) @ 1100 to 2000°F;
- ±2°C @ -50 to 0°C
- ±(0.3%rdg +1°C) @ 0 to 600°C
- ±(0.5%rdg +1°C) @ 600 to 1300°C
- Accuracy after field calibration: ±1°F @ 30 to 120°F, ±6°F @ 0 to 50°F
- Temperature coefficient: 0.1 x (specified accuracy) per °C (0 to 18°C, 28 to 50°C)
- Measurement rate: 2.5 readings/second
- Battery type: 9V, NEDA 1604, JIS 006P, IEC 6F22



- Battery life: 200 hours typical alkaline
- Operating environment: 32°F to 122°F (0°C to 50°C) at <75% RH
- Storage temperature: -4°F to 140°F (-20°C to 60°C), 0 to 80% RH (with battery removed)

SCALES

20449

Scale T-Line GCW control

Discover our advanced refrigerant scale, with a tripple range weighing format of 30/60/120 kg and 10/20/50g precision. This CE-calibrated scale complies with BRL 100 legislation and has a robust design to ensure durability. The display is protected by an aluminium cover and Plexiglas plate. The built-in NiMH battery ensures mobility and comes with a charger. With our scale, you choose precision, durability and ease of use.

TECHNICAL SPECIFICATIONS

- Weighing format tripple range 30/60/120kg 10/20/50g
- CE-certified (trade purposes)
- Meets BRL 100 legislation
- Robust cast iron body with integrated indicator
- Circular weighing platform with straight front side at the back with integrated handle, width 332 mm, depth 286 mm
- Overall dimensions W x D 332 x 413 mm
- Weighing platform with rubber mat

17224

Refrigerant charging scale 120 kg/ 5g with valve module

Simple refrigerant charging scale with valve module.

TECHNICAL SPECIFICATIONS

120 kg capacity with a 5 gram accuracy.



- Simple, water-protected keypad with 5 function keys (zero, tare (manual, automatic or preset), print, on/off and function key to which a desired function can easily be linked)
- Clearly readable LCD display, height 25 mm, protected by aluminium cover and Plexiglas plate
- Functions include: high resolution weighing (10 x more accurate), net/gross or lb/kg switching, addition, percentage weighing, article counting, hold and peak function
- Nimh battery with charger





SCALES

16679

JB Digital Refrigerant Scale 100 kg Atlas

The JB ATLAS refrigerant charging scale is designed for the HVAC/R industry. Everyday users will appreciate the advanced solid state load cell for superior sensitivity and accuracy. The ATLAS's 100 kg weight capacity, all metal construction, heavy duty plastic storage case. Operates with a 9-Volt battery (not included).



TECHNICAL SPECIFICATIONS

- Solid state load cell accurate to 0.25 oz/ 10gm without need of cylinder directly on center of weighing platform
- Pieces are modularized so parts are easily replaced without need to purchase entirely new unit
-
- LCD screen on a handheld can be read from a distance or in direct sunlight
- 100 kg capacity
- Displays weight in decimal pounds, pounds and ounces, and kilograms
- Auto shut off after 30 minutes to preserve battery and can be disabled

20373

SR47INT scale wireless 114kg

This calibrated scale combines modern wireless electronics and rugged materials to perform at the high level you demand. The platform is made of thick aluminum to maintain accuracy over the life of the product. Rubber pad and bumpers cushion both the tank and the scale itself. A new wireless protocol sends platform measurements to both the included remote display and the Fieldpiece Job Link® System Mobile App.



TECHNICAL SPECIFICATIONS

- Good in ambient conditions of 73°F ±9°F (23°C ±5°C), <75% relative humidity
- Over range: "OL" is displayed
- Maximum load: 252 lbs (114 kg)
- Auto power off: 30 minutes of inactivity
- Backlight: Blue, turns off in 60 seconds
- Accuracy: ±0.03%rdg + (10 g), (0 to 30 kg)
- ±0.05%rdg + (10 g), 30 to 114 kg)
- Resolution and Units: kg g (10 g), kg (0.1 kg), g (10 g)
- Temp. coefficient: 0.1 x (specified accuracy) per °F
- Remote Display: 80 hours typical alkaline
- Platform: 200 hours typical alkaline
- Operating environ.: 0°C to 50°C <75% RH
- Storage temp: -20°C to 60°C, 0 to 80% RH
- Weight: 3.3 kg

TEST EQUIPMENT

13284

Fieldpiece Non-contact voltage tester

This non-contact voltage detector features an analog feel. The closer the probe is to the voltage source, the louder and brighter the indicators become. Detects AC voltages without contact and features a bright red LED light and buzzer. With a 24VAC to 440VAC range of the SNCV1 offers technicians the ability to test thermostats and other HVAC/R parameter easily. Clips to your shirt pocket and is a quick source to find out whether that line is hot or not.



TECHNICAL SPECIFICATIONS

- Detects live AC voltage without contact
- Bright red LED and loud beeper
- Range: 24VAC to 440VAC

MANIFOLDS

11791 T-line 2 valves R134a

- Aluminum zeppelin body
- 2 valve
- 80 mm gauges (1% maximum deviation)
- Refrigerants: R134a, 404A, 407C and R-22



14363 T-line 2 valves R1234yf

- Aluminum zeppelin body
- 2 valve
- 80 mm gauges (1% maximum deviation)
- Refrigerants: R1234yf



11793 T-line 4 valves R134a

- Aluminum zeppelin body
- 4 valve
- 80 mm gauges (1% maximum deviation)
- Refrigerants: R134a



14364 T-line 4 valves R1234yf

- Aluminum zeppelin body
- 4 valve
- 80 mm gauges (1% maximum deviation)
- Refrigerants: R1234yf



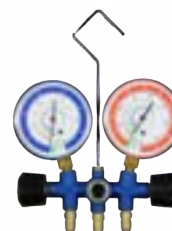
13621 T-line 1 valve nitrogen

- Aluminum body
- 1 valve
- Class 1.0 gauge
- Nitrogen



18414 T-line 2 valves light

- Aluminum body
- 2 valves
- Class 1.0 gauge
- R32, R134a, R404A, R407C - bar/psi



MANIFOLD SETS

15213 T-line 4-valves HFC set

A 4 valves manifold set for HFC refrigerants. This set contains a low and high pressure gauge with a 80mm diameter and scales for R-22, R-134a, R410A, R-407C - Bar/PSI - °C. The four hoses are included. The three 1/4" hoses have got a 1/4" ball valve and the 3/8" service hose has a straight 3/8" connection.



13273 T-line 4-valves R134a set

- Aluminum zeppelin body
- 4 valve
- 80 mm gauges (1% maximum deviation)
- R134a Quick couplers
- Refrigerants: R134a, 404A, 407C and R-22



14373 T-line 4-valves R1234yf set

- Aluminum zeppelin body
- 4 valve
- 80 mm gauges (1% maximum deviation)
- R1234yf Quick couplers
- Refrigerants: R1234yf



13274 T-line 2-valves R134a set

- Aluminum zeppelin body
- 2 valve
- 80 mm gauges (1% maximum deviation)
- R134a Quick couplers
- Refrigerants: R134a, 404A, 407C and R-22



14372 T-line 2-valves R1234yf set

- Aluminum zeppelin body
- 2 valve
- 80 mm gauges (1% maximum deviation)
- R1234yf Quick couplers
- Refrigerants: R1234yf





MANIFOLDS CO2/R744

18416

JB 2-valve CO2/R744

The 30744 CO2 Manifold from JB Industries is an easy-to-use 2-valve aluminum manifold

2-Valve aluminum manifold for transcritical CO2 applications

Unique spindle valves tighten easily

3-1/8" (80 mm) Class 1, 1% pulse-free liquid filled gauges

36" hoses with 1/4" SAE fittings (3 pack)

working pressure 2900 psi (200 bar)

Rugged carrying case (included)



TECHNICAL SPECIFICATIONS

- Low pressure 30" of Hg to 83 bar
- High pressure 30" of Hg to 160 bar
- Temperature range -55°C to 30°C
- Critical point 31.1°C/72.9 bar
- Certifications: EN472/EN837 pressure equipment directive and 2014/68/CE article 4, paragraph 3

17123

Blondelle 2-valve CO2/R744

- Refrigerant: R744 (CO2)
- Transcritical: 160 bar
- 2 lane manifold, aluminium body
- Unique spindle valves, always tight without effort
- Class 1, 'A Lame Acier' Ø 80 gauges
- Dry, oil filled (Ø 80), pulse-free
- Supplied in a Blondelle plastic carrying case including:
- Transcritical: 3 hoses, length 1meter with 1/4" SAE fittings, WP 200 Bar. 36" hoses



MANIFOLDS DIGITAL

18352

Fieldpiece SMN380V

Digital wireless 3-port refrigerant Manifold
The heavy duty casing, reinforced hook, water resistance, impact resistant screen, SM380Vstrategically placed thermocouple ports, and hermetically sealed sight glass, all ensure the SMANs are ready to withstand the rigors of field use.



TECHNICAL SPECIFICATIONS

- Display: LCD (5 inches diagonal)
- Backlight: Blue (adjustable duration)
- Low Battery Indication
- Over Range Display: OL
- Auto Power Off: 30 minutes of inactivity
- Maximum Manifold Pressure: (5500 kPa)
- Battery Type: 6 x AA alkaline
- Battery Life: 350 hours typical
- Distance decreases through obstructions

- Data Port: Micro USB (for extracting data logs or updating firmware)
- Operating Environment: (0°C to 50°C) at <75% RH
- Storage Environment: (-20°C to 60°C) at <80% RH (with battery removed)
- Temperature Coefficient: 0.1 x (specified accuracy) per °C (0°C to 18°C, 28°C to 50°C)
- Weight: (1.83 kg)
- Water Resistant: Designed to IP54

17957

Fieldpiece SMN480V

With 4 ports this manifold can handle any job. Thermocouple ports have been moved to the rear for added protection and a streamlined setup. The SM480v also has a built-in micron gauge. The extra-large LCD makes it easier for you to read measurements and live calculations.



TECHNICAL SPECIFICATIONS

- Display: LCD (5 inches diagonal)
- Backlight: Blue (adjustable duration)
- Low Battery Indication
- Over Range Display: OL
- Auto Power Off: 30 minutes of inactivity
- Maximum Manifold Pressure: (5500 kPa)
- Battery Type: 6 x AA alkaline
- Battery Life: 350 hours typical
- distance decreases through obstructions

- Data Port: Micro USB (for extracting data logs or updating firmware)
- Operating Environment: (0°C to 50°C) at <75% RH
- Storage Environment: (-20°C to 60°C) at <80% RH (with battery removed)
- Temperature Coefficient: 0.1 x (specified accuracy) per °C (0°C to 18°C, 28°C to 50°C), per
- Weight: (1.83 kg)
- Water Resistant: Designed to IP54



MANIFOLDS DIGITAL

18208 **JB Wireless 4-valve Digital Manifold**

4-Valve digital manifold w/CCLE4-60 hose set and case. Can be used with 60+ refrigerants.

TECHNICAL SPECIFICATIONS

- Measures high side and low side pressure (psi and kPa) and temperature (°F and °C)
- Calculates superheat, subcooling, vapor and liquid saturation
- Laser welded stainless steel transducers
- Universal K-Type clamp thermocouples
- Transflective display with easy-to-navigate menu
- Protective boot and water-resistant design

18641 **ITE DIMA-4**

The digital ITE manifold DIMA-4 is a high quality digital manifold and suitable for use with any k-type thermocouple. Comes with a 9V battery (40 hours of battery life), a case, hoses and 2 temperature probes. Possibility to add new refrigerants (will need re-programming)

TECHNICAL SPECIFICATIONS

- Suitable for more than 50 refrigerants:
- R134a, R290a, 407c, R410a, R404a, R600a, 1234yf, R744(CO2)
- Ammonia version upon request DIMA-4/NH3
- Switch between liquid or vapor
- Indication with non-azeotropic refrigerants (e.g. R-407c.)
- Measuring of vacuum on both working lines (0,01 bar)



- American made heavy-duty forged aluminum Zeppelin®
 - 4-valve piston style manifold
 - 3/8" bore for faster evacuation
 - Soft grip rubber handwheels reduce turning to open/close
 - KOBRA® 60' 4-pack hose set included
 - Rugged carrying case allows storage with connected hoses
- Convenient strap with hanging hook



- Max operating pressure: 56bar
- Accuracy better than 1% off scale
- Sight glass
- Includes 2 type K temperature probes
- Measurement readable in °C & °F.
- Ambient temperature sensor.
- 2 high quality ceramic pressure sensors (range -0,99 till 49,90bar)
- Readable in bar,MPa and psi.
- Subcooling & superheating function

HOSES

Service hoses

Below various standard service hoses at a glance. We can make service hoses in any desired connection, colour and length.



Connections blue	15cm	30cm	90cm	150cm	180cm	200cm	250cm	300cm
1/4" Straight x 1/4" Straight		13330			13827	13825		
1/4" Straight x 1/4" 45°				11921	11929			
1/4" Straight x 1/4" Valve 45°	11831		11846	14705				
1/4" Straight x 1/4" 90°	14059	13765	13852		13719			
1/4" Straight x 12 mm					14813		14631	
1/4" Straight x 14mm			11914	11919	11927			
1/2" ACME x 1/2" ACME			11912		11924		16165	
1/2" ACME x 1/4" Straight			10864					16250
1/2" ACME x 1/4" 45°			14690					
1/2" ACME x 1/4" Valve 45°			14925				14060	14466
1/2" ACME x 3/8" Straight				16657				14604
1/2" ACME x 12mm					16051			14897
1/2" ACME x 14mm			11822	11823	11824	13904	13713	11778
1/4" 45° x 1/4" 45°								16629
1/4" 45° x 1/4" 90°	17002							16942
1/4" Valve 45° x 12mm							16667	
1/4" 90° x 1/4" Valve 45°				14475				
1/4" 90° x 12mm				15608	15875			17304
1/4" 90° x 14mm				14021	14427		16452	16465

Connections red	15cm	30cm	90cm	150cm	180cm	200cm	250cm	300cm
1/4" Straight x 1/4" Straight					13663	13646		
1/4" Straight x 1/4" 45°		16363	11917	11922	11930			10797
1/4" Straight x 1/4" Valve 45°	11832		14296	14706				
1/4" Straight x 1/4" 90°			14390		16197			
1/4" Straight x 12mm	16538				14815		14630	
1/4" Straight x 14mm			11915	11920	11928			
1/2" ACME x 1/2" ACME					11925		16166	
1/2" ACME x 1/4" Straight					13106		17034	16249
1/2" ACME x 1/4" 45°			14171		13340	14092		
1/2" ACME x 1/4" Valve 45°			14924				14061	14467
1/2" ACME x 3/8" Straight								14605
1/2" ACME x 12mm					16052			14896
1/2" ACME x 14mm			11817	11818	11819	13903	13714	11795
1/4" 45° x 1/4" 45°								16628
1/4" 45° x 1/4" 90°								16943
1/4" Valve 45° x 1/4" Valve 45°							17170	14387
1/4" 90° x 1/4" Valve 45°				14476				
1/4" 90° x 12mm				15609	15874			
1/4" 90° x 14mm				14022			16453	16466

MANIFOLD SETS AND HOSES

Connections yellow	15cm	30cm	90cm	150cm	180cm	200cm	250cm	300cm
1/4" Straight x 1/4" 45°	10049	13710	11918	11923	11931	13778		13558
1/4" Straight x 1/4" Valve 45°	11830	14661	14295	11842	11843	13645	14094	
1/4" Straight x 1/4" 90°				14023		14761	17696	16198
1/4" 45° x 3/8" Straight	13829							
1/4" 90° x 1/4" Valve 45°					15597	15949	14352	
1/2" ACME x 1/2" ACME			11815	13839	11926			
1/2" ACME x 1/4" Straight	13581		11913	13961	13066	13105		
1/2" ACME x 1/4" 45°					13339			
1/2" ACME x 1/4" Valve 45°			13165					
1/2" ACME x 14mm			15954	13035				

T-Line service hoses 3/8" blue, red yellow



Connections blue	20cm	90cm	150cm	180cm	240cm	300cm	400cm
1/4" Straight x 1/4" Straight			16796				
1/4" Straight x 3/8" Straight		17589		16677			
3/8" Straight x 3/8" Straight	16919	14854	14855	14856	14857	14858	14859

Connections red	40cm	90cm	150cm	180cm	200cm	240cm	300cm	400cm
1/4" Straight x 1/4" Straight			16795	16174	17041			
1/4" Straight x 3/8" Straight		17590		16678			15844	
3/8" Straight x 3/8" Straight	16920	14862	14863	14864		14865	14866	14867

Connections yellow	30cm	90cm	120cm	150cm	180cm	200cm	300cm
1/4" Straight x 1/4" Straight		16071	16934	16041	16676	16883	
1/4" Straight x 3/8" Straight		16476	17368	17371	16955		16510
3/8" Straight x 3/8" Straight	16153	14845	15555	14846	14847	14833	

T-Line service hoses 1/2" black



Connections	180cm
1/4" Straight x 1/4" Straight	17899
3/8" Straight x 3/8" Straight	17901
1/2" Straight x 1/2" Straight	11790

11852
11854

Set



Set of three flexible hoses red, yellow and blue 1/4" SAE with ball valve 90 cm and 150 cm

PRESSURE GAUGES



Gauges 80 mm - 63 mm		
Refrigerant	Low pressure	High pressure
R12	11898 14620	11897 14621
R22	10524 11898 18173 14620	10523 11897 18174 14621
R32	14362 17898 18173	14361 17897 18174
R134a	10524 11886 14620 14362 16187 17562 17715 18173	10523 11904 14621 14361 16186 17714 17561 18174
R404a	10524 14620 17715 17562 18173	10523 14621 17714 17561 18174
R407a	10524 17715 18173	10523 17714 18174
R407c	10383	10384
R401a	10383 17715 17898	10384 17714 17897
R410a	18173	11897
R502	11886	11904
R507	10383 18859	10384 18858
R600a	14362 16187	14361 16186
R1234yf	14362	14361
R1270	18859	18858



Gauges oil filled 80 mm - 65 mm		
Refrigerant	Low pressure	High pressure
R22	17778	17779
R32	17338	17339
R134a	17635	17636
R404a	17635	17636
R407c	17399 17635	17400 17636
R407f	17454	17453
R410a	17635	17636
R448a	17454	17453
R449a	17454	17453
R290	17399 17338	17400 17339
R600a	17399 17338	17400 17339



Pressure gauge composite rear connection 80 mm	
Low pressure	High pressure
18106	18107



Panel mount gauges		
Refrigerant	Low pressure	High pressure
R22	17710	17709
R134a	16187	16186
R410a	17710	17709
R407c	17710	17709
R1234yf	16187	16186



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NITROGEN PRESSURE KIT

13744

T-line R134a

15331

T-line R1234yf

Pressure test kit for R134a

1. Nitrogen regulator
2. Unibas trolley for 10 ltr nitrogen cylinders
3. T line 1 valve nitrogen regulator
4. Set of ¼" hoses 1,5 m
5. Quick couplers
6. Leak detection fluid with applicator

14371

T-line R134a complete

14384

T-line R1234yf complete

Complete your nitrogen pressure kit with the D840 Nitrogen/Hydrogen leak detector.



Replacement parts/Accessories

Nitrogen regulator 0-38 bar DIN#10.....	20439
Leak detection fluid.....	12694
T line 1 valve nitrogen regulator.....	13621
Unibas trolley.....	11574

MANIFOLD SETS AND HOSES

NITROGEN

TROLLEY

11574
18519

Unibas

Unibas powder coated trolley for 10ltr and 20 ltr nitrogen cylinders



REGULATOR

20438-20444

T-Line regulator

Our Nitrogen – Nitrogen/Hydrogen pressure reducing valves are designed for precise and reliable dosing. The pressure reducing valves are available with various connections and can be used with different pressures. This means there is always a pressure reducing valve suitable for your application and situation. The robust construction ensures a long lifespan.



New



NITROGEN

Nitrogen

20438: HP RH – N2 35 bar – 5/8”BSP – ¼”SAE
 20439: HP RH – N2 35 bar – DIN477#10 – ¼”SAE
 20440: HP RH – N2 35 bar – BS341#8 – ¼”SAE
 20441: HP RH – N2 55 bar – DIN477#10 – ¼”SAE
 20442: HP RH – N2 27 bar – DIN477#10 – ¼”SAE

Nitrogen/Hydrogen

20443: HP RH – N2/H2 27 bar – 5/8”BSP – ¼”SAE
 20444: HP RH – N2/H2 27 bar – DIN477#10 – ¼”SAE

NITROGEN



REGULATOR

10905 Uniweld nitrogen

Simple, dependable, and unique nitrogen regulator for air conditioning and refrigeration applications. Has a continuously variable range from 0 to 38 bar. Comes with 1/4" SAE flare connection. No hose adapters needed. Just use your tried and tested refrigerant hose. This means increased safety.



Models

- Nitrogen regulator French.....10905
- Nitrogen regulator PSI/KPA BS341.....11756
- Nitrogen regulator 0-38 bar DIN#10...11757

Models

- Seat and adjustable screw..... 11758
- Teflon ring.....11768
- Filter.....11772
- Spring knob.....11773
- Ring.....11774
- Induction filter.....11775
- T-handle spindle.....11776
- Spring.....11777
- Membrane11957
- Over pressure valve (40 bar).12415
- T-handle nu.....11956

13617 Uniweld Pressure gauge

Pressure gauge for Uniweld Nitrogen regulator 0 - 40 bar



TECHNICAL SPECIFICATIONS

- Regulated Pressure 0-40 bar (0-600 PSI)
- 50 mm gauge diameter
- Brass case with rubber boot
- 1/4" BSP (M) bottom connection

13618 Uniweld Pressure gauge

Pressure gauge for Uniweld Nitrogen regulator 0 - 400 bar



TECHNICAL SPECIFICATIONS

- Cylinder Pressure 0-400 bar
- 50 mm gauge diameter
- Brass case with rubber boot
- 1/4" BSP (M) bottom connection

LUBRICANTS AND UV



T-line oil

LIQUIDS

Pag olie 46YF (250ml) t-line

Art. # 15344



T-Line PAG46 1234YF lubricant: Fully compatible with OE fill PAG lubricants. Suited for R-1234YF systems as well as fully backwards compatible with R-134a systems. Due to the unique "Double End Capped" chemical structure also suited for electric or hybrid automotive a/c systems.

POE oil SL 3000 (1 liter) t-line

Art. # 16601



Universal oil for air conditioning systems for cars. Suitable for refrigerant R-134a - R-1234YF and other HFC and HFO refrigerants. For open and hermetic compressors. (Standard and hybrid / electric vehicles) Good mixability with HFC and HFO refrigerants, and with POE and PAG oils. High viscosity index. Super contactor against friction wear.

PAG oil 68EP (R744)

Art. # 18205

Polyalkylene glycol (PAG) oils were specially developed for use in automotive air conditioning systems.

This oil is suitable for systems which run on R744, also known as CO₂.





LUBRICANTS AND UV

12842 T-line vacuum pump oil

The high demands of refrigeration vacuum pumps have prompted the use of special, highly refined oil with an ultra-low content of aromatics in the product. In practical terms this means that the oil stays “fit” for a longer period, reaches lower vacuum levels sooner and keeps the vacuum pump cleaner. This in turn translates into a prolonged life expectancy of the pump.



The stability of the oil means that it will not absorb moisture as quickly as standard lubricants, thus extending the longevity of the oil.

Packaged in a 946 ml. bottle.

13483 T-line UV Dye

The introduction of R-1234YF as well as the ever-increasing presence of hybrid and electric vehicles has shaken up the small world of suppliers of automotive a/c additives.

The less stable R-1234YF molecule (that is the reason it has less of an impact on the environment) is sensitive to added chemicals in a system. For this reason, it is extremely important to use compatible and safe lubricants and additives.

In the past we were offering specific UV leak detection additives for R-134a, R-1234YF, standard, electric and hybrid vehicle applications.

This was confusing for both our customers, and for our warehouse.



For this reason, we have totally re-engineered our most popular UV additive which now is effective, and safe to use in all (automotive) a/c applications.

So for both R-134a and R-1234YF refrigerants as well as standard, hybrid and electric vehicles.

The dye comes in a 250 ml easy dose bottle, and still uses only 5 mil of product per (automotive a/c) application.

Easy to use, safe to use.

10772 T-line additive oil-based systems

t-line UV Additive oil-based systems, 25ml



10773 T-line additives engine cooling systems

t-line Additive coolant systems, 25ml.



UV AND ACCESSORIES

12694 T-line orange leak

A professional leak detection spray. Produces a viscous coating which makes leaks easy to detect with the aid of nitrogen. Environmentally friendly, can be rinsed off with water.



Replacement parts/Accessories
Orange leak 5 ltr refill

TECHNICAL SPECIFICATIONS

- 7. 100% bio-degradable
- 8. non-toxic
- 9. non- corrosive
- 10. economical

13095 T-line detection system

Hose Assy - Flare 635cm (for EZ-Inject), injector and one cartridge



Replacement parts/Accessories
EZ-inject cartridge 120ml

15414 T-line UV dye & oil injector R134a

UV dye & oil injector assy clear with 134a coupler.



15785 T-line UV dye & oil injector R134a

UV Dye & Oil Injector Assy Clear with 1234YF coupler



13884 Retrofit Concertina starter kit T-line

The quickest way to safely retrofit an older (automotive) R-12 system to R-134a refrigerant. This special injector contains a proprietary PAG-plus lubricant with additives that mix well with the existing mineral oil in the system.



Replacement parts/Accessories
Retrofit cartridge.....13885



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UV AND ACCESSORIES

UV LEAK DETECTION

18639

T-line leak detection SL3300

Rechargeable Sunlonge torch set including UV enhancing glasses.

The torch has a wavelength range of 365-370 nm. UV intensity:60000 uw/cm2 at 15 inch distance

The set is supplied in a sturdy, durable case with UV goggles.



18637

T-line leak detection SL6300

Stronger version of the SL3300. The Sunlonge torch has a wavelength range of 390-395 nm. UV intensity:100000 uw/cm2 at 120 mm distance

The set is supplied in a sturdy, durable case with UV goggles.



15931

UV leak detection lamp kit Optimax Jr. complete

The super compact Optimax Jr Leak Detection Lamp is the basis of this comprehensive and affordable UV Leak Detection Kit. Besides the simple and powerful LED lamp, the kit consists of:

- The EZ Ject Dye Injector
- An injector hose with quick coupler
- An adapter to work with ¼" connections
- One EZ-Ject dye cartridge



17343

T-line mini bright

Compact UV inspection lamp operates at the 400nm wavelength which is ideal for fluorescent leak detection of mobile A/C tracer



CYLINDERS AND ADAPTERS

11727

11728

13413

Recovery cylinder

TPED standard EN13322-1

Provided with dual valve (Y) valve 1/4" SAE

One liquid port, one vapor port

Maximum pressure in cylinder: 48 bar

Safety valve opens at 42 bar

Suitable for all common refrigerants

Capacity: 12,5, 27,2 and 61 ltr





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CYLINDER ADAPTERS

CYLINDER ACCESSORIES

Cylinder adapter DIN477#6 x 1/4" SAE 11726	Cylinder adapter 3/8" BSP - 3/8" SAE 12185	Cylinder adapter 3/4" NPS Cylinder x 1/4" M.F. 15409
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Cylinder adapter 3/4" NPS x 3/8" MF 16047	HC cylinder adapter valve 15384	Cylinder adapter hydrocarbons 15810
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Tank adapter 1/4" MF SAE x 21.8mm Left thread 16344	Cylinder adapter 1234yf small 15328	Cylinder adapter 1234yf large 15327
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Cylinder adapter set 15337	Cylinder set HP R134a 16233	Cylinder adapter 3/8" BSP - 3/8" SAE 12185
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13913

Heating pad RCH-10

Heating blanket for refrigeration cylinders. Heats up the cylinder and thereby increases refrigerant pressure. Indispensable in colder ambient.

TECHNICAL SPECIFICATIONS

11. Max. heating to 45°C
12. Wattage: 220 Watt



11737

Valve 2-way 28.8mm DIN

Cylinder Valve(dual) 28.8mm DIN



HANDTOOLS

For cutting copper, brass and aluminum tubes and A/C Hoses in various sizes we are offering a suite of tube cutters and hose cutter in various sizes.

Replacement parts/Accessories
 Cutting wheel small 1/8" – 5/8"16630
 Cutting wheel large 1/4" – 1 5/8" ...17610
 Cutting wheel 1/8" – 1 1/8"18758
 Cutting wheel 1/8" - 1 ¼"11807

HAND TOOLS

- 15217**

T-line tube cutter
1/8" – 5/8"


- 15218**

T-line tube cutter
1/8" – 5/8"


- 15534**


T-line tube cutter
1/8" – 1 1/8"


- 10378**

Uniweld tube cutter
1/8" 1 ¼"


- 12103**

T-line capillary tube cutter


- 12001**

Hose cutter


- 14237**
10415

Deburring tool
Deburring inside/outside


- 18368**

T-line service hose seal remover and installation tool


- 11328**

Burgacclip pliers



HANDTOOLS

17969
17970

T-line flaring tool with eccentric cone (inch/metric)

Light weight flaring tool with an eccentric cone. Which decreases the chance of ripping, because of the rolling movement. Manual operation possible. However, you can also choose to handle it with your (wireless) drill/screwdriver.



15404

T-line flaring tool automatic

Flaring tool to create a flare on a copper tube.



11993

T-line fin straightener

For alignment and straightening condenser or evaporator fins.



11994
12459

Valve core remover

Valve core remover available in two sizes
11994 For standard & JRA valves
12459 For large eaton type valves



17109

T-line Service magnet coil 20mm

Strong permanent magnet for operating magnetic valves by hand.
Fits virtually all solenoid valve stems up to a core diameter of 20mm.



HANDTOOLS

12085
11802
16697

T-line ratchet wrenches

Large and small
Reversible ratchet wrench

Use with "Back seated valves": Proper refrigeration tools are of great importance. Straight ratchet wrenches come in handy when working in small spaces

12085 - Large straight ratchet:
- 1/2" and 9/16" hex
- 3/16" and 1/4" square

11802 - Small straight ratchet:
- 3/8" and 5/16" square
- 3/16" and 1/4" square
Reversible ratchet wrench set complete



10974

T-line Torque wrench

Torque wrench with easy to change wrench heads. Makes it easy to correctly torque the flare nuts on critical systems.

Heads included are:
17 – 22 – 24 – 26 – 27 – 29 mm.



13217

T-line Socket for R134a primary seals

Octagonal sockets (3/8" square drive) to remove and install the R-134a Primary Seals as used on many automotive air conditioning circuits. One tool for both 16mm (HP) and 13mm (LP) ports.



T-line Tube bender

Various sizes of tube benders

Models

1/4"	.....	13981
3/8"	.....	11634
1/2"	.....	11635
5/8"	.....	11636
3/4"	.....	11637
1/4" , - 5/16"	3 in 1.....	11799



HANDTOOLS

12106

T-line clutch hub toolkit

Universal tool kit for assembly & disassembly of clutches on most used compressors.



CONTENT

- Universal clutch holding tool
- Sanden SD 5 & 7 clutch end plate remover
- Bearing
- Metric clutch plate remover/installer
- Fractional clutch plate remover/installer
- Nippondenso GP/109 remover/installer
- Clutch plate remover Arbor

13831
13832

Denso 5SE, 6SE, 7EU

Most of today's modern Denso compressors are externally controlled and so optimize the capacity of the compressor. This mostly eliminates the common clutch. The compressor pulley rotates continuously with the engine. A shear protection rubber is incorporated in the pulley.. When these shearing blocks break, the pulley needs to be removed. Only the special Denso removal tool will allow you to remove the pulley without much effort or damage.



MANUFACTURER

- Original Denso product!

11099

DeLuxe (Ford) Springlock release tool set

The proven "springlock type" tube connections have been around for many decades. Used in a/c systems as well as coolant and fuel systems. This "Deluxe" disconnect tool kit provides additional sizes and a different shape to allow for use on these systems as well. Made of beautifully color anodized aluminum,



CONTENT

- 7/8" Red, 3/4" Black, 5/8" Green
- 1/2" Gold, 3/8" Blue, 5/16" Yellow

HANDTOOLS

17290 T-line Springlock set

We have put together a springlock tool set with various sizes for different car brands

Replacement parts/Accessories

Springlocktool 3/4" White Ford	12000
Springlocktool 1/2" Blue Ford	11998
Springlocktool 3/8" Green VW	10539
Springlocktool 3/8" Red Ford	11997
Springlocktool 5/8" black Ford	11999
Springlocktool 5/8" black VW	10540
Springlocktool Opel Blue	10167
Springlocktool Opel Red	10166
Springlocktool Toyota	10611
Springlocktool Audi liquid line.....	14330
Springlocktool Audi.....	14329



10611 Disconnect tool for Toyota tube connectors

To disconnect the Toyota tube connectors professionally and safely; this tool is indispensable





HANDTOOLS

14367

T-line Audi Springlock set

Audi's new air conditioning systems are a marvel of ingenuity. Just check out the way they designed the liquid and suction lines going into the firewall! Anyway, at the same time of re-engineering the layout and system, Audi engineers also developed a new tube connection. No simple pad fitting, Pea fitting or springlock; no a very new and special "springlock-like" connection was put in place. For the service engineers a big challenge, because how to open this fitting without damaging the tubes?



12545

Tubeconnectors Toyota

Several Toyota vehicles use special connection clamps to fit the liquid and suction lines.

During repair, these clamps can easily be damaged or misplaced. Hence we have added the replacement clamps to our line.



Available as a set of 1x liquid line clamp and 1x suction line clamp.

13798

Personal Protection

Replacement parts/Accessories

- Safety goggles.....11558
- Safety gloves.....15707



ASSORTMENTS

Assortment set t-line deluxe including tower

Art. # 17363



This article consists of the following parts:

- Article 17287: o-ring set 1 t-line
- Article 17799: o-ring set 2 t-line
- Article 17288: o-ring set special t-line
- Article 17289: valve/valve caps set t-line
- Article 17641: metal case assortment set t-line

This new tower replaces these older versions and contains all the most used materials.



Replacement parts/Accessories O-ring set 1 T-line 17287

O-ring 04.47x1.78 groen	11111
O-ring 06.07x1.63 groen	11190
O-ring 06.07x1.78 groen	11119
O-ring 06.65x2.70 groen	11182
O-ring 06.70x1.80 groen	11184
O-ring 06.80x1.90 groen	11185
O-ring 06.95x2.20 groen	13495
O-ring 07.00x1.50 groen	11106
O-ring 07.66x1.78 groen	10447
O-ring 08.00x2.00 groen	11112
O-ring 09.20x2.62 groen	11160
O-ring 09.25x2.39 groen	11114
O-ring 10.00x2.50 groen	11120
O-ring 10.00x2.62 groen	14076
O-ring 10.77x2.62 groen	11161
O-ring 10.82x1.78 groen	11133
O-ring 11.11x1.78 groen	11159
O-ring 13.80x2.40 groen	11169
O-ring 13.94x2.62 groen	10352
O-ring 14.00x1.78 groen	11140
O-ring 15.54x2.62 groen	11170
O-ring 17.00x2.00 groen	11149
O-ring 17.17x1.78 groen	11148
O-ring 20.00x2.40 groen	11156
O-ring 20.22x3.53 groen	11176



Replacement parts/Accessories O-ring set 2 T-line 17799

O-ring 04.47x1.33 groen	11179
O-ring 04.70x1.42 groen	11189
O-ring 04.80x1.50 groen	10850
O-ring 06.60x2.00 groen	11118
O-ring 07.50x2.50 groen	11098
O-ring 07.65x1.63 groen	11191
O-ring 07.80x1.90 groen	11187
O-ring 08.00x1.80 groen	11229
O-ring 08.80x1.90 groen	11188
O-ring 09.25x1.78 groen	11128
O-ring 09.50x2.50 groen	11233
O-ring 10.12x1.85 groen	11116
O-ring 10.80x2.40 groen	11157
O-ring 12.00x2.50 groen	11155
O-ring 13.40x1.78 groen	11230
O-ring 13.60x2.40 groen	11132
O-ring 13.70x2.50 green	17558
O-ring 14.25x2.20 groen	10157
O-ring 14.25x2.40 groen	13497
O-ring 14.88x1.88 groen	11186
O-ring 16.00x1.78 groen	11143
O-ring 16.20x2.50 green	17557
O-ring 17.12x2.62 groen	10450
O-ring 18.72x2.62 groen	11172
O-ring 21.80x3.53 groen	11178

ASSORTMENTS

ASSORTMENTS



Replacement parts/Accessories

O-ring set special T-line 17288

O-ring 07mm.....	11016
O-ring 08mm.....	11019
O-ring 11mm.....	11223
O-ring 12mm.....	11020
O-ring 13mm.....	11224
O-ring 13mm.....	11017
O-ring 16mm.....	11018
O-ring tule 06.....	10645
O-ring tule 08.....	10646
O-ring tule 10.....	10647
O-ring tule 12.....	10648
O-ring 16mm.....	11225
O-ring metal 08mm.....	11200
O-ring metal 11mm.....	11201
O-ring metal 15mm.....	11212
O-ring metal 17mm.....	11202



Replacement parts/Accessories

Valve/valve cap set T-line 17289

Valve 1234YF.....	14682
Valve Audi.....	12889
Valve Eaton 10mm.....	10297
Valve Eaton 8mm.....	10295
Valve JRA HNBR.....	10293
Valve M8 Peugeot/Volvo.....	12881
Valve M8x1 1234YF EPDM.....	16339
Valve Renault.....	12882
Valve Core standard.....	11280
Valve Core removal tool small 2 sizes.....	11994
Valve cap M8x1.0 short.....	15292
Valve cap HD M10x0.75 long.....	16808
Valve cap HD M10x1.25 short.....	16806
Valve cap LD M8x1.0 long.....	16807
Valve cap LD M9x1.0 short.....	16805

17289

Flaretite seals

Professional seal made of copper with a baked-on Loctite sealant.



Replacement parts/Accessories

Flaretite ¼".....	18234
Flaretite 3/8".....	18235
Flaretite ½".....	18236
Flaretite 5/8".....	18237
Flaretite ¾".....	12838

ASSORTMENTS

12929

Airsept ultima compressor guard assortment

New or reconditioned compressors are regularly damaged by metal shavings or dirt particles left in an air conditioning system. A simple screen in the suction line of the new compressor can prevent this from happening.

Easy to install without cutting lines.

This means no chance of leakage. Is installed by means of a simple hand press and removed using a special puller. Recommended by several Automotive OEM's.



Replacement parts/Accessories

Screen 10.03 mm. 0.395" BD K5.....12813
 Screen 10.26 mm. 0.404" BD K5....12814
 Screen 11.07 mm. 0.436" BD K5....12815
 Screen 11.76 mm. 0.463" BD K5.....12816
 Screen 11.96 mm. 0.471" BD K5.....10516
 Screen 12.50 mm. 0.492" BD K5.....12817
 Screen 12.70 mm. 0.500" BD K5.....12818
 Screen 12.95 mm. 0.510" BD K5.....10041
 Screen 13.23 mm. 0.521" BD K5.....10517
 Screen 13.49 mm. 0.531" BD K5.....10512

Replacement parts/Accessories

Screen 13.67 mm. 0.538" BD K5.....10513
 Screen 14.02 mm. 0.552" BD K5.....10043
 Screen 14.25 mm. 0.561" BD K5.....12819
 Screen 14.70 mm. 0.579" BD K5.....12820
 Screen 14.93 mm. 0.588" BD K5.....12821
 Screen 15.11 mm. 0.595" BD K5.....10042
 Screen 15.24 mm. 0.600" BD K5.....12822
 Screen 15.70 mm. 0.618" BD K5.....10514
 Screen 16.48 mm. 0.649" BD K5.....10515
 Screen 20.85 mm. 0.821" BD K5.....12778

13592

Orifice tube assortment

Comprehensive assortment automotive a/c orifice tubes. Contains variations. Total contents: 50 pieces.



ADAPTERS

ADAPTERS



11865
Adapter 14 mm x 1/4"



12686
Adapter HP Extension R134a



14351
Adapter 12 mm x 1/4"



14606
Adapter LP Extension R134a



14817
Adapter 12 mm x 3/8" SAE MF



11981
Retrofit port straight HP 3/16"



11982
Retrofit port 90° HP 3/16"



11983
Retrofit port 90°LP 1/4"



11979
Retrofit port straight HP 1/4"



11984
Retrofit port 90° HP 1/4"



11980
Retrofit port straight LP 1/4"



10602
Adapter U2-6 3/8"MF x 3/8"MF



11617
Adapter 1/4"MF x 1/4"FF Swivel



11620
Adapter MV-9611 T-1/4"FF x 1/4"MFx1/4"MF



11680
Adapter UR3-64 3/8"FF x 1/4"MF



12456
Adapter UR-3-046 1/4"Fx3/8"M



15366
Adapter 1/4"MF x 5/16"FF



11759
Adapter 1/4"FF x ACME Male



14672
Adapter UR2-64 3/8"MF x 1/4"MF



14951
Adapter 1/8"NPT M x LH 1/2" ACME-
16M (CGA166)



15325
Adapter U4-6
16M (CGA166)

ADAPTERS



17188
Service valve adapter R1234YF
LPx1/4" FF



16182
Service valve adapter
R1234YF



11864
Adapter ACME.F x 1/4"MF
HPx1/4" FF



11866
Adapter U1-06M14
14mm x 3/8"MF



12067
Adapter flare
O-ring #08 steel



14903
Service valve adapter
1234 x 1/4" MF HP



14902
Service valve adapter
1234 x 1/4" MF LP



12003
Adapter 1/2" F ACME
swivel x 1/4"MF



13398
Adapter 3/8" SAE FF
swivel x HP



17556
Adapter UR2-104 5/8"
MF x 1/4" MF



16344
Tank adapter 1/4" MF
SAE x 21.8mm Left thread



17559
Adapter UR2-84 1/2" MF
- 1/4" MF



11534
Adapter U3-6A 3/8"
MF x 1/8" FPT



16454
Adapter 1/4" MF x 5/16"
FF swivel



16332
Adapter 3/8" UNF x 1234YF
LP service port



15872
Adapter R134a HP x 1/4"
SAE F Hi-flow



12065
Adapter flare
O-ring #10 steel



12066
Adapter flare
O-ring #06 steel



unicorn

refrigeration tools & equipment

HOSE REPAIR

Burgaclip pliers

Unicorn offers many different Burgaclip fittings. These fittings are specified by fitting size and the hose size. We offer fittings with a service valve for R134a, splicers to connect multiple hoses and fittings with connections for compressors. To assemble the Burgaclip fittings you need Burgaclip manual mounting pliers. The pliers seal the clamps correctly to the hose. The blue clamp cage helps seal the clamps at the correct place.



Below you can find a menu for every type of Burgaclip fitting, we have in our portfolio. All fittings are meant for reduced barrier hoses.

Fitting sizes	Thread and measured outer thread	Hose sizes	Inner diameter
#06	5/8"-18UNF avg. 15,88mm	#06	5/16" of 8mm
#08	3/4"-16UNF avg. 19,05mm	#08	13/32" of 10mm
#10	7/8"-14UNF avg. 22,23mm	#10	1/2" of 13mm
#12	1 1/16"-4UNF avg. 26,99mm	#12	5/8" of 16mm



*Reduced barrier A/C Hose
in any desired length*

11601	Hose #06
11602	Hose #08
11603	Hose #10
11604	Hose #12
11298	Hose #14

Kop. XX	Fitting size XX	VZ	Inner ring O-ring
"O"	O-ring fitting	BU	Outer thread O-ring
Flare	Flarefitting	ST	Steel fittig
(M)	Male fitting	Compr	Compressor fitting
(F)	Female fitting	SV R134a	Service valve R134a
180°	straight fitting	Gmoer	Zonder moer
45°	45°fitting	90° blok	block type 90°fitting
90°	90° fitting	HD	High pressure
SLXX	Siz hose XX	LD	Low pressure



180° fitting "O" (F) for hose

11361	Kop.	06	SL	06
11362	Kop.	08	SL	08
11363	Kop.	10	SL	10
11364	Kop.	12	SL	12
11365	Kop.	06	SL	08
11366	Kop.	08	SL	06
11367	Kop.	08	SL	10
11368	Kop.	10	SL	08
11369	Kop.	10	SL	12
11370	Kop.	12	SL	10



45° fitting "O" (F) for hose

11371	Kop.	06	SL	06
11372	Kop.	08	SL	08
11373	Kop.	10	SL	10
11374	Kop.	12	SL	12
11375	Kop.	05	SL	06
11376	Kop.	08	SL	06
11377	Kop.	10	SL	12
11378	Kop.	12	SL	10



90° blok "O" (F) for hose

11441	Kop.	06	SL	06
11442	Kop.	08	SL	08
11443	Kop.	10	SL	10
11444	Kop.	12	SL	12



90° blok "O" (F) SV R134a for hose

11445	Kop.	06	SL	06	HD
11446	Kop.	08	SL	08	HD
11447	Kop.	10	SL	10	LD



180° fitting "O" VZ (M) for hose

11337	Kop.	06	SL	06
11338	Kop.	08	SL	08
11339	Kop.	10	SL	10
11340	Kop.	12	SL	12



45° fitting "O" VZ (M) for hose

11341	Kop.	06	SL	06
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HOSE & TUBE REPAIR



90° | fitting | "0" (F) for hose

11379	Kop. 06 SL 06
11380	Kop. 08 SL 08
11381	Kop. 10 SL 10
11382	Kop. 12 SL 12
11383	Kop. 06 SL 08
11384	Kop. 08 SL 06
11385	Kop. 08 SL 10
11386	Kop. 10 SL 08
11387	Kop. 10 SL 12
11388	Kop. 12 SL 10



360° | fitting | "0" (F) for hose

11465	Kop. 06 SL 06
11466	Kop. 08 SL 08
11467	Kop. 10 SL 10
11468	Kop. 12 SL 12



180° | fitting "0" (F)
SV R134a for hose

11398	Kop. 06 SL 06 HD
11399	Kop. 08 SL 08 HD
11400	Kop. 10 SL 10 LD
11401	Kop. 12 SL 12 LD
11402	Kop. 08 SL 10 LD



45° | fitting "0" (F) SV R134a for hose

11405	Kop. 08 SL 08 HD
11407	Kop. 12 SL 12 LD



90° | fitting "0" (F) SV R134a for hose

11408	Kop. 06 SL 06 HD
11412	Kop. 06 SL 08 HD



90° blok "O" (F) for hose

11441	Kop. 06 SL 06
11442	Kop. 08 SL 08
11443	Kop. 10 SL 10
11444	Kop. 12 SL 12



90° blok "O" (F) SV R134a for hose

11445	Kop. 06 SL 06 HD
11446	Kop. 08 SL 08 HD
11447	Kop. 10 SL 10 LD



180° fitting "O" VZ (M) for hose

11337	Kop. 06 SL 06
11338	Kop. 08 SL 08
11339	Kop. 10 SL 10
11340	Kop. 12 SL 12



45° fitting "O" VZ (M) for hose

11341	Kop. 06 SL 06
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HOSE & TUBE REPAIR



90° | fitting | "0" VZ (M) for hose

11345	Kop. 06	SL 06
11346	Kop. 08	SL 08
11347	Kop. 10	SL 10
11348	Kop. 12	SL 12



180° | fitting "0" BU (M) for hose

11349	Kop. 06	SL 06
11350	Kop. 08	SL 08
11351	Kop. 10	SL 10
11352	Kop. 12	SL 12



45° | fitting | "0" BU (M) for hose |

11357	Kop. 06	SL 06
11359	Kop. 10	SL 10



90° | fitting | "0" BU (M) for hose

11353	Kop. 06	SL 06
11354	Kop. 08	SL 08
11355	Kop. 10	SL 10
11356	Kop. 12	SL 12



180° | fitting | "O" compr. for hose

11389 *Kop. 10 SL 08*

11390 *Kop. 10 SL 10*



45° | fitting "O" compr. for hose

11392 *Kop. 10 SL 08*

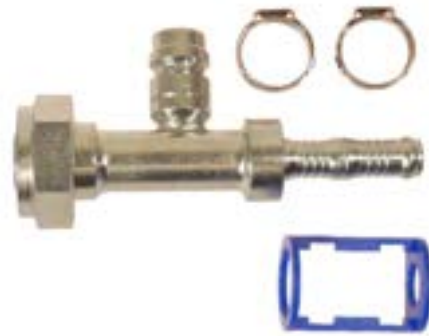
11394 *Kop. 10 SL 12*



90° | fitting "O" compr. for hose

11395 *Kop. 10 SL 08*

11396 *Kop. 10 SL 10*



180° | fitting "O" compr.
SV R134a for hose

11432 *Kop. 10 SL 08 HD*

HOSE & TUBE REPAIR



90° | fitting "O" compr.
SV R134a for hose |

11438	Kop. 10 SL 08 HD
11439	Kop. 10 SL 10 HD
11440	Kop. 10 SL 12 LD



fitting "O" gnut for hose |

5	Kop. 06 SL 06
6	Kop. 08 SL 08
7	Kop. 10 SL 10
8	Kop. 12 SL 12
	12
0	Kop. 12 SL 10



45° | fitting "O" gnut for hose |

11421	Kop. 06 SL 06
11422	Kop. 08 SL 08
11423	Kop. 10 SL 10
	! 12
11425	Kop. 12 SL 10



90° | fitting "0" gnut for hose

11426	Kop. 06 SL 06
11427	Kop. 08 SL 08
11428	Kop. 10 SL 10
11429	Kop. 12 SL 12
11430	Kop. 10 SL 12
11431	Kop. 12 SL 10



180° | fitting brazing or hose

11449	Kop. 06 SL 06
11450	Kop. 08 SL 08
11451	Kop. 10 SL 10
11452	Kop. 12 SL 12



180° | fitting bulkhead for hose

11453	Kop. 06 SL 06
11454	Kop. 08 SL 08
11455	Kop. 10 SL 10

HOSE & TUBE REPAIR



90° | fitting bulkhead for hose

11457	Kop. 06 SL 06
11458	Kop. 08 SL 08
11459	Kop. 10 SL 10
11460	Kop. 12 SL 12



180° | fitting flare (F) for hose

11469	Kop. 06 SL 06
11470	Kop. 08 SL 08
11471	Kop. 10 SL 10
11472	Kop. 12 SL 12
11473	Kop. 04 SL 06
11474	Kop. 06 SL 08
11475	Kop. 08 SL 06
11476	Kop. 08 SL 10
11477	Kop. 10 SL 08
11478	Kop. 10 SL 12



90° | fitting flare (F) for hose

11485	Kop. 06 SL 06
11486	Kop. 08 SL 08
11487	Kop. 10 SL 10
11488	Kop. 12 SL 12
11489	Kop. 04 SL 06
11491	Kop. 08 SL 10
11492	Kop. 10 SL 08
11493	Kop. 10 SL 12



45° | fitting flare (F) for hose

11479	Kop. 06 SL 06
11480	Kop. 08 SL 08
11481	Kop. 10 SL 10
11482	Kop. 12 SL 12
11483	Kop. 10 SL 08

HOSE & TUBE REPAIR



Splicer slang hose to hose

11324	SL 06 SL 06
11325	SL 08 SL 08
11326	SL 10 SL 10
11327	SL 12 SL 12
14551	SL 14 SL 14



Splice T-piece

11316	SL 06 SL 06 SL 06
11317	SL 08 SL 08 SL 08
11318	SL 10 SL 10 SL 10
11319	SL 12 SL 12 SL 12



Splicer slang hose to hose |34a

11320	SL 06 SL 06 HD
11321	SL 08 SL 08 HD
11322	SL 10 SL 10 LD
11323	SL 12 SL 12 LD



180° fitting | ORFS (F) to hose

12863	SL 06 SL 06
12864	SL 08 SL 08

HOSE & TUBE REPAIR



Tube for hose steal

12991	L 3/8"	SL 06
12992	L 1/2"	SL 08
12993	L 5/8"	SL 10
12994	L 3/4"	SL 12



Lokclip aluminum for hose

13030	9.53 NK LCR AL 50
13040	13 NK LCR AL 50
13041	16 NK LCR AL 50
13042	19 NK LCR AL 50

Lokclip steel for hose

13043	9.53 NK LCR ST 50
13044	12.7 NK LCR ST 50
13045	16 NK LCR ST 50
13046	19 NK LCR ST 50



O-ring

10069	O-ring #06
10077	O-ring #08
10085	O-ring #10
10092	O-ring #12



Flarering

11672	Flarering #04
11674	Flarering #06
11675	Flarering #08
11670	Flarering #10
11676	Flarering #12

HOSE REPAIR

TNT-8 A/C hose crimping system

The TNT-8 is a professional a/c hose crimper that makes a near perfect, OE style crimp - using the 8 easy to change jaws.

These TNT-8 series crimpers are available in configurations versions - but the base stays the same. An aircraft grade aluminum base houses 8 die segments that are easy to change. The 8 die segments flawlessly move to the center of the tools when operated. This provides a near perfect OE style crimp.

14036

TNT-8 with UHTM

This (MOSI) TNT-8 variation is operated - unique in the world - by a miniature hydraulic pump fitted on the unit. This pump is then powered by ... a (wireless) drill / screwdriver available in every workshop



14037

APT-100 air over hydraulic pump

The air hydraulic pump for the TNT-8 with UHTM. Simply connect to compressed air on one side, and on the TNT-8 / UHTM on the other side. A foot on the foot pedal puts the combination into operation.



HOSE REPAIR

Crimping fittings

All crimp fittings presented in this catalog are intended for thick-walled hoses unless specifically stated otherwise. We also have crimp fittings for thin walled hoses.



180° | fitting "0" (F) for hose

- 12281 Kop. 06 SL 06
- 12282 Kop. 08 SL 06
- 12283 Kop. 08 SL 08
- 12284 Kop. 10 SL 10
- 12285 Kop. 10 SL 12
- 12286 Kop. 12 SL 10
- 12287 Kop. 12 SL 12



45° | fitting "0" (F) for hose

- 12073 Kop. 06 SL 06
- 12074 Kop. 08 SL 08
- 12075 Kop. 10 SL 10
- 12295 Kop. 05 SL 06
- 12296 Kop. 10 SL 12
- 12297 Kop. 12 SL 10
- 12298 Kop. 12 SL 12



90° | fitting '0" (F) for hose

- 12076 Kop. 06 SL 06
- 12077 Kop. 08 SL 08
- 12078 Kop. 10 SL 10

- 12308 Kop. 08 SL 10
- 12309 Kop. 10 SL 12
- 12310 Kop. 12 SL 10
- 12311 Kop. 12 SL 12



180° | fitting "0" (F) SV R134a r for hose

- 12326 Kop. 06 SL 06 HD
- 12327 Kop. 08 SL 08 HD
- 12328 Kop. 10 SL 10 LD
- 12329 Kop. 10 SL 12 LD
- 12330 Kop. 12 SL 12 LD



45° fitting "O" (F) SV R134a for hose

12335	Kop. 06 SL 06 HD
12336	Kop. 08 SL 08 HD
12337	Kop. 10 SL 10 LD
12338	Kop. 10 SL 12 LD



90° fitting "O" (F) SV R134a for hose

12343	Kop. 06 SL 06 HD
12344	Kop. 08 SL 08 HD
12345	Kop. 10 SL 10 LD
12346	Kop. 12 SL 12 LD



180° fitting "O" compr. for hose

12312	Kop. 10 SL 08
12313	Kop. 10 SL 10
12314	Kop. 10 SL 12



90° fitting "O" compr. for hose

12318	Kop. 10 SL 08
12319	Kop. 10 SL 10
12320	Kop. 10 SL 12



180° fitting "O" compr. SV R134a for hose

12363	Kop. 10 SL 08 HD
12364	Kop. 10 SL 10
12365	Kop. 10 SL 12 LD



45° fitting "O" compr. SV R134a for hose

12366	Kop. 10 SL 08 HD
12367	Kop. 10 SL 10 LD
12368	Kop. 10 SL 12 LD

HOSE & TUBE REPAIR



90° | fitting "O" (F) SV R134a for hose

12369 Kop. 10 SL 08 HD
12370 Kop. 10 SL 10 HD
12371 Kop. 10 SL 12 LD



90° blok "O" (F) for hose

12372 Kop. 06 SL 06
12373 Kop. 08 SL 08
12374 Kop. 10 SL 10
12375 Kop. 12 SL 12



180° | fitting "O" VZ (M) for hose

12079 Kop. 06 SL 06
12080 Kop. 08 SL 08
12081 Kop. 10 SL 10



45° | fitting "O" VZ (M) for hose

12213 Kop. 06 SL 06
12215 Kop. 10 SL 10



90° | fitting "O" VZ (M) for hose

12220 Kop. 06 SL 06
12221 Kop. 08 SL 08
12222 Kop. 10 SL 10



180° | fitting "O" BU (M) for hose

12227 Kop. 06 SL 06
12228 Kop. 08 SL 08
12229 Kop. 10 SL 10



45° | fitting "0" BU (M) for hose

12242	Kop. 06 SL 06
12243	Kop. 08 SL 08
12244	Kop. 10 SL 10
12245	Kop. 12 SL 12



90° | fitting | "0" BU (M) for hose

12234	Kop. 06 SL 06
12235	Kop. 08 SL 08
12236	Kop. 10 SL 10
12237	Kop. 12 SL 12



180° | fitting "0" gmoer for hose

12351	Kop. 06 SL 06
12352	Kop. 08 SL 06
12353	Kop. 08 SL 08
12354	Kop. 12 SL 10



45° | fitting "0" gmoer for hose |

12355	Kop. 06 SL 06
12357	Kop. 08 SL 08
12358	Kop. 12 SL 10



90° | fitting "0" gmoer for hose

12359	Kop. 06 SL 06
12361	Kop. 08 SL 08
12362	Kop. 12 SL 10

HOSE & TUBE REPAIR



Splicer Hose for hose

12009	SL 06	SL 06
12454	SL 08	SL 08
12010	SL 10	SL 10
10028	SL 12	SL 12



Splicer T-stuk

13438	SL 06	SL 06	SL 06
13437	SL 08	SL 08	SL 08
11524	SL 10	SL 10	SL 10
11525	SL 12	SL 12	SL 12



Splicer Hose for hose SV R134a

11985	SL 06	SL 06	HD
11986	SL 08	SL 08	HD
11987	SL 10	SL 10	LD



LHose for hose

12398	L 3/8"	SL 06
12399	L 1/2"	SL 08
12400	L 5/8"	SL 10
12401	L 3/4"	SL 12

HOSE REPAIR

Lokring

Tube repair with the lokrings gives a decent and good looking result. Any damaged tubes can easily be fixed with the Lokrings system. Unicorn offers a wide variety: the standard, tee and reducer lokrings. We also have them with a integrated service valve. The entire product range can be found in the table below. To assemble the lokrings you need a special "hand mounting rod" and the right assembly jaws. They come in different sizes, which can also be found in the table. Last but not least you will need a small bottle of Lokprep.



Lokbox		Standard Aluminum		Reduce Aluminum	
17566	Lokbox basis airco	17039	6 NK AL 00	12186	8 5/8 NR AL 50
		10617	6 NK AL 50	12187	9/8 NR AL 50
		13422	7 NL AL 50	12188	9.53/8 NR AL 50
		12092	8 NK AL 50	13393	9.53/8.5 NR AL 50
		12093	9.53 NK AL 50		
	ring service valve R-1	12094	10 NK AL 50	12189	10/8 NR AL 50
14143	8 NK AL sv HD	10033	11 NK AL 50	12450	10/9.53 NR AL 50
11100	9.53 NK AL sv HD	12095	12 NK AL 50	12455	11/9.53 NR AL 50
13941	10 NK AL sv HD	15912	12.7 NK AL 50	12191	11/10 NR AL 50
13894	10 NK AL sv LD	10034	14 NK AL 50	12451	12/9.53 NR AL 50
14583	12 NK AL sv HD	12097	15 NK AL 50	12192	12/10 NR AL 50
13895	16 NK AL sv LD	12098	16 NK AL 50	10036	12.7/12 NR AL 50
13896	19 NK AL sv LD	10031	18 NK AL 50	12193	13/9.53 NR AL 50
		12177	19 NK AL 50	12194	13/10 NR AL 50
		10032	22 NK AL 50	12195	14/10 NR AL 50
				12453	16/9.53 NR AL 50
				14835	16/10 NR AL 50
Lokclip Aluminum		Lokclip Steel		12196	16/13 NR AL 50
13030	9.53 NK LCR AL 50	13043	9.53 NK LCR ST 50	12099	16/15 NR AL 50
13040	13 NK LCR AL 50	13044	12.7 NK LCR ST 50	14165	17/16 NR AL 50
13041	16 NK LCR AL 50	13045	16 NK LCR ST 50	10475	19/16 NR AL 50
13042	19 NK LCR AL 50	13046	19 NK LCR ST 50	10035	19/18 NR AL 50
Tube/hose fitting		Tee Aluminum		Repair fitting	
12398	Tube 3/8" hose 6	14234	10 NTK AL 50	13055	3/8" AL 06 'O' (M) BU
12399	Tube 1/2" hose 8	13595	16 NTK AL 50	13056	1/2" AL 08 'O' (M) BU
12400	Tube 5/8" hose 10			13057	5/8" AL 10 'O' (M) BU
12401	Tube 3/4" hose 12			13058	3/4" AL 12 'O' (M) BU
15521	Tube 13 hose 8 45-			13047	3/8" AL 06 'O' (M) VZ
13915	Tube 16 hose 10 90-			13048	1/2" AL 08 'O' (M) VZ
				13049	5/8" AL 10 'O' (M) VZ
				13050	3/4" AL 12 'O' (M) VZ
Lokprep/ Abrasive pad		Hand mounting rods		13051	3/8" AL 06 'O' (F)
12101	Lokprep 65G 15ml	10051	Standard	13052	1/2" AL 08 'O' (F)
10183	Abrasive pad	10029	Heavy	13053	5/8" AL 10 'O' (F)
		13906	Joint	13054	3/4" AL 12 'O' (F)

HOSE & TUBE REPAIR



HOSE REPAIR

Airsept Smart Splice

An air conditioning system pipe can become damaged or even break. With the Smart Splice system, however, these problems are easily remedied. The sealing ring has ten times the sealing area of a standard O-ring, and the kits also include a standard anti-vibration clamping ring. This combination ensures a durable repair.

Cut the pipe to be repaired neatly with a pipe cutter, clean it and install the Smart Splice. It is even possible to remove it again!

14237

Deburring tool

15217

**T-line tube cutter
1/8" – 5/8"**

10183

Abrasive sponge





Smartsplice straight fitting

13320	5/16"
13319	3/8"
13318	1/2"
13601	5/8"
14350	3/4"
15658	8 mm
13999	10 mm
14000	12 mm
14349	15 mm
15659	16 mm

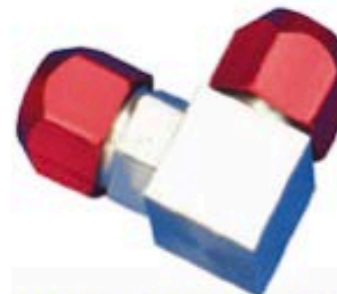
Smartsplice adapter

15645	3/8" - 5/16"
15646	1/2" - 5/16"
15647	1/2" - 3/8"
15660	12 - 10 mm



Smartsplice 45° fitting

15650	5/16"
15649	3/8"
15652	3/4"



Smartsplice 90° fitting

15654	3/8"
15653	1/2"
15656	5/8"

HOSE & TUBE REPAIR



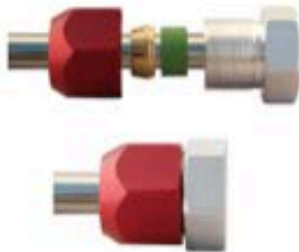
Smartsplice straight fitting LP service port

14402	3/8"
14403	1/2"
14404	5/8"
14405	10 mm
14406	12 mm
11407	15 mm
14408	16 mm



Smartsplice straight fitting HP service port

14409	5/16"
14410	3/8"
14411	1/2"
15673	8 mm
14413	10 mm
14414	12 mm
14415	15 mm



Smartsplice line terminator

14778	5/16"
14779	3/8"
15664	1/2"
14780	5/8"
15565	3/4"
15666	8 mm
15667	10 mm
15668	12 mm
15669	15 mm
15670	16 mm



Smartsplice hose splicer
aluminum

15985	#06 - #06
15986	#08 - #08
15987	#10 - #10
15988	#12 - #12



Smartsplice hose splicer
aluminum



Article	Hose/tube smart splice set
15675	Straight 5/16" for hose #06
15676	Straight 3/8" for hose #06
15677	Straight 1/2" for hose #08
15678	Straight 5/8" for hose #10
15679	Straight 3/4" for hose #12
15989	Adapter 90° 5/16" for hose #06
15990	Adapter 90° 3/8" for hose #06
15991	Adapter 90° 1/2" for hose #08
15992	Adapter 90° 5/8" for hose #10
15993	Adapter 45° 5/16" for hose #06
15994	Adapter 45° 3/8" for hose #06
15995	Adapter 45° 1/2" for hose #08
15996	Adapter 45° 5/8" for hose #10

Article	Assortment
	Smart Splice four pack
14400	
	Smart Splice five pack
15538	
	Smart Splice ten pack metric
15661	
	Smart Splice leading stop SAE five pack
15671	
	Smart Splice leading stop SAE/ metric ten pack
15672	
	Smart Splice Masterset 1/2", 3/8" & 5/16"
13362	

15227

Wrench set

The Smart Splices are easy to attach with wrenches! No special tools are required

