

Lucas



LUCAS DIESEL SERVICE

THE GLOBAL NETWORK OF DIESEL SPECIALIST MULTIBRAND WORKSHOPS

© by Lucas Diesel Systems

Welcome to the new era of DIESEL!

OUR BRAND

LUCAS DIESEL SYSTEMS

OUR CONTEXT

THE CONCEPT

OUR COMMITMENT

OUR OBJECTIVE

OUR SUCCESS

OUR ADVANTAGES

OUR VALUES

OUR NETWORK

PRO · EXPERT · MASTER

REQUIREMENTS

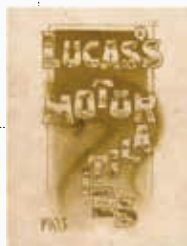
LUCAS BRAND

- Diesel Systems
- Test Bench & Tools
- Training Programmes

1870 - 1900
Establishment of the company



1900 - 1920
The product range grows



1920 - 1940
The largest supplier of electrical equipment



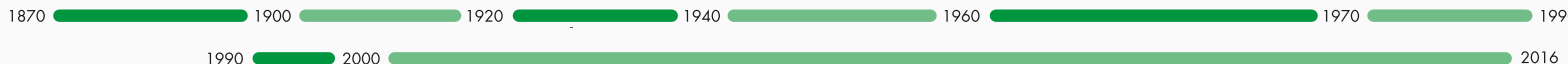
1940 - 1960
The new braking business



1960 - 1970
Expansion across Europe



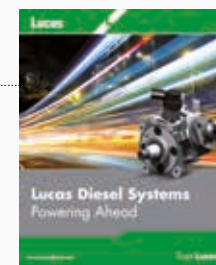
1970 - 1990
Lucas adds green to its corporate branding



1990 - 2000
One of the top 10 manufacturers in the world



2000 - 2016
Meeting all market demands



2016
Lucas Diesel Systems returns to the international market

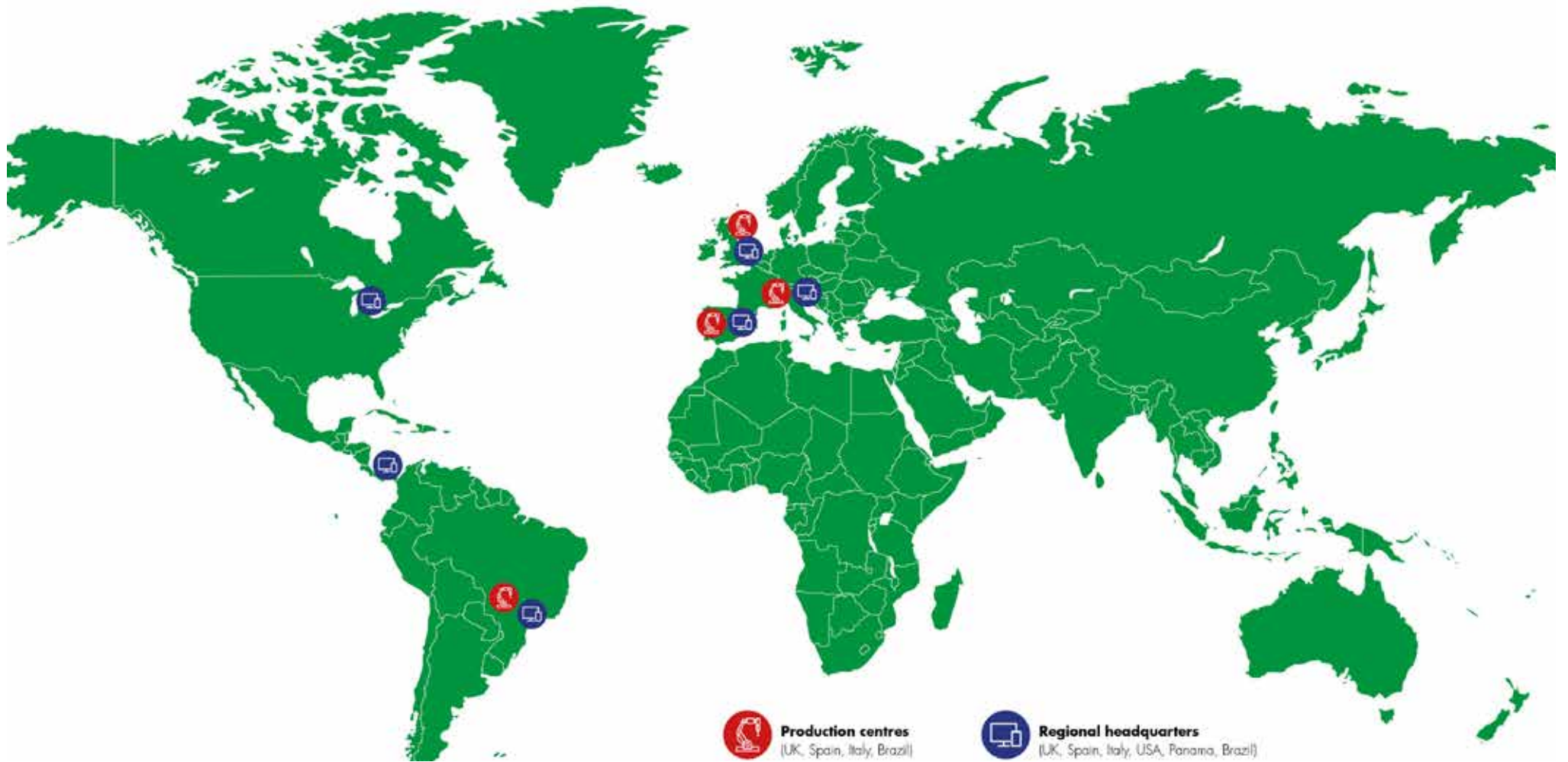
Lucas - over 140 years in the automotive market

Trust Lucas

Far before the Ford T, and even before Mercedes came up with the first carriage without horses, Lucas was already around. **The Lucas brand was established in 1872**, the same year the petrol engine was patented. The history of this company, founded by **Joseph Lucas in the United Kingdom**, where its main office is still located, is the story of one of the **most successful automotive brands of all time**.

Lucas has been offering the world an extensive range of high quality, technically excellent and innovative automotive products **for over 140 years**. Its sound reputation and consecutive international achievements have enabled it to continue developing **new business opportunities** that fulfil the increasingly **complex market demands**, and it always reacts rapidly to **satisfy the most demanding expectations**.





The new diesel era: expansion and growth

The work of **Lucas Diesel Systems** is set within this context of triumphs and longevity in the market. Our confidence in and commitment to a brand, of unparalleled quality, tradition and global recognition, combine with our **extensive experience and track record in the diesel sector**.

Our catalogue of multibrand spare parts now includes **over 2,000 reman and over 10,000 spare parts items**, and offers these exclusively for new diesel system products that come onto the market.

We have **Production Centres** in the United Kingdom, Spain, Italy and Brazil and **Regional Headquarters** in the United Kingdom, Spain, Italy, Panama, Brazil and the United Arab Emirates. Our newest location just opened in **Detroit**, where we are starting to establish **partnerships with the leading distributors in the United**

States. And we continue to expand on a constant basis, gradually opening up new Lucas distributors that already operate with our range of diesel products at numerous points around the world.

Taking into account that one of our main objectives is for the specialist diesel sector to fully meet the needs of the current market, **Lucas Diesel Systems is launching a new concept: Lucas Diesel Service - the global network of diesel specialist multibrand workshops**.



Lucas Diesel Service

The global network of diesel specialist multibrand workshops

Lucas



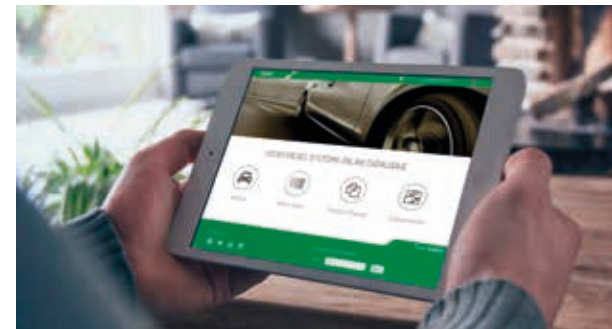
A promising and exciting future

Trust Lucas

The international automotive sector is **progressing at an unstoppable rate year on year**. Most of the population needs and owns a vehicle, which leads to an increasing rate of car ownership, and that is very positive for our sector. **This is why some of the most advantaged are workshops**. The more cars there are, the more work and the more profits there are for them.

In addition, **diesel technology is developing faster than ever**. Engines are becoming increasingly complex and efficient and there is consequently more of a **need for specialist workshops in the diesel sector** that we can fully trust in.

Furthermore, and due to the high number of systems of different brands and types assembled in new vehicles, **belonging to a single manufacturer's network is not practical**, as this only makes it possible to service a small proportion of the vehicles circulating on our roads.





The global network of diesel specialist multibrand workshops

Within this context, our **Lucas Diesel Service** concept introduces and offers a **multibrand programme**. It enables you to **service all systems and vehicles found in each market** and ensures any investment required to form part of the workshop network obtains the **highest returns possible, as quickly as possible**

Our main objective, therefore, is to make **our network of workshops truly profitable for its members**. Consequently, our business concepts are based on common sense, the highest level of repair technology, maximum quality in terms of the products offered for each vehicle, comprehensive training of the highest degree and the most professional problem-solving technical assistance.

At Lucas Diesel Systems we want **to work side by side with diesel specialist workshops**, taking into account the sector's optimistic outlook and the strength of advanced

and developed technology with many years of experience across the world, not forgetting the economic and environmental advantages that characterise a **competitive and successful business model**.

By becoming a Lucas Diesel Service workshop, your establishment will become a **visible, innovative and beneficial business** in all aspects, with the **greatest potential in the short term**.



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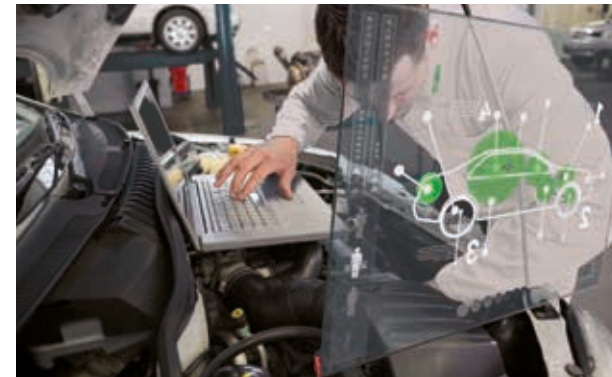
Building a different future together

Trust Lucas

At Lucas Diesel Systems we are committed to creating a **global, modern and professional network of Lucas Diesel Service workshops for diesel specialists**, as the best way to form a large group of **trusted establishments** that will become **the first choice for all types of customers**. Each associated workshop will therefore **increase its level of services**, position itself as the **expert provider in diesel specialist services in its area of business**, offer the capacity to **access the full range of Lucas Diesel Systems products** (top quality workshop equipment and parts) and receive the **best training and technical assistance in the market** from Lucas brand professionals.

At Lucas Diesel Systems we want the everyday and ordinary act of going to a workshop to become, for the professional and the end customer, a truly individual

and differentiated experience, characterised by the values conveyed in said occurrence which will be based on **quality, professionalism and excellence**.



Lucas



Your workshop, the customer's first and best choice

Trust Lucas

The current advanced diesel engines will become even more complex and efficient in the future. Constituting a successful business in the long term means having the ability **to react quickly and effectively to any demand that arises in our sector.**

When you join the global network of diesel specialists Lucas Diesel Service, **your workshop will be positioned at an optimum level within your local area of business** to be able to provide an excellent service in all aspects related to the **diagnosis, verification, repair and maintenance of diesel injection components for conventional and modern diesel systems in cars, commercial and industrial vehicles.**

The **reputation of the image of a global brand** such as Lucas, which has an extensive and sound track record in the market, will make your workshop the top choice for anyone searching for the best possible combination of **experience in diesel, quality, cost-effectiveness and service.**



Lucas



Lucas Diesel Service; a better level of service

Trust Lucas

Our concept's competitive advantage is based on providing **top quality spare parts and workshop equipment**, offering **the best and most comprehensive automotive training programmes**, having the quickest solutions by means of direct technical **assistance and support and counting on a strong brand image recognised the world over.**

As a Lucas Diesel Service network workshop you will have access to:

SPARE PARTS

Featuring exceptional technology and innovation, with the extensive multibrand range that Lucas Diesel Systems offers and that includes over 10,000 spare parts and 2,200 reman items, making it one of the **largest catalogues in the market** and offering **availability of components** exclusively for the latest new diesel systems' products added to the market.

MULTIBRAND VERIFICATION, DIAGNOSIS AND TESTING EQUIPMENT

The most modern and advanced in the market, together with its corresponding tools, **suitable for any workshop, Plug & Play, Easy Use**, of the highest quality and precision, with approved tests and permanent updates online.

COMPREHENSIVE TRAINING IN THE LATEST DIESEL TECHNOLOGY

Thanks to **qualified, expert, professional technical instructors**. Through Lucas **Academy**, Lucas Diesel Systems offers the highest level of training, tailored to each workshop. It offers courses approved by the English Motor Industry Institute **IMI** (Institute of the Motor Industry) which include theory and practical training in small groups both in person and online, taught at the Lucas Diesel Service Member's location.

LUCAS, A HISTORICAL BRAND IN THE MARKET

Applying the Lucas corporate image at your facilities will provide you with **credibility, recognition, support and the best public visibility** possible. Both the tailored design of your own establishment as well as the signage of the company vehicles, the work clothing or office materials, corporate marketing and advertising, make for a **strong image** focused on generating and maintaining the highest **recognition of your business** by your customers.

Lucas



Ready to face all challenges, both present and future

Trust Lucas

OUR ADVANTAGES



Better **visibility** of your business by applying the **exclusive Lucas brand corporate image**, recognised the world over.



Participation in **Lucas events** at a local, regional, national and international level.



Access to a differentiated **programme of discounts** based on the **service level** that each associated workshop offers.



Customised **technical support**.



Participation in Lucas **marketing programmes**, on a **global scale**.



Access to Lucas **Academy training programmes**, carried out in the country of each of the Lucas Diesel Service members.

Lucas Diesel Service

The global network of diesel specialist multibrand workshops

Lucas



Exceptional service from start to finish

Trust Lucas

OUR VALUES



Cutting-edge, reliable and durable **technology**.



Thorough and impeccable **service**.



Top quality product standards.



Fulfilment of delivery and service **lead times**.



Tailored customer service, **trust and professionalism**.



Commitment to **environmental and safety** regulations.



The best **quality-price** ratio.



Customer satisfaction, the key to our mutual **success**.

Lucas Diesel Service

The global network of diesel specialist multibrand workshops



One more member of the Lucas family

The network of Lucas Diesel Service workshops will fulfil the needs of a market that is increasingly demanding, and will stand out for its excellence in customer service and for the widest range of products and services it offers its customers, all of which come with the priceless guarantee of the Lucas brand.

We will identify your workshop's specific requirements to qualify as a member of the Lucas Diesel Service family and we will feel very proud to be able to welcome you as a new member of this successful network.

Our role consists of ensuring that our network of workshops complies with, fulfils and exceeds the changing expectations of the market and the diesel sector. We trust you will identify with our values, support our work philosophy, commit to excellence in all areas of your business and help us strengthen the global network of workshops for Lucas Diesel Service diesel specialists that we have created for you.

Diesel specialists with highly qualified and trained work teams will manage the Lucas Diesel Service workshop.

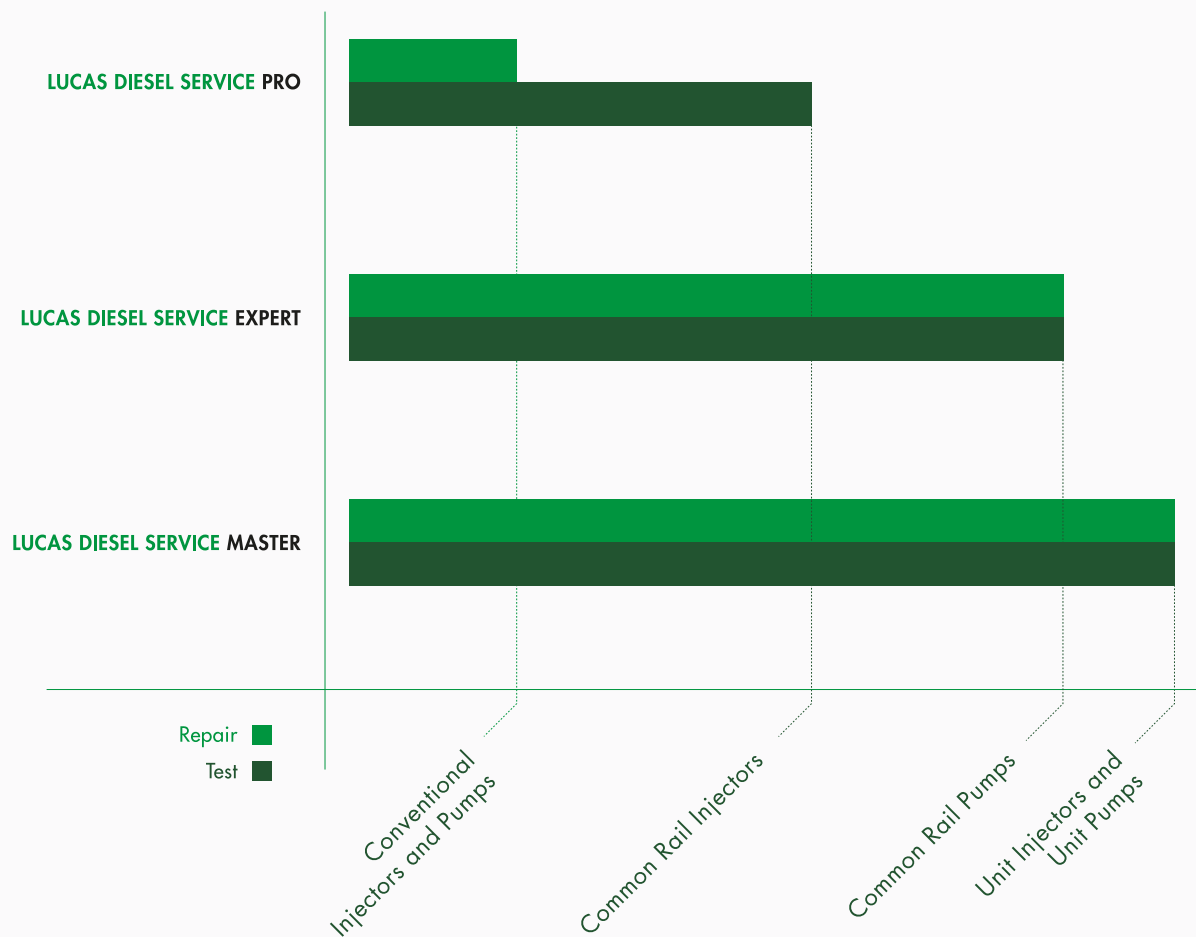
In addition, they must demonstrate the ability to verify and repair specific diesel injection systems, and have specific and cutting-edge testing equipment to perform said work with the best results.

Based on the demonstration of all of these competencies, a workshop's Lucas Diesel Service network workshop may be:

PRO

EXPERT

MASTER



Conventional Injectors and Pumps

- Bosch VE-EDC Pumps
- Bosch VE Pumps
- Bosch VP29/30 Pumps
- Bosch VP44 Pumps
- Zexel VE Pumps
- Delphi DPC Pumps
- Delphi DPC-N Pumps
- Denso VE4 Pumps
- Denso VE-EDC Pumps
- Bosch In - Line Pumps
- Bosch conventional Injectors
- Lucas conventional Injectors
- Delphi conventional Injectors
- Denso conventional Injectors

Common Rail Injectors

- Bosch Common Rail CR11 Injectors
- Bosch Common Rail CR12 Injectors
- Bosch Common Rail CR13 Injectors (Piezoelectric)
- Bosch Common Rail CRIN Injectors
- Delphi Common Rail DF11 .2 Injectors
- Delphi Common Rail DF11 .3 Injectors
- Delphi Common Rail DF11 .4 Injectors
- Denso Common Rail X1 Injectors
- Denso Common Rail X2 Injectors
- Denso Common Rail G2 Injectors
- Siemens - VDO Common Rail Injectors

Common Rail Pumps

- Bosch Common Rail CP1 Pumps
- Bosch Common Rail CP1H3 Pumps
- Bosch Common Rail CP3 Pumps
- Bosch Common Rail CP4 Pumps
- Delphi Common Rail DFP1 Pumps
- Delphi Common Rail DFP3-DFP3.4 Pumps
- Delphi Common Rail DFP6 Pumps
- Denso Common Rail HP2 Pumps
- Denso Common Rail HP3 Pumps
- Denso Common Rail HP4 Pumps
- Siemens-VDO Common Rail Pumps

Unit Injectors and Unit Pumps

- Bosch UIS Unit Injectors
- Bosch UIS - Commercial vehicles Unit Injectors
- Bosch PLD - Commercial vehicles Unit Pumps
- Delphi EUI Unit Injectors
- Siemens - VDO Unit Injectors

Meeting the demands of the whole market

Trust Lucas

A diesel specialist workshop can obtain the categorisation of **PRO, EXPERT** and **MASTER**, by joining the Lucas Diesel Service network at any of said levels and can improve by increasing the range of systems it is able to work with.

At Lucas Diesel Systems we firmly believe in a philosophy of doing and working that is **sustainable for our environment** and promotes the **collaborative economy**. Lucas Diesel Service is therefore based on a genuinely **cooperative network**, which encourages member workshops at different levels to work together, **share and complement their services in order to meet the full demand**.

LUCAS DIESEL SERVICE PRO

The **Lucas Diesel Service Pro** offers the **repair and verification of conventional systems as well as the verification of Common Rail systems**. It is the first step in forming part of the network; an ideal initiation geared

towards the workshop in which such shall find itself supported by the set of Lucas Diesel Service **advantages from the outset**.

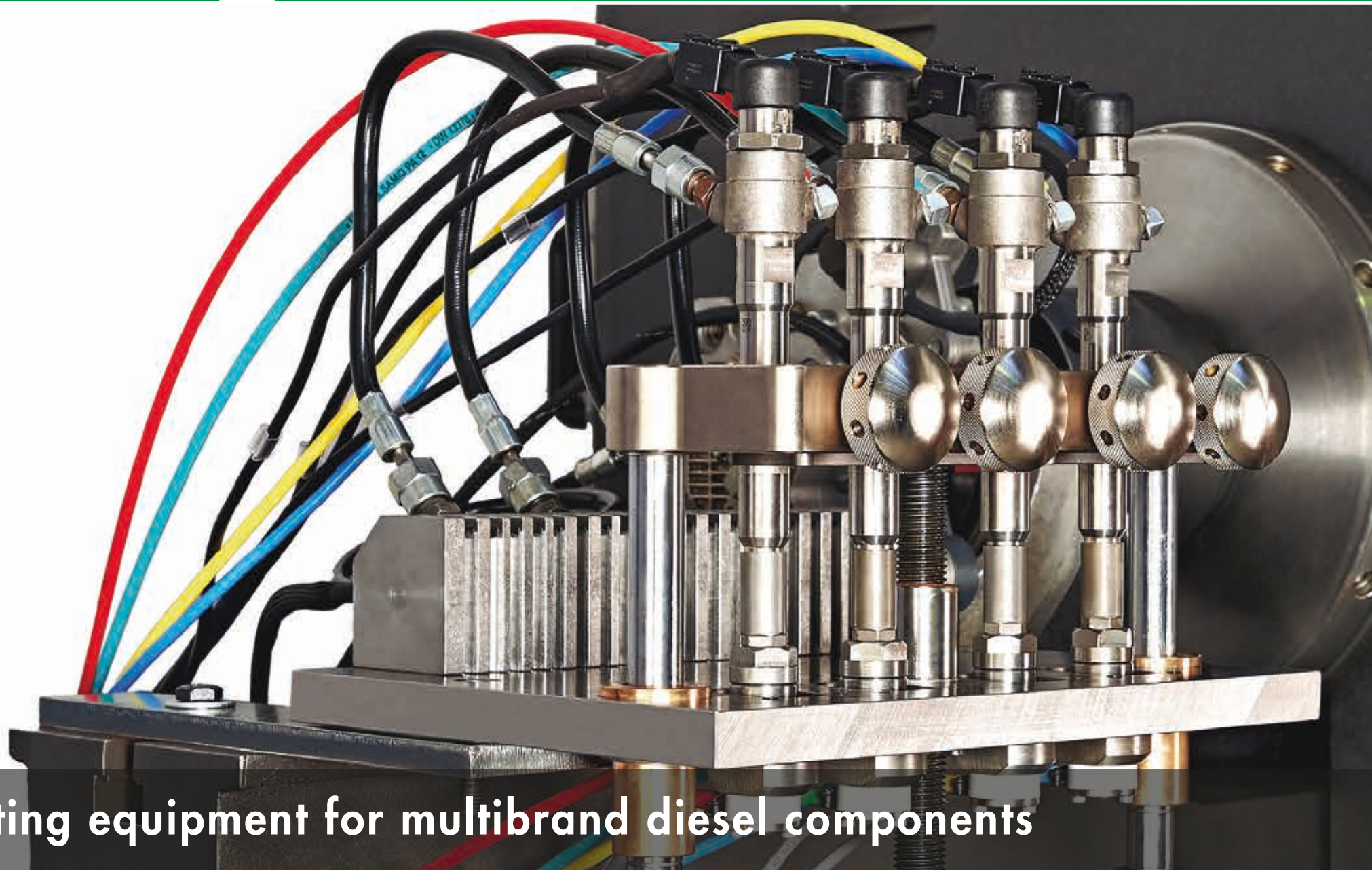
LUCAS DIESEL SERVICE EXPERT

The **Lucas Diesel Service Expert** offers the **repair and verification of conventional as well as Common Rail systems**. The range of systems that can be tested and repaired is expanding, and therefore acquiring an **increased ability to service and attend to more of the demand**, both for the end customer and other members of the network itself.

LUCAS DIESEL SERVICE MASTER

The **Lucas Diesel Service Master** offers the **repair and verification of conventional, Common Rail, injector pump and unit pump diesel systems**. This is the network's premium level, in which the workshop offers the ability to take care of **all of the market's specialist diesel services**.

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Testing equipment for multibrand diesel components

Trust Lucas

Conventional Test Bench

LUCAS DIESEL SERVICE PRO

A

Conventional Test Bench
EDT320 for CR Injectors test

LUCAS DIESEL SERVICE EXPERT

A

Conventional Test Bench
EDT200 for CR Pumps test
EDT300 for CR Injectors test
EDR700 for calibration

B

Conventional Test Bench
EDT101 for universal test
EDR700 for calibration

C

Conventional Test Bench
EDT200 for CR Pumps test
EDT310 for CR Injectors test
EDR710 / EDR720 for calibration

LUCAS DIESEL SERVICE MASTER

A

Conventional Test Bench
EDT100 for UIS/EUI/EUP test and CR Pumps
EDT310 for CR Injectors test
EDR710 for calibration

B

Conventional Test Bench
EDT101 with accessories for Cambox LDFT1163
for universal testing
EDR700/EDR710 for calibration

C

Conventional Test Bench
EDT100 for universal test
EDT300 for CR Injectors test
EDR700 for calibration

Possible options to choose from

Possible options to choose from

Tools

LUCAS DIESEL SERVICE PRO

Tools for the diagnosis of electrical components in
CR Injectors

LUCAS DIESEL SERVICE EXPERT

Tools for the assembly/disassembly of CR Injectors
Tools for the repair and calibration of CR Bosch CRI, CRIN
and Piezo Injectors
Tools for the repair and calibration of CR Denso Injectors
Tools for the repair and calibration of CR Delphi Injectors
Tools for the repair and calibration of CR Siemens-VDO
Injectors

LUCAS DIESEL SERVICE MASTER

Tools for the assembly/disassembly and repair of UIS/EUI
systems
Tools for the repair and calibration of HEUI systems

Note

In the initial phase of joining Lucas Diesel Service, existing equipment from other manufacturers may be approved, as long as they meet the quality standards required to carry out the work corresponding to each level of the network. In the following phase, as the member workshop wishes to increase the range of services offered or modify its obsolete equipment, the acquisition of each piece of equipment will be studied, according to the needs of each member.

Lucas



Excellence in automotive technical training

Trust Lucas

Training Programmes

LUCAS DIESEL SERVICE PRO

CRT01

Common Rail Systems: Bosch, Delphi, Siemens-VDO,
Denso - Theory

LUCAS DIESEL SERVICE EXPERT In addition to the preceding level

CRBIO1

Bosch Diesel Injection Common Rail 1st Gen. Repairing

CRBIO2

Bosch Diesel Injection Common Rail 2nd Gen. Repairing

CRBIO3

Bosch Diesel Injection Common Rail 3rd Gen. Repairing

CRSIO1

Delphi Diesel Injection Common Rail

CRDPIO1

Siemens-VDO Diesel Injection Common Rail

CRDSIO1

Denso Diesel Injection Common Rail

CRCP01

Caterpillar Common Rail Systems C6.6 – C6.4 / Perkins

LUCAS DIESEL SERVICE MASTER In addition to the 2 preceding levels

UISB01

UIS/UPS Bosch Systems (commercial vehicles and cars)

UISDP01

UIS Delphi Systems (commercial vehicles and cars)

CHH01

Caterpillar HEUI C7/C9 Hydraulic Systems

CHH02

Caterpillar HEUI Navistar Hydraulic Systems

UISDT01

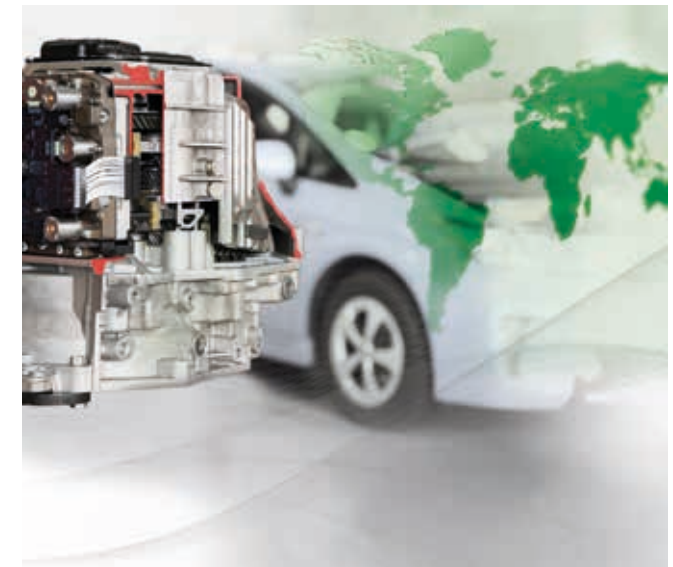
UIS-EUI Detroit Diesel Electronic Systems

CCE01

Collect Cummins Electronic Systems

Note

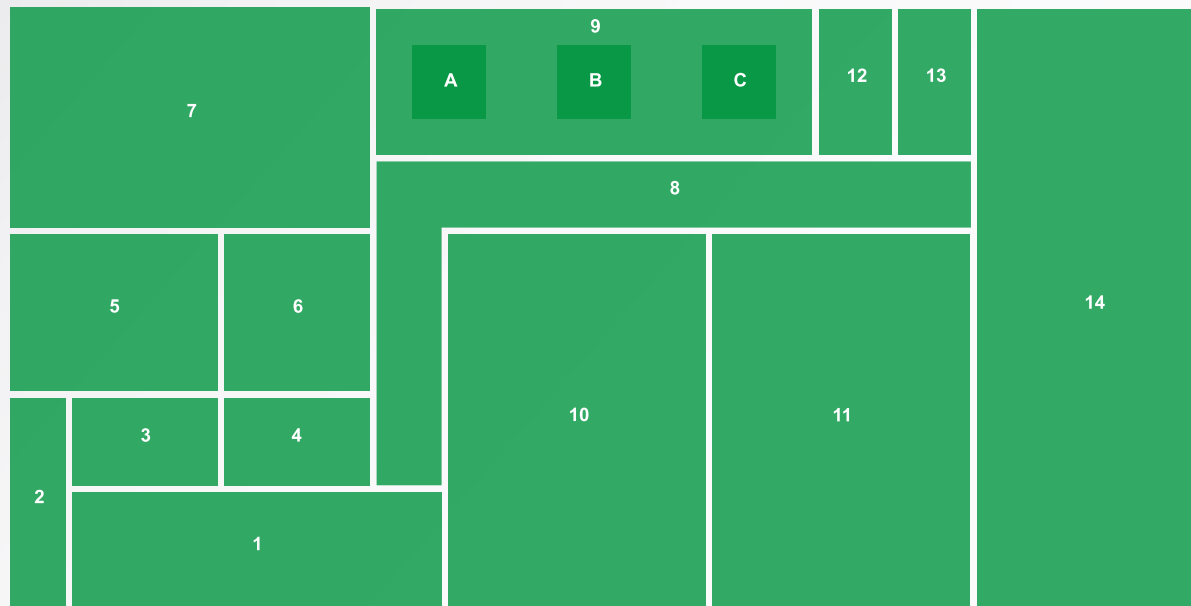
All courses listed are included in the Lucas Academy training programmes and correspond to the specific technical training that the specialist workshop must have in order to access each qualification level. If the workshop were to demonstrate that it already has some of these qualifications (these being approved by LDS), it would be agreed with the distributor that they would be optional. In any case, the workshop and the distributor will commit to undertake a series of annual courses to be determined, taking into account their needs and demands in accordance with the level it ends up adhering to.



Lucas Diesel Service

The global network of diesel specialist multibrand workshops

LUCAS DIESEL SERVICE MASTER



LUCAS DIESEL SERVICE MASTER

- 1 · RECEPTION
- 2 · ACCESSORIES STORE
- 3 · PARTS DEPARTMENT
- 4 · TESTING AREA
- 5 · SHOP WAREHOUSE
- 6 · OFFICES
- 7 · WORKSHOP WAREHOUSE
- 8 · CORRIDOR
- 9 · DIESEL LABORATORY
 - A · TESTING AREA
 - B · CLEAN ROOM
 - C · LABORATORY
- 10 · DIAGNOSIS
- 11 · PASSENGER CARS
- 12 · TRAINING ROOM
- 13 · CHANGING ROOM
- 14 · VANS AND TRUCKS

Lucas Diesel Service step by step

FACILITIES

- **Size** of the establishment suitable for the services offered.
- Customer **reception area** with display of Lucas products.
- Specific diesel **laboratory**.
- **Flexible** layout (for example, optional drive-in) based on the specific features and services of each workshop.
- **Calibrated equipment** suitable for the type of workshop.
- **Impeccable** premises according to Lucas quality standards.

STAFF

The workshop will have a team of at least 4 qualified technicians who are **specialists** in diesel and electronic diagnosis.

SERVICES

The associated workshop must be able to complete the diagnosis **and repair of the systems**, based on their level of service stipulated within the Lucas Diesel Service network.

EQUIPMENTS & TOOLS

The member workshop must have the necessary **minimum equipment** to perform an efficient diagnosis and repair, in accordance with its specific range of services.

PURCHASES

The member workshop **must meet the Lucas** spare parts sales target agreed upon with its corresponding distributor.

TRAINING

The workshop will agree with the distributor to complete a **programme of annual courses** through Lucas Academy, based on their needs and the level it ends up adhering to in the network.

MARKETING CAMPAIGNS

If the premises have internet access, the workshop will:

- Sufficiently implement the **corporate identity manual** supplied by Lucas Diesel Service, with advice from the brand.
- Use a **personalised email** with a Lucas Diesel Service domain.
- Register its **personalised Lucas Diesel Service website** managed by Lucas Diesel Systems.

FINANCIAL STATUS

The business must demonstrate a **sound financial status** for any possible investments that may have to be made.

OPTIONAL SERVICES

- Electric systems: battery, starter engines and alternators
- Turbines
- Light mechanics
- Engines

In addition, the workshop can offer other services with complementary services, provided they do not have a negative influence on the business and development of the Lucas brand.



The most intelligent vision



The **unique and attractive LUCAS image** also contributes to the **success of your business**. Its strong corporate identity enables **easy identification of the network of workshops**, giving your customers **a sense of confidence and security**. Its solid and well-known brand gives customers a **positive perception** in relation to the high quality of products and services offered.

To offer a **highly professional appearance that is completely integrated and aligned** with the Lucas brand standards, each member of the Lucas Diesel Service network will implement the **specifications included in the corporate identity manual** to be provided for this purpose.

This comprehensive document provides answers to all of the matters to be taken into account for the **correct use of the corporate visual identity of the Lucas brand** in all its aspects and areas. Lucas Diesel Systems will be at your service to provide any **help, support and advice** you may need throughout the **technical and aesthetic application process** required in your establishment.

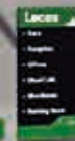
Lucas

LUCAS

MASTER Diesel Service

Store

Diagnosis



Trust Lucas

JOIN LUCAS DIESEL SERVICE, THE GLOBAL NETWORK OF DIESEL SPECIALIST MULTIBRAND WORKSHOPS



Lucas Diesel Service

The global network of diesel specialist multibrand workshops

EUROPE

UK - Chichester Road - Ponswood Ind. Estate
TN38 9BG - ST Leonards-On-Sea - East Sussex

SPAIN - Pol. Ind. Morea Sur, 59 - 31191 Beriain - Navarre

ITALY - Via F. Filzi, 15 - 20032 Cormano - Milan

NORTH AMERICA

USA - Southfield Town Center - 1000 Town Center - 7th floor
48075 Southfield - Detroit - Michigan

CENTRAL AMERICA

PANAMA - Boulevard Costa del Este
Financial Park Tower - Planta 20 - Costa del Este - Panama City

SOUTH AMERICA

BRAZIL - Rua Gastão Vidigal, 370 -13570-655 - São Carlos - SP