



# 2021/2022

## POPULAR PRODUCTS

**100's more products available**

call or visit [www.ryansautomotive.ie](http://www.ryansautomotive.ie)

Just call to book in an onsite  
**Mobile Demonstration**



**DIAGNOSTICS <<**

**INFORMATION PACKAGES <<**

**SPECIALIST TOOLS <<**

**AIR CONDITIONING <<**

**TRAINING COURSES <<**

**INJECTOR & GLOW PLUG REMOVAL <<**

**OSCILLOSCOPES <<**

**SPECIAL OFFERS & MUCH MORE <<**

*Diagnostics, Specialist Tools & Technical Know How*

**051 424 799**

visit [www.ryansautomotive.ie](http://www.ryansautomotive.ie)  
email [info@ryansautomotive.ie](mailto:info@ryansautomotive.ie)



**NEXT DAY  
DELIVERY\***

Next Day Delivery starting  
from €8.50. **FREE DELIVERY**  
on orders over €150 ex VAT

All prices correct at time of print but may vary thereafter  
The prices in this catalogue are trade prices for Trade Customers only and do not include VAT.

# Autoland Sciencetech

## MODEL - E-ISCAN

**Tablet based Bluetooth version of Autolands diagnostic software.**

Runs on any Android tablet or phone from the E-IsScan app.

It shares the same diagnostic coverage as the iScan3e Start and provides the same functionality and reliability. Covers cars, light commercials, light Asian trucks and supercars.

Wireless communication between interface and tablet.

Price includes 1 year's subscription. (Tablet not included)

**€1,195**



## MODEL - ISCAN3E

**The newest addition to Autolands range, the iScan3e is a robust handheld unit based on Vedis3/E-IsScan software.**

**Versatile – Can be upgraded for more functionality at any time.**

Available in 3 versions,

iScan3e Start – Full diagnostic software and functionality

iScan3e Standard – Also Includes Retrofits and Conversions

iScan3e Pro – Also includes Retrofits, Conversions, Programming and Coding. (Same functionality as Iscan3)

### TECHNICAL FEATURES

- ✓ Touchscreen
- ✓ WIFI
- ✓ Bluetooth
- ✓ J2534 Compatible
- ✓ Remote Support
- ✓ Service on Demand
- ✓ IMS (Optional)



FROM  
**€1,950**

\*Includes  
2 Years  
Updates

## MODEL - ISCAN3

**In Depth Vehicle Diagnostics including Retrofits, Coverions, Programming, Coding, Calibrations, Resets and Relearns.**

Module Programming/Coding for BMW, Mini, Mercedes, Landrover, Porsche, Ford and Mazda. Retrofits and Coverions for BMW, Mini, Mercedes, Porsche, Ford and VAG. Retrofit and Conversion functions include Remote Control Mirror Fold, ECO Stop/Start, Enable DVD/TV, Enable seat occupancy. The best Asian vehicle coverage on the market plus unbeatable on BMW/Mini, Mercedes, Volvo, Landrover, Porsche.



### TECHNICAL FEATURES

- ✓ **Service on Demand (SOD)** Service on Demand is a unique function which provides a solution for remote programming, coding and diagnosis using the distributors online manufacturers software.
- ✓ **IMS2 Interface Module Simulation System (Optional)** Interface Module Simulation function for working with OEM software. Coverage: Mercedes-Benz, BMW, Porsche and Vass.
- ✓ **J2534 Compatible Interface** Compatible with Jaguar, Landrover, Honda, Volvo, Toyota, GM and Ford/Mazda (programming only) J2534 function.
- ✓ **Special Functions** Programming and Coding Capabilities for Mercedes-Benz, BMW, Porsche, Landrover, Ford and Mazda.

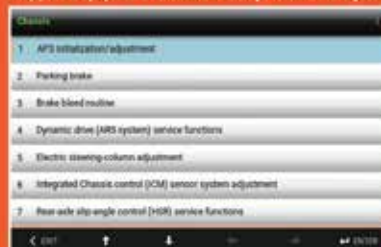
FROM  
**€2,950**

\*Includes  
2 Years  
Updates

### SERVICE RELATED FUNCTIONS

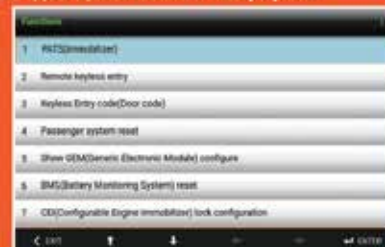
#### BMW F-series

Support Equipment Function Setup - Chassis System



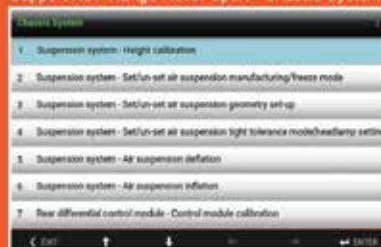
#### FORD

Support Special Functions - Body System



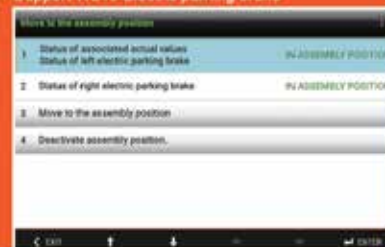
#### LAND ROVER

Support New Range Rover Sport - Chassis System



#### Mercedes-Benz

Support W213 Electric parking brake



# MAHLE TechPro

**MAHLES Premium diagnostics unit. Built to perform.**

1. Fastest Diagnostic tool on the market
2. Cyber Security Ready
3. Easy to operate
4. Read faults, live data, graphing, bi-directional controls and codings.
5. Auto Vin Recognition
6. TecDoc powered
7. 2 Years Warranty
8. Reliable Bluetooth Connection
9. Optional Haynes technical information
10. Optional ADAS, Key Coding and Towbar Coding



**€2,995.00**  
+VAT



## MAHLE TechPro Smart

**MAHLES versatile TechPro Smart can be used with any Windows, Android or IOS device.**

1. Fastest Diagnostic tool on the market
2. Cyber Security Ready
3. Easy to operate
4. Read faults, live data, graphing, bi-directional controls and codings.
5. Auto Vin Recognition
6. TecDoc powered
7. 2 Years Warranty
8. Reliable Bluetooth Connection
9. Optional Haynes technical information
10. Optional ADAS, Key Coding and Towbar Coding

**€1,490.00**  
+VAT

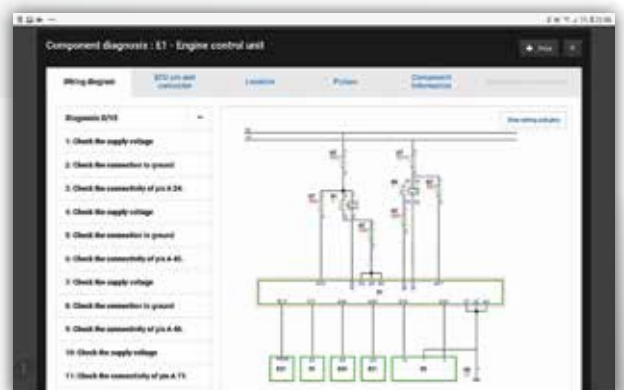
## MAHLE TechPro RMI

**The optional MAHLE TechPro RMI technical information is integrated with MAHLE diagnostics, giving the technician the repair data and diagnostics needed to repair the modern vehicle, all in one unit.**

- Service Information, schedules, resets, maintenance procedures and service checklist.
- Technical Service Bulletins, Recalls, Timing belt and chain instructions and technical specifications.
- Adjustment data, Lubricants and Capacities, Repair manuals and Technical Drawings.
- Wiring Diagrams, Pin Data, Fuses and Relays, Component Locations and Electronic Procedures and Guided tests

*Note: Used through MAHLE Diagnostics, cannot be purchased separately.*

**€202.00**  
+ VAT per year





# Tecnomotor Professional Diagnostics

Trade in any original multi-brand diagnostic tool to receive the below offers

Call our Sales Team  
for more information

## 051 424 799

### MODEL - SOCIO X5

- ✓ Comprehensive in-depth vehicle coverage
- ✓ Large 8 inch touchscreen display
- ✓ Automatic Control Unit search
- ✓ In Built bluetooth
- ✓ Live data graphing and recording
- ✓ Update over Wifi
- ✓ Optional integrated Tis2Web information system



€

Prices excluding VAT

### MODEL - SOCIO X6

**ALL THE SAME GREAT FEATURES AS THE SOCIO X5 PLUS**

- ✓ 2 channel oscilloscope
- ✓ EasyScope software
- ✓ Multimeter
- ✓ Inbuilt Camera
- ✓ Backprobe and connector kit
- ✓ Optional borescope



€

Prices excluding VAT

### MODEL - SOCIO X3

**SAVE  
€500**



- ✓ Rugged shockproof case
- ✓ In Built Bluetooth
- ✓ Comprehensive in-depth vehicle coverage
- ✓ Optional integrated Tis2Web information system



- ✓ Automatic Control Unit search
- ✓ Live data graphing and recording
- ✓ 2 Years updates included

PC not included

€

Prices excluding VAT

### MODEL - SOCIO 410

**SAVE  
€500**

**SAME FEATURES AS THE SOCIO X3 PLUS**

- ✓ 2 channel oscilloscope
- ✓ Easyscope software
- ✓ Multimeter
- ✓ Handy mini scope built into interface
- ✓ 2 Years updates included



€

Prices excluding VAT

**TISWEB combined diagnostics and tech info available on the above tools. See page 7 for more info**

**For more information on these products visit [www.ryansautomotive.ie](http://www.ryansautomotive.ie) or scan qr code**



**RyansAutomotive** | Many more products on [www.ryansautomotive.ie](http://www.ryansautomotive.ie)

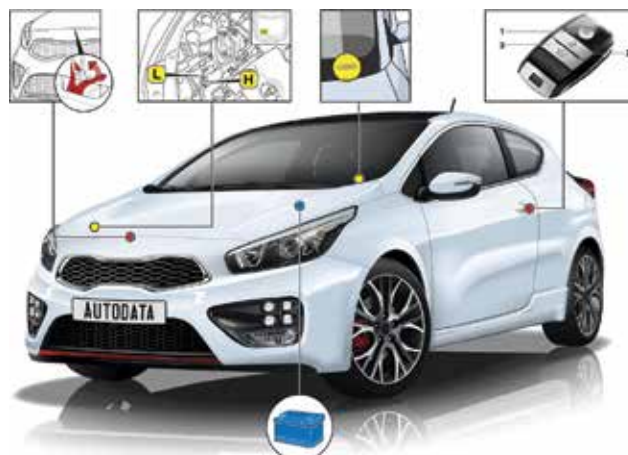
# Technical Information Systems

## Autodata

Autodata is the ultimate tool to provide quick and easy access to technical information to efficiently carry out complex diagnostics and repairs, as well as day to day servicing delivered in an easy to use consistent format for 142 manufacturers covering over 34000 models.

### TECHNICAL FEATURES

- ✓ Complete servicing on one page: all the associated information, all on one page
- ✓ Interactive coloured wiring diagrams
- ✓ Search over 79,000 error codes with the dedicated diagnostic trouble codes module
- ✓ New ASSIST ME function to further aid diagnostics
- ✓ 92,000 wiring diagrams and illustrations
- ✓ 600,000 technical step by step procedures
- ✓ Dedicated Technical Support Hotline
- ✓ Quick, Easy, Informative and always up to date
- ✓ Easy monthly payments by direct debit available



### MONTHLY PRICING

#### AUTODATA SERVICE AND MAINTENANCE

1 user ..... product number ADSM1USER..... €61.00

2 user ..... product number ADSM2USER..... €70.00

5 user ..... product number ADSM5USER..... €85.00

#### AUTODATA DIAGNOSTIC AND REPAIR (COMPLETE PACKAGE)

1 user ..... product number ADDR1USER ..... €102.00

2 user ..... product number ADDR2USER ..... €117.00

5 user ..... product number ADDR5USER ..... €142.00

Prices are correct at time of print

## Alldata

### ALLDATA OE TECHNICAL INFORMATION

- ✓ ALLDATA Repair is the industry standard for manufacturers technical information systems.
- ✓ The factory correct information is not edited or redrawn.
- ✓ Unedited repair procedures, diagrams, specifications, component locations, current TSBs, filling quantities, tighten torques, wiring diagrams and much more.
- ✓ Exactly the same as the OE site not changed or modified.
- ✓ All the information that is available on the OE technical information system.
- ✓ No need to sign up to all the individual manufactures TIS websites and pay per view and try to manage 24 different user names and passwords.
- ✓ It is online based so you will always be using the latest version.
- ✓ Unlike other information systems it has all the data just as the name says ALLDATA, not just the most popular information.
- ✓ Become a specialist in the below brands with the correct information at hand.
- ✓ Data currently available for the following brands: Alfa, Audi, BMW, Citroen, Dacia, Fiat, Ford, Honda, Hyundai, Jaguar, Lancia, Landrover, Mazda, Mercedes, Nissan, Opel, Peugeot, Renault, Seat, Skoda, Smart, Vauxhall, Volvo, VW.

## ALLDATA REPAIR®



### NEW IMPROVED SEARCH FUNCTION

### PRICING

Alldata Repair Standard (1 license)..... €95pm

Alldata Power User Package (3 licenses) .. €109pm

(Please note, a deposit of 4 months is due at initial sign up due to Alldata's cancellation policy.)



## TISWEB

Tecnomotor TIS web full is an intuitive, easy-to-use technical information system that has been honed over years of development to become the leading source of accurate information. TIS web full covers essential data required to carry out general servicing and vehicle repairs as well as being a huge reference library for

valuable data. With electrical systems and advanced technologies becoming an ever more significant feature in modern cars, it has become essential to have quality technical information, diagrams and test information.

Tecnomotor TIS web full online technical information system can be used from your PC/lap top or direct from your Tecnomotor diagnostic tool, Works on the following Tecnomotor diagnostic tools Socio x3, Socio 400, Socio x5, Socio x6.

Monthly Pricing:

TISWEB FULL = €60 +

TISWEB TECH = €31.66 +

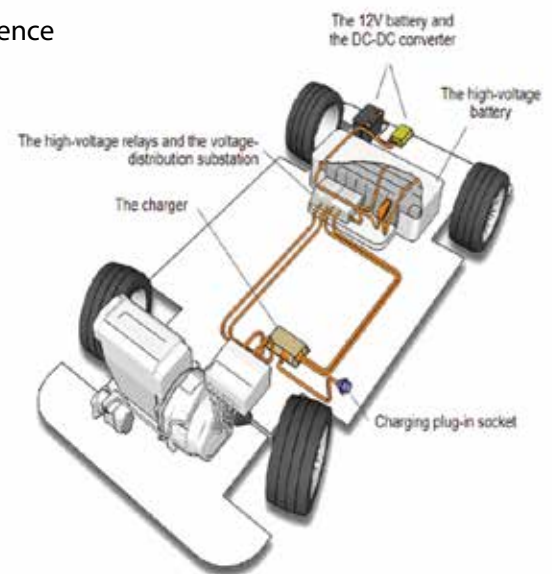
# Technical Training Courses at Ryans Automotive

In depth training courses covering both theory and practical knowledge of modern vehicle systems are now available at **Ryans Automotive**. Courses are presented by Seamus Ryan who has been involved in vehicle repair and diagnostics from an early age. Seamus has attended train the trainer courses in Ireland, Finland and Holland. Lunch and refreshments provided. Contact us on 051424799 for more information.

## Hybrid and EV 2 Day Training Course

The objectives of this course are that you will have gained the below confidence and knowledge needed when working on Hybrid and EV vehicles

- Be able to identify the different types of Hybrid and Electric vehicles
- How to work safely on Hybrid and EV vehicles
- Have a good understanding of the basic working principles of a hybrid and EV vehicle
- Have a good understanding of the different components of a hybrid and EV vehicle
- Understand the differences and challenges presented in working on Hybrid and EV vehicles
- Perform Service and maintenance on a Hybrid or EV vehicle
- Have a good understanding of how to diagnose and repair hybrid and electric vehicles
- The 1st half of each day will be spent in the classroom and the 2nd half of each day will be spent working on vehicles and components.



## Coming in 2021, TPMS and ADAS Training Courses

## Common Rail Diesel 2 Day Training Course

This course will take participants through all of the key components and functions of the common rail system, including:

- Advantages and Disadvantages of common rail
- Most popular brands and versions and how they differ and their operation principles
- Low and high pressure fuel supply system.
- Inlet metering and fuel pressure control.
- The high pressure pump and pressure generation.
- Diesel injectors (piezo and solenoid).
- Key sensors and actuators of the common rail systems.
- Typical test for all of the above systems and components



WE WILL COVER THE  
4 MAIN MANUFACTURERS:



**SIEMENS VDO**  
A u t o m o t i v e

**DELPHI** **DENSO**



# Technical Training Courses

## 2 Day Oscilloscope Course

- Lunch and refreshments provided
- Full printed course notes provided
- Maximum of 8 people
- Hands on Oscilloscope use
- Suitable for users of any brand of oscilloscope

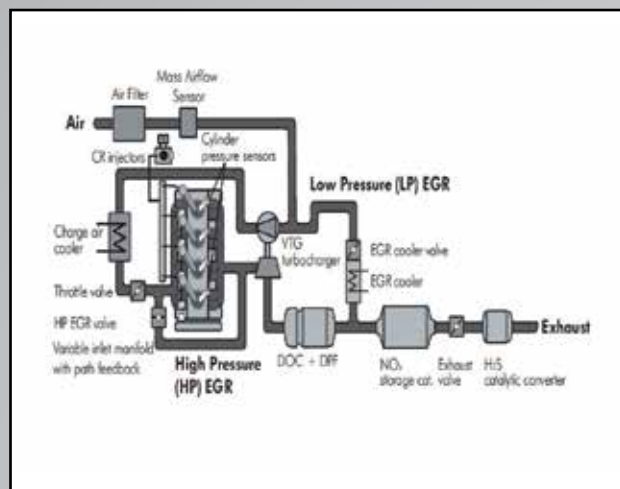
From oscilloscope basics to checking valve timing and compression tests. This course will set you up to use your oscilloscope effectively.



## 2 Day Diesel Intake and Exhaust Systems Course

Covers all aspects of the intake and exhaust system on a modern diesel such as

- Turbo charging
- Low and High Pressure EGR
- SCR and DPF
- All other intake and exhaust components
- And much more
- Lunch and refreshments provided
- Full printed course notes provided



Packages for Training Centres, ETB's, Colleges, Self learners and workshops.

## PRODIAGS ONLINE TRAINING

The worlds easiest way to study automotive technology, the following Online training manuals are available. The prices are for 12 months access.

Diesel Exhaust Gas Technology.....	€19
Common Rail Fuel Systems.....	€22
Tyre Pressure Monitoring Systems.....	€16
Hybrid and Electric Vehicle Technology.....	€19
2014 Toyota Prius PHEV Technology.....	€11
Maintenance Service Online Training.....	€19
Tyres, Rims and Tyre Work Online Training.....	€18
EOBD/OBD2 Self Diagnostics.....	€17
Automotive Electricity.....	€22
Automotive Electronics.....	€12
Charging system and starter batteries.....	€17
Workshop Safety.....	€8
Workshop waste sorting and recycling.....	€14
Starting and Start-Stop systems.....	€17
Brake service and maintenance.....	€24

*New courses coming in 2021*



# ADAS Calibration

## SICE/NEXION Group PROADAS

PROADAS is a universal modular system developed for checking and calibration of driver assistance systems, checking the alignment status and complete wheel alignment service (optional) on multi-brand vehicles and light commercial vehicles.

### Now available in several different packages/configurations:

- ✓ ADAS only Start kit
- ✓ ADAS and alignment with an existing CCD or 3D aligner from Nexion Group
- ✓ Full ADAS and Alignment package

### Features

- Compatible with passenger car and light commercial vehicles
- Compatible with vehicle on lifts or other levelled test bay; the software take in consideration the offset where the vehicle is positioned.
- Compatible with Nexion next generation 3D or CCD wheel alignerS
- Electrical movement (up/down) of the system.
- Need only 1 user for its use.
- Conforms to or exceeds vehicle manufacturer procedures
- Accurate alignment-positioning of the equipment by the sensors/cameras
- Complete printed report includes ADAS calibration results AND alignment results
- Fast alignment and positioning of the system thanks to Real Time information from the integrated sensors
- Can be used with the other brands and even OE diagnostic equipment
- All in One software. Precheck wheel alignment software to check camber and toe values according to manufacturer's specification's, a condition necessary before any ADAS sensor calibration.



From  
**€7,950**  
+VAT

## MAHLE TechPro Digital ADAS

### Simple and reliable calibration of driver assistance systems

TechPRO® Digital ADAS, MAHLE revolutionary system, is super simple and easy, making maintenance of ADAS systems accessible to all workshops. With the TARGETLESS DIGITAL SYSTEM (patent), no additional panel is required.

- New, innovative, technical, and process-based solution
- Targetless Technology
- One digital calibration panel, no individual panels and no manual swap-outs required
- Minimizes process times as much as possible
- Excellent, fast, dynamic results
- Always up-to-date with online updates
- Complete Printout report
- Process performed through MAHLE'S TechPro diagnostic system

**€POA**



**TechPRO® Digital ADAS**  
REVOLUTIONARY TECHNOLOGY  
FOR A SIMPLE CALIBRATION





# 4 Wheel **Alignment**

## **SICE A926E CCD-Radio 4 Wheel Alignment System**

- Wheeled and mobile, with closed compartment for pc and printer
- Measuring sensor with 2 high resolution cameras, electronic inclinometer and level
- Wireless data transmission
- Extremely low light sensitivity for working even in very bright light conditions
- Measuring sensor body in cast aluminium for extreme precision
- Data bank with more than 40,000 vehicles, updatable every year
- Run-out compensation with manual spin or raised wheels, real time measurement and adjustment of caster and king pin inclination (KPI).
- Easily viewed screen and printout
- Fast, precise and very reliable:
- Made by Nexion Group Company
- User friendly software for precise and quick alignment measurements
- A first class international based databank

**UP AND RUNNING PRICES**

From  
**€6,750.00**  
+VAT



## **SICE A92E 3D 2 Camera alignment system**

- Fast, precise and very reliable
- Made by Nexion Group Company
- User friendly software for precise and quick alignment measurements
- Intuitive 2-key operation with easily accessible tutor help
- Easy access to all adjustment values
- 10" to 26" sensor holder (with adaptor)
- Front infrared filter for enhanced immunity to solar reflections.
- Superior Quality Camera. Latest generation high-resolution HI-Q camera for artificial vision
- Lift Drive-On Assistant by remote camera for easy vehicle positioning (optional).
- NEW INTEGRATED LIFT WITH WORMGEAR AND SAFETY SYSTEM
- Lift level automatic tracking function (optional)
- A first class international based databank
- Live graphic indications
- Chassis measurement data
- Factory-calibrated, calibration checked only upon installation, no periodic calibrations required
- Job operation customer data bank, to recall and memorize all customer data
- Camera movement for working from ground to 2 meter height (optional)

**UP AND RUNNING PRICES**

From  
**€8,750.00**  
+VAT



**SICE IS PART OF NEXION GROUP, ONE OF THE WORLD'S LARGEST MANUFACTURERS OF WORKSHOP EQUIPMENT**

## **GEOLUX EL Laser Wheel Aligner**

**The Geolux EL. Not your average laser wheel aligner.**

- Self Centering wheel clamps
- The wheel clamps are with run-out compensator,
- Digital inclinometers allowing camber, caster and KPI
- Digital display of camber, caster and KPI
- Optional Android software to view and print results
- Reads wheel rotation angle during Castor swing procedure, so scales are not necessary on turn disks.
- Can be viewed on the digital display or via the optional android software



**UP AND RUNNING PRICES**

From  
**€2,450.00**  
+VAT



# Oscilloscopes

Check out [www.ryansautomotive.ie](http://www.ryansautomotive.ie)  
for different kits & accessories available



## GMTO/TIEPIE HS6 Diff 4 Channel Oscilloscope

" One of the most advanced scopes on the market with user friendly set up and automotive software that will not be matched."

INTENSIVE  
TRAINING  
COURSES  
AVAILABLE

### TECHNICAL FEATURES

- ✓ 5 different models/speeds available
- ✓ Up to 1 GS/s sampling speed
- ✓ 250 MHz bandwidth
- ✓ USB 3.0
- ✓ 4 channel switchable differential or offset scope!
- ✓ XM: With the extended memory option, up to 256 M Samples memory per channel is available.
- ✓ S: The SureConnect, connection test and resistance measurement are available on all channels.
- ✓ G: The SafeGround, the differential inputs can be switched to single ended inputs, with a protection against shorts circuits to ground. Optional on 1 Gs/s model.
- ✓ Spectrum analyser and serial/CAN bus pro-tocol analyser
- ✓ 1 year warranty as standard on main scope unit and option to buy 5 year warranty for €65.00
- ✓ Comes with Atis Lite Automotive Software with over 1000 component tests and preset screens.
- ✓ Fully differential

**FREE**

Setup & half day training



FROM  
**€1,395**

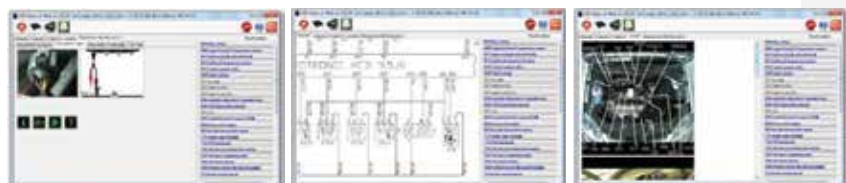
All prices excluding VAT

## AUTOMOTIVE TEST AND INFORMATION SYSTEM

### ATIS PRO SOFTWARE IS AN AUTOMOTIVE TEST AND INFORMATION SYSTEM

Detailed vehicle specific information, allowing you to search by specific vehicle giving you all of the below information:

- ✓ Wiring diagrams for Engine Management
- ✓ Specific sensor and actuator tests
- ✓ Procedures and sample wave forms
- ✓ Live connection diagrams
- ✓ Component location information with live pictures
- ✓ Technical information about the specific item you are testing
- ✓ This level of information on a scope has never been available before.
- ✓ New online database where all Atis users can share waveforms.



**€474.00**

**\* NOTE:** This can be purchased and used without owning a GMTO Scope

### OPTIONAL CUSTOM CARRY CASE

Specifically designed Carry Case for GMTO/ TiePie oscilloscopes and accessories





# Oscilloscopes, Diagnostic Accessories and More

Part No.: BPS

## BACK PROBE SET

Colour coded back probe set 4mm includes 8 probes  
These thin and flexible measuring probes fit on any test lead with 4 mm banana jacks and make it possible to connect to hard to reach places.

€46.00



Part No.: MPS4500

## GMTO PRESSURE TRANSDUCER BASIC KIT

Allows you to perform the following tests:

- Dynamic in cylinder pressure testing with the engine running or cranking. The waveform captured then allows you to perform an analysis of the cylinders compression, timing, valve condition, exhaust back pressure and more.
- Measure fuel pressures up to 45 bar
- And any other air or fluid pressure you wish to test up to 45 bar



€599.00

Part No.: 181

## LOAD PRO TEST LEADS & TROUBLESHOOTING BOOK

- Use with your multimeter to quickly load and test circuits
- Comes with 200 page electrical troubleshooting book



SCAN ME  
for more  
product  
info



€89.00

Part No.: 688

## LOW CURRENT CLAMP METER

- Full digital multimeter included
- 19mm clamp size
- Cat III 600 Volts Safety Rating
- Accurate down to 1mA/0.001A



IDEAL FOR  
BATTERY  
DRAIN

€285.00

## TEST LEADS AND ACCESSORIES

Much larger range available on our website  
[www.ryansautomotive.ie](http://www.ryansautomotive.ie)

Part No.: B2031



## 92 Piece Test Lead Set

€189.00

- Uses all 4mm BNC connectors
- Can be used with any scope or multimeter.
- Easily bypass wiring looms for test purposes
- Connects to most connectors without causing damage

Part No.: PPS



## Pressure Pulse Sensor

€72.00

- Use in conjunction with a Ditec scope to check the following:
- Pulsation of exhaust gases in the exhaust
  - Changes in the gas pressure in the inlet manifold
  - Fluctuations in the membrane pressure regulator of the fuel
  - Crankcase gases and other

Part No.: 7223



## Terminal Release Tool Set

€176.00

- Includes 24 different release tools.
- Made by Condor Germany

Part No.: 142-2



## Bed of Nails Test Clamps

€18.50

- Series of very small pins = less wire damage
- Compatible with any test leads that use the standard 4 mm banana connection

Part No.: TP-CC80



## 20/80 Amps Clamps with Female Connections

€105.00

- 20/80 Amps clamp with female 4mm banana connection
- Universal use with any brand of scope or DMM

Part No.: CA15

## AUTOLAND SINGLE CHANNEL SCOPE/MULTIMETER



- Extremely easy to use and fast single channel scope meter/multimeter
- Ideal for the novice scope user or the experienced user who wants a robust and fast scope
- Heavy duty leads
- Extremely fast and easy to use
- Built in scope auto set up for large range of components and tests
- 3.6 volt rechargeable battery Li-ion battery
- Max measuring voltage DC220V and AC250V

€495.00

Part No.: CSV1

## CARSCOPE VISO 2 CHANNEL OSCILLOSCOPE



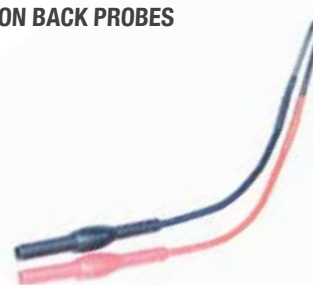
### Key performance specifications:

- 2-channel oscilloscope
- Each channel has its own independent ADC
- Advanced hardware trigger
- 8k point record length on all channels
- Up to 20 MS/s sample rate on each channel

€639.00

Part No.: 616

## SPOON BACK PROBES



- Curved probes allows back probing of round electrical connectors, especially weather pack style.
- Another great option for non-intrusive testing
- Tap readings and scope signals without damaging electrical connectors and harnesses
- Connects to standard size 4mm banana plug test leads

€15.00

Many more scope accessories available, visit [www.ryansautomotive.ie](http://www.ryansautomotive.ie)



# J2534/Pass-thru

**NxGen is a comprehensive ECU re programmer with built-in OBDII diagnostic capability for service bay repairs and automotive engineering**

A true J2534 pass-thru programmer & diagnostic tool for newer cars (approx 2005 onwards) and light commercial vehicles with unlimited functionality that is only restricted by the OEM reprogramming application or diagnostic software capability.

## Laptop Bundles

If you're not confident in the registration process and software installation Ryans Automotive can now supply laptop bundles for the specific brands that you want to cover.

Having already signed up and used these manufacturers softwares we have the experience and know how to help and guide you through the entire process.

Note: some of the parts of the application process must be inputted by the user.

Note: In some cases we recommend the OE interface



**Includes: Diagnostic Kit, Software and Laptop**

SOME OF THE BRANDS WE CAN  
SUPPLY ARE AS FOLLOWS:



## SGW Key. Security Gateway Key for FCA Group

Solution compliant with FCA requirements to carry out diagnosis on all new generation FCA vehicles.

What is the SGW on newer FCA models?

The SGW was implemented in some FCA group models from 2017 onward. The SGW in short is a module whose function is simply to keep the communication networks secure. The SGW protects the vehicle networks from being exploited by creating a firewall between two portions of the network with the most vulnerability.

The SGW Key software and interface allow you to unlock the gateway through the purchase of a token from the FCA portal and gain access to all functions your diagnostic tool is capable of.



**€695.00**



[www.ryansautomotive.ie](http://www.ryansautomotive.ie)

# Battery Management Equipment

## GYS FLASH 100

Part No.: GYSFLASH100-12HF5MT



**GYS 100AMP Battery Support Unit with 5 meter cables**

- Battery support: sustains 12V (liquid or gel) automotive battery during diagnostic work
- Advanced battery charger ensures an ideal charging cycle for battery maintenance for the most modern vehicle
- Showroom mode: maintains batteries in showroom vehicles
- In 'battery change mode, will maintain electrical supply to preserve vehicle memory settings
- High power stabilized supply: voltage & current adjustable
- Approved by many OEM manufactures

**€649.00**

## GYS Flash 120 Amp

Part No.: GYSFLASH120

**GYS 120 amp Battery Support Unit with 5 metre cables.**



### Main Features:

- The new big brother of The Flash 100amp
- Many manufacturers including BMW, Jaguar, LandRover and Mercedes now recommend a 120 amp support unit when programming.
- Supports Wet, AGM and Lithium type battery
- Comes with 5 metre cables.

**€895.00**

## Electromem Flash

Part No.: 013495

**120 Amp Battery Support Unit and Charger**



### Fully Safe System:

- Reverse polarity
- Voltage error
- Short circuit
- Overload

### Main Features:

- Comes with 6 meter cables
- Can supply up to 120 amps during battery support for diagnostic and programming
- FlashMem 120 produces three different charge cycles, Wet, AGM or Lithium LifePO4
- Equipped with micro processing CPU controller for the control and the top safety of all operations
- Automatic cycle of desulphation and exclusive function for deep discharged batteries.

**€899.00**

## 12 Volt Lithium Booster Pack GIGA

Part No.: 05390

**Made in Italy by Electromem**



Ultralight and high performance booster for professional use

Not your average light duty personal use booster, ideal for use in workshops and car sales outlets Recommended for all 12V batteries

### Features:

- Memory Saver Special Function
- Weight 3.5kg
- Equipped with cables with insulated clamps and digital display with functions indication.
- Peak ampere 4000A
- Continuous current 800A
- Start max amperage 2000A
- Reverse polarity protection and warning
- Short circuit protection
- Voltage error warning
- Overload warning
- Over discharge warning
- Over charge warning
- Over temperature warning

**€326.00**

## GYS Diagnostic Trolley

Part No.: GYST



**Diagnostic Trolley**

- Diagnostic cart with 3 shelves/levels, top shelf suitable for laptops, diagnostic tools or oscilloscopes etc and middle shelf for battery support unit and lower shelf for storing other equipment.
- This new revised version now includes a handy pole for holding leads from the battery support unit or oscilloscope that you are using

**SPECIAL OFFER AVAILABLE**  
WHEN YOU PURCHASE BOTH UNIT AND TROLLEY

**€279.00 +VAT**

## Electromem Diagnostic Cart

Part No.: 013300



Diagnostic cart with 3 shelves/levels, top shelf suitable for laptops, diagnostic tools or oscilloscopes etc. and middle shelf for battery support unit (Electromem battery support units) and lower shelf for storing other equipment.

**€298.00**

## Battery Tester XP900 with printer

Part No.: XP900 (without printer)  
XP900KIT (with printer)



- Report Test printable via in built printer (optional)
- Backlit display
- Rugged and shockproof structure
- USB / USB port

- It controls the state of 12 V batteries that comply with different standards: SAE, DIN, EN, IEC, JIS.
- Battery types, WET, GEL, AGM, MF, VRTA and SLI
- Battery tester function 12V
- Starter tester function 12/24V
- Alternator tester function 12/24V
- Vehicle mass Voltage drop test
- Report Test printable with the client and company name via PC software by connecting with PC via USB cable

**€298.00 without printer**

**€375.00 with printer**

## Battery Charger HF2000 12 and 24 Volt

Part No.: 013050

**Made in Italy by Electromem**



12 and 24 volt battery charger HF2000 professional product, complete and universal, for charging and maintaining all vehicles of small, middle and large sized like cars, commercial vehicles, trucks and boats of 12 and 24 Volt.

A powerful and reliable device managed by a microprocessor and designed for producing three different charge cycles of which each is divided into 10 phases.

### Includes:

- Wall mounting bracket
- Cigarette lighter cable and plug
- 3 Specific charging processes for WET-GEL and AGM

**€295.00**



# Moratech Air Conditioning

Part Number: CM850P



€1,995

## Cool Me 850 R134A Air Conditioning Machine

- ✓ Unlimited Pump Warranty
- ✓ 3 years' Machine Warranty
- ✓ Fully Automatic
- ✓ In built vehicle database
- ✓ Hybrid/EV vehicle ready
- ✓ Thermal Printer included
- ✓ Full servicing, calibrations and support is provided in Ireland by Ryans Automotive

"Rugged Service Unit Built To Last"

Moratech A/C machines are approved by Fiat/Chrysler, Ferrari, Lamborghini, Maserati & Dallara.

Part Number: CM4850P



€2,195

## Cool Me 4850 R1234yf Air Conditioning machine

- ✓ Unlimited Pump Warranty
- ✓ 3 years' Machine Warranty
- ✓ Fully Automatic
- ✓ In built vehicle database
- ✓ Hybrid/EV vehicle ready
- ✓ Thermal Printer included
- ✓ Full servicing, calibrations and support is provided in Ireland by Ryans Automotive

"100% Made in Italy"

Part Number: CM5000R



€2,695

## Cool Me 5000R R1234yf Air Conditioning Machine

- ✓ Unlimited Pump Warranty
- ✓ 3 years' Machine Warranty
- ✓ Fully Automatic
- ✓ In built vehicle database
- ✓ Hybrid/EV vehicle ready
- ✓ 20kg internal tank
- ✓ Thermal Printer included
- ✓ Full servicing, calibrations and support is provided in Ireland by Ryans Automotive

✱ Eight machines available in the full range with varying features. Cool Me 3000 also available for buses.

# MAHLE Air Conditioning

Part Number: 1010350362XX



€2,195

## MAHLE ArcticPro ACX110 R134a

- ✓ Thermal Printer for customer report.
- ✓ Car and Light Commercial Database
- ✓ Heavy Duty metal housing
- ✓ Optional Agri Database available
- ✓ Non condensable gas: Automatic check/manual release for ArcticPRO® ACX 110
- ✓ 12KG Internal Tank
- ✓ Fully Automatic
- ✓ 24 menu languages
- ✓ Full servicing, calibrations and support is provided in Ireland by Ryans Automotive
- ✓ 2 Years Manufacturers Warranty

Part Number: 1010350382XX



€3,495

## MAHLE ArcticPro ACX450 R1234yf

- ✓ 7" high visibility Touchscreen display
- ✓ 20kg Internal Tank
- ✓ Database for service data cars and light commercials
- ✓ Oil Care containers
- ✓ Wifi connection
- ✓ Print by wifi
- ✓ Remote Service
- ✓ High-performance vacuum pump
- ✓ Oil bottles: 3 + 1 fresh oil (PAG), used oil, UV additive + POE
- ✓ Hybrid Ready
- ✓ Full servicing, calibrations and support is provided in Ireland by Ryans Automotive
- ✓ 2 Years Manufacturer's Warranty

Part Number: 1010350394XX



€1,262

## MAHLE refrigerant Identifier R134a, R1234yf and 513A

- ✓ Optional Integrated Refrigerant Identifier for MAHLE ACX machines
- ✓ Identifies R134a, R1234yf and R513a
- ✓ Easy use through the ACX machine software
- ✓ Can be purchased with the machine or added afterwards
- ✓ Not available separately



# Air Conditioning Accessories

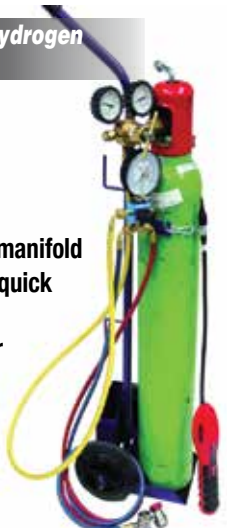
## Oxygen Free Nitrogen Nitrogen/Hydrogen Leak Testing kit

**PART NUMBER: 14300**

- ✓ Trolley for nitrogen bottle
- ✓ Pressure regulator
- ✓ Dual Manifold
- ✓ Yellow hose from regulator to manifold
- ✓ R134a OR R1234yf hoses with quick release couplings
- ✓ Nitrogen/Hydrogen Sniff Tester

**From €590**

(Price Excludes Nitrogen Bottle)



## MAHLE OzonePro Ozone Generator

**PART NUMBER: MOP**

OzonePRO is the professional sanitising system for your workshop to be used in vehicles, offices, hotel rooms, etc to kill viruses and also remove odours.

- ✓ Easy to use
- ✓ Fully automatic
- ✓ Printable Report with service outcome
- ✓ For car/truck/bus interiors
- ✓ To sanitize your workplace, Hotel room, Office, Bar.
- ✓ APP Controlled (Apple and Google Play Store)
- ✓ 5000 mg/h output
- ✓ 30,000 Hour life cycle



**€399 +VAT**

## Errecom Air Conditioning Flushing Kit

**PART NUMBER: RK108801**

- ✓ Removes metal abrasion after compressor failure
- ✓ Eliminating remaining acid caused by moisture
- ✓ Flushing out clogs caused by elastomer particles
- ✓ Remove contaminated refrigerant oil and compressor oil



**€199**

Included in the kit:

- Flush Fluid bottle with pressure gauge
- Flush Gun
- Universal adaptor kit
- 10 Litre tank for the recovery of contaminated liquid
- Plastic container for storage and handling

## Atom Machine With 48 Purifying Treatments

**PART NUMBER: RK1393**

- ✓ Atomizes liquid purifying liquid
- ✓ Infiltrates all parts of the AC system and vehicle interior
- ✓ Removes odours
- ✓ Comes with 48 treatments



**€149**

## KlimaKlamp® A/C Hose Repair Kit

**PART NUMBER: KK-BOX-BSC-001**

- ✓ Repair A/C hoses quickly and easily
- ✓ Contains Straight, 45 and 90 degree joiners
- ✓ Contains 6,8,10 and 12mm hoses
- ✓ Repair tools and clips also included
- ✓ Saves time and money



**€435 +VAT**

**Many more A/C products in stock  
Visit [www.ryansautomotive.ie](http://www.ryansautomotive.ie)**

## Digital Thermometer



**€39**

**PART NUMBER: 10553**

- Digital thermometer for vehicle air conditioning
- Easy to use
- Large display

## Refrigerant Identifier Mini R1234YF



**€799**

**PART NUMBER: 16639**

- Keep Equipment safe
- Prevents contamination
- Detects air contamination

## Recycle Guard



**€259**

**Leak Stop Protection R1234yf  
PART NUMBER: 16536**

- Prevents harmful leak stop from entering your A/C machine
- Easily connects to any A/C machine

## Compressor Guard



**€150 +VAT**

**72 piece screen assortment  
PART NUMBER: 67679**

- A simple screen fitted into the A/C pipe
- Prevents metal shavings from broken compressors travelling through the system
- Recommended by several OEMs

## Sightglass for A/C diagnosis



**€199**

**PART NUMBER: 14756**

- Quickly check the condition of the refrigerant present in an A/C system
- Helps prevent you from sucking contaminated refrigerant into your A/C equipment.

# Air Conditioning Consumables

## A/C O-Ring Kit

PART NUMBER: 79311



- Set of standard O-Rings for Air Conditioning Use
- Larger Kits also in stock

**€ 20.90**

## Extensive Consumable Assortment Kit

PART NUMBER: 17363



- 50 different standard O-Ring types
- 16 different odd size O-Rings
- 9 different valve core and 6 different valve cap types
- Available in individual boxes and with or without lockable storage

**€ 420.00**

## Replacement Hoses



- For Air Conditioning Equipment
- Hoses in stock to suits most types of A/C equipment
- Various lengths in stock from 2.5 meter to 7 meter

**€ POA**

## Extreme Ultra A/C System Leak Stop

PART NUMBER: TR1163AL01S2



- A/C system and A/C machine safe
- Seals leaks up to 0.3mm
- Suitable for R32, R134a and R1234yf
- New advanced formula

**From € 15.50 each**

## External A/C System Leak Stop

PART NUMBER: TR116601



- Suitable for Copper, Aluminium and steel
- Seals leak sizes up to 5mm
- Resistant to A/C oils

**€ 10.50**

## Brilliant UV Dye 7.5ml x 6 Shots

PART NUMBER: TR1058A601



- Visible to any UV lamp
- Does not clog systems
- Suitable for R12, R134A, R1234YF, Hybrid and EV

**€ 8.95**

## UV Dye Cleaner

PART NUMBER: 11247



- UV Dye Cleaner 250ml bottle

**€ 19.44**

## Errecom A/C Leak Finder Kit

PART NUMBER: RK1312



- Kit contains,
- Brilliant dye 120ml • UV Dye remover
  - High Bright UV Torch • UV Goggles
  - Low pressure port adaptor for R134A(R1234yf available)

**€ 99.00**

## Leak Detection T-Line Orange

PART NUMBER: 12694



- Professional Leak Detection Spray
- Leaves a viscous coating
- Enviromentally friendly, can be rinsed off with water

**€ 9.80**

## A/C Machine Service Parts in Stock

PART NUMBER: VAR



We carry a wide range of service parts for Moratech and Mahle A/C Machines including

- Filters
- Oils
- O-rings
- Quick couplers
- Hoses, etc

**€ POA**

# MAHLE Transmission Cleaning

**Mahle FluidPRO ATX ATF Machines. The only ATF Machine on the market with ZF/Mercedes approval. User-friendly design and state-of-the-art technology.**

The number of vehicles with automatic gearboxes has risen sharply in recent years. The recommendation is to service the gearbox system every 60,000 km / 37,500 miles, on average.

Only with the right equipment can this be done correctly, with all the oil replaced, unlike traditional ATF servicing. Vehicle manufacturers recommend servicing automatic gearboxes:

1. To avoid high secondary costs in the event of problems
2. To extend the service life of automatic gearboxes
3. To maintain good vehicle performance
4. To prevent malfunctions due to wear and contaminated ATF
5. To ensure a more comfortable ride

## MAHLE FluidPro ATX150

**PART NUMBER: 1010320001XX**



**€2,995**

- MAHLE's most popular ATF unit
- A service time of just 5 to 15 minutes
- 25 l interchangeable tank for new ATF with quick coupler
- Additive container: 500 ml
- Drain grille for oil sump
- Holders for hose storage
- Automatic cycle: assisted procedure
- Flushing: automatic
- Hose cleaning: automatic
- 10 l/min gear pump
- 2 Years Manufacturer's Warranty
- Adaptors not included

## Mahle FluidPro ATX180

**PART NUMBER: 1010320002XX**



**€3,995**

- MAHLE's top end machine,
- All the advantages of the ATX150 but with an additional 10l/min boost circuit
- So 2 x 10l/min gear pumps
- Speeds up the oil change process on systems with an inline thermostat
- Adaptors not included

## MAHLE FluidPro ATX190 for Mercedes

**PART NUMBER: ATX190**



**€4,500**

- The only ATF Service machine with approvals from any manufacturer
- Approved by Mercedes and ZF transmissions
- All the advantages of the ATX180 with some minor modifications for Mercedes
- Mercedes adaptors included.

## Adaptor Kit for ATF Set1

**PART NUMBER: FG193/S19**

- Huge kit with the most important adaptors
- Universal and specific adaptors for transmission connecting



**€590**

## Adaptor Kit for ATF Set2

**PART NUMBER: FG193/S10**

- Less commonly used adaptor kit
- Applicable for 15 different manufacturers



**€490**

**For more information scan the qr code**







# HEV and EV Equipment

## Electrical Safety Gloves

### PART NUMBER: IG

- Needed for working on Hybrid and Electric vehicles
- For electrical work with a maximum voltage of 1000 volts
- Class 0
- To be used with leather protectors
- Available in 3 different sizes 9, 10 & 11



€55-€69 +VAT

## Sofamel Rescue Pole 1.75m 45kva

### PART NUMBER: BS-45

- For rescuing electrified victims in case of an accident when working on Hybrid and electric vehicles
- 1.75 metre length
- Maximum voltage 45kva
- Hand protective grip



€92.60

## Danger High Voltage Sign

### PART NUMBER: DHVSL and DHVSS

- Made from rigid plastic
- Large sign = 297 x 420 mm
- Small sign = 148 x 120 mm
- Thickness 1.2mm



€15.50 - €36

## Lockout Hasp 38mm Diameter

### PART NUMBER: ALH38

- Lockout device for High Voltage electrical connection
- Used with standard padlock (padlock not included)
- Made from spark resistant aluminium



€7.76

## Restricted Area Marking Poles

### PART NUMBER: HPS06

- Kit for marking out restricted area when working on hybrid and EV
- Plastic support posts and bases for marking out restricted areas
- Posts are made from high density Polyethylene
- Posts are fitted with chain support caps
- Chain length 25 meters



€179 +VAT

## Class 1 Arc Flash Helmet

### PART NUMBER: ARC3

- Helmet with retractable face shield.
- This safety helmet, constructed from a high impact polyamide, is designed to protect against the thermal hazards of electric ARC
- The face shield comes with an Anti-Fog and Anti-Scratch premium coating.
- It also boasts a protective chin piece for added protection against an arc flash hazard



€159

## Insulated Cutter

### PART NUMBER: FG48/IS

- Insulated cutter, Protection up to 1000V.
- Meets the following standards = EN60900, VDE and GS



€24.80

## 3/8 Drive Socket Set

### Insulated to 1000V

### PART NUMBER: FG624E/S10

- Includes the following:
- 8, 10, 12, 13, 14, 17 and 19mm sockets
- Ratchet
- Extension x 2



€191

## High Voltage Multimeter

### PART NUMBER: HPS03

- Safe up to 1000 volts
- Amps up to 20 amps
- Huge range of multimeter functions



€198

## MilliOhm measuring instrument

### PART NUMBER: MM3000

- To be used with GMTO/Tiepie Oscilloscopes
- Tests resistance of motor coils
- Inbuilt presets and information



€426

## Electrical Insulation Tester

### PART NUMBER: MT1801

- Loads the circuit to test for electrical insulation
- Also used for testing Piezo Common Rail Injectors
- DMM Features (AC/DC voltages, resistance & continuity)
- CAT III 1000 V and CAT IV 600 V overload protection



€218

EV TOOL PACKAGES AVAILABLE - Many More EV Products in stock.

# Electrical/Electronic Test Aids

Part No.: AS7180

## AUTOSIM PRO

- Combined Sensor Simulator and PWM Generator
- Precise DC Voltage control
- Embedded sensor presets
- Simulates actual working condition of most automotive sensors
- Master kit also available



€269.00

Part No.: HU31035

## HUBITOOLS SENSOR SIMULATOR

- Combined Sensor Simulator and PWM Generator
- Easily rule out wiring issues
- Simulates most sensor types on the market
- Runs many actuators like egr, etc



€368.00

Part No.: CSIT

## CARSCOPE I-TESTER

Quickly and easily perform the following functions,

- Relative Compression Test
- Cylinder synchronisation
- Common Rail Pressure Test
- Optional OBD cable also available €20
- Master kit also available



€219.00

Part No.: TMX589

## TECH MULTIMETER KIT

Set Includes:

- Over 1 Hour of DVD video training included, including videos by Dan Sullivan • TMX-589 True RMS Digital Multimeter – CATIII 1000 Volt • LOADpro® Dynamic Test Leads • 200 page Electrical Troubleshooting Book • Compass for Alternator and solenoid diagnostics

€289.00



## TEST LEADS AND ACCESSORIES

Part No.: PPECB



Power Probe OBD Breakout box and tester

€199.00 +VAT

- Test all 16 pins in the OBD port
- Test for power supply and grounds in OBD port
- Allows you to switch the inbuilt voltmeter to display the voltage on the various pins
- Many more functions. Check our website for more details

Part No.: MM101



Solenoid Valve Driver

€295.00 +VAT

- Can be used to command the following components from 0 to 100 %
- EGR solenoid valves
- Turbo boost control solenoids
- EGR control solenoids
- Air conditioning compressors
- And most other PWM controlled components

Part No.: HU23105



Hubitools Handy Borescope/Videoscope 4.9mm

€398.00 +VAT

- 4.9mm head
- Front and side switchable cameras
- 2 Led lights sources and 2 cameras
- AV Out port
- Zoom x 1.5

Part No.: SGTA10



Samsung Galaxy TAB A 10.1 LTE

€245.00

- Latest 2019 version
- Ideal for Mahle TechPro Smart and general workshop use
- Optional rugged Cover also in stock

Part No.: RSB7210



Automotive Resistance Substitution Box

€79.00

- Device for simulation, inspection and testing applications of all car resistor type sensors
- Easily simulate resistances of 0 to 10000 ohms
- Quickly confirm the fault of a sensor and the integrity of the wiring loom.

Part No.: HU35025

## HUBITOOLS UNIVERSAL DIGITAL PRESSURE TESTER

The ultimate Pressure test unit. Replaces dozens of standard pressure testers in just 1 unit.

Test the following:

- Diesel and Petrol compression
- Oil pressure
- Turbo pressure
- Cooling system pressure
- AD Blue pressure
- Fuel low pressure
- Vacuum pressure
- Particle filter pressure
- And as an option, common rail high pressure

€1,304

### Features

- ✓ Sensor 0 to 300Bars
- ✓ Sensor 1 > 3Bars
- ✓ Universal Diesel Compression Adaptor for injector hole
- ✓ 2 x types of nozzle head for diesel compression adaptor
- ✓ Petrol Compression Adaptors x 2
- ✓ One way valve
- ✓ Eight specific professional quick coupling adaptors
- ✓ Coned adaptors for connecting to rubber push on hoses x 6



Much larger range available on our website  
[www.ryansautomotive.ie](http://www.ryansautomotive.ie)

# TPMS

## TPMS Starter Kit 2

### PART NUMBER: TPMSK2

- ✓ Ateq TPMS Programmer with OBD cable
- ✓ 5 years updates included
- ✓ 10 x HUF Intellisens Universal Sensors
- ✓ TPMS Online training
- ✓ TPMS Tool kit



**€570.00**

## TPMS Starter Kit 3

### PART NUMBER: TPMSK3

- ✓ Programmes a huge range of universal sensors
- ✓ 1 years updates included
- ✓ 10 x HUF Intellisens universal sensors
- ✓ TPMS Online training
- ✓ TPMS Tool kit



**€876.00**

# TECNOMOTOR EMISSIONS TESTERS

## PART NUMBER: 830

### Laptop Based Tecnomotor Petrol Emissions Tester

- ✓ 100% Made in Italy
- ✓ Very reliable and robust unit
- ✓ 5 Gas analysis
- ✓ View the readings through the laptop using the specific software
- ✓ 3 minutes warm up time
- ✓ Fast and simple maintenance through easy access to filters
- ✓ Fast measurement response time
- ✓ Optional bluetooth and internal battery for easy movement around the workshop



FROM  
**€2,495**

## PART NUMBER: 810

### Petrol Emissions Tester with In Built Screen

- ✓ The same as the 830 but with the advantage of an inbuilt screen to view readings.
- ✓ Can also be viewed via PC software.
- ✓ Also comes with inbuilt printer.
- ✓ Very user friendly



FROM  
**€2,895**

All Prices  
Excluding  
Vat

# REDLINE LEAK DETECTION

The worlds best selling diagnostic leak detector

## Part Number: SPTT

### SMOKE PRO TOTAL TECH

#### THE MASTER KIT

Package includes:

- ReadySmoke™
- OEM-Approved Vapor Producing Fluid
- Halogen Inspection Light
- EVAP Service Port Tool
- EVAP Schrader Valve Removal Tool
- Cap Plug Kit
- Standard Cone Adaptor
- Plastic Accessory Case
- Easy Intake Bladder Included
- 2 year warranty



Quickly and easily diagnoses leaks in Turbo systems, vacuum pipes, oil leaks, engine cylinders and much more.

**€740.00**  
+VAT

# REDLINE DETECTION.COM

## Part Number: EIB

### EASY INTAKE BLADDER

Great Time Saver



- Inflatable bladder to connect your smoke machine to non circular pipes.

**€129.00**



# Adblue, DPF and DEF Equipment

Check out our website for the full range [www.ryansautomotive.ie](http://www.ryansautomotive.ie)

## Diesel & Gasoline Fuel Systems, DPF & Intake Manifold Treatment Unit

**PART NUMBER: ES3**

State of the art multi system cleaner

Main features

- DPF cleaning
- Cleaning intake manifold, ports in head, valves and combustion chamber
- Clean standard diesel injector pumps and injectors
- Clean common rail diesel pumps, injectors and pressure control valves
- Run the engine independent of the vehicles own low pressure system to help with diagnosis
- Programmable duty cycle software controls
- Optional adaptors available

**€2,195**  
+VAT



## Errecom DPF Flush kit

**PART NUMBER: RK1350**



**€193**

Kit includes,

- DPF Flush Gun
- DPF Flush 5 litre
- DPF Rinse 5 litre
- The above 5 litre cans are enough fluids to do 5 vehicles each
- Interchangeable rigid probe
- Interchangeable flexible probe

## Refractometer for Adblue testing

**PART NUMBER: RFM03AB**



**€83**

- For testing of Adblue quality
- Approved by Mercedes
- Made by LTR Germany

## Sampling and Concentration Test Kit for Adblue

**PART NUMBER: AEKP01**



**€346**

- Includes adblue Refractometer
- Tests the delivery rate of the scr pump
- Tests the injected quantity
- Approved by Mercedes

## Diagnostics, Flushing and Cleaning Kit For Adblue Systems

**PART NUMBER: LE-UNAB06**

- Dosage quantity measurement (in conjunction with vehicle tester)
- Spray pattern check
- Discharge pressure measurement
- Visual inspection in the pipe circuit
- Component flush
- Exhaust/filling of empty pipes and pumps
- Solving of crystals
- Oil detection in AdBlue®
- Vacuum indication at conveyor module
- Cleaning of dirty SCR tanks and pipes
- Operating the vehicle with AdBlue® from a canister
- The adapter kit is 100% resistant to AdBlue®
- Made by Lehnert Tools Germany
- Approved by AGCO



**€1,495**

## Gauge to Check the Pressure and Vacuum of Adblue

**PART NUMBER: FP07AB**



**€219**  
+VAT

- Made by LTR Germany
- Completely resistant to Adblue
- Reads positive and negative pressure
- For reading pressure and line clearing (negative)

# MAVEL EXTENSION REELS | High quality, made in Italy

**Mavel**  
AUTOMATIC REELS

Part No.: 811200



**Roll Classic 230v Energy Reel**

**€129.00**

- Automatic spring rewinding
- Plastic outer casing. • Steel swivelling wall bracket. • 230 Volt. • Cable length = 10 meters. • Cable size = 1.5mm<sup>2</sup>. • Ratcheted stop device easily inspectable and removable by the end user. • CE approved. • TUV approved

Part No.: 811350



**Roll Classic Plus 12V Light**

**€175.00**

- Cable length = 15 meters
- Automatic spring rewinding
- Plastic outer casing
- Steel swivelling wall bracket
- Ratched stop device easily inspectable and removable by the end user
- CE approved

Part No.: 826300



**Roll Dynamic Air Reel**

**€125.00**

- Hose length = 12 meters
- Automatic spring rewinding
- Plastic outer casing
- Steel swivelling wall bracket
- Ratched stop device easily inspectable and removable by the end user
- Inlet outlet fitting size is 1/4
- CE approved

Part No.: 811600



**Rooll Classic Plus 15m ETHERNET/LAN Cable**

**€465.00**

- Cable length = 15 meters
- Automatic spring rewinding
- Plastic outer casing
- Steel swivelling wall bracket
- Ratched stop device easily inspectable and removable by the end user
- CAT 5E
- CE approved

**Many More Models Available**

## Common Rail Diesel Test Equipment

scan code for  
Must see video



Part No.: JOCR1600CF



**Fuel Rail Blanking Plugs**

**€69.00**

- Allows you to blank each cylinder when testing a common rail system
- 6 of M12 X 1.5
- 6 of M14 X 1.5

Part No.: JOCR1600FRN



**Dummy Regulators Kit**

**€139.00 + VAT**

- Ideal for testing pumps and regulators
- Bosch CP1, CP3 & CP4
- Delphi DFP1 & DFP3
- Denso HP1, HP2 & HP3
- Siemens DCP type 1 & 2

Part No.: JPCRK



**Common rail high pressure test kit**

**€695.00**

- Common rail high pressure gauge and hoses to connect to most popular systems
- Set of 8 dummy regulators
- Fuel rail blanking plugs set
- Inbuilt overpressure relief valve

Part No.: A2252



**Injector Leak Back Test Kit**

**€88.00**

- 24pc injector adapters
- 6 measurement bottles with tubing
- Heavy duty measurement tubes with hanging chain

Part No.: LR180AK2



**LTR Analog Tester with Sight Glass**

**€385.00**

- Gauge reads -1 to +9 bar
- Clear sight glass to check for air.
- Quick release connectors sets X7
- Brand: LTR Germany

Part No.: 4759



**Flair Nut Sockets for injector Pipes**

**€79.00**

- Used to open and tighten hard to reach injector pipes
- Sizes 12mm, 14mm, 16mm, 17mm, 18mm and 19mm

Part No.: HP



**Injector Test Hand Pump**

**€390.00**

- Made by LTR Germany
- Develop 600 bar pressure
- Comes with 2 different size pipes
- Other models available

Part No.: 4789



**Fuel Line Blanking Set**

**€79.00**

- 2 x male connector 8 mm
- 2 x male connector 3/8"
- 2 x male connector 10 mm
- 2 x female coupler 8 mm
- 2 x female coupler 3/8"
- 2 x female coupler 10 mm

Part No.: LE-UNKR0602



**Heavy Duty Lehnert Leakback Kit**

**€1295.00**

- Connects in circulation mode
- Vehicle can be run for long periods
- Tests return pressure
- Extensive adaptor kit
- Suitable for Piezo Injectors

Part No.: CRE04



**Containers for determining Injector Volume**

**€76.00**

- Injection volume
- Damaged or leaking injectors
- Blocked injectors
- Stuck open injectors



# Engine & Fuel System Tools

scan code for  
Must see video



Part No.: WT-11999



**Mechanical Vacuum and Pressure tester**

**€ 89.00**

- Vacuum and pressure tester
- Brake Bleeding kit included

Part No.: WT-111011



**Fuel System Pressure Test Kit**

**€ 265.00**

- 0 to 10 bar
- 42 different connectors
- 2 size Schrader connectors

Part No.: BPT01



**Back Pressure Test Kit**

**€ 81.00**

- Quickly identify blocked cats/dpfs
- Universal O2 port adaptor

Part No.: AET-800337



**Diesel Compression Tester**

**€ 340.00**

- 20 x Glow plug adaptors
- 4 x Injector adaptors
- 1 x universal injector adapter set
- 1 x 90 degree connector

Part No.: JOCTD



**Digital Turbo Pressure Tester**

**€ 195.00**

- Test pressure and Vacuum
- From Minus 1 to plus 3 bar
- View in a graph or Numerical
- Easy to connect due to special needle system

Part No.: FG170/S3



**Plastic Hose Clamper Pliers**

**€ 27.84**

- Includes 3 different sizes

Part No.: 832

Great time saver



**Oxygen Sensor Thread Repair Kit**

**€ 75.98**

- Includes 1 tap
- 1 Insert tool
- 6 repair inserts
- Replacement inserts can be ordered separately (part no 833)

Part No.: A2063



**Petrol Compression Test Kit**

**€ 52.00**

- Main gauge with quick coupling
- M10 X 1.0, M12 X 1.25, M14 X 1.25 and M18 X 1.5 adaptors
- 2 test pipes with rubber sealing cones

Part No.: GO647

THIS Works without engine cranes or transmission jacks



**Engine Support with Telescopic and Rotating Arms**

**€ 385.00**

- Load capacity 400kg
- Height adjustable non slip rubber pads

Part No.: FG189/S13



**Boost Leak Tester**

**€ 189.00**

- Universal use
- Quick release air line connector
- Built in adjustable pressure regulator
- Connect to shop air with standard tyre pressure gauge/pump. • Includes the following size adapters : 31, 38, 46, 51, 55, 60, 65, 70, 75, 80, 85, 90 mm.

Part No.: LT450



**CO2/Head Gasket Leak Detector**

**€ 108.00**

- Includes main tester unit
- Reaction & Rinsing fluid
- Wooden carry case.
- Replacement reaction fluid in stock. • Brand: LTR, Germany

Part No.: JOCRG



**FSI/GDI Digital High Pressure Tester**

**€ 398.00**

- Test low and high pressure circuits of GDI/FSI systems
- Comes with flexible attachment hoses. • 0 - 200 bar range
- Scales - Bar and PSI

Part No.: AET-350L



**Cooling System Pressure Tester**

**€ 225.00**

- 15 radiator/expansion tank adaptors
- Hard wearing plastic case
- Brand: Fasano, Italy

Part No.: 4280



**Vag Water Pump And Gear Removal Kit**

**€ 77.00 +**

- Includes pulley for removing water pump gear
- Water pump remover
- Tool for turning crankshaft
- Used for VAG 2.5TDI

Part No.: OP85



**LTR Germany Oil Pressure Test Kit**

**€ 149.00**

- PSI and Bar
- 10 adaptors with quick release
- 1 angular adaptor

100's more products available on [www.ryansautomotive.ie](http://www.ryansautomotive.ie)



# TIMING TOOLS

Over 90 different timing tools in stock

Part No.: A1392



Timing Tool BMW N40/N45 Engines

€ 198.00

- Suits 1 series E81 AND E87 and 3 Series E46 and E90 1.6

Part No.: 310216021



Opel Camshaft Disc Locking Tool

€ 26.00

- Suits engine code A10XEP
- OEM Numbers EN-49978

Part No.: FG192/F016



Timing Tool Ford 1.0 Ecoboost

€ 297.00

- Suits engine codes M1DA; M1DD; M1JA; M1JE; M1JC; M2DA; M2DB; M2DC; M2GA; P4JA; P4JB; SFJA; SFJB; XMJB; XMJA; M1CA; M1CB; SFCA; SFCB

Part No.: FG192/LR8



Timing Tool JLR 2.0GTDI Petrol

€ 187.00

- Suits
- Jaguar: XE, XJ, XF
- Land Rover: Discovery Sport, Freelander 2
- Range Rover: Evoque
- Engine: 2.0 GTDI
- Engine code: 204PT

Part No.: FG192/VW2



Timing Tool 1.2TSI VAG Petrol

€ 43.00 +VAT

- Suits engine codes CBZA,CBZB,CBZC
- OEM Numbers T10340 and T10414

# STEERING AND SUSPENSION

Part No.: G0360



Multi Steering Knuckle Spreader Tool

€ 198.00

- Allows you to easily spread a joint for the removal of seized components
- Used for ball joints, shock absorbers, steering knuckles, etc
- Avoids having to use a hammer and possibly damaging components.

Part No.: 8-33100050



Steering Wheel Level Tool

€ 89.00

- Assures a level steering wheel during the alignment procedure
- Easily calibrated

Part No.: ADS0001347



Ford Rear Trailing Arm Bush Tool

€ 240.00

- Covers 2 types of bushings
- Ford Focus MK1 and MK2
- Ford Mondeo/S-Max/Galaxy/C-Max/Kuga

Part No.: E2183



Universal Bushing/Joint Removal and Install Kit

€ 225.00

- Can also be used with a hydraulic piston

Part No.: HU42025



Lugdriller Locking Wheel Nut Remover

€ 241.00

- Works on all types of nuts and studs from any brand
- Also works on all modern cars with oddly shaped lugs
- Also works on damaged lugs

051 424 799 | visit [www.ryansautomotive.ie](http://www.ryansautomotive.ie)  
email [info@ryansautomotive.ie](mailto:info@ryansautomotive.ie)

# TRANSMISSION AND DRIVETRAIN

Part No.: 318010000



Self Adjusting Clutch (SAC) Master Kit

€ 398.00

- Essential for the correct removal and refitting of SAC clutches
- This is the master kit. Lesser kits also available.

Part No.: MHK1



Muller Werkzeug Hub Kit

€ 344.00

- Base kit for multi-use
- Use with Hydraulics, Sliding Hammer and Axle play detector
- Optional extras available

Part No.: FG198/DF



Hydraulic CV Joint Remover

€ 198.00

- Easily remove seized CV joints
- Can also be used to remove tight brake drums

Part No.: ADS0001736



Generation 2 Wheel Bearing Tool for Sprinters and Crafters

€ 396.00

- Suitable for Sprinters and Crafters 2006 on with 96mm bearing.
- Please note hydraulic piston is not included.

# LTR GERMANY BRAKE FLUID SERVICE TOOLS



## Main Brake Fluid Service Unit

- Suitable for all types of brake fluid
- Sleeplessly adjustable pressure from 0 to 4 bar. • 230 volt power supply
- Holder for 5 litre brake fluid container on the rear. • Pump cuts in and out automatically. • 3.5 metre long hose. • Comes with B611 popular adaptor to suit a large range of vehicles. • Comes with a brake bleed container and hose for old fluid.

€595.00

## Transport Cart and Suction Pump

- Transport cart for the above main brake fluid service unit.
- Contains a suction pump for draining master cylinders before removal.
- Contains space to house a 20 litre drum of brake fluid.



€495.00



## BRAKE FLUID SERVICE ADAPTOR KIT

- Adaptors made from machined aluminum
- All adaptors have a 90 degree quick release connection and can swivel through 360

degrees.

- Includes 6 adaptors of which 3 can be adjusted by 5mm to suit a wider variety of cylinders.

€295.00



## DIGITAL BRAKE FLUID TESTER

- Test and print the vehicles brake fluid water content and boiling point in minutes.

- Tests DOT 3, DOT 4 and DOT 5 brake fluids. • Comes with pc software for an official print of your results.

SELL YOUR  
BRAKE FLUID  
SERVICE

€285.00

Buy the **COMPLETE SET OF 4** for only **€1480**

## BRAKE REPAIR TOOLS

Huge range of similar products available on [www.ryansautomotive.ie](http://www.ryansautomotive.ie)

Part Number: 456200

### VW BRAKE CALIPER GUIDE REPAIR KIT



- Special drill TIN coated
- M9 X 1.25 tap
- 10 threaded inserts M9 X 1.25
- Drilling guide
- 7mm allen key

€155.00

Part Number: ADS0000470

### BRAKE BLEED NIPPLE REPAIR KIT



- Contains 2 size drill bits
- 2 taps
- 13.4 x 90 degree countersunk tool
- Locktite
- 1/4 and 1/8 bleed nipple adaptors

Save yourself the cost of a new caliper with a few minutes work

€135.00

Part Number: 463020

### BRAKE PIPE FLARING TOOL



- For use directly on the vehicle or on the bench
- Works with aluminum, copper, copper nickel and steel lines
- Sizes 4.75, 5.00 and 6.00mm lines
- Made by Muller Werkzeug Germany

€159.00

## COIL SPRING COMPRESSORS

051 424 799

visit [www.ryansautomotive.ie](http://www.ryansautomotive.ie)  
email [info@ryansautomotive.ie](mailto:info@ryansautomotive.ie)

Part No.: 321051000



### Mechanical Coil Spring Compressor

€POA

- Compression force 1600kg
- Suitable for cars, SUV's and commercial vehicles.
- Used with an impact gun or ratchet
- Auto levelling system
- Supplied with small and medium size brackets and vice for struts.

Part No.: 321056000



### Pneumatic Coil Spring Compressor

€POA

- Compression force 1960kg
- Suitable for cars, SUV's and commercial vehicles. • Pedal and safety guard with safety valves. • Auto Levelling system and easily moved brackets. • Supplied with small and medium size brackets and vice for struts. • Tools rack included.

Part No.: 321111000



### Extra Heavy Duty Pneumatic Coil Spring Compressor

€POA

- Compression force 2500kg
- Suitable for cars, large SUV's, armour plated vehicles and commercial vehicles.
- Comes with all the spec of 321056000 plus, Rear wheels for easy movement, Dust cover to safeguard cylinder, Adjustable upper mirror, Improved foot pedal and safety guard, The extra power needed to compress springs on vehicles like Mercedes ML

Part No.: 321061000



### PISTON PULLER/LOCKER FOR GAS SHOCKS

- Special kit for mounting shock absorbers with stop buffers
- Pull up the shock and lock in position so you can easily mount the plate and mounting.

€250.00



€88.00

Part No.: 321090000

### SHOCK ABSORBER SPRING LOCKING TOOL

- Used with a spring compressor to clamp the spring to the bracket
- Anchors the spring, avoiding accidents or injuries.
- Plastic scratch proof coat to protect the spring coat.



# Glow Plug Removal Tools

scan code for  
information



## GLOW PLUG BODY REMOVAL KIT

This is an advanced set to cover all different scenarios and works with a sliding hammer system that does not require a flat surface on the head

Part number: 311227004  
COMPLETE KIT: M8x1, M9x1,  
M10x1, M10x1.25

**€1,170.00**

## New Modular System | This kit is available in 4 different modules



### MODULE 1: **Part No.: 311227000 (13 pcs.)**

It contains the BASIC tools required to be able to use each specific Module for each glow plug size: M8x1, M9x1, M10x1, M10x1, 25.

**€390.00**



### MODULE 2: **Part No.: 311227001 (5 pcs.)**

It contains the tools required to remove the M8x1 glow plugs. To be used in combination with the BASIC modular tool kit 311227000.

**€249.00**



### MODULE 3: **Part No.: 311227002 (5 pcs.)**

It contains the tools required to remove the glow plugs M9x1. To be used in combination with the BASIC modular tool kit 311227000.

**€249.00**



### MODULE 4: **Part No.: 311227003 (7 pcs.)**

It contains the tools required to remove the glow plugs. M10x1 M10x1.25. To be used in combination with the BASIC modular tool kit 311227000.

**€390.00**

### Part Number: GO451

#### MASTER KIT FOR GLOW PLUG TIP REMOVAL



- Suitable for when the glow plug tip is broken in the head
- Covers 8mm, 9mm, 10mm x 1 and 10mm x 1.25 glow plugs
- Threaded puller type also available

**€489.00 + VAT**

### Part Number: FGA332/AN

#### 90 DEGREE AIR DRILL



- 90 degree air drill for drilling glow plugs.
- Great for tight areas

**€115.00**

### Part Number: 600289

#### GLOW PLUG IMPACT & SOCKET SET 1/4 DRIVE



- The impact wrench produces impact momentum in turning direction, acting like a hammer stroke on the screw connection; these strokes are executed over 50x per minute with max. 40 Nm (with 8 bar) in loosening mode, thus causing the corrosion and carbonisation to break open

- Adjustable loosening torque in 4 modes: 10 Nm / 20 Nm / 30 Nm / 40 Nm
- Made by Muller Germany

**€219.00**

### Part No.: GO453



Some times the glow plug will screw out so far but will not pull out of the head this is normally caused by carbon build up or the body of the glow plug is deformed

#### Deformed Glow Plug Puller

- This system quickly and directly grips the hex body of all types of M8 M9 M10 glow plugs
- Features the innovative FAST LOCK SYSTEM that ensures maximum quickness
- Does not damage the cylinder head and guarantees a professional job

**€268.00**

### Part No.: FG72/GMC1 & FG72/GMC2



#### Short Ratchet Tap Holder

- Ratchet tap holder for tapping glow plugs
- Available in M3 to M8 and M5 to M12 sizes

**€15.00**

### Part No.: FG183/S5



#### Special Sockets for Glow Plugs

- Swivel joint for hard to reach glow plugs
- 8mm, 9mm, 10mm, 12mm, 14mm 1/4 drive sockets

**€68.00**

### Part No.: 297001

**€138.00**



#### Micro Die Grinder

- The latest generation mini composite device for small/fine grinding and milling
- Minimal vibration and low noise
- 70,000rpm
- Provides perfect handling due to the Bionigrip anti-slip surface

**PLUS**

**Part No.: 297001/KIT5  
€89.00**



#### Micro Die Grinder Tips

- Set of 5 Carbide milling and grinding burs
- Spares can be ordered in packs of 3



# Injector Removal Tools

Part No.: HPWG

\* Prevents overloading your injector removal kit



Hydraulic Hand Pump with Gauge. 700 Bar

€ 435.00

- Builds 700 bar pressure
- Includes the correct fitting for Muller, Govoni and Pichler pistons
- Made by Muller Werkzeug Germany

Part No.: 3344



Injector Seat Cutting and Cleaning Set

€ 235.00

- Comprehensive universal cutting and cleaning set
- Includes injector washer extractor
- Suitable for Bosch, Delphi, Denso and Siemens

Part No.: GO405



Universal Injector Removal Set

€ 1,195.00

- Extraction type Hydraulic or Mechanical
- Hydraulic cylinder included (or can be purchased without)
- Adaptors included for Bosch, Denso, Delphi and Siemens
- Suitable for all 16valve (flat top) engines

Part No.: ADS4



Heavy Duty 15kg Sliding Hammer

€ 245.00

- Monster sliding hammer, best used with 2 people.
- Comes with Bosch coil type adaptor
- Adaptors available for Bosch Piezo, Delphi, Denso & Siemens

Part No.: A2209



Budget Injector Seat Cutter

€ 69.00

- Suitable for Bosch, Delphi, Denso and Siemens
- 15mm, 17mm, and 19mm

Part No.: 290206



Vibro Air Impact Hammer Kit

€ 338.00

- Helps loosen injectors
- Endless other uses
- Comes with 4 adaptors and a wall mount.

Part No.: ADS0002106



Injector Washer Removal Tool

€ 59.00

- Screw design for better grip on washer
- In built sliding hammer

Part No.: GO425



Mercedes Bosch Injector Removal Kit

€ 259.00

- Suitable for 2.1, 2.2 and 3.0V6 CDI

Part No.: 311169000



Special Adaptors for Denso Injectors

€ 417.00

- No need to dismantle injectors
- Includes 5 different adaptors for Denso injectors.

ADS 0001007



Delphi New Type Injector Removal Adaptor

€ 75.00

- Suits Delphi new type flat top injectors

Huge range of Injector removal equipment on [www.ryansautomotive.ie](http://www.ryansautomotive.ie)

## Renault M9R Injector Removal



Part No.: ADS0000806

RENAULT M9R PIEZO INJECTOR REMOVAL KIT

- Specific kit for M9R engines
- Special double grip adaptor and threaded shafts
- Special tools for removing broken injector nozzle.
- Special sockets x 2 for twisting out injector if top has broken off.

Instruction manual and first class advice and support

€ 895.00



Add this kit to your existing injector pullers

Part No.: ADS7

€ 498.00

M9R ADD ON KIT FOR UNIVERSAL INJECTORS PULLERS

- Double grip adaptor and bar.
- Tools for removing broken injector nozzle.
- Special twist socket for when top of injector is broken off. • For use with part number GO405 at the top of the page.



Part No.: ADS0001075

OPTIONAL ADD ON KIT FOR M9R BOSCH COIL TYPE INJECTORS

- Add on kit to ADS0000806
- For M9R engines from 2010 on

€ 140.00

# Customer Support



All our products are tested in house so that we have an in depth knowledge of everything we sell. Be it phone support, online support or product replacement while your own is being repaired (when available)

we won't let you down. Our Online Knowledge base and Support Library contain a host of information on vehicle problems and product information and downloads.

**Excellent aftercare service.  
Expert staff who know what they are talking about**



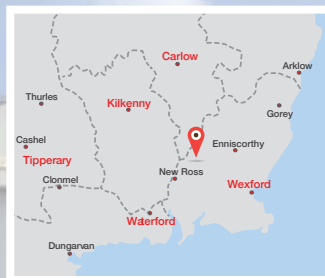
More more information visit  
[www.ryansautomotive.ie](http://www.ryansautomotive.ie)



**HUGE RANGE OF PRODUCTS ON OUR WEB SHOP** [WWW.RYANSAUTOMOTIVE.IE](http://WWW.RYANSAUTOMOTIVE.IE)

## SERVICES

- ✓ Specialist Diagnostic Centre
- ✓ Injector and Glow Plug Removal
- ✓ DPF Cleaning and Diagnosis
- ✓ Performance Tuning
- ✓ Electric Power Steering Unit Repairs
- ✓ Immobiliser Decoding
- ✓ ECU Cloning
- ✓ Automatic Transmission Flushing and Cleaning
- ✓ Petrol Injector Testing and Cleaning including Direct Injection
- ✓ Hybrid Battery Reconditioning



## OPENING HOURS

**Mon - Fri: 9am to 6pm**  
**(Closed from 1-2)**  
**Saturday: 9am to 1pm**  
**Sunday: Closed**

## HOW TO FIND US?

**Address: Ballindoney,  
Ballywilliam, Enniscorthy,  
Co. Wexford, Ireland.**  
**Eircode: Y21PC98**

**FOLLOW US:**

