



thermo**scientific**

Exploris GC Series

Mass Spectrometers

Spare Parts Guide

ThermoFisher
SCIENTIFIC

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Declaration

Manufacturer: Thermo Fisher Scientific

Thermo Fisher Scientific is the manufacturer of the instrument described in this manual and, as such, is responsible for the instrument safety, reliability, and performance only if:

- installation,
- recalibration, and
- changes and repairs

have been carried out by authorized personnel and if:

- the local installation complies with local law regulations,
- the instrument is used according to the instructions provided, and
- if its operation is only entrusted to qualified trained personnel.

Thermo Fisher Scientific is not liable for any damages derived from the non-compliance with the recommendations.

Regulatory Compliance

Thermo Fisher Scientific performs complete testing and evaluation of its products to ensure full compliance with applicable domestic and international regulations. When the system is delivered to you, it meets all pertinent electromagnetic compatibility (EMC) and safety standards as described in the next section or sections by product name.

Changes that you make to your system may void compliance with one or more of these EMC and safety standards. Changes to your system include replacing a part or adding components, options, or peripherals not specifically authorized and qualified by Thermo Fisher Scientific. To ensure continued compliance with EMC and safety standards, replacement parts and additional components, options, and peripherals must be ordered from Thermo Fisher Scientific or one of its authorized representatives.

EMC and Safety Standards

- Direct Probe Controller (DPC) standards: EMC: EN 61326-1:2013. Safety: IEC 61010-1:2001, IEC 61010-2-081:2001
- ISQ and ISQ 7000 standards: EMC: EN 61326-1:2013. Safety: IEC 61010-1:2010 (ed. 3); IEC 61010-2-081:2015 (ed. 2); IEC 61010-2-010:2014 (ed. 3); IECEE CB SCHEME CERT NO. DE 3-30000
- TSQ 9000, TSQ 8000 Evo, TSQ Duo, and TSQ 8000 standards: EMC: EN 61326-1:2013. Safety: IEC 61010-1:2010 (ed. 3); IEC 61010-2-081:2015 (ed. 2); IEC 61010-2-010:2014 (ed. 3); IECEE CB SCHEME CERT NO. DE 3-30034

Low Voltage Safety Compliance

This device complies with Low Voltage Directive 2011/95/EC.

FCC Compliance Statement

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRE OPERATION.



CAUTION Read and understand the various precautionary notes, signs, and symbols contained inside this manual pertaining to the safe use and operation of this product before using the device.

Notice on Lifting and Handling of Thermo Scientific Instruments

For your safety, and in compliance with international regulations, the physical handling of this Thermo Fisher Scientific instrument ***requires a team effort*** to lift and/or move the instrument. This instrument is too heavy and/or bulky for one person alone to handle safely.

Notice on the Proper Use of Thermo Scientific Instruments

In compliance with international regulations: Use of this instrument in a manner not specified by Thermo Fisher Scientific could impair any protection provided by the instrument.

Notice on the Susceptibility to Electromagnetic Transmissions

Your instrument is designed to work in a controlled electromagnetic environment. Do not use radio frequency transmitters, such as mobile phones, in close proximity to the instrument.

For manufacturing location, see the label on the instrument.

WEEE Compliance

This product is required to comply with the European Union's Waste Electrical & Electronic Equipment (WEEE) Directive 2002/96/EC. It is marked with the following symbol:



Thermo Fisher Scientific has contracted with one or more recycling or disposal companies in each European Union (EU) Member State, and these companies should dispose of or recycle this product. See www.thermoscientific.com/rohswcee for further information on Thermo Fisher Scientific's compliance with these Directives and the recyclers in your country.

WEEE Konformität

Dieses Produkt muss die EU Waste Electrical & Electronic Equipment (WEEE) Richtlinie 2002/96/EC erfüllen. Das Produkt ist durch folgendes Symbol gekennzeichnet:



Thermo Fisher Scientific hat Vereinbarungen mit Verwertungs-/Entsorgungsfirmen in allen EU-Mitgliedsstaaten getroffen, damit dieses Produkt durch diese Firmen wiederverwertet oder entsorgt werden kann. Mehr Information über die Einhaltung dieser Anweisungen durch Thermo Fisher Scientific, über die Verwerter, und weitere Hinweise, die nützlich sind, um die Produkte zu identifizieren, die unter diese RoHS Anweisung fallen, finden sie unter www.thermoscientific.com/rohswcee.

Conformité DEEE

Ce produit doit être conforme à la directive européenne (2002/96/EC) des Déchets d'Equipements Electriques et Electroniques (DEEE). Il est marqué par le symbole suivant:



Thermo Fisher Scientific s'est associé avec une ou plusieurs compagnies de recyclage dans chaque état membre de l'union européenne et ce produit devrait être collecté ou recyclé par celles-ci. Davantage d'informations sur la conformité de Thermo Fisher Scientific à ces directives, les recycleurs dans votre pays et les informations sur les produits Thermo Fisher Scientific qui peuvent aider la détection des substances sujettes à la directive RoHS sont disponibles sur www.thermoscientific.com/rohswEEE.

Preface

This guide contains information about ordering spare parts for the Thermo Scientific Orbitrap Exploris GC 240 and Orbitrap Exploris GC mass spectrometers.

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About Your System

Gas chromatography/mass spectrometry (GC/MS) represents a combination of two powerful analytical techniques: GC, which acts as a separation technique, and MS, which acts as a detection technique. Complex mixtures of individual compounds can be injected into the GC, either manually or by an autosampler and then separated for presentation to the MS. The MS will generate a mass spectrum of the GC eluate and its components. The mass spectrum can then be used for qualitative identification as well as accurate and precise quantification of the individual compounds present in the sample.



WARNING Thermo Fisher Scientific systems operate safely and reliably under carefully controlled environmental conditions. If the equipment is used in manner not specified by the manufacturer, the protections provided by the equipment may be impaired. If you maintain a system outside the specifications listed in this guide, failures of many types, including personal injury or death, may occur. The repair of instrument failures caused by operation in a manner not specified by the manufacturer is specifically excluded from the Standard Warranty and service contract coverage.

Related Documentation

Thermo Fisher Scientific provides the following documents for the *Orbitrap Exploris GC* series mass spectrometer:

- *Orbitrap Exploris GC and Orbitrap Exploris GC 240 Pre-Installation Requirements Guide*, PN 1R120631-0001
- *Orbitrap Exploris GC and Orbitrap Exploris GC 240 Operating Manual*, PN 1R120631-0002
- *Direct Probe System User Guide* PN 1R120505-0006

Instrument Help is available from within the *Auto Tune* and *Method Editor* software for each instrument.

System Requirements

The data system used with your mass spectrometer must meet these minimum requirements:

System	Requirements
Hardware	• 3.0 GHz Quad Core processor • 32 GB RAM with system managed memory enabled • 512 GB SSD Hard Drive • Resolution display 1920 × 1080
Software	• Microsoft™ Windows™ 10 Operating System (64-bit) English only • Microsoft .NET Framework 4.0 or later • Thermo Scientific Xcalibur, Chromeleon and Foundation software^a

^a Check release notes for compatibility with the Exactive Series instrument control software.

^b Check release notes for compatibility with Thermo Foundation, Xcalibur, Chromeleon and Exploris GC Series instrument control software.

Safety and Special Notices

Make sure you follow the precautionary statements presented in this guide. The safety and other special notices appear in boxes.

Special Notices

Special notices include the following:

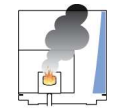
IMPORTANT Highlights information necessary to prevent damage to software, loss of data, or invalid test results; or might contain information that is critical for optimal performance of the system.

Note Highlights information of general interest.

Tip Highlights helpful information that can make a task easier.

Safety Symbols and Signal Words

All safety symbols are followed by **WARNING** or **CAUTION**, which indicates the degree of risk for personal injury, instrument damage, or both. Cautions and warnings are following by a descriptor. A **WARNING** is intended to prevent improper actions that *could* cause personal injury. A **CAUTION** is intended to prevent improper actions that *might* cause personal injury or instrument damage. You can find the following safety symbols on your instrument or in this guide.

Symbol	Descriptor
	BIOHAZARD: Indicates that a biohazard <i>will, could, or might</i> occur.
	BURN HAZARD: Alerts you to the presence of a hot surface that <i>could or might</i> cause burn injuries.
	ELECTRICAL SHOCK HAZARD: Indicates that an electrical shock <i>could or might</i> occur.
	FIRE HAZARD: Indicates a risk of fire or flammability <i>could or might</i> occur.
	FLAMMABLE GAS HAZARD: Alerts you to gases that are compressed, liquefied or dissolved under pressure and can ignite on contact with an ignition source. This symbol indicates this risk <i>could or might</i> cause physical injury.
	GLOVES REQUIRED: Indicates that you must wear gloves when performing a task or physical injury <i>could or might</i> occur.
	HAND AND CHEMICAL HAZARD: Indicates that chemical damage or physical injury <i>could or might</i> occur.
	INSTRUMENT DAMAGE: Indicates that damage to the instrument or component <i>might</i> occur. This damage might not be covered under the standard warranty.
	LIFTING HAZARD: Indicates that a physical injury <i>could or might</i> occur if two or more people do not lift an object.
	MATERIAL AND EYE HAZARD: Indicates that eye damage <i>could or might</i> occur.
	RADIOACTIVE HAZARD: Indicates that exposure to radioactive material <i>could or might</i> occur.

Symbol	Descriptor
	READ MANUAL: Alerts you to carefully read your instrument's documentation to ensure your safety and the instrument's operational ability. Failing to carefully read the documentation <i>could</i> or <i>might</i> put you at risk for a physical injury.
	TOXIC SUBSTANCES HAZARD: Indicates that exposure to a toxic substance could occur and that exposure <i>could</i> or <i>might</i> cause personal injury or death.
	For the prevention of personal injury, this general warning symbol precedes the WARNING safety alert word and meets the ISO 3864-2 standard. In the vocabulary of ANSI Z535 signs, this symbol indicates a possible personal injury hazard exists if the instrument is improperly used or if unsafe actions occur. This symbol and another appropriate safety symbol alerts you to an imminent or potential hazard that <i>could cause personal injury</i> .

Hazardous Substances Precautions



WARNING Before using hazardous substances (toxic, harmful, and so on), please read the hazard indications and information reported in the applicable Material Safety Data Sheet (MSDS). Use personal protective equipment according to the safety requirements.

Biological Hazard Warning Note



In laboratories where samples with potential biological hazards are handled, the user must label any equipment or parts which might become contaminated with biohazardous material.

The appropriate warning labels are included with the shipment of the instrument. It is the user's responsibility to label the relevant parts of the equipment.

When working with biohazardous materials, you are responsible for fulfilling the following mandatory requirements:

- Providing instructions on how to safely handle biohazardous material.
- Training operators to be aware of potential hazards.
- Providing personal protective equipment.

- Providing instructions for what to do if operators are exposed to aerosols or vapors during normal operation (within the intended use of the equipment) or in case of single fault situations such as a broken vial. The protective measures must consider potential contact with the skin, mouth, nose (respiratory organs), and eyes.
- Providing instructions for decontamination and safe disposal of relevant parts.



WARNING The user or operator is responsible for the safe handling of hazardous chemicals or biological compounds including (but not limited to) bacterial or viral samples and the associated waste, according to international and local regulations.

Venting Toxic Gases

When analyzing toxic compounds, be aware that during the normal operation of the GC some of the sample might be vented outside the instrument through the split and purge flow vents; therefore, be sure to vent the exhaust gases to a fume hood. Consult local environmental and safety regulations for instructions in exhausting fumes from your system.

Contacting Us

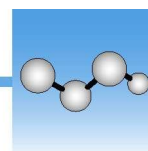
There are several ways to contact Thermo Fisher Scientific for the information you need.

✚ To find out more about our products

Go to www.thermofisher.com for information about our products.

✚ To get local contact information for sales or service

Go to gcgcms.freshdesk.com/support/home



Ordering Spare Parts

This chapter contains illustrations and part numbers for all the replaceable components in Orbitrap Exploris GC 240 and Orbitrap Exploris GC instruments. Refer to the operating manual or your training material for information about installing these components in your instrument. Any component throughout the documentation that has a part number can be ordered from us. Components without part numbers are not available.

Contents

- [Calibration Gas Components](#)
- [Column Components](#)
- [Ion Source Components](#)
- [Dual Filament Components](#)
- [Analyzer Components](#)
- [Vacuum Interlock Components](#)
- [Pump Components](#)
- [MS System Tools](#)
- [Upgrade Equipment](#)

Identifying A Part

To identify a part, you need to know where it is located in the instrument or the part's relationship to a particular functionality of the instrument. Use the categories in the table of contents to find a location or functionality that relates to the component you need. For example, if you know the part is related to the calibration gas, look in the Calibration Gas Components category. Then refer to the illustrations in that category to visually identify that particular part.

IMPORTANT Only components with a part number are available for purchase. The part you are looking for may be shown in an illustration, but if it does not list a part number, it is not available.

Calibration Gas Components

You can purchase the following calibration gas components for the *Orbitrap Exploris GC* and *Orbitrap Exploris GC 240* mass spectrometers. Be sure to include the component's part number when placing an order with your local Sales/Service Representative.

The following calibration gas components can be replaced on the *Orbitrap Exploris GC* and *Orbitrap Exploris GC 240* instrument.

- Transfer Line Assembly
- Dual-Level Calibration Gas Module
- Calibrant Reservoir Kit
- Gas Mixing Chamber
- Transfer Line Locking Clip
- Source Gas Tube Kit

Transfer Line Assembly	Quantity: Each
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Thermo Scientific Part Number	1R120630-6000
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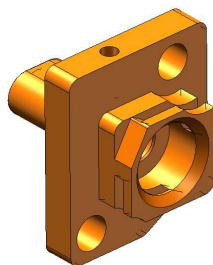
Dual-Level Calibration Gas Module**Quantity: Each****Thermo Scientific Part Number****1R119246-0003**

NOTE: To replace all the M4 x 10 mm screws on the calibration controller, order two of PN 1R76913-0410.

Calibrant Reservoir Kit**Quantity: Each****Thermo Scientific Part Number****1R120433-0001**

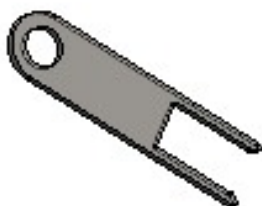
NOTE: To refill the Reservoir, order FC43 P/N 50010-30059

Gas Mixing Chamber	Quantity: Each
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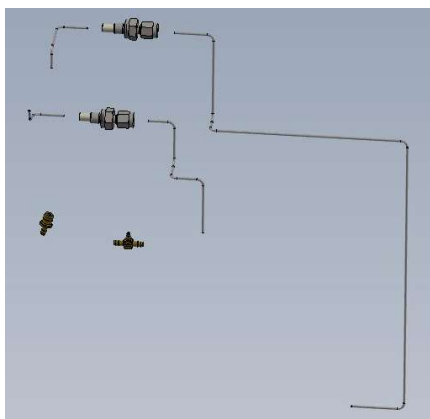


Thermo Scientific Part Number	1R120630-2007
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Transfer Line Locking Clip (3 pack)	Quantity: 3
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Thermo Scientific Part Number	1R120630-6207
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Source Gas Tube Kit**Quantity: Each****Thermo Scientific Part Number****1R120630-6205**

Column Components

You can purchase the following column components for the instruments. Be sure to include the component's part number when placing an order with your local Sales/Service Representative.

- Graphite Vespel Ferrule for 0.18 mm Columns
- Graphite Vespel Ferrule for 0.25 mm Columns
- Graphite Vespel Ferrule for 0.32 mm Columns
- No-Hole Graphite Vespel Ferrule
- SiTite Ferrule for 0.25 mm Columns
- SiTite Ferrule for 0.32mm Columns
- Nut for SiTite Ferrules
- Nickel-Coated Nut for Graphite Vespel Ferrules
- Spring-loaded Transfer Line Nut
- Graphite Ferrules for 0.1–0.25 mm Columns used with Spring-loaded Transfer Line Nut

Note The parts in this chapter are compatible with all GC-MS systems.

Graphite Vespel Ferrule for 0.18 mm Columns

Quantity: Pkg of 10



Thermo Scientific Part Number

1R76458-2016

Graphite Vespel Ferrule for 0.25 mm Columns

Quantity: Pkg of 10



Thermo Scientific Part Number

29033496

Graphite Vespel Ferrule for 0.32 mm Columns

Quantity: Pkg of 10



Thermo Scientific Part Number

1R76458-2019

No-Hole Graphite Vespel Ferrule

Quantity: Pkg of 10



Thermo Scientific Part Number

1R76458-2009

SilTite Ferrule for 0.25 mm Columns

Quantity: Pkg of 10



Thermo Scientific Part Number

1R76458-2000

SilTite Ferrule for 0.32mm Columns	Quantity: Pkg of 10
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Thermo Scientific Part Number	1R76458-2024
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Nut for SilTite Ferrules	Quantity: Pkg of 5
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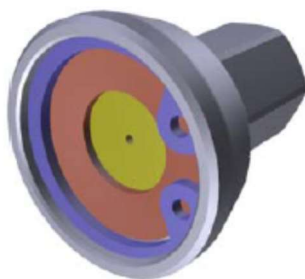
Thermo Scientific Part Number	1R76458-2001
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Nickel-Coated Nut for Graphite Vespel Ferrules	Quantity: Pkg of 5
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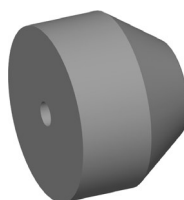
Thermo Scientific Part Number	1R76256-0060
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Spring-loaded Transfer Line Nut	Quantity: Each
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Thermo Scientific Part Number	1R120434-0010
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Graphite Ferrules for 0.1–0.25 mm Columns used with Spring-loaded Transfer Line Nut	Quantity: Pkg of 10
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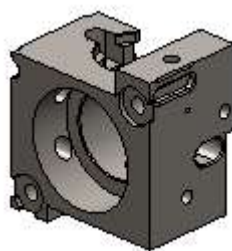
Thermo Scientific Part Number	290VA191
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Ion Source Components

The following ion source components can be replaced on the Q Exactive GC and Exactive GC systems. Be sure to include the component's part number when placing your order. See the operating manual for your instrument for information about installing these component.

- Ion Source Block
- Front Door Guide
- Repeller Plate (Locking Mate Plate Assembly)
- Source Bracket
- Thumbscrew-Repeller Spacer
- Insulating Spacer
- Lens/Source Heater
- Lens Heater Block
- Lens Plate and Springs
- Source to Ion Guide Spacer
- EI Ion Source Cartridge (Low Activity)
 - Ion Cartridge Sleeve
 - EI Ion Volume (Low Activity)
 - Ion Volume-Repeller Insulator
 - Repeller (Low Activity)
 - Ion Volume Locking Ring
 - Repeller Spring
 - Repeller Nut
 - Lens 3/RF Lens
 - Lens 1
 - Lens 2

Ion Source Block	Quantity: Each
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Thermo Scientific Part Number	1R120630-2003
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Repeller Plate (Locking Mate Plate Assembly)	Quantity: Each
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Thermo Scientific Part Number	1R120404-1312
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Front Door Guide	Quantity: Each
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Thermo Scientific Part Number	1R120630-2027
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NOTE: There are two front door guides on the ion source, so to replace them, order two of PN **1R120630-2027**

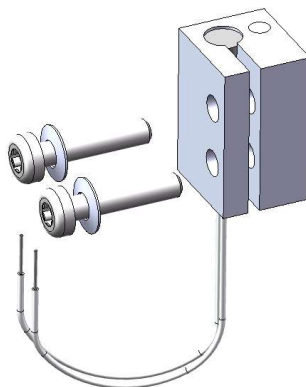
Source Bracket	Quantity: Each
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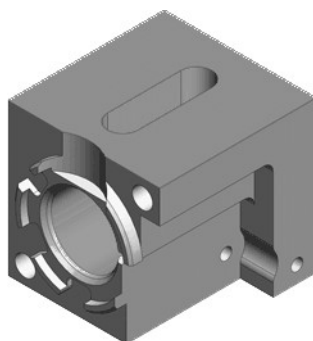
Thermo Scientific Part Number	1R120630-1506
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Insulating Spacer**Quantity: Each****Thermo Scientific Part Number****1R120705-0203**

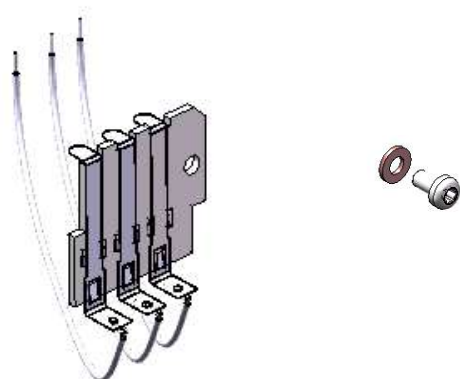
NOTE: There are two insulating spacers on the ion source, so to replace them, order two of PN **1R120705-0203**.

Lens/Source Heater**Quantity: Each****Thermo Scientific Part Number****1R120404-1330**

NOTE: There are two lens/source heaters on the ion source, so to replace them, order two of PN 1R120404-1330. To replace the M4 x 20 mm screws on each lens/source heater, order two of PN 1R76913-0420.

Lens Heater Block**Quantity: Each****Thermo Scientific Part Number****1R120404-1321**

NOTE: To replace all the M3 x 6 mm screws on the grounding strap, order two of PN 1R76913-0305.

Lens Plate and Springs**Quantity: Each****Thermo Scientific Part Number****1R120404-1750**

NOTE: To replace the M3 x 6 mm screw on the lens plate and springs, order PN 1R76913-0306. To replace the copper washer, order PN 1R76483-5003.

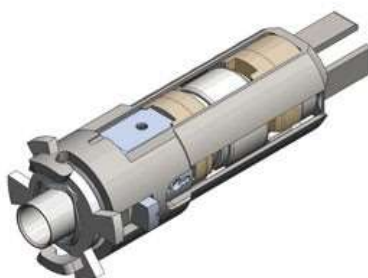
Prefilter Insulator**Quantity: Each****Thermo Scientific Part Number****1R120404-1340****Floating Source Isolator****Quantity: Each****Thermo Scientific Part Number****1R120705-0149**

Ion Source Cartridge Components

The ion source cartridge consists of the following components. See the operating manual for information about installing these components

- EI Ion Source Cartridge (Low Activity)
- Ion Cartridge Sleeve
- EI Ion Volume (Low Activity)
- Ion Volume-Repeller Insulator
- Repeller (Low Activity)
- Ion Volume Locking Ring
- Repeller Spring
- Repeller Nut
- Lens 3/RF Lens
- Lens 1
- Lens 2
- Filament Clip

EI Ion Source Cartridge (Low Activity)	Quantity: Each
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Thermo Scientific Part Number	1R120404-4100
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Ion Cartridge Sleeve	Quantity: Each
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Thermo Scientific Part Number	1R120404-1105
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EI Ion Volume (Low Activity)	Quantity: Each
	
Thermo Scientific Part Number	1R120404-4111
Ion Volume-Repeller Insulator	Quantity: Each
	
Thermo Scientific Part Number	1R120404-1114
Repeller (Low Activity)	Quantity: Each
	
Thermo Scientific Part Number	1R120404-1161
Ion Volume Locking Ring	Quantity: Each
	
Thermo Scientific Part Number	1R120404-1118

Repeller Spring	Quantity: Pkg of 5
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Thermo Scientific Part Number	1R76485-1000K
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NOTE: Although the ion source only contains one repeller spring, you will receive a package of five when you order PN 1R76485-1000K.

Repeller Nut	Quantity: Each
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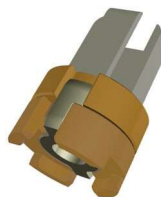
Thermo Scientific Part Number	1R120404-1120
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Lens 2	Quantity: Each
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Thermo Scientific Part Number	1R120404-1140
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Lens 3/RF Lens	Quantity: Each
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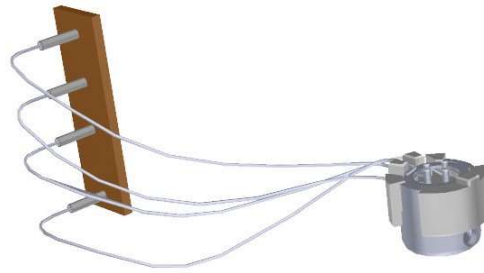
Thermo Scientific Part Number	1R120574-0103
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Lens 1	Quantity: Each
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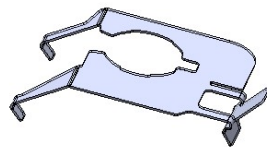
Thermo Scientific Part Number	1R120574-0139
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Dual Filament	Quantity: Each
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Thermo Scientific Part Number	1R120404-1940
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Filament Clip	Quantity: Each
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Thermo Scientific Part Number	1R120630-1555
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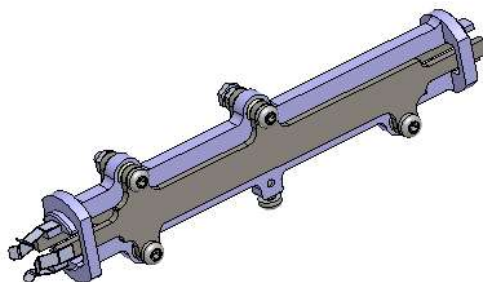
Analyzer Components

You can purchase the following analyzer components for the Q Exactive GC and Exactive GC instruments. Be sure to include the component's part number when placing an order with your local Sales/Service Representative.

The following analyzer components can be replaced on the Q Exactive GC and Exactive GC instrument.

- Injection Flatapole
- Inter Flatapole Lens
- Interface Lens PCB
- Heat Shield
- Source Feedthrough
- Glass Top Cover

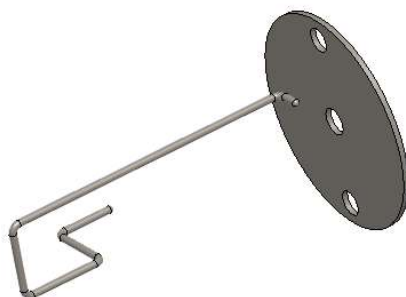
Injection Flatapole	Quantity: Each
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Thermo Scientific Part Number	1R120705-0100
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Inter Flatapole Lens

Quantity: Each

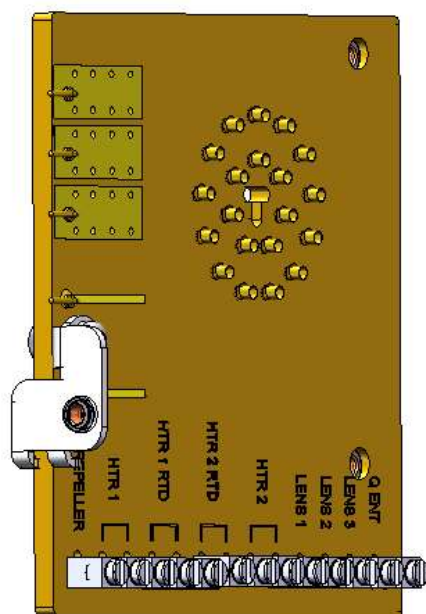


Thermo Scientific Part Number

1R120630-1505

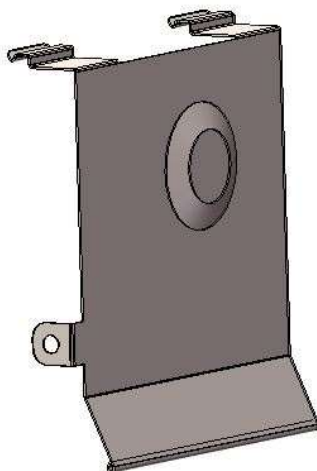
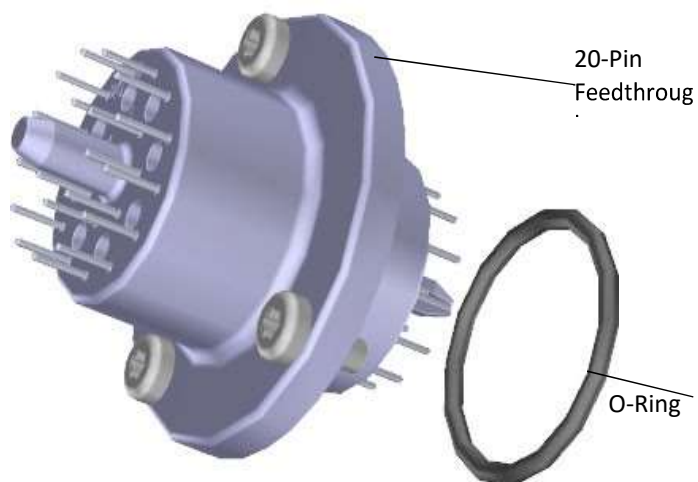
Lens Interface PCB

Quantity: Each



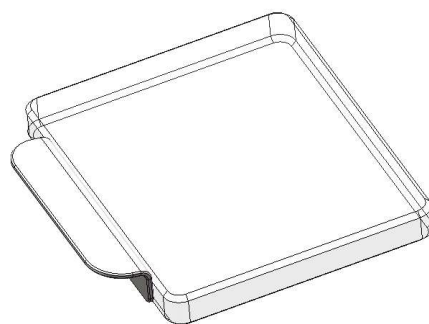
Thermo Scientific Part Number

1R120578-0210

Heat Shield**Quantity: Each****Thermo Scientific Part Number****1R120630-1502****Source Feedthrough****Quantity: Each****Thermo Scientific Part Number****1R120610-0020**

NOTE: To replace all the M4 x 10 mm screws on the 20-pin feedthrough, order three of PN 1R76913-0410. To replace the o-ring, order PN 1R3814-123.

Glass Top Cover	Quantity: Each
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Thermo Scientific Part Number	1R120705-0148
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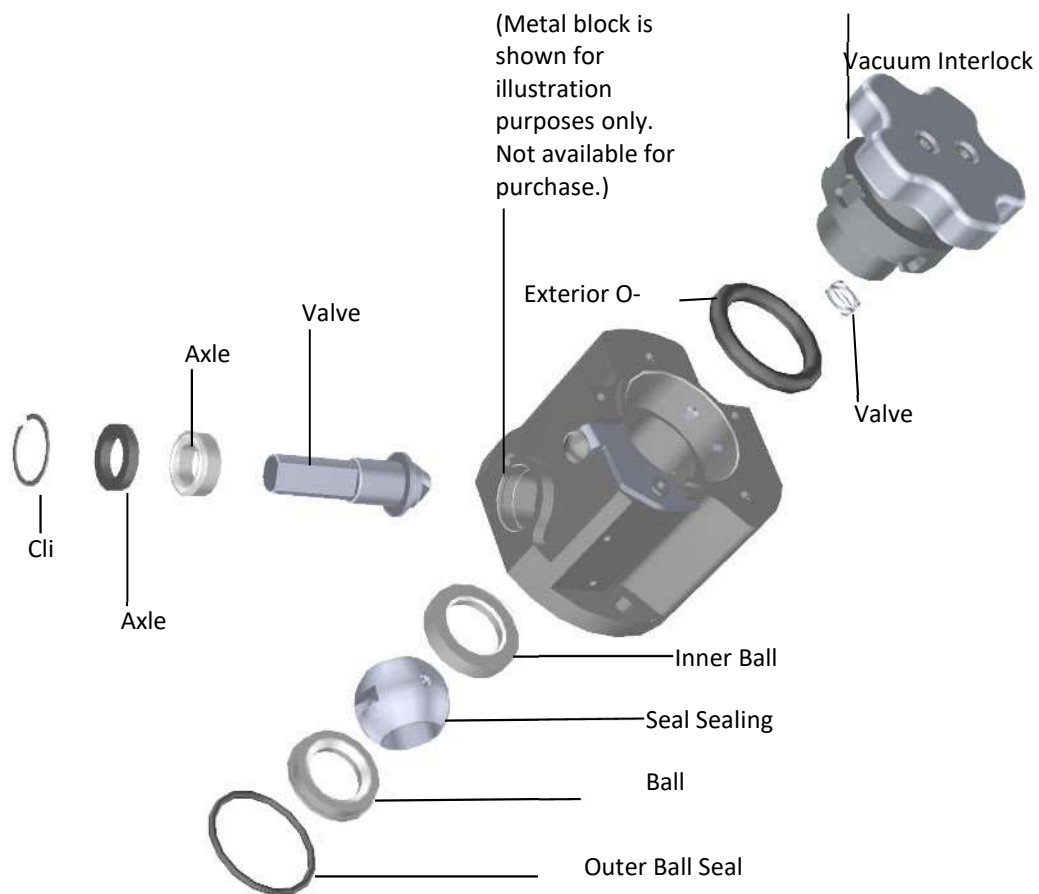
Vacuum Interlock Components

You can purchase the following vacuum interlock components for the any GC-MS system with a vacuum probe interlock. Be sure to include the component's part number when placing an order with your local Sales/Service Representative. See the operating manuals for your system for information about installing these components.

The following vacuum interlock components can be replaced.

- Inner Ball Seal
- Valve Axle
- Axle Seal
- Axle Bearing
- Sealing Ball
- Outer Ball Seal
- Valve Spring
- Vacuum Interlock Knob
- Clip
- Interior O-Ring
- Exterior O-Ring
- VPI Push Button Assy.
- Vacuum Interlock Microswitch Assembly
- 2-Way Valve 24 V

Table 2. Replaceable Components of the Vacuum Interlock



Inner Ball Seal

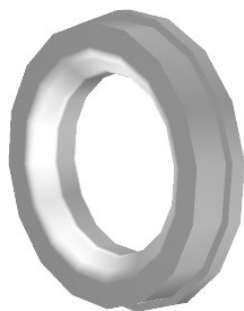
Quantity: Each



Thermo Scientific Part Number

1R120406-1008

Valve Axle**Quantity: Each****Thermo Scientific Part Number****1R120406-1003****Axle Seal****Quantity: Each****Thermo Scientific Part Number****1R120406-2204****Axle Bearing****Quantity: Each****Thermo Scientific Part Number****1R120406-1005**

Sealing Ball**Quantity: Each****Thermo Scientific Part Number****1R120406-1004****Outer Ball Seal****Quantity: Each****Thermo Scientific Part Number****1R120406-1002****Valve Spring****Quantity: Each****Thermo Scientific Part Number****1R76485-1001**

Vacuum Interlock Knob	Quantity: Each
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Thermo Scientific Part Number	1R120406-3000
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Clip	Quantity: Pkg of 5
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Thermo Scientific Part Number	1R76483-2102
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Interior O-Ring	Quantity: 1
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Thermo Scientific Part Number	1R3814-127
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Exterior O-Ring	Quantity: 1
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Thermo Scientific Part Number	1R3815-320
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VPI Push Button Assy.

Quantity: Each

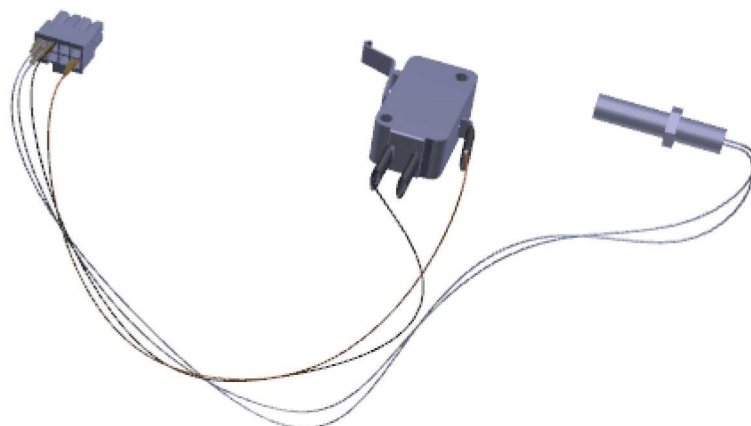


Thermo Scientific Part Number

1R119378-0122

Vacuum Interlock Microswitch Assembly

Quantity: Assembly

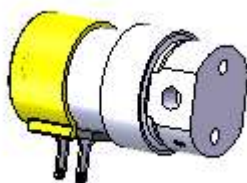


Thermo Scientific Part Number

1R120406-1030

2-Way Valve 24 V

Quantity: Assembly



Thermo Scientific Part Number

1R76461-5002

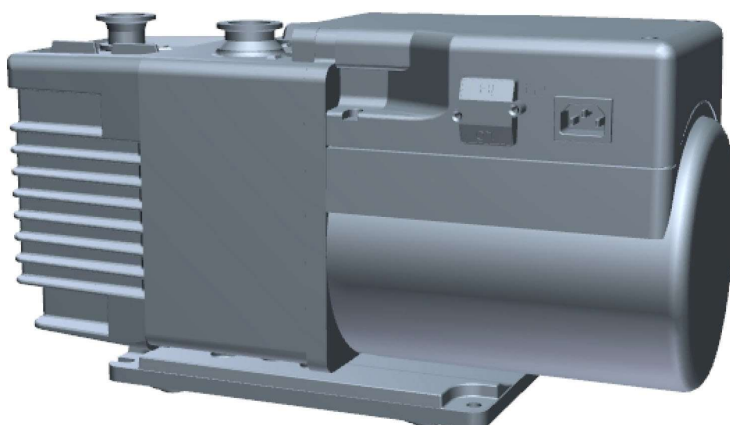
Pump Components

The following pump components are available for the ISQ and TSQ GC-MS instruments. Refer to the operating manual for your instrument for installation instructions

- [Rough Pump \(RV3\)](#)
- [Graduated Nipple](#)
- [Clamp](#)
- [Centering Ring](#)
- [Oil Mist Filter](#)

Rough Pump (RV3)

Quantity: Each



Thermo Scientific Part Number

1R76505-3007

Graduated Nipple

Quantity: Each

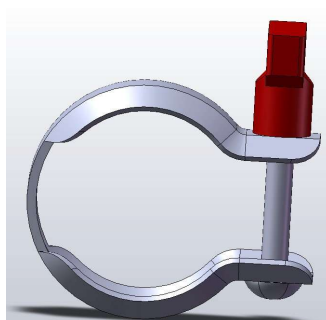


Thermo Scientific Part Number

1R76505-5003

Clamp

Quantity: Each



Thermo Scientific Part Number

1R76505-2002

Centering Ring

Quantity: Each



Thermo Scientific Part Number

1R76505-2001

Oil Mist Filter

Quantity: Each

System: All



Thermo Scientific Part Number

1R76505-0036

MS System Tools

The MS systems ship with a toolkit that contains all the tools you will need to perform maintenance on the instrument. It does not contain any consumable items or cleaning supplies.

The following toolkit components can be replaced.

- VPI MS Toolkit for Exploris GC
- Source Exchange Tool
- Forceps, 8 in.
- Source Plug
- Source Plug O-ring
- Transfer Line Cleaning Tool.

VPI MS Toolkit for Exploris GC and Exploris GC 240**Quantity: Each****Thermo Scientific Part Number****1R120467-0003****Source Exchange Tool****Quantity: Each****Thermo Scientific Part Number****1R120406-2000****Forceps, 8 in.****Quantity: Each****Thermo Scientific Part Number****1R76360-0008**

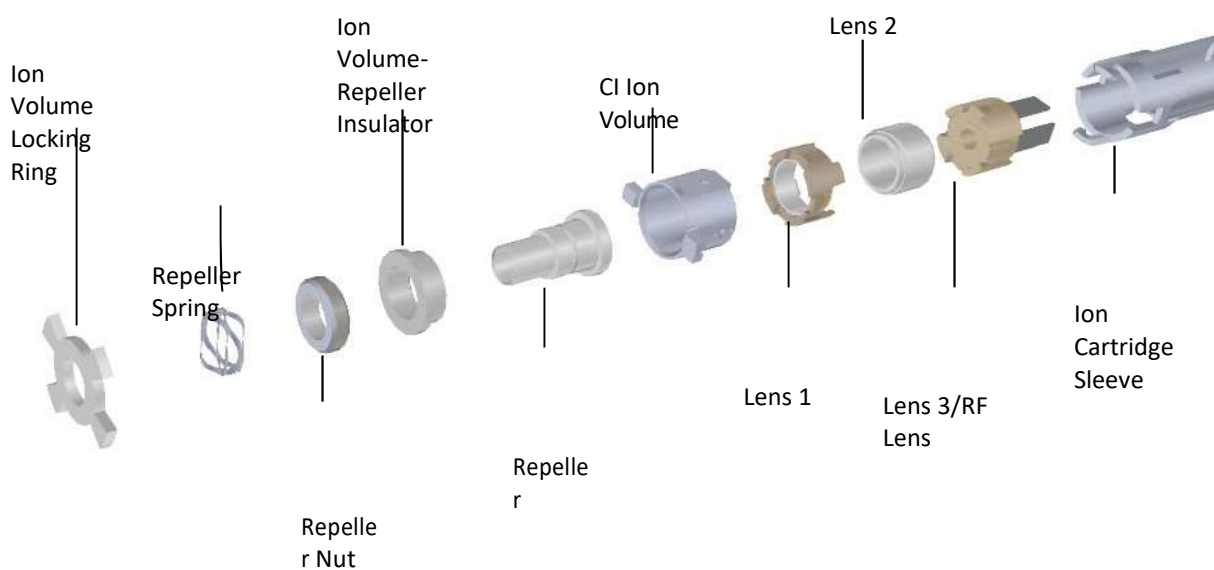
Source Plug**Quantity: Each****Thermo Scientific Part Number****1R120589-2000****Source Plug O-ring****Quantity: Each****Thermo Scientific Part Number****1R3816-202****Transfer Line Cleaning Tool****Quantity: Each****Thermo Scientific Part Number****1R120630-9903**

Upgrade Equipment

The following upgrade equipment is available for the Q Exactive and Exactive GC instruments. Contact your local Sales/Service Representative to place an order.

- CI Ion Source Cartridge (Low Activity)
- CI Reagent Gas Flow Module
- CI Ion Volume
- EI/CI Ion Volume
- Q Exactive GC Probe Kit

Figure 2. CI Ion Source Cartridge Components



CI Ion Source Cartridge (Low Activity)

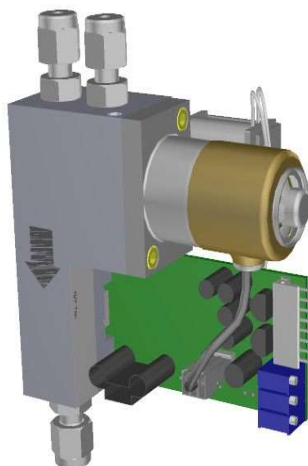
Quantity: Each



Thermo Scientific Part Number

1R120404-4500

CI Reagent Gas Flow Module	Quantity: Each
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Thermo Scientific Part Number	1R23331-0092
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CI Ion Volume	Quantity: Each
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Thermo Scientific Part Number	1R120404-4112
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EI/CI Ion Volume	Quantity: Each
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Thermo Scientific Part Number	1R120404-4113
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Q Exactive GC and Exactive GC Probe Kit	Quantity: Each
Thermo Scientific Part	1R120705-
The probe kit also contains the ceramic insulator (PN 1R120601-1000) and the start cable (PN 1R119378-0032)	



