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REFRIGERANT TOOLS



NEW DEPOT
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SOUTHAMPTON



Third Edition



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SOUTHAMPTON DEPOT

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JAVAC and Star International

We have great pleasure in announcing that Star International (Part of the Star International Group of Companies) have become the World-Wide Marine & Offshore contact for the supply of all marine & offshore refrigeration process technology from Javac.

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Refrigerant Recovery

XTR-PRO-DV Dual Voltage

The JAVAC XTR-PRO-DV is the first DUAL VOLTAGE portable recovery units offered in our premium commercial range of products. An industry first "X-CONNECT-TECHNOLOGY" protects the XTR-PRO-DV's vital components against incorrect voltage e.g. 240v supply when switched to 110v.

Some of the special features of the XTR-PRO-DV include a heavy duty 1/2 HP high torque AC motor, reduced noise and increased liquid pumping by up to 50%. This ensures that the residual vapour moves faster and delivers your results quicker.

This unit provides true multi purpose recovery, capable of recovering a range of CFC's, HCFC's and HFC's with blends of A & B variations of most of these gases. The XTR-PRO-DV includes a comprehensive built in manifold analyser. Purge and self cleaning is "on the fly" so there is no need to shut down.

You can push, pull and sub cool by using this advanced facility. Built in safety features include; cool to touch, refrigerant connections that point down away from your eyes, safety switches, thermal overloads, circuit breakers and convenient connection points all on one side of the unit.

Overall, the XTR-PRO-DV is ergonomically designed, making this unit easy to carry. Like all of JAVAC's products, it is built to stringent standards for quality.



*XTR-PRO-DV comes set on 240v with a 240V lead. The 110v lead is extra

Product No. **01020177**

TECHNICAL SPECIFICATIONS

Key Features

- Dual Voltage 240v/110v
- Combined 30KG/HR, Push Pull 300KG/HR, Vapour 15KG/HR, Liquid 90KG/HR
- Weight: 13kg
- Size: 420mm (L) 290mm (W) 420mm (H)
- Oil free compressor
- Ceramic bearings
- Integrated self purge
- High power fan cooling
- Purge Facility
- HP and LP gauge fully enclosed
- Integrated circuit breaker protection
- High capacity condenser
- Connection fittings 1/4 SAE
- Liquid and vapour recovery
- 110V or 240V easy selection switch

Additional Features

- Recovers most refrigerants
- Easy to clean inlet filter
- Robust blow moulded case

12 month warranty

Vacuum Pumps

CC-231

- Double Stage
- Dual Voltage 110/240 50Hz
- Displacement 225 Ltr/Min (9cfm)
- Ultimate Vacuum micron 12 Micron
- Dimensions (mm) 380x160x285
- Net Weight 15.5kg
- Ammonia version available



Product No. 01020178

Universal High Vacuum Pump Oils

- Designed for rotary vane vacuum pumps to maximise performance and increase the depth of vacuum
- These high quality oils incorporate additives to improve the anti-wear performance, oxidisation resistance, corrosion protection, pour point (cold starting), air release and anti-foaming tendencies
- They also possess excellent demulsibility properties which aid water separation, increasing gas ballast performance



Product No. 01020179

Hand Held Leak Detection

GAS-Mate

Combustible Gas Leak Detector

The GAS-Mate is a high quality and economical gas leak detector with high sensitivity. It is perfect for checking leaks in residential and commercial combustion appliances, such as natural gas or propane heating systems as well as pipelines.

GAS-Mate uses leading edge technology to detect hydrocarbons and other gases with twice the sensitivity of competing models. GAS-Mate is a precision instrument with rugged construction and a high impact casing, ideal for heavy duty handling. An extremely reliable unit, the manufacturer also offers a 2 year replacement warranty.

Features at a Glance

- Sensitive to 5ppm methane; which is twice the sensitivity of its nearest competitor
- Also detects natural gas, propane, butane, cyclopentane, ethane, ethanol, isobutane and ammonia
- Variable audio alarm and flashing LED to indicate leak strength
- Adjustable sensitivity helps pinpoint leaks fast
- Auto zeroing for ignoring background gas levels in leak test area
- Small sensor and probe tip allows leak detection in small places
- Runs continuously for 60 hours on 2 x 'D' alkaline batteries
- The base unit includes sensor, 2 x 'D' batteries and hard plastic carry case



Product No. 01020204

Technical Specifications

Suggested Applications

- Medium to heavy duty • Commercial applications

Sensitivity to Methane

- 5ppm

Leak Indicators

- Variable flashing yellow LED and audible tick rate dependant on gas concentration

Power Source

- 2 x 'D' alkaline batteries

Battery Life

- 60 hours

Probe Type

- Chrome plated flexible metal

Probe Length

- 43cm

Control Panel

- 3 position switch: Off, High & Adjustable sensitivity

Slide Switch

- Sensitivity

Operating Temperature Range

- 0°C to 45°C

Storage Temperature Range

- -10°C to 60°C

Dimensions

- 224mm x 51mm x 76mm

Weight (with batteries)

- 700grams

Certification

- CE UL913 Class 1, Division 1, Group A, B, C & D, Met Laboratories Listing #E112145

Manufacturer's warranty: 24 months

Hand Held Leak Detection

Tek-Mate Leak Detector F-Gas Compliant

The UK's Best Selling Refrigerant Leak Detector

Offering hand-held convenience, the Tek-Mate leak detector boasts proven heated diode sensor technology. The Tek-Mate incorporates an electro-chemical sensor consisting of a ceramic substrate, doped with a reactive element and maintained at high temperature by a built-in heating element.

The Tek-Mate sensor provides similar responses to CFCs (such as R11 and R12), HCFCs (such as R22 and R123), HFCs (such as R134a) as well as replacement blends (such as R404a and R410a) so that the operator does not need to determine the refrigerant in use. Tek-Mate is sensitive to R22 at 2 grams/year and R410A at 5grams/yr, making it easy to detect a leak of any size.

Packaged in a durable plastic case, the Tek-Mate leak detector is well above its class as a cost effective tool.

- F- GAS Compliant tested to BSEN14624
- Base unit includes Sensor, 2 D-size alkaline batteries, spare filters, and a hard plastic carrying case.
- Sensitivity to CFCs, HCFCs, HFCs 0.4oz/yr.
 - R22: 2g/yr
 - R410A: 5g/yr



Product No. **01020180**

- Controls 3-position soft touch switch off low sensitivity, high sensitivity
- Power 2 D-size (1.5-volt) alkaline batteries
- Contamination adjustment - Automatic
- Operating temperature range -20°F to 122°F - 27°C to 50°C

Charging Scales

Wey-Tek HD Wireless Scale

The Most advanced Technology in refrigerant scales

The worlds first Bluetooth enabled refrigerant scale. The Wey-TEK-HD is available in two different models: an industry first wireless platform that communicates with and displays through your smartphone via a free downloadable app (available on app store and Google play store) and a wireless platform with optional handpeice.

The app based Scale features an innovative 'JOB LOG' feature which provides a full data log of all completed jobs. This can then be Emailed or 'Snapshot' to either the customer or Office. This feature offers Full F-Gas traceability for all used and recovered refrigerant. The low and High Alarm settings feature also gives the user flexibility on monitoring the charge or recovery process.

Wey-TEK-HD wireless base model

- Communicates and displays through a downloadable free app on you smartphone (compatible with IOS iPhone 4S an above and Android)
- Bluetooth transmission to a range of 30FT
- Measure in LBS/KGS/OZ
- Large durable weigh platform
- Capacity: 115kg
- Powered via Double A Batteries
- Hard plastic carry case included
- Two year warranty



Product No. 01020181

Charging Scales

Wey-Tek HD Hand Piece

Bluetooth Hand piece to suit the Wey-Tek HD

Wey-Tek-HD wireless base with optional handpeice

- Can be used in lieu of smartphone via Bluetooth transmission
- Large vivid colour display is easy to read, even in direct sunlight
- Auto shut-off and screen dimming
- Magnet on handpeice for placing on a tank or nearby system.



Product No. 01020182

REF Meter OCTA

The light weight, the sturdy aluminium body as well as the unique cable auto reel combined with state-of-the-art technology are some of the benefits of the further developed REF-METER. The excellent features like the high accuracy, the easy to read LCD display etc remain the same. The high quality product offers a perfect platform for large refrigeration cylinders and is easy programmable and calibratable. The REF-METER-OCTA is supplied in a carrying pouch.

Technical Data:

- For use with 65Kg cylinders
- Capacity 100 kg (220 lbs)
- Platform diameter 320 mm
- Accuracy +/- 0.5%
- Resolution 2 g
- Power supply 4 AAA batteries
- Battery lifetime 30 hours



Product No. 01020183

Refrigeration Manifolds

Piston-Valve Series Manifold Gauge Sets

- High quality extruded aluminium body, precisely machined and colour anodized
- Teflon piston-valve mechanism, excellent sealing & large flow
- 80mm gauges with soft cushion protective cover, class 1.0 accuracy, pulse-free pointer, zero-pointed calibration, and colour coded
- Extra large sight glass for visual refrigerant check
- Soft ergonomic with colour coded knobs
- Heavy-duty swivel hanging hook
- Goodyear GY5 hose sets meet UL1963 & SAE J196 standard, 800psi (55bar) working pressure, 4000psi (276bar) burst pressure



Hydrocarbon R32 and R1234YF/ZE Equipment

BM2-3-DS-R32/R410A

Refrigeration Manifolds for R32 and R410A in a carry case with 3 x 36" hoses

- 2 valve
- with sight glass



Refrigeration Hoses

Set of 3 Charging Lines 1/4" SAE



High quality lines suitable for all refrigerants, working pressure 60 BAR / 870 PSI

Product No.	Designation	Length
01020186	CCL-36	36" 90 cm
01020232	CCL-48	48" 120 cm
01020233	CCL-60	60" 150 cm
01020234	CCL-72	72" 180 cm



Product No. **01020186**

R410A/R32 Hoses, set of 3



High quality lines suitable for all refrigerants, working pressure 60 BAR / 870 PSI

Description	Product No.
R410A and R32 Hose set 60" 1/4" x 5/16"	01020235
R410A and R32 Hose set 60" 1/4" x 5/16" with ball valves set back	01020236
R410A and R32 hose set 60" 1/4" x 5/16" with standard ball valves	01020237



Vacuum Gauges

VG-64 Digital Vacuum Gauge Upgrade

Dual Port, High Resolution, FAST Response
Digital Vacuum Gauge NOW with Convenient
Magnetic HVAC Strap

Features and Benefits:

- Reads vacuum in seven international units
- UPGRADE - now with magnetic HVAC strap inc
- Ultra fine resolution (1 micron when vacuum is less than or equal to 200 microns)
- Auto shut-off
- Display updates every 1/2 second
- Convenient built-in hanger
- Cleaning port provides quick cleaning and drying of sensor
- Easy to clean sensor (use isopropyl alcohol)
- Low battery indicator

Specifications:

Sensor type	Thermistor
Connector type	Standard 1/4" male flared fitting
Vacuum range	0-12,000 microns
Parameter scale	Microns, PSI, InHg, mBars, Pascals, Torr, mTorr
Best resolution	1 micron (0-200 microns)
Operating temp. range	35°F to 125°F (2°C to 52°C)
Overpressure	500 psi max (34 Bar)
Accuracy	+/- 10% (100-1000 microns)
Power source	9 V battery (not included)



Product No. 01020190

Vacuum Gauges

REF VAC Digital Vacuum Gauge

The Ref Vac is the latest measuring instrument for continuous reading of measurement values during the evacuation process out in the field as well as in the laboratory. Thanks to the large LCD display, the changing data can always be read easily. The vacuum gauge can be set to the main vacuum units such as microns, mbar, Pa, Torr, mTorr, psi, and inHG. It can accurately display the vacuum from 18000-0 microns. The unit also has a practical hook for hanging and conforms to the protection class IP 54.

Specification

Sensor Type	Thermistor
Vacuum Range	0-18000 microns
Accuracy	+/- 10% 0-100 microns +/- 6% 101-750 microns
Units	microns, mbar, Pa, Torr, mTorr, psi, inHG
Display	0-20: 0.2 microns
Resolution	21-200: 1 microns 201-500: 5 microns
Connector Type	Standard male 1/4 inch SAE
Operating Temp Range	0°C to +40°C

A handheld digital pressure gauge with a yellow face and green body, connected to a brass fitting on a yellow hose.

Product No. 01020189

Auto shutoff	After 10 mins If vacuum gauge greater than 18000 microns
	After 30 mins If vacuum value less than 18000 microns
Battery life	40 hours
Over pressure	Max 34 bar
Hanging hook included	

CR2-40 Absolute Torr Gauge

- Javac Absolute Vacuum Gauge
- Range 0 - 40 Torr
- Range 0 - 50 mbar
- 100mm Diameter
- 1/4" Flare connection
- Stainless Steel construction



Product No. 01020191

Tube Working Tools

Tube Expander Set JAV-1000B

The heavy duty tube expander includes 6 heads. 3/8", 1/2", 5/8", 3/4", 7/8" and 1-1/8" Complete with steel case and inner/outer reamer



Product No. 01020192

HY EX 6 Hydraulic Tube Expander

- New Hydraulic Expander Tool Kit.
- Complete with 6 heads, 3/8", 1/2", 5/8", 3/4", 7/8" and 1-1/8"
- Easy single hand operation
- Small space capable
- 120 angle
- Interchangeable heads 3/8" - 1-1/8"
- Compatible with REFCO expander Systems
- Includes deburring tool RFA-209-STYLOHD

Dimensions	Length	25cm	(10")
	Width	4.5cm	(1.75")
	Height	12cm	(5")
	Weight	1.2 kg	(2.6 lbs)

Soft tubing only: copper, aluminium and brass.



Product No. 01020193

Tube Working Tools

Tube Cutter Range

- Black strengthened titanium blade
- Robust construction
- Smooth turn bearing rollers
- Large easy turn handwheel
- Integrated copper tube reamer

Tube Cutter

Up to $\frac{1}{2}$ "

Product No.

01020206

Up tp 5/8"

01020207

Up tp 1 $\frac{1}{2}$ "

01020208



Tube Benders

- Crossbow Bender
- Tube Bender 1/2" OD
- Tube Bender 3/8" OD
- Triple Tube Bender



Stylo De-Burrer

- Handy De-Burring tool with rotating blade, removes rough or irregular edges of pipe



Tube Working Tools

Portable Hydraulic Tube Bender HB85

- Die-cast aluminium body and stainless steel body pump with double hydraulic circuit
- High working range thanks to very long piston stroke
- Adjustable pump lever according to hand size
- Die-cast aluminium formers
- Galvanized steel counter formers with die-cast aluminium laterals for quick coupling

Pipe Sizes: 1/4", 5/16", 3/8", 1/2", 5/8", 3/4, 7/8"



Product No. 01020196

Flaring and Swaging Kit

The Javac JAV-275K Flaring and swaging kit is made of forged high quality steel for use with copper tube. Ideal for tight, limited access areas, achieving the professional seal on all flaring and swaging joints. All packed in a handy hard plastic blow mould casing

- Flaring and Swaging 1/8"-3/4"
- Tool Flaring adaptors and 3/16"-3/4" Swaging adaptors



Product No. 01020205

Welding & Brazing Equipment

Olympus Brazing and Soldering Torch

- Auto ignition
- Variable flame control
- Swivel tip 360 degrees
- For use with MAPP and Propane gas.
- 1 year warranty



Product No. 01020197

Portapak Trolley

This trolley has an adjustable handle which allows you to reduce the height of trolley to 700mm, very useful for vehicle head room. Extended handle height 955mm, this trolley is suitable for 5L and 10L cylinders.



Product No. 01020199

Welding & Brazing Equipment

Welding and Brazing Toolbox

Toolbox brazing kit consisting of:

- 1 x Oxygen regulator
- 1 x Acetylene regulator
- 1 x brazing torch and mixer
- 1 x pair of 5m hoses
- 1 x flip up brazing goggles
- 4 x assorted size nozzles
- 1 x pistol grip spark lighter
- 1 x cylinder spanner
- 1 x nozzle cleaning set
- 1 x pair of flashback arrestors



Product No. 01020198

Item	Product No.	Item	Product No.
Welding Set oxy-act complete in toolbox	01020209	6mm x 5m Act Hose	01020219
Flashback Arrestor Oxygen flame	01020210	6mm x 10m Oxy Hose	01020220
Flashback Arrestor Fuel Gas	01020211	6mm x 10m Act Hose	01020221
0-4 bar SS Regulator Oxygen	01020212	5 meter OXY-ACET Hose Set	01020222
A1.5 bar SS Regulator Acetylene	01020213	10 meter OXY-ACET Hose Set	01020223
Cylinder Trolley Oxy-Act 5 & 10 ltr	01020214	L/Wt Nozzle no7	01020224
Nozzle Cleaner	01020215	L/Wt Nozzle no10	01020225
Combination Spanner	01020216	L/Wt Nozzle no13	01020226
Flip-Front Goggles	01020217	L/Wt Nozzle no18	01020227
Cup Spark Lighter	01020218	L/Wt Shank Oxy-Act	01020228
6mm x 5m Oxy Hose	01020230	L/WT Mixer chamber assembly	01020229

Sealants, Service Tools & Valves

Service Ratchet Wrenches

Straight Wrench



Product No. 01020200

1/4" & 3/16" Offset Wrench



Product No. 01020231

Inspection Mirrors M2

2' - 2.1/4" Mirror Telescopic



Product No. 01020201

Temperature Instruments

RT-905 Digital Thermometer

- Range -50 to +200 °C, °F, switchable.
- CE Approval
- Max/Min memory
- St/Steel probe 5" with 1 mtr cable.
- Hold function
- Alarm Functions



Product No. 01020202

Test Instruments

EM310C AC Digital Clamp Meter

- Back light
- Continuity buzzer
- Data hold
- Max. Display 1999

Specifications:

DC Voltage:	1000V \pm (1%+2)
AC Voltage:	750V \pm (1.2%+5)
DC Current:	20A / 200A / 1000A
Resistance:	200 / 2K \pm (1%+3)
Temperature:	-40°C ~ 750°C \pm (1%+3)



Product No. 01020203

Nitrogen Pressure Testing

50 Bar (OFN) Nitrogen Regulator RS-750

- 300 bar maximum inlet pressure.
- 0 - 50 bar (0 - 750 psi) outlet pressure range.
- Designed for testing refrigeration systems that use R410A refrigerant gas in accordance with BS EN 378.
- 1/4" SAE flare outlet connection to allow for rapid connection to industry standard hoses.
- Large pressure adjustment knob to allow for easy pressure adjustment.
- 0 - 70 bar (0 - 1000 psi) working pressure gauge scale to allow for accurate delivery pressure setting.



Product No. 01020187

Nitrogen Pressure Testing

Nitrogen Cylinder Trolley

- Heavy duty cylinder trolley for the safe transportation of nitrogen cylinders
- Solid rubber wheels
- Security chain



Product No. 01020188

Star Refrigerants - RS Series of drop-in zero ODP Refrigerants

All of the RS series of refrigerants are non ozone depleting with a safety classification of A1 and can be used both with traditional lubricants (eg mineral and alkyl benzene oils) and the new synthetic lubricants such as polyolesters. They provide a simple and low cost method of switching away from CFCs and HCFCs including the interim ozone depleting blends.

Cylinder - Available in 30 Ltr and 60 Ltr

- Refrigerant: RS 24 R426A
- Refrigerant: RS 44 R424A
- Refrigerant: RS 45 R434A
- Refrigerant: RS 50 R442A
- Refrigerant: RS 52 R428A
- Refrigerant: RS 70 R453A
- Refrigerant: R134A
- Refrigerant: R404A
- Refrigerant: R407C
- Refrigerant: R410A
- Refrigerant: R422A
- Refrigerant: R422D
- Refrigerant: R437A
- Refrigerant: R417A

Retest and refurbishing of all refrigerants Cylinders/Tanks

All cylinders are tested to the following standards:

- BS EN 1968 • BS EN 1803 • BS EN 1802

Retest/refurbishment

- Refrigerant Cylinder Retest - up to 60L
- High Pressure Cylinder Retest - up to 50L
- Internal Shot blast
- Internal Oil Wash
- External Prime and Top Coat
- External Blast, Prime & Top Coat
- Assemble and Supply Vapour / Liquid Valves

Refrigerant Processing

- Oil/Water/Nitrogen Removal
- Distillation
- Waste Product/Refrigerants Disposal



STAR
INTERNATIONAL

**For all on-board
welding solutions**



Worldwide Marine and
Offshore Services

Some of the popular products and services we offer

- Welding Gases
- Plasma Cutters
- Gas Welding Equipment
- Arc Welding Equipment
- Marine Chemicals
- Water Treatment Test Kits
- Fuel Oil Test Kits
- Reagents
- Biological Products
- Disposable Span Gases
- Medical Equipment
- Fire Fighting Equipment (Service)
- Lifejacket, Immersion Suits (Supply & Service)
- Liferaft (Service, Exchange & Supply)
- Multi Gas Detectors (Supply & Service)
- Refrigeration Services / Spares Supplied
- RS Series Refrigerant Gases
- Rescue Boats and Lifeboats (Supply & Service)
- Marine Safety Equipment (Supply & Service)
- Star EndoSan (Next Generation Disinfectant)
- Den-Sin Ultra High Pressure Washers

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