

Gas Equipment

For Cutting, Gouging, Welding & Heating

QUALITY GAS EQUIPMENT

Blackwoods

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We Thank You For Choosing Our Quality Gas Equipment

Beginning in 1988, Tesuco® has established itself as a specialist equipment supplier for all gas welding, heating and cutting applications. Tesuco® is proud to be 100% Australian owned and has been quality endorsed by SAI Global to the AS/NZS ISO 9001 Standard since 1995.

Tesuco[®] continues to introduce new and exciting products from the best Australian and overseas manufacturers. This booklet introduces you to our range of welding, heating and cutting equipment, available through our extensive distributor network both here and abroad.

Only trained operators may use this equipment.

Blackwoods

YGEN/LPG

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MEDICAL AND 11

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www.blackwoods.com.au

Website



Scan QR code to view our complete range of **gas equipment.**

Our name Tesuco[®] comes from Technical Supplies Company.

Australian Standards

There are many Australian standards covering gas equipment, however one of the most important is AS 4839 – "The Safe Use of Portable and Mobile Oxy-Fuel Systems for Welding, Cutting, Heating and Allied Processes". It covers items like cylinder handling and transportation, gases, hoses and hose length, regulators, flashback arrestors, blowpipes, tips and nozzles and includes a guide on maintenance and testing of the equipment.

For peace of mind Tesuco® equipment conforms to all of the relevant Australian and New Zealand standards. In some products, such as our oxygen regulators, our testing is beyond that of many in the marketplace. Not all oxygen regulator have passed the promoted ignition test (referred to as the bomb test) as listed in AS 4267. To ensure ultimate safety, Tesuco® oxygen regulators have passed this test.

Acetylene Withdrawal Rates

Choice of equipment may be restricted by the size or number of acetylene cylinders you use. Acetylene cylinders must display the maximum withdrawal rate on the cylinder label. Further to this, continuous withdrawal (over 20 minutes) and depletion of cylinder contents will reduce the available withdrawal rate. Exceeding the maximum withdrawal rate of acetylene cylinders may cause flashbacks, serious damage to equipment and/or injury to the operator. The correct cylinder size or number of cylinders must be used relevant to the gas consumption of the tip. To simplify this, flow rate information to safely use each tip/nozzle is supplied in this booklet and a guide for cylinders to be used.

Bottom & Side Entry Regulators

Previously, regulators from most suppliers have only been available in bottom entry. Cylinders, however may have either a top or side outlet valve. To cater for this Tesuco[®] regulators are available in both bottom and side entry configuration.

This ensures the appropriate regulator can be used to maintain the correct orientation of the regulator and gauges during operation, making it easier to read and adjust pressures.



Heating & Gouging Nozzles

Due to the large flow rate of these items, it is not recommended to use a single cylinder, standard flashback arrestors, or 5 mm ID hose. High flow flashback arrestors have part numbers starting with FRH or FTH, 10 mm ID hose is recommended for all heating and gouging applications.



LPG Withdrawal Rates

As with acetylene, flow rate for LPG is restricted by the size of the cylinder used. For example, the maximum continuous draw off @ 21°C for a 45 kg cylinder is 56.6 L/min. As a result it may be dangerous to use some equipment if the gas supply is not sufficient. It is imperative that the operator selects the correct gas supply for the equipment being used. Failure to do this may cause flashbacks, serious damage to equipment and/or injury to the operator.

Hoses

All Tesuco® hoses meet the requirements of AS/NZS 1335. 5mm ID hoses suit welding, brazing and cutting while 10 mm ID hoses suit gouging and heating applications due to flow rates.



Gas Equipment Flow Diagram

OXYGEN Check the cylinder flowrate before using any gas equipment.	MER NO.PART NUMBERRC180X100173 6333	MFR NO. PART NUMBER RC1SOX45 0190 4803 RC1SOX45 0218 8159	
ACETYLENE	MFR NO. PART NUMBER R01BA015 1173 6316	MER NO. PART NUMBER ROISACIE 0190 4735	
OXYGEN Check the cylinder flowrate before using any gas equipment.	View of the sector of the se	MERNO. 0120 4803 RISOXA5 0218 8159	
LPG		MFR NO. PART NUMBER RC1RLP4 0173 6350	

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MFR NO.	PART NUMBER
FRSO	0173 5908
FRSOQD4	0218 8346
FRSOR	0190 4854
FRHO	0173 6384
FRHOR	0218 8380

-

PART NUMBER

01735 891

0218 8363

0190 4837

0173 6367

0218 8397

MFR NO.

FRSFQD4

FRSFR

FRHF

FRHFR

.

FRSF

	5 mm ID TWIN HOSE	
MFR NO.		PART NUMBER
GWTW0A5		0218 8788
GWTWOA10		0190 4990
GWTW0A15		0190 4922
GWTW0A20		0190 4939



10 mm ID Twin Hose

PART NUMBER

0218 8805

0218 8822

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MFR NO.

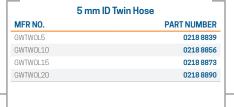
GWTW10A15



	MFR NO.	 PART NUMBER
	FTSF	0173 5925
	FTSFQD1	0190 5041
	FTMF	0218 8431
	FTMFQD1	0218 8465
	FTHF	0173 6401

	_
MFR NO.	PART NUMBER
FRSO	0173 5908
FRSOQD4D	0218 8346
FRSOR	0190 4854
FRHO	0173 6384
FRHOR	0218 8380

MFR NO.	 PART NUMBER
FRSF	0173 5891
FRSFQD4D	0218 8363
FRSFR	0190 4837
FRHF	0173 6367
FRHFR	0218 8397



Note: When heating or gouging, high flow (FRH-/FTH-) model flashback arrestors and

10 mm twin hoses must be used.





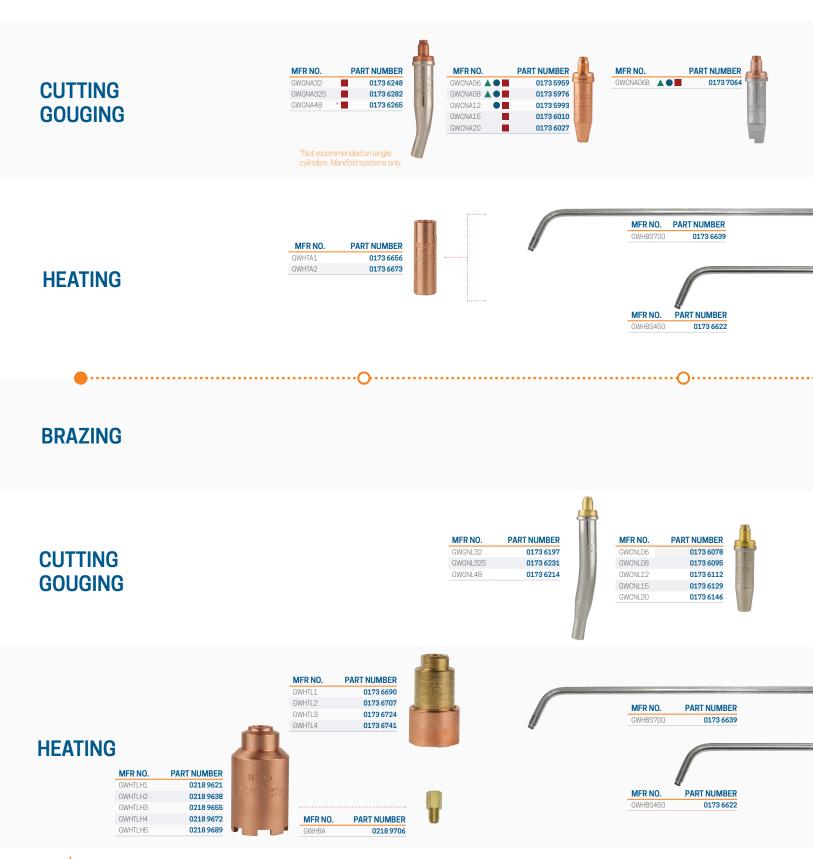
MFR NO.	 PART NUMBER
FTSO	0173 5942
FTSOQD4D	0190 5024
FTMO	0218 8414
FTMOQD1D	0218 8448
FTHO	0173 6418

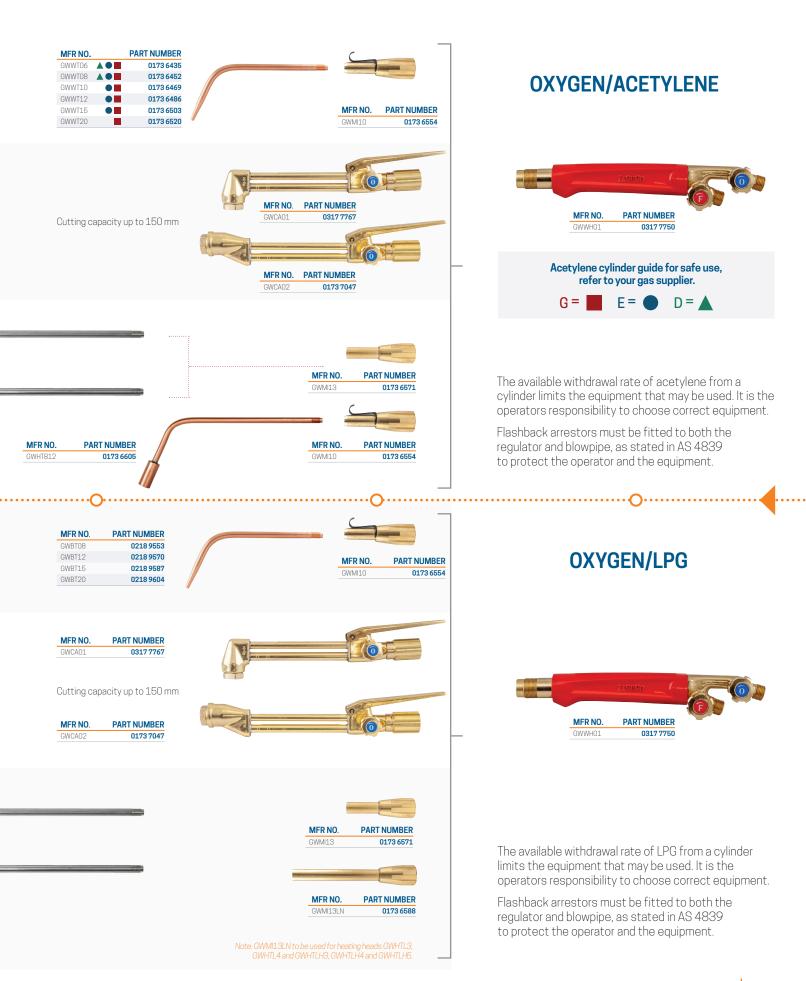


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Gas Equipment Flow Diagram

WELDING





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Gas Equipment Accessories

TRIPLE FLINT LIGHTER

Tesuco[®] triple flint lighter is designed for safe use to light any gas welding, brazing, heating and cutting tip or nozzle.

The cup pockets the gas for easy and quick lighting. It has three flints that can be rotated as one wears out. Replacement triple flints are available in four pack.



GWTFFlint gun triple flint10218 8244GWTFRTriple flint replacement40218 8261

SPARKI

Hands free igniter for welding and cutting torches. Simply attach to the work bench or anywhere that is metal on the work site, turn on the fuel gas then push the tip into the igniter to light the flame and then adjust the oxygen at the same time without the need to hold the lighter.

MFR NO.	DESCRIPTION	PART NUMBER
SPT031	30 mm Magnetic base	0189 1152
SPT051	50 mm Magnetic base	0189 1169
SPT101	100 mm Steel base	0189 1186

Shade 5 Flame Pro[®] goggles are th

WELDING GOGGLES

Flame Pro[®] goggles are the flip up design, which can be operated using one hand. When the shaded lenses are flipped up the user is still protected by a set of clear lenses. This also saves having to remove them in-between welding, brazing and cutting operations.

Shade 5 goggles are required when using any gas welding, brazing, heating and cutting applications to protect your eyes.





MFR NO.	DESCRIPTION	PART NUMBER
GWGP	Gas welding goggles Flame Pro® Shade 5	0218 9298
GWGS5	Goggle filter lens shade 5 (pair)	0218 9315
GWGCL	Goggle clear cover lens (pair)	0218 9332



TIP CLEANING SET

Tesuco[®] cleaner set are design to be used on all tips and nozzles.

During operation, cutting, heating, brazing and welding nozzles and tips can become blocked with slag deposits. The tip cleaning set comprises 13 sizes of round wires and a file to clear the hole of debris for longer life.



COMBINATION SPANNER



NOZZLE NUT

MFR NO.	DESCRIPTION	PART NUMBER
SPCANND	Twin pack	0218 8312

INSTRUCTION MANUAL Gas Equipment



MFR NO.	PART NUMBER
GWKIM	0218 8329

REGULATOR GAUGE PROTECTORS

Twin Pack



SPRGPRD Red 0218 8193 0218 8210 SPRGPBD Black

REGULATOR OUTLET 90° ELBOW



MFR NO.	INLET	OUTLET	PART NUMBER
G-AD90RH58	5/8-18UNF RH female	5/8-18UNF RH male	0218 9196
G-AD90LH58	5/8-18UNF LH female	5/8-18UNF LH male	0218 9213

ROLLER GUIDE & RADIUS BAR

MFR NO.	DESCRIPTION	PART NUMBER
GWRB	Radius bar	0338 2294
GWRG	Roller guide	0338 2277
GWRGR	Roller guide with radius bar	0218 8176



D2 STYLE COUPLING PINS



MFR NO. DESCRIPTION TYPE PART NUMBER QPFDT5 IBEDA Coupliing Pin Fuel 5 mm D2 0218 9417 QPODT5 IBEDA Coulping Pin Oxygen 5 mm D2 0218 9434 0218 9451 QPFDT1 IBEDA Coupling Pin Fuel 10 mm D2 QPODT1 D2 0218 9468 IBEDA Coupling Pin Oxygen 10 mm

COUPLING PINS TO EN 561



MFR NO.	DESCRIPTION	TYPE	PART NUMBER
QPFDM5	Fuel gas male	D4 LH	0218 9340
QPODM5	Oxygen male	D4 RH	0218 9366
QPFDF5	Fuel gas female	D1 LH	0218 9383
QPODF5	Oxygen female	D1 RH	0218 9400

HOSE CONNECTION & JOINER

GWLP240LH

10. GWHCI



GWHC34

GWHC35

MFR NO.	SIZE	DESCRIPTION	TYPE	PART NUMBER
GWLP112U	5 mm	Right hand	LP112	0218 9043
GWLP240U	5 mm	Left hand	LP240	0218 9060
GWLP265U	5 mm		LP265	0218 9077
GWHCF	5 mm	Left hand		0218 9094
GWHCI	5 mm	Right hand		0218 9128
GWHCF10	10 mm	Left hand		0218 9111
GWHCI10	10 mm	Right hand		0218 9145
GWHC34		Right hand hose joiner	WB34	0218 9162
GWHC35		Left hand hose joiner	WB35	0218 9179

FLASHBACK ARRESTOR WITH Q/A COUPLER **HOSE JOINER**

MFR NO.	DESCRIPTION	PART NUMBER
FISFQD4	Inline fuel gas	0218 8482
FISOQD4	Inline oxygen	0218 8499



FISOQD4

Selection Guide Welding & Brazing Tips

OXYGEN/ACETYLENE

Style 551



			PRESS	URE (KPA)	TYPICAL CO	NSUMPTION (L/MIN)	
MFR NO.	TIP SIZE	WELD THICKNESS	OXYGEN	ACETYLENE	OXYG	EN / FUEL GAS	PART NUMBER
GWWT06	6	1.2	50	50	1.5		0173 6435
GWWT08	8	2	50	50	2		0173 6452
GWWT10	10	2.6	50	50	3		0173 6469
GWWT12	12	3.2/4	50	50	4		0173 6486
GWWT15	15	5/6.5	50	50	6.5		0173 6503
GWWT20	20	8.2/10	50	50	12		0173 6520

Acetylene cylinder guide for safe use, refer to your gas supplier.



Typical consumption rates have been listed. These may vary depending on settings by the operator and environmental conditions.

OXYGEN/LPG Style 554





			PRESS	URE (KPA)	TYPICAL CONSUMPTION (L/MIN)	
MFR NO.	TIP SIZE	BRAZING THICKNESS	OXYGEN	ACETYLENE	OXYGEN / FUEL GAS	PART NUMBER
GWBT08	8	2	50	50	0.5	0218 9553
GWBT12	12	3.2/4	50	50	2	0218 9570
GWBT15	15	5/6.5	50	50	3	0218 9587
GWBT20	20	8.2/10	50	50	5	0218 9604



Typical consumption rates have been listed. These may vary depending on settings by the operator and environmental conditions.

Selection Guide Heating Nozzles

OXYGEN/ACETYLENE





		PRESSI	JRE (KPA)	TYPICAL CONSU	JMPTION (L/MIN)		
MFR NO.	TIP SIZE	OXYGEN	ACETYLENE	OXYGEN	FUEL GAS	HEAT OUTPUT (MJ/H)	PART NUMBER
GWHT812	8x12	150	100	45-58	41-55	180	0173 6605
GWHTA1	8×12	150	100	45-58	41-55	180	0173 6656
GWHTA2	12×12	200	100	74	65	215	0173 6673

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Typical consumption rates have been listed. These may vary depending on settings by the operator and environmental conditions.

OXYGEN/LPG



		PRESSL	PRESSURE (KPA)		MPTION (L/MIN)		
MFR NO.	TIP SIZE	OXYGEN	ACETYLENE	OXYGEN	Fuel GAS	HEAT OUTPUT (MJ/H)	PART NUMBER
GWHTL1	18 x 12	500	100	200	50	280	0173 6690
GWHTL2	36 x 12	600	100	300	75	420	0173 6707
GWHTL3	48 x 12	600	100	400	100	560	0173 6724
GWHTL4	48 x 15	1000	300	600	150	840	0173 6741
GWHTLH1	H1	100-200	50	67-117	17-33	186	0218 9621
GWHTLH2	H2	200-300	50	98-213	25-53	298	0218 9638
GWHTLH3	H3	200-500	100	142-382	37-95	532	0218 9655
GWHTLH4	H4	300-600	100	233-473	60-118	663	0218 9672
GWHTLH5	H5	400-800	100-200	283-662	72-167	934	0218 9689
GWHBA	Adaptor – mu	st be used in GWHTLH1	. to 5				0218 9706

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Typical consumption rates have been listed. These may vary depending on settings by the operator and environmental conditions.

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Selection Guide Cutting Nozzles

OXYGEN/ACETYLENE

Copper oxygen/acetylene cutting nozzles perform the same as traditional brass ones but have the advantage of better heat dissipation and less slag adherence. Nozzles are marked according to the requirements in AS 4839.

Maximum cutting with a GWCA01 and GWCA02 cutting attachment is 150 mm. For cutting up to 300 mm, use Tesuco® one piece cutting torches.





GWCNA12

			PRESSURE (KPA)		TYPICAL CO	NSUMPTION (L	<u>/MIN)</u>	
MFR NO.	MAX PLATE THICKNESS (MM)	NOZZLE SIZE	OXYGEN	ACETYLENE	OXYGEN	ACETYLENE		PART NUMBER
GWCNA06	6	6	200	100	11	2		0173 5959
GWCNA08	10	8	200	100	20	3.5		0173 5976
GWCNA12	20	12	250	100	38	4		0173 5993
GWCNA15	75	15	350	100	75	7		0173 6010
GWCNA20	125	20	400	100	134	9		0173 6027

Acetylene cylinder guide for safe use, refer to your gas supplier.



TVDICAL CONCUMPTION



OXYGEN/LPG

Oxygen/LPG cutting nozzles perform extremely well for certain applications. Due to less carbon in LPG, there is less slag adherence to the bottom of the cut. Nozzles are marked according to the requirements in AS 4839.

Maximum cutting with a GWCA01 and GWCA02 cutting attachment is 150 mm. For cutting up to 300 mm, use Tesuco® one piece cutting torches.



GWCNL08

			PRESSURE (KPA) (L/MIN)				
MFR NO.	MAX PLATE THICKNESS (MM)	NOZZLE SIZE	OXYGEN	ACETYLENE	OXYGEN	ACETYLENE	PART NUMBER
GWCNL06	6	6	200	100	17	2	0173 6078
GWCNL08	12	8	200	100	30	3.5	0173 6095
GWCNL12	20	12	250	100	68	4.5	0173 6112
GWCNL15	75	15	400	100	111	6	0173 6129
GWCNL20	125	20	400	100	171	6.5	0173 6146

Note: Typical consumption rates have been listed, but may vary depending on environmental conditions.

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Maximum plate thickness for a cutting attachment is 150 mm.



Selection Guide Gouging Nozzles

OXYGEN/ACETYLENE



			PRESSURE (KPA)		TYPICAL CONSUMPTION (L/MIN)		
MFR NO.	TYPE	NOZZLE SIZE	OXYGEN	ACETYLENE	OXYGEN	ACETYLENE	PART NUMBER
GWGNA32	Bent	32	500	100	61	15	0173 6248
GWGNA32S	Straight	32	500	100	61	15	0173 6282
GWGNA48	Bent	48	600	100	85	18	0173 6265

Acetylene cylinder guide for safe use, refer to your gas supplier.

G = E = D = 🔺

OXYGEN/LPG



GWGNL32

			PRESSURE (KPA)		TYPICAL CONS		
MFR NO.	TYPE	NOZZLE SIZE	OXYGEN	ACETYLENE	OXYGEN	ACETYLENE	PART NUMBER
GWGNL32	Bent	32	500	100	94	12	0173 6197
GWGNL32S	Straight	32	500	100	94	12	0173 6231
GWGNL48	Bent	48	600	100	120	13	0173 6214



Typical consumption rates have been listed. These may vary depending on settings by the operator and environmental conditions.



GAS CONTROL

Gas Control is a technologically advanced gas leakage detection spray, designed to test the hermetic sealing of any type of gas system. The liquid has a special formulation to inhibit corrosion when used on copper, brass and steel. The liquid, when applied will detect the slightest leak, forming bubbles or foam where it occurs.

FEATURES

- Sold to distributors in a display pack of 12 units
- Aerosol with easy to use Acc-U-Sol valve
- Aluminum container
- Safety tear-off tab
- Small extension tube supplied for accurate application
- Approved by DVGW to DIN EN 14291

MFR NO.	DESCRIPTION	PART NUMBER
OTLDS	400 g, UN1950, aerols, class 2.2	0218 9723

Gas Equipment Oxygen/Acetylene Kit





GWKOAT

		PART NUMBER 0218 9757	PART NUMBER 0173 6537	PART NUMBER 0218 9740	
MFR No.	DESCRIPTION	MFR NO. GWKOAT	MFR NO. GWKOA	MFR NO. GWKOAS	PART NUMBER
GWKITE	Heavy duty red kit box with equipment tray	•	•	•	0244 9143
RC1BOX10	Oxygen regulator – Bottom entry	•	•		0173 6333
RC1SOX10	Oxygen regulator – Side entry			•	0190 4803
RC1BAC1.5	Acetylene regulator – Bottom entry	•	٠		0173 6316
RC1SAC1.5	Acetylene regulator – Side entry			•	0190 4735
FRSF	Flashback arrestor, Regulator end, Standard flow, Fuel Gas	•	•	•	0173 5891
FRSO	Flashback arrestor, Regulator end, Standard flow, Oxygen	•	•	•	0173 5908
GWTWOA5	Twin gas hose 5 m – Oxygen/Acetylene	•			0218 8788
GWTWOA10	Twin gas hose 10 m – Oxygen/Acetylene		•	•	0190 4990
FTSF	Flashback arrestor, Torch end, Standard flow, Fuel Gas	•	•	•	0173 5925
FTSO	Flashback arrestor, Torch end, Standard flow, Oxygen	•	•	•	0173 5942
GWWH01	Blowpipe	•	•	•	0317 7750
GWMI10	Mixer 10 mm	•	•	•	0173 6554
GWWT10	Welding tip, Oxygen/Acetylene, Size 10	•	•	•	0173 6469
GWWT12	Welding tip, Oxygen/Acetylene, Size 12	•	•	•	0173 6486
GWWT15	Welding tip, Oxygen/Acetylene, Size 15		•	•	0173 6503
GWWT20	Welding tip, Oxygen/Acetylene, Size 20		•	•	0173 6520
GWCA01	Cutting attachment	•	•	•	0317 7767
GWCNA08	Cutting nozzle, Oxygen/Acetylene, Size 8	•	•	•	0173 5976
GWCNA12	Cutting nozzle, Oxygen/Acetylene, Size 12	•	•	•	0173 5993
GWCNA15	Cutting nozzle, Oxygen/Acetylene, Size 15		•	•	0173 6010
GWRB	Radius bar and pivot		•	•	0338 2294
GWRG	Roller guide		•	•	0338 2277
GWGP	Welding goggles	•	•	•	0218 9298
GWTF	Flint Lighter – Triple Flint	•	•	•	0218 8244
GWTC	Tip cleaners	•	•	•	0218 8278
GWS	Combination spanner	•	•	•	0218 8295
GWKIM	Instruction manual for gas equipment	•	•	•	0218 8329

Gas Equipment Oxygen/LPG Kit





GWKOLT

		PART NUMBER 0218 9791	PART NUMBER 0173 6894	PART NUMBER 0218 9774	
MFR NO.	DESCRIPTION	MFR NO. GWKOLT	MFR NO. GWKOL	MFR NO. GWKOLS	PART NUMBER
GWKITE	Heavy duty red kit box with equipment tray	•	•	•	0244 9143
RC1BOX10	Oxygen regulator – Bottom entry	•	•		0173 6333
RC1SOX10	Oxygen regulator – Side entry			•	0190 4803
RC1RLP4	LPG regulator – Rear entry	•	•	•	0173 6350
FRSF	Flashback arrestor, Regulator end, Standard flow, Fuel Gas	•	•	•	0173 5891
FRSO	Flashback arrestor, Regulator end, Standard flow, Oxygen	•	•	•	0173 5908
GWTW0L5	Twin gas hose 5 m – Oxygen/LPG	•			0218 8839
GWTWOL10	Twin gas hose 10 m – Oxygen/LPG		•	•	0218 8856
FTSF	Flashback arrestor, Torch end, Standard flow, Fuel Gas	•	•	•	0173 5925
FTSO	Flashback arrestor, Torch end, Standard flow, Oxygen	•	•	•	0173 5942
GWWH01	Blowpipe	•	•	•	0317 7750
GWMI10	Mixer 10 mm	•	•	•	0173 6554
GWBT08	Brazing tip, Oxygen/LPG, Size 8	•	•	•	0218 9553
GWBT12	Brazing tip, Oxygen/LPG, Size 12	•	•	•	0218 9570
GWBT15	Brazing tip, Oxygen/LPG, Size 15		•	•	0218 9587
GWBT20	Brazing tip, Oxygen/LPG, Size 20		•	•	0218 9604
GWCA01	Cutting attachment	•	•	•	0317 7767
GWCNL08	Cutting nozzle, Oxygen/LPG, Size 8	•	•	•	0173 6095
GWCNL12	Cutting nozzle, Oxygen/LPG, Size 12	•	•	•	0173 6112
GWCNL15	Cutting nozzle, Oxygen/LPG, Size 15		•	•	0173 6129
GWRB	Radius bar and pivot		•	•	0338 2294
GWRG	Roller guide		•	•	0338 2277
GWGP	Welding goggles	•	•	•	0218 9298
GWTF	Flint lighter	•	•	•	0218 8244
GWTC	Tip cleaners	•	•	•	0218 8278
GWS	Combination spanner	•	•	•	0218 8295
GWKIM	Instruction manual for gas equipment	•	•	•	0218 8329

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National Branch Network



Australian Capital Territory Canberra (Fyshwick)

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New South Wales

Albury Broken Hill Coffs Harbour Dubbo Lismore Newcastle Orange Sydney (Greystanes) Tamworth Tuggerah Wagga Wagga

South Australia Adelaide Mt Gambier Roxby Downs Whyalla

Gladstone Gympie Hamilton Mackay Mt Isa Rockhampton Toowoomba

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Cairns

Queensland

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Mandurah

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