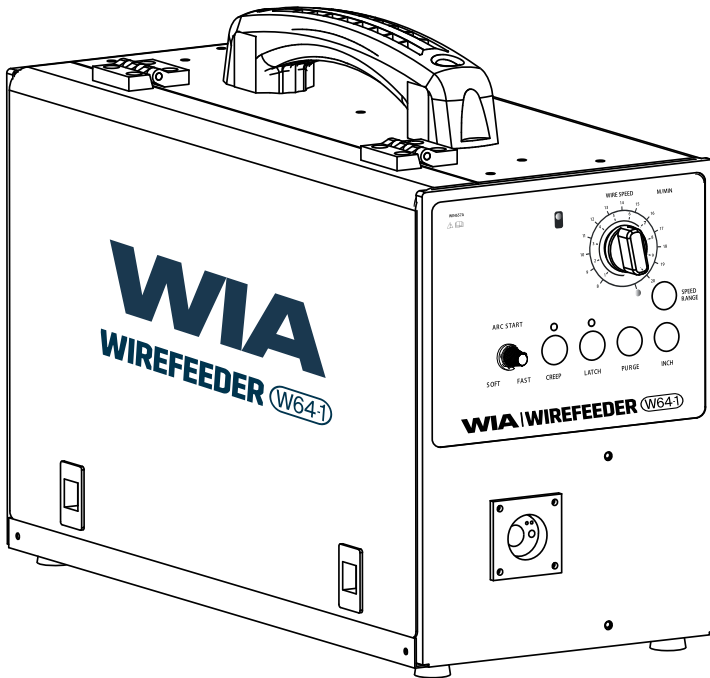


# WIA

# WIREFEEDER **W64-1**

## Wirefeeder

OPERATORS MANUAL | W64-1



From serial numbers W641A\*

WELD WITH THE BEST.

WELDING.COM.AU

## **WELDING INDUSTRIES AUSTRALIA**

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**READ FIRST**

The information contained in this manual is set out to enable you to properly maintain your new equipment and ensure that you obtain maximum operating efficiency.

Please ensure that this information is kept in a safe place for ready reference when required at any future time.

When ordering spare parts, please quote the model and serial number of the power source and part number of the item required. All relevant numbers are shown in lists contained in this manual. Failure to supply this information may result in unnecessary delays in supplying the correct parts.

**SAFETY**

Before this equipment is put into operation, please read the Safe Practices section of this manual. This will help to avoid possible injury due to misuse or improper welding applications.

**HANDLE ON WIREFEEDER**

Please note that the handle fitted to the Weldmatic W64-1 wirefeeder is intended for carrying the equipment by hand only.

**DO NOT** use this handle for suspending or mounting the wirefeeder in any other manner.

**SAFE PRACTICES WHEN USING WELDING EQUIPMENT**

These notes are provided in the interests of improving operator safety. They should be considered only as a basic guide to Safe Working Habits. A full list of Standards pertaining to industry is available from the Standards Association of Australia, also various State Electricity Authorities, Departments of Labour and Industry or Mines Department and other Local Health or Safety Inspection Authorities may have additional requirements. Australian Standard AS1674.2 provides a comprehensive guide to safe practices in welding.

**Eye Protection**

**NEVER LOOK AT AN ARC WITHOUT PROTECTION.** Wear a helmet with safety goggles or glasses with side shields underneath, with appropriate filter lenses protected by clear cover lens. This is a **MUST** for welding, cutting, and chipping to protect the eyes from radiant energy and flying metal. Replace the cover lens when broken, pitted, or spattered.

**Recommended Shade Filter Lens**

Amps	TIG	MMAW	MIG	Pulsed MIG
<b>0-100</b>	10	9	10	12-13
<b>100-150</b>	11	10	10	12-13
<b>150-200</b>	12	10-11	11-12	12-13
<b>200-300</b>	13	11	12-13	12-13
<b>300-400</b>	14	12	13	14
<b>400-500</b>	–	13	14	14
<b>500 +</b>	–	–	14	14

## Burn Protection

The welding arc is intense and visibly bright. Its radiation can damage eyes, penetrate light-weight clothing, reflect from light-coloured surfaces, and burn the skin and eyes. Burns resulting from gas-shielded arcs resemble acute sunburn, but can be more severe and painful.

Wear protective clothing - leather or heat resistant gloves, hat, and safety-toe boots. Button shirt collar and pocket flaps, and wear cuffless trousers to avoid entry of sparks and slag.

Avoid oily or greasy clothing. A spark may ignite them. Hot metal such as electrode stubs and work pieces should never be handled without gloves.

Ear plugs should be worn when welding in overhead positions or in a confined space. A hard hat should be worn when others are working overhead.

Flammable hair preparations should not be used by persons intending to weld or cut.

## Toxic Fumes

Adequate ventilation with air is essential. Severe discomfort, illness or death can result from fumes, vapours, heat, or oxygen depletion that welding or cutting may produce. **NEVER** ventilate with oxygen.

Lead, cadmium, zinc, mercury, and beryllium bearing and similar materials when welded or cut may produce harmful concentrations of toxic fumes. Adequate local exhaust ventilation must be used, or each person in the area as well as the operator must wear an air-supplied respirator. For beryllium, both must be used.

Metals coated with or containing materials that emit fumes should not be heated unless coating is removed from the work surface, the area is well ventilated, or the operator wears an air-supplied respirator.

Work in a confined space only while it is being ventilated and, if necessary, while wearing air-supplied respirator.

Vapours from chlorinated solvents can be decomposed by the heat of the arc (or flame) to form phosgene, a highly toxic gas, and lung and eye irritating products. The ultra-violet (radiant) energy of the arc can also decompose trichlorethylene and perchloroethylene vapours to form phosgene. Do not weld or cut where solvent vapours can be drawn into the welding or cutting atmosphere or where the radiant energy can penetrate to atmospheres containing even minute amounts of trichlorethylene or perchloroethylene.

## Fire and Explosion Prevention

Be aware that flying sparks or falling slag can pass through cracks, along pipes, through windows or doors, and through wall or floor openings, out of sight of the operator. Sparks and slag can travel up to 10 metres from the arc.

Keep equipment clean and operable, free of oil, grease, and (in electrical parts) of metallic particles that can cause short circuits.

If combustibles are present in the work area, do NOT weld or cut. Move the work if practicable, to an area free of combustibles. Avoid paint spray rooms, dip tanks, storage areas, ventilators. If the work can not be moved, move combustibles at least 10 metres away out of reach of sparks and heat; or protect against ignition with suitable and snug-fitting fire-resistant covers or shields.

Walls touching combustibles on opposite sides should not be welded on or cut. Walls, ceilings, and floor near work should be protected by heat-resistant covers or shields.

A person acting as Fire Watcher must be standing by with suitable fire extinguishing equipment during and for some time after welding or cutting if;

- Combustibles (including building construction) are within 10 metres.
- Combustibles are further than 10 metres but can be ignited by sparks.
- Openings (concealed or visible) in floors or walls within 10 metres may expose combustibles to sparks.
- Combustibles adjacent to walls, ceilings, roofs, or metal partitions can be ignited by radiant or conducted heat.

After work is done, check that area is free of sparks, glowing embers, and flames.

A tank or drum which has contained combustibles can produce flammable vapours when heated. Such a container must never be welded on or cut, unless it has first been cleaned as described in AS.1674-2. This includes a thorough steam or caustic cleaning (or a solvent or water washing, depending on the combustible's solubility), followed by purging and inerting with nitrogen or carbon dioxide, and using protective equipment as recommended in AS.1674-2. Water-filling just below working level may substitute for inerting.

Hollow castings or containers must be vented before welding or cutting. They can explode. Never weld or cut where the air may contain flammable dust, gas, or liquid vapours.

## Shock Prevention

Exposed conductors or other bare metal in the welding circuit, or ungrounded electrically alive equipment can fatally shock a person whose body becomes a conductor. Ensure that the equipment is correctly connected and earthed. If unsure have the equipment installed by a qualified electrician. On mobile or portable equipment, regularly inspect condition of trailing power leads and connecting plugs. Repair or replace damaged leads.

Fully insulated electrode holders should be used. Do not use holders with protruding screws. Fully insulated lock-type connectors should be used to join welding cable lengths.

Terminals and other exposed parts of electrical units should have insulated knobs or covers secured before operation.

**If the supply cable is damaged it must be replaced by the manufacturer, their service agent or a similarly qualified person.**

## 1 INTRODUCTION

Gas Metal Arc Welding (G.M.A.W.) is an arc welding process where a consumable wire is fed by motor driven feed rolls to a welding gun, and where welding current is supplied from the welding power source. The welding arc is struck between the work piece and the end of the wire, which melts into the weld pool. The arc and the weld pool are both shielded by gas flow from the gun, or in the case of “self shielded” wires, by gases generated by the wire core.

The process is very versatile in that by selection of the correct wire composition, diameter and shielding gas, it can be used for applications ranging from sheet-metal to heavy plate, and metals ranging from carbon steel to aluminium alloys.

The Weldmatic W64-1 4RD has been designed to be used with consumable wires in the range from 0.6mm to 1.6mm diameter. The smaller wire sizes are used when welding at lower currents, such as sheet-metal applications. Increasing the wire diameter permits higher welding currents to be selected.

A common application of G.M.A.W. is for welding Mild Steel. In this application, a Mild Steel solid consumable wire such as AUSTMIG ES6 is used with a shielding gas of Carbon Dioxide, or Argon mixed with Carbon Dioxide. Alternatively, Flux-cored consumable wires are available in both gas shielded, and ‘gasless’ self shielding types.

Stainless steel and Aluminium can be welded with G.M.A.W. using the correct consumable wire and shielding gas.

The Weldmatic W64-1 4RD wirefeeder has been designed to feed a range of hard, soft, and flux-cored wires for the G.M.A.W. process. A compact motor with integral gear box is coupled to a 4 roll drive assembly forming the basic component of the wirefeeder. The motor is controlled by an electronic speed control which provides speed regulation and compensation for supply voltage variations.

## 2 RECEIVING

Check the equipment received against the shipping invoice to make sure the shipment is complete and undamaged. If any damage has occurred in transit, please immediately notify your supplier.

The W64-1 package contains:

- Weldmatic 4RD Enclosed Wirefeeder W64-1 with Drive Rolls 0.9/1.2 V Groove 0.9/1.2mm Knurled.
- Interconnecting leads
- (This) Operating Manual W64-41.

If the W64-1, 4RD Wirefeeder is included in a package with a Weldmatic MIG welder, it will also contain the following:

- Welding gun and cable assembly (see Section 10.4 for details)
- Work lead
- Gas hose
- Argon/mixed gas regulator/flowgauge.

### 3 SPECIFICATIONS

#### Wirefeeder

<b>Supply Voltage</b>	32 volts AC, (from welding power source)
<b>Rated Supply Current</b>	5 Amps
<b>Pre-gas Range</b>	0 - 2 seconds
<b>Post-gas Range</b>	0 - 10 seconds
<b>Start Speed</b>	Normal or Creep (switchable)
<b>Spool Sizes</b>	5 kg, 15 kg
<b>Wirespeed Range</b>	0 - 172 RPM: 0 - 20 Metres per min (0 - 10 Metres per min Low Speed Range, 8 - 20 Metres per min High Speed Range)
<b>Wire Size Range</b>	0.6mm - 1.6mm diameter

### 4 CONTROLS

#### 1 Power on Indicator

This indicator is illuminated when wirefeeder is connected to a power source and the power source is switched on.

#### 2 Arc start

This control can be set to modify arc starting conditions. For many applications the control can be set at the mid point.

Rotating the knob towards 'FAST' will provide faster wire acceleration at arc start giving quicker starts, suitable for applications such as rapid tack welding.

Rotating the knob towards 'SOFT' will slow wire acceleration, providing a softer start suitable for larger diameter and aluminium wires.

#### 3 Wire Speed Control

This control sets the speed of the wire drive motor within the range of 0 - 172 RPM, equivalent to 0 - 20 metres per minute of welding electrode wire. Rotate the control clockwise to increase the feed speed.

This control is used in conjunction with the Wire Speed Range Select Switch. Switch to low for slower (0-10 metres/min wirespeed control and switch to high for higher (8-20 metres/min) wire speeds.

#### 4 Wire Speed Range Indicator Light

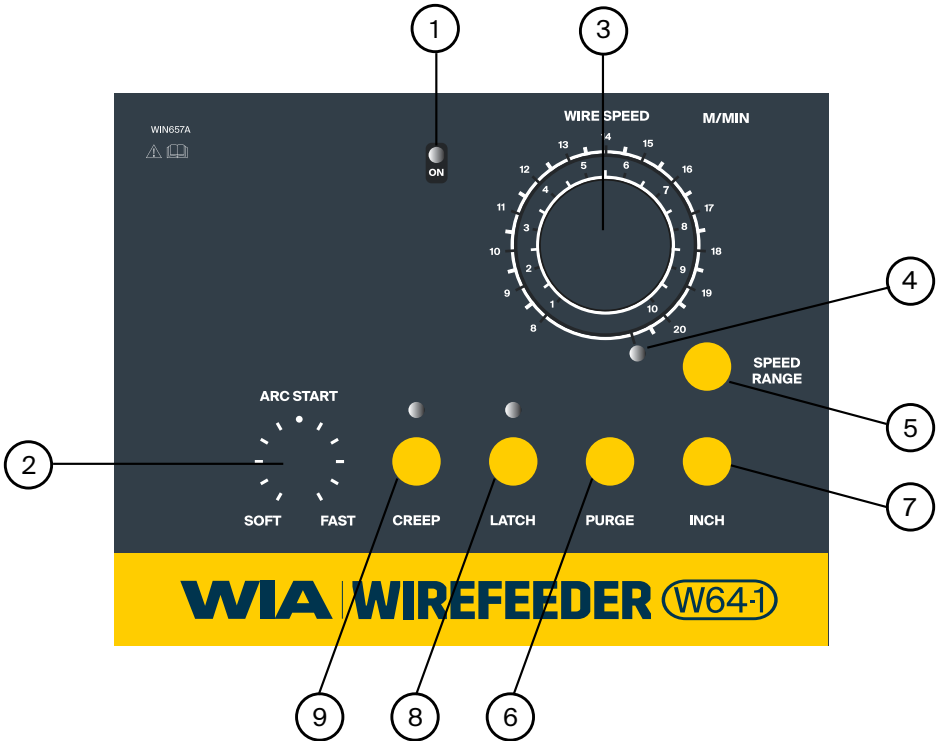
This indicator is illuminated when speed range is set to High speed range (8-20 metres/min).

#### 5 Wire Speed Range Select Switch

Press to change from Low wire speed range to High wire speed range.

#### 6 Purge Button

Press to open the gas solenoid valve without energising the welding power source.



**Fig 1 Controls on front face of wirefeeder**

## 7 Inch Button

Press to feed wire without energising the welding power source. The wire will feed at the current wirespeed setting.

## 8 Latch Select Button and Indicator

Press to select and deselect 'Latch' mode. When 'Latch' mode is selected, the operator needs to close the gun switch momentarily only to commence welding, and again momentarily to end welding. This can help to reduce operator fatigue during long welding runs.

## 9 Creep Select Button and Indicator

'Creep' is selected when welding more difficult materials such as aluminium or stainless steel. In 'Creep' mode, the wire is fed slowly until contact is detected and then accelerated to the selected speed. Because the wire comes into contact with the work slowly the arc establishes smoothly.

This is followed by rapid acceleration so that the arc does not flare up and damage the tip.

Even if an arc is not established, within one second of the gun switch being operated the wire feed accelerates to selected welding speed.

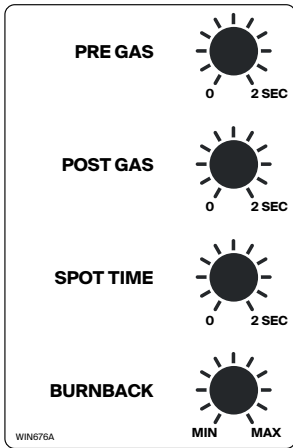


Fig 2 Controls inside wirefeeder

## Wirefeeder Controls on Inside Panel

### Pre Gas Control

Sets the time period of gas flow from gun switch on until welding commences, and can be set for 0 – 2 seconds.

### Post Gas Control

This sets the time period of gas flow after welding ceases, and can be set for 0 – 2 seconds.

### Spot Time Control

When the setting is other than fully anti clockwise, the welder will operate for a short time after each trigger press. Turn clockwise to increase the weld duration up to a maximum of 5 seconds.

### Burnback Control

This control sets the time period that welding voltage continues after the gun switch is released, and wirefeed ceases. The extra time allows the wire to “burn back” slightly toward the tip.

When set correctly ‘Burnback’ prevents the welding wire freezing in the weld pool at the end of a weld.

## 5 INSTALLATION

### Do Not Touch Live Electrical Parts

Touching live electrical parts can cause fatal shocks or severe burns. The electrode and work circuit is electrically live whenever the output is on. The input power circuit and machine internal circuits are also live when power is on. In semi-automatic wire welding, the wire, wire reel, drive roll housing, and all metal parts touching the welding wire are electrically live. Incorrectly installed or improperly grounded equipment is a hazard. Do not touch live electrical parts. **ELECTRIC SHOCK** can kill. Wear dry, hole-free insulating gloves and body protection. Insulate yourself from work and ground using dry insulating mats or covers big enough to prevent any physical contact with the work or ground.

### Remote Wirefeeder

The remote wirefeeder is connected to the Weldmatic power source via the composite cable interconnecting lead. Check all connections are firmly made to ensure good electrical contact, and to prevent gas leaks.

The Weldmatic W64-1 4RD wirefeeder is supplied fitted with WF027 bottom rollers which are suitable for both 0.9mm and 1.2mm diameter steel wire.

### Fitting The Gun and Cable Assembly

The supplied welding gun/cable assembly is equipped with a ‘Euro’ wirefeeder connector which incorporates all required connection points for welding current, shielding gas and gun switch control.

To attach the gun/cable assembly to the wirefeeder mechanism, engage the mating parts of the male and female Euro connectors, then rotate the locking ring clockwise to firmly secure the connection.

## Fitting the Consumable Wire

**The quality of the consumable wire greatly affects how reliably a gas metal arc welder will operate. For best results when welding mild steel, we recommend quality WIA AUSTMIG ES6. Dirty, rusty or kinked wire will not feed smoothly through the gun cable and will cause erratic welding. Deposits from the wire will clog the gun cable liner requiring it to be replaced prematurely.**

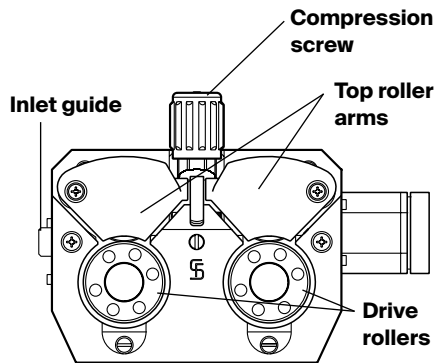
Place the spool of welding wire onto the spool holder. The location pin should mate with a hole provided on the wire spool body. Secure the spool with plastic nut. Check the adjustment of the spool brake, which should be set to prevent over run of the wire spool at the end of a weld, without unduly loading the wirefeed motor. The braking can be adjusted by using an allen key to adjust Hex head bolt inside the hub.

## Feeding the Consumable Wire

At the wirefeeder, release the compression screw and rotate the top roller arms to the open position. The end of the welding wire can now be passed through the inlet guide, over the first lower roller, through the intermediate guide, over the second lower roller and into the output wire guide tube. Check that the drive roll grooves are correct for the wire in use. The appropriate size is stamped on the visible side of the installed rollers. Check also that the correct size contact tip is fitted at the gun end. Feed roller and tip details are shown in Section 10 of this manual.

Return the top roller arms to the closed position and adjust the compression screw to provide sufficient clamping of the drive rollers to achieve constant wirefeed. Do not over tighten.

With the equipment energised, operate the gun switch to feed wire through the gun cable.



**Fig 3 WF042 Four Roll Drive**

## 6 BASIC WELDING INFORMATION

Refer to the Weldmatic power source Operators Manual for gas and weld setting and gun position information.

## 7 GENERAL MAINTENANCE

**Before removing the equipment cover, ENSURE that the equipment is disconnected from the mains power supply. When the equipment is energised LETHAL VOLTAGES are present.**

### Dust

Care should be taken to prevent excessive build-up of dust and dirt within the welding power source. It is recommended that at regular intervals, according to the prevailing conditions, the equipment covers be removed and any accumulated dust be removed by the use of a dry, low pressure compressed air, or a vacuum cleaner. The machine should be blown out with compressed air at least every 12 months as grinding dust can settle on PCB componentry causing failure. Failure to maintain machines may void warranty.

### Wirefeed

In order to obtain the most satisfactory welding results from the G.M.A.W. process, the wirefeed must be smooth and constant. Most causes of erratic wirefeed can be cured by basic maintenance. Check that the:

- 1 Feed rolls are the correct size and type for the wire in use. Check also that the drive groove is aligned with the wire and that the groove is not worn;
- 2 Gun cable liner is clear of dust and swarf build-up. When replacement becomes necessary, fit only the correct liner (see page 19). The build-up of dust can be minimised by regular purging of the liner

with dry compressed air. This may be conveniently done each time the wire spool is replaced;

- 3 Welding tip is free of obstructions such as spatter build-up. Ream out the tip bore with a suitable size oxy-tip cleaner. Replace the welding tip as it becomes worn;
- 4 Feed roll pressure is not excessive. The pressure should be just sufficient to feed the wire evenly. Excessive pressure will deform the electrode wire and make feeding more difficult;
- 5 Consumable wire spool holder rotates smoothly and that the braking action is not excessive. The spool should only have sufficient braking to prevent over run when the motor stops. This also may be conveniently checked each time the wire is replenished;
- 7 Welding wire is straight and free of buckles or 'waviness'. To check, remove 2 or 3 metres of wire from the spool. Clamp one end in a vice or similar, then holding the other end pull the wire out straight. Look down the length of the wire, any buckles will be obvious. Buckled wire is extremely difficult to feed reliably and should be replaced;
- 8 Welding wire is free of surface rust. Replace if rust is evident.

## 8 EXTERNAL TROUBLE SHOOTING

**Refer to the Weldmatic power source Operators Manual for trouble shooting tips. If these checks do not identify the fault condition, the equipment should be returned to a WIA Service agent. Phone 1300 300 884 for details of your nearest service agent.**

## 9 TROUBLE SHOOTING CHART

<b>Problem</b>	<b>Likely Reason</b>	<b>Outcome</b>
<b>GMAW/MIG Models</b>		
The machine feeds slowly and then speeds up after 3-5 seconds.	Creep mode is selected, or machine has a permanent creep mode function.	Some models have a creep mode function that cannot be adjusted. Other models have a push button selection for creep mode on/off.
Nothing happens for first x seconds after trigger is pulled.	Pre gas is selected to x seconds	Allow for Pre Gas time, or adjust time.
The arc starts normally but then stops x seconds.	Spot time is selected to x seconds.	Spot time selection should be adjusted to 0 seconds.
The arc does not stop after trigger is released.	Latch mode is selected	Latch mode should be switched off.
Motor continues to run once arc is extinguished.	Latch mode is selected	Latch mode should be switched off.
Weld is contaminated with small bubbles (presence of porosity).	Air in the gas hose. The torch gas hose has not been purged sufficiently.	Purge the system and confirm sufficient gas flow through the regulator.
	The gas hose is not securely connected at the machine or at the regulator.	Ensure the gas connections from regulator through to the torch connection are sufficiently tightened.
	Air is being drawn into arc through torch nozzle.	Remove nozzle, check O ring on torch head, check condition of insulator in nozzle.
Wire feed stutters and arc is erratic. Also, motor turns correctly with roller tension removed.	Torch consumables are blocked/partially blocked.	Liners and contact tips are consumable and wear over time.
	Rusty MIG wire.	Replace the torch liner and reduce wire feed tension.
Presence of porosity at weld start.	The torch gas hose has not been purged sufficiently.	Purge the system and confirm sufficient gas flow through the regulator.



# 11.1 ASSEMBLY AND PARTS LIST - W64-1 WIREFEEDER

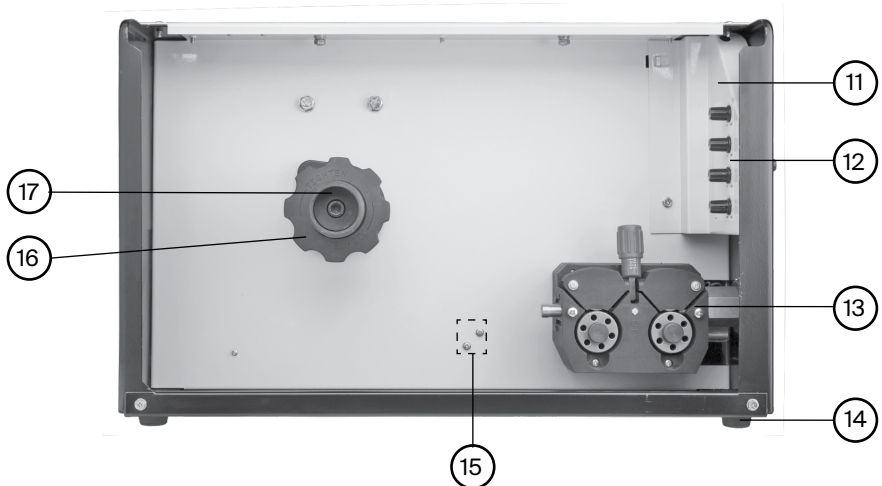
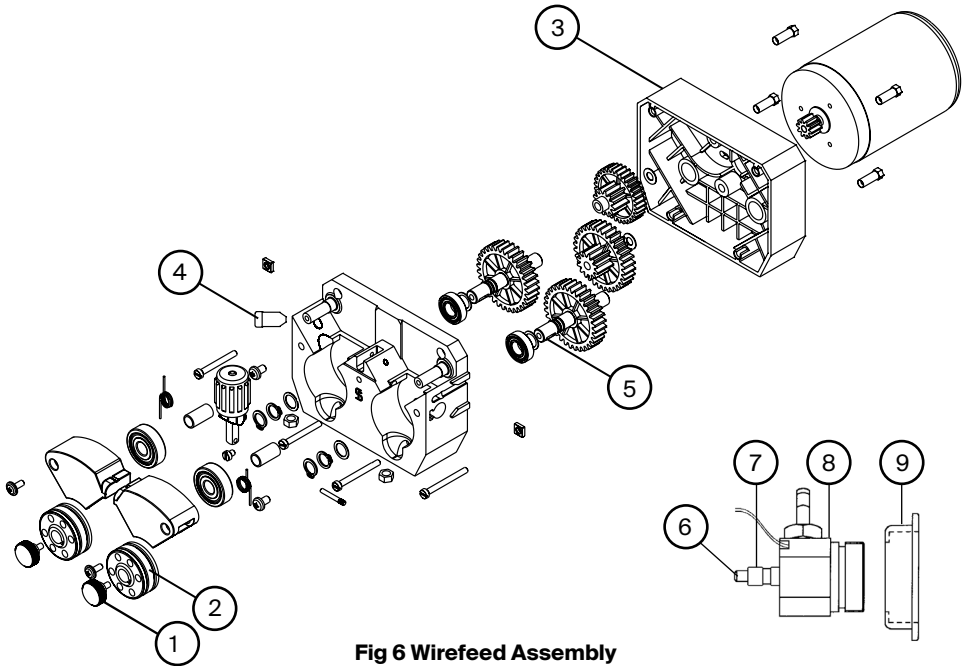


Fig 5 W64-1 Wirefeeder Assembly

<b>Item #</b>	<b>Part #</b>	<b>Description</b>	<b>Qty</b>
1	M0049	Slam Action Latch	2
2	PAN196	Door	1
3	M0041	Hinge Set	2
4	M0042	Handle	1
5	PAN195	Top / Side Panel	1
6	M0047	Adjusting Knob, Large	2
7	WIN657	Front Panel Sticker	1
8	E0016	Adjusting knob, Small	5
9	WF001-6	Euro Surround, Plastic	1
10	PAN126	Front Panel	1
11	PAN201	PCB Cover	1
12	PWA099	Wirefeed Control Printed Circuit Assembly	1
		Includes Potentiometer, Wirespeed Control (1K)	1
13	WF042	Four Roll Drive and Euro Adaptor Assembly (see page 17)	1
14	M0043	Rubber Foot	4
15	E0041	Gas Valve 24 vdc	1
16	M0046	Spool Retaining Nut	1
17	M0044	Spool Holder Assembly (incl nut)	1
Not shown	AM343	Current Sensor	1

## 11.2 ASSEMBLY AND PARTS LIST - WF042 WIREFEED ASSEMBLY

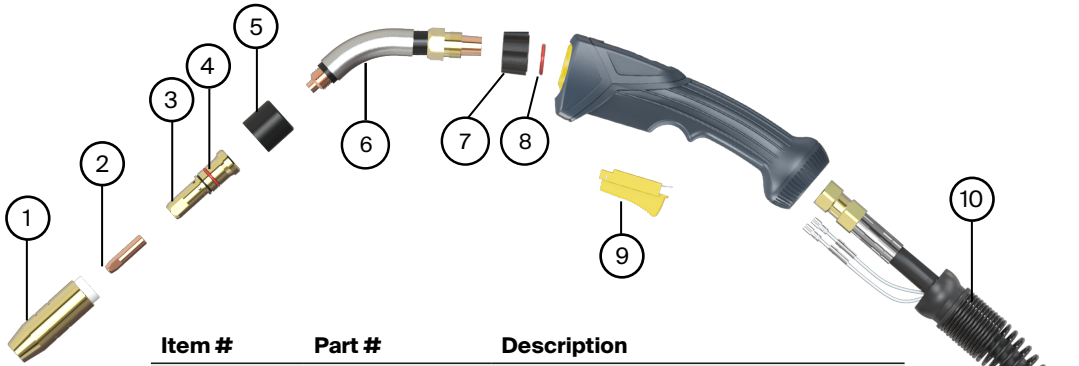


**Fig 6 Wirefeed Assembly**

Item #	Part #	Description	Qty
1	WF045	Roller Retaining Screw	2
2	WF027	0.9 + 1.2 mm, Solid Wire (fitted)	2
	WF026	0.6 + 0.8 mm, Solid Wire	2
	WF028	1.2 + 1.6 mm, Solid Wire	2
	WF029	1.0 + 1.2 mm, Aluminium	2
	WF030	1.0 + 1.2 mm, Flux Cored Wire	2
	WF031	1.2 + 1.6 mm, Flux Cored Wire	2
3	WF049	4 Roll Drive Box Assembly incl. Front & Rear Plastic Housing & Pressure Screw Complete	1
4	WF043	Inlet Guide	1
5	W26-0/4	Woodruff Key	2
6	WF001-21	Outlet Guide Tube (oversize, cut to 41mm long)	1
7	WF038	Positioning Shaft, Brass	1
8	WF044	Euro Adaptor incl Gas Barb, Positioning Shaft & Guide Tube	1
9	WF001-6	Plastic Euro Cover	1

### 11.3 ASSEMBLY AND PARTS LIST - GUN AND CABLE ASSEMBLY

#### 11.3.1 200 AMP TORCH



Item #	Part #	Description
1	BE4392	Brass Nozzle 1/2"
2	BE7488	Contact Tip 0.030"/0.8mm
	BE7489	Contact Tip 0.035"/0.9mm
3	BE4335	Gas Diffuse
4	BE7126	O-Ring 12.5X1.8
5	BE4323	Rubber Cap
6	BEQT2-45	Swan Neck 45°
7	BE1840057	Locking Nut
8	BE1840057	O-ring 17x2.65
9	BE5662	Trigger PMS116C
10	GUN018	Front Cable Support
11	GUN019	Back Cable Support Spring
12	GUN020	Back Handle
13	GUN021	Gun Plug Nut
14	GUN022	Bernard Euro Gun Plug
15	BE4907	O-Ring 4x1
16	BEL3B-15	Liner 0.030-0.040x10ft
17	BE4421	O-Ring 5.28x1.78

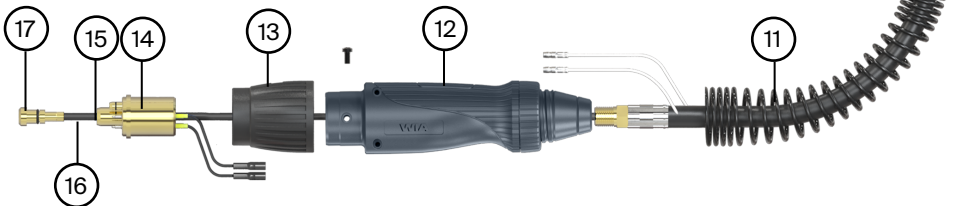
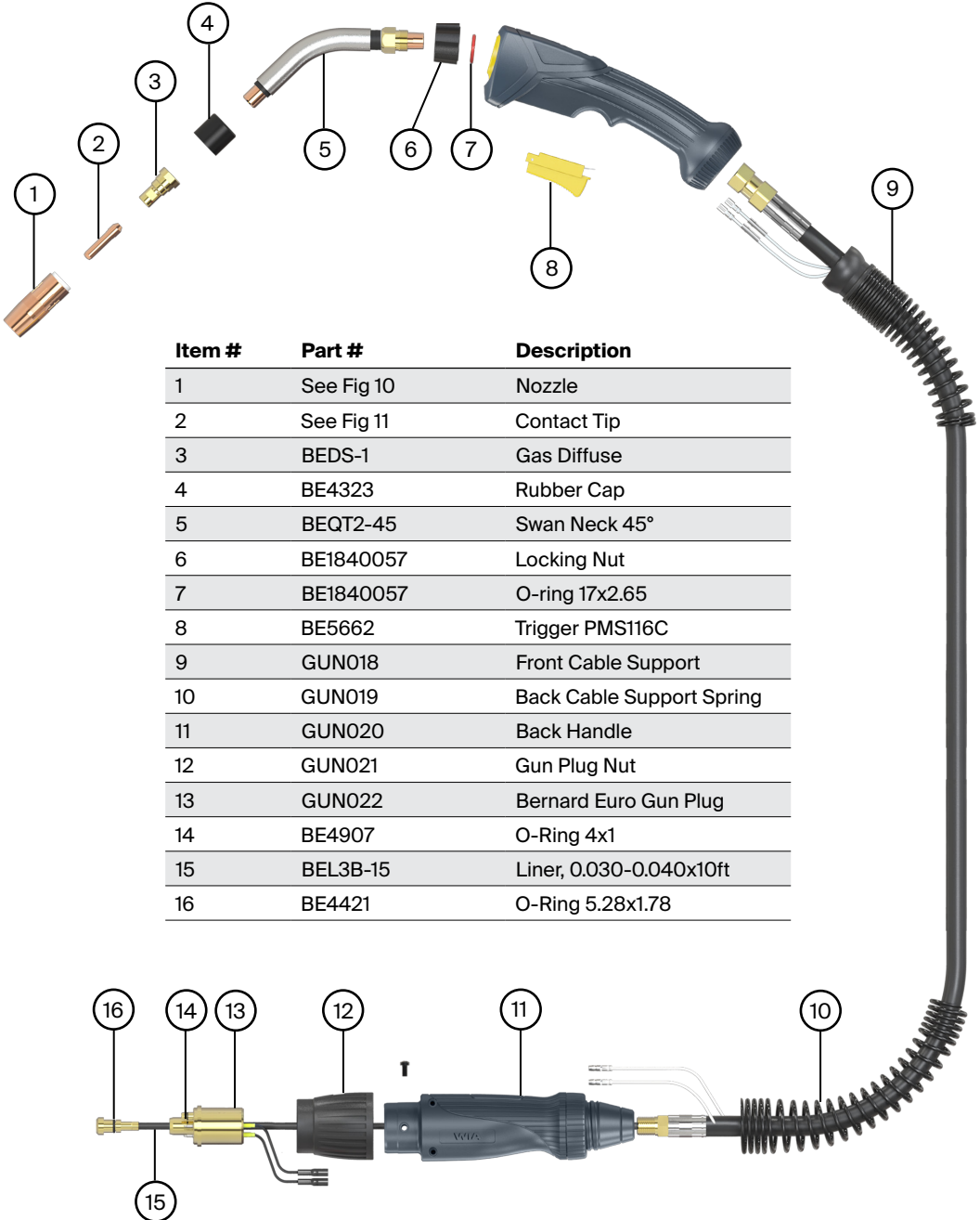


Fig 7 200 Amp Torch Supplied with Weldmatic 270

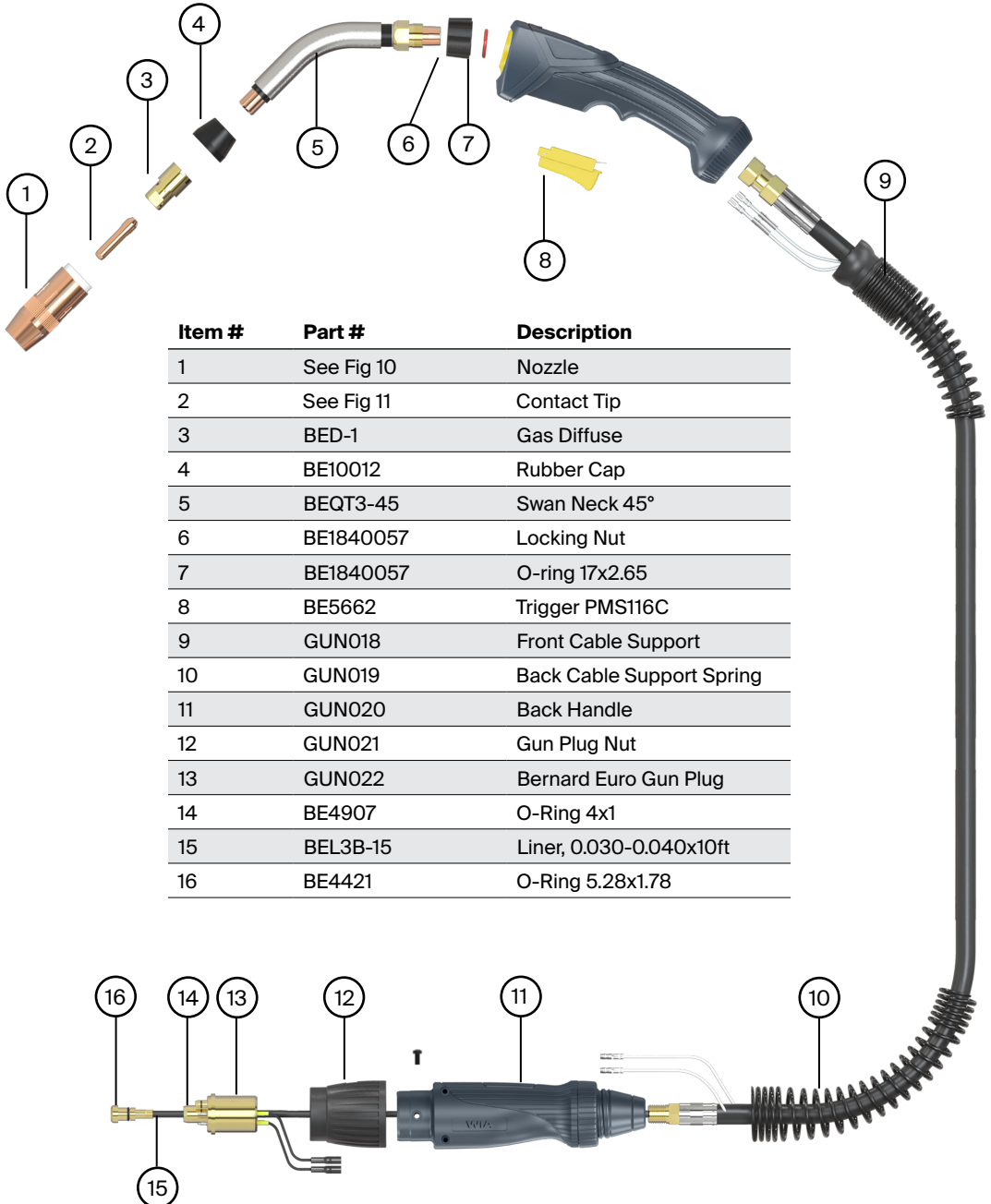
### 11.3.2 300 AMP TORCH



Item #	Part #	Description
1	See Fig 10	Nozzle
2	See Fig 11	Contact Tip
3	BEDS-1	Gas Diffuse
4	BE4323	Rubber Cap
5	BEQT2-45	Swan Neck 45°
6	BE1840057	Locking Nut
7	BE1840057	O-ring 17x2.65
8	BE5662	Trigger PMS116C
9	GUN018	Front Cable Support
10	GUN019	Back Cable Support Spring
11	GUN020	Back Handle
12	GUN021	Gun Plug Nut
13	GUN022	Bernard Euro Gun Plug
14	BE4907	O-Ring 4x1
15	BEL3B-15	Liner, 0.030-0.040x10ft
16	BE4421	O-Ring 5.28x1.78

Fig 8 300 Amp Torch Supplied with Weldmatic 356 & 396. Use Centre Fire Tip Consumables.

### 11.3.3 400 AMP TORCH



Item #	Part #	Description
1	See Fig 10	Nozzle
2	See Fig 11	Contact Tip
3	BED-1	Gas Diffuse
4	BE10012	Rubber Cap
5	BEQT3-45	Swan Neck 45°
6	BE1840057	Locking Nut
7	BE1840057	O-ring 17x2.65
8	BE5662	Trigger PMS116C
9	GUN018	Front Cable Support
10	GUN019	Back Cable Support Spring
11	GUN020	Back Handle
12	GUN021	Gun Plug Nut
13	GUN022	Bernard Euro Gun Plug
14	BE4907	O-Ring 4x1
15	BEL3B-15	Liner, 0.030-0.040x10ft
16	BE4421	O-Ring 5.28x1.78

**Fig 9 400 Amp Torch Supplied with Weldmatic Fabricator. Use Centre Fire Tip Consumables.**

## Nozzles

Part #	Description
BEN-3400C	Nozzle, copper, 3/4" I.D , flush
BEN-3414B	Nozzle, brass, 3/4" I.D , 1/4" recess
BEN-3414C	Nozzle, copper, 3/4" I.D , 1/4" recess
BEN-3418B	Nozzle, brass, 3/4" I.D , 1/8" recess
BEN-5800C	Nozzle, copper, 5/8" I.D , flush
BEN-5814B	Nozzle, brass, 5/8" I.D , 1/4" recess
BEN-5814C	Nozzle, copper, 5/8" I.D , 1/4" recess
BEN-5818B	Nozzle, brass, 5/8" I.D , 1/8" recess
BEN-5818C	Nozzle, copper, 5/8" I.D , 1/8" recess

**Fig 10 Part Number of Nozzles**

## Tips

Wire diameter	Part #
0.8 mm	BET-030
0.9 mm	BET-035
1.0 mm	BET-039
1.2 mm	BET-045
1.4 mm	BET-052
1.6 mm	BET-062
2.0 mm	BET-078

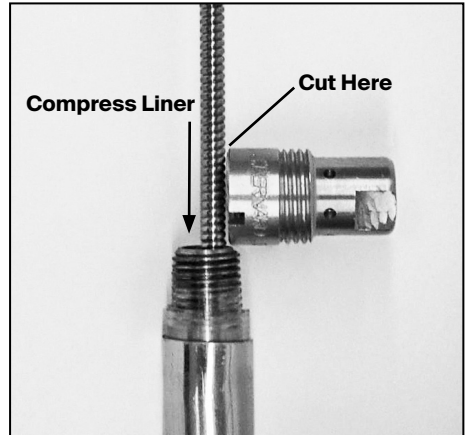
**Fig 11 Part Number of Tips**

**To replace liner:** Disconnect gun/cable assembly at the Euro adaptor. Remove nozzle (1), gas diffuser (3) and insulator (4). Withdraw old liner from the wirefeeder end. Insert new liner and refit gun/cable assembly to the wirefeeder.

Make sure cable is straight. At the gun end, compress the liner within the gun cable, then cut it approx 20 mm past the end of the body tube/neck (5) (the diameter of the gas diffuser is 20 mm and can be used as a guide) - see Figure 12.

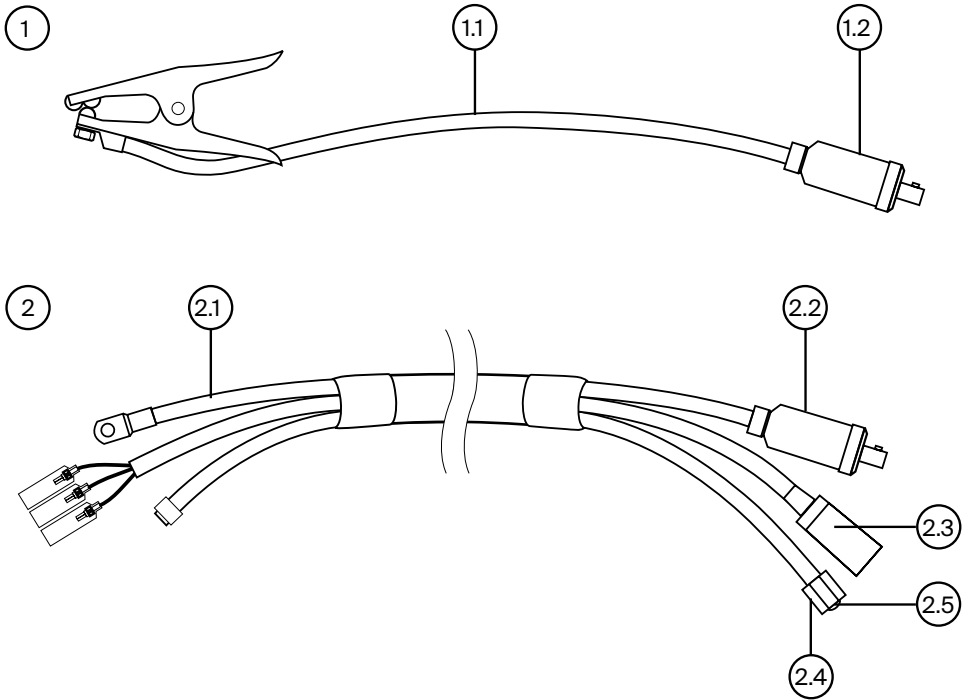
Refit insulator and screw gas diffuser on firmly with a wrench.

Insert tip (2) into gas diffuser then thread nozzle onto gas diffuser/tip and tighten firmly by hand.



**Fig 12 Replacing the gun cable liner**

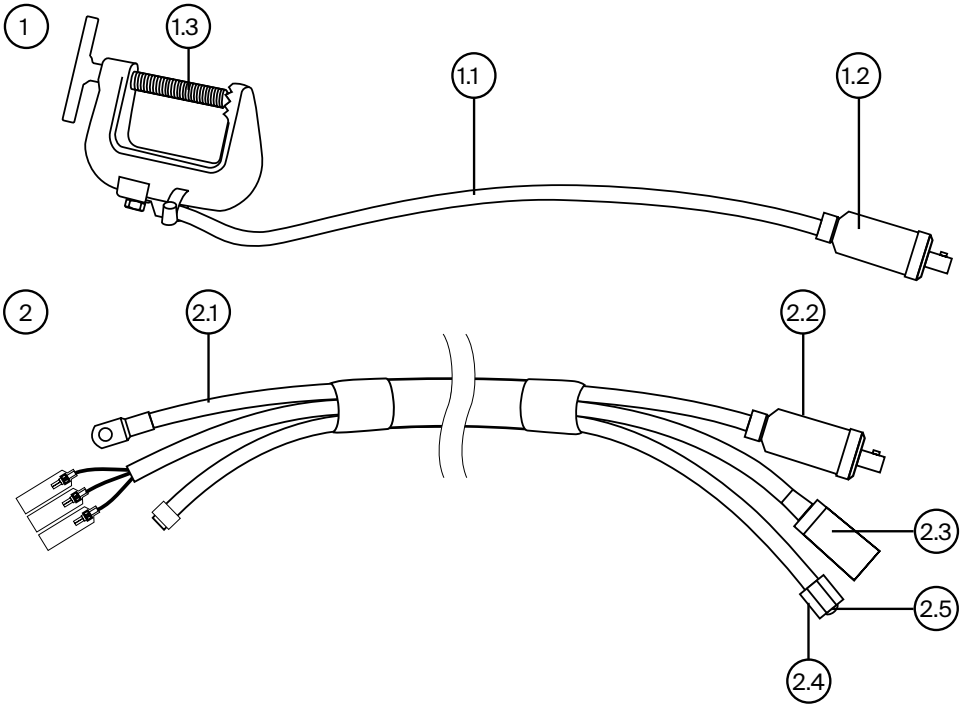
**11.4 ASSEMBLY AND PARTS LIST -  
WORK LEAD & INTERCONNECTING LEAD KIT (270 & 356)**



**Fig 13 Work Lead & Interconnecting Lead Kit supplied with Weldmatic 270 & 356**

Item #	Part #	Description
1	AM311-2/10	Work Lead
Includes 1.1		Welding Cable, 35mm <sup>2</sup>
1.2	CX21	Plug, Dinse
2	AM341-1/10	10m Interconnecting Lead (for complete assembly order AM342-1/10)
Includes 2.1		Welding Cable, 35mm <sup>2</sup>
2.2	CX21	Plug, Dinse
2.3	E0062	Control Plug, 3 Pin
2.4	TC267	Gas Nut
2.5	TC268	Gas Tail (5mm)

**11.5 ASSEMBLY AND PARTS LIST -  
WORK LEAD & INTERCONNECTING LEAD KIT (396 & FABRICATOR)**



**Fig 14 Work Lead & Interconnecting Lead Kit supplied with Weldmatic 396 & Fabricator**

Item #	Part #	Description
1		Work Lead
Includes 1.1		Welding Cable, 50mm <sup>2</sup>
1.2	CX22	Plug, Dinse
1.3	CLA001	Work Clamp, G Clamp Style
2		
Includes 2.1	AM342-1/10	Welding Cable, 50mm <sup>2</sup>
2.2	CX22	Plug, Dinse
2.3	E0062	Control Plug, 3 Pin
2.4	TC267	Gas Nut
2.5	TC268	Gas Tail (5mm)

## 12 AUSTRALIAN WARRANTY INFORMATION



### WIA Weldmatic MIG Equipment

#### 3 Year Gold Shield Warranty Statement

Effective 1st January 2022

Welding Industries of Australia (WIA) warrants to the original retail purchaser that the Weldmatic welding machine purchased (Product) will be free from defects in materials and workmanship for a period of 3 years from the date of purchase of the Product by the customer. If a defect in material or workmanship becomes evident during that period, Welding Industries of Australia will, at its option, either:

- Repair the Product (or pay for the costs of repair of the Product); or
- Replace the Product.

In the event of such a defect, the customer should return the Product to the original place of purchase, with proof of purchase, or contact Welding Industries of Australia on 1300 300 884 to locate an authorised service agent.

Products presented for repair may be replaced by refurbished products of the same type rather than being repaired. Refurbished parts may be used to repair the product. Replacement of the product or any part does not extend or restart the Warranty Term. The repair of your products may result in the loss of any user-generated data. Please ensure that you have made a copy of any data saved on your product.

Any handling and transportation costs (and other expenses) incurred in claiming under this warranty are not covered by this warranty and will not be borne by Welding Industries of Australia.

Welding Industries of Australia will return the replacement product, if original found to be faulty, freight free to the customer.

This warranty covers the Weldmatic power source and wirefeeder only, and does not extend to the regulator, gun assembly or accessories included in the original purchase package.

The obligation of Welding Industries of Australia under this warranty is limited to the circumstances set out above and is subject to:

- The customer being able to provide proof of purchase of the Product and the purchase price paid for the Product;
- The relevant defect in materials or workmanship;
- The Product not having been altered, tampered with or otherwise dealt with by any person in a manner other than as intended in respect of the relevant Product; and
- The Product not having been used or applied in a manner that is contrary to customary usage or application for the relevant Product or contrary to any stated instructions or specification of Welding Industries of Australia.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. The benefits given by this warranty are in addition to other rights and remedies which may be available to the customer under any law in relation to goods and services to which this warranty relates.

Warranty provided by:

**Welding Industries of Australia**

(ABN 63 004 235 063)

A Division of ITW Australia Pty Ltd

5 Allan Street, Melrose Park  
South Australia 5039

**1300 300 884**

**Email:** [info@welding.com.au](mailto:info@welding.com.au)

**Web:** [www.welding.com.au](http://www.welding.com.au)

## 13 NEW ZEALAND WARRANTY INFORMATION



### **WIA Weldmatic MIG Equipment**

#### **3 Year Gold Shield Warranty Statement**

Effective 1st January 2022

WIA Weldmatic Fabricator machines purchased in New Zealand have identical warranty conditions as Australia, with the below conditions:

In the event of defects listed in the Australian warranty conditions, the customer should return the Product to the original place of purchase, with proof of purchase, or contact Weldwell on 0800 9353 9355.

The warranty shall not apply to parts that fail due to normal wear.

For customers located in New Zealand, you can contact:

#### **Weldwell New Zealand**

Division of ITW New Zealand

64 Thames Street  
Napier 4110  
New Zealand

**0800 9353 9355**

**Email:** [info@weldwell.co.nz](mailto:info@weldwell.co.nz)

**Web:** [www.weldwell.co.nz](http://www.weldwell.co.nz)

**NOTES:**



## **WELDING INDUSTRIES AUSTRALIA**

A Division of ITW Australia Pty Ltd

ABN: 63 004 235 063

1300 300 884

**Email:** [info@welding.com.au](mailto:info@welding.com.au)

**welding.com.au**

## **WELDWELL NEW ZEALAND**

A Division of ITW New Zealand

NZBN: 9 429 039 833 129

GST NO: 080177186

**0800 9353 9355**

**Email:** [info@weldwell.co.nz](mailto:info@weldwell.co.nz)

**weldwell.co.nz**

W64-41 RevC

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