

# PANDROL



## UK ATW consumables parts and hardware

INFORMATION



01  
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**Partners in excellence**



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# 1. Welding Kit, Consumables and Hardware

## 1.1 Welding Kits

### Welding Kits PLA VG2 JS (felted) 25 mm

Product Name	Part Number	PADS Number
56E1 / 54E1 Type A (Standard Grade)	70-00-78800032	0057/050991
56E1 / 54E1 Type B (Standard Grade)	70-00-78800024	0046/014198
56E1 / 54E1 Type C (Standard Grade)	70-00-78800025	0046/014197
56E1 / 54E1 Type A R350HT (Premium Grade)	70-00-78800043	0046/035053
56E1 / 54E1 Type B R350HT (Premium Grade)	70-00-78800052	0046/035030
56E1 / 54E1 Type C R350HT (Premium Grade)	70-00-78800053	0046/035031
60E1 Type A (Standard Grade)	70-00-78800023	0046/014180
60E1 Type B (Standard Grade)	70-00-78800046	0046/035058
60E1 Type C (Standard Grade)	70-00-78800047	0046/035059
60E1 Type A R350HT (Premium Grade)	70-00-78800016	0046/035052
60E1 Type B R350HT (Premium Grade)	70-00-78800056	0046/035032
60E1 Type C R350HT (Premium Grade)	70-00-78800055	0046/035033
BS95 Bull Head Rail Type A (Standard Grade)	70-00-78800030	0046/014950
BS95 Bull Head Rail Type B (Standard Grade)	70-00-78800033	0046/014956
BS95 Bull Head Rail Type C (Standard Grade)	70-00-78800034	0046/014957
39E1 (BS80A) Type A (Standard Grade)	70-00-78800037	0046/014952
39E1 (BS80A) Type A R350 HT (Premium Grade)	70-00-78800038	N/A
49E1 Type A (Standard Grade)	70-00-78800020	0046/035070

### Welding Kits Wide Gap 68 mm

Product Name	Part Number	PADS Number
56E1 / 54E1 Gap 68mm (Standard Grade)	70-00-76600001	0046/014184
56E1 / 54E1 Gap 68mm R350HT (Premium Grade)	70-00-76600003	0057/051000
60E1 Gap 68mm (Standard Grade)	70-00-76600002	0046/014187
60E1 Gap 68mm R350HT (Premium Grade)	70-00-76600004	0046/035029
56E1 / 60E1 Gap 68mm Composite (Standard Grade)	70-00-76807002	0046/014199
39E1 (BS80A) Gap 68mm Not Felted (Standard Grade)	70-00-76800016	0046/014201
49E1 Gap 68mm Not Felted (Standard Grade)	70-00-76800013	0046/014200

### Welding Kits – HWR (Head Wash Repair) Felted

Product Name	Part Number	PADS Number
56E1 / 54E1 HWR CC (Standard Grade)	70-00-75700011	0046/035085
56E1 / 54E1 HWR CC R350 HT (Premium Grade)	70-00-75700007	0046/035086
60E1 HWR CC (Standard Grade)	70-00-75700002	0046/035068
60E1 HWR CC R350HT (Premium Grade)	70-00-75700008	0046/035087

For a full list of our SRG Groove Rail and APR Crane Rail Products, please contact us directly.

Figure 1: Pandrol Welding Kit Box Example



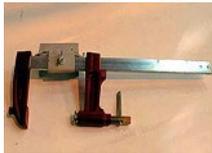
Figure 2: Pandrol One-Shot Crucible Box Example



## 1.2 Consumables

Product Name	Part Number	PADS Number	Product Image
One-Shot Crucible CJ2 Filtered Lid (CCF)	71-01-83450123	0046/014181	
Ignitors – Tube of 100	71-00-82632450	0046/014145	
Tube of Luting Paste	71-00-83661112	0046/014182	
Bucket of Luting Paste	71-00-83661130	0046/014188	
Felt for Step Mould (box of 30 strips)	71-00-83661115	0046/014178	
StartWel® Thermic Starter 10 pack	71-00-82632501	0046/14965	
StartWel® Thermic Starter 100 pack (10x10)	71-00-82632502	0046/14966	

## 1.3 Hardware

Product Name	Part Number	PADS Number	Product Image
Pair of Mould Shoes 25mm	72-00-83200001	0046/014142	
Base Plate PLA 25MM	72-00-83100002	0046/014143	
Mould Clamp (Standard)	72-00-S0000136	0046/014139	
Slag Bowl	72-00-81532010	0046/014144	
3 – Level Preheater Burner Support	72-00-S0000253	0046/014140	
One Shot Crucible Fork	72-00-82631411	0046/014828	
Plug Holder	72-00-83432920	0046/014146	
Hot Waste Metal Tray	72-00-11319003	0046/014148	
Mould Clamp (Tight Areas)	72-00-81250902	0046/014141	

Product Name	Part Number	PADS Number	Product Image
Pair of Mould Shoes 68 mm	72-00-83200002	0046/014833	
Base Plate PLA 68 mm	72-00-83100003	0046/014830	

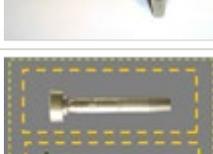
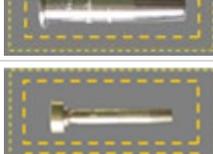
### 1.3.1 Additional HWR Hardware

Product Name	Part Number	PADS Number	Product Image
Pair of Mould Shoes for HWR	72-00-S0000361	0046/035065	
HWR cutting tool	72-00-S0000344	0046/035062	
HWR preheater holder for RT22 <b>Note:</b> To be used only with the 3-level torch support preheater holder. Part Number 72-00-S0000253	72-00-S0000403	0046/035061	

# 2. Oxy-Fuel Gas Cutting and Pre-heating Parts List and Procedures

## 2.1 Oxy – Propane – Cutting and Preheating

Product Name	Part Number	PADS Number	Product Image
Propane Regulator 0 – 4.0 Bar	74-00- 829EP3LP1551	0046/014168	
Oxygen Regulator 0 - 10.0 Bar	74-00- 996ED10OX1542	0046/014167	
Oxygen Flashback Arrestor	74-00-1883TRGB	0046/014840	
Fuel Gas Flashback Arrestor	74-00-1883TLGB	0046/014841	
Oxygen Gauge 0 - 6.0 bar	74-00-8E661OX	0046/014161	
Gasket	74-00-84139A	0046/014164	
Oxygen T-piece 3/8 BSP R/H	74-00-H2221	0046/014159	
Propane Gauge 0 - 2.5 bar	74-00-8E686	0046/014162	
Gasket	74-00-84139A	0046/014164	
Fuel Gas T-piece 3/8 BSP L/H	74-00-H2222	0046/014160	
Oxygen Hose 20m long x 10mm bore 3/8 BSP to 9/16 UNF Nut R/H	74-00-OXY20X10	0046/014157	

Product Name	Part Number	PADS Number	Product Image
Propane Hose 20m long x 8mm bore 3/8 BSP to 9/16 UNF Nut L/H	74-00-PROP20X8	0046/014158	
Oxygen Flashguard	74-00-883FGR	0046/014155	
Fuel Gas Flashguard	74-00-883FGL	0046/014156	
Shank 43-2 (UNF) Note: -2 represents Country Manufacture code only	74-00-1401253	0046/014847	
Propane Mixer F43	74-00-48302003	0046/014153	
Propane Preheater RT 22 Hole	74-00-35910229	0046/014152	
Propane Cutting Torch 49-2 Note: -2 represents Country Manufacture code only	74-00-1300440	0046/014169	
Propane Nozzle 3NFF	74-00-62903NFF	0046/014170	
Propane Cutting Nozzle 4NFF (For HWR only)	74-00-62904NFF	0046/035064	
Cutting Wheels	74-00-H2129	0046/014959	

### 2.1.1 Oxy-Propane Preheating

The Oxy-Propane preheating system for both standard and wide gap welds is shown in Figure 3.

Figure 3 shows mostly Harris equipment used throughout the system, this is the recommended set up for PLA welding although any make of regulator, flash back arrestor and in-line check gauge can be used provided they conform to appropriate standard and system requirements.

- Propane regulators can be single stage and shall conform to BS EN ISO 2503
- Oxygen regulators shall be multi-stage and conform to BS EN ISO 2503
- Flash Back Arrestors shall conform to BS EN 730
- In line check gauges shall conform to the requirements of BS EN ISO 5171 and shall be capable of displaying and measuring 0.6 bar Propane or 1.2 bar Oxygen clearly and with an accuracy of +/- 5%

Hoses shall be 20 metres long, with 8mm bore Propane and 10mm bore Oxygen. Failure to use hoses of this length and diameter will result in a preheating flame that could cause over or under heating of the rails.

Hose tail internal diameters must be greater than 5.5mm

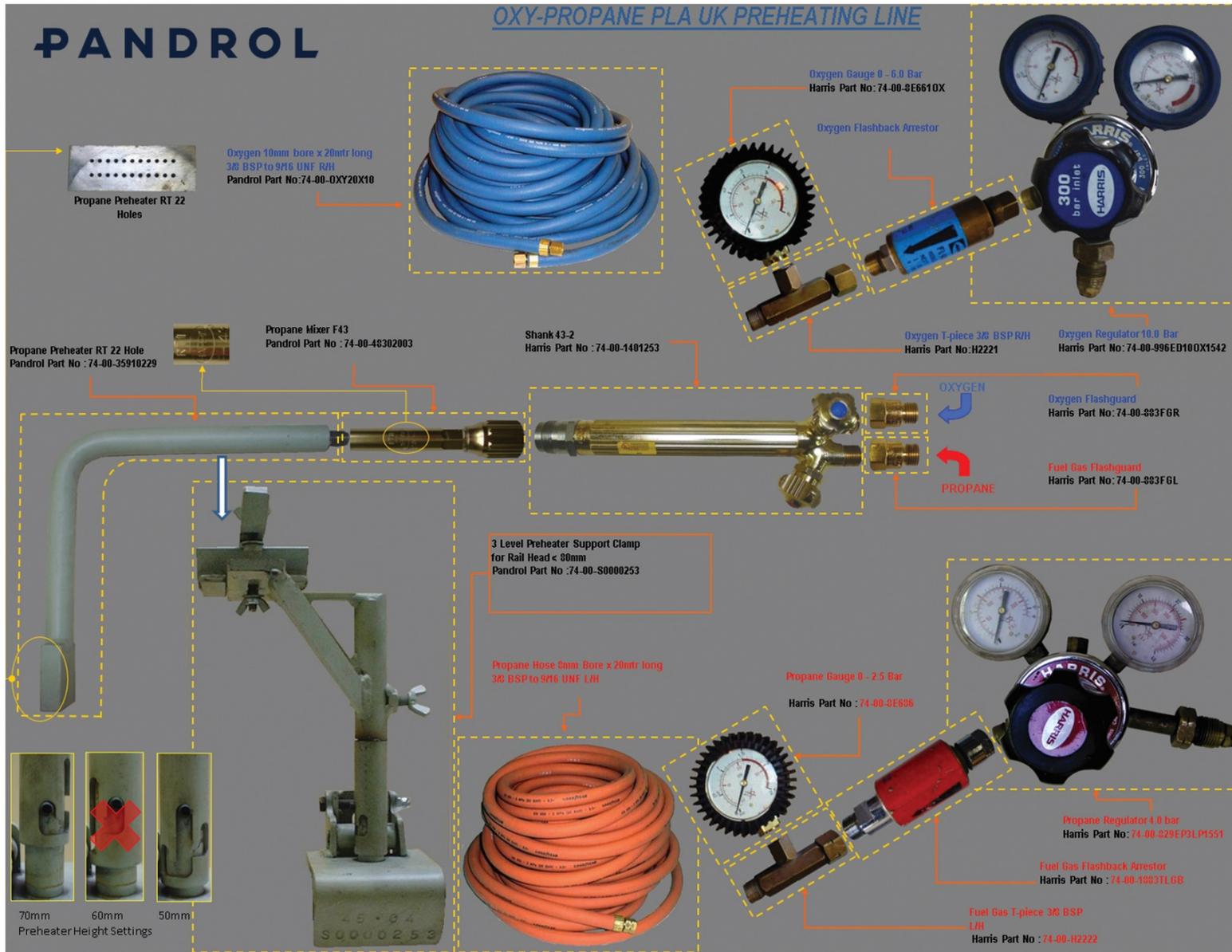
Hoses shall conform to BS EN ISO 3821

Hoses shall be fitted to a hose check valve (Flashguard) at the preheater end.

The RT 22 hole preheater burner can only be obtained from Pandrol UK Ltd.

The cylinder's used with PLA Oxy-Propane preheating shall be in accordance with the relevant rail authority.

Figure 3:



## 2.2 Oxy – Acetylene – Cutting and Preheating

Product Name	Part Number	PADS Number	Product Image
Acetylene Regulator 0 – 4.0 Bar	74-00- 896E1AC404	0046/014839	
Oxygen Regulator 0 - 10.0 Bar	74-00- 996ED10OX1542	0046/014167	
Oxygen Flashback Arrestor	74-00-1883TRGB	0046/014840	
Fuel Gas Flashback Arrestor	74-00-1883TLGB	0046/014841	
Oxygen Hose 8mm bore x 18m long 3/8 BSP to 9/16 UNF R/H	74-00-OXY8X18	0046/014859	
Acetylene Hose 8mm bore x 18m long 3/8 BSP to 9/16 UNF L/H	74-00-ACET8X18	0046/014860	
Oxygen Gauge 0 - 2.5 bar	74-00-8E686	0046/014850	
Gasket	74-00-84139A	0046/014164	
Oxygen T-piece 9/16 R/H	74-00-H2226	0046/014848	
Acetylene Gauge 0 - 2.5 bar	74-00-8E686AC	0046/014862	
Gasket	74-00-84139A	0046/014164	
Fuel Gas T-piece 9/16 L/H	74-00-H2227	0046/014849	
Oxygen Flashguard	74-00-883FGR	0046/014155	

Product Name	Part Number	PADS Number	Product Image
Fuel Gas Flashguard	74-00-883FGL	0046/014156	
Shank 43-2 (UNF) Note: -2 represents Country Manufacture code only	74-00-1401253	0046/014847	
Acetylene Mixer E243	74-00-9100314	0046/014843	
Acetylene Preheater RT 8 hole	74-00-35910247	0046/014838	
Acetylene Cutting Torch 49-2 Note: -2 represents Country Manufacture code only	74-00-1300410	0046/014846	
Acetylene 3AC Cutting Nozzle	74-00-62903AC	0046/014851	
Acetylene 4AC Cutting Nozzle (For HWR only)	74-00-62904AC	N/A	
Cutting Wheels	74-00-H2129	0046/014959	

### 2.2.1 Oxy-Acetylene Preheating

The Oxy-Acetylene preheating system for both standard and wide gap welds is shown in Figure 4.

Figure 4 shows mostly Harris equipment used throughout the system, this is the recommended set up for PLA welding although any make of regulator, flash back arrestor and in-line check gauge can be used provided they conform to appropriate standard and system requirements.

- Regulators shall be multi-stage and conform to BS EN ISO 2503
- Flash Back Arrestors shall conform to BS EN 730 and be both pressure and temperature sensitive
- In line check gauges shall conform to the requirements of BS EN ISO 5171 and shall be capable of displaying and measuring 0.6bar acetylene or 0.6bar oxygen clearly and with an accuracy of +/- 5%

Hoses shall be a maximum of 18metres long, with 8mm bore Acetylene and 8mm bore Oxygen.

Hose tail internal diameters must be greater than 5.5mm

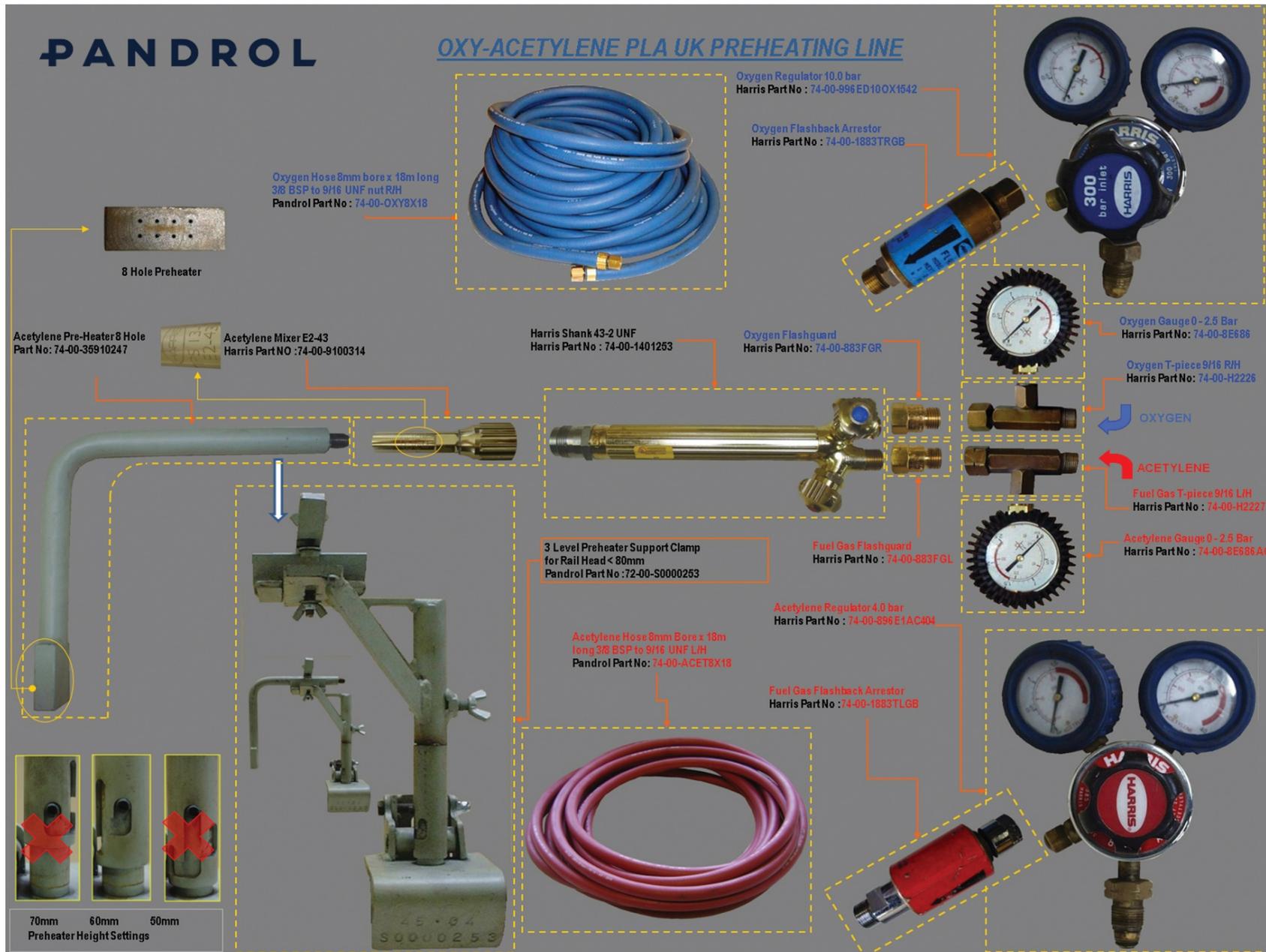
Hoses shall conform to BS EN ISO 3821

Hoses shall be fitted to a hose check valve (Flashguard) at the preheater end.

The RT 8 hole preheater burner can only be obtained from Pandrol UK Ltd

The cylinders used with PLA Oxy-Acetylene preheating shall be in accordance with the relevant rail authority.

Figure 4:



## 2.3 Preheating Equipment

Oxy fuel gas equipment shall be checked to ensure that it is in good working order and suitable for use, each time it used.

Oxy fuel gas equipment shall be tested every 6 months in accordance with British Compressed Gas Association Code of Practice CP7 or Rail Authority requirements CAL 501.

CP7 recommends that gas equipment is renewed 5 years after the date of manufacture.

Harris Regulators have a unique 8 digit code which provides full traceability at unit level.

Example: “PKJ00001”

The 1<sup>st</sup> letter is the plant where the unit was manufactured, in this case “**P**” for Poland

The 2<sup>nd</sup> letter represents the production year. “**K**” = 2017 (See table below)

The 3<sup>rd</sup> letter represents the production month “**J**” = September (See table below)

The five digit code represents the specific product number. In this case, **1st** regulator produced in September “**00001**” The 5 digit code will start from **0** at the beginning of each month. The numbers will run consecutively for the regulators produced in that particular month.

Plant		Letter	
Poland		P	

Year	Year	Month	Month
J	2016	January	A
K	2017	February	B
L	2018	March	C
M	2019	April	D
N	2020	May	E
P	2021	June	F
Q	2022	July	G
R	2023	August	H
S	2024	September	J
T	2025	October	K
U	2026	November	L
V	2027	December	M

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Find out more at

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