

TRIANCO

Oil

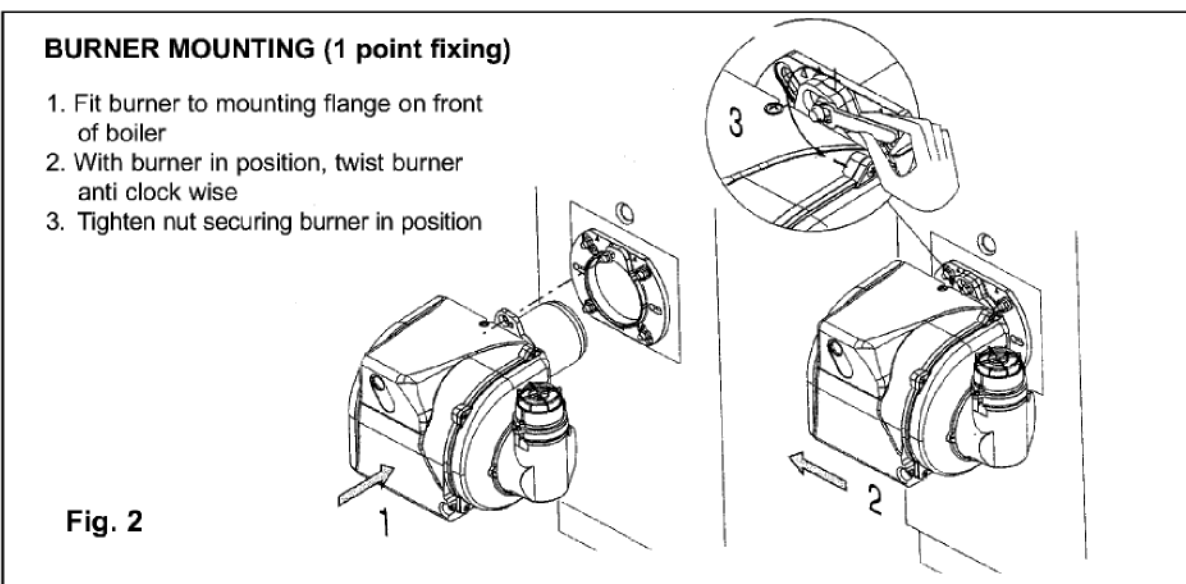
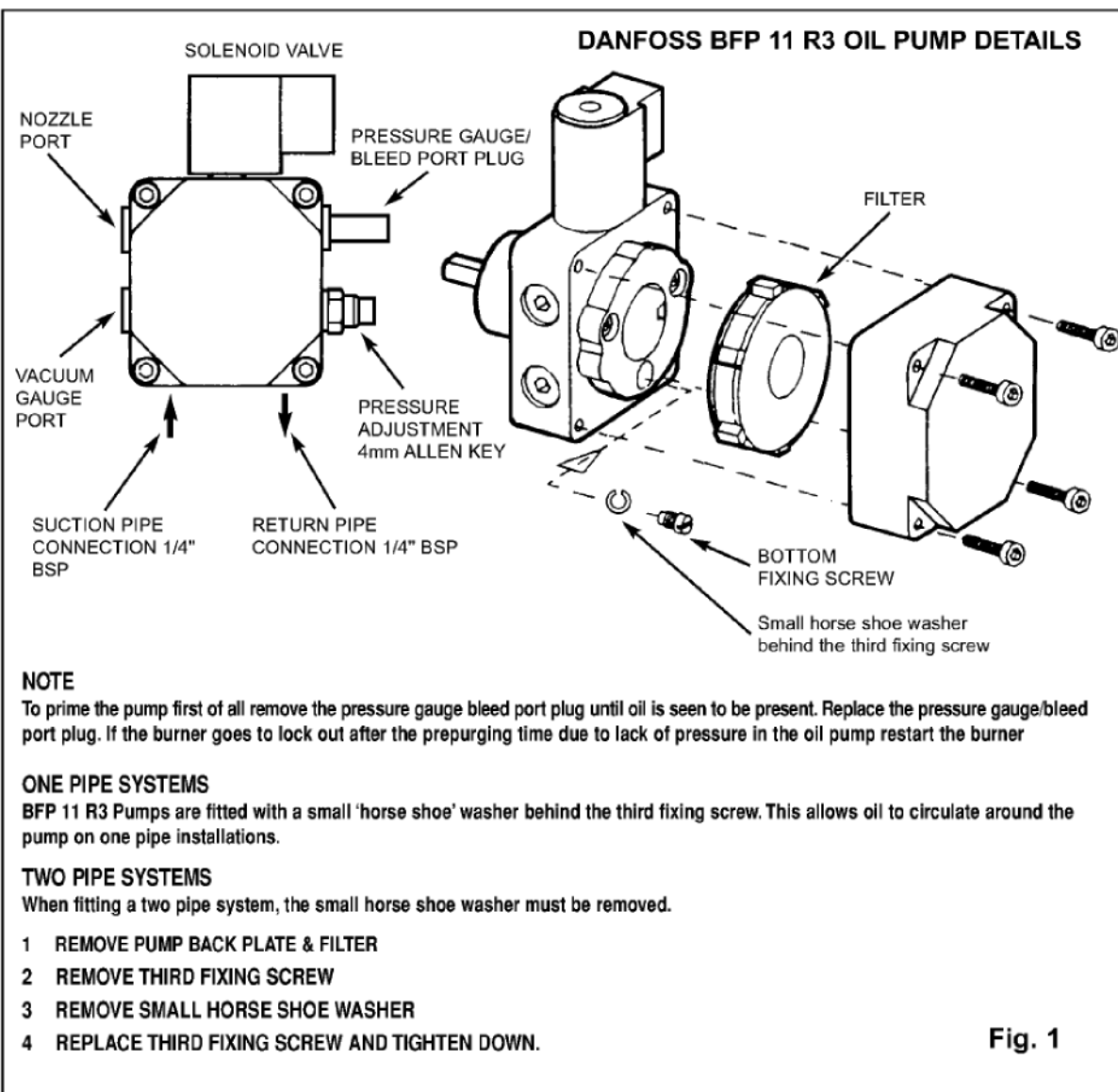
TRIANCO - OIL BURNER*BURNER DETAILS*



**EuroStar Premier
Condensing Boiler
50/90 & 100/125**

To be retained by householder

PRIMING AND ADJUSTMENT OF THE PUMP

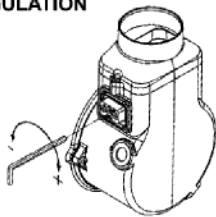


TECHNICAL DATA

MODEL		MAX 4
Voltage single phase 50Hz	V	230
Motor	W	90
Rpm	No	2800
Capacitor	uF	3
Ignition transformer	kV/mA	15/40
Control box	SATRONIC	TF 830.3
Fuel: Kerosene	Mj/kg	43.3

Model	Output (non-condensing)	Output (condensing)	Nozzle	Pump Pressure	CO ₂ (%)
50/90	50,000 BTUs	53,400 BTUs	0.45 x 80°EH	120 psi	12.0
	60,000 BTUs	64,000 BTUs	0.5 x 80°EH	140 psi	12.5
	70,000 BTUs	74,400 BTUs	0.6 x 80°EH	125 psi	12.5
	80,000 BTUs	84,800 BTUs	0.65 x 80°EH	130 psi	13.0
	90,000 BTUs	95,200 BTUs	0.75 x 80°EH	125 psi	13.0
100/125	100,000 BTUs	104,700 BTUs	1.0 x 80°EH	100 psi	11.5
	110,000 BTUs	115,000 BTUs	1.0 x 80°EH	110 psi	11.5
	120,000 BTUs	120,000 BTUs	1.0 x 80°EH	135 psi	11.5
	125,000 BTUs	130,900 BTUs	1.0 x 80°EH	150 psi	11.5

AIR REGULATION



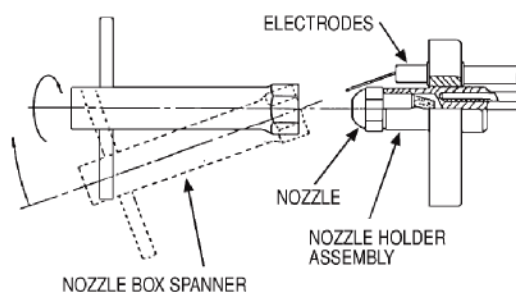
Air Adjustments

To adjust the air, use the allen key provided. Turn the air adjustment screw to + or – setting. The number will be indicated in the display window.

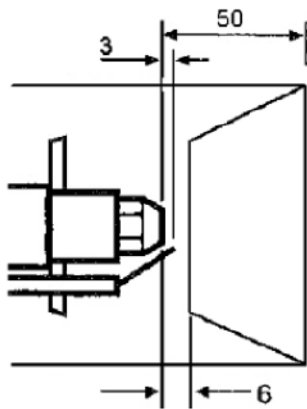
NOZZLE REPLACEMENT

- Switch off electrical supply to the boiler and turn off oil.
- Remove burner plug from boiler control box.
- Undo fixing nuts and remove burner.
- Remove blast tube from burner, exposing the nozzle holder assembly.
- Loosen the electrode assembly and remove the flame ring.
- Taking care not to damage the electrodes, remove the nozzle.
- Fit a new nozzle of the same specification, ensuring the same level of care.
- Replace the flame ring in the same position, check position of electrodes and tighten.
- Refit the blast tube.

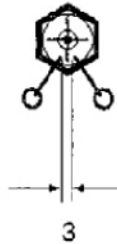
IMPORTANT: BURNER NOZZLES ARE ONLY GUARANTEED UP TO THE FIRST SERVICE.



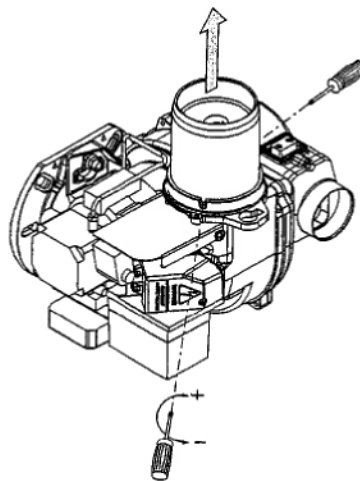
COMBUSTION HEAD SETTINGS



50/90 MODEL FIXED HEAD



BLAST TUBE REMOVAL

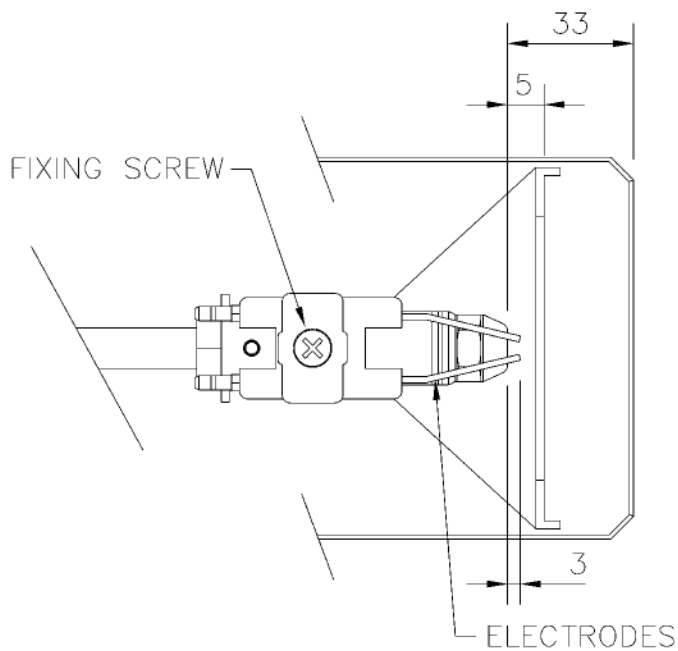
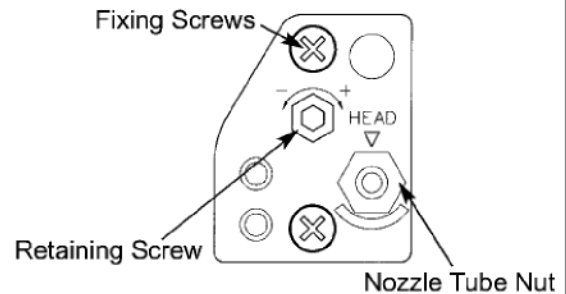


COMBUSTION HEAD SETTINGS

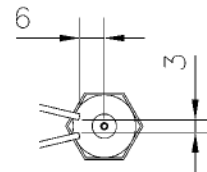
ELECTRODE REMOVAL MAX 4

Isolate the mains power supply to the boiler. Turn off the oil supply and remove the burner cover. On the back of the burner is the head fixing plate, remove the nut from the end of the nozzle tube and then remove the 2 fixing screws and the retaining screw. Remove the blast tube from the burner this will allow the inner nozzle assembly to be pulled forward to give access to the electrode assembly. Disconnect the ignition cables remove electrode fixing screw and replace electrodes. Before re assembly set the electrode position, refer to Combustion Head Settings. Reassemble in reverse order, recheck electrode position before fixing the burner back in to the boiler.

HEAD FIXING PLATE



100/125 Adjustable head



BURNER FAULT-FINDING

ELECTRICAL SAFETY - before making any electrical checks, switch off the mains supply to the boiler

FAULT	POSSIBLE CAUSE	ACTION
BURNER WILL NOT START	Control box locked out	Press orange reset button on front of burner. NB: ONLY TRY TWICE
	High limit stat tripped	Press red reset button (under control panel) and check function of boiler stat
	System controls satisfied	Ensure all controls are calling for heat
	Fuse blown	Fit new fuse (5A). If problem persists, check for short circuit in wiring
	Motor or pump seized	Check for rotation, replace as necessary
BURNER STARTS BUT FLAME NOT ESTABLISHED	No oil supply	Check oil level in tank, check oil supply for adequate flow
	Photocell not seeing flame	Clean photocell, ensure it is fully inserted
	Air trapped in pump	Bleed excess air via tapping on oil pump
	Solenoid valve faulty	Check coil for continuity, replace as necessary
	Nozzle blocked	Replace nozzle with one of same specification (see burner leaflet)
	Electrodes incorrectly set	Reset gap and position to settings shown in burner leaflet
	Electrode insulator cracked	Replace as necessary
	Ignition transformer or leads faulty	Check for spark, check condition of HT leads, replace as necessary
	Low oil pressure	Check pump pressure and adjust to settings shown in burner leaflet
FLAME ESTABLISHED BUT BURNER LOCKS OUT AFTER A FEW SECONDS	Oil contaminated with water	Run off oil at burner until free of water and drain condensation from tank
	Oil filter partially blocked	Wash filter clean with kerosene
	Photocell faulty	Clean photocell, ensure it is fully inserted, check for damage. Replace as necessary
	Low oil pressure	Check pump pressure and adjust to settings shown in burner leaflet

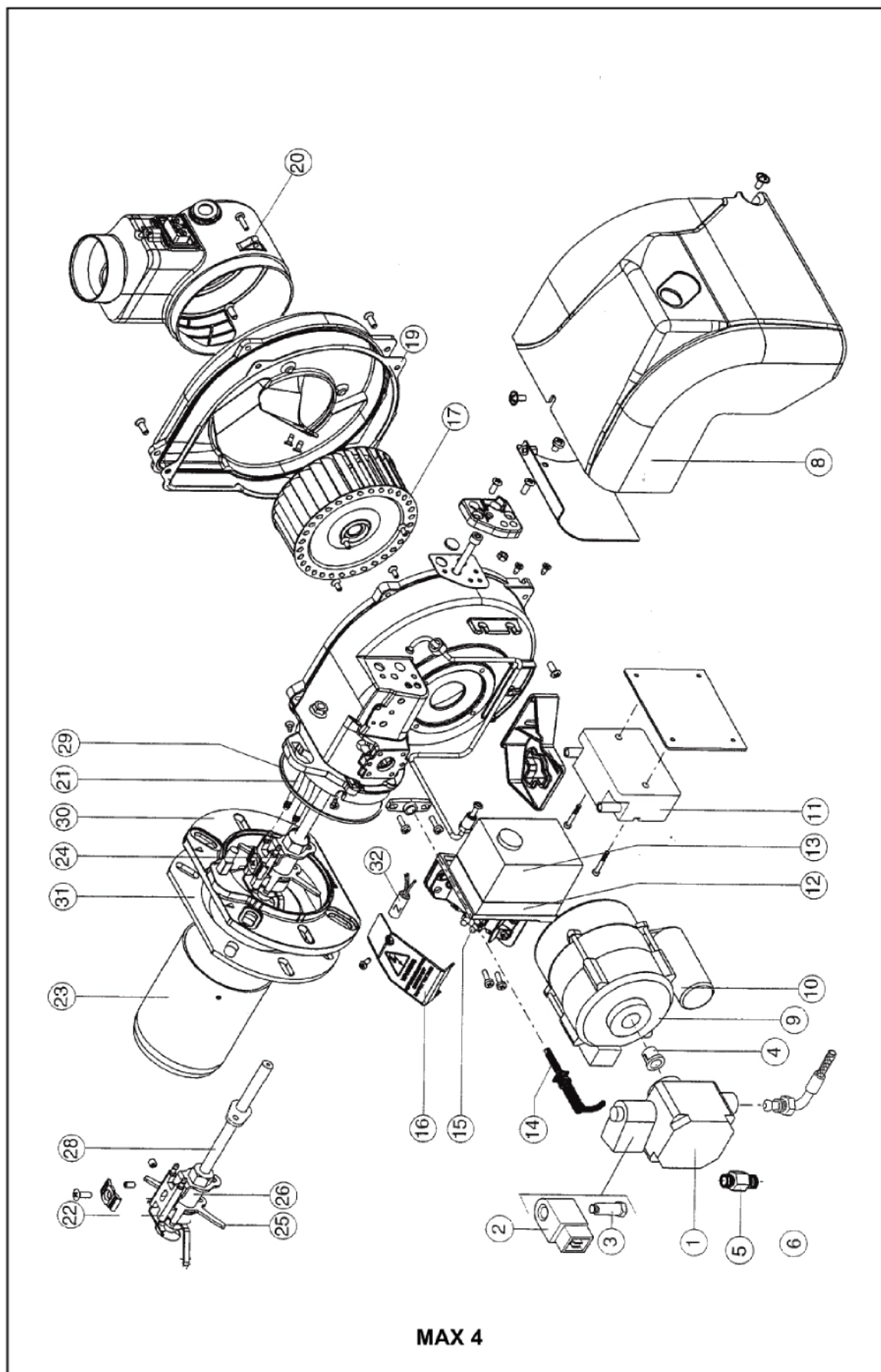
BURNER FAULT-FINDING (cont.)

ELECTRICAL SAFETY - before making any electrical checks, switch off the mains supply to the boiler

FAULT	POSSIBLE CAUSE	ACTION
MORNING START LOCKOUT	Faulty non-return valve or air leak in two-pipe system	Replace non-return valve, cure leak
	Low voltage to appliance	Check with local electricity board
	Combustion settings incorrect	Check combustion under normal running conditions, check against settings shown in burner leaflet
	Oil level in tank falling below burner	Raise tank or fir two-pipe system
DELAYED IGNITION (BURNER PULSATES ON STARTUP)	Nozzle partially blocked	Replace nozzle with one of same specification (see burner leaflet)
	Low oil pressure	Check pump pressure and adjust to settings shown in burner leaflet
	Flue blocked or damaged	Check flue and rectify/replace as necessary
	Fan slipping on shaft	Check fan and retighten/replace as necessary
	Pump coupling loose or worn	Check fan and rectify/replace as necessary
BURNER STARTS VIOLENTLY	Delayed ignition	Reset electrode gap and position to settings shown in burner leaflet
		Check electrodes for damage, replace as necessary
		Check condition of HT leads, replace as necessary
BURNER REPEATEDLY ATTEMPTS TO FIRE (balanced flue only)	Exhaust gas in combustion air	Remove air hose from boiler end of flue, leaving burner end in place. If burner starts normally, check flue for breakdown of seals and repair/replace as necessary If indeterminate, leaving hose attached, pierce a small hole in air hose and use flue gas analyser to check for carbon dioxide. If more than trace elements present, check flue for breakdown of seals and repair/replace as necessary
COMBUSTION FUMES SMELL	Baffle access cover not secure	Tighten wing nuts, securing door in position
	Baffle access cover seal damaged	Replace seal as necessary
	Burner incorrectly fitted, or fixing gasket damaged	Check burner fixing gasket, replace as necessary. Tighten burner mounting nuts
	Flue gasket damaged	Check gasket, replace as necessary. Tighten flue mounting nuts

BURNER SPARES

Description		50/90	100/125
FULL BURNER ASSEMBLY		223120	223230
1 – OIL PUMP	DANFOSS BFP 11 R3	221329	221329
2 – COIL		203082	203082
3 – OIL VALVE		221303	221303
4 – COUPLING		221304	221304
5 – NIPPLE		221305	221305
6 – FLEXIBLE OIL LINE		207019	207019
8 – COVER		223153	223153
9 – MOTOR	AEG 90W	221340	221340
10 – CAPACITOR		223122	223122
11 – IGNITION TRANSFORMER		203053	203053
12 – CONTROL BOX BASE		207628	207628
13 – CONTROL BOX	SATRONIC TF 830.3	29064	29064
14 – PHOTOCELL	SATRONIC	223168	223168
15 – WIRING TERMINAL BLOCK		223154	223154
16 – PROTECTION BOX		223155	223155
17 – FAN		223156	223156
18 – FAN SCOOP		223157	223157
19 – GASKET		223158	223158
20 – AIR INLET MANIFOLD		223159	223436
21 – IGNITION CABLES		223160	223160
22 – ELECTRODES		221322	221322
23 – BLAST TUBE		223123	223429
24 – FIRING HEAD		223124	223232
25 – NOZZLE HOLDER SUPPORT		223125	223125
26 – NOZZLE HOLDER		223126	223126
28 – ROD		223127	223438
29 – 'O'-RING SEAL		223128	223128
30 – MOUNTING FLANGE		223151	223151
31 – MOUNTING GASKET		223152	223152
33 – NOZZLE	0.75 x 80°EH	207433	-
33 – NOZZLE	0.65 x 80°EH	223161	-
33 – NOZZLE	0.60 x 80°EH	26213	-
33 – NOZZLE	0.50 x 80°EH	223162	-
33 – NOZZLE	0.45 x 80°EH	223163	-
33 – NOZZLE	1.0 x 80°EH	-	26367





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