

Clemas & Co Ltd

Industrial Cleaning Equipment
Sales - Hire - Service

TYPHOON PRESSURE WASHERS OPERATOR MANUAL



Clemas & Co. Unit 5 Ashchurch Business Centre, Alexandra Way, Tewkesbury,
Gloucestershire, GL20 8NB.

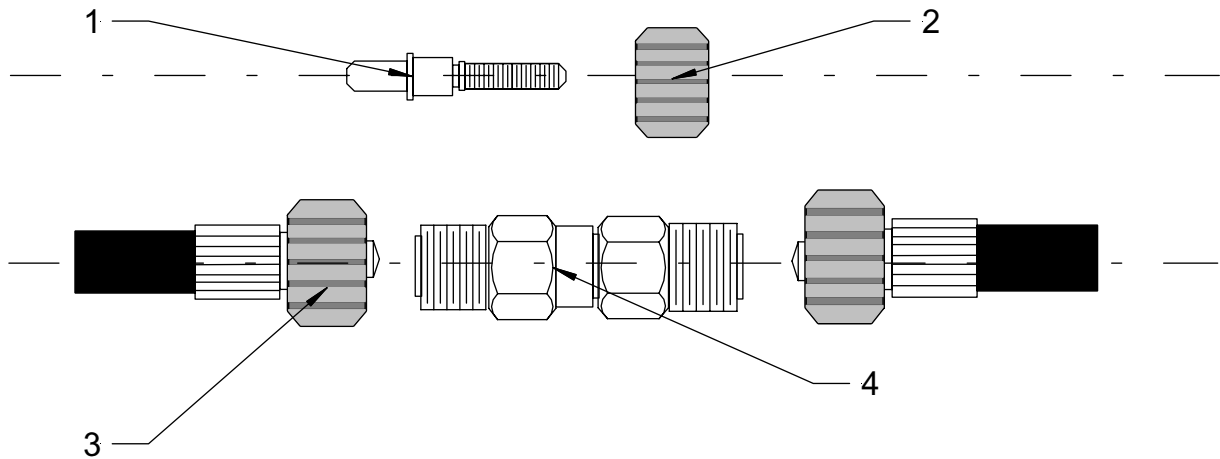
Tel: 01684 850777

Fax: 01684 850707

Email: info@clemas.co.uk

Web: www.clemas.co.uk

High Pressure Hoses

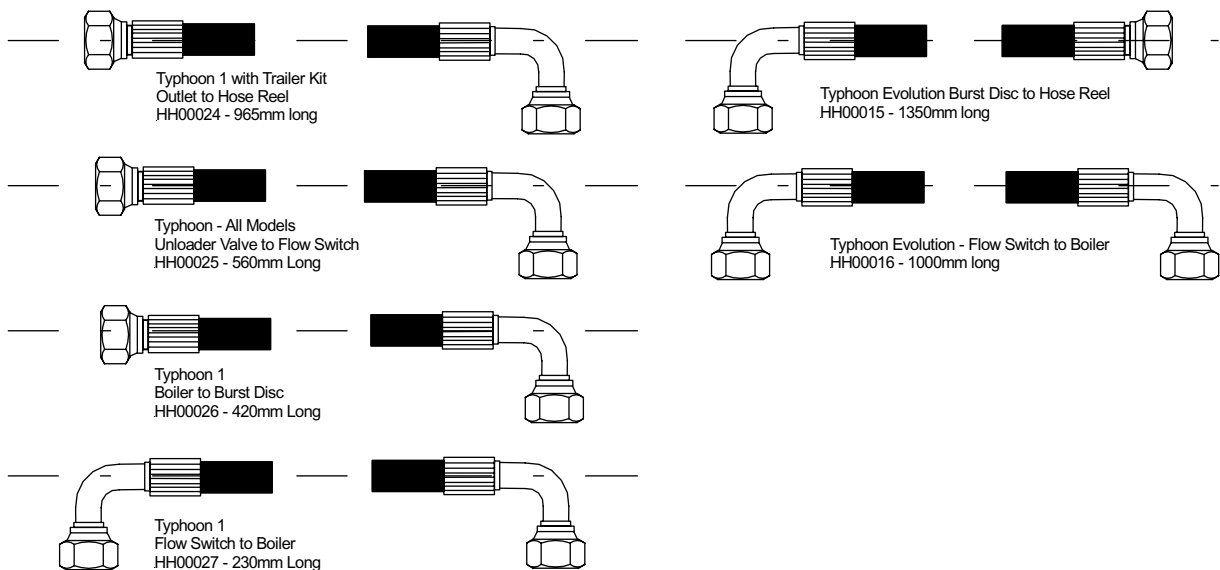


- | | |
|-----------------------|--------------------------|
| 1. Hose Insert | MV00490 (items 1 and 2) |
| 2. Nut | Not available separately |
| 3. High Pressure Hose | HH00030MVG |
| 4. Hose Joiner | MV00500 |

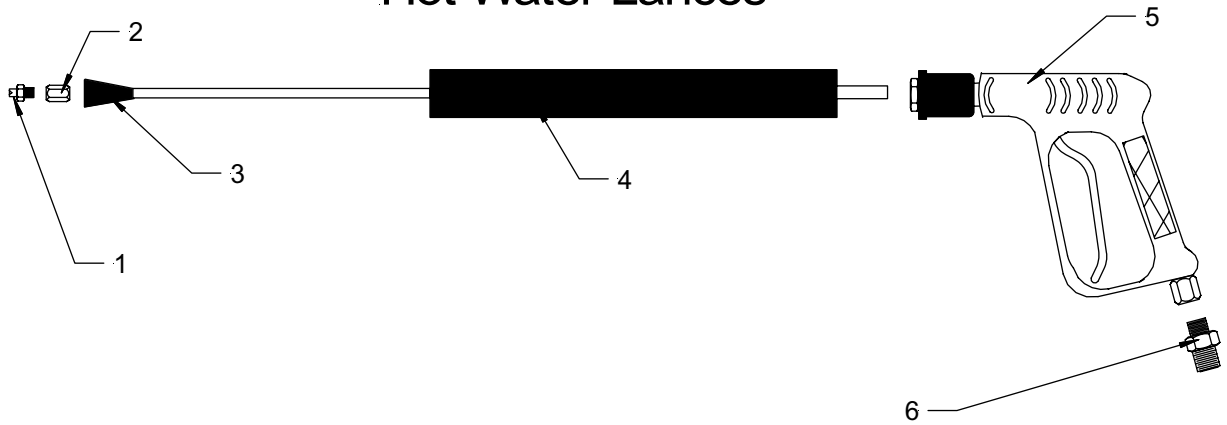
Alternative Hose Lengths

- | | | |
|-------|---|---|
| 15mtr | - | HH00050MVG - standard hose for Typhoon 1 |
| 30mtr | - | HH00100MVG - standard hose for Evolution Models |

Typhoon HP Hoses

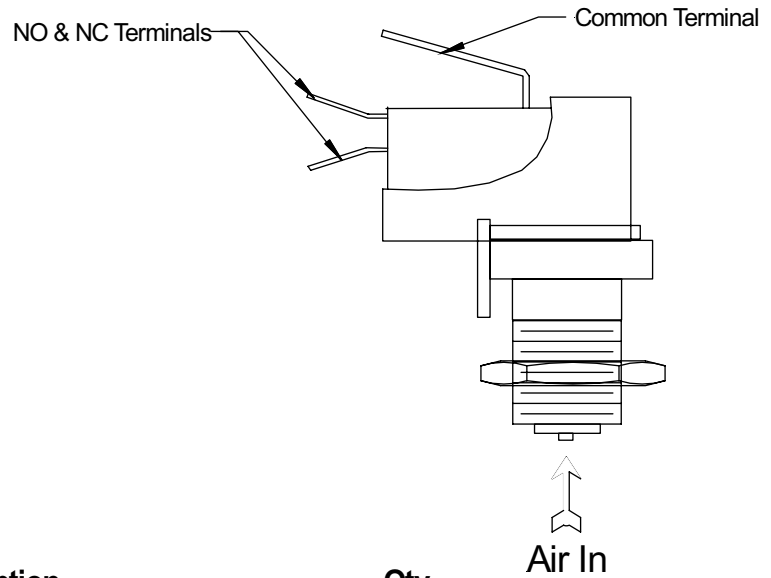
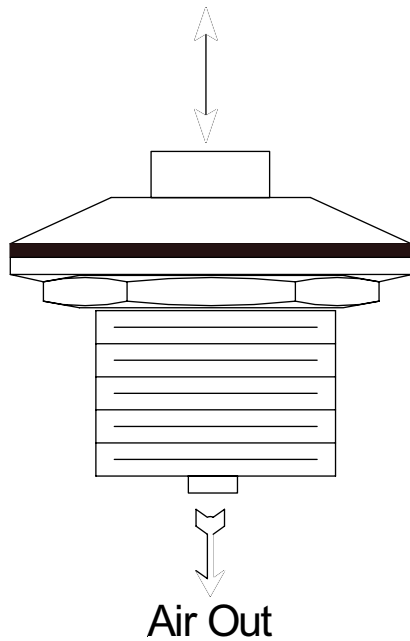


Hot Water Lances



Position	Part Number	Description	Qty
1	N26001/1505	High Pressure Nozzle	1
2	DEM20340	Barrel Nut 1/4" BSP	1
3	MTM0001000	Rubber Cover	1
4	DEM10032R	QR Lance 05	1
5	DEM10030	QR Trigger	1
6	MTM70012	MVG Coupling	1

Air operated push button and switch



Part No.	Description	Qty
H6442B	Push Button (Blue)	1
H6442R	Push Button (Red)	1
H65000	Air Pipe	2
H6871AC	Switch	2

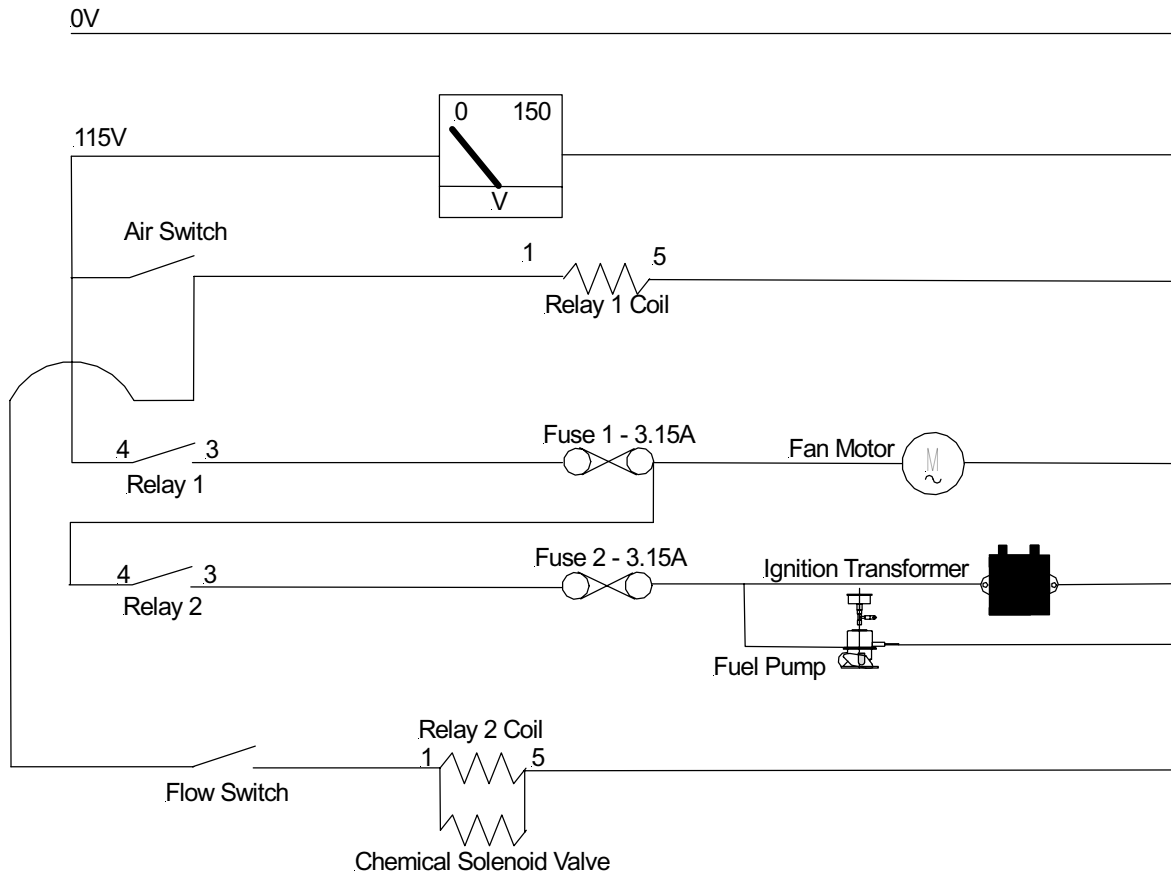
How does this work?

The air switch push button contains a membrane which, when the button is pushed increases the air pressure in the air pipe which in turn activates a mechanism inside the switch.

The top terminal on the switch is a common live feed in and the other two are N/O and N/C respectively which means it does not matter which terminal you use for the switching signal.

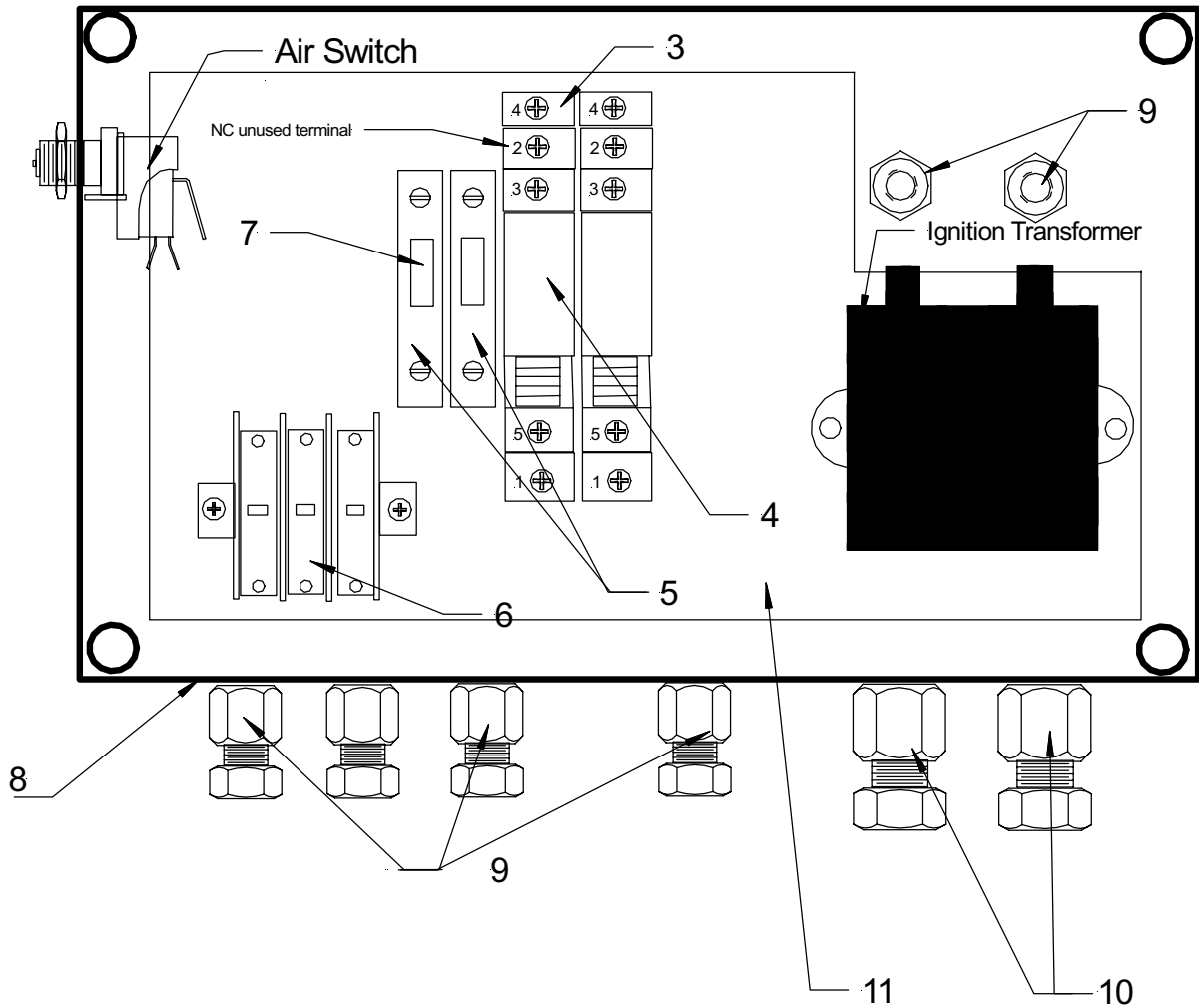
With the Typhoon 1 you are turning the fan motor on which gives a live feed to the flow switch which in turn signals the relay to give fuel and sparks at the same time.

Typhoon Wiring Diagram



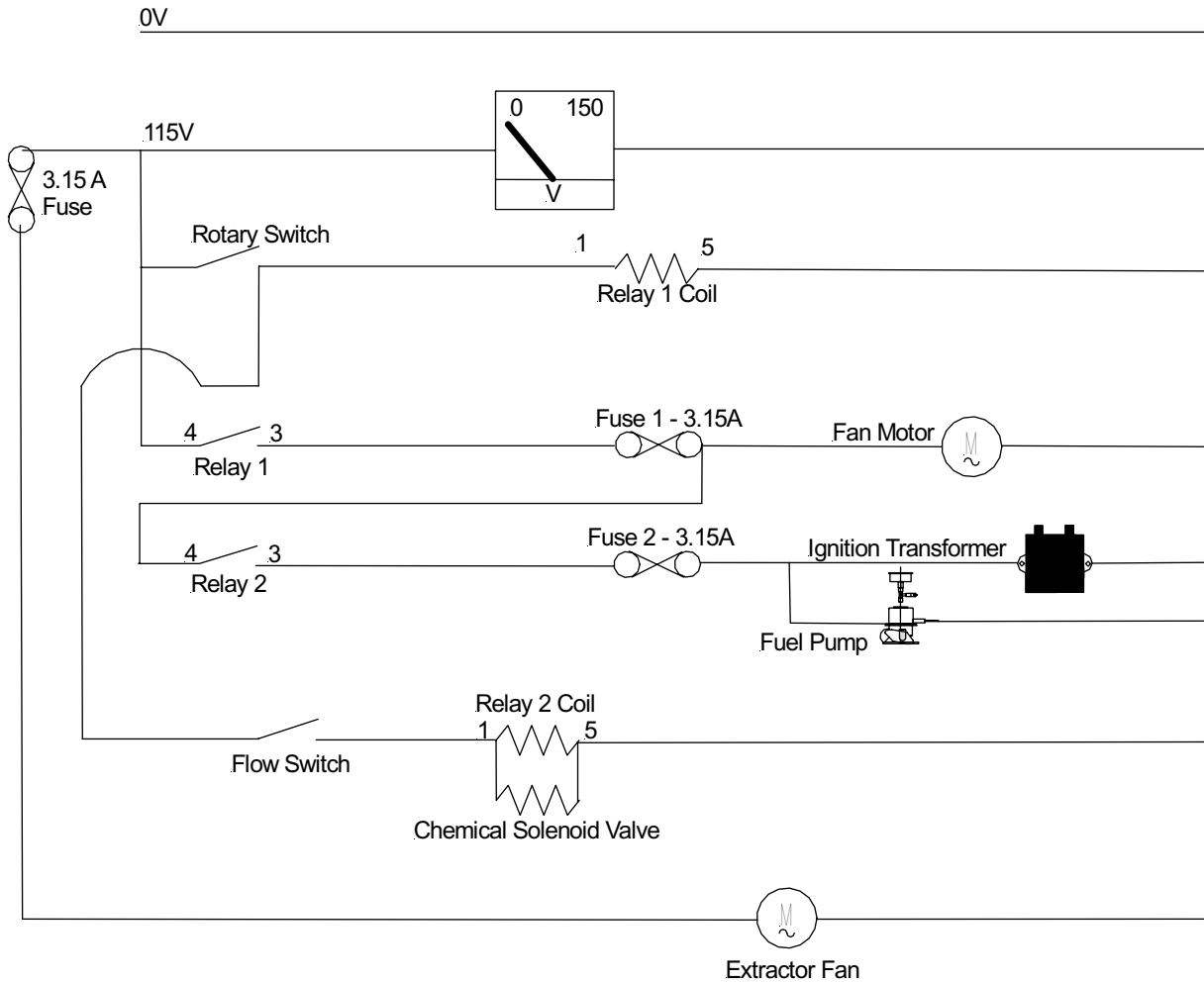
Description	Part Number	Qty
Airswitch	H6871AC	1
Relay	DEM100915	2
Fuse	FUSE002	2
Fan Motor	DB000171	1
Ignition transformer	DB000255	1
Fuel Pump	DB002305	1
Flow Switch	MV00385	1
Chemical Solenoid Valve	DEM101191	1
Volt Meter 150V	DEM101107	1

Typhoon Electric Box



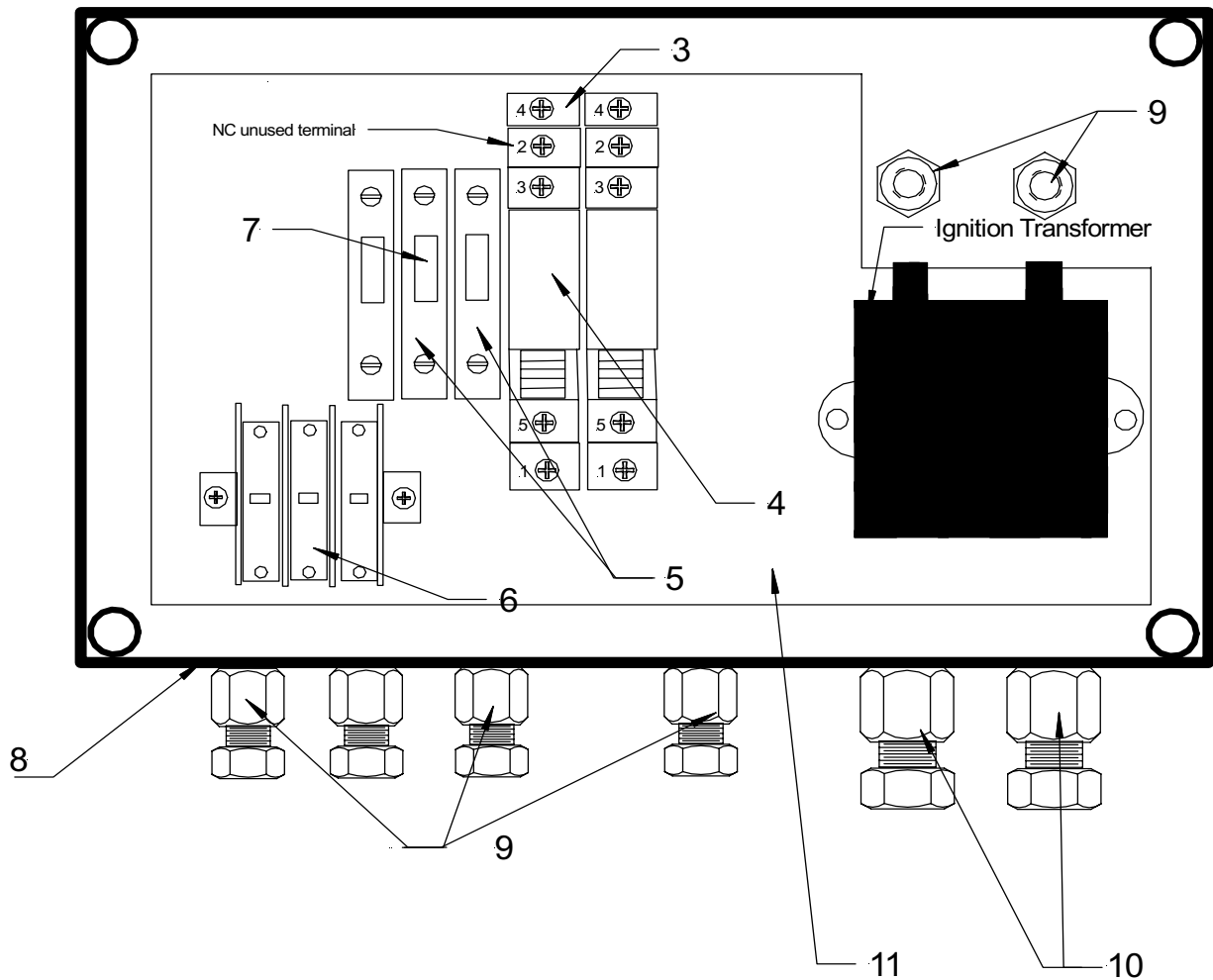
Pos	Description	Part No	Qty
3	Relay Base	DEM4100750	2
4	Relay	DEM100915	2
5	Fuse Holder	DEM100920	2
6	3 Way Connector	DEM100948	1
7	Fuse 3.15 amp	FUSE002	2
8	Typhoon Electrical Box	DEM100875	1
9	PG 9 Cable Gland	DEM20110	6
10	PG11 Cable Gland	DEM20100	2
11	Back Plate Electrical Box	DEM10330	1
Not Shown	End Stops—fitted to the rail to prevent the fuse holders and relays from detaching.	DEM100921	2

Typhoon Evolution Wiring Diagram



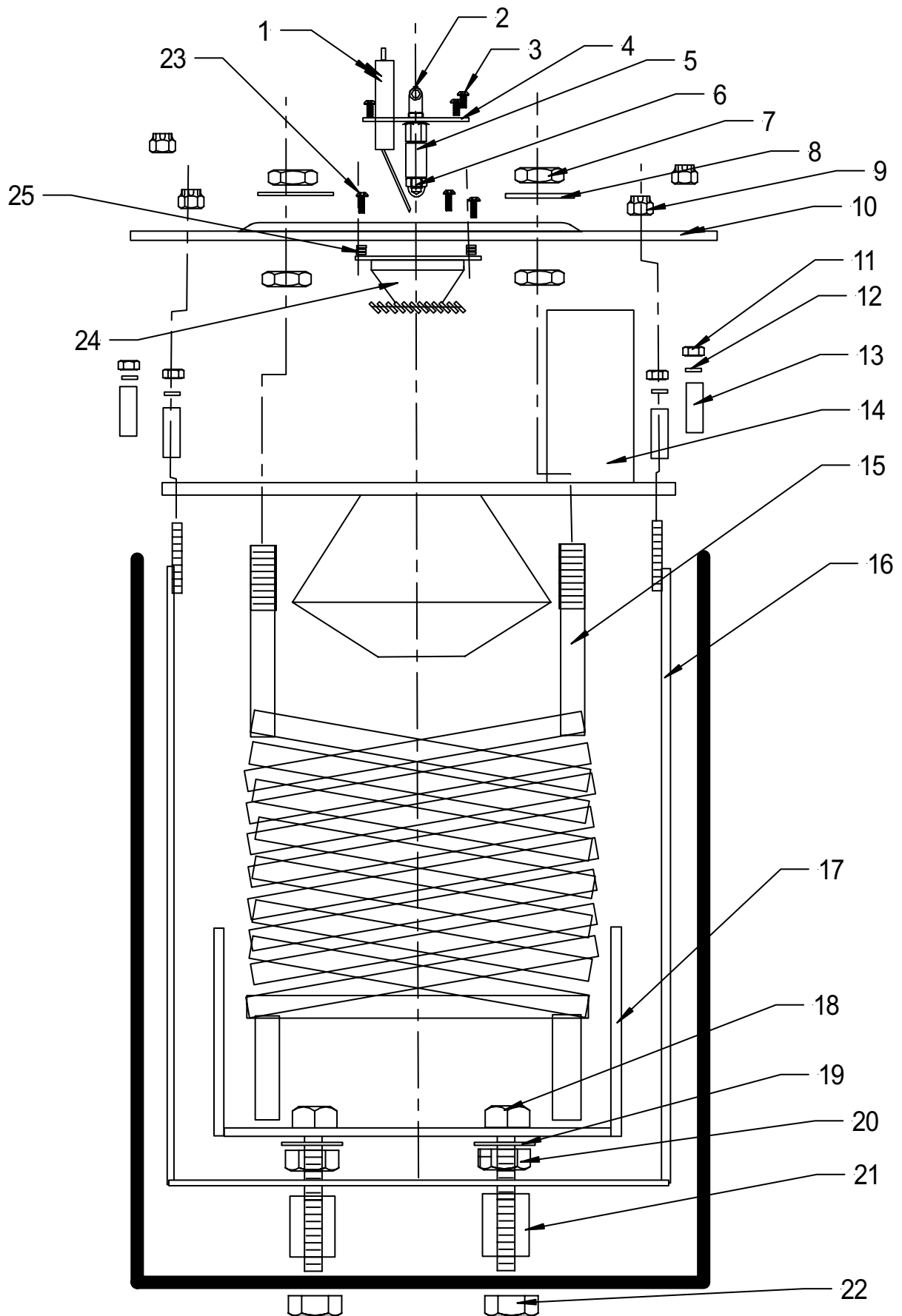
Fuse 3.15amp	FUSE002
Rotary Switch	DEM100755
Relay	DEM100915
Fan Motor	DB000171
Ignition Transformer	DB000255
Fuel Pump	DB002305
Flow Switch	MV00385
Chemical Solenoid Valve	DEM101191
Extractor Fan	DEM100918

Typhoon Evolution Electric Box

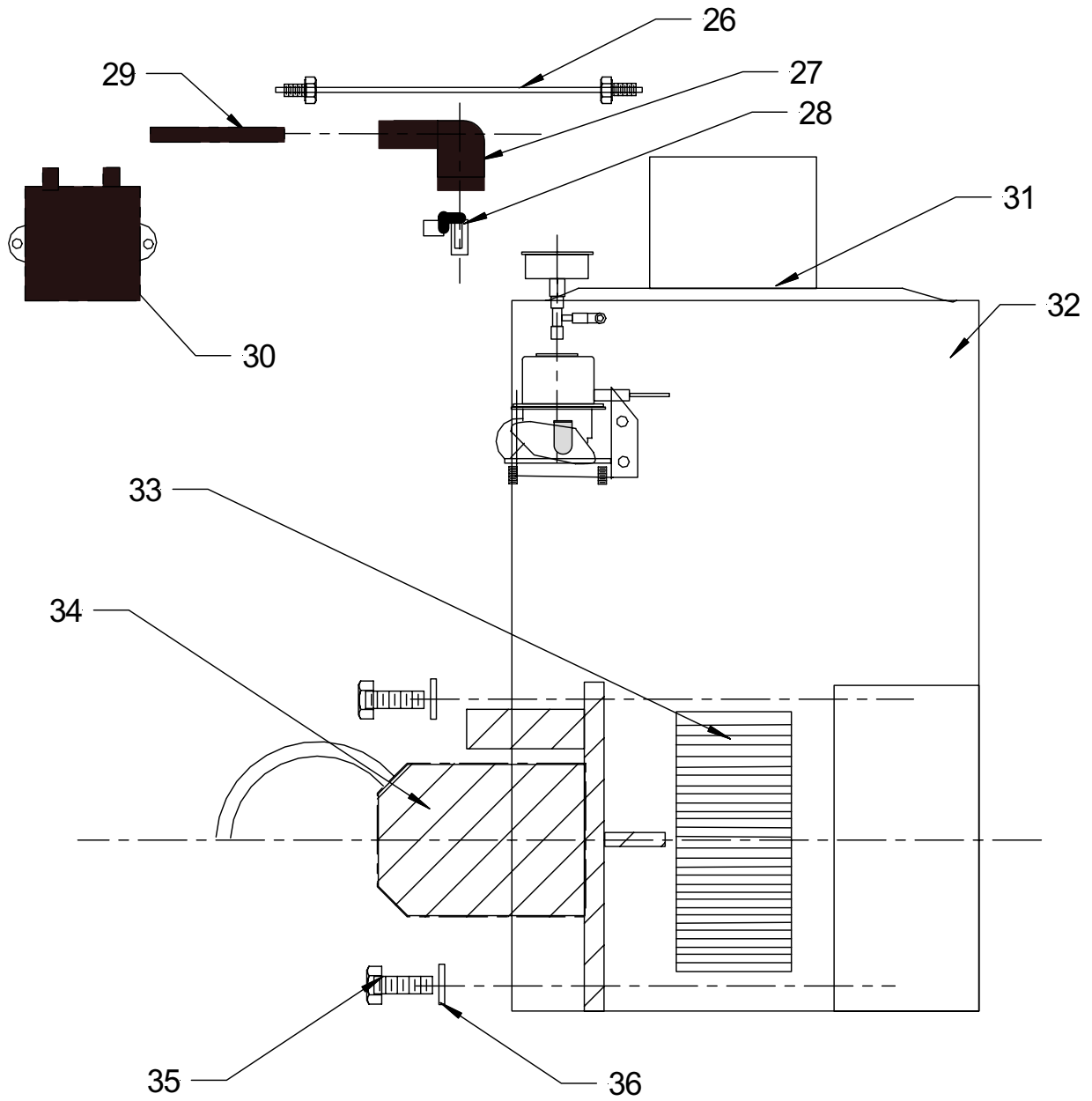


3	Relay Base	DEM100750
4	Relay	DEM100915
5	Fuse Holder	DEM100920
6	3 Way Connector Block	DEM100920
7	Fuse 3.15amp	FUSE002
8	Electrical Box	DEM10323
9	PG 9 Cable Gland	DEM20110
10	P G 11 Cable Gland	DEM20100
11	Back Plate Electrical Box	DEM10330
Not Shown	End Stops—fitted to the rail to prevent the fuse holders and relays from detaching	DEM100921

Inner Boiler Details



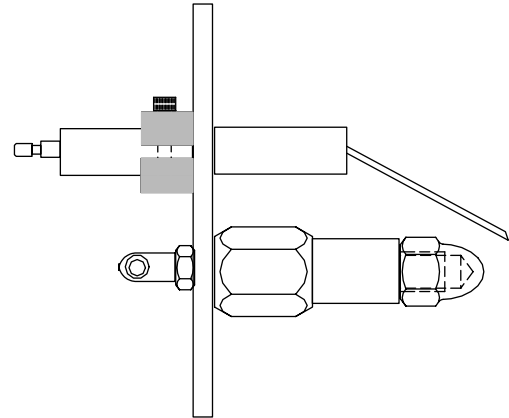
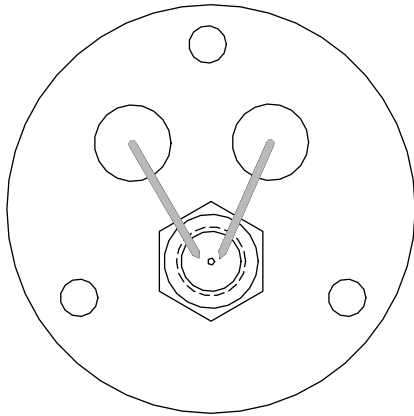
Outer Boiler Details



Boiler Parts List

No	Description	Part Number	Qty
1	Electrode	DB000110	2
2	Adaptor	DB000130	1
3	Screw	NBW00450	3
4	Top Plate	DB000030	1
5	Nozzle Holder	DB000020	1
6	Nozzle	DB000015	1
7	3/8" BSP Nut	DB000340	4
8	Washer	DB000320	2
9	Nyloc Nut	NBW00160	4
10	Outer Drum Lid	DB000041	1
11	Plain Nut	NBW00200	4
12	Washer	NBW00300	4
13	Spacer	DB000280	4
14	Inner Drum Lid & Cone	DB000051	1
15	Heating Coil	DB000094	1
16	Inner Drum	DB000070	1
17	Flame Pan	DB000081	1
18	Bolt	DB000065	3
19	Washer	NBW00310	3
20	Nut	DB000345	3
21	Spacer	DB000350	3
22	Nut	DB000345	3
23	Screw	NBW00460	3
24	Flame Swirler	DB000100	1
25	Washer	NBW00300	9
26	Fuel Pipe	DB002400	1
27	HT Cap (Rubber)	DB000220	2
28	Rajah Clip	DB000230	2
29	HT Lead	DB000215	2
30	Ignition Transformer 230V	DB000252	1
	Ignition Transformer 110V	DB000255	1
31	Gasket	DB000300	1
32	Outer Drum + Fan Housing	DB000060	1
33	Impeller	DB000180	1
34	Fan Motor 230V	DB000160	1
	Fan Motor 110V	DB000170	1
35	Bolt	NBW00060	2
36	Washer	NBW00280	2

Electrode Setting Details

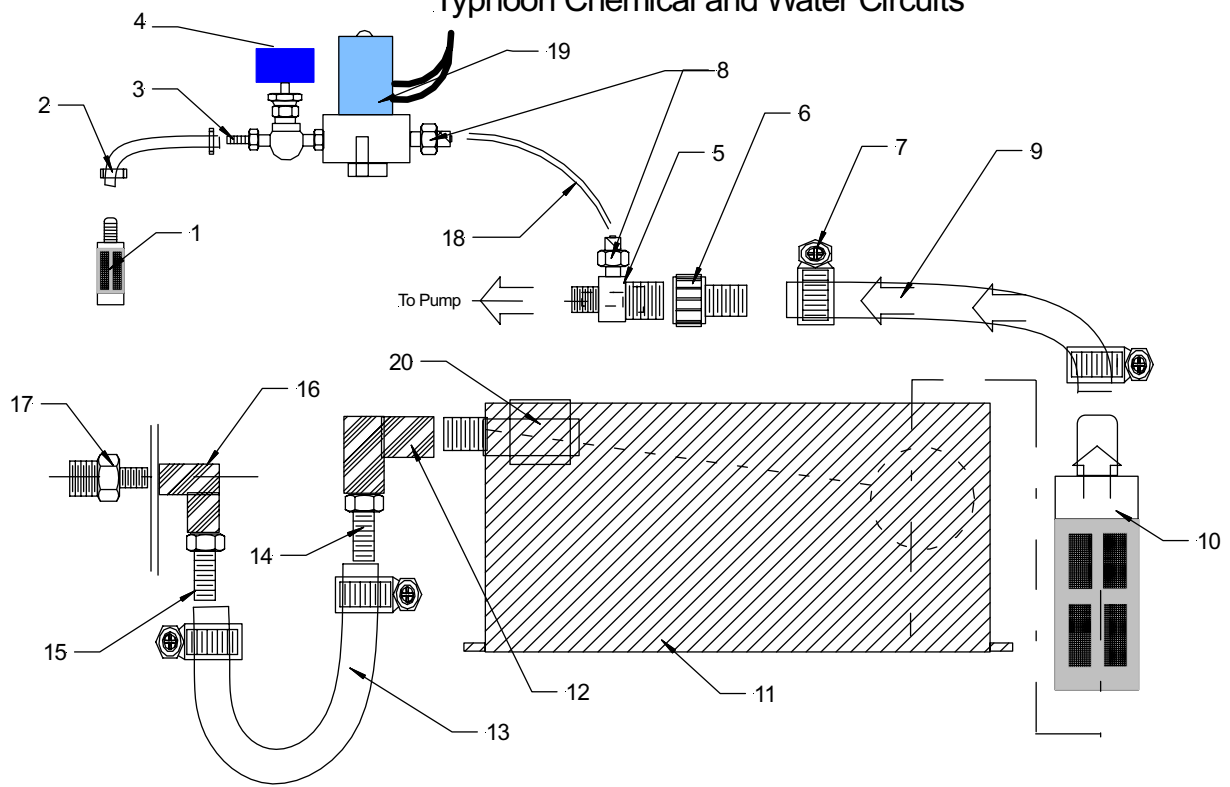


The electrodes should be set according to the picture. 50% of the ceramic insulation should be inside the boiler and 50% outside. The electrode gap should be approximately 6mm and the tips should not be in the fuel spray.

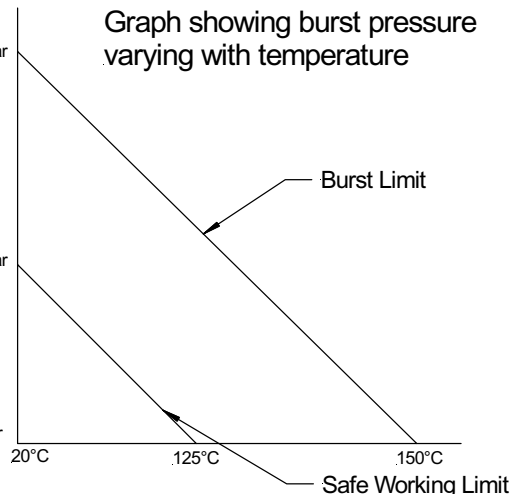
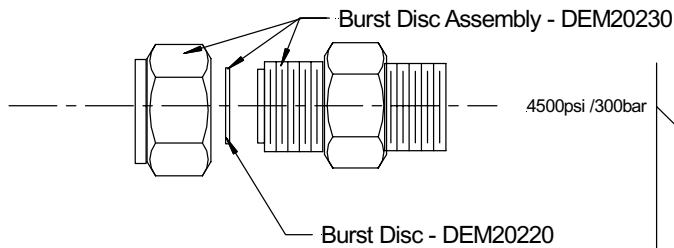
Common problems - fuel filters and nozzles are not changed regularly enough. The nozzle is a precision instrument that can be damaged by small particles of solid matter in the fuel that it is not possible to filter out. Nozzles will not atomise the fuel correctly leading to a longer flame path which you can see by flames visible near the top of the chimney. To remedy this empty the fuel tank and fill with clean fuel, change the filter and then change the fuel nozzle. Clean the electrodes and grind the tips to reveal new metal. Reset and refit and run the boiler with the gun removed for 10 minutes. This will burn off any excess fuel and clean the boiler tubes.

Service the boiler frequently for reliable running, an unserviced boiler does not heat the water correctly wasting your money!!

Typhoon Chemical and Water Circuits



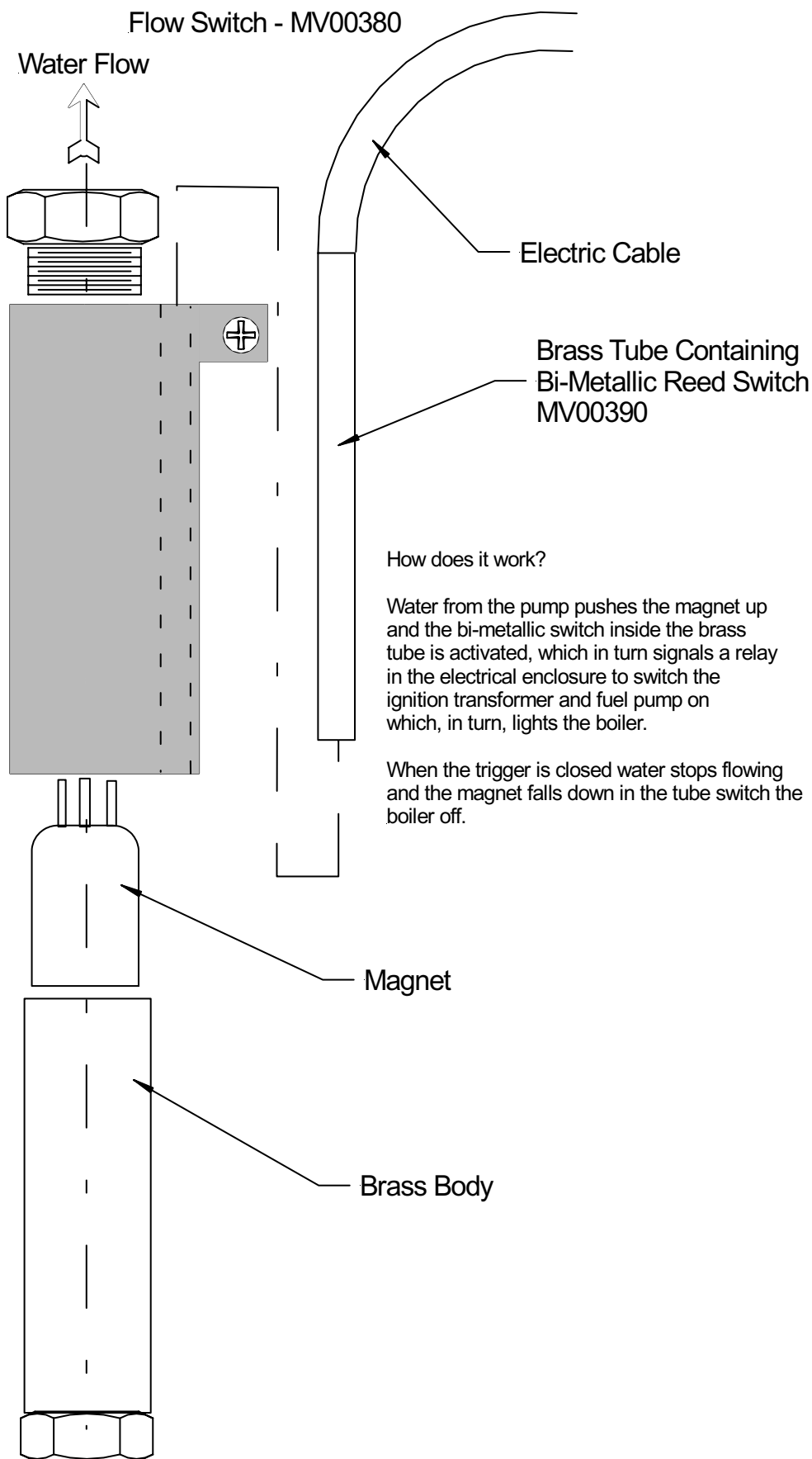
Chemical & Water Circuits							
1	MTM86010	Chemical Filter	1	12	MTM0012FF03	Brass Elbow	1
2	DEM20500	O Clip	4	13	HH0053	Pipe	1
3	DEM10115	Chemical Pipe	2	14	DEM10310	Hose Tail	1
4	DEM101191	Chemical Solenoid	1	15	DEM10300	Hose Tail	1
5	PA00100	Chemical Intake	1	16	MTM0012FF02	Brass Elbow	1
6	MTM71167	Hose Barb Comp	1	17	DEM20255	Adaptor	1
7	DEM20500	Jubilee Clip	4	18	MTM0012FM03	Brass Elbow	2
8	DEM20400	Hose tail	1	19	DEM101191	Chemical Solenoid Valve	1
9	HH0053	Inlet Pipe	1	20	MTM89011B	Mesh Insert	1
10	MTM85002	Water Filter	1	21	MTM89011	Brass Filter	1
11	DEM10435	Water Tank	1				



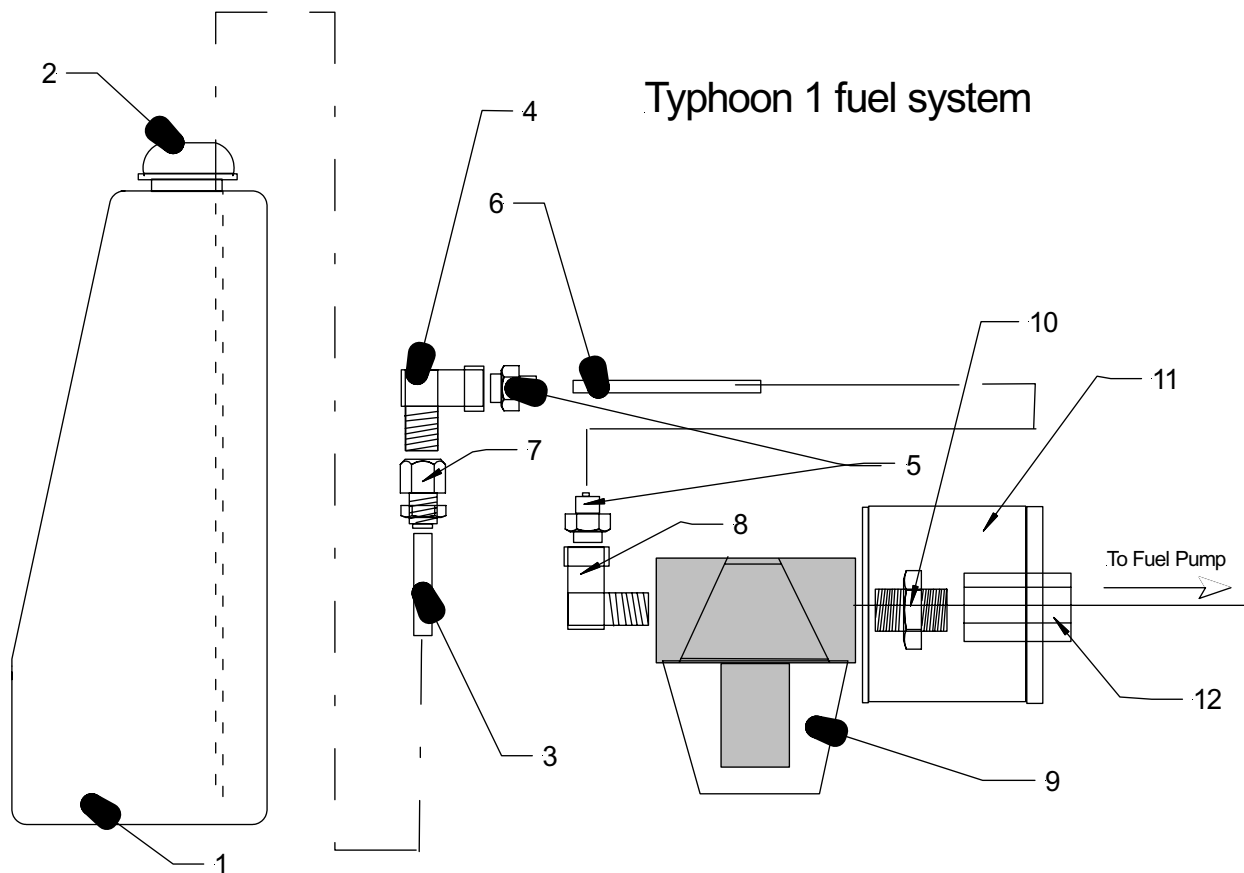
The burst disc fitted to the Demon hot water range of machines is designed to burst either with excess heat or excess pressure. The burst disc works like a fuse and will always fail safe. Rupturing of the burst disc is commonly due to one of three faults, not cooling the machine after using, a poorly maintained boiler or flow switch failure.

Running the machine for two minutes with the boiler switched off will increase the life of the boiler.

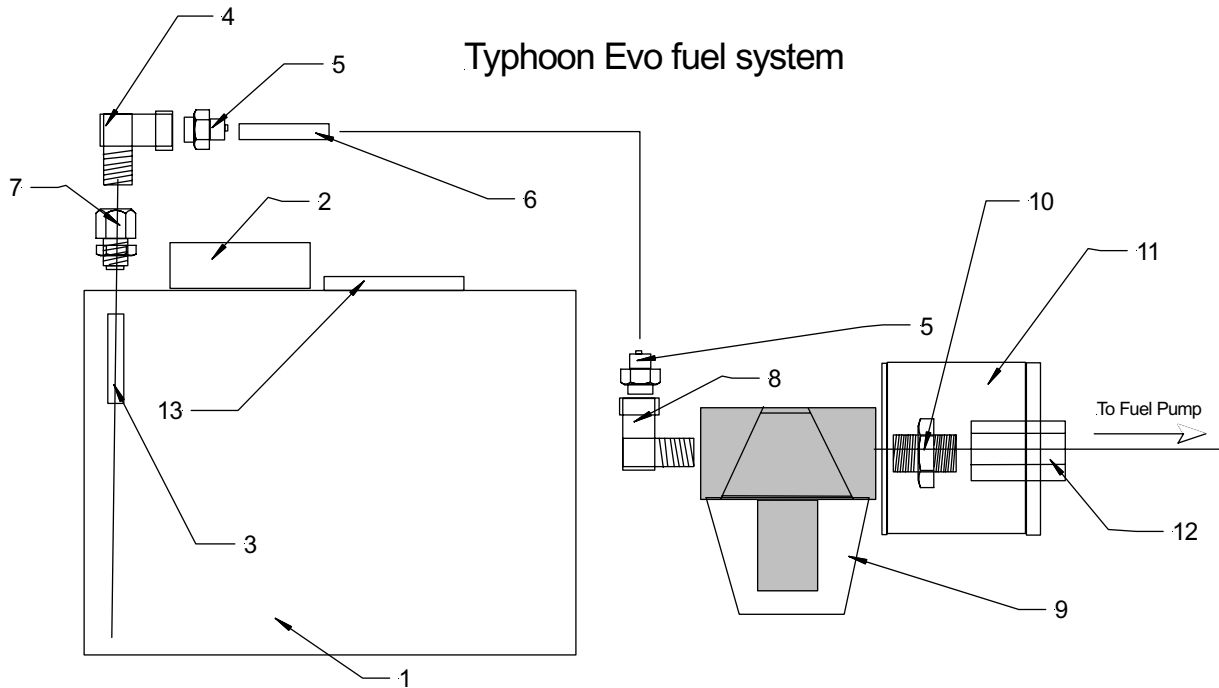
Maintaining the boiler regularly will also lead to increased efficiency and fewer breakdowns.



Demon Typhoon 1 Fuel Tank



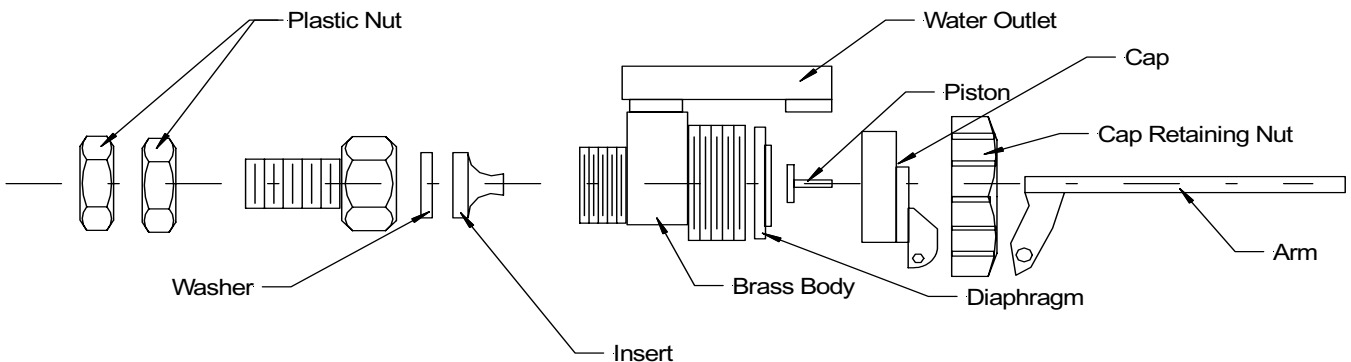
Fuel System Part List			
No	Part No	Description	Qty
1	DEM10410	Fuel Tank 24 Litre	1
2	DEM10420	Fuel Tank Cap	1
3	DEM20450	Fuel Pickup Pipe	1
4	DEM20440	Elbow Adaptor	1
5	DEM20452	Nylon Hose Connector	2
6	DEM20450	Fuel Pickup Pipe	1
7	DEM20430	Bulkhead Adaptor	1
8	DEM20440	Elbow Adaptor	1
9	MTM87100	Fuel Filter	1
10	DEM20330	1/4" Male x Male Adaptor	1
11	DB0023055	Bracket	1
12	DEM20340	1/4" Barrel Nut	1



Typhoon Evolution Fuel System

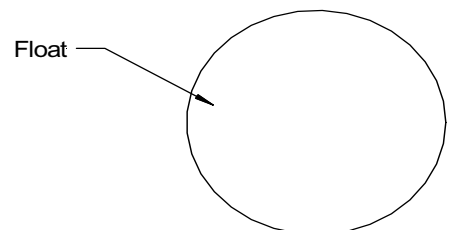
Pos	Description	Part Number	Qty
1	45 Litre Painted Fuel Tank	DEM10415	1
2	Locking Fuel Cap	DEM10423	1
3	Fuel Pickup Pipe	DEM20450	1
4	Fuel Pickup Elbow Adaptor	DEM20440	1
5	Fuel Pipe Adaptor	DEM20452	2
6	Fuel Pipe	DEM20450	1
7	Bulkhead Adaptor	DEM20430	3
8	Fuel Pickup Elbow Adaptor	DEM20440	1
9	Fuel Filter	MTM87100	1
10	1/4" Male x Male Adaptor	DEM20330	1
11	Fuel Filter Bracket	DB0023055	1
12	1/4" Barrel Nut	DEM20340	1
13	Fuel Level Gauge	DEM202551	1

Float Valve Assembly

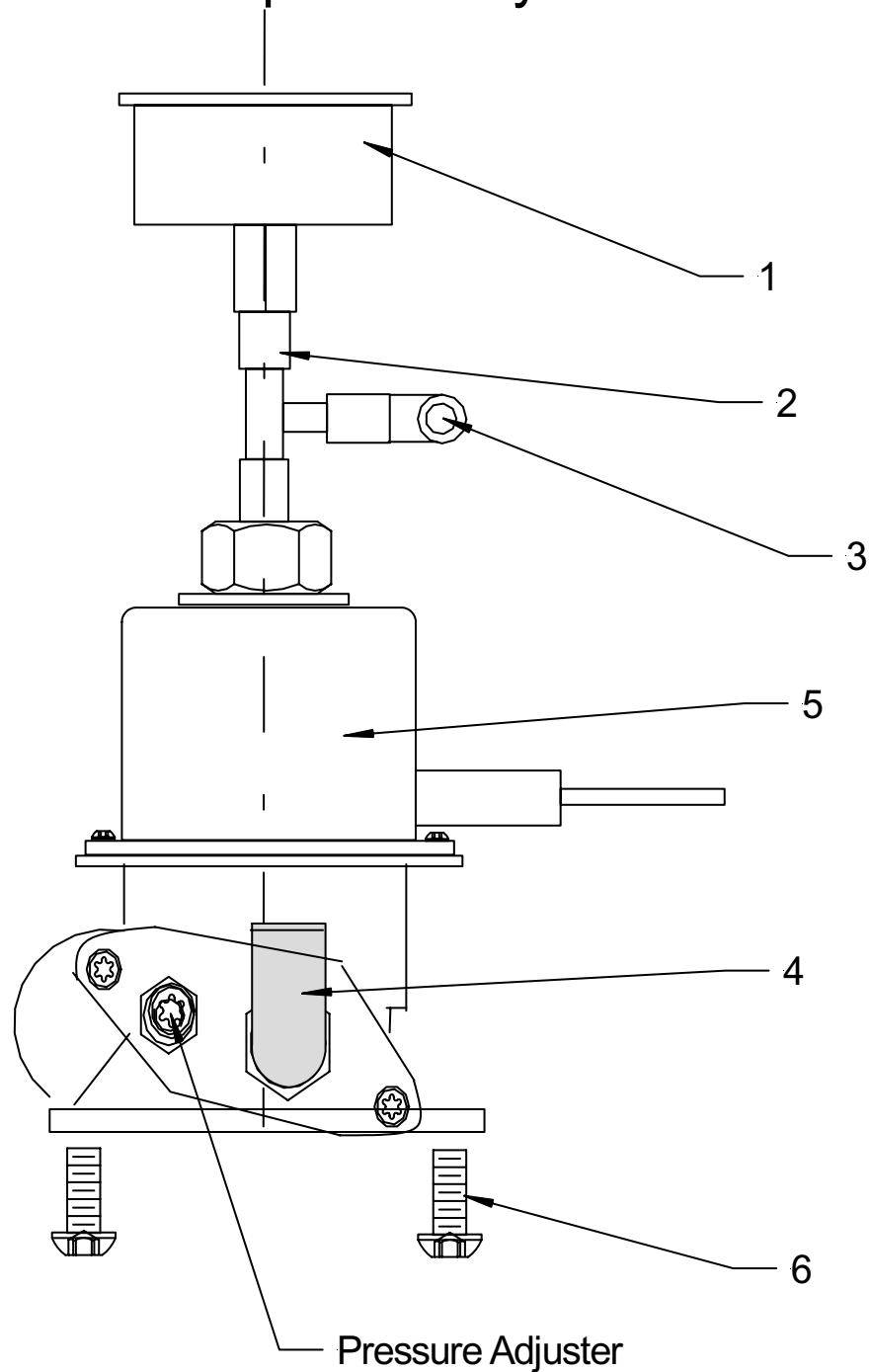


Part No.	Description	Qty
DEM10450	Float Valve Complete	1
DEM10445	HP Insert (white) 7 to 20bar	1
DEM10446	MP Insert (black) 3 to 7 bar	1
DEM10447	LP Insert (green) 0 to 3 bar	1

No other parts available



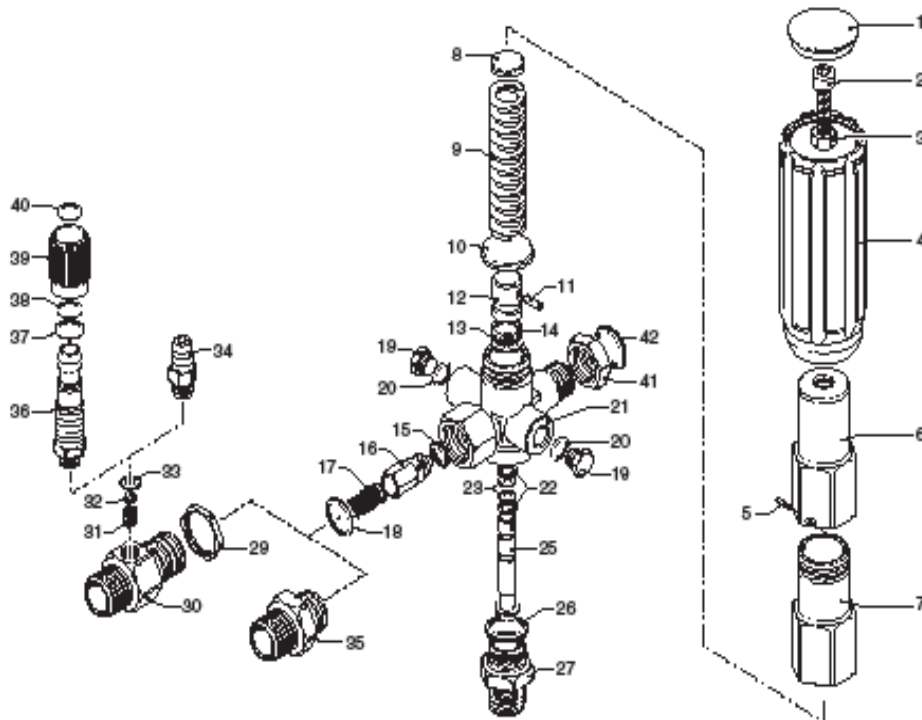
Fuel Pump Assembly



Item	Description	Part Number	Quantity
1	Fuel Pressure Gauge	DEM20630	1
2	Tee	DB000155	1
3	Adaptor	DB000135	1
4	Adaptor	DB000145	1
5	Fuel Pump Complete 110V	DB002305	1
5	Fuel Pump Complete 230V	DB002300	1
6	Screw	AR1260470	2

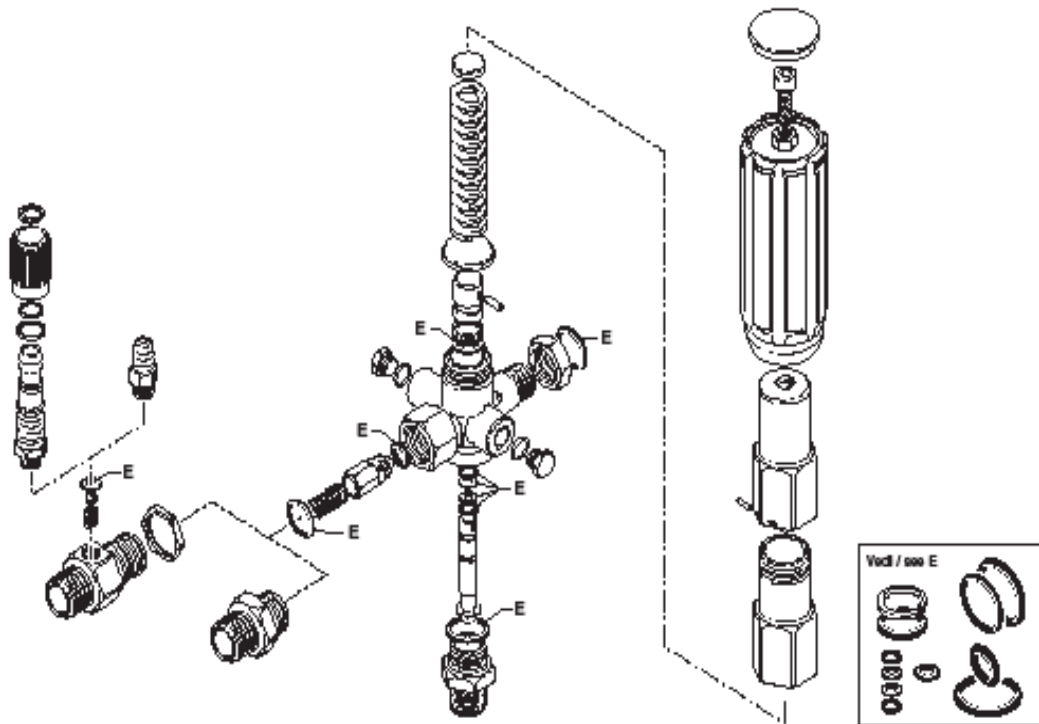
Note: Pump available in 230V or 110V only, fuel pump has no sevicable parts, when fitting new pump do not shorten leads, pressure set to 110psi (7.5 bar).

GYMATIC 3/A



UN002250-IA

KIT RICAMBI / PART KITS



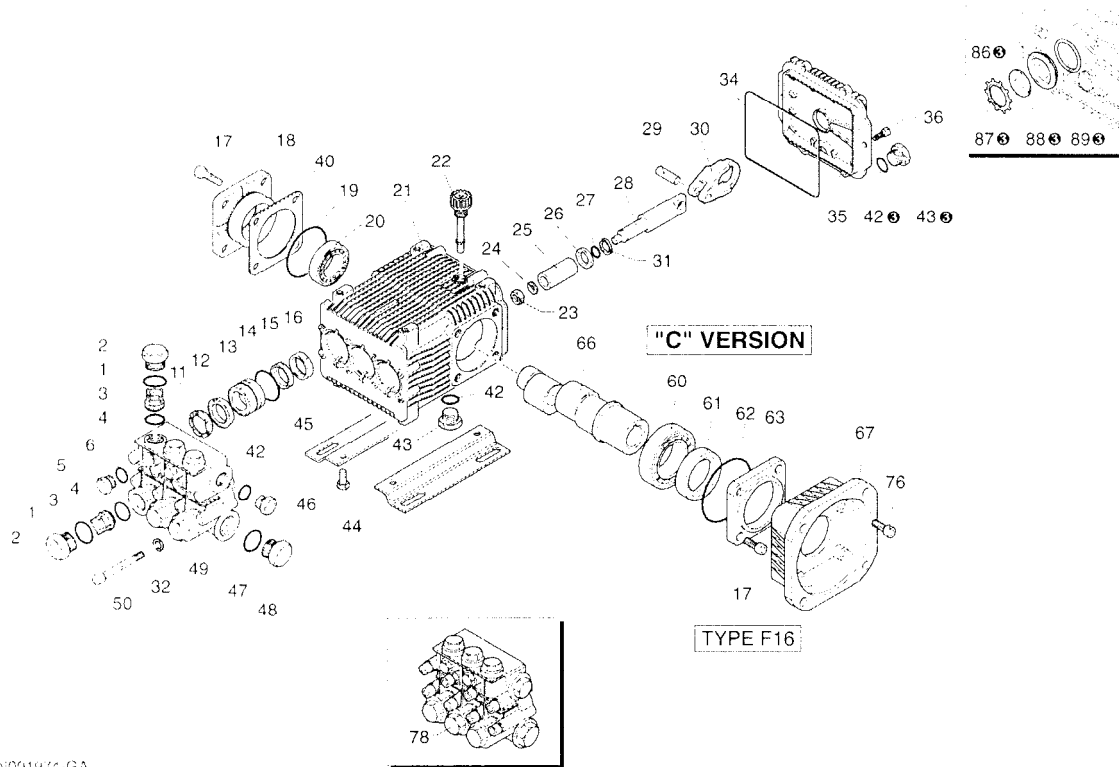
UN002260-IA

GYMATIC 3/A		
Pos	Part Number	Description
1	AR1560580	Knob plug
2	AR180030	Screw
3	AR1660210	Nut
4	AR1560400	Handle
5	AR1080070	Pin
6	AR1560420	Adjusting screw
7	AR1560410	Spring guide
8	AR1560440	Plate
9	AR1560350	Spring
10	AR1080610	Spring plate
11	AR1080660	Pin
12	AR1080540	Upper piston
16	AR1560100	Jet
17	AR1560140	Spring
19	AR880581	Plug
20	AR820510	O ring
21	AR1560020	Valve housing
25	AR1560320	Lower piston
27	AR1080831	By pass adjuster
29	AR1560510	Nut
30	AR1560500	Fitting ³ / ₈
30	AR1560530	Fitting ³ / ₈
30	AR1560540	Fitting ³ / ₈
31	AR1560520	Spring
32	AR1250280	Ball
34	AR1560490	Hose tail
35	AR1560110	Adaptor ³ / ₈
35	AR1560111	Adaptor ³ / ₈
36	AR1560650	Hose tail
37	AR800560	O ring
38	AR480560	O ring
39	AR1560670	Detergent reg knob
40	AR1560660	Ring
41	AR1080390	Nut
13,14,15,18,22,23,26,33,42	ARKIT2611	O Rings

RK

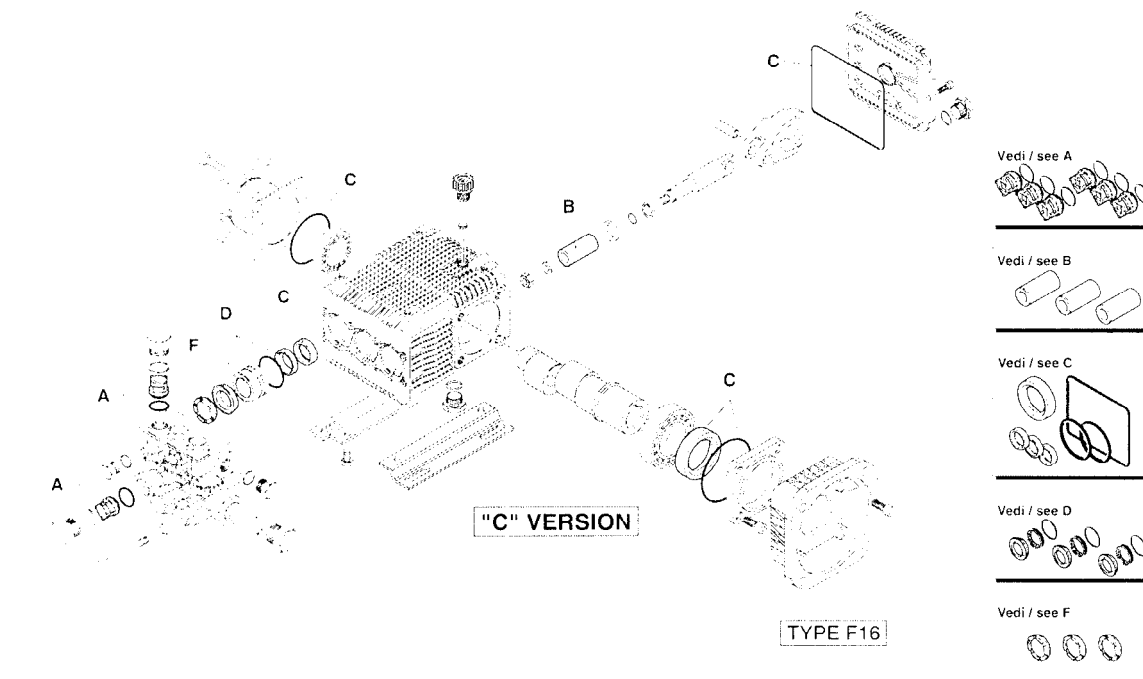
NOISE DATA
C

1450_{rpm}



UN0019/4-GA

KIT RICAMBI / PART KITS



UN0019/5-GA

RK MODEL: 15.20H

Pos	Part No	Description	Qty	Pos	Part No	Description	Qty
1	AR960160	O Ring	6	36	AR1343510	Screw	6
2	AR960090	Plug	6	40	AR1380120	0.10mm shim	1+3
2	AR1380740	Plug	6	40	AR1380130	0.20mm shim	1+3
3	AR1389051	Complete Valve	6	40	AR1380530	0.25mm shim	1+3
4	AR880830	O Ring	6	40	AR1382810	0.05mm shim	1+3
5	AR880581	Plug	2	42	AR740290	O ring	3
6	AR820510	O Ring	2	43	AR1980740	³ / ₈ G plug	2
11	AR960110	Support Ring	3	44	AR1260470	Screw	4
12	AR880320	Gasket	3	45	AR1380141	Base	2
13	AR1380090	Piston Guide	3	46	AR1980740	³ / ₈ G Plug	1
14	AR961240	O Ring	3	46	AR1981180	³ / ₈ G Plug	1
15	AR880330	Gasket	3	47	AR180101	O Ring	1
16	AR138130	Seal	3	48	AR820361	Plug	1
17	AR850370	Screw	8	48	AR960870	Plug	1
18	AR1380050	Closed Bearing sup	1	49	AR1381071	Pump head	1
19	AR640030	O Ring	1	50	AR820150	Screw	8
20	AR2280240	Bearing	1	60	AR1380320	Bearing	1
21	AR1382770	Pump Housing	1	61	AR621170	Seal	1
22	AR880130	Oil Cap	1	62	AR1380220	O Ring	1
23	AR962010	Nut	3	63	AR1380210	Shaft cover	1
24	AR962000	Washer	3	66	AR2280180	Hollow Shaft 28mm	1
24	AR1380940	Ceramic Piston	3	66	AR2280170	Hollow Shaft 028mm	1
26	AR1380950	Spacer	3	66	AR2280160	Hollow Shaft 028mm	1
27	AR600180	O ring	3	66	AR2280150	Hollow Shaft 028mm	1
28	AR1380920	Guiding Piston	3	67	AR1380370	El Motor flange	1
29	AR1380060	Piston Pin	3	76	AR620610	Screw	4
30	AR1383050	Aluminium con-rod	3	86	AR1260250	Oil Indicator	1
31	AR1080401	Ring	3	87	AR1260430	Snap Ring	1
32	AR1381850	Washer	8	88	AR1780690	Disc	1
34	AR1780510	O Ring	1	89	AR1140450	O Ring	1
35	AR1789010	Complete cover	1				

Valve Kit		Piston Kit		Oil Seal Kit	
ARKIT1828		ARKIT2757		ARKIT1856	
Pos	Qty	Pos	Qty	Pos	Qty
3	6	25	3	16	3
4	6			19	1
				34	1
				61	1
				62	1

Water Seal		Support Ring	
ARKIT1857		ARKIT1829	
Pos	Qty	Pos	Qty
12	3	11	3
14	3		
15	3		