

## **PRESSURE TESTER**

TW0016/TW0019

### **OPERATING & SAFETY INSTRUCTIONS Plus PARTS LIST**



*For further service or back up, please contact* **ArcGen Hilta**  
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**Warning this equipment may constitute a potential hazard**



**This equipment is designed for use in High Pressure Water Jetting and could cause serious injury or death if incorrectly used.**

**Before commencing the use of this equipment answer the following questions.**

- (a) Have you been fully trained by a qualified instructor?
- (b) Have you read the manual?
- (c) Do you understand the Water Jetting Association Code of Practice?
- (d) Have you been equipped with the correct Personal Protective Equipment?
- (e) Do you fully understand all of the equipment being used in connection with this item?
- (f) Has a risk assessment for this task been carried out?
- (g) Is the equipment suitable for the task in hand?
- (h) Has the working area been isolated and warning signs erected?

If you answer **NO** to any of the above, **or do not understand any question**, you may be in breach of Health and Safety Guidelines.

**Do not proceed without consulting your Health and Safety Representative.**

ArcGen Hilta do not accept responsibility for any event arising from incorrect or misuse of the equipment.

Technical information, warning signs, personal protective equipment and training by qualified instructors are available from ArcGen Hilta – contact details below.

## **IMPORTANT**

### **‘PROTECTION FROM FROST’**

**WHEN FREEZING CONDITIONS ARE LIKELY TO BE ENCOUNTERED, IT IS ESSENTIAL TO PROTECT THE HIGH PRESSURE PUMP**

**EITHER:**

**STORE THE MACHINE WHERE THE TEMPERATURE WILL NOT FALL TO FREEZING**

**OR:**

**AFTER USE, RUN THE MACHINE FOR 20 SECONDS WITH IT DISCONNECTED FROM THE WATER SUPPLY**

## Introduction

The TW0016 pressure tester is designed primarily for the leak testing of pipelines and other vessels. If it is required for proof pressure testing of systems then it would be necessary for calibrated gauges to be fitted and for periodic checking and recording of these to be carried out.

Everything required for testing, including supply and delivery hoses, is included with the machine.

## Specification

TW0016/TW0019		
Pressure range	0 – 100bar	
Flow	4.75 litres/min	
Motor	1.0kW 110v 1ph 50hz	
Supply Hose	½” x 1m with ‘Hozelock connector	
Delivery Hose	3/8” 180bar rated hose x 1250mm long terminating ½” BSP coned female.	
Pressure gauges	2 x 0 – 2000psi glycerine filled.	
Cable/plug	3m cable c/with 110v 16amp plug	
Box size:-	Length	500mm
	Width	350mm
	Height	360mm
Weight	43kgs	
Power supply required	110v 1ph 16Amp	

## Safety Precautions

Before starting to use the pressure tester:-

- This is a high pressure device and is capable of serious injury if incorrectly used. Make sure that you read and understand the following instructions **before** starting to use the machine.
- You are advised to wear suitable protective clothing including goggles and gloves.
- Check that the electric motor is connected to the correct electricity supply. If in doubt, check the rating plate on the motor.
- Ascertain what the maximum safe pressure is of the system which you are to test and the pressure at which you are to test.

- Check the condition of the high pressure hose and fittings. If worn or damaged they must be replaced before commencing work.
- Make sure that only the correct fittings are used when attaching the high-pressure hose to the unit to be tested. The hose connection is a ½" BSP male coned fitting.

### Using the Pressure Tester

1. The pump flow rate is only 4.75 litres/min, therefore it is sensible to fill the system to be tested direct from mains supply. Only connect the pressure tester when the system is full.
2. Connect the inlet hose to a suitable water supply.
3. Run the pump with the outlet disconnected until water flows freely, indicating that the pump is primed.
4. Stop the motor and connect the outlet hose to the system to be tested.
5. Adjust the pressure regulating valve (PRV) to the lowest setting, close the shut-off tap and start the motor.
6. Adjust the PRV to raise the pressure until the desired test pressure is indicated on the red gauge.
7. Open the shut-off tap to allow water to flow into the system.
8. When the set pressure is reached, close the shut-off tap and stop the motor. At this point both gauges should read the same.
9. Any pressure loss in the system will be indicated by a gradual reduction in the reading on the yellow gauge.

### Warning

Under no circumstances should the pump be left running with either the shut-off tap closed or when the system has come up to test pressure. Failure to comply with this will result in the pump overheating and being damaged.

## Spare Parts

Before ordering spare parts please have the following information available:-

The model and serial number.

Identify the part and its number from the following drawing.

Telephone your order to Arc Gen Hilta on 01902 790 824. Fax confirmation on 01902 790 355.

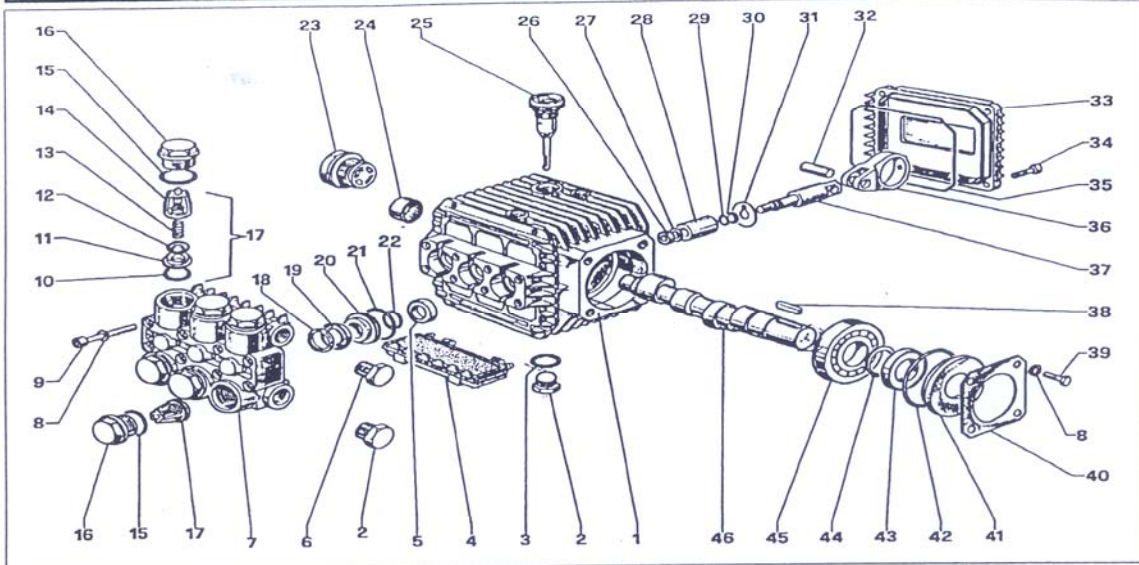
<b>Pressure Tester Model No. TW0016 / TW0019</b>	
<b>Part Number</b>	<b>Description</b>
TW401224	Test Box Assembly
TW401903	Rubber Foot
TW416025	Pressure Gauge
TW419183	Pressure Regulating Valve
TW430193	Electric Motor
TW436326	Cable
TW436522	Earth Strap
TW436523	Earth Strap
TW436619	16 Amp Plug
TW440050	Bypass Hose
TW440052	Hose Assembly
TW440111	Hozelock Connector
TW440112	Inlet Hose
TW442915	Valve
TW448810	Jubilee Clip
TW449208	Inlet Filter
TW494004	Edging - Black

<b>Pump Repair Kits</b>	
TW424901	Kit 1 Comprising 6 Valves
TW424997	Kit 97 Comprising 3 sets of seals



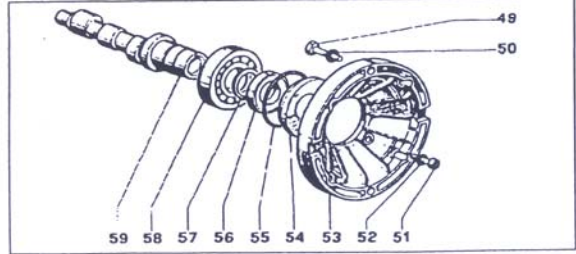
**PUMP FOR 110V PRESSURE TESTER – WW95**

**PUMP SERIES WW55-56-74-75-90-93-94-95**



Ref	Code	Description	N pcs
1	51.0106.22	Crankcase	1
2	98.2100.00	Cap G 3/8x13	2
3	90.3833.00	O-ring dia 13,95x2,62	1
4	51.2091.02	Protection cover	1
5	90.1565.00	Oil seal dia 15x24x5 kit 83	3
6	98.2041.00	Cap G1/4x9	1
7	51.1200.22	Manifold All. Nickel	1
8	51.1200.41	Manifold OT 58 - Brass	1
9	96.6938.00	Washer dia 6,4 Washer	12
10	99.1943.00	Screw M6x40 UNI 5931	8
11	90.3841.00	O-ring dia 17,13x2,62 kit 1	6
12	36.2003.66	Valve seat kit 1	6
13	36.2001.76	Valve kit 1	6
14	94.7376.00	Spring dia 9,4x14,8 kit 1	6
15	36.2002.51	Valve guide kit 1	6
16	90.3847.00	O-ring dia 20,24x2,62 kit 84	6
17	98.2218.00	Cap M 24x1,5 kit 84	6
18	36.7032.01	Valve unit kit 1	3
19	51.1000.51	Head ring kit 96-97	3
20	90.2620.00	Packing dia 15 kit 96-97	3
21	51.0800.70	Packing retainer dia 15 kit 86-96	3
22	90.3604.00	O-ring 25,12x1,78 kit 86-96-97	3
23	90.3835.00	O-ring dia 15,08x2,62 kit 86-96-97	3
24	97.5968.00	Oil level indicator G 3/4	1

Ref	Code	Description	N pcs
24	91.8014.00	Bearing race	1
25	99.2103.00	Oil dipstick G 3/8	1
26	99.2216.00	Nut M8 inox	3
27	96.7008.00	Washer dia 8	3
28	51.0400.09	Piston dia 15	3
29	90.3572.00	O-ring 5,28x1,78 - spec.	3
30	90.5022.00	Anti-extrusion ring	3
31	96.7070.00	Washer dia 9	3
32	97.7310.00	Piston pin dia 8x24,5	3
33	51.1600.22	Crankcase cover	1
34	99.1687.00	Screw M 6x18 - UNI 5931	4
35	90.3917.00	O-Ring dia 88,57x2,62	1
36	51.0300.22	Connecting rod	3
37	51.0500.56	Piston guide	1
38	91.4878.00	Key	1
39	99.1807.00	Screw M6x10 UNI 5739	4
40	50.1500.74	Crankcase cover	1
41	50.2115.51	Spacer	1
42	90.4097.00	o-ring 55,56x3,53	1
43	90.1634.00	Oil seal dia 25x42x7	1
44	90.0635.00	Circlip crankshaft	1
45	91.8328.00	Ball bearing 6305	1
46	51.0200.35	Crankshaft WW55/74/90	1
	51.0201.35	Crankshaft WW56/75/93	1
	51.0204.35	Crankshaft WW94	1
	51.0217.35	Crankshaft WW95	1



Ref	Code	Description	N pcs
49	99.2730.00	Screw 5/16"x3/4"x24 UNF	4
50	96.7014.00	Washer dia 8,4	4
51	10.0346.22	Flange	1
52	99.1867.00	Screw M 6x18 UNI 5931	4
53	96.6938.00	Washer dia 6,4	4
54	50.2115.51	Spacer	1
55	90.4097.00	O-ring dia 55,56x3,53	1
56	90.1644.00	Oil seal dia 30x42x7	1
57	90.0667.00	Circlip crankshaft	1
58	91.8373.00	Ball bearing 6206	1
	51.0212.35	Crankshaft WW55/74/90	1
	51.0213.35	Crankshaft WW56/75/93	1
59	51.0214.35	Crankshaft WW94	1
	51.0216.35	Crankshaft WW95	1

KIT N	KIT 1	KIT 83	KIT 84	KIT 86	KIT 96	KIT 97
Position Included	10-11-12 13-14-17	5	15-16	20-21-22	18-19-20 21-22	18-19-21 22
N.PCS	6	3	6	3	1	3

**SERIES WW55-56-74-75-90-93-94-95**

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