

ORIGINAL INSTRUCTION MANUAL

For
INDUSTRIAL VACUUM CLEANER
(Retain for future reference)



TI80 DLCF

For Dry Collection ONLY
EARTHED 400V 3ph 50Hz,
Serial No.....

(To be completed by user)

READ THIS INSTRUCTION MANUAL
BEFORE USING THE APPLIANCE

Part Number	Model Description
55 63662 00	TI80 DLCF 7.5kW 400v 3ph
55 63655 00	TI80 DLCF 15kW 400v 3ph

We reserve the right to change the design without notice

UNIT DESCRIPTION

This appliance is a heavy-duty industrial dry pick-up Vacuum Cleaner consisting of: -

A multistage centrifugal exhauster to create the vacuum and airflow driven by a three phase induction motor which in turn is controlled by its own starter.

A filter separator made up of a multiplicity of fabric filter sleeves with a manual shaker to enable filter cleaning.

A collection bin, which, by means of a manual lifting mechanism be raised into the collection position or lowered to the ground for removal and emptying.

All of the above is mounted on a wheeled frame, to enable the appliance to be manually moved. This frame is provided with lifting locations so it can be transported by a fork lift truck.

A selection of accessories (some optional) consisting of a collection hopper (to increase the collection volume) hoses, extension arms and collection tools etc are available.

This BVC Heavy Duty Vacuum Unit is designed to handle a wide range of dry cleaning and debris collection operations in industrial areas and is designed to be used with a separate collection hopper.

PREPARATION FOR USE

Unpack and identify each item of equipment against packing note.

Check that the details given on the motor rating plate are in accordance with your electricity supply.

WARNINGS

1. This appliance must only be operated / repaired by SUITABLY TRAINED and authorised personnel and only genuine BVC spare parts be used.
2. Only use accessories approved by the manufacturer.
3. This appliance or the accessories must not be modified.
4. This appliance must not be stored or used in wet conditions i.e. outside in the rain
5. The filtration systems on this appliance must only be configured as shown in these instructions.
6. Periodically clean the filter sleeves by using the filter manual shaker. This should be carried out with the exhauster off and the collection bucket fitted.
7. Ensure that the collection bucket fitted under the filter is emptied regularly and is not allowed to become completely full. The collection bucket and contents may be very heavy and should be lifted appropriately.
8. Tie back long hair and loose clothing when operating this vacuum cleaner.
9. Be careful when moving/operating on slopes use the locking devices on the castors as the unit may 'run away' when in use.
10. When using a separate collection hopper, emptying and moving the hopper must be carried out with the appropriate lifting equipment operated by a competent person.

WARNINGS

11. In the event of an accident or breakdown, disconnect the Vacuum Cleaner from the supply by removing the plug from the supply socket and contact BVC for repair. (Please empty and clean the machine). Contact the BVC Service Department who will arrange a suitable company for collection.
12. This machine must not be installed as a fixed extraction system and/or run unattended.
13. Ensure that the product being collected is suitable for vacuum cleaning.

NOISE EMISSION = Sound Power level LwA 84dB(A) plus level of uncertainty KwA 2dB(A), Sound Pressure Level LpA 80dB(A) plus level of uncertainty KpA @ 1M free field conditions in accordance with 60335-2-69:2012 Annex EE Noise Test Code.

WEIGHT (EMPTY) = 275 Kg – 7.5kW
380 Kg – 15kW

SPECIAL CONDITIONS FOR SAFE USE

1. The equipment must be inspected and maintained in accordance with the manufacturer's recommended schedule.
2. The user shall regularly inspect the equipment and cable and return to the manufacturer if there are signs of deterioration or damage.
3. The equipment shall be cleaned in accordance with the manufacturers recommended schedule.
4. The equipment must be wired to the electrical supply in accordance with the manufacturers instructions.
5. Do not pull the machine along by the flexible cord.
6. Keep trailing leads tidy, flat on the floor to avoid a trip hazard.
7. Equipment shall not be used where aggressive substances may be present.
8. Replace silicone grease on joints on motor after every opening. Ensure that silicone grease is compatible with the environment the appliance is used within.
9. Replacement screws used on the motor must be 8.8 to EN 20898.
10. Do not use for the collection of flammable or explosive dusts.
11. This vacuum cleaner must not be used for the collection of health endangering, flammable or explosive materials. Nor must it be used or stored outside in wet conditions, i.e. outside in the rain, swimming pools etc.
12. Hearing protection should be worn when operating or when in close proximity to the operating vacuum cleaner. A Risk Assessment should be undertaken to determine if further PPE is required due to the nature of the product being collected and the area in which vacuuming is taking place.

NORMAL USE

STARTING:

1. Close exhauster insulating valve.
(Not required on 7.5kW unit).
2. Ensure all hoses and collection hoppers are connected.
3. Operate the start button.
(**Note:** The machine is fitted with a Star Delta starter and will take a period of time to achieve full speed).
4. When full speed is achieved open the exhauster-isolating valve.
(Not required on 7.5kW unit).



DURING USE:

1. Take care to keep clear of the hose end and the material being collected at the intake.
2. Do not attempt to lower or raise the collection drum with the vacuum unit running.
3. Do not attempt to open or close the lid on the collection hopper (if used) with the vacuum unit running.
4. The machine should be stopped if abnormal noise or vibrations are observed.

STOPPING:

1. Ensure the collection hose(s) are free from any product.
2. Press the stop button.

NORMAL USE

EMPTYING THE BIN:

1. Release the latch and gently lower the collection bin to the ground
2. Empty the collection bin using the optional lifting frame if required.
3. Replace the bin by holding the handle in the raised position and push the collection bin under the machine so that the hooks on the bin engage on the lifting pins.
4. Lift the bin using the handle and hold in place by engaging the latch.

MOVING:

1. Empty the collection bucket prior to lifting the vacuum unit with a forklift or other lifting device.
2. Use the locking bar to prevent accidental release of the collection drum when moving the vacuum unit.

ELECTRICAL SUPPLY - THREE PHASE APPLIANCE

WARNING - THIS APPLIANCE MUST BE EARTHED

- The electrical connections of these machines must be carried out by a competent electrician.
- As this machine is an earthed appliance it must be fitted with a cable having an earth core and therefore must be connected to a 4-pin plug.
- The machine is fitted with a 4 core cable, 3 cores (one for each phase) and 1 core for earth
- Green/Yellow for 'E' earth lead.
- When wired to the mains plug, but before use, the rotation of the exhauster must be checked. Switch on momentarily and check that rotation is anticlockwise looking through the window. If the direction of rotation is incorrect, interchange any two of the phase connections at the free end of the cable.

SPARES

We recommend that stocks be retained of the following:

55 63662 00 – TI80 DLCF – 7.5kW / 400 / 3 / 50

QUANTITY	PART NUMBER	DESCRIPTION
2	63 31108 21	BELTS 1262 SPZ
1	01 16016 00	BEARING NON-DRIVE END
1	01 16017 00	BEARING DRIVE END
30	53 63606 00	FILTER SLEEVE 1025mm POLYESTER
30 OR	53 63606 01	FILTER SLEEVE 1025mm ANTISTATIC
30 OR	53 63606 02	FILTER SLEEVE 1025mm NOMEX

55 63655 00 – TI80DLCF – 15kW / 400 / 3 / 50

QUANTITY	PART NUMBER	DESCRIPTION
3	53 64377 01	BELTS 1287 SPZ
1	01 16016 00	BEARING NON-DRIVE END
1	01 16017 00	BEARING DRIVE END
30	53 63606 00	FILTER SLEEVE 1025mm POLYESTER
30 OR	53 63606 01	FILTER SLEEVE 1025mm ANTISTATIC
30 OR	53 63606 02	FILTER SLEEVE 1025mm NOMEX

MAINTENANCE

RECOMMENDED MAINTENANCE SCHEDULE		
Item	Frequency Of Inspection Based On 4 Hours Use Per Day	Frequency Of Replacement Based On 4 Hours Use Per Day
Electrical Supply Cable	1 Month	When Required
Drive Set (Belts & Pulleys)	3 Months	36 Months
Bearings Drive End	12 Months	36 Months
Bearings Non-drive End	12 Months	36 Months
Motor	As Per Motor Manufacturers Instructions	As Per Motor Manufacturers Instructions
Clear Flow Filters	6 Months	24 Months
External Cleaning	Daily	-

DO NOT - Carry out maintenance in a potentially explosive atmosphere.

ELECTRICAL SUPPLY - Always disconnect the machine from electrical supply prior to carrying our maintenance.

EMPTY THE BIN - Clean The Filters Prior To Carrying Out Any Maintenance.

ELECTRICAL SUPPLY CABLE - Inspect the electrical supply cable for splits, cracks and damage and the integrity of the fittings at each end of the cable.

REPAIR – Returning the machine to BVC:

Please empty and thoroughly clean the machine so that it is safe to work on without personal protection equipment prior to return. Contact BVC Service Department prior to return.

MAINTENANCE CONTINUED...

PULLEYS - Ensure the pulleys are clean and free from any dust build up.

BELTS - Inspect every three months. Electrically isolate the machine. Remove outer belt guard, If belts are frayed, cracked or showing significant signs of wear it should be replaced. If the belts need tensioning follow the procedure below.

BELT REPLACEMENT - Slacken the two locking nuts under the motor mounting support plate (by the starter cable glands). The worn belts can now be removed. Fit new belts, lightly tension the belts until they have is no curve between the pulleys, ensuring the ribs are a snug fit in pulley groves; mark two lines on the back of the belts 200mm apart; tension the belts until distance between two lines has increased by 1.0mm (i.e. 0.5% increase); Lock mounting plate in position. Rotate the drive by hand 10 times and check extension.

Check belts frequently in first 24 hours of operation, re-adjust if necessary.

ENSURE - that the driving and driven shafts are parallel and that the pulleys are aligned by using a straight edge and adjusting the motor position accordingly. Always ensure that the motor is secured in position when adjustments are completed. If belts will not run true, the pulley shafts are either twisted in relation to one another or not parallel to one another.

WARNING - Over tightening the belts can give rise to premature bearing/belt failure and excessive temperatures.

BEARINGS - The drive end bearing should be re-greased and inspected every six months for excessive play. Remove the belts and check for radial play on the drive shaft. If the radial play is greater than 0.25mm then the drive end bearing needs changing. As the exhauster will be stripped down the non drive end bearing should also be changed.

GENERAL CARE

CLEAR FLOW FILTERS - INSPECTION

- Release the 2 toggle clips and remove the filter bonnet cover at the top of the T180 unit
- Inspect the top of the spigot plate, which holds the clear flow filter sleeves
- If the top surface of the spigot plate is clean or is covered in a thin film of very fine dust the filter is working correctly.
- If the top surface of the spigot plate or the inside of the cover is covered with significant amounts of dust it indicates that a clearflow filter sleeve(s) is allowing dust through and needs changing.

CLEAR FLOW FILTER - CLEANING

- Frequently clean the filter sleeves by using the filter manual shaker. This should be carried out with the machine powered off and the collection bucket fitted.
- Ensure that the collection bucket is emptied regularly and is not allowed to become completely full. The collection bucket and contents may be very heavy and should be lifted carefully.

EXTERNAL CLEANING

- Clean the machine on a daily basis or when accumulated dust layers are 5mm

INTERCEPTOR COLLECTION DRUM

- When using a separate interceptor drum, emptying and moving the drum must be carried out with the appropriate lifting equipment operated by a competent person

MOTOR

- The motor should be maintained in accordance with the motor manufacturers instructions supplied with these instructions.

UK/EC DECLARATION OF CONFORMITY

UK/EC DECLARATION OF CONFORMITY

(INDUSTRIAL VACUUM CLEANERS)

Manufacturer: - Quirepace Ltd, Pennant Park, Fareham, Hants, PO16 8XU

Authorised Representative: - Headlands Consulting Limited, Carrow Castle, Geevagh, Boyle, Co Roscommon, F52 FC89, Ireland

We QUIREPACE LTD DECLARE UNDER OUR SOLE RESPONSIBILITY THAT THE PRODUCT (S) DESCRIBED BELOW: -

TI80DCF	7.5kW 400V 3PH 50Hz	55 63688 00	Serial No:	AB
TI80DLCF	7.5kW 400V 3PH 50Hz	55 63662 00	Serial No:	AA
TI80DLCF	15kW 400V 3PH 50Hz	55 63655 00	Serial No:	AC
TI60CF	4kW 400V 3PH 50Hz	55 64010 00	Serial No:	BA
TI60CFA	4kW 400V 3PH 50Hz	55 64012 00	Serial No:	BB


To which this declaration relates is/are in Conformity with the following Standards or other normative documents: -

- BS EN 60335-1:2012+A15:2021** Household and similar electrical appliances.
Safety - General requirements.
- BS EN 60335 - 2 - 69: 2012** Particular requirements, for wet and dry vacuum cleaners,
including, power brush for industrial and commercial use.
- BS EN 61000 - 6 - 4: 2019** Electromagnetic compatibility (EMC) - Generic standards.
Emission standard for industrial environments

Following the provisions of the directives: -

Machinery Directive 2006/42/EU
 Low Voltage Directive 2014/35/EU Electromagnetic Compatibility Directive 2014/30/EU





G Hall / M Brown Senior Engineers
 R Pescott Managing Director

DATE 15/05/2023