



Metcalfe EP10, NA10, EP15 & NA15

10lb (4.5kg) & 15lb (6.8kg)

Bench Mounted Peelers

Service Manual



EP10

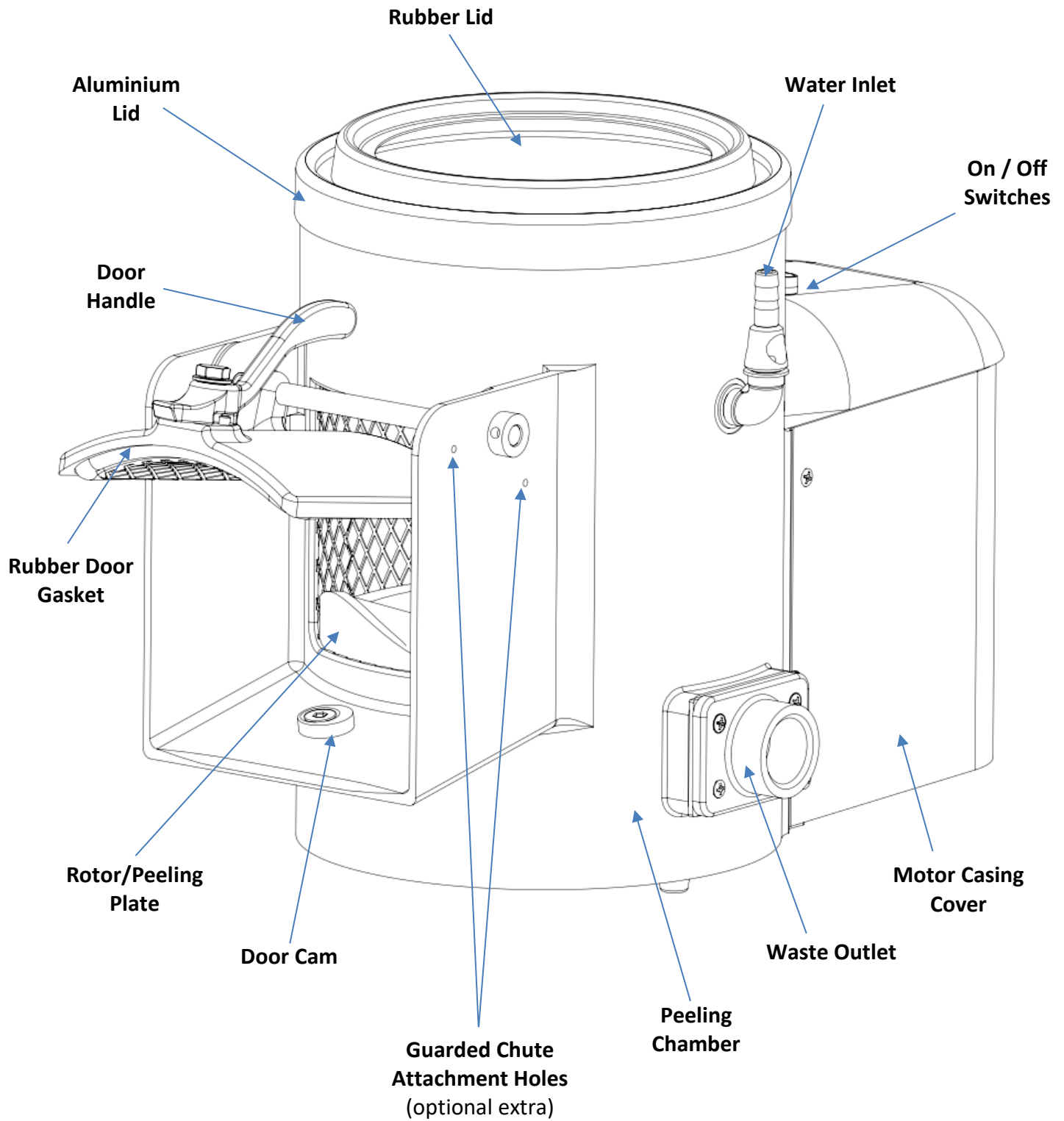


NA15

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Metcalfe Bench Potato Peeling Machines



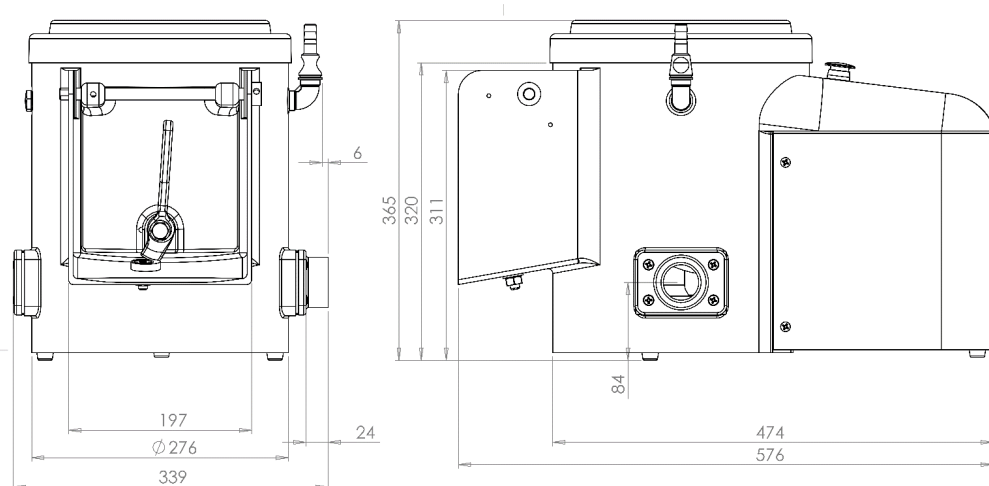
Technical Specifications

Model	Capacity (Kg)	Phase (Ø)	Motor (Volt)	Frequency (Hz)	AMP (A)	Power (kW / hp)
EP10 & NA10	4.5	1	220	50	2.8	0.25 / 0.33
EP15 & NA15	6.8	1	220	50	2.8	0.25 / 0.33

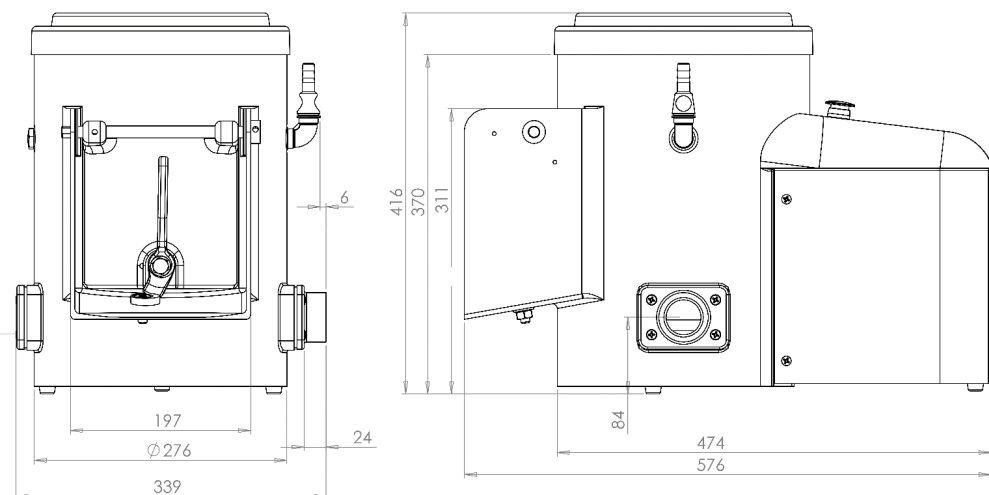
Dimensions | Shipping Information

Model	Overall Dimensions D x W x H (mm)	Net Weight (Kg)	Packed Dimensions D x W x H (mm)	Packed Weight (Kg)	Volume (m3)
EP10 & NA10	576 x 339 x 365	27	665 x 265 x 480	30	0.04
EP15 & NA15	576 x 339 x 416	30	665 x 265 x 480	34	0.04

EP10 & NA10 Drawing

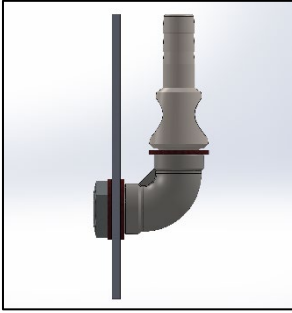


EP15 & NA15 Drawing



Installation

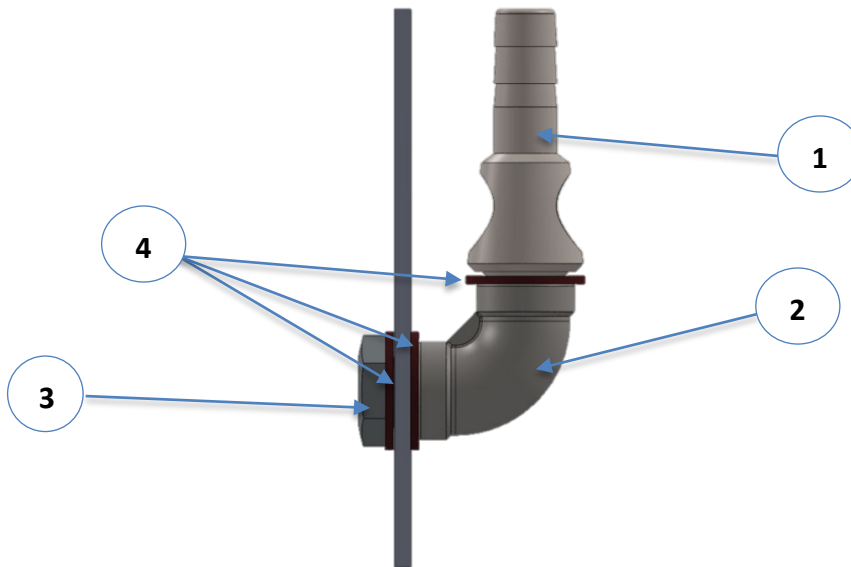
Water Supply Connection



The water inlet nozzle connector is supplied and should be fitted to the outside of the machine facing upwards. It has two possible inlet locations, one on either side of the machine, whichever is more convenient for your installation.

1. Thread the water inlet valve (1) onto the elbow joint (2), ensuring a fibre washer (4) is placed between the two.
Ensure the valve is tightened securely to eliminate leakages.
2. Take the water inlet bush (3) with a fibre washer (4) placed over it and feed through the chamber wall from the inside.

3. Place another fibre washer (4) onto the water inlet bush on the exterior side of the chamber. Take the assembly from step 1 and thread the remaining elbow joint opening onto the water inlet bush.
Ensure the assembly is tightened securely to eliminate leakages. Also ensure the water inlet valve is pointing directly upwards, otherwise the air gap does not function correctly.



Connect the water supply pipe to the water inlet, connect the other end of the supply pipe to a cold water tap or shut off valve that can be used to supply a sufficient water flow into the machine.



Waste Outlet Connection

The waste outlet is screwed onto the right-hand side of the machine but can be used on either side of the machine to suit your installation. Pipe work for the waste outlet can be purchased from a hardware store, or we can supply as an optional extra a waste pipe, elbow and coupling. This is to be fitted to the waste outlet casting to discharge the waste into a sink.

Having connected the water inlet, waste outlet and the electrical supply, the machine is ready for operation.

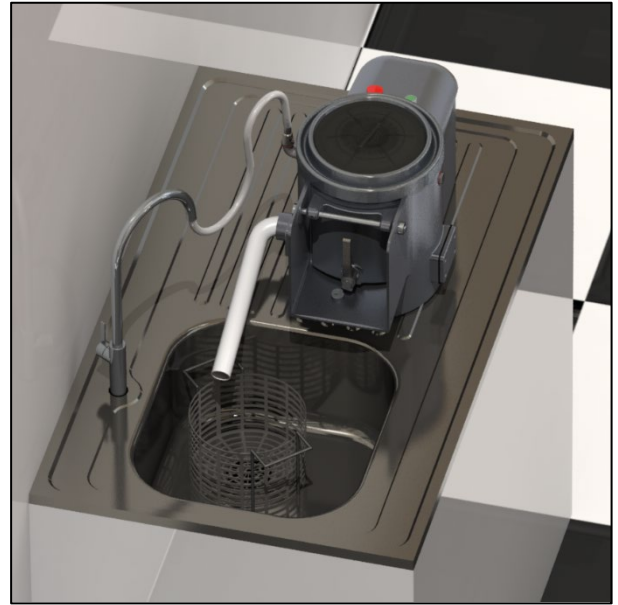
Installation of Optional Extras

Installation Kit (optional extra)



Comprises a Sink Skip, Length of Waste Pipe, Elbow & Coupling, 3ft Length Water Inlet Hose & Tap Connector.

This image shows a typical installation utilising the kit.



Waste Disposal Adaptor (optional extra)



The waste disposal adaptor enables the waste pipe to be connected direct to the drain. It gives an additional water supply to the waste outlet to flush away the sludge.

The waste disposal adaptor fits onto the waste outlet on the side of the peeler. Ensure that the waste disposal adaptor is vertical and securely in place.

Two adjusting screws and lock nuts are provided to adjust the water flow through the machine. The top one controls the flow through the peeler and the lower one controls the flow to the waste pipe.



Small External Interceptor (optional extra)



This image shows a typical external interceptor installation.



Tundish (optional extra)



The use of a tundish meets the requirements of water regulations G19.1, G19.3 & G19.4 contained in “The Water Supply Regulations 1999” and the “Water Byelaws 2000 (Scotland)”.

The tundish can be fitted instead of the standard water inlet nozzle supplied with all Metcalfe peelers.

Operation

Full operational instructions can be found on the side of each peeler.

The machine works off 230volt 50Hz 1 Phase supply and comes fitted with a 3-pin 13amp fused plug.

1. Ensure that the chute door is closed.
2. Turn on the machine by pressing the green start button.
3. Turn on the water supply.
4. Remove the rubber lid and load the potatoes through the top of the peeler and replace the lid.



DO NOT load the potatoes before running the unit as this will damage the bearings, shaft assembly & motor and will void the warranty.

5. Carefully remove rubber lid to check peeling progress.
6. Once peeled, open the door whilst the machine is still running to discharge the potatoes into a sink or bucket.
7. Once empty, you can then switch the machine off.



DO NOT at any point put your hand or any implement into the machine, whilst it is in operation.

Cleaning Instructions

Daily cleaning should be considered mandatory for all equipment used in the preparation of food. Once your peeler has made contact with any food product, the entire peeler, including removable parts must be thoroughly cleaned. This process is to be repeated essentially at least once a day, or at the end of each operation period. If the machine has not been used for a while it must be cleaned before use as well.

1. Switch off unit at socket.
2. Remove metal lid.
3. Unscrew the fixing screw securing the rotor plate using the box spanner provided.
4. Lift out the rotor plate using the lifting hook provided.
5. Turn on cold water supply to clean the inside of the chamber with a nylon brush.
6. To clean the rotor plate, wash in cold water **ONLY** using a nylon brush.



NEVER wash the plate in hot water or in a dishwasher as this will remove the coating.

7. Use a damp cloth to wipe the outside of the unit.



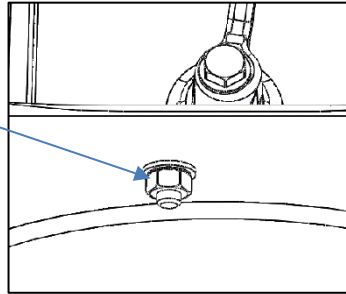
DO NOT use cleaning materials containing abrasives or bleaches.

Maintenance

How to Adjust Door Cam

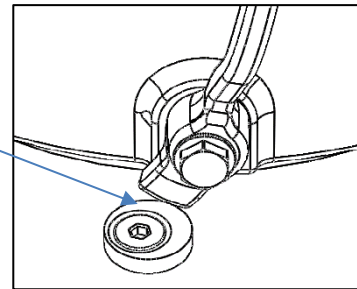
Over time the door may loosen slightly. If this happens a door cam has been fitted to enable the operator to retighten the door.

1. Undo the nut underneath the chute to loosen the cam.



2. Turn the door cam into position so that the door handle can be locked in place securely.

3. Retighten the nut to secure the door cam into its new and correct position.



Service

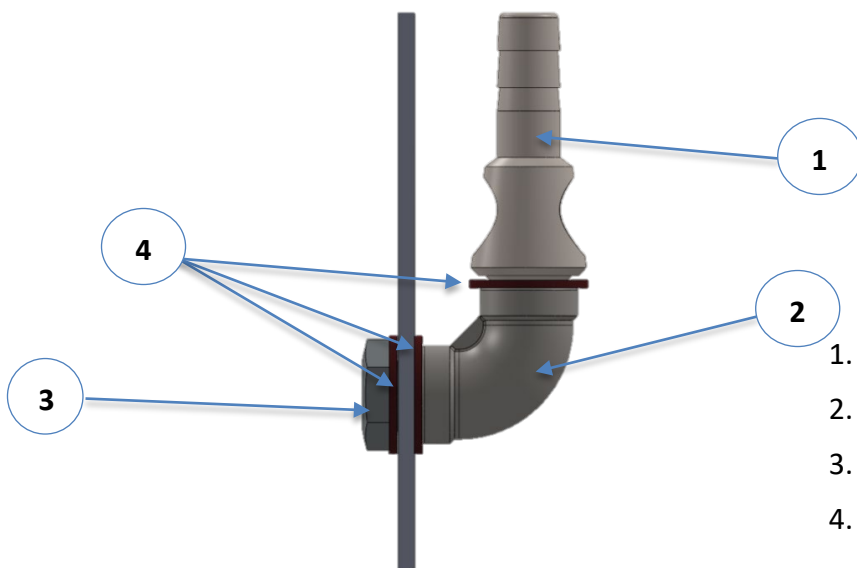
Disassembly Instructions

1. Remove rubber lid and aluminium lid.
2. Undo the rotor plate fixing screw using the box spanner provided and lift the rotor plate using the lifting hook provided.
3. Unscrew sweeper casting and remove.
4. Turn machine upside down and remove v-belt.
5. Release locking nut & screw which holds the pulley in place and remove pulley.
6. Knock out spindle down into the peeling chamber.
7. Undo the three screws which hold the bearing retainer washer, located underneath the pulley, and remove.
8. Stand machine back upright & take out the spindle assembly. (The spindle is threaded onto the sweeper. If difficulty is being experienced in removing the sweeper, it may be necessary to place the spindle in a vice to be able to release it from the sweeper).
9. If necessary, remove any remaining part of the bearings on the spindle and inside the peeling chamber housing, if original spindle is to be reused.

DO NOT re-use spindle if it is damaged.

Water Inlet Valve Assembly Instructions

4. Thread the water inlet valve (1) onto the elbow joint (2), ensuring a fibre washer (4) is placed between the two.
Ensure the valve is tightened securely to eliminate leakages.
5. Take the water inlet bush (3) with a fibre washer (4) placed over it and feed through the chamber wall from the inside.
6. Place another fibre washer (4) onto the water inlet bush on the exterior side of the chamber. Take the assembly from step 1 and thread the remaining elbow joint opening onto the water inlet bush.
Ensure the assembly is tightened securely to eliminate leakages. Also ensure the water inlet valve is pointing directly upwards, otherwise the air gap does not function correctly.

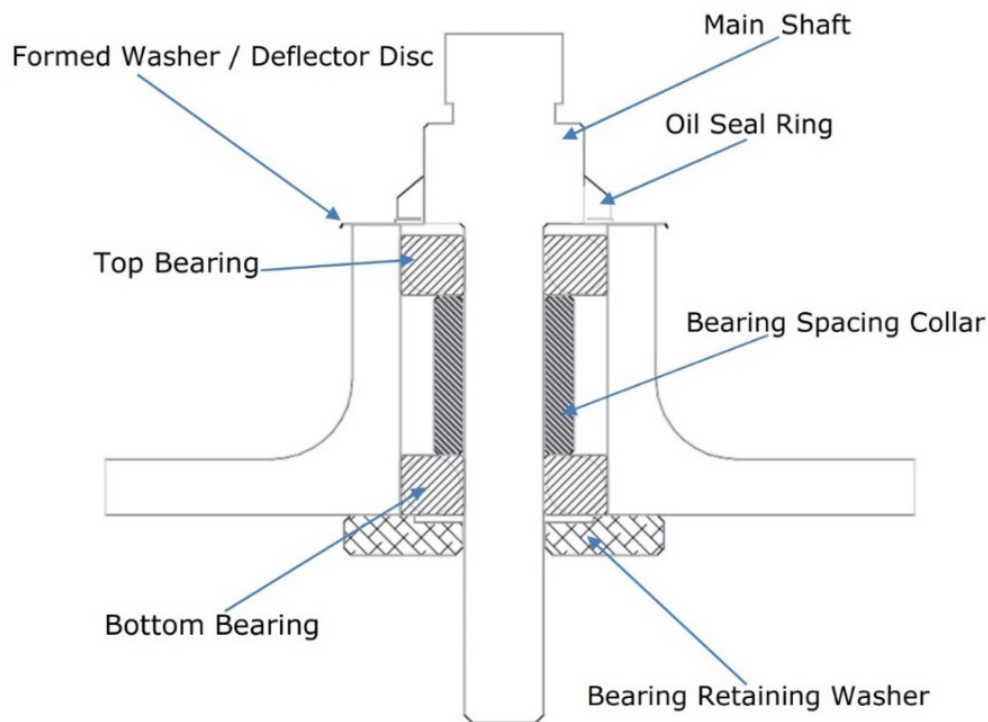


Bill of Materials:

1. Water Inlet Valve (PW08 X 1)
2. 3/8" BSP Stainless Steel Elbow (PE02 X 1)
3. Water Inlet Bush (PC07 X 1)
4. 11/16" Fibre Washer (ZZ012916 X 3)

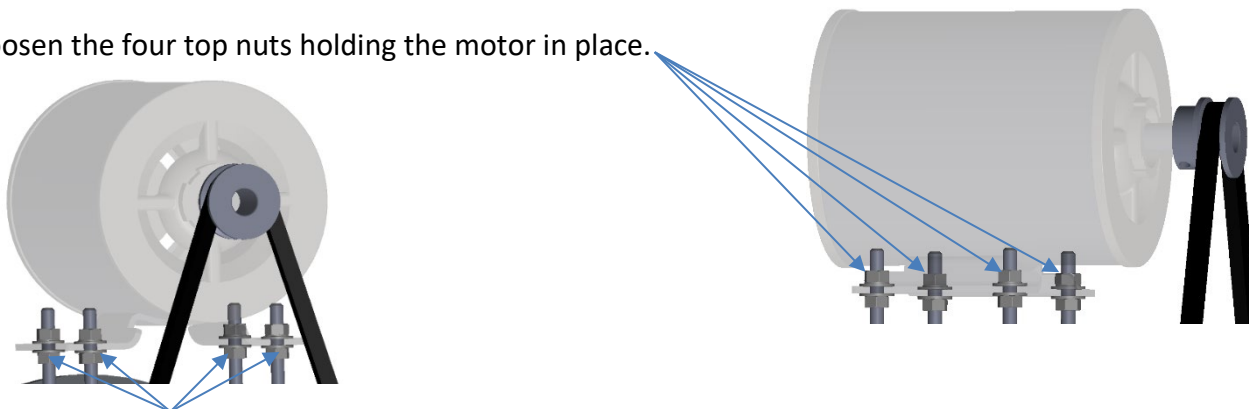
Shaft & Bearing Assembly Replacement

1. Turn the machine upside down and fit the bottom bearing into the housing from underneath the machine, ensuring it is flush with the base of the peeler.
2. Stand the machine back upright and fit the first bearing along with the bearing spacing collar onto the shaft.
3. Fit the second bearing along with the bearing spacing collar on to the shaft, and fit shaft through the first bearing, from inside the unit. Tap the shaft gently into place with a mallet, making sure that the bearing is fitted properly (the bearing should be flush with the casting or just below it).
4. Turn the machine upside down and refit the bearing retaining washer, securing it with the three screws.
5. Fit the deflector disc to the shaft (turned down outer edge facing downwards), securing with the silicon adhesive supplied. Allow to dry for 24 hours.
6. Turn the machine upside down and refit the pulley and belt.
7. Stand the machine back upright and fit the oil seal over the shaft, so that it is flush with the deflector disc.
8. Re-screw the sweeper and fit the rotor plate back into place, securing with the rotor plate fixing screw.
9. Refit the top casting and rubber lid.



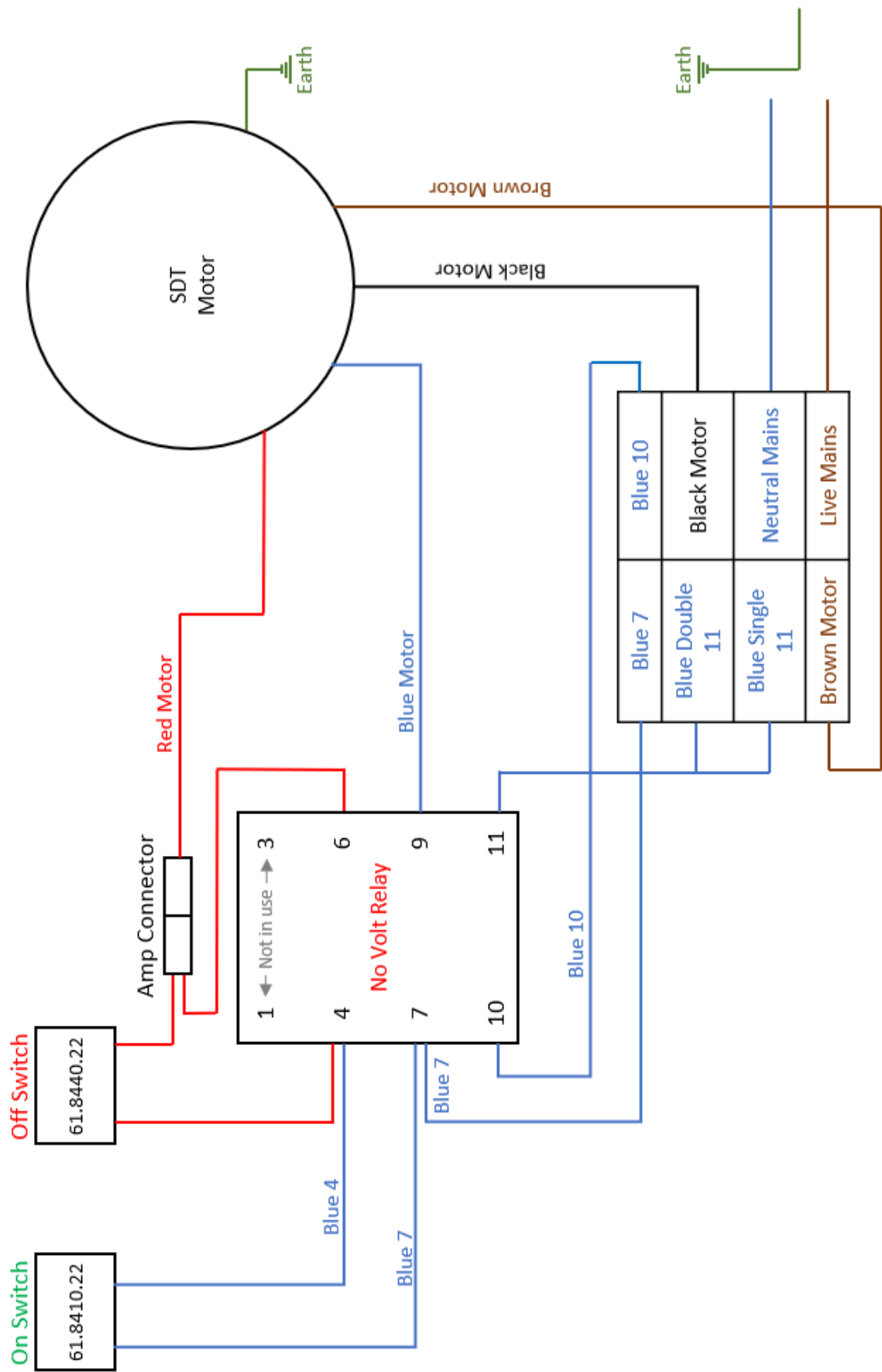
V-belt Tensioning Instructions

1. Turn machine on its front so that the motor is on top and the machine is sitting on its door (if a guarded discharge chute is fitted please remove before attempting this).
2. Lubricate supply cable with washing-up liquid. Pull cable through cable grommet into the motor cover (enough to allow removal of the motor cover).
3. Remove the motor cover by unscrewing the four screws on the motor housing cover.
4. Loosen the four top nuts holding the motor in place.



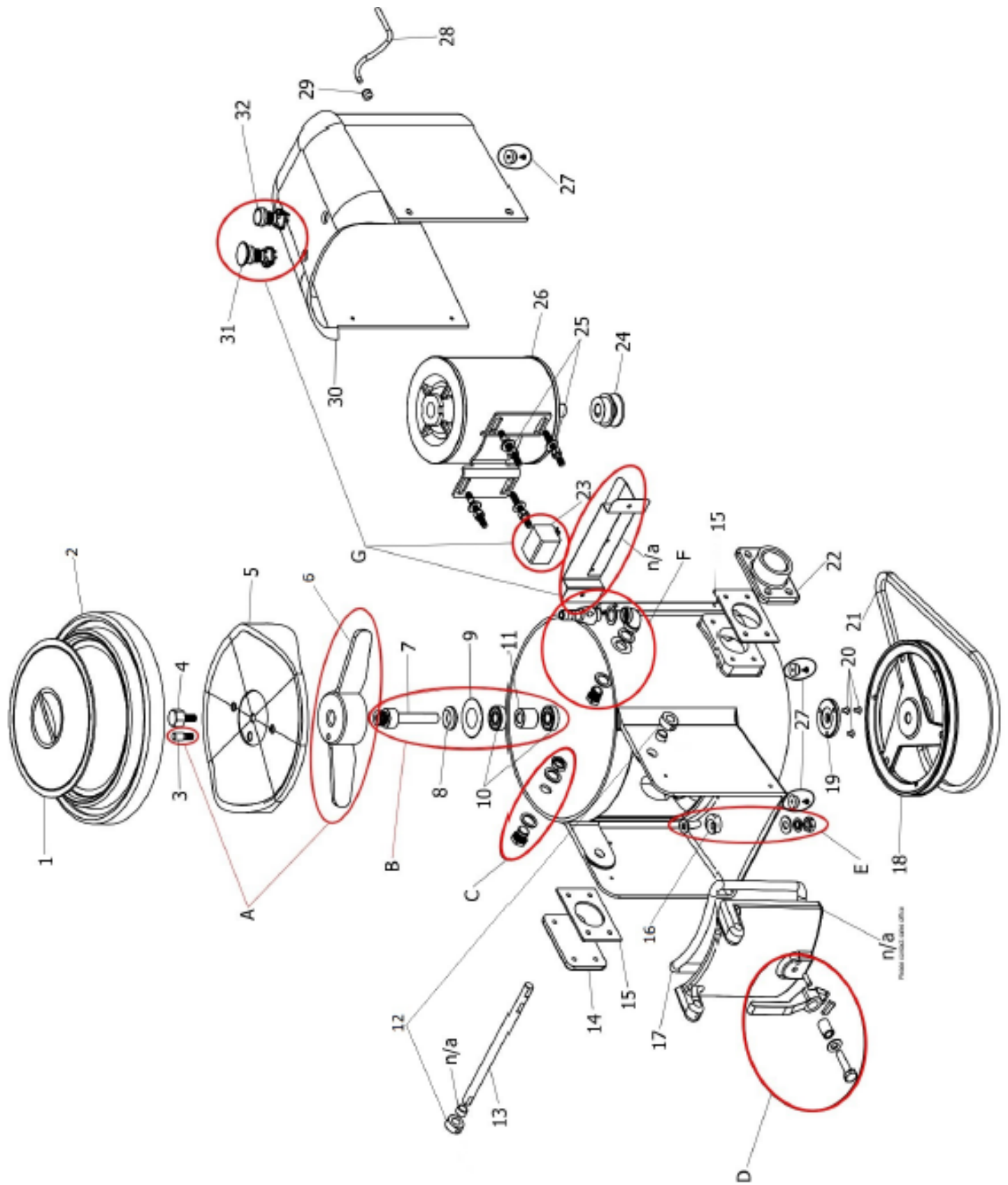
5. Tensioning of the belt can be done by adjusting the four bottom nuts on the motor studs.
6. Once you have the correct tension, tighten the four top nuts to re-secure the motor into place.
7. Refit the motor cover and pull the cable back out.

On/Off Switch Wiring Diagram



SDT Motor
08/2021

Breakdown Drawing



Parts List

Item	Quantity	Part Number	Description
1	1	PL01	Rubber Lid
2	1	9T31	Spun Lid C/W Gasket
3	1	TD07	Drive Peg
4	1	TR02	Rotor Plate Fixing Screw
5	1	TR01	Rotor Plate
6	1	TS01	Sweeper (Only)
7	1	TS02	Spindle / Shaft
8	1	TO01	Oil Seal
9	1	TW06	Washer, Formed (Deflector Disc)
10	2	TB01	Bearing
11	1	TB05	Bearing Spacing Collar
12	2	PD14M	Door Spindle Collar
13	1	TD06	Door Hinge Pin
14	1	TW02	Water Outlet Blank 1½"
15	2	TG02	Water Outlet Gasket 1½"
16	1	TD04M	Door Cam
17	1	9T15A	Door Gasket
18	1	TP07	Pulley, Drive (Large)
19	1	TR04	Bearing Retaining Washer
20	3	TS03	Screw for Bearing Retaining Washer
21	1	TB04	Belt, Ref: A34/A880
22	1	TW01	Water Outlet 1½"
23	1	ECN01	No-Volt Relay (Only)
24	1	TP06	Pulley for Motor (Small)
25	4	TM04	Motor Stud 2½"
26	1	TM01/SDT	Motor, 1/3 HP, 220/240V 50Hz
27	3	9T14	Rubber Foot with Screw
28	1	TC07	Power Cable, 2.5m Length 13amp
29	1	TC04	Cable Gromet
30	1	TM02	Motor Cover
31	1	TS14	Switch, Off (Mushroom Head)
32	1	TS13	Switch, On
-	1	9EC01	Box Spanner
-	1	TL03	Lifting Hook

Assemblies Parts List



Item	Quantity	Part Number	Description
A	1	9T13	Sweeper Assembly Inc Parts: TD07 & TS01
B	1	9T11	Bearings, Shaft Assembly Inc Parts: TB01 x 2, TB05, TO01, TS02, TS07 & TW06
C	1	9P06	Chamber Blanking Bolt, Nut & Washers Inc Parts: PC06 & PN02
D	1	9T02MM	Door Handle, Bolt & Bush (U/O)
E	1	9T23M	Door Cam, Bolt, Nut & Washer
F	1	9P84	Water Inlet, Nut & Washer
G	1	9T29	No Volt Relay Assembly C/W On & Off Switches Inc Parts: ECN01, TI02, TP10, TS10, TS11, TS13, TS14, TT06, TT07, TT08 & WDT01

Spare Parts and Service

For more information on Metcalfe spare parts, accessories and service support please contact us on the details below.


Please always quote the Serial Number of the machine. This can be found on the serial number plate which is located on the rear of the motor cover.





metcalfeTM

Tel: +44 (0)1766 830 456 Fax: +44 (0)1766 831 170

Serial No: EPU0/1234/7B			
Model: EP10	Phase: 1		
220 - 240 V	50 Hz		250 W
M: April	Yr: 2017		30,00 Kg

Metcalfe Sales & Spares Department

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Metcalfe Service Department

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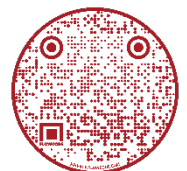
Additional copies of this service manual can be obtained by contacting the sales or service department.

We reserve the right to make changes in design and specification to any product without prior notification.

8/2021

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