



**HIGH-PERFORMANCE POWER TOOLS & ACCESSORIES**

DRILL • SAW • SURFACE PREP • METAL FINISHING • MIXING • NON-SPARKING • DUST COLLECTION

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# PTX Eco Smart

## Operating Manual

## Schematic

## Parts list





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## **Safety Instructions For All Tools**

- **STAY ALERT, WATCH WHAT YOU ARE DOING** and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite injuries.
- **CONSIDER WORK AREA ENVIRONMENT.** Don't expose power tools to rain. Don't use power tools in damp or wet locations. Keep work area well lit. Do not use tool in presence of flammable liquids or gases.
- **GUARD AGAINST ELECTRIC SHOCK.** Prevent body contact with grounded surfaces. For example: pipes, radiators, ranges and refrigerator enclosures.
- **KEEP CHILDREN AWAY.** Do not let visitors contact too or extension cord. All visitors should be kept away from work area.
- **STORE IDLE TOOLS.** When not in use, tools should be stored in dry, and high or locked-up place - out of reach if children.
- **DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was intended.
- **USE RIGHT TOOL.** Don't force small tool or attachment to do the job of a heavy-duty tool. Don't use tool for purpose not intended-for example - don't use PTX Eco Smart for grinding tree limbs or logs.
- **DRESS PROPERLY.** Do not wear loose clothing or jewelry. They can be caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.
- **USE SAFETY GLASSES.** Also use face or dust mask if grinding operation is dusty.
- **DON'T ABUSE CORD.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
- **SECURE WORK.** Use clamps or vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
- **DON'T OVERREACH.** Keep proper footing and balance at all times.
- **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords period damaged, have repaired by authorized service, control extension cords periodically and replace if damaged. Keep it dry, clean, and free from oil and grease.
- **DISCONNECT OR LOCK OFF TOOLS** when not in use, and when changing accessories, such as wheels, rings and rolls.
- **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- **AVOID UNINTENTIONAL STARTING.** Don't carry tool with finger on switch. Be sure switch is off when plugging in.
- **EXTENSION CORDS.** Make sure your extension cords in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The following table shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller gage number, the heavier the cord.

You have made a good decision by buying our **PTX Eco Smart**. This grinding and polishing machine with its large variety of tools accessories can be universally used for most surface problems. Due to its ergonomic form and low weight, it is particularly easy to operate.

You can obtain very decorative surfaces through the exact continuous speed control at the handle. A built-in tachogenerator provides powerful numbers of revs. Technical and mechanical features have especially been tuned.

**Important! PTX wheels are only for surface grinding, not for edge grinding.**

## Use - Operating

**Do not work without a PTX protective cover !**

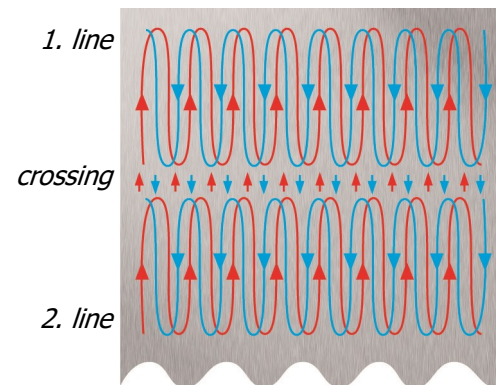
Using of the tools:

1. Press the spindle lock on the housing and simply slide on the grinding wheels, brushes or wheels turning in the correct direction on to the finned shaft. They will be secured automatically.
2. Even narrow grinding wheels can be used on the PTX Eco Smart and above all positioned freely on the finned shaft (no spacer rings required).
3. Grinding in corners - simply slide the grinding roller on the finned shaft a littel towards the outside. (Before press the spindle lock!)

**Important information about handling for grinding and satin without any shadows!**

Per short grinding hubs about 11 to 15" length, forward and backward in machine direction and by concurrent and sidewise cogging the machine, you will get seamless transition and decorative surfaces (Oscillation-effect!).

Bigger metal-sheets are processed stepwise. By reduced grinding pressure from one to the other grinding area, the different grinding areas will be one shadow-free surface.



## Recommended RPM ranges

Easy continuous speed control due to knurl wheel at the handle: 1.000 - 3.800 rpm

**Position B-D** Ideal speed range for most tools and allows very clean, shadow-free surfaces, particularly with **PTX Eco Smart flap-, combi-mix, gum and fleece wheels**. In order to remove dirt or scratches, or when using brushes, speed can be increased.

**Position D-E** Recommended for **PTX** polishing tools (felt, SuperPolish e.g.) up to mirror finish.

**Position B-C** Recommended for grinding with **PTX** grinding belts and sleeves.

**Scan the QR code or visit [www.csunitec.com/metal-surface-finishing](http://www.csunitec.com/metal-surface-finishing) to:**

- Access CS Unitec's guides on how to accomplish different finishes with the PTX
- See the 100's of abrasives, accessories and available for the PTX Eco Smart and other metal finishing tools
- Contact us to speak to a CS Unitec metal finishing specialist



## Grinding belt accessory

By fitting our abrasion-proof PTX Eco Smart grinding belt roll (P/N 47006), you can rapidly convert the PTX Eco Smart into a belt grinding tool for working round stock, e.g. pipes. The grinding belt roll is subject to wear. If the side stainless steel discs of the belt driving roll are worn out due to wear, the product must be replaced with a new one.



## Grinding belt use

**(Please turn the grinding- and polishing belts inside!)**

The grinding or polishing belt is centrally moved over the work piece and grinding belt roll, pulled tight rearwards and used with roughly position B-C. The belt works over the desired points by tensioning and lateral displacement.



## Maintenance

### 1. Carbon brushes

Only wear carbon brushes up to the white mark. **Only use the replacement carbon brushes supplied by us.** Our **guarantee obligations no longer apply**, if you do not use our carbon brushes. Pull the plug out of the socket, loosen screws (pos. 149) and slide cover (pos. 110). Disconnect cords, remove carbon brushes, clean the carbon holder with pressure-air. Insert new carbon brushes (which must not jam in the carbon holder). Insert contact discs of the cords in the lug adapter plug and slide on to the carbon holder contact plate and refit the compression springs. Check the correct positioning of the switch and again mount the cover (do not jam in the cords). Sparking of the brush can be observed through the air inlet slots. Switch off the machine immediately in the case of strong sparking. To avoid serious damage as a result, it is advisable to send the machine to us.

### 2. Cleaning

Metal dust deposits in the interior of the machine can be prevented by blowing out with compressed air through the air inlet slots.

### 3. Gear

Do not loosen the screws on the gear head within the guarantee period, because otherwise our guarantee no longer applies. Replace the gear grease after about 1,500 operating hours. By loosening screws (pos. 210), the gear cover (pos. 213) can be removed, the old gear grease removed and replaced by 16 g gear grease.

### 4. PTX Eco Smart adapter & expansion roller

**These products are subject to wear.** The Eco Smart adapter (pos. 161) must be replaced with a new Eco Smart adapter when worn out or after 1500 hours of use or after 1 year from the date of purchase by the end user, whichever occurs first. If the tools on the Eco Smart adapter (P/N 42004) or the expansion roller (P/N 47005) are no longer fixed due to wear and are slipping, the adapter or the expansion roller must also be replaced, regardless of the running time.

## Technical Data

**1,710 Watt**, 110 - 120 volts, 50 Hz.

Continuous speed regulation by fitted tachogenerator (speed-stable). Weight about 7,7 lbs (3,5 kg).

**Noise/vibration information:** The typical weighted acceleration is 23 ft/s<sup>2</sup> (7 m/s<sup>2</sup>).

Typically the A-weighted noise levels are: Sound pressure level: 87 db (A).

Sound power level: 100 db (A). Wear ear protection!

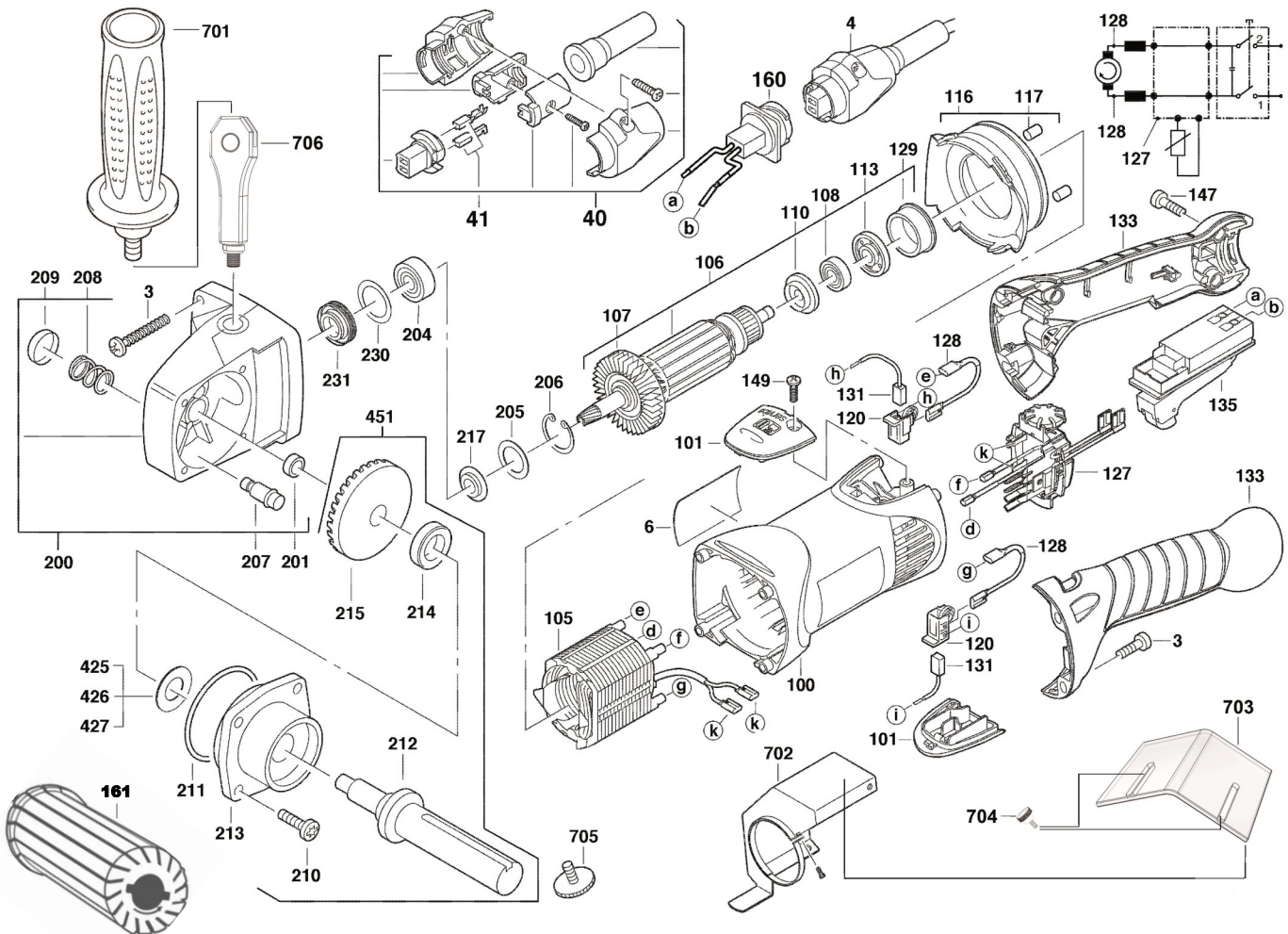
## Guarantee

A 12 month guarantee (as from invoice date) is given for all technical and mechanical parts, except in the case of outside culpability.

**Spares can be supplied according to the list. We will carry out necessary repairs.**

# PTX Eco Smart Schematic

## Type 1.710 - 120 V



# PTX Eco Smart Parts list

## Type 1.710 - 120 V

Pos.	Item-No.	Designation	Pos.	Item-No.	Designation
3	52003-3	Screw	200	52265	Gear box with threaded insert
4	52004-2	Cable ( 4 m ) 110-120 V	201	52201	sleeve
100	52100-3	Motor-plastic case	204	52204	Ball bearing
101	52101-3	Service case cover	205	52205	Washer
105	52251a	Magnetic field 110 V	206	52206	Locking ring
106	52252a	Armature incl. pinion 110 V	207	52207	Locking pin
107	52107	Fan	208	52208	Compressing spring
108	52108	Ball bearing	209	52209	Push button
110	52110	Sealing ring	210	52210	Screw
113	52113	Magnetic ring	211	52211	Spacer
116	52253	Flange	212	52212	Spindle shaft
117	52117	Spacer ring	213	52213	Bearing shield
120	52120-3	Carbon brush holder	214	52214-3	Spacer ring
127	52127-2	Electronic-unit 110 volts	215	52215-3	Crown wheel
128	52128	Cable	217	52217	Sealing ring
129	52129	Bearing cover	230	52230	Washer
131	52131-1	Carbon brush 110 volts	231	52231-3	Nut
133	52133	switch handle with softgrip	701	52700	Grip with foam M8x50
135	52135-3	Switch	702	52702	Protection cover complete
147	52003-3	Screw	703	52706	Polycarbonat extension
149	52149-3	Screw	704	65208	Knurled screw
160	52160-3	Cable connection	705	50048	Screw of spindle shaft
161	42004	PTX Eco Smart Adapter	706	52710	Variable handgrip

# CE 94 attachment for manual

## ENGLISH

### EC-DECLARATION OF CONFORMITY

We declare under our sole responsibility that the product described under "Technical Data" fulfills all the relevant provisions of the directives 2011/65/EU (RoHS), 2004/108/EC (until 19 April 2016), 2014/30/EU (from 20 April 2016), 2006/42/EC and the following harmonized standards have been used: EN 60745-1:2009+A11:2010, EN 60745-2-3:2011+A2:2013+A11:2014+A12:2014+A13:2015, EN 55014-1:2006+A1:2009+A2:2011, EN 55014-2:1997+A1:2001+A2:2008, EN 61000-3-2:2014, EN 61000-3-3:2013, EN 50581:2012

## DEUTSCH

### CE-KONFORMITÄTSERKLÄRUNG

Wir erklären in alleiniger Verantwortung, dass das unter „Technische Daten“ beschriebene Produkt mit alle relevanten Vorschriften der Richtlinie 2011/65/ EU (RoHS), 2004/108/EG (bis 19. April 2016), 2014/30/EU (ab 20. April 2016), 2006/42/EG und den folgenden harmonisierten normativen Dokumenten übereinstimmt: EN 60745-1:2009+A11:2010, EN 60745-2-3:2011+A2:2013 +A11:2014+A12:2014+A13:2015, EN 55014-1:2006+A1:2009+A2:2011, EN 55014-2:1997+A1:2001+A2:2008, EN 61000-3-2:2014, EN 61000-3-3:2013 EN 50581:2012

## FRANÇAIS

### DECLARATION CE DE CONFORMITÉ

Nous déclarons sous notre propre responsabilité que le produit décrit aux „Données techniques“ est conforme à toutes les dispositions des directives 2011/65/EU (RoHS), 2004/108/CE (jusqu'au 19 April 2016), 2014/30/UE (à partir du 20 April 2016), 2006/42/CE et des documents normatifs harmonisés suivants: EN 60745-1:2009+A11:2010, EN 60745-2-3:2011+A2:2013 +A11:2014+A12:2014+A13:2015, EN 55014-1:2006+A1:2009+A2:2011, EN 55014-2:1997+A1:2001+A2:2008, EN 61000-3-2:2014, EN 61000-3-3:2013 EN 50581:2012

## ITALIANO

### DICHIARAZIONE DI CONFORMITÀ CE

Dichiariamo sotto la nostra esclusiva responsabilità che il prodotto descritto ai „Dati tecnici“ corrisponde a tutte le disposizioni delle direttive 2011/65/EU (RoHS), 2004/108/CE (fi no a 19 Aprile 2016), 2014/30/UE (fi no a 20 Aprile 2016), 2006/42/CE e successivi documenti normativi armonizzati: EN 60745-1:2009+A11:2010, EN 60745-2-3:2011+A2:2013+A11:2014+A12:2014+A13:2015, EN 55014-1:2006+A1:2009+A2:2011, EN 55014-2:1997+A1:2001+A2:2008, EN 61000-3-2:2014, EN 61000-3-3:2013 EN 50581:2012

## NEDERLANDS

### EC - VERKLARING VAN OVEREENSTEMMING

Wij verklaren in uitsluitende verantwoording dat het onder „Technische gegevens“ beschreven product overeenstemt met alle relevante voorschriften van de richtlijn 2011/65/EU (RoHS), 2004/108/EG (tot 19 April 2016), 2014/30/EU (vanaf 20 April 2016), 2006/42/EG en de volgende geharmoniseerde normatieve documenten: EN 60745-1:2009+A11:2010, EN 60745-2-3:2011+A2:2013+A11:2014+A12:2014+A13:2015, EN 55014-1:2006+A1:2009+A2:2011, EN 55014-2:1997+A1:2001+A2:2008, EN 61000-3-2:2014, EN 61000-3-3:2013, EN 50581:2012

## DANSK

### CE-KONFORMITETSERKLÆRING

Vi erklærer som eneansvarlig, at det under „Tekniske data“ beskrevne produkt stemmer overens med alle relevante forskrifter, der følger af direktiv 2011/65/ EU (RoHS), 2004/108/EF (indtil 19 April 2016), 2014/30/EU (fra 20 April 2016), 2006/42/EF samt af følgende harmoniserede normative dokumenter: EN 60745-1:2009+A11:2010, EN 60745-2-3:2011+A2:2013+A11:2014+A12:2014+A13:2015, EN 55014-1:2006+A1:2009+A2:2011, EN 55014-2:1997+A1:2001+A2:2008, EN 61000-3-2:2014, EN 61000-3-3:2013, EN 50581:2012

## NORGE

### CE-SAMSVARERKLÆRING

Vi erklærer i alene ansvar at produktet beskrevet i „Teknisk data“ overensstemmer med alle relevante forskrifter til EU direktiv 2011/65/ EU (RoHS), 2004/108/EC (til April 19, 2016), 2014/30/EU (fra 20 April 2016), 2006/42/EF og de følgende harmoniserte normative dokumenter. EN 60745-1:2009+A11:2010, EN 60745-2-3:2011+A2:2013+A11 :2014+A12:2014+A13:2015, EN 55014-1:2006+A1:2009+A2:2011, EN 55014-2:1997+A1:2001+A2:2008, EN 61000-3-2:2014, EN 61000-3-3:2013 EN 50581:2012

## PORTUGUES

### DECLARAÇÃO DE CONFORMIDADE CE

Declaramos sob responsabilidade exclusiva, que o produto descrito sob „Dados técnicos“ corresponde com todas as disposições relevantes da diretiva 2011/65/EU (RoHS), 2004/108/CE (até 19 April 2016), 2014/30/UE (desde 20 April 2016), 2006/42/CE e dos seguintes documentos normativos harmonizados. EN 60745-1:2009+A11:2010, EN 60745-2-3:2011+A2:2013 +A11:2014+A12:2014+A13:2015, EN 55014-1:2006+A1:2009+A2:2011, EN 55014-2:1997+A1:2001+A2:2008, EN 61000-3-2:2014, EN 61000-3-3:2013 EN 50581:2012

Geretsried, 2024-08-27



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