

# **Grinder & Sander**

# 322BE1-BP





France **TOOL FRANCE** 9 Rue des Pyrénées, 91090 LISSES, France www.promac.fr

# CE-Conformity Declaration CE-Konformitätserklärung Déclaration de Conformité CE

Product / Produkt / Produit: Grinder & Sander

322BE1-BP

**Brand / Marke / Marque:** 

#### **PROMAC**

Manufacturer / Hersteller / Fabricant: TOOL FRANCE

9 Rue des Pyrénées, 91090 LISSES, France

We hereby declare that this product complies with the regulations Wir erklären hiermit, dass dieses Produkt der folgenden Richtlinie entspricht Par la présente, nous déclarons que ce produit correspond aux directives suivantes

#### 2006/42/EC

Machinery Directive Maschinenrichtlinie Directive Machines

#### 2014/30/EU

electromagne compa bility elektromagne sche Verträglichkeit compa bilité électromagné que

#### 2011/65/EU

RoHS directive / RoHS-Richtlinie / Directive RoHS

designed in consideration of the standards und entspechend folgender zusätzlicher Normen entwickelt wurde et été développé dans le respect des normes complémentaires suivantes

> EN ISO 12100:2010 EN 62841-1:2015 EN 62841-3-4:2016 EN61000-6-4:2007+A1:2011

Responsible for the Documentation / Dokumentations-Verantwortung / Résponsabilité de Documentation:
Head Product-Mgmt. / Leiter Produkt-Mgmt. / Resp. Gestion des Produits
TOOL FRANCE

2020-08-19 Christophe SAINT SULPICE, General Manager

TOOL FRANCE 9 Rue des Pyrénées, 91090 LISSES, France

### **Safety Rules for All Power Tools**

- 1. Read and become familiar with the entire instruction manual. Learn the tool's applications, limitations and possible hazards.
- 2. Earth all tools. If the tool is equipped with a three-prong plug. It must be plugged into a three-contact electric outlet. The third prong is a ground to provide protection against accidental electrical shock. If an adapter is used to accommodate a tow-contact outlet, the adaptor's grounding lug must be connected to a known ground. Never remove the third prong on a three prong plug.
- 3. Check damaged parts. A guard or any other part that is damaged should be checked to ensure that it will operate properly and perform its intended function before the tool is used further. Check for proper alignment of moving parts and for possible broken parts, loose mountings, or any other condition that could affect the tool's operation. A guard or other damaged part should be properly repaired or replaced.
- 4. Disconnect power before servicing and when changing accessories such as blades, cutters.
- 5. Keep guards in place and in working order.
- 6. Protect your eyes from being injured by objects thrown by a power tool. Always wear safety glasses or safety goggles.
- 7. Wear a face mask or dust mask if the cutting operation produces dust.
- 8. Don't force the tool. It will give a better and safer performance when used on jobs for which it was designed.
- 9. Avoid accidental starting. Ensure that the power switch is in the OFF position before plugging in the power cord. Remove the switch when the tool is not being used.
- 10. Remove adjusting keys and wrenches. Ensure that keys and adjusting wrenches are removed from the tool before turning it on.
- 11. Drugs, alcohol, and medication. Do not operate tool if you are under the influence of drugs, alcohol, or medication that could affect your ability to use the tool properly.
- 12. Use recommended accessories. Using improper accessories can be hazardous. If in doubt, check the instruction manual.
- 13. Never stand on a tool. Falls can result in injury.
- 14. Never leave a tool running unattended. Turn the power switch OFF. Don't leave the tool until it has come to a complete stop.
- 15. Always remove the power cord plug from the electric outlet when making adjustments, changing parts, cleaning, or working on the table.
- 16. Avoid dangerous conditions. Don't use power tools in wet or damp areas or expose them to rain. Keep your work area clean and well lighted. Do not use power tools in areas where fumes from paint, solvents, or flammable liquids pose a potential hazard.
- 17. Keep visitors and children away. Other people should keep a safe distance from the work area, especially when the tool is operating.

- 18. Use the proper tool. Don't force a tool to do a job for which it was not designed.
- 19. Keep tools in top condition. Keep them clean and sharp for best and safest performance. Follow the instructions for changing accessories and lubricating.
- 20. Secure all work. When practical use clamps or a vise to hold work. It is safer than using your hands and prevents round or odd shaped pieces from turning.
- 21. Don't overreach. Keep proper footing and balance at all times. Wear oil resistant rubber-soled footwear. Keep the floor clear of oil, scrap wood, and other debris.
- 22. Wear proper clothing and, if necessary, protective hair covering. Loose clothing or jewelry can get caught in moving parts.
- 23. Make the workshop childproof with padlocks, master switches, or by removing starter keys.

#### **EN – ENGLISH (Original instructions)**

Operating Instructions

Dear Customer.

Many thanks for the confidence you have shown in us with the purchase of your new machine. This manual has been prepared for the owner and operators of a PROMAC grinder to promote safety during installation, operation and maintenance procedures. Please read and understand the information contained in these operating instructions and the accompanying documents. To obtain maximum life and efficiency from your machine, and to use the machine safely, read this manual thoroughly and follow instructions carefully.

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#### 1. Declaration of conformity

On our own responsibility we hereby declare that this product complies with the regulations\* listed on page2.

Designed in consideration with the standards\*\*.

#### 2. Warranty

The Tool France guarantees that the supplied product is free from material defects and manufacturing faults.

This warranty does not cover any defects which are caused, either directly or indirectly, by incorrect use, carelessness, accidental damage, repair, inadequate maintenance or cleaning and normal wear and tear.

Any warranty details (i.e. warranty period) can be found in the General Terms and Conditions (GTC) that are integral part of the contract. These GTC can be viewed at the website of your dealer or sent to you upon request.

Tool France reserves the right to make changes to the product and accessories at any time.

#### 3. Safety

#### 3.1 Authorized use

This grinder is designed for grinder metal and a similar grinder only. Machining of other materials is not permitted and may be carried out in specific cases only after consulting with the manufacturer.

The proper use also includes compliance with the operating and maintenance instructions given in this manual.

The machine must be operated only by persons familiar with its operation and maintenance and who are familiar with its hazards.

The required minimum age must be observed.

The machine must only be used in a technically perfect condition.

When working on the machine, all safety mechanisms and covers must be mounted.

In addition to the safety requirements contained in these operating instructions and your country's applicable regulations, you should observe the generally recognized technical rules concerning the operation of metalworking machines.

Any other use exceeds authorization.

In the event of unauthorized use of the machine, the manufacturer renounces all liability and the responsibility is transferred exclusively to the operator.

#### 3.2 General safety notes

Metalworking machines can be dangerous if not used properly. Therefore, the appropriate general technical rules as well as the following notes must be observed.



Read and understand the entire instruction manual before attempting assembly or operation.



Keep this operating instruction close by the machine, protected from dirt and humidity, and pass it over to the new owner if you part with the tool.

No changes to the machine may be made.

Daily inspect the function and existence of the safety appliances before you start the machine.

Do not attempt operation in this case, protect the machine by unplugging the power cord.

Before operating the machine, remove tie, rings, watches, other jewelry, and roll up sleeves above the elbows.

Remove all loose clothing and confine long hair.

**Wear safety shoes**; never wear leisure shoes or sandals.

Always wear the approved working outfit:

- safety goggles
- ear protection
- dust protection







Do not wear gloves while operating this machine.



Install the machine so that there is sufficient space for safe operation and workpiece handling.

Keep work area well lighted.

The machine is designed to operate in closed rooms and must be bolted stable on firm and levelled table surface

Make sure that the power cord does not impede work and cause people to trip.

Keep the floor around the machine clean and free of scrap material, oil and grease.

Stay alert!

Give your work undivided attention.

Use common sense. Do not operate the machine when you are tired.

Keep an ergonomic body position. Maintain a balanced stance at all times.

Do not operate the machine under the influence of drugs, alcohol or any medication. Be aware that medication can change your behavior.



Never reach into the machine while it is operating or running down.



Keep children and visitors a safe distance from the work area.

Never leave a running machine unattended. Before you leave the workplace switch off the machine.

Do not operate the electric tool near inflammable liquids or gases.

Observe the fire fighting and fire alert options, for example the fire extinguisher operation and place.

Do not use the machine in a dump environment and do not expose it to rain.

Always use a suitable dust collection device

Machine only stock which rests securely on the table.

Specifications regarding the maximum or minimum size of the workpiece must be observed.

Do not stand on the machine.

Connection and repair work on the electrical installation may be carried out by a qualified electrician only.



Have a damaged or worn power cord replaced immediately.

Make all machine adjustments or maintenance with the machine unplugged from the power

source.



#### 3.3 Remaining hazards

When using the machine according to regulations some remaining hazards may still exist.

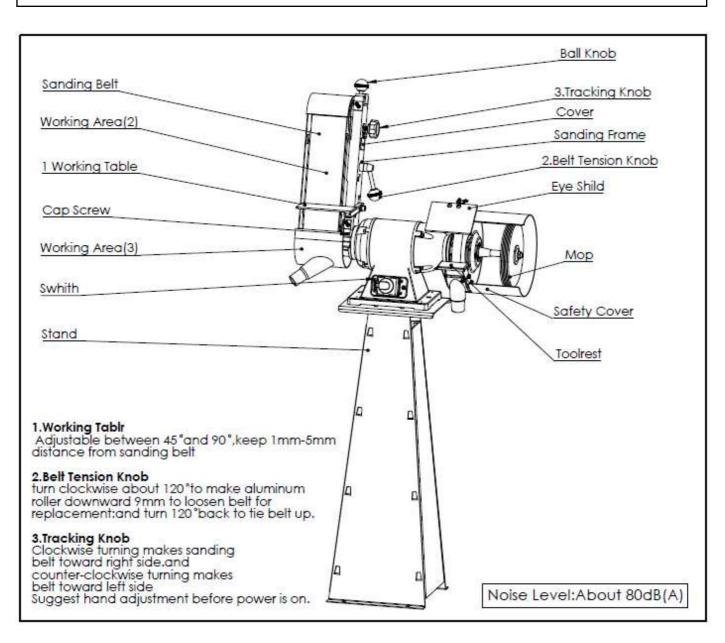
Thrown workpieces and workpiece parts can lead to injury.

Dust and noise can be health hazards. Be sure to wear personal protection gear such as safety goggles and dust mask. Use a suitable dust collection system.

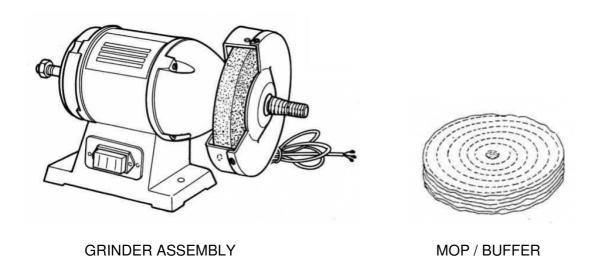
The use of incorrect mains supply or a damaged power cord can lead to injuries caused by electricity.

#### 4. Machine specifications Technical data

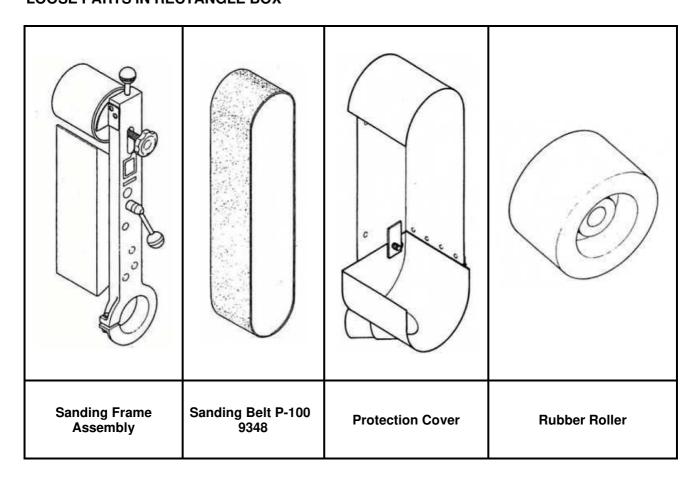
Modell	322BE1-BP
Motor kW	0.52
Power	400 / 50 /3
Grinding Wheel Size mm	200 x 25 x 20.0
Speed (RPM)	2850
Belt Size mm.	100 x 1000
Speed of Belt m/min	16
Work Space of Grinder mm	100 x 106
Work Space of Belt mm	105 x 250
Overall Dimension (B x T x H) mm	500 x 280 x 630
Height with stand mm (Option No. 9399)	1420
Gross Weight (kg)	27.0



#### 5. UNPACKING AND CHECKING LIST

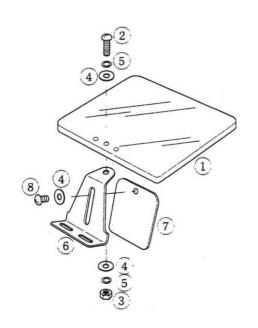


#### **LOOSE PARTS IN RECTANGLE BOX**



#### **UNPACKING AND CHECKING LIST**

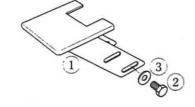




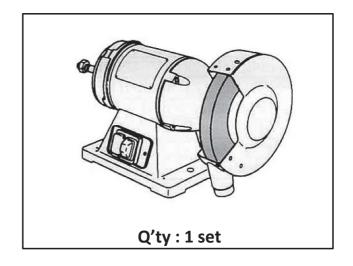
## Ref No. Parts Name / Description Q'ty

1	Eye Shield	1
2	Screw (M6x20L)	1
3	Nut (M6)	1
4	Washer (M6x16x2t)	3
5	Spring Washer (M6)	2
6	Bracket	1
7	Spark Arrestor	1

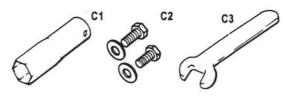
Bag 2:Toolrest



Ref No. Parts Name / Description Q'ty		
1	Toolrest	1
2	Hex Bolt M6x8L	4
3	Washer M6x16x2t	4



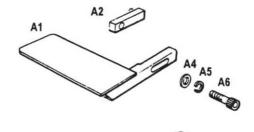
Bag 3....Socket Wrench, Open Spanner



# Ref No. Parts Name / Description Q'ty

1	Socket Wrench	1
2	Screw / Washer	2/2
3	Open Spanner	1

## Bag 4.....Working Table





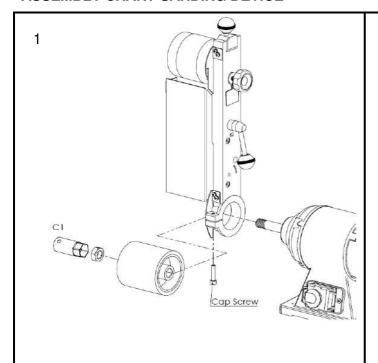
# Ref No. Parts Name / Description Q'ty

A1	Working Table	1
A2	Set Block	1_
A3	Hex. Wrench 6mm	1
A4	Washer Ø8.5 x Ø18 x 2	1
_A5	Spring Washer M8	1
<u>A6</u>	Cap Screw M8 P1. 25x25	11

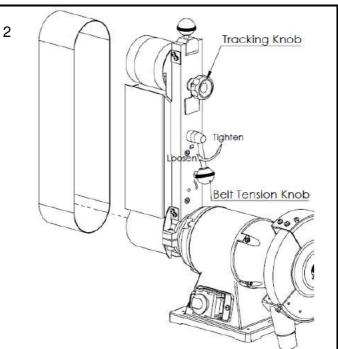
#### **Loose Parts in Rectangle Box**

Figure				
Title	Sanding Frame Assembly	Sanding Belt	Protection Cover	Rubber Roller
Q'ty	1	1	1	1

#### **ASSEMBLY CHART-SANDING DEVICE**

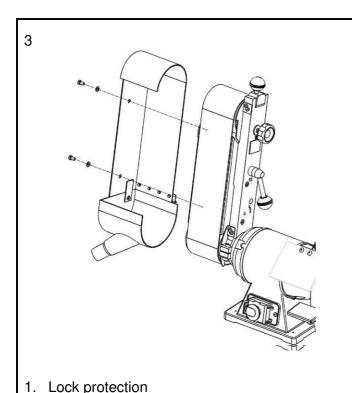


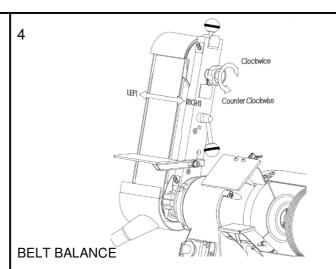
- 1. Remove the left side hex. Nut from shaft
- 2. Place frame assembly in. tighten cap screw by 6mm hex. Wrench (Supplied)
- 3. Mount the rubber into frame assembly tighten hex. Nut firmly by socket wrench (supplied)



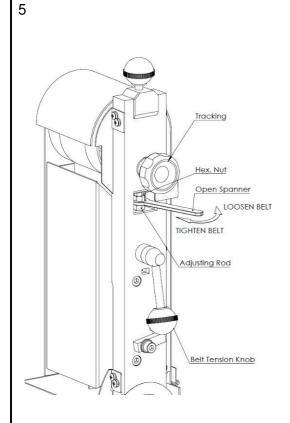
- Observe aluminum roller whether it's tail end is at the right angle (90°) to the frame. (Turn tracking knob clockwise may make the tail end of roller upward)
- 2. Turn belt tension knob clockwise about 120° to make aluminum roller downward and locate sanding belt on the center of rollers.
- 3. Turn belt tension knob counter-clockwise 120° back to tie belt up.

#### ASSEMBLY CHART-SANDING BELT DEVICE





- Turn Tracking knob clockwise to make sanding belt toward right side or turn counter-clockwise to make belt toward left side Note: It is only allowed a tiny adjustment at each turn.
- 2. Rotate belt by hand, meanwhile adjust tracking knob.
- 3. Control the switch for a short on/off starting with left hand. Meanwhile put right hand on tracking knob for clockwise or counter turning till the belt runs stably between the two rollers.



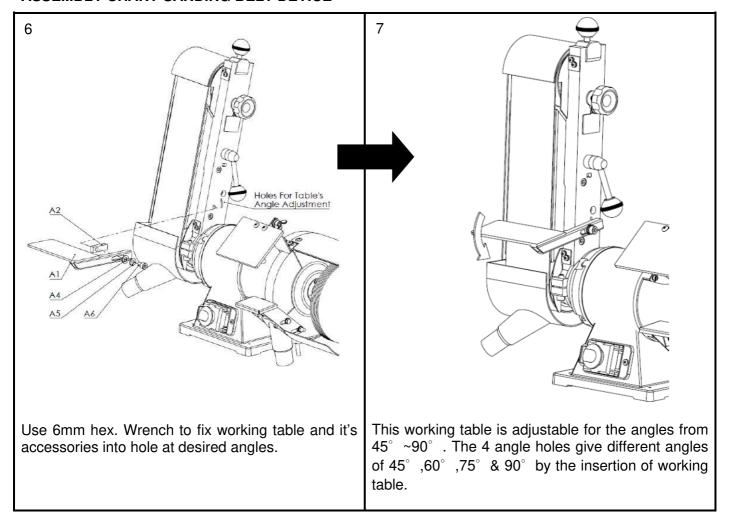
#### **BELT TENSION ADJUSTMENT**

- 1. Be sure switch is on OFF position.
- 2. Test Belt tension from the back by thumb press.
- 3. If the tension is not high enough for working, may begin the following procedures:
- 3.1. Turn the belt tension knob clockwise about  $120^{\circ}$  and remove the sanding belt from rollers.
- 3.2. Open the cover where the position is located down the tracking knob.
- 3.3. Clockwise loosen the hex. Nut (part No.57) by a supplied 12mm open spanner.
- 3.4. Turn adjusting rod (Part No.58) clockwise to increase belt tension.

#### NOTE:

- a. Each clockwise turning of adjusting rod makes aluminum roller upward 2.5mm, and each counter turning shall make the roller downward 2.5mm.
- Normally it is unnecessary to make a whole turning of 2.5mm micro adjustment is always recommended. Each edge turning of the hex. Adjusting rod makes aluminum roller upward or downward 0.42mm.
- 3.5. Counter-clockwise tighten the hex. Nut (Part No. 57) to fix the position of adjusting rod. 3-6 Close the cover
- 4. Locate sanding belt on the center of two rollers.
- 5. Repeat the procedures of belt balance of the fig.4 (page 5).

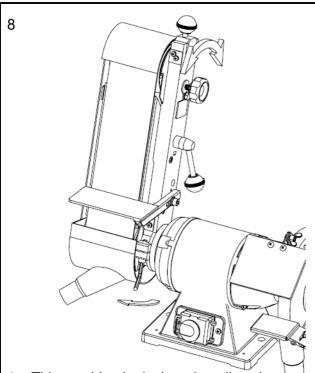
#### ASSEMBLY CHART-SANDING BELT DEVICE



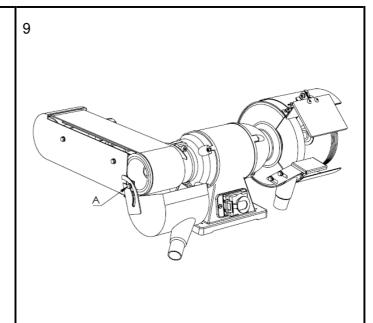
#### **RELACEMENT OF BELT**

- 1. Turn belt tension clockwise about 120°.
- 2. Remove protection cover and the used belt.
- 3. Locate the new belt on the counter of two rollers.
- 4. Turn belt tension knob counter clockwise 120° back to the belt up.
- 5. Rotate belt by hand, meanwhile adjust tracking knob as a pretest before power test.
- 6. Locate protection cover then use left hand to control the switch with a short on/off starting meanwhile put right hand on tracking knob for clockwise or counter turning till the belt runs stably between the two rollers.
- 7. Check belt tension if the tension is improper for working then begin the adjustment procedures until the tension satisfactory.
- 8. Repeat the procedures of hand test & power test for belt balance as the fig 4 (page 4).
- 9. Adjust frame assembly and fix working table at the desired angles

#### **ASSEMBLY CHART-SANDING BELT DEVICE**



- 1. This machine is designed to allow the sanding belt to be operated vertically or horizontally at comfortable choice.
- 2. Use 6mm hex. Wrench may loosen and tighten cap screw to adjust frame assembly in proper angles.



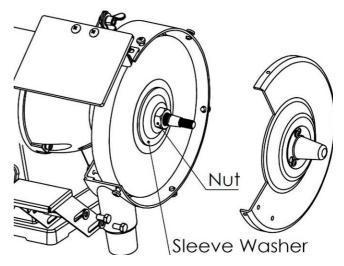
#### **Curve Sanding**

- 1. Put frame assembly to horizontal position.
- 2. Loosen screw A showed in figure.
- 3. Open the roller cover to proper position and fix it.
- 4. This machine is now ready for the operation of curve sanding.

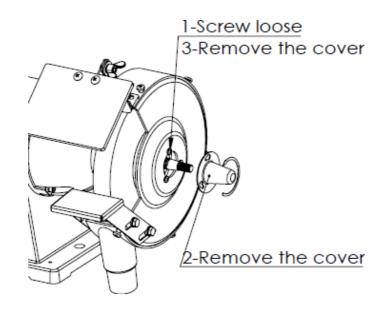
#### RELACEMENT OF WHEEL

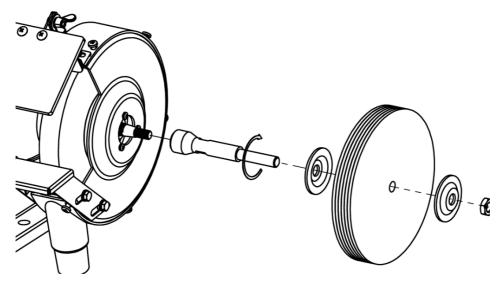
- Remove toolrest and eyeshield or dust collector unit from wheel cover by taking off bolts and screws
- 2. Take off screws to allow removing wheel cover as figure.
- 3. Remove nut, sleeve washer or balancing flange and waste wheel.
- 4. Put new wheel and very parts back in reverse order. It's important to make a good adjustment of balancing before.
- 5. assembling wheel cover. This message could be learned.
- 6. For your safety, check all screws and bolts.

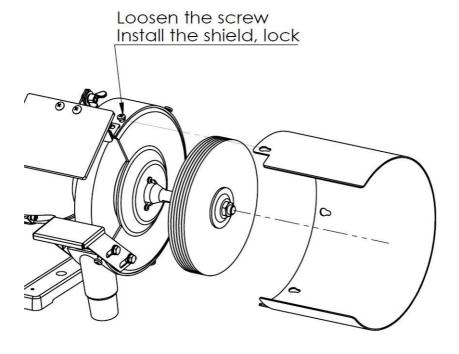
  Make sure they are all well fixed before switch
- 7. The distance between wheel, spark arrestor and toolrest table should be always remained at about 5mm to get the better spark arresting effect and good grinding performance.
- 8. When this distance was changed due to the wearing of wheel, you need to do adjustment.



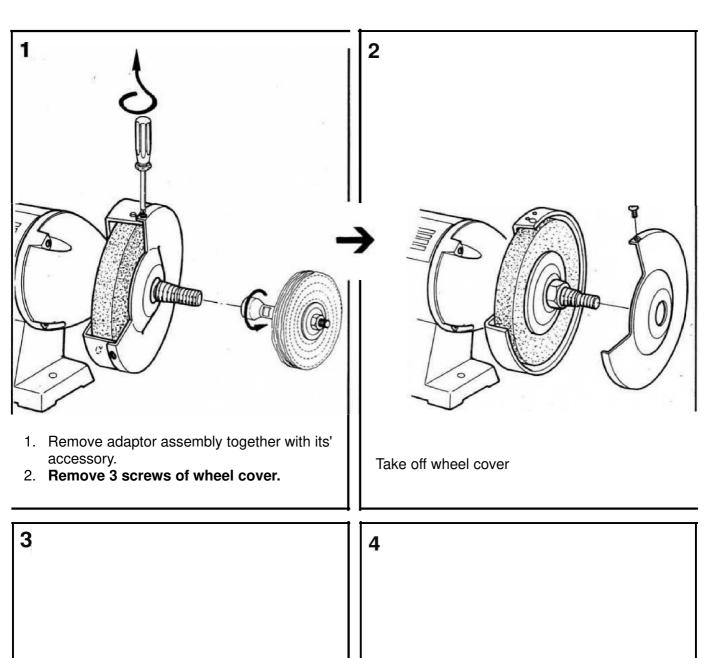
#### **ASSEMBLY CHART-MOP/BUFFER**

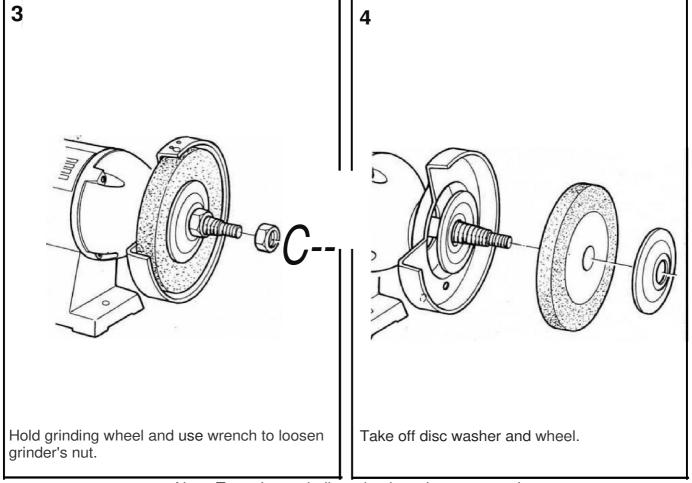






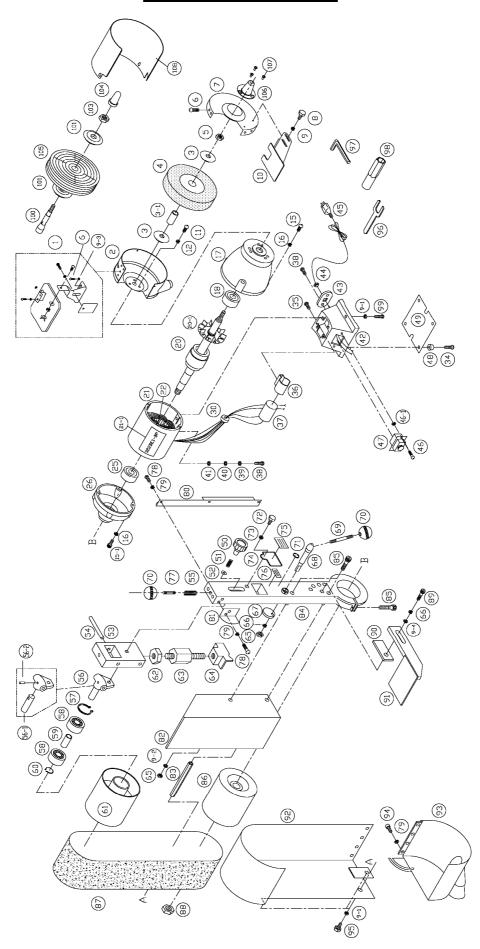
#### **GRINDING WHEEL'S REPLACEMENT**





Note: To replace grinding wheel, act in reverse order.

## 6. 322BE-BP Exploded View



# 7. 322BE-BP Parts List

Index	Part			
No.	No.	Description	Size	Qty.
1	PM-322401	Eye Shield	100x130x5mm	1
2	PM-322402	Wheel Cover Assy	for 8"	1
		(Including #2 & #7)		
3	PM-320008	Disc Washer	1/2HP-5/8"	2
3-1	PM-320007	Bush	Ø5/8"x30mm	1
			8"x1"x20mm A60L	
5	PM-320009	Hex. Nut	5/8"	1
			M5x8L	
			for 8"	
			M6x10L	
			M6x16x2T	
			M6x18x2.0T	
			M5x12x1T	
			M8x18x2T	
			2B8	
			1/4"x1/2	
12	PM-322412	Spring Washer	M6(1/4")	3
			3/16"x1.1/4"	
			3/16"x1"	
			M5(3/16")	
			Ø117 6204	
			6204zz	
			28x499LxØ60	
			Ø22.5x105mm	
21	PM-322025		117x120	1
		(Including #21 & #22)		
			6205zz	
26	PM-322020	Left Support	Ø117 6205	1
			3/16×1/2	
			for single phase	
			3/16"x3/8"	
39			M5	
40		Copper Set		1
			M5	
			Ø117	
43	PM-320003	Fixing Plate	0)4/0 4	1
			6W3-4	
			0.75x4Cx6'	
	PM-371652		400V/50HZ NVR	
			150,017,,,,,	
			152x217mm	
			Ø8.8x11.2x16L5.5	
			M8x13x1T	
		Pin		1
55	PM-321202	Spring	Ø9.8x13.8x40L8.5	1

Index No.	Part No.	Description	Size	Qty.
		•		-
56	PM-321042	Adjustable Block		1
57	PM-321041	Snap Ring	R35	1
		Ball Bearing		
		Bush		
		Snap Ring		
		Aluminum Roller		
		Hex. Nut		
		Adjusting Rod		
		Press Block		
		Hex Nut Loose Proof		
66	PM-350206	Spring Washer	M8(5/16")	2
67	PM-321062	Cam		1
68	PM-321065	Cam Shaft		1
69	PM-321049	Screw Shaft	M8x72mm	1
70	PM-315050	Ball Knob	Ø35 xM8	2
72	PM-321201	Cover Screw	M6x15L	1
73	PM-321052	Wave Washer	M8x12x0.5T	1
		Cover		
		Screw Shaft A		
		Screw		
		Spring Washer		
		Protection Sheet 1		
		Protection Sheet 2		
		Belt Sport		
		Hex. Shaft		
		Sanding Frame		
85	PM-500115B	Cap Screw	M8x35l	3
86	PM-322069	Rubber Roller	100x105mmx3/4"	1
		Sanding Belt		
		Hex. Nut-Left Thread		
		Cap Screw		
		Set Block		
		Working Table		
		Sanding Belt Protector 1		
	1 101 022201	· · · · · · · · · · · · · · · · · · ·		
	PM-322108			
		Hex Bolt		
	PM-321101			
		Hex. Wrench		
		Socket Wrench		
		Screw		
		Adapt (Including #100~#103)		
		Adapt Cap		
		Mop/Buffer		
		Rotor Shaft Cap		
		Screw		
108	PM-322118	Safety Cover	8"	1

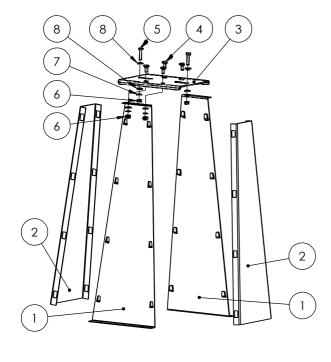
# [ABOUT WORKSTAND] Optional

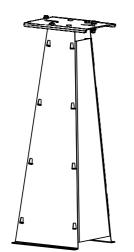
# Unpacking and List Checking

Ref. No.	Parts Name /Description	Q'ty
1	Stand Leg (front & rear)	2
2	Stand Leg (left & right)	2
3	Stand Top	1
4	Sruare Neck Bolt(5/16"-18NCx5/8")	4
5	Hex.Bolt(5/16"-18NCx2"L type Hex.Bolt(5/16"-18NCx3/4"S type	2 2
6	Hex Nut(5/16")	6
7	Spring Washer(M8)	6
8	Washer(M8x18x2t)	8

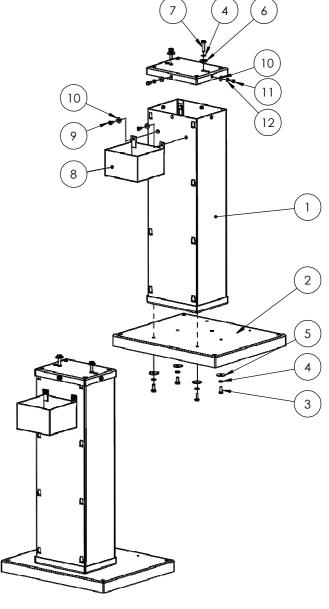
# \*Universaal Workstand

Ref. No.	Parts Name /Description	Q'ty
1	Stand	1
2	Bottom Plate	1
3	Hex Bolt(M8x20L)	4
4	Spring Washer(M8)	6
5	Washer(M8x30x3t)	4
6	Washer(M8x18x2t)	2
7	Hex Bolt(M8x35L)	2
8	Cooler Box)	1
9	Screw(M6x16)	2
10	Washer(M5x16x2t)	6
11	Hex Bolt(M6x12)	4
12	Spring Washer(M6)	4

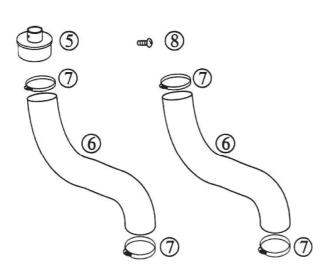




After Assembled

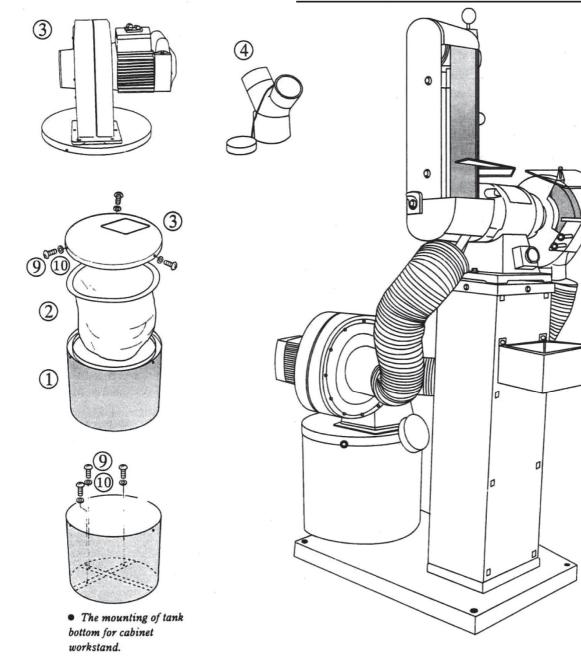


After Assembled



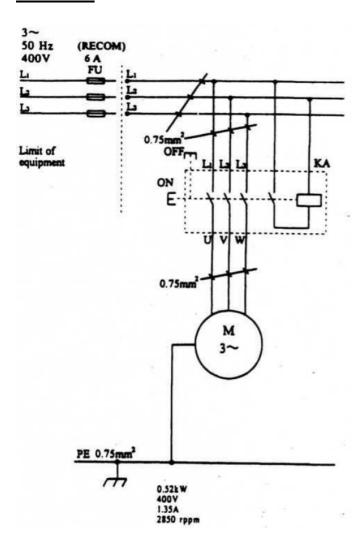
# **Unpacking and Checking List**

Ref. N	o. Parts Name / Description	Q'ty
1	Dust Collection Tank	1
2	Dust Collection Bag	1
3	Tank Cover, Collector Body with Motor	1
4	Chip Inlet (5"-4")	1
5	Chip Inlet (4"-1.5")	2
6	Hose (4")	2
7	Clamp (4.5")	4
8	Screw (M5x8)	4
9	Screw (M6x16)	6
10	Washer (M6)	6



# Electrical circuit diagram

# 322BE1-BP



# **Electrical components Parts List**

Item Designation	Description & Function	Technical Data	Remark
KA	Magnetic contactor three phase	400Vac, 6A	
XP	Plug for supply for three phase	400Vac, 16A	EERE DFNS &
	Cable three phase	VCTF, 4 x 0.75mm <sup>2</sup>	VDE0620

Note:



#### **Environmental protection**

Protect the environment.

Your appliance contains valuable materials which can be recovered or recycled. Please leave it at a specialized institution.



This symbol indicates separate collection for electrical and electronic equipment required under the WEEE Directive (Directive 2012/19/EC) and is effective only within the European Union.

#### Umweltschutz

Schützen Sie die Umwelt!

Ihr Gerät enthält mehrere unterschiedliche, wiederverwertbare Werkstoffe. Bitte entsorgen Sie es nur an einer spezialisierten Entsorgungsstelle.



Dieses Symbol verweist auf die getrennte Sammlung von Elektro- und Elektronikgeräten, gemäß Forderung der WEEE-Richtlinie (2012/19/EU). Diese Richtlinie ist nur innerhalb der Europäischen Union wirksam.

#### Protection de l'environnement

Protégez l'environnement!

Votre appareil comprend plusieurs matières premières différentes et recyclables. Pour éliminer l'appareil usagé, veuillez l'apporter dans un centre spécialisé de recyclage des appareils électriques.



Ce symbole indique une collecte séparée des équipements électriques et électroniques conformément à la directive DEEE (2012/19/UE). Cette directive n'est efficace que dans l'Union européenne.