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## **RESIN BOND DIAMOND WHEELS and BELTS BREAK IN and USAGE INSTRUCTIONS**

Resin bond diamond wheels are produced by embedding diamond particles within a layer of tough, flexible resin over a sponge rubber backing. The soft, flexible design allows the surface to conform to the stone reducing flat spots and scratching. These wheels are best used for sanding and pre-polishing – they are not recommended for shaping and aggressive grinding.

Nova and REZ wheels have a thicker resin bond containing the diamond particles and have quite a rough surface – breaking in these wheels is critical for optimal results.

### **NOTES ON BREAKING IN:**

- a) It is essential to break wheels in before use – some take longer to break-in than others. Usually the finer grits take longer to break in than the more coarse wheels.
- b) Break in is necessary to remove excess resin coating the surface of the diamond particles, smooth out the work surface and/or reduce any vacuum effect between diamond particles.
- c) Breaking in is best done by working over the whole surface of the wheel with a piece of agate or corundum through the whole sequence of grits. Spend a few minutes at least on each wheel.
- d) It will take longer to remove excess resin on the finer grit wheels (#3000 and finer) – these wheels will continue to improve as more stones are worked.

### **NOTES ON USAGE:**

- a) All diamond wheels **MUST** be used wet – they will be damaged extremely quickly if used dry. Ensure there is a sufficient water drip on the wheel when used.
- b) Do not use excessive pressure but apply stone to wheel with firm, even pressure. Too light a pressure can cause scratching.
- c) Use sufficient pressure to cause the wheel to depress slightly to conform to your stone – you may need slightly more pressure on a Nova or REZ wheel.
- d) Avoid digging sharp or leading edges into the wheel surface as this can damage the resin material causing delamination or dislodgement of diamond particles from the surface.
- e) Work the stone over the whole wheel surface to ensure even wear.
- f) In order to avoid scratching, ensure wheels are broken in properly and each sanding step is complete before moving to the next grit.

### **NOTES ON WARRANTY:**

- a) Surface texture varies between brand – Nova and REZ wheels have a very lumpy rough texture while Eastwind and Auscut standard wheels are smoother to start with. This does not affect usage.
- b) Resin bond diamond wheels may have some variation in colour and texture – this is normal and does not affect usage. Minor bumps and irregularities on the surface of the wheel is not a problem and will in almost every case be smoothed out during the break in process.
- c) Warranty does not cover normal wear or damage from being inadequately cooled or inappropriately used. Length of time before replacement is required will vary depending on frequency of use and type of stone being worked.

### **NOTES ON DIAMOND BELTS:**

- a) Belts must be broken in similarly to resin bond wheels – use same instructions as above.
- b) Never run an expanding drum without the belt.
- c) Always ensure expanding drums are run in the correct direction (see arrow label).
- d) Belts may need to be worked on and off the drum – belts will have small but noticeable slack at rest but if too loose, will not fit firmly when drum is running (and expanded to hold belt on).