

CRA STATE THAT THE AVERAGE HIGH-SPEED TURBINE LIFE BETWEEN REPAIRS IS ONLY 10.6 MONTHS.

IF THIS IS SO WHAT QUESTIONS DO YOU NEED TO ASK YOUR REPAIRER AND WHAT DECISIONS DO YOU NEED

TO MAKE TO INCREASE THE ODDS IN YOUR FAVOUR?

How to reduce your repair bills and extend the life of your handpieces by up to 20%

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Handpiece Hotline



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If by gaining knowledge and asking a series of questions you could reduce your handpiece repair costs by up to 20%, possibly more, would you do it?

The intention of this article is to give you tools so that you can drive down the **Hourly Dollar Operating Cost** of your handpieces, which surely is the only logical way to monitor and manage a handpiece's financial cost and performance. It is therefore necessary to look beyond just the invoice value. For instance:

- ❖ How much would you gain and what would be the effect on your bottom line if the operational life of your handpieces was six months longer but the repair cost was only 10% greater?
- ❖ Better still what would be the effect if the service life increased and the repair cost reduced?
- ❖ Right now, how long do you suffer poor performance until you send a handpiece for repair?

Services

To maximise service life and reduce breakdowns, all manufacturers, without exception, recommend oil-free compressors plus dry filtered air and filtered water. *Does your repairer meet these minimum standards?*

Tooling

Special tools are required to breakdown handpieces. Without them:

- ❖ Internal parts can be damaged
- ❖ It may not be possible to completely break the handpiece down to change critical internal components. With high speeds for instance, if seals and O-rings are not replaced, water leaks can occur corroding and damaging the bearings, impeller and turbine chamber. Expensive!

What are the reasons a repairer may not have special manufacturers tooling?

- ❖ It is not authorised to repair the handpieces

- ❖ The tools are expensive to purchase markedly increasing set up costs

Parts

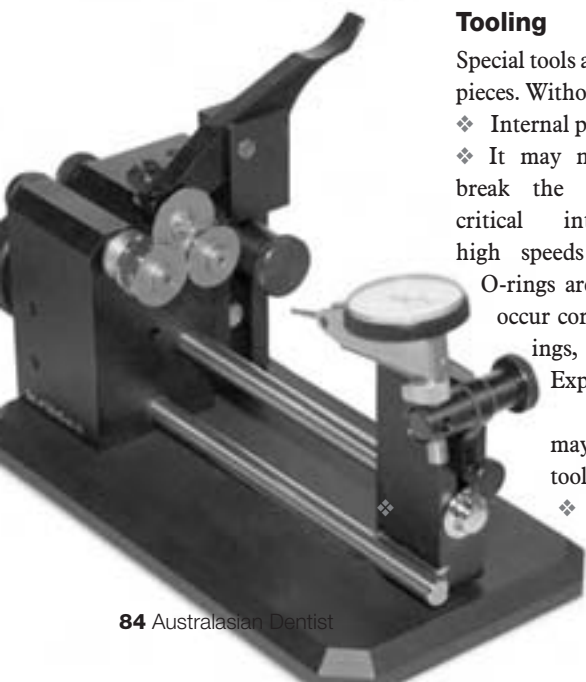
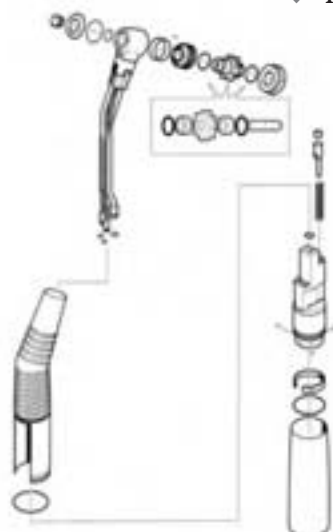
With few exceptions, genuine parts are better than non-genuine parts. Are your handpieces being fitted with old parts bought from another hemisphere? In the last 12 months a repair company was discovered selling top brand, cheap 'new' handpieces sourced from overseas. It looked like an irresistible deal until it was discovered that the 'new' handpieces were not so new.

And do you know the relationship between your repairer, the manufacturer and the authorised Australian distributor? Handpiece manufacturers constantly strive to improve their products. They provide drawings, instructional manuals, CD's and technical expertise so that repairs are performed correctly and their handpieces function at peak performance. W&H for instance, regularly distribute Technical Update Bulletins with design and parts upgrades, drawings and improvements to repair techniques and it provides its authorised repair centres with immediate web access to all its technical resources. This is a benefit that you pay for when you purchase a top brand handpiece. Why not use it?

Testing

All repairers test handpieces – to some extent. However there are tests that are critical but may not necessarily be carried out. With high speeds there is an ISO Standard for chuck strength which is easy and low cost to check, and spindle concentricity, which is not. Yet it is here that you can noticeably reduce repair expenditure.

Have you ever noticed that the service life of your high-speed handpieces is getting shorter but you don't know why? Spindles get out of alignment with use. A handpiece may be dropped or mishandled in the cleaning and sterilisation process so that the spindle does not rotate precisely. It is therefore necessary to measure spindle concentricity with micron accuracy. If this facility is not available for your handpieces what can happen?





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Handpiece Repairer Assessment

To assess a repairer ask these questions. For a fuller understanding and to have complete confidence in your repairer you will need to follow up with supplementary questions.

- Is your compressor oil free? YES NO
- Is the air filtered? YES NO
- Is the water filtered? YES NO
- Do the manufacturers supply you with official tooling? YES NO
 Check for each of your handpiece brands
 KaVo NSK Sirona W&H _____
- Do you receive technical update bulletins from the manufacturers? YES NO
 Check for each of your handpiece brands
 KaVo NSK Sirona W&H _____
- Do you buy your parts from authorised Australian distributors? YES NO
 Check for each of your handpiece brands
 KaVo NSK Sirona W&H _____
- With each repair do you replace all the soft components recommended by the manufacturer? YES NO
- Do you accurately measure and record RPM? YES NO
- Do you accurately measure and record high-speed spindle concentricity? YES NO

- ❖ The turbine may be replaced irrespective of spindle concentricity. This is about as logical as taking your car in to replace the alternator but having a new engine fitted. If the spindle is accurate, why throw it and the impeller away when it is only necessary to replace bearings and O-rings?
- ❖ Alternatively, in an attempt to provide a 'low cost repair' only the bearings may be replaced irrespective of spindle concentricity. But, is this good practice when the spindle does not turn accurately and the new and expensive bearings are prematurely wrecked at 300,000 RPM?

Summary

In summary: Your handpieces are fundamental to the generation of your income. When a repairer is price driven, has difficulty obtaining genuine parts and the tooling to breakdown handpieces, is not able to fully test and accurately measure, you may discover internal components have not been replaced, performance is down and low cost repairs are in reality, high cost repairs. For many, reducing handpiece repair costs by 20% is only a matter of a simple decision.

In Practice Maintenance

Incorrect maintenance procedures result in the premature breakdown of 34.6% of handpieces sent for repair. Correct in-practice maintenance procedures will be covered in a future article. ◆