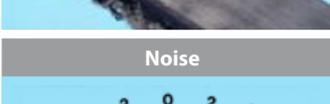




TIMING BELT FAULT FINDER

Symptoms	Probable cause	Corrective action
 Tensile failure	Foreign body in drive Excessive installation tension Belt crimped due to improper handling	▶ Ensure cover is correctly fitted ▶ Install at correct tension ▶ Observe handling instructions
 Tooth shear	Low tension Seizure of driven part Misalignment	▶ Install at correct tension ▶ Eliminate cause ▶ Correct alignment
 Tooth wear	Incorrect tension Worn pulley(s)	▶ Install at correct tension ▶ Replace pulley(s)
 Hollowed teeth	Extremely low tension Loss of tension during running	▶ Install at correct tension ▶ Ensure tensioner screws are tight
 Back cracks	High temperature Low temperature Back idler is worn out	▶ Eliminate cause ▶ Eliminate cause ▶ Replace back idler
 Land wear	Excessive tension Rough pulley(s)	▶ Install at correct tension ▶ Replace pulley(s)
 Oil contamination	Oil leak	▶ Replace faulty oil seals
 Edge wear	Flange(s) damaged Misalignment	▶ Replace pulley(s) ▶ Correct alignment
 Noise	High tension Low tension Misalignment Flange(s) damaged	▶ Install at correct tension ▶ Install at correct tension ▶ Correct alignment ▶ Replace pulley(s)



When a belt fails prematurely, it is important to determine why it failed, so that corrective action can be taken. In most cases, the cause of the failure is to be found in a problem with one of the drive components.

If the belt has to be removed for any reason, a new belt should be installed. Never refit a used belt. The following list, developed by Gates engineers, assists in spotting and correcting problems.



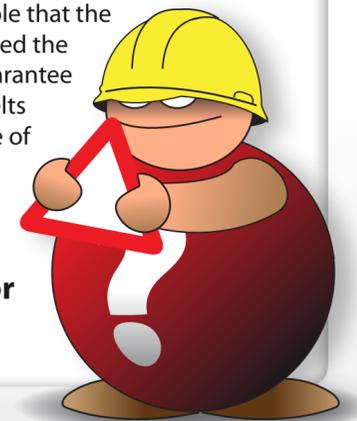
INSTALLATION TIPS AND RECOMMENDATIONS



- ⚠ Timing belts are not interchangeable. Make sure you use the correct belt recommended in Gates catalogues.
- ⚠ Handle the belt with care and store it in its protective box until installation. Never coil, crimp or twist timing belts, as this could damage the tensile cords.
- ⚠ Always follow the vehicle manufacturer's recommendations for replacing timing belts.
- ⚠ Some car makers have designed special installation tools. Use of any other tool could cause damage, so make sure you have the right tools at hand. Use Gates professional automotive tools. 1
- ⚠ Be careful not to force the belt.
- ⚠ Never reinstall a used belt.
- ⚠ If you have to replace one component of the drive, make sure you also replace the other components: it is highly probable that the source of damage to one element will also have affected the other components of the system. The best way to guarantee your customers a reliable drive system is to change belts and metal components at the same time. Gates range of PowerGrip® Kits offers the perfect solution. 2



Gates PowerGrip®, the professional's choice for timing belt drive systems!



For application information and technical tips on specific drives check our online catalogue at www.gatesautocat.com

