



APPLICATIONS NOTICE

temperzone limited
Auckland, NEW ZEALAND.
Phone 0-9-279 5250, Fax 0-9-275 5637
Email sales@temperzone.co.nz

temperzone australia pty ltd
Sydney, AUSTRALIA.
Phone (02) 8822 5700, Fax (02) 8822 5711
Email sales@temperzone.com.au

Form NS 006

TO: AUTHORISED DEALERS/DISTRIBUTORS
N.Z. APPROVED INSTALLERS
H.O., REG'L & AUST. MANAGERS
APPLIC. NOTICE GENERAL LIST

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FROM : T King/M Vlug

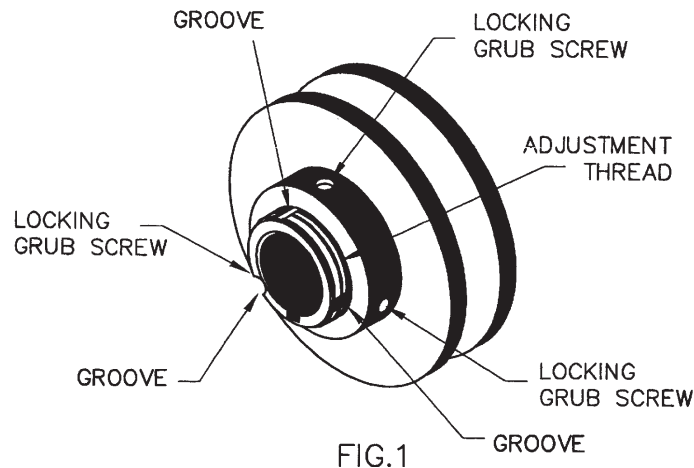
SUBJECT: **VARIABLE PITCH PULLEYS**
UNITS: **ISD, IJD, PA, CC and OPA Units**

Variable Pitch/Speed Pulleys Adjustment Guide

Before adjusting *single* or *double* groove pulleys, remove tension on the V belts by adjusting the motor plate tensioning screws.

To adjust *single groove* variable pitch pulley:-

1. Loosen three locking grub screws.
2. Rotate the movable flange anti-clockwise to reduce the pitch and slow the fan driven speed.
3. Rotate the movable flange clockwise to increase the pitch and speed up the fan driven speed.
4. One third of a turn (120°) varies the pitch circle diameter by 2.18 mm.
5. Align the grub screws with the grooves, tighten each grub screw and apply a drop of "Loctite Blue 243"
6. Re-align the belts using the pulley faces as a guide, refer note and figure 2 below in troubleshooting guide
7. Apply a drop of "Loctite Blue 243" to grub screws when re-tightening on to the shaft and flat.
8. After adjusting the pulley, remember to re-tension the belts.



To adjust *double groove* variable pitch pulley:-

1. Mark both moveable flanges with an index mark.
2. Loosen six locking grub screws (may be easier to loosen just three screws and adjust one side first then the other).
3. Rotate the movable flanges anti-clockwise to reduce the pitch and slow the fan driven speed.
4. Rotate the movable flanges clockwise to increase the pitch and speed up the fan driven speed.
5. One third of a turn (120°) varies the pitch circle diameters by 2.18 mm.
6. Both moveable flanges must be adjusted equally (hence the index mark).
7. Align the grub screws with the grooves, tighten the grub screws and apply drop of "Loctite Blue 243".
8. Re-align the belts using the pulley faces as a guide; refer note and figure 3 below in troubleshooting guide.
9. Apply a drop of "Loctite Blue 243" to grub screws when re-tightening on to the shaft and flat.
10. After adjusting the pulley, remember to re-tension the belts.

Variable Pitch/Speed Pulleys Troubleshooting Guide:-

Premature Belt Failure or Excessive Vibration

Be careful not to slow the fan down too much. Rotating the moveable flange anti-clockwise too far will “bottom” the belt and it will not sit properly in the groove. This will cause rough running and early belt failure. Also the moveable flange will only be held on by a thread or two. A minimum clearance of 6mm is required between the bottom of the cog belt and the bottom of the pulley groove. See figures 2 and 3.

Poor Alignment of the Belts or Belts Squealing

Single and Double groove pulleys should be aligned using the outside faces, noting that the variable pitch pulley faces will most likely be wider than the standard fixed pulley, allowance should be made for this so that the belt/belts, is/are centralised. See figures 2 and 3.

ENSURE MOTOR AND FAN SHAFTS ARE PARALLEL.

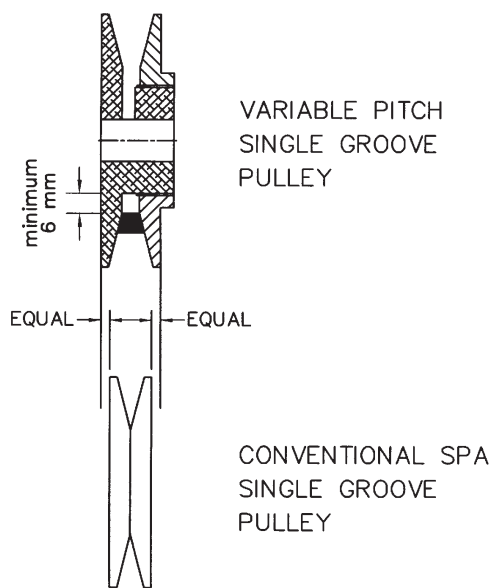


FIG.2

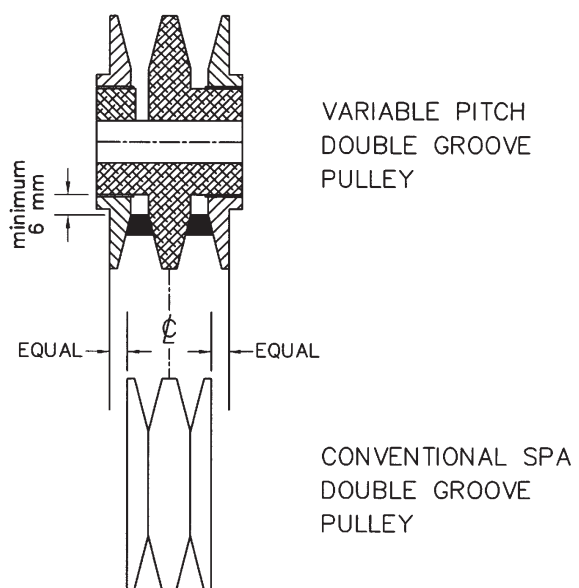


FIG.3

BEWARE!

The main causes of premature failure or excessive wear are: incorrect alignment of pulleys, fan and motor shafts not parallel and incorrect belt tensioning (refer Applications Notice 01/03).