



# APPLICATIONS NOTICE

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Form NS 006

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APPLIC. NOTICE GENERAL LIST

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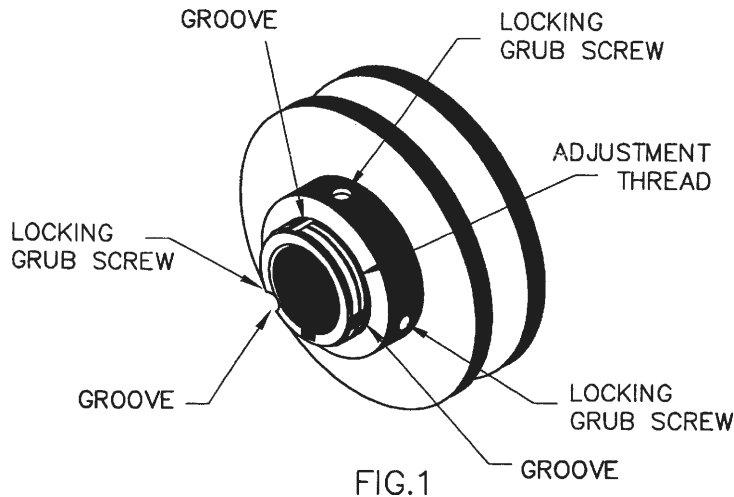
SUBJECT: **VARIABLE PITCH PULLEYS**

UNITS: **ISD, IJD, PA, CC and OPA Units**

## Variable Pitch/Speed Pulleys Adjustment Guide

### 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 ( $120^\circ$ ) 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"
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.



### 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 ( $120^\circ$ ) 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"
8. Realign 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

## 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 6 mm 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.

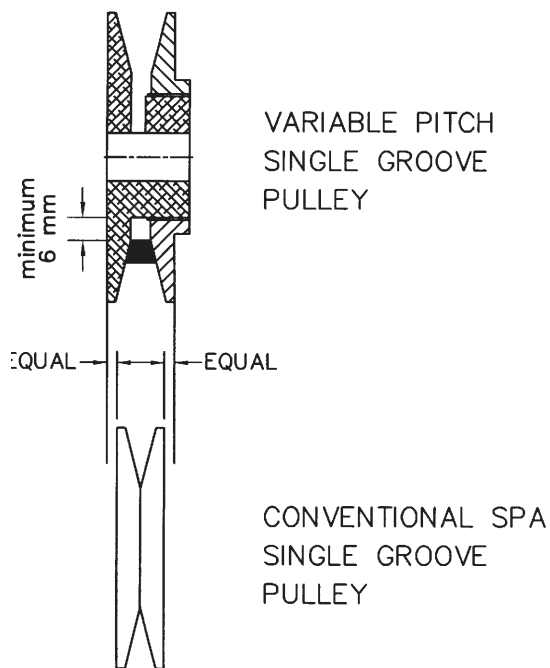


FIG.2

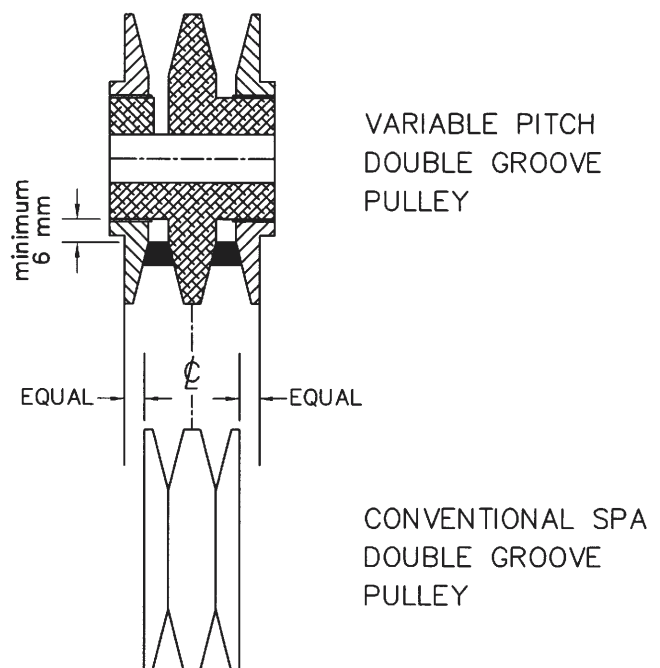


FIG.3