

# 1VP-2VP Key Type Sheaves Instruction Manual

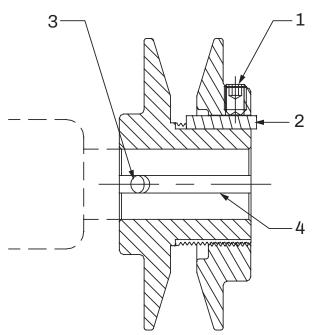
These instructions must be read thoroughly before installation or operation. This instruction manual was accurate at the time of printing. Please see **dodgeindustrial.com** for updated instruction manuals.

WARNING: To ensure the drive is not unexpectedly started, turn off and lock-out or tag power source before proceeding. Failure to observe these precautions could result in bodily injury.

WARNING: All products over 25 kg (55 lbs) are noted on the shipping package. Proper lifting practices are required for these products.

# SINGLE GROOVE SHEAVE

 ${\bf CAUTION:}\ {\bf Do}\ {\bf not}\ {\bf operate}\ {\bf sheave}\ {\bf with}\ {\bf flange}\ {\bf projecting}\ {\bf beyond}\ {\bf the}\ {\bf hub}\ {\bf end}.$ 



NOTE: Key (2) protrudes to provide a better grip when removing.

WARNING: Because of the possible danger to person(s) or property from accidents which may result from the improper use of products, it is important that correct procedures be followed. Products must be used in accordance with the engineering information specified in the catalog. Proper installation, maintenance and operation procedures must be observed. The instructions in the instruction manuals must be followed. Inspections should be made as necessary to assure safe operation under prevailing conditions. Proper guards and other suitable safety devices or procedures as may be desirable or as may be specified in safety codes should be provided, and are neither provided by Dodge® nor are the responsibility of Dodge. This unit and its associated equipment must be installed, adjusted and maintained by qualified personnel who are familiar with the construction and operation of all equipment in the system and the potential hazards involved. When risk to persons or property may be involved, a holding device must be an integral part of the driven equipment beyond the speed reducer output shaft.

#### MOUNTING

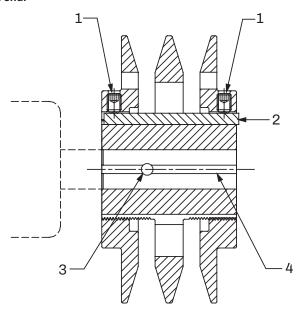
- Slide the sheave onto the shaft. All sheaves should be mounted on the motor or driving shaft with the end containing the setscrew (3) towards the motor. Be sure setscrew (3) is well over the shaft.
- 2. Be sure both driving and driven sheaves are in alignment and that shafts are parallel. Total axial and parallel misalignment must not exceed 1/4".
- 3. Fit the shaft key (4) between the sheave and shaft and wrench torque the setscrew to 110 in-lb minimum and 130 in-lb maximum to secure the sheave in position.

#### **ADJUSTING**

- Loosen setscrew (1) in the flange and pull out external key (2)
- Adjust sheave pitch diameter for desired operating speed by opening rotating parts by half or full turn increments from closed position. Each complete turn reduces (or increases) the pitch diameter from 0.200 inches. Refer to the PT Components Engineering Catalog CA4000 for exact value of the pitch diameter at specific flange position.) Do not open more than five full turns for (A) belts or six full turns for (B)belts.
- 3. Replace key (2) in position and tighten setscrew (1) to 110 in-lb minimum and 130 in-lb maximum. (Suggestion: Leave a slight portion of the key (2) protruding from th end of the hub to provide a better grip when removing.)
- Put on belt and adjust belt tension. (Do not force belts over grooves.) Refer to the PT Components Engineering Catalog CA4000 for belt tensioning instructions.
- Future adjustments should be made by loosening the belt tension and increasing or decreasing the pitch diameter of the sheave by half or full turns as required. Readjust belt tension before starting drive.
- Be sure that all keys are in place and all setscrews are torqued properly before starting drive. Check setscrews and belt tension after 24 hours service.

### TWO GROOVE SHEAVE

CAUTION: Do not operate sheave with flange projecting beyond the hub end.



NOTE: Key (2) protrudes to provide a better grip when removing.

## **MOUNTING**

- Remove key (2) from sheave. Unscrew flanges until setscrew

   (3) is visible. If set screw (3) is at an angle, flange may have
   to be removed in order to tighten it.
- 2. Slide the sheave onto the shaft. All sheaves should be mounted on the motor or driving shaft with the end containing the set screw (3) toward the motor. If setscrew (3) is at an angle, mount away from motor.
- 3. Be sure the center flange of both the driving and driven sheaves are in alignment and that shafts are parallel. Total axial and parallel misalignment must not exceed 1/4.
- 4. Fit the shaft key (4) between sheave and shaft and wrench torque the setscrew to 110 in-lb minimum and 130 in-lb maximum to secure the sheave in position. Replace outboard flange.

# **ADJUSTING**

- Loosen setscrew (1) in each flange and pull out external key (2).
- 2. Adjust sheave pitch diameter for desired operating speed by opening each rotating part the same number of half or full turn increments from closed position. Each complete turn reduces (or increases) the pitch diameter from 0.200 inch (Refer to the PT Components Engineering Catalog CA4000 for exact value of the pitch diameter at specific flange position.) Do not open more than five full turns for (A) belts or six full turns for (B) belts.
- 3. Replace the key (2) in position and tighten setscrew (1) to 110 in-lb minimum and 130 in-lb maximum. (Suggestion: Leave a slight portion of the key (2) protruding from the end of the hub to provide a better grip when removing.)
- 4. Put on belt and adjust belt tension. (Do not force belts over grooves.) Refer to the PT Components Engineering Catalog CA4000 for belt tensioning instructions.
- Future adjustments should be made by loosening the belt tension and increasing or decreasing the pitch diameter of the sheave by half or full turns as required. Readjust belt tension before starting drive.
- Two groove sheaves must have both halves adjusted with the same number of turns from the closed position to ensure the same pitch diameter.
- 7. Be sure that all keys are in place and all setscrews are torqued properly before starting drive. Check setscrews and belt tension after 24 hours service.

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