

# SGK CLUTCH COUPLING

## SERIES 100/400/600

- Large Coupling Bores
- Superior Misalignment
- Easy to Install and Service



The SGK product line is available in three series. Within each series there are eight different models based on torque capability ranging from 200 to 18,000 lb-ft.

■ Series 100 Coupling is used primarily for indoor industrial applications. The clutch is grease-lubricated and is suitable for operation in temperatures down to +20° F.

■ Series 400 Coupling is intended for use in adverse environments. The clutch is oil lubricated and is suitable for operation in temperatures down to -40° F.

■ Series 600 Coupling is intended for use in adverse conditions. In addition, it utilizes centrifugal throw-out (C/T) sprags to extend life. It can only be used in applications where the over-running speed is significantly higher than the drive speed. The clutch is oil lubricated and is suitable for operation in temperatures down to -40° F.

Spare parts kits are available to allow replacement of seals, gaskets, and o-rings in the SGK couplings. For critical installations where minimum downtime is extremely important, we suggest the stocking of the complete spacer assembly. The spacer assembly can be replaced within minutes without moving the shafts of the equipment. This is done by simply removing the bolts in the gear couplings at each end. The following instructions are provided for use with spare parts kits.

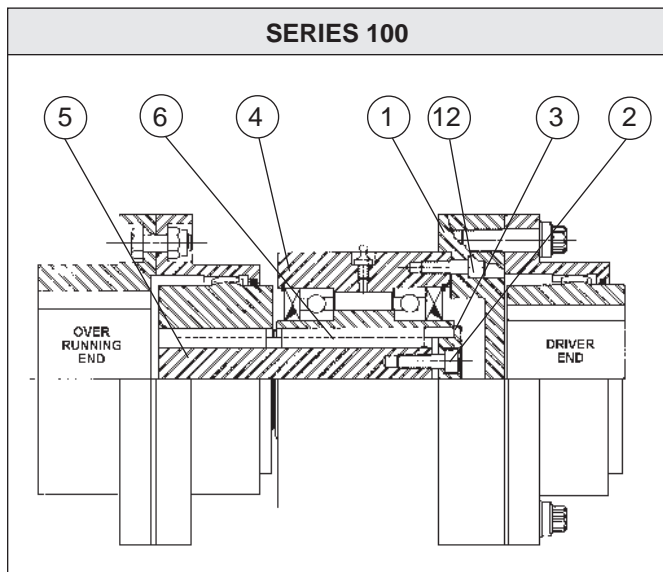
SGK SPARE PARTS KITS		
SEAL & O-RING KIT <i>Series 100 not applicable</i>		GEAR CPLG. PARTS KIT
SERIES 400	SERIES 600	SERIES 100, 400, 600
SGK-410-81	SGK-610-81	SGK-10-82
SGK-415-81	SGK-615-81	SGK-15-82
SGK-425-81	SGK-625-81	SGK-25-82
SGK-430-81	SGK-630-81	SGK-30-82
SGK-435-81	SGK-635-81	SGK-35-82
SGK-440-81	SGK-640-81	SGK-40-82
SGK-445-81	SGK-645-81	SGK-45-82
SGK-450-81	SGK-650-81	SGK-50-82

### GEAR COUPLING SERVICE

An o-ring and gasket kit is available for replacement of these gear coupling items.

### CLUTCH SERVICE

Wear out or improper lubrication (EP lubricants) may cause the clutch to malfunction. If clutch slippage occurs, it should be replaced. For replacement of clutch or clutch seals, use the following procedures.

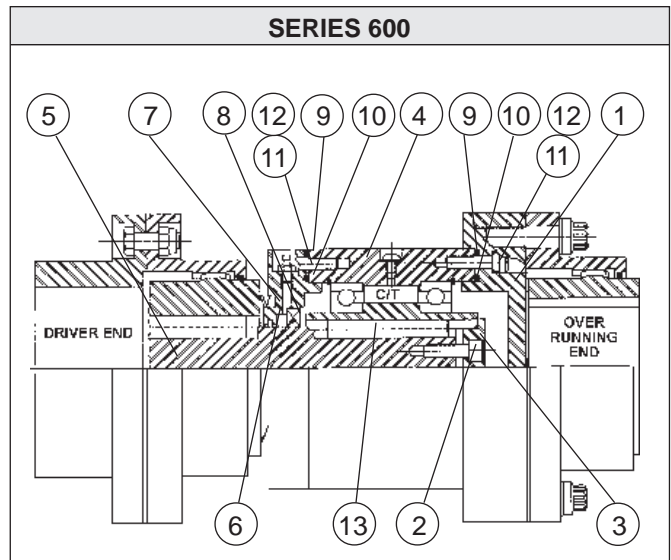
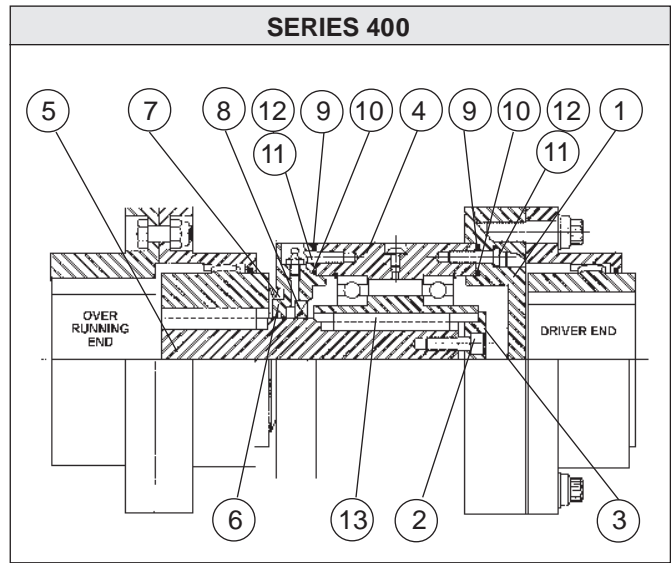


### SERIES 100 - SERVICE INSTRUCTIONS

- 1) Remove clutch spacer assembly from installation.
- 2) Set spacer assembly with "over-running end" down on clean, dry surface. Remove adapter (#1).
- 3) Remove bolt (#2) and keeper plate (#3).
- 4) Remove clutch (#4) from shaft (#5).
- 5) Position clutch so that it provides the proper direction of drive in the assembly. Slide clutch onto shaft and insert key (#6). Install keeper plate and properly torque bolts (#2) according to values in torque chart.
- 6) Install adapter onto clutch. Apply *Loctite Threadlocker #262* to threads of adapter bolts (#12) and torque according to values in torque chart.
- 7) Recheck clutch for proper rotation and reinstall per installation instructions.

## SERIES 400 / 600 - SERVICE INSTRUCTIONS

- 1) Drain oil from clutch and remove clutch spacer assembly from installation.
- 2a) **SERIES 400-** Set spacer assembly with "over-running end" down on clean, dry surface. Remove adapter (#1).
- 2b) **SERIES 600-** Set spacer assembly with "driver end" down on clean, dry surface. Remove adapter (#1).
- 3) Remove bolt (#2) and keeper plate (#3).
- 4) Remove clutch (#4) from shaft (#5).
- 5) Remove seal cover (#6) from clutch.
- 6) Replace seals (#7 and #8) in seal cover.
- 7) Position clutch so that it provides the proper direction of drive in the assembly. Install new o-rings (#9 and #10) in seal cover. Install new o-rings (#11) onto special bolts (#12). Apply *Loctite Threadlocker #262* to threads and bolt seal cover to proper end of clutch. Torque bolts according to values shown.
- 8) Slide clutch and seal cover assembly onto shaft and insert key (#13). Be careful not to damage clutch seal on shaft keyway. Install keeper plate and torque bolts (#2) according to values shown. If bolts are not lock wired, clean bolts and use *Loctite Threadlocker #262* on threads.
- 9) Install new o-rings (#9 and #10) in adapter. Install new o-rings (#11) onto special bolts (#12). Apply *Loctite Threadlocker #262* to threads and bolt adapter onto clutch. Torque bolts according to values shown.
- 10) Fill clutch one-half full with *Dexron II* type automatic transmission fluid. For operating temperatures below -10° F., consult PT Tech.
- 11) Recheck clutch for proper rotation and reinstall per installation instructions.



RECOMMENDED TORQUE VALUES									
SGK MODEL NUMBER		10	15	25	30	35	40	45	50
KEEPER PLATE BOLT (ITEM 2)	lbs-ft	27	27	27	120	120	120	120	200
ADAPTER OR SEAL COVER BOLT (ITEM 12)	lb s-ft	27	27	27	50	100	100	200	200

**WARRANTY:** PT Tech guarantees all its products will leave the factory in good condition. PT Tech warrants its products against defects in workmanship and material for a period of 365 days (one year) after shipment. Adjustments under this warranty will be made only after completion of inspection of the part or product in PT Tech's factory. PT Tech's liability under the warranty shall extend only to the replacement or correction of any defective part or product determined by PT Tech's inspection as not conforming to this warranty. Under no circumstances shall PT Tech be liable for consequential or incidental damages. This warranty shall not apply to any product which shall have been repaired or altered without PT Tech's knowledge and consent or operated or installed contrary to PT Tech's instruction or subjected to misuse, improper maintenance, or damaged by accident or negligence.

**PERFORMANCE ASSURANCE:** Rated torque and speeds are provided by PT Tech to assist the buyer in selecting the proper product. In addition, engineering assistance is offered by PT Tech for design and application of custom designed drives. Since the actual performance characteristics of the buyer's equipment cannot be completely analyzed nor duplicated in laboratory tests, performance assurance of all PT Tech products in the buyer's applications is the responsibility of the buyer. Performance assurance is usually accomplished through manufacture of a prototype by PT Tech and a test or qualification program on the part of the buyer.

*Rotating equipment is potentially dangerous and should be properly guarded. The user should check all applicable safety codes in his area and provide suitable guards.*



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### SGK SERVICE INSTRUCTIONS