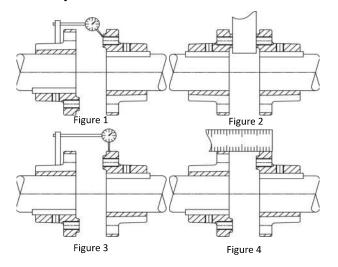


# SERIES "EL" - COUPLING INSTALLATION AND MAINTENANCE INSTRUCTIONS.

# INSTALLATION

- 1) Make sure that all the proper coupling parts, keys, etc. are on hand.
- 2) Make sure that the prime mover is disconnected from the power source so that it cannot be started accidentally during installation.
- 3) Remove dirt and burrs from the shafts and coat with a suitable anti-galling lubricant.
- 4) Insert keys in shaft keyways. Keys should have a snug fit to the sides of the keyways with slight clearance top to bottom. Mount hubs on the shafts and snug up the set screws over the keyways and/or TAPER-LOCK® bushings.
- Align the shafts by placing the machines in their approximate positions. (Refer to Table No. 1 for the correct shaft separation.) It is possible to make the shaft separation smaller than the width of the elastomeric element, provided the shaft sizes are not larger than the inside diameter of the element. Doing so is not recommended as it will not allow replacement of the elastomeric element without unbolting the driving or driven equipment, thereby disturbing the alignment.
- 6) Align the shafts. Best coupling performance is obtained when the alignment is checked with dial indicators.

NOTE: Always rotate the hub on which the indicator is mounted.



### Angular Alignment.

Check by mounting indicator on the body of one hub and placing the

pointer on the raised pad face of the other hub. (See Figure 1.) Adjust machines until the best possible alignment is obtained. As an alternate method, insert a feeler gage between the hubs at 4 points approximately 90° apart and adjust the machines. (See Figure 2.) When checking the angular alignment, both hubs may need to be rotated simultaneously.

### B. Parallel Alignment.

Mount the indicator on the body of one hub and place the pointer on the flange of the other hub. (See Figure 3.) Adjust machines until the indicator reading is the same at 4 points approximately 90° apart. As an alternate method, place a straight edge across one hub flange and adjust the machines until the straight edge rests squarely on the other hub flange. (See Figure 4.) This should be done at 90° intervals around the hub.

Securely tighten foundation bolts and recheck the alignment. Adjust the machines again, if necessary.

### 7) Assemble Coupling.

Loosen the set screws over the keyways or loosen the lock screws on the TAPER-LOCK® bushings and place the elastomeric element between the hub flanges. (See reverse side for element mounting procedure) Place the supplied hardened washers under the cap screw heads and torque the screws down to the given specification. Keep the surfaces between the steel bushing in the elastomeric element, the hardened washer and the cap screw head free from dirt and apply a light oil or grease film to both sides of the hardened washer. This is very important since it will significantly reduce the rubber stresses around the metal inserts when torqueing down the cap screws. Tighten the set screws over the keyways or tighten the lock screws on the TAPER-LOCK® bushings.

## **MAINTENANCE**

- It is advisable to keep excessive grease and oil away from the elastomeric element, unless special highly oil resistant elements have been requested.
- When severe operating conditions are encountered, especially when the prime movers are diesel engines with 4 or fewer cylinders, the tension on the bolts should be checked every 6 months with a torque wrench. The same applies to the set screws over keyways or to TAPER-LOCK® bushings.
- 3) When bolts have been removed more than 10 times, the self-locking nylon coating could wear off, therefore, it is recommended that new bolts be installed to avoid the possibility of bolts loosening and backing out during severe operating condition.

Series "EL" Size	5	20-20	20-40	30-75	30-115	30-150	40-250	50-350	60-463	65-560	70-910
Shaft Separation	.47	.92	1.23	1.56	1.56	1.76	2.00	1.89	2.19	2.19	2.19
Bolt Torque FT LBS	17	26	26	26	49	49	74	160	300	450	450

CAUTION: INSTALL GUARDS AROUND COUPLING ACCORDING TO LOCAL AND NATIONAL CODES.

TAPER-LOCK® is a registered trademark of DODGE / Reliance Electric Co.

# **CLOCKWISE ROTATION DRIVES**

- 1) This assembly instruction sheet describes the assembly position shown. Note the arrows on the element are to point towards the of the element when used on clockwise rotation drives, as threaded holes in the hubs.
- 2) Elements with non-uniform cross sections must be mounted such that the thicker cross section is worked in compression and the thinner section is in tension, otherwise the torque carrying capacity of the element is greatly reduced.

Elements with uniform cross sections can be mounted to the hubs in any manner desired. (Sizes 5, 20, 30, 50, 60 and 70)

Rotation view from back side of motor.

Place the supplied hardened washers under the cap screw heads Keep the surfaces between the steel bushing in the elastomeric from dirt and apply a light oil or grease film to both sides of significantly reduce the rubber stresses around the metal element, the hardened washer and the cap screw head free the hardened washer. This is very important since it will and torque the screws down to the given specification.

bushings when torquing down the cap screws.

DRIVEN HUB 0 DRIVE HUB

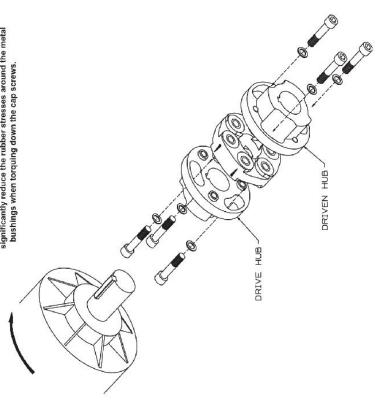
# COUNTER-CLOCKWISE ROTATION DRIVES

- This assembly instruction sheet describes the assembly position of the element when used on counter-clockwise rotation drives, as shown. Note the arrows on the element are to point towards the bolt heads.
- 2) Elements with non-uniform cross sections must be mounted such that the thicker cross section is worked in compression and the thinner section is in tension, otherwise the torque carrying capacity of the element is greatly reduced.

Elements with uniform cross sections can be mounted to the hubs in any manner desired. (Sizes 5, 20, 30, 40, 50, 60 and 70)

Rotation view from back side of motor.

3) Place the supplied hardened washers under the cap screw heads Keep the surfaces between the steel bushing in the elastomeric from dirt and apply a light oil or grease film to both sides of significantly reduce the rubber stresses around the metal element, the hardened washer and the cap screw head free the hardened washer. This is very important since it will and torque the screws down to the given specification.



E-13

DATA SHEET DS113 REV. 07

DATA SHEET DS1113 REV. 07