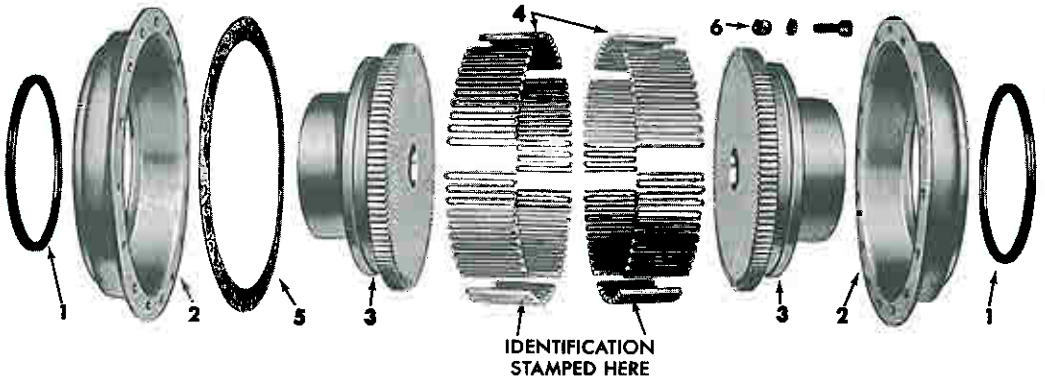
TYPE F STEELFLEX COUPLINGS



1. **Seal Ring**
2. **Half Cover**
3. **Hub**
   (Specify bore and keyway)
4. **Grid**
   INNER layer painted light grey, stamped "IN"
   OUTER layer painted bronze, stamped "OUT"
5. **Gasket**
6. **Cap Screws and Nuts**

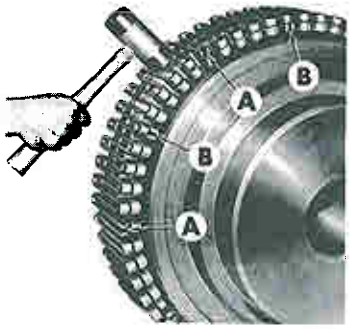
When ordering spare parts, specify hub bores and keyways and state coupling size as stamped on coupling cover and hub.

CAUTION: Consult applicable local and national safety codes for proper guarding of rotating shafts and couplings.

INSTALLATION — For best results, assemble standard couplings with minimum misalignment and with "normal gap." Heat small interference fit hubs in an oven or in oil. Apply flame heat evenly to large hubs, but DO NOT apply flame directly to the grid groove area. Also, DO NOT heat hubs over 275°F (135°C).

LIMITED END FLOAT — When electric motors, generators, engines, compressors and other machines are fitted with sleeve or straight roller bearings, limited axial end float kits are recommended for protecting the bearings. Consult Falk for details.

GRID — DO NOT APPLY LOAD UNLESS complete grid is installed correctly. The number of segments and layers is listed in Table 1. Color coding is explained on Page 2 under "INSERT GRID." Grid identification is stamped at the end of the section as shown above.



Installation — Grid rungs are truly radial, therefore it is necessary to spread the grid slightly so that it will pass over the coupling teeth at the outside diameter. To accomplish this with a minimum amount of spreading, start the grid at either end and tap the rungs only part way into the grooves. After all of the rungs are partially in their respective grooves, tap the grid all the way into place. When installing a two-layer grid, center the sections of the outer ("OUT") layer over the free ends of the inner ("IN") layer, see A above, and extend all free ends in the same direction, see A and B above.

Removal — A round rod or screw driver that will conveniently fit into the open loop ends of the grid is all that is required in the way of tools. Begin at the open end of the grid section and insert the rod or screw driver into the loop ends. Use the teeth adjacent to each loop as a fulcrum and pry the grid out radially in even, gradual stages. Proceed alternately from side to side lifting the grid about half way out until the end of the grid is reached. By following the same procedure once again, the grid will clear the teeth.

LUBRICATION SPECIFICATIONS — Refer to Manual 428-010 for recommended lubricants. The following specifications apply to lubricants for Falk couplings that are lubricated annually and operate within ambient temperatures of 0° to 150°F (−18° to +66°C). For temperatures beyond this range, consult the Factory.

Dropping Point — 300°F (149°C) or higher.

Consistency — NLGI No. 2 with worked penetration value in the range of 250 to 300.

Separation and Resistance — Low oil separation rate and high resistance to separation from centrifuging.

Liquid Constituent — Possess good lubricating properties . . . equivalent to a high quality, well refined, petroleum oil.

Inactive — Must not corrode steel or cause swelling or deterioration of neoprene.

Clean — Free from foreign inclusions.

MAINTENANCE — Adequate lubrication is essential for proper operation of the coupling. Lubricate at least once every twelve months. Lubricate oftener when the coupling is exposed to excessive moisture, extreme temperatures or rapid reversing or shock loads.

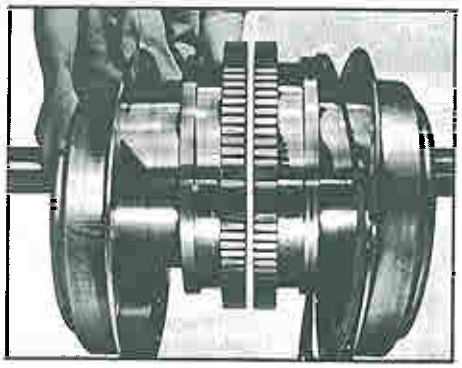
DISCONNECTING — To disconnect, clean coupling, oil hubs, remove cap screws, draw covers back and remove grid as shown at the left.

TABLE 1 INSTALLATION DATA*

Coupling Size	Max Speed rpm	Approx Lubricant lb	GAP (See Page 2)			Grid		Operating Alignment Limits		Cover Bolt Torque (Ft-lb)
			Min	Normal	Max	No. of Layers	No. Segments Per Layer	Offset (Max)	Angular (Max)	
200	1800	10	1/16	1/4	1/2	2	4	.015	.015	48
210	1600	13	1/16	1/4	1/2	2	4	.015	.015	83
220	1500	14	1/16	1/4	1/2	2	4	.015	.015	83
230	1300	17	1/16	1/4	1/2	2	6	.015	.015	83
240	1200	27	1/8	1/2	3/4	2	8	.015	.015	83
250	1000	34	1/8	1/2	3/4	2	8	.015	.015	94
260	900	43	1/8	1/2	3/4	2	8	.015	.015	94
270	700	54	1/8	1/2	3/4	2	8	.015	.015	141
280	600	70	1/8	1/2	3/4	2	8	.015	.015	141
290	500	86	1/8	1/2	3/4	2	9	.020	.020	284
300	400	93	1/8	1/2	3/4	2	10	.020	.020	284

* Refer to Factory for maximum bores and reboring instructions.

INSTALLATION OF TYPE F STEELFLEX COUPLINGS



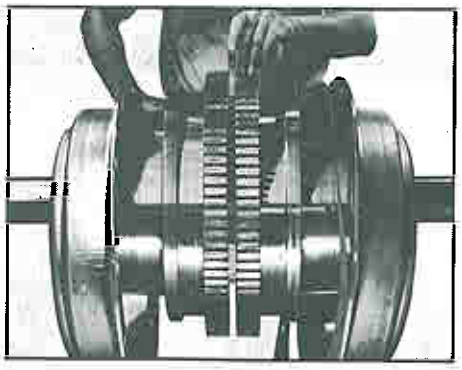
1 MOUNT COVER, SEAL RING, HUB AND GASKET ON SHAFT

Place cover with seal ring on shaft before mounting hub. Mount hubs on their respective shafts so that the hub face is flush with the end of its shaft. Carefully insert gasket.

COUPLING GAP

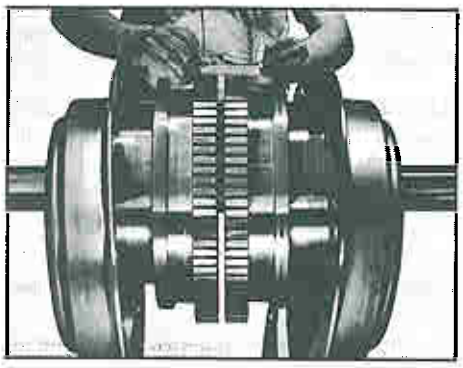
Maintain the normal coupling gap shown on Page 1 whenever possible, and to insure optimum performance, do not exceed the minimum and maximum gaps. Consult the Factory if limited axial end float is required.

Provide for shaft end play in the coupling gap when sleeve bearing units are used. After mounting the coupling hubs, position the free unit so that the coupling gap will be within the minimum and maximum limits when both shafts are in their extended or retracted positions. After the gap has been set and the shafts aligned, tighten the unit foundation bolts and recheck alignment.



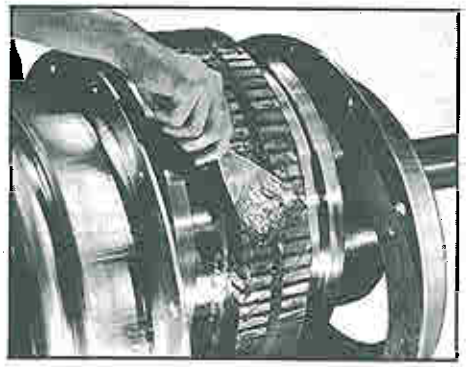
2 GAP AND ANGULAR ALIGNMENT

Use a spacer bar equal in thickness to normal gap specified in Table 1. Insert bar, as shown above, to same depth at 90° intervals and measure clearance between bar and hub face with feelers. The difference in minimum and maximum measurements should not exceed the ANGULAR limit specified in Table 1.



3 OFFSET ALIGNMENT

Align so that a straight edge rests squarely (or within the limits specified in Table 1) on both hubs as shown above and also at 90° intervals. Check with feelers. The clearance should not exceed the OFFSET limit specified in Table 1. Tighten all foundation bolts and repeat Steps 2 and 3. Realign coupling if necessary.



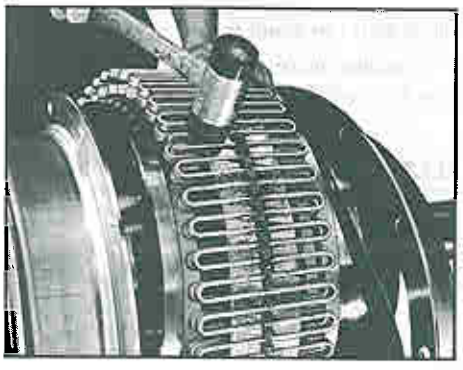
4 PACK WITH LUBRICANT

Pack as much lubricant as possible into the gap, the hub grooves and the side pockets. Make certain that the side pockets formed by the recess in the hubs are packed solid. Refer to Page 1 for lubrication specifications.

5 INSERT INNER GRID

(Painted Light Grey, Stamped "IN")

Insert all sections of inner ("IN") layer of the grid as instructed on Page 1. Use a plastic or hard rubber mallet to avoid damaging grid and hub.



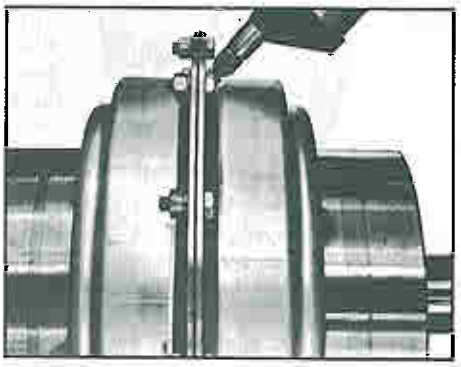
6 INSERT OUTER GRID

(Painted Bronze, Stamped "OUT")

Insert all sections of outer ("OUT") layer of grid as instructed on Page 1. Note the positioning of loops and free ends of the grid. Do not damage grid or hub grooves.

7 PACK VOIDS WITH LUBRICANT

Pack as much lubricant as possible into the spaces around the grid, but keep lubricant flush with outside diameter of grid to permit positioning of gasket and cover. Center gasket on coupling, remove lube plugs and lightly lubricate seal rings to facilitate assembly.



8 ASSEMBLE COVERS LUBRICATE EVERY 12 MONTHS

Assemble covers with lube holes at 180° (90° for half covers with 2 lube holes). Check seal rings for proper seating. Insert fasteners and tighten to torque specified in Table 1. Remove all lube plugs and insert your lube fitting. Fill with recommended grease until an excess appears at an open hole; then insert plug. Continue procedure until all plugs have been inserted. CAUTION: Make certain all plugs are inserted after lubricating.