

ALIGN GEAR COUPLING  
ALIGN GEAR COUPLING

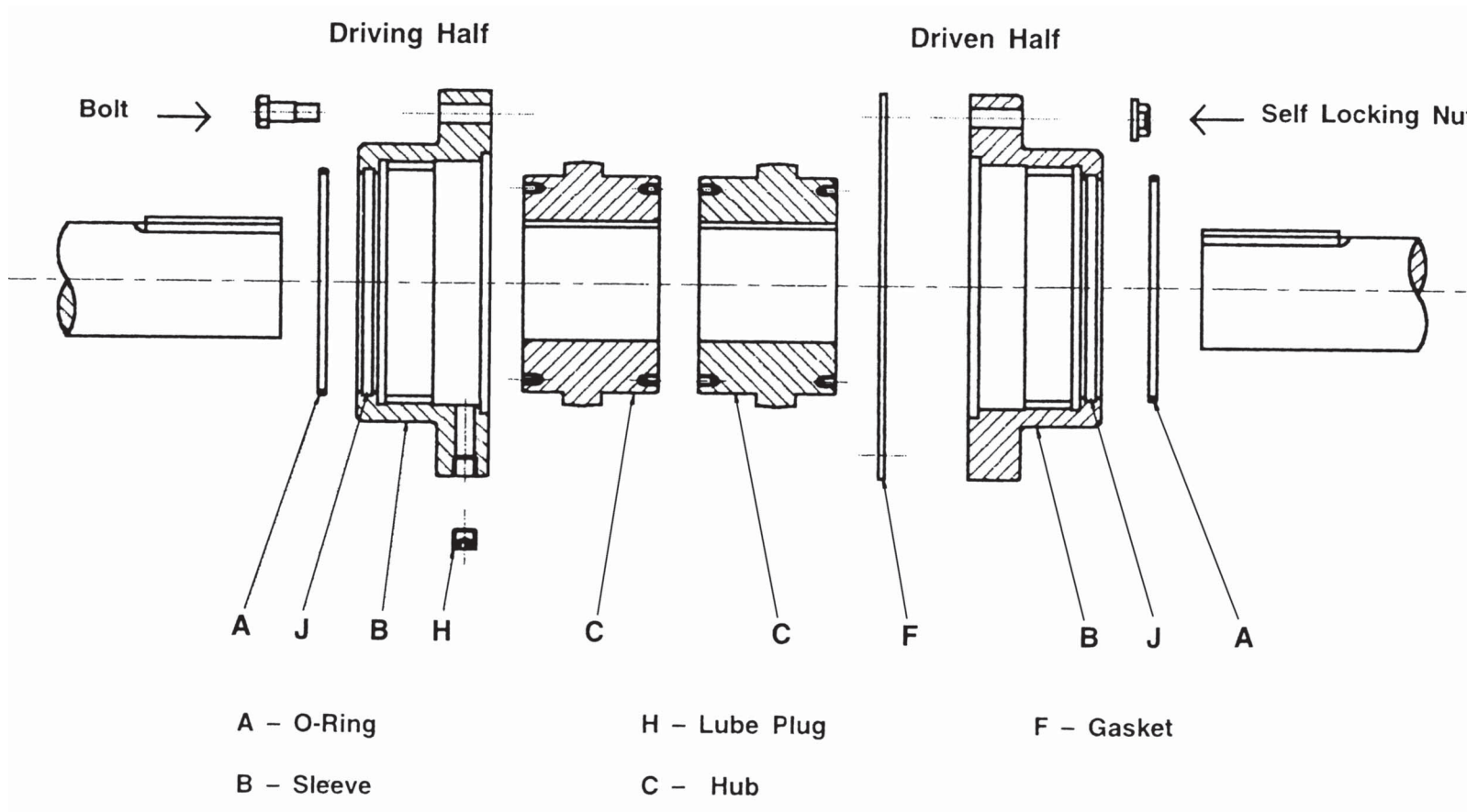
**INSTALLATION  
AND  
MAINTENANCE  
MANUAL**



*Always a step ahead in technology*

Manual No. : 07/G/IM/07

## INSTALLATION & MAINTENANCE ELIGN GEAR COUPLING



## **1. ASSEMBLING**

- 1.1 Ensure all parts are clean.
- 1.2 Apply a light coat of grease to the O-Rings A and insert O-Rings into grooves J of sleeves B.
- 1.3 Place sleeves B over shaft ends. Care should be taken not to damage O-Rings A.
- 1.4 Install hubs C on their respective shafts with the longest hub end towards shaft end or towards machine bearing depending on the type (see page 5). If needed, uniformly heat hub C (max 120°C) to install them easily on the shaft, in this case, avoid any contact between the hub C and O-Ring A. Hub faces have to be flush with shaft end. In case of doubt, please consult us.
- 1.5 Install units to be connected in place and check the spacing N between hubs. See the tabulation (page 3) or approved drawing for correct hub spacing N, according to coupling type. In case of doubt, pl. consult us.
- 1.6 Align the two shafts, check alignment using a precise tools & measuring instruments / alignometer. Alignment precision depends on running speed (see page 6).
- 1.7 Coat hub & sleeve gearing with grease (see tabulation page 5) and slide sleeves B over hubs.
- 1.8 Insert gasket F and bolt sleeves together. Tighten bolts uniformly. See tabulation (page 4) for correct tightening torque (T Nm). Make sure that sleeve is freely sliding above hubs by axially displacing it to a value equal to N.
- 1.9 For the type ED, ES & ER remove both lube plugs H of one sleeve B and add grease in sufficient amount to overflow with lubricant holes in horizontal position. For the types ET & EV repeat this operation for the second sleeve. For quantity & quality of grease, see tabulation (page 5). Re-install the 2 plugs H. For type EV consult us.

## **2. MAINTENANCE**

### **2.1 Every 3,000 hours.**

Check that sleeves are freely moving axially: follow instructions as indicated in 1.8. Fill up grease level: Proceed as mentioned under 1.9.

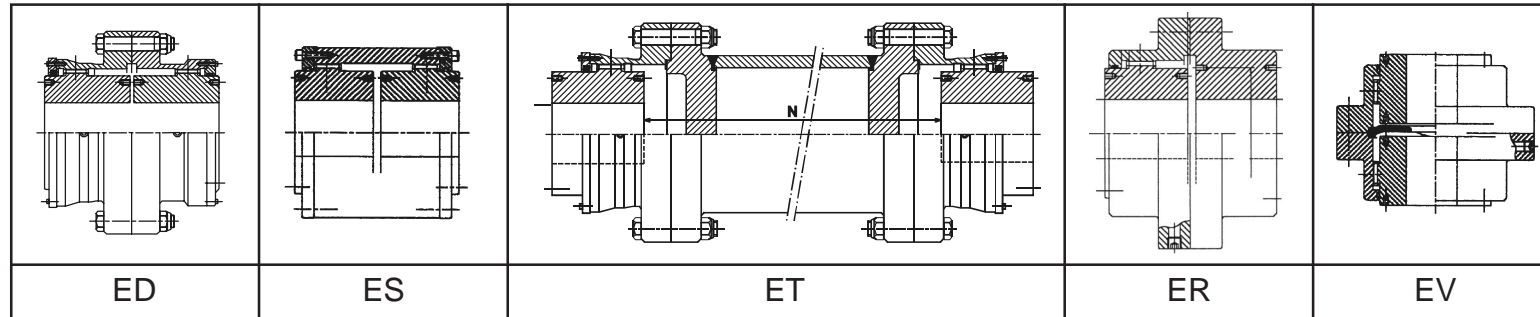
### **2.2 Every 8,000 hours or every 2 years.**

- 2.2.1 Remove bolts and gasket F.
- 2.2.2 Control gearing and sealing.
- 2.2.3 Control alignment.

Type	N (mm)			
	ED	ES	ER	EV
<b>130</b>	3	--	5	8
<b>280</b>	3	--	5	5
<b>500</b>	3	--	5	12.5
<b>1000</b>	5	--	6	11
<b>1600</b>	5	5	6	13
<b>2200</b>	6	6	6.5	14
<b>3200</b>	6	6	6.5	15
<b>4500</b>	8	8	8	17
<b>6200</b>	8	8	8	20
<b>8400</b>	8	8	8	27
<b>11500</b>	8	8	10	34
<b>17400</b>	10	10	13	28

Type	ED, ET, ER, EV		ED, ES, ET, ER, EV	
	Exposed Metric Bolts		Pipe Plug	
	Tightening Torque	Socket Size	Plug Size	Key Size
	T (Nm)	(mm)	(inch)	(mm)
<b>130</b>	33.5	10	1/8" BSP	5
<b>280</b>	66	12	1/8" BSP	5
<b>500</b>	112	14	1/8" BSP	5
<b>1000</b>	277	19	1/8" BSP	5
<b>1600</b>	277	19	1/8" BSP	5
<b>2200</b>	537	24	1/8" BSP	5
<b>3200</b>	537	24	1/8" BSP	5
<b>4500</b>	537	24	1/8" BSP	5
<b>6200</b>	537	24	1/8" BSP	5
<b>8400</b>	537	24	3/8" BSP	8
<b>11500</b>	795	30	3/8" BSP	8
<b>17400</b>	795	30	3/8" BSP	8

## TYPES OF ELIGN GEAR COUPLINGS

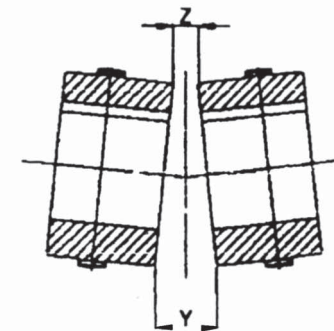
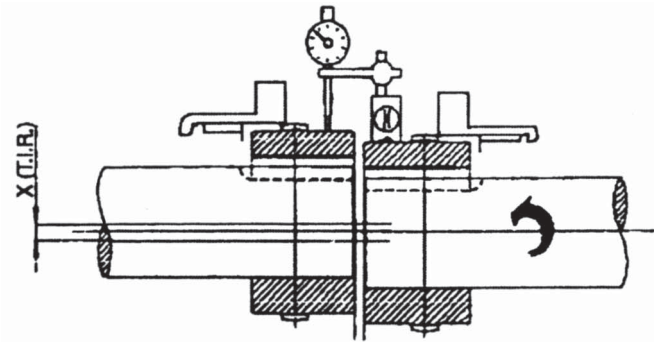


### RECOMMENDED LUBRICANTS & QUANTITY

**LUBRICANTS : GREASE :**  
 SERVOGEM EP-2 OF INDIAN OIL MAKE OR EQUI. GRADE.  
 HP LITHON EP-2 OF HINDUSTAN PETROLEUM MAKE OR EQUI. GRADE.

**QUANTITY :**

Type	QTY. (dm <sup>3</sup> )				
	ED	ES	ET	ER	EV
<b>130</b>	0.047	--	2 x 0.025	0.025	2 x 0.021
<b>280</b>	0.074	--	2 x 0.037	0.037	2 x 0.037
<b>500</b>	0.131	--	2 x 0.065	0.065	2 x 0.057
<b>1000</b>	0.207	--	2 x 0.105	0.105	2 x 0.104
<b>1600</b>	0.362	0.362	2 x 0.180	0.180	2 x 0.164
<b>2200</b>	0.522	0.522	2 x 0.260	0.260	2 x 0.254
<b>3200</b>	0.796	0.796	2 x 0.400	0.400	2 x 0.387
<b>4500</b>	0.976	0.976	2 x 0.490	0.490	2 x 0.514
<b>6200</b>	1.513	1.513	2 x 0.760	0.760	2 x 0.741
<b>8400</b>	2.017	2.017	2 x 1.010	1.010	2 x 0.940
<b>11500</b>	2.429	2.429	2 x 1.210	1.210	2 x 1.120
<b>17400</b>	3.286	3.286	2 x 1.640	1.640	2 x 1.690



Types <b>ED, ES, ET, ER, EV</b>	SPEED (rpm)									
	0-250		250-500		500-1000		1000-2000		2000-4000	
	X max (mm)	(Y-Z) (mm)	X max (mm)	(Y-Z) (mm)	X max (mm)	(Y-Z) (mm)	X max (mm)	(Y-Z) (mm)	X max (mm)	(Y-Z) (mm)
<b>130 - 1000</b>	0.25	0.25	0.25	0.25	0.25	0.25	0.15	0.20	0.08	0.10
<b>1600 - 6200</b>	0.50	0.60	0.50	0.60	0.25	0.35	0.15	0.20	0.08	0.10
<b>8400 - 17400</b>	0.90	1.00	0.50	0.75	0.25	0.35	0.15	0.20	--	--