

7. Instruction for Installation

1. Small Size(up to size 60)

Hub bore and keyway must be machined accurately. During the key-fit to the shaft and the hub, be careful with the oil leakage.

- ① Clean all parts, Grease the crowned gear teeth and O-Ring.
Put O-Ring onto the shafts.
- ② Place the flanged sleeves on the shafts and mount the hubs.
- ③ Using a spacer bar, make the gap between the hubs equal to the normal gap specified.
- ④ Align the shaft with a strait bar by checking every 90 degree, referring to the table 3. Make it sure with a dial gauge not to exceed the offset limit.
- ⑤ Insert gasket between the flanged sleeves and fasten the bolts, positioning the lube plugo at 90.
- ⑥ Fill grease until overflowing at the open opposite Lub plug hole.

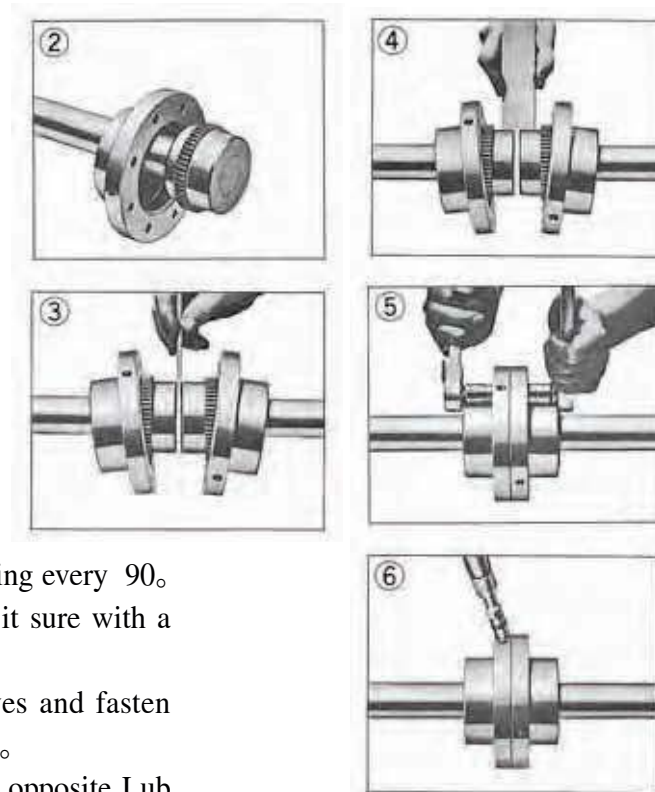


Fig. 3 Operating Limits of misalignment (mm)

Table 3

Size	10	15	20	25	30	35	40	45	50	55	60	70	80	90	100
Angular degree	0.125	0.125	0.25	0.25	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4
Gap	3	3	3	4.5	4.5	6	6	8	8	8	8	9.5	10	13	13
Flange Bolt Torque(kg-cm)	96	320	480	960	960	1,650	1,650	1,650	2,070	2,070	2,070	2,980			

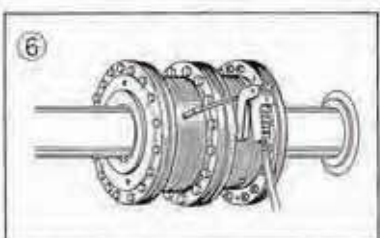
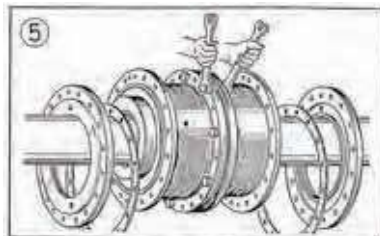
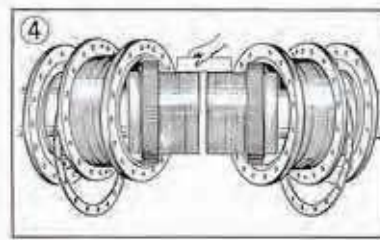
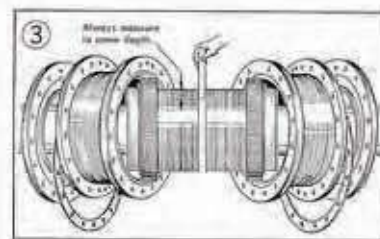
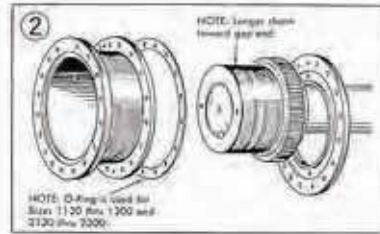
☒ The life of coupling is reduced by excess of the OFFSET limit.

2. Large Size (over size 70)

Hub bore and Keyway must be machined accurately.

During the Key-Fit work, be careful Internal Gear not to make oil leakage.

- ① Clean all parts. Pack with grease and seals with grease before assembly.
- ② Place the side covers with sealing gaskets on the shafts before mounting the crown gears. Mount crown gears on their respective shafts. Mount Internal Gears with side cover gaskets.
- ③ Use a spacer bar equal into the gap. The difference in minimum and maximum measurements should not exceed the angular limit specified in table 3.
- ④ Align with a straightedge, rests squarely at every 90° as shown in photo Check with feelers. The tolerance should not exceed the offset limit specified in Table 3.
- ⑤ Insert gasket between flanges. Position Internal Gears with lube holes at about 90° and then fasten the bolt&nuts.
- ⑥ Remove all lube plugs and fill recommended grease into the coupling until excess flow through the opposite lub plug hole. And screw down plugs.



8. Selection of Puller Holes

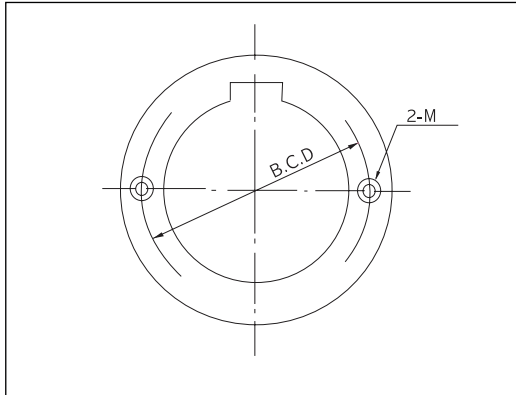
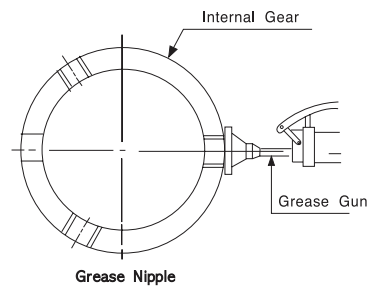


Table 4

Size	BCD	Tap Size
20KG	89	M8
25KG	112	M10
30KG	128	M10
35KG	152	M12
40KG	181	M16
45KG	200	M16
50KG	216	M20
55KG	238	M20
60KG	268	M20
70KG	305	M24
80KG	318	M24
90KG	356	M30
100KG	394	M30
110KG	426	M30
120KG	498	M30

9. Lubrication and Handling

Information of the adequate lubricant for good performance and long life.



1. Lubricant

- ① Grease the Internal gear teeth and crown gear teeth, and fill enough lubricant Grease.
- ② Lub weight - Refer to " Dimensions Table" on page30.
- ③ Supplement and Replacement;

Add grease every moth or every 240~250 hours operating.

Renew all the contaminated grease every 3 months or every 4,000 hours operating

④ Selection

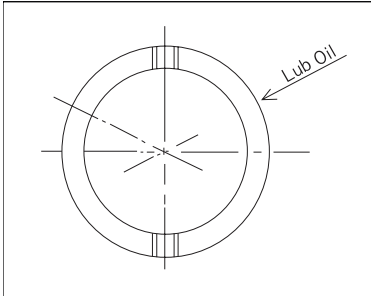
Allowable temperature of grease is from -17℃ to 70℃. Refer to the table 6 that shows the coupling RPM allowed for the listed grease.

Table 5

Company	Oil	Grease # 1	Grease # 0
Gulf Oil Corp.		Gulfcrown Grease EP #1	Gulfcrown Grease EP #0
Shell Oil Corp.		Alvania Grease EP #1	Alvania Grease EP-RO
Texaco Inc.		Multifak EP - 1	Multifak EP - O
Mobil Oil Corp.		Mobilux EP - 1	Mobilux EP - O

☒ NOTE : Lubricants listed in this manual are typical products.

2. Lubricant Filling



- ① Place the Lub plug holes × 2EA horizontal level. Fill up Lubricant until it overflows from the opposite hole.
- ② Supplement every month, or 240-250 hours operating.
- ③ Replacement completely all the contaminated lubricant, every 3 months or every 4,000 hours operating.

3. Selection of Lubricant

Table 6

Cmpany	Shell	Mobil	Michang	Buhmwoo	Gulf	Fujikosan Nipponkoju	Houghton	Hanil		Caltex
CST 40 [ⓧ] 68	omala 68	Mobilgear 626	Pio Gear EP 68	Buhmwoo Gearlube BG-68	Gulf EP Lubricant R 68	Hirax ME GO 300	MP Gear Oil 68	Nico Gear SP 68	Daphne CE compound 68C	Meropa Lubricant 68
100	omala 68		Pio Gear EP 68	Buhmwoo Gearlube BG-100	Gulf EP Lubricant HD 100	Hirax ME GO 500	MP Gear Oil 100	Nico Gear SP 100	Daphne CE compound 100S	Meropa Lubricant 100
150	omala 150	Mobilgear 629	Pio Gear EP 150	Buhmwoo Gearlube BG-150	Gulf EP Lubricant R150, HD150	Hirax ME GO 700	MP Gear Oil 150	Nico Gear SP 150	Daphne CE compound 150S	Meropa Lubricant 150, Synthetic Gear Lube
150	omala 220	Mobilgear 630	Pio Gear EP 220	Buhmwoo Gearlube BG-220	Gulf EP Lubricant R220, HD220	Hirax ME GO 1000	MP Gear Oil 220	Nico Gear SP 220	Daphne CE compound 220S	Meropa Lubricant 220
320	omala 320	Mobilgear 632	Pio Gear EP 320	Buhmwoo Gearlube BG-320	Gulf EP Lubricant R320, HD320	Hirax ME GO 1500	MP Gear Oil 320	Nico Gear SP 320	Daphne CE compound 320S	Meropa Lubricant 320

ⓧ Above are sample products.