

OLDHAM COUPLING Instruction Manual

- Thank you for purchasing an **OLDHAM COUPLONG**.
- Be sure the product delivered matches your order. This will prevent you from accidents, injuries or equipment damage caused by installing the wrong unit. If an incorrect unit is delivered, contact **TSUBAKIMOTO CHAIN** immediately.
- This manual should remain with the product at all times including when redistributed.
- To ensure safety, this manual should be available to every user.



WARNING

Death or serious injury may result from misusing the product without following the directions given under this sign.



CAUTION

Minor or moderate injury, as well as damage to the product may result from misusing the product without following the directions given under this sign.

Note : Failure take heed of information labeled "CAUTION" may also lead to serious accidents depending on the situation.



WARNING

(General)

- Install a safety cover and prevent access to any rotating parts: otherwise injury may occur. Set a safety mechanism to stop the rotating parts when the cover is lifted.
- Transporting, installing, operating, maintaining or inspecting must be carried out by skilled and professional engineers to avoid mis-handling and hazardous situations.
- When coupling is used with vehicles that carry human, use a device to protect the vehicle: otherwise, accidents and damage may occur.
- When the coupling is used for an elevator, install a safety device on the elevator in order to prevent it from falling, which can cause damage and accidents resulting in death or injury.

(Unpacking upon delivery)

- If delivered in a wooden case, unpack with care. Sharp nails may cause injury.

(Additional machining)

- Never modify the coupling; the quality or function of the product may decrease and break or damage the machine or injure the operator.

(Transportation)

- Never step under the product when it is being elevated for transportation: otherwise, either the product or load may fall, causing accidents resulting in death or injury.

(Installation)

- Wear appropriate clothing and safety gear (safety goggles, gloves, shoes, etc.).
- Make sure the power is switched off, and the machine is completely stopped before installing. Take caution so that the power does not reconnect accidentally.
- Make sure to tighten and apply sufficient amount of anti-loosening agent to the hexagonal socket head cap screws.

(Operation)

- Avoid contact with any rotating parts (coupling, shaft, etc.) during operations. Rotating parts can catch approaching objects and cause serious injuries.

(Maintenance and inspection)

- Avoid contact with any rotating parts (coupling, shaft, etc.) during maintenance and inspection. Rotating parts can catch approaching objects and cause serious injuries.
- Make sure the power is switched off, and the machine is completely stopped before carrying out maintenance and inspection.
- Take caution so that the power does not reconnect accidentally.
- Make sure the driving and driven equipment are also completely stopped.



CAUTION

(General)

- Do not use coupling beyond its capacity as specified in the drawing. Exceeding its capacity can break the machine and cause injuries.
- Do not use damaged couplings. They can break your equipment and cause injuries.

(Transportation)

- Pay extra attention so that the equipment will not fall or rollover during transportations.

(Installation)

- Do not touch the edge and inner diameter of any part with bare hands to avoid possible injury.
- Make sure to align the drive and driven shafts as instructed in the manual when installing the coupling

(Operation)

- Do not touch the coupling during operations to avoid injuries.
- Immediately stop the machine upon any sign of abnormal operation.

(Maintenance and inspection)

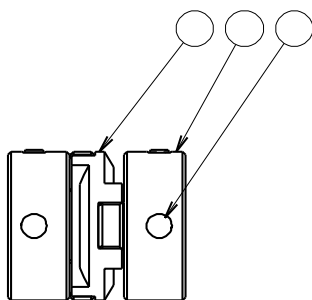
- Wear appropriate clothing and safety gear (safety goggles, gloves, shoes, etc.).
- Clean the surrounding area and maintain a clutter-free space to avoid secondary accidents.
- Comply with Ordinance on Labor Safety and Hygiene 2-1-1 general standards.
- Conduct periodic inspections to make sure that the drive and driven shafts are aligned as described in the manual, and that the rubber and plastic parts are not worn or deformed.

(Environment)

- Coupling scraps should be disposed as general waste by skilled professionals.
- This coupling meets RoHS (Restriction of Certain Hazardous Substances) standards and contains no hazardous chemicals.

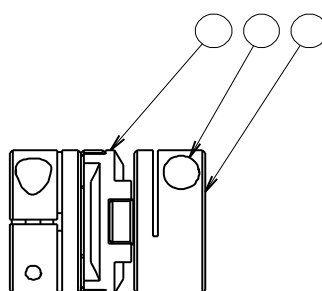
1. Structure

■SET SCREW TYPE



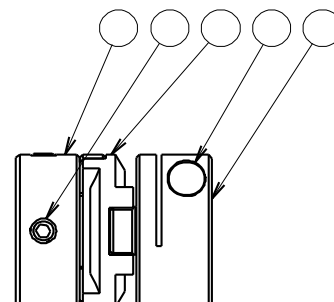
- ① HUB
- ② INSERT
- ③ SET SCREW

■CLAMP TYPE



- ① HUB
- ② INSERT
- ③ SOCKET BOLT

■SET SCREW – CLAMP TYPE



- ① HUB
- ② CLAMP HUB
- ③ INSERT
- ④ SET SCREW
- ⑤ SOCKET BOLT

2. Centering

Align coupling and shafts within the allowable figures given in Table 1.

Accurate alignment can extend life.

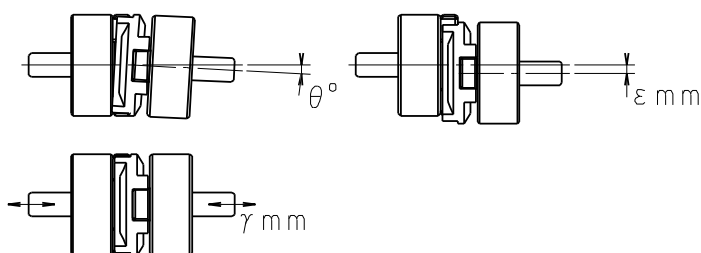


Table 1 ■Allowable misalignment

TYPE	Angular (θ°)	Parallel (ε mm)		Axial (γ mm)
	Allowable	Allowable	Recommended	Allowable
EJC13	0.5	1.3	0.1	±0.05
EJC19	0.5	1.9	0.2	±0.1
EJC25	0.5	2.5	0.2	±0.1
EJC33	0.5	3.3	0.2	±0.15
EJC41	0.5	4.1	0.25	±0.15
EJC51	0.5	5.1	0.25	±0.2
EJC57	0.5	5.7	0.25	±0.2

3. Installation

After the coupling and shafts are aligned, connect the shafts by tightening the set screws or the socket bolts.

Tighten them by torque wrench at the torque strengths shown in Table 2.

Leave a small gap between the top of the drive tenons of a hub and the insert for allowable axial misalignment rating.

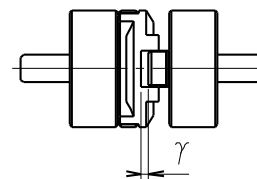


Table 2 ■TIGHTNING TORQUE AND STOCK BORE SIZE

			TIGHTNING TORQUE		STOCK BORE SIZE													
TYPE		SIZE	N · m	[kg·cm]	3	4	5	6	6.35	8	9.525	10	12	14	16	20	25	30
EJC13	SET SCREW	M3	0.92	9.2	○	○	○	○	○									
EJC19	SET SCREW	M3	0.92	9.2		○	○	○	○	○								
EJC19	CLAMP	M2.5	1.21	12.3		○	○	○	○	○								
EJC25	SET SCREW	M4	2.2	22.4				○	○	○	○	○	○					
EJC25	CLAMP	M3	2.1	21.4				○	○	○	○	○	○					
EJC33	SET SCREW	M4	2.2	22.4						○	○	○	○	○	○			
EJC33	CLAMP	M3	2.1	21.4						○	○	○	○	○	○			
EJC41	SET SCREW	M5	4.0	40.8							○	○	○	○	○	○		
EJC41	CLAMP	M4	4.6	46.9							○	○	○	○	○	○		
EJC51	CLAMP	M5	9.5	96.9									○	○	○	○	○	
EJC57	CLAMP	M6	16.0	163										○	○	○	○	○

Warranty

TSUBAKIMOTO CHAIN CO. hereinafter referred to as "Seller"

Customer: hereinafter referred to as "Buyer"

Goods sold or supplied by Seller to Buyer: hereinafter referred to as "Goods"

1. Warranty period without charge

18 months effective the date of shipment or 12 months effective the first use of Goods, including installation of Goods to Buyer's equipment or machines - whichever comes first.

2. Warranty coverage

Should any damage or problem with the Goods arise within the warranty period, given that the Goods were operated and maintained under instructions provided in the manual, Seller would repair and replace at no charge once the Goods are returned to Seller. The following are excluded from the warranty.

- 1) Any costs related to removing Goods from the Buyer's equipment or machines to repair or replace parts.
- 2) Costs to transport Buyer's equipment or machines to the Buyer's repair shop.
- 3) Costs to reimburse any profit loss due to any repair or damage and consequential losses caused by the Buyer.

3. Warranty with charge

Seller will charge any investigation and repair of Goods caused by:

- 1) Improper installation by failing to follow the instruction manual.
- 2) Insufficient maintenance or improper operation by the Buyer.
- 3) Incorrect installation of Goods to other equipment or machines.

4) Any modifications or alterations of Goods by the Buyer.

5) Any repair by engineers other than the Seller or those designated by the Seller.

6) Operation in an inappropriate environment not specified in the manual.

7) Force Majeure or forces beyond the Seller's control such as natural disasters and injustice done by a third party.

8) Secondary damage or problem incurred by the Buyer's equipment or machines.

9) Defected parts supplied, or specified by the Buyer.

10) Incorrect wiring or parameter setting by the Buyer.

11) The end of life cycle of the Goods under normal usage.

12) Loss or damage not liable to the Seller.

4. Dispatch Service

Service to dispatch a Seller's engineer to investigate, adjust or trial test Seller's Goods is at the Buyer's expense.

5. Disclaimer

1) In our constant efforts to improve, **TSUBAKIMOTO CHAIN** may change the contents of this document without notice.

2) Considerable effort has been made to ensure that the contents of this document are free from errors. However, **TSUBAKIMOTO CHAIN** makes no warranties with respect to the accuracy of information described herein. In the mean time, we would appreciate comments or reports on any inaccuracies or omissions found in this document to help us make timely amendments as necessary. Your cooperation is greatly appreciated.



TSUBAKIMOTO CHAIN CO.

1-1, Kohtari-Kuresumi, Nagaokakyo

Kyoto 617- 0833, Japan

Website: <http://tsubakimoto.com/>

Global Associated Partners:

U.S. Tsubaki Power Transmission, LLC

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