

Chain Couplings

Instruction and Lubrication Manual

These instructions must be read thoroughly before installation or operation. This instruction manual was accurate at the time of printing. Please see dodgeindustrial.com for updated instruction manuals.

WARNING: To ensure the drive is not unexpectedly started, turn off and lock-out or tag power source before proceeding. Failure to observe these precautions could result in bodily injury.

WARNING: All products over 25 kg (55 lbs) are noted on the shipping package. Proper lifting practices are required for these products.

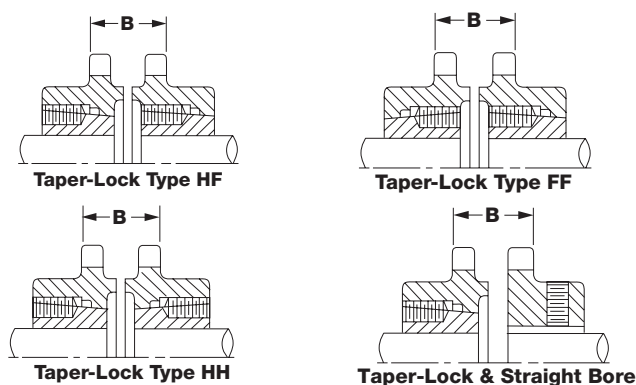


Figure 1 - "B" Dimension

WARNING: Because of the possible danger to person(s) or property from accidents which may result from the improper use of products, it is important that correct procedures be followed. Products must be used in accordance with the engineering information specified in the catalog. Proper installation, maintenance and operation procedures must be observed. The instructions in the instruction manuals must be followed. Inspections should be made as necessary to assure safe operation under prevailing conditions. Proper guards and other suitable safety devices or procedures as may be desirable or as may be specified in safety codes should be provided, and are neither provided by Dodge® nor are the responsibility of Dodge. This unit and its associated equipment must be installed, adjusted and maintained by qualified personnel who are familiar with the construction and operation of all equipment in the system and the potential hazards involved. When risk to persons or property may be involved, a holding device must be an integral part of the driven equipment beyond the speed reducer output shaft.

INSTALLATION

1. All parts should be examined for any damage during the shipping and handling process. Measurements should be taken to ensure parts meet application requirements, such as hub and shaft fits, shaft separation, etc. All parts must be clean and free of any foreign material before attempting assembly.
2. If a cover is to be used, slip one of the rubber rings onto each shaft. For selection and direction of assembly of rubber rings, see Table 2 and 3 on page 2.
3. Install flanges on shaft. For Taper-Lock® flanges, install bushing in the flange per instructions included with bushing or find instruction manual MN4044 at dodgeindustrial.com. For finished bore flanges, slip hub onto shaft and tighten set screws to value listed in Table 1. Set screws should be checked periodically for tightness. Shaft ends must not project beyond end of flanges.
4. Shaft separation for the chain coupling should be set per appropriate "B" dimension in Table 2. "B" dimension is illustrated in Figure 1.
5. Align shaft. Some parallel and angular misalignment usually develops during operation. Therefore, the shafts must be aligned as accurately as possible during installation to minimize wear. This will result in far longer service life with lower maintenance and operating cost. Periodically angular, axial and parallel misalignment should be inspected to be within the acceptable limits of the coupling.
6. Wrap the chain around flanges and secure ends. Chain should move freely on flanges when coupling is properly aligned.
7. If cover is to be used, slide the rubber rings on the flange hubs and against the chain. Rings are designed larger than cover to provide a good seal.

Table 1 – Set screw installation torque for straight and finished bore flanges

Inch set screw size	#0	#1	#2	#3	#4	#5	#6	#8	#10	1/4	5/16	3/8	7/16	1/2	3/4	7/8	1
Torque (lb-in)	1	1.8	1.8	5	5	10	10	20	36	87	165	290	430	620	1325	2400	5200
Torque (Nm)	0.1	0.2	0.2	0.6	0.6	1.1	1.1	2.3	4.1	9.8	18.6	32.8	48.6	70.1	149.7	271.2	813.5
Metric set screw size	M4	M5	M6	M8	M10	M12	M16	M20									
Torque (in-lbs)	19	35	64	150	290	480	1190	2100									
Installation torque (Nm)	2.2	4	7.2	17	33	54	134	237									

NOTE: Verify set screw size prior to tightening

Table 2 – "B" dimension

Coupling Number	4012 4016	5012 5016 5018	6018 6020	8018 8020	10020	12020
"B" dimension (in)	27/32	1 – 1/32	1 – 11/32	1 – 11/16	2 – 1/16	2 – 11/16

2. Apply a coating of grease approximately 1/8" thick to the inside of the cover halves.
3. Place one cover half around the coupling and put the gaskets on the exposed cover ends. Put the remaining cover half in place, add cover screws and tighten alternately and evenly until snug.
4. Inspect unit periodically for adequate amount of grease.

Table 4 – Grease part numbers

Description	Part number
Dodge coupling grease – 14 oz. cartridge	012995
Dodge coupling grease – 10-pack of 14 oz. cartridges	012996
Dodge coupling grease – Case (Qty. 30 – 14 oz. cartridges)	012997

Lubrication of coupling without cover

1. Brush thoroughly at least once a week with a medium body (30W) machine or engine oil or with a good quality roller bearing grease of medium consistency. Particular attention to lubrication is required for couplings operating at high speeds relubricate frequently as required.

Note: Operation above the following speeds without a cover is not recommended.

Table 3 - Maximum coupling speed without cover

Coupling Number	4012 4016 5012	5016 5018	6018 6020	8018 8020	10020	12020
Speed (RPM)	875	800	675	500	450	400

Lubrication of coupling with cover

1. Work a good quality roller bearing grease of soft or medium consistency into the chain around its perimeter, being careful to completely lubricate the chain rollers and teeth. Apply a small amount of grease around the perimeter and the outside edge of the rubber rings. Dodge coupling grease is recommended. Please see Table 4 for part number reference.

Additional instructions for safe installation and use

1. All rotating parts should be guarded to prevent contact with foreign objects which could result in sparks, ignition or damage to the coupling.
2. Couplings should be periodically inspected for normal wear, dust/dirt buildup or any similar scenario that would impede heat dissipation.
3. Overloading may result in breakage or damage to the coupling or other equipment. As a result the coupling could become an explosion hazard. Damaged coupling components or elements must not be operated in hazardous environments.

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