

DRIVELINE COUPLER

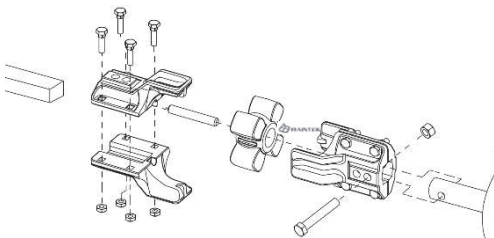


Designed to connect and protect the center drive gear motor and gearboxes

RainTek coupler is a shock-attenuating drive connection between the center drive gear motor and gearbox. It is the pivot industry standard. It is available in a variety of sizes and configurations to fit any brand of center pivot.

Features and Benefits

In addition to connecting the critical drive train components the coupler acts as both a torque dampener to absorb start up torque from the gear motor and as a fuse to protect other components in an overload condition.

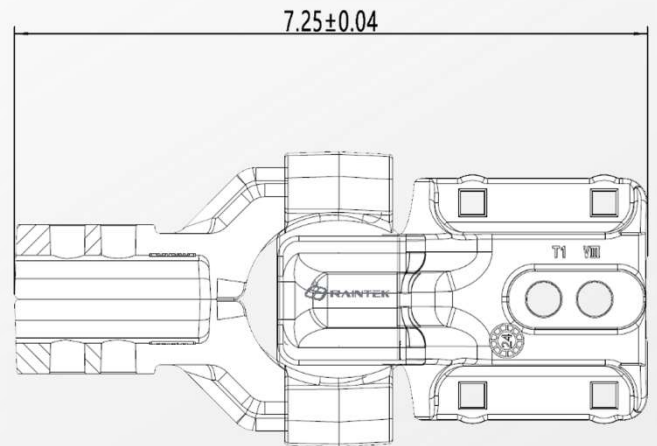
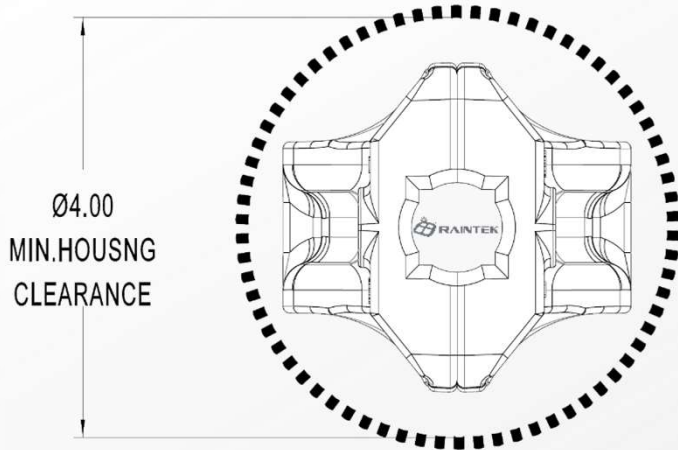


Product Number	Description
RTCPL-M78	Both ends 1"rd. × 7/8"sq.
RTCPL-M34	One end 1"rd. × 7/8"sq., Another end 3/4"sq. × 3/4"sq.
RTCPL-M11	One end 1"rd. × 7/8"sq., Another end 1"sq. × 1"sq

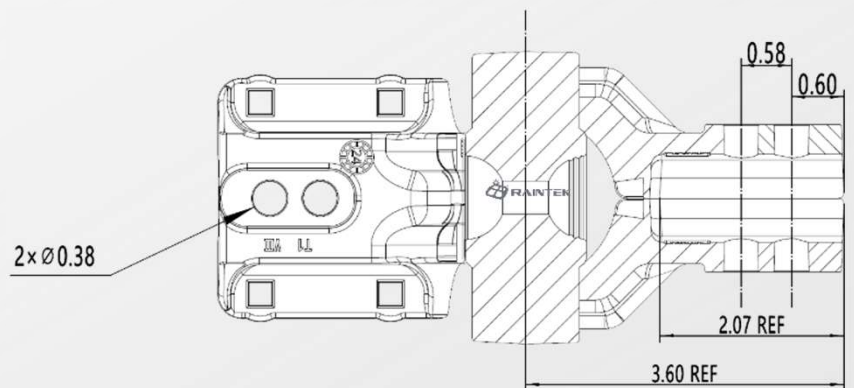
- Shock-attenuating coupler insert ensures smoother starts and stops;
- Acts as a fuse to safeguard components during overload conditions;
- Alignment rod secures the insert and maintains alignment;
- Urethane insert offers UV and chemical resistance;
- Groove insert option easily converts for towable application;
- Unique anti-rotation bolt design enabling quick, single-wrench assembly;
- Curved insert pressure pads adjust for misalignment;
- Variety sizes can fit any brand of center pivot irrigation system;
- Customized packages offer more flexible adaptation to customer needs;
- CE certificated.



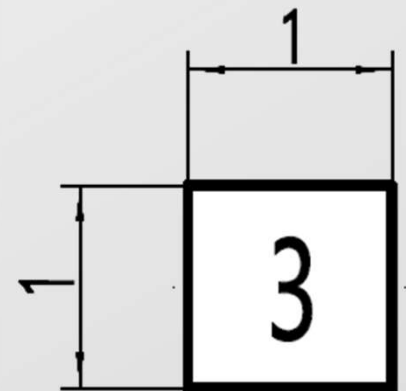
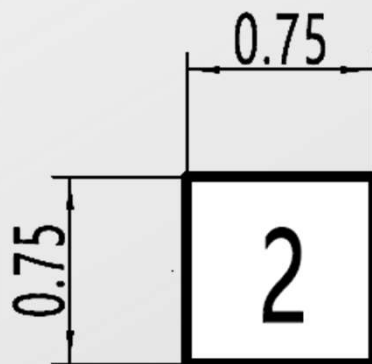
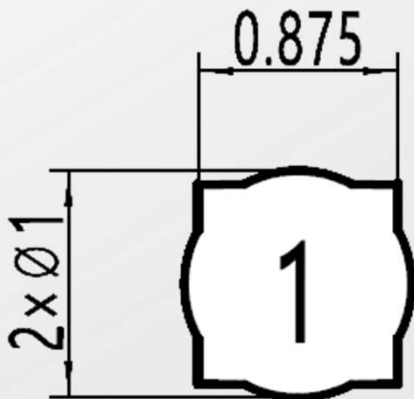
DIMENSIONS



Product Number	End Type
RTCPL-M78	#1 × 1 / #1 × 1
RTCPL-M34	#1 × 1 / #2 × 1
RTCPL-M11	#1 × 1 / #3 × 1



END TYPES



SELECTION GUIDE

The output shafts of the motor and gearbox are round with an outer diameter of 1 inch. Therefore, #1 shown in the figure above must be selected for one end of the coupler. The dimension for the other end depends on the side length of the drive shaft: select #1 from the figure above for 7/8", #2 for 3/4", and #3 for 1".



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Material List

Each RainTek coupler kit comes with the following components and quantity as shown in Figure 1:

No.	Components	Part Number	Quantity
a	Coupler Plate	RTCPL-CPO78/34/11	4
b	Coupler Insert	RTCPL-MIO24	1
c	1/4" Bolt	RTCPL-BO14	8
d	1/4" Lock Nut	RTCPL-NO14	8
e	3/8" Hex Bolt	RTCPL-BO38	1
f	3/8" Lock Nut	RTCPL-NO38	1
g	Alignment Rod	RTCPL-ARO25	1

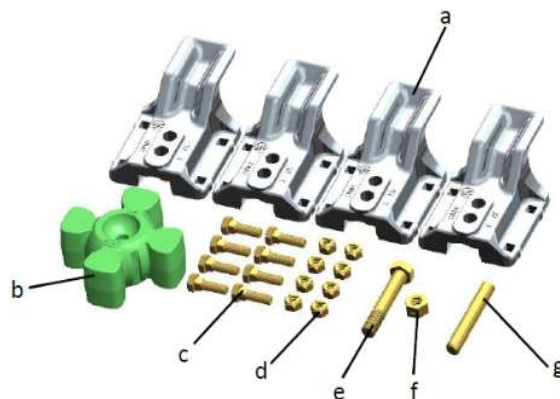


Figure 1: Coupler Kit Components

Installation

Install the couplers with the insert onto gearbox and center drive. Align one of the two holes on the coupler with the through hole on either the gearbox or the center drive shaft. Insert the 3/8" bolt and engage the 3/8" lock nut into the thread as shown in Figure 2. Stop turning when thread interference begins. Don't tighten down lock nut at this point.

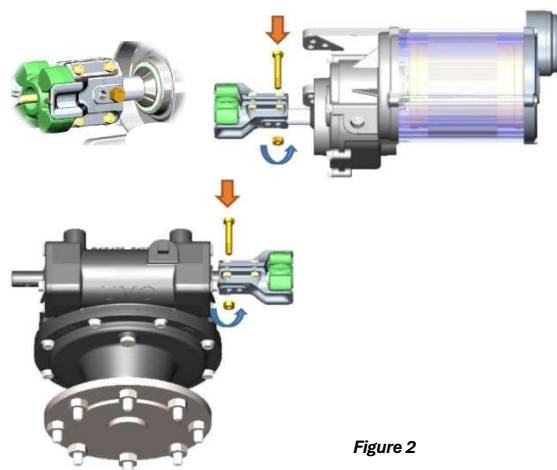


Figure 2

Install only one set of couplers without the insert onto one end of the drive shaft. Save the remaining set for later installation, see Figure 3. Don't tighten down lock nut at this point.

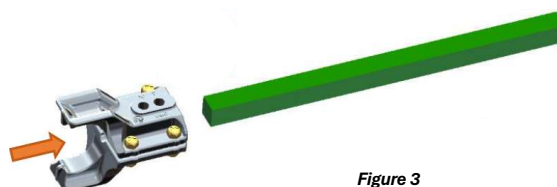


Figure 3

Insert the alignment rods on both sides through the center hole located on the insert all the way through until they are fully seated in the couplers. Then align the couplers axially by rotating the already installed coupler on both the gearbox and center drive. The ideal orientation of the couplers on the gearbox and center drive before installing the drive shaft is where the insert's openings are vertical, and that the lock nuts are facing towards you.

INSTALLATION

Complete the installation of the drive shaft by first removing the 3/8" lock nut and 3/8" bolt from the coupler that was pre-installed on the center drive's shaft. Slide the coupler back as indicated in Figure 4 on the center drive's shaft until bottoming out. Align the coupler load arm on drive shaft with the insert openings on the center drive shaft.

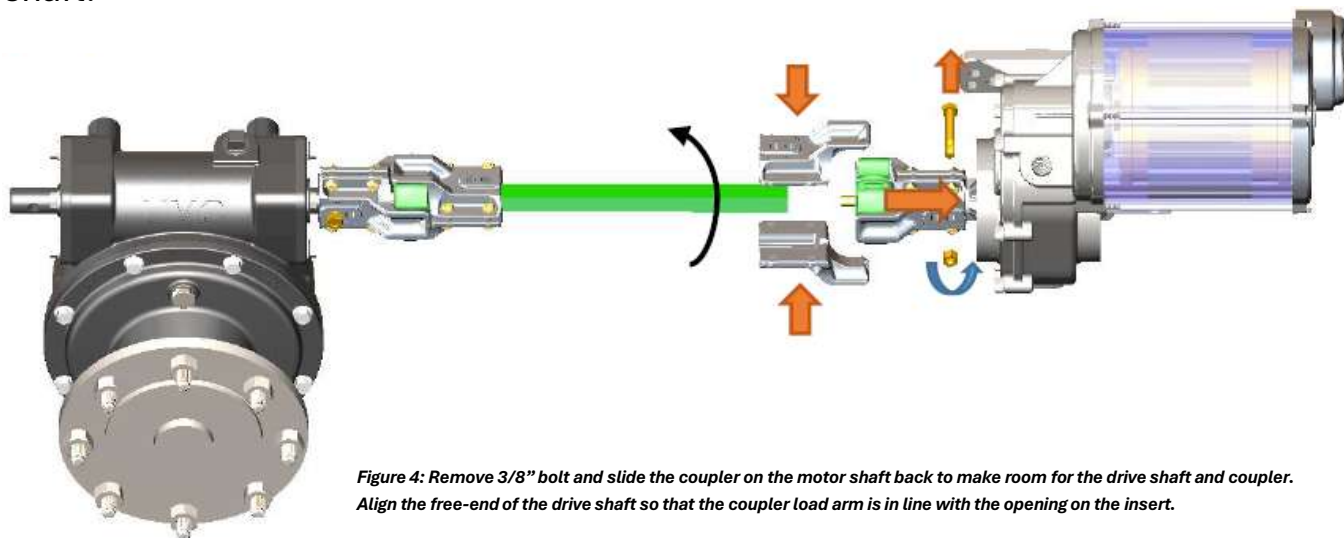


Figure 4: Remove 3/8" bolt and slide the coupler on the motor shaft back to make room for the drive shaft and coupler. Align the free-end of the drive shaft so that the coupler load arm is in line with the opening on the insert.

Before you begin to finalize the installation of the power transmission system, take the time to check the following to ensure proper installation. First, the couplers and the inserts should be fully engaged. Second, the alignment rods should be fully seated within the insert and coupler pairs. Lastly, the drive shaft should be installed in the couplers equally spaced on both ends.

After the final check is completed, begin by tightening the four 1/4" bolts on the couplers that are installed on the drive shaft. Tighten the four 1/4" lock nuts in an alternating fashion, as shown in the Figure 5, tighten to 7 ft-lbs. of torque. Don't over-tighten, or else can result in damage to the load arms.

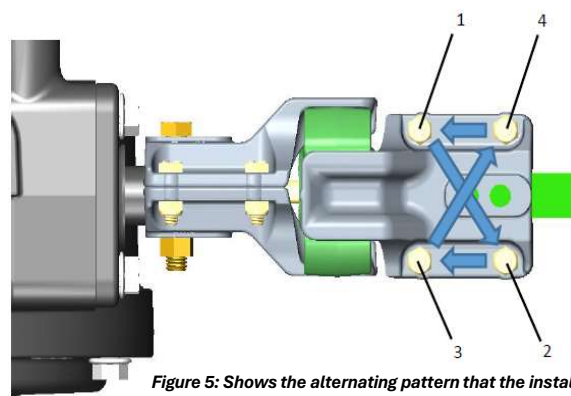


Figure 5: Shows the alternating pattern that the installer should take when tightening down the 1/4" lock nuts.

