















Ranger Bolt on Hardware (part # 620112) parts list & instructions

 <p>Universal Actuator Bracket Part # 610400 1 per</p>	<p>NOTE: Arrow installs toward drive.</p>	 <p>3/8 x 16 x 8" carriage bolt Part # 610510 2 per</p>	 <p>3/8 x 2 1/2" shoulder bolt Part # 610512 3 per</p>
 <p>Square Post Flush Mount Bracket Part # 610402 1 per</p>	 <p>Round Post Flush Mount Bracket Part # 610404 1 per</p>	 <p>Tap bolt 1/4 x 20 x 3 1/2" Part # 610522 2 per</p>	 <p>3/8 x 16 serrated hex nut Part # 610518 5 per</p>
 <p>Actuator Bracket Part # 610406 1 per</p>	 <p>Gate Support Bracket Part # 610120 2 per</p>	 <p>Tap bolt 1/4 x 20 x 2 1/2" Part # 610520 2 per</p>	 <p>1/4 x 20 serrated hex nut Part # 610526 2 per</p>
			 <p>3/8 USS flat washer Part # 610514 6 per</p>
			 <p>3/8 SAE flat washer Part # 610516 2 per</p>
			 <p>1/4 SAE flat washer Part # 610524 4 per</p>

Mounting Brackets Information

Determining which of the brackets will be needed for your installation.

The hinge post is the post your gate hinges are attached to. Follow the steps below to identify which of the included brackets will be needed for your installation.

Is the hinge post round or square?

Square post will use the "square post flush mount bracket"

Round post will use the "round post flush mount bracket"

NOTE: If a round post is to be used it might be necessary to brace the post so that it does not rotate.

Is the gate a light weight farm gate?

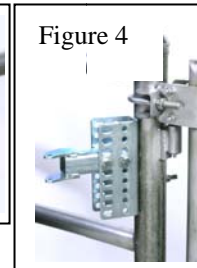
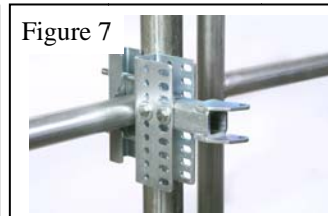
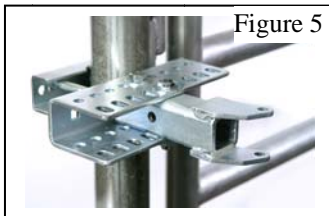
If so, use the "gate support brackets" to attach the gate bracket so that the bolts can be securely tightened.

Universal Actuator Bracket Information

The universal actuator bracket can be installed in many different ways to accommodate your gate opener installation. Use the pictures below to help understand the many ways this bracket can be installed and determine the installation method you are going to use. The pictures below are for reference and your installation might differ. Universal actuator bracket must be securely installed. Drilling through the post is the strongest method (see figure 4 and 6).

NOTE: The universal actuator bracket should be aligned level with a horizontal gate section.

It is recommended that the square post flush mount bracket and the round post flush mount bracket be installed for strength on opposite side of post from the universal bracket.



Actuator Bracket Information

The actuator bracket has a 3/8" pre drilled hole that the linear actuator will mount to. This is the pivot point for the linear actuator.

Pull to Open installation the pre-drilled hole must be located 5" behind the gate hinge and 8" to the inside of the property.

Push to Open installation the pre-drilled hole must be located 7" in front of the gate hinge and 4" to the drive side of the hinge..

These dimensions are measured from the center of the gate hinge (pivot point).



Figure 9

Push to Open Installation and Pull to Open Illustration:

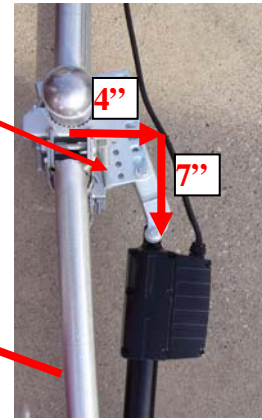
Universal actuator bracket hole pattern allows for the actuator bracket to be installed as shown in this location only. For more information see Ranger manual page 7.

Pull to Open
shown in the full open position



Universal actuator bracket has an arrow stamped on one end. This must point toward drive.

Push to Open
Shown in full closed position



Direction of gate movement when opening

Installing Universal Actuator Bracket

When determining where the universal actuator bracket will mount on the hinge post you must consider where the gate bracket is going to connect to the gate. The gate bracket attaches approximately 34" out on the gate measured from the gate hinge center. Once universal actuator bracket location is determined, verify that the gate bracket can be installed to the gate so that linear actuator is level.

Attaching universal actuator bracket to hinge post or post being used

See figure 15, 16 and 17

Mounting hardware needed, two 3/8" x 16 x 8" carriage bolts, two 3/8" USS flat washers, two 3/8" serrated hex nuts and universal actuator bracket with associated bracket (round or square post mount) determined above then tighten nuts securely.

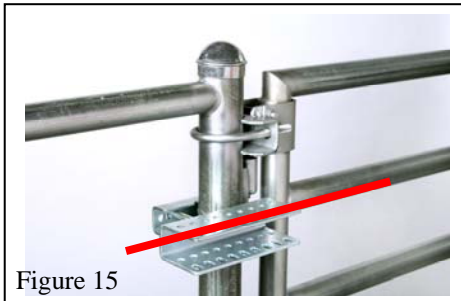


Figure 15

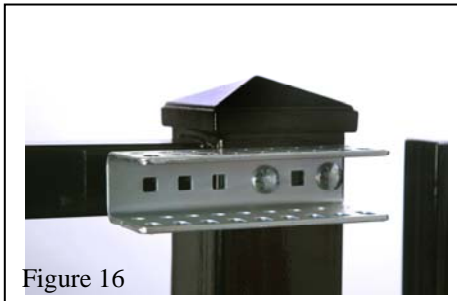


Figure 16

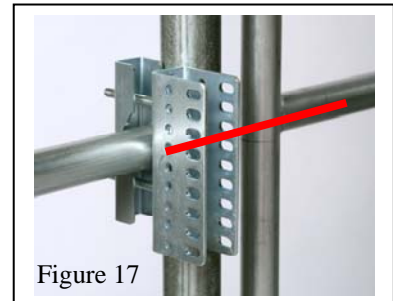


Figure 17

Attaching Actuator Bracket to Universal actuator Bracket

Hardware needed, two 3/8" x 2 1/2" shoulder bolts, two 3/8" USS flat washers, two 3/8" serrated hex nuts.

1. Attach actuator bracket to universal actuator bracket.
2. Verify that actuator bracket pivot hole dimension is located in the correct position.
3. Tighten bolts securely.

Installing Linear Actuator to Actuator Bracket

Refer to ranger installation manual page 7 for detailed information.