

WP0326

Dodge® Quantis gear reducers: replacing integral motors in the field

Dodge Customer/Order Engineering



Quantis integral motors are easily replaceable in the field. If the customer is replacing a failed motor, or wants to change the motor hp that will be used with the reducer, the motor can be replaced with a few steps. For a quote on a new integral motor, contact Renewal Parts with the reorder number of the reducer on the nameplate and they can quote a new motor, input pinion, and if changing motor size, a new adapter plate.

Replacing a Quantis Integral Motor.

1. Orient the gearbox with the input shaft pointing vertical up. (Alternatively, you could keep reducer in current position and drain out the oil, and remember to re-fill when complete).
2. Remove the 8 bolts that can be seen holding the adapter plate onto the main housing. Either discard this adapter plate/input assembly if you are changing the motor size or if the motor size remains the same, remove adapter plate from current motor and attach to new motor.
3. Anytime you step away from the open gearbox, cover the opening so that no contaminants can get inside.
4. Apply Loctite Hi-tack gasket sealant to gearbox input. Lay gasket on reducer input, align holes.
5. Lay new adapter plate/input assembly onto gasket, align bolt holes
6. Apply Loctite 243 to 8 bolts and attach adapter plate to reducer housing. Tighten bolts.

It is also possible to rotate the motor to relocate the conduit box. You can also rotate the conduit box 180° to adjust the cable entry location.

Rotating an integral motor to relocate conduit box.

1. Take off adapter plate bolts, remove plate and motor from reducer.
2. Heat up cap screws to loosen the locktite bonding and unscrew motor from plate.
3. Rotate motor to desired position.
4. To relocate cable entry; unbolt conduit box and rotate 180°
5. Switch drain plugs on top and bottom to put drain hole facing down on the motor.

Notes:

1. New motor and input gaskets must be used.
2. Conduit box must be bolted on and not welded onto motor.
3. Cap screws must be heated or there is a 50-50 chance of breaking the bolts.
4. Conduit box can only rotate 180°.

EXTERNAL/PUBLIC DOCUMENT

ABB Motors and Mechanical Inc.

6040 Ponders Court

Greenville, SC 29615

Phone: +1 864 284 5700

Email: DodgeEngineering@abb.com