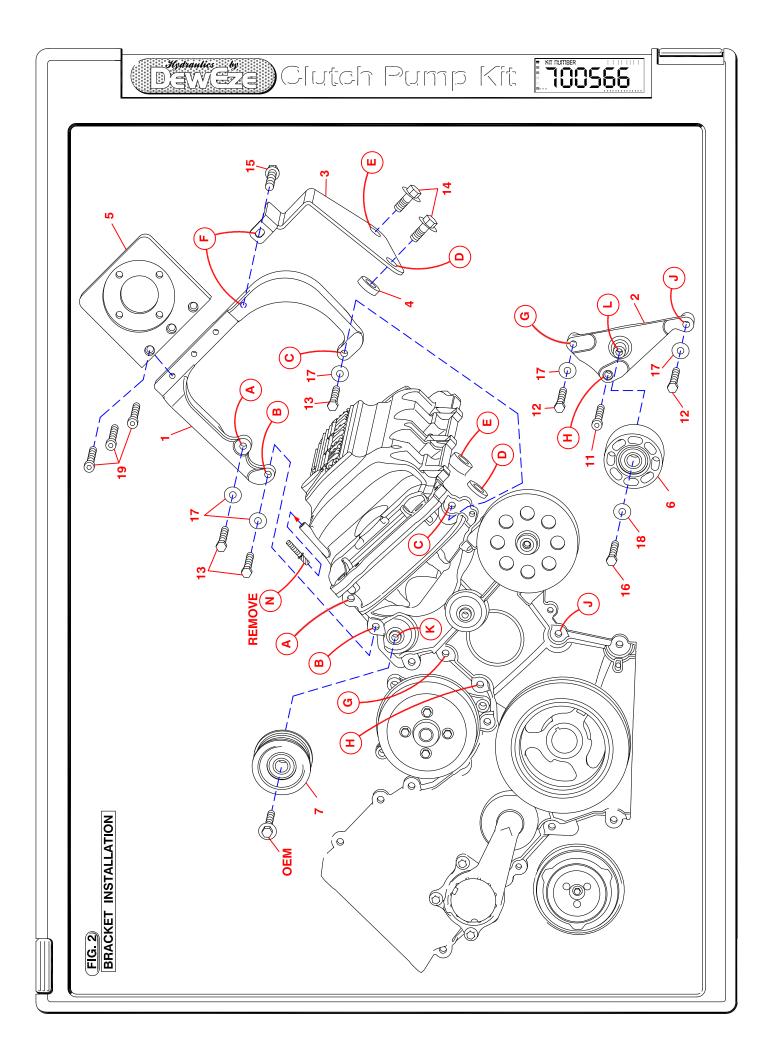
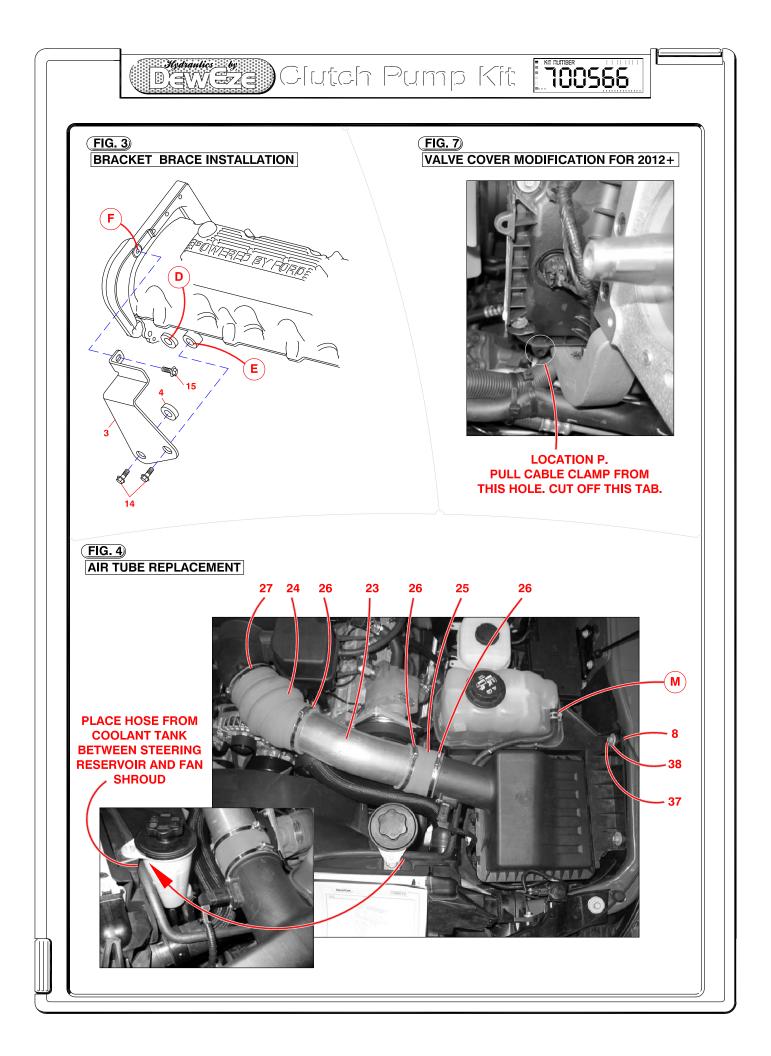
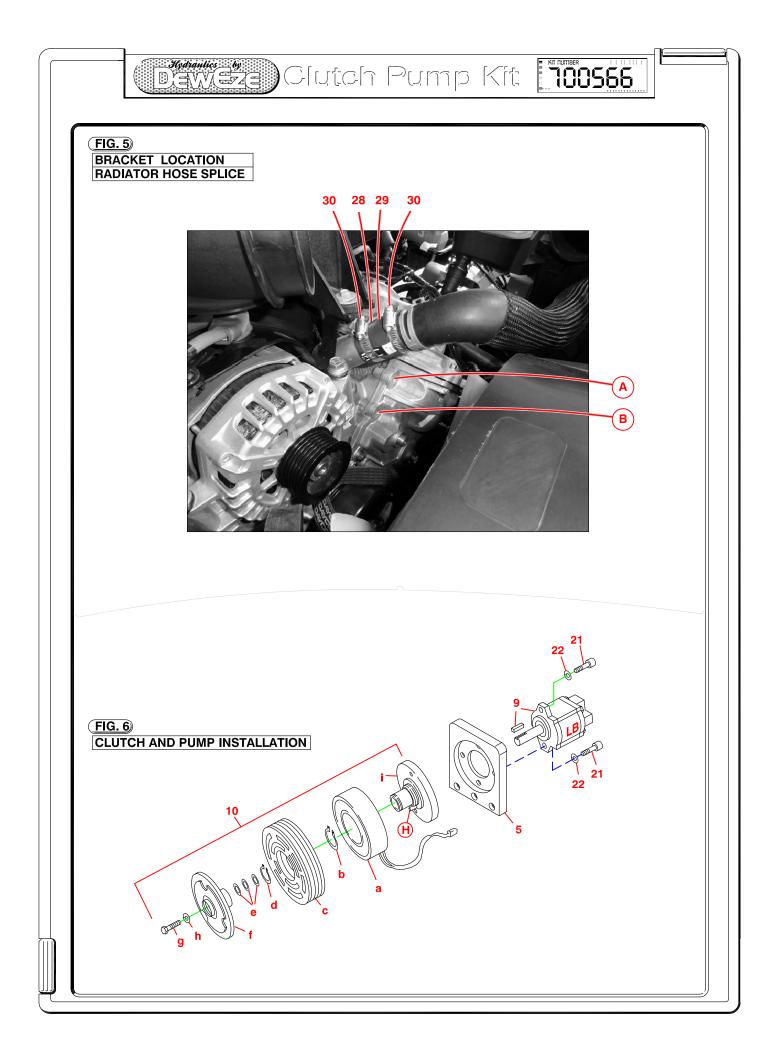


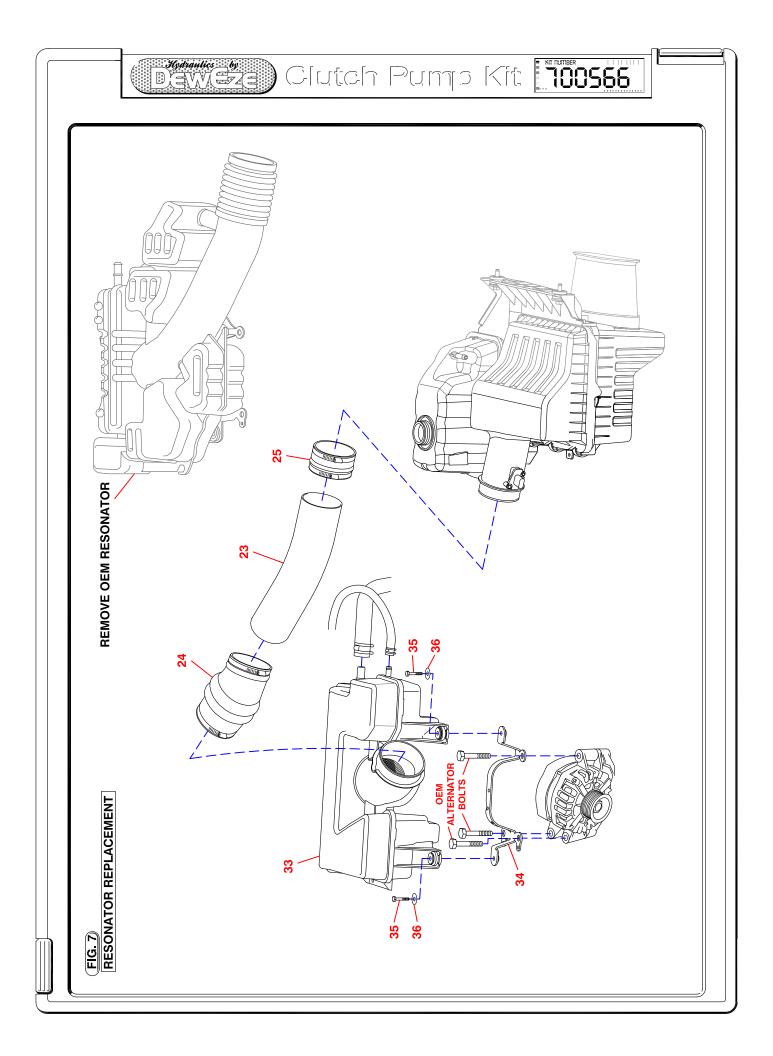
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2013









## **DEWEZE Clutch Pump Kit 700566** Ford 6.2L Gas, AA Pump, Rear Port, 2014+

# INSTALLATION INSTRUCTIONS

- 1. The installation of this kit requires trained decision-making concerning clearances, tying components together, rerouting, or relocating OEM components, etc. It is impossible to describe all of the clearance and vibration points, etc. in the installation instructions. Therefore, the technician must exercise professional judgment to achieve the best quality installation.
- 2. Disconnect the battery.
- 3. Remove the two bolts mounting the resonator. Remove the resonator/air tube. Remove three alternator mounting bolts and remove the resonator mounting bracket (34). Install the new resonator bracket (34) with the OEM alternator bolts. Install the new resonator (33) using two M6 x 30 bolts (35) with two 1/4 flat washers (36).
- 4. Drain just enough of the engine coolant to remove the upper radiator hose from the engine water neck. Insert the hose splice (28) into the OEM radiator hose, push the short piece of radiator hose (29) onto the splice and onto engine with two 1.5" hose clamps (30). Unclamp the hose from the top front of the coolant tank (Location M), thread it between the power steering reservoir and the fan shroud and connect it back to the coolant tank. Replace coolant.
- 5. The supply hose for the power steering pump must be rotated to clear the new belt routing. Hold the spring clamp with locking pliers, and rotate the hose as far towards the driver side fender as possible. Using a cable tie (31), secure the steering hose to the radiator hose running between the coolant tank and the radiator. On 2012 and newer trucks, pull the wiring cable from the attachment point on the

front of the driver's side valve cover at Location P, Fig. 7. Cut off that tab from the cover to give clearance for the belt.

- Remove the rear bolt from the airbox attached to the fender, Fig. 4, and place the 1/2" heavy washer (8) between the airbox and the fender to angle the outlet tube forward. Fasten with M8 x 35 bolt (37) and 5/16 large dia flat washer (38).
- 7. Remove the three bolts on the lower portion of engine at Locations G, H, and J. Install the idler bracket (2) with two M8 x 65 hex head bolts (12) and two M8 flat washers (17) at Locations G and J. Insert the M8 x 60 low head socket head bolt (11) at Location H. Install the flat idler (6) with 3/8 x 1 1/2 bolt (16) and 3/8 flat washer (18) at Location L.
- Install the pump bracket brace (3) to the two large threaded holes on the side of the cylinder head at Locations D and E, placing the bushing (4) between the front hole and the bracket using M16 x 35 flange bolts (14). Do not completely tighten.
- 9. Remove the OEM flat idler at Location K. Remove the OEM stud bolt holding the wiring clip at Location N. Remove the three bolts at locations A, B, and C. Install the pump bracket (1) with three M8 x 50 hex bolts (13) and three M8 flat washers (17). Fasten brace to pump bracket with 3/8 x 3/4 flange head bolt (15) through brace into back of pump bracket. Tighten all the bolts on the brace. Install the 6groove idler (7) at Location K with the OEM bolt.

- Hold pump (9) onto back of pump plate (5) and clutch hub (10i) onto front of bracket, making sure anti-rotation pin (P) on front of hub is on top. Place two 3/8 x 1 1/4 socket head bolts (21) and 3/8 high collar lock washers (22) through pump, through mounting plate and thread into hub. Torque to 20 lb-ft.
- Slide coil (10a) over hub, aligning hole in the back plate of coil with the anti-rotation pin (P) in the hub. The wires from the coil should be on the same side as the pin (P). Install large snap ring (10b) to hold coil in place.
  NOTE: THE BEVEL ON BOTH SNAP RINGS MUST FACE AWAY FROM THE PUMP. REFER TO INSTRUCTION SHEET FOR THE CLUTCH FOR CORRECT INSTALLATION OF SNAP RINGS.
- 12. Slide clutch pulley (10c) onto hub. Install small snap ring (10d) to hold pulley in place.
- 13. Place the key onto the pump shaft. Slide the hub/armature (10f) onto the pump shaft aligning the keyways.

#### NOTE: SET THE AIR GAP BETWEEN THE HUB/ARMATURE AND THE PULLEY USING SHIMS (10e) ACCORDING TO INSTRUCTION SHEET FOR CLUTCH.

- 14. Thread bolt (10g) and lock washer (10h) into pump shaft. Torque to value in clutch instruction sheet.
- 15. Install belt (32) according to diagram.
- 16. Place elbow (25) onto airbox with 3.5" clamp (26). Insert DewEze air tube (23) into elbow using a 3.5" clamp (26). Place 3.5" end of reducer onto air tube using 3.5" clamp (26), also pushing 4" end onto air intake using the 4" clamp (27). Make sure there is clearance between the air tube and the clutch. Adjust the air tube and elbow by twisting them if needed.
- 17. Reconnect the battery.
- 18. Run the engine and check for any clearance or alignment problems. Adjust as needed.

#### Installing the Warner AA clutch

Hub, Coil and Rotor/Pulley are preassembled by Warner. Armature is shipped loose along with Hardware Kit (consisting of center bolt, washer and shims)

Step 1:

Slide the Hub/Coil/Rotor/Pulley Assembly onto the pump shaft and secure to pump face using pump manufacturer supplied bolts through the two bolt holes.

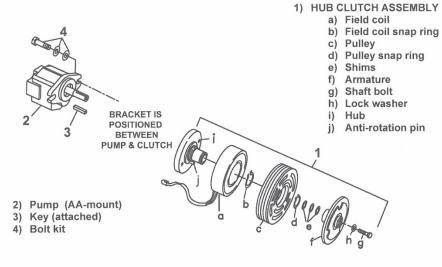
Step 2:

Place two shims onto pump shaft on top of rotor face. Slide armature onto shaft and measure air gap between the Armature and Rotor. Repeat this step and add shims as needed (more or less than 2) to acquire 0.02 - 0.04" air gap between the rotor and armature. Check air gap at 3 locations  $120^{0}$  apart.

Step 3:

Fasten center bolt and washer to face of pump shaft and tighten to 25 ft. lbs. torque.

### Failing to set the air gap correctly will cause premature pump failure due to axial load placed on the pump shaft.



### Installing the Ogura AA clutch

Hub, Coil and Rotor/Pulley are preassembled by Ogura. Armature is shipped loose along with Hardware Kit (consisting of center bolt, washer and shims)

Step 1:

Slide the Hub/Coil/Rotor/Pulley Assembly onto the pump shaft and secure to pump face using pump manufacturer supplied bolts through the two bolt holes.

Step 2:

Place two shims onto pump shaft on top of rotor face. Slide armature onto shaft and measure air gap between the Armature and Rotor. Repeat this step and add shims as needed (more or less than 2) to acquire 0.3 to 0.6mm (.011" to .023") air gap between the rotor and armature. Check air gap at 3 locations  $120^{\circ}$  apart.

Step 3:

Fasten center bolt and washer to face of pump shaft and tighten to 25 ft. lbs. torque.

### Failing to set the air gap correctly will cause premature pump failure due to axial load placed on the pump shaft.

