How does a hydraulic liftgate system work?

AFTER MORE than a half century of building better liftgates, we sometimes lose sight of fundamentals when explaining to customers how a typical liftgate actually works. In our quest for continuous improvement of our products we naturally focus on specific areas like hermetically-sealed solenoids, marine-duty switches, adjustable gland packing nuts and pressure-compensated flow control valves, often to the neglect of giving end-users the bigger picture.

Here’s a brief explanation of how the “guts” of a liftgate hydraulic system function. When the toggle switch in the control box 1 is switched to the UP position, the motor start solenoid 2 supplies power to the motor 3 which turns the pump 4 forcing hydraulic fluid through the high pressure hose into the cylinder 5. The pressure inside the cylinder forces the piston out, which in turn raises the liftgate platform. When the control box switch is turned to the DOWN position, the lowering valve coil 6 is activated, allowing fluid to flow from the cylinder back into the reservoir 7. This releases pressure on the cylinder piston, enabling the liftgate platform to lower by gravity. That’s the Anthony fundamentals, and the rest is history. For more information about our products, call us at (815) 842-3383 or fax your request to (815) 844-3612. And be sure to visit our newly-updated Web site at www.anthonyliftgates.com.