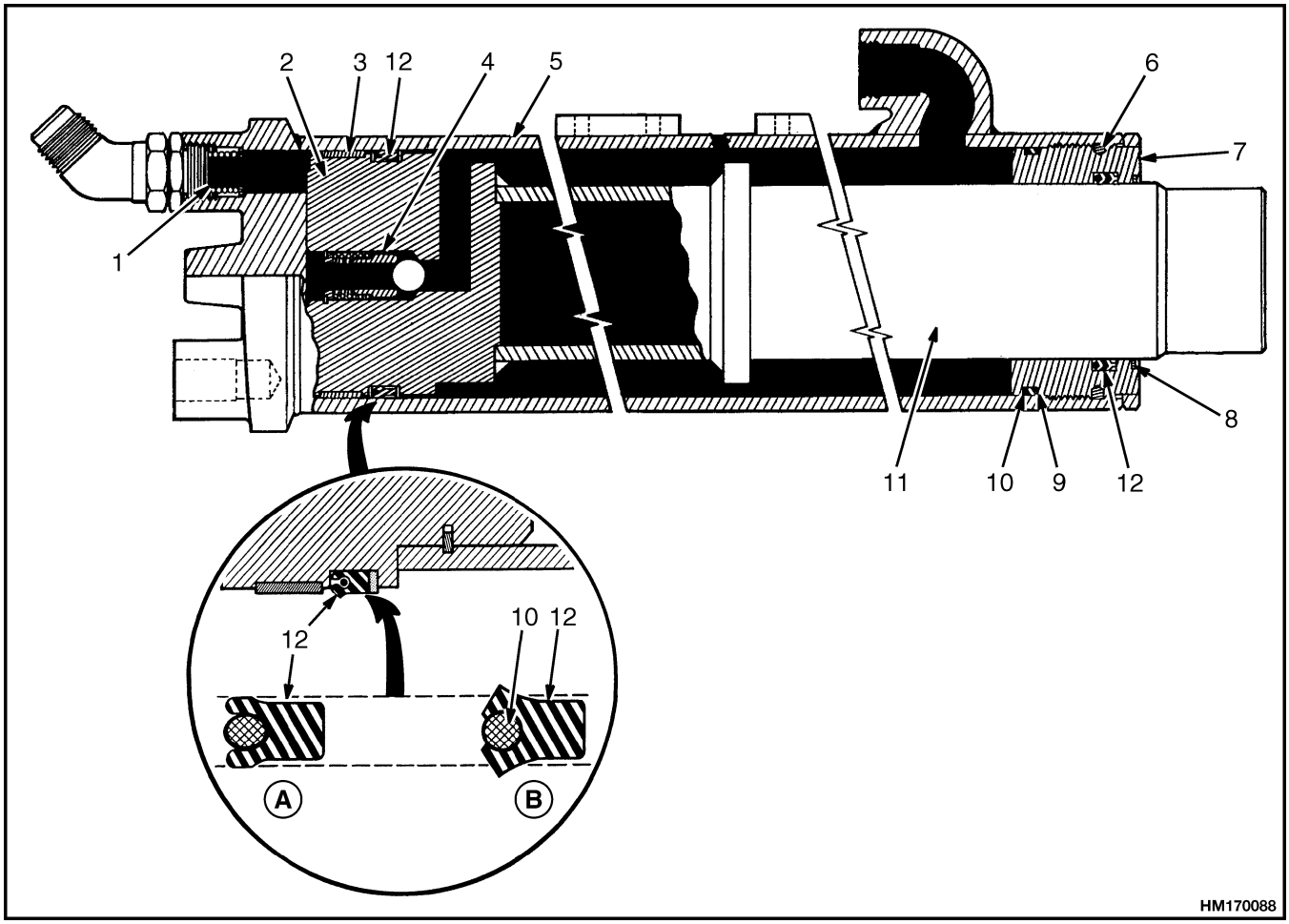
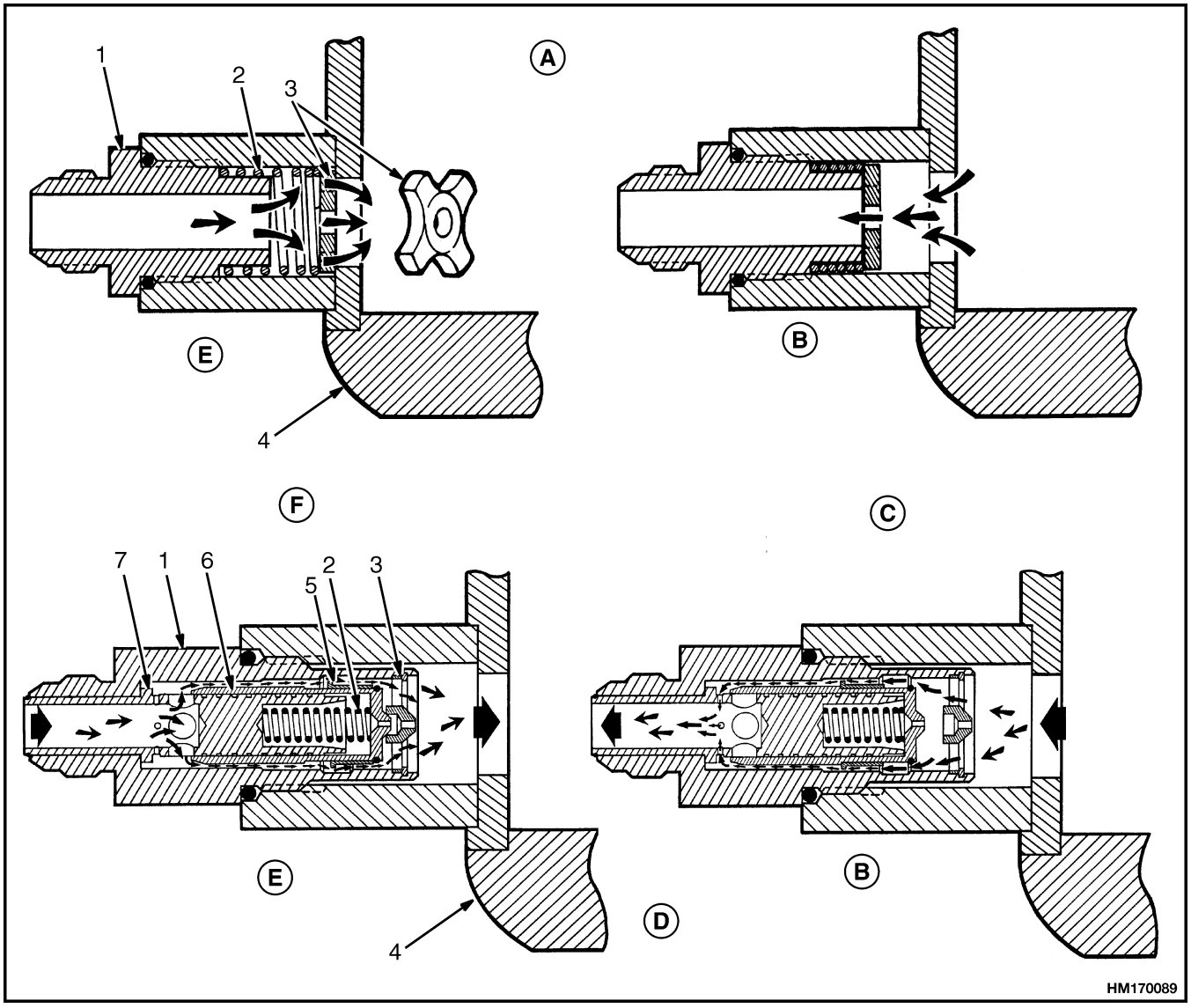


A. INSTALLED

B. NOT INSTALLED

1. LOWERING CONTROL VALVE
2. PISTON
3. BEARING
4. CHECK VALVE
5. SHELL
6. NYLON RING
7. RETAINER
8. WIPER SEAL
9. BACK-UP RING
10. O-RING
11. ROD
12. SINGLE-LIP SEAL

Figure 4. Two-Speed Lift Cylinder



A. LOW PRESSURE DESIGN
B. LOWERING
C. RESTRICTED FLOW
D. HIGH PRESSURE DESIGN
E. LIFTING
F. FREE FLOW

1. SPECIAL FITTING OR VALVE BODY
2. SPRING
3. SPECIAL WASHER
4. CYLINDER
5. ORIFICE SLEEVE
6. PLUNGER
7. MAIN SLEEVE

Figure 5. Lowering Control Valves

During lowering, oil from the lift cylinder moves the orifice sleeve. The orifice sleeve moves away from the larger inner diameter area of the bore in the valve body. This movement makes a restriction to the oil flow. As the pressure increases, the plunger begins to move against the spring. The movement begins to close the openings of the large holes in the main sleeve. Additional pressure will push the plunger against the main sleeve to close the large holes completely. All the oil must then go through the small holes to the center of the main sleeve. This restriction permits the piston rod to lower only at a maximum controlled speed.