



Disassembly

Disconnect wiring harness from reverse solenoid. Disconnect brake hose from rear of master cylinder. Remove e-clips from one side of housing and remove cross pins. Remove carabiner from breakaway cable. Remove breakaway cable latch. Pull nose of coupler while feeding breakaway cable through housing window. Inner member will now be free of housing.

Bleeding Brakes

Remove forward most plastic cap of outer housing. Remove round black master cylinder cap. Fill reservoir with DOT 3 brake fluid. If using a pressure or vacuum bleeder, build pressure/vacuum and follow the bleeding instructions of the tool. Priming the master cylinder can assist in pressure or vacuum bleeding. To prime, insert a flat head screwdriver into the bottom front hole of the housing. Using the housing as leverage, rock the screwdriver to the front of the housing to press the master cylinder push rod backwards. Repeat several times, ensuring reservoir does not run dry. Proceed with bleeding instructions. To manually bleed, follow priming instructions above until pressure builds on push rod. Post-bleeding, ensure reservoir is filled within 3/8" of the top of the grommet, or approximately half a fingernail length.

Replacing Reverse Solenoid

Ensure the coupler is in fully extended position. Remove rear plastic cap on top of housing. Disconnect the white and blue 12v wires that extend from reverse solenoid to wiring harness and pull up through access hole. Using long nosed pliers, turn the reverse solenoid counterclockwise until free. Remove and re-place o-ring from inside the master cylinder port. To reinstall, place a small dab of grease onto plunger to hold in place. Install solenoid, turning clockwise to hand tight. Tuck wires back through the access hole and connect to trailer wiring harness. Re-bleed brakes to remove air from brake system. Reinstall plastic cap into housing.

Assembly

Connect casting assembly to master cylinder assembly via shock pin. Feed carabiner end of breakaway cable aft along bottom starboard side of housing. Direct carabiner end of cable up and out the cable exit of starboard side of housing. Feed enough cable slack so that loop extends past rear cross pin hole. Slide inner assembly into housing, keeping it along port side wall of housing. Ensure cable loop is behind rear cross pin hole, then install rear cross pin and e-clip. Pull breakaway cable taught by hand. The ferrule should not extend out of the cable exit. The cable should be close against the rear pin and not snagged on back of master cylinder. Install front cross pins and e-clips. Install breakaway cable latch plate using 5/32x 1/2" rivets. Install carabiner to safety cable. Connect reverse lockout solenoid wiring (blue – reverse signal, white – ground) Connect brake hose/tube and bleed brakes. Install black caps.