

ENGINE COOLING FAN

1991 Mazda Miata

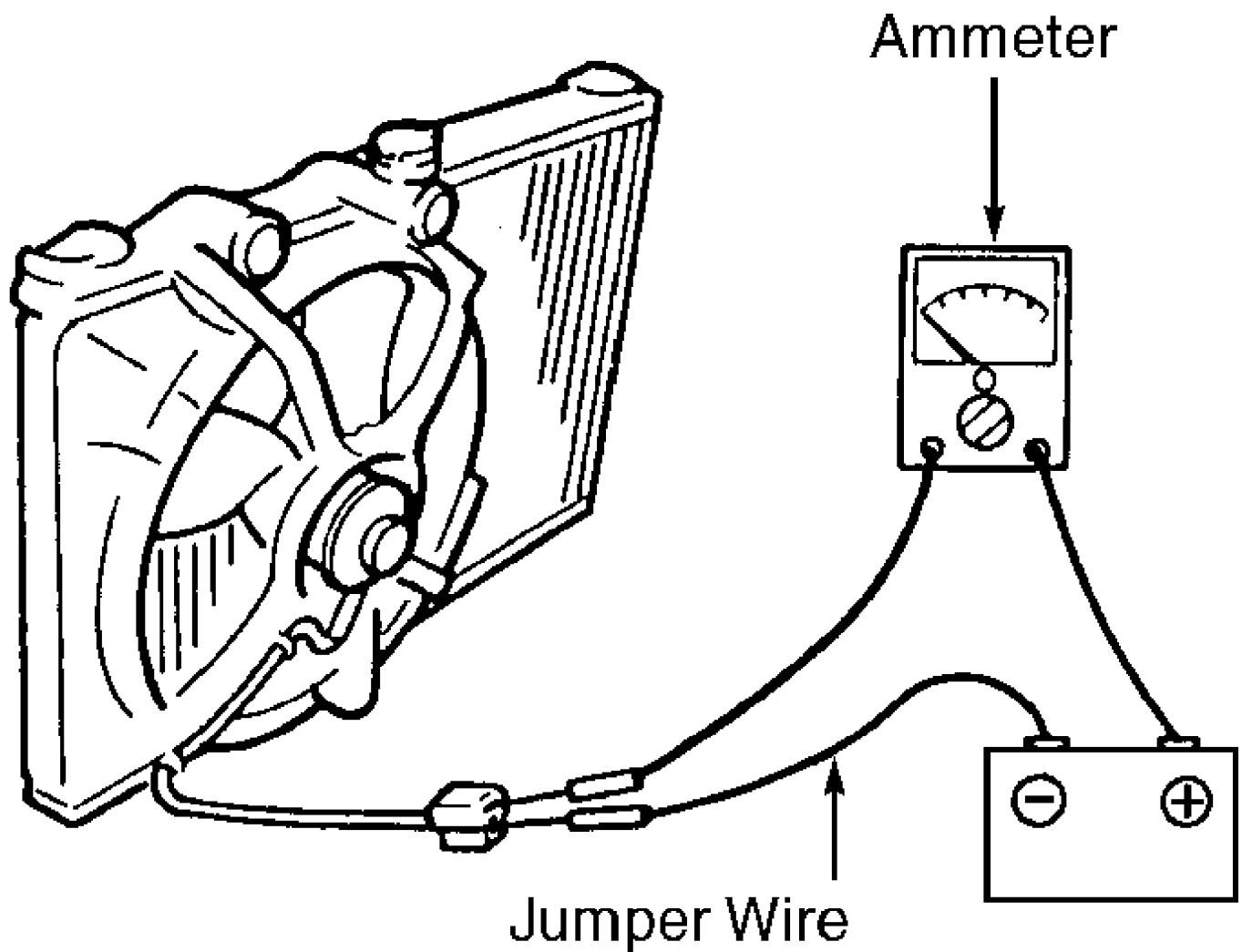
1990-91 ENGINE COOLING
Mazda Engine Cooling Fans

Miata

ELECTRIC COOLING FAN SYSTEM & COMPONENT TESTING

COOLING FAN MOTOR TEST

1) Ensure battery is fully charged. Disconnect fan motor connector. Connect ammeter between battery and cooling fan motor connector. See Fig. 1.



90H09834

Fig. 1: Testing Cooling Fan Motor
Courtesy of Mazda Motors Corp.

2) Ensure fan motor operates smoothly at specified current. Check current draw against COOLING FAN MOTOR CURRENT SPECIFICATIONS table. If fan draws more than specified amperage, check wiring. If

wiring is okay, replace fan.

COOLING FAN MOTOR CURRENT SPECIFICATIONS TABLE

Engine	Amp.
Miata	5.3-6.5

THERMO SWITCH TEST

Disconnect negative battery cable. Remove thermo switch. Suspend switch in container filled with water and heat. See Fig. 2. Switch is normally open. Continuity should not exist until temperature reaches more than 207°F (97°C).

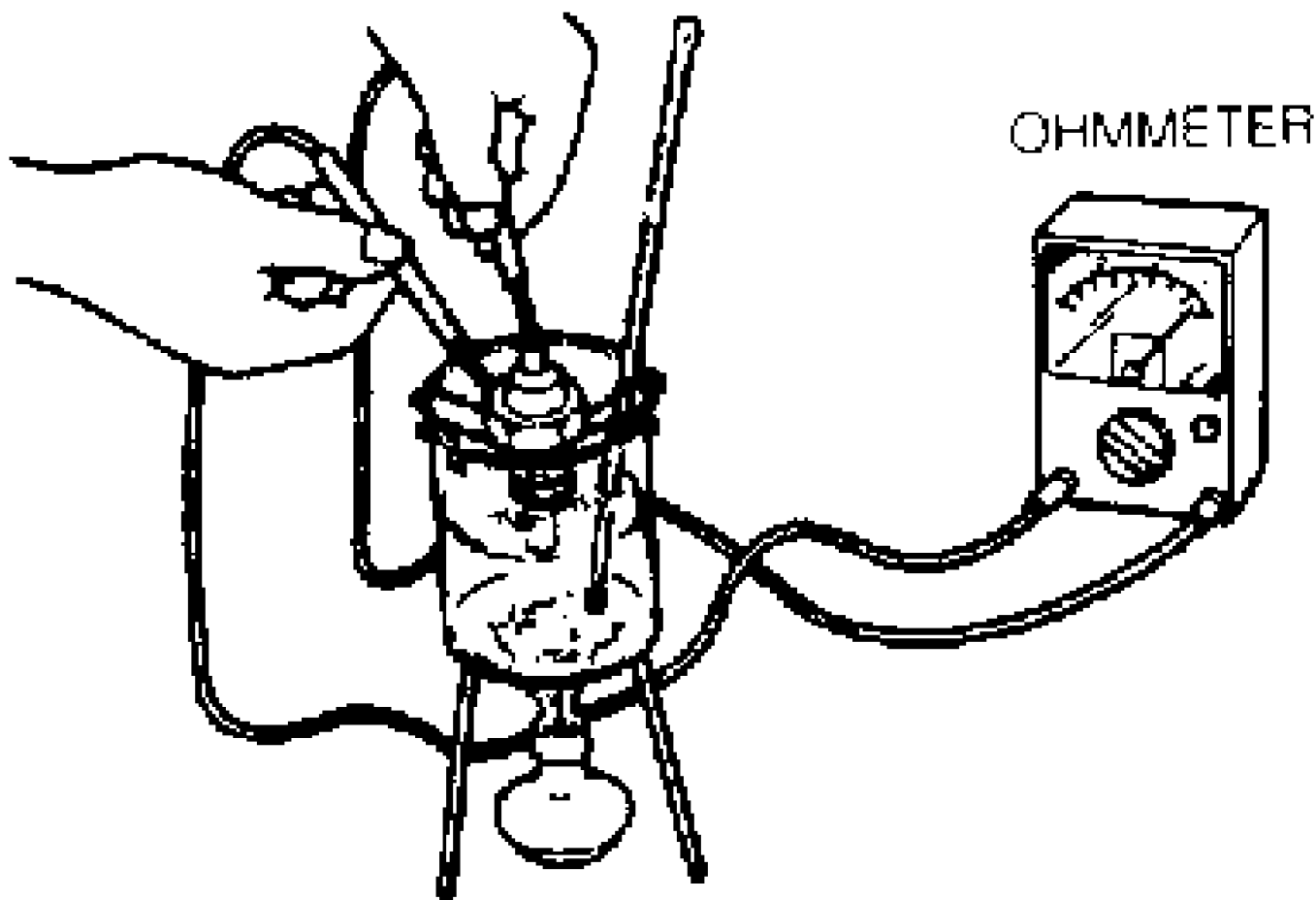
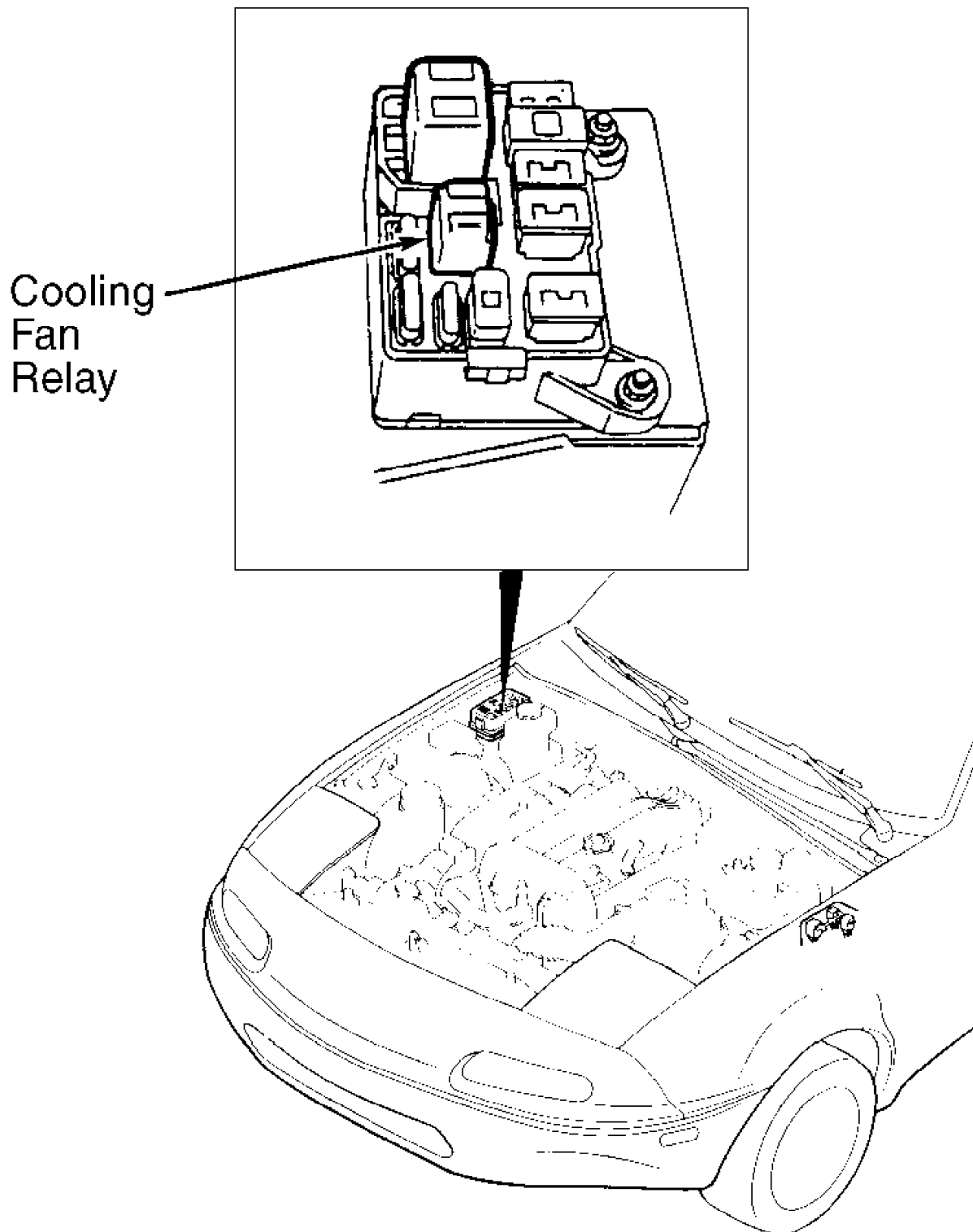


Fig. 2: Testing Thermo Switch
Courtesy of Mazda Motors Corp.

COOLING FAN RELAY TEST

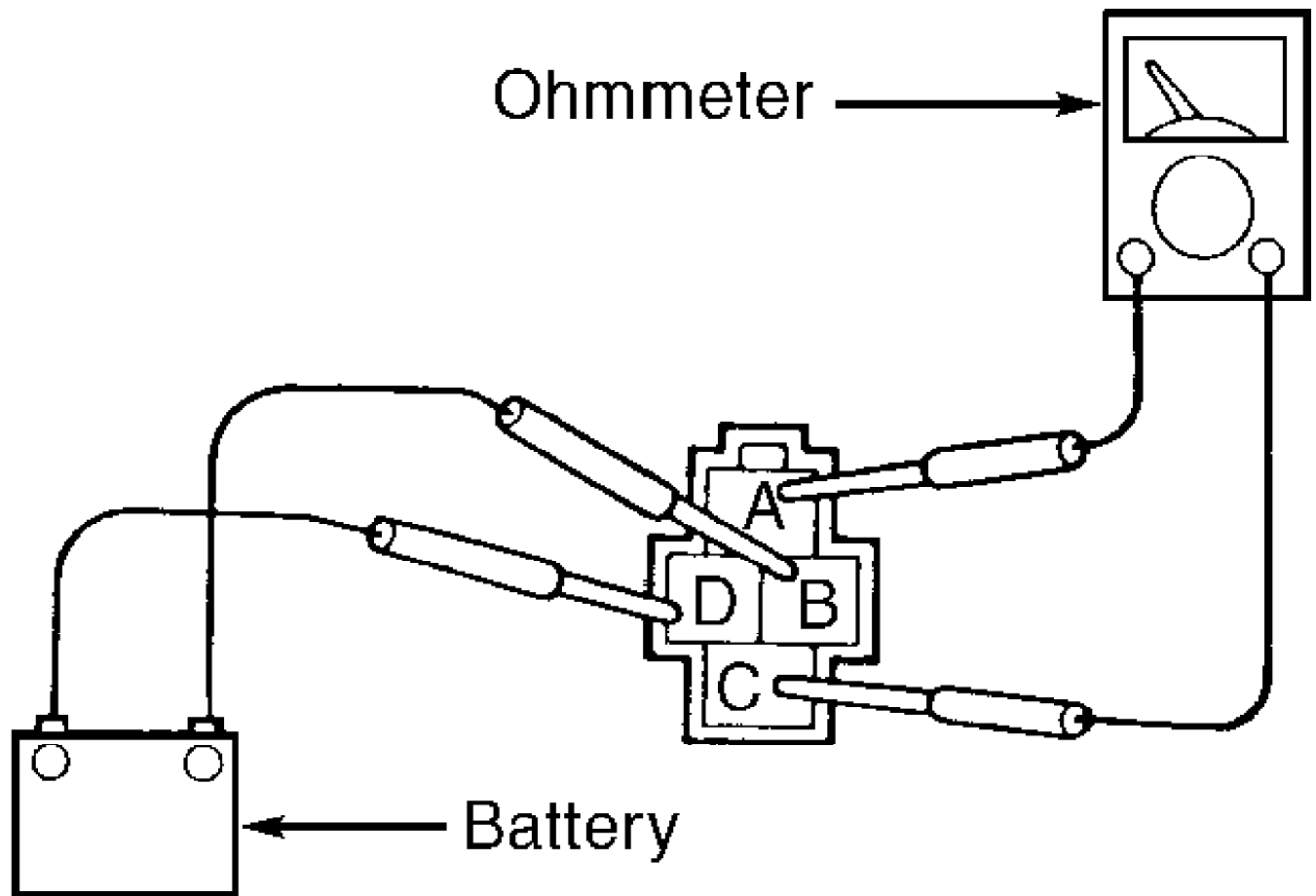
1) To test relay, disconnect relay wire harness connector. See Fig. 3.



91I01517

Fig. 3: View of Cooling Fan Relay Location
Courtesy of Mazda Motors Corp.

2) Using a ohmmeter, check for continuity between terminals "B" and "D" of fan relay. See Fig. 4. Continuity should exist.



91A01518

Fig. 4: Testing Cooling Fan Relay
Courtesy of Mazda Motors Corp.

3) Check for continuity between terminals "A" and "C". Continuity should not exist. Apply battery voltage between terminal "B" and terminal "D", check for continuity between terminals "A" and "C". Continuity should exist. If fan relay failed any of the test, replace relay.