AIR CONDITIONER

INSTALLATION

INSTRUCTIONS

PORSCHE 914

PART NO. ZPW-805-914

EFFECTIVE SERIAL NO. 914-01001 AND UP

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DPD/CM-83
1.1 Remove engine compartment cover mounts by removing two 6mm capscrews.

1.2 Disconnect and remove battery mounting tray.

1.3 Locate and drill a 1-3/8" hole in engine compartment as illustrated. Install caterpillar grommet.

1.4 Locate and drill a 1-3/8" hole in engine compartment as illustrated. Install caterpillar grommet.

1.5 Loosen alternator bolt to relieve bolt tension.

1.6 Remove and retain smog pump by loosening adjustment bolt as illustrated.

1.7 Remove and retain smog pump and hardware as illustrated.

1.8 Remove and retain blower wheel screws and three arm bolts. Discard flatwashers.

1.9 Remove three fasteners from engine cover.

1.10 Remove additional fasteners underneath vehicle.
1.11. Remove engine cover plate by tilting back and lifting free.

1.12 Modify cover plate as illustrated. Discard shaded portion of plate.

1.13 Remove and retain blower wheel. Discard 2mm spacers located behind wheel.

1.14 Route compressor drive belt through cavity in back of blower housing.

1.15 Slip belt over drive pulley before positioning pulley on crankshaft.

1.16 Slip blower wheel into position.

1.17 Reinstall cowl with original hardware.

1.18 Reinstall and secure blower wheel and smog pump bracket with three original cap screws and lockwashers. Torque to 10-12 ft.-lbs. NOTE: ALTERNATOR BELT MUST BE ROUTED OVER DRIVE PULLEY BEFORE MOUNTING BLOWER AND SMOG PUMP PULLEY BRACKET.

1.19 Secure mount bracket arms and timing plate with original hardware. Use three 3/16" flatwashers to space out timing plate and smog pump pulley bracket.

1.20 Reinstall smog pump and original belt. Adjust belt to proper tension.

1.21 Readjust alternator belt to proper tension.
1.22 Remove fuel injection computer, brackets and existing hardware from inside engine compartment. Retain computer and hardware. Discard mounting brackets.

(For 1.8 liter engine, use steps 1.23 & 1.24 or 1.25 through 1.27)

1.23 Secure computer to new mounting bracket with original hardware as illustrated.

1.24 Remount computer to firewall with four #10 x 3/4" S.M. screws as illustrated.

1.25 Secure adapter bracket to new mounting bracket with two #8 x 1/2" S.M. screws.

1.26 Secure computer to new mounting bracket adapter with original hardware.

1.27 Remount computer to firewall with four #10 x 3/4" sheet metal screws.

(For 2.0 liter engine use steps 1.28 & 1.29)

1.28 Secure two angle brackets to computer with two original shoulder screws.

1.29 Remount computer to firewall with four #10 x 3/4" sheet metal screws.

1.30 If necessary, reroute computer harness.
1.31 Disconnect heater control cable from R.H. damper. Remove and retain damper for later reinstallation.

1.32 Modify right rear engine cover.

1.33 Cut rubber seal and trim edge of pan as illustrated. CAUTION: BRAKE LINE LOCATED UNDER BODY PANEL IN VICINITY TO BE CUT.

1.34 Remove and discard existing oil cooler bracket illustrated.

1.35 Mount clutch holding plate to compressor with four 1/4" x 3/8" capscrews. Torque to 7-8 ft.-lbs. NOTE: CLEAN GREASE OFF OF COMPRESSOR SHAFT BEFORE INSTALLING CLUTCH PLATE, AND ROUTE CLUTCH WIRE OUT TOP SIDE OF CLUTCH.

1.36 Attach clutch pulley to compressor shaft with a 5/16" x 1-1/2" capscrew and flatwasher. Torque to 20-25 ft.-lbs. NOTE: MAKE SURE KEY OF PULLEY ALIGNS WITH KEY OF COMPRESSOR SHAFT.
1.37 Secure idler pulley to compressor bracket as illustrated. NOTE: IDLER MUST BE SECURED BEFORE MOUNTING BRACKET TO VEHICLE.

1.38 Mount compressor bracket to engine with four 8mm x 1.25mm x 30mm capscrews and lockwashers as illustrated. TORQUE TO 12-15 FT. LBS. NOTE: DO NOT TIGHTEN BOTTOM LEFT HAND CAPSCREW AT THIS TIME. ACCELERATOR CABLE MUST BE POSITIONED FORWARD OF BRACKET.

1.39 Position compressor on bracket. Do not secure at this time.

1.40 Remove one 8mm capscrew from bottom left hand corner of compressor mount. Position oil cooler bracket in place and secure with capscrew as illustrated.

1.41 Slip drive belt over clutch and idler pulley as illustrated. NOTE: IDLER IS BACK-SIDE IDLER.

CAUTION
If bolts, flatwashers and lockwashers are not used as designated in instructions compressor could be damaged.
1.42 With compressor in proper position on bracket, loosely install (D) three 3/8Nc x 1-1/2" cap screws, flat washers and lock washers and (E) one 3/8Nc x 1-1/4" cap screw, flat washer and lock washer as illustrated. DO NOT TIGHTEN SCREWS.

1.43 Insert (D) 3/8Nc x 1" cap screw and lock washer as illustrated. DO NOT TIGHTEN SCREW.

1.44 Pry compressor back and install two or three spacers between compressor and upper adjustment support as required to obtain a snug fit as illustrated. DO NOT TIGHTEN SCREWS.

1.45 Draw up compressor with (C) 3/8Nc x 1-3/4" adjustment stud, lock washer, flat washer and hex nut to obtain approximately 120-130 lbs. belt tension.

1.46 Secure compressor in place with (D) three 3/8Nc x 1-1/2" cap screws and (E) one 3/8Nc x 1-1/4" cap screw as illustrated. TORQUE TO 15-20 FT. LBS.

1.47 Secure (D) 3/8Nc x 1" cap screw as illustrated. If required install additional spacers to maintain proper tension. Secure all compressor mounting bolts. TORQUE TO 15-20 FT. LBS.

1.48 Reinstall forward engine cover as illustrated. Leave out right hand 6mm screw.

1.49 Position rear compressor shroud (A) around compressor and secure to top mounting holes with two 3/8 x 1/2" cap screws and 3/8" lock washers. NOTE: THROTTLE CABLE MUST BE ROUTED BETWEEN SHROUD AND FORWARD SIDE OF COMPRESSOR.

1.50 Secure inboard side of shroud and forward engine cover with one original 6mm screw as illustrated.

1.51 Position front compressor shroud cover (B) over clutch. Secure to engine with original 6mm machine screw and to engine cover with one #8F x 1/2" sheet metal screw as illustrated. NOTE: ROUTE CLUTCH WIRE UP THROUGH FASCIA.

1.52 Reinstall right hand damper. CAUTION: MAKE SURE ARM DOES NOT TOUCH MOUNT.

1.53 Reroute accelerator cable in order to allow sufficient clearance for compressor clutch and muffler. Resecure cable with strap provided in kit.
2.1 Record all required information on warranty card. Return card to DPD for registration.

2.2 Pull back carpet on passenger side of forward firewall.

2.3 From inside passenger compartment, locate and drill a 1-3/8" hole in front firewall as illustrated. NOTE: USE EXTREME CARE IN DRILLING HOLE. GAS TANK OVERFLOW HOSE LOCATED BEHIND PANEL.

2.4 Replace carpet and cut a hole in carpet directly over 1-3/8" dia. hole as illustrated.

2.5 Pull back carpet on passenger side of floor board. Locate and drill a 5/8" diameter hole in floor panel as illustrated.

2.6 Cut "V" groove in firewall foam insulation as illustrated.

2.7 Replace carpet and cut a x-slit in carpet directly over drain tube hole.

CONSOLE S-KIT ONLY: (Steps 2.8 thru 2.11)

2.8 Remove console glove box from between seats.

2.9 Remove bottom and forward panels from inside center console. Remove liner knobs before removing panels. NOTE: DISCONNECT GAUGES BEFORE REMOVING FORWARD PANEL.

2.10 Remove and retain gauges from forward panel. Discard panel.

2.11 Remove center console from vehicle and use template #2223 to modify right side of console as illustrated.
2.12 Use template 32234 to modify left side of center console as illustrated.

2.13 Modify console bracket as illustrated. Cut and bend flange forward in order to fasten bracket to transmission tunnel.

2.14 Record date and mileage on evaporator case serial number plate.

2.15 Remove fuse block and retain fasteners.

2.16 Remove odometer reset knob from underside of instrument panel and retain bolt and spacer.

2.17 Position evaporator case on floor board of vehicle as illustrated. Connect liquid hose to expansion valve and suction hose to evaporator header. Push remainder of hoses out proper holes in firewall. NOTE: WRAP EXPOSED SUCTION HEADER WITH PRESTITE TAPE.

2.18 Insert drain tube through 'Y' slot and hole provided in floor panel. Connect opposite end to drain plug on back of evaporator case.
2.19 Connect (yellow) wire from fuse holder to fuse block terminal with battery lead as illustrated.

2.20 Connect (white) wire from terminal E5 to fourth (unoccupied) terminal from right hand side of fuse block as illustrated.

2.21 Reinstall fuse block with original hardware.

2.22 Secure odometer extension to cable with set screw as illustrated (Refer to Illustration opposite step N.30).

2.23 Loosen first Phillips head screw left of steering column in padded dash.

2.24 Raise evaporator case up into position and pull case forward until R.H. bracket hooks over lip of dash. Secure bracket with one #8A x 1" sheet metal screw as illustrated. NOTE: IT MAY BE NECESSARY TO BEND BRACKET TO CLEAR METAL LIP.

2.25 Slip left side evaporator mounting bracket between padded and metal dash, as illustrated. Resecure Phillips screw.

2.26 Secure left hand end of evaporator case with one 1-1/2" sheet metal screw as illustrated.

2.27 Secure center evaporator mounting bracket to dash panel with one #8A x 1/2" sheet metal screw.

2.28 Secure right rear evaporator mounting bracket to dash with two #8A x 1/2" sheet metal screws. NOTE: SECURE EVAPORATOR MOTOR GROUND WIRE ALONG WITH BRACKET.

2.29 Slip a 3/8" rubber grommet over end of wire harness. Route wire harness through hole in firewall under gas tank and through hole in forward luggage compartment.

2.30 Slip odometer extension through hole in bracket as illustrated.
2.31 Place tray in top of console and slide console into former position. Secure console to transmission tunnel with original fasteners.

2.32 Secure gauges in new forward console panel as illustrated.

2.33 Connect gauges to existing wires and slip panel into place. Secure panel to tray and console with two #10 x 1/2" black sheet metal screws as illustrated.

2.34 Replace bottom panel of console and reattach lever knobs.

2.35 Resecure center glove box with original hardware.
3.1 Remove and retain spare tire cover and spare tire from luggage compartment. Modify spare tire cover by cutting off 1" from back side of fiberboard. **CAUTION:** Do NOT cut carpet.

3.2 Disconnect and remove wind shield washer bottle.

3.3 Locate and drill a 1-1/8" dia. hole inside front luggage compartment. Cut a 1" long slit in carpet directly over hole.

3.4 Use threaded retaining bracket as a guide to locate template #9140 in bottom of spare tire well. Bend up front of template and follow bottom of tire well. Align template sides with ridges in bottom of tire well.

3.5 Center punch and drill eight 1-1/8" dia. holes in bottom of spare tire well. Cut out remainder of material between holes to form two rectangular holes as illustrated on template #9140. **NOTE:** CUT OFF TOW RING TO PROVIDE CLEARANCE FOR AIR SCOOP.

3.6 Drill a 1-3/8" hole in bottom of spare tire well. Locate hole in line with back edge of rectangular hole. Insert caterpillar grommet.

3.7 Apply sealing compound around cutout before installing condenser.

3.8 Position condenser assembly over rectangular holes in wheel well and secure with nine #8 x 1/2" sheet metal screws. Front flange of shroud should be located on the raised portion of wheel well. Other flanges should be in the recessed portion of wheel well. **NOTE:** AIR DEFLECTOR WILL PROTRUDE THROUGH WHEEL WELL AND ALONG FORWARD EDGE OF REAR RECTANGULAR HOLE IF LOCATED CORRECTLY.
3.9 Secure receiver filter to rear wall of front luggage compartment with two #8F x 1/2" sheet metal screws as illustrated.

3.10 From underneath vehicle, position rear flange of air scoop along rear edge of front rectangular hole. Secure scoop with four #8F x 1/2" sheet metal screws as illustrated.
4.1 Remove and retain right hand rocker panel and existing fasteners.

4.2 Locate and drill a 1-3/8" and 1-1/8" hole in both sides of wide rocker panel rib, located up front. Cut out remainder of web between existing and drilled out holes in rocker panel ribs as illustrated.

4.3 Locate and drill two 1-3/8" holes, one in right front wheel well and one in passenger compartment as illustrated. Use template S914A to locate holes.

4.4 Slip a rubber grommet on liquid hose and route through hole in front luggage compartment and hole in passenger compartment. Connect to receiver filter. NOTE: REMOVE RUBBER PLUGS OR PLASTIC CAPS BEFORE SECURING LINES OR HOSES.

4.5 Connect short liquid hose to condenser and receiver filter as illustrated. NOTE: ROUTE LIQUID HOSE AS ILLUSTRATED IN ORDER TO PREVENT DAMAGE BY SPARE TIRE.

4.6 Route discharge hose from front luggage compartment, through hole in rear corner of spare tire well, around rear of front wheel well, through rocker panel ribs, and up through hole in rear wheel well to compressor. Connect to condenser.
4.7 Tape clutch wire to suction hose at 10" intervals.

4.8 Route suction hose from engine compartment, down through hole in rear wheel well, through rocker panel ribs, up through hole in front wheel well and into passenger compartment.

NOTE: BEND BODY AND FENDER-SEAM FLANGE DOWN WHERE HOSES CROSS.

CAUTION
MAKE SURE HOSES DO NOT COME IN CONTACT WITH ANY SHARP EDGES.

4.9 Route discharge hose in engine compartment as illustrated and connect to compressor. Connect suction hose to compressor.

4.10 Clamp discharge hose in front and rear wheel well with #12 clamps and #8 DF x 1/2" sheet metal screws.

4.11 Clamp suction hose in front and rear wheel well with #14 clamps and #8 DF x 1/2" sheet metal screws.

CAUTION
WHEN ROUTING CLUTCH WIRE THRU HOSE CLAMPS MAKE SURE WIRE IS PROTECTED BY RUBBER PART OF CLAMP.

4.12 Secure hoses to rocker panel ribs with nylon straps as illustrated.
1975 PORSCHE

This wiring diagram supersedes diagram in instructions.

MAGNETIC CLUTCH
3.0 - 3.7 AMPS

CONDENSER FAN MOTOR
3.0 - 6.5 AMPS

EVAPORATOR FAN MOTOR
LOW 3.5 - 4.5 AMPS
MEDIUM 5.5 - 7.0 AMPS
HIGH 6.0 - 10.0 AMPS

CONNECT FROM RADIO TO FOURTH TERMINAL
CONNECT BATTERY LEAD ON FUSE BLOCK
CONNECT TO FUSE BLOCK
CONNECT FUSE TO GROUND

40 AMP FUSE
RELAY
RESISTOR
ON-OFF SWITCH
THERMOSTAT
5.1 Secure (green) ground wire to vehicle with one #8 x 1/2" sheet metal screw.

5.2 Connect clutch wire to clutch lead and tape.

5.3 Take up any slack in clutch wire and tape to suction hose.

5.4 Connect long lead of wire harness to condenser fan motor.

5.5 Replace battery and reconnect cables.
6.1 Maintain vacuum for 10-20 minutes.

6.2 Brake vacuum with charge of R-12. Hold pressure at approximately 50 PSI.

6.3 Leak test.

6.4 Re-evacuate to 30" vacuum to boil off moisture.

6.5 Purge air from hoses with R-12. Charge with 2-1/2 pounds of R-12 or until sight glass clears.

**Correct Charge**

Use 2-1/2 pounds of R-12. Three cans is too much.

**Do Not Invert Freon Container**

If system is charged with engine running, refrigerant must be introduced through SUCTION port to avoid explosion of refrigerant can. Do not shake or invert refrigerant container. This may cause liquid refrigerant to enter compressor and damage reed plate.

The air conditioner needs to be operated for at least 5 minutes a month regardless of outside weather. This will keep the chest and in the compressor from drying out. If the seal needs to be replaced, the compressor will have to be removed from the car.

The underside of the condenser should be kept clean to increase the effectiveness of the cooling system.

The condenser fins can be cleaned by blowing compressed air through them and straightened with a fin comb.
7.1 Remove metal shavings from passenger compartment.

7.2 Affix "Air Conditioned by DPD" decal to rear window or where state law permits.

7.3 Check evaporator fan motor for quiet operation at each speed.

7.4 Check for proper drainage from evaporator case.

7.5 Remove metal shavings from spare tire well.

7.6 Check condenser fan motor for quiet operation.

7.7 Position spare tire over condenser shroud and reconnect windshield washer hose to spare tire valve.

7.8 Reinstall original spare tire cover.

7.9 Replace rocker panel and secure in place with rivets furnished in kit.

7.10 Reinstall engine cover.

7.11 Road test vehicle with air conditioner in operation.

7.12 Recheck compressor belt tension for 90-95 pounds gauge. NOTE: RUN A/C FOR APPROX. 15 MIN. BEFORE RECHECKING BELT TENSION.