Distributor/Dealer Service Instructions for:

Customer Satisfaction Notification No. C30
PCM Electrical Connector Seals

Effective immediately, all repairs on involved vehicles are to be performed according to this notification. Rapid Response Transmittal (RRT) #03−014 is being cancelled. Those vehicles that have already had this repair performed, as determined by our warranty records, have been excluded from this notification.

Models

- 2004 (CS) Chrysler Pacifica
- 2004 (DR) Dodge Ram Pick Up (Built at St. Louis North (J) and Saltillo (G) Assembly Plants equipped with a gasoline engine)
- 2004 (JR) Dodge Stratus Sedan, Chrysler Sebring Sedan and Convertible
- 2004 (KJ) Jeep Liberty
- 2003−2004 (PT) Chrysler PT Cruiser
- 2003 (RS) Dodge Caravan and Chrysler Voyager (2.4L Engine Only)
- 2004 (RS) Dodge Caravan/Grand Caravan, Chrysler Town & Country

NOTE: This notification applies only to the above vehicles built from June 15, 2003 through August 14, 2003 (MDH 0615XX through 0814XX).

2003 (RG) Chrysler Voyager

IMPORTANT: Many of the vehicles within the above build period have already been inspected or repaired and, therefore, have been excluded from this recall.

Important: Some of the involved vehicles may be in Distributor/Dealer vehicle inventory. Distributors/Dealers should complete this repair on these vehicles before retail delivery. Distributors/Dealers should also perform this repair on vehicles in for service. Involved vehicles can be determined by using the VIP inquiry process.

Subject

The Powertrain Control Module (PCM) electrical connector seal (one or all) on about 63,000 of the above vehicles (1531 in Int’l markets) may be out of place or “rolled”. This could allow water to enter into the PCM. Water and the resulting corrosion inside of the connector can cause various electrical and driveability concerns.
Repair

The PCM electrical connector seals must be inspected. Connectors with a “rolled” seal must be disconnected and properly reconnected.

Parts Information

No parts are required to perform the service procedure. However, if water and/or corrosion are found inside of a connector, the PCM and/or wiring harness may require replacement. Distributors/Dealers should reference the Mopar Parts Catalog for the appropriate replacement PCM and/or wiring harness part numbers, if necessary. Very few vehicles are expected to require PCM and/or wiring harness replacement.
A. Inspect PCM Connectors

IMPORTANT: Do not remove the electrical connectors from the PCM. This will only increase the risk of disturbing an otherwise sealed connector. An out of place seal can only be identified while the connector is plugged in.

1. Disconnect the negative battery cable.

NOTE: To enhance customer satisfaction, remember to reset the clock when you have completed the service procedure.

![Diagram of vehicle showing PCM and connectors](image)

**FIGURE 1 – JR Vehicle Shown**

<table>
<thead>
<tr>
<th>FRONT</th>
<th>FRONT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1–</td>
<td>NEGATIVE BATTERY CABLE</td>
</tr>
<tr>
<td>2–</td>
<td>POWER DISTRIBUTION CENTER</td>
</tr>
<tr>
<td>3–</td>
<td>PCM</td>
</tr>
<tr>
<td>4–</td>
<td>ELECTRICAL CONNECTORS</td>
</tr>
</tbody>
</table>
2. **For PT and DR vehicles only**: Remove the air cleaner assembly.

3. **For CS and RS/RG Vehicles only**: Raise the vehicle on an appropriate hoist.

4. **For CS and RS/RG Vehicles only**: Remove the left front wheel well splash shield.

5. Remove the PCM mounting bracket screws.

6. Rotate the PCM to visually inspect the four (4) PCM electrical connectors (Figure 1) for the presence of an out of place seal (Figure 2). Do not disconnect the connectors. **If the LIGHT BLUE colored seal can be seen through the red locking tab, it is improperly installed or out of place.**

   - **If one or more of the seals are out of place**, continue with Step 7.
   - **If NONE of the seals are out of place**, no further action is necessary. Continue with Step 11.

**NOTE:** If an ORANGE colored seal is visible through the red locking tab, no further action is necessary. Only light blue seals require repair.

7. Disconnect each PCM electrical connector that has the light blue seal visibly out of place (Figure 2).

**IMPORTANT:** Color photographs of the PCM connector and displaced seal can be viewed on DealerCONNECT. From the Service tab, select “STAR Online”, then select “STAR Center News, Documents and Reference Sheets” and then select “PCM Connector Seal Sheet”.

8. Inspect the disconnected electrical connector(s) and mating PCM connector for the presence of water and/or corrosion.

- **If any corrosion is present in the harness and/or PCM connector**, the PCM and affected wiring harness must be replaced. **Continue with Section B – Replace PCM.**

- **If water or moisture is present, without any signs of corrosion**, dry the connector as follows:
  
  a. Firmly tap the harness connector onto a paper towel to remove the majority of the water from the connector.

  b. Using a blow dryer or heat gun, thoroughly dry out the harness and PCM connectors. Do NOT use shop air to blow out the connector.
IMPORTANT: If the vehicle is equipped with a Huntsville PCM, the module connector can be dried out. If the vehicle is equipped with a Motorola PCM, the module must be replaced. Refer to the PCM barcode label to identify the module manufacturer.

c. Continue with Step 9.

- If NO water or corrosion is present in the harness and/or PCM connector, continue with Step 9.

9. Carefully reconnect the PCM connector(s). This may take several attempts. Be sure to insert the connector straight into the module. If the connector is not inserted straight into the module, it may cause the seal to move out of place.

10. Verify that all seals are in place (Figure 2).

11. Reinstall the PCM. Tighten the PCM mounting bracket fasteners.
   - For CS/RS/JR vehicles, tighten the mounting bolts to 35 in−lbs (4 N·m).
   - For KJ/PT vehicles, tighten the mounting bolts to 100 in−lbs (11.3 N·m).
   - For DR vehicles, tighten the mounting bolts to 75 in−lbs (8.5 N·m) and the nuts to 60 in−lbs (6.8 N·m).

12. **For CS and RS/RG Vehicles only:** Install the left wheel well splash shield.

13. **For CS and RS/RG Vehicles only:** Lower the vehicle.

14. **For PT and DR vehicles only:** Install the air cleaner assembly.

15. Connect the negative battery cable.
B. Replace PCM

NOTE: Only those vehicles that have water and/or corrosion found during the inspection in Section A. require PCM replacement. Very few vehicles are expected to require PCM replacement.

1. Disconnect the remaining PCM electrical connectors.

2. Remove the three (3) PCM-to-bracket bolts, then remove the PCM from the bracket and set it aside for return to the Warranty Material Return Center.

3. Install the new PCM on the bracket.
   - For CS/RS/RG/KJ/JR/DR vehicles, tighten the mounting bolts to 35 in–lbs (4 N·m).
   - For PT vehicles, tighten the mounting bolts to 105 in–lbs (11.8 N·m).

4. Reinstall the PCM onto the vehicle. Tighten the PCM mounting bracket fasteners.
   - For CS/RS/RG/JR vehicles, tighten the mounting bolts to 35 in–lbs (4 N·m).
   - For KJ/PT vehicles, tighten the mounting bolts to 100 in–lbs (11.3 N·m).
   - For DR vehicles, tighten the mounting bolts to 75 in–lbs (8.5 N·m) and the nuts to 60 in–lbs (6.8 N·m).
5. If only the PCM required replacement (DR/KJ vehicles with a Motorola PCM), carefully reconnect the PCM connector(s). This may take several attempts. Be sure to insert the connector straight into the module. If the connector is not inserted straight into the module, it may cause the seal to move out of place. Verify that all seals are in place (Figure 2) and then continue with **Section F – PCM/Vehicle Data Set-up**.

- If one of the PCM wiring harnesses required replacement, continue with the applicable section, **Section C – Replace Transaxle Wiring Harness**, **Section D – Replace Engine/Powertrain Wiring Harness** or **Section E – Replace Headlamp & Dash Wiring Harness**. Refer to the table below to correlate the PCM connector color to the harness type.

<table>
<thead>
<tr>
<th>Vehicle</th>
<th>Black Connector</th>
<th>Orange or Gray Connector</th>
<th>White Connector</th>
<th>Green Connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS/RG</td>
<td>Engine</td>
<td>Engine</td>
<td>Engine</td>
<td>Transaxle</td>
</tr>
<tr>
<td>CS</td>
<td>Headlamp/Dash</td>
<td>Engine</td>
<td>Headlamp/Dash</td>
<td>Headlamp/Dash</td>
</tr>
<tr>
<td>PT</td>
<td>Headlamp/Dash</td>
<td>Engine</td>
<td>Headlamp/Dash</td>
<td>Engine</td>
</tr>
<tr>
<td>JR</td>
<td>Headlamp/Dash</td>
<td>Engine</td>
<td>Headlamp/Dash</td>
<td>Headlamp/Dash</td>
</tr>
<tr>
<td>KJ</td>
<td>Headlamp/Dash</td>
<td>Engine</td>
<td>Headlamp/Dash</td>
<td>Headlamp/Dash</td>
</tr>
<tr>
<td>DR</td>
<td>Powertrain</td>
<td>Powertrain</td>
<td>Headlamp/Dash</td>
<td>Powertrain</td>
</tr>
</tbody>
</table>
C. Replace Transaxle Wiring Harness – RS/RG Only

NOTE: Only those vehicles that have corrosion found during the inspection in Section A. require wiring harness replacement. Very few vehicles are expected to require wiring harness replacement.

1. Disconnect the grey 8–way connector at the left frame rail.
2. Lower the vehicle.
3. Disconnect the transaxle solenoid connector (Figure 3).
4. Disconnect the input and output speed sensor (Figure 3).

5. Disconnect the PRNDL switch connector (Figure 3).

6. Remove the harness from the vehicle.

7. Position the new harness onto the vehicle.

8. Connect the PRNDL switch connector (Figure 3).

9. Connect the input and output speed sensor (Figure 3).

10. Connect the transaxle solenoid connector (Figure 3).

11. Raise the vehicle on an appropriate hoist.

12. Carefully reconnect the PCM connector(s). This may take several attempts. Be sure to insert the connector straight into the module. If the connector is not inserted straight into the module, it may cause the seal to move out of place.

13. Verify that all seals are in place (Figure 2).

14. Connect the grey 8−way connector at the left frame rail.

15. Install the left side fender shield.

16. Lower the vehicle.

17. Connect negative battery cable.

D. Replace Engine or Powertrain Harness (Typical)

NOTE: Only those vehicles that have corrosion found during the inspection in Section A. require wiring harness replacement. Very few vehicles are expected to require wiring harness replacement.

1. Disconnect the positive battery cable.
2. Remove the battery and battery tray.
3. Remove the air cleaner assembly.
4. Disconnect the affected PCM electrical connectors (if necessary).
5. Remove the Power Distribution Center (PDC) cover and rotate the PDC on its hinges to expose the connectors on the bottom of the PDC.
6. Disconnect the harness connectors that connect to the PDC.
7. Disconnect the ground eyelets.
8. Disconnect the following items located in the engine compartment as necessary:
   a. injector harness.
   b. camshaft position sensor.
   c. speed control servo.
   d. upstream and downstream oxygen sensors.
   e. leak detection pump.
   f. oil pressure sensor.
   g. starter battery positive wire (B+).
   h. purge solenoid.
   i. idle speed motor.
   j. throttle position sensor.
k. intake air temperature sensor.
l. air conditioning transducer switch.
m. transaxle solenoid connector.
n. input and output speed sensor.
o. PRNDL switch connector.
p. crankshaft position sensor.
q. starter solenoid.
r. generator field wire connector.
s. generator battery positive wire.
t. air conditioning clutch coil.

9. Remove the old wiring harness from the vehicle.

10. Place the new wiring harness into position.

11. Connect the wiring harness to the following items located in the engine compartment as necessary:

a. purge solenoid.
b. idle speed motor.
c. throttle position sensor.
d. intake air temperature sensor.
e. air conditioning transducer switch.
f. injector harness.
g. camshaft position sensor.
h. speed control servo.
i. upstream and downstream oxygen sensors.
j. leak detection pump.
k. oil pressure sensor.
l. starter battery positive wire (B+).
m. transaxle solenoid connector.
n. input and output speed sensor.
o. PRNDL switch connector.
p. crankshaft position sensor.
q. starter solenoid.
r. generator field wire connector.
s. generator battery positive wire.
t. air conditioning clutch coil.

12. Connect the ground eyelets.

13. Connect the harness connectors that connect to the PDC.

14. Rotate the PDC into position and install the cover.

15. Route the remainder of the harness to the PCM location.

16. Carefully reconnect the PCM connector(s). This may take several attempts. Be sure to insert the connector straight into the module. If the connector is not inserted straight into the module, it may cause the seal to move out of place.

17. Verify that all seals are in place (Figure 2).

18. For RS/RG/CS vehicles, install the left side fender shield.

19. Install the air cleaner assembly.

20. Install the battery tray and battery.

21. Connect the positive battery cable and then the negative battery cable.

22. Continue with Section F – PCM/Vehicle Data Set-up.
E. Replace Headlamp & Dash Harness (Typical)

NOTE: Only those vehicles that have corrosion found during the inspection in Section A. require wiring harness replacement. Very few vehicles are expected to require wiring harness replacement.

1. Remove the air cleaner assembly.

2. Disconnect the affected PCM electrical connectors (if necessary).

3. Disconnect the following items located in the engine compartment as necessary:
   a. ignition switch.
   b. vehicle speed sensor.
   c. A/C pressure sensor.
   d. A/C clutch relay
   e. oxygen sensors.
   f. ASD relay.
   g. radiator fan relay.
   h. clutch interlock switch.
   i. brake switch.
   j. Autostick switch.
   k. fuel pump relay.
   l. starter relay.
   m. transaxle solenoid connector.
   n. input and output speed sensor.
   o. PRNDL switch connector.
   p. For PT and JR vehicles: Remove the front fascia.
4. Remove the old wiring harness from the vehicle.

5. Place the new wiring harness into position.

6. Connect the wiring harness to the following items located in the engine compartment as necessary:
   a. ignition switch.
   b. vehicle speed sensor.
   c. A/C pressure sensor.
   d. A/C clutch relay.
   e. oxygen sensors.
   f. ASD relay.
   g. radiator fan relay.
   h. clutch interlock switch.
   i. brake switch.
   j. Autostick switch.
   k. fuel pump relay.
   l. starter relay.
   m. transaxle solenoid connector.
   n. input and output speed sensor.
   o. PRNDL switch connector.
   p. For PT and JR vehicles: Install the front fascia.
   q. headlamps.
   r. turn signal lamps.
7. Route the remainder of the harness to the PCM location.

8. Carefully reconnect the PCM connector(s). This may take several attempts. Be sure to insert the connector straight into the module. If the connector is not inserted straight into the module, it may cause the seal to move out of place.

9. Verify that all seals are in place (Figure 2).

10. Install the air cleaner assembly.

11. Connect the positive battery cable and then the negative battery cable.

12. Continue with Section F – PCM/Vehicle Data Set-up.
F. PCM/Vehicle Data Set-up

1. Connect the DRB III® to the data link connector located under the instrument panel. Turn the ignition key to the “ON” position.

2. With the ignition switch in the “ON” position, determine if the vehicle is equipped with a SKIM module by using the DRB III and selecting from the menu screen:
   a. Select #1 – “DRB III Standalone” from Main Menu screen.
   d. Select #8 – “System Monitor” from Select System screen.
   e. Select #3 – “J1850 Module Scan” from Select Monitor screen and then press ENTER to continue and note if the vehicle is equipped with SKIM.

   ► If the vehicle is equipped with SKIM obtain the vehicle PIN (Personal Identification Number) before continuing with Step 3. This information is available from the original selling invoice, the Dial VIP System, or by contacting the DaimlerChrysler Customer Assistance Center (DCCAC) at 1–800–992–1997.

   WARNING: Failure to use the SKIM PIN number to transfer the secret key code data from the SKIM module will cause a no–start condition.

   ► If the vehicle is not equipped with SKIM then continue with Step 3.

   f. Press PAGE BACK.

3. Press PAGE BACK to return to the Select System screen.

5. Press ENTER to continue.

6. Press the RIGHT ARROW key to go to Page 2 of 2.

7. Select #1 – “Miscellaneous”.

8. Select #3 – “Check VIN”.

9. Press ENTER to program the VIN.

►If the vehicle is equipped with SKIM:

a. Press ENTER to continue.

b. Press ENTER to continue again.

c. Enter the vehicle 4–digit PIN.

d. Press ENTER to continue.

e. Press ENTER to continue again.

f. Press ENTER to continue again.

g. Press ENTER to update VIN.

h. Press ENTER to continue.

i. Press ENTER to transfer secret key data.

j. Press ENTER to continue.

k. Cycle ignition key to “OFF” position and then back to “ON” position and then press ENTER.

l. Press any key to continue.

►If the vehicle is NOT equipped with SKIM:

a. Enter the 17–digit VIN.

b. Press ENTER to continue.

c. Press PAGE BACK.
10. Select #1 – “Miscellaneous”.

11. Select #1 – “Check PCM Odometer”.

12. Press YES if the vehicle has LESS than 50 miles on the odometer or press NO if the vehicle has MORE than 50 miles on the odometer.

13. Enter current odometer reading and then press ENTER.

14. Cycle ignition key to “OFF” position and then back to “ON” position and then press ENTER.

15. Press PAGE BACK.

16. Press PAGE BACK again.

17. Select #2 – “Transmission”.

18. Select #1 – “Transmission Module”.

19. Select #9 – “Miscellaneous”.

20. Select #3 – “Pinion Factor”.

21. Press any key to continue.

22. Select the correct tire size for the vehicle and then press ENTER.

23. Verify the selected tire size and then press PAGE BACK to exit.

24. Select #6 – “Quicklearn” and then follow the instructions displayed on the DRB III screen.

25. Disconnect the DRB III.
Completion Reporting and Reimbursement

Claims for vehicles that have been serviced must be submitted on the DIAL System or on the Distributor/DealerCONNECT Claim Entry Screen located on the Service tab. Claims submitted will be used by DaimlerChrysler to record Customer Satisfaction Notification service completions and provide Distributor/Dealer payments.

Use one of the following labor operation numbers and time allowances:

<table>
<thead>
<tr>
<th>Labor Operation Number</th>
<th>Labor Operation Description</th>
<th>Time Allowance</th>
</tr>
</thead>
<tbody>
<tr>
<td>08−C3−01−81</td>
<td>Inspect PCM connector seals</td>
<td>0.2 hours</td>
</tr>
<tr>
<td></td>
<td>JR/KJ/DR</td>
<td>0.2 hours</td>
</tr>
<tr>
<td></td>
<td>PT</td>
<td>0.3 hours</td>
</tr>
<tr>
<td></td>
<td>RS/RG/CS</td>
<td>0.4 hours</td>
</tr>
<tr>
<td>08−C3−01−82</td>
<td>Inspect and reposition PCM connector seal(s) and inspect for water/corrosion</td>
<td>0.2 hours</td>
</tr>
<tr>
<td></td>
<td>JR/KJ/DR</td>
<td>0.2 hours</td>
</tr>
<tr>
<td></td>
<td>PT</td>
<td>0.3 hours</td>
</tr>
<tr>
<td></td>
<td>RS/RG/CS</td>
<td>0.4 hours</td>
</tr>
<tr>
<td>08−C3−01−83</td>
<td>Inspect/reposition PCM connector seals; inspect for water/corrosion and replace PCM (Motorola) (KJ/DR only)</td>
<td>1.1 hours</td>
</tr>
<tr>
<td>08−C3−01−84</td>
<td>Inspect/reposition PCM connector seals; inspect for water/corrosion; replace PCM and replace Transmission Wiring Harness (RS/RG only)</td>
<td>1.2 hours</td>
</tr>
</tbody>
</table>
Inspect/reposition PCM connector seals; inspect for water/corrosion; replace PCM and replace Engine or Powertrain Wiring Harness 08−C3−01−85

- CS: 2.2 hours
- RS/RG (2.4L Engine): 2.3 hours
- JR/PT: 2.6 hours
- DR: 1.7 hours
- KJ: 1.3 hours

Inspect/reposition PCM connector seals; inspect for water/corrosion; replace PCM and replace Headlamp and Dash Wiring Harness 08−C3−01−86

- CS: 3.3 hours
- JR/PT: 3.6 hours
- DR: 2.4 hours
- KJ: 3.2 hours

Inspect/reposition PCM connector seals; inspect for water/corrosion; replace PCM; replace Engine or Powertrain Wiring Harness and replace Headlamp and Dash or Transmission Wiring Harness 08−C3−01−87

- RS/RG (2.4L Engine): 2.5 hours
- CS: 3.9 hours
- JR/PT: 4.5 hours
- DR: 3.2 hours
- KJ: 3.5 hours

Inspect/reposition PCM connector seals; inspect for water/corrosion; replace PCM and replace Engine Wiring Harness 08−C3−01−88

- RS/RG (3.3L/3.8L Engine): 3.6 hours

Inspect/reposition PCM connector seals; inspect for water/corrosion; replace PCM; replace Engine Wiring Harness and replace Transmission Wiring Harness 08−C3−01−89

- RS/RG (3.3L/3.8L Engine): 3.8 hours

Add the cost of the parts, if necessary, plus applicable Distributor/Dealer allowance to your claim.
Parts Return

Removed PCM’s must be returned to the Warranty Material Return Center.

NOTE: See the Warranty Administration Manual, Recall Claim Processing Section for complete claim processing and material return instructions.

Distributor/Dealer Notification

Regional offices will receive an electronic list of involved vehicles. The Vehicle List is arranged by Distributor/Dealer code and in Vehicle Identification Number (VIN) sequence. The lists are for Distributor/Dealer reference in arranging for service of involved vehicles.

Vehicle Lists, Global Recall System, VIP and Distributor/Dealer Follow Up

All involved vehicles have been entered into the Global Recall System (GRS) and Vehicle Information Plus (VIP) for Distributor/Dealer inquiry as needed.

GRS provides involved Distributors/Dealers with an updated VIN list of their incomplete vehicles. Completed vehicles are removed from GRS within several days of repair claim submission.

Distributors/Dealers must perform this repair on all unsold vehicles before retail delivery. Distributors/Dealers should also use the VIN list to follow up with all owners to schedule appointments for this repair.
Owner Notification and Service Scheduling

All involved vehicle owners should be notified of the service requirement by their Distributor/Dealer. Owners are requested to schedule appointments for this service. A sample copy of the owner notification letter is attached.

Additional Information

If you have any questions or need assistance in completing this action, please contact your International Service and Parts manager.

International Service and Parts
DaimlerChrysler Corporation
CUSTOMER SATISFACTION NOTIFICATION
TO INSPECT YOUR VEHICLE’S POWERTRAIN CONTROL MODULE
ELECTRICAL CONNECTOR SEALS

Dear DaimlerChrysler Vehicle Owner:

The satisfaction of our customers is very important to DaimlerChrysler. Because of this, we are requesting owners of the vehicles listed below to contact their dealer to have the following service performed:

- 2003 model year Dodge Caravan, Chrysler Voyager and PT Cruiser vehicles equipped with a 2.4L engine.
- 2004 model year Jeep® Cherokee; Dodge Caravan/Grand Caravan, Stratus sedan and Ram pick-up; and Chrysler PT Cruiser, Sebring convertible and sedan, Town & Country and Pacifica vehicles

The problem is... The Powertrain Control Module (PCM) electrical connector seals on your vehicle, may be out of place. This could allow water to enter into the PCM. Water and the resulting corrosion inside of the connector can cause various electrical and driveability concerns.

What DaimlerChrysler and your dealer will do... DaimlerChrysler will repair your vehicle free of charge (parts and labor). To do this, your dealer will inspect the PCM electrical connector seals and repair any that are found to be out of place. If a connector is corroded, the PCM and affected wiring harness will be replaced. The inspection and seal repair will take about ½ hour to complete. PCM and wiring harness replacement, if necessary, could take up to another five hours. However, additional time may be necessary depending on how dealer appointments are scheduled and processed.

What you must do... Simply contact your dealer right away to schedule a service appointment.

If you need help... If you have trouble getting your vehicle serviced, please contact the DaimlerChrysler Distributor nearest your location. A representative will assist you in getting your vehicle serviced. This information can be found in the Customer Assistance section of your Owner’s Manual.

If you have already experienced the problem described above and have paid to have it repaired, contact the DaimlerChrysler Distributor nearest your location for reimbursement procedures.

We apologize for any inconvenience, but we believe that this service will help to ensure your continuing satisfaction with your vehicle. Thank you for your attention to this important matter.

International Service and Parts
DaimlerChrysler Corporation
C30

Buckle up for Safety

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