

Bad starter or relay?

For my Colorado trip I left El Cajon about mid-night on Monday Aug 1ST . I drove to El Centro and stopped for gas. It was about 2AM and still over 100 degrees there. When I went to start the Jeep I turned the key and nothing happened. The starter wouldn't crank at all. Not even a click. Since the lights were working and bright I knew there wasn't a battery problem. I waited a few minutes, thinking about what to do and whether I should return home, then I remembered that often, when a starter won't crank, you can tap it with a hammer and get it to work. I did that and it cranked normally.

I decided to continue the trip. When I got to Yuma I stopped. Again the Jeep wouldn't start. I was near a Denny's so I decided to have breakfast. When I finished breakfast I again tapped the starter with a hammer and it started.

I decided I had better get a new starter so I waited in Yuma for a repair shop to open and had a new starter installed. I left Yuma about 10 AM and headed east. When I stopped in Gila Bend for gas again the same symptom. The new starter wouldn't crank.

I sat at the gas station a while trying to decide whether to return home or not. After waiting a while I tried to start the Jeep and it started normally so I continued. I decided to leave the engine running when I got gas along the way. I got to Flagstaff AZ where I had planned to stop for the night. It was cool there and there was a light rain. I stopped the engine and then it re-started normally several times.

I continued on to Colorado with no starter problems the whole time. While I was there the weather was cool. I realized that the common denominator of my starting problems was hot weather. Tapping on the starter didn't have anything to do with making the starter work. Waiting a few minutes for the engine to cool is what made starter work.

When I got to Lake City I talked to a mechanic. When I told him that tapping on the starter seemed to fix the problem he at first said "you need a new starter". Then when I told him that I still had the problem after replacing the starter, he said. "You have a bad relay."

I didn't realize that Jeeps have a relay under the hood in addition to the solenoid relay on the starter. The relay is in the rectangular plastic box on the passenger side under the hood in a TJ. The mechanic just replaced my "heat sensitive" relay with one of the unused relays I had in my Jeep.

I wasn't sure my problem was solved until I returned home via the desert between Phoenix and El Cajon in hot weather. I stopped several times with no starter problems.

I spent a couple of hundred dollars replacing a starter that wasn't bad. It is my fault because I was sure the starter was bad and I just told the guy to replace it without looking for other problems.

The moral of the story is... first try the inexpensive fixes before replacing more expensive items. Lesson learned.

Replacing my starter along with replacing my clutch made my Colorado trip kind of expensive but still it was well worth it.