

Alternative Scorpio A/C Compressor _____

I grabbed a nice, tight 2.9 Bronco II compressor for cheap the other day, thinking I'd just slap that puppy in my project car...

Well, there's a reason no one talks about that swap: it doesn't*. However, there is a fairly elegant way to make it happen, using stock hoses and two new fittings.

*The Ford compressor is also a Nippondenso design, but it's a 6 cylinder, a bit longer and fatter, and it has two lower mounting tabs on each end.

Parts _____

- Bronco II Nippondenso (Ford-branded) compressor... fits a *slew* of Ford trucks and other non-passenger cars, from mid 80s to mid 90s. ~\$30
- Bronco hose manifolds
- Discharge hose fitting from the compressor off the Bronco. See new pictures below for recent changes.
- Suction fitting: NAPA 206917 ~\$12
- Union fitting with R12 Schrader valve NAPA 201212 ~\$11. I still have R12 fittings on my car, as my gauges and pump are for R12. If I sell the car, I'll add the R134A fittings. Note that some Bronco compressors have a Schrader valve on the suction fitting.
- 2 cans R134A ~\$20. 2 cans = 24 oz, which happens to be the right amount for the Scorpio. The volume of R134A is only 80% of the original charge.
- Clutch from the Scorpio compressor. The Bronco clutch is slightly different.

Mounting _____

The adjustment slot has to be widened ~1/2 inch. The opening can be seen at the top of the slot.



The compressor housing has to be spaced back a bit- you can tell by laying the Scorpio compressor next to the Ford unit- to get the pulley in alignment with the crank pulley. There's only one set of tabs that works to mount on the Scorpio bracket. It will be obvious once you lay it up.



Clutch: Stock clutch and pulley fit right. Ground wire needs some attention. There's no screw casting on the a/c housing.

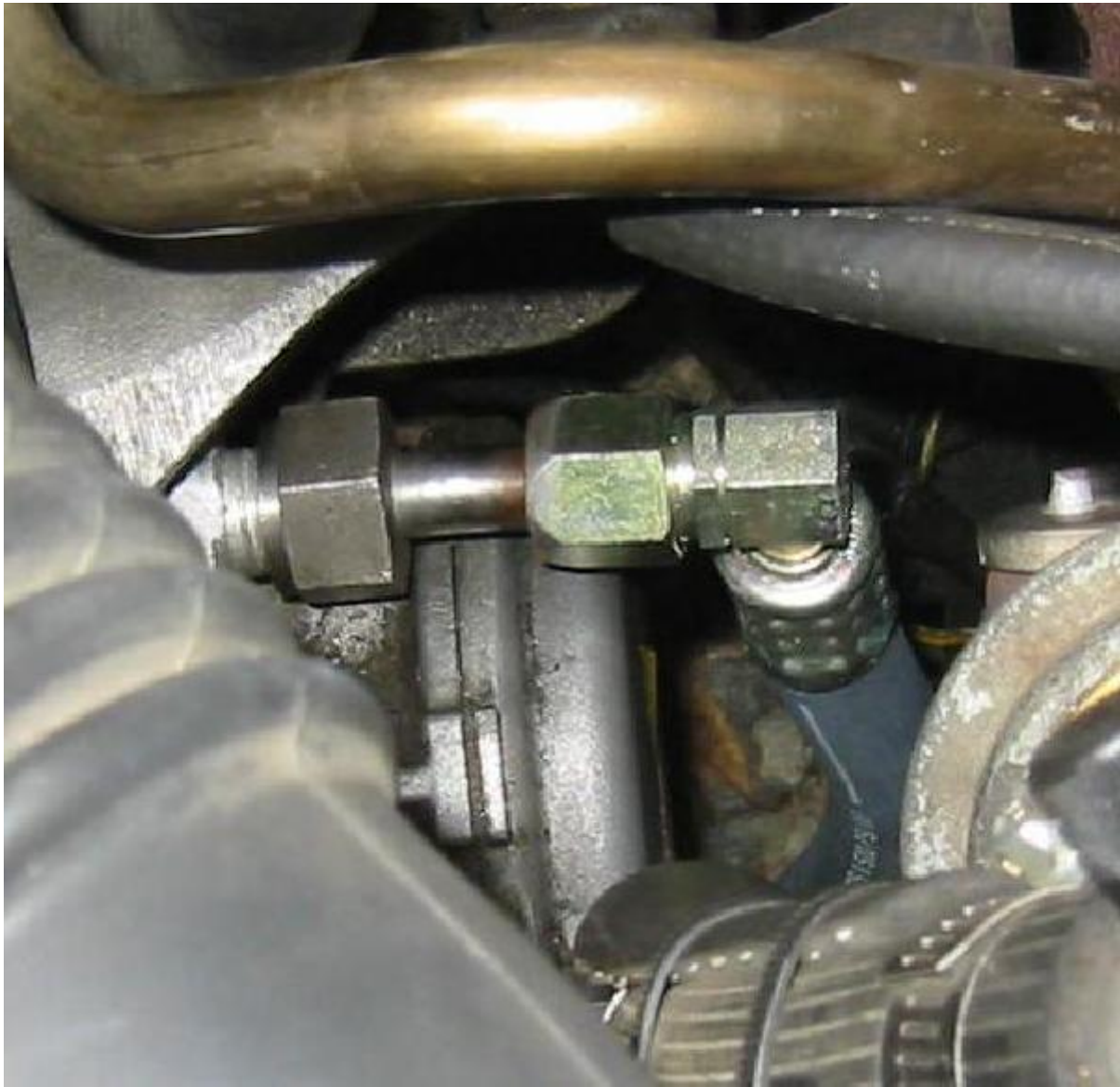
Hoses: Take the aluminum manifold off the Scorpio hoses. Especially for the discharge hose, I recommend carefully cutting the hose clamps off and saving all the length of hose. Take the old hose and clamp off the Bronco fitting, jam the fitting in the Scorpio discharge hose, clamp well. NAPA didn't list a suitable replacement for the stock fitting.

The suction fitting goes in the Scorpio suction hose.



Update Aug 08: New discharge hose, new fitting for the compressor. The suction hose is very difficult to seal on a smooth piece of pipe, as shown above. I had this new hose and fittings made up locally.





The union goes somewhere convenient in the hose so the system can be charged (optional, depending on the compressor).



Everything else is stock Scorpio.

The car's been w/o a/c charge for at least a couple of years.

Tonight: ambient 110-120 degrees at the a/c air intake, hood open, sucking air off the engine as it charges with R134 at about 2000 rpm.

Temp out the center vent 62 degrees Suction side ~50 lbs, discharge ~250 Haven't driven it on the road, so it would probably do *much* better.

Update July 1,2010:

Recharged this car again: ~40 degrees out of the center vent at 82 degrees ambient temperature. Probably would have dropped a few more degrees if I'd driven it longer. ~52 degrees out at ~100 degrees ambient temp. I did drive it longer.

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