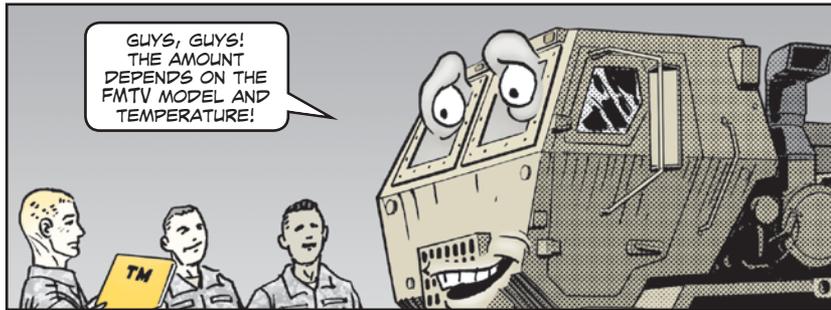
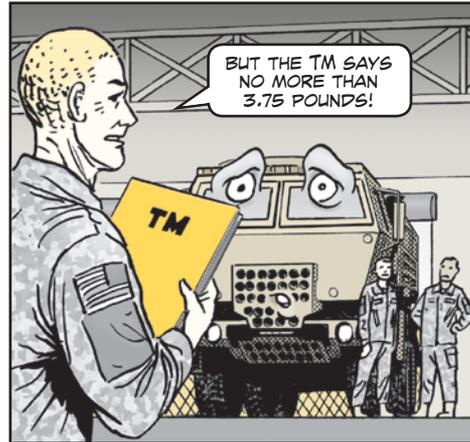
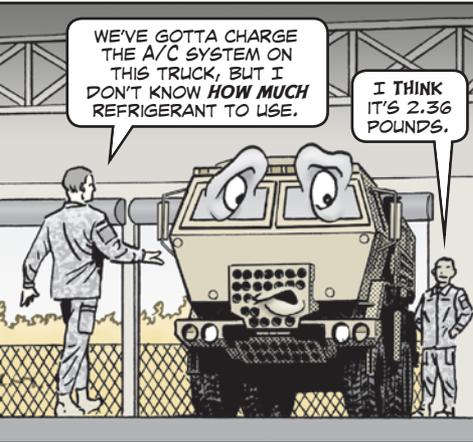
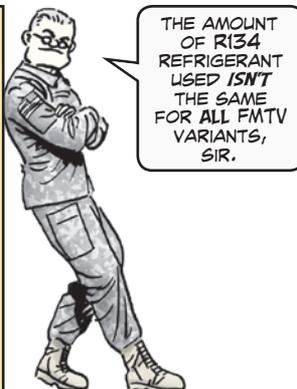


What's the A/C Charge Weight?



Dear Half-Mast,
Our shop does air conditioner work on up-armored FMTVs. A lot of these trucks don't have stickers on them that list the correct charge weights.
The TMs aren't clear about the amount of refrigerant to add after recovering the vehicle's A/C system, either. They say the system holds 4 pounds, but not to add more than 3.75 pounds.
Several of our mechanics believe the correct amount should be around 2.36 pounds. Since there's not a sticker and the TM is iffy, how much refrigerant should we use?
Mr. R.M.S.



HERE'S WHAT YOU NEED FOR A SYSTEM THAT'S BEEN COMPLETELY DRAINED:

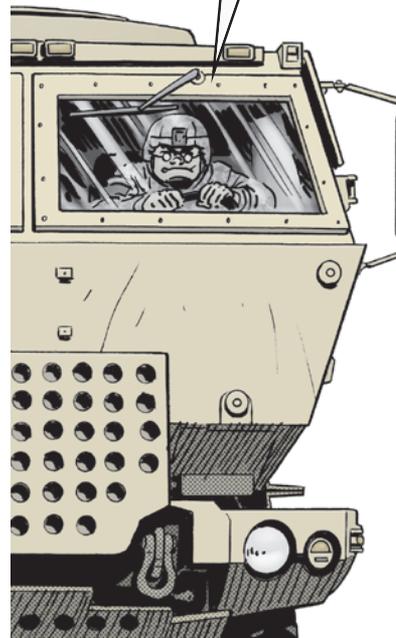
- **FMTV trucks upgraded with LSACs.** WP 0160 of TB 9-2320-320-13&P-2 says to use 3.5 pounds of refrigerant for vehicles below serial number 104,721 and 3.75 pounds for SN 104,721 and above.
- **FMTV A1 low velocity air drop (LVAD).** Use 3.75 pounds for vehicles with SN 120,386-120,978. This info will be published in the next EM 0195 IETM update.
- **FMTV A1P2 LTAS.** Use 3.75 pounds of refrigerant. The LTAS air conditioning info is in the TM 9-2320-333-14&P IETM (EM 0294).



Amount of R134 refrigerant depends on FMTV model and temperature

NEW TRUCKS COMING OFF THE OSHKOSH ASSEMBLY LINE ARE BEING CHARGED WITH 3.75 POUNDS OF REFRIGERANT.

THIS SHOULD BE CONSIDERED THE BASE AMOUNT ONLY. THOUGH, THE ACTUAL PSI WILL VARY DEPENDING ON AMBIENT TEMPERATURE...



| Temperature (°F) | HFC-134a PSI | Temperature (°F) | HFC-134a PSI |
|------------------|--------------|------------------|--------------|
| -60 | 21.8 | 55 | 51.1 |
| -55 | 20.4 | 60 | 57.3 |
| -50 | 18.7 | 65 | 63.9 |
| -45 | 16.9 | 70 | 70.9 |
| -40 | 14.8 | 75 | 78.4 |
| -35 | 12.5 | 80 | 88.4 |
| -30 | 9.8 | 85 | 94.9 |
| -25 | 6.9 | 90 | 103.9 |
| -20 | 3.7 | 95 | 113.5 |
| -15 | 0.0 | 100 | 123.6 |
| -10 | 1.9 | 105 | 134.3 |
| -5 | 4.1 | 110 | 145.3 |
| 0 | 6.5 | 115 | 157.6 |
| 5 | 9.0 | 120 | 170.3 |
| 10 | 12.0 | 125 | 183.6 |
| 15 | 15.0 | 130 | 197.6 |
| 20 | 18.4 | 135 | 212.4 |
| 25 | 22.1 | 140 | 227.9 |
| 30 | 36.1 | 145 | 244.3 |
| 35 | 30.4 | 150 | 261.4 |
| 40 | 35.0 | 155 | 279.5 |
| 45 | 40.0 | 160 | 298.4 |
| 50 | 45.3 | 165 | 318.3 |