

REFRIGERANT CHARGE INFORMATION - R134A SYSTEMS

A correct refrigerant charge is necessary to achieve optimum performance from an air conditioning system. This is very important with the vehicle A/C systems designed for R134a refrigerant. A total A/C system refrigerant charge has been determined for each chassis/Evans system combination shown. When servicing the refrigerant system, **the only way to be certain of an exact charge is to fill an empty system with the specified amount of R-134a refrigerant.** If an A/C system is operating and the amount (charge) of refrigerant within the system is not known, some simple checks can be performed to determine if the operating charge is adequate:

1. Compressor clutch engaged, and compressor operating.
2. Suction hose fitting (at evaporator outlet) cold to the touch. This fitting may sweat or even frost lightly.
3. Chilled discharge air at the dash louvers, when the temperature control is set at the coolest setting (water valve completely closed).
4. CAUTION!!! Some systems may have a sight glass on the receiver drier. The sight glass is only useful when considered along with steps 1 through 3 above. *R-134a compressor oil circulating in the system can make a sight glass appear foamy even with a proper system charge! Disregard a milky or foamy sight glass if the A/C system passes steps 1 through 3 above.* If a clear sight glass can be seen, this simply confirms an adequate operating charge.

Total R-134a Refrigerant charges for various vehicle/chassis are shown below:

RV APPLICATIONS

FRONT ENGINE CHASSIS	CHARGE
GM (Chevy) P-30, L-19, L-29, L-65	2.75 Lbs.
GM (Chevy) P-12 w/Parallel-Flow Condenser	2.0 Lbs.
Workhorse before '05 model except W-24	2.75 Lbs. (1)
Workhorse - all models with black Behr condenser and two fans	2.00 Lbs.
Workhorse W22/W24 w/Multi-flow Condenser and no fans	1.5 Lbs.
Ford E-33 w/Serpentine Condenser	2.25 Lbs.
Ford F-53 w/Black Fin & Tube Condenser	2.75 Lbs.
Ford F-53 w/Silver Multi-flow Condenser(starting with MY2012)	2.13 Lbs.
Ford F-53 w/Silver Multi-flow Condenser(starting with MY2016)	2.75 Lbs.
Ford V-10 Super Duty w/6mm Condenser	2.75 Lbs.
FTL Front Engine Diesel w/Parallel-Flow Condenser	1.5 Lbs.
FTL Front Engine Diesel w/remote mounted condenser and fan	2.25 Lbs.

(1) For W22 without an auxiliary condenser, charge would be 1.75 lbs and performance would be reduced.

DIESEL ENGINE CHASSIS BUILT PRIOR TO 2015	CHARGE
Front-mounted Step well Parallel-Flow Condenser	2.00 Lbs.
Spartan (Fleetwood Heritage only)	5.25 Lbs.
Spartan Rear-Side Mounted Condenser (>500 HP)	4.50 Lbs.
Spartan Rear-Side Mounted Condenser (<500HP)	3.00 Lbs.
Spartan Rear-Side Mounted Condenser (Full cover -2011 or later)	5.50 Lbs.
Spartan Rear Std Center Mounted Condenser	3.00 Lbs.
Spartan Front Mounted Evans Fin & Tube Condenser	3.50 Lbs.

Spartan Mid-Engine Chassis	2.50 Lbs.
Spartan Front Mounted Parallel Flow Condenser	2.50 Lbs.
FTL Rear Mounted Evans Fin & Tube Condenser	4.50 Lbs.
FTL Remote Mounted Parallel Flow Condenser w/12" Elec. Fan	2.75 Lbs.
FTL Rear Mtd Large Parallel Flow Cond. w/Side Radiator w/No Elec. Fan	4.00 Lbs.
FTL Front Mounted Evans Fin & Tube Condenser w/16" Elec. Fan	3.50 Lbs.
Workhorse Pusher Front Mounted Fin & Tube Condenser	3.00 Lbs.
Road Master (Monaco/Holiday Rambler) Rear Condenser	4.00 Lbs.

DIESEL ENGINE CHASSIS BUILT IN 2015, 2016 & 2017	CHARGE
FTL Remote Mounted Parallel Flow Condenser w/ 12" Electric Fan, <=450 Hp	2.25 Lbs.
FTL Rear Mounted Serpentine Condenser Below Side Radiator w/ No Elect. Fan, >=450 Hp	7.50 Lbs.
Spartan Rear Mounted Fin & Tube Condenser, Side Radiator w/ No Elect. Fan, 450 Hp, 40' Long Chassis	7.00 Lbs.
Spartan Rear Mounted Fin & Tube Condenser, Side Radiator w/ No Elect. Fan, >=450 Hp, 43' or Longer Chassis	8.00 Lbs.
Spartan Rear Mounted Multi-flow, Side Radiator w/ No Elect. Fan, 600 Hp	4.50 Lbs.

**STEP VAN APPLICATIONS
GRUMMAN OLSON / MORGAN OLSON**

CHASSIS	CHARGE
Freightliner Front Engine, Gas or Diesel	1.50 Lbs.
GM (Chevy) P Series/Workhorse, Gas or Diesel	2.25 Lbs.
Workhorse 8.1 L Gas	2.00 Lbs.
Workhorse with International Engine	2.00 Lbs.
Navistar V-8 Diesel	2.25 Lbs.
Ford	2.25 Lbs.

UNION CITY BODY CO.

CHASSIS	CHARGE
Freightliner Front Engine, Gas or Diesel	1.50 Lbs.
Workhorse, Gas or Diesel ***Prior to 6/2/2002 (small R/D)***	2.75 Lbs.
Workhorse, Gas or Diesel ***After 6/2/2002 (large R/D)***	3.50 Lbs.
Navistar V-8 Diesel	2.25 Lbs.