

# AUTOMOTIVE A/C 101

# **HOW TO RECHARGE**



# 1. INSTALL SMART CLIPS®

Insert SMART CLIPS into the vehicle's center air vent then tighten the recharge hose to the can by turning it clockwise.



# 4. CONNECT RECHARGE HOSE

Shake the can well and connect the recharge hose to low-side service port. Pull the coupler ring back as you push fitting onto the port. Ensure the coupler locks in place to prevent leaking. **Note:** The recharge hose will only connect to the low-side port.



# 7. CHECK GAUGE PRESSURE

Periodically stop charging to read the pressure gauge when the compressor clutch cycles on. Continue the process until the gauge reaches the ideal PSI level according to the chart. If your gauge is not increasing, stop charging and check SMART CLIPS as directed in next step.



#### 2. LOW-SIDE PORT LOCATION

Open the vehicle's hood, locate the low-side service port and remove the plastic port cap. The port will be located on the larger diameter A/C line between the compressor and the evaporator.

Some vehicles with expansion valves cannot be accurately charged using low-side pressure gauge only. If your gauge is not increasing, stop charging and check air vent temperature. The PSI may only increase to 25-30 psi on these systems.	
AMBIENT TEMPERATURE	LOW-PRESSURE GAUGE (PSI)
65°F (18°C)	25-35 psi / 172-241kPa
70°F (21°C)	35-40 psi / 241-276kPa
75°F (24°C)	35-45 psi / 241-310kPa
80°F (27°C)	40-50 psi / 276-345kPa
85°F (29°C)	45-55 psi / 310-379kPa
90°F (32°C)	45-55 psi / 310-379kPa
95°F+ (35°C+)	50-55 psi / 345-379kPa

# **5. HOW TO USE PRESSURE GAUGE**

Determine the ideal PSI level using temperature pressure chart. If the gauge reads:

**Below 25 PSI:** system is low on refrigerant. **25-55 PSI:** system may be properly charged. **Above 55 PSI:** If compressor clutch is cycled on, do not recharge - seek a mechanic's assistance.



#### **8. CHECK SMART CLIPS**

Check SMART CLIPS for vent temperature. With vehicle in park, press gas pedal slightly to increase RPM and check color for:

**Blue**: Cool, A/C is approaching optimum fill. **Green**: Max cold, A/C charging is complete. **Note:** If the outside temperature is above 95°, only the blue clip needs to change.



A/C

#### **3. START THE A/C SYSTEM**

Start the engine and turn on the A/C. Set the controls to maximum cool, maximum air flow and recirculation mode. Close all windows and doors of vehicle.



# 6. ADD REFRIGERANT

Add refrigerant to the system while continually rotating the can in a sweeping motion from the 12 o'clock to 3 o'clock position. This ensure even and thorough distribution of the PAG oil



9. RECHARGE COMPLETE

Stop charging when correct PSI level is reached or SMART CLIPS indicate the A/C is blowing cold. Remove the quick-connect coupler from the service port and store can in a cool, dry place. If can is empty, discard according to state or local guidelines.

**CAUTION:** Please remember to always wear protective rubber gloves and eye wear while recharging. **WARNING:** Do not overcharge the system / Do not vent refrigerant. Never place refrigerant can on any hot engine parts.