Your Ultimate Source for OEM Repair Manuals

FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

2005 FORD StreetKa OEM Service and Repair Workshop Manual

Go to manual page

6. Allow the vehicle to idle for 5 minutes.
7. Turn engine off and proceed to procedure 2 — ambient temperature between 21 °C (70 °F) and 38 °C (100 °F).

Inspection

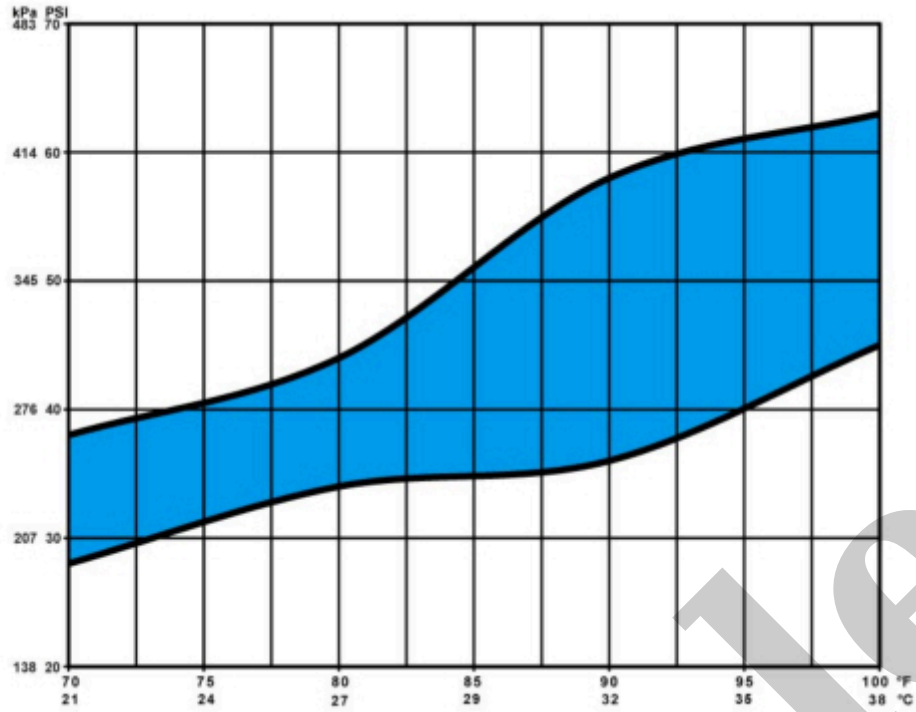
NOTE

Procedure 2— Ambient Temperature between 21°C (70°F) and 38°C (100°F)

1. Run the engine until it reaches normal operating temperature.
2. Connect the air conditioning service unit to the refrigerant system.
3. Set temperature to the lowest possible temperature setting with the dual function disabled (if equipped). Manually set blower on HI. If the vehicle has a fresh air/recirc button, set it to FRESH. If the vehicle has an A/C (air conditioning) switch or compressor on switch, set it to A/C (air conditioning) ON.
4. Open all vehicle windows and leave the hood open for the test. Open the rear doors.
5. Confirm the compressor is operating and the engine cooling fan(s) are operating or engaged. Allow the vehicle to idle until the suction (low-side) and discharge (high-side) pressures are stable or fluctuate in a range that repeats.
6. Record the ambient (shop) temperature.
7. Record the discharge pressure. If the pressure is fluctuating, record the average value.
8. Determine if the discharge pressure falls within the normal operating limits using the

   Normal Refrigerant Discharge Pressures 21 - 38° C (70 - 100° F) Ambient (30 - 60% Relative Humidity)

   chart below.



E194833

Click here to learn about symbols, color coding, and icons used in this manual.

11. **NOTE**

Use the following table to guide diagnosis of the refrigerant system if operating pressures are outside normal limits.

NOTE

Proper A/C system diagnosis on vehicles with Variable compressors is dependent on correct refrigerant system charge and tested in ambient temperatures above 21°C (70°F). Never replace a Variable compressor without first recovering and recharging the A/C system to vehicle specification and retesting in ambient temperatures above 21°C (70°F).

NOTE

The following table is meant to lead the technician in a diagnostic direction. It is not meant to be the final path to replacement of a component. Follow the Diagnostic and Testing (D&T) portion of the of the workshop manual (WSM) for actual final direction in circuit and component conditions found and actions taken.

	• Low refrigerant charge — leak in system. • High Side Restrictions (Cycling) (condenser, liquid line/IHX line restriction, Reciever/Dryer restriction).
Additional Possible Components or Causes Associated With Inadequate Compressor Operation	
• Compressor drive belt — loose • Compressor clutch — slipping • Clutch coil open — shorted, or loose mounting • Control assembly switch — dirty contacts or sticking open • Clutch wiring circuit — high resistance, open or blown fuse • Compressor operation interrupted by engine computer	
Additional Possible Components or Causes Associated With a Damaged Compressor	
• Incorrect clutch air-gap • Suction accumulator — refrigerant oil bleed hose plugged • Refrigerant leaks	

[a] Low pressure reading will be normal to high if restriction is downstream of service access valve.

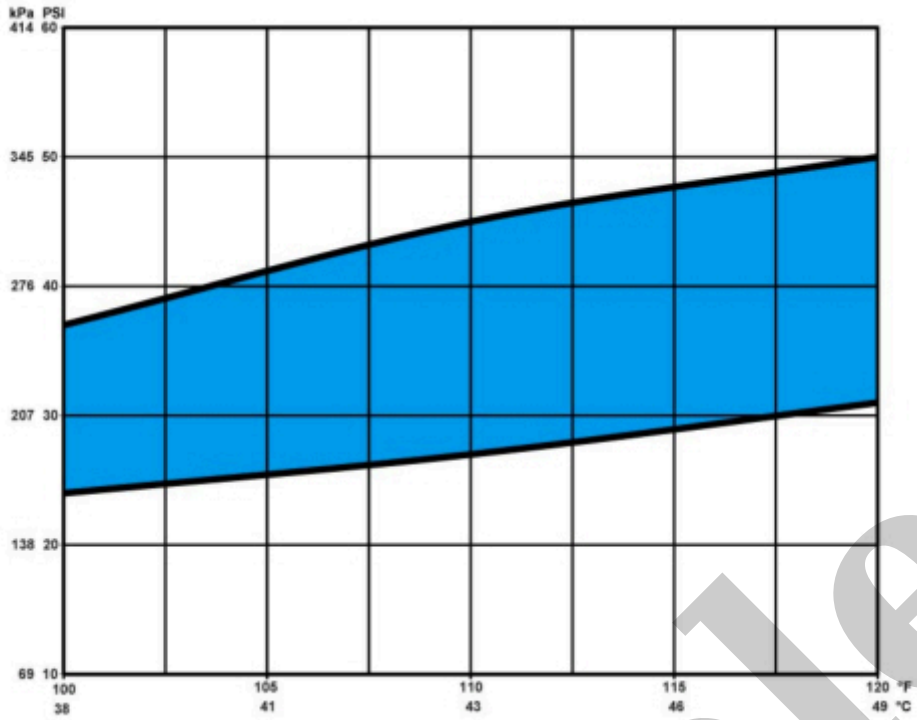
[b] Low pressure reading will be low if restriction is upstream of service access valve.

Inspection

NOTE

Procedure 3 — Ambient Temperature Above 38 °C (100 °F)

1. Run the engine until it reaches normal operating temperature.
2. Connect the air conditioning service unit to the refrigerant system.
3. Set temperature to the lowest possible temperature setting with the dual function disabled (if equipped). Manually set blower on HI. If the vehicle has a fresh air/recirc button, set it to FRESH. If the vehicle has an A/C (air conditioning) switch or compressor on switch, set it to A/C (air conditioning) ON.
4. Open all vehicle windows and leave the hood open for the test. Open the rear hatch and/or rear doors (if equipped).



E194835

Click here to learn about symbols, color coding, and icons used in this manual.

11. **NOTE**

Use the following table to guide diagnosis of the refrigerant system if operating pressures are outside normal limits.

NOTE

Proper A/C (air conditioning) system diagnosis on vehicles with Variable compressors is dependent on correct refrigerant system charge and tested in ambient temperatures above 21°C (70°F). Never replace a Variable compressor without first recovering and recharging the A/C (air conditioning) system to vehicle specification and retesting in ambient temperatures above 21°C (70°F).

NOTE

The following table is meant to lead the technician in a diagnostic direction. It is not meant to be the final path to replacement of a component. Follow the Diagnostic and Testing (D&T) portion of the of the workshop manual (WSM) for actual final direction in circuit and component conditions found and actions taken.

	• Low refrigerant charge — leak in system. • High Side Restrictions (Cycling) (condenser, liquid line/IHX line restriction, Reciever/Dryer restriction).
Additional Possible Components or Causes Associated With Inadequate Compressor Operation	
• Compressor drive belt — loose • Compressor clutch — slipping • Clutch coil open — shorted, or loose mounting • Control assembly switch — dirty contacts or sticking open • Clutch wiring circuit — high resistance, open or blown fuse • Compressor operation interrupted by engine computer	
Additional Possible Components or Causes Associated With a Damaged Compressor	
• Incorrect clutch air-gap • Suction accumulator — refrigerant oil bleed hose plugged • Refrigerant leaks	

[a] Low pressure reading will be normal to high if restriction is downstream of service access valve.

[b] Low pressure reading will be low if restriction is upstream of service access valve.

6. Allow the vehicle to idle for 5 minutes.
7. Turn engine off and proceed to procedure 2 — ambient temperature between 21 °C (70 °F) and 38 °C (100 °F).

Inspection

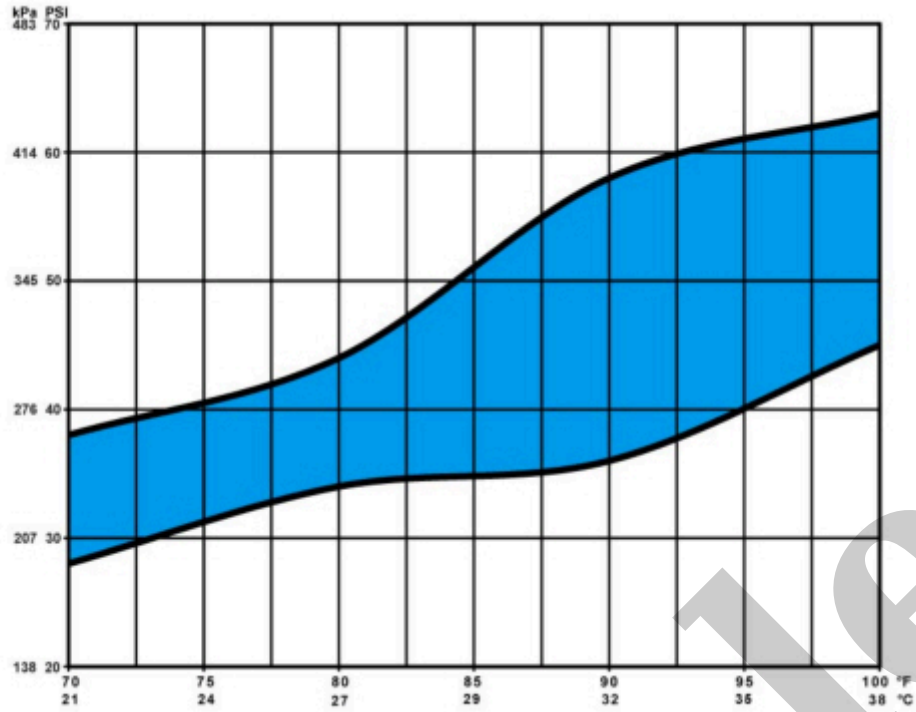
NOTE

Procedure 2— Ambient Temperature between 21°C (70°F) and 38°C (100°F)

1. Run the engine until it reaches normal operating temperature.
2. Connect the air conditioning service unit to the refrigerant system.
3. Set temperature to the lowest possible temperature setting with the dual function disabled (if equipped). Manually set blower on HI. If the vehicle has a fresh air/recirc button, set it to FRESH. If the vehicle has an A/C (air conditioning) switch or compressor on switch, set it to A/C (air conditioning) ON.
4. Open all vehicle windows and leave the hood open for the test. Open the rear doors.
5. Confirm the compressor is operating and the engine cooling fan(s) are operating or engaged. Allow the vehicle to idle until the suction (low-side) and discharge (high-side) pressures are stable or fluctuate in a range that repeats.
6. Record the ambient (shop) temperature.
7. Record the discharge pressure. If the pressure is fluctuating, record the average value.
8. Determine if the discharge pressure falls within the normal operating limits using the

   Normal Refrigerant Discharge Pressures 21 - 38° C (70 - 100° F) Ambient (30 - 60% Relative Humidity)

   chart below.



E194833

Click here to learn about symbols, color coding, and icons used in this manual.

11. **NOTE**

Use the following table to guide diagnosis of the refrigerant system if operating pressures are outside normal limits.

NOTE

Proper A/C system diagnosis on vehicles with Variable compressors is dependent on correct refrigerant system charge and tested in ambient temperatures above 21°C (70°F). Never replace a Variable compressor without first recovering and recharging the A/C system to vehicle specification and retesting in ambient temperatures above 21°C (70°F).

NOTE

The following table is meant to lead the technician in a diagnostic direction. It is not meant to be the final path to replacement of a component. Follow the Diagnostic and Testing (D&T) portion of the of the workshop manual (WSM) for actual final direction in circuit and component conditions found and actions taken.

	• Low refrigerant charge — leak in system. • High Side Restrictions (Cycling) (condenser, liquid line/IHX line restriction, Reciever/Dryer restriction).
Additional Possible Components or Causes Associated With Inadequate Compressor Operation	
• Compressor drive belt — loose • Compressor clutch — slipping • Clutch coil open — shorted, or loose mounting • Control assembly switch — dirty contacts or sticking open • Clutch wiring circuit — high resistance, open or blown fuse • Compressor operation interrupted by engine computer	
Additional Possible Components or Causes Associated With a Damaged Compressor	
• Incorrect clutch air-gap • Suction accumulator — refrigerant oil bleed hose plugged • Refrigerant leaks	

[a] Low pressure reading will be normal to high if restriction is downstream of service access valve.

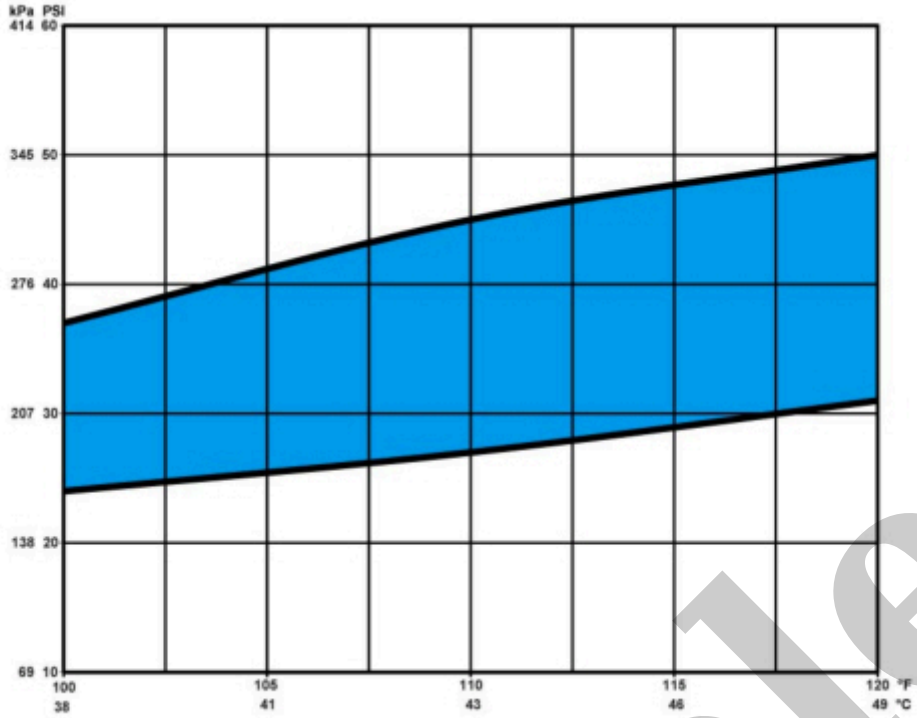
[b] Low pressure reading will be low if restriction is upstream of service access valve.

Inspection

NOTE

Procedure 3 — Ambient Temperature Above 38 °C (100 °F)

1. Run the engine until it reaches normal operating temperature.
2. Connect the air conditioning service unit to the refrigerant system.
3. Set temperature to the lowest possible temperature setting with the dual function disabled (if equipped). Manually set blower on HI. If the vehicle has a fresh air/recirc button, set it to FRESH. If the vehicle has an A/C (air conditioning) switch or compressor on switch, set it to A/C (air conditioning) ON.
4. Open all vehicle windows and leave the hood open for the test. Open the rear hatch and/or rear doors (if equipped).



E194835

Click here to learn about symbols, color coding, and icons used in this manual.

11. **NOTE**

Use the following table to guide diagnosis of the refrigerant system if operating pressures are outside normal limits.

NOTE

Proper A/C system diagnosis on vehicles with Variable compressors is dependent on correct refrigerant system charge and tested in ambient temperatures above 21°C (70°F). Never replace a Variable compressor without first recovering and recharging the A/C system to vehicle specification and retesting in ambient temperatures above 21°C (70°F).

NOTE

The following table is meant to lead the technician in a diagnostic direction. It is not meant to be the final path to replacement of a component. Follow the Diagnostic and Testing (D&T) portion of the of the workshop manual (WSM) for actual final direction in circuit and component conditions found and actions taken.