

# **COOL-PACK**

## ***Radiator Cooling System***

1987 to 1996 Ford F-150, F250 and Bronco  
(with Gas Engines Only)

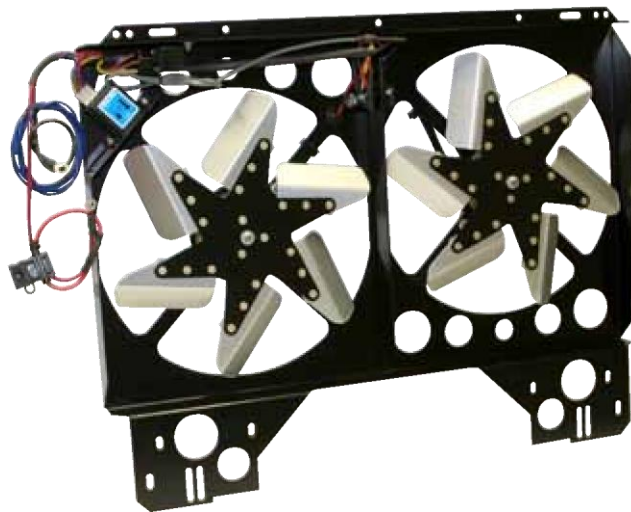
**Installation Instructions:**

**Part No. 19510**

PLEASE READ ALL OF THE INSTRUCTIONS BEFORE BEGINNING INSTALLATION OF THIS SYSTEM



**FRONT VIEW 19510 Shown**



**REAR VIEW 19510 Shown**

## **Tools recommended:**

Ratchet / socket set; 3/8 inch drive  
Large adjustable wrench  
Box wrench, 12mm  
Mini-screwdriver, flat blade (supplied)

## **Notes:**

1. Verify that your vehicle's cooling system is functioning correctly. It is important that the coolant is fresh and properly mixed per factory specifications. The radiator should be free of any corrosion or blockage. Cooling system should be filled to factory specified level.

## **Equipment removal (Retain all bolts and nuts):**

1. Remove the shroud bolts that secure the shroud to the left and right radiator brackets. Remove the shroud from the two clips that secure the lower half of the shroud to the radiator core.

2a. Loosen and remove the four bolts that attach the fan clutch assembly to the water pump flange. Remove the shroud, fan clutch and fan assembly. Replace the four bolts removed with the provided 8mm or 5/16" -24 hex bolts and washers.

2b. If the vehicle is equipped with a thread-on fan clutch, remove it with a 1 1/2" wrench or large adjustable wrench. **Note:** *It may be necessary to lightly tap the wrench with a small mallet in order to loosen the nut.*

## **Cool-Pack Installation (Mechanical)**

1. Carefully place the Cool-Pack assembly in position where the shroud was located being careful to lower the Cool-Pack unit's bottom tabs into the clips originally used to secure the radiator shroud.

2. Insert the sensor probe through the foam pad, adhesive side out. Remove the adhesive backing and insert probe into the radiator fins. The ideal probe location is three to five inches (3" to 5") below the top of the core in the center. Secure the probe wiring loom to prevent contact with the fan blades or any other moving parts. **Note:** Be sure that the probe and probe wire are away from the fan blade area. Allow 1" or more clearance.

3. With the Cool-Pack assembly in place, attach the top tabs of the Cool-Pack to the radiator core using the bolts that were removed in Step 1 of "Equipment Removal".

## **Cool-Pack Installation (Electrical)**

1. Disconnect the positive (red) battery cable. Remove the hex nut that tightens the terminal to the battery post.

2. Inspect and clean battery cable and terminal.

3a. Connect the blue Cool-Pack wire to the A/C Pressure Switch located on the dryer unit. **Note:** *If you are unsure or cannot locate the proper wire, it may be necessary to consult a repair manual or wiring schematic. Do not cut the A/C wire on the vehicle!* Use the provided wiretap instead. If vehicle does not have air conditioning, cut the wire and install a wire cap to the end of the wire.

3b. If a manual turn-on switch is desired, and there is no A/C connected in the system, the blue wire can be energized from a manual toggle switch to turn the unit on.

3c. If the vehicle does not have air conditioning, and a manual turn-on switch is not desired, cut the blue wire and install the provided wire cap to the end of the wire.

4. Connect the fused power wire to the battery cable terminal and replace the hex nut. At this time, you should also reconnect the battery cable to the battery.

5. Connect the black wire to body ground. Recommended attachment points are underneath an upper radiator core support bolt, the negative battery pigtail, or drill 1/8" hole in (metal) core support, frame, or fenderwell and use either of the sheet metal screws provided. To ensure a better electrical connection, scratch or scuff the paint surface where you will be attaching the wire.

### **Cool-Pack Adjustment:**

1. After vehicle has reached normal operating temperature, the preset temperature (approx. 195°F) controller can be adjusted for the fans to turn on at any temperature between 170°F-220°F.

2. Turn adjustment screw clockwise (CW) for a higher turn-on temperature. Conversely, turn the screw counterclockwise (CCW) for a lower turn-on temperature.

3. For units manufactured in 2022 or later, the adjustment is reverse! Turn the adjustment screw counterclockwise (CCW) for a higher turn on temperature. Conversely, turn the screw clockwise (CW) for a lower turn on temperature.

**Note:** *Setting the turn-on temperature to lower than 185°F may affect vehicle emission control compliance.*

**\*\*The small blue adjustment screw can be found by following the power wire to where it enters the potted switch, next to the relay.\*\***

