

# Frostbite <u>Aluminum Radiators (2-Row, 3-Row, & 4-Row)</u> Application Specific Fitment

# NOTE: Read all instructions carefully before attempting the installation.

Thank you for making FROSTBITE your choice in a high-performance aluminum radiator. Extensive dyno/street/track testing has enabled FROSTBITE to offer the most advanced design aluminum radiator for your application. Proper installation and maintenance will ensure long life and maximum performance from your FROSTBITE aluminum radiator.

#### WARNING!

- Holley Performance Products is not responsible for any vehicle damage or personal injury that may occur due to improper installation, errors, misuse, or removal of other products associated with this installation
- Holley always suggests that our products be installed by trained professionals to ensure proper installation.
- A 50/50 coolant mixture is recommended, unless specified differently by your vehicle's manufacturer
- DO NOT run the engine or operate your vehicle while overheating is occurring. Serious damage to engine may occur.

## Parts Included:

- Frostbite Aluminum Radiator
- Frostbite Etched Radiator Cap

#### **Recommended Tools:**

Flat Head Screwdriver	1/2" & 9/16" Wrench	10mm-18mm Sockets	Channel Lock Style Pliers
PTFE Tape	Drain or Catch Pan (for fluid collection)	Coolant	Coolant Funnel
Pliers	Wheel Chocks	Phillips Head Screwdriver	Hose Clamp Pliers

# **BEFORE STARTING:**

Place the vehicle in an adequately lit and ventilated location where the floor is solid and flat. DO NOT work on a hot engine. Allow ample time for vehicle to cool. The coolant system is a pressurized system while at operating temperature. Please be sure to wear the proper safety equipment; eye goggles and gloves are recommended to ensure a safe installation.

## **INSTALLATION:**

- 1. Make sure the vehicle is in park and disconnect the negative battery cable from the battery to prevent electrical damage.
- 2. Place catch or drain pan below location of drain plug on radiator.
- 3. Loosen and remove coolant drain plug located at the bottom of the radiator. **NOTE: Due to various application fitments** utilizing these instructions, the drain plug may be located on either the driver's or passenger's side of the radiator.
- Use catch or drain pan to collect all existing coolant. Removal of the radiator cap will aid in the draining process.
- 5. Use a screwdriver or pliers (depending on manufacturer's attachment method) to remove the clamp securing the overflow hose coming from the filler neck of the radiator and going to the coolant overflow bottle. Retain this hose for later as it will be reused during the installation of the new radiator and components.
- 6. Use channel lock pliers or hose clamp pliers to loosen the clamp on the upper radiator hose.
- 7. Repeat the same process for loosening and removing the clamp for the lower radiator hose.
  - **PLEASE NOTE**: For vehicles equipped with automatic transmissions, you will also need to remove the two transmission cooler lines at this point. Place the drain pan below the location of these plugs to allow any fluid to leak out once lines are disconnected from radiator.
- 8. Using the appropriate socket, remove bolts securing the fan shroud to the OEM radiator. Once all bolts are removed, allow the fan shroud to rest on the fan at this point.
- 9. Loosen and remove any bolts related to upper radiator brackets. Please be careful to place any and all removed hardware in a manner for easy identification later in the installation process.

- 10. At this point, the radiator should be able to be removed from the vehicle by lifting straight up.
- 11. With the old radiator out, you can start to swap any items that will transfer from the old radiator to the new Aluminum radiator. Some of these items will include radiator mounting brackets, isolators, or mounts in the lower radiator support.
- 12. This is also an opportune time to inspect, clean, and remove any debris from your radiator support area.
- 13. If your vehicle has a radiator mounted overflow tank, remove from old radiator and attach to new radiator utilizing provisions found on radiator. Make sure the drain plug on the new aluminum radiator is closed and tight prior to placing into vehicle.
- 14. Once all items have been transferred from old radiator to new aluminum radiator, drop the new radiator back into vehicle. Make sure the radiator sits back in the same position as the original radiator.
- 15. Installation is now the reverse of the removal of the old radiator.
- 16. Attach coolant overflow hose to filler neck of the new aluminum radiator at one end and overflow bottle on the other end. Positions clamps in the original locations and tighten.
- 17. Attach the lower radiator hose making sure the hose is firmly attached to the outlet end on radiator. Once the hose is in position, reposition the clamp and tighten.
- 18. Reattach the coolant lines (for automatic transmission equipped vehicles).
- 19. Reattach fan shroud to the new aluminum radiator.
- 20. Repeat the procedure for reattaching the upper radiator hose.
- 21. Position and tighten the upper radiator brackets.
- 22. Check all connections and hoses to make sure they are secure.
- 23. Make sure that there is clearance between the radiator, fan shroud, and fan.

## 24. RE-CHECK ALL OF YOUR WORK.

- 25. Fill the radiator with coolant. Once radiator is full, reconnect the negative battery cable to the battery.
- 26. Start up engine and allow the coolant to begin to flow through the engine. As the coolant begins to circulate, continue to add coolant to the radiator until full.
- 27. Add coolant to the radiator overflow bottle to the manufacturer's "cold full" level.
- 28. Allow the engine to come to normal operating temperature. Check for leaks. Shut the engine off and allow it to cool down.
- 29. Recheck all connections to ensure they are secure.
- 30. Give vehicle a test drive checking carefully for any new noises. After several days of driving, check connections and retighten all bolts.