



## Preventing Radiator Damage During Installation

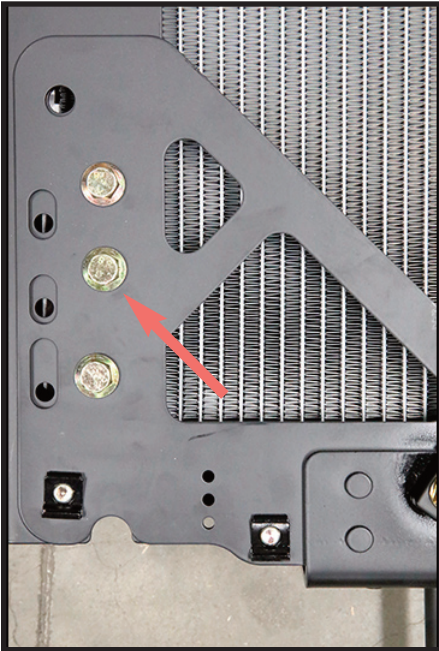
Installing a new heavy-duty truck radiator into an old radiator frame can sometimes lead to unintended damage to the new radiator. This damage can cost your repair business (as well as your customer) additional time and money, not to mention a lot of frustration for all involved.

It's also important to be aware that damage incurred during installation is not covered under warranty. Northern Radiator emphasizes the importance of proper installation procedures to protect your warranty. Damage resulting from improper installation can void the warranty, leaving you responsible for any repair or replacement costs.

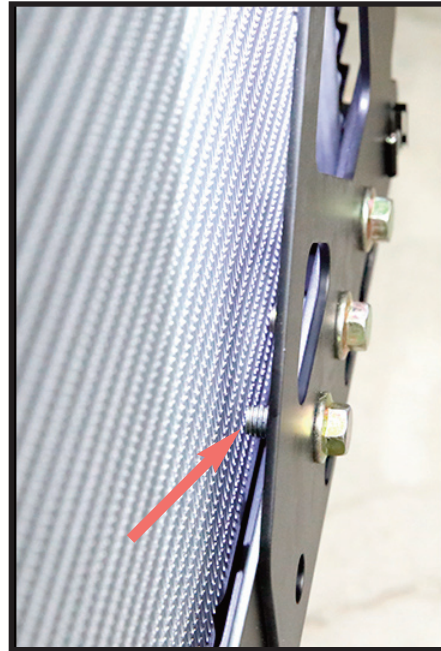
Let's review some common causes of radiator damage during installation, as well as some tips to avoid these issues on future replacement jobs.

### Common Causes of Radiator Damage during Replacement

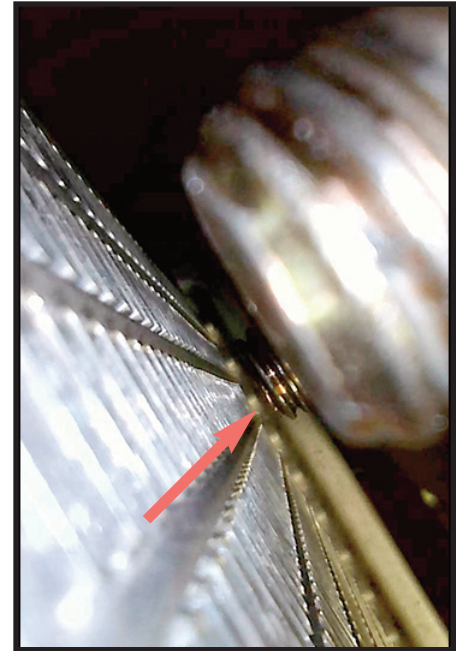
1. **Careless Handling of Radiator:** Caution needs to be used when pulling the new radiator out of the box and installing it into the frame. The core and tubes of the radiator are extremely fragile and require the utmost care in handling. It is very easy to "knick", slip with a tool, or even bump the radiator core while installing. Be careful where you set it, or what you "lean" it against in the shop. Heavy-duty radiators are robust but not impervious to physical damage during handling.
2. **Proper Hardware:** Another easily overlooked situation is the use of the wrong hardware. If the bolts are too long, they will thread into the core when reassembling the frame. Extreme care must be taken to make sure that the close "tolerances" are being observed while reinstallation takes place.
3. **Physical Force:** Forcing a radiator into a radiator frame that is bent or warped could cause the radiator to twist and leak once fully installed.
4. **Use of Old Hardware/Frame:** Many times, the use of existing hardware makes the radiator to frame install difficult because of tight-fit, rusty components, or damaged components. Also, extreme care must be taken to make sure the reassembly of the frame components is correct and in the proper position.



Frame bottom: Use caution; incorrect or misplaced bolts can damage core.



Showing minimal clearance between bolts and core.



Close-up of clearance of bolts.

## Tips to Avoid Radiator Damage

1. **Check Compatibility:** Ensure the new radiator is compatible with the existing frame. Consult your new radiator's specifications and compare them with the old frame dimensions before disassembly to remove old radiator from frame.
2. **Inspect and Prepare the Frame:** Thoroughly inspect the old frame for any signs of wear, rust, out of square/twisting or damage. Repair or replace if needed to provide a stable and secure mounting base for the new radiator.
3. **Use Proper Tools and Techniques:** Use the appropriate tools and techniques to mount the radiator. Avoid using excessive force and ensure that mounting bolts are evenly tightened to prevent stress on the radiator.
4. **Replace Mounting Hardware:** It's recommended to use new mounting hardware that comes with the new radiator. This ensures a secure and proper fit.
5. **Follow Manufacturer Instructions:** Always follow the installation instructions provided by the manufacturer. These guidelines are designed to ensure proper installation and prevent damage.
6. **Consider Purchasing Replacement Radiators with Frames:** We encourage customers to consider purchasing replacement radiators that include the frame. This ensures perfect alignment and compatibility, simplifying the installation process and safeguarding your investment. Northern offers a wide range of heavy-duty truck radiators with the frame and radiator already assembled and ready to be installed directly into the vehicle.

Taking the time to properly prepare and install your new heavy-duty truck radiator can save you from costly damage and downtime. At Northern Radiator, we are committed to providing quality products and support to keep your customers running smoothly. To learn more about Northern's framed radiator options, [contact your Sales Rep](#) or our friendly [customer service](#) team today.