

Radius Arm Instructions

FIRCH
F A B W O R K S

Installation of these radius arms is a bolt on upgrade. All factory hardware is maintained. Minor trimming of the factory radius arm drop bracket is required for proper and clean radius arm movement. Failure to follow these instructions can lead to damage of the Firch Fab radius arm.

Note: Coil height must be within a specified range for the radius arms to function properly (0" - 3.5"). This radius platform is designed for stock coil height (0") or coil height up to 3.5" over stock height. These radius arms cannot be installed with a coil height greater than 3.5".

Factory Arm Removal

Removal of the factory arms can be done either on a lift or on properly sized jack stands with the vehicle on the ground. The following steps are to be done with one side at a time. DO NOT perform each step on both sides of the vehicle at the same time. Doing so will result in a much more difficult installation.

1. With the front axle safely supported on both driver and passenger side start by loosening, **not removing**, the three 18mm bolts on the factory radius arm.

TECH NOTE: The following steps: 2 & 3 should be followed in the exact order of bolt removal. Doing so results in a simple removal of factory arms.

2. With the three bolts now loose, remove the upper axle side bolt completely.
3. With the upper bolt removed, proceed with removal of the frame side bolt, followed by the lower axle side bolt.
4. With the arm completely removed from the vehicle it is now time to trim a small portion of the inside face of the frame side radius arm mount. Refer to image on the last page for exact details.
5. Debur and paint this trimmed area.

Firch Fab Radius Arm installation

1. Using the factory hardware, lift the rear of the arm into the hanger pocket, and slide the bolt through.
2. Insert the supplied spacer on the inside of hanger pocket. This will fill the remaining space that was taken by the large factory bushing housing.
3. Lift the lower radius arm up around the axle bushing and slide the factory CAM bolt into place. Set the CAM bolt in the neutral or 12 o'clock position.

With the lower portion of the radius arm installed it is now time to set the upper arm length.

4. Thread the supplied jam nut onto the Heim joint, then thread the heim joint into the upper control. The total finished length should be set to 16.75" center to center of the front bolt hole to center of Heim. Torque the jam nut to the specified setting on "bolt torque guide"

5. Take the now assembled upper arm and slide it over the axle side bushing first, insert the factory hardware back into place, followed by dropping it down into the upper arm pocket.

Repeat steps 1 through 6 on the opposite side of the vehicle

Final Steps

Get road-ready: tighten and align your rig.

1. Torque all the hardware to spec. See references (below).
 - **Axle side Hardware**
 - 18mm factory upper: 180 ft. lbs.
 - 18mm CAM bolt lower: 180 ft. lbs.
 - **Radius arm upper bolt**
 - 9/16 Grade 8 bolt : 150 ft. lbs.
 - **Radius arm frame side bolt**
 - 18mm factory bolt: 180 ft lbs

Alignment Specs

1. Take vehicle in for professional alignment. Recommended alignment specs (below):

Generation	Toe (inches)	Camber: Driver and Passenger	
4th (2013-2018)	0.000" - 0.005"	2.5° - 4.0°	2.5° - 4.0°
5th (2019-present)	0.000" - 0.005"	2.5° - 4.0°	2.5° - 4.0°

NOTE: Ensure that the vehicle DOES NOT have any cross caster.

Hanger trimming reference



NOTE: this image is showing the inside face of the hanger. The factory weld stops just below the bottom edge of the frame rail. Your cut line will start here and go back to the corner of the crossmember. If this is not cut out damage to the radius arm will occur as the suspension cycles.