

Parts Checklist:

- Literature (instructions)
- Invoice
- □ IRO mountain decal 11976 (2)
- □ Female End 80027 (2)
- Male end 80025 (2)

#185 2" Flex End Hardware 13311 (2)

- End Cap 91124 (2)
- Race 91123 (2)
- 12mm Ball 91122 (1)
- 5-40 X 1-1/4 SHCS (9)
- □ 3/32 Hex L-key (hex plus) (1)
- □ 1/4-28 Straight grease zerk (1)

#186 Clamping Hardware 13312 (2)

- □ 3/8-16 X 1-1/4 Hex bolt gr8 (1)
- □ 3/8-16 Nylock flange nut gr8 (1)
- 3/8 Mil spec washer (1)



Installation Instructions Safety Warning:

We recommend that these components be installed by a qualified professional. Knowledge of suspension component function is necessary for safe installation and post installation inspections. Be sure to re-torque all suspension components after the first 100 miles of use, and frequently inspect all safety critical suspension components.

Before you begin:

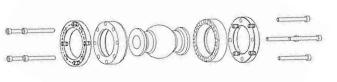
- Read all safety warnings.
- Read and understand installation instructions.
- Contact Iron Rock Off Road with any questions before, during, or after installation.
- Ensure that all parts are present and in good condition using the included parts checklist.
- Be sure you have the following tools and supplies:
 - Floor jack and jack stands
 - Basic hand tools
 - Multi-purpose grease
 - Anti-seize compound

Prepare parts for installation:

- 1. Locate control arms and male threaded ends. Lightly coat male threads with anti-seize compound. Install threaded male end into female end.
- 2. Locate hardware kit 185. Assemble flex ends into female end as follows:
- 3. Insert two 5-40 socket head cap screws into one end cap and one race. Spherical bore of race facing away from end cap.
- Install this small assembly into the flex end housing. The races are a tight fit, use a hammer and a wide punch to assist you if needed.
- 5. Apply a thin coating of multi-purpose grease to the mating surfaces of the ball and both races.
- 6. Place the ball in the race (inside the flex end). The ball should perfectly fit the contour of the race.
- 7. Insert the other race onto the ball so that the spherical bore is contacting the ball. Once again, the races are a tight fit, use a hammer and wide punch if needed. (The two screws should be through one washer and both races at this point).
- 8. Insert the second end cap in the flex end housing, sliding the bolts through the holes.
- 9. Start threading the two bolts that are in the flex end assembly.
- 10. Insert the remaining six cap screws through the remaining holes.
- 11. Snug up all of the bolts fairly tight.
- 12. Torque bolts evenly starting at one bolt using a crisscross pattern, like torqueing lug nuts. Torque all eight bolts to 20 in/lbs.
- 13. Adjust length based on the chart in **figure 1** as a starting point. This chart assumes you are using longer lower control arms. If not, use OEM length.
- 14. Locate hardware kit 186. Align male end and female end to each other. Install and tighten thread clamping bolts.
- 15. You should now have two completely assembled control arms.

Lift Height	UCA Length
OEM	18-3/4"
2.5"	18-15/16"
3.5"	19-1/16"
4"	19-3/16"
4.5"	19-1/4"
5.5"	19-1/2"
6.5"	19-7/8"
8"	20-3/8"

Figure 1





Installation:

- 16. Lift front of vehicle and support with tall jack stands under the unibody frame.
- *Tip: break lug nuts loose before lifting vehicle.
- Ensure that vehicle is safely supported.
 Remove front tires.
- Loosen all upper control arm bolts (remove nuts but leave bolts for now).
- 20. Place a floor jack under the driver's side of front axle for support (do not lift vehicle).
- 21. Remove upper control arms from the Jeep and install the new ones. Re-use original
- fasteners. Do not tighten nuts at this time. 22. Install front tires.
- Raise vehicle from jack stands and place jack stands under the axle.
- 24. With the vehicle's weight on the suspension, torque upper control nuts to 60 foot pounds.
- 25. Torque lug nuts to spec.
- 26. Torque any other loose bolts to spec.

Adjustments and Safety Inspection:

- 27. Check all components for clearance for suspension to fully cycle up and down and wheels to turn lock to lock.
- 28. A professional front end alignment is recommended after installation.
- Recommended caster setting: +3.75 to +6.0 (+4.5 degrees is recommended unless a different setting is required for proper driveshaft running length)
 - Recommended toe in setting: 0 degrees

* Re-torque all fasteners, including lug nuts, after 100 miles, and frequently inspect all safety critical suspension components.

