HONED

**Tie Rod Kit Installation Instructions - EF and ED Civic and CR-X**

1. Loosen wheel nuts. Jack up car and support vehicle with axle stands
2. Remove wheel nuts and wheel
3. Remove the split pin from oem tie rod end
4. Loosen and remove OEM tie rod castle nut with 17mm socket. Loosen the inner jam nut on the inner rack end.
5. Remove OEM tie rod end from the suspension knuckle with suitable tie rod end puller, and unthread tie rod from inner rack end. **Mark the location of the OEM tie rod end or count the number of exposed threads so that the new tie rod end can be installed in the same location to minimise the effect on your wheel alignment.**
6. Assembly the Honed tie rod end by threading the ½" jam nut provided onto each rod end, then threading the rod end into the turnbuckle. The assembly should measure **168mm for EF8 and EF9 SiR applications, 181mm for all other applications** from the inner end of the turnbuckle to the centre of the rod end, which is the same length as the OEM tie rod end.
7. Tighten ½"-20 jam nuts on the tie rod to 60Nm (40lbf.ft).
8. Install the correct quantity of spacers above (thick, medium and thin) and below the rod end and install the 12mm castle nut to the top of each stub, **refer to the table below for spacer configurations**. The correct total number of spacers should be 3 per side.
9. Install turnbuckle-rod end assembly to inner rack end and tighten jam nut on inner rack end.
10. Install tapered lower part of tie rod stub into its mating hole in the suspension knuckle and install the lower 10mm castle nut.
11. Torque lower castle nut of tie rod end (m10 x 1.25) to 43 N.m or 32 lbf.ft and fit the new split pin provided
12. Torque upper castle nut of tie rod stub (m12 x 1.25) to 69 N.m or 51 lbf.ft and fit the new split pin provided
13. Perform bump steer measurement if necessary to determine correct spacer configuration. **The table below provides guidance on suggested spacer configuration, however it is always best to measure your vehicle if possible.**
14. Install the provided plastic rack travel spacer, by removing the inner rack end boot clamp and sliding the boot out of the way to the outboard side. The rack spacer can then simply be clipped onto the rack shaft directly inboard of the location where the inner rack end threads into the rack. Check that the spacer is correctly positioned by cycling the steering from left to right to ensure that it stays in position. **This spacer serves to limit steering lock to ensure no contact between the Honed tie rod end and the wheel, and is optional depending on your wheel diameter and offset.**
15. Refit the inner rack boot to the rack, with either a cable tie or new band clamp (not provided)
16. Refit the wheel
17. Cycle the steering from left to right and check clearance between the wheel and the tie rod end.
18. Repeat steps for the other side of the car

| Vehicle modifications | | | Spacer Configuration |
|---|---|---|---|
| Stock Camber arm | Ride height 295-320 | Stock Caster | Medium spacer and thin spacer beneath rod end |
| Aftermarket camber arm | Ride height 295-320 | Increased caster: 4-6 deg | Thick spacer and medium spacer beneath rod end |
| Aftermarket camber arm and Roll centre adjuster | Ride height 295-320 | Increased caster: 4-6 deg | Thick spacer beneath rod end |

*Note if you cannot identify a row that matches your vehicle Honed recommends that you measure the bumpsteer of your vehicle and set the rod end height by experimentation or contact Honed for support.

Now that you have successfully installed the Honed tie rod kit to your vehicle it is critical that you take the car to get a wheel alignment as soon as possible. **Note that these components are intended for race use only, and will require regular inspection and maintenance if necessary.** Honed takes no responsibility for injury or financial loss as a result of use or misuse of these