

FRONT TOOLS REQUIRED:

- Hydraulic jack and jack stands
- Metric Wrenches and Sockets

INSTALLATION:

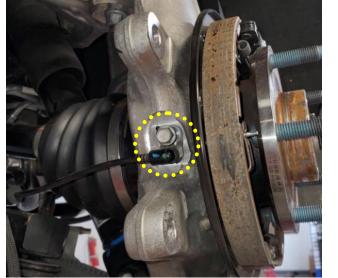
- 1. Lift the rear of the vehicle and safely support with jack stands under the cradle. *Make sure parking brake is released*.
- 2. Undo the clips holding the **brake pad sensor**, **brake line and wheel speed sensor** together.
- Using a 15mm socket, remove the two (2) bolts holding the caliper to the spindle as shown. Hang and support the brake caliper in the top front of the wheel well. Ensure that the brake line have no tension on them.
 (Remove and discard caliper if you are converting to a 15" wheel. Ensure brake fluid does not get on painted surfaces. Draining the master cylinder is recommended)
- Using a T30 Torx, remove the screw holding the rotor on to the hub.
 (*Remove and discard rotor* if you are converting to 15" wheel)





WWW.BMRSUSPENSION.COM







- Using a 10mm socket, remove the wheel speed sensor from the spindle. Hang sensor of to the side to not be damaged.
- 6. Using a T15 Torx, **remove** the three (3) screws holding the **brake duct to the spindle**.
- 7. Using a 10mm wrench, remove the stud from the control arm connecting to the ride height sensor.

(NOTE: It is best to leave the ride height sensor linkage connected to the stud to avoid damaging the ball socket)

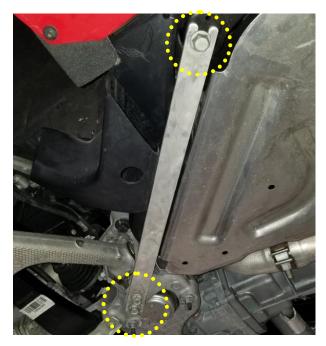
 With the hub exposed, use a 10mm socket and remove the bolt holding the parking brake line to the spindle.





WWW.BMRSUSPENSION.COM







- 9. Use a **flat head screw driver** or a **pick** and **release the ball from the parking brake mechanism on the face of the hub.**
- 10.In order to again more room to work around the control arm, us an 18mm
- socket **and remove the three (3) bolts** holding the **aluminum strap** brace to the **chassis** and **rear cradle**.
- 11. Using an **18mm wrench** and an **8mm allen socket**, **remove the lower sway bar end link** from the control arm.
- 12. Using a 32mm socket and a large impact, remove the axle retaining nut from the inside of the hub.
 (NOTE: You may have to use a dead blow or non-marring hammer to free the axle splines from the hub.)



WWW.BMRSUSPENSION.COM



13. Using a 21mm socket and wrench loosen the inner bolts of the lower control arm to allow the control arm to pivot without binding the bushings for future steps.

(NOTE: If you are replacing the lower control arms. You will need to drop the cradle in order to remove the forward lower control arm bolts. During re-assembly, it is possible to flip the direction of the bolt so this is not required in the future.

- 14. Using **an 18mm wrench**, **remove the nut holding the toe rod to the spindle**. Completely remove toe rod if you are replacing them with adjustable one.
- 15.**Support the lower control arm** with a screw jack or a jack and **loosen the 21mm bolt** holding the **shock to the control arm**. With the bolt removed, lower the control arm and suspension.
- 16. With the axle nut removed, loosen the nut holding the lower control arm balljoint to the spindle using a 21mm wrench. Unseat balljoint and set aside spindle and hub.
- 17. Loosen the nut on the upper control arm balljoint using an 18mm socket or wrench.Unseat the balljoint.
- 18.Disconnect the upper ball joint from the spindle and **pivot the spindle outward** will **pulling the axle stub through the spindle**. Be careful not to damage the axle boots during removal.



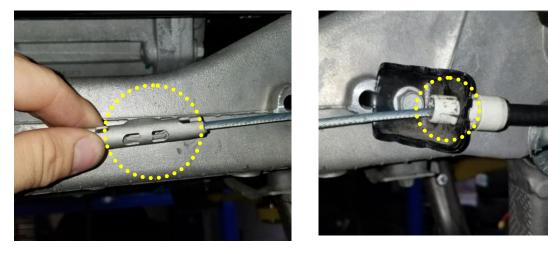


WWW.BMRSUSPENSION.COM



(NOTE: if you are replacing the spindle with a billet 15" conversion spindle, remove hub)

- 19. If you are replacing the lower control arms, it is now time to **lower the rear cradle** in order to remove and flip the forward lower control arm bolts.
- 20.Using a screw jack or a jack, **support the transmission**. Ensure that the placement of the jack will not interfere with the remove the rear cradle.
- 21. Inspect and follow all wiring, brake lines and cooler lines connecting the rear cradle. Using a trim tool or appropriate socket/wrench. Remove the clips or brackets.
- 22. In the rear of the cradle, you must **disconnect the parking brake lines** as shown.





WWW.BMRSUSPENSION.COM





23. **Remove** the four (4) nuts from the **transmission mounts** as shown.

24. Ensuring that all wiring, brake hoses and cooler lines are disconnected

and free of the rear cradle, use a 24mm socket and loosen the four (4) bolts holding the cradle to the chassis. Using a screw-jack, transmission jack or hydraulic jack, support the rear cradle and remove the four (4) bolts holding it to the chassis.





WWW.BMRSUSPENSION.COM





(NOTE: The rear cradle has locating dowels that fit tight in the chassis, **Iower the cradle slowly** to ensure you are not bending or binding on these dowels.)

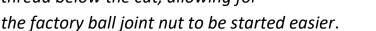
- 25. Lower the entire rear cradle, sway bar, leaf-spring, control arm and toe rods as one assembly.
- 26.With the rear cradle secure and at a workable height, **remove the lower control arm.**
- 27.After the **rear lower control arm** has been **removed**, the **rear cradle** can be raised and **reinstalled**.

WWW.BMRSUSPENSION.COM



- 28. Lay the adjustable lower control arm over the factory control arm. Unscrew the rod ends evenly to duplicate the length of the factory control arm. Ensure that the left and right control arm are adjusted evenly.
- 29. If you are installing a pair of SPN570 (15" conversion spindles), it is a good time to mock up the spindle to the lower control arm balljoint using the factory nut. You will need to trim off the unused threads on the balljoint to maintain clearance for the axle hubs.

NOTE: Before cutting the threads of the ball joint, it is a good idea to thread a nut below the area that you will cutting. When you remove the nut, it will reform the last thread below the cut, allowing for







30. If you are **installing a pair of SPN570 Spindles**, **transfer over wheel hub** and **parking brake mechanism**. The brake dust shield will need to be trimmed in order to clear a 15" wheel. Mark the shield using the provided rotor and trim using a cut off wheel. Use the factory toe rod to **set the length** of your **adjustable toe rod**. *Ensure that each rod end is threaded into the aluminum arm equally*.

WWW.BMRSUSPENSION.COM



- 31. Reinstall the lower control arm in the cradle with the front bolt pointing forward. To make sure that the bolts are reinstalled so that they can be removed in the future without removing the cradle.
- 32. **Reinstall all components in reverse order**. Ensure proper clearance between the leaf spring and the control arm and adjust the bump stop evenly.
- 33. Ensure that the jam nuts are tightened and that the rod ends are vertical and will not binds in their range of motion.
- 34. After installation it is highly recommended that your vehicle is professionally aligned.



WWW.BMRSUSPENSION.COM