



## 2019-2024 Mazda 3 1.5" lift kit installation guide

*Professional installation is recommended*

*FOR OFF-ROAD USE ONLY!*

### **IMPORTANT!**

Lifting and modifying the suspension on your vehicle may result in drive line vibrations, damaged bushings, erratic handling characteristics, and shortened suspension component life. HRG Offroad recommends the following:

- Checking and/or replacing worn drive axles with new parts, not remanufactured.
- Checking and/or replacing all worn factory rubber bushings with urethane bushings, such as Prothane.
- Checking and/or replacing worn shock absorbers and bump stops.
- Performing a 4 wheel alignment after working on suspension components.

**Lift kits may not be legal for use on public highways in your area. Please check local laws before installing!!**

### **WARNING!**

***Lifted vehicles are more prone to rolling over.***

Some HRG Offroad products are designed to improve off-road capabilities. Modifying the suspension of your vehicle may result in handling characteristics that are different from a factory equipped vehicle. Extreme care must be used to prevent a rollover or loss of control. Always operate your modified vehicle at a reduced speed to ensure your ability to maintain control under all driving conditions. Driving your vehicle in an unsafe manner may result in serious injury or death. HRG Offroad lift kits are designed and tested to work together. HRG Offroad does not recommend combining this lift kit with any other type of suspension or body lift. Always wear your seat belt.

Recommended tire/wheel sizes:

Stock size: 205/60/16 or 215/45/18

+1" larger tire

For 16" wheel: 205/65/16\* or 225/60/16\*

For 18" wheel: 215/50/18\* or 235/45/18

***\*Be sure to check fitment prior to installation! These sizes are only suggestions. HRG is not responsible for improperly fitted wheels/tires***

**Included in the kit:**

2 1.5" front spacers 5550

2 1" rear spacers 5551

6 M10 nuts

2 rear shock extensions

Installation time: Approximately 2-3 hours

Difficulty: Easy

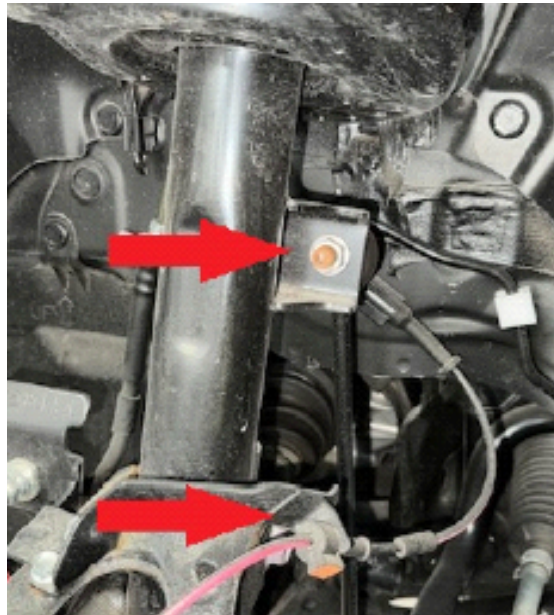
## **FRONT INSTALLATION:**

**Parts needed: 2 1.5 inch front spacers, 6 m10 nuts**

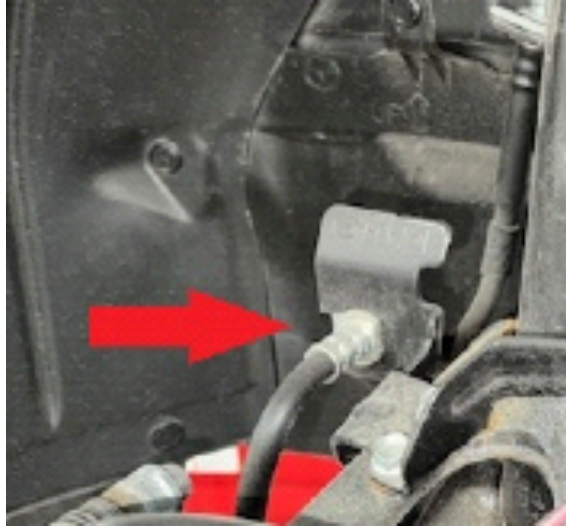
**Tools required: Lug wrench, jack/jack stands, impact driver, 14mm socket, 14mm wrench, 17mm socket, 18mm socket, 21mm socket, 21mm wrench, 6mm allen key, common pliers, heavy hammer, torque wrench.**

Step 1. Lift vehicle and remove wheels.

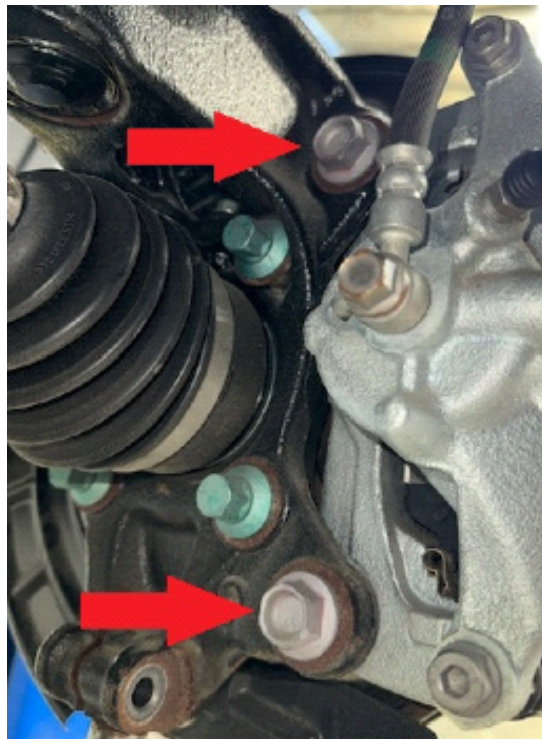
Step 2. Remove 17mm nut holding driver side sway bar link to strut. Use a 6mm allen key to hold sway bar link stud still while removing nut. Pull ABS wire off of bracket. (see photo)



Step 3. Remove brake hose from strut.



Step 4. Remove brake caliper. Be sure to support caliper with a length of wire or string. Do not allow caliper to hang from brake hose.



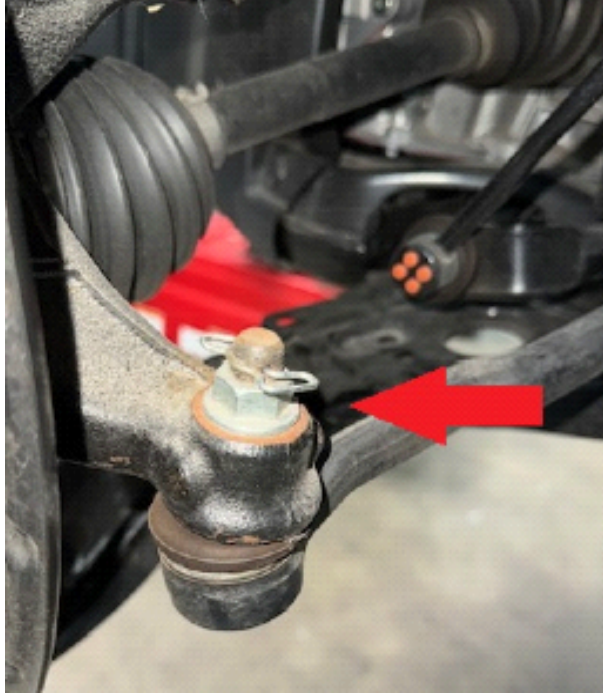
Step 5. Remove axle nut and brake rotor



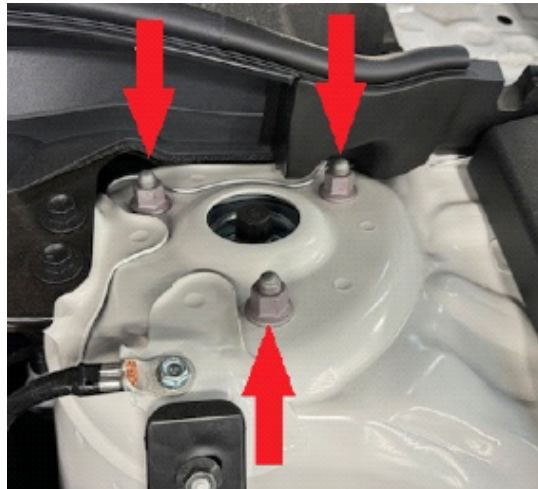
Step 6. Remove bolt on lower ball joint.



Step 7. Remove cotter pin and loosen nut from tie rod end. Strike knuckle with large hammer to release tie rod end. Remove nut.



Step 8. Remove nuts from upper strut mount on driver side.



Step 9. Carefully remove entire strut and hub assembly from fender well.

Step 10. Place strut spacer on top of strut and secure with hardware provided in the kit.

***NOTE: On certain aftermarket struts, It may be necessary to trim the studs slightly to allow the spacer to fit flush against the strut. If so, thread the nut onto the stud, trim the stud, and then back the nut off to clean the threads. This procedure is not necessary on OEM Mazda struts.***



Step 11. Install lift spacer in strut tower. Secure with OEM hardware. Torque nuts to 35 ft-lb.

Step 12. Slide axle back into hub.

Step 11. Using a pry bar, pull the lower control arm down to get lower ball joint back into wheel hub. Install and tighten lower ball joint bolt.



Step 12. Reinstall ABS wires and brake hoses.

Step 13. Reinstall tie rod end.

Step 14. Tighten axle nut to spec.

Step 15. Reinstall brake rotor and caliper. Torque bolts to spec.

Step 16. Install sway bar link relocation brackets as shown. These brackets are an interference fit. The holes will not line up exactly. This is intentional and causes the bracket to clamp tightly against the mount.



Step 17. Repeat installation procedure on passenger side.

Step 18. Double check all bolts. Refer to torque specs.

Step 19. Reinstall wheels.

## **REAR INSTALLATION:**

**Parts needed: 2 rear spring spacers.**

**Tools needed: Lug wrench, jack/jack stands, impact driver, 17mm socket, 14mm socket, torque wrench.**

Step 1. Jack up vehicle and support with jack stands.

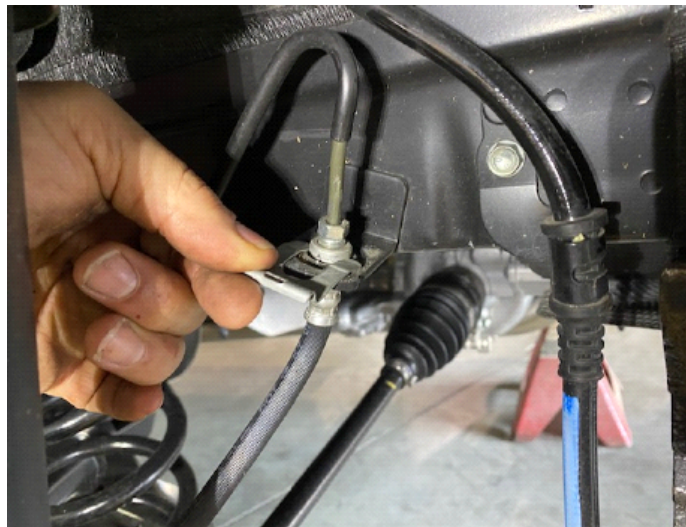
Step 2. Remove wheels.

Step 3. Support rear axle with floor jack.



Step 4. Remove bolts holding rear shocks to rear axle.

Step 5. Unclip rear brake line and unbolt ABS wire.





Step 6. Release pressure on springs by lowering rear axle with floor jack. It may be necessary to loosen the bolts on the swingarm to allow the axle beam to fully drop.



Step 7. Remove spring and rubber isolator.



Step 8. Place lift spacer between frame rail and isolator, reinstall spring. **Note: Pay attention to the "clocking" of the springs. Be sure they fit into the slot on the lower spring isolator as precisely as possible.**

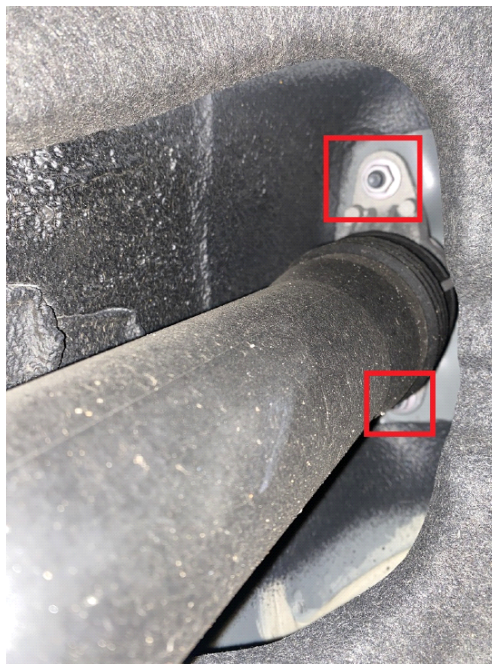


Step 9. Use floor jack to compress the springs and raise the rear axle back into place.



Step 10. Tighten bolts holding swingarms to body

Step 11. Remove nuts holding shock absorber to body.



Step 12. Bolt shock spacer to body using original hardware



Step 13. Attach shock spacer to shock absorber using hardware provided in the kit.

Step 14. Reinstall bolts holding shock absorbers to rear axle

Step 15. Repeat steps 3-14 for passenger side.

Step 16. Reconnect sway bar end links.

Step 17. Double check all bolts.

Step 18. Reinstall wheels.

Step 19. Get a professional 4 wheel alignment.

#### **Torque specs:**

Wheel lug nuts: 100 ft-lbs

Strut mounting nuts: 30 ft-lbs

Axle nut: 150 ft-lb

Front brake caliper mounting bracket: 75 ft-lb

Front/rear sway bar end links: 37 ft-lb

Front lower ball joint bolt: 50 ft-lb

Outer tie rod end: 35 ft-lb

Rear shock absorber upper mounting nuts: 30 ft-lb

Rear shock absorber lower mounting bolt: 50 ft-lb

Rear swingarm mounting nuts: 85 ft-lb

**Note: Installing a lift kit will change the suspension geometry and will require a 4 wheel alignment.**

**Warning: Failure to follow the procedures in these installation instructions may result in unsafe**

**handling characteristics, damage to vehicle, or loss of control.**

**For tech support, please call 1-844- HRG LIFT (474-5438) from 8-4:30 PM EST Mon-Thu 8-3:30 PM Fri or email us 24/7 at [support@hrgoffroad.com](mailto:support@hrgoffroad.com).**

*This product is intended for off-road use only!!*

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## Checklist

- CX51324F-1.5 (2) 5550
- CX51324+R-1.0 (2) 5551
- CX30 RSE (2)
- CXSBLB (1 pack of 2)
- Sticker