

# MOR/ryde Drive Axle Suspension System

(Double Eye Leaf Spring)

RL Rubber Spring

Replacement Instructions



MOR/ryde International

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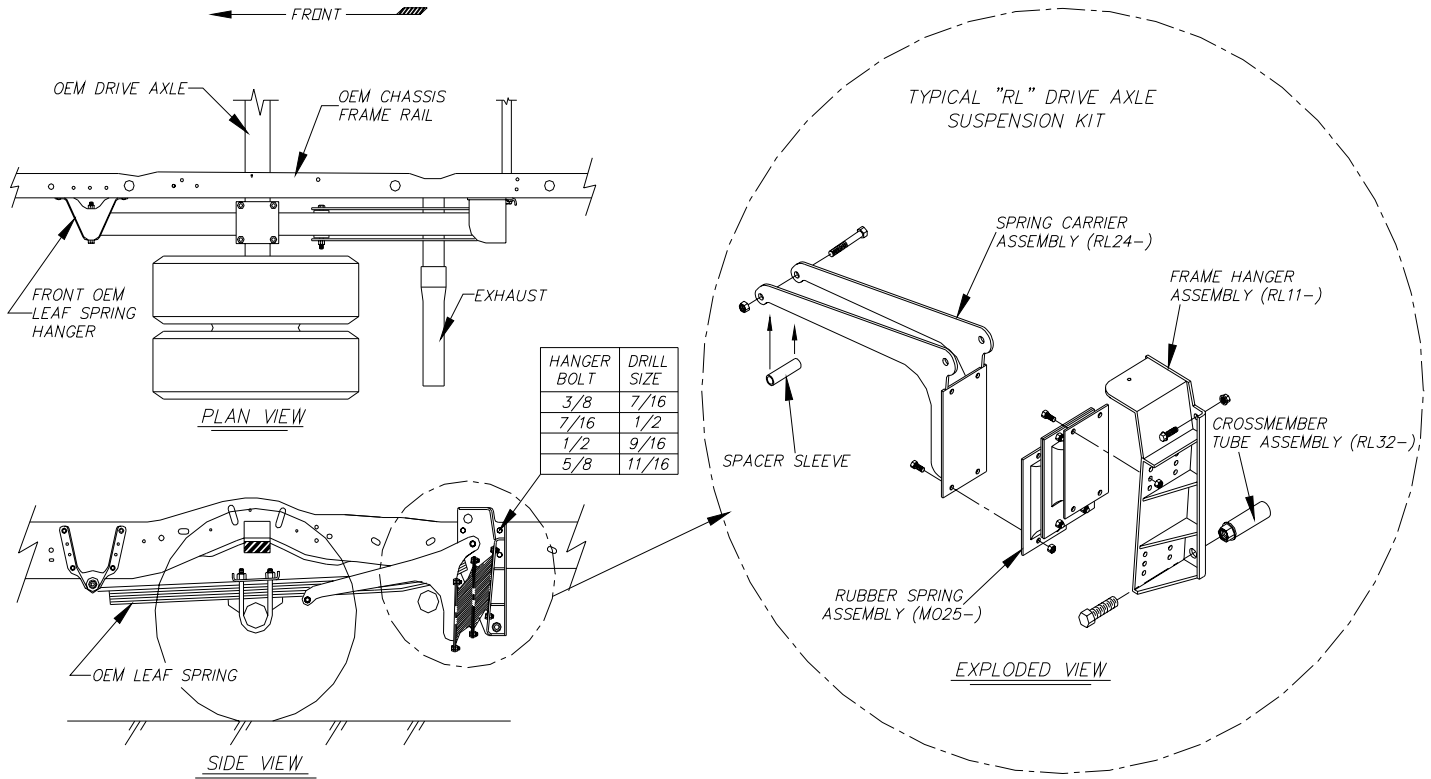
[www.morryde.com](http://www.morryde.com)

RL153-001 REV.

# MOR/ryde "RL" Rubber Spring Replacement Instructions

Instructions will assume procedures apply to both sides of vehicle.

## TYPICAL "RL" DRIVE AXLE SUSPENSION KIT



U.S. PATENT NO. 6,176,478

### Required Tools for Spring Replacement of MOR/ryde "RL" Suspension Kit

- \*Floor Jack
  - \*Safety Stands
  - Socket Set
  - 9/16" Swivel Socket
  - Wrench Set
  - Drift Pin
  - \* Check for adequate capacity. It must support the weight of the rear of the vehicle.
- MOR/ryde Installation Tool  
or  
Large C-Clamp (6" min.),  
Porta-Power,  
Small Pipe Clamp

### Torque Chart Foot-LBS +/- 10%

Bolt Size	Grade 5	Grade 8
1/4 - 20	7	10
5/16-18	14	20
3/8-16	25	35
7/16-14	40	55
1/2-13	60	90
5/8 - 11	115	170
5/8-18	125	185
3/4 - 10	190	280



Step 1

Be sure to block the front tires before raising the rear of the vehicle. Place floor jack under the differential and raise the drive axle tires off the floor.

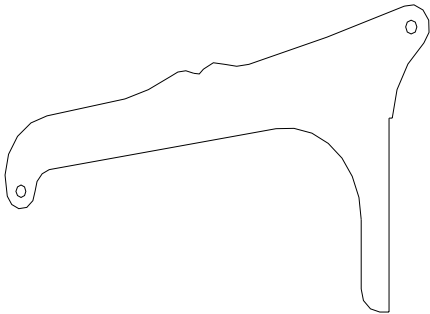


Step 2

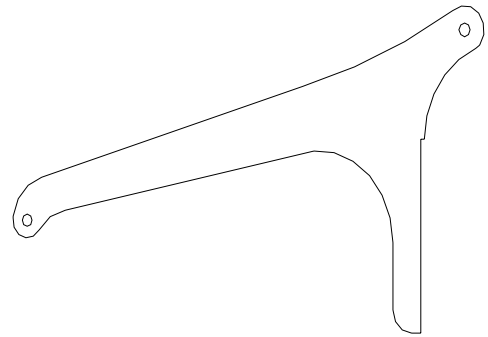
Place a jack stand under the OEM chassis frame and release the floor jack. The rear tires should be approximately 1" above the floor. The floor jack should remain under the differential to support the weight of the axle.

Be sure the jack stands have sufficient capacity to safely support the vehicle.

Note: If you have a MOR/ryde installation tool (this came with the replacement rubber springs) and lobes are present, (refer to the diagram below) then proceed to step 3. If you do not have a MOR/ryde installation tool proceed to step 6 for a C-clamp installation or to step 7 for a Porta-power installation.



Spring Carrier shown with lobes.



Spring Carrier shown without lobes.



Step 3

Be sure the threaded rod on the installation tool has a liberal coating of grease before proceeding. Position the MOR/ryde installation tool on the Spring Carrier between the raised lobes.



Step 4

Tighten Installation Tool against bottom of leaf spring so that pressure is removed from Spacer Sleeve/Pad. Remove 1/2" nut and bolt from Spacer Sleeve/Pad.



Step 5

Reverse Installation Tool until it can be removed from Spring Carrier. This will un-load the Rubber Spring Assembly. Proceed to step 8.



Step 6

Position C-clamp between lower portion of Spring Carrier and Frame Hanger as shown. Tighten C-clamp so that the pressure is removed from Spacer Sleeve/Pad. Remove 1/2" nut and bolt and Spacer Sleeve/Pad. Remove the C-Clamp.



Step 7

Position Porta-Power between lower portion of MOR/ryde Spring Carrier and rear of axle. Pump Porta-Power so that the pressure is removed from Spacer Sleeve/Pad. Remove 1/2" nut and bolt and Spacer Sleeve/Pad. Remove the Porta-Power.



Step 8

Before removing the 3/8" nuts and bolts from Spring Carrier and frame hanger, note the hole that the rubber spring assembly is bolted into. It is adjustable on the Frame Hanger. Remove the defective Rubber Spring assembly.

Insert new Rubber Spring assembly (into the same holes that it was removed from) and install 3/8" nuts and bolts. (Alignment pins should be used to align the holes and a vise grip may be useful to hold parts in place). Reverse procedures (steps 3-7) to reinstall Spacer Sleeve/Pad back into original location. Reinstall the 1/2" nut and bolt, be sure the bolt head faces the frame. Be sure that all nuts and bolts are torqued. Raise chassis off of jack stands. Remove stands and lower the vehicle back onto the floor.



The closest edge of the exhaust pipe to the MOR/ryde Rubber Spring should be a 2" minimum clearance and 1" minimum clearance to steel components. Other options for exhaust and tailpipe termination may be:

- 1 In front of drive axle,
- 2 behind the Frame Hanger or
- 3 out the back of vehicle.

Be sure when altering exhaust that the joints are gas tight. Acceptable methods may be to weld seams and/or exhaust pipe joint clamps.

**WARNING: The exhaust pipe must not touch or blow on the MOR/ryde rubber spring. Doing so could cause premature failure of the rubber spring.**