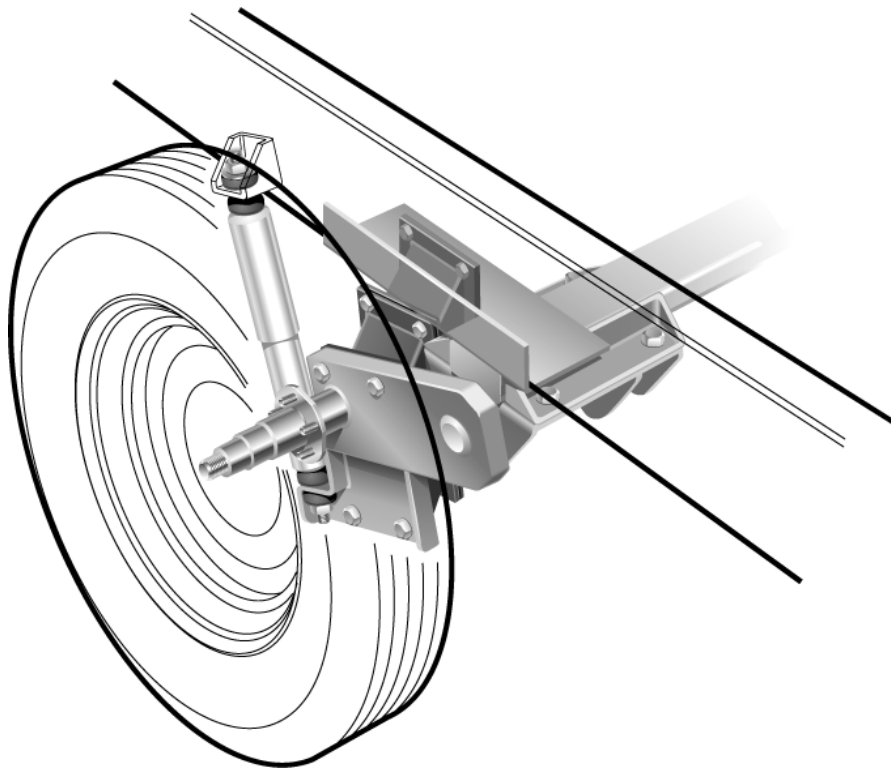




“IS”
INDEPENDENT SUSPENSION SYSTEM
TIRE CHANGING INSTRUCTIONS.



* Made in U.S.A. Patent number 5899470

How to Change a Tire on the Independent Suspension System (IS).

Caution:

- Prior to changing a tire on the IS make sure the unit is on stable ground.
- Do not attempt to change the tire on a busy road, if possible the unit should be moved to a safe area before attempting to change a tire.

Tools that are needed:

- Four way lug nut wrench or socket to remove lug nuts.
- Leveling blocks or 3-4 pieces of 2x6 wood cut to 8 inch lengths.
- A two ton trolley/floor jack found at a local auto supply store.

Precautions to the IS system:

The safest practice to changing a tire on a trailer that features the IS system is to first jack safely by the frame of the trailer. This should be done by supporting the unit in equal points.

If supporting the trailer by the frame is not an option then jacking on the IS can be done however care must be taken prior to doing so. First you should be familiar with the below components as placement of the jack is critical.

- Rubber Spring Assembly
- Hydraulic Shock
- Torque Bracket Assembly
- Beam Assembly
- Hanger Assembly

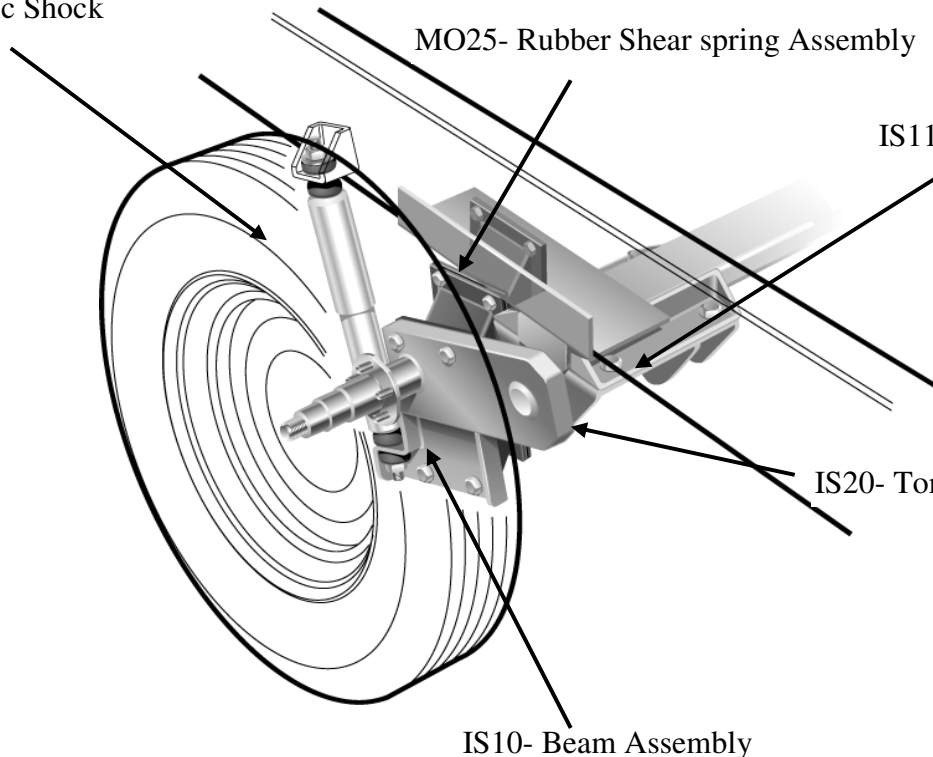
UO109- Hydraulic Shock

MO25- Rubber Shear spring Assembly

IS11- Hanger Assembly

IS20- Torque Bracket Assembly

IS10- Beam Assembly



Precautions to the IS system continued:

The Rubber Shear spring can easily be damaged by a jack. Precautions should be taken to not jack directly on the rubber shear spring. Additionally the Shock Mount, Torque Bracket Assembly, and Hanger Assembly should also not be used as a jack point.

The correct jack point is located on the Beam Assembly, the area is the Steel Spring Plate located behind the spindle assembly. The Rubber Shear Spring Assembly will be bolted to the beam assembly. See Figure 1 below.



Figure 1

Step One:

Position the trailer on level solid ground. If changing a tire on the front axle then position the rear axle on 2x6 leveling blocks. This action will relieve pressure on the front axle making the tire changing process easier. See Figure 2 below.



Figure 2

Step Two:

Prior to loosening the lug nuts the trolley jack should be positioned below the Spring Plate Jack

Point. The trolley jack should be completely at rest and should fit as close to the low side of the plate as possible. See Figure 3 below.



Figure 3

Step Three:

Loosen the wheel bolts to hand tight to be able to later loosen them once the wheel is off the ground.

Step Four:

Begin jacking the trolley jack which will raise the wheel. The Rubber Shear Spring Assembly will begin to deflect. Figure 4 shows the jack prior to jacking. Figure 5 shows the jack after jacking.



Figure 4



Figure 5

Note: The Rubber Shear Spring can deflect up to five inches, the greater the jacking pressure applied the higher the wheel will rise off the ground. Caution should be taken to not lift the entire trailer. Stop jacking on the spring plate if the entire trailer begins to lift.

Step 6:

At this time the flat tire can be removed and the spare tire can be installed. Note that the amount of lift may not be as much to remove the flat tire as it can be to install the spare tire.

Step 7:

Once the spare tire is installed the lugnuts should be hand tightened.

Step 8:

The jack can now be relieved of pressure lowering the spare tire to the ground.

Step 9:

Lugnuts should be torqued to proper torque rating provided by wheel and/or brake manufacturer. Refer to coaches owners manual for this information. If lugnut torque rating is unknown please contact MOR/ryde for assistance.