



UNIVERSAL ROADMASTER PCT 1/B2007 001 390 AND PAT 94/5738 FITTING INSTRUCTIONS FOR RM10-60

IMPORTANT

- A. The Roadmaster must only be fitted when the load is off the axle and the axle and leaf springs are hanging free
- B. Before fitting, check the leaf springs for any sign of excess wear, fatigue, cracked or broken blades or worn blades or worn bushes – especially on older springs, these must be replaced where necessary.
- C. Ensure all existing U bolts, nuts, shackle bolts and nuts are secure before fitting.

Any deviation from these instructions will render the warranty void. This kit will not be warranted if installed on any vehicle used for racing, similar activities or if fitted to a vehicle where the rear suspension has been modified in any way.

WHEN USING THE TROLLEY JACK AND JACK STANDS

With vehicle on a level surface, place blocks on either side of front wheels to prevent vehicle rolling. Jack up rear of vehicle under the diff, using a trolley jack of the correct lifting capacity. Support vehicle on chassis with jack stands on either side assuring that the vehicle is safe to work on. Remove jack allowing axle and springs to hang free. Remove wheels for easy access.

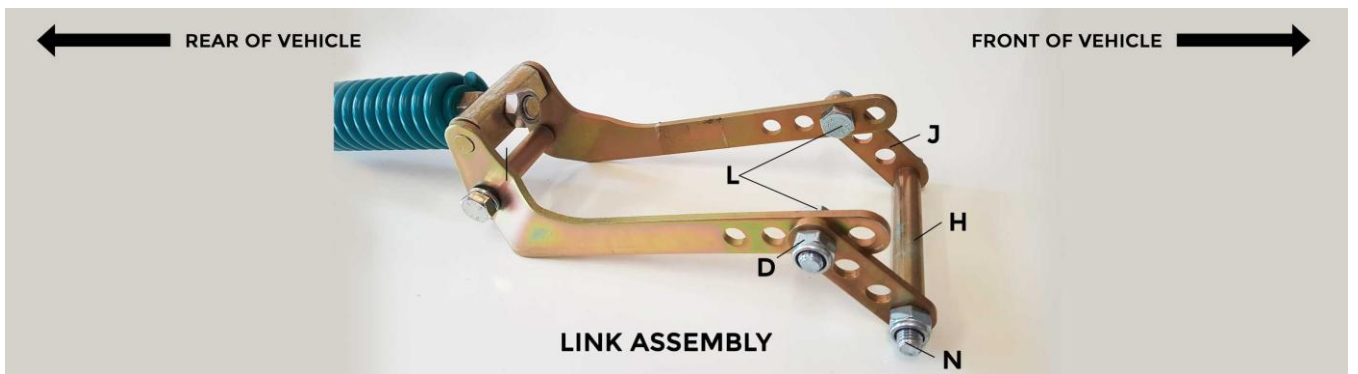
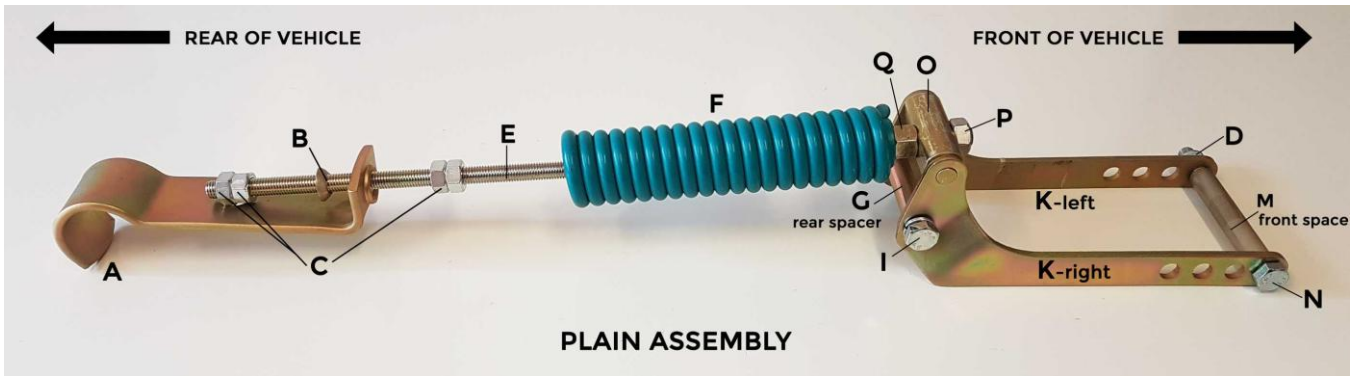
WHEN USING A TWO POST HOIST AS IN FITMENT CENTRES

Lift vehicle on hoist. It is not necessary to remove wheels, however, it will make fitting a little easier. Axle and spring must hang free without restrictions.



Fig: Roadmaster axle under

COMPONENT PARTS



	Component	QTY/KIT		Component	QTY/KIT
A	Eye Bracket	2	J	Link plates	4
B	Cup Bearing	2	K	Side Plate	2 + 2
C	Nut M12 Plain	8	L	Link Bolt M12 X 25mm	4
D	Nut M12NYLOC	8	M	Front Spacer x 95mm	2
E	Threaded Rod	2	N	Front Bolt M12 x 110mm	2
F	Tension Spring	2	O	Threaded Draw Bar	2
G	Rear Spacer x 65mm	2	P	Nut M14	2
H	Link Spacer x 110mm	2	Q	Draw Bar Tie Bolt M12 x 60mm	2
I	Rear Bolt M12 x 95mm	2			

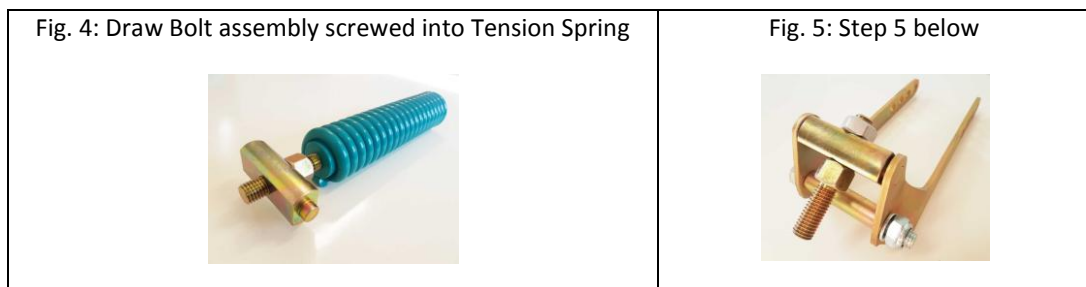
ASSEMBLY

The Roadmaster kit is usually delivered with steps 1 – 5 pre-assembled, but should it be necessary to do a complete assembly please follow the steps as set out.

1. Apply Loctite 243 (general thread lock adhesive or similar) to the screw thread of one side of the **Tie Bolt** and screw the **Tie Bolt** into the **Draw Bar**. Tighten to a torque of 106 Nm +/- 10 Nm.
2. Screw a **M14 nut** onto the part of the **Tie Bolt** that protrudes through the **Draw Bar** and tighten to 106 Nm +/- 10 Nm.
3. The sub-assembly should look like the assembly in Figure 3 below.


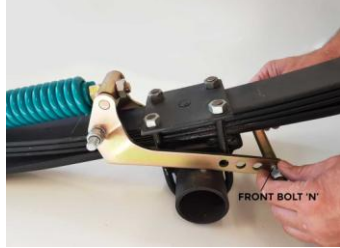

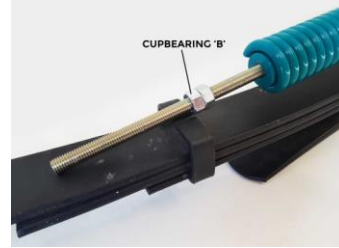
Fig. 3: Sub- assembly **Q** (Draw Bar locked on Tie Bolt)

4. Apply Loctite 243 to the screw thread of the open end of the **Tie Bolt** and screw the assembly into the end of the **Tension Spring** with the 14mm hole and torque to 106 NM +- 10 Nm. The sub-assembly should look like the assembly in figure 4. (One method to torque this step is to screw a 12 mm nut onto a short bolt and to screw this into the 12mm hole on the other end of the **Tension Spring**. Lock the nut onto the **Tension Spring**. Hold this end with a socket that is pushed over both the bolt head as well as the nut and torque from the other side i.e. by turning the 14mm nut. Then remove the short bolt and nut.)

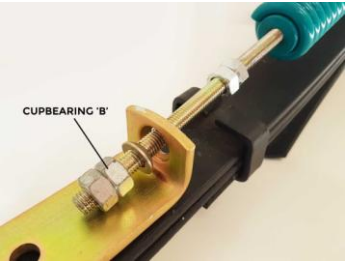
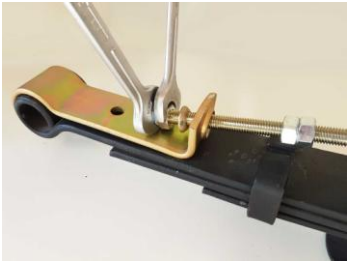
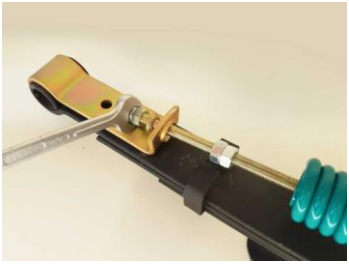
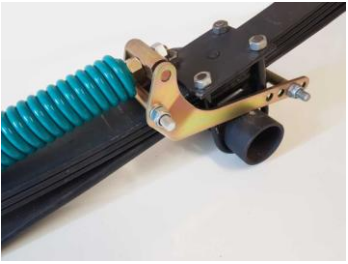
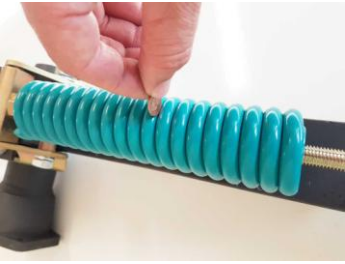



5. Take the left and right side plates and assemble to draw bar **O**. Fit the rear spacer **G** with rear bolt **I**, spring washer and nyloc nut, **tighten fully**.

START HERE WITH PARTLY ASSEMBLED KITS:

			
<p>6. Slide the side plates of the partly assembled unit either side of the “U” bolts. The rear spacer must rest on top of the main blade. The ideal position is with the draw bar as close to the axle as possible. Check that all hand brake cables and brake pipes are clear.</p>	<p>7. Fit front bolt N with front spacer M and nylock nut finger tight.</p>	<p>8. WHERE APPLICABLE: If the front bolt cannot pass under the spring pack, then <u>the links</u> must be used. The bolt head sits on the inside of the side plate K the link sits on the outside. Fit link spacer (extra long) H and bolt N with nyloc nut finger tight. Change the link fitting holes as necessary.</p>	<p>9. Take the Threaded Rod and spin two plain nuts near the centre of the rod. Screw the Rod into the Tension Spring with minimum 25-50mm thread engagement into the Spring. Fit the Eye Bracket over the rear shackle of the top leaf spring. If space do not allow for the eye bracket to be pushed in position from the front, try doing so from the rear.</p>

SPRING & EYE BRACKET ASSEMBLY

			
<p>10. Insert the open end of the Threaded Rod through the Spring eye of the eye bracket. Slide cup bearing B over rod. Assemble two plain nuts to Threaded Rod. (a maximum of 5mm thread only should show past the end nut)</p>	<p>11. Lock the two nuts firmly together.</p>	<p>12. Lightly tension the Spring by turning the rear set of locked nuts clockwise. If access is difficult use the two nuts that are positioned in the middle of the Threaded Rod.</p>	<p>13. Tighten all front bolts (and link nyloc nuts if used). Adjust all components so that they are centralized on the spring.</p>
			
<p>14. Continue turning the locked nuts clockwise until the gap between the coils at the centre of the spring is 1.2mm.</p>	<p>15. Finally tighten the locking nuts at the rear end of the tension spring. Recheck the tightness of all nuts</p>		

After fitting of ROADMASTER has been completed:

- If jack stands were used, replace wheels, jack up vehicle, remove the stands and lower vehicle to the ground.
- When using a two poster hoist, just lower vehicle to the ground.
- If these instructions are followed correctly you will be amazed at the improvement of stability, handling and load carrying capacity achieved by fitting the ROADMASTER to your vehicle.

- **PLEASE NOTE:** Should the threaded rod touch the U-shaped bracket (that is fitted to some vehicles towards the rear of the leaf spring pack) remove this bracket as it's purpose is actually to keep the pack together prior to fitment.



U-shaped Bracket of the leaf spring pack.