

# Dobinsons Spring and Suspension <a href="mailto:admin@dobinsons.com">admin@dobinsons.com</a> 58 Hollingsworth Street Kawana QUEENSLAND AUSTRALIA 4701

## FITTING INSTRUCTIONS PART NUMBER – MRA19-A104

FRONT STRUT

**FORD BRONCO 21+** 

#### NOTE – Installation is always recommended by a competent technician. Height not to be adjusted on vehicle.

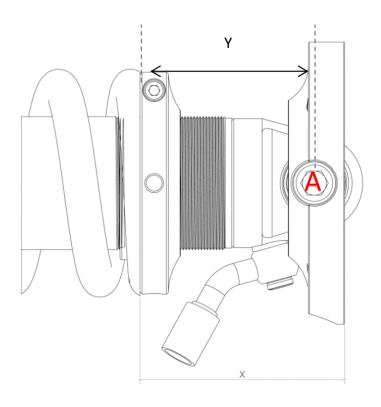
COMPONENTS		
2 X MRA19-A104 SHOCK ABSORBERS	RES MOUNT KIT INCLUDES	
2 X C19-568 (MRA19-A104KA) OR C19-570 (MRA19-A104KB)	2 BRACKETS	
1 KIT RM19-052 (RES MOUNT KIT)	4 HOSE CLAMPS	
	4 X 250MM M8 CAPTIVE NUT	
	• 4 X M8 X 25MM BOLT	

#### Fitting to 2021 + BRONCO

- 1. To set an approx. lift height, see table at end for setting preload. This will get you close to the lift you require.
- 2. Raise the front end of the vehicle off the ground using a certified jacking system.
- 3. Support the vehicle using properly rated jack stands. The jack stands should be on the chassis rails of the body. Check the jack stands are locked in place and can handle the weight of the vehicle when it is lowered onto them. Check the vehicle will also not move. The wheels may need chocks to stop them moving.
- 4. Remove the front wheels.
- 5. Support the lower control arm with a jack.
- 6. Loosen sway bar link nut both sides. Sway bar may need to be moved out of way to remove and fit shock absorbers.
- 7. Remove brake lines if attached to control arms or spindle and move away so it can all lower down without stretching the lines.
- 8. Remove the spindle from the UCA ball joint. This may require a hit on the spindle housing where it is on the ball joint to loosen it.
- 9. You may wish to loosen the lower control arm bushes to make it easier to move the arms out of the way. IF you do this, please note the position of the alignment cams.
- 10. Remove the top 3 nuts on the strut cap. It is important to NOT loosen the middle nut as this is part of the shock absorber.
- 11. Remove the lower bolts from the shock absorber mount holding it to the lower control arm. Keep note of the direction this bolt is going as it will need to be put back in the same direction.
- 12. Remove the strut assembly from the vehicle. It is important to not damage any lines or cv boots. Sometimes you may need to use a lever bar to get it out as the lengths of the shocks may only just fit into the whole suspension setup.
- 13. Tighten the top bolt which holts the top cap onto the shock absorber. This should be done up very tight so the cap does not move on the bush steel face. It should be fixed to it so the rubber needs to torsion. This should be tightened at 90 degrees to the body. See SETTING PRELOAD diagram for the position in which is should be tightened.
- 14. Install new Dobinsons struts in the existing location. The hose will need to be facing outwards towards the wheels. Check pictures.
- 15. Place the 3 bolts and spring washers in the top cap though the tower into the threaded holes and tighten up to 32 ft lbs torque.
- 16. Install the lower shock fixing bolts into the lower arm through the original mounting holes like original shock absorber. DO NOT TIGHTEN this bolt yet. It should only be tightened at ride height.
- 17. Attach the spindle to the upper control arm.
- 18. Install wheels back onto vehicle.
- 19. Lower the vehicle onto the ground after jacks are removed.
- 20. IF the bolts in the inner lower control arms were loosened before at the earlier stage the retighten them up into the original alignment position.
- 21. Move the vehicle forwards and backwards in a short area (like 2m forward and 2m backward) to allow the vehicle to settle.
- 22. Tighten the lower shock absorber bolt now the vehicle has settled.
- 23. The vehicle should now be aligned as soon as possible to minimise any tyre wear.
- 24. It is good practice to come back after 500 km and check all bolts are tight.

#### **SETTING PRELOAD**





- 1 BOLT "A" SHOULD BE TIGHTENED TO 55 FT LBS TORQUE. THIS SHOULD BRING MAKE THE TOP CAP PULL TIGHT ONTO THE BUSH SLEEVE ON THE EYE. IF IT IS NOT TIGHT, YOU CAN APPLY MORE TORQUE. DO NOT GO BEYOND 80 FT LBS OF TORQUE.
- 2 PLEASE NOTE LIFT HEIGHTS BELOW ARE APPROX AND VARY DEPENDING ON WEIGHT AND WHERE IT IS PLACED ON THE VEHICLES FRONT AND REAR. FOR EXAMPLE IF LOADING WEIGHT BEYOND THE REAR AXLE, IT CAN LIFT THE FRONT UP.
- 3 IF UPGRADING COILS, OR CHANGING COILS, MAKE SURE THE COIL DOES NOT BOTTOM OUT WHEN FULLY COMPRESSED

#### **PRELOAD SETTINGS**

Lift Height	Accessories	Seat Height to centre of bolt (Y)	Seat height to top of cap (X)
50mm	0-40kgs	57mm MINIMUM PRELOAD	80mm MINIMUM PRELOAD
50mm	100-120kgs	63mm	86mm
75mm	0-40kgs	72mm	95mm
75mm	50-80kgs	78mm	101mm

### **FITTING PICTURES**

