

FAQ's

Roadsafe Rear Lower & Upper Trailing Arms

Why upgrade your Trailing Arms?

From genuine the wall thickness of the rear upper and lower trailing arms on the Patrols & Landcruiser are quite thin. You upgrade your trailing arms to increase the wall thickness, and the subsequent strength.

Patrol genuine rear lower trailing arms have a wall thickness of less than 2.5mm. The Roadsafe lower arms are supplied in 5.5mm wall thickness. A massive increase in strength. Refer to image on the right showing the genuine cross section (left) and Roadsafe cross section (right).



If you have a look under your vehicle, you might see that your rear lower trailing arms are bent (as per image on the left). This is due to the thin walls, and an upgrade is recommended. Bent lower arms can result in diff pinion breakage.



For lifted vehicles, Rear Lower trailing arms are also available in an extended form to give increased clearance for the rear tyre to the front of the rear guard (basically gets the diff in the factory position in the guard).

Rear Upper trailing arms are also upgraded from standard (with a massive 5.75-6.5mm wall thickness) and available as on-car adjustable to aid in diff pinion angle correction for lifted vehicles.

Why aren't the lower arms 'adjustable'?

The lower arms Roadsafe run as a fixed length – either standard, 11 or 16mm extended. Being low and close to the ground we want to avoid nuts and threads that can get caught up... plus after the first run in the bush any exposed thread on a lower adjustable arm gets damaged anyway, so any further adjustability is no longer a viable option. Plus, the lower arms require strength, so they don't get bent, the turnbuckle on the lower arms simply creates a weak point that will create issues in the long run.



Why 11mm or 16mm extended for the Patrols?

These extended lengths for the lower arms were determined based on the optimal tyre clearance to the front of the rear guard. On SWB 2" lifted patrols (plus LWB's and utes) an 11mm extended lower arm repositions the diff so the tyre clears the front of the rear guard. On SWB with greater than 2" lift the 16mm extended rear lower arms give the best positioning in re-centering the tyre in the guard. This is particularly relevant if you want to run bigger tyres. But be wary... too big and you might have to chop the guards out.

Why are the upper arms 'adjustable'?

The upper arms are on-car adjustable purely to allow ease of adjustability when you are endeavouring to set the required length to sort out the diff pinion angle correction.

The Upper arms are 'shorter' than the standard factory arms, and adjust shorter (not longer). This pulls the diff back around to replicate more of the factory positioning after a lift.

What is the 'BENT' upper adjustable arm for?

The TANP47AB is designed with a bend to allow for clearance of aftermarket long range fuel tanks. If during articulation you hear a bang on the rear of the driver's side, odds are your RH rear upper trailing arm is fouling on your fuel tank. At full droop the Roadsafe TANP47AB's bent design provides for clearance of the fuel tank. Recent upgrades now include a greater radius in the bend to allow for better articulation and droop. You can fit the 'bent' upper arm alongside a standard upper arm, providing you set the adjustment to replicate the bushing to bushing centre dimensions of the original arm. It is recommended if fitting a 'bent' upper arm to also upgrade the other side with Heavy Duty Adjustable, so as to maintain the same 'strength' in both upper arms on both sides.



Do I need to use both Extended Lower Arms and Adjustable Upper Arms?

It really is a bag of worms, personal preference and vehicle have a fair bit to do with it. Heavy Duty longer lower arms are the quickest, easiest, price conscious fix to get the pinion angle back within tolerance, and locate the diff in the factory position in the guard.

SWB Patrols with big lift will generally need both, as the tolerances are smaller due to drive shaft length.

Basically, if you lift your vehicle (say GQ SWB for example) 4" of spring, then the rear diff will roll forward towards the centre of the car. 16mm extended lower arms will push the diff back not quite 16mm, locating the diff into the factory position in the guard, keeping the tyre centred. Height also changes the roll of the diff, which is where the Adjustable Upper Arms come into play, so you can reverse the roll & fix the diff pinion angle back to original.

If you've got a LWB GQ and you're wanting to fit 35's and a 4" lift you should be fine with 16mm longer lower arms only. If you're going up to 37's you'll probably need both extended lower arms and adjustable upper arms – and more likely a chop out of the guards.

If I fit Longer Lower Arms will I need Tail Shaft Spacers?

This needs to be dealt with on a case by case basis. Tail Shaft Spacers are required on the Patrols and Cruisers when you have a large amount of lift and the tail shaft is in danger of separating at the slip joint. The Tail Shaft Spacer simply mounts between the tail shaft flange and the diff flange.

Tail Shaft separation can be exacerbated by the fitment of extended Lower Trailing Arms.

What Bushings are supplied in the Arms?

In the Patrol & Landcruiser rear upper and lower trailing arms Roadsafe include a high flex rubber bushing as standard. The arms are also available with an alternative Genuine rubber bushing for those customers who are keen on maintaining genuine rubber.

What Colour are the Roadsafe Upper & Lower Rear Trailing Arms?

Originally the Roadsafe Arms were gold anodised. However over the last 2 years there has been a progressive change to a black e-coated style arm. Aside from the longevity and 'meaner look', the black e-coat allows for a more discreet installation.

Are the Replacement Trailing Arms ADR Approved?

Under NCOP V3 (VSB14) the replacement trailing arms are street legal. They are a standard replacement item, fitted with no additional modification to the mount points or similar required.

What is the warranty on the Upgraded rear Lower Control Arms?

The standard warranty on the arms is one year / 20,000 kms. However on the upgraded rear lower trailing arms (standard, 11mm & 16mm extended for the Cruiser & Patrol) we offer a LIFETIME warranty against Bending. If you can bend these big boys (with minimum 5.5mm wall thickness) you have bigger issues!

What vehicles are the arms available for?

- Nissan Patrol GQ-GU
- Toyota Landcruiser 80,105 Series
- Toyota Prado 120, 150 series
- Toyota FJ Cruiser
- Toyota Landcruiser 200 Series
- Toyota Hilux 4 Runner (4th Gen)
- Landrover Defender, Discovery 1 and Range Rover

