



Installation Guide

1967 Mustang 3-Link

INTRODUCTION

CONGRATULATIONS on your purchase of the RRS 3-Link rear suspension system. This bolt-in system is designed to transform the handling of your Mustang to match, or exceed, the capabilities of new millennium Ford-badged machinery. While relatively straightforward to install, RRS cannot stress enough the importance of thoroughly reading the entirety of this comprehensive, step-by-step Installation Guide before commencing fitment – including those who have previously installed an RRS 3-Link, as they are all subtly different for each vehicle. Taking the time to read through the Installation Guide and familiarising yourself the installation (along with the benefits of the various tuning adjustments this system offers), will not only ensure you obtain the maximum benefit and performance out of your RRS 3-Link, but also ensure it will give you many years of trouble free service.

ADVANTAGES

WITH its extremely long top arm (torque arm) the RRS 3-Link boasts drastically improved suspension geometry over the horribly wrong factory leaf spring set-up – which was originally designed for horse-drawn buggies! In fact the RRS 3-Link features better geometry than any factory four-link set-up. This superior geometry results in drastically-reduced roll understeer, accurate turn in and superior steady-state cornering, which makes the car more neutrally balanced and endows it with more predictable handling. For performance applications, the RRS 3-Link system increases chassis beaming and torsion rigidity for faster suspension reaction time (for better feedback), greater torque handling capacity, optimum torque transference to the chassis and precise control over differential movements. It also allows wheels with up to a 5½-inch offset to be used. Best of all, the modular design incorporates generous user-adjustable settings including; ride height, damper tuning, pinion angle, lateral differential location and roll centre height (for fine tuning the vehicle's handling characteristics). All of which results in better traction (for improved acceleration and braking) along with outstanding cornering ability.

CONSULTATION

RRS always recommends you engage the services of a qualified mechanic for the installation. If you are a novice and choose to install the RRS 3-Link yourself, RRS recommends having a qualified mechanic inspect the final installation. Regardless of who undertakes the fitment, if you have any questions, do not hesitate to call RRS (02 9907 3755). One of our qualified technicians will gladly help with any queries you have and gladly talk you through any installation or tuning issues.

INVENTORY CHECK

RRS includes a Parts Packing List with all their products. While we go much effort to ensure all components have been correctly packaged, we recommend you go through the Parts Packing List and physically check off each of the components (including fasteners) before commencing the installation.

BEFORE BEGINNING

BEFORE placing the car on a hoist or stands, determine the ride height of the car by measuring from the centre of the wheel (axle) up to the guard lip on both sides – do not be surprised if the left and right measurements differ. Record these measurements on a piece of paper, as they will be required during the installation of the RRS 3-Link. It is also necessary to pre-determine whether you wish the car to ride at the same height, a lower height or a higher height at the conclusion of the 3-Link installation. If you do wish to make a ride height change, write down the desired changes next to your actual measurements.

NEW WHEELS

IF ADDING new wheels will be part of the RRS 3-Link installation, these should be installed prior to beginning the installation. Doing so will allow you to determine the desired ride height and to ensure there's adequate wheel well clearance. With some wheel and tyre widths and offsets it may be necessary to use a non-standard width differential housing. RRS is able to supply custom width housings on request.

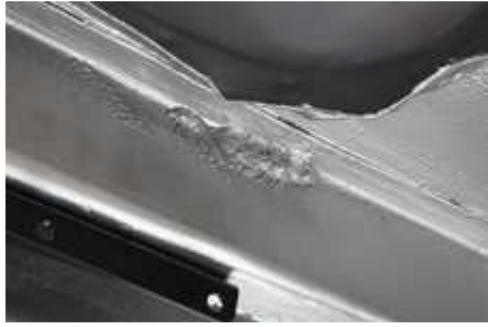
TYRE CLEARANCE

As the factory leaf spring system compresses, the differential housing can move forward as much as 60mm. When cornering (i.e. one side down one side up), this moves one side further forward than the other – which induces hideously-undesirable roll understeer. The RRS 3-Link is designed to limit this fore/aft movement of the differential housing to 15mm (throughout its travel) which substantially minimises roll understeer. If your wheel well openings have been modified to accept very wide or very large diameter tyres that run close to the guard, you may experience guard fouling problems with the RRS 3-Link due to the different arc of travel the differential housing now moves through. That is to say; with the RRS 3-Link, the tyre will stay more centred in the wheel arch throughout the range of suspension travel.

VARYING TOLERANCES

EVERY RRS bracket is laser cut to exact tolerances and all frames and cross-members are jig welded in precision fixtures for steadfast consistency. In comparison, Ford's original construction tolerances were quite loose, with variances of up 8mm (5/16") being observed. Also collision and rust repairs can result in considerable movement of structural members. A couple of examples of the typical inaccuracies introduced by rust repair work include; lateral shrinkage when adding new floor sections and lateral spreading when adding a new tunnel. New floors often entail new seat boxes. Many installers use the seat mounting holes in the seat boxes to align the replacement floor sections – this is hideously inaccurate.

To accommodate these unknown variables, all RRS mounts and frames are manufactured for ease of fitment and allow for significant chassis variations. However they may require jacking into location or some deft persuasion with a plastic-faced hammer or heavy rubber mallet.



Step No.01

Back in the 60s, Ford was none too particular with regards to the application of sound body deadener. All the RRS bolt-in crossmembers, mounts and frames are a precision fit. Large, random deposits of body sealer and the like, along with large spot weld 'dags' or welding 'flash' will affect the fit. Therefore, thoroughly check all areas where RRS brackets and mounts will fit up and remove and clean or grind smooth as necessary. Also before beginning the installation, carefully check the chassis rails and floor for accident damage or corrosion. A creased or crinkled rail is a telling sign of a prior collision. Once again, such damage will affect fit, repair any damage where necessary.



Step No.02

Although the installation of the RRS 3-Link is being shown here with no engine or gearbox in place, it is designed to be installed with these components in place. After stripping the vehicle of the old, leaf springs, shocks and differential housing, remove both the front seat and front carpets. Using some sort of jacking device, lift and place the Torque-Arm front crossmember in position. (*Note: simply pulling the carpets back after removing the seats, will often suffice.). The Torque Arm and Torque Arm crossmember must transfer all the torque that the engine and gearbox are applying to the differential. RRS has designed the arm and accompanying crossmember to handle up to 1000ft/lbs of torque.



Step No.03

Give the crossmember a couple of good sharp strikes with a soft-face hammer or rubber mallet to ensure its sitting hard against the back of the seat boxes. Similar hammer strikes will be needed on a number of mounts, to ensure proper seating. When doing so, do not use a metal faced hammer as this will damage the powder coating and allow corrosion to propagate.

(*Note: if your vehicle is fitted with aftermarket chassis connectors, it may be necessary to remove the alignment tabs (see arrow) to facilitate fitment of the torque arm mounting crossmember. Under these circumstances, the crossmember would mount in the same location as if the tabs were butted up against the end of the sub chassis.



Step No.04

With the crossmember held firmly in place via a jack or gearbox stand, drill the four, vertical mounting holes with the long 5/16" drill bit (supplied).



Step No.05

This thick strip of metal is a load-spreader plate. It's designed to reinforce the surrounding area to inhibit stress risers from occurring – which in turn leads to metal fatigue. RRS supplies a number of specific-fit load-spreaders for a number of the 3-Link's mounts, frames and brackets. It's imperative they're all installed correctly. The load-spreader plates (left and right) are positioned atop the torque arm mounting crossmember – which is located under the front seats. Lightly tension the bolts while drilling the holes – for both sides. With all the holes drilled and all the bolts in place (complete with washer under the Nylock nut - see next step), progressively tighten (left to right as well as front to back) to 25ft/lbs of torque. *Note: No washer is required on top of the load spreader plate.



Step No.06

With the four vertical bolts on each side installed and torque'd to specs, drill the horizontal, 3/8" mounting holes. Drill through both sides of the chassis box section.



Step No.07

The 3/8" hole on the outer side of the box section now needs to be opened up to 17mm (11/16). A Unibit or Step-Drill is ideal for this operation. *Warning: do not open up the hole on the inside of the box section – only the outer hole.



Step No.08

Slip one of the heavy-duty crush tubes into each outside hole. Install the 3 1/2" x 3/8 bolts along with a washer (on the inside) and a Nylock nut. Progressively tighten to 30ft/lbs of torque.



Step No.09

Unbolt the original pinion snubber bump rubber. One of the major advantages of the RRS 3-Link rear suspension system is the elimination of the dramatic pinion angle change under aggressive acceleration. This dramatic change (up to seven degrees of rotation) is inherent in all factory leaf-spring systems. Ford installed this pinion snubber to prohibit diff pinion from contacting the floor under these circumstances. The RRS 3-Link has been designed to limit pinion angle change to just 1.78°, therefore the snubber rubber is no longer needed.



Step No.10

Note raised panel in the centre of this panel has a square slot stamped into it. This slot is designed to accommodate a push-in-style rubber – i.e. same as the OEM bump rubbers used on the left and right chassis rails. The OEM panel never featured this slot, rather it used a bolt in snubber rubber. Therefore this slot denotes this panel as an aftermarket replacement piece. Many versions of this aftermarket panel do not incorporate the threaded summer rubber holes. If your panel does not incorporate the two 5/16 UNC OEM threaded holes (arrows), drill and tap them as necessary. The RRS 3-Link turns this area into a load-bearing point. Inspect to ensure that it's in good condition.



Step No.11

The large 5/8 UNC bolt at either end of the coil-over mounting brace runs through the original shock-mount holes. As the bar is slipped into place, have someone thread the nuts onto the bolts a few turns (do not tighten yet) to stop the bolts from slipping out. Prior to installing the coil-over brace, carefully inspect the shock mounting holes for damage and fatigue cracks. Such damage often results from the installation of Aussie Falcon shocks – which look identical but are somewhat longer. Consequently the shocks bottom out before the diff bottoms out on the bump stops – which in turn hammers out the shock mounting holes. Severe axle tramp, liberal body articulation and over tightened shock mounting rubbers can all lead to shock mounting hole damage and failure as well.



Step No.12

Ensure the flat flange (arrow) sits flush against the body and that the holes at either end line up with the original shock mount holes. It is not uncommon to have to clean away underbody sealer and spot weld dags from this area to allow the adjustable plate to sit flush against the body.



Step No.13

The bevel on the large, load-spreading washer must face upwards. Although this is an extremely large (5/8) bolt, it's clamping onto sheet steel. Therefore the 15/16 Nylock nut should only be tightened to a moderate 65ft/lbs of torque



Step No.14

Time to install the innovative RRS torque-arm onto the differential. With the housing laying on its back, remove the five nuts (shown) securing the centre section and replace them with the unique RRS stud extensions – don't forget to include the supplied lock washers under each stud extender. *Note: make them finger tight only at this stage as it makes lining up the holes in the arm easier. And be sure to thread the lock nuts (arrow), as far down the top tread as they will go. OEM centres relied on copper washers to stop oil from seeping out of the centre section mounting bolts, while aftermarket centres are virtually all spot-face machined to create an oil-tight seal. Either way, add a dab of high-temperature silicone sealant to the base of each stud extension to ensure an oil-tight seal – do not (under any circumstance) use a washer (of any kind) under the stud extenders.



Step No.15

Loosen and remove the five bolts that secure the pinion. With the bolts removed, check that each of the threads are clean and undamaged. The RRS supplied pinion bolts require full thread depth and full thread engagement. Run a 3/8 UNF bottom tap down each hole to verify each thread is free of debris and clean to full depth – as well as threaded to the very bottom. Blow out any particles using compressed air. *Warning: Some nine-inch pinions do not feature a fully machined face (arrow) – which can lead to torque arm misalignment. If the pinion is spot faced it will need precision machined washers (call RRS). However if the pinion is totally un-machined it will need machining. Also, if your pinion features an integrally-cast pinion snubber, this will also need machining off.



Step No.16

RRS supplies new longer, 3/8 UNF Allen-head bolts – to accommodate for the thickness of the torque-arm's mounting plate. Before installing these grade-eight, high-tensile bolts, apply a medium-strength thread locking compound (like Loctite 243, which does not require heat to remove) to ensure the bolts don't work themselves loose.



Step No.17

Locate the torque arm over the five stud extenders, then thread in the longer RRS pinion mounting bolts. Tightening the pinion bolts to the correct torque is critical. Use a calibrated torque wrench to torque them up to 32ft/lbs.



Step No.18

After the pinion bolts are torque'd up, use an open-end spanner to tighten the RRS stud extenders. These should be tightened to around 30ft/lbs of torque.



Step No.19

Run the top nuts (A) down and lightly nip them against the torque arm's mounting flange – do not overly tighten them. Now run the nuts on the underside of the mounting plate (B) up and tighten them up against the underside of the mounting plate. This torque arm mounting arrangement not only secures the torque arm, but forms a pinion support cradle that gives it a considerable amount of reinforcement



Step No.20

With the torque arm mounted, it's time to install the two lower control arms. Before installing the lower control arms, lubricate both faces of the urethane bush with graphite grease – this will prevent them from squeaking and from tearing in service. You'll note the two bushes on the lower control arm are different diameters, the smaller diameter bush installs into the differential housing.



Step No.21

Slip the arm into place and tighten the bolts to moderate 32 ft/lbs of torque. This is pivot point hence therefore it should not be overly tightened – the Nylock nuts will prohibit the fastener from working loose.



Step No.22

The 3-Link is now starting to take shape. Not only does the thick mounting plate on the RRS torque arm act as a pinion girdle, its design also increases the overall strength and rigidity of the differential housing itself.



Step No.23

Once mounted in the car, it's difficult to install the countersunk bolts that secure the lower shock mounting clevis. Therefore it's best to do this while the housing is out of the car. The four holes allow for five different height settings. In the fully up position, only the two lowest holes in the mounting clevis are used. With stock wheels, this position will raise the ride height 1.5-inches. From there, moving the clevis down one bolt hole higher lowers the ride height a little over one inch.

In the fully down position, only the two upper holes in the mounting clevis are used. With stock wheels, this position will lower the ride height by as much as 4.0-inches. This setting is not legal for road use and is intended for racing applications. Always consult your state registration body for legal limits on raising or lowering your vehicle.

Showing new clevis mount + two height settings



Step No.24

The lower control arm, front bush bolts into the original spring eye mount. Due to the dimensions of the internal crush tube, the bush is quite a snug fit. It too will require a few persuasive taps with a soft face hammer or rubber mallet to make it slip into position.



Step No.25

To align the holes, use a spike or screwdriver of a smaller OD and manipulate it around until the holes line up.



Step No.26

Even when accurately aligned, it will normally take a couple of taps with a soft hammer to knock the bolts into place. *Note: For this mount, use the original leaf spring bolts and OEM nuts. Inspect both for impairments, if either exhibits any sign of damage replace them. Tighten nut to the factory specifications or around 42ft/lbs



Step No.27

The over-centre link joins the RRS Torque arm to the torque-arm cross member – its design to accommodate for the difference in the path lengths travelled by the torque arm and lower control arms as the differential housing moves through its full range of travel. Screw the over- centre link's Heim joint into the end of the torque arm until half the thread is engaged – then nip up the lock nut.



Step No.28

Using the measurements taken before disassembling the leaf spring rear end (and incorporating any desired changes. Move the differential housing to the chosen desired ride height. Adjust the lower Heim joint (arrow) until the over-centre link is perpendicular.



Step No.29

With the diff still at ride height, you now need to adjust pinion angle. Moving the top bolt up and down will set the pinion angle (for the desired ride height). As previously mentioned, one of the advantages of the RRS 3-Link is the fact that it limits pinion angle change under acceleration (as well as reducing nose dive under braking). Therefore the RRS 3-Link needs considerably less, static pinion angle than the leaf spring's original 3.5-degree setting. Adjust the top bolt so the pinion is 1.5 degrees down at the chosen ride height - never set the pinion facing upwards.



Step No.30

Your RRS 3-Link should be looking something like this now.



Step No.31

The 3-link's Torque arm will closely hug the tail shaft once installed. If your engine and gearbox are installed, check now for adequate clearance – it should be a minimum of 10mm at all times from full bump to 180mm of droop.



Step No.32

Next up is the watts linkage mounting frame. The section that extends down is called the centre leg (A). The fore-aft position of this centre leg is critical, as space between the watts linkage propeller (see Step No.49) and the back of the diff (pumpkin) is quite tight. This frame must withstand all the lateral loads that are applied to the car by the rear tyres – hence it's substantial construction.



Step No.33

There is one of these plates on the inside of either chassis rail, they are for the factory exhaust mounts and must be removed as they foul the Watts linkage mounting frame. They're attached to chassis rail via five spot welds; three of the spot welds can be accessed with a spot weld drill, the two remaining ones are inaccessible. Use a thin cold chisel to break these two inaccessible spot welds and remove the plates.



Step No.34

After 40-odd years of service, your average Mustang sheet metal would have moved around quite considerably – this is on top of the original, loose manufacturing tolerances. Therefore the Watts linkage frame has been deliberately designed to allow it to sit in varying positions. Determining the correct positioning of this frame is critical as there is a minimum allowable clearance between the centre leg and the back of the diff pumpkin. With the frame held up in place (via jack or body clamps), rock it back and forth to ensure the flat area (A) sits snugly against the boot floor panelling directly in front of the gas tank.



Step No.35

The distance from the centre leg to the back of the diff pumpkin needs to be a minimum of 55mm (2.25") – see arrow.



Step No.36

The frame has a tendency to pull in towards the diff as the mounting bolts are tightened. Therefore, once you've got the frame in the correct location and orientation, mark the chassis rails with a felt tip pen – if you don't wish to mark the paint a strip of masking tape can be used. The markings allow you to gauge whether any movement is taking place. This will become clear as you add the chassis wedges in Step No.43.



Step No.37

The Watts linkage frame needs to be held firmly in place while the mounting holes are drilled. It's recommended that you use a jack or body clamps to hold the frame tight. Begin by drilling the vertical holes in the inner side-support plate, with a 5/16 drill bit.



Step No.38

To ensure the holes stay aligned while drilling, loosely and temporarily install the bolts for the load spreader plate (the long plate sitting in the foreground) after drilling each hole.



Step No.39

Once the three holes are drilled, remove the three bolts and install the load spreader plate. Be cautious of moving the frame when the bolts are removed as the holes can be difficult to re-align. Note in the final installation, the bolts are threaded in from the top (unlike seen in the previous step) and ensure each bolt has a washer under each Nylock nut. Lightly tension the bolts to 18ft/lbs, then repeat drilling and fastening the other side.



Step No.40

There is a second side-support plate on each side that mounts on the outside of the chassis rail (outer side-support plate). With the three horizontal clamping bolts loosely installed and the outer side-support plate held firmly against the chassis rail, drill the three vertical mounting holes as shown. Once again temporarily install a bolt after each hole is drilled to stop the support plate from moving out of alignment while drilling the subsequent hole.



Step No.41

Note in the previous step how there was a noticeable gap between the inner and outer side-support plates. This allows the two bracing plates to firmly clamp the rail once the three horizontal bolts are tightened. Tighten these bolts over several progressive steps to minimise distortion in the side-support plates. You'll note in Step No.45 that once all three bolts are tightened there's very little distortion in the side-support plates and there's absolutely no play between the bracing plates and the chassis rail.



Step No.42

Note the gap above the triangle corner plate in the watts linkage frame (arrow). This gap allows the watts linkage frame to rotate, thus adjusting the gap between the centre leg and the diff pumpkin.



Step No.43

To hold the desired gap firm, RRS supply three chassis wedge plates of differing thicknesses. Select the plate (or combination of plates) that attain the correct centre leg to diff pumpkin gap and insert them into the gap.



Step No.44

Drill the three mounting holes on both sides and insert the bolts into place. As you begin tightening the mounting bolts, moving from left to right and back again several times will ensure the frame bolts up evenly and squarely.



Step No.45

This is what it should look like once it's all bolted up tightly.



Step No.46

The watts linkage outer pivot locators (see arrows) can be mounted either before or after the differential housing is installed in the car. Note how they both mount to the diff using the same two top holes, with one facing up and the other facing down.



Step No.47

Assemble the Watts linkage's two horizontal arms and the centre propeller (A) as shown here. The two centre pivots that attach to the watts linkage propeller are self lubricating Heim joints and do not need lubrication, however the two outer pivots (B) use urethane bushes and do need lubrication.



Step No.48

The large pivot shaft bolt in the centre of the Watts linkage propeller screws into the one of the three threaded holes in the centre leg (See step No.32) via a 6mm Allen wrench. With the differential housing set at the desired ride height, select the centre leg hole that's closest to the horizontal centreline of the axle tubes (see dotted line).



Step No.49

With the differential still set at ride height, adjust the Watts linkage's two horizontal arms so that the propeller is held in an accurate vertical orientation. Having the centre propeller in an accurate vertical attitude is critical to the effective operation of the watts linkage.

To adjust their length of the horizontal arms, loosen the lock nuts on the centre, two Heim joints. Remove the bolts from the outer mounts and drop the arms. Turning (screwing) the arm clockwise makes it shorter, anticlockwise makes it longer.



Step No.50

This what the assembled watts linkage should like once installed. Note the two horizontal arms should be close to parallel and the centre propeller vertical.



Step No.51

Adjusting the length of the Watts linkage's two horizontal arms, allows the differential housing to be adjusted laterally across the car. Using the method described in Step No.49, lengthen the arm on the side you want differential to move across too, while shortening the opposite arm an identical amount *Note: making equal, but opposite, adjustments to either side will keep the centre propeller in its vertical orientation, while laterally moving the housing. Re-install the two horizontal arms. It may take several adjustments to accurately locate the housing in the centre of the vehicle. Loose 60s manufacturing tolerances combined with 40-years of use, can result varying panel alignment. Therefore to centre the differential in the car, use the sill rail as your reference point along with a straight edge off the housing end or axle flange. Once centred in the car, some may choose to check the housing to wheel arch measurements to see of the wheels and tyres will sit equidistant from the guard lips. Do not be surprised if these measurements are different – especially if the car has ever had a rear-quarter replacement. Do not adjust the differential to be in the centre of the wheel arches, as this will make the car 'crab' down the road. Rather, have the wheel arches corrected. A guard roller (as used by many large tyre shops) is capable of moving the guard lips up to 12mm (1/2-inch). Otherwise any competent body shop will be able to make the necessary modifications. Wheel alignment machines will give very accurate measurements of differential location, fine tuning the housing's location may be necessary (and desirable) during the wheel alignment.



Step No.52

You can see here how close the Watts linkage propeller comes to the diff pumpkin. If the rails are tweaked (as a result of a collision or rust repair work carried on the rails) the propeller can contact the pumpkin – this is must not be allowed to happen, otherwise catastrophic mechanical failure can occur. Move the housing through it's full range of travel to ensure there's a minimum of 10mm clearance at all times. This is also a good time to check tail shaft clearance through the full range of travel. See notes on tail shaft length along with tail shaft fitment in regards to the RRS 3-Link at the end of this installation guide.



Step No.53

While the coil-over shocks are shipped pre-assembled they require pre-load adjustment prior to (and again after) installation. Prior to installation, the lower spring saddle, or collar (A) must be adjusted until it lightly contacts the spring – this ensures the spring is captive when the suspension is at full droop. Once the lower spring saddle is adjusted, nip up the locking collar with the supplied spanners. *Note: it takes very little tightening of the lock-collar to ensure the two threaded collars do not move (rotate) when in use. Each unit features standard 64mm (ID) coils, allowing different spring rates to be custom ordered. The supplied, high-quality silicone springs are specified for sports-orientated ride.



Step No.54

When installing the coil-over-shock units, be sure to insert the spacers (see arrows) on either side of the lower mount. These are necessary to stop the shock from binding within the mount. Tighten the bolt up to 45ft/lbs of torque. Ensure the shock valving adjuster knob is facing inwards on both sides. Adjusting this knob changes the damper's bump and rebound rates allowing you to fine tune the suspension to your desired application and preferential ride quality.



Step No.55

Once installed the shocks should look like this. Once you get the car back on the ground, set it up with ½ a tank of fuel and the driver - or a simulated weight in the driver's seat. If you find that the ride heights differ from left to right, you can raise the low side but adjusting the spring seat collars upwards on the low side. Do not adjust the high side down as the spring will no longer be captive under full suspension droop. If you wish to lower the car you must set the lower spring mounts to a lower position (see Step No.23). Once again due to inaccuracies in the body work, measurements from the guard lip to the axle centre line may not result in a level riding car or the body up the



Step No.56

With the RRS 3-link installed and adjusted, go over the entire installation and re-tension all the bolts. For the vehicle's maiden voyage, avoid busy and major roads until correct operation can be verified. In the first 1000km, there will be much settling in, therefore it's vitally important that all the fasteners are once again need re-tensioning. This checking regime will ensure a long service life for the installation and the 3-Link's componentry. While the RRS 3-Link system allows plenty of room for generously-sized exhaust systems, it may require some adjustments to clear the various linkages and coil-over shock units – most notably the existing hoops that run over the differential housing.

TAILSHAFT LENGTH & FITMENT

Also, with regards to tailshaft length, the RRS 3-Link works in the opposite way to the factory leaf spring set-up. Now as the differential housing is allowed to droop, the tailshaft length gets shorter (this is opposite to the leaf spring set-up). This can make it difficult to install the tailshaft when the differential housing is in the full droop position. Also when the shocks are disconnected, the differential housing can drop down further than normal. This extra travel can make the slip yoke bottom out in the gearbox. If you can't install the tailshaft at standard droop, drop the bottom bolt out of each coil-over shock unit, raise the differential housing up to near full bump and install the tailshaft. Now lower the housing and re-installed the shocks. With the suspension at it's natural full-droop position (i.e. shocks installed), ensure the tailshaft still has a minimum of 10mm of end free play. *Note: If your Ford has been modified, it may not have the correct length tailshaft installed. This can occur for many reasons. Different bellhousings, different slip yokes, early (short) or late model (long) C4 rear extension housing and physically the wrong tailshaft installed in the vehicle. With the RRS 3-Link installed and the suspension at full bump, there should no more that 25mm of slip yoke protruding out of the back of the gearbox. While at full droop there should be at least 8mm of free play (slip yoke travel). Once the installation is finished, go over and double check and re-tension all the bolts. Take it for a test drive and re-tension all the bolts once again. In the first 1000km much movement and settling takes place, so it's vitally important that all the bolts be re-tensioned yet again after this period.