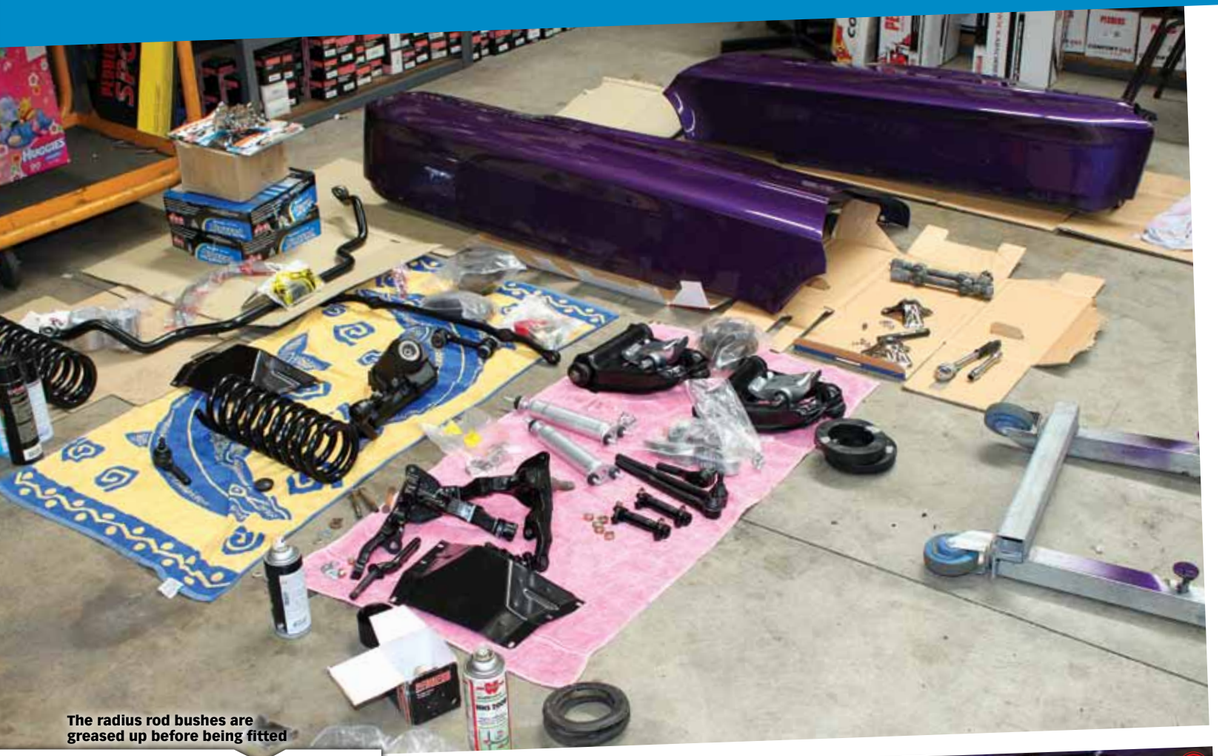
STOP AND TURN

WORDS AND PICS BY ROY VELARDI

Suspension and brake upgrades for your XW-XF Falcon

As the most common Falcon built featured in Street Fords is the XW-XF model, it was time to do an article on the front suspension and brake upgrades available. Our test car is an XY that will be used regularly on the street and strip.

After some back and forth from Pedders suspension we came up with several suggestions, and after some input from me (the owner and end user) we decided to lean towards a more drag strip oriented set-up that would still perform well on the street.



The radius rod bushes are greased up before being fitted

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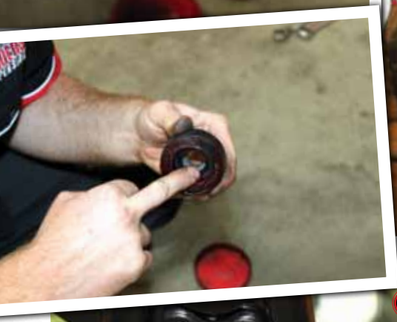

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Safety is paramount so make sure split pins are fitted to suspension items where required

2

The powder coated lower control arm is then fitted along with new camber pins

4

We used rubber bushed upper control arms as available on XA onwards Falcons. It basically means maintenance free operation and no squeaks

5

Here is the powder coated stub axle being fitted

THE INSTALL

COIL SPRINGS

Coil springs are the foundations of the modern lowering suspension system. Their spring rate and 'loaded' or installed height are fundamental in influencing chassis dynamics, vehicle balance and ride quality.

And of course, the loaded height determines the vehicle's ride height and its 'trim' or attitude. Pedders Sports Ryder coils are designed and engineered to the highest quality standards to deliver unrivalled performance, consistency and reliability.

SHOCKS

I chose the 90/10 Drag Shock for up front duties, which helps upon launch at the drag strip to transfer weight to the rear suspension/wheels. The rear suspension consists of a McDonald Brothers street triangulated four link kit with adjustable QA1 coil over shocks.

BUSHES

Suspension bushes play a critical role in car safety, ride comfort and handling. They are used to position and align suspension and steering components such as shock absorbers, swaybars, torsion bars, radius rods and control arms.

Bushes are made from a number of different types of materials, including rubber, urethane and synthetic rubber compound. Each type is chosen for a particular application based on a number of characteristics, including its general performance, feel and response characteristics, noise and durability.

BALL JOINTS

Ball joints are the pivot between the wheels and the suspension of a car. Ball joints play a critical role in the safe operation of a car's steering and suspension. Ball joints can also be found in most linkage systems for motion control applications, and should not be confused with spherical rod end bearings, which are a different design.

Sealed ball joints do not require lubrication as they are 'lubed for life', but standard ball joints must be lubed from time to time. It's best to inspect standard ball joints once a year.

SWAYBARS

A swaybar is usually a torsional spring that resists body roll motions. It is usually constructed out of a U-shaped piece of steel that connects to the body at two points, and at the left and right sides of the suspension.

The bar resists the bending through its stiffness..

Some anti-roll bars, particularly those intended for use in auto racing, are adjustable, allowing their stiffness to be altered by increasing or reducing the length of the lever arms. This permits the roll stiffness to be tuned for different situations without replacing the entire bar.

Pedders really take care of your car when fitting suspension. Here Alan is using the spring compression tool

6

New spring saddles and Pedders 90/10 shocks were fitted. The springs are 6 cylinder versions to allow for maximum lift when drag racing with the sway bar removed

The tripod is then refitted along with the new shock rubbers and washers

7

A new 27mm sway bar, tie rods, idler arm and pitman arm were fitted and is all Pedders suspension gear

8

SOURCE:

www.pedders.com.au

PEDDERS SUSPENSION

XW-XF FALCON & 1968-1973 MUSTANG DISC BRAKE UPGRADE KIT

Are you in need of a bolt on brake upgrade kit for your Falcon or Mustang? If yes then read on.

The Ford Falcon and Mustang are fitted with 287mm ventilated discs along with heavy steel single piston callipers. While this setup worked well back in the '70s including long stints at Bathurst and on the drag strip, it's nowhere near advanced as the brake systems available for these cars today.

With any performance upgrade to making the car go faster the same needs to be done in the stopping department.

I looked around for a quality brake upgrade kit that could be bolted on easily and would allow me to retain the 15' wheels I have. It didn't take long to find one that suited my needs and budget. Hopper Stoppers has just the kit.

The kit is available with smooth, slotted, and drilled and slotted rotors. They are 300mm in diameter and are clamped by AU Falcon alloy calipers. They come with everything you need and a full set of detailed instructions that include photo's to make it even easier to understand.

THE KIT

The Hoppers Stoppers kit comes with all the parts needed to complete the conversion including brake pads!

The kit being fitted is a 300mm disc kit with twin piston alloy calipers. The kit is a 100% bolt on affair and can be fitted just as easily at home with basic tools.

WHEELS

Some 15-inch wheels minimum are needed to allow the fitment of the kit. Contact Hoppers Stoppers if any more details are required on this aspect of the installation.

BEDDING IN

New discs and pads require bedding in when new. Ideally drive the car on a stretch of road that has minimal traffic.

Start by travelling at around 60km/h then gradually slowing the car by braking gently to around 10km/h then speed up again to around 60km/h. Repeat the procedure 3-4 times.

After speaking to Peter Koning from Hoppers Stoppers he informed me that the pads and discs will need at least 100km of driving to fully "bed in" and the brake performance will be further improved.

THE INSTALL


1 Apply high temperature bearing grease to the hub adapters


2 Grease the new wheel bearing sets by adding some wheel bearing grease to your hand then work the bearing along the grease


3 Fit the grease packed inner wheel bearings to the hub and install the grease seal by gently tapping it into place.

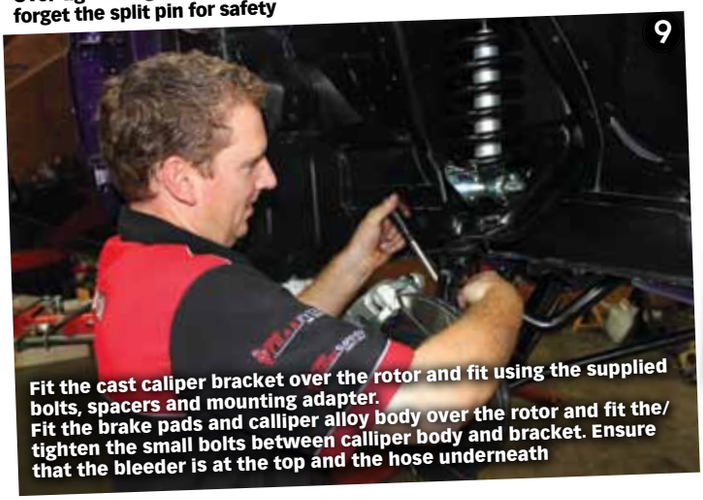

4 Install the hub onto the stub axle


5 Add the already greased outer wheel bearing


6 Refit the bearing tab washer and fit the centre nut tightening to the recommended preload. We tightened the nut tightly then backed it off half a turn. Over tightening will destroy the bearings easily. Don't forget the split pin for safety


7 Fit the grease cap by gently tapping the edge using a rubber mallet


8 Fit the disc rotor over the hub and install two wheel nuts to hold the disc in place while the caliper is fitted.


9 Fit the cast caliper bracket over the rotor and fit using the supplied bolts, spacers and mounting adapter. Fit the brake pads and calliper alloy body over the rotor and fit the/ tighten the small bolts between calliper body and bracket. Ensure that the bleeder is at the top and the hose underneath


10 Install the wheels and check for calliper clearance and check for brake hose clearance

SOURCE

HOPPERS STOPPERS

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www.hoppers.com.au