#### **THE 4x4 SUSPENSION EXPERTS**



### SUSPENSION



#### dobinsons.com

#### HEAD OFFICE

58 Hollingsworth Street, NORTH ROCKHAMPTON QLD 4701 Phone +61749277444

#### BRISBANE

30 Kremzow Road, BRENDALE QLD 4701 Phone +617 3205 6979

#### SYDNEY

Unit 2/63 Hartley Road, SMEATON GRANGE NSW 2567 Phone +61 2 4647 8295 MELBOURNE Unit 1/13a Abbotts Road, DANDENONG VIC 3175 Phone +61 3 9706 5200 ADELAIDE

25 Barndioota Road, SALISBURY PLAIN SA 5109 Phone +61 8 8369 1377

# **COIL SPRINGS**

## COIL SPRINGS



#### Dobinsons proudly boast one of the worlds largest range of coil springs including raised height and heavy duty 4wd springs, lowered performance passenger car springs, O.E. replacement springs and heavy duty springs for commercial vehicles.

As Dobinsons coil springs are manufactured in-house, Dobinsons can manufacture smaller quantities and in most cases there are many different coil spring options available for your vehicle. This ensures the customer receives the best spring to suit their application and avoids a "One Size Fits All" scenario, especially important when selecting the correct spring rates and ride heights. When matched with a set of corresponding Dobinsons Shock Absorbers, Dobinsons can provide you with unrivalled performance and handling.

#### MANUFACTURED WITH PRECISION

Each coil spring is precisely wound by a programmable logic computer to achieve perfect pitch. This precision is extremely important when manufacturing variable and progressive rate coil springs.

Engineered coil ends are designed to fit directly into the original vehicle mounting points without any modification.



#### THE LATEST TECHNOLOGY

Dobinsons new coil spring cold roller is the latest addition to the coil spring manufacturing process. Cold rolling coil springs dramatically decreases production time without compromising strength or durability, maintaining the high quality you expect from Dobinsons.



#### FULLY SCRAGGED & LOAD TESTED

All Dobinsons coil springs are load tested and scragged 100% to eliminate subsequent spring sag, and ensure they meet and maintain the required specifications. We also perform spring fatigue and hardness testing using in-house state of the art testing equipment.



#### **POWDER COAT FINISH**

A durable powder coat finish provides extreme protection against the elements.



# LEAF SPRINGS

## LEAF SPRINGS



#### DESIGN

Our design engineers ensure that all our leaf springs are designed specifically for each vehicle model, with consideration given to the load and height requirements for each application.

Design is one of the most important stages in the leaf spring manufacturing process, and with over 60 years of design and manufacturing experience, we recognise the importance of this.

Design features include Drawn, tapered and thinned leaf ends for even stress distribution over the entire spring pack, two stage spring design for the rear of most vehicles to achieve optimum ride and handling both laden and unladen and carefully selected leaf lengths and thickness's to maximize the spring life, comfort, load carrying capacity, wheel travel and performance.



#### SHOT-PEENED & SCRAGGED

Each Dobinsons leaf spring is shot-peened on the tension side of each life and completely scragged. This dramatically reduces the chance of sagging and breakage and doubles the expected working life of the spring. Random sampling from production is then also durability tested to ensure Dobinsons leaf springs will outlast the competitors.



#### HIGH QUALITY SPRING STEEL

Dobinsons<sup>™</sup> leaf springs are manufactured from only the highest quality raw materials. We understand the importance of selecting not only the highest quality spring steel, but also the correct grade that will give the longest life under the harshest conditions.





## LEAF SPRING ACCESSORIES

When installing leaf springs in a vehicle, there are a number of parts and accessories required to correctly fit the springs.

Dobinsons Spring & Suspension offer a wide-range of leaf spring accessories, including u-bolts, shackle kits and greaseable shackle pins and polyurethane bush kits.



#### U-Bolts

Dobinsons 4x4 U-bolts are made from high quality, 10.9 grade high tensile steel and supplied with hardened deep nuts for maximum clamping pressure and reliability. It is recommended that when replacing leaf springs that new u-bolts are fitted.

Supplied in anti corrosion zinc finish.





#### **Shackles and Pins**

Dobinsons Spring & Suspension's range of 4x4 shackles and pins have been designed and manufactured to maximize the life of both the polyurethane bushes and shackles. Incorporating a recessed twin hole greasable design to ensure both halves of the polyurethane bush receive even grease distribution. Greasing polyurethane bushes not only reduces friction and wear, it also reduces the chances of corrosion on the shackle pins and reduces squeaking. Dobinsons 4x4 shackles and pins are a heavy duty design and provide simple servicing through external grease nipples.

In some cases Dobinsons also provide anti-inverse shackles to prevent the shackles from inverting on lifted leaf spring vehicles



#### **Polyurethane Bushes**

Dobinsons Spring & Suspension's polyurethane bushes have been designed and manufactured from the highest quality raw materials and unlike other competitors have been designed to suit both Dobinsons leaf springs and the original vehicle leaf springs.

Polyurethane-Bushes Dobinsons Polyurethane leaf spring bushes provide a smooth comfortable ride and when combined with Dobinsons 4x4 greasable shackles provide a far superior service life than the original vehicle bushes.

Dobinsons polyurethane bushes feature unique internal diamond grease traps to maximize bush and shackle life.



# SHOCK ABSORBERS

0

Numerous Numerous

## TWIN TUBE NITRO-GAS

Designed, developed and tested in Australia by Dobinsons Spring & Suspensions', in-house suspension design engineers, Dobinsons 4x4 shock absorbers are designed and tested to perform in the harshest conditions right across the world.

As Dobinsons Spring & Suspension export to over 50 countries worldwide from their Australian head office, the importance of quality is at the forefront in the complete design and manufacturing process. This ensures every shock can withstand the blistering heat and corrugations of the Australian outback right through to the subzero temperatures of an Alaskan winter.

Dobinsons Twin Tube Nitrogen Gas charged shock absorbers are made from the world's highest quality external and internal parts sourced worldwide. They provide a significant increase in performance over the standard shock absorbers.

Originally equipped shock absorbers are prone to shock fade and when a vehicle is loaded simply cannot cope with the additional weight and the harsh condition that 4x4 owners love to put them through.

Dobinsons twin tube shock absorbers feature larger bodies, larger bores and increased valving performance to dramatically improve vehicle handling and control and reduces shock fade.

Where possible Dobinsons design each part number to provide a longer shock absorber for more wheel travel, firmer valving for a more controlled ride and a larger body with increased oil capacity for cooler operation than the original vehicle shock absorbers.

Other hidden design features also include thicker external tube wall thickness up to 3mm on Dobinsons 4x4 struts where other brands use as small as 1.5mm.

Selected Dobinsons 4x4 struts also include single piece drop forged lower mounting stems to provide far superior strength and reliability.

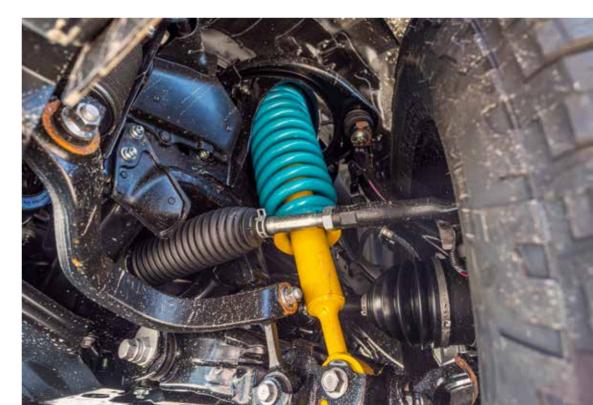
#### FEATURES:

- DIRECT BOLT-IN O.E. REPLACEMENT
- STEEL DUST COVER FOR ADDED PROTECTION\*
- **35MM & 32MM BORE SIZE**
- DOUBLE CHROMED 18MM ROD
- 60MM & 51MM BODY SIZE
- HIGH QUALITY FUCH'S OIL

- NOK MULTI-LIP SEALS
- TEFLON PISTON RINGS
- **LONGER EXTENDED LENGTHS\***
- **TWIN-TUBE BIG-BORE DESIGN**
- VEHICLE & WEIGHT SPECIFIC VALVING
- NATURAL RUBBER BUSHINGS

\*Where Applicable





# MONOTUBE SHOCK ABSORBERS

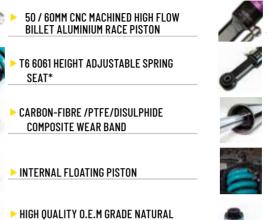
Dobinsons IMS monotube shock absorbers are designed for next level performance over twin tube shocks in those hot, harsh, demanding conditions. By utilising the monotube design, Dobinsons IMS shock absorbers are able to resist fade far longer on corrugated roads, long or hard working 4WD trips, towing or racing conditions. Vehicle and weight specific valving provide the best in comfort and ride quality. Over 4 years of research, development and testing were undertaken to produce Dobinsons Monotube Internal Floating Piston Shock Absorbers. The IMS series introduces top quality build design and features to achieve the ultimate in performance and durability. to resist fade in even the most demanding conditions.

50mm and 60mm extra large bores provide the perfect housing for an enormous oil capacity and surface area Be sure to take full advantage of these performance engineered shock absorbers.





#### FEATURES:



**RUBBER BUSHINGS** 



\*Where Applicable



## MRR 3-WAY ADJUSTABLE

Built on the back of the race winning Monotube Remote Reservoir (MRR) shock absorbers, Dobinsons new range of MRR Adjustable shock absorbers combine the best in high performance race-bred Monotube technology, with an all new 3-way damping adjustment system to turn your 4x4 into the ultimate off-road machine.

> The new 6063 honed aluminium reservoir, revised light-weight floating piston, Carbon Fibre/PTFE/Disulphide composite wear band, improved 3-stage sealing system and the ability to run lower gas pressure with the addition of the reservoir compression adjuster, have combined to provide massive reductions in shock absorber friction, resulting in an improved vehicle ride and damping performance.

50mm and 60mm extra large bores, combined with remote oil reservoirs, provide the perfect housing for an enormous oil capacity and surface area to resist shock fade and maintain vehicle handling.

















CARBON-FIBRE/PTFE/DISULPHIDE COMPOSITE WEAR BAND FOR THE ULTIMATE IN LOW-FRICTION, LOW-WEAR PERFORMANCE

50 / 60MM CNC MACHINED HIGH FLOW

BILLET ALUMINIUM RACE PISTON

56MM / 66MM O.D. SHOCK BODY

SYSTEM

HOSES

PRECISION HONED TO +/- 0.04MM

3MM THICK HEAVY DUTY DOM SEAMLESS

UPGRADED 3 STAGE FKM-HNBR SEALING

TSUGAMI<sup>™</sup> CNC MACHINED COMPONENTS

FOR PRECISE TOLERANCES

PARKER™ BRAIDED HIGH PRESSURE

5140 HV900 HARD CHROME PLATED, HEAT











# **REMOTE RESERVOIR**

Dobinsons Spring & Suspension's range of 2.5" Adjustable Remote Reservoir Dual Rate Coilovers have been designed and manufactured with the highest level of performance and reliability in mind. Manufactured from high strength DOM 3mm wall steel tubing, Dobinsons Coil-overs utilise a 2.6"/66mm body, with a 2.35"/60mm high-flow CNC Machined T6 6061 Piston, designed to be fitted with 3" inside diameter coil springs.

> Dobinsons Coilovers feature a 3 way damping adjustment system - high and low speed compression adjustments located on the remote reservoir and rebound adjustment located at the base of the shock shaft on the lower mount.

> Combining features such as 3 way adjustability, hi flow CNC aluminium race pistons, finned reservoirs and ultra high strength shafts, Dobinsons Coilovers are the perfect fit for your coil-over converted daily driver or your full blown race rig. These featured packed coil overs utilize a seal and oil package designed with longevity in mind and will perform without the requirements of high frequency servicing. When combined with the 3 way adjustability for changes in vehicle loads or race conditions, Dobinsons coil-overs provide the ultimate in performance, reliability and tunability.

Dobinsons have a selection of 3 inch coilover coils available to suit Remote Reservoir Universal Coilovers.



12 STAGE

REBOUND Adjustment

20 STAGE LOW SPEED COMPRESSION ADJUSTMENT

Part Number	Extended (inch/mm)	Com- pressed (inch/mm)	Reservoir Length (inch/mm)	Thread Length (inch/mm)	Hose Length (inch/mm)	Rod Diameter (mm)
MRA92-A2510	29.45/750	19.48/496	10/250	8/200	19.6/500	22
MRA92-A2512	33.42/851	21.48/547	12/300	10/250	19.6/500	22
MRA92-A2514	38.49/980	24.00/611	12/300	12/300	19.6/500	22

Shorter leg available separately (MRA92-001) to reduce extended and compressed length by 20mm.

#### FEATURES:

- 5140 HV900 HARD CHROME PLATED, HEAT TREATED 22MM MICRO-POLISHED HIGH STRENGTH SHOCK SHAFT
- SHAFT MINIMUM TENSILE STRENGTH EXCEEDING 700MPA/100 PSI AND HARDNESS EXCEEDING 46HRC
- SHOCK BODY PRECISION HONED TO +/-0.04MM
- PARKER STEEL BRAIDED HIGH PRESSURE HOSES
- LIGHTWEIGHT CNC MACHINED LOW FRICTION FLOATING PISTON

- 3 STAGE FMK+HNBR LONG LIFE, LOW FRICTION SEALING SYSTEM
- PTFE LINED HIGH OUALITY SPHERICAL BEARINGS
- FULLY REBUILDABLE AND TUNABLE
- DUAL RATE DESIGN WITH HIGH OUALITY **SLIDER & CROSS-OVER RINGS**
- 64MM FINNED RESERVOIR (NOT PICTURED)
- **350V.L. HIGH PERFORMANCE DAMPING FLUID**
- T6061 CNC MACHINED ULTRA HIGH FLOW RACE PISTON



-

## ADJUSTABLE MONOTUBE STEERING DAMPER

HEAVY DUTY STEERING DAMPER

A SHOCK ABSORBER

Dobinsons Adjustable Monotube Steering Damper offers increased steering control and reduces unwanted steering forces in both directions normally found in conventional steering dampers. The through shaft damping system allows for even steering pressure for the entire travel of the shock in both directions.

- 56MM EXTRUDED AND CNC MACHINED 6061-T6 HARD ANODIZED ALUMINIUM BODY
- ► HARD-ANODIZED AND CLEAR COATED FOR A DURABLE FINISH
- EXTERNAL RESERVOIR DESIGN SEPARATES OIL AND HIGH-PRESSURE NITROGEN GAS
- BLACK-ANODIZED, CNC MACHINED 6061-T6 BILLET ALUMINIUM
- ▶ 5/8" HARD CHROME PLATED HEAT TREATED ALLOY STEEL SHAFT
- > 50MM HIGH-FLOW 6061-T6 CNC MACHINED PISTON
- > NATURAL RUBBER OEM STYLE BUSHINGS
- ▶ DIRECT REPLACEMENT FOR STOCK AND AFTER-MARKET LIFTS KITS
- ▶ 12 STAGES OF ADJUSTMENT
- ▶ DIRECT, BOLT-ON REPLACEMENT FOR EASY FITMENT
- ► VEHICLE & WEIGHT SPECIFIC VALVING
- ► NATURAL RUBBER BUSHINGS

#### AVAILABLE TO SUIT:

TOYOTA LANDCRUISER 80/105 (SS59A824), NISSAN PATROL GQ/GU (SS51A811), TOYOTA LANDCRUISER 79 SERIES

Dobinsons Spring and Suspension's range of 4WD steering dampers are the perfect addition to your Dobinsons suspension kit. Featuring a larger body size for smoother cooler operation and 50/50 valving Dobinsons heavy duty steering dampers ensure comfortable controlled steering operation, especially on vehicles fitted with raised suspension, additional accessories or larger tyres.

Dobinsons heavy duty steering dampers feature a massive 18mm chromed rod, 32mm bore and 50mm body with steel stone guard. End mountings are kept the same as the original vehicle mountings to ensure quick hassle free fitment.

AVAILABLE TO SUIT MOST POPULAR SOLID AXLE 4x4 MODELS.



## HYDRAULIC BUMP STOPS

Bolt-in and/or weld-in bracket kits available to suit Nissan Patrol, Toyota LandCruiser (76, 78, 79, 80, 105, 200), Prado, FJ Cruiser, Jeep Wrangler & Gladiator + more coming soon.



Bump stops are a critical component in a 4x4's suspension system. Dobinsons range of bump stops provide smoother, more controlled bottom out and allow extension of the bump stop position to protect long-travel suspension components during the full suspension travel.

Dobinsons race-ready Hydraulic Bump Stops combine an off-road racing inspired triple seal design, a 3mm thick EDP coated steel body and includes interchangeable Rubber or Nylon rod ends to provide smooth, quiet, improved bottom out control during the harshest impacts, with the ultimate in quality and longevity.

Dobinsons Hydraulic Bump Stops are available in different variations to suit a wide range of suspension set-ups and applications. Each application is different in its own right and vehicle owners have different desired outcomes.

Each Dobinsons Hydraulic Bump Stop includes an interchangeable rod end, with both super quiet rubber and hard nylon, as well as a removable dust cover for a stealth appearance.

Part Number	Body OD	Extended	Compressed	Stroke
HBS56-001	56	273	223	50
HBS66-002	66	304	247	57
HBS66-003	66	351	266	85
HBS56-006	56	238	188	50
HBS56-009	56	186	140	46



#### FEATURES:

- CNC MACHINED 50/60MM BILLET ALUMINIUM PISTON
- EDP COATED 3MM THICK 56/66MM STEEL BODY
- THREADED BODY FOR HEIGHT ADJUSTMENT
- SUPPLIED WITH BOTH INTERCHANGEABLE SUPER QUIET RUBBER ROD END & HARD NYLON
- 30/40MM MICRO POLISHED HARD CHROME SHAFT
- SLOW REBOUND VALVING TO PREVENT BUCKING
- REMOVABLE DUST COVER BOOT FOR STEALTH APPEARANCE
- **FULLY REBUILDABLE & TUNABLE**
- O-RING TRAVEL INDICATOR
- ► HEAVY DUTY EXTREME-RACE STYLE TRIPLE SEAL DESIGN
- NITROGEN GAS CHARGED & TUNABLE (100 TO 300 PSI)
- EXTRA SHORT DEAD LENGTHS FOR COMPACT FITMENT



# **ARMS & COMPONENTS**

Dobinsons

.

1/100

1'ER

1

1

1000

and it

55

### ALUMINIUM UPPER CONTROL ARMS

## TUBULAR UPPER CONTROL ARMS

Dobinsons Spring & Suspension's Aluminium Series Upper Control Arms are engineered to be camber adjustable for those vehicles that need it. Manufactured from 6082 T6 aluminium, Dobinsons Aluminium UCA's are designed to be stronger than OEM arms, while also looking good at the same time. Manufactured with maintenance free rubber bushes and balljoints, providing you with added piece of mind.

#### **AVAILABLE FOR**

Nissan Navara NP300 (2015-present) - UCA45-205K Toyota Hilux Revo (2015-Present) - UCA59-202K Toyota Prado 150 (2010-Present) - UCA59-203K

Coming Soon - Ford Ranger, LandCruiser 200 Series, LandCruiser 300 Series, Isuzu D-MAX/Mazda BT-50, Mitsubishi Triton, Dodge RAM, Toyota FJ Cruiser + more







Dobinsons Tubular Upper control arms are manufactured from 35, 36 and 38mm Chrome-Moly Tubing with an extra thick 5mm wall, for the ultimate in strength and reliability. When raising an IFS vehicle beyond 2" in the front suspension the wheel alignment geometry prevents a correct wheel alignment being performed. Dobinsons Upper Control arms are designed with up to 3° increased castor and increased camber to allow the wheel alignment to be corrected at larger lifts.

#### **AVAILABLE FOR**

Toyota Hilux Revo - UCA59-003K Toyota Hilux Vigo - UCA59-003K Toyota LandCruiser 200 Series - UCA59-001K Toyota LandCruiser 100 Series - UCA59-006K Toyota Prado 150 - UCA59-002K Toyota FJ Cruiser - UCA59-002K Ford Ranger PX2 - UCA19-004K Ford Ranger PX3 - UCA19-004K Mazda BT-50 Series II - UCA19-004K Dodge RAM DT & DS - UCA16-008K



#### **QUALITY BALL JOINTS**

Dobinsons Aluminium and Tubular Upper Control Arms both utilise 555™ OEM quality Ball Joints where available.





Dobinsons Spring & Suspension stock a wide range of suspension components, including: Panhard rods, swaybar extensions, control arms, diff drops, drop boxes, castor plates, castor bush kits and more.

When raised suspension has been fitted to a vehicle, it can alter the vehicles suspension, brakes and steering geometry and in some cases this requires additional suspension components to ensure the vehicles handling and performance isn't compromised. This is especially important in vehicles fitted with larger lift kits. The required alignment parts are outlined in the 4x4 suspension catalogue individual pages.

PANHARD RODS



SWAYBAR EXTENSIONS



TRAILING ARMS



**TORSION BARS** 





DIFF DROPS



DROP BOXES



CASTOR CORRECTION



STRUT TOP CAPS

**DRIVELINE & SUSPENSION** 

COMPONENT SPACERS



BRAKE PROPORTIONING VALVE EXTENSIONS



C.V. BOOTS - HIGH CLEARANCE



**QUICK-RIDE KITS** 

+ MORE

# **GVM UPGRADES**

FE)

14411

## **GVM UPGRADES**

If your vehicle carries a lot of weight for a living, or you are setting up for a big lap of Aus, chances are you are over your Gross Vehicle Mass (GVM) and you don't even know it.

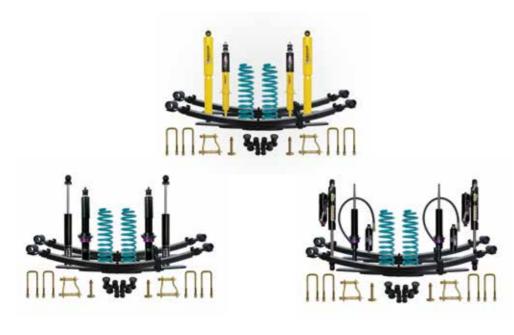
Common accessories and touring gear all add up easily, so don't get caught out being overloaded.

Dobinsons GVM Upgrades are Federally Approved and when fitted preregistration, your vehicle will be legal Australia-Wide

#### THREE DIFFERENT SHOCK ABSORBER OPTIONS

Dobinsons GVM Upgrades are available with Twin-Tube Nitro Gas, IFP Monotube Shock Absorbers (IMS) and MRR 3-Way Adjustable Shock Absorbers.

Different coil and leaf spring options available (selected vehicles).



#### **TOYOTA LANDCRUISER VDJ79** FORD RANGER PX3 4.5 DIESEL (DUAL CAB & SINGLE **GVM INCREASE TO 3500KGS** CAB) **GVM INCREASE TO 3900KGS** TOYOTA LANDCRUISER 76 SERIES ISUZU D-MAX 3RD GENERATION **GVM INCREASE TO 3700KGS GVM INCREASE TO 3600KGS** TOURING AND CONSTANT LOAD OPTIONS AVAILABLE. TOYOTA LANDCRUISER 78 SERIES MAZDA BT-50 3RD GENERATION **GVM INCREASE TO 3600KGS GVM INCREASE TO 3900KGS** TOURING AND CONSTANT LOAD OPTIONS AVAILABLE. **TOYOTA HILUX 8TH GENERATION GVM INCREASE UP TO 3500KGS** COMING (DEPENDING ON MODEL) SOON NOTES



#### TOYOTA LANDCRUISER 300 SERIES



#### Manufacturers and Suppliers of...

Improved 4x4 Leaf Springs
Performance Coil Springs
Greasable 4x4 Shackles & Pins
Polyurethane Bushes

Shock Absorbers U-Bolts & Nuts

4x4 Torsion Bars 4x4 Accessories



#### HEAD OFFICE

58 Hollingsworth Street North Rockhampton QLD Australia 4701 **Tel: +617 4927 7444** Email: admin@dobinsons.com

#### SYDNEY BRANCH

Unit 2 / 63 Hartley Road Smeaton Grange NSW Australia 2567 **Tel: +61 2 4647 8295** Email: sydney.sales@dobins<u>ons.com</u>

#### **BRISBANE BRANCH**

30 Kremzow Road Brendale QLD Australia 4500 **Tel: +61 7 3205 6979** Email: brisbane.sales@dobinsons.com

#### **MELBOURNE BRANCH**

Unit 1 / 13a Abbotts Road Dandenong South VIC Australia 3175 **Tel: +61 3 9706 5200** Email: melbourne.sales@dobinsons.com

#### ADELAIDE BRANCH

25 Barndioota Road Salisbury Plain SA Australia 5109 **Tel: +61 8 8369 1377** Email: adelaide.sales@dobinsons.com

#### www.dobinsons.com



**Proudly Supplied by:**