



## 4x4 Spring Catalogue

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**2010 - VERSION 1**

**COIL SPRINGS, LEAF SPRINGS  
& TORSION BARS**

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# LOVELLS

## **SUSPENSION**

### **FOR THE RIDE OF YOUR LIFE**

#### **The Company**

Established in 1930, Lovells Springs is Australia's most experienced manufacturer of replacement coil and leaf springs for the automotive industry. Lovells have gained reputation as being at the forefront of spring design and manufacturing techniques as well as high quality suspension components by committing to the finest quality materials, skilled staff, computer spring design and test equipment, PLC (programmable logic controlled) manufacturing equipment and extensive road and race tested products to ensure "THE RIDE OF YOUR LIFE".



#### **Why Springs Are Replaced**

To achieve improvements in the following areas:

- ◆ **Ride Height**
- ◆ **Handling**
- ◆ **Load Carrying Capacity**
- ◆ **Comfort**

#### ◆ **Ride Height**

To restore the vehicle to its original standard ride height, when the original springs have sagged or weakened.

To lower the centre of gravity of the vehicle for enhanced appearance, performance and handling characteristics.

To raise the vehicle for increased ground clearance and load carrying capabilities eg. towing, LPG tanks, load bearing accessories.

#### ◆ **Handling**

Lovells Springs ratings exceed that of original equipment springs by around 10%-50%, therefore handling is dramatically improved by controlling excessive body roll and brake dive.

#### ◆ **Load Carrying**

Lovells offer a vast range of heavy duty uprated coil & leaf springs to increase the vehicle's load carrying capabilities and maintain stability when laden. These springs should be selected where a vehicle carries heavy loads, is used for towing, is fitted with LPG or larger fuel tank and other load bearing accessories i.e. bull bar, winch etc.

#### ◆ **Comfort**

Lovells Springs offer a vast range of variances in progressive and linear rate spring design, ratings and ride height options to enable the vehicle to be enhanced to the customers exacting comfort requirements.

#### **Spring Manufacture**

##### **Coil Springs**

**Lovells Coil Springs** are designed as a superior replacement part for mass produced O.E. (Original Equipment) coil springs.

Lovells springs are designed on advanced computer aided design programs and sophisticated inhouse test machines, before extensive road testing and performance checks to ensure the ultimate performance of the product.

Lovells Springs are manufactured in accordance with ISO9002 to the highest standards in our own modern manufacturing facilities. All Lovells Springs are manufactured to exceed the appropriate Australian Standards using Australian made Onesteel (previously BHP) micro alloy spring steels supplied to AS1447-1991. All heating and tempering furnaces are electronically controlled to precise temperatures and each spring is formed on PLC machines.

All coil springs are shot peened to eliminate material surface defects and are powder coated with Lovells Blaze Blue © before being final inspected, labelled and packaged in a protective display box.

Lovells coil springs are available in linear rate (Fig A.) or variable rate (Fig B.) design depending on the application.





## Spring Manufacture (Continued)

### Variable Rate Coil Springs

The principle of variable rate coil springs is as follows: Spring rates increase when you need it (i.e. cornering and load carrying) and decrease when you don't (i.e. normal comfort driving).

The simple rule is "less coils in a spring, the higher the spring rate". As the spring compresses under load the gathered coils come into contact and become inactive thus increasing the spring rate.

Note: Variable rate coil springs are not necessary for all vehicles and are only to be used in vehicles recommended by Lovells.

### Leaf Springs (Laminated Springs)

As per Lovells coil springs, leaf springs are designed as a superior replacement part for mass produced O.E. (Original Equipment) leaf springs.

Practically all leaf springs used on cars, 4x4's and trucks are of the semi elliptic type. The semi elliptic spring has function of not only a spring, it can dampen vertical deflection, supports the vehicle, positions the axle and cushions both driving torque and brake reaction.

Lovells leaf springs are once again manufactured using premium quality OneSteel micro alloy steel.



Leaf springs are cambered on specially designed machines before being assembled, rate tested and inspected. All leaf springs are enamel dipped in Lovells Navy Blue ready for despatch.

### Ride Height Options

Vehicle ride heights (Eye Brow Heights) are measured vertically from the centre of the wheel hub to the edge of the guard.

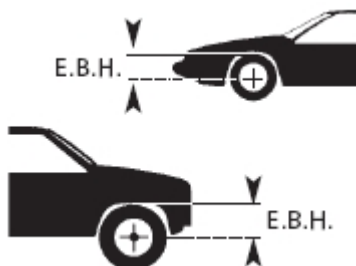
Vehicle ride heights are approximate only and can vary depending on:

- ◆ Age of vehicle
- ◆ Load Bearing Accessories (i.e. bullbars, winches, extra fuel tanks, fridges, spare wheel carrier etc.)

When selecting springs all of the these factors must be taken into consideration.

### Eye Brow Height

Measuring of the "Eye Brow Height - E.B.H." is illustrated in the following diagram



## FRONT / REAR

<i>Designation</i>	<i>Approximate Ride Height Change</i>
<b>Std Height</b>	Standard (Heavier Spring Rate than Original Equipment)
<b>Raised</b>	Raises vehicle by approx 25-50mm OR Maintains Std Height when vehicle is Fitted with Load Bearing Accessories
<b>Raised H/Duty</b>	Maintains raised height when vehicle is fitted with Load Bearing Accessories—increasing load carrying capacity

### Additional Part No. Prefix

**HD** - (Heavy Duty) extra heavy duty for Increased load carrying capacity ie. Larger fuel tanks, LPG tanks, camping / trekking cargo

**LTO** - (Long Travel Option) suits 4x4 vehicles with aftermarket shock absorbers which are normally longer than original and enable coil spring to remain trapped.

LTO part numbers also suit O.E. original length shock absorbers.

**HDLTO** - (Heavy Duty Long Travel Option) above two descriptions combined, suits 4x4 vehicles with longer shock absorber & increases load carrying capacity.

**L.B.A** - (Load Bearing Accessories) Accessories such as bullbars, winches, extra fuel tanks, fridges, spare wheel carrier etc.

NOTE: Spring selection for vehicles with L.B.A must be scrutinised carefully as variables such as location of equipment may change from vehicle to vehicle. The above details are given as an average only. Please consult Lovells Springs Pty. Ltd. for further details.

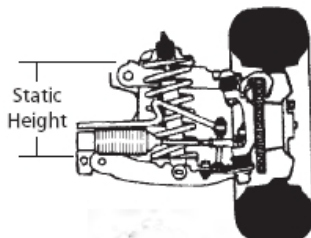
**IMPORTANT: Pay close attention to all symbols, foot notes and advice in this catalogue.**

**INSTALLATION OF RAISED SUSPENSION SYSTEMS CAN INCREASE THE RISK OF VEHICLE ROLL OVER.**

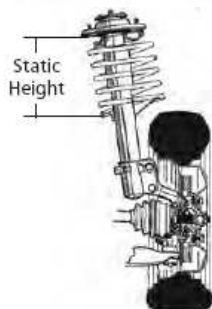
## Customer Specific Design and Spring Identification

If the springs you require are not listed in the catalogue, please make enquiries with our customer service technicians who will arrange for the manufacture of custom springs to your specification and / or sample

To achieve initial design parameters we will require the following:

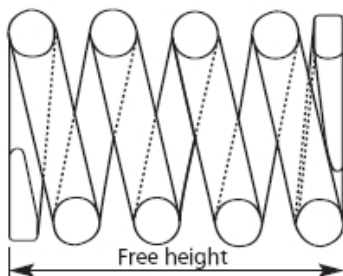


**Static (working) height:**  
 The length of the coil Static spring whilst still mounted Height in the vehicle under normal load.

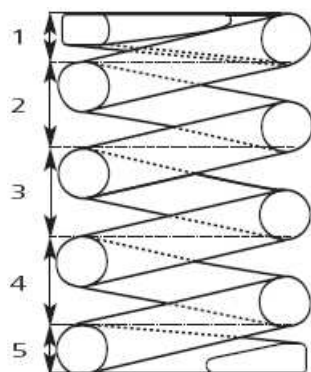


**Trapped height:** The overall length of a coil spring when still in the vehicle while the body of the vehicle is jacked up, to full extension of shock absorber.

**Free height:** The overall length of a coil spring at its longest part while not under load i.e. out of the vehicle.



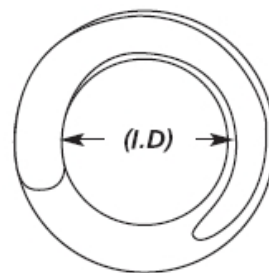
**Total coils:** Total number of complete turns = 5.0 turns.  
 (in this example)



**Diameter of material:** Use Vernier caliper to measure.

Check at various points along coil and then check end coils as the diameter may vary.

**Inside diameter (I.D):** Use Vernier caliper to measure inside diameter of coil spring at both ends. Measure coil spring whilst (I.D) out of vehicle.

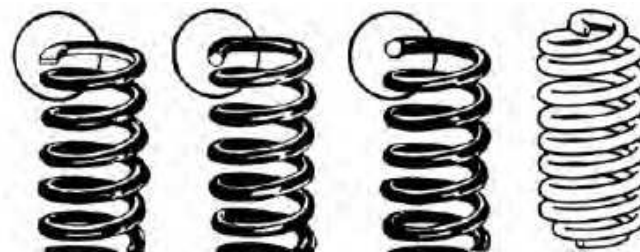


**Spring end finish:**

**Normal:** Unground, straight cut.

**Ground:** Ground flat

**Reduced:** End coil finishes smaller in diameter than main coils.



Square (Tapered)

Square (Untapered)

Tangential

Pig Tail

## Fitting Guide

1. With vehicle on level (flat) ground, measure and record corner heights (E.B.H) from centre of rim to wheel arch.
  2. With vehicle on flat ground measure and record static (working) height of O.E.M.(original) coils.(length of coil under load).
  3. Lift vehicle and record trapped height of coil springs from front and rear. (wheels at full droop with springs and shocks still in vehicle).
  4. Check inside diameter, top and bottom, of spring against O.E.M.(original) coils
  5. Remove old suspension in accordance with vehicle manufacturers manual.
  6. Reassemble new suspension components and fit to vehicle
- Note: Final tensioning of all bolts & nuts to be done with suspension at normal ride height. Failure to observe this requirement may void any warranty.
7. Align vehicle to manufacturers specifications. Place vehicle on level ground and record final corner heights (E.B.H) from centre of rim to wheel arch.

**Important: U-bolts must be checked regularly & retensioned.**

For Maximum leaf spring life, after fitment of new leaf springs, U-bolts must be retensioned after 500km with vehicle fully laden.

Lovells recommend all U-bolts to be checked regularly & retensioned if required. Torque settings are available upon request.

## **Suspension Modification Regulations**

This information has been extracted from the RTA Code of Practice for Light Vehicle Modifications. Lovells Copy No. 753 - issued 1996.

### **ADR Regulations:**

#### **2.4.1. Precedence of ADR's and manufacturers' guidelines**

It is important to note that the requirements of the ADRs and the original manufacturers' modification guidelines take precedence over the Code of Practice. Persons modifying or certifying modifications to light vehicles must ensure that any relevant manufacturers' recommendations are complied with and that no ADR compliance is invalidated, even as an unintended result of complying with the Code of Practice.

- ♦ Vehicles built/manufactured between 1934 - 31/12/1960 are not covered by regulation.
- ♦ **Vehicles built after 1/1/1961** - to the introduction of ADR 13. ADR 13 was Introduced 1973 and was enforced until 9/1991.

Minimum Head Light Height: 600mm

Maximum Head Light Height: 1400mm

**Note: measurements are taken from the ground to the bottom of the headlight.**



**Vehicles built 10/91 on**

Minimum Head Light Height: 500mm

Maximum Head Light Height: 1200mm

**Note: measurements are taken from the ground to the bottom of the headlight.**



### **3.5.2 Certification of suspension modifications**

Certification of suspension modifications shall be treated as follows:

**Minor modifications** can be treated as owner certified. These are modifications which do not affect the basic geometry or load carrying members of the suspension.

*Examples are:*

- additional or uprated anti roll bars;
- uprated shock absorbers and / or springs;
- altered vehicle ride height by no more than one third of the manufacturer's suspension travel in the direction of the ride height change; fitting of suspension assemblies which were options from the original manufacturer for the particular make / model.

Major modifications are to be certified by an engineering signatory. These are modifications to suspension components, systems or installations which affect the major load carrying components of the suspension and which were not options available from the original manufacturer for the particular make / model.

*Examples are:*

- replacement of the original suspension (front or rear) with a system of a different design eg: from another model vehicle.
- changes to suspension components such as changing the front cross member to accommodate an engine change; substantially altering the mass of the vehicle

### **3.5.3 Australian Design Rules**

While no ADR is involved directly with suspension systems, the following are examples of ADRs which may be affected indirectly by a suspension modification:

- ADR7/- Brake hoses
- ADR13/- Installation of lighting devices - eg: height
- ADR14 - Rear vision mirrors - eg: attitude change
- ADR31 - Brake systems - eg: partial failure
- ADR43 - Vehicle configuration and dimensions
- 6.4 'Ground Clearance'. The ground clearance of a vehicle, measured from a horizontal road surface to any point on the underside of the vehicle except the tyres, wheels & wheel hubs must, under the condition of 'Maximum Load Test Mass' loading as specified in the relevant braking rule, be not less than..
- 6.4.1 for any point in the width of the vehicle which is within one meter fore and aft of any 'Axle', **100mm.**
- ADR61- Vehicle marking (license plate heights)
- 61.6.1.1 Registration Plates. Provision shall be made for mounting a registration plate be affixed to the rear of the vehicle so that no part of such plate will be more than 1300mm from the ground.
- ADR62- Mechanical connections between vehicles
- 5.2.3.2 Vehicles fitted with a 50mm 'Ball coupling' Towbar, the height to centre of the ball determined in the laden condition must be between 350-420mm.

### **3.5.4.11 Changes to ride height are limited to one third of the working travel of the suspension from kerb mass height to metal to metal bump or rebound positions as specified by the manufacturer**

Such modifications must comply with the following:

- altered spring free lengths are acceptable providing the spring seat load is maintained at full rebound and material stresses are not exceeded; the use of extended spring shackle plates is not permitted.



#### 3.5.4.11 (Cont):

- the suspension ride height of a coil spring shall not be lowered by cutting off a section of the spring coils. New coil springs with increased spring rate specifications to provide for the reduced travel of the suspension shall be fitted.

#### 3.5.6 Road testing

The completed vehicle must be evaluated under a range of road operating conditions to establish that ride, handling and steering characteristics are appropriate for the vehicle character and proposed type of operation. While some of these aspects are subjective, the vehicle must not behave in an unpredictable manner under any circumstances and its general behaviour must not be significantly different from the majority of vehicles available at the time of road test. The vehicle must be suitable for subsequent sale to persons of average driving ability.

### Glossary

Symbol	Description
All	All engine sizes within year of manufacture
D	Diesel Powered Engines
P	Petrol Powered Engines
T	Turbo
~~~~~	Leaf Springs-made to sample
—	Leaf Springs
H/Top	Hard Top
S/Top	Soft Top
T/Back	Tray Back or Cab Chassis
P/Up	Pick Up or Utility
D/Cab	Dual Cab
S/Rig	Spray Rig (suits vehicles with water tanks eg. fire trucks etc)
M/Use	Mine Use
MD	Medium Duty
XHD	Extra Heavy Duty
LWB	Long Wheel Base
SWB	Short Wheel Base
*	Suspension Kit Available (Springs/Shock Absorbers & Components).

### Catalogue Information

Information contained herein supersedes all previous catalogues.

Information regarding vehicle specifications i.e. build dates, make / model and engine type have been sourced from industry accepted manuals, refer bibliography.

Due to frequent vehicle production changes, no responsibility will be accepted by Lovells Springs Pty. Ltd. for any inaccuracies or variances of information contained in this catalogue.

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### Trading Terms & Conditions

Refer inside front cover for details.

### Bibliography

The Red Book - Identification Manuals.

### Notes:

Year	Model & Type	Kit Available	Engine			FRONT			REAR				
			Cyl	Type	List	Standard Height	Raised Height	Raised H/Duty	List	Standard Height	Raised Height	Raised H/Duty	
DAEWOO - (SSANGYONG)													
8/96-02	Musso	+		All		<<SSANG001 Torsion Bar>>			B		SRR-100		
DAIHATSU													
'F' Series & Scat													
12/74-6/84	F10,F20	+	4	P			DU-1 ~	DU-1HD ~			DU-2 ~	DU-2HD ~	
11/78-6/84	F50,F60	+	4	D			DU-3 ~	DU-3HD ~			DU-2 ~	DU-2HD ~	
11/79-6/84	F25,55P,65P T/Back	+	4	D			DU-7 ~	DU-7HD ~			DU-8 ~	DU-8HD ~	
Feroza													
10/88-9/93	F300	+	4	P		<<DAI007 Torsion Bar>>				DU-9 ~	DU-9HD ~		
10/93-5/98	F300 Wide Track	+	4	P		<<DAI007 Torsion Bar>>				DU-10 ~	DU-10HD ~		
10/93-5/98	F300 Narrow Track	+	4	P		<<DAI007 Torsion Bar>>				DU-11 ~	DU-11HD ~		
Rocky													
6/84-8/93	F70,75 H/Top	+	4	D			DU-6 ~	DU-6HD ~			DU-5 ~	DU-5HD ~	
11/86-6/93	F77R T/Back	+	4	D			DU-7 ~	DU-7HD ~			DU-8 ~	DU-8HD ~	
8/93-1/99	F78 Wagon		4	D		<<DAI010 Torsion Bar>>			B	DRS-69	DRR-66	DRR-66HD	
6/84-1/89	F80,85 H/Top	+	4	P			DU-4 ~	DU-4HD ~			DU-5 ~	DU-5HD ~	
11/86-1/89	F87 T/Back	+	4	P			DU-7 ~	DU-7HD ~			DU-5 ~	DU-5HD ~	
IMPORTANT: New hi-tensile U-bolts and nuts must be used when fitting Lovells Heavy Duty leaf springs													
FORD													
Bronco													
3/81-87	Bronco		8	P	C	FFS-23	FFR-23	FFR-10					
Courier													
5/87-10/02	PC,PD,PE	+	4	All		<<MAZDA005 Torsion Bar>>				MR-26SH ~	MR-26 ~	MR-26HD ~	
11/02 on	PG		4	All		<<MAZDA005 Torsion Bar>>					MR-26SH ~	MR-26 ~	
Escape													
2/01 on	BA,ZA,ZB			All	B	FFS-63	FFR-63		B	FRS-64	FRR-64		
2/01 on	BA,ZA,ZB (low option)			All	B	FFL-63			B	FRL-64B			
Expedition (Export)													
2007 on	Wagon			All	C			FFR-200SP	C			FRR-201SP	
Explorer													
10/96-12/99	UN,UP,UQ Wagon		6	P		Torsion Bar					FE-1 ~		
10/01-04	UT,UX Wagon		6	P	B		FFR-107		B		FRR-109		
1/03 on	UX Wagon		8	P	B		FFR-108		B		FRR-109		
F-Series													
1977-79	F100		8	P	C	FFS-9	FFR-9						
1980-85	F100-F150 LWB		8	P	C	FFS-23	FFR-23	FFR-10					
1986-12/92	F150		8	P	C	FFR-23	FFR-10						
Maverick													
3/88-3/94	LWB Wagon	+	6	All	B	DFS-41	DFR-41	DFR-41HD	B	DRS-42	DRR-42	DRR-42HD	
3/88-3/94	SWB Wagon	+	6	All	B	DFS-31	DFR-31	DFS-41	B	DRS-33	DRR-33	DRS-42	
3/88-3/94	T/Back-Leaf/Leaf	+	6	All			NP-13 ~	NP-13HD ~			NP-12 ~	NP-12HD ~	
1991-3/94	T/Back-Coil/Coil	+	6	All	B	DFS-41	DFR-41	DFR-41HD	C		DRR-49	DRR-49HD	
IMPORTANT: New hi-tensile U-bolts and nuts must be used when fitting Lovells Heavy Duty leaf springs													
Coil/Coil = with front & rear coil springs. Leaf/Leaf = with front & rear leaf springs													
T/Back Vehicles: Above part numbers suit alloy tray fitment only. For steel tray part numbers, please contact Lovells Springs													
Raider													
8/91-96	UV Wagon	+	4	2.6		<<MAZDA005 Torsion Bar>>				MR-26SH ~	MR-26 ~	MR-26HD ~	
Ranger													
12/06 on	PJ Super Cab	+	4	All		<<MAZDA003 Torsion Bar>>					MR-28 ~	MR-28HD ~	
Note: Extra Heavy Duty Leaf Springs available for rear of Ranger PJ Supercab - Part No. MR-28EHD													
Territory													
04 on	SX,SY AWD (4WD)		6	P	B	FFS-80	FFR-80		B	FRS-81	FRR-81		
Note: SX,SY Ford Territory 4WD - Super Low & Sports Low part no.'s available. Refer Passenger Vehicle Catalogue													
IMPORTANT: New hi-tensile U-bolts and nuts must be used when fitting Lovells Heavy Duty leaf springs													
HOLDEN													
Captiva													
09/06 on	CG Wagon			All	A	HFS-116	HFR-116		A	HRS-117	HRR-117		
09/06 on	CG Wagon (Low option)			All	A	HFL-116			A	HRL-117			
Colorado													
8/08 on	Pick Up	+		All		<<HOLD010 Torsion Bar>>					HR-18 ~	HR-18HD ~	
Drover													
3/85-87	QB H/Top-S/Top	+	4	All			SK-5 ~	SK-5HD ~			SK-6 ~	SK-6HD ~	
Frontera													
10/95-12/98	Hardtop		4	2		<<HOLD011 Torsion Bar>>			B		HRR-152		

Year	Model & Type	Kit Available	Engine		FRONT			REAR					
			Cyl	Type	List	Standard Height	Raised Height	Raised H/Duty	List	Standard Height	Raised Height	Raised H/Duty	
HOLDEN (Cont.)													
Jackaroo													
11/81-4/92	UBS SWB Wagon	+	4	All		Torsion Bar available - refer Kit Catalogue					HJ-1 ~	HJ-1HD ~	
11/81-4/92	UBS LWB Wagon	+	4	All		Torsion Bar available - refer Kit Catalogue					HJ-2 ~	HJ-2HD ~	
5/92-1/98	UBS25 SWB Wgn	+	4	D		<<HOLD009 Torsion Bar>>			B		HRR-67	HRR-67HD	
5/92-1/98	UBS25 LWB Wgn	+	4	D		<<HOLD009 Torsion Bar>>			B		HRR-67	HRR-67HD	
2/98 on	UBS26,69,73 Wgn	+	4	P		Torsion Bar available - refer Kit Catalogue			B		HRR-67HD	HRR-67EHD†	
Note: † price code C													
Rodeo													
7/85-2/03	KB,KBD,TFS,R7,R9	+	4	All		Torsion Bar available - refer Kit Catalogue					HR-15 ~	HR-15HD ~	
3/03-8/08	RA Single Cab	+	4	All		<<HOLD010 Torsion Bar>>					HR-16 ~	HR-16HD ~	
3/03-8/08	RA Dual Cab	+	4	All		<<HOLD010 Torsion Bar>>					HR-17 ~	HR-17HD ~	
IMPORTANT: New hi-tensile U-bolts and nuts must be used when fitting Lovells Heavy Duty leaf springs													
HONDA													
CROSSROAD - refer Land Rover Discovery													
CR-V													
12/01 on	CR-V		4	All	B	HFS-132	HFR-132		B	HRS-133	HRR-133		
HYUNDAI													
Terracan													
11/01 on	HP Wagon		6	All	B	<<HYUND004 Torsion Bar>>			B	HRS-520	HRR-520	HRR-520HD	
Tucson													
8/04 on	Wagon		6	All	B		HFR-525		B		HRR-526		
ISUZU													
Bighorn													
11/81-4/92	UBS SWB Wagon	+	4	All		Torsion Bar available - refer Kit Catalogue					HJ-1 ~	HJ-1HD ~	
11/81-4/92	UBS LWB Wagon	+	4	All		Torsion Bar available - refer Kit Catalogue					HJ-2 ~	HJ-2HD ~	
5/92-1/98	UBS25 SWB Wgn	+		All		<<HOLD009 Torsion Bar>>			B		HRR-67	HRR-67HD	
5/92-1/98	UBS25 LWB Wgn	+		All		<<HOLD009 Torsion Bar>>			B		HRR-67	HRR-67HD	
2/98 on	UBS26,69,73 Wgn	+	4	P		Torsion Bar available - refer Kit Catalogue			B		HRR-67HD	HRR-67EHD†	
Note: † price code C													
IMPORTANT: New hi-tensile U-bolts and nuts must be used when fitting Lovells Heavy Duty leaf springs													
JEEP													
Cherokee													
3/79-85	J20 Cherokee		6	P			AJ-6 ~				AJ-7 ~		
3/79-85	J20 Cherokee		8	P			AJ-8 ~				AJ-9 ~		
4/94-8/01	XJ Cherokee Sport		6	P	B	CFR-33	CFR-52	CFR-52HD			AJ-12 ~		
4/94-8/01	XJ Cherokee Limited		6	P	B		CFR-33	CFR-52			AJ-10 ~		
9/01-1/08	KJ Cherokee	+		All	B		CFR-106	CFR-106HD	B		CRR-107	CRR-107HD	
2/08 on	KK Cherokee	+		P	B		CFR-67		B		CRR-68		
Grand Cherokee													
4/96-5/99	ZJ Grand Cherokee		6	P	B		CFR-58		B		CRR-59		
6/99-6/05	WJ,WG Grand Cherokee	+	8	P	B	CFS-62	CFR-62	CFR-62HD	B	CRS-63	CRR-63	CRR-63HD	
7/05-2/08	WH,WK Grand Cherokee	+		All	B		CFR-104	CFR-104HD	B		CRR-105	CRR-105HD	
Commander													
5/06 on	XH Wagon	+		All	B		CFR-108	CFR-108HD	B		CRR-109	CRR-109HD	
CJ Series & Wrangler													
2/66-77	CJ-5		6	P			AJ-1 ~				AJ-2 ~		
6/66-77	CJ-6		6	P			~~~~				AJ-3 ~		
9/78-81	CJ-7 Renegade		6	P			AJ-4 ~				AJ-7 ~		
86-9/96	Wrangler YJ	+	6	P			AJ-14 ~				AJ-15 ~		
10/96-2/07	Wrangler TJ	+	6	All	B		CFR-33	CFR-52	B		CRR-57		
3/07 on	Wrangler JK LWB	+	4	D	B		CFR-101	CFR-101HD	B		CRR-102	CRR-102HD	
KIA													
1/97-03	JA Sportage		4	P	A		KFR-3		A		KRR-4		
5/05 on	JE Sportage		6	P	B		HFR-525		B		HRR-526		
LADA													
7/83-1/98	Niva 4x4		4	P	B		HFL-2/6		B		LRR-3		



Variable Rate Cols shown in **BOLD ITALICS**

Year	Model & Type	Kit Available	Engine			FRONT			REAR				
			Cyl	Type	List	Standard Height	Raised Height	Raised H/Duty	List	Standard Height	Raised Height	Raised H/Duty	
NISSAN													
Navara													
1/86-3/97	D21 P/Up & D/Cab	*	4	All		<<NISS013 Torsion Bar>>					NP-11 ~	NP-11HD ~	
4/97-11/05	D22 P/Up & D/Cab	*	4	All		<<NISS025 Torsion Bar>>					NP-22 ~	NP-22MS ~	
12/05 on	D40 P/Up & D/Cab	*	6	All	B	DFS-87	DFR-87	DFR-87HD			NP-70 ~	NP-70HD ~	
Note: Extra Heavy Duty Leaf Springs available for rear of D40 Navara - Part No. NP-70EHD													
IMPORTANT: New hi-tensile U-bolts and nuts must be used when fitting Lovells Heavy Duty leaf springs													
Pathfinder													
2/88-8/92	WD21 Wagon 2 door	*	4	P		<<NISS017 Torsion Bar>>				B		DRR-30	DRR-30HD
9/92-10/95	WD21 Wagon 4 door	*	6	P		<<NISS017 Torsion Bar>>				B	DRR-30	DRR-30HD	DRR-30EHD
Note: Extra Heavy Duty Coil Springs available for rear of WD21 2door Wagon - Part No. DRR-30EHD													
11/95-6/05	R50 Wagon 2 Door	*	6	P	B	DFS-84	DFR-84	DFR-84HD	B	DRS-83	DRR-83	DRR-83HD	DRR-83HD
11/95-6/05	R50 Wagon 4 Door	*	6	P	B	DFS-84	DFR-84	DFR-84HD	B	DRR-83	DRR-83HD	DRR-83HD	DRR-83EHD
7/05 on	R51 Wagon	*	6	P	B	DFS-88	DFR-88	DFR-88HD	B	DRS-89	DRR-89		DRR-89HD
Patrol													
5/74-80	G60		6	P			NP-1 ~	NP-1HD ~				NP-2 ~	NP-2HD ~
MQ-Series													
6/80-3/83	SWB/LWB Wagon	*	6	All			NP-3 ~	NP-3HD ~				NP-6 ~	NP-6HD ~
6/80-83	T/Back	*	6	P			NP-3 ~	NP-3HD ~				NP-6 ~	NP-6HD ~
6/80-83	T/Back	*	6	D			NP-5 ~	NP-5HD ~				NP-6 ~	NP-6HD ~
MK-Series													
3/83-87	SWB Wagon	*	6	P			NP-7 ~	NP-7HD ~				NP-10 ~	NP-10HD ~
3/83-87	SWB Wagon	*	6	D			NP-8 ~	NP-8HD ~				NP-10 ~	NP-10HD ~
3/83-87	LWB Wagon	*	6	P			NP-7 ~	NP-7HD ~				NP-10 ~	NP-10HD ~
3/83-87	LWB Wagon	*	6	D			NP-8 ~	NP-8HD ~				NP-10 ~	NP-10HD ~
GQ-Series													
2/88-12/97	SWB (Linear rate option)	*	6	All	B	DFS-31	DFR-31	DFS-41	B	DRS-33	DRR-33		DRS-42
2/88-12/97	SWB (Long travel option)		6	All	B		DFR-31LTO		B		DRR-33LTO		
2/88-12/97	LWB	*	6	All	B	DFS-41	DFR-41	DFR-41HD	B	DRS-42	DRR-42		DRR-42HD†
2/88-12/97	T/Back (Leaf/Leaf)	*	6	All			NP-13 ~	NP-13HD ~				NP-12 ~	NP-12HD ~
2/88-12/97	T/Back (Coil/Leaf)	*	6	All	B	DFS-41	DFR-41	DFR-41HD				NP-12MD ~	NP-12HD ~
2/88-12/97	T/Back (Coil/ Coil)	*	6	All	B	DFS-41	DFR-41	DFR-41HD	B	DRS-42	DRR-49†		DRR-49HD†
Note: Extra Heavy Duty Coil Springs available for rear of GQ Patrol - Part No. DRR-42EHD (Price Code C)													
IMPORTANT: New hi-tensile U-bolts and nuts must be used when fitting Lovells Heavy Duty leaf springs													
T/Back Vehicles: Above part numbers suit alloy tray fitment only. For steel tray part numbers, please contact Lovells Springs													
Raised & Raised H/Duty options (coil springs only) - Lovells recommend the use of front radius arm offset castor bush kits Part No. N81730													
Raised & Raised H/Duty options (coil springs only) - Lovells recommend the use of front adjustable panhard rod - Part No. LPR004 & rear adjustable panhard rod Part No. LPR005													
Note: † price code C													
GU Series													
11/97 on	Wagon (Linear rate option)	*	6	All	B	DFS-41	DFR-41	DFR-41HD	B	DRS-42	DRR-42		DRR-42HD†
11/97 on	Wagon (Long travel option)		6	All	B		DFR-41LTO		B		DRR-42LTO		
4/99 on	T/Back (Coil/Coil)	*	6	D	B	DFS-41	DFR-41	DFR-41HD	C		DRR-49		DRR-49HD
4/99 on	T/Back (Coil/Leaf)	*	6	D	B	DFS-41	DFR-41	DFR-41HD			NP-61 ~		
Note: Extra Heavy Duty Coil Springs available for rear of GU Patrol - Part No. DRR-42EHD (Price Code C)													
IMPORTANT: New hi-tensile U-bolts and nuts must be used when fitting Lovells Heavy Duty leaf springs													
T/Back Vehicles: Above part numbers suit alloy tray fitment only. For steel tray part numbers, please contact Lovells Springs													
Raised & Raised H/Duty options (coil springs only) - Lovells recommend the use of front radius arm offset castor bush kits Part No. N81730													
Raised & Raised H/Duty options (coil springs only) - Lovells recommend the use of front adjustable panhard rod - Part No. LPR004 up to 2/03, LPR028 2003													
on and rear adjustable Part No. LPR005 up to 2/03, LPR029 2003 on													
Note: † price code C													
Terrano II													
3/97-4/00	R20 Wagon	*	4	All		<<NISS032B Torsion Bar>>				B		DRR-30	DRR-30HD
Note: Extra Heay Duty coil springs available for R20 Wagon Part No. DRR-30EHD													
X-trail													
10/01-6/05	TI Wagon		4	All	B		DFR-92		B		DRR-93		
RANGE ROVER													
9/72-4/95	Wagon	*	8	P	B	RFR-1	RRR-2	RFR-20	B	RRR-2	RRR-6		RRR-8
SSANGYONG - refer Daewoo													
SUBARU - refer Subaru (Passenger & Commercial Spring Catalogue)													

Year	Model & Type	Kit Available	Engine			FRONT			REAR				
			Cyl	Type	Dist	Standard Height	Raised Height	Raised H/Duty	List	Standard Height	Raised Height	Raised H/Duty	
SUZUKI													
Jimny													
10/98 on	SN413 - JB33 Wagon	*	4	P	A	SFS-80	SFR-80		A	SRS-81	SRR-81‡		
10/98 on	Wagon (Low option)		4	P	A	SFL-80			A	SRL-81			
IMPORTANT: ‡ Longer travel shock absorbers must be used with these coils													
Sierra													
7/74-6/78	LJ50 Soft Top		3	P			SK-3 ~	SK-3HD ~			SK-4 ~	SK-4HD ~	
11/77-81	LJ80 S/Top, H/Top		4	P			SK-1 ~	SK-1HD ~			SK-2 ~	SK-2HD ~	
11/77-81	LJ80 Trayback		4	P			SK-5 ~	SK-5HD ~			SK-8 ~	SK-8HD ~	
7/81-7/88	SJ40 S/Top, H/Top		4	P			SK-5 ~	SK-5HD ~			SK-6 ~	SK-6HD ~	
7/81-7/88	SJ40 Tray Back	*	4	P			SK-5 ~	SK-5HD ~			SK-8 ~	SK-8HD ~	
10/84-3/96	SJ50, SJ413 LWB	*	4	P			SK-7 ~	SK-7HD ~			SK-8 ~	SK-8HD ~	
4/96-12/98	SJ413, SJ80		4	P	A	SFS-18	SFR-18		A	SRS-19	SRR-19		
Vitara													
8/91-3/98	JLX SWB H/Top	*	4	All	A		SFR-10		A		SRR-11		
8/91-3/98	JLX LWB H/Top	*	4	All	A		SFR-10		A		SRR-11		
8/91-3/98	JLX SWB S/Top	*	4	All	A		SFR-10		A		SRR-11		
4/98-05	JLX Grand Vitara	*	6	P	A	SFR-30	SFR-35		A	SRR-31	SRR-36		
8/01 on	XL-7 Wagon	*	6	P	A	SFR-30	SFR-30HD		A		SRR-35		
05 on	JLX Grand Vitara (4 cyl.)	*	4	P	A		SFS-32		A		SRR-33		
05 on	JLX Grand Vitara (6 cyl.)	*	6	P	A	SFS-32	SFR-32		A		SRR-33		
X90													
4/96-6/98	Sedan		4	P	A	SFS-20	SFR-20		A	SRS-21	SRR-21		
4/96-6/98	Sedan (Low option)		4	P	A	SFL-20			A	SRL-21			
IMPORTANT: New hi-tensile U-bolts and nuts must be used when fitting Lovells Heavy Duty leaf springs													
TOYOTA													
4 Runner													
7/84-10/85	YN60 Wagon	*	4	P		TL-7SH ~	TL-7 ~	TL-23 ~		TL-17SH ~	TL-17 ~	TL-17HD ~	
7/84-10/85	LN60 Wagon	*	4	D		TL-23SH ~	TL-23 ~	TL-23HD ~		TL-17SH ~	TL-17 ~	TL-17HD ~	
11/85-5/89	LN61/YN63 Wagon	*	4	All		<<TOY026 Torsion Bar>>					TL-24 ~		
10/89-6/96	LN/RN130 Wagon	*	4	All		<<TOY026 Torsion Bar>>			B	TRS-46	TRR-46	TRR-46HD	
Note: Raised & Raised H/Duty options (coil springs only) - Lovells recommend the use of rear adjustable panhard rod Part No. LPR019													
Fortuner (Export)													
3/05 on	Pick Up			All	B		TFR-118HD	TFR-118EHD	B		TRR-142HD	TRR-142EHD	
Hi-Lux & SR5													
1/79-7/83	RN36-46	*	4	P		TL-29 ~	TL-7SH ~	TL-7 ~		TL-17SH ~	TL-17 ~	TL-17HD ~	
8/83-8/88	RN50	*	4	P		TL-29 ~	TL-7SH ~	TL-7 ~		TL-17SH ~	TL-17 ~	TL-17HD ~	
8/83-12/97	RN36,46,105	*	4	P		TL-7SH ~	TL-7 ~	TL-23 ~		TL-17SH ~	TL-17 ~	TL-17HD ~	
8/83-12/97	LN65,67,106,111	*	4	D		TL-23SH ~	TL-23 ~	TL-23HD ~		TL-17SH ~	TL-17 ~	TL-17HD ~	
8/88-12/97	LN111,RN110	*	4	All		<<TOY026 Torsion Bar>>					TL-34 ~		
8/93-7/97	YN65,67 P/Up	*	4	P		TL-7SH ~	TL-7 ~	TL-23 ~		TL-17SH ~	TL-17 ~	TL-17HD ~	
11/97-3/05	LN167RP,RZN169RP	*	4	All		<<TOY026 Torsion Bar>>					TL-34 ~		
11/97-3/05	RZN167RT,169RT	*	4	All		<<TOY026 Torsion Bar>>					TL-38 ~	TL-38HD ~	
1/98-3/05	LN172RC,RZN174	*	4	All		Torsion Bar available - refer Kit Catalogue					TL-38 ~	TL-38HD ~	
3/05 on	Single Cab GGN25R,KUN26R	*	4	D	B	TFS-118	TFR-118	TFR-118HD			TL-61 ~	TL-61HD ~	
3/05 on	Dual/Xtra CabGGN25R,KUN26R	*	4	D	B	TFS-118	TFR-118	TFR-118HD			TL-60 ~	TL-60HD ~	
3/05 on	Single Cab GGN25R,KUN26R	*	6	P	B	TFR-118	TFR-118HD	TFR-118EHD			TL-61 ~	TL-61HD ~	
3/05 on	Dual/Xtra CabGGN25R,KUN26R	*	6	P	B	TFR-118	TFR-118HD	TFR-118EHD			TL-60 ~	TL-60HD ~	
Note: Extra Heavy Duty Leaf Springs available for rear of GGN25R & KUN26R Hilux - Part No. TL-60EHD													
IMPORTANT: New hi-tensile U-bolts and nuts must be used when fitting Lovells Heavy Duty leaf springs													
T/Back Vehicles: Above part numbers suit alloy tray fitment only. For steel tray part numbers, please contact Lovells Springs													
Landcruiser 40 Series													
1965-72	LWB Troopy		6	All			TL-3 ~				TL-4 ~		
3/59-7/80	BJ,FJ,HJ40 SWB	*	6	All			TL-1 ~	TL-1HD ~			TL-2 ~	TL-16 ~	
8/80-4/86	BJ,FJ40, BJ42,46 SWB	*		All			TL-11 ~	TL-11HD ~			TL-12 ~	TL-12HD ~	
3/69-7/80	FJ45,HJ45 T/Back	*	6	All			TL-1 ~	TL-1HD ~			TL-5 ~	TL-5HD ~	
3/69-7/80	FJ45,HJ45 Troopy	*	6	All			TL-1 ~	TL-1HD ~			TL-13 ~	TL-13HD ~	
8/80-4/86	FJ45,HJ47 T/Back	*	6	All			TL-11 ~	TL-11HD ~			TL-14 ~	TL-14HD ~	
8/80-4/86	FJ45,HJ47 Troopy	*	6	All			TL-11 ~	TL-11HD ~			TL-14 ~	TL-14HD ~	
Landcruiser 50 Series													
11/72-7/80	FJ55 Wgn	*	6	P			TL-3 ~	TL-3HD ~			TL-4 ~	TL-4HD ~	
Landcruiser 60 Series													
8/80-6/87	HJ60 Wagon - 2H	*	6	D		TL-22SH ~	TL-22 ~	TL-22HD ~		TL-31 ~	TL-21 ~	TL-27 ~	
7/87-2/89	HJ60 Wagon - 12H	*	6	D			TL-40 ~	TL-40HD ~			TL-41 ~	TL-41HD ~	
7/87-12/89	FJ60 Wagon - 3F	*	6	P		TL-9SH ~	TL-9 ~	TL-9HD ~			TL-41 ~	TL-41HD ~	
8/80-87	FJ60 Wagon - 2F	*	6	P		TL-9SH ~	TL-9 ~	TL-9HD ~		TL-31 ~	TL-21 ~	TL-27 ~	



Year	Model & Type	Kit Available	Engine			FRONT			REAR				
			Cyl	Type	Test	Standard Height	Raised Height	Raised H/Duty	List	Standard Height	Raised Height	Raised H/Duty	
TOYOTA (Cont.)													
Landcruiser 70 Series													
11/84-12/89	RJ,LJ70/73 Bundera	*	4	P	B		TFR-41 ~	TFR-41HD ~	B	TRS-42	TRR-42	TRR-42HD	
11/84-12/89	BJ,FJ70,73,74	*		All			TL-19 ~	TL-19MS ~		TL-31 ~	TL-21 ~	TL-27 ~	
1/90-10/94	BJ, HZJ77, PZJ70-73			All			TL-19 ~	TL-19MS ~			TL-21 ~	TL-27 ~	
11/84-12/89	BJ,FJ,HJ75 Ute	*	6	All			TL-19 ~	TL-19MS ~			TL-20 ~	TL-20MS ~	
11/84-12/89	BJ,FJ,HJ75 Ute -S/Rig	*	6	All			TL-19MS ~				TL-20SR†		
11/84-12/89	BJ,FJ,HJ75 - M/Use	*	6	All			TL-19MS ~				TL-20MS ~		
11/84-12/89	BJ,FJ75,HJ75 Troopy M/Haul	*	6	All			TL-19MS ~				TL-28MH ~		
11/84-12/89	FJ75,HJ75 Troopy	*	6	All			TL-19 ~	TL-19MS ~			TL-20 ~	TL-20MS ~	
1/90-9/99	FZJ,HZJ75 T/Back	*	6	All			TL-25 ~	TL-25MS ~			TL-26 ~	TL-26MS ~	
1/90-9/99	FZJ,HZJ75 S/Rig	*	6	All			TL-25MS ~				TL-20SR ~		
1/90-9/99	HZJ75 Troopy	*	6	D			TL-25 ~				TL-26MS ~		
10/99-2/07	FZJ,HZJ78 Troopy	*	6	All	B	TFS-79	TFR-79	TFR-79HD		TL-79 ~	TL-79MS ~	TL-79XHD ~	
10/99-2/07	FZJ,HZJ79 T/Back	*	6	All	B	TFS-79	TFR-79	TFR-79HD			TL-79 ~	TL-79MS ~	
10/99-2/07	FZJ,HZJ79 S/Rig	*	6	All	B		TFR-79				TL-79SR ~		
10/99-2/07	FZJ,HZJ79 T/Back- M/Use	*	6	All	B		TFS-79				TL-79XHD ~		
2/07 on	LC 76 Wagon	*	8	D	B	TFS-127	TFS-79	TFR-79		TL-80 ~	TL-80HD ~	TL-80XHD ~	
2/07 on	LC 78 Troopy	*	8	D	B		TFS-79	TFR-79		TL-79 ~	TL-79MS ~	TL-79XHD ~	
2/07 on	LC 79 T/Back	*	8	D	B		TFS-79	TFR-79			TL-79 ~	TL-79MS ~	
2/07 on	LC 79 S/Rig			8	D	B		TFR-79			TL-79SR ~		
2/07 on	LC 79 T/Back- M/Use	*	6	All	B		TFR-79				TL-79XHD ~		
IMPORTANT: New hi-tensile U-bolts and nuts must be used when fitting Lovells Heavy Duty leaf springs													
T/Back Vehicles: Above part numbers suit alloy tray fitment only. For steel tray part numbers, please contact Lovells Springs													
Note: ‡ Special longer U bolts required													
Landcruiser 80 Series													
5/90-7/91	FJ,HDJ80 Wagon	*	6	All	B	TFS-43	TFR-43	TFR-43HD	B	TRS-45	TRR-45	TRR-45HD	
8/91-2/98	FZJ,HZJ80 Wagon	*	6	All	B	TFS-44LTO	TFR-44LTO	TFR-44HDLTO	B	TRS-47LTO	TRR-47LTO	TRR-47HDLTO†	
8/91-2/98	FZJ,HZJ80 Wgn- Comfort ©			6	All				B	TRS-80	TRR-80		
8/91-2/98	FZJ,HZJ80 Wagon- Linear ‡‡‡	*	6	All	B	TFS-44	TFR-44	TFR-44HD	B	TRS-47	TRR-47	TRR-47HD†	
IMPORTANT: © Comfort option - rear. ‡‡‡ Linear rate option. † Price code C													
Raised & Heavy duty options - Lovells recommend the use of front radius offset castor bush kits Part No. N81730													
Raised & Raised H/Duty options (coil springs only) - Lovells recommend the use of front adjustable panhard rod - Part No. LPR007: rear adjustable panhard rod Part No. LPR0008													
Landcruiser 100 Series													
3/98-10/07	UZJ105 Wagon	*	8	All		Torsion Bar available - refer Kit Catalogue				TRS-47LTO	TRR-47LTO	TRR-47HDLTO†	
3/98-10/07	FZJ,HZJ105 Wagon	*	6	All		TFS-44LTO	TFR-44LTO	TFR-44HDLTO		TRS-47LTO	TRR-47LTO	TRR-47HDLTO†	
3/98-10/07	FZJ,HZJ105 Wgn- Linear ‡‡‡	*	6	All		TFS-44	TFR-44	TFR-44HD		TRS-47	TRR-47	TRR-47HD†	
IMPORTANT: ‡‡‡ Linear rate option. † Price code C													
Raised & Heavy duty options - Lovells recommend the use of front radius offset castor bush kits Part No. N81730													
Raised & Raised H/Duty options (coil springs only) - Lovells recommend the use of front adjustable panhard rod - Part No. LPR007: rear adjustable panhard rod													
LPR0008													
Lower than standard height coils available for rear UZJ105 Wagon part no. TRL-47 Sports Low & TRL-47SL Super Low, price code B													
Landcruiser 200 Series													
11/07 on	Wagon	*	8	P	B		TFR-121	TFR-123	B		TRR-122	TRR-122HD	
11/07 on	Wagon	*	8	D	B		TFR-123	TFR-123HD	B		TRR-122	TRR-122HD	
Prado													
7/96-12/02	RZJ/VZJ95 Wagon	*	6	P	B	TFS-72	TFR-72	TFR-72HD	B	TRS-73	TRR-73	TRR-73HD	
2/03 on	120 Ser. Wagon LWB	*	4	All	B	TFS-118	TFR-118	TFR-118HD	B	TRS-119	TRR-119	TRR-119HD	
2/03 on	120 Ser. Wagon LWB	*	6	All	B	TFR-118	TFR-118HD	TFR-118EHD	B	TRS-119	TRR-119	TRR-119HD	
2/03 on	120 Ser. Wagon SWB	*	4	All	B	TFS-118	TFR-118	TFR-118HD	B	TRS-119	TRR-121	TRR-121HD	
2/03 on	120 Ser. Wagon SWB	*	6	All	B	TFR-118	TFR-118HD	TFR-118EHD	B	TRS-119	TRR-121	TRR-121HD	
Rav 4													
7/94-6/00	3 Door H/Top		4	P	B	TFS-81	TFR-81		B	TRS-82	TRR-82		
7/00-2/06	H/Top		4	P	B	TFS-126	TFR-126		B	TRS-127	TRR-127		
7/00-2/06	H/Top (Low option)		4	P	B	TFL-126			B	TRL-127			