

# Fitting Instructions #0145IS

**Ford Ranger/Mazda BT-50 2006-on; Holden Colorado/Isuzu D-MAX 2007-on; Holden Rodeo 2003-2008; Mitsubishi Triton 1996-on; Nissan Navara 2005-on; Toyota Hilux 2005-on**  
***Greasable Front Fixed Pin/Greasable Rear Shackle with Bushes***

**SuperPro**  
Suspension Parts

**Revision: B**

**Date: 02/09/2016**

***Important Note: These components must be fitted by qualified persons only, to factory specifications, as per factory service manual.***

Before commencing any work, ensure that the kit contains the required componentry (See Table 1).

## Installation Instructions:

- Use a jack to raise the rear of the vehicle and support chassis on vehicle stands or use a hoist to raise vehicle (recommended);
- Remove rear leaf springs as per factory service manual – taking into account the following
  - Disconnect any cables/hoses/sensors that could get overstretched if the axle housing and leaf spring is lowered – check leaf spring and both front and rear of axle housing for;
    - Brake hoses
    - ABS sensor cables
    - Handbrake cables
    - Diff breathers
    - Diff locker cables/hoses/sensors
    - etc
- Remove current bushes from leaf spring
  - If OE bushes are installed:
    - The leaf spring front eye bushes may need to be pressed out by metal shell;
  - If Aftermarket bushes are installed:
    - Press out steel tube (if applicable) from leaf spring front eye and remove bushes;
- Remove current bushes from vehicle rear chassis eyes;
- Remove any debris from chassis eyes and leaf spring eyes and clean with a rag;

## Install the new SuperPro bushings and shackles with the following procedure:

- See Table 1 for correct bush placement;
- Note: D40 Navara's have special fitting instructions: See "Fitting Instructions #2766IS"

### Front fixed pin:

- Screw the grease nipples into the recessed end of the fixed pins and firmly tighten (see figure 1). **DO NOT** over tighten grease nipple as this will damage the thread;
- Place the D-washer on the shank of the pin as per figure 1;
- Lightly grease outer bore of bushes (figure 2) and fit into the front leaf spring eyes;
  - For correct bush placement see Table 1;
- Liberally grease the inside and the ends of the bushes (figure 2) and the shank of the fixed pins;
- Push the steel tubes into the installed front leaf spring eye bushes;

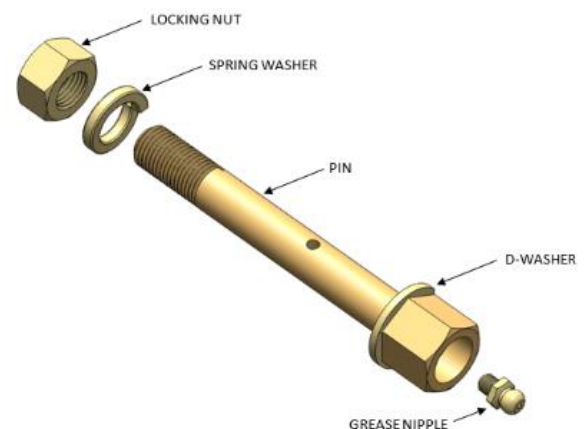


Figure 1: Diagram of fixed pin

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- As this is a universal pin, when tightening, ensure that the nut doesn't bottom out on the pin thread before completely tight. Add a flat washer if required.

## Rear swing shackle:

- Screw the grease nipples in the end of each shackle pin and firmly tighten. **DO NOT** over tighten grease nipple as this will damage the thread;
  - Screw and tighten the shackle pins into the threaded holes in the shackle plates as per figure 3;

Note: Actual product may vary; diagram for example only

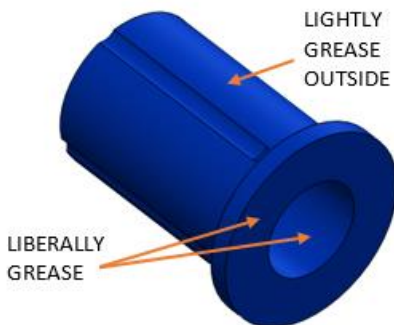


Figure 2: Diagram of bush greasing

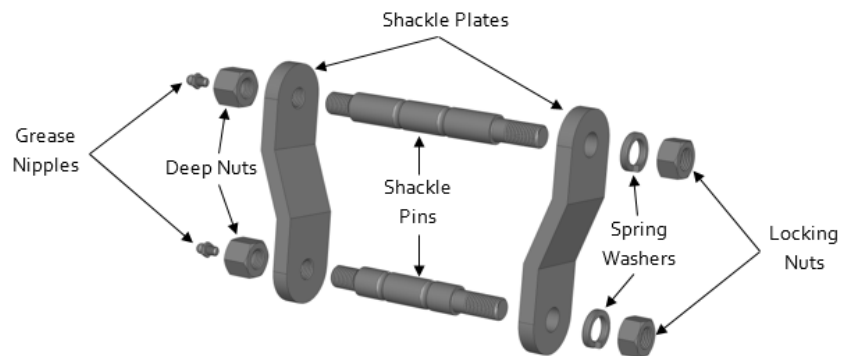


Figure 3: Diagram of swing shackle

- Over the grease nipples, screw the deep nuts and only lightly finger tighten (figure 3);
- Very lightly grease outer bore of bushes (figure 2) and fit into the leaf spring eyes and vehicle chassis;
  - For correct bush placement see Table 1;
- Grease the inside and the ends of the bushes (figure 2) and the surfaces of the shackle pins;

## Re-installation:

**Note:** It is recommended to fit new U-bolts when re-installing the leaf springs.

- Re-install leaf springs as per factory service manual with new SuperPro swing shackle and fixed pin hardware and assemble as per figure 1 and figure 3 – do not fully tighten nuts;
- Re-install any other components that were removed during installation;
- Lower vehicle to the ground and settle the suspension;

**Note:** The front fixed pins and rear swing shackle nuts must be tightened in the following order

- Tighten all locking nuts on front fixed pins and rear swing shackles to 120 Nm;
- Tighten all deep nuts on rear swing shackles to 115 Nm;
- Use grease gun with SuperPro grease cartridge (WPCARTSIL) to grease all grease nipples.

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**TABLE 1: KIT CONTENTS AND BUSH LOCATION**

Kit No.	Bush Position						Hardware	
	Upper Rear Chassis		Rear Leaf Spring Rear Eye		Rear Leaf Spring Front Eye		Shackle Qty	Steel Tube Qty
	Bush No.	Qty	Bush No.	Qty	Bush No.	Qty		
KIT096RSK	SPF2672	4	SPF2671	4	-	-	4	-
KIT136RSK	SPF1708	4	SPF1708	4	-	-	4	-
KIT141RSK	SPF2768	4	SPF2767	4	-	-	4	-
KIT143RSK	SPF0187	4	SPF1710	4	-	-	4	-
KIT156RSK	SPF1781	4	SPF1798	4	-	-	4	-
KIT168RSK	SPF3803	4	SPF3804	4	-	-	4	-
KIT185RSK	SPF4040	4	SPF2231	4	-	-	4	-
KIT193RSK	SPF3596	4	SPF3595	4	-	-	4	-
KIT070SK	SPF2231	4	SPF2231	4	SPF0972	4	4	2
KIT083SK	SPF0187	4	SPF1710	4	SPF1082	4	4	2
KIT096SK	SPF2672	4	SPF2671	4	SPF2670	4	4	2
KIT136SK	SPF1708	4	SPF1708	4	SPF1163	4	4	2
KIT141SK	SPF2768	4	SPF2767	4	SPF2766	4	4	2
KIT143SK	SPF0187	4	SPF1710	4	SPF1082	4	4	2
KIT145SK	SPF0753	4	SPF0502	4	SPF2670	4	4	2
KIT156SK	SPF1781	4	SPF1798	4	SPF1798	4	4	0
KIT168SK	SPF3803	4	SPF3804	4	SPF3802	4	4	2
KIT185SK	SPF4040	4	SPF2231	4	SPF2670	4	4	2
KIT193SK	SPF3596	4	SPF3595	4	SPF3595	4	4	0
KIT211SK	SPF2767	4	SPF2767	4	SPF2766	4	4	2

**Note: Bush part numbers are embedded in the bush and consist of the last four digits (ie. SPFXXXX)**