

# Fitting Instructions #0219RIS

Toyota Hilux GUN1\_4WD 2015-on

## *Greasable Front Fixed Pin/Greasable Rear Shackle with Bushes*



**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;

#### **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;
- 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.



Figure 1: Diagram of fixed pin

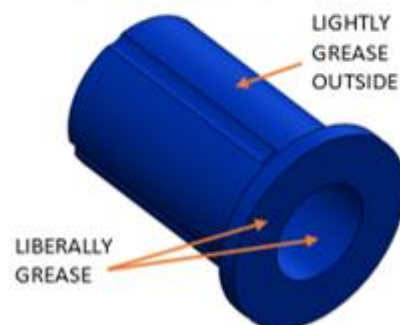


Figure 2: Diagram of bush greasing

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## Rear swing shackle:

**Note:** This kit covers all 2015-on Hilux models, including models that have a head light levelling sensor connected to the rear swing shackle.

Shackles on vehicles **without** a head light levelling sensor connected to the rear swing shackle are to be assembled as shown in figure 3 and figure 4.

### Passenger Side (LHS)

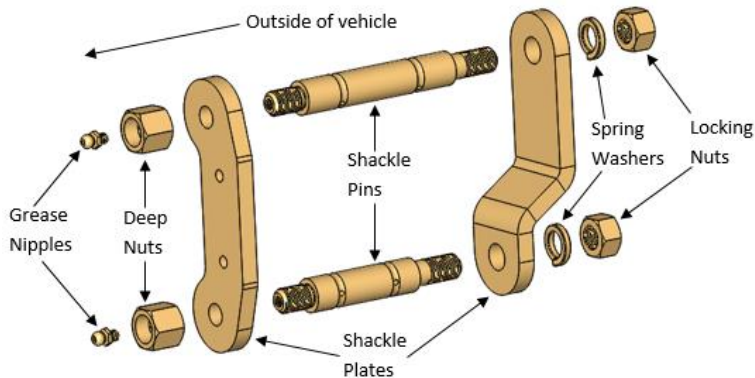


Figure 3: Passenger side w/o head light levelling sensor

### Driver Side (RHS)

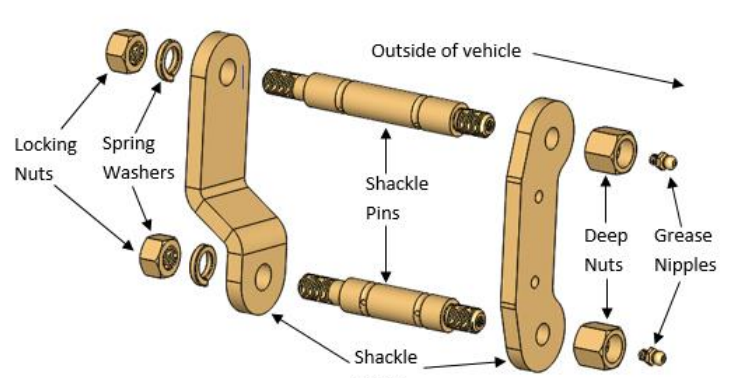


Figure 4: Driver side

Shackles on vehicles **with** a head light levelling sensor connected to the rear swing shackle are to be assembled as shown in figure 5 and figure 6. Note the top deep nut and locking nut on the passenger side (LHS) have been swapped around (circled in figure 5).

### Passenger Side (LHS)

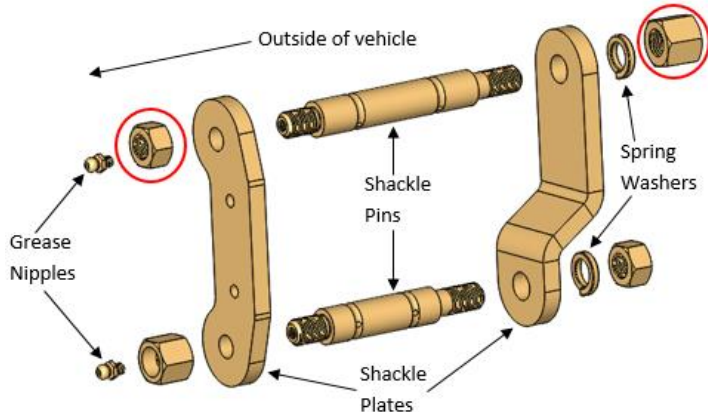


Figure 5: Passenger side with head light levelling sensor

### Driver Side (RHS)

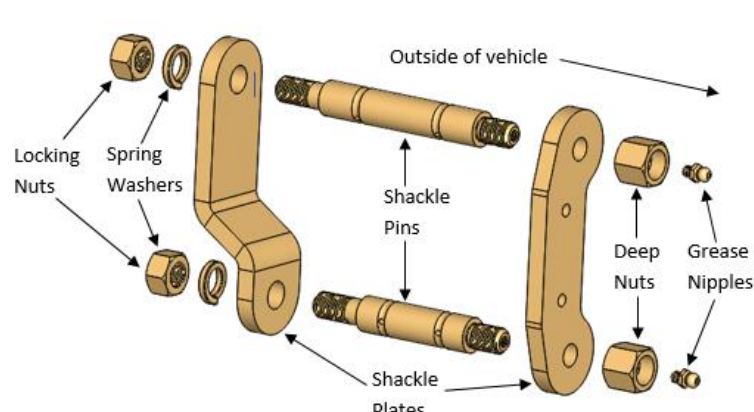


Figure 6: Driver side

## Assemble rear swing shackles using the following procedure:

- 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 figures 3-6;
- Over the grease nipples, screw the deep nuts and only lightly finger tighten (figures 3-6);
- 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;

**Superpro**  
Suspension Parts

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

- Note:** If the fixed pin is installed from outside to inside on the LHS of the vehicle (side with the fuel tank), push the black bush (SPF4848) onto the end of the fixed pin as shown in figure 7 and figure 8 below. This gives protection for the fuel tank in the event of a side impact collision.

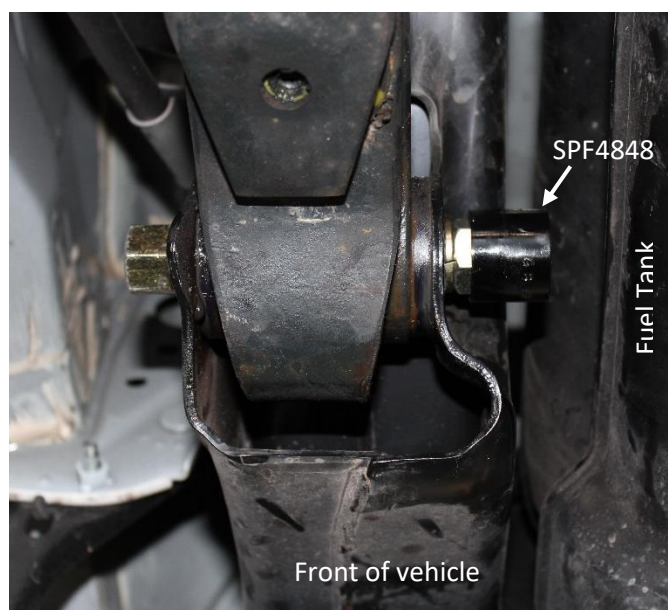


Figure 8: SPF4848 installed on fixed pin

**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 Molygrease to grease all grease nipples.
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- Re-install any other components that were removed during installation;

**Note:** For vehicles with the head light levelling sensor attached to the shackle, care must be taken to ensure that the rotary position of the potentiometer on the shackle does not differ from the original position.

- Lower vehicle to the ground and settle the suspension.

TABLE 1: KIT CONTENTS AND BUSH LOCATION								
	Bush Position							
	Upper Rear Chassis		Rear Leaf Spring Rear Eye		Rear Leaf Spring Front Eye		Hardware	
Kit No.	Bush No.	Qty	Bush No.	Qty	Bush No.	Qty	Shackle Qty	Steel Tube Qty
KIT219SK	SPF2672	4	SPF2671	4	SPF2670	4	4	2
Note: Bush part numbers are embedded in the bush and consist of the last four digits (ie. SPFXXXX)								