

Fitting Instructions #0168LIS

Ford Ranger; Mazda BT50 11/2011-on

Strut Spacer/Raising Block Lift Kit – Approximate 40-50 mm Lift

Important Notes:

These components must be fitted by qualified persons only, in conjunction with the factory service manual.

***Components have only been tested on and deemed suitable for vehicles with OE suspension.
-Supplied kits and instructions are suitable for the vehicles kits were tested on. Fitting requirements may vary across vehicle model range.***

Vehicle will require a wheel alignment after components have been fitted.

To improve off-road suspension articulation after fitment of this lifting kit, fit extended travel rear shock absorbers.

Installation Instructions: Strut Spacers (FSS-006)

- Use a jack to raise the front of the vehicle and support chassis on vehicle stands or use a hoist to raise vehicle (recommended);
- Before disconnecting any suspension components – take into account the following:
 - Disconnect any cables/hoses/sensors that could get overstretched during the installation procedure. Check for;
 - Brake hoses
 - ABS sensor cables
 - Etc
- Remove strut – It will be necessary to do the following to allow re-installation of strut assembly once the strut spacer has been attached:
 - Mark or make note which strut is left or right;
 - Undo sway bar links on both sides to allow sway bar to be moved away;
 - Remove hub nut and loosen spline on CV shaft;
 - Disconnect tie rod end from steering knuckle;
 - Remove brake calliper and rotor;
 - Disconnect upper control arm from steering knuckle ensuring the CV joint does not fall out;
- Install strut spacers on front strut assembly:
 - Place strut spacer on to strut top cap as shown in picture 1;
 - Note: Supplied washers are not required;
 - Use OE nuts on OE strut top cap studs and tighten as per factory service manual;
- With the new strut spacer, it will be necessary to turn the strut 180° to refit to the vehicle;
- Reinstall strut assembly with strut spacer into vehicle;
- Reconnect any cables/hoses/sensors that were disconnected, replace any other components that were removed during installation and torque all fasteners as per factory service manual specifications;

Note: Actual product may vary; diagram for example only



Picture 1: Picture of strut spacer on strut

- After lowering the vehicle to the ground, loosen both side upper control arm bolts to relax the stress on the rubber bushes and retighten at ride height.

Installation Instructions: Rear Raising Blocks (FSB-006)

- Use a jack to raise the rear of the vehicle and support chassis on vehicle stands or use a hoist to raise vehicle (recommended);
- Before disconnecting any suspension components – take into account the following:
 - Disconnect any cables/hoses/sensors that could get overstretched when the axle housing 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

Note: A leaf spring on either side of the vehicle must be attached to the axle housing at any time. Raising blocks must be installed one side at a time.

- Disconnect rear lower shock absorber eye from vehicle mounting point;
- Disconnect axle housing from leaf spring and gradually lower axle housing until the raising block will fit in the gap between the leaf spring perch and the leaf spring. See Picture 2;

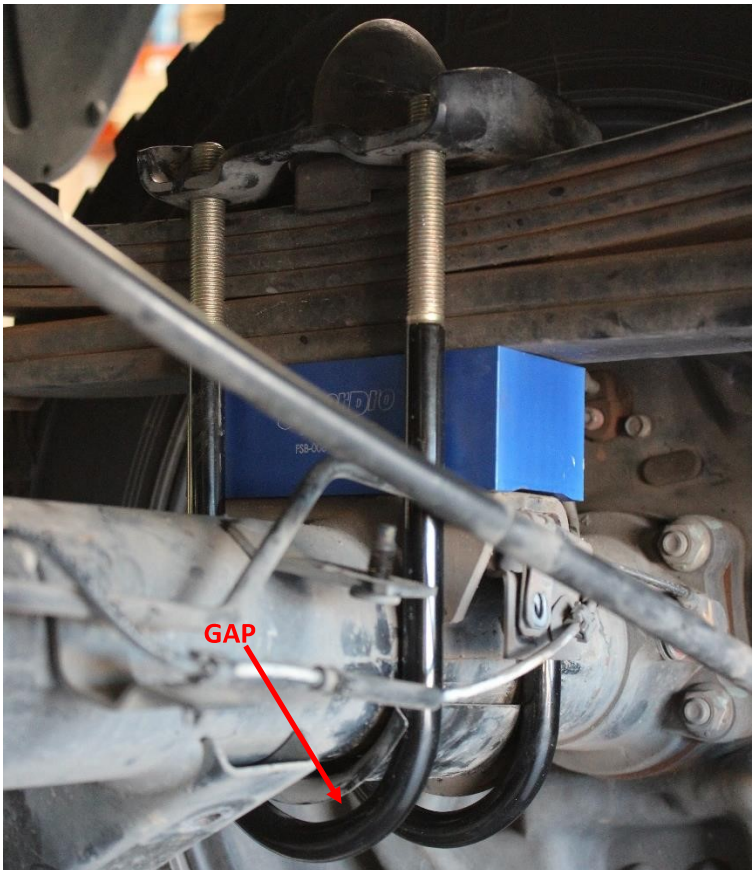


Picture 2: Raising Block Installation

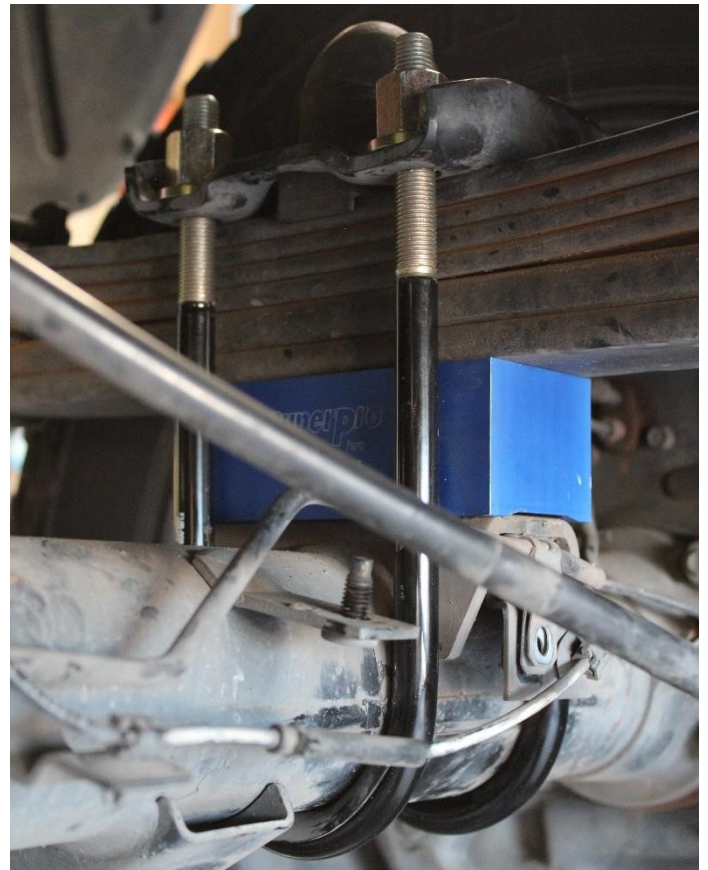
Note: It may be necessary to loosen (**do not remove**) the U-bolt nuts on the other side of the vehicle if more distance between the leaf spring and the axle housing is required.

- Place the protruding pin on the raising block into the recess on the leaf spring perch and raise axle housing gradually until the leaf spring centre bolt head fits into the recess on the raising block;

- Reconnect axle housing to leaf spring using the following procedure with the supplied extended U-bolts.
 - Fit U-bolt around the axle as seen in *Picture 3*. Do not push U-bolt up all the way against the axle at this stage, just enough to allow the fish plate to fit on U-bolts (*Picture 3*).
 - Place washers and nuts on U-bolts and draw the U-bolts up against the axle by tightening the nuts **evenly** as seen in *Picture 4*.
 - Ensure that the U-bolt is sitting correctly around the axle and in the upper fish plate and the U-bolts are tightened evenly. **Failure to do so will bend the new U-bolt when tightening.**



Picture 3: U-bolt and fish plate installation



Picture 4: U-bolt tightened

- Repeat procedure on other side of vehicle to install the other raising block;
- Torque all U-bolts to 130-150 Nm;
- Reattach both rear shock absorbers. It may be necessary to lower wheels onto the ground;
 - **Do not try and jack up rear axle while vehicle is in the air;**
- Reconnect any cables/hoses/sensors that were disconnected, replace any other components that were removed during installation and torque all fasteners to service manual specifications.
 - **Ensure no cables/hoses/sensors will be overstretched at full droop before reattachment.**

Note: Check all fasteners after 1000 km.