2009-13 F150 2WD/4WD; 2010-11 F150 Raptor 4WD
2" Ford Front Leveling Kit

Parts:

2 - Front Strut Extenstions
6 - 10mm Washers
6 - 10mm Lock Nuts
6 - Threaded studs

PRE-INSTALLATION

Professional installation by a certified technician is strongly recommended.

Not responsible for altered products. No claims are made regarding any lifting devices. Any and all claims implied in this document excluded.

NOTES:

The following instructions assume the use of factory wheels with size 35x12.50x18 tires. The use of wider tires will require trimming and offset wheels. **IMPORTANT: If equipped, this vehicle requires EPAS (Electronic Power Assist Steering) plugs to be disconnected before installing this kit. Failure to do so may result in damage to the EPAS module, requiring its replacement.**

REQUIRED TOOLS:

15mm Wrench	15mm Socket	29mm Socket	1 1/16" Wrench
21mm Wrench	21mm Socket	16mm Wrench	3/8" Wrench
9/16" Wrench	9/16" Socket	Hammer	Floor Jack & Stands

Torque Specs:

Size	Grade 5	Grade 8
5/16"	15 ft/lbs	20 ft/lbs
3/8"	30 ft/lbs	35 ft/lbs
7/16"	45 ft/lbs	60 ft/lbs
1/2"	65 ft/lbs	90 ft/lbs
9/16"	95 ft/lbs	130 ft/lbs
5/8"	135 ft/lbs	175 ft/lbs
3/4"	185 ft/lbs	280 ft/lbs

Size	Class 8.8	Class 10.9
12MM	55ft/lbs	75ft/lbs
14MM	85ft/lbs	120ft/lbs
16MM	130ft/lbs	165ft/lbs
18MM	170ft/lbs	240ft/lbs

INSTALLATION INSTRUCTIONS

STEP 1: Jack up front of vehicle so that front wheels are off the ground. Support vehicle with jack stands.
STEP 2: Remove front wheels. (21mm deep well socket) Remove front skid plate if equipped. (15mm socket)
STEP 3: IMPORTANT: Disconnect EPAS (Electronic Power Assist Steering) plugs from EPAS module. Module is located on steering assembly near front differential. Must be disconnected BEFORE installation.
STEP 4: Remove nut from tie rod on knuckle. (21mm wrench) Use appropriate tool to remove tie rod from knuckle. Move linkage forward to make room. (save factory hardware)
STEP 5: Remove sway bar nut. (15mm wrench - save factory hardware)
STEP 6: Loosen, but do not remove, lower control arm bolts. (21mm wrench - 1 1/16" socket)
STEP 7: Support knuckle with jack stand and remove upper control arm nut. (18mm wrench) Use appropriate tool to separate the ball joint from the upper control arm, but don't let the knuckle to pull out so far that the shaft pulls out of the differential.
STEP 8: Remove lower strut bolt from lower control arm. (29mm socket and 1 1/16" wrench - save factory hardware)
STEP 9: Remove nuts on upper strut tower that holds assembly in place. (15mm wrench - save factory hardware)
STEP 10: Lower jack to let lower control arm and knuckle swing down. Remove strut from vehicle.
STEP 11: Install threaded studs up through bottom of new spacer. (Flat side down) Use washers and nuts to pull studs into place.
STEP 12: Install new strut spacer on strut (A - Drivers, B - Passenger) and secure with factory hardware and torque to 30 ft/lbs.
STEP 13: Reinstall strut assembly in vehicle and secure with included lock washers and nuts - torque to 30 ft/lbs. (17mm wrench)
STEP 14: Secure strut to lower control arm with factory nuts. (29mm socket and 1 1/16" wrench)
STEP 15: Raise lower control arm with jack and connect upper ball joint on upper control arm to spindle, using 3/8" wrench to hold ball joint if it spins while tightening. (18mm wrench - Torque to factory specs)
STEP 16: Reinstall tie rod on knuckle with factory hardware. (21mm socket)
STEP 17: Repeat steps 4 - 16 on opposite side of vehicle.
STEP 18: Reinstall sway bar with factory hardware. (18mm wrench - Torque to factory specs)
STEP 19: Reinstall wheels and tires. (21mm deep-well socket)
STEP 20: Reconnect EPAS plugs (if removed)
STEP 21: Jack up vehicle and remove jack stands. Lower vehicle to floor. Torque all bolts to factory specs.
STEP 22: Have alignment done to factory specifications by a certified alignment professional.

POST-INSTALLATION

STEP 1: Check for proper torque on all fasteners. Check steering for proper working order and check for interference. Test brake system. Check clearance between all rotating, mobile, fixed and hot parts.

STEP 2: Check distance between tire sidewall and the brake hose during full-turn to full-turn steering sweep. Do not skip this step! Any contact may result in component failure.

STEP 3: Adjust headlights to proper alignment.

MAINTENANCE: After 500 miles, re-torque all fasteners. (Recommended every 1000 miles thereafter) Have all suspension, driveline and steering components inspected buy a certified technician durning routine maintenance (Recommended every 3000 miles)