



3651 N. Highway 89 • Chino Valley, AZ 86323

(928) 636-7080 • www.p-a-g.net

## 1997-02 FORD F150 2WD 2" FRONT END LEVELING KIT (COIL SPRING SPACERS) INSTALLATION INSTRUCTIONS KIT# FL220PA

### ⚠WARNING

Read and understand all instructions, warnings, cautions, and notes in this sheet and in your owners manual before you begin the installation of this coil lift kit.

### ⚠WARNING

Proper installation of a Performance Automotive Group kit requires knowledge of the factory recommended procedures for disassembly and assembly of original equipment components. We recommend that the factory shop manual and any special tools necessary to your vehicle be on hand during the installation. Installation of this kit without proper knowledge of the factory recommended procedures may affect the performance of these components and the safety of your vehicle. We strongly recommend that a certified mechanic familiar with the installation of similar components install this kit.

### ⚠WARNING

Ensure that your vehicle tires are properly blocked and secured before you begin installation of this kit.

### ⚠CAUTION

It is the customer's responsibility to ensure that all mounting hardware is correctly tightened before, during, and after use of this kit. DO NOT EXCEED manufacturer's load specifications for your vehicle. Always operate your vehicle in a safe manner. If your vehicle is equipped with any type of extra duty suspension or special towing package, this kit may not fit properly. If your vehicle is equipped with any type of aftermarket springs, lift kits, or bushings, this kit may not fit properly.

### ⚠NOTE

Special tools, such as coil spring compressors, may be required for installation of this kit.

### ⚠WARNING

Many states now have laws restricting bumper heights and vehicle lifts. Local laws should be consulted to determine if the changes you intend to make to your vehicle comply with state laws. Before combining a body lift with a suspension lift, consult an installation professional to see how this will affect your specific application.

### ⚠WARNING

This kit should only be installed on vehicles in good working condition. Before installation, the vehicle should be thoroughly inspected for evidence of corrosion or deformation. This kit should not be installed on any vehicle that is suspected to have been in a collision or misused. Failure to observe this warning may result in serious personal injury and/or severe damage to your vehicle.

### ⚠WARNING

To ensure the Supplemental Restraint System (SRS, or air bag) is not accidentally deployed during kit installation, always ground yourself and the vehicle. Do not use power or pneumatic tools. Exercise extreme caution while working near SRS sensors and wiring. Do not allow anyone near air bags during kit installation. Accidental deployment can result in serious personal injury or death.

### ⚠WARNING

Always wear eye protection when operating power tools.

### ⚠NOTE

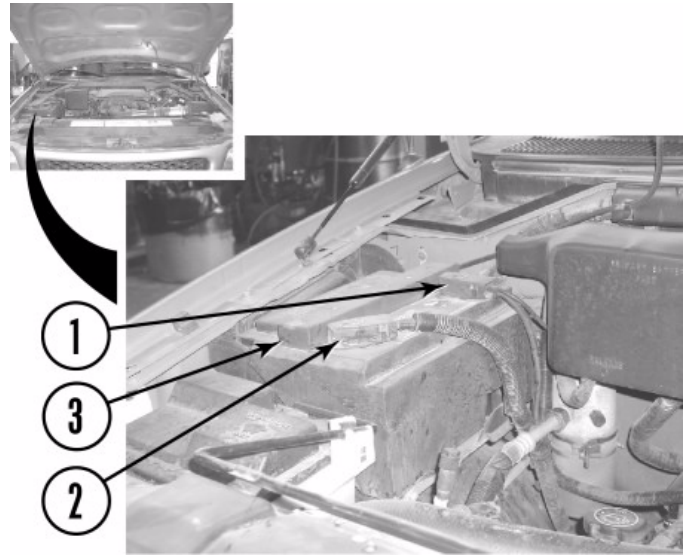
Performance Automotive Group recommends applying the Loctite® supplied in the kit to the threads of all fasteners unless specified otherwise in the instructions.

## A. Before you start.

### ⚠NOTE

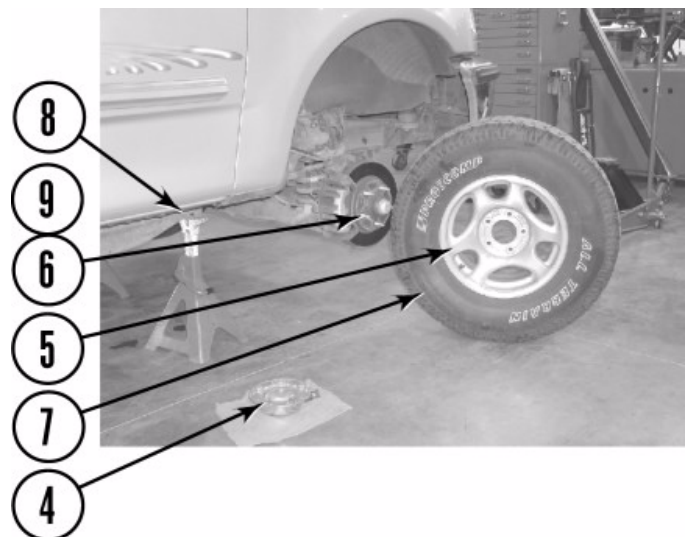
Keep track of hardware quantity and position. Kit parts are prefaced by the word *kit* in italics.

1. Read all warnings and instructions completely and carefully before you begin.
2. Special tools, such as coil spring compressors, are required for installation of this coil lift kit.
3. Check to make sure the kit is complete (refer to the Parts List at the end of this document).
4. Only install this kit on the vehicle for which it is intended. If anytime during the installation you encounter something different from what is outlined in the instructions, call technical support at (928) 636-3175.
5. Park the vehicle on a clean, dry, flat, level surface and block the tires so the vehicle cannot roll in either direction.
6. Disconnect both battery cables.
  - a. Disconnect negative cable (1) first, then the positive cable (2) from the battery (3).

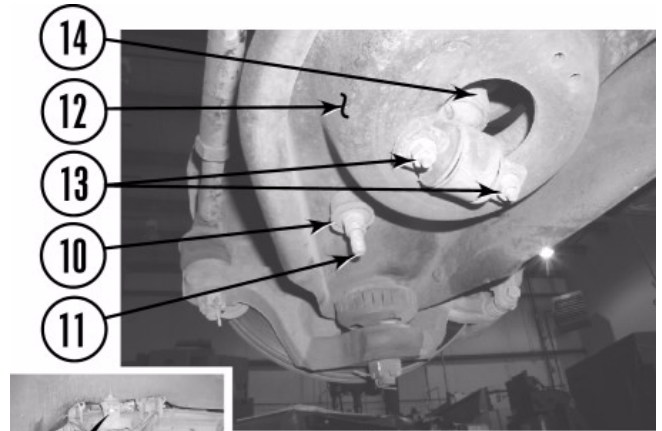


## B. Get ready to install coil spring leveling kit.

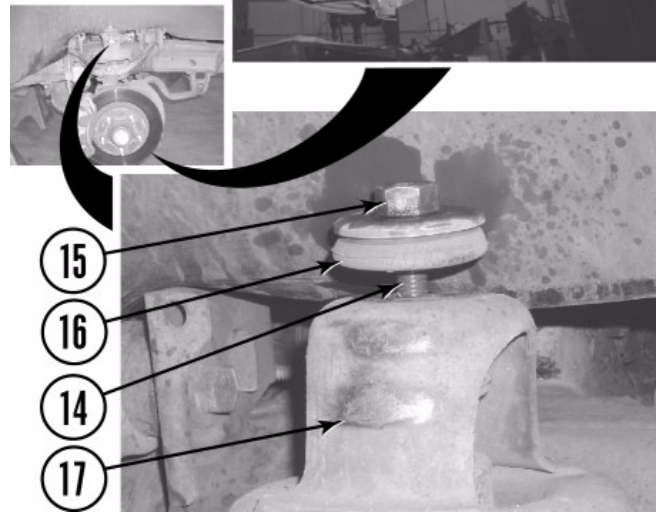
1. Lift front wheel assemblies.
  - a. If so equipped, remove two caps (4) from front wheels (5).
  - b. Loosen five lug nuts (6) each from two front wheels (5).
  - c. Using a hydraulic jack, slowly lift front of vehicle so that two front tires (7) are three to five inches off of ground. Position jack stands under frame jack points (8). Lower frame onto jack stands.
  - d. Remove five lug nuts (6) each and two front wheels (5) from spindle (9).



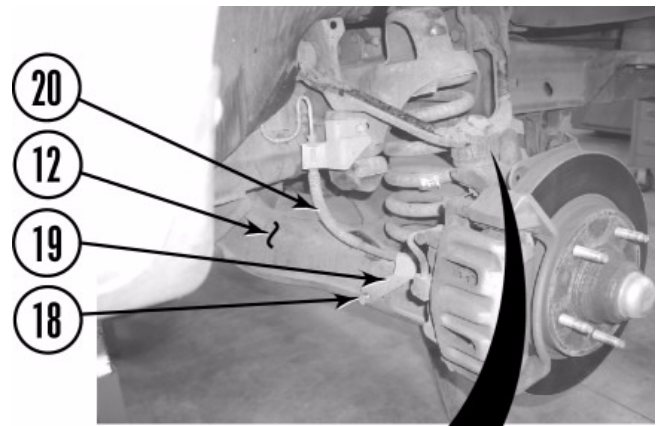
2. Remove front axle driver side hardware.
  - a. Remove nut with captive bushing (10) and sway bar link (11) from lower a-arm (12).
  - b. Remove two nuts (13), and shock (14) from lower a-arm (12).



- c. Remove nut with captive washer (15), bushing (16) and shock (14) from spring perch (17).

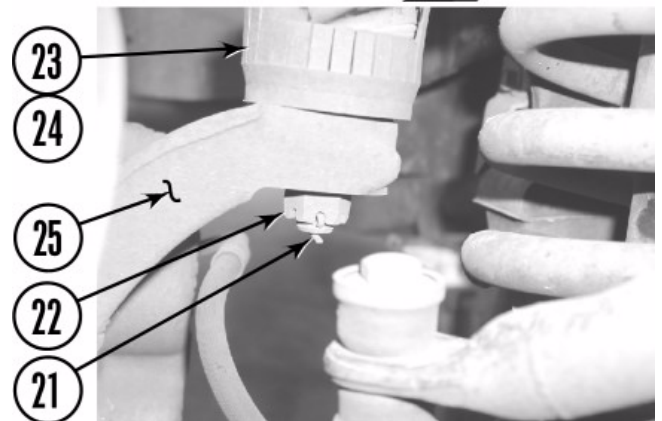


- d. Remove bolt (18), bracket (19), and brake hose (20) from lower a-arm (12).



- e. Lift lower a-arm (12) with hydraulic jack. Do not lift frame (8) off of jack stands.

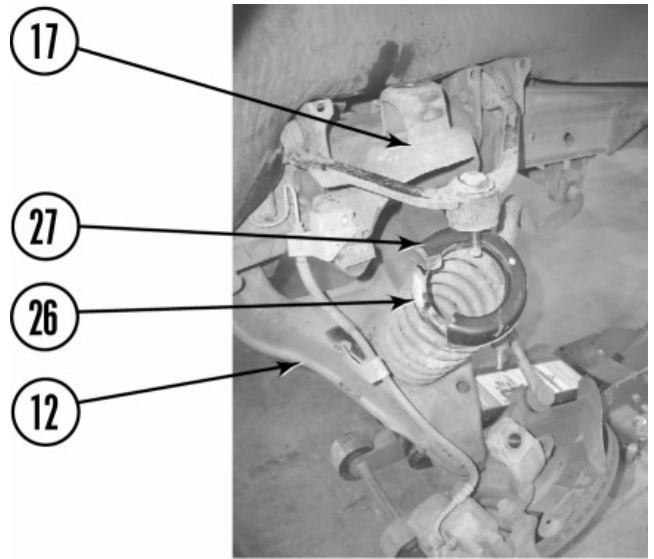
- f. Remove cotter key (21), castle nut (22), ball joint (23), and upper-a arm (24) from spindle assembly (25).



**NOTE**

When lowering the lower a-arm pay special attention to the brake lines so that they are not being stretched by the spindle assembly.

- g. Lower lower a-arm (12).
- h. Remove coil spring (26) coil spring bushing (27) from spring perch (17) and lower a-arm (12).

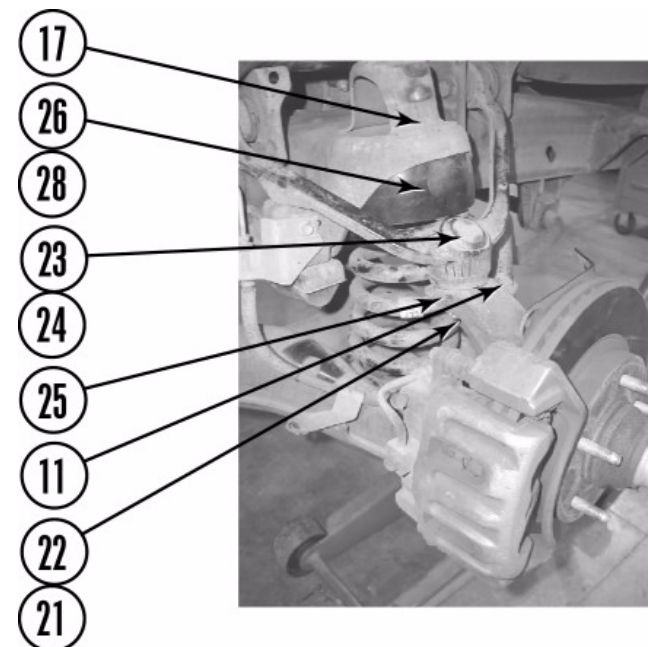


**C. Installing coil spring leveling kit.**

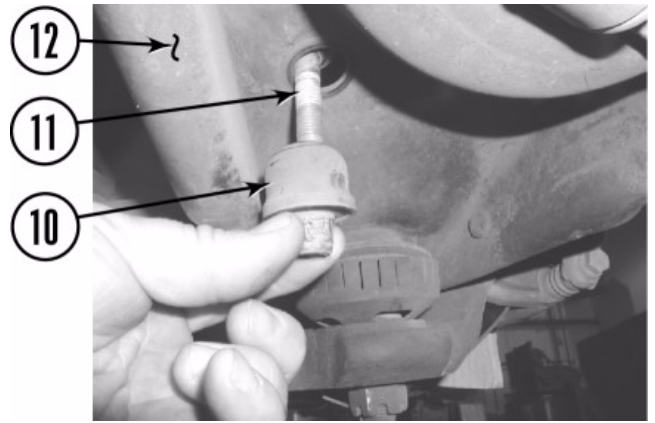
- 1. Install coil spring spacer driver side.
  - a. Position *kit* coil spring spacer (28) on coil spring (26).



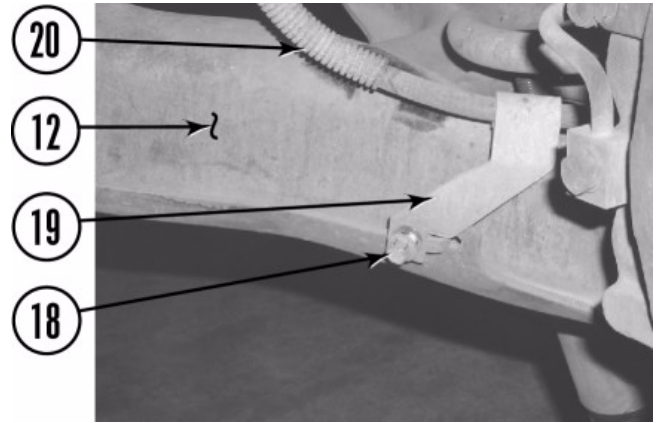
- b. Install coil spring (26) and *kit* coil spring spacer (28) on spring perch (17) and lower a-arm (12).
- c. Raise lower a-arm (12) using hydraulic jack, position ball joint (23) and upper a-arm (24) in spindle assembly (25). Position sway bar link (11) on lower a-arm (12).
- d. Install castle nut (22) and cotter key (21) on ball joint (23) and upper a-arm (24).



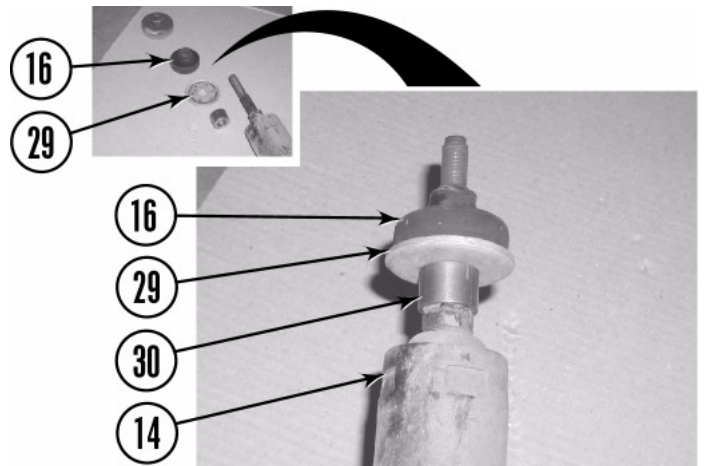
- e. Install sway bar link (11) on lower a-arm (12) with nut with captive bushing (10).



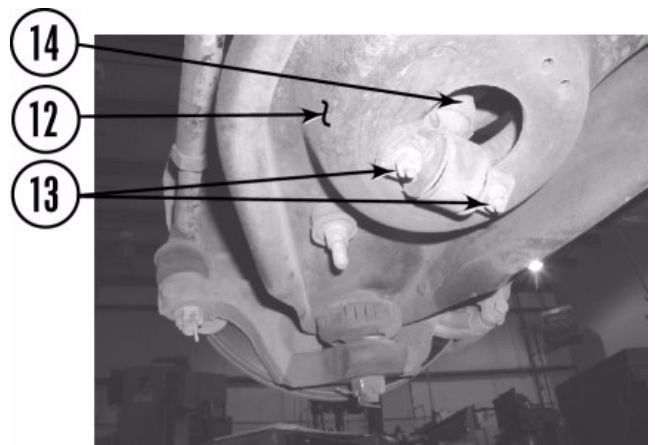
- f. Install bracket (19) and brake hose (20) on lower a-arm (12) with bolt (18).



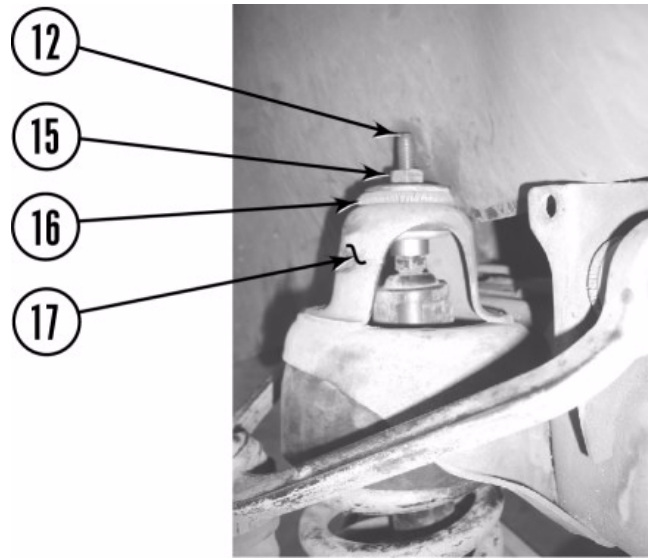
- g. Remove lower shock bushing (16) and washer (29) from shock (14)
- h. Install *kit* shock bushing spacer (30), washer (29), and lower shock bushing (16) on shock (14).



- i. Install shock (14) on lower a-arm (12) with two nuts (13).

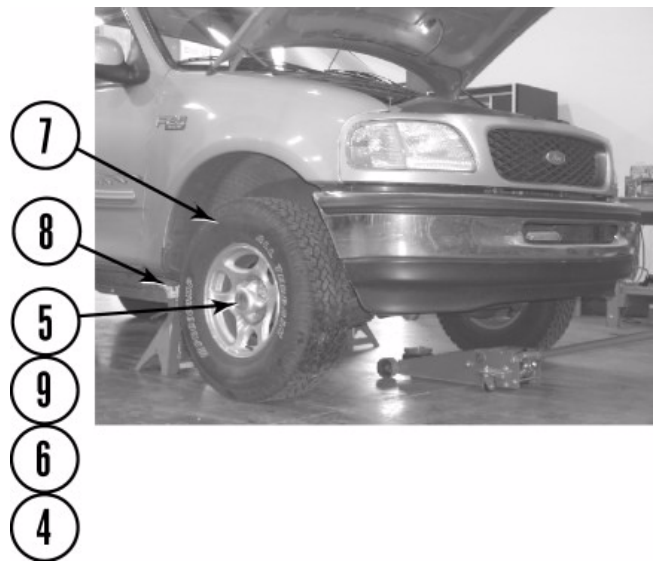


- j. Install shock (12) and bushing (16) on spring perch (17) with nut with captive washer (15).
- k. Repeat steps B.2.a. through C.1.j. for driver side front wheel assembly.



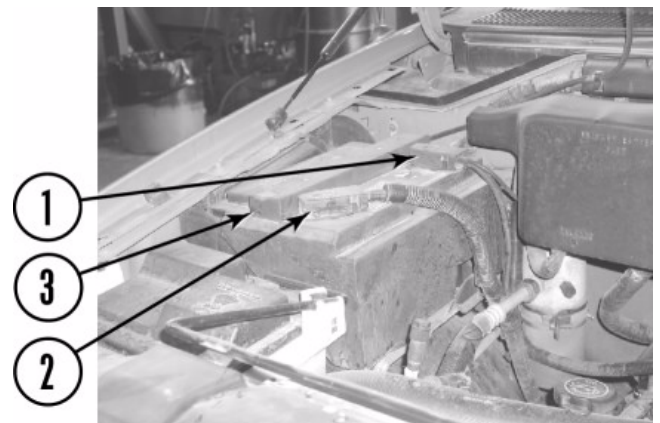
2. Finish front wheel assemblies.

- a. Install two front wheels (5) on front spindle (9) with eight lug nuts (6) each.
- b. Using a hydraulic jack, slowly lift front of vehicle so that front tires (7) are three to five inches off of ground. Remove jack stands from frame (8). Lower vehicle to ground and tighten sixteen lug nuts (6) to 85 lb-ft.
- c. If removed, install two caps (4) on front wheels (5).



3. Connect both battery cables.

- a. Connect positive cable (2) first, then the negative cable (1) to the battery (3).



## D. Finish coil spring leveling kit installation.

1. Double check the vehicle.

### ⚠CAUTION

Retorque all fasteners after 500 miles and after off road use. All coil spring lift components should be visually inspected and fasteners retorqued during routine vehicle servicing.

- a. Check all mounting hardware to ensure it is properly tightened.
- b. Start vehicle and check the steering in both directions to ensure that there is no bind. Check all steering connections. Ensure that the steering gear box has no interference and is in proper working condition.
- c. Check the operation of the brakes and the parking brake. Check brake lines for adequate travel. Ensure brake lines do not touch any surfaces, moving or otherwise. If necessary, adjust brake lines and or brake line brackets to eliminate all contact.
- d. Check clutch operation. Check both shift levers' operation. Ensure that there is proper engagement in all gears and 4 wheel drive ranges.

### ⚠WARNING

Suspension over travel can result in serious damage or failure of OEM components and aftermarket equipment.

- e. Ensure that all OEM or aftermarket bump stops are installed.
- f. Test drive vehicle in all gears and 4 wheel drive ranges. Pay close attention to all vehicle systems. Check all hardware again in 500 miles and as part of your regular maintenance schedule.

## E. Vehicle Alignment

1. Align vehicle to OE specifications. Retain alignment results.

### ⚠CAUTION

Performance Automotive Group does not recommend any particular wheel and tire combinations for use with its body lifts and cannot assume responsibility for the customer's choice of wheels and tires. Reference your owner's manual for recommended tire sizes and warnings related to the use of oversized tires. Larger wheel and tire combinations increase stress and wear on steering and suspension components, which leads to increased maintenance and higher risk for component failure. Larger wheel and tire combinations also alter speedometer calibration, braking effectiveness, center of gravity, and handling characteristics. Consult with an experienced local off road shop to find what wheel and tire combinations work best with your vehicle.

### ⚠NOTE

All warranty information, instruction sheets, and other documents regarding the installation of this product must be retained by the vehicle owner. Information contained in the instructions and on the warranty card will be required for any warranty claims. The vehicle owner needs to understand the modifications made to his vehicle and how they affect vehicle handling and performance. Failure to provide the customer with this information can result in damage to the vehicle and severe personal injury.

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## Parts List

Callout	Quantity	Description
(28)	2	Coil spacers
(30)	2	Shock spacers
	1	Warning sticker
	1	Logo sticker