

# Suzuki Samurai Coated Stainless Steel Braided Brake Lines (SKU# SB-BL)

## Installation Instructions



**Notice:** After completing this installation you will need to bleed the brake system. Click [HERE](#) for complete full color instructions on Suzuki Samurai Brake System Bleeding.

SUZUKI SAMURAI FRONT BRAKE LINES



SUZUKI SAMURAI REAR BRAKE LINES



These Brake Lines are supplied in either 15" or 21" lengths.

**CAUTION:** Safety glasses should be worn at all times when working with vehicles and related tools and equipment.



### Suggested Tools:

- Twin Post Lift (or a Floor Jack and 4 Jack Stands)
- Standard Screwdriver
- Sockets: 10 & 14 mm
- Ratchet
- Impact Wrench: 1/2" Drive (or Lug Wrench)
- Impact Socket: 19 mm (If using Impact Wrench on lug nuts)
- Tubing Wrench: 10 mm
- Ball Peen Hammer
- Drain Pan (to collect brake fluid)
- Brake Fluid: DOT 3



**FOR ADDITIONAL COPIES OF THESE AND OTHER INSTRUCTIONS GO TO:** [www.lowrangeoffroad.com](http://www.lowrangeoffroad.com) and click on the "INSTRUCTIONS" tab.

**Tech Tip:** Performing this job will result in considerable loss of brake fluid. This may be a good time to replace the brake fluid, if not done recently. Brake system components will last longer and work better with fresh brake fluid.

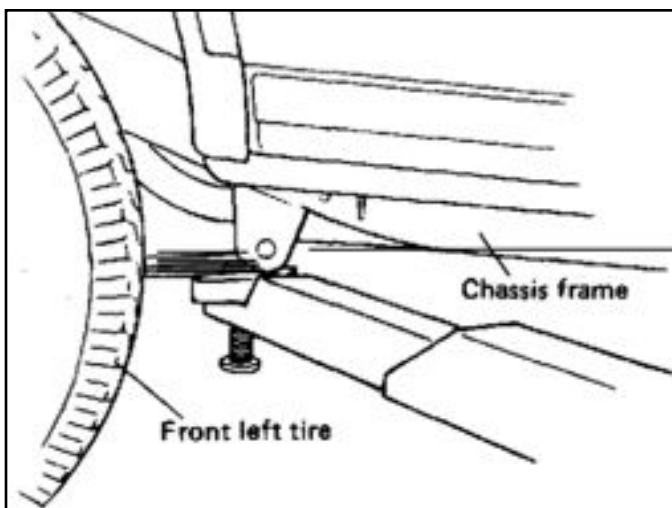


## Lifting and Supporting the Vehicle

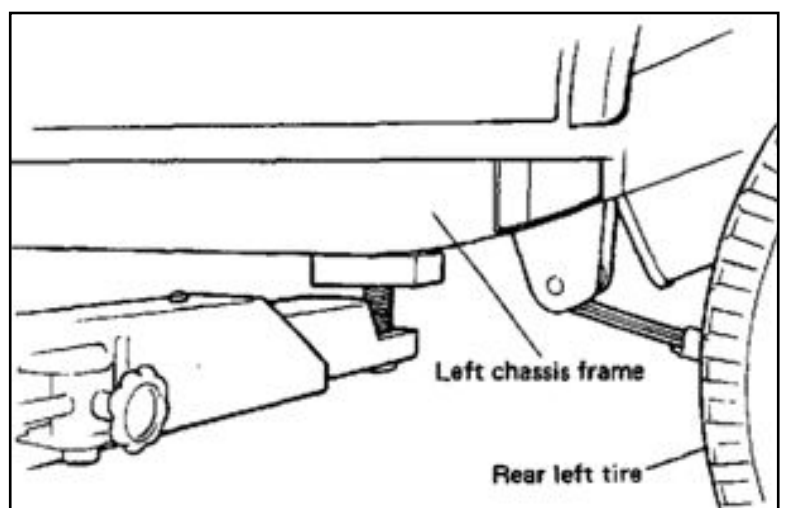


### Lifting Option 1

Lift and support the vehicle on a twin post, frame contact, lift.



Front Positioning

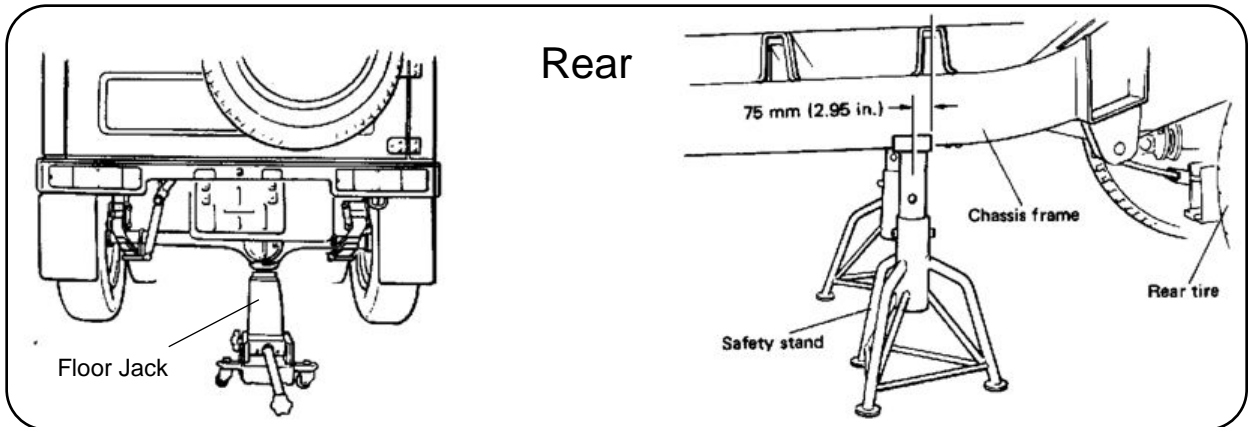
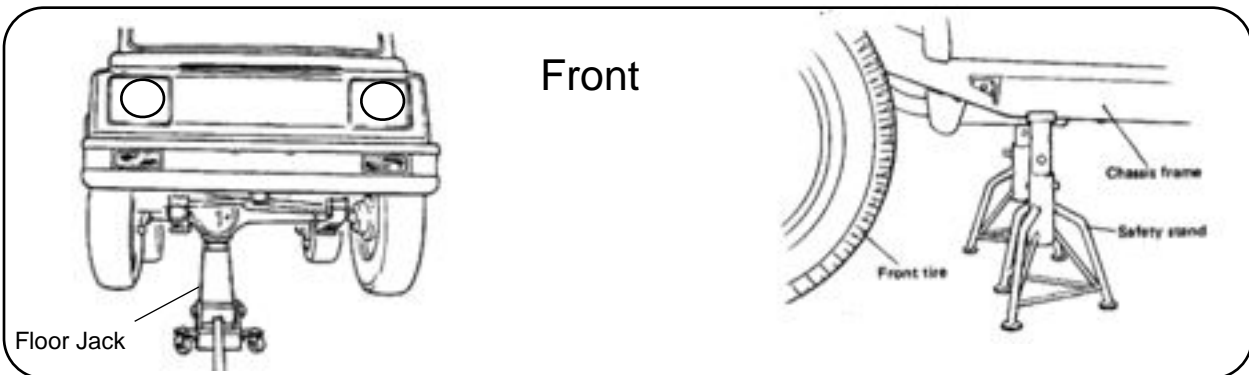


Rear Positioning



## Lifting Option 2

Lift the vehicle with a floor jack and support it on safety stands.



### Tech Tip

When working on suspension, brakes or drive train parts it is a good idea to spray all fasteners with penetrating oil a day ahead. If not done a day ahead, an hour or even minutes before is helpful.

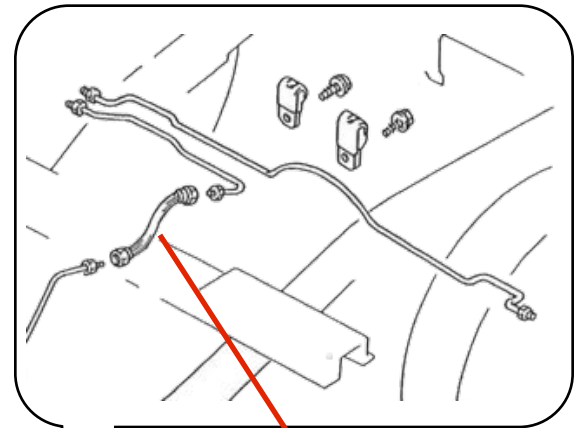


# Brake System Parts Identification



**Notice:** The 1968 to 1988.5 Models have two rear flexible brake lines. The 1988.5 to 1995 models have only one rear flexible brake line.

1988.5 to 1995 Models



Driver Side  
Rear Flexible  
Brake Line

Passenger Side  
Rear Flexible  
Brake Line

Passenger Side  
Front Flexible  
Brake Line

Driver Side  
Front Flexible  
Brake Line

Rear Flexible  
Brake Line

Banjo  
Bolt

1986 to 1988.5

Copper  
Washer

Copper  
Washer

Retainer  
Clip

1968 to 1988.5 Models





### Step 1

Remove all 4 wheel assemblies using a 19 mm socket.

Note: Although this job could be done without removing the wheels, we find the job goes better if the wheels are removed.



### Step 2

Place a drain pan under the passenger side front wheel.



### Step 3

Loosen the banjo bolt using a 14 mm socket.



### Step 4

Remove the banjo bolt and (2) copper washers.



### Step 4 Continued

Be sure that both copper washers are removed.



### Step 5

Install the old banjo bolt and (2) new supplied copper washers on the new brake line as shown.

Note: Insure that the banjo bolt and all surfaces that contact the copper washers are clean and free from dust, dirt and grit.



### Step 6

Install the banjo bolt and supplied brake line as shown.

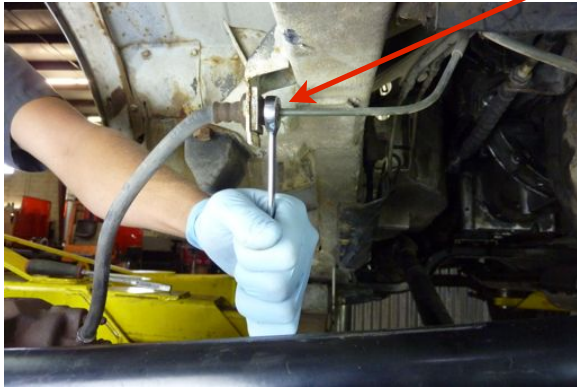
Note: Be sure the copper washers remain in place.



### Step 7

Snug the banjo bolt and then torque it to 14.5 to 28.5 ft. lbs.

Flare Nut



### Step 8

Loosen the flare nut 4 or 5 turns using a 10 mm tubing wrench.

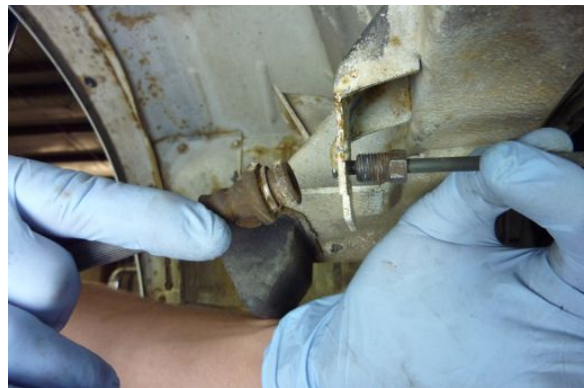
### Step 9

Remove the brake line retainer clip using a standard screwdriver.



### Step 10

Hold the flare nut with a 10 mm wrench, pull the flexible brake line toward you and . . . . .



### Step 11

. . . . . unthread the flexible brake line.



## Step 12

Thread the new brake line onto the flare nut.

Note: Be sure both fittings are clean.

**Caution:** Be careful not to cross-thread these fittings.



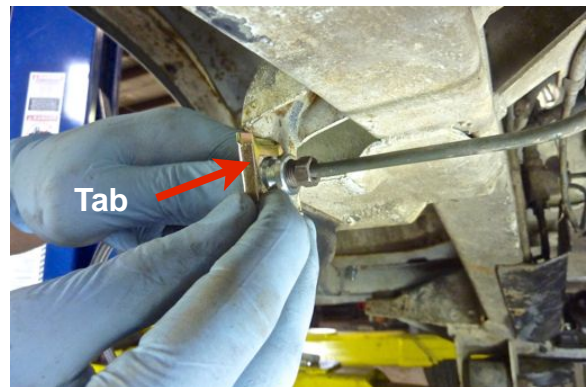
## Step 13

Be sure the brake line is properly fitted in the brake line bracket.



## Step 14

Tighten the flare nut to 10.5 to 13.0 ft. lbs.



## Step 15

Install the supplied retainer clip as shown.

Note: The tab should be oriented, toward the flare nut.



### Step 15 Continued

Retainer clip properly installed.



### Step 16

While observing the hose, have an assistant turn the steering, full right and full left. Be sure the hose does not kink, bind, rub or stretch. Adjust the hose routing if necessary.



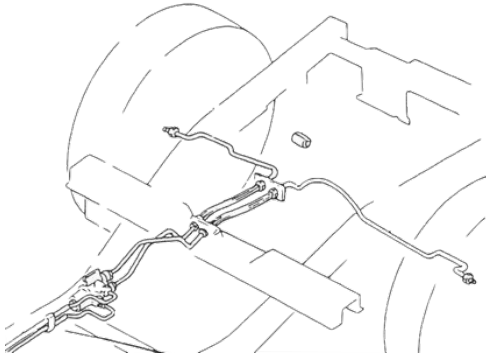
### Step 17

Repeat **Steps 2 through 16** on the driver side front wheel.

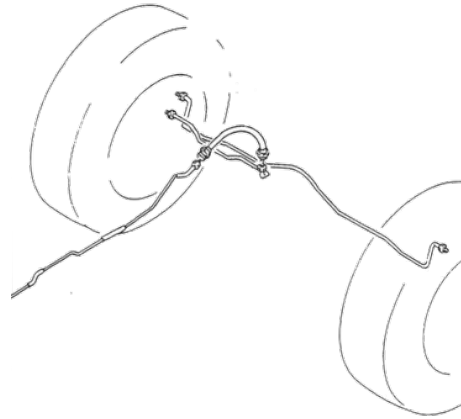
## Replacing REAR Flexible Brake Line(s)



**Tech Tip:** 1986 to 1988.5 Samurai's have two flexible rear brake lines and the 1988.5 to 1995 models have only one flexible rear brake line. We are working on a 1987 Samurai with 2 flexible brake lines.



1986 to 1988.5 Suzuki Samurai



1988.5 to 1995 Suzuki Samurai



### Step 18

If not previously done, remove both rear wheels.

**Note:** These brake lines could be replaced without removing the wheels but we have found that the job goes better with the wheels out of the way.

### Step 19

Place a drain pan under the rear flexible brake line(s).



**Important Notice:** These instructions will show the removal and replacement of the driver side rear flexible brake line. If the vehicle you are working on has two rear flexible brake lines (model years 86 to 88.5), the procedures for the second line is exactly the same as the first.



### Step 20

Disconnect the lower end the passenger side brake line using a 10 mm tubing wrench.



### Step 21

Remove the retainer clip using a standard screwdriver.



### Step 22

Disconnect the flexible brake line from the support bracket.



### Step 23

Kink the flexible brake line and secure it using a zip tie or tape to reduce fluid loss.

Note: If fluid is dark or old you may want to let it drain so it can be replaced with new fluid.



### Step 24

Disconnect the upper end of the driver side brake line using a 10 mm tubing wrench.



### Step 25

Remove the retainer clip using a standard screwdriver.



### Step 26

Remove the driver side brake line and set it aside.



### Step 27

Insert the new brake line (does not matter which end) through the bracket and thread it on the flare nut.

Note: To reduce the risk of leaks, be sure that all the parts associated with this connection are clean.

**Caution:** Be careful not to cross-thread the fittings.



## Step 28

While holding the brake line secure in the bracket, tighten the flare nut using a 10 mm tool.

Note: Final tightening of the flare nut may be easier after the next step.



## Step 29

Install the supplied retainer clip.

Note: Insure that the tab is oriented toward the flare nut. Double check the flare nut to be sure it is tight. The torque spec is 10.5 to 13.0 ft. lbs.



## Step 30

Connect the lower end of the flexible brake line by inserting it through the bracket and threading the flare nut into it.



## Step 31

While holding the flexible brake line tight against the bracket, tighten the flare nut using a 10 mm tubing wrench.

Note: Final tightening of the flare nut might be easier after the next step.



### Step 32

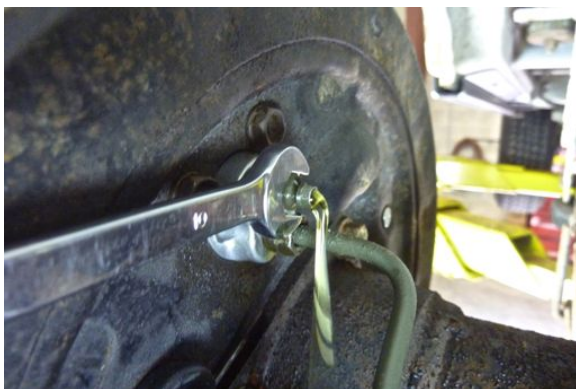
Install the retainer clip with the tab oriented toward the flare nut.

Note: Double check the flare nut to be sure it is tight. The torque spec is 10.5 to 13.0 ft. lbs.



### Step 33

Repeat **Steps 18 through 32** on the second brake line if it has one.



### Important Notice:

The Braking System will not work until it is filled with brake fluid and purged of all the air. This purging process is called "Bleeding". To obtain instructions on how to properly bleed the system click [HERE](#).

### Step 34

Replace all 4 wheel assemblies and tighten the lug nuts in a progressively tighter criss-cross pattern until 36.5 to 57.5 ft. lbs. is reached. Lower the vehicle to the floor.



### Congratulations:

You have successfully installed your flexible brake hoses. We hope these instructions have been helpful.





As always, If you experience any difficulty during the installation of this product please contact Low Range Off-Road Technical Support at 801-805-6644 M-F 8am-5pm MST. Thank you for purchasing from Low Range Off-Road.



These instructions are designed as a general installation guide. Installation of many Low Range Off-Road products require specialized skills such as metal fabrication, welding and mechanical trouble shooting. If you have any questions or are unsure about how to proceed, please contact our shop at 801-805-6644 or seek help from a competent fabricator. Using fabrication tools such as welders, torches and grinders can cause serious bodily harm and death. Please operate equipment carefully and observe proper safety procedures.

Rock crawling and off-road driving are inherently dangerous activities. Some modifications will adversely affect the on-road handling characteristics of your vehicle. All products sold by Low Range Off-Road are sold for off road use only. Any other use or application is the responsibility of the purchaser and/or user. Some modifications and installation of certain aftermarket parts may under certain circumstances void your original dealer warranty. Modification of your vehicle may create dangerous conditions, which could cause roll-overs resulting in serious bodily injury or death. Buyers and users of these products hereby expressly assume all risks associated with any such modifications and use.

Revised 06/21/12© Copyright 2012 Low Range Off-Road, LC All Rights Reserved

