

TOOL USE INSTRUCTION

RIVIAN	TOOL NUMBER	TSN00952-100-A
	TITLE	BRAKE CALIPER SPREADER
	REV - DATE	REV C - 02/27/2026

CONTENTS

[OVERVIEW](#)

[SAFETY](#)

[INITIAL SETUP](#)

[TOOL USE INSTRUCTION](#)

[MAINTENANCE & STORAGE](#)

[SERVICE & REPLACEMENT PARTS](#)

[TROUBLESHOOTING](#)

[SYMBOL GLOSSARY](#)

TOOL FUNCTION

Used to push back Hydraulic piston in brake calipers as well as push sliding stainless steel bushings in cast subframe assemblies



OVERVIEW

SPECIFICATIONS

Weight: 2 lbs

Overall Dimensions: 12 in . Length, 7 in Width

Load Rating: N/A

Voltage Rating: N/A

LABOR CODES

1400- Brakes General

1418- Brake Pads

181012510- Control Arm, Lower, Front, LH, 2nd Generation Subframe (Remove and Replace)

OTHER TOOLS REQUIRED

Access to **RiDE** service Procedures





WARNING

Do not perform procedure if tool is damaged or missing parts. Consult the Rivian Service Tool Catalog for replacement components.

Failure to follow guidelines outlined in this document could result in injury and/or property damage.

SAFETY GUIDELINES

<p>1</p>	<p>Risk of Pinch Point</p> <ul style="list-style-type: none"> • keep hands and fingers clear of all moving parts. 	
<p>2</p>	<p>PPE REQUIRED</p> <ul style="list-style-type: none"> • eye protection • closed toe shoes • gloves 	
<p>3</p>	<p>CAUTION</p> <p>Risk of</p> <ul style="list-style-type: none"> • damage to vehicle or property if tool is used incorrectly 	



1	EDV 2-Piston: Refer to service manual: 141810010-Brake Pad Set, Front (Remove and Replace)	Use TUI (Tool Use Instructions) alongside the service manual procedure
2	EDV Rear Brake Pad: Refer to service manual: 141820010 Brake Pad Set, Rear (Remove and Replace)	Use TUI (Tool Use Instructions) alongside the service manual procedure
3	R1 Front Brake Pad: Refer to service manual: 141810010 Vehicles with 4 Piston Caliper	Use TUI (Tool Use Instructions) alongside the service manual procedure
4	R1 rear Brake Pad: Refer to service manual: 141820010 Brake Pad Set, Rear (Remove and Replace)	Use TUI (Tool Use Instructions) alongside the service manual procedure
5	R1 Front Lower Control Arm (GEN 2 Subframe): Refer to service manual procedure 181012510 Control Arm, Lower, Front, LH, @nd Generation Subframe (Remove and Replace)	Use TUI (Tool Use Instructions) alongside the service manual procedure



<p>1</p>	<p>Caliper rotated to gain access to the pistons</p>	
<p>2</p>	<p>Adjust TSN00952 Brake Caliper Spreader to fit in between the caliper body and the extended caliper pistons</p>	<p>Hold the press pads on the tool in place as you use the ratchet function to expand and contract the caliper press tool</p>
<p>3</p>	<p>Once TSN00952 Brake Caliper Spreader is inserted into the caliper, compress the pistons by adjusting (ratcheting) the tool and applying pressure in a parallel manner to prevent misalignment.</p>	
<p>4</p>	<p>Once pistons are compressed, Install new pads (if needed), re-install the caliper body onto the caliper bracket and torque all removed fasteners to spec (as specified in the service manual)</p>	<p>Be sure to press the brake pedal before moving the vehicle to allow the pistons in the caliper to apply pressure to the pads and evenly distribute force on the pads prior to moving the vehicle!</p>



<p>1</p>	<p>Slide caliper of the rotor and knuckle</p>	<p>Make sure there is enough slack in the brake line to position the caliper on top of the rotor</p>
<p>2</p>	<p>Remove the brake pads (x2) to gain access to the pistons inside the caliper</p>	
<p>3</p>	<p>Insert TSN00952 Brake Caliper Spreader and adjust to fit the space between all 4 pistons. Important: Position the Brake Caliper press tool evenly on all 4 pistons to prevent any damage to the pistons when compressing.</p>	
<p>4</p>	<p>Compress the pistons by adjusting (ratcheting) the tool and applying pressure in a parallel manner to prevent misalignment.</p>	

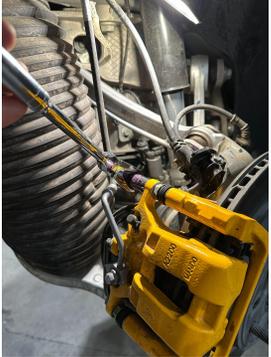


<p>5</p>	<p>Once the pistons are all compressed, re-install pads (x2) and the brake pad spring clips (x2).</p>	
<p>6</p>	<p>Re-mount the caliper assembly back on to the rotor and knuckle assembly and torque all removed fasteners back to required torque specs as detailed in the service manual</p>	<p>Important: Press the brake pedal to allow the pistons to apply pressure to the pads and evenly distribute force on the rotor prior to moving the vehicle.</p>



<p>1</p>	<p>Using RiDE complete procedure using: 141820010- Brake Pad Set, Rear (Remove and Replace) set the rear pads in Park Brake Maintenance mode</p>	
<p>2</p>	<p>Slide caliper of the rotor and knuckle to gain access to the piston</p>	
<p>3</p>	<p>Insert TSN00952 Brake Caliper Spreader tool and adjust to fit the space between the piston and caliper body</p>	
<p>4</p>	<p>Compress the piston until it is flat and cannot be compressed any more (there will be noticeable resistance)</p>	



<p>5</p>	<p>Once the piston is fully compressed, re-install pads (x2) and the brake pad spring clips (x2).</p>	
<p>6</p>	<p>Re-mount the caliper assembly back on to the rotor and knuckle assembly and torque all removed fasteners back to required torque specs as detailed in the service manual</p>	
<p>7</p>	<p>Using RiDE complete procedure using: 141820010- Brake Pad Set, Rear (Remove and Replace) exit Parking Brake Maintenance Mode</p> <p>Test and check that EPB works as intended before releasing the vehicle</p>	



<p>1</p>	<p>Remove Lower control arm from the subframe to gain access to the bushings</p>	
<p>2</p>	<p>Insert TSN00952 Brake Caliper Spreader and adjust to fit the space between the casting opening (Camber pocket shown) Position the spreader in the middle of the bushing to ensure proper flat contact.</p>	
<p>3</p>	<p>Insert TSN00952 Brake Caliper Spreader tool and adjust to fit the space between the casting opening (Caster pocket shown) Position the spreader in the middle of the bushing to ensure proper flat contact.</p>	
<p>4</p>	<p>Compress the sliding bushing until it is flat against the casting and cannot be compressed any more (there will be noticeable resistance). This will allow the bushing to slide and give sufficient space to install the control arm.</p>	



<p>5</p>	<p>Install the Lower control arm and torque all removed fasteners back to required torque specs as detailed in the service manual</p>	
<p>6</p>	<p>Torquing the fastener (be sure to do it at proper ride height) will pull the bushing back into the proper position. (Camber shown)</p>	
<p>7</p>	<p>Torquing the fastener (be sure to do it at proper ride height) will pull the bushing back into the proper position. (Caster shown)</p>	



BASIC MAINTENANCE GUIDE

TASK	FREQUENCY
Inspect tool for proper operation (expand/ retract)	Before Each Use
Inspect flat plates for any burs or material that may damage the contacting surface	Before Each Use
Put tool back in designated storage spot after being used	After Each Use



SERVICE & REPLACEMENT COMPONENTS

FOR OTHER ITEMS NOT SHOWN, CONTACT RIVIAN SERVICE TOOL ENGINEERING

ITEM	DESCRIPTION	SUPPLIER + PART NUMBER	PHOTO
1	Brake Caliper Press	Blue Point BTCP500	



TROUBLESHOOTING

PROBLEM	SOLUTION
Brake pad spreader tool does not expand or retract easily	Clean threads and apply light grease. Operate tool to ensure that there is no binding.
Brake pad spreader tool does not expand or retract after cleaned and greased.	Replace the tool assembly
The flat contact plates are bent or have a noticeable curve	Replace the tool assembly
The screw gear and plate are on one side	Unscrew the assembly (hold one plate as the other one moves) and position the handle to the center of the plates





DANGER

Risk of electrocution or electric shock



WARNING

Risk of minor injury



DANGER

Risk of major injury such as

- fire
- chemical or poison
- crushing / maiming
- death



CAUTION

Risk of

- damage to vehicle or property
- data disruption
- voiding warranty



CAUTION

Risk of Pinch Point

- keep hands and fingers clear of all moving parts.



PPE REQUIRED

IMPORTANT

Refer to the service manual for vehicle component instructions!

REVISION LOG

REV	DATE	CHANGE DESCRIPTION
A	03/31/2024	Initial release
B	05/19/2025	Update instructions

