

**IS 250/350 Conv (FRONT) 2010-  
IS 250/350 Conv (REAR) 2010-2013**

Preparation

**Part Number:**

**PTR09-53108: All IS 250 Models - Front**

**PTR09-30102: IS 350 & GS 350 - Front**

**PTR09-53109: IS 250 AWD & RWD - Rear**

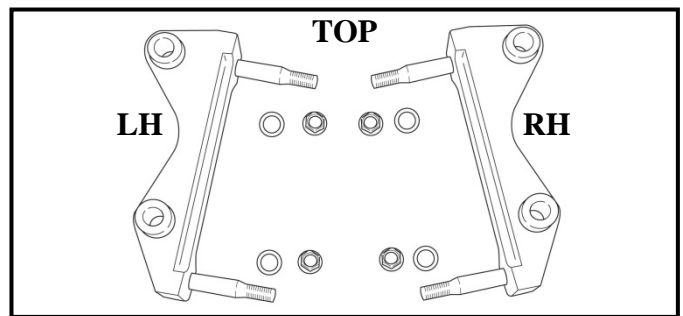
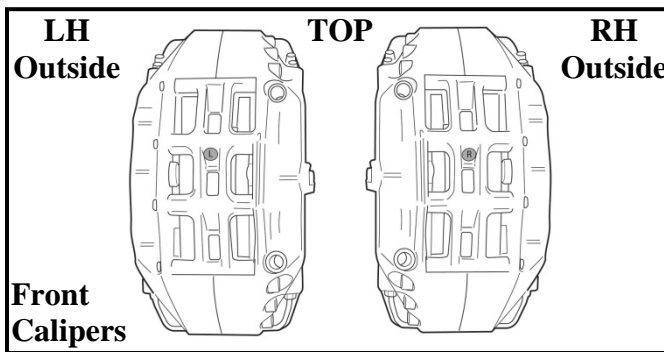
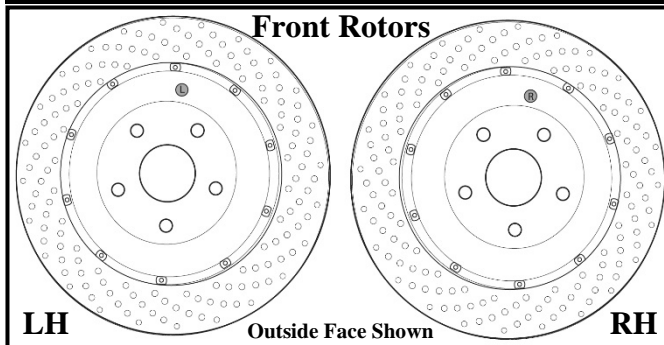
**PTR09-53110: All IS 350 Models - Rear**

**PTR09-53103: IS 250 C & GS 350 - Rear**

**PTR09-30101: GS 350 Fit Kit**

**Front Kit Contents**

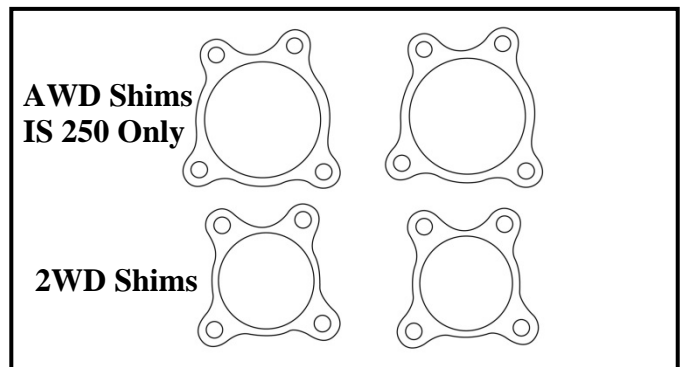
Item #	Quantity Req'd.	Description
1	1	Brake Rotor, LH Front
2	1	Brake Rotor, RH Front
3	1	Brake Caliper Assembly, LH Front with Brake Pads
4	1	Brake Caliper Assembly, RH Front with Brake Pads
5	1	Brake Caliper Bracket, LH Front with M12 Washers & 7/16-20 Self-Locking Nuts
6	1	Brake Caliper Bracket, RH Front with M12 Washers & 7/16-20 Self-Locking Nuts
7	1	Hardware Bag



**Front Kit Hardware Contents**

Item #	Quantity Req'd.	Description
1	5*	Copper Crush Washers
2	2	AWD Shims for Front Axle Hubs (IS 250 Kits Only)
3	2	2WD Shims for Front Axle Hubs
4	1	Spare Tire Warning Label
5	1	Installation Instructions
6	1	Mirror Hanging Tag
7	1	Brake Caliper Template
8	1	Owner's Document

**\* 4 Required + 1 spare**



**Vehicle Service Parts (may be required for reassembly)**

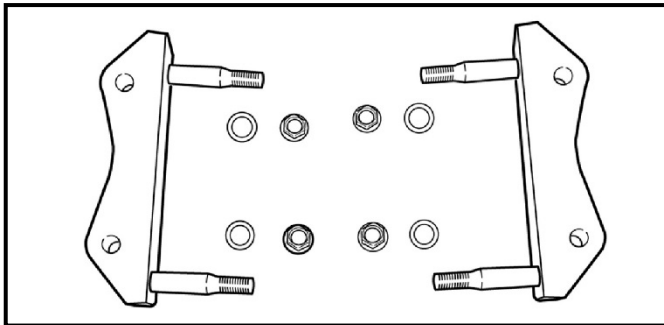
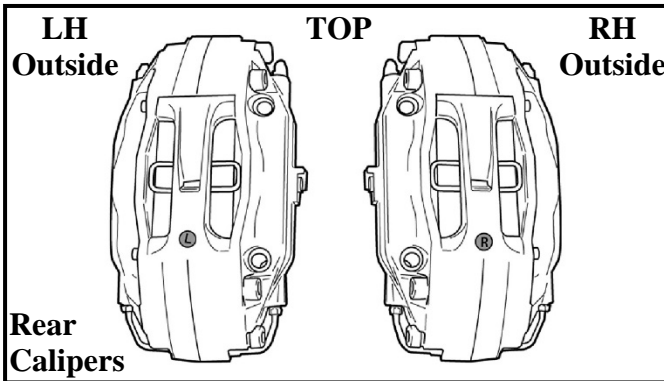
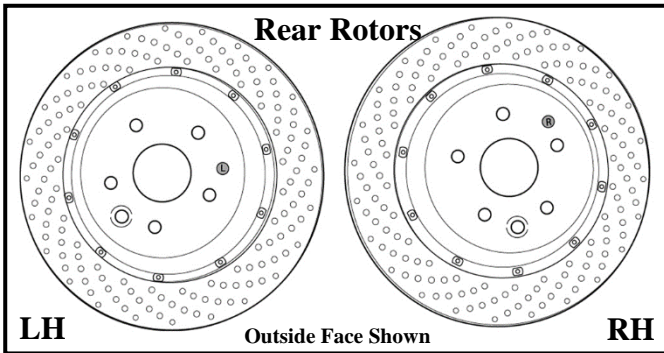
Item #	Quantity Req'd.	Description
1	2	Front Axle Hub Nut , P/N 90177-22001 (for AWD only)

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**Rear Kit Contents**

Item #	Quantity Reqd.	Description
1	1	Brake Rotor, LH Rear
2	1	Brake Rotor, RH Rear
3	1	Brake Caliper Assembly, LH Rear with Brake Pads
4	1	Brake Caliper Assembly, RH Rear with Brake Pads
5	2	Brake Caliper Bracket, Rear with M12 Washers & 7/16-20 Self-Locking Nuts
6	1	Hardware Bag



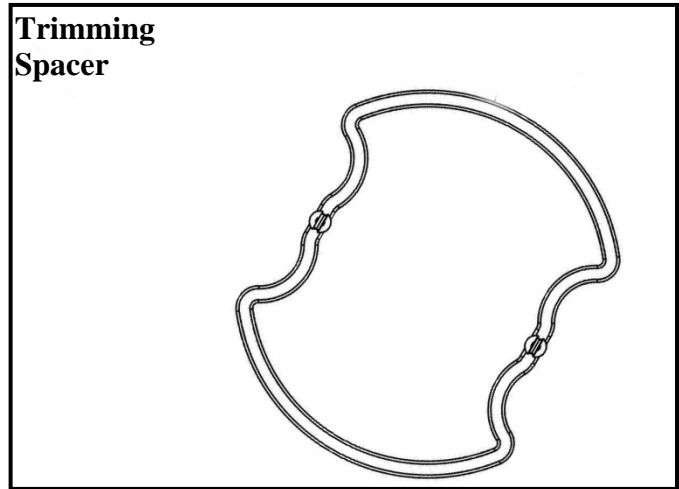
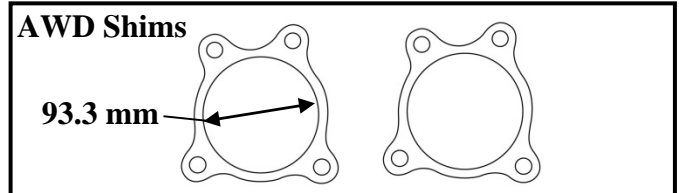
**Rear Hardware Contents**

Item #	Quantity Reqd.	Description
1	5*	Copper Crush Washers
2	1	Spare Tire Warning Label
3	1	Installation Instructions
4	1	Mirror Hanging Tag
5	1	Brake Caliper Template
6	1	Owner's Document

**\* 4 Required + 1 spare**

**GS Fit Kit Contents**

Item #	Quantity Reqd.	Description
1	2	AWD Shims for Front Axle Hubs
2	1	Rotor Spacer for trimming rear dust shields
3	1	Installation Instructions



**Additional Items Required For Installation**

Item #	Quantity Reqd.	Description
1		

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## Preparation

**Recommended Tools**

<b>Personal &amp; Vehicle Protection</b>	<b>Notes</b>
Safety Glasses	Safety Glasses /face shield
Vehicle Protection	Seat & Floor Covers
Fender Covers	
Work Gloves	
<b>Special Tools</b>	<b>Notes</b>
SST: 09930-00010	Drive Shaft Nut Chisel
Chassis Lift or	(Hydraulic Jack & Jack Stands)
Fluid Drip Trays	One per side
TRD Brake Bleeding Machine with IS/GS Adaptor	
<b>Installation Tools</b>	<b>Notes</b>
21mm Deep Socket	½" Drive
Air Impact Gun	½" Drive
10mm Combination Wrench	
10mm Nut Driver	
17mm Deep Socket	½" Drive
30mm Deep 12 point Socket	½" Drive (AWD only)
Torque Wrenches	3/8" & ½" Drive
½" Socket	3/8" Drive
14mm Socket	3/8" Drive
Air Powered Nibbler	
Air Powered Cut Off Wheel	
Air Powered Buffer Wheel	
Hammer	
Soft Mallet	
11mm Combination Wrench	
5mm Allen T-Wrench	
Breaker Bar	½" Drive
Brush or Vacuum for Chips	
11mm Deep Socket	3/8" Drive
<b>Special Chemicals</b>	<b>Notes</b>
Toyota Brake Fluid	#00475-1BF03 or Fluid: SAE J1703 or FMVSS No. 116 <b>DOT3</b>
Toyota Brake Cleaner	#00289-2BC00-CA
Black Felt Tip Paint Marker	P/N 04002 purchased from 1-888-396-3848 or <a href="http://www.markingpendepot.com">www.markingpendepot.com</a>

**Conflicts**

17 in. OE Wheels will not fit. No conflicts with 18 in. OE, Lexus Genuine Accessory and F-Sport Wheels except for the IS Convertible. OE 18 in. wheels on the IS Convertible do NOT provide sufficient clearance for F-Sport front Performance Brake Kits. Lexus Genuine Accessory or F-Sport wheels are recommended.

**NOTE:** The OE 18 in. wheels may need to be rebalanced with the weights placed behind the wheel spokes to provide required clearance.

**General Applicability**







Front & Rear Brake Upgrade can be installed on all IS 250 – 350 models except for vehicles with 17 in. OE Wheels. Some OE 18 in. wheels may require the balance weights to be placed behind the spokes as noted in the instructions.

**Recommended Sequence of Application**

Item #	Accessory
1	Accessory Wheels/Tires *
2	Springs/Shocks
3	Sway Bars
4	Front Brake Upgrade
5	Rear Brake Upgrade

\*Mandatory

**Legend**

	<b>STOP:</b> Damage to the vehicle may occur. Do not proceed until process has been complied with.
	<b>OPERATOR SAFETY:</b> Use caution to avoid risk of injury.
	<b>CAUTION:</b> A process that must be carefully observed in order to reduce the risk of damage to the accessory/vehicle and to ensure a quality installation.
	<b>TOOLS &amp; EQUIPMENT:</b> Used in Figures calls out the specific tools and equipment recommended for this process.
	<b>REVISION MARK:</b> This mark highlights a change in installation with respect to previous issue.
	<b>SAFETY TORQUE:</b> This mark indicates that torque is related to safety.



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Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

These guidelines can be found in the "Accessory Installation Practices" document.

This document covers such items as:-

- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.).
- Safety (eye protection, rechecking torque procedure, etc.).
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.).
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.).

Please see your Lexus dealer for a copy of this document.

**1. Prepare the Vehicle.**

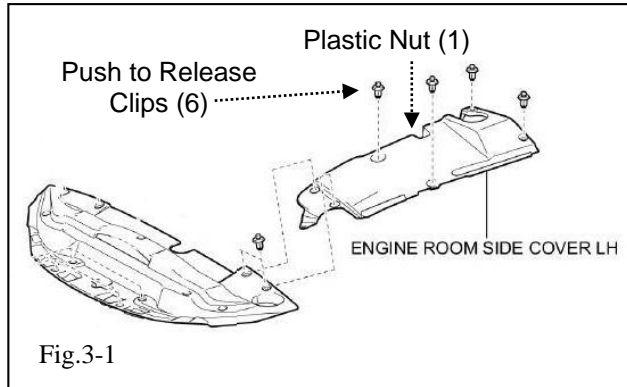
- (a) Before working on the vehicle, protect the seats and carpets with covers. Open the hood and place a Fender Cover over the driver side fender to protect the vehicle paint.

**2. Check the Kit Contents.**

- (a) Check the Front & Rear Brake Upgrade kits for contents and damage.

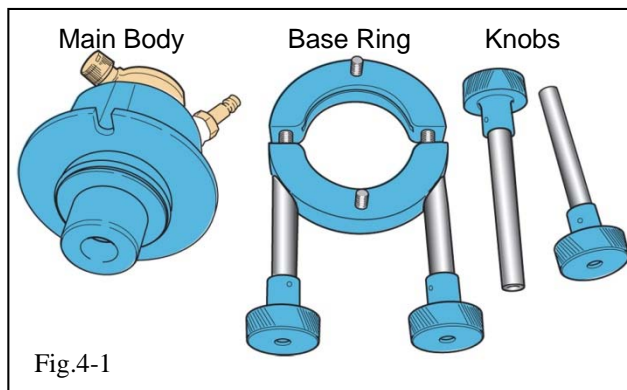


**NOTE: Because IS & GS Calipers look identical, but differ with the internal piston diameters, it is important to not open and pre-stage kits in a manner that might allow the calipers to be mixed up. Attachment "C" provides instructions on how to identify calipers.**



### 3. Remove the Engine Room Side Cover.

- (a) Remove the Engine Room LH Side cover by removing six (6) push to release clips and one 10mm plastic hex nut (Fig. 3-1). GS vehicles have fewer clips.

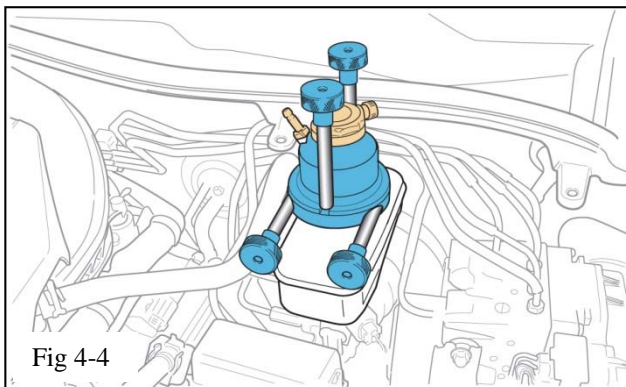
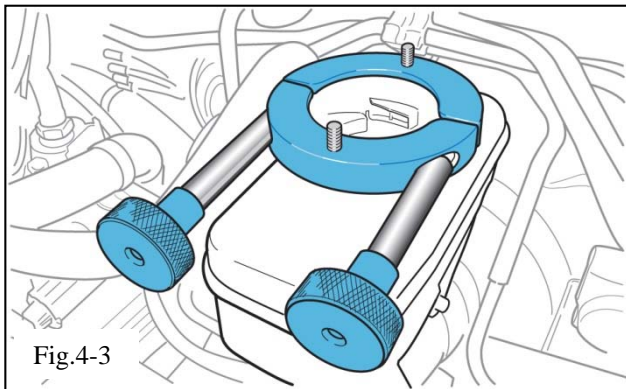
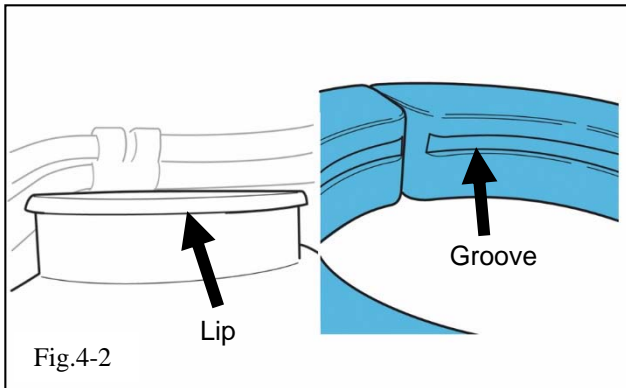


### 4. Attach Brake Fluid Adaptor

- (a) Remove brake reservoir cap.
- (b) The brake fluid adaptor has the components shown (Fig. 4-1). The parts include the main body, the base ring, and two knobs.

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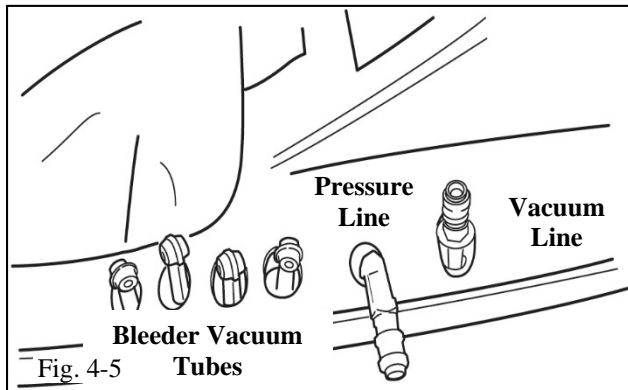
## Procedure



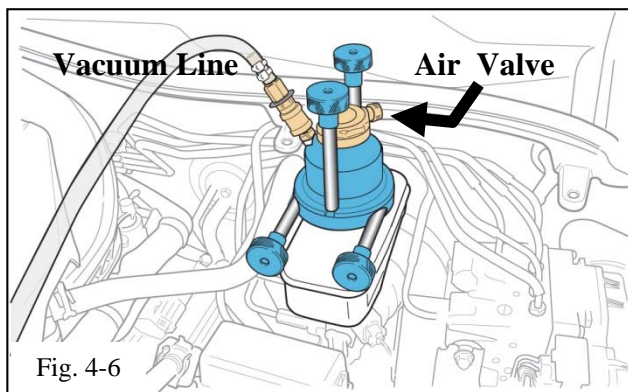
(c) Fix the adaptor base in place by clamping it around the lip at the top of the brake fluid reservoir neck (Fig. 4-2 & 4-3). The lip on top of the fluid reservoir fits in the groove on the inside of the adaptor base. Lightly tighten the 2 knobs but leave them slightly loose so the base can rotate.

(d) Seat the o-ring on the bottom of the adaptor in the top of the reservoir neck and attach the 2 long clamps (Fig. 4-4). Snug all 4 knobs finger tight. It helps to twist the adaptor while pushing down making it easier to get the o-ring into the reservoir neck.

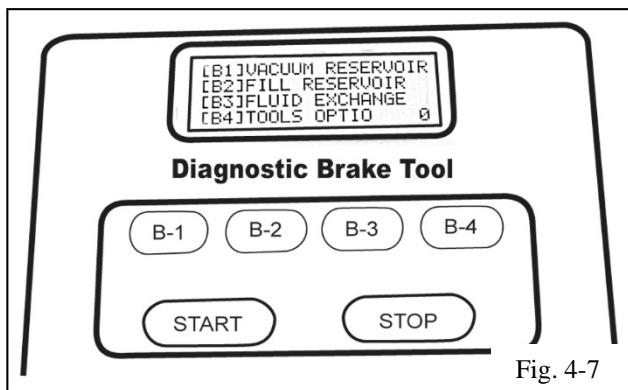
## Procedure



- (e) Attach the vacuum line to the adaptor as shown in (Figs. 4-5 & 4-6).



- (f) Close the air valve on the adaptor by turning it clockwise as shown in (Fig. 4-6).



- (g) After making certain the brake fluid reservoir on the brake bleeding machine is full, press the B-1 Button on the brake bleeding machine control panel as shown in (Fig. 4-7). After 50 seconds, an alarm will sound. Press STOP on the control panel to quiet the alarm.

**NOTE: You may continue to the next step while waiting for the alarm to sound.**

## 5. Remove the Front Wheels.



- (a) Use a vehicle hoist to lift the vehicle using the vehicle jacking points. If a vehicle hoist is not available, use a hydraulic jack to lift the front of the vehicle and set it on jack stands. Use the owner's manual to locate the proper vehicle jacking points.



**CAUTION:** Always use jack stands to support the vehicle, never work on a vehicle using only the jack.

- (b) Use a 21mm deep socket and ½" air impact gun to remove all wheel lug nuts. If wheel locks are installed, they must be removed by hand.
- (c) Remove all four wheel/tire assemblies and save for reuse.
- (d) Place drip trays under each caliper assembly to catch any brake fluid that may drip in subsequent steps.

## 6. Disconnect the Front Speed Sensor.

For 2WD go to Step 6(a), for AWD go to 6(b)

- (a) Disconnect the speed sensor connector from the front speed sensor (Fig 6-1).



**CAUTION:** Prevent foreign matter from adhering to the speed sensor.

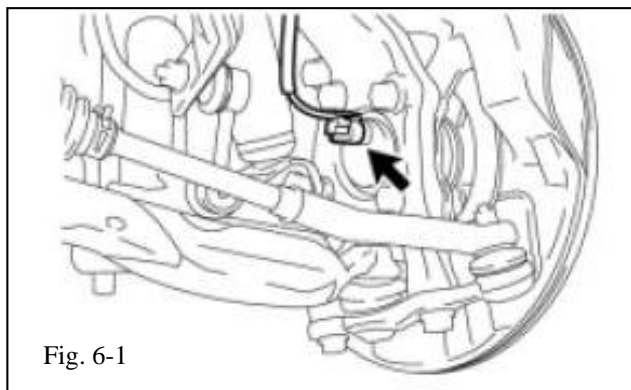


Fig. 6-1



## Procedure

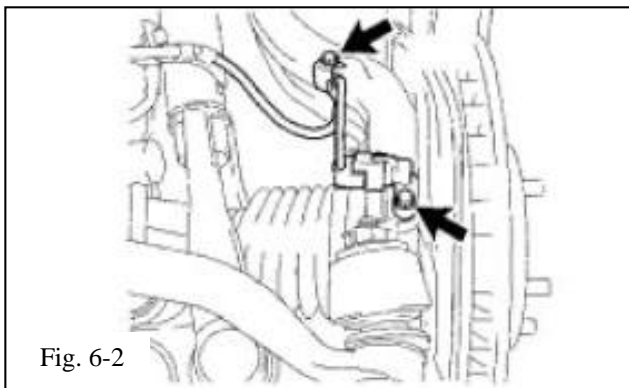


Fig. 6-2

- (b) Remove the 2 bolts and separate the speed sensor from the steering knuckle (Fig. 6-2).

**⚠ CAUTION:** Be careful not to damage the speed sensor. Prevent foreign matter from adhering to the speed sensor.

### 7. Remove Factory Front Brake Caliper & Rotor.

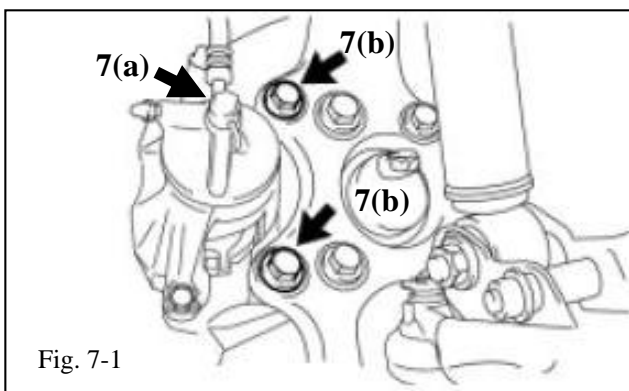


Fig. 7-1

- (a) Loosen and then remove the union bolt from the OE brake caliper that secures the flexible hose to the caliper. Remove and discard the aluminum gasket from the end of the flexible hose (Fig. 7-1).
- (b) Remove the 2 bolts and disconnect the brake caliper Assembly (Fig. 7-1). Retain these bolts, but discard the caliper.
- (c) Remove and discard the brake rotor (also called disk).

### 8. Replace the Dust Cover with Shims.

**For 2WD go to Step 8(a), for AWD go to 8(c)**

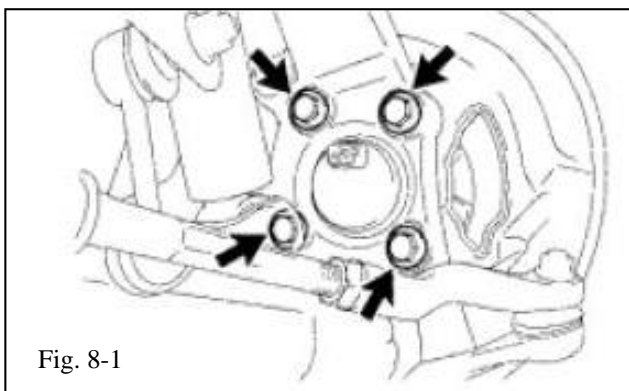


Fig. 8-1

- (a) Remove the 4 bolts, front axle hub sub-assembly and dust cover (Fig.8-1). Discard the dust cover.
- (b) Reinstall the front axle hub assembly to the steering knuckle using the 2WD shim in place of the dust cover between the steering knuckle and the front axle hub assembly. Tighten the 4 bolts.

**⚠ Torque: 51 lbf·ft (69 N·m).**

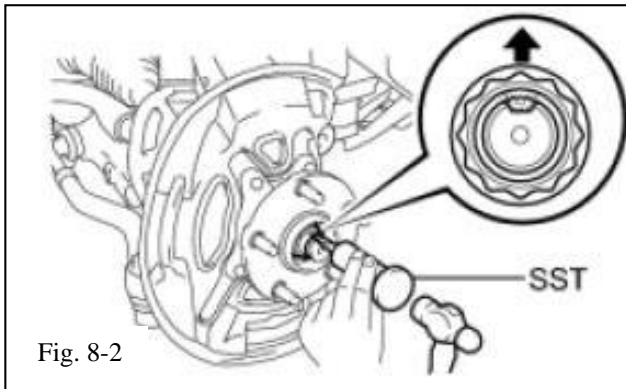


Fig. 8-2

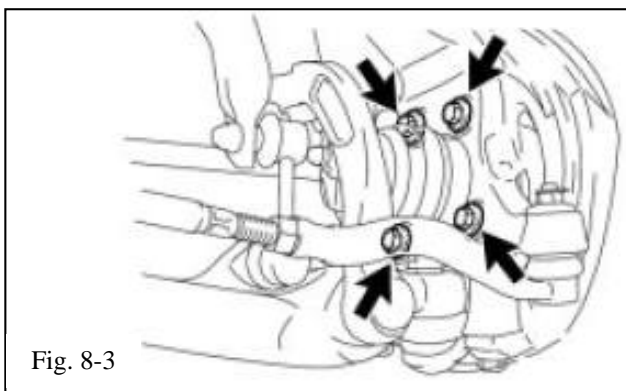


Fig. 8-3

**For 2WD go to Step 9**

- (c) Using SST and a hammer, release the staked part of the front axle hub nut (Fig. 8-2). Remove and discard the nut as it is to be replaced with a new nut, P/N 90177-22001.

**SST: 09930-00010**

**⚠ CAUTION: Release the staked portion of the nut completely; otherwise the threads on the drive shaft may be damaged.**

- (d) Using a plastic hammer, separate the front drive shaft assembly from the front axle hub.

**⚠ CAUTION: Be careful not to damage the front drive shaft boot.**

- (e) Remove the 4 bolts, front axle hub sub-assembly (Fig 8-3) and dust shield. Retain the bolts and axle sub-assembly. Discard the dust cover.

- (f) Reinstall the front axle hub assembly to the front drive shaft assembly and the steering knuckle using the 4WD shims in place of the dust covers between the steering knuckle and the front axle hub assembly. Tighten the 4 bolts.


**⚠ Torque: 51 lbf·ft (69 N·m)**

**⚠ CAUTION: Be careful not to damage the front drive shaft boot.**

- (g) Install a new front axle hub nut using a 30 mm socket and snug it in place. It will not be torqued until after the brakes have been bled.

- (h) Reinstall the speed sensor (Fig. 6-2). Torque the upper bolt to 120 lbf·in (14 N·m) and the lower bolt to 75 lbf·in (8.5 N·m).

 **Torque Upper: 120 lbf·in (14 N·m)**

 **Torque Lower: 75 lbf·in (8.5 N·m)**


### 9. Install the F-Sport Front Rotor & Caliper.

- (a) Install the caliper bracket to the steering knuckle using the original caliper mounting bolts removed earlier (Fig 9-1).

 **Torque: 58 lbf·ft (78 N·m)**

- (b) Make certain the hub face and the centering ring on the hub are free of excess rust and or dirt.

- (c) Install the rotor assembly, seating it squarely on the hub face. Place two wheel nuts on opposite studs to prevent the rotor from falling off the hub and to hold it in place (finger tight) (Fig. 9-2).

 **CAUTION: The rotor hats have a small L (left) or R (right) sticker. Install “L” on the left side and “R” on the right side.**

- (d) Once the rotor is in place, remove the “L” or “R” sticker and clean any adhesive residue.

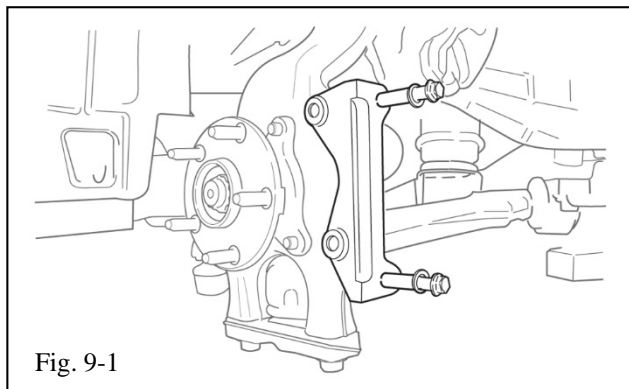


Fig. 9-1

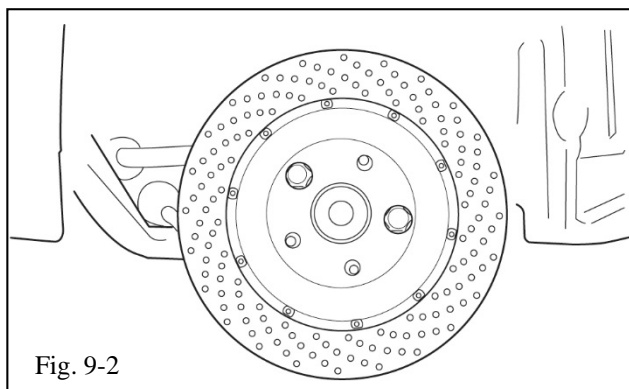


Fig. 9-2

## Procedure

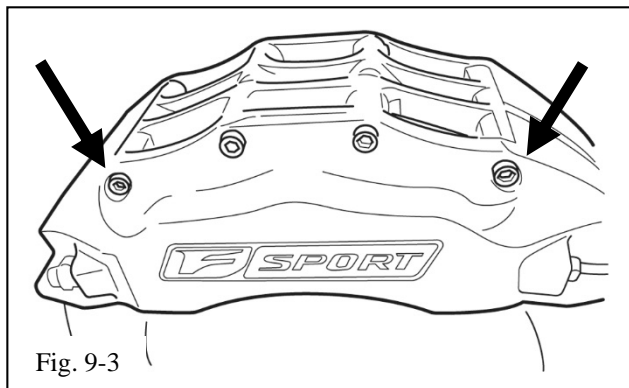


Fig. 9-3

- (e) With the caliper on a padded work bench, using an M5 Allen wrench back out the 2 outer bridge bolts 3 turns (Fig 9-3). Then turn the caliper over and remove the foam insert from between the brake pads.

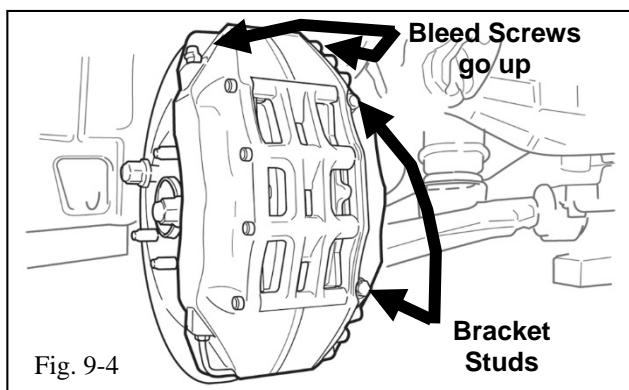




Fig. 9-4

- (f) After removing the nuts and washers from the caliper bracket studs, install the caliper/pad assembly onto the rotor with the bleed screws up while aligning the mounting holes with the studs (Fig. 9-4). Install the washers and then the nuts. Tighten the nuts.

 **Torque: 40 lbf·ft (54 N·m).**

 **CAUTION: The calipers have a small L (left) or R (right) sticker. Install “L” on the left side and “R” on the right side.**

- (g) Once the caliper is in place, remove the “L” or “R” sticker and clean any adhesive residue.

 (h) Re-tighten the 2 outer bridge bolts on the caliper until snug using an M5 Allen T-wrench. Do not use a torque wrench, the anti-seize compound will cause a false reading. Do not over-torque these bolts, snug is tight enough.

## 10. Attach the Original Front Flexible Brake Hose.

**⚠ NOTE:** Inspect both sides of the copper washers used in the following step to ensure they are flat & smooth. One spare washer is included in the kit in case of loss or damage.

- (a) Using two copper washers, one on each side of the banjo fitting on the end of the flexible brake hose, re-insert the union bolt through the banjo fitting and screw it into the caliper (Fig. 10-1). Note how the anti-rotation tang on the banjo fitting fits in the slot on the caliper.

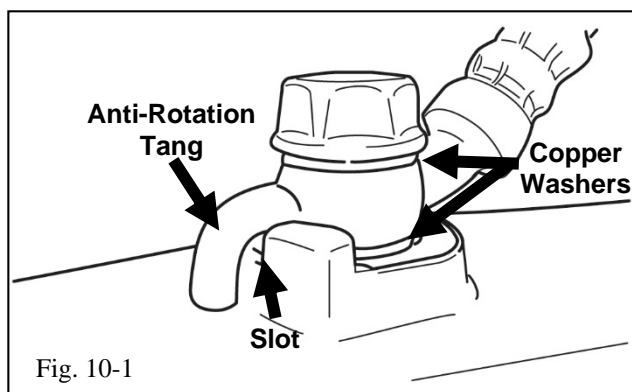


Fig. 10-1

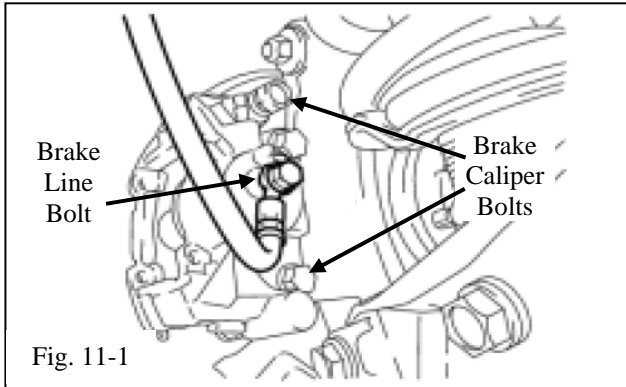
**⚠ Torque: 14 lbf·ft (19 N·m)**

**⚠ CAUTION:** Make sure the original aluminum gasket has first been removed from the banjo fitting. Do not over tighten the banjo bolt. Doing so can strip the aluminum threads in the caliper, causing irreparable damage to the caliper. Also, make sure that the flexible hose is not twisted when it is installed on the new caliper. Immediately clean any spilled fluid.

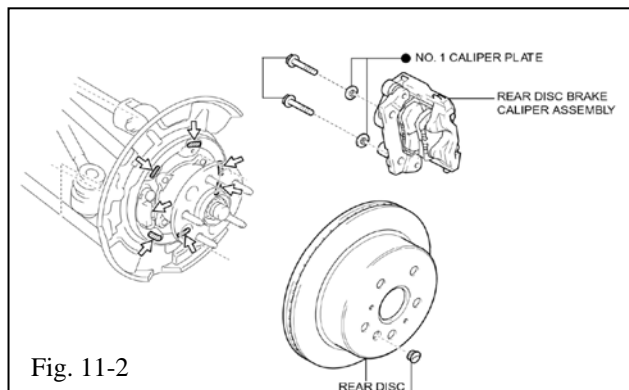
- (b) Have an assistant turn the steering wheel while observing the flexible brake hose for any binding. Also check for clearance to all suspension components.

**Repeat Steps 6(a) through 10(b) for the opposite side of the vehicle.**

## Procedure

**11. Remove Factory Rear Brake Caliper.**

- (a) Loosen and remove the union bolt holding the brake line flexible hose to the caliper. Remove and discard the aluminum gasket from the end of the flexible hose (Fig. 11-1).



- (b) Remove the 2 bolts and discard the brake caliper assembly (Figs. 11-1 & 11-2). Retain the 2 bolts. Leave the factory rear rotors in place.

**12. Trim the Rear Dust Cover.**

**⚠ CAUTION:** This section must NOT be omitted.

**NOTE:** The dust cover must be trimmed in order for the new rotor and caliper to fit & function properly.

**For the all IS models C, go to Step 12(a)**

**For the GS 350, go to Step 12(b)**

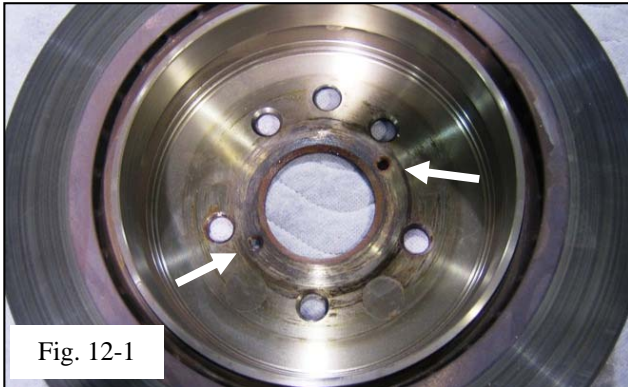
- (a) Install 2 lug nuts finger tight to hold the original rear brake rotor in place.

**For the all IS models, go to Step 12(d)**

(b) Remove the rotor and install the orange spacers (Figs. 12-1 & 12-2). The spacer snaps into the two M8 threaded holes.

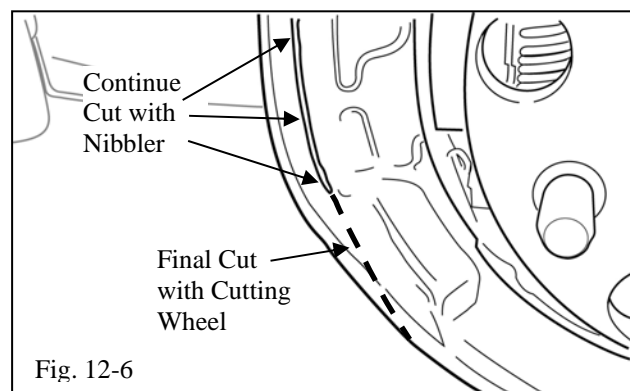
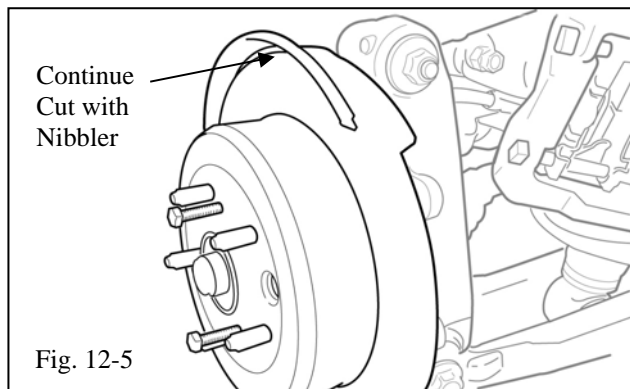
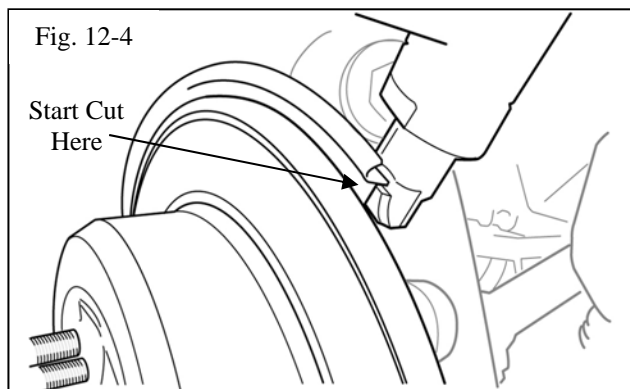
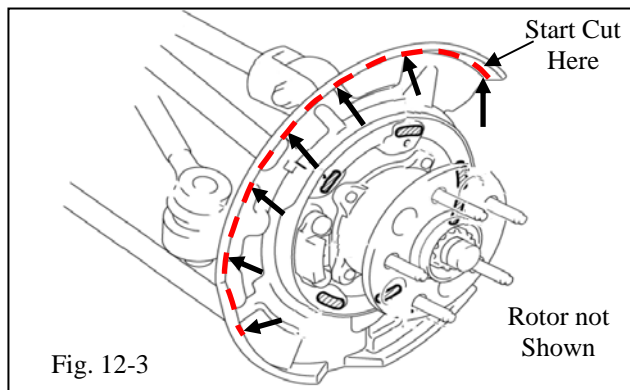
(c) Install 2 lug nuts finger tight to hold the original rear brake rotor in place with the orange spacer inside.

**For the GS 350, go to Step 12(d)**



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Procedure



(d) Use an Air Powered Nibbler to start cutting the dust cover at the top just above the factory caliper opening as shown. Use the outer edge of the brake rotor as a guide for the nibbler (Figs. 12-3 & 12-4).

(e) Continue cutting off the top portion of the dust cover with nibbler as shown (Fig. 12-5).

**NOTE: Rotor disk is not shown for clarity.**

(f) Continue cut with nibbler around down to bottom section as shown (Fig. 12-6).

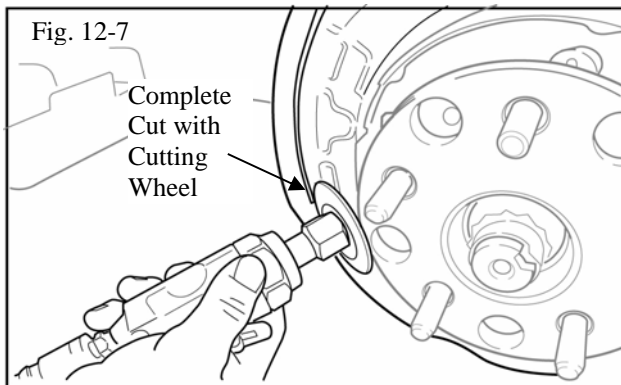
**NOTE: Rotor disk is not shown for clarity.**



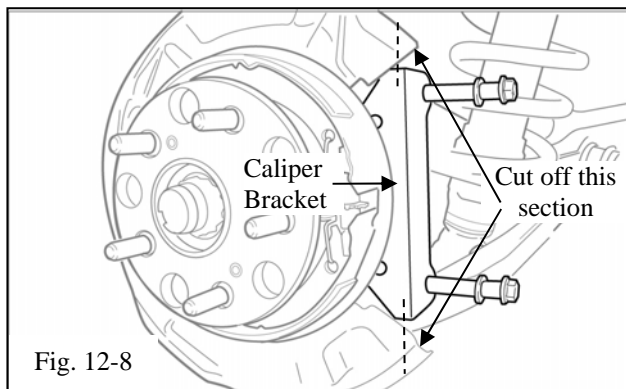
(g) Remove and discard the brake rotor/disc.

**STOP** NOTE: Before discarding the brake rotor, remove and save the rubber plug from the parking brake adjustment access hole and the orange spacer used on the GS.

(h) Complete the cut by cutting the final lower section of the dust cover with a small cutting wheel as shown (Figs. 12-6 & 12-7).

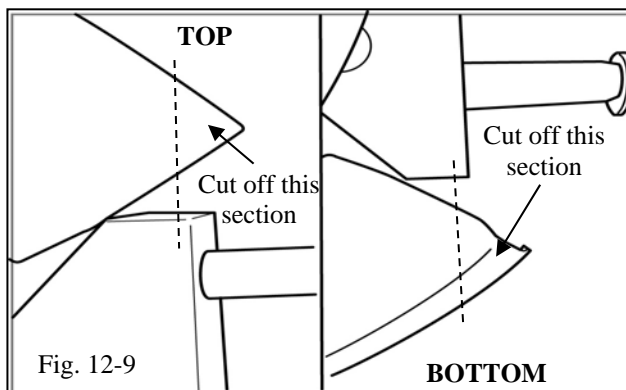


(i) Temporarily install the caliper bracket using the original caliper mounting bolts removed earlier (Fig. 12-8).



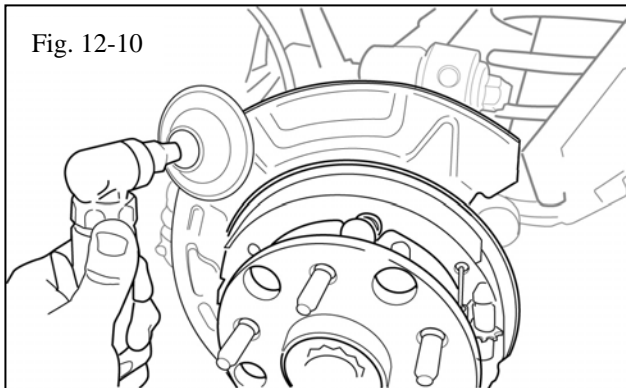
(j) Mark the top portion of the dust cover to be cut to allow the caliper to fit properly as shown (Figs. 12-8 & 12-9).

(k) Mark the bottom portion of the dust cover to be cut to allow the caliper to fit properly as shown (Figs. 12-8 & 12-9).



(l) Remove the caliper bracket and cut off both the top and bottom corners of the dust cover as shown.

## Procedure

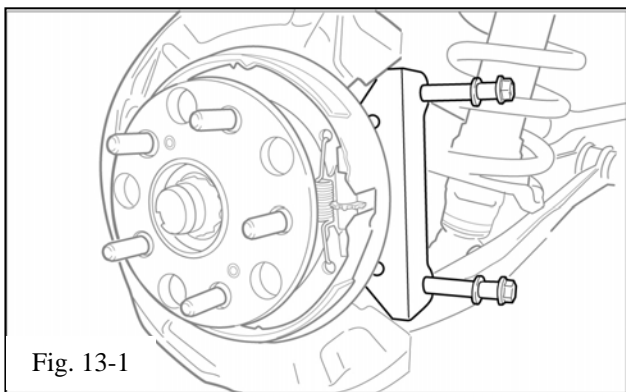


(m) Use a power sander to smooth out all rough edges along the cut lines of the dust cover (Fig. 12-10). Once complete, brush or vacuum all chips off the rear parking brake assembly.

**+** **CAUTION: Make sure there are no rough edges along the cut lines.**

(n) Use the black paint felt tip marker to apply black paint to all cut edges of the dust cover.

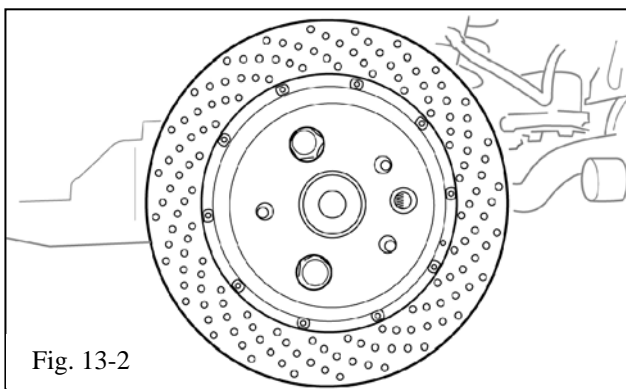
### 13. Install the F-Sport Rotor & Caliper.



(a) Install the caliper bracket to the axle carrier assy. using the original caliper mounting bolts removed earlier (Fig 13-1).

**S** **Torque: 58 lbf·ft (78 N·m)**

(b) Make certain the hub face and the centering ring on the hub are free of excess rust and or dirt.

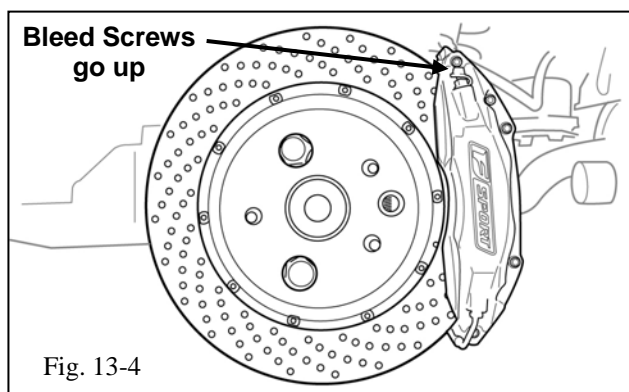
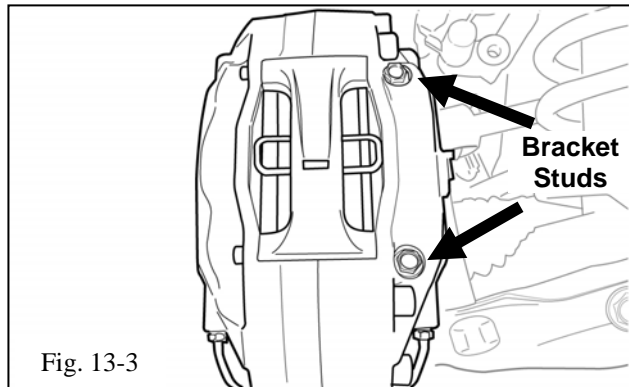


(c) Install the rotor assembly, seating it squarely on the hub face. Place two wheel nuts on opposite studs to prevent the rotor from falling off the hub and to hold it in place (finger tight) (Fig. 13-2).

**!** **NOTE: The rotor hats have a small L (left) or R (right) sticker. Install “L” on the left side and “R” on the right side.**

(d) Once the rotor is in place, remove the “L” or “R” sticker and clean off any adhesive residue.

## Procedure



- (e) Before installing the caliper remove the foam insert from between the brake pads.
- (f) After removing the nuts and washers from the caliper bracket studs, install the caliper/pad assembly onto the rotor with the bleed screws up by aligning the mounting holes with the studs (Fig. 13-3 & 13-4). Install the washers and then the nuts. Tighten the 1/2" nuts.



**Torque: 40 lbf·ft (54 N·m).**



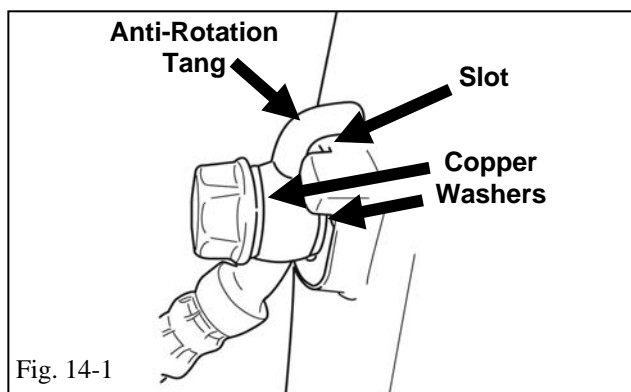
**CAUTION:** The calipers have a small L (left) or R (right) sticker. Install "L" on the left side and "R" on the right side.

- (g) Once the caliper is in place, remove the "L" or "R" sticker and clean any adhesive residue.

#### 14. Attach the Original Rear Flexible Brake Hose.

**⚠ NOTE:** Inspect both sides of the copper washers used in the following step to ensure they are flat & smooth. One spare washer is included in the kit incase of loss or damage.

- (a) Using two supplied copper washers, one on each side of the banjo fitting, re-insert the union bolt through the banjo fitting and screw it into the caliper (Fig. 14-1). Note how the anti-rotation tang on the banjo fitting fits in the slot on the caliper.



**⚠ Torque:** 168 lbf·in (19 N·m)

**CAUTION:** Make sure the original aluminum gasket has first been removed from the banjo fitting. Do not over tighten the banjo bolt.

Doing so can strip the aluminum threads in the caliper, causing irreparable damage to the caliper. Also, make sure that the flexible hose is not twisted when it is installed on the new caliper. Immediately clean any spilled fluid.

Repeat Steps 11(a) through 14(a) for the opposite side of the vehicle.

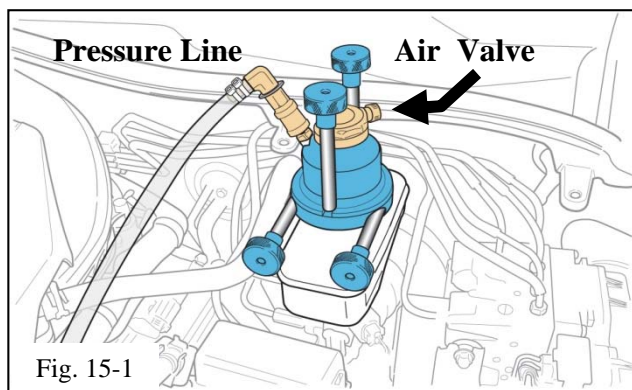


Fig. 15-1

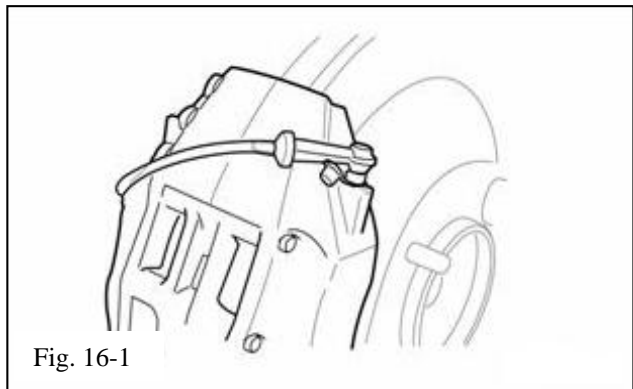


Fig. 16-1

### 15. Attach Brake Bleeder Machine Pressure Line

- Lower the vehicle to gain access to the brake fluid fill adaptor.
- Disconnect the vacuum line and attach the pressure line as shown in Fig. 15-1.
- Open the air bleed valve by turning counterclockwise.

### 16. Bleed Brakes, all four corners of the vehicle.

- Raise the vehicle.
- Attach one of the four bleeder vacuum tubes to the outside bleeder screw on the Passenger side rear caliper as shown in (Fig. 16-1). Leave the remaining three vacuum tubes open and unused in the bleeder machine.

**HINT: The rear line is longer and may be easier to use.**

- Press the B-3 Button on the bleeder machine control panel.
- Open the bleeder screw  $\frac{1}{4}$  turn.

**NOTE: Tap the calipers with a soft mallet to dislodge any trapped air bubbles. If you do not see fluid in the clear tubing, confirm the bleeder screws are open.**

- Close the bleeder screw when you no longer see any bubbles.
- Using the same vacuum line, bleed the inboard bleeder screw on the passenger side caliper. Once again, tap the caliper to help remove air bubbles while bleeding.

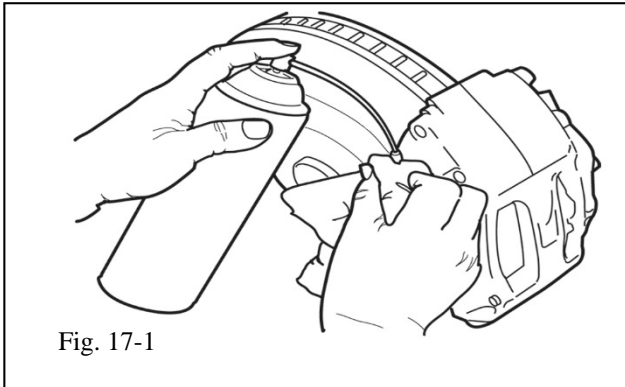
- (g) Continue to the driver side rear caliper and bleed the outside bleeder screw followed by the inside.
- (h) Again tap both calipers and then repeat Steps 16(d) through 16(g).
- (i) Bleeding is complete when a solid stream of brake fluid free of bubbles is observed from all four bleeder screws on the second sequence of bleeding. Tighten the bleeder screws.





**Torque 120 lbf·in (13 N·m)**


**Repeat Steps 16(b) through 16(i) for the front calipers starting on the outside of the passenger side caliper.**

- (j) Press the STOP button on the control panel once all four calipers have been bled.
- (k) Hold a rag to wipe any dripping brake fluid while removing the four bleeder vacuum tubes.



### 17. Clean the Calipers.

-  (a) Remove any traces of brake fluid which may remain in the bleed screw nipples by spraying brake cleaner into each one, and using a soft cloth to wipe away any excess (Fig. 17-1). Insert the tip of the plastic tube down into the bleeder screws until it reaches the bottom. While holding a rag tightly around the bleeder screw, squirt a small amount of brake cleaner into the bleeder screw.
- 

 **CAUTION: Failure to clean the brake fluid from inside the bleed screw nipples will allow brake fluid to seep past the threads and discolor the caliper paint.**

### 18. Check for Leaks.



- (a) Have a second person depress brake pedal slowly 3-4 times and hold brake pedal down. Check for fluid leaks while the brake pedal is depressed. Check the connections at the banjo fitting ends of the brake hoses, and all bleed screws.
- (b) Cover all 8 bleed screws with the attached rubber caps.

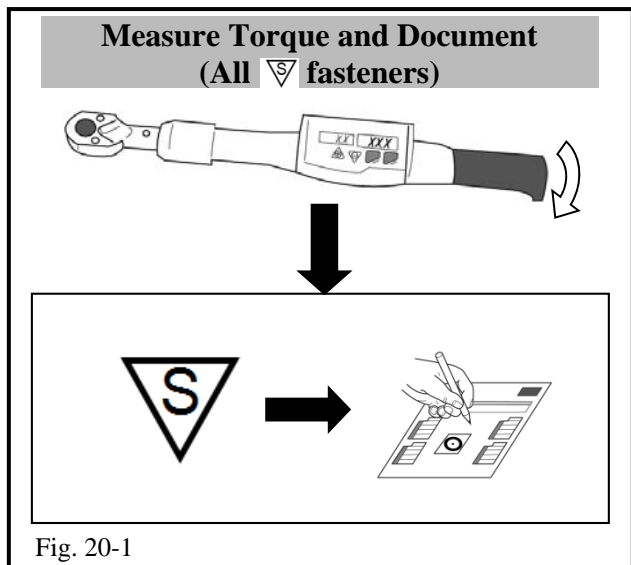
### 19. Torque & Stake Front Axle Nuts (AWD only)

- (a) With an assistant holding the brake pedal, torque and stake both front axle nuts.

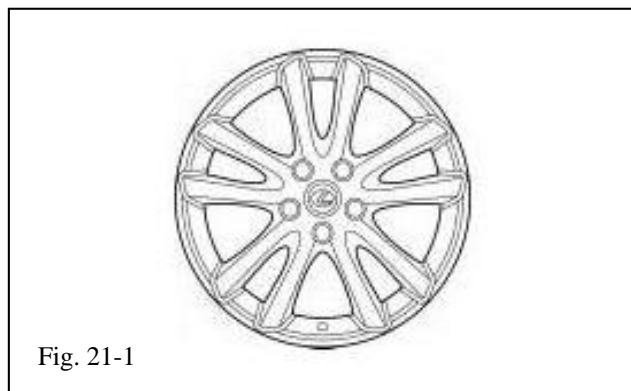
 **Torque: 217 lbf·ft (294 N·m).**

**20. Perform a Torque Audit**

-  (a) Perform a Torque Audit on all  fasteners.
- (b) Record the torque values on the Torque Audit Sheet (Fig 20-1).

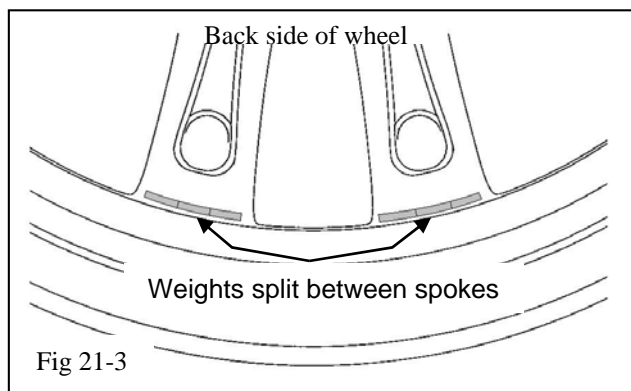
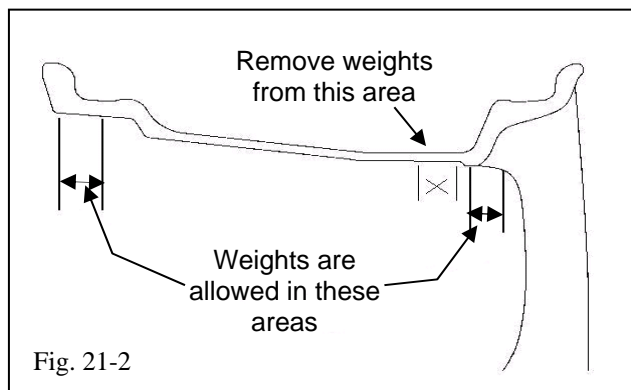
**21. Reinstall the Wheels and Lower the Vehicle.**

- (a) Confirm the type of wheel on the vehicle. If the OE 18 in. wheel for the IS 250 or IS 350 Sedan is used (Fig 21-1), follow the next steps to re-balance the front wheels. **All other acceptable Lexus Sport, Lexus Genuine Accessory or F-Sport wheels will not require this step.**





## Procedure



(b) Inspect wheel for weights located in the concern area shown in (Fig. 21-2).

- (1) If there are no weights found in this location you can now mount the wheel.
- (2) If weight is found here remove and re-balance the wheel assy.

(c) Rebalance the wheel using the split spoke feature on your tire balancing machine.

- (1) You may have to choose the gap between the double spokes as a spoke selection point for your tire balancing machine. (Fig. 21-3).

- (2) If your tire balancer does not have this feature, you will have to use your best judgment to split the weight added behind the spokes.

**⚠ CAUTION: There must be at least a 3.5 mm gap between the wheel weights and brake caliper.**

(3) Apply weights as shown (Figs. 21-2 & 21-3).

- (a) Remove dirt, oil and water from the surface where the balance weight is to be adhered.
- (b) Do not touch the sticking surface of the tape.
- (c) Adhere the sticking type balance weight to the flat position shown in the illustration.

(d) Push the balance weight securely with a finger to adhere it behind the spokes.

(e) Do not reuse a balance weight.

(d) Reinstall the wheels. Tighten the lug nuts hand tight.

**⚠ CAUTION: Do not allow the wheel to bump against the caliper or rotor and this can chip the paint.**

(e) Carefully rotate each wheel completely by hand, checking for any excess resistance and or interference.

(f) After initially snugging the lug nuts, lower the vehicle until the tires just touch the ground.

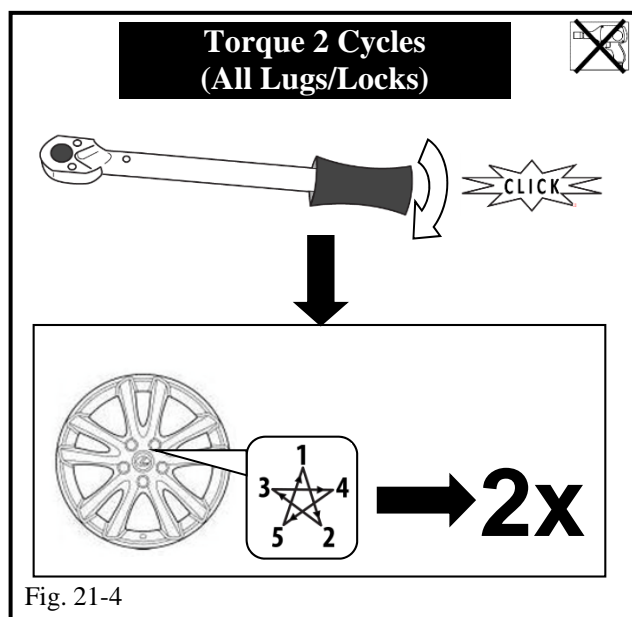
(g) Use a 21mm socket, splined key (if necessary) and torque wrench to tighten the lug nuts in sequence 1 through 5 (Fig. 21-4).

**S Torque: 76 lbf·ft (103 Nm)**

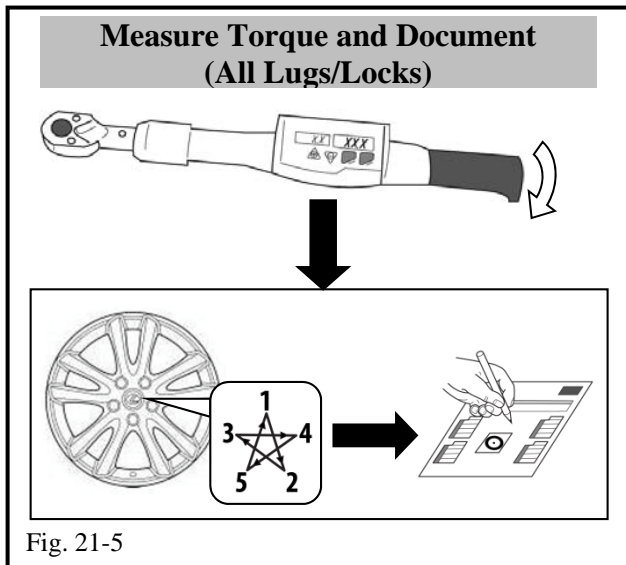
(h) Re-torque all lug nuts in same 1-5 sequence (Fig 21-4).

**S Torque: 76 lbf·ft (103 Nm)**

**STOP CAUTION: DO NOT USE IMPACT WRENCH TO INSTALL OR REMOVE WHEEL LOCKS.**



## Procedure



- (i) With the vehicle still on the lift, use a digital torque wrench to measure the torque of each lug nut/lock and record it on the Torque Audit Sheet (Fig. 21-5).




**NOTE: Both wheels should not rotate when the lug nuts are being torqued. If the wheels rotate, then re-check for fluid leaks. If no leaks are found, remove wheels and repeat brake bleeding procedure.**

- (j) Lower vehicle from lift or jack stands and apply brakes to ensure they are functioning properly before driving vehicle away.

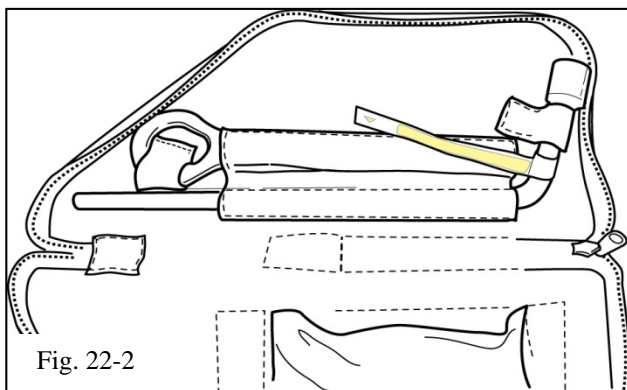
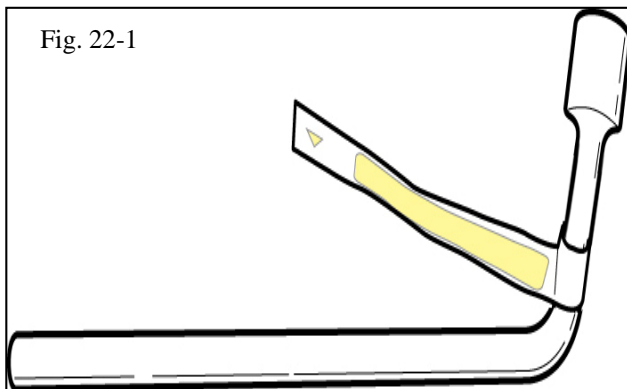
**22. Place the Documents and Move the Vehicle.**

(a) Place break-in procedure tag on inside mirror, and owner's document in glove box.

(b) Attach the spare tire warning label to the vehicle lug wrench as shown (Fig. 22-1). Replace the lug wrench in its storage bag (Fig. 22-2) and replace the storage bag in the vehicle.

 (c) Carefully move vehicle at low speed and apply brakes gently several times to ensure that all components are working correctly.

**Warning: Do not drive vehicle and apply brakes aggressively until rotors have been properly bedded or broken-in.**



### Care and Maintenance

- Your brake calipers have a painted finish. Immediately clean off any spilled brake fluid, wiping it off with a soft, clean terry-cloth towel. Rinse the area with clean water.
- Bedding-in rotors and pads is critical to the optimum performance of your new brakes. When bedding-in new parts, you are not only heat-cycling the pads, you are also depositing a layer of pad material onto the rotor face. If not bedded-in properly, an uneven layer of pad material will be deposited onto the rotor, causing vibration.
- Wash F-Sport Performance Brake system and wheels with mild soap and rinse with water. Chemical-based wheel cleaners can permanently discolor the anodized finish on the rotor hats. More frequent wheel cleanings may be required with less aggressive cleaning techniques.

Checklist - these points **MUST** be checked to ensure a quality installation.

<u>Check:</u>	<u>Look For:</u>
<p><u>Accessory Function Checks</u></p> <p><input type="checkbox"/> Check for Leaks</p> <p><input type="checkbox"/> Document Check</p> <p><input type="checkbox"/> Torque Audit</p>	<p>There should be no brake fluid leaks at the hose ends and bleeder screws.</p> <p>The TRD Big Brake Kit Mirror Tag should be hanging from the vehicle mirror and the TRD Big Brake Kit Owners Manual should be in the vehicle glove box. The spare tire warning label should be on the vehicle lug wrench.</p> <p>All Delta-S Fasteners must be audited and recorded on the applicable Torque Audit Sheet.</p>
<p><u>Vehicle Function Checks</u></p> <p><input type="checkbox"/> Brake Fluid Level</p> <p><input type="checkbox"/> Brake Pedal Feel</p>	<p>The vehicle brake fluid level should be full.</p> <p>The vehicle brake pedal should be firm and solid when depressed and held while the engine is running.</p>
<p><u>Vehicle Appearance Check</u></p> <p><input type="checkbox"/> After accessory installation and removal of protective cover(s), perform a visual inspection.</p>	<p>Ensure no damage (including scuffs and scratches) was caused during the installation process.</p> <p>(For PPO installations, refer to TMS Accessory Quality Shipping Standard.)</p>