Part Number: PTCCY-89310/89320

Tire Size Notice

Toyota recommends the use of OEM wheels and tires. The Toyota TRD Lift Kit is designed to be used with the OEM wheel and tire sizes. Tire and wheel combinations different than OEM wheel and tire size may void the vehicle's warranty.

Kit Contents

Item #	Quantity Reqd.	Description
1	*SEE PAGE 2 FOR KIT CONTENTS*	

Hardware Bag Contents

Item #	Quantity Reqd.	Description
1	*SEE PAGE 2 FOR KIT CONTENTS*	

Additional Items Required for Installation

Item #	Quantity Reqd.	Description
1	*N/A*	

Conflicts

Lift Kit cannot be installed with any of the following:

Model/Grade:	Limited, Platinum, Trailhunter, TRD Pro
Drivetrain:	All 2WD
Suspension:	Adaptive Variable Suspension

General Applicability

Lift Kit can only be installed if the vehicle matches the following criteria:

PTCCY-89310	MY25 and newer 4Runner
	SR5, TRD Sport, TRD Off-Road
PTCCY-89320	MY25 and newer 4Runner HV
	TRD Off-Road

Recommended Sequence of Application

Item #	Accessory
1	N/A

Vehicle Service Parts (may be required for reassembly)

Item #	Qty.	P/N	Description
1	2	90304-83003	Seal, Dust (for front axle hub)
2	1	90430-24017	Gasket, Front Differential Drain Plug
3	1	12157-10010	Gasket, Front Differential Filler Plug

Recommended Tools

Personal & Vehicle Protection	Notes
Safety Glasses	
Special Tools	**Notes**
SST	09628-62011 09930-00010, 09229-55010 09961-02080, 09960-20010 09520-01011, 09520-20010 09950-40011, 09955-04090
Wheel Alignment equipment	Refer to Toyota Repair Manual for required tools & SSTs
Techstream GTS	
TSS configuration equipment	Refer to Toyota Repair Manual for required tools & SSTs
Panoramic View Monitor configuration equipment	
Headlight Aim configuration equipment	
Installation Tools	**Notes**
Socket	10mm, 12mm, 14mm, 17mm, 19mm, 21mm, 22mm, 24mm
Ratchet	
Screwdriver	Flathead
Pliers	
Wrench	10mm, 14mm, 27mm, Adjustable, 14mm crowfoot
Paint Marker / Tape	
Torque Wrench	
Brass Bar	
Hammer	Plastic-faced & Regular
Pump Jack	

Legend

STOP: Damage to the vehicle may occur. Do not proceed until process has been complied with.

OPERATOR SAFETY: Use caution to avoid risk of injury.

CAUTION: 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.

TOOLS & EQUIPMENT: Used in Figures calls out the specific tools and equipment recommended for this process.

REVISION MARK: This mark highlights a change in installation with respect to previous issue.

SAFETY TORQUE: This mark indicates that torque is related to safety.

REGULATORY MARK: This mark indicates the component is related to regulatory compliance.

	Component Description	Component P/N	PTCCY-89310	PTCCY-89320
Hardware Bag Contents	NUT, CASTLE	90171-A0012	2	2
	CLIP	90468-A0003	2	2
	NUT, CASTLE	90171-18003	2	2
	PIN, COTTER	90252-03011	2	2
	NUT, CASTLE	90171-A0014	2	2
	PIN, COTTER	90252-04005	2	2
	NUT, LOCK	90177-A0023	2	2
	CAP, FR HUB GREASE	43514-0C020	2	2
	NUT, LOCK	90177-14003	2	2
Kit Contents	ARM ASSY, SUSPENSION, RH	PT901-89310	1	1
	ARM ASSY, SUSPENSION, LH	PT901-89320	1	1
	FRONT LOWER BALL JOINT ATTACHMENT, RH	PT981-35310	1	1
	FRONT LOWER BALL JOINT ATTACHMENT, LH	PT981-35320	1	1
	SHAFT ASSY, FR DRIVE, RH	43410-AK020	1	1
	SHAFT ASSY, FR DRIVE, LH	43420-AK020	1	1
	FRONT SHOCK ABSORBER W/ COIL SPRING	PTR13-89410	2	-
		PTR13-89420	-	2
	TIE ROD END SUB-ASSEMBLY, RH	PT81G-35310	1	1
	TIE ROD END SUB-ASSEMBLY, LH	PT81G-35320	1	1
	REAR COIL SPRING	PTR63-89330	2	-
		PTR63-89340	-	2
	REAR SHOCK ABSORBER	PTR13-89330	2	2

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 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 Toyota dealer for a copy of this document.

1. DISCONNECT BATTERY

(a) Place the vehicle in park and turn off the ignition.

(b) Disconnect cable from negative battery terminal (Fig. 1-1).

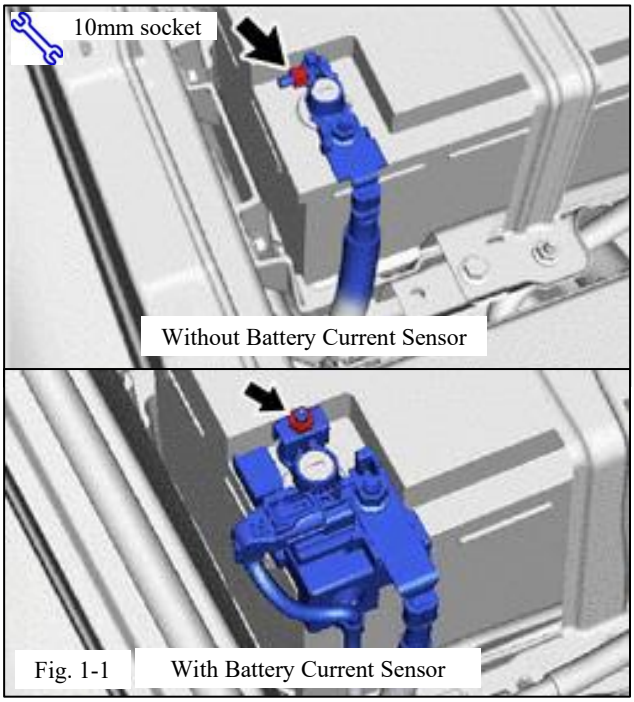


Fig. 1-1

2. DISCONNECT NO.2 AIR TUBE ASSEMBLY

(a) Under hood, release the retainer and disconnect the No. 2 air tube assembly from the intercooler assembly (Fig. 2-1).

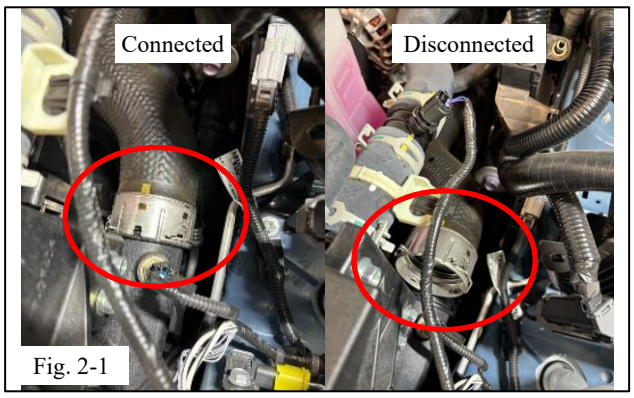


Fig. 2-1

3. REMOVE WHEEL ASSEMBLY

(a) Loosen the axle hub nuts on front and rear wheels.

(b) Lift the vehicle and remove the axle hub nuts and wheel assemblies on front and rear wheels (Fig. 3-1).

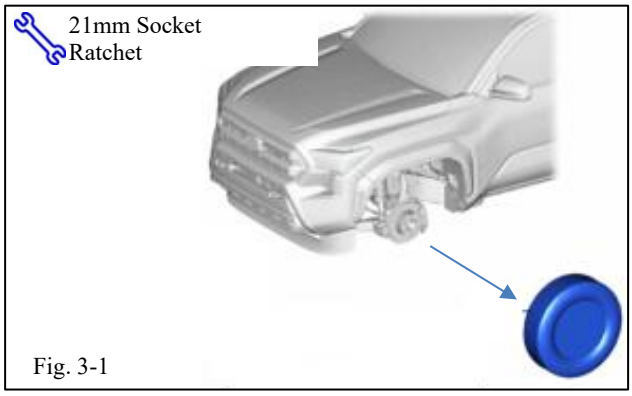


Fig. 3-1

4. REMOVE FRONT FENDER APRON TRIM PACKING

(a) Remove Front Fender Apron Trim Packing A and set aside (Fig. 4-1).

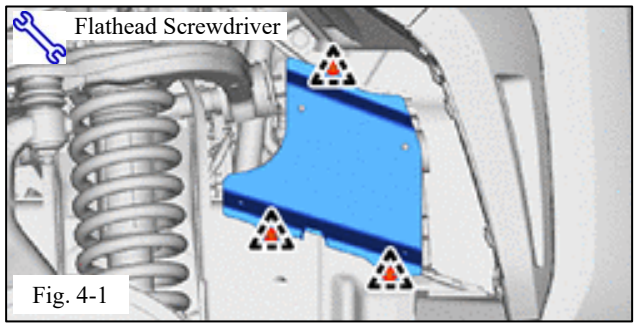


Fig. 4-1

(b) Remove Front Fender Apron Trim Packing B and set aside (Fig. 4-2).

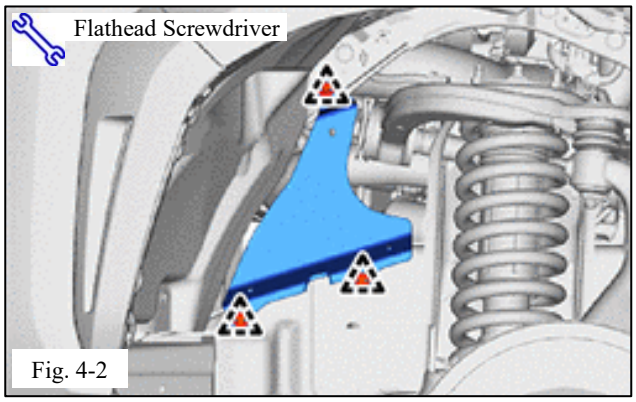


Fig. 4-2

5. DISCONNECT FRONT SPEED SENSOR

(a) Remove (2) bolts that disconnect Front Speed Sensor brackets from frame. Retain the bolts (Fig. 5-1).

CAUTION: Do not damage loose wire harness or brake hose.

CAUTION: Do not rotate or apply excessive force to front speed sensor during removal from knuckle as it may result in damage to front speed sensor.

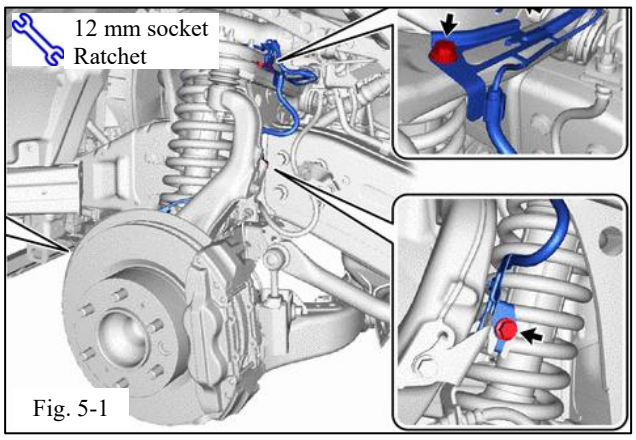


Fig. 5-1

6. DISCONNECT STEERING KNUCKLE

(a) Support the lower arm using a jack and wooden block.

(b) Remove and discard the cotter pin and nut (Fig. 6-1).

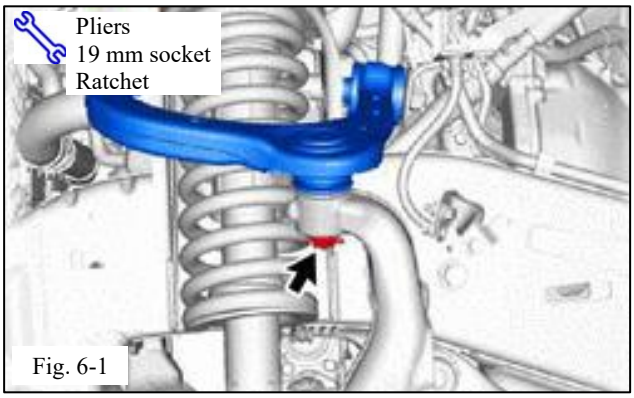


Fig. 6-1

(c) Using SST, disconnect the front upper suspension arm assembly from the steering knuckle (Fig. 6-2).

SST 09628-62011

CAUTION: The knuckle assembly may droop forward. Support the knuckle as needed to avoid stretching the brake hose.

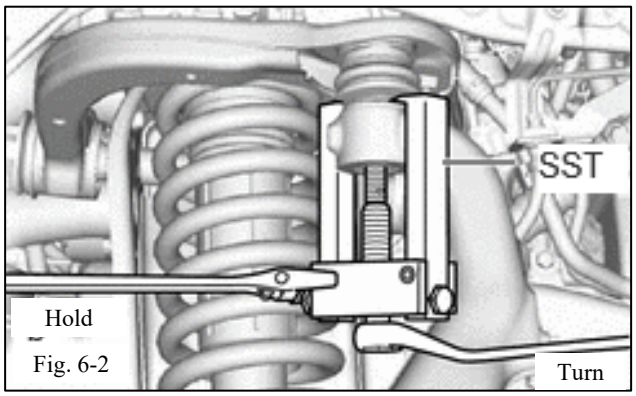


Fig. 6-2

7. REMOVE FRONT UPPER SUSPENSION ARM ASSEMBLY

(a) Using tape or a marker, mark the position of the front upper suspension arm assembly on the shock absorber frame shroud (Fig. 7-1).

CAUTION: This position is important when TRD upper control arm is installed.

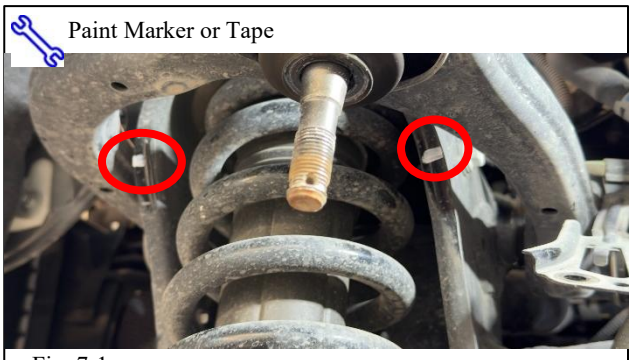


Fig. 7-1

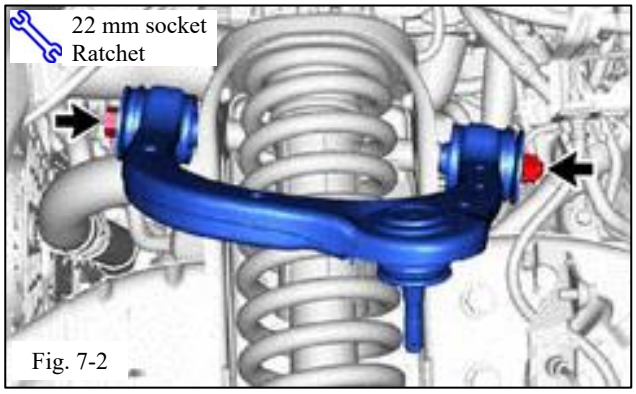


Fig. 7-2

(b) Loosen the nut of front upper control arm at the frame, then remove and retain the bolt (Fig. 7-2).

(c) Remove and discard the OE front upper control arm.

8. INSTALL FRONT UPPER SUSPENSION ARM ASSEMBLY

(a) Install the front upper suspension arm (provided in kit) assembly using the bolt, nut, and (2) washers.

P/N: PT901-89310 (Gas)

PT901-89320 (Hybrid)

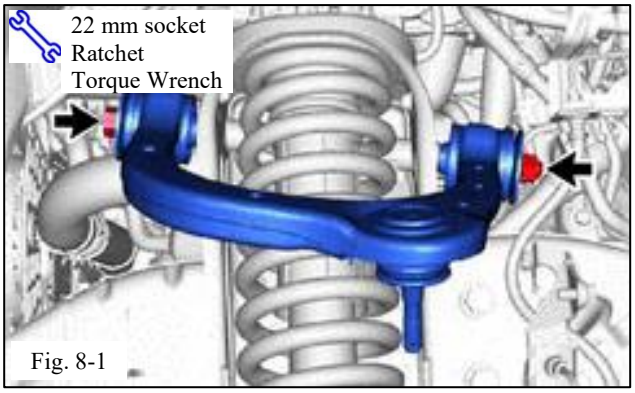


Fig. 8-1

(b) Hold the front upper suspension arm in the position marked during disassembly (from step 6a) and tighten to 196 N-m (145 ft-lbf) (Fig. 8-1).

Torque: 196 N-m (145 ft-lbf)

9. CONNECT STEERING KNUCKLE

(a) Connect the steering knuckle to the front upper suspension arm assembly.

CAUTION: Use a pry bar to bring the front upper suspension arm assembly downwards to connect to knuckle. Use a towel around the pry bar to avoid damage to upper control arm finish.

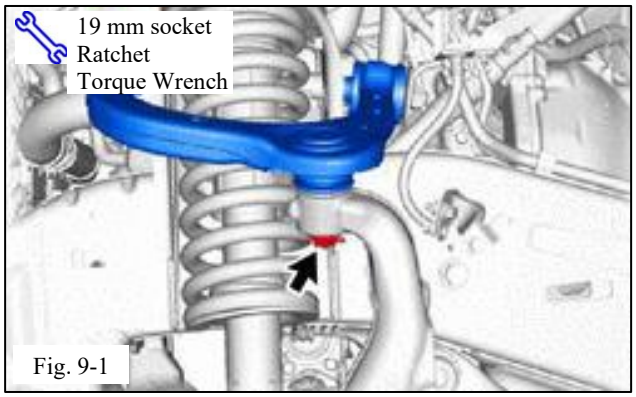


Fig. 9-1

(b) Install castle nut (included in kit) and tighten to 125 N-m (92 ft-lbf) (Fig. 9-1).

P/N: 90171-A0012 (Castle Nut)

Torque: 125 N-m (92 ft-lbf)

(c) Insert new clip (included in kit) (Fig. 9-1).

P/N: 90468-A0003 (Clip)

CAUTION: Further tighten the nut up to 60° if the holes for the cotter pin are not aligned.

10. *REPEAT STEPS 4-9 FOR OPPOSITE SIDE OF VEHICLE*

11. REMOVE FRONT AXLE HUB GREASE CAP

(a) Using a screwdriver and hammer, remove the front axle hub grease cap (Fig. 11-1).

CAUTION: Do not damage the axle hub.

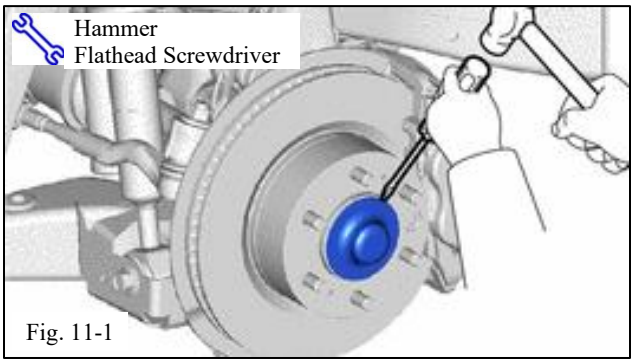


Fig. 11-1

12. REMOVE FRONT AXLE SHAFT NUT

(a) Set SST aligned with the groove on the front drive shaft assembly and unstake the front axle shaft nut using a hammer (Fig. 12-1).

SST 09930-00010

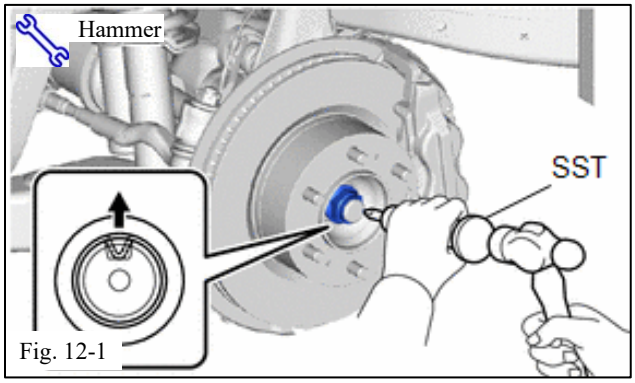


Fig. 12-1

CAUTION: Loosen the staked part of front axle shaft nut completely, otherwise the threads of the Driveshaft may be damaged, and Axle Nut will be difficult to remove.

(b) Using SST, remove and discard front axle shaft nut while applying the brake (Fig. 12-2).

SST 09229-55010

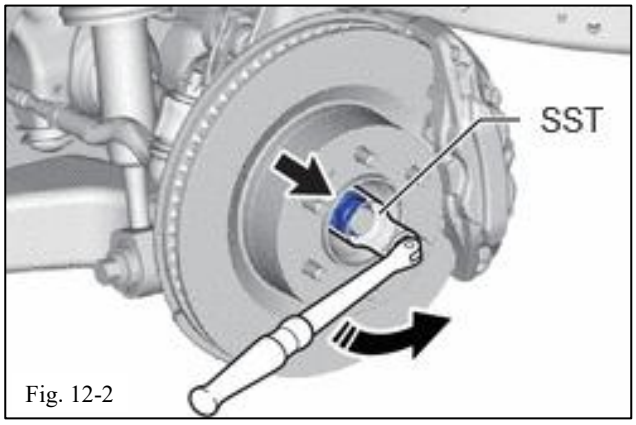


Fig. 12-2

13. REMOVE FRONT STABILIZER LINK ASSEMBLY

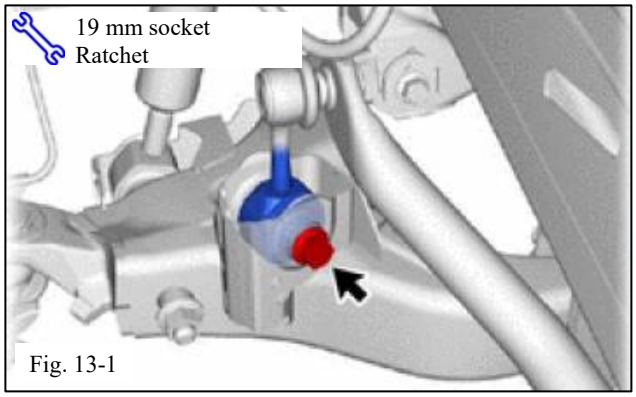


Fig. 13-1

(a) Remove and retain the (1) bolt from front stabilizer link assembly and front lower suspension arm (Fig. 13-1).

14. REMOVE TIE ROD ASSEMBLY

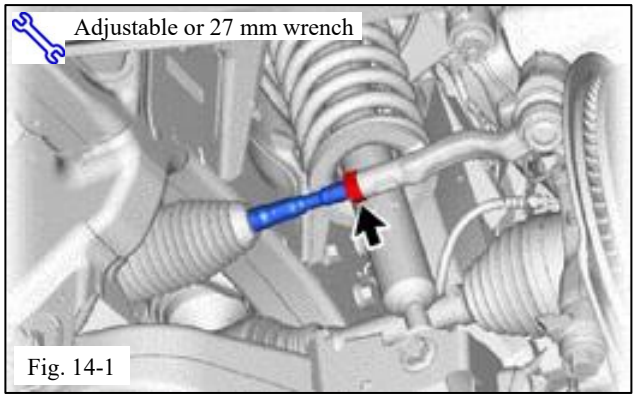


Fig. 14-1

(a) Loosen tie rod end assembly jam nut (Fig. 14-1).

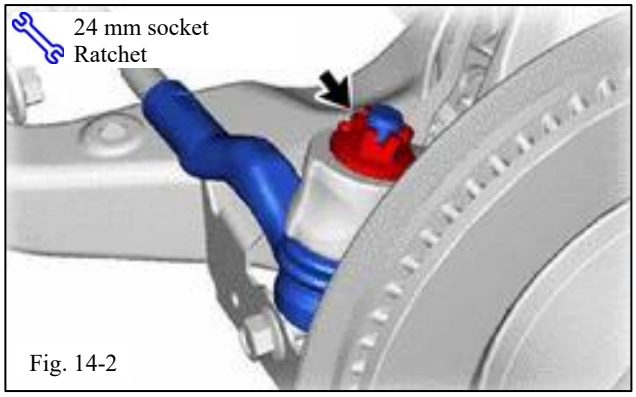


Fig. 14-2

(b) Remove and discard the cotter pin and castle nut (Fig. 14-2).

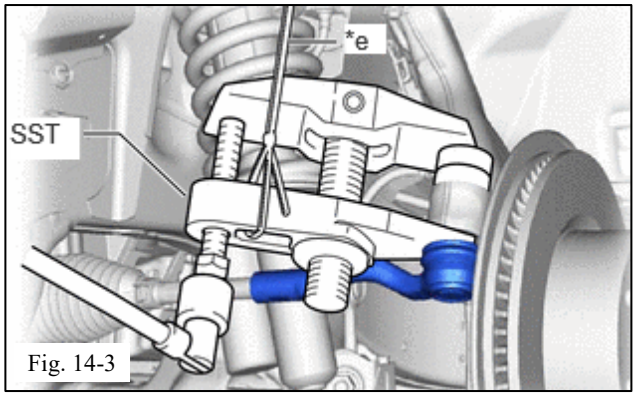


Fig. 14-3

(c) Install 2 spacers (SST Spacer C) to the tie rod assembly (Fig. 14-3).

SST 09961-02080

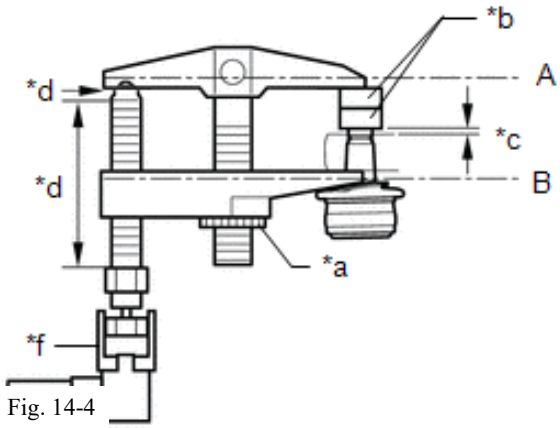


Fig. 14-4

*a	Center Nut
*c	1 mm (0.0394 in.)
*e	String
*b	SST (Spacer C)
*d	Molybdenum grease application area
*f	Place wrench here

Note: Make sure that the clearance between the tie rod assembly and spacers (SST spacer B) is 1mm (0.0394in.) or more to prevent damage to the SST (Fig. 14-4).

(d) Using SST, separate the tie rod assembly from the steering knuckle.

SST 09960-20010

CAUTION: Apply molybdenum grease to the bolt threads and the tip of the SST.

NOTE: Tighten the string firmly to secure SST to steering knuckle to prevent SST from falling off.

NOTE: Install SST so that (A) and (B) shown in the illustration are parallel. Otherwise, the ball joint dust cover may be damaged.

NOTE: Do not damage the ball joint dust cover, steering knuckle, or front disc brake dust cover.

(e) Unscrew tie rod assembly from inner tie rod, remove tie rod assembly from steering rack, and discard tie rod end assembly.

NOTE: The jam nut is left in-place on the inner tie rod. It is not necessary to remove the jam nut.

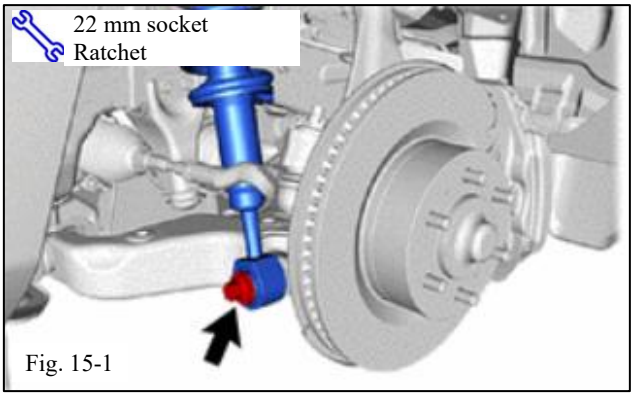


Fig. 15-1

15. DISCONNECT FRONT SHOCK ABSORBER W/ COIL SPRING

(a) Remove and retain front shock absorber lower bolt and nut (Fig. 15-1).

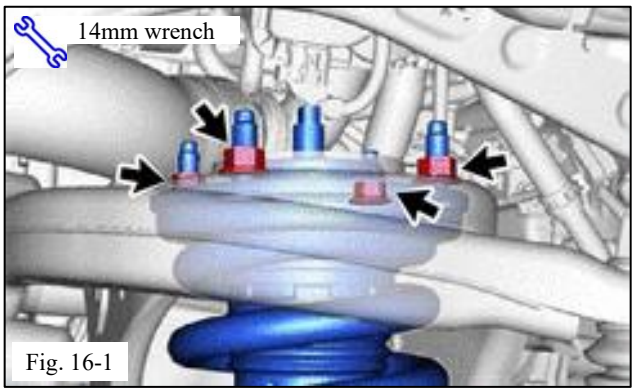


Fig. 16-1

16. REMOVE FRONT SHOCK ABSORBER WITH COIL SPRING

(a) Remove and retain (4) nuts from the shock absorber's upper side (Fig. 16-1).

(b) Remove shock absorber and coil spring assembly from the vehicle and discard.

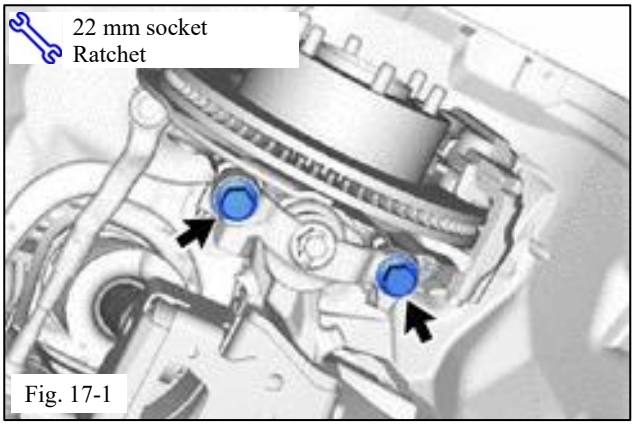


Fig. 17-1

17. DISCONNECT FRONT LOWER BALL JOINT ATTACHMENT

(a) Remove and retain the two lower ball joint attachment bolts (Fig. 17-1).

CAUTION: Do not use the column steering lock to resist loosening torque. If necessary, steer the hubs to the full RH steering lock to break the lower ball joints loose.

18. REMOVE FRONT LOWER NO.1 SUSPENSION ARM SUB-ASSEMBLY

(a) Support the front suspension using a jack and wooden block.

(b) Place matchmarks on the front No. 2 suspension camber adjust cam and front No. 1 suspension camber adjust cam (Fig. 18-1).

(c) Loosen camber and toe adjustment cam bolts, but do not remove.

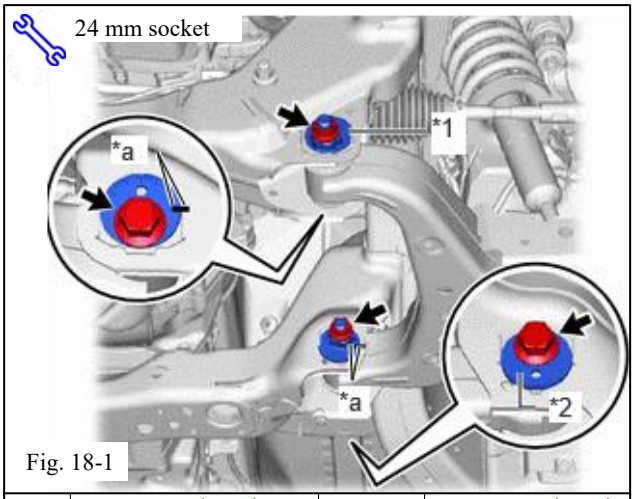


Fig. 18-1

*1	Front No. 2 Suspension Camber Adjust Cam	*2	Front No. 1 Suspension Camber Adjust Cam
*a	Matchmark	-	-

19. *REPEAT STEPS 11-18 FOR OPPOSITE SIDE OF VEHICLE.*

20. REMOVE FRONT SKID PLATE

(a) Remove 6-8 M8 bolts (quantity depends on model) to release the skid plate and set aside.

21. DRAIN DIFFERENTIAL OIL

(a) Using a 10mm hexagon wrench, remove and set aside the front differential filler plug and gasket (Fig. 21-1).

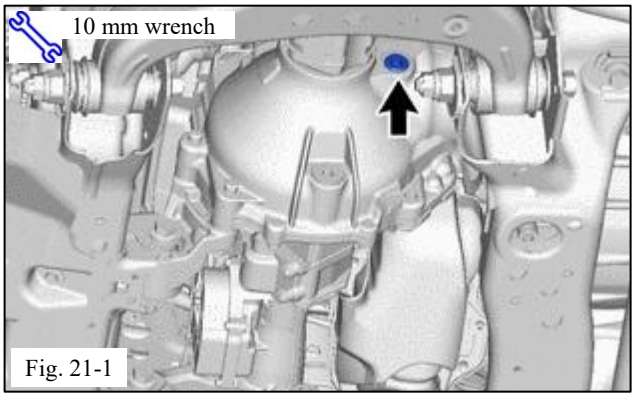


Fig. 21-1

(b) Using a 10mm hexagon wrench, remove the front differential drain plug and gasket, and drain the oil (Fig. 21-2).

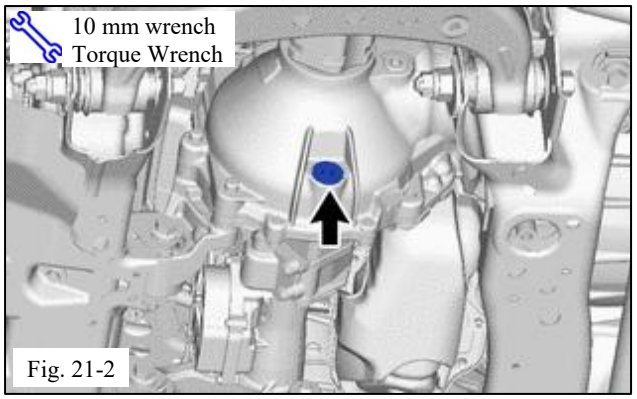


Fig. 21-2

(c) Using a 10mm hexagon wrench, reinstall the front differential drain plug with a new gasket (NOT provided in kit) and torque to 64.7 N-m (48ft-lbf) (Fig. 21-2).

P/N: 90430-24017 *(Gasket, Front Differential Drain Plug)*

Torque: 64.7 N-m (48 ft-lbf)

(d) Temporarily reinstall the front differential filler plug.

22. DISCONNECT FRONT DRIVE SHAFT ASSEMBLY

(a) Using a plastic faced hammer, lightly tap the end of the front drive shaft assembly and disengage the front drive shaft assembly and front axle hub and bearing assembly with ABS sensor (Fig. 22-1).

(b) Disconnect the front drive shaft assembly from the front axle assembly.

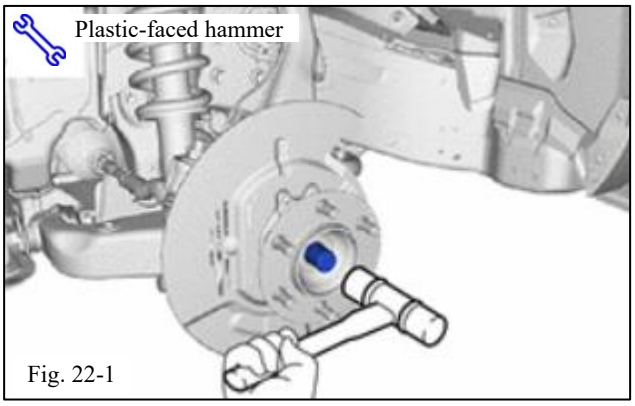


Fig. 22-1

23. REMOVE FRONT DRIVE SHAFT ASSEMBLY

(a) Using SST, remove and discard the front drive shaft assembly (Fig. 23-1).

SST 09520-01011
SST 09520-20010

NOTE: Do not damage the differential side gear shaft oil seal, inboard joint boot, and front driveshaft dust cover.

NOTE: Do not drop the front driveshaft assembly.

NOTE: When carrying the front driveshaft assembly, hold it horizontally.

HINT: Hook the SST claw at the position shown in the illustration to remove the front driveshaft assembly (Fig. 23-1).

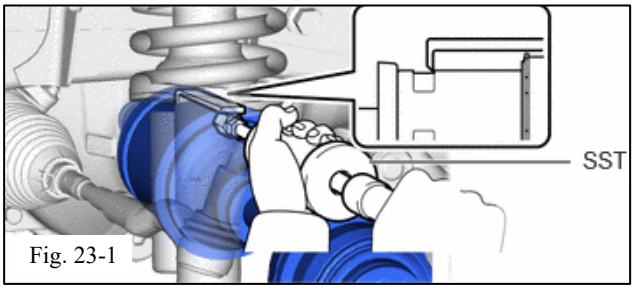


Fig. 23-1

24. REPEAT STEPS 22-23FOR OPPOSITE SIDE OF VEHICLE

25. REMOVE FRONT LOWER BALL JOINT ATTACHMENT

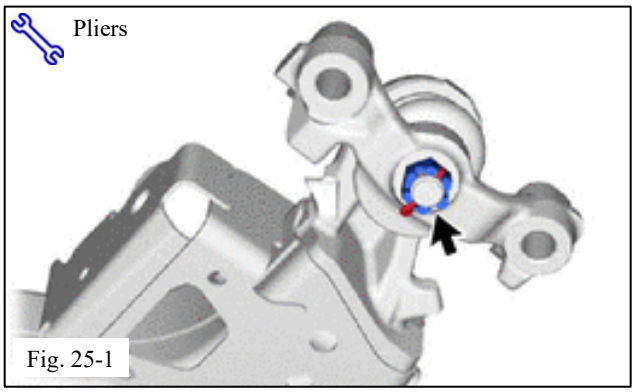


Fig. 25-1

(a) Remove and discard the cotter pin and nut (Fig. 25-1).

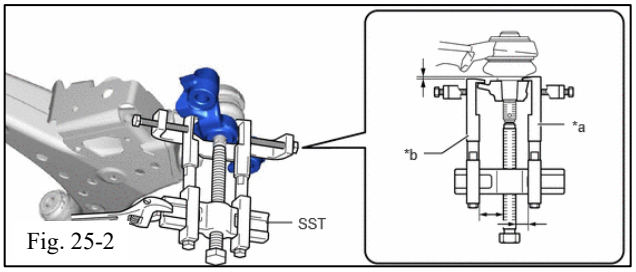


Fig. 25-2

(b) Using SST, remove and discard front lower ball joint attachment (Fig. 25-2).

SST 09950-40011
SST 09955-04090

HINT:

Claw A (*1): SST 09955-04090
Claw B (*2): SST 09955-04031

26. CONNECT FRONT LOWER BALL JOINT ATTACHMENT

(a) Identify correct lower ball joint attachment (provided in kit) for correct side of vehicle by locating the “L” or “R” mark on the end faces of the lower ball joint attachment.

P/N: PT981-35310 (RH)
PT981-35320 (LH)

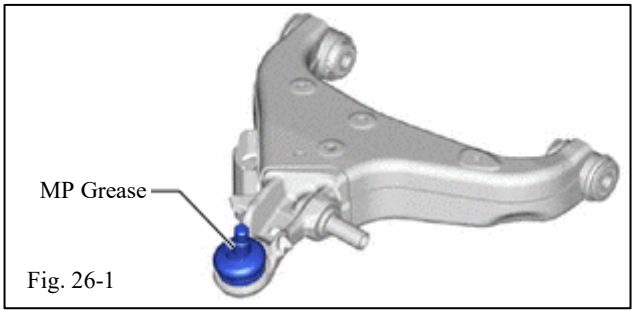


Fig. 26-1

(b) Apply MP grease to the locations shown in Fig. 26-1.

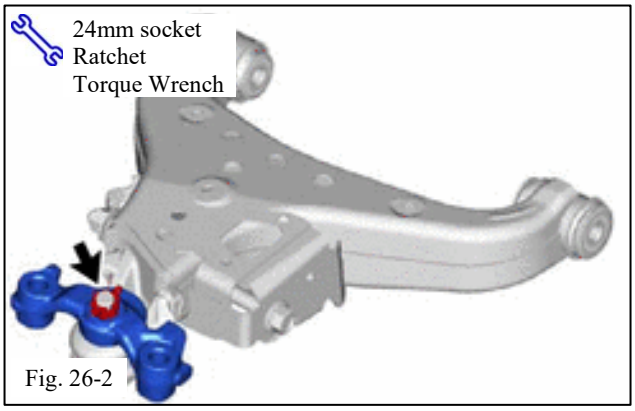


Fig. 26-2

(c) Connect the front lower ball joint attachment to the front lower No.1 suspension arm sub-assembly (Fig. 26-2).

(d) Install castle nut (provided in kit) and tighten to 159 N-m (117 ft-lbf) (Fig. 26-2).

P/N: 90171-18003 (Castle Nut)

Torque: 159 N-m (117 ft-lbf)

(e) Install cotter pin (provided in the kit) (Fig. 26-2).

P/N: 90252-03011 (Cotter Pin)

27. *REPEAT STEPS 25-26 ON OPPOSITE SIDE OF VEHICLE*

28. INSTALL FRONT DRIVE SHAFT ASSEMBLY

(a) Select the correct front drive shaft (provided in kit) by identifying the part number:

P/N: 43410-AK020 (RH)
43420-AK020 (LH)

(b) Coat the splines of the inboard joint with Toyota genuine differential gear oil LT.

(c) Coat the snap ring of the inboard joint with MP grease.

(d) Align the splines and tap in the front drive shaft assembly with a brass bar and hammer (Fig. 28-1).

NOTE: Using MP grease, set the TRD Front Driveshaft hole snap ring in the groove with the opening facing downwards and centered radially.

NOTE: Do not damage inboard joint boot, front driveshaft cover, and differential side gear shaft oil seal.

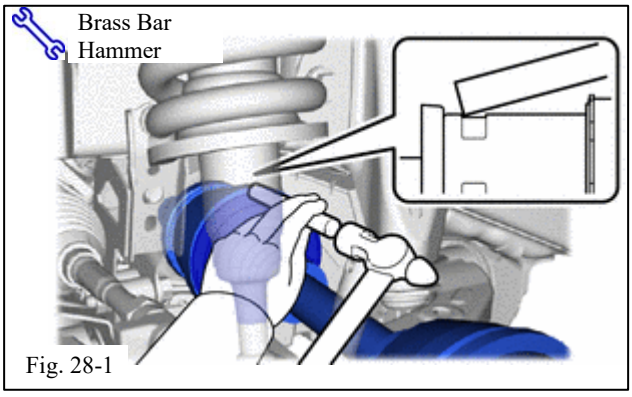


Fig. 28-1

NOTE: Follow the proper handling and installation procedures. If front driveshaft assembly is installed at too large an angle or slides too much, it may fall out of the groove of the tripod joint.

NOTE: Do not tap the end of the front drive outboard joint assembly with a hammer, etc.

HINT: Determine whether the front driveshaft assembly is completely tapped in by checking for changes in the tapping sound or the reaction of the brass bar.

CAUTION: Do not allow driveshaft to hang as it may overextend.

(e) Align and insert Driveshaft spline into the front steering knuckle's hub.

(f) Repeat for opposite side of vehicle.

29. INSTALL FRONT SHOCK ABSORBER WITH COIL SPRING

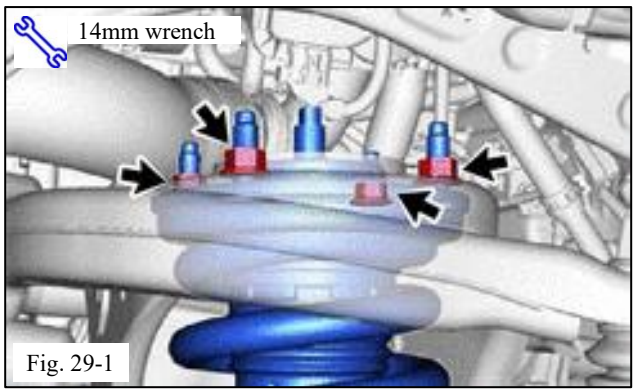


Fig. 29-1

(a) Install front shock absorber assembly (provided in kit) onto vehicle and temporarily tighten the (4) nuts on the upper side of the front shock absorber assembly (Fig. 29-1).

P/N: *PTR13-89410 (Gas)*
PTR13-89420 (Hybrid)

NOTE: Arrow should face toward installer. Protrusion should face inboard.

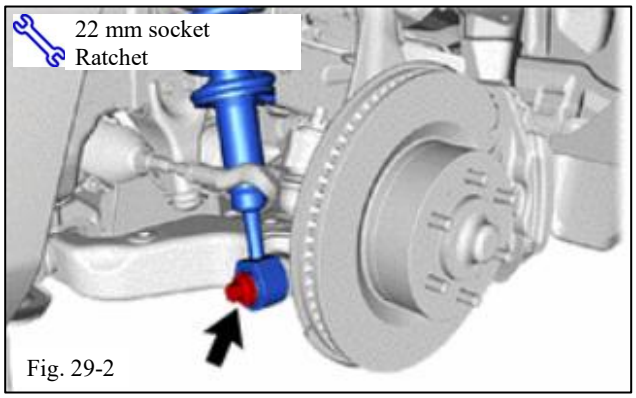


Fig. 29-2

(b) Install and temporarily tighten the bolt and nut (that was previously removed for the Front Shock Absorber lower side) (Fig. 29-2).

CAUTION: Bolt shall be inserted from the front of the vehicle (bolt head facing forwards) and nut on rear-facing side of the vehicle.

(c) Tighten the (4) nuts on the upper side of the front shock absorber assembly to 45 N-m (33 ft-lbf) (Fig. 29-1).

Torque: 45 N-m (33 ft-lbf)

(d) Repeat for opposite side of vehicle.

30. INSTALL STEERING KNUCKLE

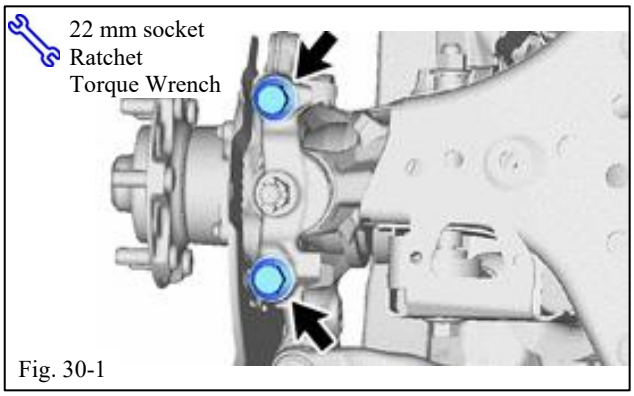


Fig. 30-1

(a) Install the steering knuckle and front ball joint attachment fastening point with the two bolts previously removed and tighten to 300 N-m (221 ft-lbf) (Fig. 30-1).

Torque: 300 N-m (221 ft-lbf)

31. INSTALL TIE ROD ASSEMBLY

(a) Select the correct TRD Tie Rod End Sub-Assembly (provided in kit) for the side of the vehicle by confirming the part number and marking.

P/N: *PT81G-35310 (RH)*
PT81G-35320 (LH)

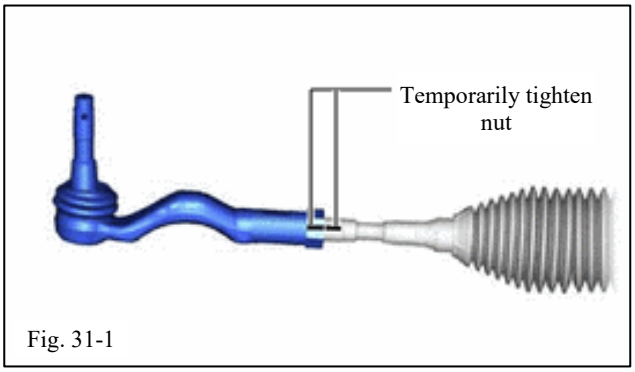


Fig. 31-1

(b) Install and temporarily tighten the TRD tie rod end assembly onto the inner tie rod (Fig. 31-1).

NOTE: Ensure Tie Rod lengths are equidistant to the OE Inner Tie Rod.

32. CONNECT TIE ROD ASSEMBLY

(a) Connect tie rod assembly to the steering knuckle with new castle nut (provided in kit) and tighten to 120 N-m (89ft-lbf) (Fig. 32-1).

P/N: 90171-16011

Torque: 120 N-m (89 ft-lbf)

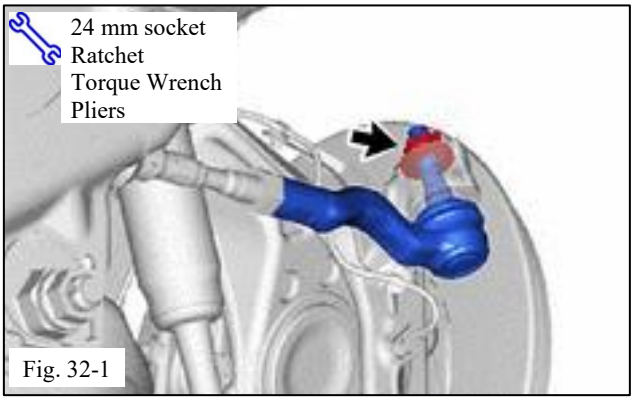


Fig. 32-1

(b) Install a new cotter pin (provided in the kit) for the tie rod.

P/N: 90252-04005

NOTE: Further tighten the nut up to 60° if the holes for the cotter pin are not aligned.

33. *REPEAT STEPS 31-32 ON OPPOSITE SIDE OF VEHICLE*

34. INSTALL FRONT AXLE SHAFT NUT

(a) Clean the threaded parts on the front drive shaft assembly and a new front axle shaft nut (provided in kit) using non-residue solvent (Fig. 34-1).

P/N: 90177-A0023

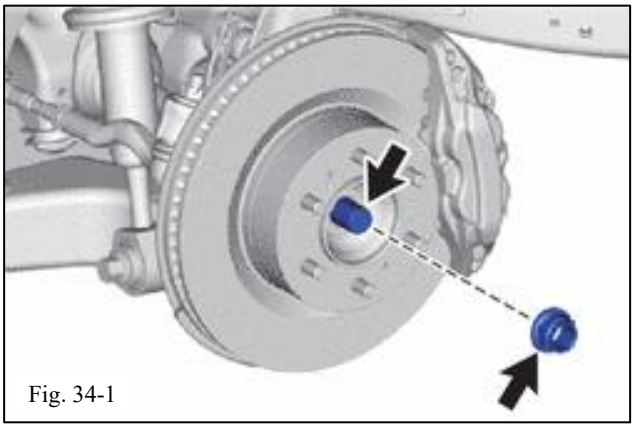


Fig. 34-1

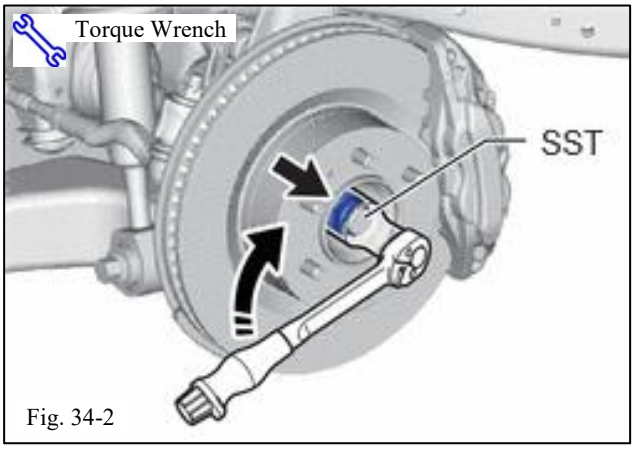


Fig. 34-2

(b) Using SST, tighten the front axle shaft nut to 340 N-m (251 ft-lbf) (Fig. 34-2).

SST 09229-55010

Torque: 340 N-m (251 ft-lbf)

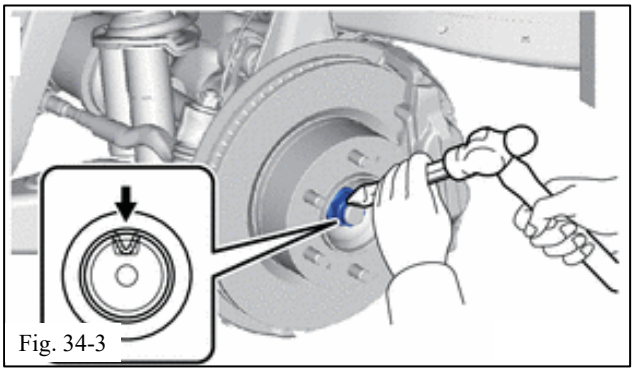


Fig. 34-3

(c) Using a chisel and hammer, stake the front axle shaft nut (Fig. 34-3).

35. INSTALL FRONT AXLE HUB GREASE CAP

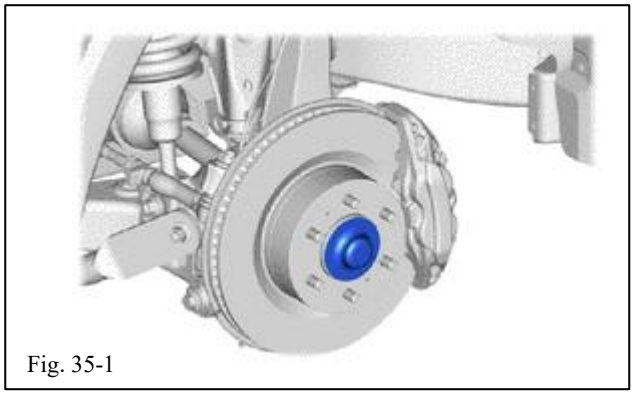


Fig. 35-1

(a) Install new front hub grease cap (provided in kit) (Fig. 35-1).

P/N: 43514-0C020

CAUTION: Make sure to securely fit the grease cap to the axle hub.

(b) Repeat for opposite side of vehicle.

36. RECONNECT STABILIZER BAR

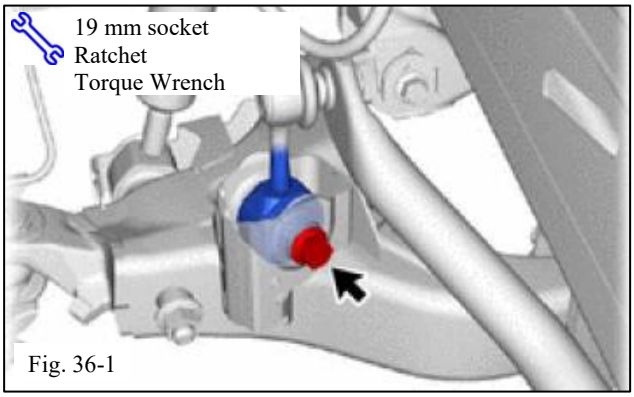


Fig. 36-1

(a) Install the OE Stabilizer Bar Link into the Lower Control Arm and tighten the bolt and tighten to 149 N-m (110 ft-lbf) (Fig. 36-1).

Torque: 149 N-m (110 ft-lbf)

(b) Repeat for opposite side of vehicle.

37. TIGHTEN BOLTS FOR FRONT SPEED SENSOR

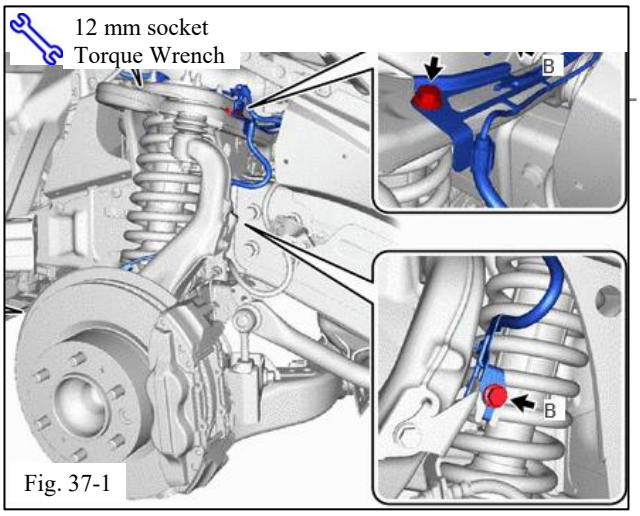


Fig. 37-1

(a) Install the wire harness along the front steering knuckle (Fig. 37-1) and tighten bolts to 12.5 N-m (9 ft-lbf).

Torque: 12.5 N-m (9 ft-lbf)

NOTE: Keep the tip of the speed sensor and installation hole free of foreign matter.

NOTE: Do not twist the speed sensor wire harness when installing it.

(b) Repeat for opposite side of vehicle.

38. INSTALL FRONT LOWER NO.1 SUSPENSION ARM SUB-ASSEMBLY

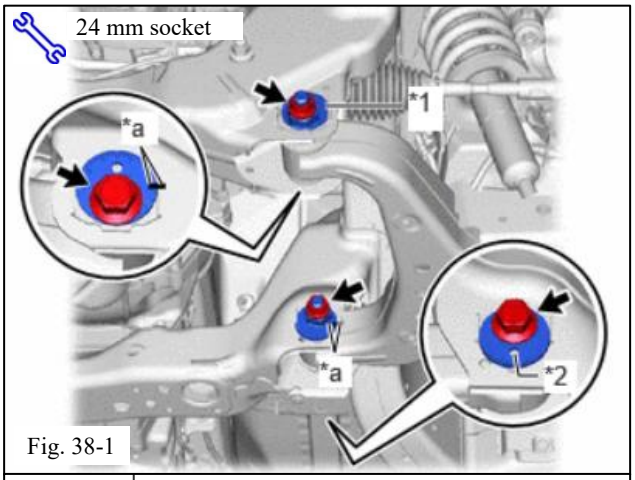


Fig. 38-1

*1	Front No. 2 Suspension Camber Adjust Cam
*2	Front No. 1 Suspension Camber Adjust Cam
*a	Matchmark

(a) Install the front lower No.1 suspension arm sub-assembly, 2 front No.2 suspension camber adjust cams, and 2 front No.1 suspension camber adjust cams with the 2 nuts (Fig. 38-1).

(b) Align matchmarks on the front No. 2 suspension camber adjust cam and front No. 1 suspension camber adjust cam with the matchmarks on the vehicle body (Fig. 38-1).

(c) Temporarily tighten adjustment cam bolts and nuts.

39. REFILL FRONT DIFFERENTIAL

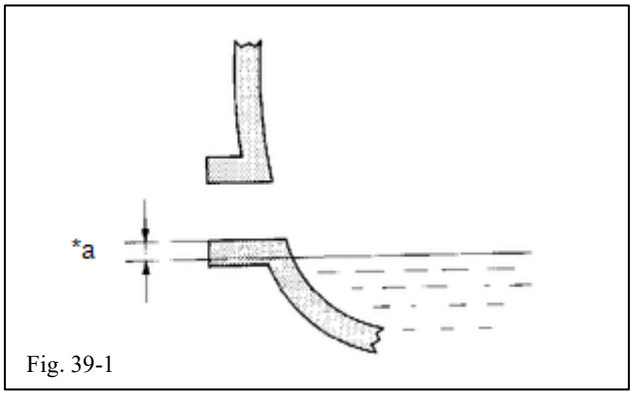


Fig. 39-1

(a) Add differential oil, so that the oil level is between 0-5mm (0-0.197in) (*a) from the bottom lip of the differential filler plug hole (Fig. 39-1).

Differential Oil Type and Viscosity:
Toyota Genuine Differential gear oil LT 75W-85 GL-5 or equivalent

Front Differential Capacity:

w/ A.D.D.: 1.33 liters (1.41 US qts., 1.17 Imp. Wts)

w/o A.D.D: 1.22 liters (1.29 US qts., 1.07 Imp. Wts)

CAUTION: Too much or too little oil will lead to differential problems. When vehicle is complete and ready, drive the vehicle and check the oil level again.

(b) Install a new gasket (NOT provided in kit) and the front differential filler plug and tighten to 39.2 N-m (29 ft-lbf).

P/N: 12157-10010 (Gasket, Front Differential Filler Plug)

Torque: 39.2 N-m (29 ft-lbf)

NOTE: All Lift Kit components have been installed for front suspension. Continue for rear suspension installation.

REAR SUSPENSION INSTALLATION

40. Disconnect Brackets

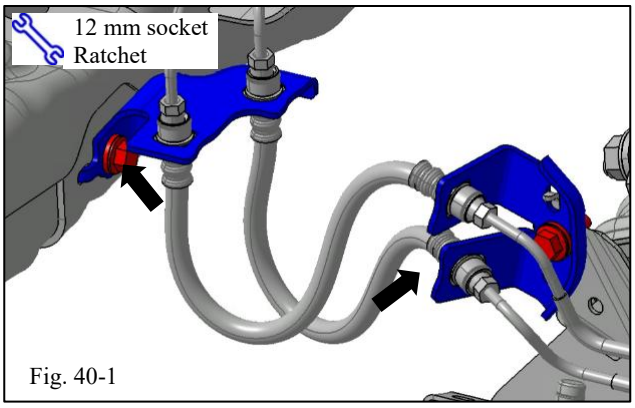


Fig. 40-1

(a) Remove (2) bolts to disconnect two brake hose brackets - one on axle side and one on frame side. Retain for installation (Fig. 40-1).

CAUTION: Do not disconnect brake hose from brake tube. Remove brake hose brackets allow for greater movement of the rear suspension without opening the hydraulic brake system.

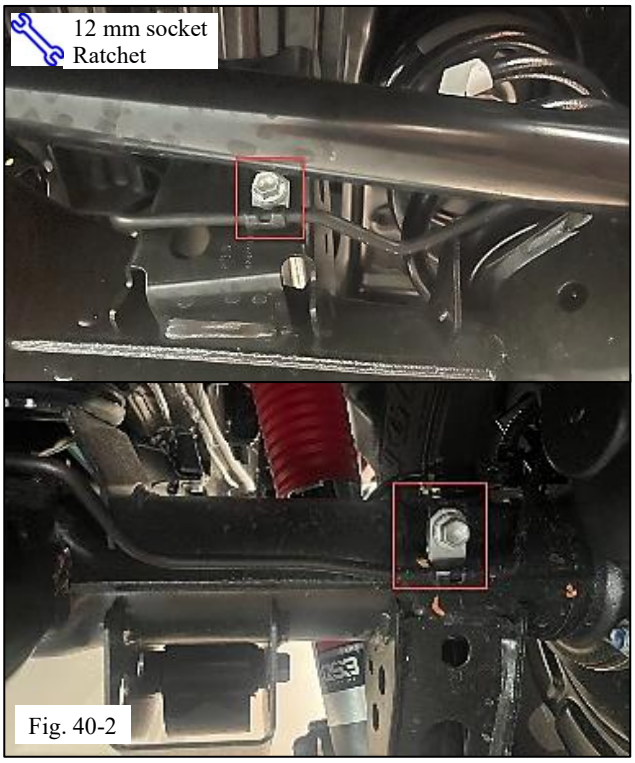


Fig. 40-2

(b) Remove (2) bolts to disconnect the brake tube mounting brackets on the backside of the axle. Retain for reinstallation (Fig. 40-2).

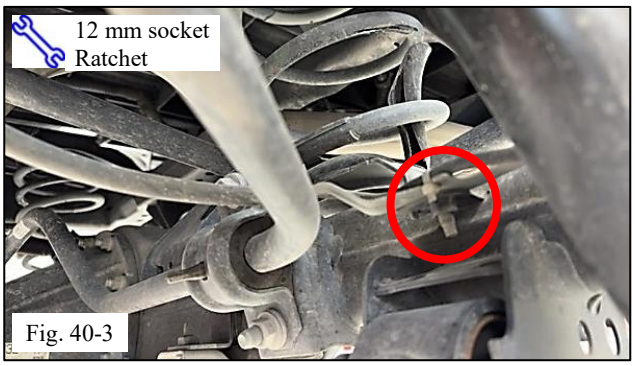


Fig. 40-3

(c) Remove (2) bolts to disconnect the EPB wire harness from the axle (RH) and frame (LH). Retain for reinstallation (Fig. 40-3).

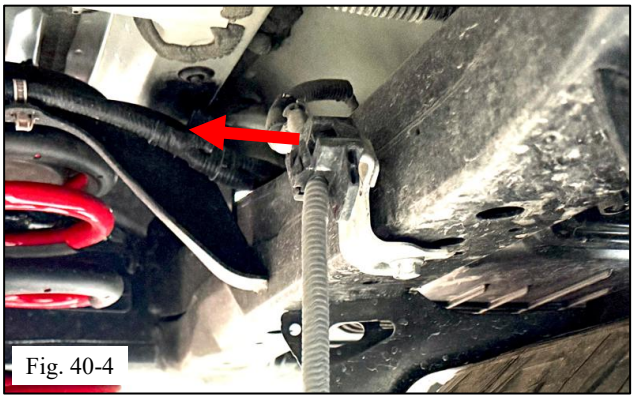


Fig. 40-4

(d) Unclip the rear differential wire harness to allow for enough slack (Fig. 40-4).

41. SUPPORT REAR AXLE HOUSING ASSEMBLY

(a) Using a jack and wooden block, support the rear axle housing assembly (Fig. 41-1).

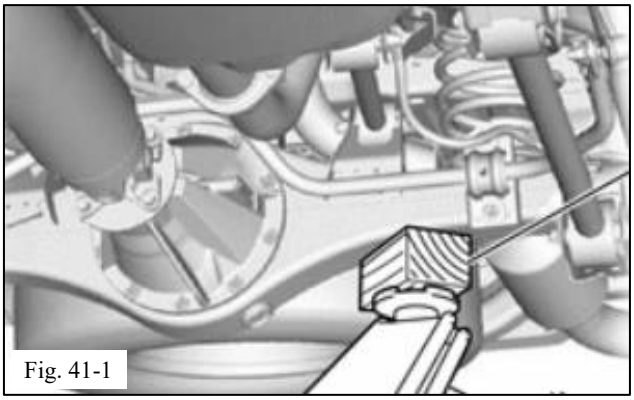


Fig. 41-1

42. SEPARATE REAR NO.2 STABILIZER LINK

(a) Remove and retain the nut, then separate the rear No.2 stabilizer link from the vehicle body (Fig. 42-1).

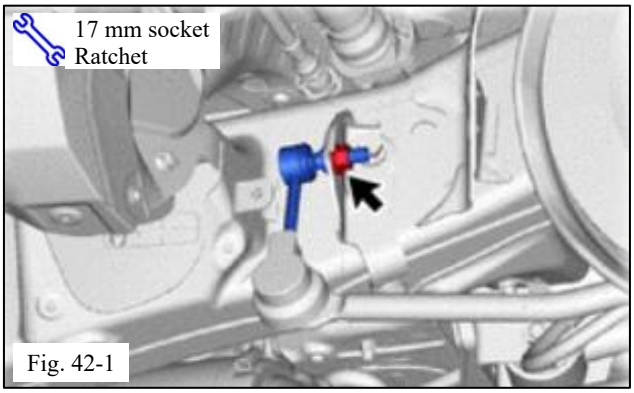


Fig. 42-1

43. REMOVE REAR SHOCK ABSORBER ASSEMBLY

(a) Remove and retain the bolt on the lower side of the rear shock absorber assembly (Fig. 43-1).

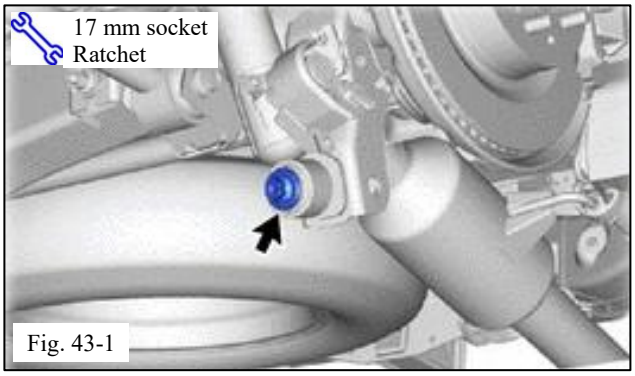


Fig. 43-1

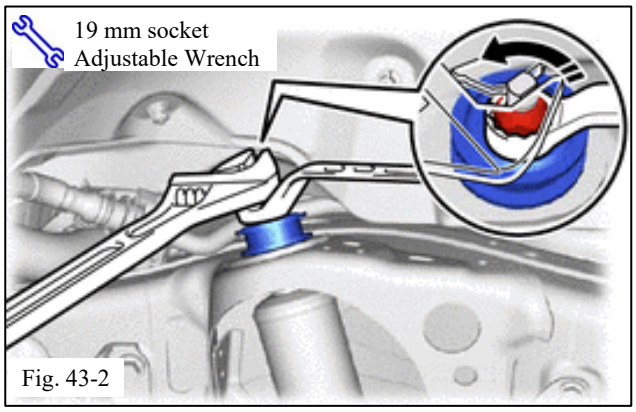


Fig. 43-2

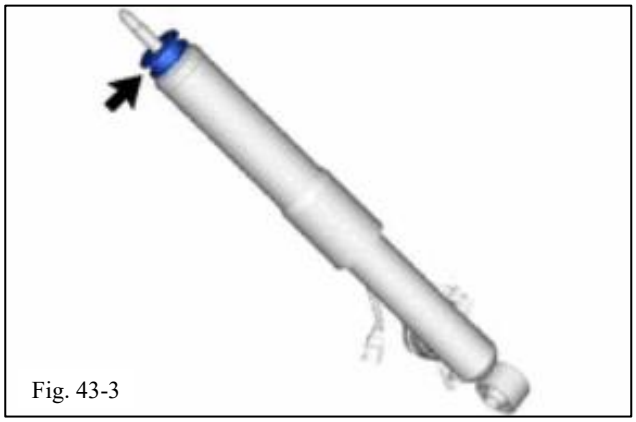


Fig. 43-3

(b) Remove the lock nut, rear No. 1 shock absorber cushion, and rear shock absorber assembly. Retain the rear No. 1 shock absorber cushion (Fig. 43-2).

CAUTION: Ensure the brake hoses and wire harnesses are not being stretched during this process.

(c) Remove and retain the rear No. 2 shock absorber cushion from the rear shock absorber assembly (Fig. 43-3).

44. REMOVE REAR COIL SPRING

(a) While lowering the rear axle housing assembly, remove and discard the coil spring (Fig. 44-1).

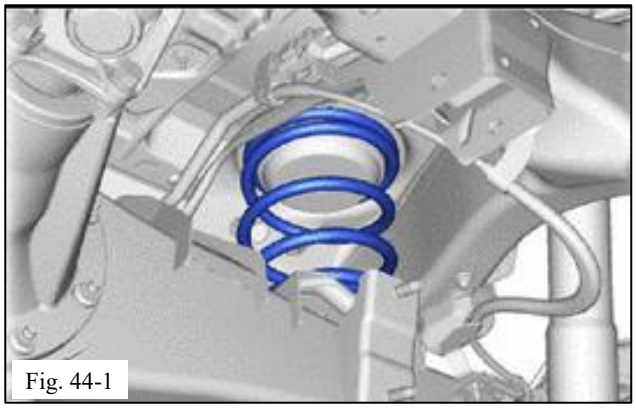


Fig. 44-1

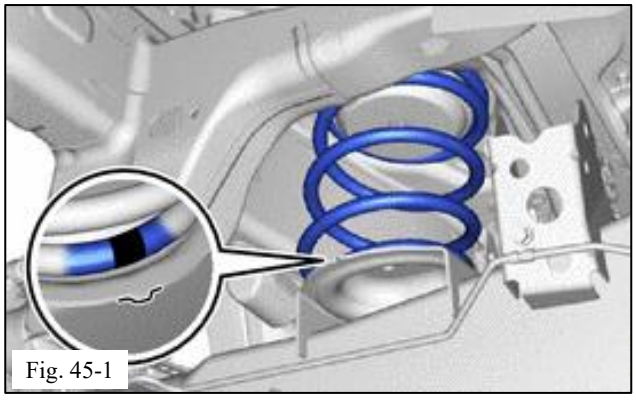


Fig. 45-1

45. INSTALL REAR COIL SPRING

(a) Install the rear coil spring (provided in kit) by aligning the identification mark of the rear coil spring with the protrusions in the rear axle housing assembly (Fig. 45-1).

46. INSTALL REAR SHOCK ABSORBER ASSEMBLY

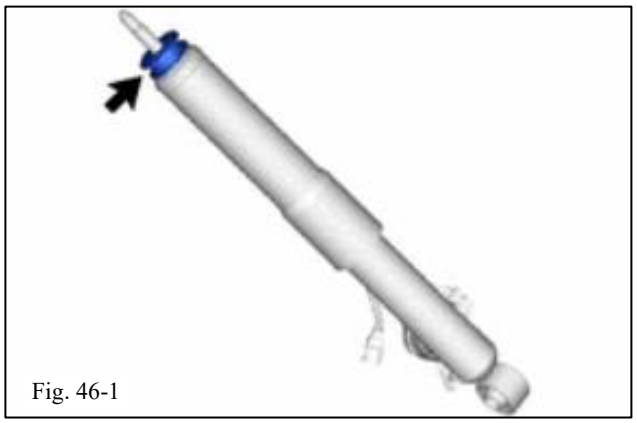


Fig. 46-1

(a) Install the rear No. 2 shock absorber cushion onto the rear shock absorber (provided in kit) (Fig. 46-1).

NOTE: The side of the cushion with the larger hole must face up.

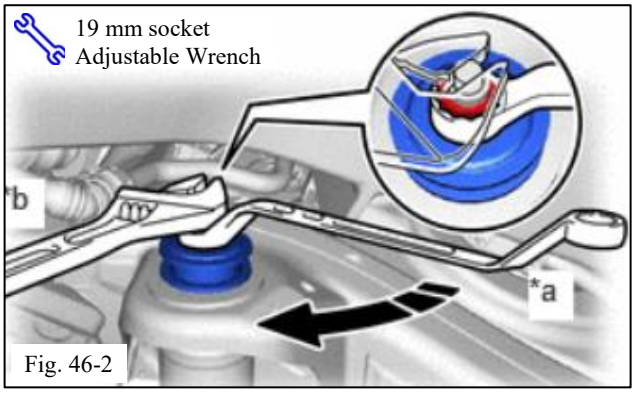


Fig. 46-2

(b) Install the rear shock absorber assembly and rear No. 1 shock absorber cushion with a new lock nut (provided in kit) (Fig. 46-2).

P/N: 90177-14003

NOTE: Ensure TRD sticker is facing outwards

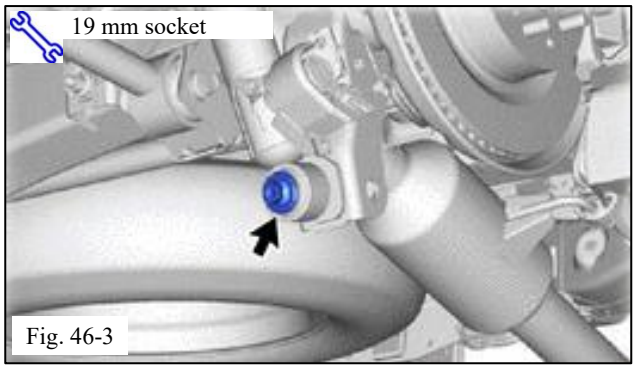


Fig. 46-3

(c) Install the lower side of the rear shock absorber assembly with the bolt and tighten to 104 N-m (77 ft-lbf) (Fig. 46-3).

Torque: 104 N·m (77 ft·lbf)

47. CONNECT REAR NO.2 STABILIZER LINK

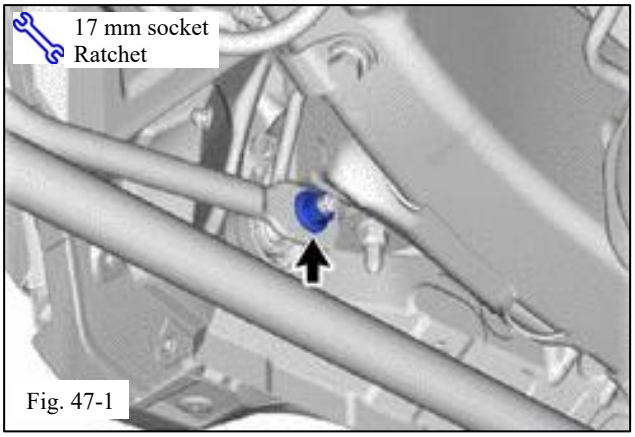


Fig. 47-1

(a) Install the rear stabilizer link assembly with the nut (Fig. 47-1).

Torque: 75 N-m (55 ft-lbf)

48. *REPEAT STEPS 42-48 FOR OPPOSITE SIDE OF VEHICLE*

49. Install Brackets

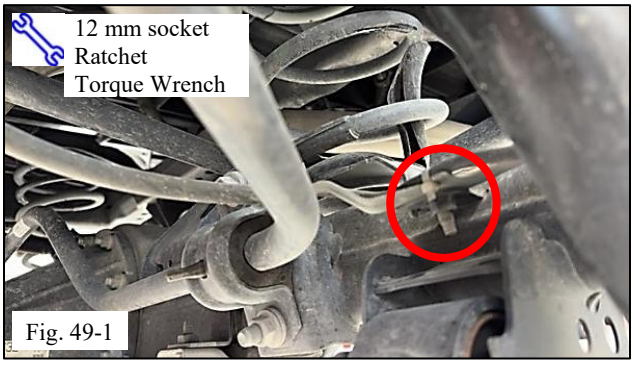


Fig. 49-1

(a) Install (2) bolts to reconnect the EPB wire harness to the axle (RH) and frame (LH). (Fig. 49-1).

Torque: 29 N-m (21 ft-lbf)

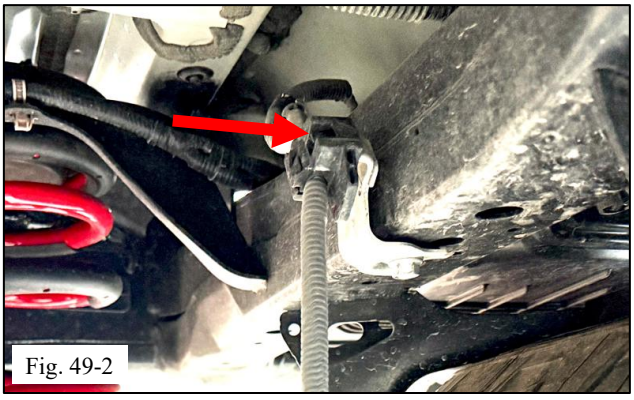


Fig. 49-2

(b) Clip the rear differential wire harness (Fig. 49-2).

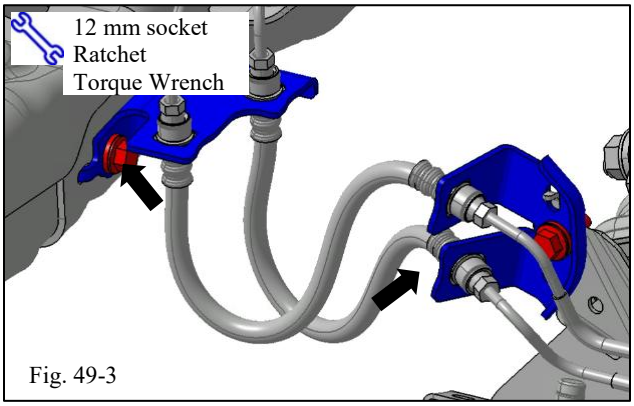


Fig. 49-3

(c) Install (2) bolts to reconnect both brake hose brackets - one on axle side and one on frame side (Fig. 49-3).

Torque: 29 N-m (21 ft-lbf)

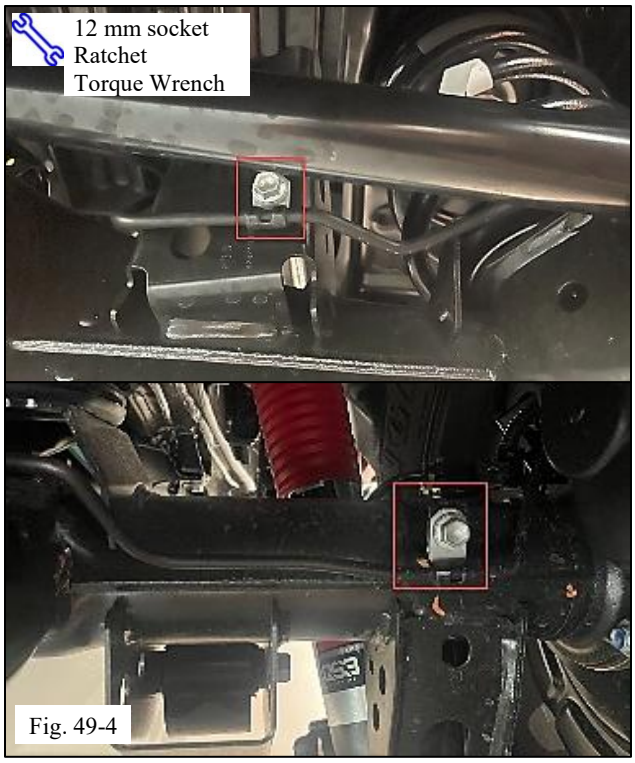


Fig. 49-4

(d) Install (2) bolts to reconnect the brake tube mounting brackets on the backside of the axle (Fig. 49-4).

Torque: 29 N-m (21 ft-lbf)

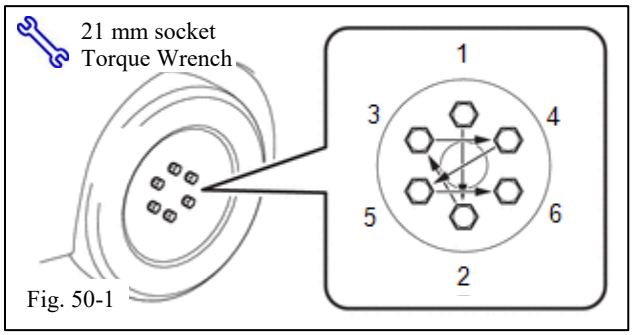


Fig. 50-1

50. INSTALL WHEEL ASSEMBLIES

(a) Install all (4) wheel assemblies following the pattern shown (Fig. 50-1).

(b) Once tight, lower vehicle to ground and torque to the following:

Torque (Steel Wheel): 209 N-m (154 ft-lbf)

Torque (Aluminum Wheel): 131 N-m (97 ft-lbf)

NOTE: Toyota recommends the use of OEM wheels and tires. The Toyota TRD lift kit is designed to be used with the OEM wheels and tire sizes. Tires and wheel combinations different than OEM wheel and tire size may void the vehicle's warranty.

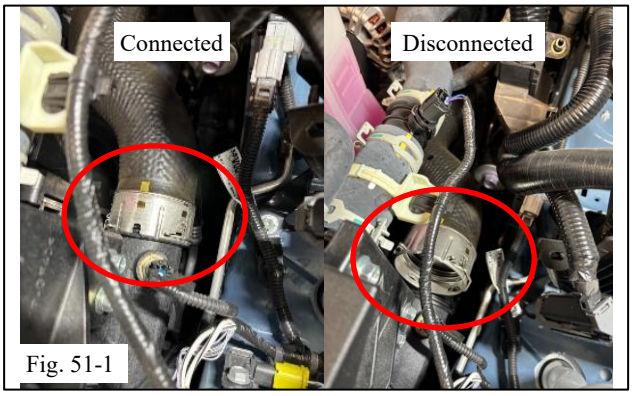


Fig. 51-1

51. CONNECT NO.2 AIR TUBE ASSEMBLY

(a) Connect the No. 2 air tube assembly to the intercooler assembly and lock the retainer (Fig. 51-1).

52. WHEEL ALIGNMENT

(a) Adjust tire pressure.

(b) Loosen the following fasteners for suspension members with bushings:

(1) Lower Control Arm at frame

(2) Front Shock Absorber lower bolt

(c) Press down on the vehicle several times to stabilize the suspension.

(d) Torque the following suspension member fasteners with the vehicle on a level surface, at curb height:

(1) TRD Front Shock Absorber lower bolt at lower arm

Torque: 265 N·m (195 ft·lbf)

(e) Inspect Wheel Alignment

(1) Use wheel alignment tester or equivalent.

(f) Adjust Camber and Caster (Fig. 52-1)

(1) Loosen the bolt and nut.

(2) Turn the adjustment cam to adjust the camber and casters to the target value.

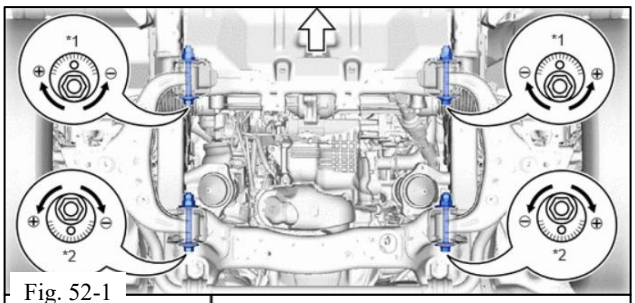


Fig. 52-1

*1	Front Adjusting Cam
*2	Rear Adjusting Cam
⇨	Front of the Vehicle

Target Values

Camber:	0.18° ± 0.75°
Caster:	2.60° ± 0.75°

HINT:

The No. 1 to (+) by 1 notch changes the caster by +0°04’ and camber by +0°07’.

The No. 2 to (+) by 1 notch changes the caster by +0°04’ and camber by +0°07’.

(3) Tighten the bolt and nut to 295 N-m (218 ft-lbf)

Torque: 295 N·m (218 ft·lbf)

(g) Adjust Toe-In

(1) Remove and retain the clip from the steering rack boot.

(2) Loosen the nut of the tie rod (Fig. 52-2).

(3) Turn both steering rack ends the same amount to adjust the toe.

Target Value

Toe: 0.3° ± 0.16°

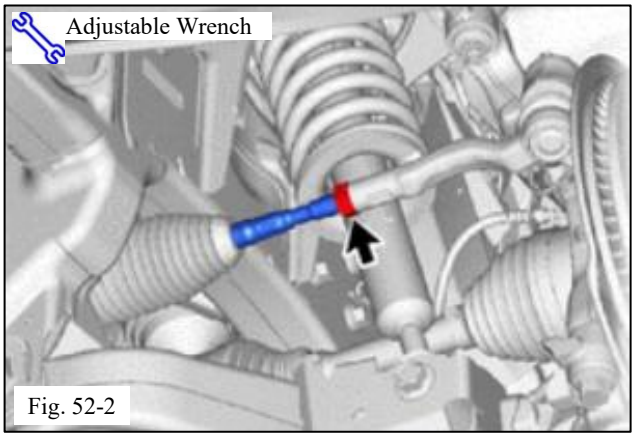
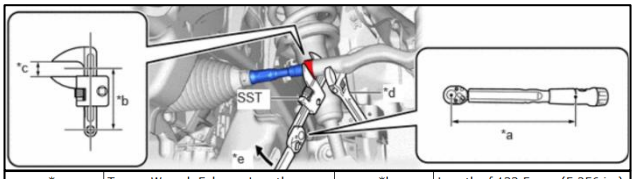


Fig. 52-2



*a	Torque Wrench Fulcrum Length	*b	Length of 133.5 mm (5.256 in.)
*c	26 mm (1.02 in.)	*d	Hold
*e	Turn	-	-

Fig. 52-3

(4) Using SST, tighten the lock nut of the tie rod end sub-assembly on both sides of the vehicle (Fig. 52-3).

SST 09922-10010

Torque: 67 N·m (49 ft·lbf)

(5) Fix twisted steering rack boot and install the clip with the tabs toward the front of the vehicle.

(6) Check that the tie rod is at the ball joint moveable range center.

53. INSTALL SKID PLATE (IF EQUIPPED)

(a) Refer to Skid Plate instructions for proper installation method and torque.

54. CONFIGURE TOYOTA SAFETY SENSE (TSS)

Due to a change in the vehicle height, it is required to reconfigure the TSS system.

(a) Front Camera Adjustment

Repair Manual >> ADAS/AD >> Advanced Driver Assistance System >> Front Camera >> Target Adjustment (One Time Recognition) (w/ Lift Kit)

Tire Size					Camera Height Value for Global Tech Stream		Radar Height Value for Global Tech Stream		FCM Restriction Mode	Tire Inch Up Mode
					mm	inch	m	ft		
245	/	70	R	17	1704	67.1	0.82	2.7	Mode 2	Normal Mode
265	/	55	R	20	1704	67.1	0.82	2.7	Mode 2	Normal Mode
265	/	70	R	18	1704	67.1	0.82	2.7	Mode 2	Normal Mode

Fig. 54-1

(1) If the installed **tire size <u>matches</u> the Tire Pressure Label** on the driver side door jamb, enter the values when prompted (Fig. 54-1).

(2) If the installed **tire size <u>does not match</u> the Tire Pressure Label**, please refer to Appendices 1-3 to determine GTS input values for camera height, radar height, Restriction Mode, and Tire Inch Up Mode.

⚠ **CAUTION: The appropriate appendix is determined by the tire size listed on the Tire Pressure Label.**

- 245/70R17 – Appendix 1 (pg. 32-34)
- 265/55R20 – Appendix 2 (pg. 35-37)
- 265/70R18 – Appendix 3 (pg. 38-40)

⚠ **CAUTION: If total lift kit exceeds 4", some TSS functions are not supported and must be disabled.**

(b) Front Radar Adjustment

Repair Manual >> ADAS/AD >> Advanced Driver Assistance System >> Millimeter Wave Radar Sensor >> Target Adjustment (Triangle Target) (w/ Lift Kit)

(1) If the installed **tire size <u>matches</u> the Tire Pressure Label** on the driver side door jamb, enter the values when prompted (Fig. 54-1).

(2) If the installed **tire size <u>does not match</u> the Tire Pressure Label**, please refer to Appendices 1-3to determine GTS input values for camera height, radar height, Restriction Mode, and Tire Inch Up Mode.

⚠ **CAUTION: The appropriate appendix is determined by the tire size listed on the Tire Pressure Label.**

- 245/70R17 – Appendix 1 (pg. 32-34)
- 265/55R20 – Appendix 2 (pg. 35-37)
- 265/70R18 – Appendix 3 (pg. 38-40)

⚠ **CAUTION: If total lift kit exceeds 4", some TSS functions are not supported and must be disabled.**

55. CHECK & CONFIGURE PANORAMIC VIEW MONITOR (IF EQUIPPED)

(a) Confirm image generated by PVM system. Vehicle height may impact the system's ability to generate a smooth image from multiple cameras. If adjustment is required, refer to the Toyota Repair Manual for model specific instructions:

Repair Manual >> Audio/Visual/Telematics >> Park Assist / Monitoring >> Panoramic View Monitor

56. CHECK & CONFIGURE PARKING ASSIST MONITOR (IF EQUIPPED)

(a) Confirm image generated by PAM system. If adjustment is required, refer to the Toyota Repair Manual for model specific instructions:

Repair Manual >> Audio/Visual/Telematics >> Park Assist / Monitoring >> Parking Assist Monitor

57. INSPECT & ADJUST HEADLIGHT AIM

(a) Refer to the Toyota Repair Manual for model specific instructions on how to inspect and adjust headlight aim:

Repair Manual >> Vehicle Exterior >> Lighting (Ext) >> Headlight Assembly >> Adjustment

58. PERFORM FUNCTION CHECKS (on next page)

CAUTION: DO NOT SKIP the final checks.

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

Accessory/Part Level Checks

- ☐ All fasteners torqued according to specification. Safety critical torques verified.
- ☐ Permanently removed components have been discarded.
- ☐ Front & Rear Brake Hoses are not twisted, and hose routing appears natural.
- ☐ Brake rotors are clean and free of contamination.
- ☐ All wire harnesses disconnected during installation have been reconnected.
- ☐ Tires properly inflated.
- ☐ All components removed from engine bay are properly secured.

Vehicle/System Level Checks

- ☐ Front differential oil is topped off if driveshafts were replaced.
- ☐ TSS is configured for appropriate vehicle height.
- ☐ Headlights are properly aimed and within specification.
- ☐ Perform visual inspection to ensure no damage (including scuffs and scratches) was caused during the installation process.
- ☐ If the total Lift Kit height exceeds 4”, the correct steps were followed in accordance with step 54 and the Toyota Repair Manual.

Test Drive Vehicle

- ☐ Check Brake application
- ☐ Check Front Wheel Alignment
- ☐ No abnormal suspension noises
- ☐ Parking Brake function
- ☐ Dynamic Radar Cruise Control (DRCC) & Lane Trace Assist (LTA) operation

APPENDIX 1: Front Camera & Radar Height Look-Up Table – Group 1
This section is only applicable to vehicles with the following OE Tire Size specified on the Tire Pressure Label on the driver's side door jamb:

Tire size: 245/70R17

If a different tire size is used, the following table lists common tire sizes which are same as, or larger in diameter than OE tire.
Find your applicable tire size and enter the corresponding information in GTS when prompted.

CAUTION: Toyota recommends the use of OEM wheels and tires. The Toyota OEM lift kit is designed to be used with OEM wheels and tire sizes. Tire and wheel combinations different than OEM wheel and tire size may void the vehicle's warranty.
*Note 1: Total lift exceeds 4", some TSS functions are deactivated.
*Note 2: Tire Inch Up Mode selection is only needed when Restriction Mode 2 is picked.
*Note 3: Units shown on this table are in accordance with GTS+ specifications

Group 1												
Wheel Size	Aspect Ratio	Tire Size	Tire Diameter	Total Lifted Height (TRD Lift Kit +	Camera Height Value for Global Tech Stream		Radar Height Value for Global Tech Stream		FCM Restriction Mode	Tire Inch Up Mode	Note
			inch	inch	mm	inch	m	ft			
17"	65	275 / 65 R 17	31.1	2.8	1712	67.4	0.83	2.73	Restriction Mode 2	Mode 1	
		305 / 65 R 17	32.6	3.6	1731	68.1	0.85	2.79	Restriction Mode 2	Mode 2	
	70	255 / 70 R 17	31.1	2.8	1712	67.4	0.83	2.73	Restriction Mode 2	Mode 1	
		265 / 70 R 17	31.9	3.2	1722	67.8	0.84	2.76	Restriction Mode 2	Mode 1	
		275 / 70 R 17	32.4	3.5	1728	68.0	0.85	2.78	Restriction Mode 2	Mode 2	
		285 / 70 R 17	33.0	3.8	1736	68.3	0.86	2.81	Restriction Mode 2	Mode 2	
		295 / 70 R 17	33.5	4.0	1742	68.6	0.86	2.83	Restriction Mode 2	Mode 3	
		305 / 70 R 17	33.9	4.2	1747	68.8	0.87	2.84	Restriction Mode 4	-	Note 1
		315 / 70 R 17	34.7	4.6	1757	69.2	0.88	2.88	Restriction Mode 4	-	Note 1
	75	235 / 75 R 17	31.1	2.8	1712	67.4	0.83	2.73	Restriction Mode 2	Mode 1	
		245 / 75 R 17	31.7	3.1	1719	67.7	0.84	2.75	Restriction Mode 2	Mode 1	
		255 / 75 R 17	32.1	3.3	1724	67.9	0.84	2.77	Restriction Mode 2	Mode 2	
		285 / 75 R 17	33.9	4.2	1747	68.8	0.87	2.84	Restriction Mode 4	-	Note 1
	80	235 / 80 R 17	31.8	3.2	1721	67.8	0.84	2.76	Restriction Mode 2	Mode 1	
		255 / 80 R 17	33.3	3.9	1740	68.5	0.86	2.82	Restriction Mode 2	Mode 3	
	Flotation Tire Size	34x10.50R17	33.5	4.0	1742	68.6	0.86	2.83	Restriction Mode 2	Mode 3	
		35x11.50R17	34.8	4.6	1758	69.2	0.88	2.88	Restriction Mode 4	-	Note 1
		33x12.50R17	32.8	3.6	1733	68.2	0.85	2.80	Restriction Mode 2	Mode 2	
		35x12.50R17	34.8	4.6	1758	69.2	0.88	2.88	Restriction Mode 4	-	Note 1
		37x12.50R17	36.8	5.6	1784	70.2	0.90	2.97	Restriction Mode 4	-	Note 1

APPENDIX 1: Front Camera & Radar Height Look-Up Table – Group 1
This section is only applicable to vehicles with the following OE Tire Size specified on the Tire Pressure Label on the driver's side door jamb:

Tire size: 245/70R17

Group 1													
Wheel Size	Aspect Ratio	Tire Size	Tire Diameter	Total Lifted Height (TRD Lift Kit +	Camera Height Value for Global Tech Stream		Radar Height Value for Global Tech Stream		FCM Restriction Mode	Tire Inch Up Mode	Note
			inch	inch	mm	inch	m	ft			
18"	60	265 / 60 R 18	30.6	2.6	1705	67.1	0.83	2.71	Restriction Mode 2	Normal	
		285 / 60 R 18	31.5	3.0	1716	67.6	0.84	2.74	Restriction Mode 2	Mode 1	
		305 / 60 R 18	32.4	3.5	1728	68.0	0.85	2.78	Restriction Mode 2	Mode 2	
		325 / 60 R 18	33.4	3.9	1740	68.5	0.86	2.82	Restriction Mode 2	Mode 3	
	65	265 / 65 R 18	31.5	3.0	1717	67.6	0.84	2.75	Restriction Mode 2	Mode 1	
		265 / 65 R 18	31.6	3.1	1718	67.6	0.84	2.75	Restriction Mode 2	Mode 1	
		275 / 65 R 18	32.3	3.4	1727	68.0	0.85	2.78	Restriction Mode 2	Mode 2	
		285 / 65 R 18	32.8	3.7	1733	68.2	0.85	2.80	Restriction Mode 2	Mode 2	
		295 / 65 R 18	33.1	3.8	1737	68.4	0.86	2.81	Restriction Mode 2	Mode 3	
		305 / 65 R 18	33.6	4.0	1743	68.6	0.86	2.83	Restriction Mode 4	-	Note 1
		325 / 65 R 18	34.8	4.7	1759	69.3	0.88	2.88	Restriction Mode 4	-	Note 1
	70	255 / 70 R 18	32.1	3.3	1724	67.9	0.84	2.77	Restriction Mode 2	Mode 2	
		265 / 70 R 18	32.9	3.7	1734	68.3	0.85	2.80	Restriction Mode 2	Mode 2	
		275 / 70 R 18	33.4	4.0	1741	68.5	0.86	2.82	Restriction Mode 2	Mode 3	
		285 / 70 R 18	34.0	4.2	1748	68.8	0.87	2.85	Restriction Mode 4	-	Note 1
		295 / 70 R 18	34.3	4.4	1752	69.0	0.87	2.86	Restriction Mode 4	-	Note 1
		305 / 70 R 18	34.8	4.7	1759	69.3	0.88	2.88	Restriction Mode 4	-	Note 1
	75	285 / 75 R 18	35.1	4.8	1762	69.4	0.88	2.89	Restriction Mode 4	-	Note 1
	Flotation Tire Size	37x11.50R18	36.5	5.5	1780	70.1	0.90	2.95	Restriction Mode 4	-	Note 1
		33x12.50R18	32.5	3.5	1730	68.1	0.85	2.79	Restriction Mode 2	Mode 2	
		34x12.50R18	33.5	4.0	1742	68.6	0.86	2.83	Restriction Mode 2	Mode 3	
		35x12.50R18	34.6	4.6	1756	69.1	0.88	2.87	Restriction Mode 4	-	Note 1
		37x12.50R18	36.6	5.6	1781	70.1	0.90	2.96	Restriction Mode 4	-	Note 1
		35x13.50R18	34.5	4.5	1755	69.1	0.88	2.87	Restriction Mode 4	-	Note 1
		37x12.50R18	36.5	5.5	1780	70.1	0.90	2.95	Restriction Mode 4	-	Note 1

APPENDIX 1: Front Camera & Radar Height Look-Up Table – Group 1
This section is only applicable to vehicles with the following OE Tire Size specified on the Tire Pressure Label on the driver's side door jamb:

Tire size: 245/70R17

Group 1												
Wheel Size	Aspect Ratio	Tire Size	Tire Diameter	Total Lifted Height (TRD Lift Kit +	Camera Height Value for Global Tech Stream		Radar Height Value for Global Tech Stream		FCM Restriction Mode	Tire Inch Up Mode	Note
			inch	inch	mm	inch	m	ft			
20"	50	285 / 50 R 20	31.2	2.9	1713	67.4	0.83	2.73	Restriction Mode 2	Mode 1	
		305 / 50 R 20	32.1	3.3	1724	67.9	0.84	2.77	Restriction Mode 2	Mode 2	
	55	255 / 55 R 20	31.3	2.9	1714	67.5	0.83	2.74	Restriction Mode 2	Mode 1	
		275 / 55 R 20	32.1	3.3	1725	67.9	0.85	2.77	Restriction Mode 2	Mode 2	
		285 / 55 R 20	32.6	3.6	1731	68.1	0.85	2.79	Restriction Mode 2	Mode 2	
		295 / 55 R 20	32.8	3.6	1733	68.2	0.85	2.80	Restriction Mode 2	Mode 2	
		305 / 55 R 20	33.2	3.9	1739	68.5	0.86	2.82	Restriction Mode 2	Mode 3	
		335 / 55 R 20	34.5	4.5	1755	69.1	0.88	2.87	Restriction Mode 4	-	Note 1
	60	245 / 60 R 20	31.6	3.1	1718	67.6	0.84	2.75	Restriction Mode 2	Mode 1	
		255 / 60 R 20	32.1	3.3	1724	67.9	0.84	2.77	Restriction Mode 2	Mode 2	
		265 / 60 R 20	32.5	3.5	1730	68.1	0.85	2.79	Restriction Mode 2	Mode 2	
		275 / 60 R 20	33.1	3.8	1737	68.4	0.86	2.81	Restriction Mode 2	Mode 3	
		285 / 60 R 20	33.7	4.1	1745	68.7	0.87	2.84	Restriction Mode 4	-	Note 1
		295 / 60 R 20	33.9	4.2	1748	68.8	0.87	2.85	Restriction Mode 4	-	Note 1
		325 / 60 R 20	35.6	5.1	1769	69.6	0.89	2.92	Restriction Mode 4	-	Note 1
	65	275 / 65 R 20	34.1	4.3	1750	68.9	0.87	2.85	Restriction Mode 4	-	Note 1
		285 / 65 R 20	34.8	4.7	1759	69.3	0.88	2.88	Restriction Mode 4	-	Note 1
		295 / 65 R 20	35.1	4.8	1763	69.4	0.88	2.90	Restriction Mode 4	-	Note 1
	Flotation Tire Size	33x11.50R20	32.8	3.6	1733	68.2	0.85	2.80	Restriction Mode 2	Mode 2	
		35x11.50R20	34.8	4.7	1759	69.3	0.88	2.88	Restriction Mode 4	-	Note 1
		37x11.50R20	36.5	5.5	1780	70.1	0.90	2.95	Restriction Mode 4	-	Note 1
		33x12.50R20	32.8	3.6	1733	68.2	0.85	2.80	Restriction Mode 2	Mode 2	
		35x12.50R20	34.8	4.6	1758	69.2	0.88	2.88	Restriction Mode 4	-	Note 1
		37x12.50R20	36.8	5.6	1784	70.2	0.90	2.97	Restriction Mode 4	-	Note 1
		33x13.50R20	32.6	3.6	1731	68.1	0.85	2.79	Restriction Mode 2	Mode 2	
		35x13.50R20	34.8	4.6	1758	69.2	0.88	2.88	Restriction Mode 4	-	Note 1
		37x13.50R20	36.8	5.6	1784	70.2	0.90	2.97	Restriction Mode 4	-	Note 1
		38x13.50R20	37.8	6.1	1796	70.7	0.92	3.01	Restriction Mode 4	-	Note 1

APPENDIX 2: Front Camera & Radar Height Look-Up Table – Group 2
This section is only applicable to vehicles with the following OE Tire Size specified on the Tire Pressure Label on the driver's side door jamb:

Tire size: 265/55R20

If a different tire size is used, the following table lists common tire sizes which are same as, or larger in diameter than OE tire.
Find your applicable tire size and enter the corresponding information in GTS when prompted.

CAUTION: Toyota recommends the use of OEM wheels and tires. The Toyota OEM lift kit is designed to be used with OEM wheels and tire sizes. Tire and wheel combinations different than OEM wheel and tire size may void the vehicle's warranty.
*Note 1: Total lift exceeds 4", some TSS functions are deactivated.
*Note 2: Tire Inch Up Mode selection is only needed when Restriction Mode 2 is picked.
*Note 3: Units shown on this table are in accordance with GTS+ specifications

Group 2												
Wheel Siz	Aspect Ratio	Tire Size	Tire Diameter	Total Lifted Height (TRD Lift Kit +	Camera Height Value for Global Tech Stream		Radar Height Value for Global Tech Stream		FCM Restriction Mode	Tire Inch Up Mod	Not
			inch	inch	mm	inch	m	ft			
17"	65	305 / 65 R 17	32.6	3.0	1717	67.6	0.84	2.75	Restriction Mode 2	Mode 1	
	70	265 / 70 R 17	31.9	2.7	1708	67.2	0.83	2.72	Restriction Mode 2	Normal	
		275 / 70 R 17	32.4	2.9	1714	67.5	0.83	2.74	Restriction Mode 2	Mode 1	
		285 / 70 R 17	33.0	3.2	1722	67.8	0.84	2.76	Restriction Mode 2	Mode 1	
		295 / 70 R 17	33.5	3.5	1728	68.0	0.85	2.78	Restriction Mode 2	Mode 2	
		305 / 70 R 17	33.9	3.6	1733	68.2	0.85	2.80	Restriction Mode 2	Mode 2	
		315 / 70 R 17	34.7	4.1	1743	68.6	0.86	2.83	Restriction Mode 4	-	Note 1
	75	255 / 75 R 17	32.1	2.8	1710	67.3	0.83	2.72	Restriction Mode 2	Normal	
		285 / 75 R 17	33.9	3.6	1733	68.2	0.85	2.80	Restriction Mode 2	Mode 2	
	80	255 / 80 R 17	33.3	3.4	1726	68.0	0.85	2.78	Restriction Mode 2	Mode 2	
	Flotation Tire Size	34x10.50R17	33.5	3.5	1728	68.0	0.85	2.78	Restriction Mode 2	Mode 2	
		35x11.50R17	34.8	4.1	1744	68.7	0.86	2.83	Restriction Mode 4	-	Note 1
		33x12.50R17	32.8	3.1	1719	67.7	0.84	2.75	Restriction Mode 2	Mode 1	
		35x12.50R17	34.8	4.1	1744	68.7	0.86	2.83	Restriction Mode 4	-	Note 1
		37x12.50R17	36.8	5.1	1770	69.7	0.89	2.92	Restriction Mode 4	-	Note 1

APPENDIX 2: Front Camera & Radar Height Look-Up Table – Group 2
This section is only applicable to vehicles with the following OE Tire Size specified on the Tire Pressure Label on the driver's side door jamb:

Tire size: 265/55R20

Group 2												
Wheel Siz	Aspect Ratio	Tire Size	Tire Diameter	Total Lifted Height (TRD Lift Kit +	Camera Height Value for Global Tech Stream		Radar Height Value for Global Tech Stream		FCM Restriction Mode	Tire Inch Up Mod	Not
			inch	inch	mm	inch	m	ft			
18"	60	305 / 60 R 18	32.4	2.9	1714	67.5	0.83	2.74	Restriction Mode 2	Mode 1	
		325 / 60 R 18	33.4	3.4	1726	68.0	0.85	2.78	Restriction Mode 2	Mode 2	
	65	275 / 65 R 18	32.3	2.9	1713	67.4	0.83	2.73	Restriction Mode 2	Mode 1	
		285 / 65 R 18	32.8	3.1	1719	67.7	0.84	2.75	Restriction Mode 2	Mode 1	
		295 / 65 R 18	33.1	3.3	1723	67.8	0.84	2.77	Restriction Mode 2	Mode 1	
		305 / 65 R 18	33.6	3.5	1729	68.1	0.85	2.79	Restriction Mode 2	Mode 2	
		325 / 65 R 18	34.8	4.1	1745	68.7	0.87	2.84	Restriction Mode 4	-	Note 1
	70	255 / 70 R 18	32.1	2.7	1710	67.3	0.83	2.72	Restriction Mode 2	Normal	
		265 / 70 R 18	32.9	3.2	1721	67.8	0.84	2.76	Restriction Mode 2	Mode 1	
		275 / 70 R 18	33.4	3.4	1727	68.0	0.85	2.78	Restriction Mode 2	Mode 2	
		285 / 70 R 18	34.0	3.7	1734	68.3	0.85	2.80	Restriction Mode 2	Mode 2	
		295 / 70 R 18	34.3	3.8	1738	68.4	0.86	2.81	Restriction Mode 2	Mode 3	
		305 / 70 R 18	34.8	4.1	1745	68.7	0.87	2.84	Restriction Mode 4	-	Note 1
	75	285 / 75 R 18	35.1	4.2	1748	68.8	0.87	2.85	Restriction Mode 4	-	Note 1
	Flotation Tire Size	37x11.50R18	36.5	5.0	1766	69.5	0.89	2.91	Restriction Mode 4	-	Note 1
		33x12.50R18	32.5	3.0	1716	67.6	0.84	2.74	Restriction Mode 2	Mode 1	
		34x12.50R18	33.5	3.5	1728	68.0	0.85	2.78	Restriction Mode 2	Mode 2	
		35x12.50R18	34.6	4.0	1742	68.6	0.86	2.83	Restriction Mode 2	Mode 3	
		37x12.50R18	36.6	5.0	1767	69.6	0.89	2.91	Restriction Mode 4	-	Note 1
		35x13.50R18	34.5	4.0	1741	68.5	0.86	2.82	Restriction Mode 2	Mode 3	
		37x12.50R18	36.5	5.0	1766	69.5	0.89	2.91	Restriction Mode 4	-	Note 1

APPENDIX 2: Front Camera & Radar Height Look-Up Table – Group 2
This section is only applicable to vehicles with the following OE Tire Size specified on the Tire Pressure Label on the driver's side door jamb:

Tire size: 265/55R20

Group 2												
Wheel Siz	Aspect Ratio	Tire Size	Tire Diameter	Total Lifted Height (TRD Lift Kit +	Camera Height Value for Global Tech Stream		Radar Height Value for Global Tech Stream		FCM Restriction Mode	Tire Inch Up Mod	Not
			inch	inch	mm	inch	m	ft			
20"	50	305 / 50 R 20	32.1	2.7	1710	67.3	0.83	2.72	Restriction Mode 2	Normal	
	55	275 / 55 R 20	32.1	2.8	1711	67.4	0.83	2.73	Restriction Mode 2	Mode 1	
		285 / 55 R 20	32.6	3.0	1717	67.6	0.84	2.75	Restriction Mode 2	Mode 1	
		295 / 55 R 20	32.8	3.1	1719	67.7	0.84	2.75	Restriction Mode 2	Mode 1	
		305 / 55 R 20	33.2	3.3	1725	67.9	0.85	2.77	Restriction Mode 2	Mode 2	
		335 / 55 R 20	34.5	3.9	1741	68.5	0.86	2.82	Restriction Mode 2	Mode 3	
	60	255 / 60 R 20	32.1	2.7	1710	67.3	0.83	2.72	Restriction Mode 2	Normal	
		265 / 60 R 20	32.5	3.0	1716	67.6	0.84	2.74	Restriction Mode 2	Mode 1	
		275 / 60 R 20	33.1	3.3	1723	67.8	0.84	2.77	Restriction Mode 2	Mode 1	
		285 / 60 R 20	33.7	3.6	1731	68.1	0.85	2.79	Restriction Mode 2	Mode 2	
		295 / 60 R 20	33.9	3.7	1734	68.3	0.85	2.80	Restriction Mode 2	Mode 2	
		325 / 60 R 20	35.6	4.5	1755	69.1	0.88	2.87	Restriction Mode 4	-	Note 1
	65	275 / 65 R 20	34.1	3.7	1736	68.3	0.86	2.81	Restriction Mode 2	Mode 2	
		285 / 65 R 20	34.8	4.1	1745	68.7	0.87	2.84	Restriction Mode 4	-	Note 1
		295 / 65 R 20	35.1	4.3	1749	68.9	0.87	2.85	Restriction Mode 4	-	Note 1
	Flotation Tire Size	33x11.50R20	32.8	3.1	1719	67.7	0.84	2.75	Restriction Mode 2	Mode 1	
		35x11.50R20	34.8	4.1	1745	68.7	0.87	2.84	Restriction Mode 4	-	Note 1
		37x11.50R20	36.5	5.0	1766	69.5	0.89	2.91	Restriction Mode 4	-	Note 1
		33x12.50R20	32.8	3.1	1719	67.7	0.84	2.75	Restriction Mode 2	Mode 1	
		35x12.50R20	34.8	4.1	1744	68.7	0.86	2.83	Restriction Mode 4	-	Note 1
		37x12.50R20	36.8	5.1	1770	69.7	0.89	2.92	Restriction Mode 4	-	Note 1
		33x13.50R20	32.6	3.0	1717	67.6	0.84	2.75	Restriction Mode 2	Mode 1	
		35x13.50R20	34.8	4.1	1744	68.7	0.86	2.83	Restriction Mode 4	-	Note 1
		37x13.50R20	36.8	5.1	1770	69.7	0.89	2.92	Restriction Mode 4	-	Note 1
		38x13.50R20	37.8	5.6	1782	70.2	0.90	2.96	Restriction Mode 4	-	Note 1

APPENDIX 3: Front Camera & Radar Height Look-Up Table – Group 3
This section is only applicable to vehicles with the following OE Tire Size specified on the Tire Pressure Label on the driver's side door jamb:

Tire size: 265/70R18

If a different tire size is used, the following table lists common tire sizes which are same as, or larger in diameter than OE tire.
Find your applicable tire size and enter the corresponding information in GTS when prompted.

CAUTION: Toyota recommends the use of OEM wheels and tires. The Toyota OEM lift kit is designed to be used with OEM wheels and tire sizes. Tire and wheel combinations different than OEM wheel and tire size may void the vehicle's warranty.
*Note 1: Total lift exceeds 4", some TSS functions are deactivated.
*Note 2: Tire Inch Up Mode selection is only needed when Restriction Mode 2 is picked.
*Note 3: Units shown on this table are in accordance with GTS+ specifications

Group 3												
Wheel Siz	Aspect Ratio	Tire Size	Tire Diameter	Total Lifted Height (TRD Lift Kit +	Camera Height Value for Global Tech Stream		Radar Height Value for Global Tech Stream		FCM Restriction Mode	Tire Inch Up Mode	Note
			inch	inch	mm	inch	m	ft			
17"	70	285 / 70 R 17	33.0	2.8	1710	67.3	0.83	2.72	Restriction Mode 2	Normal	
		295 / 70 R 17	33.5	3.0	1717	67.6	0.84	2.75	Restriction Mode 2	Mode 1	
		305 / 70 R 17	33.9	3.2	1721	67.8	0.84	2.76	Restriction Mode 2	Mode 1	
		315 / 70 R 17	34.7	3.6	1732	68.2	0.85	2.80	Restriction Mode 2	Mode 2	
	75	285 / 75 R 17	33.9	3.2	1721	67.8	0.84	2.76	Restriction Mode 2	Mode 1	
	80	255 / 80 R 17	33.3	2.9	1714	67.5	0.83	2.74	Restriction Mode 2	Mode 1	
	Flotation Tire Size	34x10.50R17	33.5	3.0	1717	67.6	0.84	2.75	Restriction Mode 2	Mode 1	
		35x11.50R17	34.8	3.6	1733	68.2	0.85	2.80	Restriction Mode 2	Mode 2	
		33x12.50R17	32.8	2.6	1707	67.2	0.83	2.71	Restriction Mode 2	Normal	
		35x12.50R17	34.8	3.6	1733	68.2	0.85	2.80	Restriction Mode 2	Mode 2	
		37x12.50R17	36.8	4.6	1758	69.2	0.88	2.88	Restriction Mode 4	-	Note 1

APPENDIX 3: Front Camera & Radar Height Look-Up Table – Group 3
This section is only applicable to vehicles with the following OE Tire Size specified on the Tire Pressure Label on the driver's side door jamb:

Tire size: 265/70R18

Group 3													
Wheel Size	Aspect Ratio	Tire Size	Tire Diameter	Total Lifted Height (TRD Lift Kit +	Camera Height Value for Global Tech Stream		Radar Height Value for Global Tech Stream		FCM Restriction Mode	Tire Inch Up Mod	Note
			inch	inch	mm	inch	m	ft			
18"	60	325 / 60 R 18	33.4	2.9	1715	67.5	0.84	2.74	Restriction Mode 2	Mode 1	
	65	285 / 65 R 18	32.8	2.7	1708	67.2	0.83	2.72	Restriction Mode 2	Normal	
		295 / 65 R 18	33.1	2.8	1712	67.4	0.83	2.73	Restriction Mode 2	Mode 1	
		305 / 65 R 18	33.6	3.0	1718	67.6	0.84	2.75	Restriction Mode 2	Mode 1	
		325 / 65 R 18	34.8	3.7	1733	68.2	0.85	2.80	Restriction Mode 2	Mode 2	
	70	265 / 70 R 18	32.9	2.7	1709	67.3	0.83	2.72	Restriction Mode 2	Normal	
		275 / 70 R 18	33.4	3.0	1715	67.5	0.84	2.74	Restriction Mode 2	Mode 1	
		285 / 70 R 18	34.0	3.2	1723	67.8	0.84	2.77	Restriction Mode 2	Mode 1	
		295 / 70 R 18	34.3	3.4	1727	68.0	0.85	2.78	Restriction Mode 2	Mode 2	
		305 / 70 R 18	34.8	3.7	1733	68.2	0.85	2.80	Restriction Mode 2	Mode 2	
	75	285 / 75 R 18	35.1	3.8	1737	68.4	0.86	2.81	Restriction Mode 2	Mode 3	
	Flotation Tire Size	37x11.50R18	36.5	4.5	1755	69.1	0.88	2.87	Restriction Mode 4	-	Note 1
		34x12.50R18	33.5	3.0	1717	67.6	0.84	2.75	Restriction Mode 2	Mode 1	
		35x12.50R18	34.6	3.6	1731	68.1	0.85	2.79	Restriction Mode 2	Mode 2	
		37x12.50R18	36.6	4.6	1756	69.1	0.88	2.87	Restriction Mode 4	-	Note 1
		35x13.50R18	34.5	3.5	1730	68.1	0.85	2.79	Restriction Mode 2	Mode 2	
		37x12.50R18	36.5	4.5	1755	69.1	0.88	2.87	Restriction Mode 4	-	Note 1

APPENDIX 3: Front Camera & Radar Height Look-Up Table – Group 3
This section is only applicable to vehicles with the following OE Tire Size specified on the Tire Pressure Label on the driver's side door jamb:

Tire size: 265/70R18

Group 3													
Wheel Siz	Aspect Ratio	Tire Size	Tire Diameter	Total Lifted Height (TRD Lift Kit +	Camera Height Value for Global Tech Stream		Radar Height Value for Global Tech Stream		FCM Restriction Mode	Tire Inch Up Mod	Not
			inch	inch	mm	inch	m	ft			
20"	55	295 / 55 R 20	32.8	2.6	1707	67.2	0.83	2.71	Restriction Mode 2	Normal	
		305 / 55 R 20	33.2	2.9	1713	67.4	0.83	2.73	Restriction Mode 2	Mode 1	
		335 / 55 R 20	34.5	3.5	1729	68.1	0.85	2.79	Restriction Mode 2	Mode 2	
	60	275 / 60 R 20	33.1	2.8	1712	67.4	0.83	2.73	Restriction Mode 2	Mode 1	
		285 / 60 R 20	33.7	3.1	1719	67.7	0.84	2.75	Restriction Mode 2	Mode 1	
		295 / 60 R 20	33.9	3.2	1722	67.8	0.84	2.76	Restriction Mode 2	Mode 1	
		325 / 60 R 20	35.6	4.1	1743	68.6	0.86	2.83	Restriction Mode 4	-	Note 1
	65	275 / 65 R 20	34.1	3.3	1724	67.9	0.84	2.77	Restriction Mode 2	Mode 2	
		285 / 65 R 20	34.8	3.7	1733	68.2	0.85	2.80	Restriction Mode 2	Mode 2	
		295 / 65 R 20	35.1	3.8	1737	68.4	0.86	2.81	Restriction Mode 2	Mode 3	
	Flotation Tire Size	33x11.50R20	32.8	2.6	1707	67.2	0.83	2.71	Restriction Mode 2	Normal	
		35x11.50R20	34.8	3.7	1733	68.2	0.85	2.80	Restriction Mode 2	Mode 2	
		37x11.50R20	36.5	4.5	1755	69.1	0.88	2.87	Restriction Mode 4	-	Note 1
		33x12.50R20	32.8	2.6	1707	67.2	0.83	2.71	Restriction Mode 2	Normal	
		35x12.50R20	34.8	3.6	1733	68.2	0.85	2.80	Restriction Mode 2	Mode 2	
		37x12.50R20	36.8	4.6	1758	69.2	0.88	2.88	Restriction Mode 4	-	Note 1
		35x13.50R20	34.8	3.6	1733	68.2	0.85	2.80	Restriction Mode 2	Mode 2	
		37x13.50R20	36.8	4.6	1758	69.2	0.88	2.88	Restriction Mode 4	-	Note 1
		38x13.50R20	37.8	5.1	1771	69.7	0.89	2.92	Restriction Mode 4	-	Note 1