

Part Number: PTCCY-35310/20/30/40/50/60/70/80**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 Req'd.	Description
1	SEE PAGE 2 FOR FULL KIT CONTENTS	

Hardware Bag Contents

Item #	Quantity Req'd.	Description
1	SEE PAGE 2 FOR FULL KIT CONTENTS	

Additional Items Required for Installation

Item #	Quantity Req'd.	Description
1	N/A	

Conflicts

TRD Lift Kit cannot be installed with any of the following:

Model/Grade:	TRD Pro, Limited, Trailhunter, Pre-Runner
Drivetrain:	All 2WD
Suspension:	Active Variable Shock (AVS) absorbers Rear Leaf spring

General Applicability

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

Vehicle:	MY24 and newer Tacoma
Engine:	2.4L 4-Cyl Turbo Hybrid 2.4L 4-Cyl Turbo
Drivetrain:	4WD only
Bed Length (Wheelbase):	5ft bed (WB: 3350mm, 131.9in) 6ft bed (WB: 3685mm, 145.1in)

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	39mm
Ratchet			
Screwdriver	Flathead		
Pliers			
Wrench	10mm	14mm	
	27mm	Adjustable	
	14mm crowfoot		
Paint Marker / Tape			
Torque Wrench			
Brass Bar			
Hammer			
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

Kit PN			PTCCY-35310	PTCCY-35320	PTCCY-35330	PTCCY-35340	PTCCY-35350	PTCCY-35360	PTCCY-35370	PTCCY-35380
Kit Hardware Component Parts	NUT, LOCK		90177-A0019	2	2	2	2	2	2	2
	NUT, CASTLE		90171-A0014	2	2	2	2	2	2	2
	PIN, COTTER		90252-04003	2	2	2	2	2	2	2
	NUT, CASTLE		90171-18003	2	2	2	2	2	2	2
	PIN, COTTER		90252-04009	2	2	2	2	2	2	2
	NUT, CASTLE		90171-A0012	2	2	2	2	2	2	2
	CLIP		90468-A0003	2	2	2	2	2	2	2
	NUT, LOCK		90177-A0023	2	2	2	2	-	-	-
	CAP, FR HUB GREASE		43514-0C020	2	2	2	2	-	-	-
Kit BOM	Fr Upr Control Arm	RH	PT901-35240	1	1	1	1	1	1	1
		LH	PT901-35241	1	1	1	1	1	1	1
	Tie Rod	RH	PT81G-35310	1	1	1	1	1	1	1
		LH	PT81G-35320	1	1	1	1	1	1	1
	Shock Absorbers Module	#1	PTR13-35410	2	-	2	-	2	2	-
		#2	PTR13-35420	-	2	-	2	-	-	2
		#3	PTR13-35430	-	-	-	-	-	-	2
	Shock Absorber	Rear	PTR13-35330	2	2	2	2	2	2	2
	Rear Spring	#1	PTR63-35340	2	2	2	2	2	-	2
		#2	PTR63-35350	-	-	-	-	-	2	-
		#3	PTR63-35360	-	-	-	-	-	-	2
	Lower Knuckle	86 Spec.	RH	PT981-35310	1	1	-	-	1	1
			LH	PT981-35320	1	1	-	-	1	1
		91 Spec.	RH	PT981-35330	-	-	1	1	-	-
			LH	PT981-35340	-	-	1	1	-	-
	DriveShaft	RH	43410-AK020	1	1	1	1	-	-	-
		LH	43420-AK020	1	1	1	1	-	-	-

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.

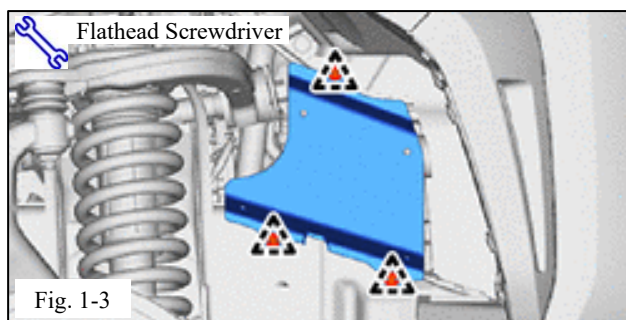
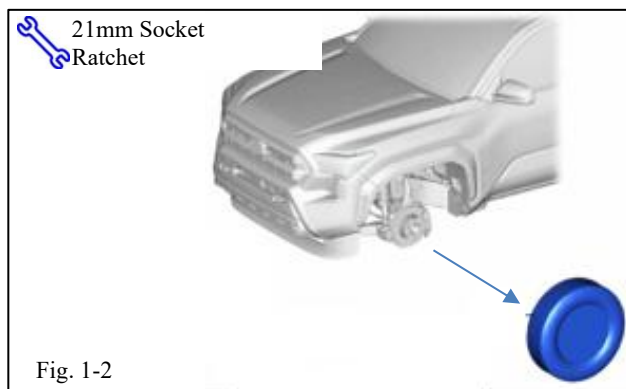
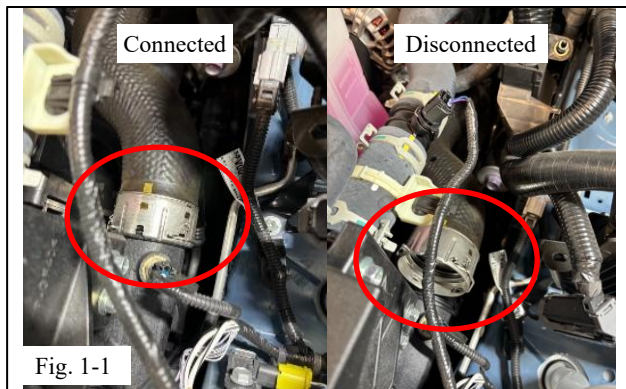
This document covers such items as:-

- 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.).

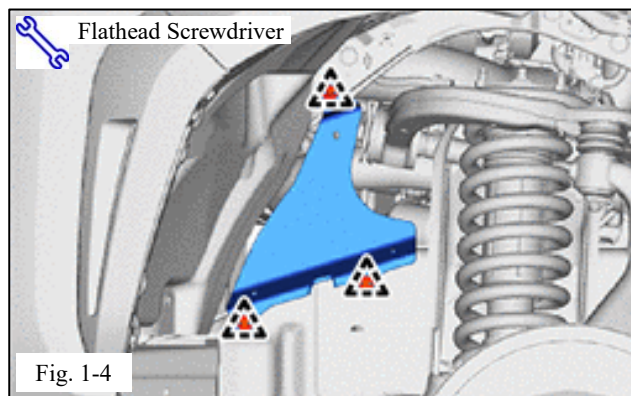
Please see your Toyota dealer for a copy of this document.

1. Prepare the Vehicle

- Place the vehicle in park and turn off the ignition.
- Disconnect negative battery terminal.
- Under hood, release the retainer and disconnect the No. 2 air tube assembly from the intercooler assembly (Fig. 1-1).
- Lift the vehicle.

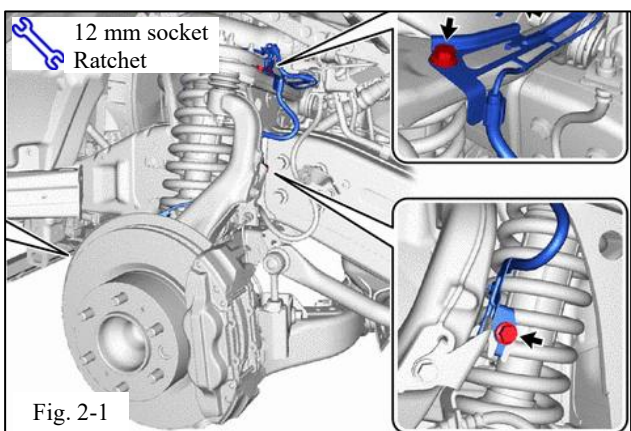


- Remove front and rear wheels (Fig. 1-2).
- Remove Front Fender Apron Trim Packing A and set aside (Fig. 1-3).



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

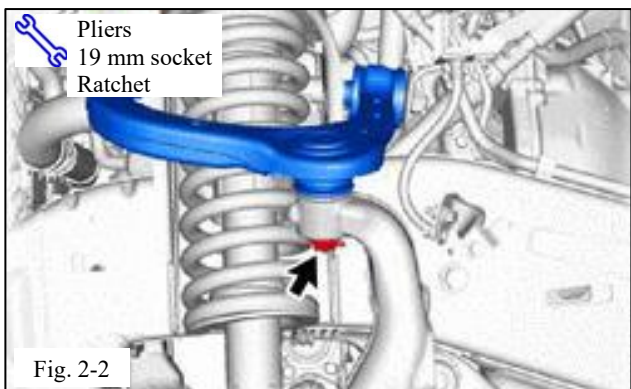
2. Remove and Replace Front Upper Control Arm



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

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

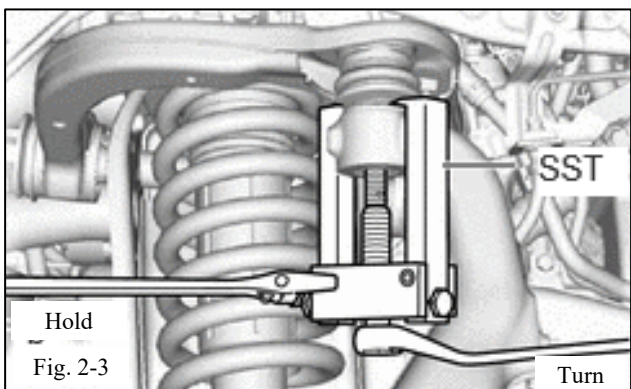
CAUTION: Do not rotate or apply excessive force to front speed sensor during removal from knuckle as it may result in damage to front speed sensor.



- (b) Disconnect Steering Knuckle

- (1) Remove and discard the cotter pin (Fig. 2-2).

- (2) Loosen the castle nut (Fig. 2-2).



- (3) Using SST, remove and discard the nut, then disconnect the Front Upper Control Arm from the Steering Knuckle (Fig. 2-3).

SST 09628-62011

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



Fig. 2-4

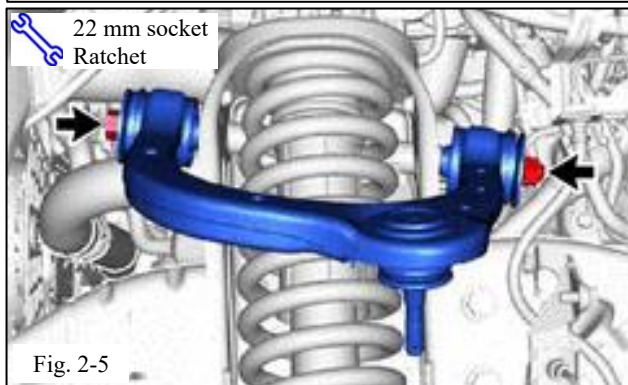


Fig. 2-5

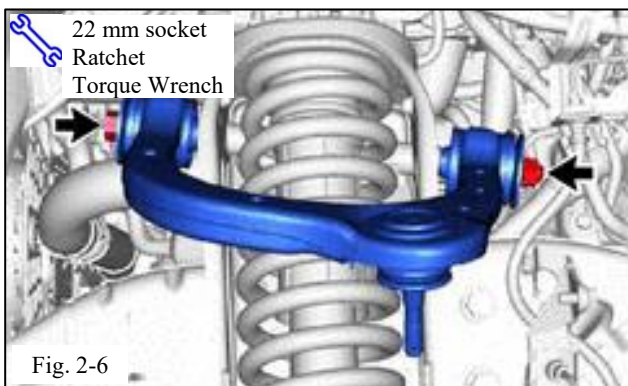


Fig. 2-6

- (c) Using tape or a marker, mark the position of the upper control arm on the shock absorber frame shroud (Fig. 2-4).

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

- (d) Remove Front Upper Control Arm assembly
- (1) Loosen the nut of front upper control arm at the frame, then remove and retain the bolt (Fig. 2-5).
 - (2) Remove and discard the OE front upper control arm.

- (e) Install TRD Front Upper Control Arm

- (1) Install the TRD Front Upper Control Arm using the bolt, nut, and (2) washers.

P/N: PT401-35240 (RH)

PT401-35241 (LH)

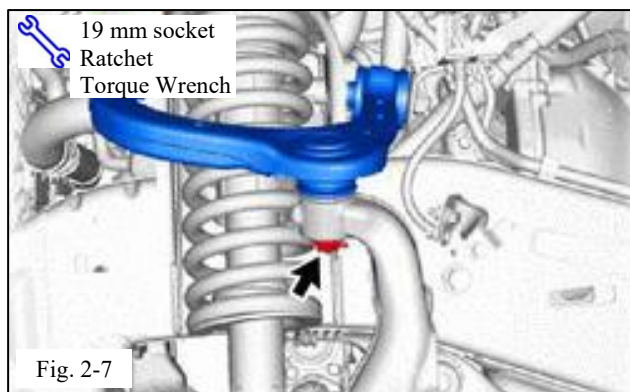
- (2) Hold the TRD upper control arm in the position marked during disassembly (from step 2c) and tighten to 185 N-m (136 ft-lbf) (Fig. 2-6).

Torque: 185 N-m (136 ft-lbf)

- (f) Connect Steering Knuckle

- (1) Connect the TRD Front Upper Control Arm to Steering Knuckle.

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



- (2) Install castle nut (included in kit) and tighten to 125 N-m (92 ft-lbf) (Fig. 2-7).

P/N: 90171-A0012 (Castle Nut)

⚠ Torque: 125 N-m (92 ft-lbf)

- (3) Insert new cotter pin (included in kit) (Fig. 2-7).

P/N: 90468-A0003 (Cotter Pin)

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

- (g) Repeat step 2 for opposite side of vehicle.

3. Prepare for Driveshaft Removal (if necessary)

NOTE:

Front Driveshaft required for:

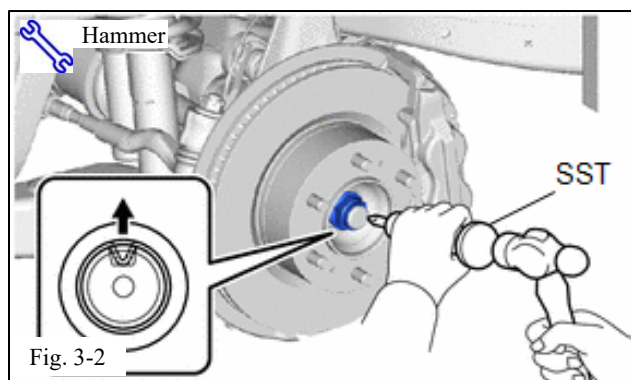
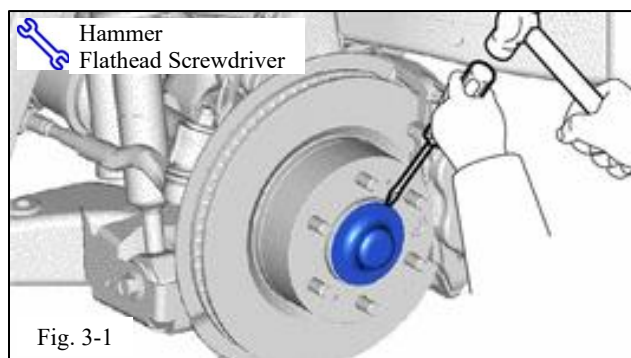
- Gas engine SR5
- Gas engine TRD Sport

Front Driveshaft replacement NOT required for:

- Gas engine TRD Off-Road
- HV TRD Off-Road
- HV TRD Sport

- (a) Remove and discard the front axle hub grease cap using a screwdriver and a hammer (Fig. 3-1).

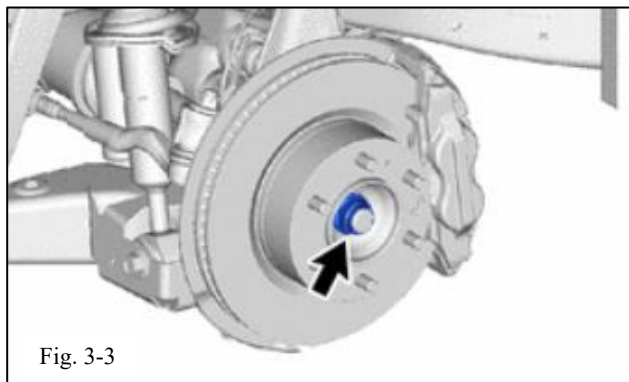
⚠ CAUTION: Do not damage the axle hub.



- (b) Using SST and hammer, release the staked part of the front axle shaft nut (Fig. 3-2).

SST 09930-00010

⚠ 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.

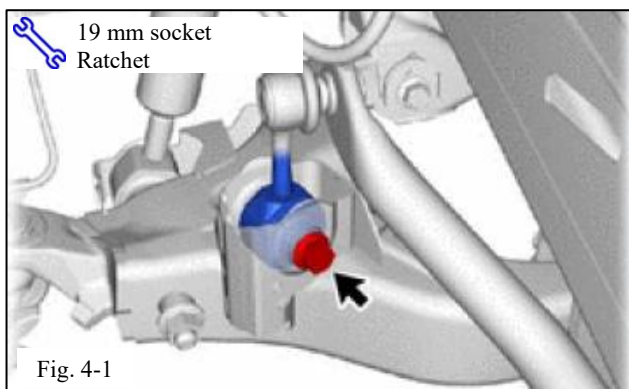


- (c) Using SST, remove and discard front axle shaft nut (Fig. 3-3).

SST 09229-55010

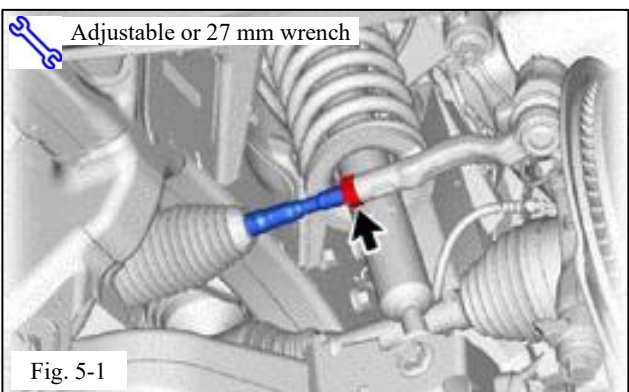
- (d) Partially drive-out the Front Driveshaft spline out of the hub assembly.
- (e) Repeat for the opposite side of the vehicle.

4. Disconnect Stabilizer Bar Linkage to Lower Control Arm

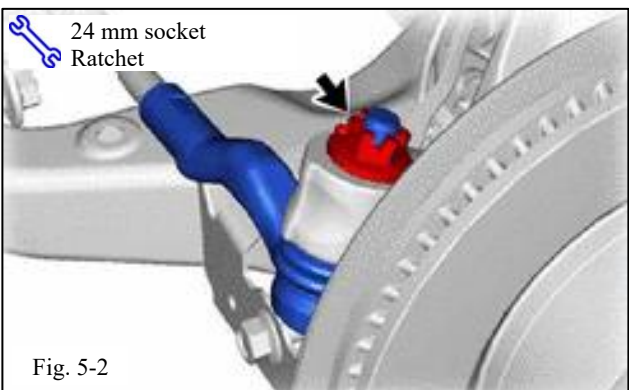


- (a) Remove the bolt and OE front stabilizer bar link assembly from lower control arm. Retain the bolt (Fig. 4-1).
- (b) Repeat for opposite side of vehicle.

5. Remove Tie Rod End Sub-Assembly



- (a) Loosen Tie Rod End Sub-Assembly jam nut (Fig. 5-1).



- (b) Remove and discard the cotter pin and castle nut (Fig. 5-2).

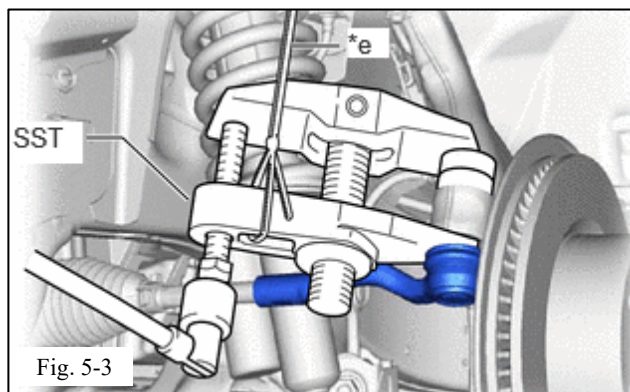


Fig. 5-3

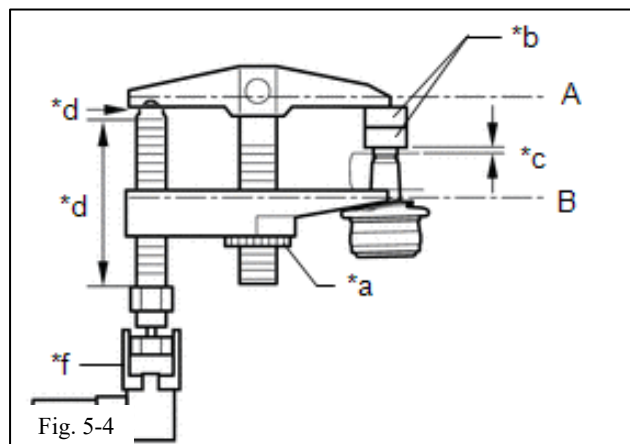


Fig. 5-4

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

- (c) Install 2 spacers (SST Spacer C) to the steering knuckle (Fig. 5-3).

SST 09961-02080

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. 5-4).

- (d) Using SST, separate the tie rod end sub-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.

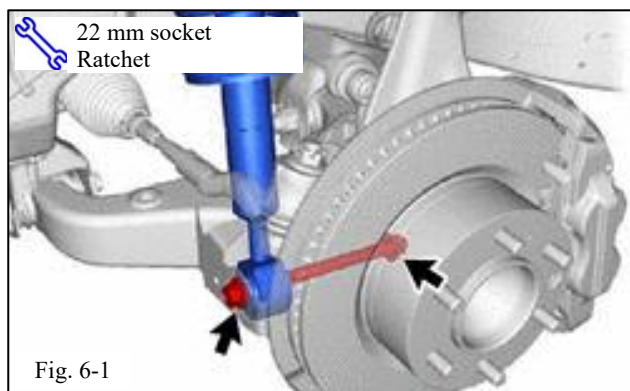
- (e) Unscrew Tie Rod End Sub-Assembly from inner tie rod, remove Tie Rod End Sub-Assembly from steering rack, and discard Tie Rod End Sub-Assembly.

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

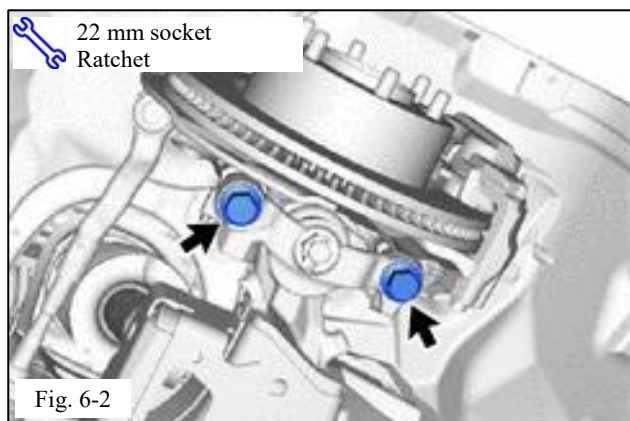
- (f) Repeat for the opposite side of the vehicle.

6. Prepare Lower Ball Joint Attachment

- (a) Remove and retain front shock absorber lower bolt and nut (Fig. 6-1).

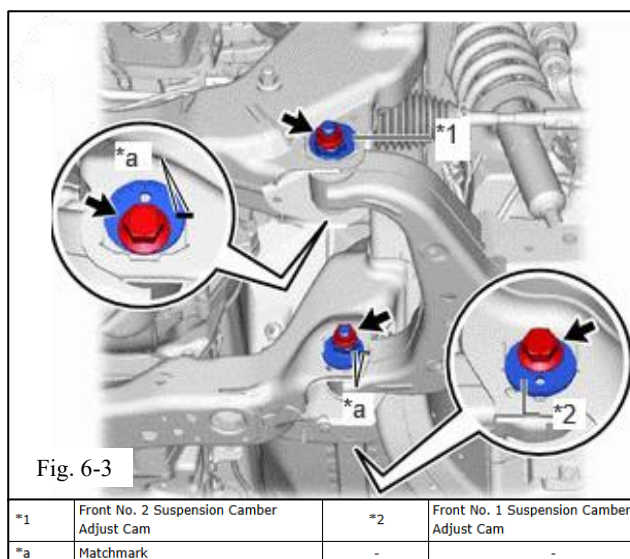


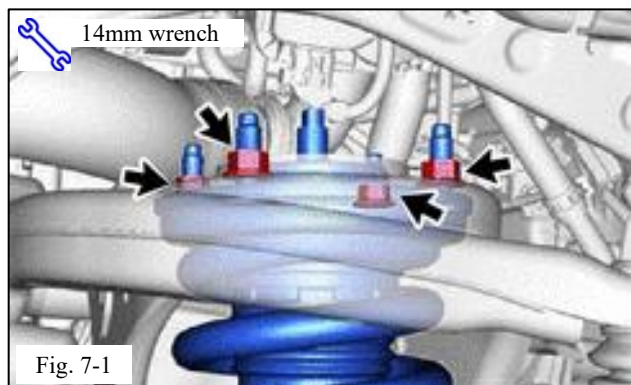
- (b) Remove and retain the two lower ball joint attachment bolts (Fig. 6-2).



- ⚠ 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.

- (c) Place matchmarks on the front No. 2 suspension camber adjust cam and front No. 1 suspension camber adjust cam (Fig. 6-3).
- (d) Loosen camber and toe adjustment cam bolts, but do not remove.
- (e) Repeat step 6 for opposite side of vehicle.





7. Remove Front Shock Absorbers

- Remove and retain (4) nuts from the shock absorber's upper side (Fig. 7-1).
- Remove shock absorber and coil spring assembly from the vehicle.
- Repeat step 7 for the opposite side of vehicle.

8. Remove Front Driveshaft (if necessary)

NOTE:

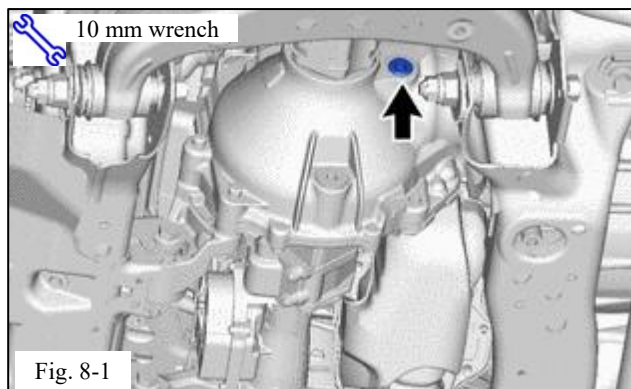
Front Driveshaft required for:

- Gas engine SR5
- Gas engine TRD Sport

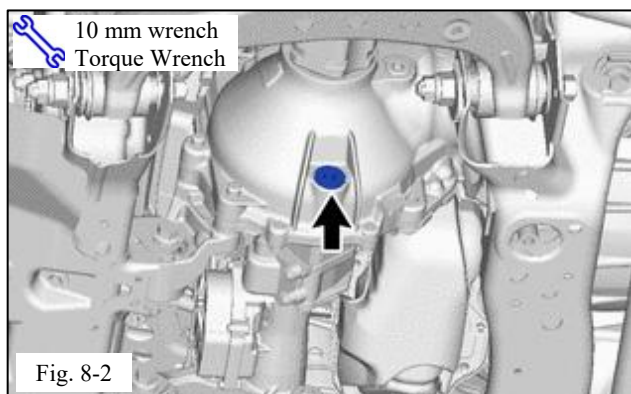
Front Driveshaft replacement NOT required for:

- Gas engine TRD Off-Road
- HV TRD Off-Road
- HV TRD Sport

- Drain differential oil.



- Using a 10mm hexagon wrench, remove and set aside the front differential filler plug and gasket (Fig. 8-1).



- Using a 10mm hexagon wrench, remove the front differential drain plug and gasket, and drain the oil (Fig. 8-2).
- 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. 8-2).

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

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

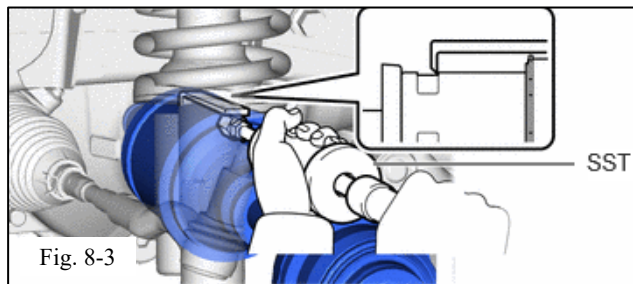


Fig. 8-3

(4) Temporarily reinstall the front differential filler plug.

(b) Using SST, remove and discard the OE Front Driveshaft assembly (Fig. 8-3).

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. 8-3).

(c) Repeat for opposite of vehicle.

9. Remove and Replace Front Lower Ball Joint Attachment

(a) Remove Front Lower Ball Joint Attachment

(1) Remove and discard the cotter pin and castle nut (Fig. 9-1).

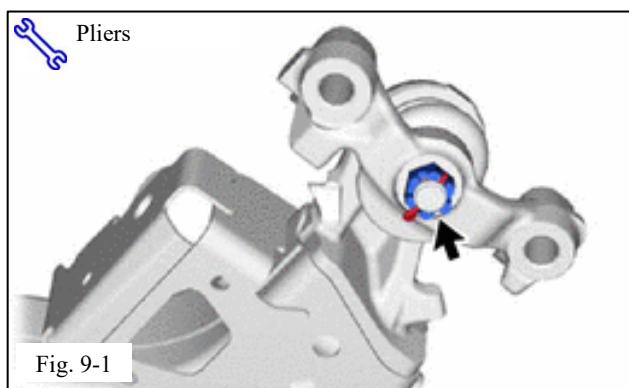


Fig. 9-1

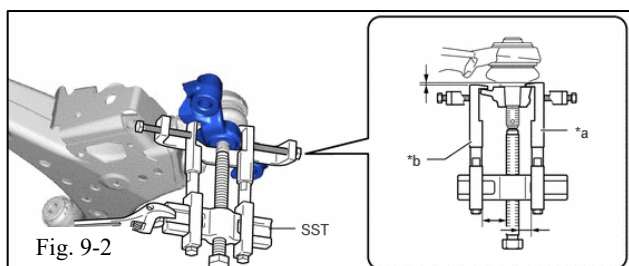


Fig. 9-2

(2) Using SST, remove front lower ball joint attachment (Fig. 9-2).

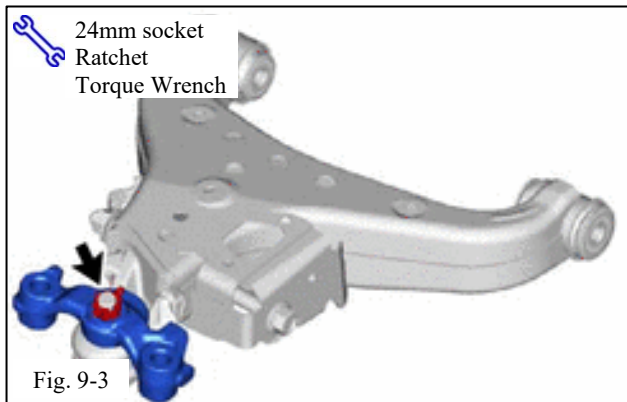
SST 09950-40011

SST 09955-04090

HINT:

Claw A (*1): SST 09955-04090

Claw B (*2): SST 09955-04031



(b) Install TRD Front Lower Ball Joint Attachment

- (1) Identify correct lower ball joint attachment for correct side of vehicle by locating the “L” or “R” mark on the end faces of the TRD lower ball joint attachment.

P/N: PT981-35310/35330 (RH)

PT981-35320/35340 (LH)

- (2) Install TRD Front Lower Ball Joint Attachment onto the lower ball joint located on the lower control arm (Fig. 9-3).

- (3) Install castle nut (provided in kit) and tighten to 159 N-m (117 ft-lbf) (Fig. 9-3).

P/N: 90171-18003 (Castle Nut)

⚠ Torque: 159 N-m (117 ft-lbf)

- (4) Install cotter pin (provided in the kit) (Fig. 9-3).

P/N: 90252-04009 (Cotter Pin)

- (c) Repeat step 9 for opposite side of vehicle.

10. Install TRD Front Driveshaft (if necessary)

NOTE:

Front Driveshaft required for:

- Gas engine SR5
- Gas engine TRD Sport

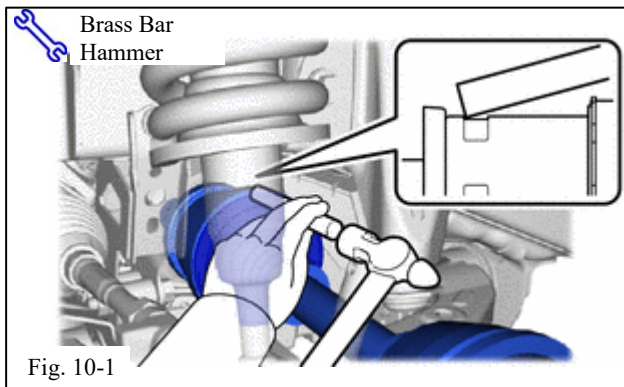
Front Driveshaft replacement NOT applicable for:

- Gas engine TRD Off-Road
- HV TRD Off-Road
- HV TRD Sport

- (a) Select the correct TRD Front Driveshaft by identifying the part number:

P/N: 43410-AK020 (RH)

43420-AK020 (LH)



- (b) Coat the splines of the inboard joint with differential oil.

⚠ CAUTION: Do not apply lubricants to the threaded portion of the driveshaft.

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

- (d) Align the splines and tap in the front driveshaft assembly with a brass bar and hammer (Fig. 10-1).

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.

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.

- (e) Support TRD Front Driveshaft.

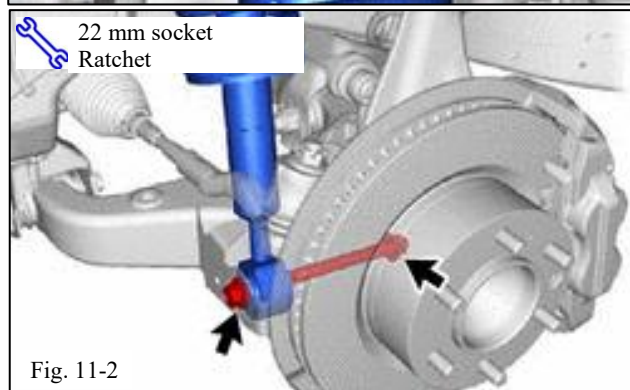
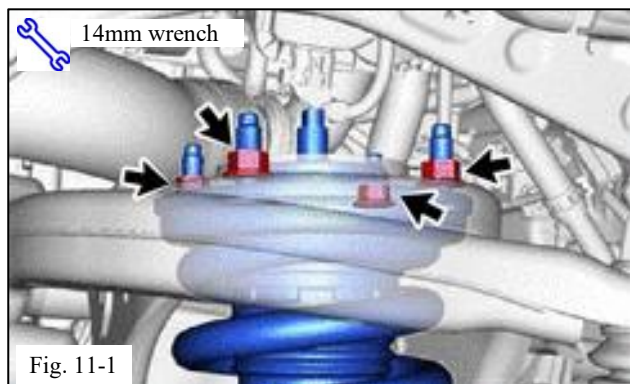
⚠ CAUTION: Do not allow driveshaft to hang as it may overextend.

- (f) Repeat for opposite side of vehicle.

11. Install TRD Front Shock Absorber Assembly

- (a) Install TRD Front Shock Absorber assembly onto vehicle.
- (b) Tighten the (4) nuts on the upper side of the front shock absorber assembly to 45 N-m (33 ft-lbf) (Fig. 11-1).

⚠ Torque: 45 N-m (33 ft-lbf)



- (c) Install and temporarily tighten the bolt and nut (that was previously removed for the Front Shock Absorber lower side) (Fig. 11-2).

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

- (d) Repeat for opposite side of vehicle.

12. Install TRD Tie Rod End Sub-Assembly

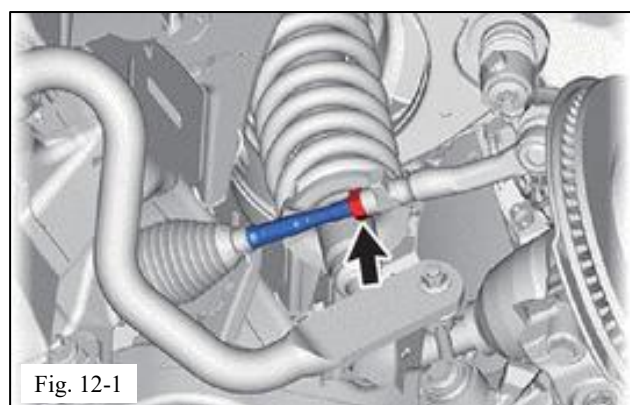
- (a) Select the correct TRD Tie Rod End Sub-Assembly for the side of the vehicle by confirming the part number and marking.

P/N: PT81G-35310 (RH)

PT81G-35320 (LH)

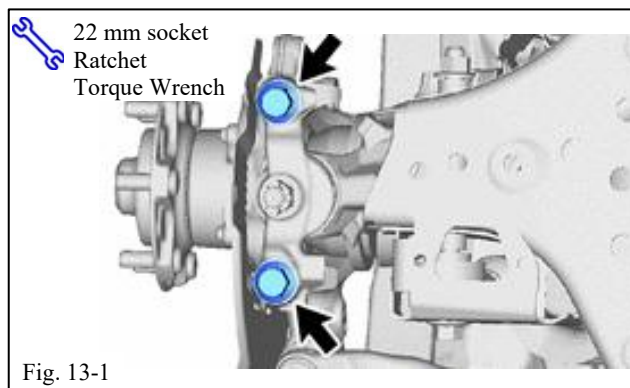
- (b) Install and temporarily tighten the TRD Tie Rod End Sub-Assembly onto the Inner Tie Rod (Fig. 12-1).
- (c) Repeat for opposite side of vehicle.

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



13. Install Front Steering Knuckle Assembly

- (a) Align and insert Driveshaft spline into the front steering knuckle's hub.
- (b) Connect the Front Lower Ball Joint Attachment to the Steering Knuckle with the two bolts previously removed and tighten to 300 N-m (221 ft-lbf) (Fig. 13-1).



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



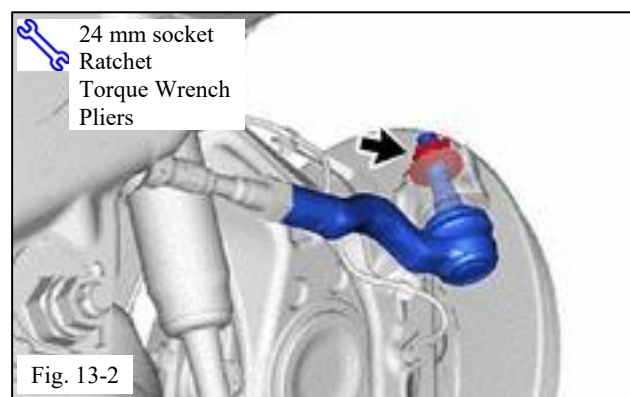
CAUTION: Do not use the column steering lock to resist loosening torque. If necessary, steer the hubs to the full LH steering lock to tighten the lower ball joint bolts.

- (c) Connect TRD Tie Rod End Sub-Assembly onto the steering knuckle with a new castle nut (provided in the kit) and tighten to 120 N-m (89ft-lbf) (Fig. 13-2).

P/N: 90171-A0014



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



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

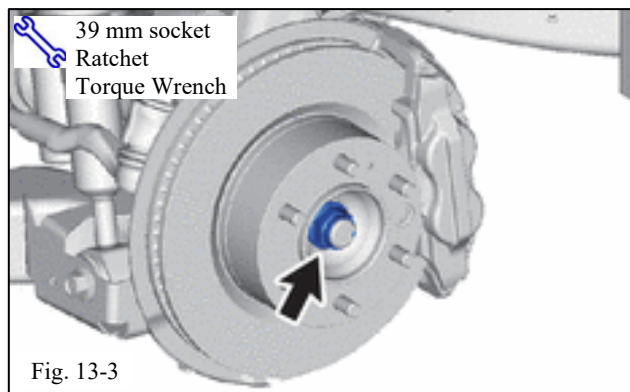
P/N: 90252-04003

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

- (e) Clean the threaded parts on the front driveshaft assembly and the new front axle shaft nut using non-residue solvent.



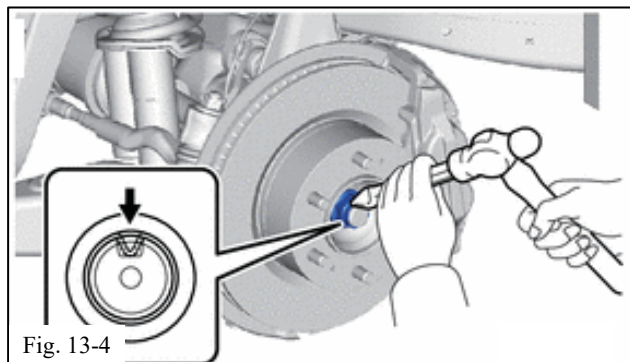
CAUTION: Cleaning is required even when using a new front drive shaft assembly. Keep the threaded parts free of oil and foreign matter.



- (f) Install new Front Axle Shaft nut as supplied in the kit and tighten to 340 N-m (251 ft-lbf) (Fig. 13-3).

P/N: 90177-A0023

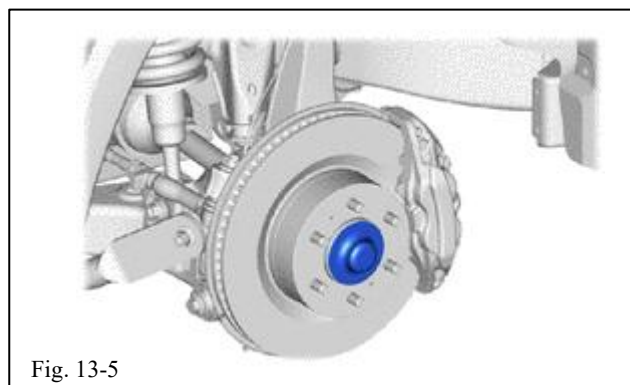
⚠ Torque: 340 N-m (251 ft-lbf)



- (g) Using SST, stake the new front axle shaft nut (Fig. 13-4).

P/N: 90177-A0023

SST 09229-55010



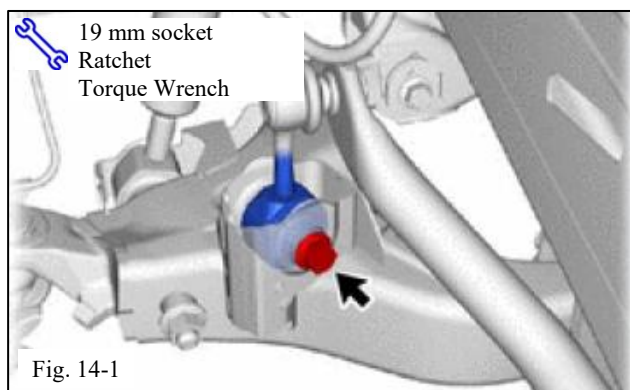
- (h) Install new front hub grease cap as supplied in the kit (Fig. 13-5).

P/N: 43514-0C020

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

- (i) Repeat for opposite side of vehicle.

14. Reconnect Stabilizer Bar

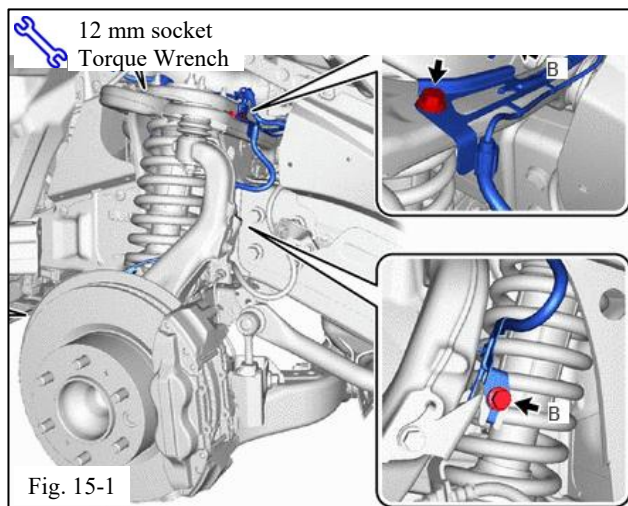


- (a) Install the OE Stabilizer Bar Link into the Lower Control Arm and tighten the bolt and tighten to 140 N-m (103 ft-lbf) (Fig. 14-1).

⚠ Torque: 140 N-m (103 ft-lbf)

- (b) Repeat for opposite side of vehicle.

15. Install Wire Harness Along Front Upper Control Arm



- (a) Install the wire harness along the front steering knuckle (Fig. 15-1) and tighten bolt to 12.5 N-m (9 ft-lbf).

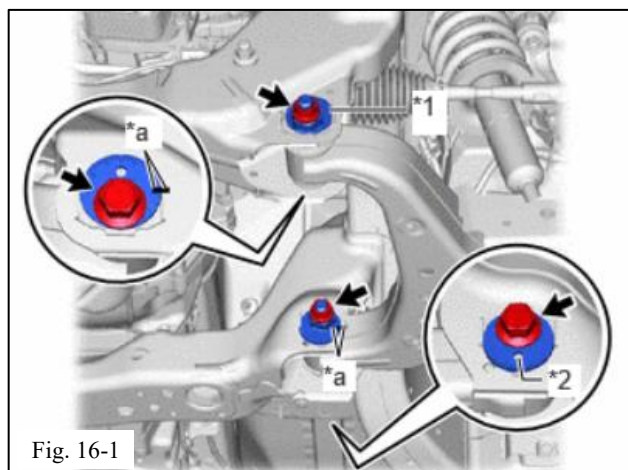
⚠ Torque: 12.5 N-m (9 ft-lbf)

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.

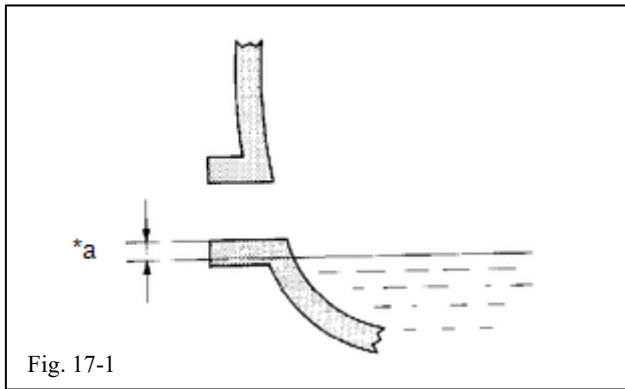
16. Complete Front Suspension Install



- (a) 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. 16-1).
- (b) Temporarily tighten adjustment cam bolts and nuts.

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

17. Refill Front Differential



- (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. 17-1).

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: 1.21 liters (1.28 US qts., 1.06 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)

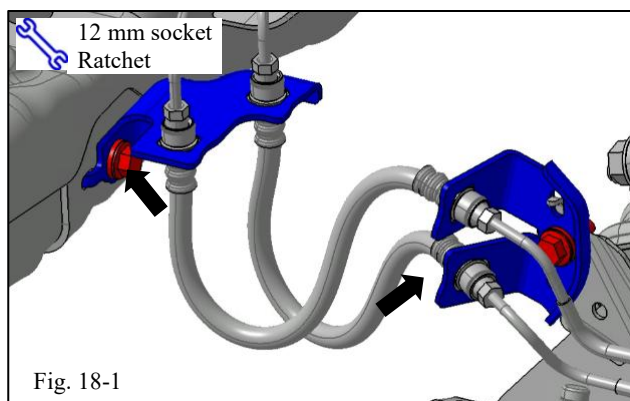
NOTE: All Lift Kit components have been installed for front suspension. Continue for rear suspension installation.

REAR SUSPENSION INSTALLATION

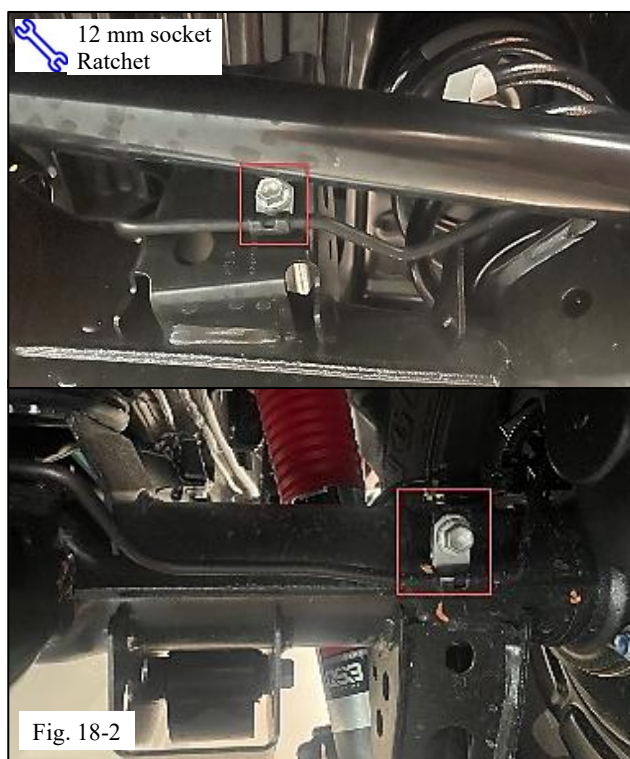
18. Disconnect Brackets

- (a) Remove (2) bolts to disconnect two brake hose brackets - one on axle side and one on frame side. Retain for installation (Fig. 18-1).

⚠ 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.



- (b) Remove (2) bolts to disconnect the brake tube mounting brackets on the backside of the axle. Retain for reinstallation (Fig. 18-2).

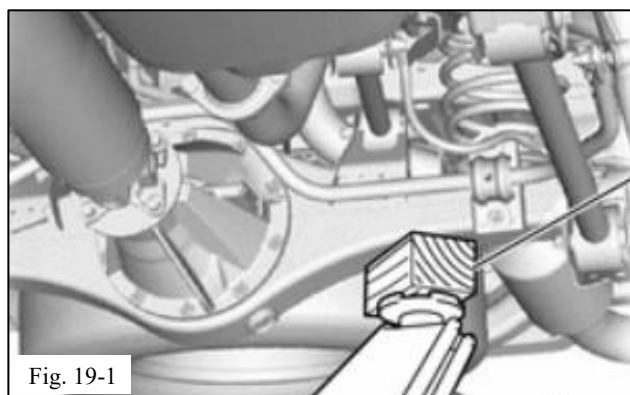


- (c) Remove (2) bolts to disconnect the EPB wire harness from the axle (RH) and frame (LH). Retain for reinstallation (Fig. 18-3).

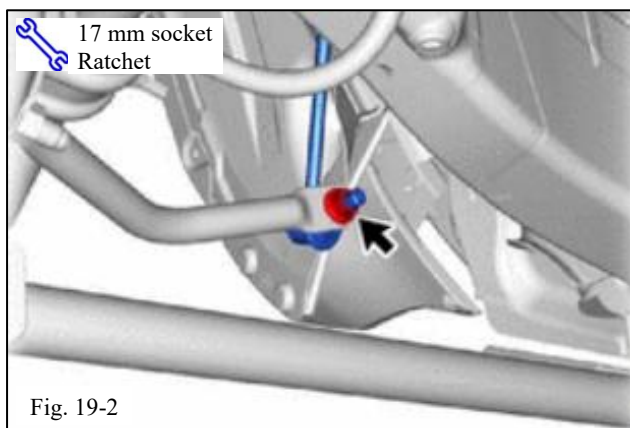


19. Remove Rear Shock Absorber Assembly

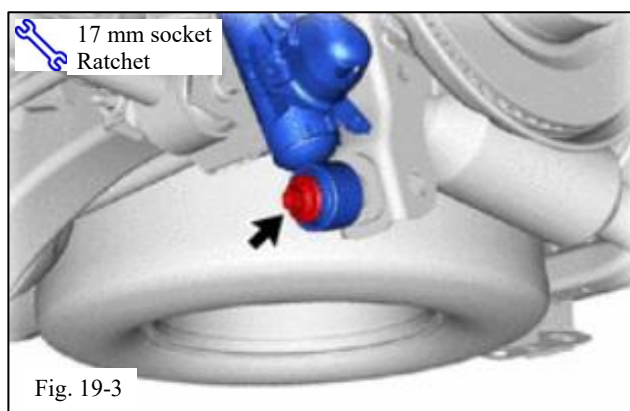
- (a) Using a pump-jack, support the rear axle housing assembly (Fig. 19-1).



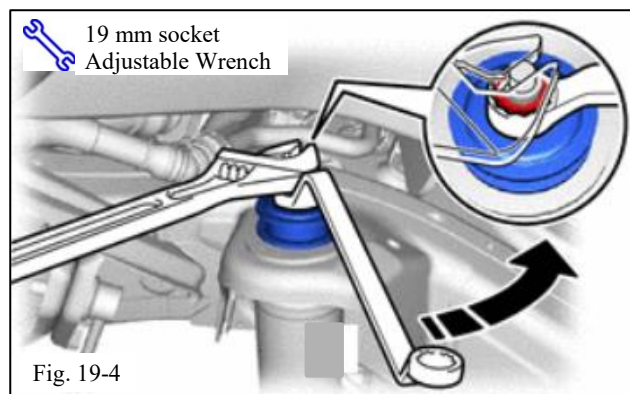
- (b) Remove the nut, then separate the rear stabilizer link assembly from the rear stabilizer bar (Fig. 19-2).



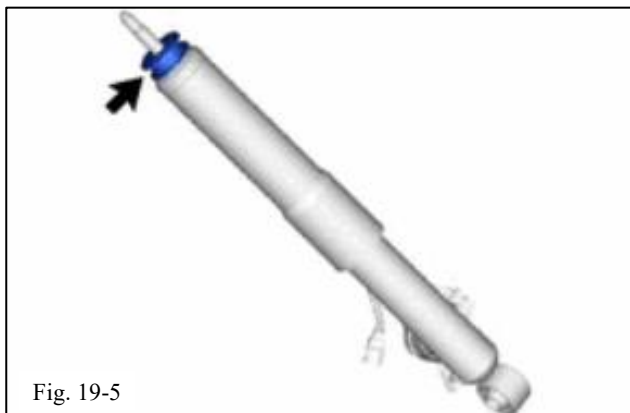
- (c) Remove and retain the bolt on the lower side of the rear shock absorber assembly (Fig. 19-3).



- (d) Remove the nut, rear No. 1 shock absorber cushion, and rear shock absorber assembly. Retain the rear No. 1 shock absorber cushion (Fig. 19-4).

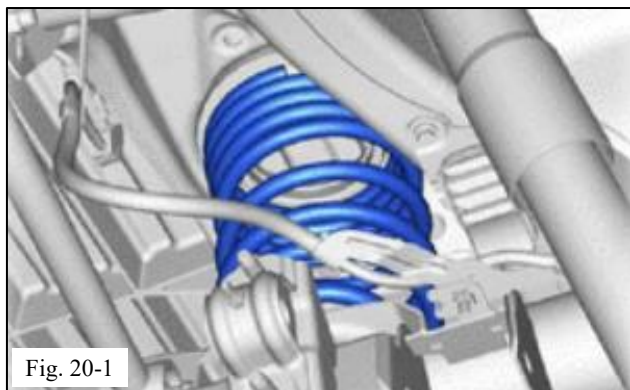


- CAUTION:** Ensure the brake hoses and wire harnesses are not being stretched during this process.



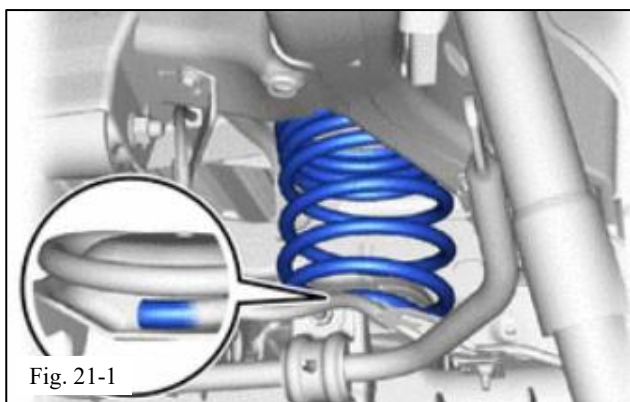
- (e) Remove and retain the rear No. 2 shock absorber cushion from the rear shock absorber assembly (Fig. 19-5).

20. Remove Coil Spring



- (a) While lowering the axle housing, remove and discard the coil spring (Fig. 20-1).
- (b) If vehicle is equipped with hollow spring, remove and retain hollow spring for reinstallation.

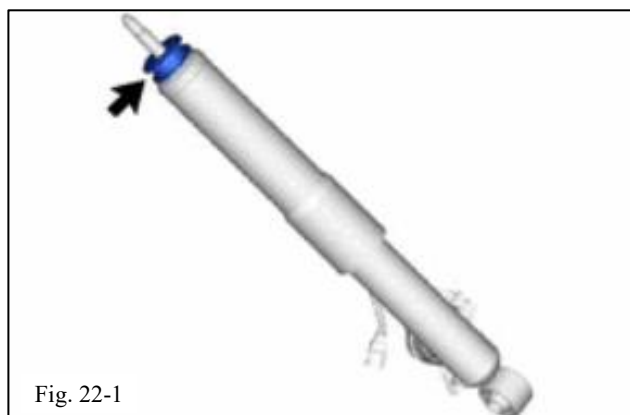
21. Install TRD Coil Spring



- (a) If vehicle is equipped with hollow spring, reinstall hollow spring.
- (b) Install TRD rear coil spring (Fig. 21-1).

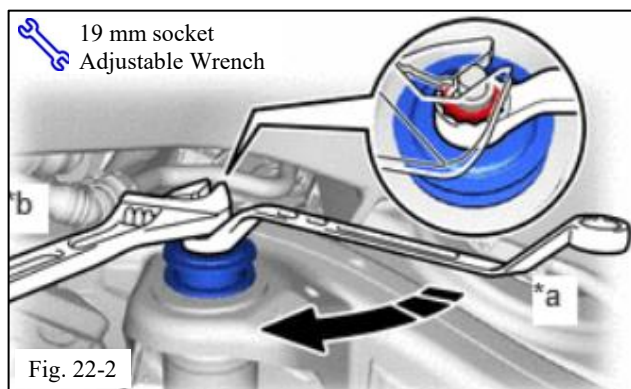
⚠ CAUTION: Check that the rear coil spring end is in the correct position.

22. Install TRD Rear Shock Absorber Assembly



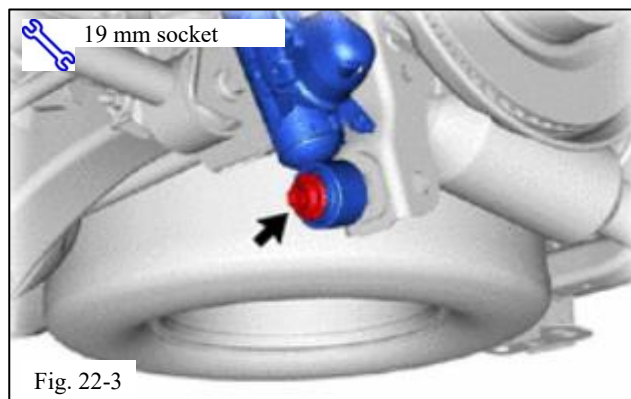
- (a) Install the rear No. 2 shock absorber cushion onto the TRD rear shock absorber (Fig. 22-1).

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

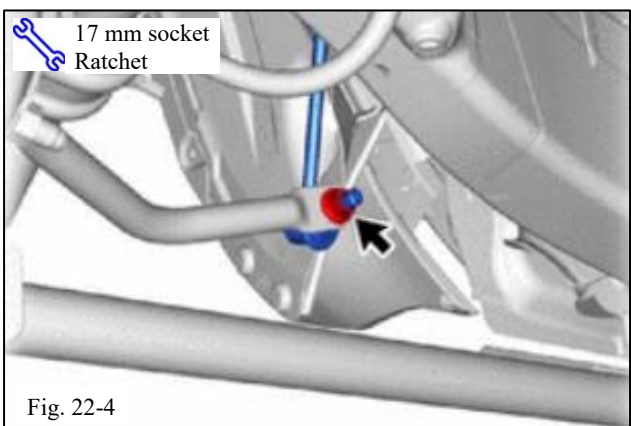


- (b) Install the TRD rear shock absorber assembly and rear No. 1 shock absorber cushion with a new nut (provided in kit) (Fig. 22-2).

P/N: 90177-A0019



- (c) Install the lower side of the TRD rear shock absorber assembly with the bolt (Fig. 22-3).

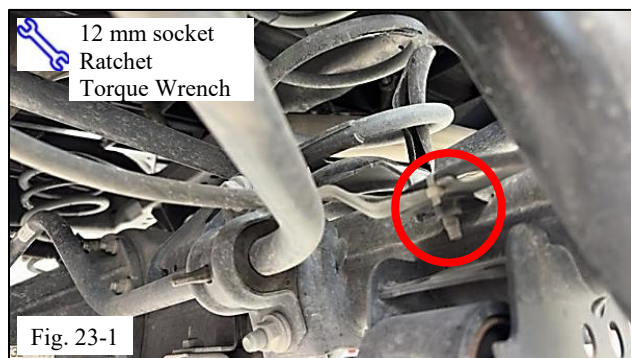


- (d) Install the rear stabilizer link assembly with the nut (Fig. 22-4).

⚠ Torque: 75 N-m (55 ft-lbf)

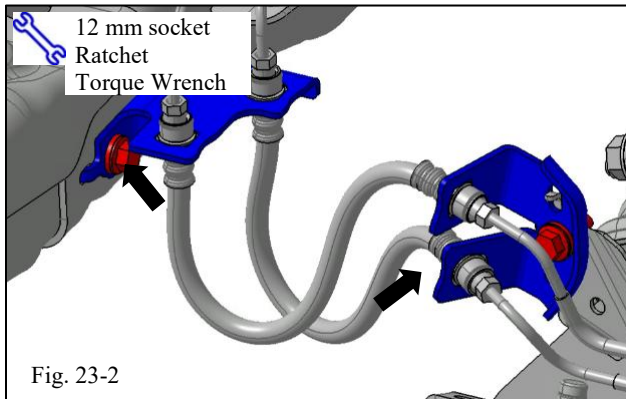
- (e) Repeat on other side of vehicle.

23. Install Brackets



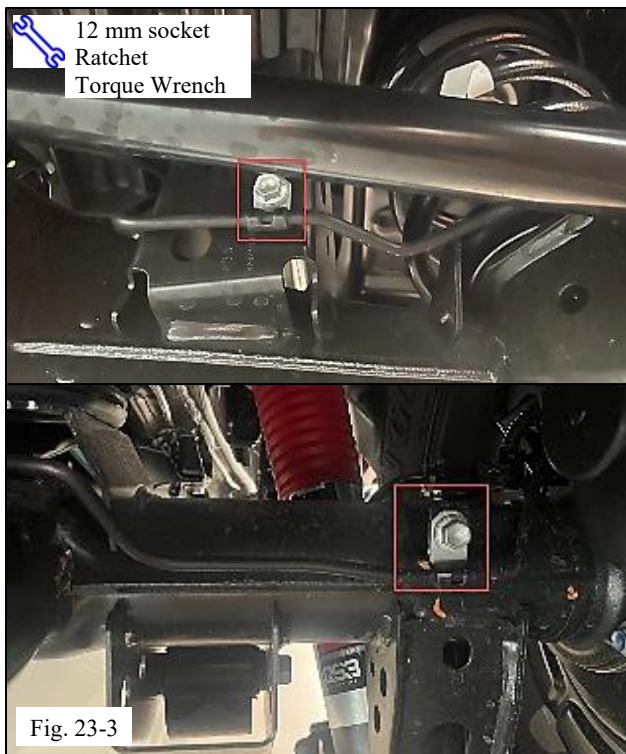
- (a) Install (2) bolts to reconnect the EPB wire harness to the axle (RH) and frame (LH). (Fig. 23-1).

Torque: 15 N-m (11 ft-lbf)



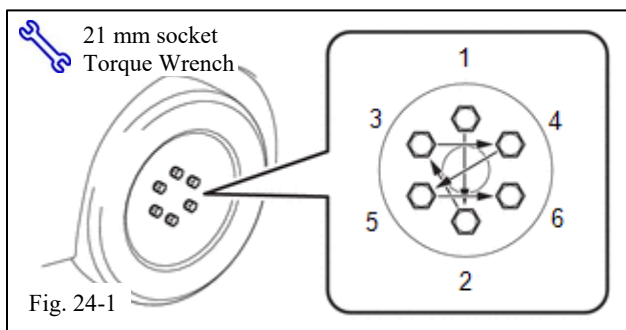
- (b) Install (2) bolts to reconnect both brake hose brackets - one on axle side and one on frame side (Fig. 23-2).

S Torque: 15 N-m (11 ft-lbf)



- (c) Install (2) bolts to reconnect the brake tube mounting brackets on the backside of the axle (Fig. 23-3).

S Torque: 15 N-m (11 ft-lbf)



24. Install Tire-Wheel Assemblies

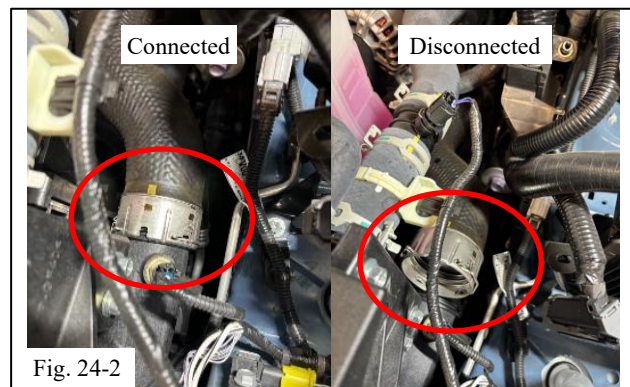
- Install all (4) wheel assemblies following the pattern shown (Fig. 24-1).
- Once tight, lower vehicle to ground and torque to the following:

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.

- Connect the No. 2 air tube assembly to the intercooler assembly and lock the retainer (Fig. 24-2).



25. Wheel Alignment

- Adjust tire pressure.
- Loosen the following fasteners for suspension members with bushings:
 - Lower Control Arm at frame
 - Front Shock Absorber lower bolt
 - Rear Shock Absorber lower bolt
- Bounce the vehicle about five times to settle the suspension.
- Torque the following suspension member fasteners with the vehicle on a level surface, at curb height:
 - TRD Front Shock Absorber lower bolt at lower arm

Torque: 180 N·m (133 ft·lbf)

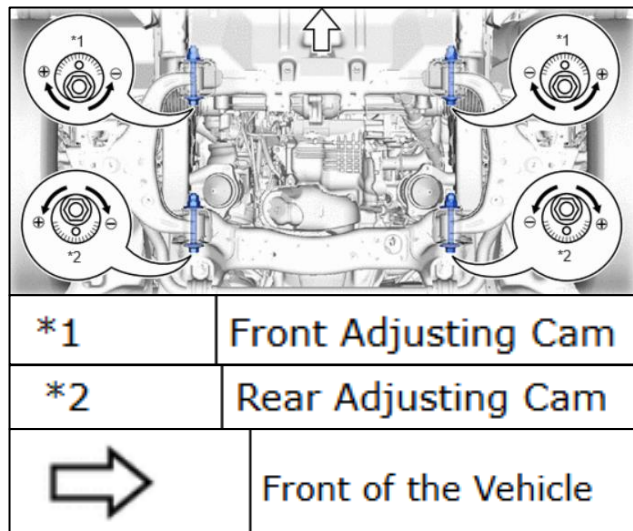


Fig. 25-1

- (2) TRD Rear Shock Absorber lower bolt at axle

Torque: 98 N·m (72 ft·lbf)

- (e) Inspect Wheel Alignment

- (1) Use wheel alignment tester or equivalent.

- (f) Adjust Camber and Caster (Fig. 25-1)

- (1) Loosen the bolt and nut.
(2) Turn the adjustment cam to adjust the camber and casters to the target value.

Target Values

Camber: $0.18^{\circ} \pm 0.75^{\circ}$

Caster: $2.40^{\circ} \pm 0.75^{\circ}$

HINT:

The No. 1 to (+) by 1 notch changes the caster by $+0^{\circ}07'$ and camber by $+0^{\circ}05'$.

The No. 2 to (+) by 1 notch changes the caster by $+0^{\circ}06'$ and camber by $+0^{\circ}03'$.

- (3) Tighten the bolt and nut to 280 N·m (207 ft·lbf)

Torque: 280 N·m (207 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. 25-2).
(3) Turn both steering rack ends the same amount to adjust the toe.

Target Value

Toe: $0.3^{\circ} \pm 0.16^{\circ}$

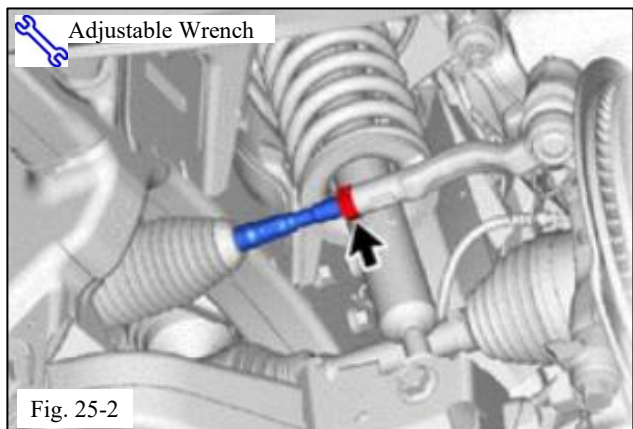


Fig. 25-2

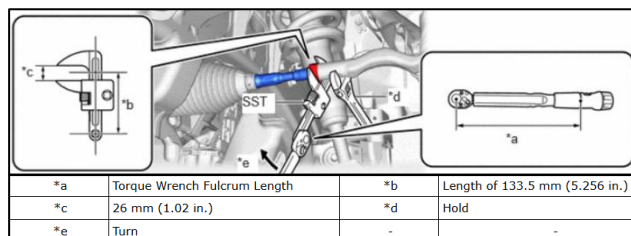


Fig. 25-3

- (4) Using SST, tighten the lock nut of the tie rod end sub-assembly on both sides of the vehicle (Fig. 25-3).

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.

26. 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	1715	67.5	0.77	2.5	Mode 2	Normal Mode
265 / 70 R 17	1717	67.6	0.77	2.5	Mode 2	Normal Mode
265 / 65 R 18	1715	67.5	0.77	2.5	Mode 2	Normal Mode
265 / 70 R 18	1715	67.5	0.77	2.5	Mode 2	Normal Mode

Fig. 26-1

- (1) If the installed **tire size matches the Tire Pressure Label** on the driver side door jamb, enter the values when prompted (Fig. 26-1).
- (2) If the installed **tire size does not match 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. 30-32)
- 265/70R17 – Appendix 2 (pg. 33-35)

- 265/65R18 – Appendix 2 (pg. 36-38)
- 265/70R18 – Appendix 3 (pg. 39-41)



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 matches the Tire Pressure Label** on the driver side door jamb, enter the values when prompted (Fig. 26-1).
- (2) If the installed **tire size does not match 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. 30-32)
- 265/70R17 – Appendix 2 (pg. 33-35)
- 265/65R18 – Appendix 2 (pg. 36-38)
- 265/70R18 – Appendix 3 (pg. 39-41)



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

27. 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 System >> Calibration*

28. Inspect and 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*

29. Perform Function Checks (on next page)



CAUTION: DO NOT SKIP the final checks.

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 26 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 is in accordance with GTS+ specifications

Group 1																	
Wheel Size	Aspect Ratio					Tire Diameter	Lift Amount from Tire		Total Lifted Height (TRD Lift Kit + Tire)	Camera Height Value for Global Tech Stream		Radar Height Value for Global Tech Stream		FCM Restriction Mode	Tire Inch Up Mode	Note	
							mm	inch		mm	inch	mm	inch				m
		Tire Size				inch	mm	inch	inch	mm	inch	m	ft				
17"	65	275	/	65	R 17	31.1	7.6	0.3	2.8	1722	67.8	0.77	2.52	Restriction Mode 2	Tire Inch UP Mode 1		
		305	/	65	R 17	32.6	26.7	1.1	3.6	1741	68.5	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2		
	70	255	/	70	R 17	31.1	7.6	0.3	2.8	1722	67.8	0.77	2.52	Restriction Mode 2	Tire Inch UP Mode 1		
		265	/	70	R 17	31.9	17.8	0.7	3.2	1732	68.2	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1		
		275	/	70	R 17	32.4	24.1	0.9	3.5	1738	68.4	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2		
		285	/	70	R 17	33.0	31.8	1.3	3.8	1746	68.7	0.80	2.62	Restriction Mode 2	Tire Inch UP Mode 2		
		295	/	70	R 17	33.5	38.1	1.5	4.0	1752	69.0	0.80	2.62	Restriction Mode 2	Tire Inch UP Mode 3		
		305	/	70	R 17	33.9	42.7	1.7	4.2	1757	69.2	0.81	2.65	Restriction Mode 4	-	Note 1	
		315	/	70	R 17	34.7	53.3	2.1	4.6	1767	69.6	0.82	2.69	Restriction Mode 4	-	Note 1	
		75	235	/	75	R 17	31.1	7.6	0.3	2.8	1722	67.8	0.77	2.52	Restriction Mode 2	Tire Inch UP Mode 1	
	245		/	75	R 17	31.7	15.2	0.6	3.1	1729	68.1	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1		
	255		/	75	R 17	32.1	20.3	0.8	3.3	1734	68.3	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 2		
	285		/	75	R 17	33.9	42.7	1.7	4.2	1757	69.2	0.81	2.65	Restriction Mode 4	-	Note 1	
	80	235	/	80	R 17	31.8	16.5	0.7	3.2	1731	68.1	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1		
		255	/	80	R 17	33.3	35.6	1.4	3.9	1750	68.9	0.80	2.62	Restriction Mode 2	Tire Inch UP Mode 3		
	Flotation Tire Size	34x10.50R17				33.5	38.1	1.5	4.0	1752	69.0	0.80	2.62	Restriction Mode 2	Tire Inch UP Mode 3		
		35x11.50R17				34.8	54.1	2.1	4.6	1768	69.6	0.82	2.69	Restriction Mode 4	-	Note 1	
		33x12.50R17				32.8	28.7	1.1	3.6	1743	68.6	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2		
		35x12.50R17				34.8	54.1	2.1	4.6	1768	69.6	0.82	2.69	Restriction Mode 4	-	Note 1	
		37x12.50R17				36.8	79.6	3.1	5.6	1794	70.6	0.84	2.75	Restriction Mode 4	-	Note 1	

Appendix

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	Lift Amount from Tire		Total Lifted Height (TRD Lift Kit + Tire)	Camera Height Value for Global Tech Stream		Radar Height Value for Global Tech Stream		FCM Restriction Mode	Tire Inch Up Mode	Note
						inch	mm		mm	inch	m	ft			
18"	60	265	/	60 R 18	30.6	1.3	0.1	2.6	1715	67.5	0.76	2.49	Restriction Mode 2	Normal Model	
		285	/	60 R 18	31.5	12.2	0.5	3.0	1726	68.0	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1	
		305	/	60 R 18	32.4	24.1	0.9	3.5	1738	68.4	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
		325	/	60 R 18	33.4	36.2	1.4	3.9	1750	68.9	0.80	2.62	Restriction Mode 2	Tire Inch UP Mode 3	
	65	265	/	65 R 18	31.5	13.2	0.5	3.0	1727	68.0	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1	
		265	/	65 R 18	31.6	14.0	0.6	3.1	1728	68.0	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1	
		275	/	65 R 18	32.3	22.9	0.9	3.4	1737	68.4	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
		285	/	65 R 18	32.8	29.2	1.2	3.7	1743	68.6	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
		295	/	65 R 18	33.1	33.0	1.3	3.8	1747	68.8	0.80	2.62	Restriction Mode 2	Tire Inch UP Mode 3	
		305	/	65 R 18	33.6	39.1	1.5	4.0	1753	69.0	0.80	2.62	Restriction Mode 4	-	Note 1
		325	/	65 R 18	34.8	54.6	2.2	4.7	1769	69.6	0.82	2.69	Restriction Mode 4	-	Note 1
	70	255	/	70 R 18	32.1	20.2	0.8	3.3	1734	68.3	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 2	
		265	/	70 R 18	32.9	30.5	1.2	3.7	1744	68.7	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
		275	/	70 R 18	33.4	36.8	1.5	4.0	1751	68.9	0.80	2.62	Restriction Mode 2	Tire Inch UP Mode 3	
		285	/	70 R 18	34.0	44.2	1.7	4.2	1758	69.2	0.81	2.65	Restriction Mode 4	-	Note 1
		295	/	70 R 18	34.3	48.1	1.9	4.4	1762	69.4	0.81	2.65	Restriction Mode 4	-	Note 1
		305	/	70 R 18	34.8	54.6	2.2	4.7	1769	69.6	0.82	2.69	Restriction Mode 4	-	Note 1
	75	285	/	75 R 18	35.1	58.2	2.3	4.8	1772	69.8	0.82	2.69	Restriction Mode 4	-	Note 1
	Flotation Tire Size	37x11.50R18			36.5	76.5	3.0	5.5	1790	70.5	0.84	2.75	Restriction Mode 4	-	Note 1
		33x12.50R18			32.5	25.7	1.0	3.5	1740	68.5	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
		34x12.50R18			33.5	38.1	1.5	4.0	1752	69.0	0.80	2.62	Restriction Mode 2	Tire Inch UP Mode 3	
		35x12.50R18			34.6	52.1	2.1	4.6	1766	69.5	0.82	2.69	Restriction Mode 4	-	Note 1
		37x12.50R18			36.6	77.5	3.1	5.6	1791	70.5	0.84	2.75	Restriction Mode 4	-	Note 1
		35x13.50R18			34.5	51.1	2.0	4.5	1765	69.5	0.81	2.65	Restriction Mode 4	-	Note 1
		37x12.50R18			36.5	76.5	3.0	5.5	1790	70.5	0.84	2.75	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 Diameter	Lift Amount from Tire		Total Lifted Height (TRD Lift Kit + Tire)	Camera Height Value for Global Tech Stream		Radar Height Value for Global Tech Stream		FCM Restriction Mode	Tire Inch Up Mode	Note
						inch	mm	inch	inch	mm	inch	m	ft			
20"	50	285	/	50	R 20	31.2	9.3	0.4	2.9	1723	67.8	0.77	2.52	Restriction Mode 2	Tire Inch UP Mode 1	
		305	/	50	R 20	32.1	19.7	0.8	3.3	1734	68.3	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 2	
	55	255	/	55	R 20	31.3	9.7	0.4	2.9	1724	67.9	0.77	2.52	Restriction Mode 2	Tire Inch UP Mode 1	
		275	/	55	R 20	32.1	20.7	0.8	3.3	1735	68.3	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 2	
		285	/	55	R 20	32.6	26.7	1.1	3.6	1741	68.5	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
		295	/	55	R 20	32.8	28.7	1.1	3.6	1743	68.6	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
		305	/	55	R 20	33.2	34.7	1.4	3.9	1749	68.9	0.80	2.62	Restriction Mode 2	Tire Inch UP Mode 3	
		335	/	55	R 20	34.5	50.7	2.0	4.5	1765	69.5	0.81	2.65	Restriction Mode 4	-	Note 1
		60	245	/	60	R 20	31.6	14.0	0.6	3.1	1728	68.0	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1
	255		/	60	R 20	32.1	19.7	0.8	3.3	1734	68.3	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 2	
	265		/	60	R 20	32.5	25.7	1.0	3.5	1740	68.5	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
	275		/	60	R 20	33.1	33.0	1.3	3.8	1747	68.8	0.80	2.62	Restriction Mode 2	Tire Inch UP Mode 3	
	285		/	60	R 20	33.7	40.6	1.6	4.1	1755	69.1	0.80	2.62	Restriction Mode 4	-	Note 1
	295		/	60	R 20	33.9	43.7	1.7	4.2	1758	69.2	0.81	2.65	Restriction Mode 4	-	Note 1
	325		/	60	R 20	35.6	64.8	2.6	5.1	1779	70.0	0.83	2.72	Restriction Mode 4	-	Note 1
	65	275	/	65	R 20	34.1	45.6	1.8	4.3	1760	69.3	0.81	2.65	Restriction Mode 4	-	Note 1
		285	/	65	R 20	34.8	54.6	2.2	4.7	1769	69.6	0.82	2.69	Restriction Mode 4	-	Note 1
		295	/	65	R 20	35.1	58.7	2.3	4.8	1773	69.8	0.82	2.69	Restriction Mode 4	-	Note 1
	Flotation Tire Size	33x11.50R20	32.8	28.7	1.1	3.6	1743	68.6	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2				
		35x11.50R20	34.8	54.6	2.2	4.7	1769	69.6	0.82	2.69	Restriction Mode 4	-	Note 1			
		37x11.50R20	36.5	76.5	3.0	5.5	1790	70.5	0.84	2.75	Restriction Mode 4	-	Note 1			
		33x12.50R20	32.8	28.7	1.1	3.6	1743	68.6	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2				
		35x12.50R20	34.8	54.1	2.1	4.6	1768	69.6	0.82	2.69	Restriction Mode 4	-	Note 1			
		37x12.50R20	36.8	79.6	3.1	5.6	1794	70.6	0.84	2.75	Restriction Mode 4	-	Note 1			
		33x13.50R20	32.6	26.7	1.1	3.6	1741	68.5	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2				
		35x13.50R20	34.8	54.1	2.1	4.6	1768	69.6	0.82	2.69	Restriction Mode 4	-	Note 1			
		37x13.50R20	36.8	79.6	3.1	5.6	1794	70.6	0.84	2.75	Restriction Mode 4	-	Note 1			
		38x13.50R20	37.8	92.2	3.6	6.1	1806	71.1	0.86	2.82	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: 265/70R17 & 265/65R18

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 is in accordance with GTS+ specifications

Note 3: Units shown on this table is in accordance with GPS Specifications

Group 2															
Wheel Size	Aspect Ratio	Tire Size				Tire Diameter	Total Lifted Height (TRD Lift Kit + Tire)	Camera Height Value for Global Tech Stream		Radar Height Value for Global Tech Stream		FCM Restriction Mode	Tire Inch Up Mode	Notes	
								mm	inch	m	ft				
17"	65	305	/	65	R 17	32.6	3.0	1727	68.0	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1		
	70	265	/	70	R 17	31.9	2.7	1718	67.6	0.77	2.52	Restriction Mode 2	Normal Model		
		275	/	70	R 17	32.4	2.9	1724	67.9	0.77	2.52	Restriction Mode 2	Tire Inch UP Mode 1		
		285	/	70	R 17	33.0	3.2	1732	68.2	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1		
		295	/	70	R 17	33.5	3.5	1738	68.4	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2		
		305	/	70	R 17	33.9	3.6	1743	68.6	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2		
		315	/	70	R 17	34.7	4.1	1753	69.0	0.80	2.62	Restriction Mode 4	-	Note 1	
	75	245	/	75	R 17	31.7	2.6	1715	67.5	0.76	2.49	Restriction Mode 2	Normal Model		
		255	/	75	R 17	32.1	2.8	1720	67.7	0.77	2.52	Restriction Mode 2	Normal Model		
		285	/	75	R 17	33.9	3.6	1743	68.6	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2		
	80	235	/	80	R 17	31.8	2.6	1717	67.6	0.77	2.52	Restriction Mode 2	Normal Model		
		255	/	80	R 17	33.3	3.4	1736	68.3	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2		
	Flotation Tire Size		34x10.50R17				33.5	3.5	1738	68.4	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
			35x11.50R17				34.8	4.1	1754	69.1	0.80	2.62	Restriction Mode 4	-	Note 1
			33x12.50R17				32.8	3.1	1729	68.1	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1	
			35x12.50R17				34.8	4.1	1754	69.1	0.80	2.62	Restriction Mode 4	-	Note 1
			37x12.50R17				36.8	5.1	1780	70.1	0.83	2.72	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: 265/70R17 & 265/65R18

Group 2														
Wheel Size	Aspect Ratio	Tire Size				Tire Diameter	Total Lifted Height (TRD Lift Kit + Tire)	Camera Height Value for Global Tech Stream		Radar Height Value for Global Tech Stream		FCM Restriction Mode	Tire Inch Up Mode	Note
								mm	inch	m	ft			
18"	60	305	/	60	R 18	32.4	2.9	1724	67.9	0.77	2.52	Restriction Mode 2	Tire Inch UP Mode 1	
		325	/	60	R 18	33.4	3.4	1736	68.3	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
	65	275	/	65	R 18	32.3	2.9	1723	67.8	0.77	2.52	Restriction Mode 2	Tire Inch UP Mode 1	
		285	/	65	R 18	32.8	3.1	1729	68.1	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1	
		295	/	65	R 18	33.1	3.3	1733	68.2	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1	
		305	/	65	R 18	33.6	3.5	1739	68.5	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
		325	/	65	R 18	34.8	4.1	1755	69.1	0.80	2.62	Restriction Mode 4	-	Note 1
		255	/	70	R 18	32.1	2.7	1720	67.7	0.77	2.52	Restriction Mode 2	Normal Model	
	70	265	/	70	R 18	32.9	3.2	1731	68.1	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1	
		275	/	70	R 18	33.4	3.4	1737	68.4	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
		285	/	70	R 18	34.0	3.7	1744	68.7	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
		295	/	70	R 18	34.3	3.8	1748	68.8	0.80	2.62	Restriction Mode 2	Tire Inch UP Mode 3	
		305	/	70	R 18	34.8	4.1	1755	69.1	0.80	2.62	Restriction Mode 4	-	Note 1
		75	285	/	75	R 18	35.1	4.2	1758	69.2	0.81	2.65	Restriction Mode 4	-
	Flotation Tire Size	37x11.50R18	36.5	5.0	1776	69.9	0.83	2.72	Restriction Mode 4	-	Note 1			
		33x12.50R18	32.5	3.0	1726	68.0	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1				
		34x12.50R18	33.5	3.5	1738	68.4	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2				
		35x12.50R18	34.6	4.0	1752	69.0	0.80	2.62	Restriction Mode 2	Tire Inch UP Mode 3				
		37x12.50R18	36.6	5.0	1777	70.0	0.83	2.72	Restriction Mode 4	-	Note 1			
		35x13.50R18	34.5	4.0	1751	68.9	0.80	2.62	Restriction Mode 2	Tire Inch UP Mode 3				
		37x12.50R18	36.5	5.0	1776	69.9	0.83	2.72	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: 265/70R17 & 265/65R18

Group 2														
Wheel Size	Aspect Ratio	Tire Size				Tire Diameter	Total Lifted Height (TRD Lift Kit + Tire)	Camera Height Value for Global Tech Stream		Radar Height Value for Global Tech Stream		FCM Restriction Mode	Tire Inch Up Mode	Note
								mm	inch	m	ft			
20"	50	305	/	50	R 20	32.1	2.7	1720	67.7	0.77	2.52	Restriction Mode 2	Normal Model	
	55	275	/	55	R 20	32.1	2.8	1721	67.8	0.77	2.52	Restriction Mode 2	Tire Inch UP Mode 1	
		285	/	55	R 20	32.6	3.0	1727	68.0	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1	
		295	/	55	R 20	32.8	3.1	1729	68.1	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1	
		305	/	55	R 20	33.2	3.3	1735	68.3	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 2	
		335	/	55	R 20	34.5	3.9	1751	68.9	0.80	2.62	Restriction Mode 2	Tire Inch UP Mode 3	
		60	255	/	60	R 20	32.1	2.7	1720	67.7	0.77	2.52	Restriction Mode 2	Normal Model
	265		/	60	R 20	32.5	3.0	1726	68.0	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1	
	275		/	60	R 20	33.1	3.3	1733	68.2	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1	
	285		/	60	R 20	33.7	3.6	1741	68.5	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
	295		/	60	R 20	33.9	3.7	1744	68.7	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
	325		/	60	R 20	35.6	4.5	1765	69.5	0.81	2.65	Restriction Mode 4	-	Note 1
	65	275	/	65	R 20	34.1	3.7	1746	68.7	0.80	2.62	Restriction Mode 2	Tire Inch UP Mode 2	
		285	/	65	R 20	34.8	4.1	1755	69.1	0.80	2.62	Restriction Mode 4	-	Note 1
		295	/	65	R 20	35.1	4.3	1759	69.3	0.81	2.65	Restriction Mode 4	-	Note 1
	Flotation Tire Size	33x11.50R20				32.8	3.1	1729	68.1	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1	
		35x11.50R20				34.8	4.1	1755	69.1	0.80	2.62	Restriction Mode 4	-	Note 1
		37x11.50R20				36.5	5.0	1776	69.9	0.83	2.72	Restriction Mode 4	-	Note 1
		33x12.50R20				32.8	3.1	1729	68.1	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1	
		35x12.50R20				34.8	4.1	1754	69.1	0.80	2.62	Restriction Mode 4	-	Note 1
		37x12.50R20				36.8	5.1	1780	70.1	0.83	2.72	Restriction Mode 4	-	Note 1
		33x13.50R20				32.6	3.0	1727	68.0	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1	
		35x13.50R20				34.8	4.1	1754	69.1	0.80	2.62	Restriction Mode 4	-	Note 1
		37x13.50R20				36.8	5.1	1780	70.1	0.83	2.72	Restriction Mode 4	-	Note 1
		38x13.50R20				37.8	5.6	1792	70.6	0.84	2.75	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 is in accordance with GTS+ specifications

Group 3															
Wheel Size	Aspect Ratio	Tire Size					Tire Diameter inch	Total Lifted Height (TRD Lift Kit + Tire) inch	Camera Height Value for Global Tech		Radar Height Value for Global Tech		FCM Restriction Mode	Tire Inch Up Mode	Note
									mm	inch	m	ft			
17"	70	285	/	70	R	17	33.0	2.6	1717	67.6	0.77	2.52	Restriction Mode 2	Normal Model	
		295	/	70	R	17	33.5	2.9	1723	67.8	0.77	2.52	Restriction Mode 2	Tire Inch UP Mode 1	
		305	/	70	R	17	33.9	3.0	1727	68.0	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1	
		315	/	70	R	17	34.7	3.5	1738	68.4	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
	75	285	/	75	R	17	33.9	3.0	1727	68.0	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1	
	80	255	/	80	R	17	33.3	2.8	1720	67.7	0.77	2.52	Restriction Mode 2	Normal Model	
	Flotation Tire Size	34x10.50R17					33.5	2.9	1723	67.8	0.77	2.52	Restriction Mode 2	Tire Inch UP Mode 1	
		35x11.50R17					34.8	3.5	1739	68.5	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
		33x12.50R17					32.8	2.5	1714	67.5	0.76	2.49	Restriction Mode1	Normal Model	
		35x12.50R17					34.8	3.5	1739	68.5	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
		37x12.50R17					36.8	4.5	1764	69.4	0.81	2.65	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 + Tire)	Camera Height Value for Global Tech		Radar Height Value for Global Tech		FCM Restriction Mode	Tire Inch Up Mode	Note
						inch	inch	mm	inch	m	ft			
18"	60	325	/	60	R 18	33.4	2.8	1721	67.8	0.77	2.52	Restriction Mode 2	Tire Inch UP Mode 1	
	65	295	/	65	R 18	33.1	2.7	1718	67.6	0.77	2.52	Restriction Mode 2	Normal Model	
		305	/	65	R 18	33.6	2.9	1724	67.9	0.77	2.52	Restriction Mode 2	Tire Inch UP Mode 1	
		325	/	65	R 18	34.8	3.5	1739	68.5	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
		265	/	70	R 18	32.9	2.6	1715	67.5	0.76	2.49	Restriction Mode 2	Normal Model	
	70	275	/	70	R 18	33.4	2.8	1722	67.8	0.77	2.52	Restriction Mode 2	Tire Inch UP Mode 1	
		285	/	70	R 18	34.0	3.1	1729	68.1	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1	
		295	/	70	R 18	34.3	3.2	1733	68.2	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1	
		305	/	70	R 18	34.8	3.5	1739	68.5	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
		75	285	/	75	R 18	35.1	3.6	1743	68.6	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2
	Flotation Tire Size	37x11.50R18				36.5	4.4	1761	69.3	0.81	2.65	Restriction Mode 4	-	Note 1
		34x12.50R18				33.5	2.9	1723	67.8	0.77	2.52	Restriction Mode 2	Tire Inch UP Mode 1	
		35x12.50R18				34.6	3.4	1737	68.4	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
		37x12.50R18				36.6	4.4	1762	69.4	0.81	2.65	Restriction Mode 4	-	Note 1
		35x13.50R18				34.5	3.4	1736	68.3	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
		37x12.50R18				36.5	4.4	1761	69.3	0.81	2.65	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 + Tire)	Camera Height Value for Global Tech		Radar Height Value for Global Tech		FCM Restriction Mode	Tire Inch Up Mode	Note
						inch	inch	mm	inch	m	ft			
20"	55	305	/	55	R 20	33.2	2.7	1719	67.7	0.77	2.52	Restriction Mode 2	Normal Model	
		335	/	55	R 20	34.5	3.3	1735	68.3	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 2	
	60	275	/	60	R 20	33.1	2.7	1718	67.6	0.77	2.52	Restriction Mode 2	Normal Model	
		285	/	60	R 20	33.7	3.0	1725	67.9	0.77	2.52	Restriction Mode 2	Tire Inch UP Mode 1	
		295	/	60	R 20	33.9	3.1	1728	68.0	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1	
		325	/	60	R 20	35.6	3.9	1750	68.9	0.80	2.62	Restriction Mode 2	Tire Inch UP Mode 3	
	65	275	/	65	R 20	34.1	3.1	1730	68.1	0.78	2.55	Restriction Mode 2	Tire Inch UP Mode 1	
		285	/	65	R 20	34.8	3.5	1739	68.5	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
		295	/	65	R 20	35.1	3.7	1743	68.6	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
	Flotation Tire Size	35x11.50R20				34.8	3.5	1739	68.5	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
		37x11.50R20				36.5	4.4	1761	69.3	0.81	2.65	Restriction Mode 4	-	Note 1
		35x12.50R20				34.8	3.5	1739	68.5	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
		37x12.50R20				36.8	4.5	1764	69.4	0.81	2.65	Restriction Mode 4	-	Note 1
		35x13.50R20				34.8	3.5	1739	68.5	0.79	2.59	Restriction Mode 2	Tire Inch UP Mode 2	
		37x13.50R20				36.8	4.5	1764	69.4	0.81	2.65	Restriction Mode 4	-	Note 1
		38x13.50R20				37.8	5.0	1777	70.0	0.83	2.72	Restriction Mode 4	-	Note 1