TOYOTA

PRODUCT SUPPORT DIVISION

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X Action
X Retain
___ Information

INTEROFFICE MEMORANDUM

SB-10058681-4896

To: All Toyota Region General Managers/Vice Presidents

From: Bob Waltz,
Group Vice President, Product Quality and Service Support

Subject: Limited Service Campaign (LSC) DSD
2004 through 2006 Model Year Tundra Vehicles
Frame Inspection

In August 2013 Toyota announced a Limited Service Campaign (LSC D0D) for certain 2004-2006 model year Toyota Tundra vehicles currently registered in specific cold climate areas with high road salt usage (Cold Climate States*). Toyota is now announcing LSC DSD to also support owners of vehicles that are not registered in Cold Climate States but believe their vehicle has been operated in cold climate regions where high road salt is frequently used and/or customers with concerns that their vehicle's frame has more-than-normal corrosion.

LSC DSD covers vehicles ***currently registered*** in the following states: ***AK, AL, AR, AZ, CA, CO, FL, GA, HI, IA, ID, KS, LA, MO, MS, MT, NC, ND, NE, NM, NV, OK, OR, SC, SD, TN, TX, UT, WA, and WY.***

Background

- Toyota has received reports that certain 2004 through 2006 model year Tundra vehicles operated in specific cold climate areas with high road salt usage may exhibit more-than-normal corrosion to the vehicle's frame.
- This condition is unrelated to, and separate from, normal surface rust which is commonly found on metallic surfaces after some years of usage and/or exposure to the environment.

Limited Service Campaign (LSC) Remedy

If a customer believes his/her vehicle has been or will be operated in cold climate regions of the United States where high road salt is frequently used and/or a customer is concerned that their vehicle's frame has more-than-normal corrosion, dealerships are requested to inspect the vehicles frame for excessive corrosion. Based upon the results of the inspection dealership are requested to do one or more of the following at ***no charge*** to the vehicle owner:

- If the vehicle's frame passes Toyota's inspection, no further action is required.
- If significant rust perforation is found, the dealer will replace the vehicle's frame at no charge to the owner.

*Customers will have until **July 31, 2015**, to have the inspection of the vehicle's frame. If before the **July 31, 2015,** expiration date an authorized Toyota dealer confirms that the vehicle's frame has significant rust perforation, the appropriate repairs must be completed within three months of the inspection date*. Please schedule all inspections well in advance of the July 31, 2015, expiration date to ensure that your dealership has sufficient time to complete this Limited Service Campaign.*

*Due to facility and staffing challenges when scheduling and performing frame replacements and the production and shipping of the frames and associated parts.

1. **Dealer Letter Mailing Date**
   The attached Dealer Letter will be sent to all Toyota dealers in mid-January 2015.

2. **Dealer Letter Mailing Date**
   The attached Dealer Letter will be sent to all Toyota dealers in mid-January, 2015.

3. **Owner Notification Mailing Date**
   The owner notification will commence in mid-January, 2015, approximately one week after the Dealer Letter.

   Please note that only owners of the covered vehicles will be notified. If a dealer is contacted by an owner who has not yet received a notification, please instruct them to ***verify eligibility by confirming through TIS prior to performing repairs***. Dealers should perform the inspection, and if applicable repair, as outlined in the Technical Instructions found on TIS.

4. **Number and Identification of Covered Vehicles**
   There are approximately 311,000 Tundra (certain 2004 – 2006 model years) vehicles covered by LSC DSD. The vehicles covered by this campaign were produced from Sep. 12, 2003 – Jan. 2, 2007.

5. **Parts and Material Ordering**
   Please refer to the Dealer Letter for additional information.

6. **Region/District Summary Reports**
   We have enclosed the following LSC DSD Summary Reports in the Region/Private Distributor (PD) Service Manager/Customer Service Operations Manager/Director of Service package:
   - Region/PD Summary Report that provides an overview of the entire Region/PD for this LSC.
   - A District Summary Report that indicates the number of covered vehicles per dealership in each district for this LSC.

The attached Dealer Notification Letter contains additional details.

Please review this notification with your staff to assure that all relevant personnel have been briefed regarding this subject.

Thank you for your cooperation.

Enclosures

cc: Region/Private Distributor Assistant General Managers
Region/Private Distributor Customer Service Operations Managers
Region/Private Distributor Service Managers/Directors/VPs
Region/Private Distributor Parts Managers/Directors/VPs
Region/Private Distributor Customer Services Field Managers
Region/Private Distributor Technical Services and Training Managers
Region/Private Distributor District Service and/or Parts Managers
Region/Private Distributor Customer Relations Managers
Region/Private Distributor PDC Managers
Region/Private Distributor Field Technical Specialists
Region/Private Distributor Service Training Specialists
Region/Private Distributor Vehicle Operations Managers
All NAPC General Managers
All TMS Sales Administration Managers
All TMS Product Quality & Service Support Managers
All Field Product Engineers

TOYOTA

Toyota Motor Sales, U.S.A., Inc.
19001 South Western Avenue
Torrance, CA 90501
(310) 468-4000

To: All Toyota Dealer Principals, Service Manager, and Parts Managers (located in AK, AL, AR, AZ, CA, CO, FL, GA, HI, IA, ID, KS, LA, MO, MS, MT, NC, ND, NE, NM, NV, OK, OR, SC, SD, TN, TX, UT, WA, and WY)

Subject: Limited Service Campaign (LSC) DSD
2004 through 2006 Model Year Tundra Vehicles
Frame Inspection

In August 2013 Toyota announced a Limited Service Campaign (LSC D0D) for certain 2004-2006 model year Toyota Tundra vehicles currently registered in specific cold climate areas with high road salt usage (Cold Climate States). Toyota is now announcing LSC DSD to also support owners of vehicles that are not registered in Cold Climate States but believe their vehicle has been operated in cold climate regions where high road salt is frequently used and/or customers with concerns that their vehicle's frame has more-than-normal corrosion.

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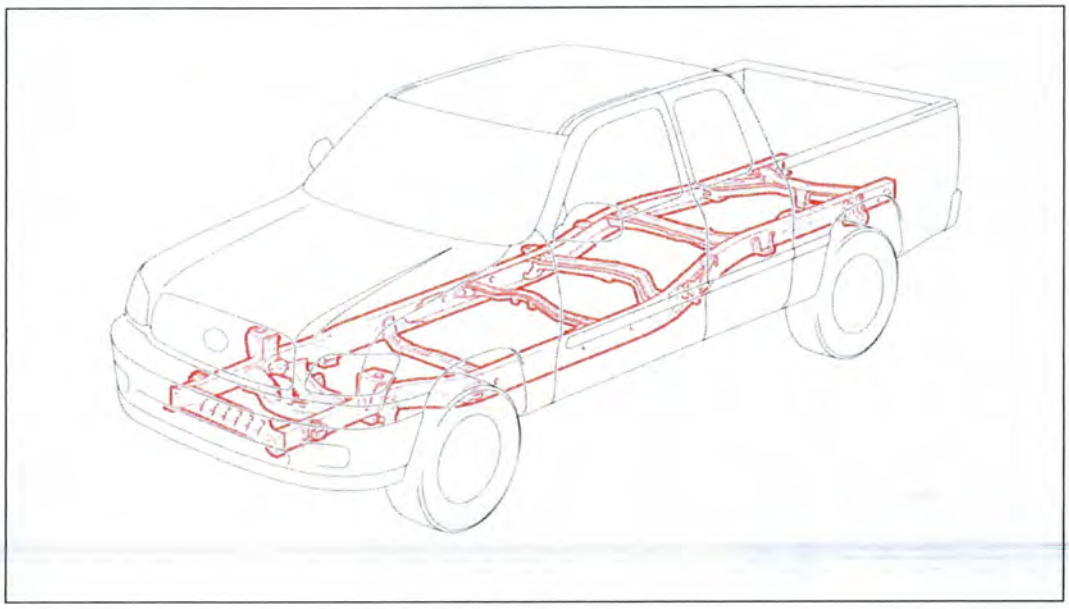

Condition

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Limited Service Campaign (LSC) Remedy

If a customer believes his/her vehicle has been operated in cold climate regions of the United States where high road salt is frequently used and/or a customer is concerned that their vehicle's frame has more-than-normal corrosion, dealerships are requested to inspect the vehicles frame for excessive corrosion. Based upon the results of the inspection, dealership are requested to do one or more of the following at ***no charge*** to the vehicle owner:

- If the vehicle's frame passes Toyota's inspection, no further action is required.
- If significant rust perforation is found, the dealer will replace the vehicle's frame at no charge to the owner.

STOP

*Customers will have until **July 31, 2015**, to have the inspection of the vehicle's frame. If before the **July 31, 2015**, expiration date, an authorized Toyota dealer confirms that the vehicle's frame has significant rust perforation, the appropriate repairs must be completed within three months of the inspection date*. Please schedule all inspections well in advance of the July 31, 2015, expiration date to ensure that your dealership has sufficient time to complete this Limited Service Campaign.*

*Due to facility and staffing challenges when scheduling and performing frame replacements and the production and shipping of the frames and associated parts.

1. **Owner Notification**
   The owner notification will commence in mid-January 2015.

2. **Dealer/Owner Lists**
   Summary Reports containing the ***number*** of covered vehicles in your dealership's Primary Marketing Area (PMA) have been enclosed in the dealer package. Based upon our records, a dealership which does not have a covered vehicle in their PMA will receive a report indicating so.

3. **Vehicle Coverage**
   There are approximately 311,000 Tundra (certain 2004 – 2006 model years) vehicles covered by LSC DSD. The vehicles covered by this campaign were produced from Sep. 12, 2003 – Jan. 2, 2007.

   Please note that only owners of the covered vehicles registered in that specific state will be notified. VINs registered within that specific state will be loaded simultaneously on TIS.

4. **Remedy Procedure**
   The Supplemental Frame Replacement TI contains the frame inspection criteria and the procedure for replacing the frame, if needed, based on Toyota's inspection criteria.

   STOP

   - Verify vehicle eligibility by confirming through TIS prior to performing the inspection/repair.
   - Dealers that conduct LSC DSD on vehicles not covered under this program ***will not receive reimbursement.***

5. **Parts and Material Ordering**
   To assist dealers in determining the correct part number(s) to order, a website has been set up to look up part numbers by VIN.
   - Go to http://toyota-frame-parts-lookup.imagespm.info
   - **When first logging in, enter your dealer code and the default password; xxxxx.** Upon logging in, the website will ask for you to reset the password and provide an email address.
   - Enter the VIN and the correct part numbers to order will be displayed.
   - Order parts through the Dealer Daily Parts System
   - ETAs for the parts will be available via the normal system

   The website is for part(s) application reference only and will not order the part, nor will it confirm campaign applicability or completion status.

STOP

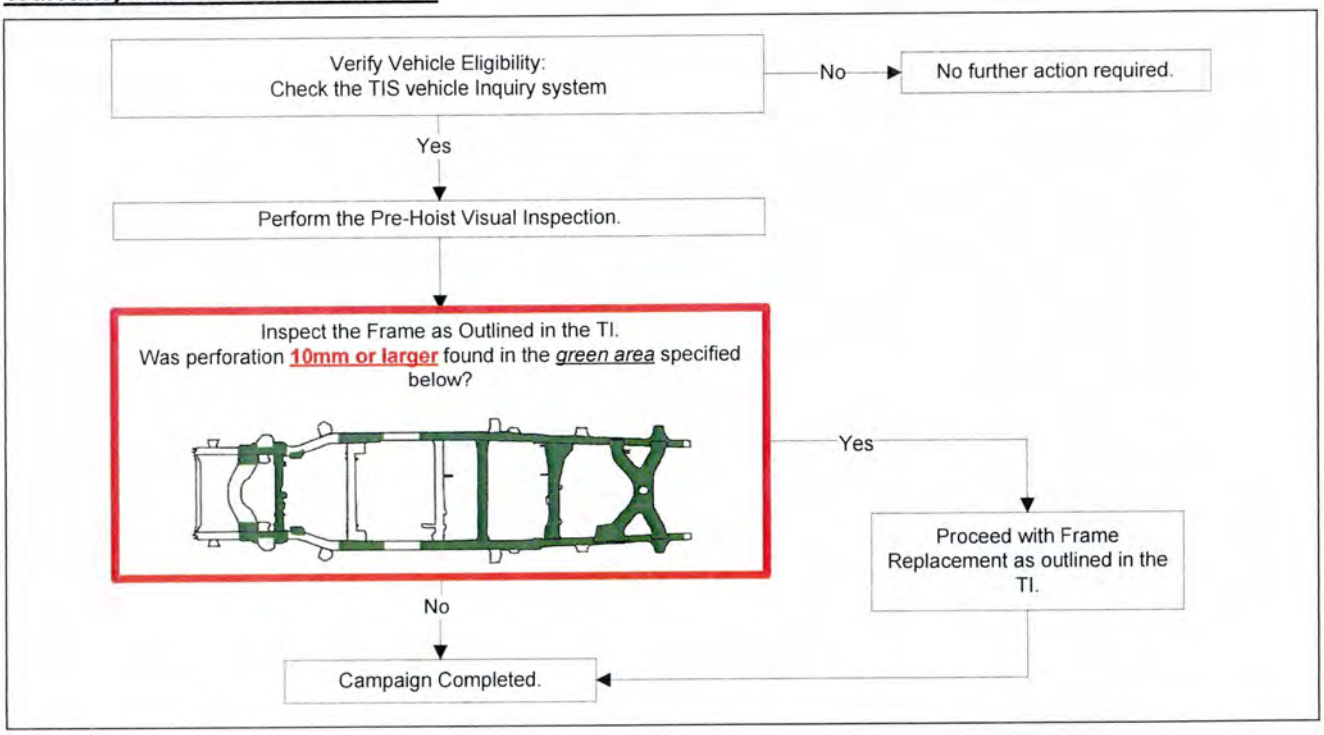
Only vehicles currently registered in the "***Warm Weather States***" are covered under LSC DSD (LSC expiration date July 31, 2015)
Warm Climate States: **AK, AL, AR, AZ, CA, CO, FL, GA, HI, IA, ID, KS, LA, MO, MS, MT, NC, ND, NE, NM, NV, OK, OR, SC, SD, TN, TX, UT, WA, and WY**

6. Tools and Equipment

Please refer to TIS for the Technical Instructions containing a list of tools and equipment.

- Frame Inspection/Replacement Technical Instruction

7. Warranty Processor Instructions



Operation Codes:

Op. Code	Description	Flat Rate Hour
3628C1	Frame Inspected – No Significant Perforation Found*	*0.6 hr/vehicle*
DSD001	2WD Frame Replacement by Dealer	*40.6 hr/vehicle*
DSD002	4WD Frame Replacement by Dealer	*42.6 hr/vehicle*
DSD003	2WD Frame Replacement by Outside Shop	*3.8 hr/vehicle*
DSD004	4WD Frame Replacement by Outside Shop	*3.8 hr/vehicle*

* Based upon Toyota's inspection criteria

- The flat rate times include 0.1 hours for administrative cost per unit for the dealership.

Allowable Sublet for Limited Service Campaign DSD

- **Sublet:** The sublet cost for Frames Replaced at an Independent or Dealer Body Shop should be claimed under sublet type **'YF'** using the following formula:

Description	Sublet Amounts
Op. Code DSD003 (2WD)	= *Maximum 36.8 hours X Outside Repair Shop Rate*
Op. Code DSD004 (4WD)	= *Maximum 38.8 hours X Outside Repair Shop Rate*
• A maximum of $250 per vehicle may be claimed under sublet type **'YG'** for the cost of transporting vehicles to an Independent or Dealer Body Shop for Op. Codes DSD003 and DSD004.	

STOP

Only vehicles currently registered in the ***"Warm Weather States"*** are covered under LSC DSD (LSC expiration date July 31, 2015)
Warm Climate States: **AK, AL, AR, AZ, CA, CO, FL, GA, HI, IA, ID, KS, LA, MO, MS, MT, NC, ND, NE, NM, NV, OK, OR, SC, SD, TN, TX, UT, WA, and WY**

(Warranty Processor Instructions CONTINUED . . .)

- **Rental Vehicles:**

Op. Code	Description	Sublet Amounts	Sublet Type	DSPM Authorization
DSD005	Vehicle Rental 1-30 Days	**Follow the Toyota Transportation Assistance Program (TTAP) Guidelines.**	RT	Not Required
DSD006	Vehicle Rental 31-60* Days (For frame replacement)		RT	Required

Rental car for frame replacement is up to 7 days under sublet type RT. If frame replacement is delayed due to parts availability, additional time, up to a total of 30 days, may be claimed. Additional time, up to a total of 60 days, may be claimed ***only* with DSPM advance written authorization.
(Submit LSC claims following the procedures described in the Toyota Warranty Policy and Procedures Manual.)

8. **Customer Handling**
Please consider this campaign an opportunity to assure customers that Toyota is focused on their satisfaction. Customers who receive the owner notification may contact your dealership with questions regarding the letter and/or campaign remedy. Please welcome them to your dealership and answer any questions that they may have. A Q&A is provided to assure a consistent message is communicated.
   - Customers with additional questions or concerns should be instructed to please contact the Toyota Customer Experience Center (1-888-270-9371).
   - If a customer has previously paid for repairs of their Tundra frame for this specific condition during the applicable period, please contact the Toyota Customer Assistance Center at 1-888-270-9371.

9. **Media Contacts**
For News media inquiries only:
Due to the nature of this LSC, it is imperative that all media contacts (local and national) receive a consistent message. In this regard, all media contacts must be directed to Cindy Knight (310) 468-2170, in Toyota Corporate Communications. (Please do not provide these numbers to customers or call if you are a dealer associate. Please provide these contacts to media associates only.)

As part of our dedication to continuous improvement, changes have been incorporated in the production process to ensure the highest quality products are provided to our customers.

Please review this entire package with your Service and Parts staff to familiarize them with the proper step-by-step procedures required to implement this Limited Service Campaign.

Thank you for your cooperation,
TOYOTA MOTOR SALES, U.S.A., INC.

Only vehicles currently registered in the "***Warm Weather States***" are covered under LSC DSD (LSC expiration date July 31, 2015)
Warm Climate States: **AK, AL, AR, AZ, CA, CO, FL, GA, HI, IA, ID, KS, LA, MO, MS, MT, NC, ND, NE, NM, NV, OK, OR, SC, SD, TN, TX, UT, WA, and WY**

Limited Service Campaign DSD
Certain 2004 through 2006 Model Year Tundra Vehicles - Frame Inspection

[VIN]

Dear Toyota Owner:

At Toyota, we are dedicated to providing vehicles of outstanding quality and value. As part of our continual efforts to meet your product expectations, Toyota would like to announce a Limited Service Campaign Program, which includes your vehicle.

What is the condition?

Toyota has received reports that certain 2004 through 2006 model year Tundra vehicles operated in specific cold climate areas with high road salt usage may exhibit more-than-normal corrosion to the vehicle's frame. This condition is unrelated to and separate from normal surface rust which is commonly found on metallic surfaces after some years of usage and/or exposure to the environment.

What is included in this Limited Service Campaign?

If you believe your vehicle has been operated in cold climate regions of the United States where high road salt is frequently used, any authorized Toyota Dealer will inspect your vehicle's frame for excessive corrosion*.

The Limited Service Campaign covers remedy cost for perforation of the vehicle's frame caused by rust corrosion with no mileage limitations until 07/31/2015 (your vehicle must be inspected by this date).

You must have your vehicle inspected by a participating Toyota Dealership no later than ***July 31, 2015***. Please schedule an appointment with an authorized participating Toyota dealer well in advance of the ***July 31, 2015,*** expiration date to ensure that your dealership has sufficient time to complete this Limited Service Campaign on your vehicle.

Vehicles currently registered in the following states, as well as the U.S. territories, will receive this offer: ***AL, AK, AR, AZ, CA, CO, FL, GA, HI, IA, ID, KS, LA, MO, MS, MT, NC, ND, NE, NM, NV, OK, OR, SC, SD, TN, TX, WA, UT, WY.***

***Please see your Toyota dealership for further details.**

How do you take advantage of this Limited Service Campaign?

If you believe your vehicle has been operated in cold climate regions of the United States where high road salt is frequently used and/or if you have a concern that your vehicle's frame may have more-than-normal corrosion, please contact your authorized Toyota dealer and make an appointment to have your vehicle's frame inspected completed ***by 07/31/2015.*** The inspection will take approximately 30 minutes.

This offer is limited to your specific vehicle whose Vehicle Identification Number (VIN) is printed at the beginning of this letter and is subject to the same conditions set forth in the New Vehicle Limited Warranty section of your Owner's Manual Supplement or Owner's Warranty Information booklet.

This program is intended for individual customer support and only applies to work performed at an authorized Toyota dealership.

What if you have other questions?

- Your local Toyota dealer will be more than happy to answer any of your questions and set up an appointment to perform this Limited Service Campaign.
- You can find additional information and locate a Toyota dealer in your area by going online and visiting www.toyota.com/recall.
- If you require further assistance, you may contact the Toyota Customer Experience Center at 1-888-270-9371 Monday through Friday, 5:00 am to 6:00 pm, Saturday 7:00 am through 4:00 pm Pacific Time.

What if you have previously paid for repairs for this condition?

If you have previously paid for repairs related to this condition, please mail all required paperwork to the following address for reimbursement consideration and allow 6 – 8 weeks for processing:

Toyota Motor Sales, USA, Inc.
Toyota Customer Experience WC10
19001 South Western Avenue
Torrance, CA 90509

Please refer to the attached Reimbursement Checklist for required document and submission details

If you no longer own this vehicle or would like to update your vehicle ownership/contact information, please go to www.toyota.com/ownersupdate. You will need your full 17-digit Vehicle Identification Number (VIN) to input the new information. If you are a vehicle lessor, please assist us by forwarding this notice to the lessee.

We have sent this notice in the interest of your continued satisfaction with our products, and we sincerely regret any inconvenience this condition may have caused you.

Thank you for driving a Toyota.

Sincerely,
TOYOTA MOTOR SALES, U.S.A., INC.

Limited Service Campaign
Reimbursement Checklist

☐ Repair Order or Invoice
- Must include the following information
  - Mileage on the date that the repair order was created
  - Itemized breakdown of labor charges for each repair performed
  - Detailed diagnosis statement
    1. Why was the vehicle brought into the repair facility?
    2. What was the repair facility's diagnosis?
    3. What did the repair facility do to correct the concern?

☐ Proof-of-Payment
- Only the following items are valid proof-of-payment
  - Copy of a cancelled check
  - Copy of a signed credit card receipt
  - Copy of a credit card statement
  - (If paid by cash) Letter from repair facility, on company letterhead, signed by the manager, verifying the amount paid by cash

☐ Proof-of-Ownership
- Only the following items are valid proof-of-ownership
  - Copy of the Bill of Sale
  - Copy of the Title

☐ Name, Address and Phone Number printed on all documents

If the repair was completed prior to the Campaign launch or completed at an independent repair facility, Toyota requires that the vehicle visits a Toyota Dealership for inspection of the repair in order to complete the Campaign prior to reimbursement consideration.

TOYOTA

Limited Service Campaign DSD (FAQ)
Certain 2004 - 2006 Tundra Vehicles
Excessive Corrosion to the Vehicle's Frame

Frequently Asked Questions

Published mid-January 2015

In August 2013 Toyota announced a Limited Service Campaign (LSC D0D) for certain 2004-2006 model year Toyota Tundra vehicles currently registered in specific cold climate areas with high road salt usage (Cold Climate States*). Toyota is now announcing LSC DSD to also support owners of vehicles that are not registered in Cold Climate States but believe their vehicle has been operated in cold climate regions where high road salt is frequently used and/or customers with concerns that their vehicle's frame has more-than-normal corrosion.

Q1: What is the condition?

A1: Toyota has received reports that certain 2004 through 2006 model year Tundra vehicles operated in specific cold climate areas with high road salt usage may exhibit more-than-normal corrosion to the vehicle's frame. This condition is unrelated to and separate from normal surface rust which is commonly found on metallic surfaces after some years of usage and/or exposure to the environment.

Q2: What is the cause of this condition?

A2: The frames in some number of vehicles may not have corrosion-resistant protection sufficient for use in these areas. This, combined with prolonged exposure to road salts and other environmental factors, may contribute to the development of rust corrosion in the frames of some vehicles. This condition is unrelated to, and separate from, normal surface rust which is commonly found on metallic surfaces after some years of usage and/or exposure to the environment.

Q3: What states are covered by Limited Service Campaign (LSC) DSD?

A3: Vehicles currently registered in the following states and the U.S.A. Territories will be covered by this offer: ***AK, AL, AR, AZ, CA, CO, FL, GA, HI, IA, ID, KS, LA, MO, MS, MT, NC, ND, NE, NM, NV, OK, OR, SC, SD, TN, TX, UT, WA, and WY***

Q3a: Why are only 30 states involved in LSC DSD?

A3a Toyota has previously launched a separate LSC (D0D) in the other 20 states (Cold Climate States*). Toyota has determined that vehicles currently registered in the Cold Climate States are more likely to experience the conditions that are primary factors in producing excess corrosion to the frame.

****CT, DE, IL, IN, KY, MA, MD, ME, MI, MN, NH, NJ, NY, OH, PA, RI, VA, VT, WI & WV***

In order to support customers in the remaining 30 states, who believe their 2004-2006 model year Tundra vehicles have been operated in cold climate regions of the United States where high road salt is frequently used, Toyota is announcing this LSC.

Q4: Which and how many vehicles are covered by this LSC?

A4: There are approximately 311,000 Tundra (2004 – 2006 model year) vehicles covered by LSC DSD.

Model	Model Year	Production Range	Appx. UIO
Tundra	2004-2006	Sep. 12, 2003 – Jan. 2, 2007	311,000

Q5: What is Toyota going to do?

A5: In mid-January 2015, Toyota will notify owners of covered vehicles by first class mail. If you believe your vehicle has been operated in cold climate regions of the United States where high road salt is frequently used, you may obtain an inspection at ***no charge*** until ***July 31, 2015***, if you so desire.

If a Toyota dealership determines that your vehicle's frame has significant rust perforation before the* ***July 31, 2015****, expiration date, the dealer will have an additional 3 months to perform the appropriate repairs. Please schedule an appointment well in advance of the* ***July, 31, 2015****, expiration date to ensure sufficient time to complete this LSC.*

Please note: All vehicles must have the campaign completed and claims filed by the deadlines outlined above.

** Per Toyota's Inspection Criteria*

Q5a: How does Toyota obtain my mailing information?

A5a: Toyota uses an industry provider who works with each state Department of Motor Vehicles (DMV) to receive registration or title information. Please make sure your registration or title information is correct.

Q6: What should I do?

A6: If you believe your vehicle has been operated in cold climate regions of the United States where high road salt is frequently used, please contact any authorized Toyota dealer and schedule an appointment to have the vehicle inspected before ***July 31, 2015.***

Q7: How long will the inspection take?

A7: The inspection will take approximately 30 minutes. However, depending upon the dealer's work schedule, it may be necessary to make the vehicle available for a longer period of time.

Q7a: What if the vehicle's frame fails Toyota's inspection criteria; how long will the repair take?

A7a: The frame replacement will take approximately 40-45 hours. However, depending upon the dealer's work schedule, it may be necessary to make the vehicle available for a longer period of time.

Q8: When will this Limited Service Campaign expire?

A8: This Limited Service Campaign will be offered until ***July 31, 2015.*** All applicable repairs must also be ***completed*** by this date.

Q9: What if I have previously paid for repairs related to this campaign?

A9: Reimbursement consideration instructions will be provided in the remedy owner letter.

Q10: What if I have additional questions or concerns?

A10: Customer satisfaction is very important to Toyota. If you have additional questions or concerns, please contact the Toyota Customer Experience Center at 1-888-270-9371 Monday through Friday, 5:00 am to 6:00 pm, or Saturday 7:00 am through 4:00 pm Pacific Time.

Wayne Hutchinson / TMS Toyota Customer Services
Product Quality and Service Support, Quality Compliance
January 14, 2015
Approved By: Bob Waltz

To: All Toyota Dealers
From: Product Support Division

Limited Service Campaign (LSC) DSD
Certain 2004 – 2006 Model Year Tundra Vehicles
Frame Inspection
********URGENT********

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Background
Toyota has received reports that certain 2004 through 2006 model year Tundra vehicles operated in specific cold climate areas with high road salt usage may exhibit more-than-normal corrosion to the vehicle's frame. This condition is unrelated to and separate from normal surface rust which is commonly found on metallic surfaces after some years of usage and/or exposure to the environment.

- **Toyota will begin to notify owners in mid-January 2015.**
- A Dealer Letter containing additional information (i.e. Technical Instructions, reimbursement procedures, etc.) has been posted on TIS.
- ***Operation Codes will be active on 01/15/2015.***
- ***Please refer to TIS for vehicle applicability and additional information.***

Customer and Media Contacts
- A Q&A has been attached for your use in the event you receive a customer contact. If a customer has further questions, please direct the inquiry to the Toyota Customer Experience Center at 1-800-331-4331.
- If you are a dealership associate and have any questions, please contact your District Service/Parts Manager.
- ***In the event you are contacted by the News media***, it is imperative that all media contacts (local and national) receive a consistent message. Please direct all media contacts to Cindy Knight (310) 468-2170, in Toyota Corporate Communications. (Please do not provide these numbers to customers or call if you are a dealer associate. Please provide these contacts to only media associates.)

TOYOTA

Limited Service Campaign DSD (FAQ)
Certain 2004 - 2006 Tundra Vehicles
Excessive Corrosion to the Vehicle's Frame

Frequently Asked Questions

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Q5: What is Toyota going to do?

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If a Toyota dealership determines that your vehicle's frame has significant rust perforation before the* ***July 31, 2015****, expiration date, the dealer will have an additional 3 months to perform the appropriate repairs. Please schedule an appointment well in advance of the* ***July, 31, 2015****, expiration date to ensure sufficient time to complete this LSC.*

Please note: All vehicles must have the campaign completed and claims filed by the deadlines outlined above.

** Per Toyota's Inspection Criteria*

Q5a: How does Toyota obtain my mailing information?

A5a: Toyota uses an industry provider who works with each state Department of Motor Vehicles (DMV) to receive registration or title information. Please make sure your registration or title information is correct.

Q6: What should I do?

A6: If you believe your vehicle has been operated in cold climate regions of the United States where high road salt is frequently used, please contact any authorized Toyota dealer and schedule an appointment to have the vehicle inspected before ***July 31, 2015.***

Q7: How long will the inspection take?

A7: The inspection will take approximately 30 minutes. However, depending upon the dealer's work schedule, it may be necessary to make the vehicle available for a longer period of time.

Q7a: What if the vehicle's frame fails Toyota's inspection criteria; how long will the repair take?

A7a: The frame replacement will take approximately 40-45 hours. However, depending upon the dealer's work schedule, it may be necessary to make the vehicle available for a longer period of time.

Q8: When will this Limited Service Campaign expire?

A8: This Limited Service Campaign will be offered until ***July 31, 2015.*** All applicable repairs must also be ***completed*** by this date.

Q9: What if I have previously paid for repairs related to this campaign?

A9: Reimbursement consideration instructions will be provided in the remedy owner letter.

Q10: What if I have additional questions or concerns?

A10: Customer satisfaction is very important to Toyota. If you have additional questions or concerns, please contact the Toyota Customer Experience Center at 1-888-270-9371 Monday through Friday, 5:00 am to 6:00 pm, or Saturday 7:00 am through 4:00 pm Pacific Time.

SUPPLEMENTAL TECHNICAL INSTRUCTIONS

FOR

LIMITED SERVICE CAMPAIGN DSD

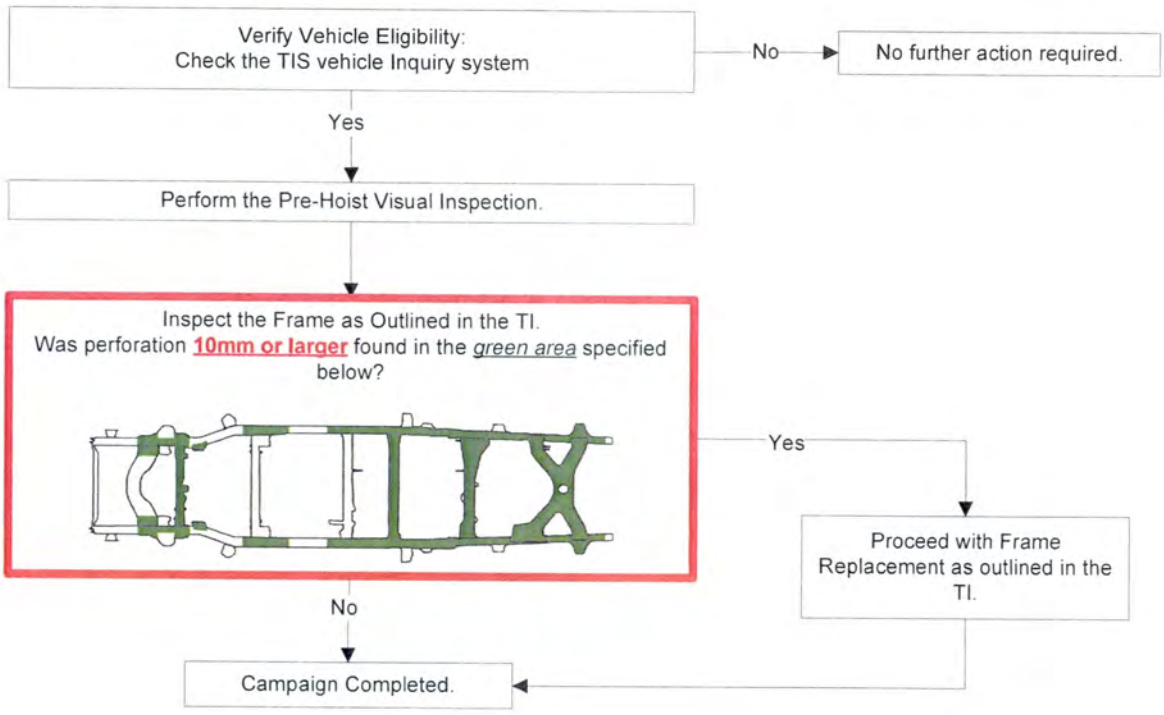
* *

CERTAIN 2004-2006 MODEL YEAR TUNDRA

* *

FRAME INSPECTION/REPLACEMENT

I. OPERATION FLOWCHART



II. PREPARATION

A. TOOLS & EQUIPMENT

- **Above Ground Lift (Required)**
- Alignment Rack
- A/C Service Equipment with Manifold Gauges
- Brake Bleeder
- Cooling System Tester
- Engine Hanger
  - 5VZ-FE Engine (2004 MY)
    - 12282-62070 – Engine hanger No. 2 (Qty: 1)
    - 90119-10684 (90080-11443) – Bolt (Qty: 2)
  - 1GR-FE Engine (2005-2006 MY)
    - 12281-31060 – Engine hanger No. 1 (Qty: 1)
    - 12282-31040 – Engine hanger No. 2 (Qty: 1)
    - 90119-08A87 – Bolt (Qty: 4)
- Engine Hoist (Qty: 2) or Hydraulic Mini Crane (Qty: 2)
- Engine Sling Device
- Floor Jack
- Protective Gloves
- Protective Eyewear
- Ratcheting Tie Down Strap (2 in X 27 ft, Minimum Work Load Capacity: 3,000 lbs)
- Screw Jacks (QTY 2)
- Standard Hand Tools
- Special Service Tools (SST)
  - 09325-40010 - Transmission Oil Plug
  - 09520-01010 - Drive Shaft Remover Attachment
  - 09520-32040 - Slide Hammer
  - 09610-20012 - Pitman Arm Puller
  - 09617-24011 - Steering Rack Wrench or Equivalent (22MM)
  - 09628-62011 - Ball Joint Puller
  - 09709-29018 - LSPV Gauge Set
  - 09870-00005-01 - A/C Quick Joint Puller No.1 (1GR-FE Only)
  - 09922-10010 - Variable Open Wrench
- Techstream
- Torque Wrench
- Torx® T55H Socket

B. SUPPLIES

- ATF D-II or DEXRON®III (DEXRON®II) – As needed
- Hypoid Gear Oil API GL-5 SAE 75W-90 – 1.15 liter (4WD Only, Front Differential)
- MP Grease
- Marker
- ND-OIL 8 Compressor Oil – As needed
- R134a Refrigerant – As needed
- Silicon Lubricant
- Toyota DOT 3 Brake Fluid – 3 pints
- Toyota Long Life Coolant – 2 gallons
- Vinyl Tape

C. PARTS

To assist dealers in determining the correct part number(s) to order, a website has been set up to look up part numbers by VIN. Please go to http://toyota-frame-parts-lookup.imagespm.info select the appropriate campaign/vehicle, enter the VIN, and the correct part numbers to order will be displayed. ***The website is for part(s) application reference only and won't order the parts or confirm campaign completion status.***

- The parts will need to be ordered through the Dealer Daily Parts System.
- ETAs for the parts will be available via the normal system.
- Frame ETAs will be made available on the Dealer Daily website, in the MAC reference area.

Note: When first logging in; enter your dealer code and the default password; XXXXX. Upon logging in the website will ask for you to reset the password and provide an email address.

An illustration of the parts replaced and their location(s) have been provided. Please reference the ***"Illustration Name"*** and ***"Page"*** columns in the parts tables below.

Individual Parts:

Part Number	Part Description (Model Year)	Quantity	Illustration Name	Page
04000-6310C	Frame, Sub-Assy	1	Frame & Misc Parts	9
04000-6320C	Frame, Sub-Assy	1	Frame & Misc Parts	9
04000-6330C	Frame, Sub-Assy	1	Frame & Misc Parts	9
04000-6340C	Frame, Sub-Assy	1	Frame & Misc Parts	9
04000-6350C	Frame, Sub-Assy	1	Frame & Misc Parts	9
04000-6360C	Frame, Sub-Assy	1	Frame & Misc Parts	9
04000-6370C	Frame, Sub-Assy	1	Frame & Misc Parts	9
04000-6380C	Frame, Sub-Assy	1	Frame & Misc Parts	9
04000-6390C	Frame, Sub-Assy	1	Frame & Misc Parts	9
04000-6410C	Frame, Sub-Assy	1	Frame & Misc Parts	9
04000-6420C	Frame, Sub-Assy	1	Frame & Misc Parts	9
04000-6430C	Frame, Sub-Assy	1	Frame & Misc Parts	9
04000-6440C	Frame, Sub-Assy	1	Frame & Misc Parts	9
04000-6450C	Frame, Sub-Assy	1	Frame & Misc Parts	9
04000-6460C	Frame, Sub-Assy	1	Frame & Misc Parts	9
04000-6470C	Frame, Sub-Assy	1	Frame & Misc Parts	9
04000-6480C	Frame, Sub-Assy	1	Frame & Misc Parts	9
04000-6490C	Frame, Sub-Assy	1	Frame & Misc Parts	9
04000-6510C	Frame, Sub-Assy	1	Frame & Misc Parts	9
04000-6520C	Frame, Sub-Assy	1	Frame & Misc Parts	9
04000-6530C	Frame, Sub-Assy	1	Frame & Misc Parts	9
04000-6540C	Frame, Sub-Assy	1	Frame & Misc Parts	9
04000-6550C	Frame, Sub-Assy	1	Frame & Misc Parts	9
04000-6560C	Frame, Sub-Assy	1	Frame & Misc Parts	9
04000-6570C	Frame, Sub-Assy	1	Frame & Misc Parts	9
04483-0C030	Shackle Kit, Rear Spring	2	Rear Suspension	9
12157-10010	Gasket, Front Differential Filler Plug	1	Front Differential	15
16492-21050	Packing (For Radiator Drain Cock)	1	Radiator	20
17451-0D030	Gasket, Exhaust Pipe (1GR-FE)	1	Exhaust System	18
18495-38020	Retainer, Exhaust Pipe (2UZ-FE)	2	Exhaust System	18
18495-76010	Retainer, Exhaust Pipe (5VZ-FE)	1	Exhaust System	18
23232-41081	Gasket (For Fuel Pump Hose) (2UZ-FE)	1	Fuel System	17
43425-04020	Ring, Shaft Snap (For Front Drive Inner Shaft Outer)	2	Front Driveshaft	16

Individual Parts (Continued):

Part Number	Part Description (Model Year)	Quantity	Illustration Name	Page
47322-0C050	Tube, Rear Brake, No.2	1	Brake Tubes	11
47322-0C060	Tube, Rear Brake, No.2	1	Brake Tubes	11
47322-0C080	Tube, Rear Brake, No.2	1	Brake Tubes	11
47322-0C090	Tube, Rear Brake, No.2	1	Brake Tubes	11
47323-0C013	Tube, Rear Brake, No.3	1	Brake Tubes	11-12
47323-0C040	Tube, Rear Brake, No.3	1	Brake Tubes	11-12
47323-0C070	Tube, Rear Brake, No.3	1	Brake Tubes	11-12
47323-0C080	Tube, Rear Brake, No.3	1	Brake Tubes	11-12
47361-0C013	Tube, Rear Brake, No.10	1	Brake Tubes	11-12
47361-0C020	Tube, Rear Brake, No.10	1	Brake Tubes	11-12
47361-0C040	Tube, Rear Brake, No.10	1	Brake Tubes	11-12
47361-0C050	Tube, Rear Brake, No.10	1	Brake Tubes	11-12
90080-11491	Bolt (With Trailer Hitch Only)	12	Rear Bumper	20
90089-17059	Nut (With Trailer Hitch Only)	2	Rear Bumper	20
90430-12026	Gasket (For Pulsation Damper Hose)	2	Fuel System	17
90430-12026	Gasket (For Pulsation Damper Hose)	1	Fuel System	17
90430-24003	Gasket, Front Differential Drain Plug	1	Front Differential	15
90917-06057	Gasket, Exhaust Pipe (5VZ-FE)	1	Exhaust System	18
90917-06083	Gasket, Exhaust Pipe (2UZ-FE)	2	Exhaust System	18
90917-06083	Gasket, Exhaust Pipe (1GR-FE)	1	Exhaust System	18
95381-04045	Cotter Pin	2	Front Driveshaft	16
96711-19007	Packing (For Radiator Drain Cock)	1	Radiator	20

Parts Kits:

Part Number	Part Description	Quantity
04000-57634	Parts Kit No.1 – Common Replacement kit A-4 (2004 MY)	1

The kit listed above includes the following parts:

Part Number	Part Description	Qty	Illustration	Page
47353-35110	Bracket, Flexible Hose No. 3	1	Brake Tubes	11-12
47354-35100	Bracket, Flexible Hose No. 4	1	Brake Tubes	11-12
48409-34020	Cam Sub-Assy, Front Suspension Toe Adjust	2	Front Suspension	10
48409-34030	Cam Sub-Assy, Front Suspension Toe Adjust, No 2	2	Front Suspension	10
48452-35020	Plate, Front Suspension Toe Adjust, No. 2	4	Front Suspension	10
48824-34030	Bracket, Front Stabilizer, No 1 RH	1	Front Suspension	10
48829-34020	Bracket, Front Stabilizer, No 1 LH	1	Front Suspension	10
77285-34031	Clamp, Fuel Tube, No 1	4	Fuel Tubes	13-14
77285-34060	Clamp, Fuel Tube, No 1	1	Fuel Tubes	13
77285-34071	Clamp, Fuel Tube, No 1	2	Fuel Tubes	13-14
77285-34080	Clamp, Fuel Tube, No 1	1	Fuel Tubes	13
77285-34260	Support, Fuel Return and Main Tube	1	Fuel Tubes	14
77285-34270	Support, Fuel Return and Main Tube	1	Fuel Tubes	13
77285-34280	Support, Fuel Return and Main Tube	2	Fuel Tubes	13-14
77285-34290	Support, Fuel Return and Main Tube	1	Fuel Tubes	13-14
77285-34300	Support, Fuel Return and Main Tube	1	Fuel Tubes	13-14
77285-34310	Support, Fuel Return and Main Tube	1	Fuel Tubes	13-14
82666-35200	Clamp	2	ABS & VSC	19
82711-16830	Clamp, Wiring Harness	3	Wire Harness Clamps	15
82711-26380	Clamp, Wiring Harness	16	Wire Harness Clamps	15
82711-3A640	Clamp, Wiring Harness	1	Wire Harness Clamps	15
82711-3F050	Clamp, Wiring Harness	3	Wire Harness Clamps	15
89515-35030	Clamp	2	ABS & VSC	19
90099-14120	O-Ring	1	Air Conditioning	19
90099-14121	O-Ring	1	Air Conditioning	19
90119-12311	Bolt	4	Rear Bumper	20
90159-60440	Screw	4	Frame & Misc Parts	9
90178-10024	Nut	4	Front Bumper	20
90179-08054	Nut	1	AT Shift Cable	20
90179-10071	Nut	4	Engine Mounting	19
90179-14019	Nut	8	Rear Suspension	9
90179-10039	Nut	6	Rear Suspension	9
90182-10004	Nut	2	Front Suspension	10
90201-14025	Washer	6	Rear Suspension	9
90201-15012	Washer	8	Rear Suspension	9
90467-13076	Clip	2	Bed Mounting	10
90468-08035	Clip	4	Brake Tubes	11-12
90904-12066	Way, No.2 (For Front Brake Tube)	1	Brake Tubes	11-12
90904-12067	Way, No.3 (For Front Brake Tube)	1	Brake Tubes	11-12
90904-12068	Way (For Front Brake Tube)	1	Brake Tubes	11-12
90949-01C06	Clamp, Brake Tube, No. 6	8	Brake Tubes	11-12
90949-01C32	Clamp	1	Brake Tubes	11
95381-03225	Cotter Pin	2	Front Suspension	10
95381-03225	Cotter Pin	2	Power Steering	16

Parts Kits (Continued):

Part Number	Part Description	Quantity
04000-57734	Parts Kit No.2 – Common Replacement Kit A-5 (2005-2006 MY)	1

The kit listed above includes the following parts:

Part Number	Part Description	Qty	Illustration	Page
47353-35110	Bracket, Flexible Hose No. 3	1	Brake Tubes	11-12
47354-35100	Bracket, Flexible Hose No. 4	1	Brake Tubes	11-12
48409-34020	Cam Sub-Assy, Front Suspension Toe Adjust	2	Front Suspension	10
48409-34030	Cam Sub-Assy, Front Suspension Toe Adjust, No 2	2	Front Suspension	10
48452-35020	Plate, Front Suspension Toe Adjust, No. 2	4	Front Suspension	10
48824-34030	Bracket, Front Stabilizer, No 1 RH	1	Front Suspension	10
48829-34020	Bracket, Front Stabilizer, No 1 LH	1	Front Suspension	10
77285-34031	Clamp, Fuel Tube, No 1	3	Fuel Tubes	14
77285-34071	Clamp, Fuel Tube, No 1	2	Fuel Tubes	14
77285-34260	Support, Fuel Return and Main Tube	1	Fuel Tubes	14
77285-34280	Support, Fuel Return and Main Tube	2	Fuel Tubes	14
77285-34290	Support, Fuel Return and Main Tube	1	Fuel Tubes	14
77285-34300	Support, Fuel Return and Main Tube	1	Fuel Tubes	14
77285-34310	Support, Fuel Return and Main Tube	1	Fuel Tubes	14
82666-35200	Clamp	2	ABS & VSC	19
82711-16830	Clamp, Wiring Harness	3	Wire Harness Clamps	15
82711-26380	Clamp, Wiring Harness	16	Wire Harness Clamps	15
82711-33100	Clamp, Wiring Harness	3	Wire Harness Clamps	15
82711-3A640	Clamp, Wiring Harness	1	Wire Harness Clamps	15
82711-3F050	Clamp, Wiring Harness	3	Wire Harness Clamps	15
82711-3F400	Clamp, Wiring Harness	3	Wire Harness Clam	15
89515-35030	Clamp	2	ABS & VSC	19
90099-14120	O-Ring	1	Air Conditioning	19
90099-14121	O-Ring	2	Air Conditioning	19
90119-12311	Bolt	4	Rear Bumper	20
90159-60440	Screw	4	Frame & Misc Parts	9
90178-10024	Nut	4	Front Bumper	20
90179-08054	Nut	1	AT Shift Cable	20
90179-10071	Nut	4	Engine Mounting	19
90179-14019	Nut	8	Rear Suspension	9
90179-10039	Nut	6	Rear Suspension	9
90182-10004	Nut	2	Front Suspension	10
90201-14025	Washer	6	Rear Suspension	9
90201-15012	Washer	8	Rear Suspension	9
90467-13076	Clip	2	Bed Mounting	10
90468-08035	Clip	4	Brake Tubes	11-12
90904-12066	Way, No.2 (For Front Brake Tube)	1	Brake Tubes	11-12
90904-12067	Way, No.3 (For Front Brake Tube)	1	Brake Tubes	11-12
90904-12068	Way (For Front Brake Tube)	1	Brake Tubes	11-12
90949-01C06	Clamp, Brake Tube, No. 6	8	Brake Tubes	11-12
90949-01C32	Clamp	1	Brake Tubes	11-12
95381-03225	Cotter Pin	2	Front Suspension	10
95381-03225	Cotter Pin	2	Power Steering	16

Parts Kits (Continued):

Part Number	Part Description	Quantity
04000-5710C	Parts Kit No.3 – Common Replacement Kit B-4	1

The kit listed above includes the following parts:

Part Number	Part Description	Qty	Illustration	Page
47351-0C010	Bracket, Flexible Hose, No. 2	1	Brake Tubes	12
77285-0C010	Clamp, Fuel Tube, No. 1	1	Fuel Tubes	14
77285-0C020	Clamp, Fuel Tube, No. 1	1	Fuel tubes	14
90080-11180	Bolt	4	Spare Tire Carrier	10
90080-11180	Bolt	3	Brake Tubes, LSPV	15
90080-11180	Bolt	10	Fuel Tubes	13-14
90080-11275	Bolt	2	Front Suspension	10
90080-11373	Bolt	9	Frame & Misc Parts	9
90080-11387	Bolt	4	Engine Mounting	19
90080-11410	Bolt	2	Front Suspension	10
90080-11482	Bolt	2	Front Suspension	10
90080-11555	Bolt	2	Power Steering	16
90105-14132	Bolt	6	Rear Suspension	9
90119-A0073	Bolt	6	Rear Bumper	20
90119-A0077	Bolt	2	Fuel Tank	19
90949-A1002	Clamp, Brake Tube, No. 7	1	Brake Tubes	11-12

Part Number	Part Description	Quantity
04000-5270C	Parts Kit No.4 – Brake Tube Kit 6 (w/o VSC for 2004 MY)	1

The kit listed above includes the following parts:

Part Number	Part Description	Qty	Illustration	Page
47313-0C040	Tube, Front Brake, No.3	1	Brake Tubes	11
47314-0C011	Tube, Front Brake, No.4	1	Brake Tubes	11
47316-0C060	Tube, Front Brake, No.6 (DCB)	1	Brake Tubes	11
47316-0C070	Tube, Front Brake, No.6 (ACB, RCB)	1	Brake Tubes	11
47317-0C011	Tube, Front Brake, No.7	1	Brake Tubes	11
47319-0C021	Tube, Front Brake, No.9 (ACB, RCB)	1	Brake Tubes	11
47319-0C030	Tube, Front Brake, No.9 (DCB)	1	Brake Tubes	11
47324-0C014	Tube, Front Brake, No.4	1	Brake Tubes	11
90080-11180	Bolt	5	Brake Tubes	11

Part Number	Part Description	Quantity
04000-5730C	Parts Kit No.5 – Brake Tube Kit 6 (with VSC for 2004 MY)	1

The kit listed above includes the following parts:

Part Number	Part Description	Qty	Illustration	Page
47313-0C050	Tube, Front Brake, No.3 (DCB)	1	Brake Tubes	12
47313-0C060	Tube, Front Brake, No.3 (ACB, RCB)	1	Brake Tubes	12
47314-0C011	Tube, Front Brake, No.4	1	Brake Tubes	12
47316-0C051	Tube, Front Brake, No.6	1	Brake Tubes	12
47317-0C011	Tube, Front Brake, No.7	1	Brake Tubes	12
47322-0C041	Tube, Rear Brake, No.2	1	Brake Tubes	12
47325-0C041	Tube, Rear Brake, No.5	1	Brake Tubes	12
47328-0C020	Tube, Rear Brake, No.8	1	Brake Tubes	12
47329-0C010	Tube, Rear Brake, No.9	1	Brake Tubes	12
90080-11180	Bolt	6	Brake Tubes	12

Parts Kits (Continued):

Part Number	Part Description	Quantity
04000-5740C	Parts Kit No.6 – Brake Tube Kit 8 (w/o VSC for 2005 & 2006 MY)	1

The kit listed above includes the following parts:

Part Number	Part Description	Qty	Illustration	Page
47313-0C040	Tube, Front Brake, No.3	1	Brake Tubes	11
47314-0C011	Tube, Front Brake, No.4	1	Brake Tubes	11
47316-0C060	Tube, Front Brake, No.6 (DCB)	1	Brake Tubes	11
47316-0C070	Tube, Front Brake, No.6 (ACB, RCB)	1	Brake Tubes	11
47317-0C020	Tube, Front Brake, No.7	1	Brake Tubes	11
47319-0C040	Tube, Front Brake, No.9 (ACB, RCB)	1	Brake Tubes	11
47319-0C050	Tube, Front Brake, No.9 (DCB)	1	Brake Tubes	11
47324-0C014	Tube, Rear Brake, No.4	1	Brake Tubes	11
90080-11180	Bolt	5	Brake Tubes	11

Part Number	Part Description	Quantity
04000-5750C	Parts Kit No.7 – Brake Tube Kit 9 (with VSC for 2005 and 2006 MY)	1

The kit listed above includes the following parts:

Part Number	Part Description	Qty	Illustration	Page
47313-0C070	Tube, Front Brake, No.3 (ACB, RCB)	1	Brake Tubes	12
47313-0C080	Tube, Front Brake, No.3 (DCB)	1	Brake Tubes	12
47314-0C011	Tube, Front Brake, No.4	1	Brake Tubes	12
47316-0C080	Tube, Front Brake, No.6	1	Brake Tubes	12
47317-0C020	Tube, Front Brake, No.7	1	Brake Tubes	12
47322-0C100	Tube, Rear Brake, No.2	1	Brake Tubes	12
47325-0C080	Tube, Rear Brake, No.5	1	Brake Tubes	12
47328-0C020	Tube, Rear Brake, No.8	1	Brake Tubes	12
47329-0C010	Tube, Rear Brake, No.9	1	Brake Tubes	12
90080-11180	Bolt	6	Brake Tubes	12

Part Number	Part Description	Quantity
04000-57834	Parts Kit No.8 – LSPV 3 (w/o VSC)	1

The kit listed above includes the following parts:

Part Number	Part Description	Qty	Illustration	Page
47910-34070	Valve Assy, Load Sensing Proportioning	1	LSPV	15
47920-34040	Spring Assy, Load Sensing	1	LSPV	15
47926-35010	Spacer, Load Sensing Valve	1	LSPV	15
47931-34020	Bracket, Load Sensing Valve	1	LSPV	15
47937-60010	Plate, Load Sensing Valve Set	1	LSPV	15
90467-31110	Clip (For Load Sensing Valve Boot)	1	LSPV	15

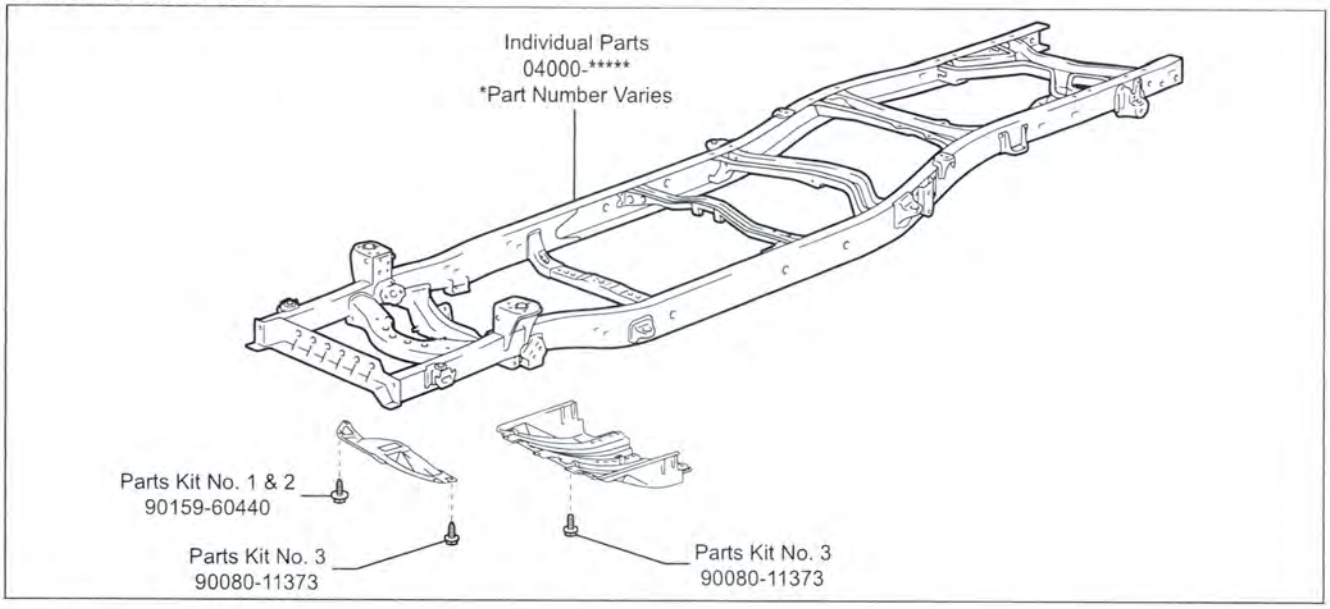
Part Number	Part Description	Quantity
04000-57934	Parts Kit No.9 – LSPV 4 (with VSC)	1

The kit listed above includes the following parts:

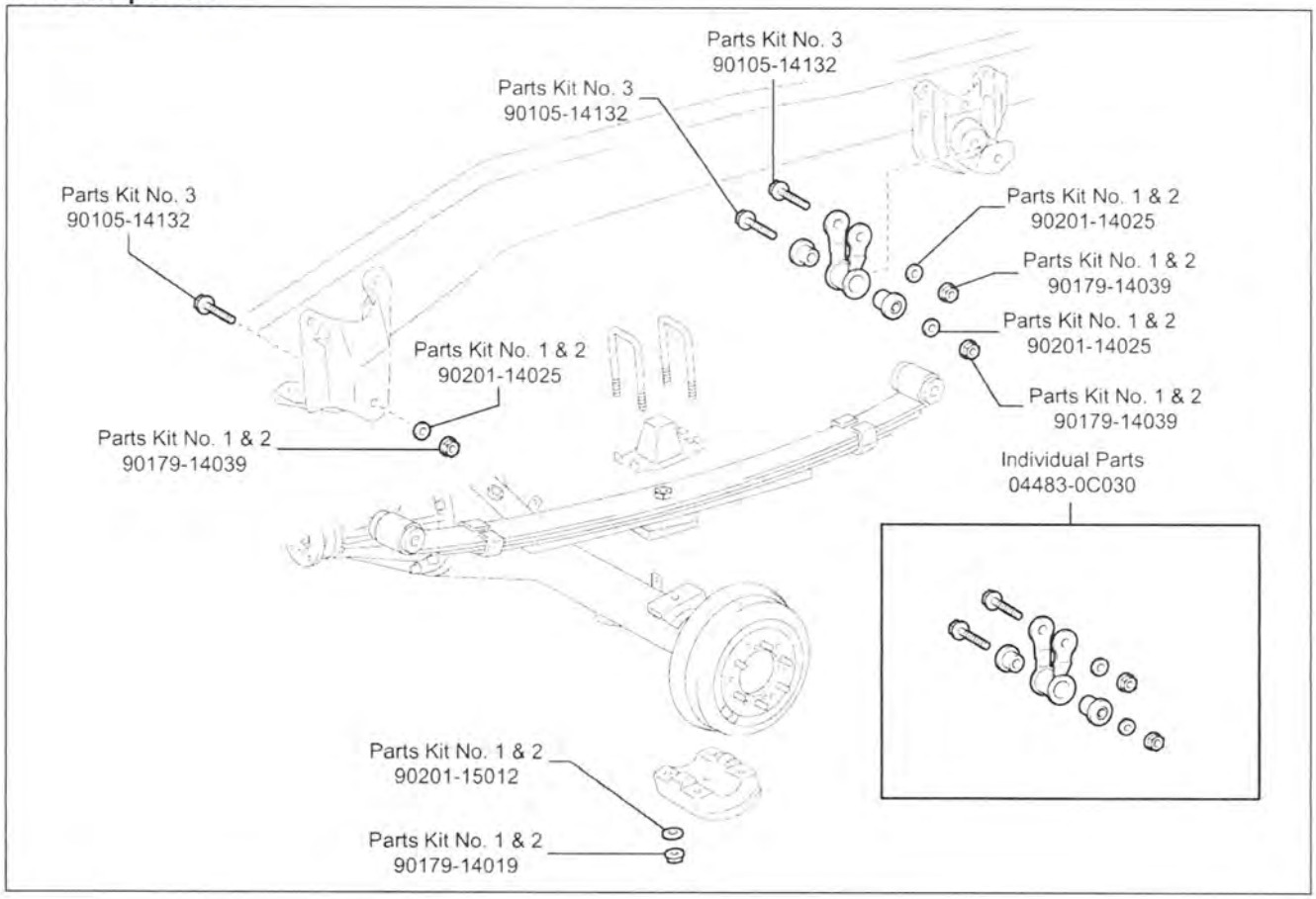
Part Number	Part Description	Qty	Illustration	Page
47150-34020	Valve Assy, Blend Proportioning	1	Brake Tubes	12
47191-34010	Bracket, Load Sensing Valve	1	Brake Tubes	12
90119-08A25	Bolt	2	Brake Tubes	12

D. PARTS ILLUSTARTION

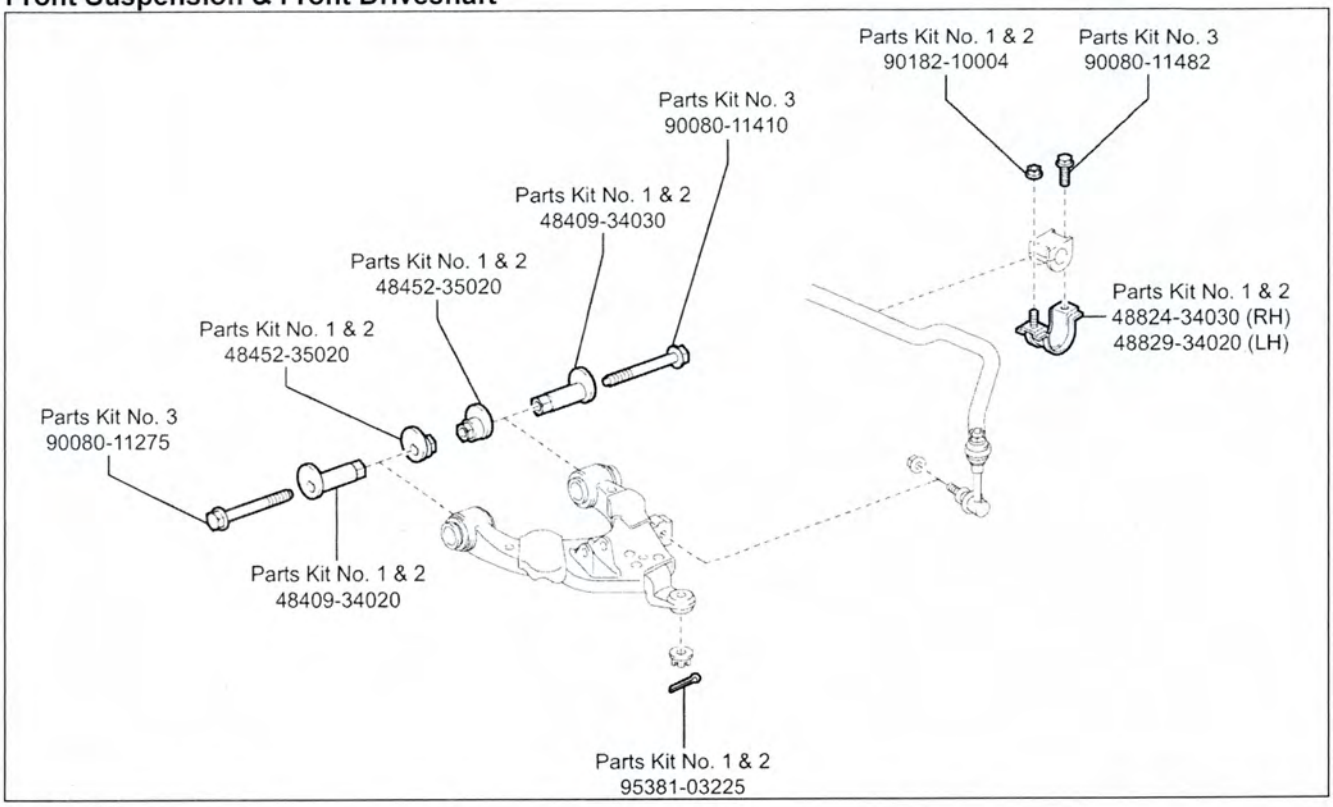
Frame & Misc Parts



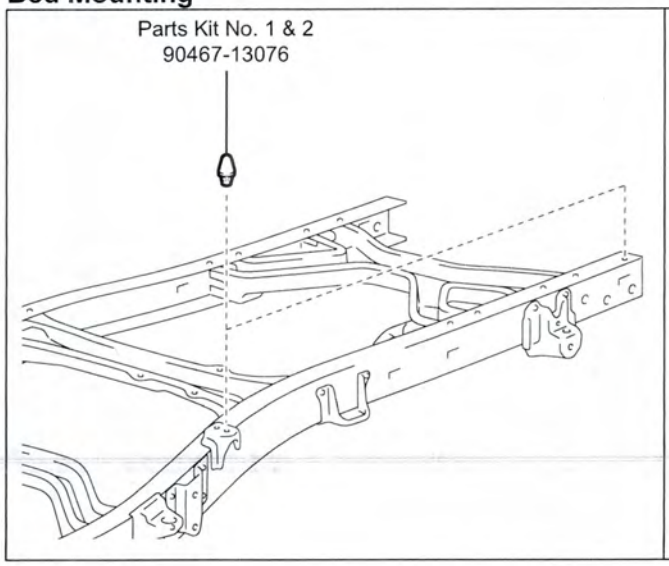
Rear Suspension



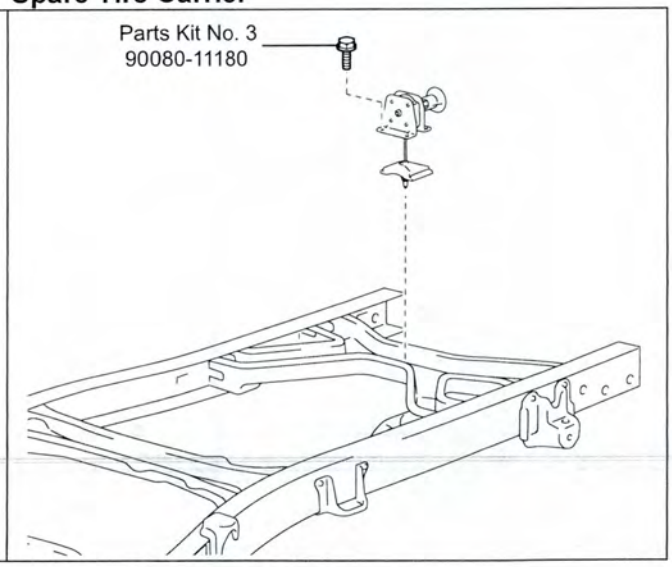
Front Suspension & Front Driveshaft



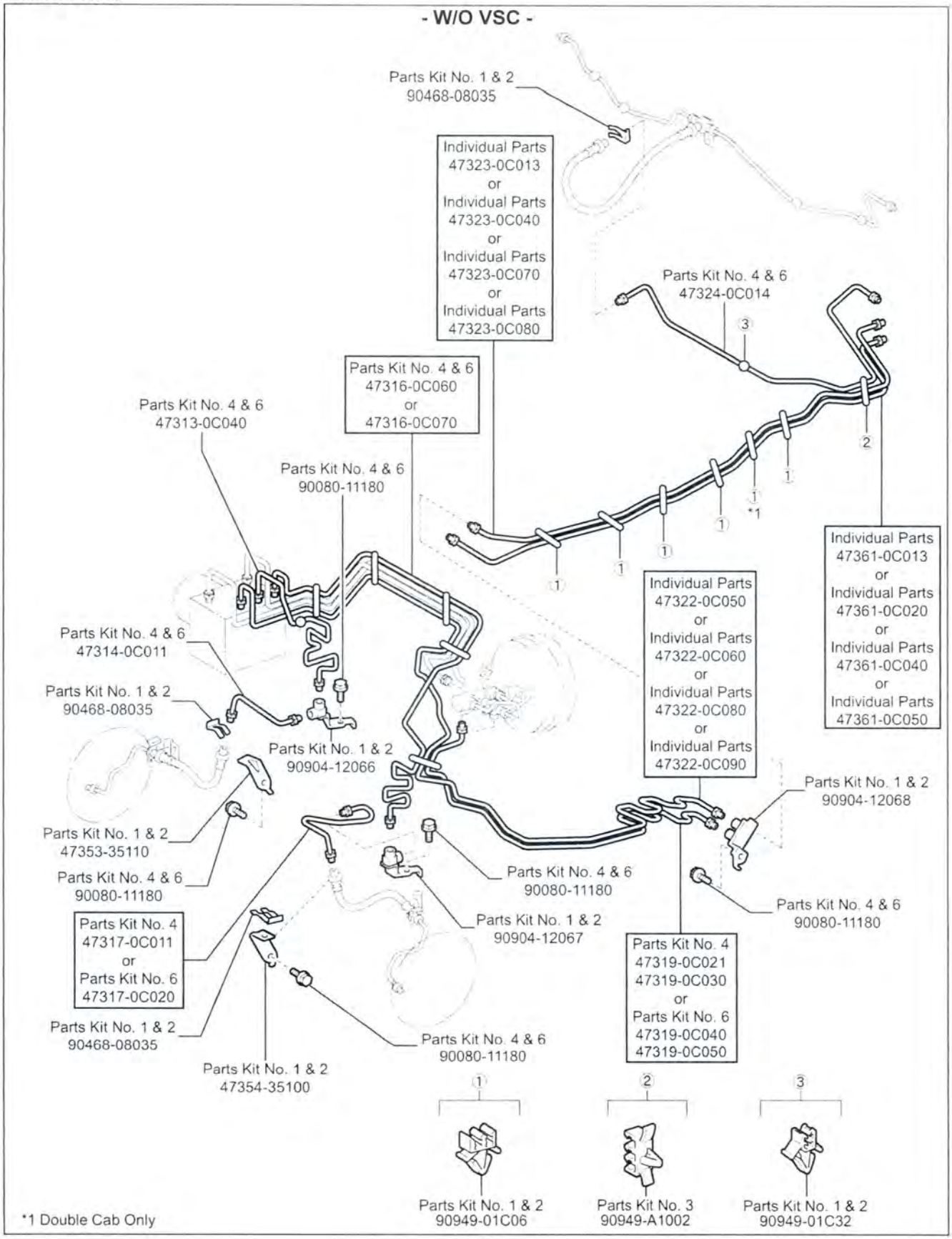
Bed Mounting



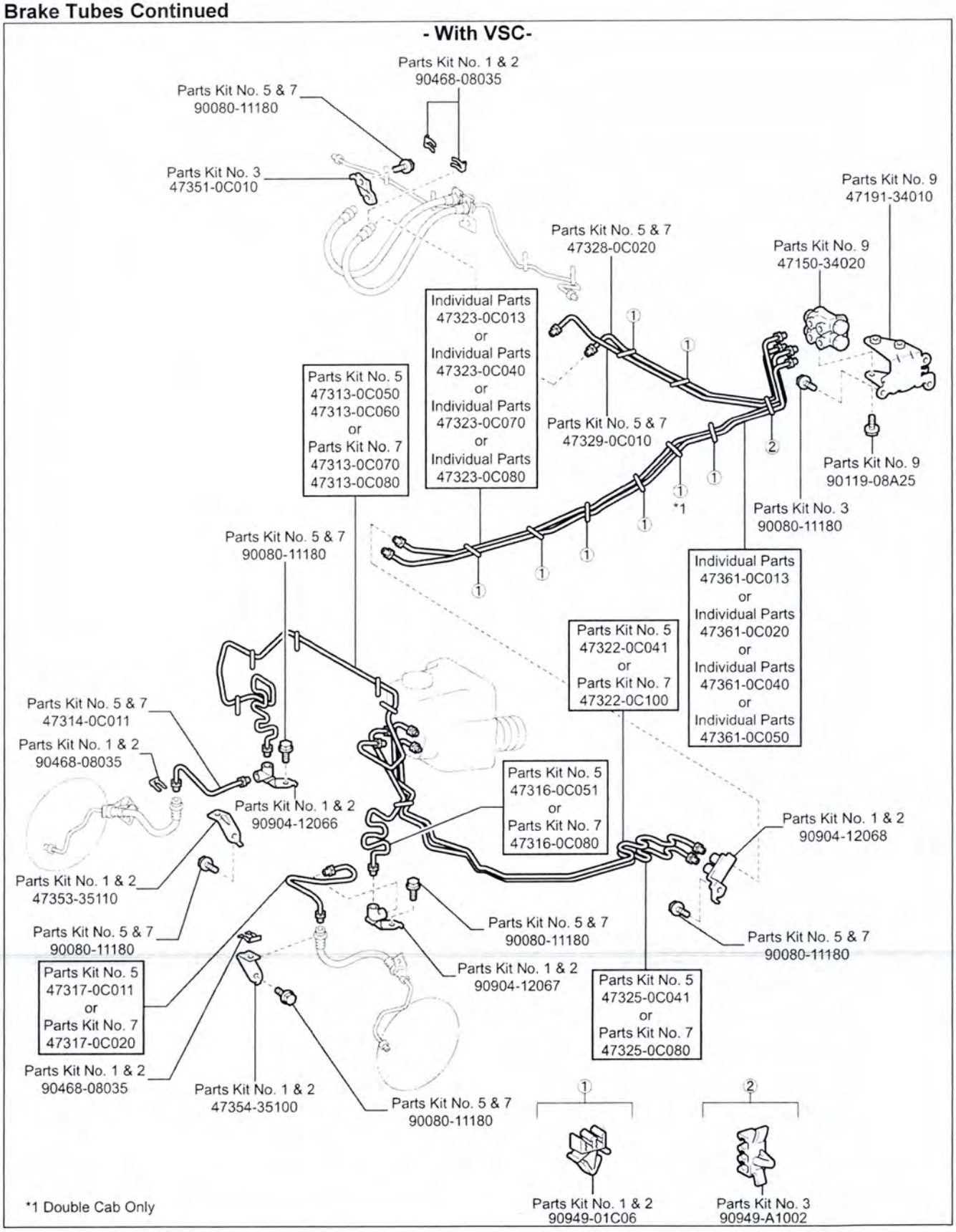
Spare Tire Carrier



Brake Tubes

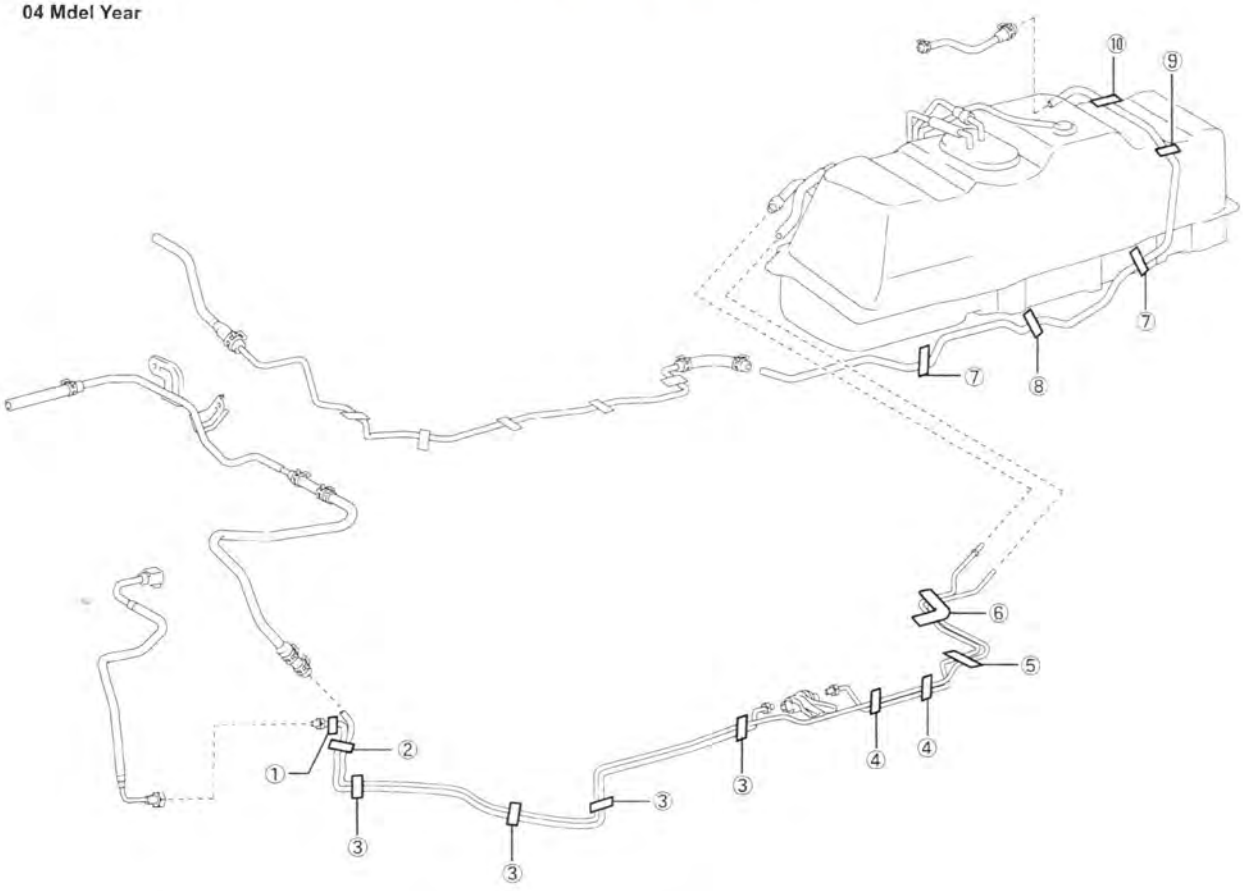

- W/O VSC -
Parts Kit No. 1 & 2
90468-08035
Individual Parts
47323-0C013
or
Individual Parts
47323-0C040
or
Individual Parts
47323-0C070
or
Individual Parts
47323-0C080
Parts Kit No. 4 & 6
47324-0C014
Parts Kit No. 4 & 6
47316-0C060
or
47316-0C070
Parts Kit No. 4 & 6
47313-0C040
Parts Kit No. 4 & 6
90080-11180
Individual Parts
47361-0C013
or
Individual Parts
47361-0C020
or
Individual Parts
47361-0C040
or
Individual Parts
47361-0C050
Individual Parts
47322-0C050
or
Individual Parts
47322-0C060
or
Individual Parts
47322-0C080
or
Individual Parts
47322-0C090
Parts Kit No. 4 & 6
47314-0C011
Parts Kit No. 1 & 2
90468-08035
Parts Kit No. 1 & 2
90904-12066
Parts Kit No. 1 & 2
90904-12068
Parts Kit No. 1 & 2
47353-35110
Parts Kit No. 4 & 6
90080-11180
Parts Kit No. 4 & 6
90080-11180
Parts Kit No. 1 & 2
90904-12067
Parts Kit No. 4 & 6
90080-11180
Parts Kit No. 4
47317-0C011
or
Parts Kit No. 6
47317-0C020
Parts Kit No. 4
47319-0C021
47319-0C030
or
Parts Kit No. 6
47319-0C040
47319-0C050
Parts Kit No. 1 & 2
90468-08035
Parts Kit No. 4 & 6
90080-11180
Parts Kit No. 1 & 2
47354-35100
*1 Double Cab Only
Parts Kit No. 1 & 2
90949-01C06
Parts Kit No. 3
90949-A1002
Parts Kit No. 1 & 2
90949-01C32

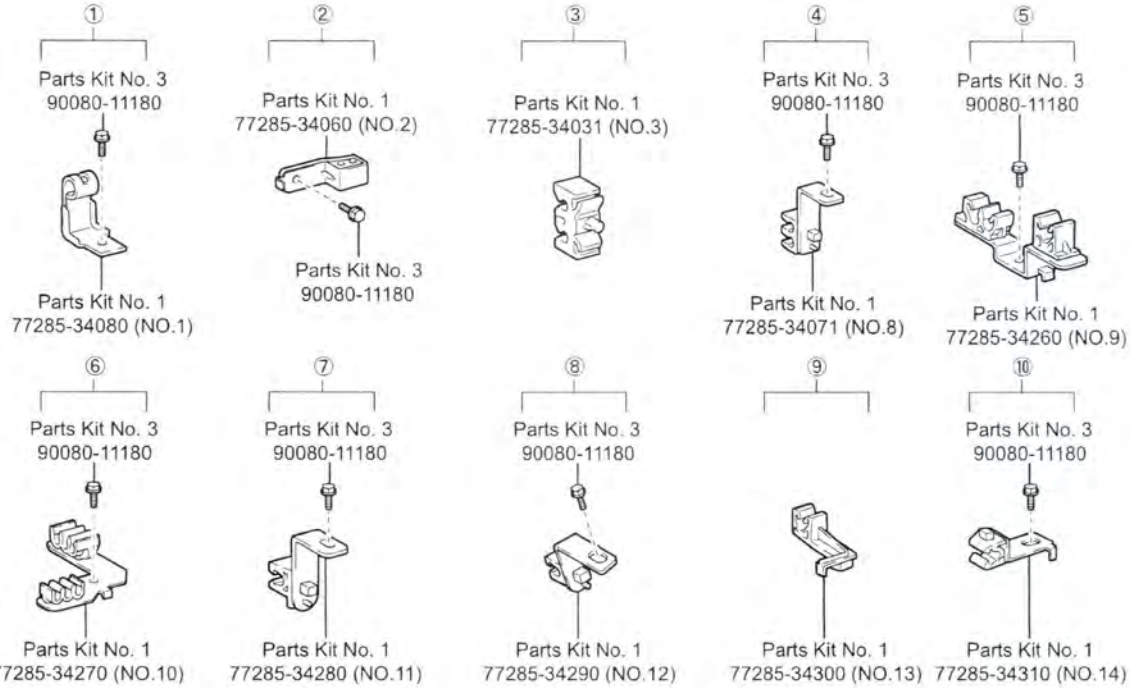
Brake Tubes Continued



Fuel Tubes

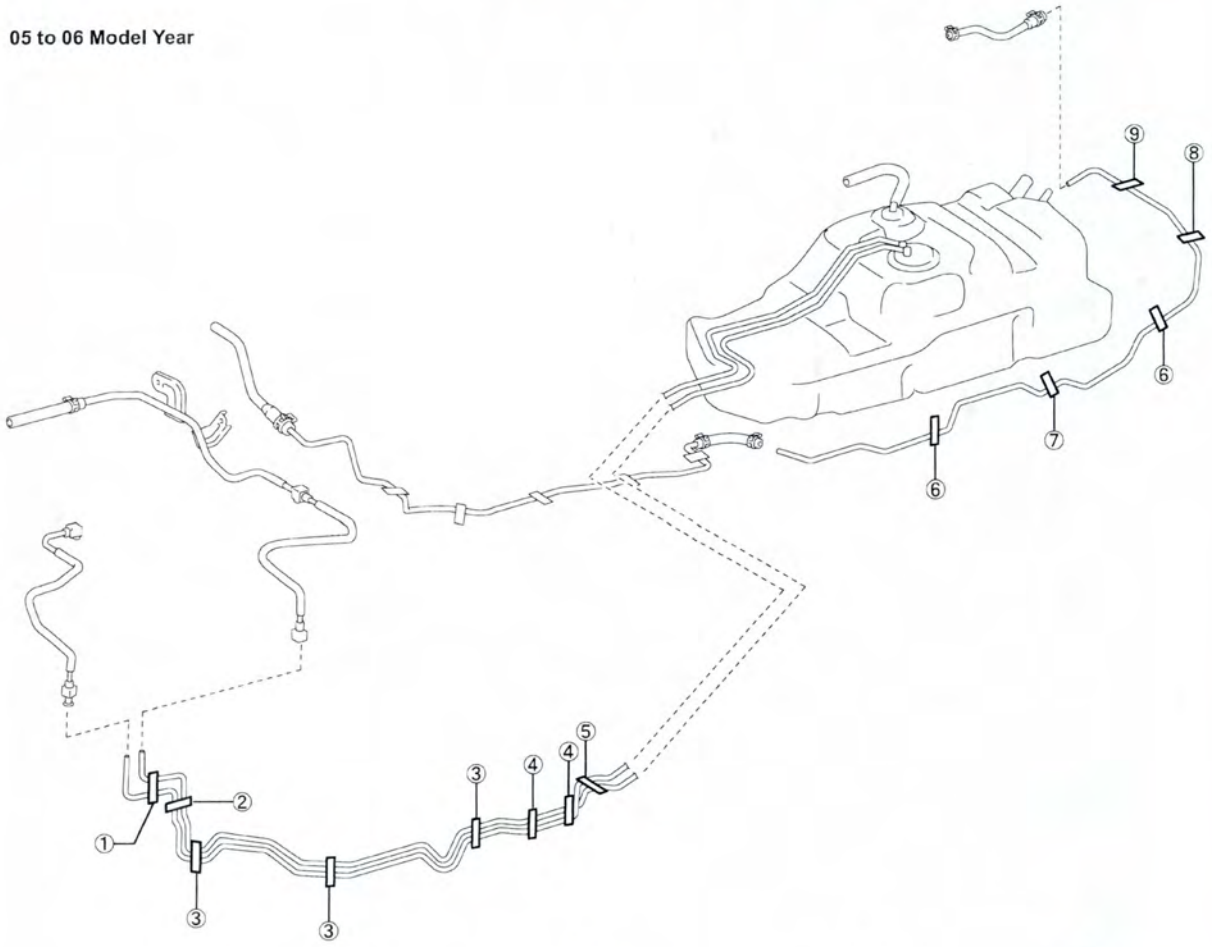
- 04 Model Year -





Fuel Tubes Continued...

- 05 to 06 Model Year -



① Parts Kit No. 3 90080-11180 — Parts Kit No. 3 77285-0C010 (NO.1)

② Parts Kit No. 3 77285-0C020 (NO.2) — Parts Kit No. 3 90080-11180

③ Parts Kit No. 2 77285-34031 (NO.3)

④ Parts Kit No. 3 90080-11180 — Parts Kit No. 2 77285-34071 (NO.8)

⑤ Parts Kit No. 3 90080-11180 — Parts Kit No. 2 77285-34260 (NO.9)

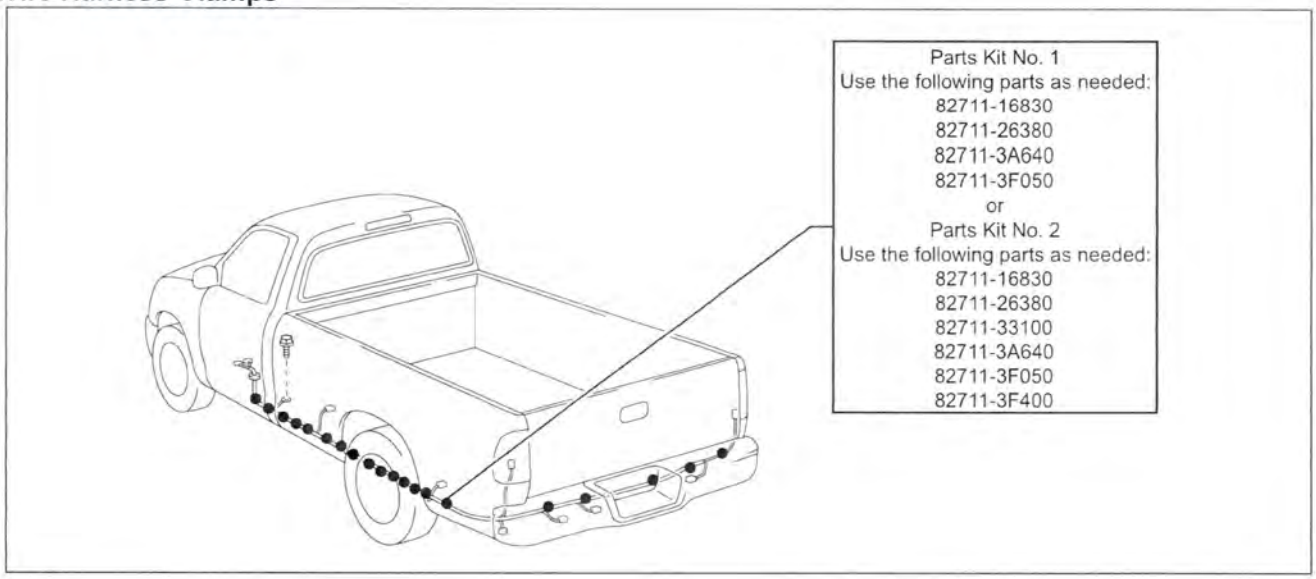
⑥ Parts Kit No. 3 90080-11180 — Parts Kit No. 2 77285-34280 (NO.11)

⑦ Parts Kit No. 3 90080-11180 — Parts Kit No. 2 77285-34290 (NO.12)

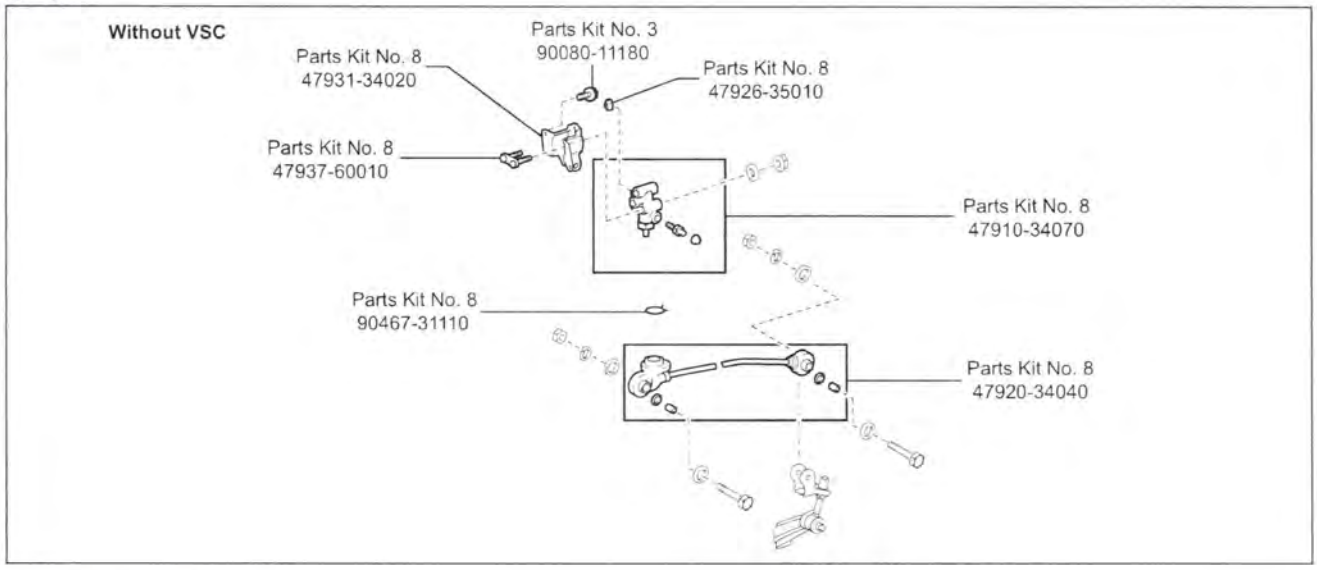
⑧ Parts Kit No. 2 77285-34300 (NO.13)

⑨ Parts Kit No. 3 90080-11180 — Parts Kit No. 2 77285-34310 (NO.14)

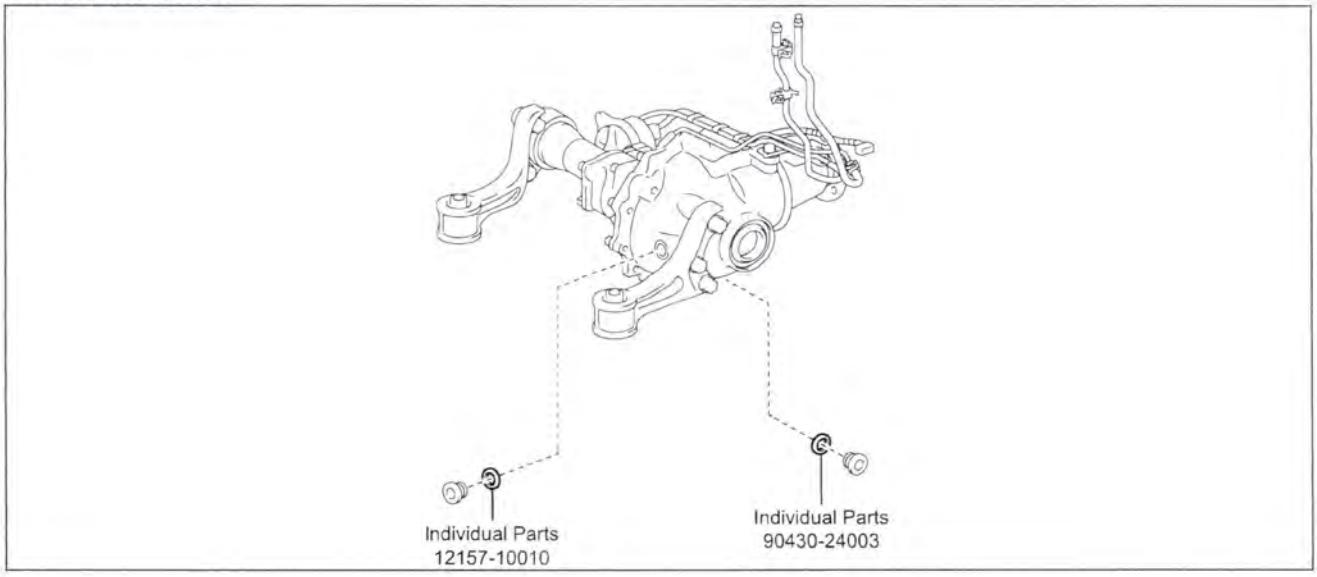
Wire Harness Clamps



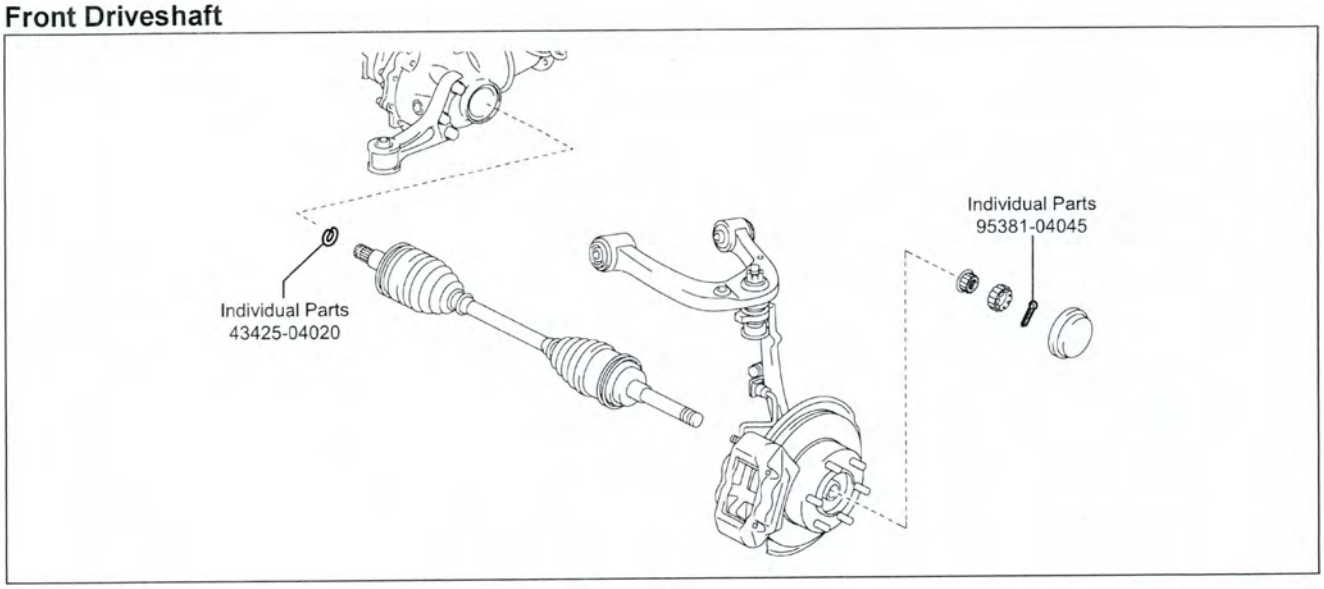
LSPV



Front Differential



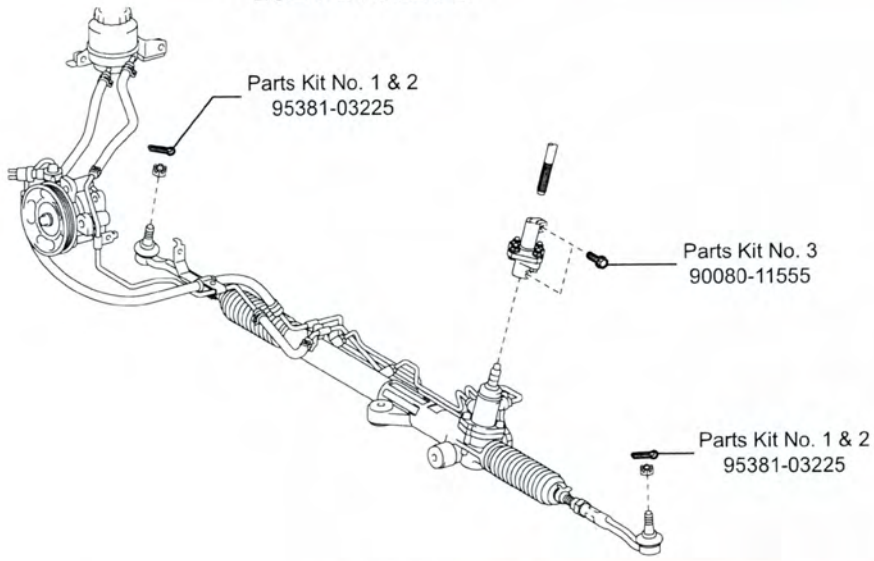
Front Driveshaft



Power Steering

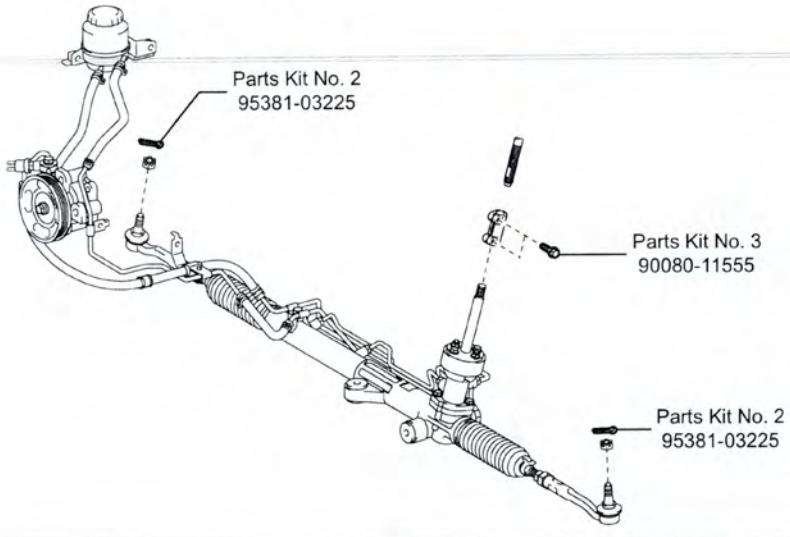
- 2UZ-FE / 5VZ-FE -

2UZ-FE
5VZ-FE



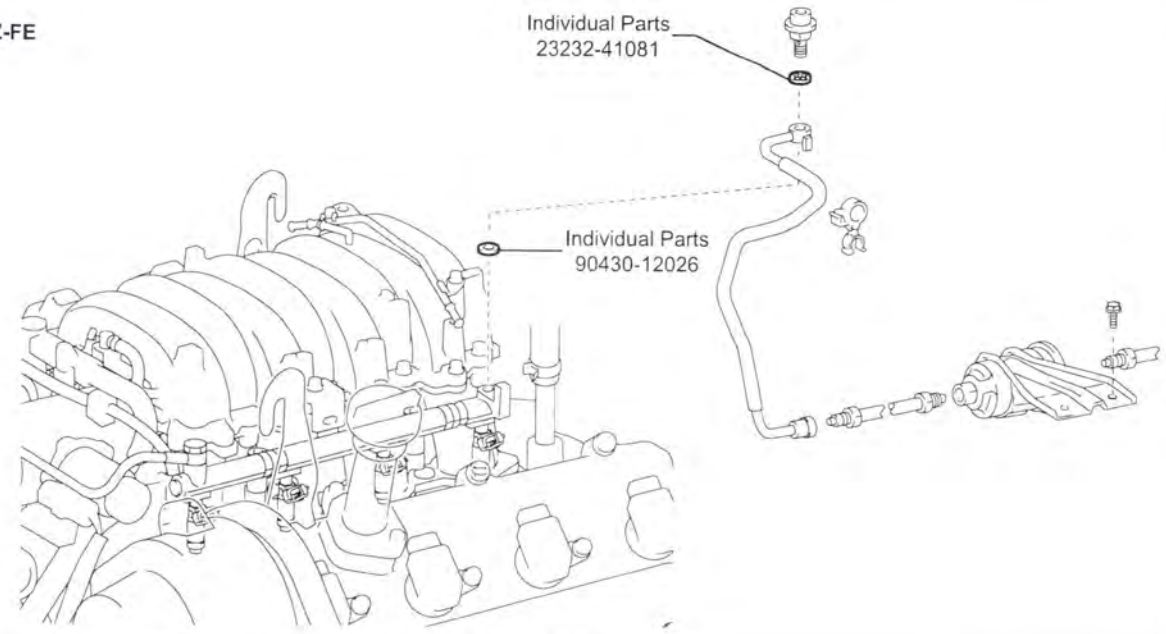
- 1GR-FE -

1GR-FE



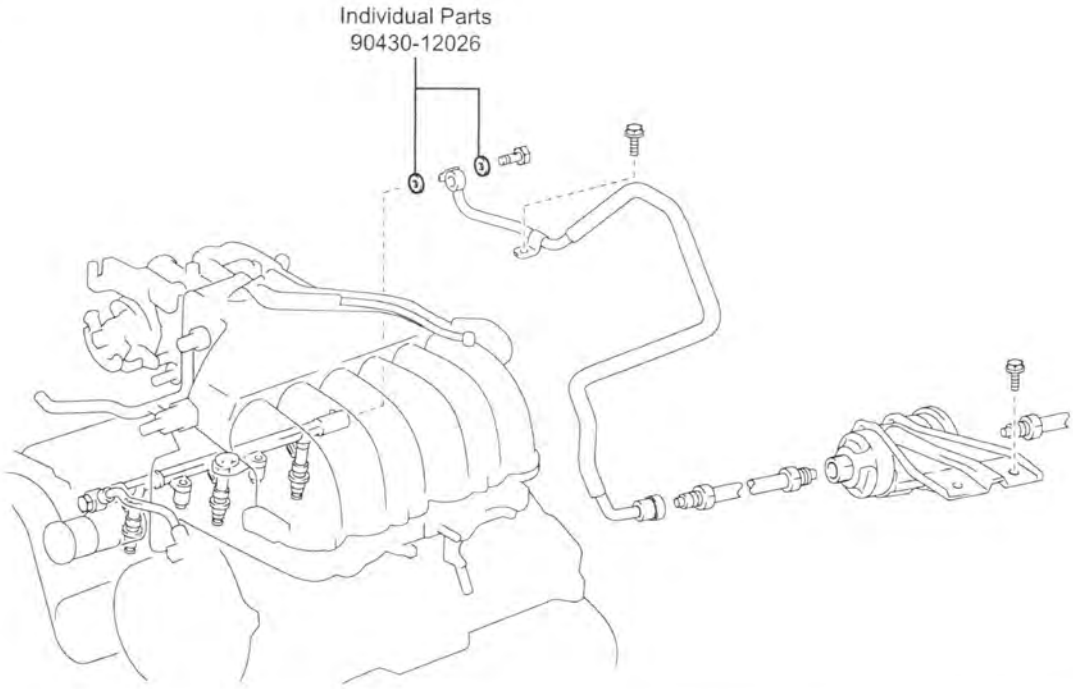
- 2UZ-FE -

2UZ-FE



- 5VZ-FE -

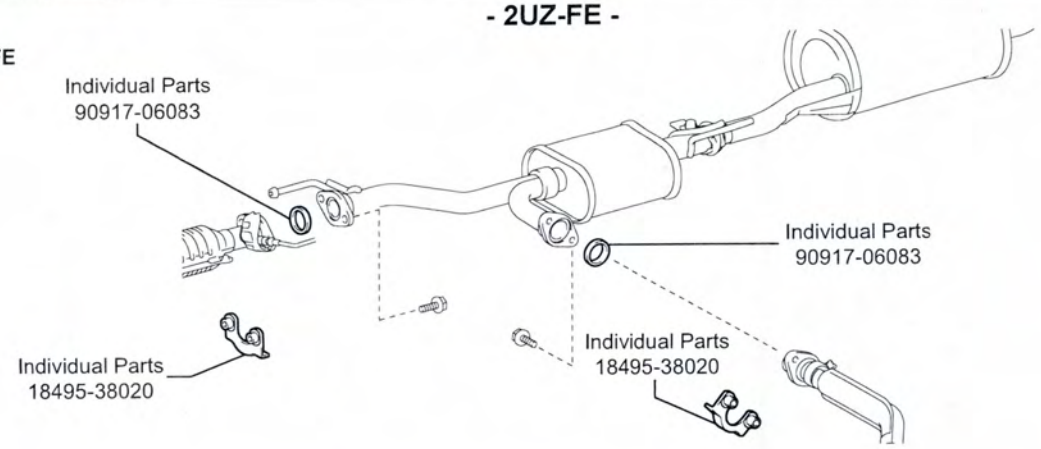
5VZ-FE



Exhaust System

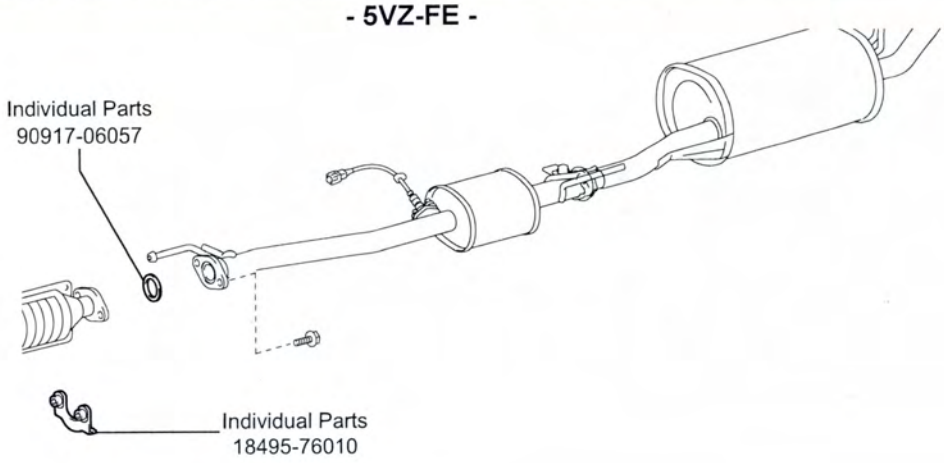
- 2UZ-FE -

2UZ-FE



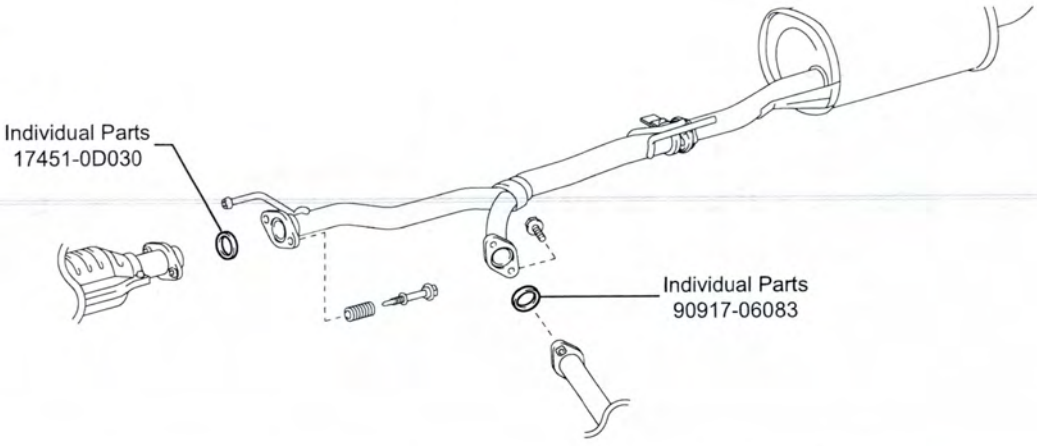
- 5VZ-FE -

5VZ-FE

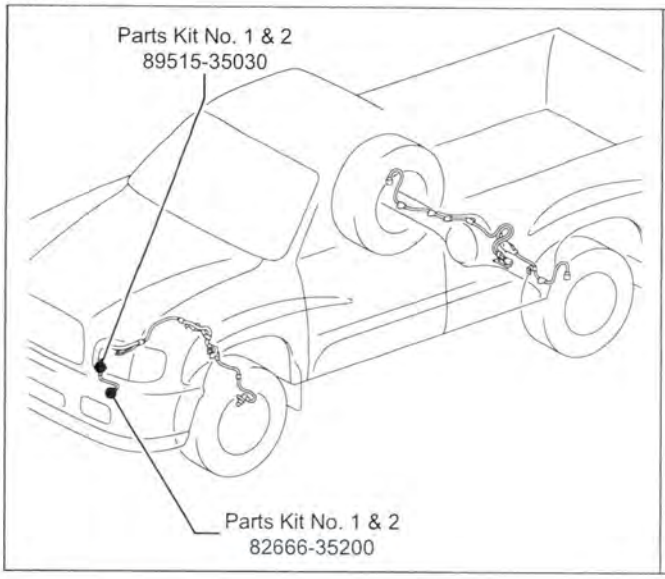


- 1GR-FE -

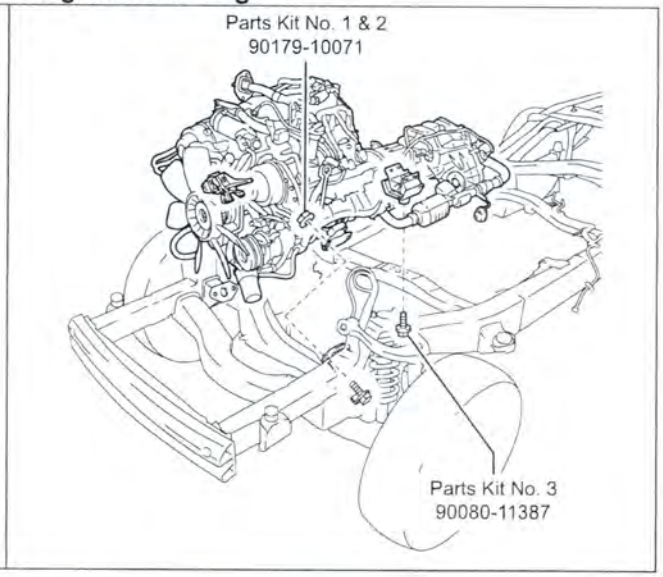
1GR-FE



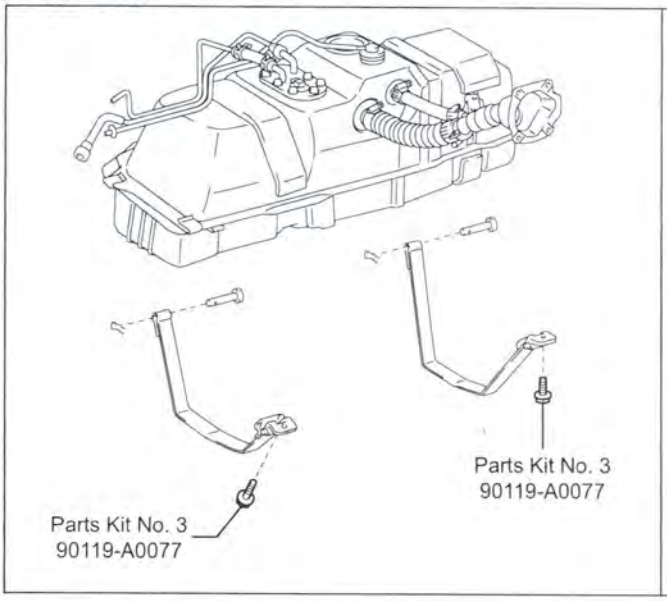
ABS



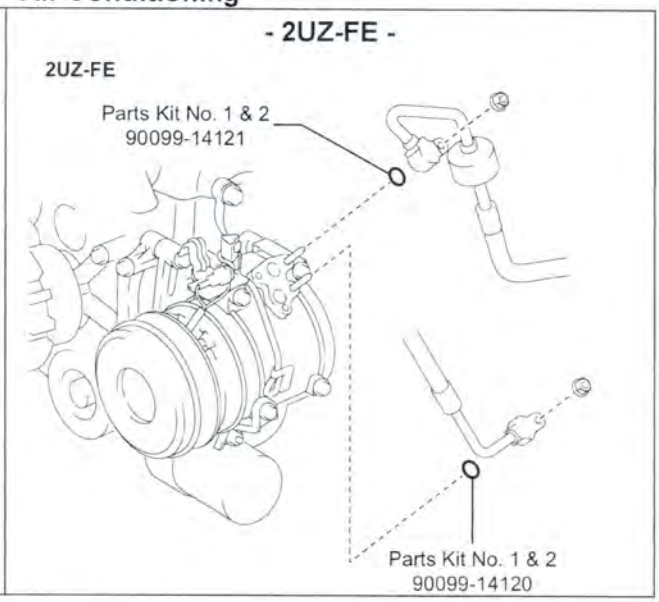
Engine Mounting



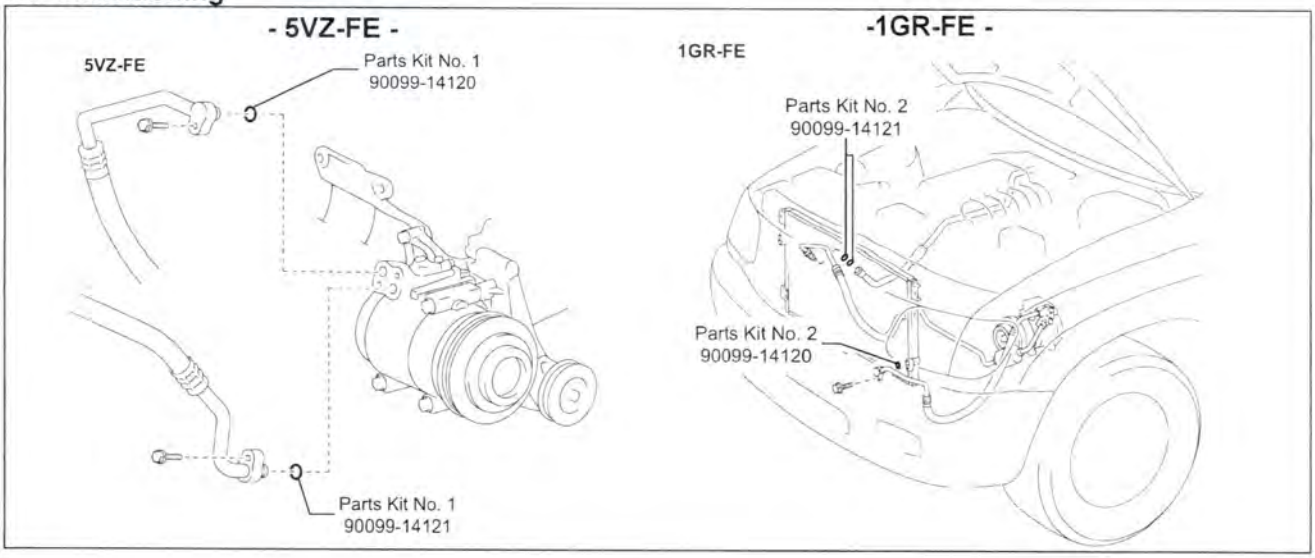
Fuel Tank



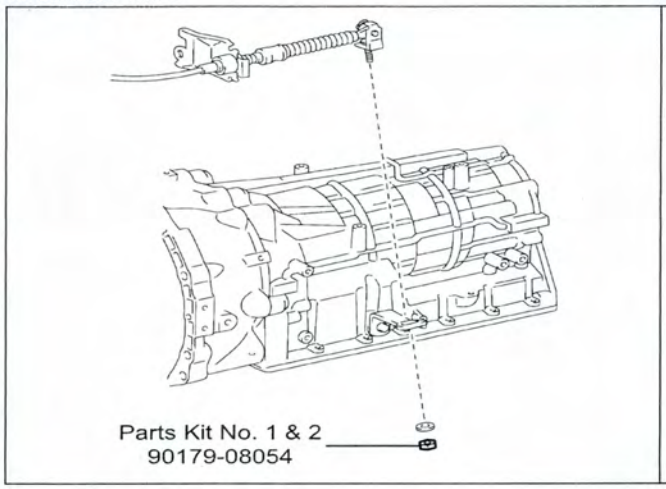
Air Conditioning



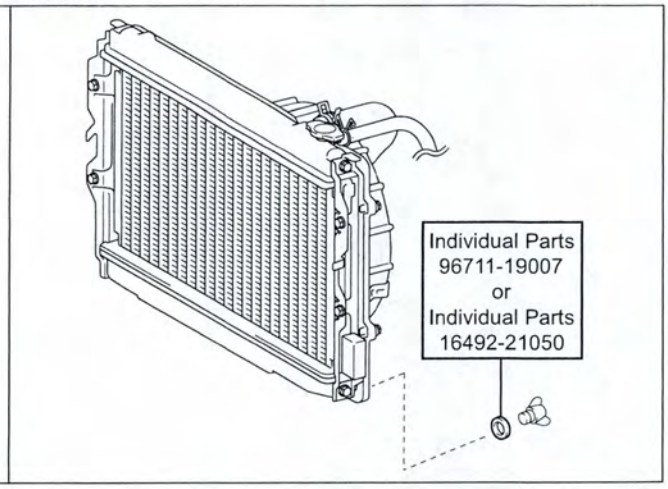
Air Conditioning



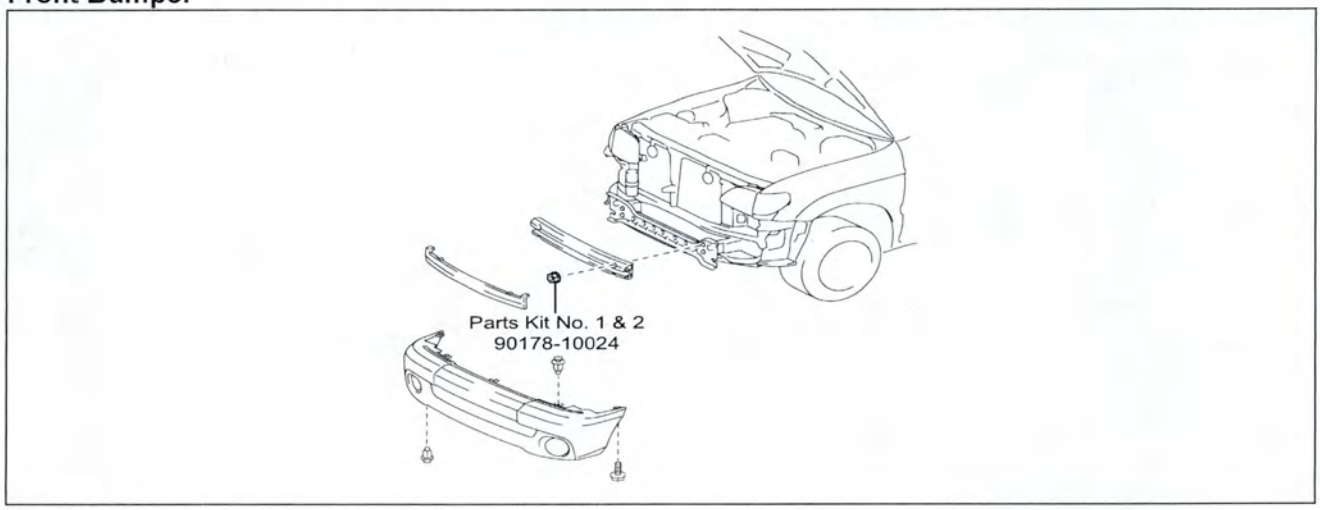
AT Shift Cable



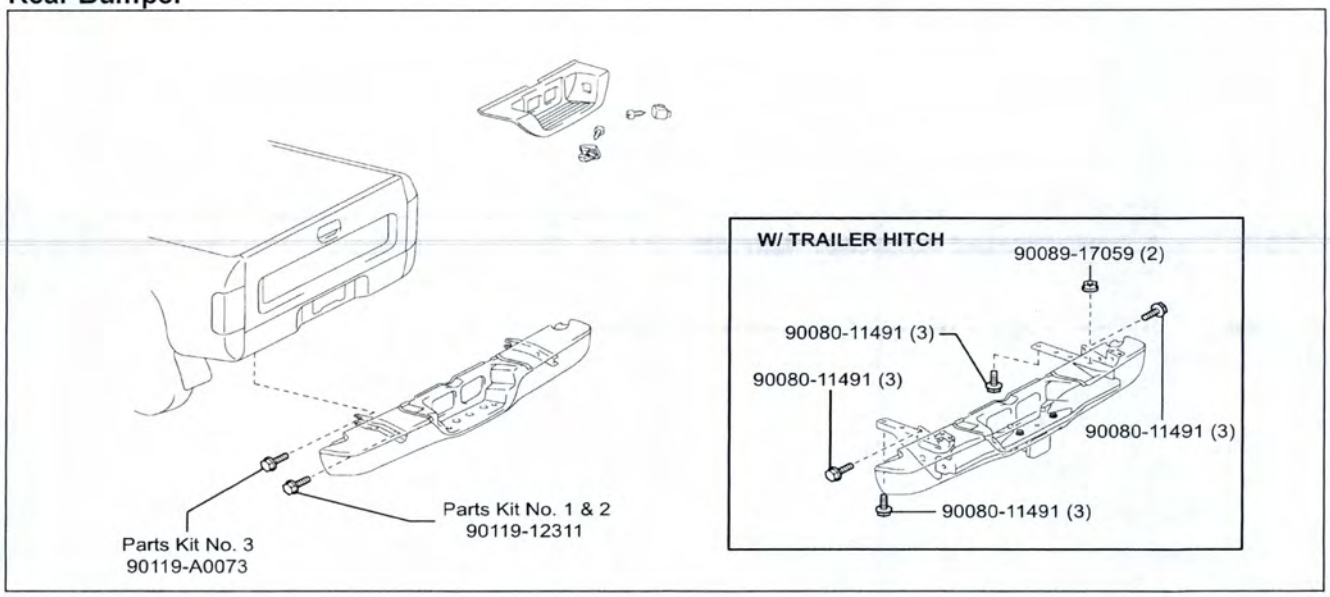
Radiator



Front Bumper



Rear Bumper



III. VEHICLE INSPECTION WORK PROCEDURE

A. PERFORM INITIAL PRE-HOIST INSPECTION

STOP

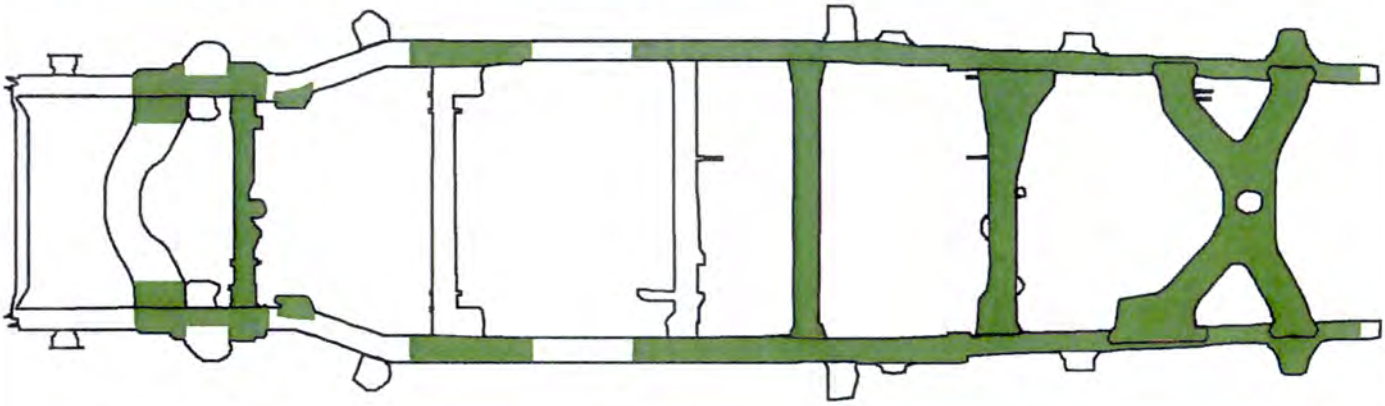
- If the frame is heavily corroded, ONLY raise the vehicle high enough to remove the tires.
- For added safety and support, place jack stands under the front and rear portions of the frame.
- ***DO NOT*** work directly underneath the vehicle when performing bed assy removal.

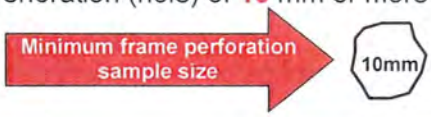
1. CENTER THE VEHICLE BETWEEN THE LIFT ARMS

a) Verify the vehicle is aligned with the center point of the lift and with the front wheels are pointed straight to prevent interference and damage to the frame and/or lift.

B. VISUALLY INSPECT THE FRAME

1. VISUALLY INSPECT THE SPECIFIC AREAS (HIGHLIGHTED IN GREEN) OF THE FRAME ASSEMBLY AS SHOWN FOR VISIBLE SIGNS OF PERFORATION.



Judgment Criteria	Result	Action
Perforation (hole) of **10** mm or more 	NG	• Replace the frame • Proceed to section **IV. VEHICLE CONDITION INSPECTION** below to begin the frame replacement process.
NO perforation or Perforation (hole) of less than **10** mm	OK	• Campaign Complete

NOTE: Use protective eyewear and gloves when performing the under vehicle inspection because rusted metal may flake off.

IV. VEHICLE CONDITION INSPECTION

A. VISUALLY INSPECT THE INTERIOR AND EXTERIOR OF THE VEHICLE AND NOTE ANY DAMAGES PRIOR TO BEGINNING WORK

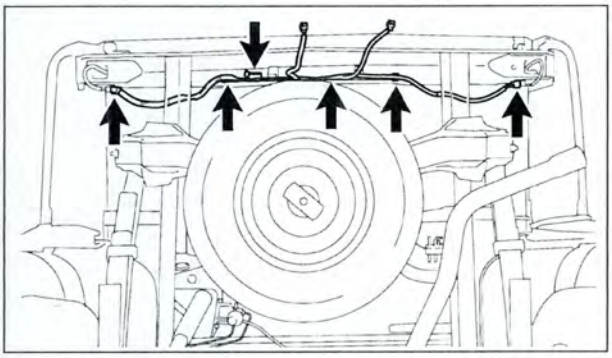
V. FRAME REPLACEMENT WORK PROCEDURE

- Due to the size and weight of the frame, only ***above-ground lifts*** are to be utilized when performing the frame replacement on 2004 – 2006 Tundra Vehicles. If a dealership is not equipped with above-ground lifts, the frame replacement may need to be sublet to a body shop or other dealership business.
- The actual vehicle specs, equipment and parts required may differ than what is shown. Please use the correct specifications and parts for the model you are working on.
- For additional repair information, please reference the appropriate repair manual in TIS for the vehicle you are working on.
- As you disassemble the vehicle you may encounter parts that are in need of replacement, which are not covered by this repair procedure. If this is the case, please take the time to inform the customer that these parts can be replaced with no or minimal labor cost.

A. REMOVE THE BED ASSY

1. REMOVE THE FOLLOWING PARTS

- License Plate Lights
- Center Rear Bumper Pad
- Rear Bumper Assy
- Trailer Hitch ***(If Equipped)***
- Rear Mudguards (***If Equipped***)
- Side Step Assy (***If Equipped***)
- Fuel Tank Filler Pipe Shield
- Spare Tire

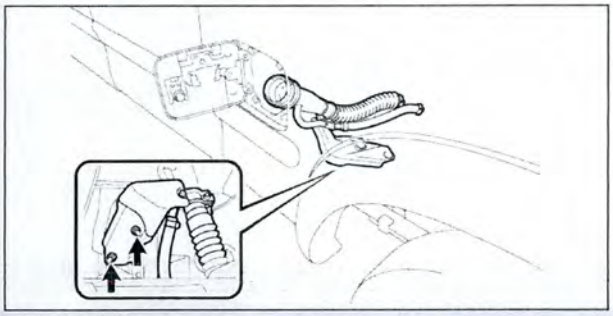


2. REMOVE THE WIRE HARNESS

a) Disconnect the connectors.
b) Disconnect the clamps and the wire harness from the bed assembly.

NOTE:

- **The number of connectors may differ depending on the vehicle specification.**
- **Be careful not to damage the wire harness clamps when removing them.**



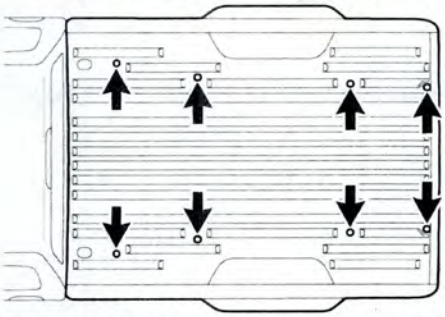
3. DISCONNECT THE FUEL INLET PIPE

a) Remove the 2 nuts and disconnect the fuel inlet pipe.

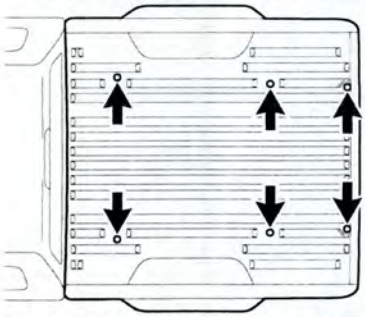
4. REMOVE THE BED ASSEMBLY

a) Using a Torx® T55H Socket, remove the Torx® bolts from the bed assembly.

- **Regular Cab: 8 Torx® bolts**



- **Access Cab / Double Cab: 6 Torx® bolts**



NOTE: Using 4 or more people, evenly support the bed to remove the bed assembly from the frame.

B. SAFETY CHECKLIST & PRECAUTIONS WHEN DRAINING THE FUEL SYSTEM

- Always remember ***"SAFETY FIRST"***.
- Be extremely careful when handling fuel to prevent fires from occurring.
- Before beginning work on the fuel system, perform the following safety check list.
- Before removing any fuel system part, drain all fuel to prevent spilling.

1. AIR VENTILATION

- ☐ Perform work in a well ventilated area.
- ☐ **DO NOT** work underground or in an area where fuel vapors may fill the room due to poor ventilation.
- ☐ Quickly clean up any spilled fuel with a dry cloth and dissipate the fuel vapors.
- ☐ Dry all cloths that have come in contact with fuel in a well ventilated area and dispose of them properly (according to applicable local regulations).

2. FIRES AND IGNITION SOURCES ARE STRICTLY PROHIBITED

- ☐ Fires and ignition sources are prohibited while working on the fuel system.
- ☐ Clearly display the sign found on the next page stating **"WORKING WITH GASOLINE, NO FIRES OR IGNITION SOURCES".**
- ☐ Smoking is prohibited near the work area.
- ☐ **DO NOT** work in areas where there are welders, grinders, drills, electric motors, heaters, etc.
- ☐ **DO NOT** use work lamps or any other electrical appliance due to the risk of sparks flying from the power switch or a rise in temperature.
- ☐ **DO NOT** use metal hammers while working, due to the risk of flying sparks.
- ☐ **DO NOT** start any engines or perform any of the above in neighboring work bays.

3. FIRE EXTINGUISHER

- ☐ Have a fire extinguisher ready and available before beginning work.

4. PREVENT STATIC ELECTRICITY

- ☐ To help prevent static electricity, lightly wet the floor with water, but not to the point where it creates a hazardous working condition.
- ☐ Place appropriate warning cones or stand signs around the area as a caution.

5. PRECAUTIONS WHEN USING A LIFT

- ☐ For bays equipped with auto lifts, cover all access cover joints with duct tape.
- ☐ In the event that fuel has leaked inside the auto lift, remove the access cover and clean up any spilled fuel. Dissipate fuel vapors until the smell is gone.

6. PREVENT THE FUEL FROM SPRAYING

- ☐ When disconnecting any fuel tubes, pipes, hoses or connectors there may still be some pressure remaining, even after discharging the system. To prevent the fuel from spraying, cover the tubes, pipes or connectors with a shop rag before disconnecting.
- ☐ Remember to always wear protective goggles especially when disconnecting fuel tubes, pipes, hoses or connectors.

7. PREVENT THE FUEL FROM CONTACTING OTHER PARTS

- ☐ Do not allow the fuel to come in contact with any parts made of rubber or leather.

8. ASSIGN A SAFETY SUPERVISOR

- ☐ Assign a safety supervisor to be in charge of all safety precautions and fire hazards around the work area.

■Copy And Display When Working

WORKING WITH GASOLINE

NO FIRES NO IGNITION SOURCES

Supervisor _____

■ Copiar y exhibir al trabajar

TRABAJANDO CON GASOLINA

NINGÚN INCENDIOS

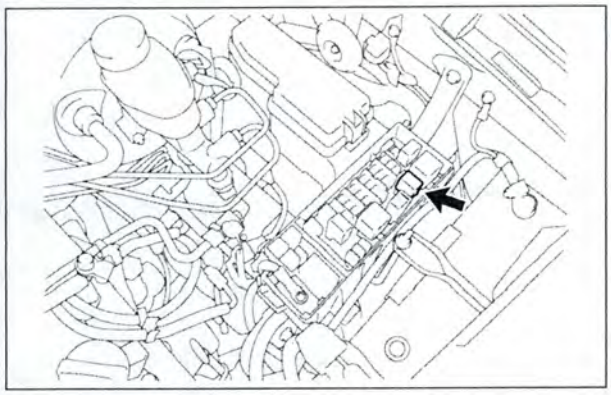
NINGUNA FUENTE DE IGNICIÓN

Supervisor _____

C. DEPRESSURIZE THE FUEL SYSTEM PRESSURE AND EVACUATE A/C REFIGERANT

- The actual vehicle specs, equipment and parts required may differ than what is shown. Please use the correct specs and parts for the model you are working on.
- For additional repair information, please reference to the appropriate repair manual.
- ***DO NOT*** disconnect any part of the fuel system until you have discharged the fuel pressure.
- Even after discharging the fuel pressure, place a piece of cloth around the lines, pipe, hoses, and connectors as you separate them to reduce the risk of fuel spraying on yourself, in the engine compartment, and onto other parts.

1. CHECK FOR DTCs TO DETERMINE VEHICLE ORIGINAL OPERATING CONDITION



2. REMOVE THE FUEL PUMP RELAY

a) Remove the junction block cover.
b) Remove the fuel pump relay.

3. DISCHARGE THE FUEL SYSTEM PRESSURE

a) Start the engine.
b) After the engine has stopped, turn the ignition switch OFF.
c) Crank the engine again to check that it does not start.

NOTE: Make sure to follow the procedure listed above; this prevents a large amount of gasoline from leaking out of the high pressure fuel line when it is disconnected.

4. EVACUATE THE A/C REFRIGERANT

D. PREPARATION FOR REMOVAL OF THE BODY ASSY

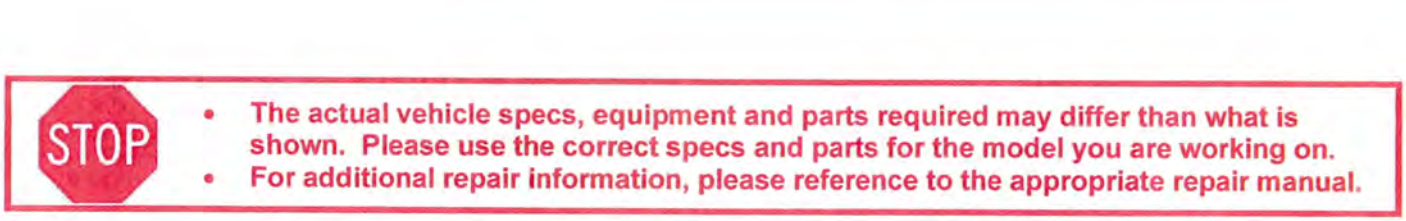
1. RECORD THE RADIO STATION PRESETS
2. DISCONNECT THE NEGATIVE (-) BATTERY TERMINAL CABLE

Note: if the vehicle is equipped with power seats, you will need to access the front seat bolts prior to disconnecting the battery in order to lift the seat to access the chassis wire.

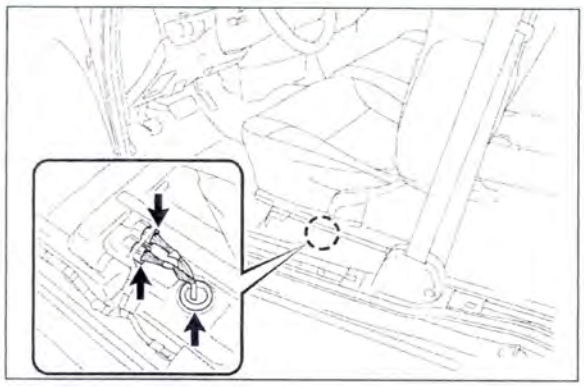
- **Wait at least 90 seconds after disconnecting the negative (-) battery terminal from the battery to prevent the SRS System from deploying (i.e. airbag, seat belt pretensioner, etc.).**

3. REMOVE THE FOLLOWING INTERIOR PARTS TO PREPARE THE CAB FOR REMOVAL AND ACCESS WIREHARNESS CONNECTORS/CAB MOUNTING BOLTS

- Front Door Scuff Plate LH/RH (**RH side for 5VZ-FE Only**)
- Left Rear Door Scuff Plate (**Access/Double Cab Only**)
- Right Rear Door Scuff Plate (**5VZ-FE Access Cab Only**)
- Cowl Side Trim Board LH/RH
- Manual Trans Shift Lever (***Manual Trans Only***)
- Front Seat Bolts LH/RH (**RH side for 5VZ-FE Only**)
- Glove Compartment Door
- Lower No.2 Instrument Finish Panel
- No.4 Heater To Register Duct
- Transfer Case Shift Lever (***5VZ-FE 4WD)***

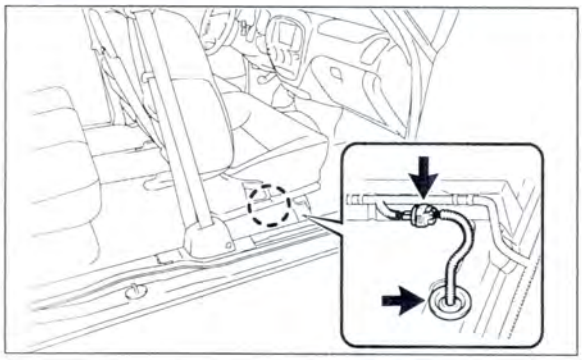


- **The actual vehicle specs, equipment and parts required may differ than what is shown. Please use the correct specs and parts for the model you are working on.**
- **For additional repair information, please reference to the appropriate repair manual.**



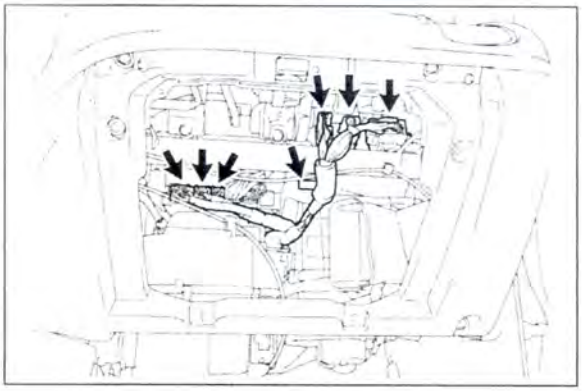
4. DISCONNECT THE FRAME WIRE CONNECTORS

a) Fold back the floor carpet and disconnect the oxygen sensor wire harness connector.
b) Disconnect the oxygen sensor wire harness grommet.
c) Pull out the frame wire harness from the vehicle cab.



5. DISCONNECT THE OXYGEN SENSOR WIRE HARNESS CONNTECTOR (5VZ-FE ONLY)

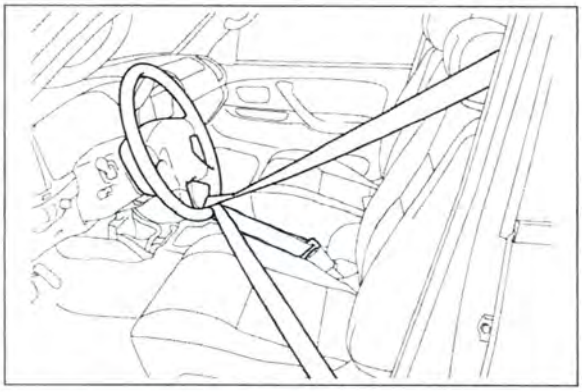
a) Fold back the floor carpet and disconnect the connector(s).
b) Disconnect the frame wire harness grommet.
c) Pull out the oxygen sensor wire harness from the vehicle cab.



6. DISCONNECT THE ENGINE WIRE HARNESS

a) Disconnect the connectors and clamp.

NOTE: The number of connectors will differ depending on the vehicle specs.



7. SECURE THE STEERING WHEEL

a) Make sure the front wheels are in a straight-ahead position and the steering wheel is centered.
b) Using the seat belt, hold the steering wheel in position as shown in the illustration, in order to prevent damage to the spiral cable.

8. DISCONNECT THE A/C DISCHARGE HOSE AND SUCTION HOSE

- **Place jack stands under the front and rear portions of the frame to support the frame.**
- **DO NOT work directly underneath vehicle when preparing the vehicle for cab body assy removal, unless noted.**
- **The actual vehicle specs, equipment and parts required may differ than what is shown. Please use the correct specs and parts for the model you are working on.**
- **For additional repair information, please reference to the appropriate repair manual for the vehicle you are working on.**

9. LIFT VEHICLE
10. REMOVE THE FOLLOWING PARTS UNDER VEHICLE COMPONENTS

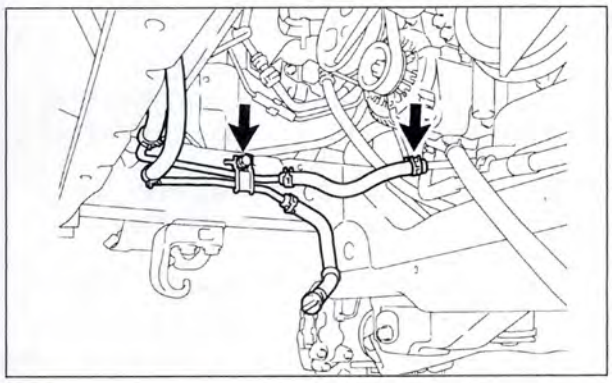
- No.1 Engine Under Cover

NOTE: Use precaution when performing this step, as you will need to work underneath the vehicle.

11. DRAIN THE FOLLOWING FLUIDS

- Engine Coolant (**including the engine block**)
- Clutch Fluid (***Manual Transmission Only***)
- Brake Fluid
- Front Differential Oil (***4WD Only***)

Note: DO NOT remove the radiator cap while the radiator and engine are hot, as doing so may cause the coolant to spray out causing potential injuries.



12. REMOVE THE OIL COOLER PIPE (2UZ-FE/1GR-FE ONLY)

a) Disconnect the hose.
b) Remove the bolt and oil cooler pipe.

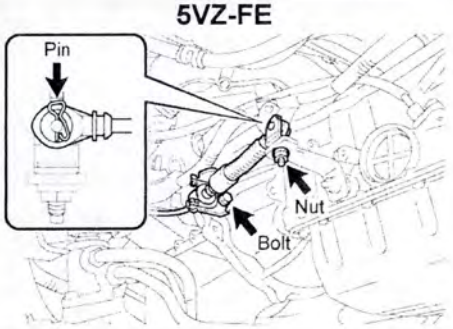
13. DISCONNECT THE TRANSMISSION SHIFT CABLE

a) Remove Heat Shield (***2UZ-FE***)
b) Remove the pin and washer.
c) Remove the bolt(s) and disconnect the shift cable.

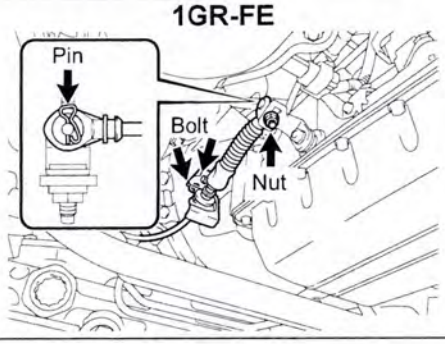
NOTE:

- **If the pin is difficult to remove, remove the nut and then the cable.**
- **Use precaution when performing this step, as you will need to work underneath the vehicle.**

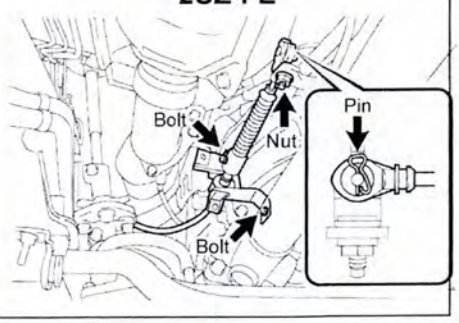
5VZ-FE

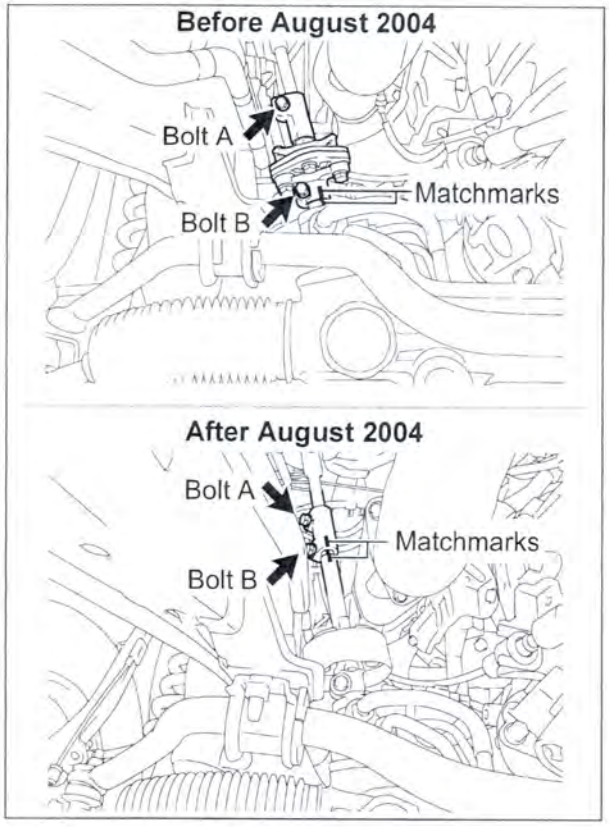


1GR-FE



2UZ-FE



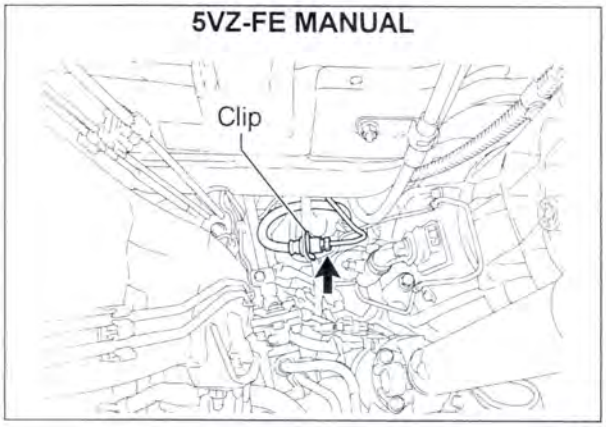


14. REMOVE THE NO. 2 STEERING INTERMEDIATE SHAFT

NOTE: Use precaution when performing this step, as you will need to work underneath the vehicle.

a) Place match marks on the No.2 intermediate shaft and control valve shaft.
b) Loosen bolt "A" and remove bolt "B".
c) Slide the No.2 steering intermediate shaft and remove it.

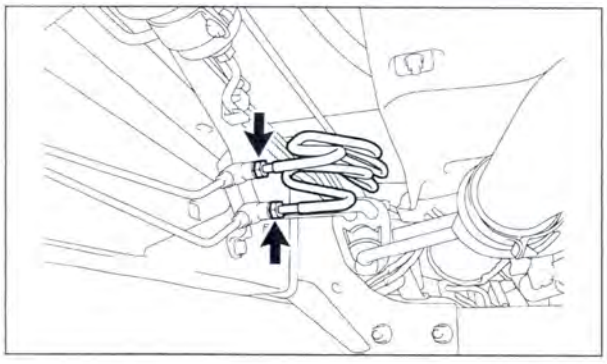
NOTE: If the No. 2 intermediate shaft assy. is stuck, tap it from below with a brass hammer to disconnect it.



15. DISCONNECT THE CLUTCH MASTER CYLINDER TUBE (5VZ- FE MANUAL TRANSMISSION VEHICLES ONLY)

NOTE: Use precaution when performing this step, as you will need to work underneath the vehicle.

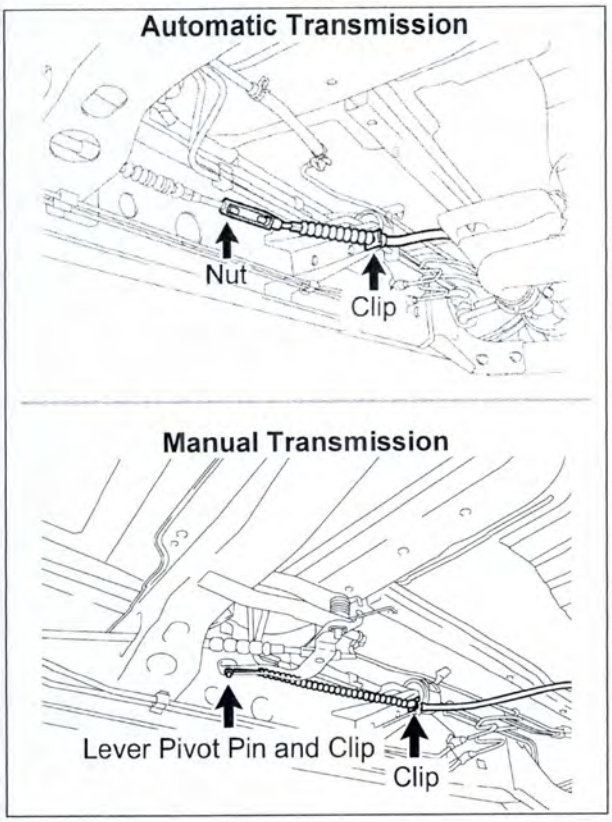
a) Disconnect the clutch master cylinder tube.
b) Remove the clip and disconnect the clutch hose.



16. DISCONNECT THE REAR BRAKE TUBES

a) Using a flare nut wrench, disconnect the 2 rear brake tubes.

NOTE: Use precaution when performing this step, as you will need to work underneath the vehicle.



17. DISCONNECT THE NO. 1 PARKING BRAKE CABLE

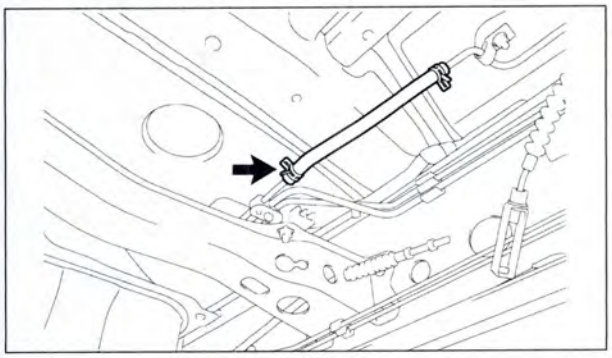
For Automatic Transmission Vehicles:

a) Loosen the nut and separate the No.1 parking brake cable.
b) Remove the clip and the No.1 parking brake cable.

For Manual Transmission Vehicles:

a) Remove the clip and lever pivot pin.
b) Remove the clip and the No.1 parking brake cable.

NOTE: Use precaution when performing this step, as you will need to work underneath the vehicle.



18. DISCONNECT THE NO.1 FUEL HOSE

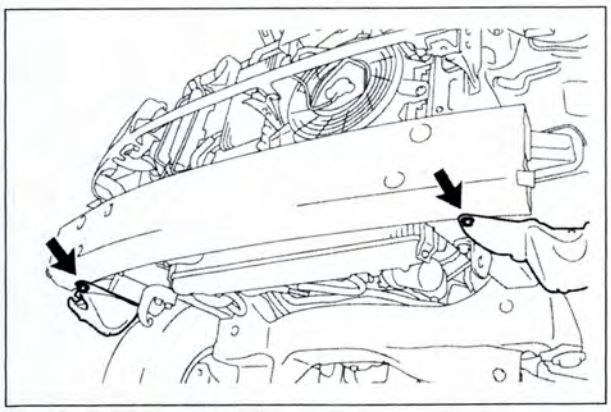
a) Remove the clip and disconnect the No.1 fuel hose.

NOTE: Use precaution when performing this step, as you will need to work underneath the vehicle.

19. LOWER THE VEHICLE PART WAY DOWN

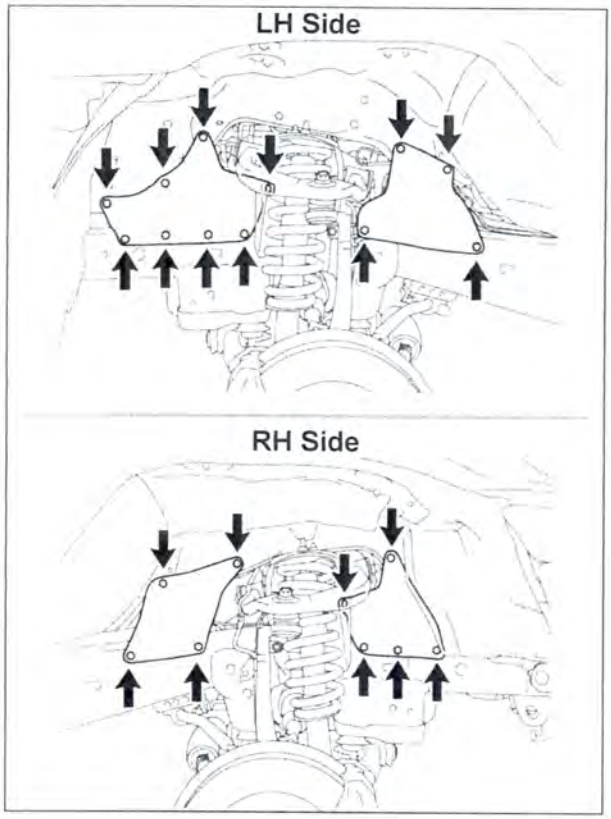
20. REMOVE THE FOLLOWING COMPONENTS

- Front Wheels
- Front Fender Mudguard LH/RH (***If Equipped***)
- Front Bumper Assy
- Front Bumper Energy Absorber



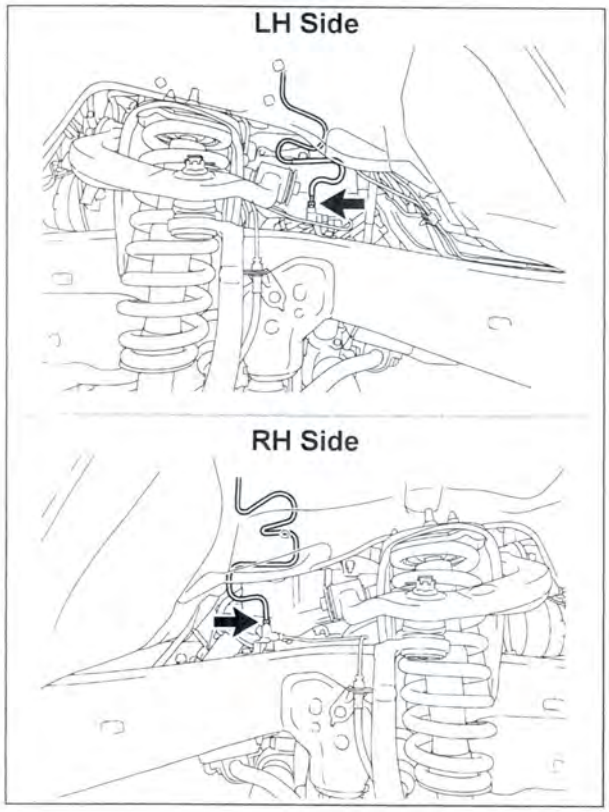
21. DISCONNECT THE FRONT FENDER LINERS

a) Remove the 2 screws and disconnect the front fender liners from the front bumper reinforcement.



22. REMOVE THE FRONT FENDER APRON SEALS

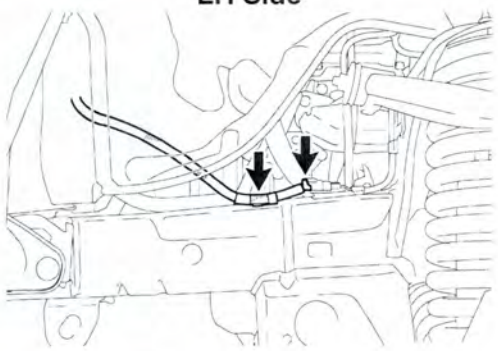
a) Remove the 21 clips and 4 front fender apron seals.



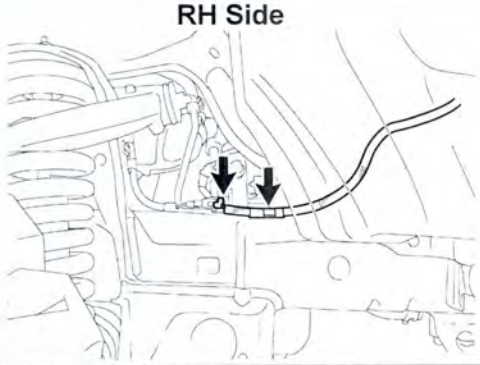
23. DISCONNECT THE FRONT BRAKE TUBES

a) Disconnect the front brake tube.
b) Repeat the procedure on the opposite side.

LH Side



RH Side



24. DISCONNECT THE FRONT SPEED SENSOR CONNECTORS

a) Disconnect the clamp and front speed sensor connector.
b) Repeat the procedure on the opposite side.

25. REINSTALL FRONT WHEELS

26. LOWER THE VEHICLE TO THE GROUND

27. REMOVE/DISCONNECT THE FOLLOWING PARTS FROM ENGINE COMPARTMENT AREA

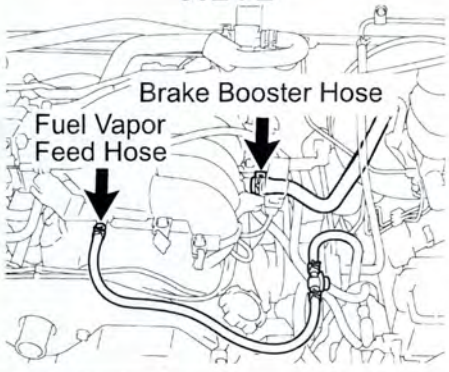
- Throttle Body Cover
- V-Bank Cover (***1GR-FE Only***)
- Air Cleaner Assy & Hose
- Disconnect Accelerator Control Cable(***5VZ-FE Only***)
- Coolant/Heater Hoses (engine side)
- Fan Shroud
- External Trans Cooler (***If Equipped***)
- Radiator Assy
- A/C Compressor Discharge & Suction Hoses

NOTE: After disconnecting the automatic transmission oil cooler hoses and A/C lines, plug them and cap the fittings to prevent oil from spilling out and debris from entering the system.

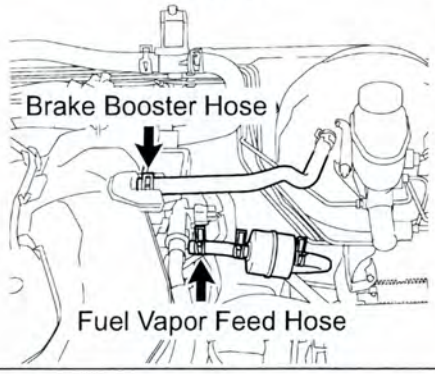
28. DISCONNECT THE FOLLOWING ENGINE COMPARTMENT HOSES

a) Disconnect the brake booster hose.
b) Disconnect the fuel vapor feed hose.

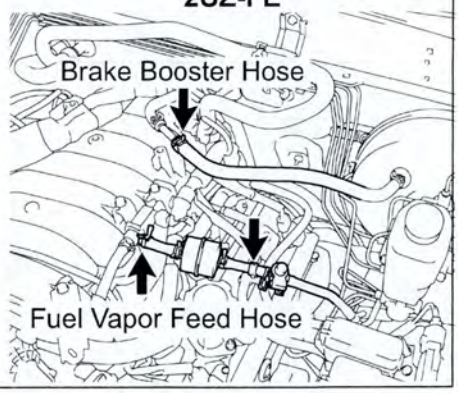
5VZ-FE

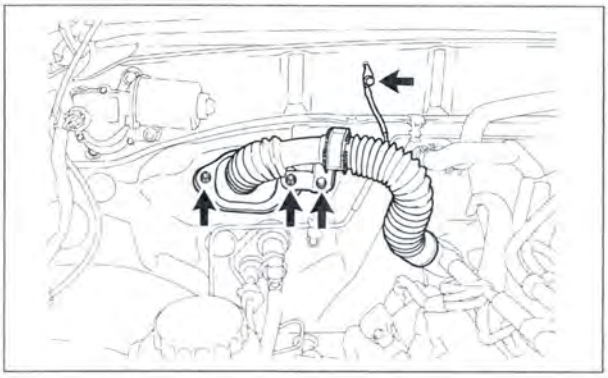


1GR-FE



2UZ-FE

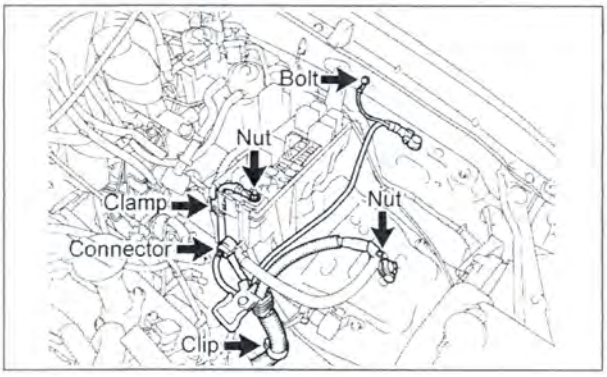




29. DISCONNECT THE ENGINE WIRE HARNESS

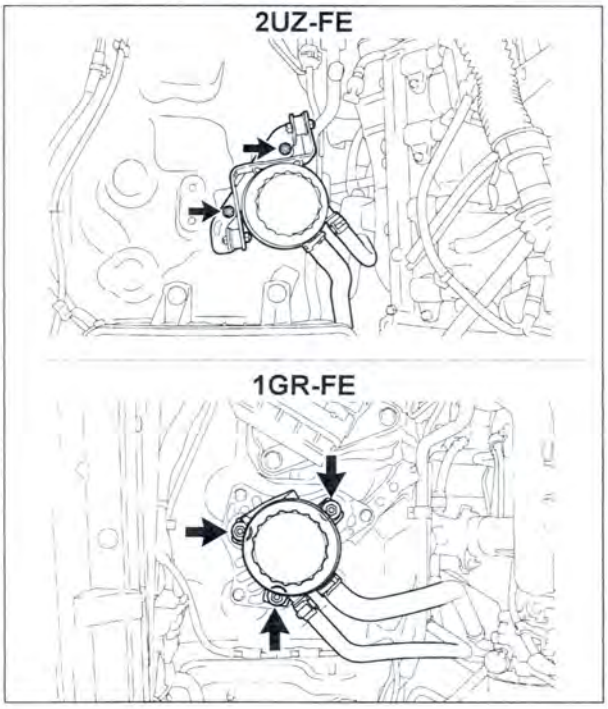
a) Remove the bolt and disconnect the ground wire from cowl panel.
b) Remove the bolt and the 2 nuts holding the engine wire harness connector from the cowl panel.
c) Gently pull the engine wire harness out from body assembly.

Note: Ensure all connectors have been previously disconnected from the glove compartment to ensure you do not damage the wire harness.



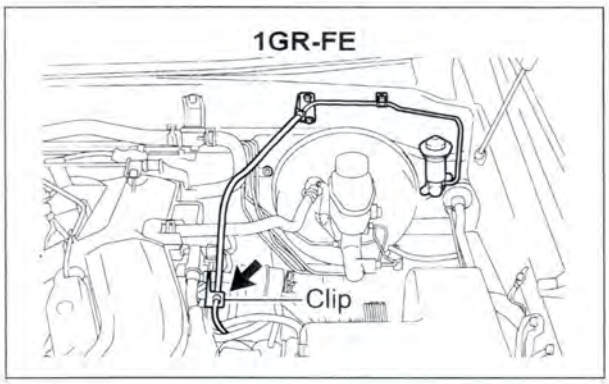
30. DISCONNECT THE NO.2 ENGINE WIRE HARNESS

a) Remove the relay box cover.
b) Disconnect the connector and clamp.
c) Remove the bolt and disconnect the ground wire.
d) Remove the nut and disconnect the positive (+) battery cable.
e) Remove the clip and disconnect the No.2 engine wire harness.



31. DISCONNECT THE POWER STEERING PUMP OIL RESERVOIR (2UZ-FE/1GR-FE ONLY)

a) Remove the 2 nuts and disconnect the vane pump oil reservoir (***2UZ-FE Only***).
b) Remove the 3 nuts and disconnect the vane pump oil reservoir (***1GR-FE Only***).



32. DISCONNECT THE CLUTCH MASTER CYLINDER TUBE (1GR-FE MANUAL TRANSMISSION VEHICLES ONLY)

NOTE: Use precaution when performing this step, as you will need to work underneath the vehicle.

c) Disconnect the clutch master cylinder tube.
d) Remove the clip and disconnect the clutch hose.

E. REMOVAL OF THE BODY ASSY

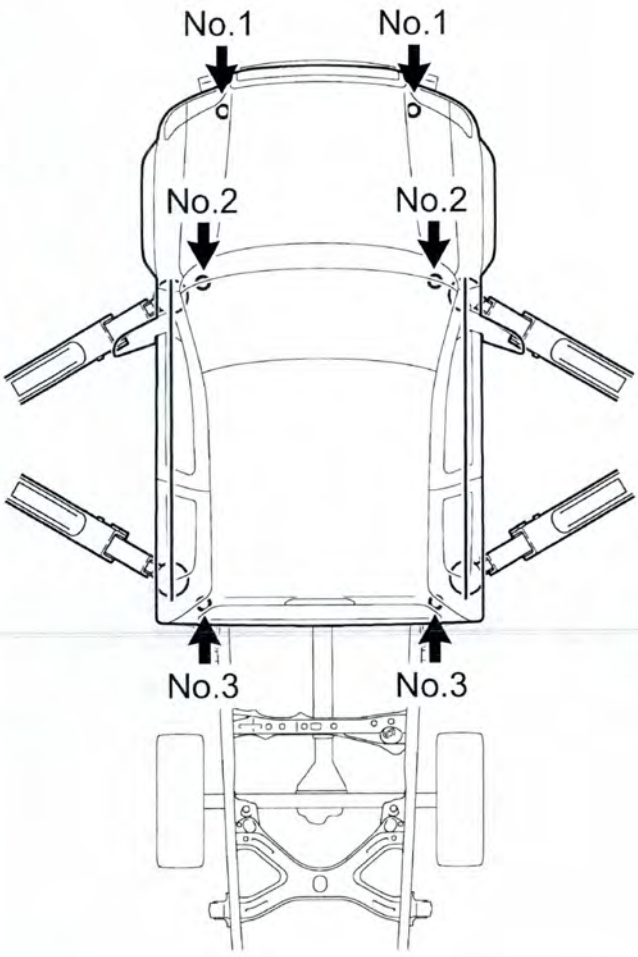
33. REMOVE THE CAB BODY ASSY USING AN *ABOVE GROUND* LIFT

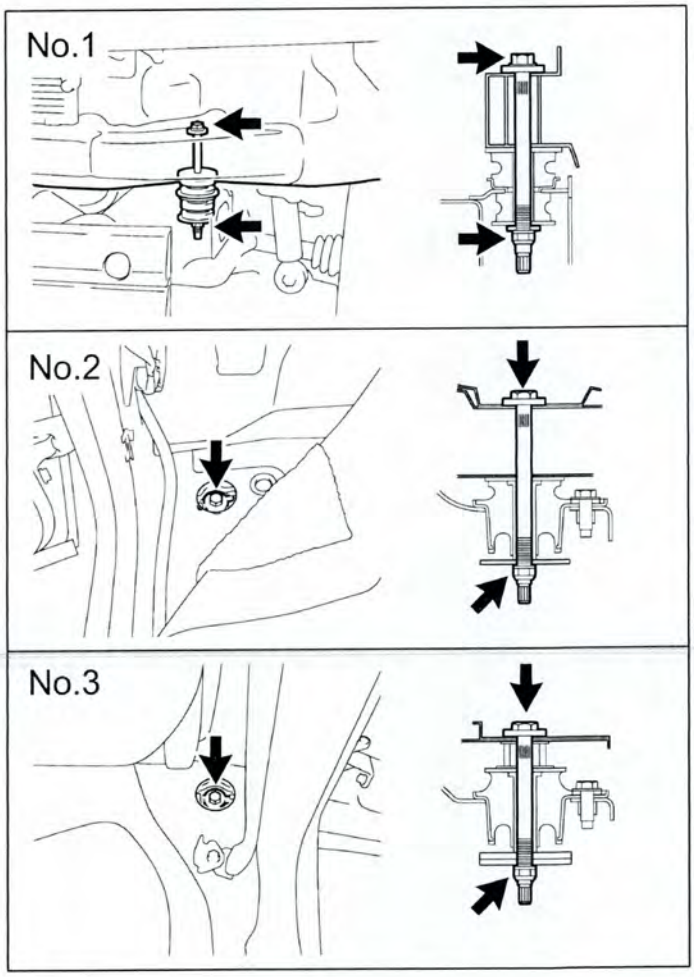
Note: Before rolling chassis out, mark the location of the tires on the floor, this will help align the chassis when the cab is reinstalled.

a) Remove the 6 nuts and 6 washers.
b) Set the lift arms under the cab body assy. so they ***DO NOT*** interfere with the frame or cab mounts.
c) Check that all wire harnesses, hoses, cables and the steering shaft are disconnected.
d) Lift the cab assy up slowly, making sure it does not interfere with anything while being raised.
e) Raise the cab assy high enough so that the top of the engine clears the lowest point of the cab assy.
f) Pull the frame assy out from under the cab assembly.
g) Lower the cab assy all the way down and leave it on the lift.

NOTE:

- **Center the cab assy weight on the lift arms so that it does not slant/tilt to one side.**
- **Raise the cab assy slightly off the frame and verify that it is held securely by the lift arms.**
- ***DO NOT* work directly underneath the vehicle when pulling the frame assy out from under it.**
- ***DO NOT* remove the cab mount bolts, as they will be used as guides during the cab assy. reinstallation process.**



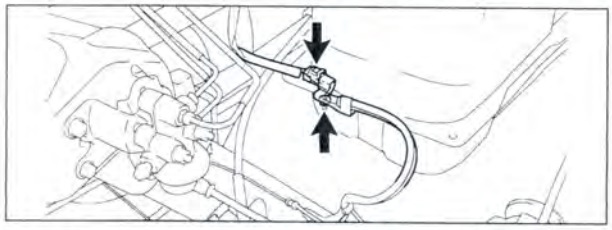


F. DISASSEMBLE THE FRAME

1. PLACE THE FRAME ON A 2ND LIFT

a) Place the frame on the 2nd lift, and secure it with a ratcheting tie down strap. This will prevent the frame from tilting or falling off as parts are removed.

- **Ratcheting Tie Down: Qty: 1**
  - **Demensions: 2 in X 27 ft**
  - **Minimum Work Load Capacity: 3,000 lbs**



2. DISCONNECT THE REAR SPEED SENSOR CONNECTOR

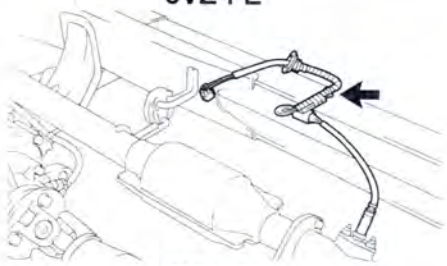
a) Remove the nut and disconnect the rear speed sensor connector.

3. REMOVE THE FOLLOWING PARTS

- Front Propeller Shaft (***4WD Only***)
- Rear Propeller Shaft
  - Insert **SST 09325-40010** into transmission after the rear propeller shaft is removed to prevent oil leakage ***(2WD Only)***.
- Fuel Tank Straps
- Fuel Tank
- Charcoal Canister Assy

NOTE: Place match marks on the front (if equipped) and rear propeller shafts before removal.

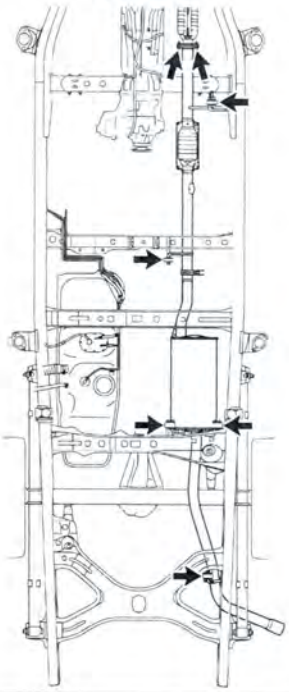
5VZ-FE



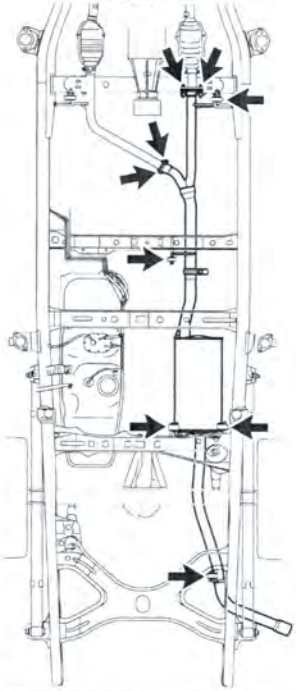
4. REMOVE THE EXHAUST SYSTEM

a) Disconnect the oxygen sensor wire harness clamp (***5VZ-FE Only***).
b) Remove the 2 bolts and flange retainer (***5VZ-FE Only***).
c) Remove the 4 bolts and 2 springs (***1GR-FE Only***).
d) Remove the 4 bolts and 2 flange retainers (***2UZ-FE Only***).
e) Remove the exhaust and exhaust pipe(s)

5VZ-FE



1GR-FE



2UZ-FE

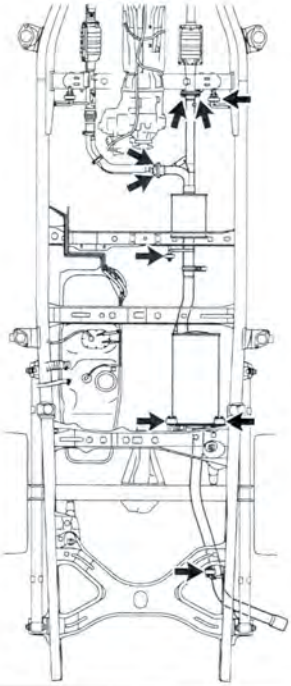


Illustration A

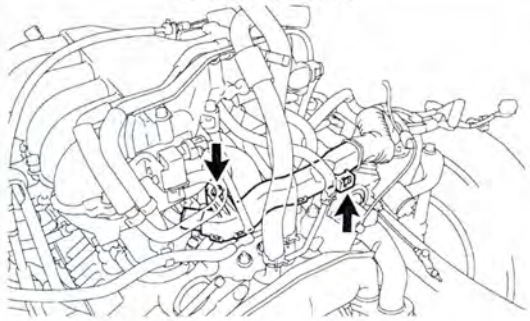
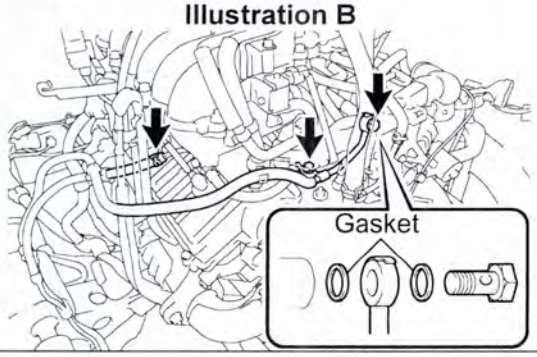


Illustration B

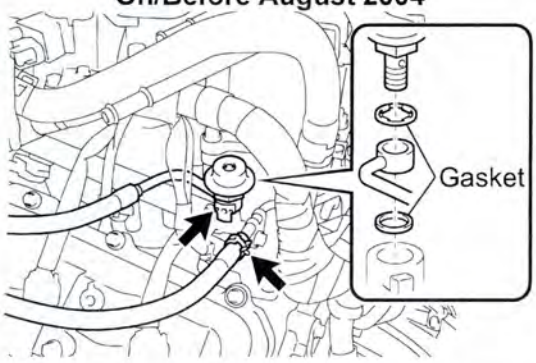


5. DISCONNECT THE FUEL PIPES AND HOSES

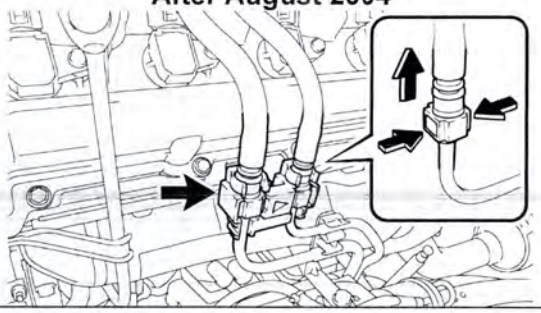
For 5VZ-FE Vehicles:

a) Remove the bolt and wire harness clamp (**Illustration A**).
b) Remove the bracket bolt (**Illustration B**).
c) Remove the union bolt and the main fuel pipe (**Illustration B**).
d) Remove the 2 gaskets (**Illustration B**).
e) Remove the clip and disconnect the fuel return hose (**Illustration B**).

On/Before August 2004



After August 2004



For 2UZ-FE Vehicles Produced On Or Before August 2004)

a) Remove the pulsation damper with **SST 09612-24011**, and disconnect the main fuel hose.
b) Remove the 2 gaskets.
c) Remove the clip and disconnect the fuel return hose.

NOTE:

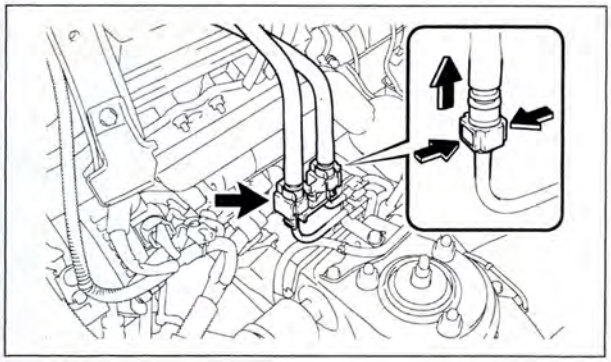
- **Put a shop towel under the delivery pipe to catch any spilled fuel.**
- **Slowly loosen the pulsation damper.**

For 2UZ-FE Vehicles Produced After August 2004)

a) Remove the fuel pipe clamp.
b) Disconnect the 2 fuel pipes.

NOTE:

- **Be sure to remove them by hand.**
- **When the connector and the pipe are stuck, pinch the fuel pipe with fingers and push the fuel tube connector to the fuel pipe by pressing the release buttons, then pull the connector out.**



For 1GR-FE Vehicles:

a) Remove the fuel pipe clamp.
b) Disconnect the 2 fuel pipes.

NOTE:

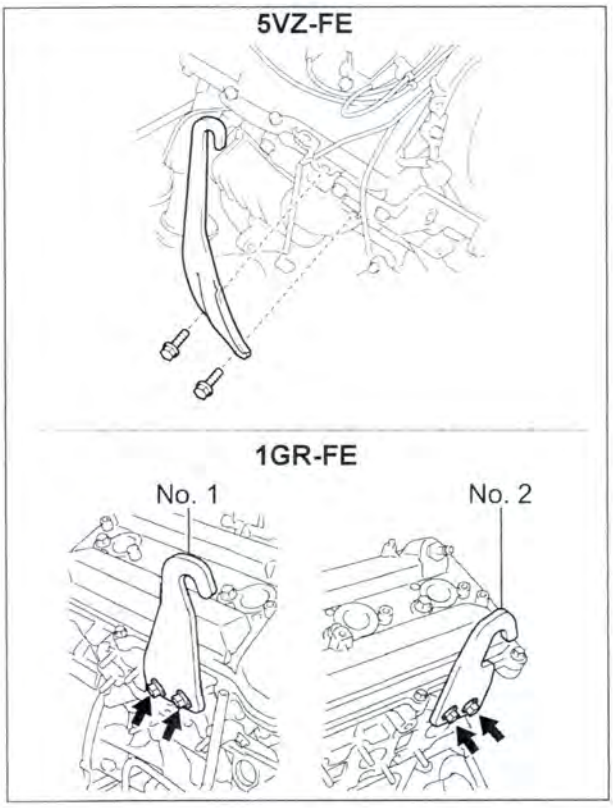
- **Be sure to remove them by hand.**
- **When the connector and the pipe are stuck, pinch the fuel pipe with fingers and push the fuel tube connector to the fuel pipe by pressing the release buttons, then pull the connector out from the pipe. Do not use any tools at this time.**

6. **REMOVE THE DRIVE BELT**

7. **REMOVE AND SET A SIDE THE POWER STEERING PUMP ASSY**

a) Remove the drive belt.
b) Disconnect the connector (***5VZ-FE / 1GR-FE Only***).
c) Remove the 2 bolts and the nut (***2UZ-FE Only***) or the bolt and the nut (***5VZ-FE Only***) or the 2 bolts (***1GR-FE Only***) and the power steering vane pump.

NOTE:
- **DO NOT disconnect the power steering pump hoses or lines.**
- **Make sure to keep the power steering pump reservoir in an upright position to prevent the fluid from leaking out.**

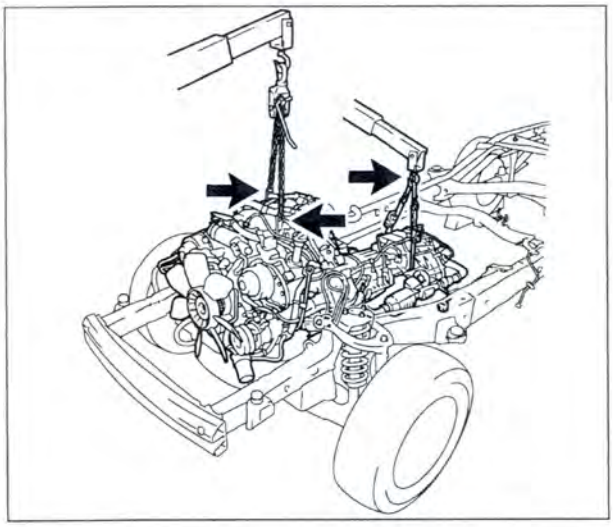


8. **REMOVE THE ENGINE AND TRANSMISSION ASSY.**

a) Disconnect and remove the necessary items/parts to prepare the engine and transmission assy for removal.
b) Install the engine hanger(s) (***5VZ-FE / 1GR-FE Only***).

For 5VZ-FE Vehicles:
12282-62070 = Engine Hanger No. 1, Qty: 1
90119-10684 (90080-11443) = Bolt, Qty: 2

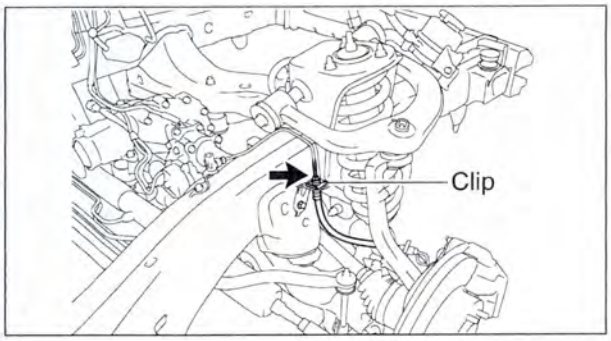
For 1GR-FE Vehicles:
12281-31060 = Engine hanger No. 1, Qty: 1
12282-31040 = Engine hanger No. 2, Qty: 1
90119-08A87 = Bolt, Qty: 4



c) Remove the engine and transmission assy.

NOTE:
- **When removing the engine and transmission assy, ALWAYS use 2 engine hoists or mini cranes to lift it.**
- **DO NOT use 1 engine hoist or mini crane to lift the engine and transmission assy, as the unbalanced weight may lead to an accident or injury.**
- **ONLY use engine hoists or mini cranes that can properly support the weight of the engine and transmission assy.**
- **Carefully adjust the 2 engine hoists or mini cranes used so that the engine and transmission assy is properly balanced.**

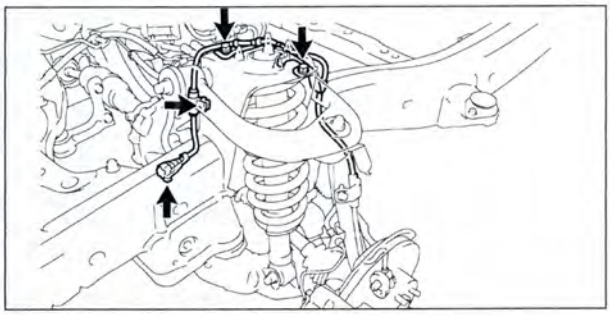
9. **REMOVE THE 4 WHEELS**



10. DISCONNECT THE FRONT BRAKE HOSE

a) Disconnect the front brake tube from the brake hose.
b) Remove the clip and disconnect the front brake hose.
c) Repeat the procedure on the opposite side.

NOTE: Plug the brake hose to ensure no debris enters.



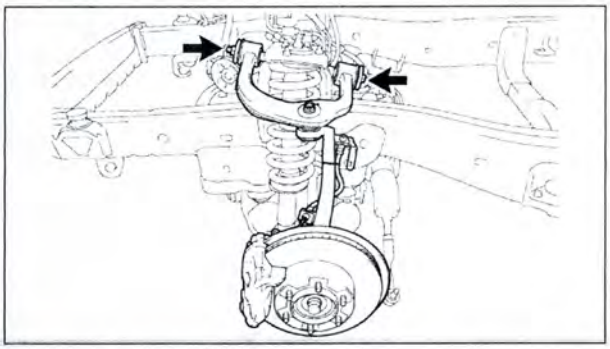
11. DISCONNECT THE FRONT SPEED SENSOR WIRE HARNESS

a) Remove the 2 bolts, 2 clamps and the connector.
b) Repeat the procedure on the opposite side.

12. REMOVE THE FOLLOWING PARTS

- Front Stabilizer Bar
- Front Axle Shaft Nut (***4WD Only***)
- The Tie Rod End
  - Remove the cotter pin and nut.
  - Using the **SST 09610-20012**, disconnect the tie rod end.
- Lower Ball Joint
  - Remove the cotter pin and nut.

Using the **SST 09628-62011**, disconnect the lower ball joint.



13. REMOVE THE FRONT SUSPENSION UPPER ARM AND STEERING KNUCKLE ASSY

a) Remove the bolt, nut, 2 washers and front suspension upper arm and steering knuckle assy.
b) Repeat the procedure on the opposite side.

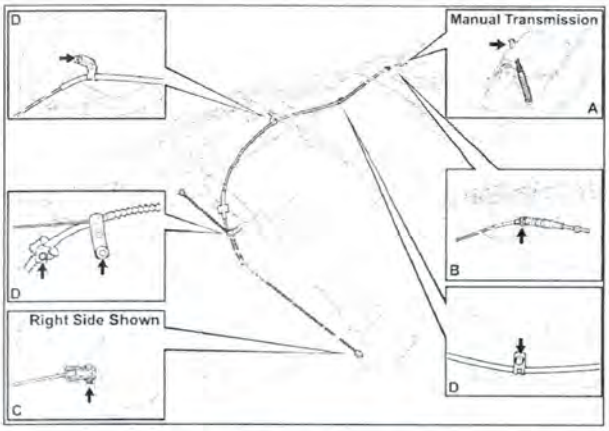
NOTE: If the drive shaft is difficult to disconnect, tap the drive shaft loose with a plastic hammer.

14. REMOVE THE FOLLOWING PARTS

- Front Shock Absorber
- Power Steering Link Assembly w/ Power Steering Vane Pump
- Front Drive Shaft (***4WD Only***)
- Front Differential Carrier (***4WD Only***)

NOTE:

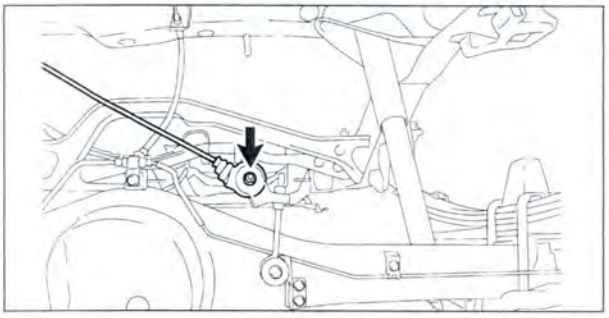
- **When removing the power steering link with the vane pump attached, have one person support the power steering link and the other support the vane pump.**
- **Make sure to keep the power steering pump reservoir in an upright position to prevent the fluid from leaking out.**
- **If the drive shaft is difficult to remove tap it with a plastic hammer.**
- **Be careful not to damage the dust cover and oil seal.**



15. REMOVE THE NO.2 PARKING BRAKE CABLE

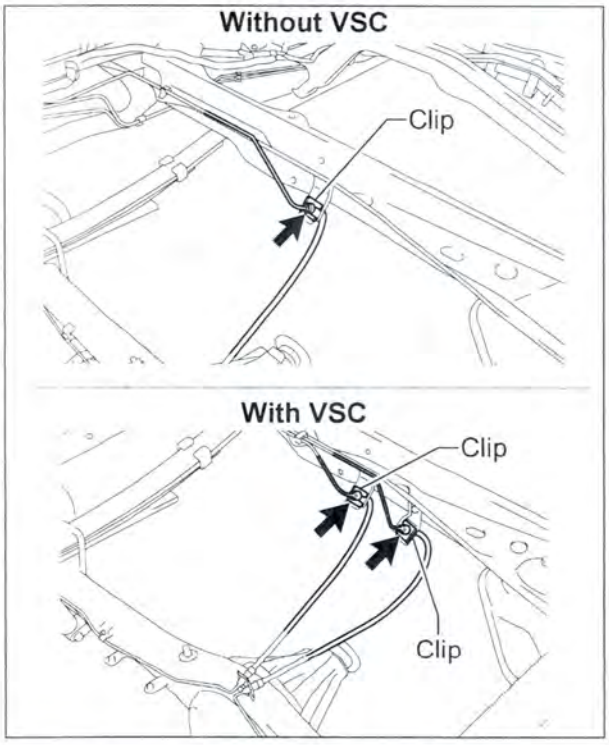
a) Remove the No. 2 parking brake cable adjustment nut (***Manual Transmission Vehicles Only***).
b) Remove the clip.
c) Remove the 2 clips and 2 pins.
d) Remove the 4 bolts and No.2 parking brake cable.

16. REMOVE THE PARKING BRAKE INTERMEDIATE LEVER (MANUAL TRANSMISSION VEHICLES ONLY)



17. DISCONNECT THE LOAD SENSING SPRING ASSY (LSPV EQUIPPED VEHICLES ONLY)

a) Remove the bolt, washer, nut and disconnect the load sensing spring assy.



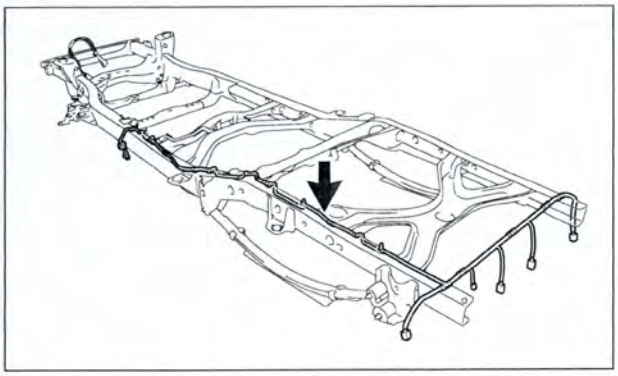
18. DISCONNECT THE BRAKE HOSE

a) Disconnect the No.4 rear brake tube.
b) Remove the clip and disconnect the brake hose.
c) Repeat the procedure on the opposite side (***VSC Equipped Vehicles Only***).

NOTE: Plug the brake hose(s) to ensure no debris enters.

19. REMOVE THE FOLLOWING PARTS

- Rear Stabilizer Bar ***(If Equipped)***
- Rear Shock Absorbers
- Rear Differential Assy
- Spare Tire Carrier

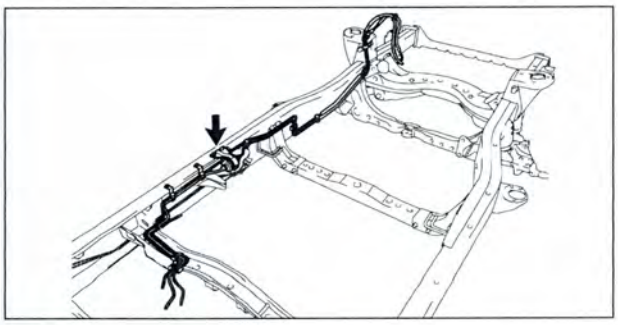


20. REMOVE THE FRAME WIRE HARNESS

a) Remove the bolt and disconnect the ground wire ***(If Equipped)***.
b) Disconnect the clamps and remove the frame wire harness.

NOTE:

- **The number of wire harness clamps will differ depending on the vehicle specification.**
- **Take care not to damage or break the wire harness clamps during removal.**

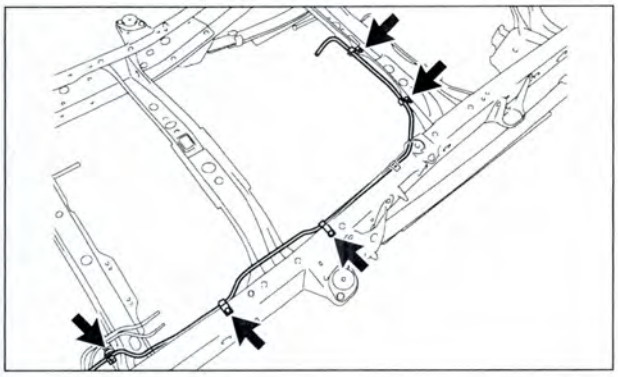


21. REMOVE THE FUEL TUBES

a) Remove the bolts, clamps and fuel tubes.

NOTE:

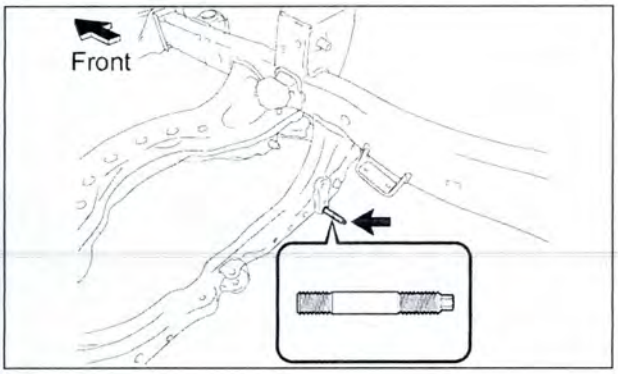
- **The number of fuel tube clamps will differ depending on the vehicle specification.**
- **If the fuel tube clamp(s) are damaged replace them.**



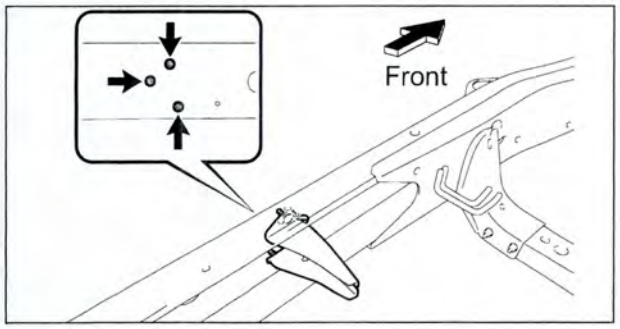
22. REMOVE THE CHARCOAL CANISTER TUBE

a) Remove the bolts, clamps and canister to front side member tube.

NOTE: The number of clamps will differ depending on the vehicle spec.

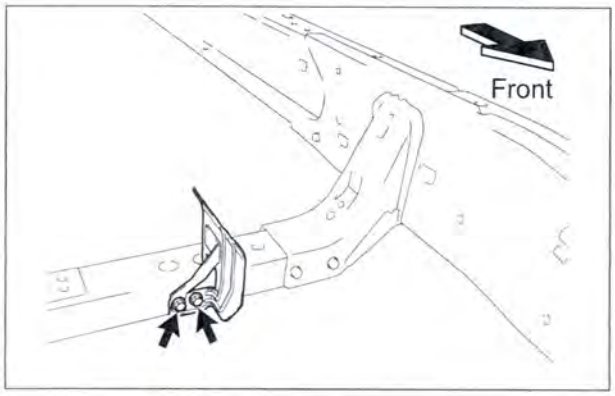


23. REMOVE THE STUD BOLT



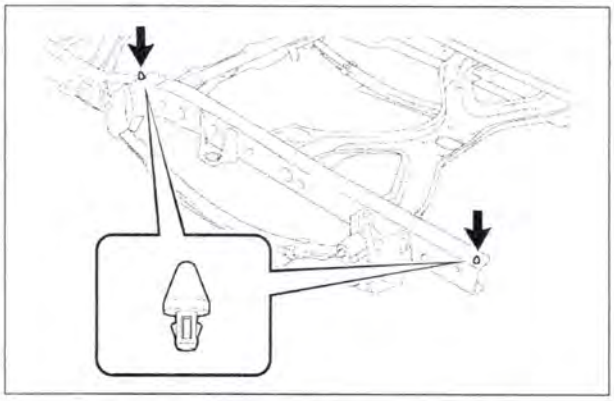
24. REMOVE THE PARKING BRAKE CABLE SUPPORT BRACKET

a) Remove the 3 nuts and parking brake cable support bracket.



25. REMOVE THE PROPELLER SHAFT HEAT INSULATOR (ONLY FOR VEHICLES PRODUCED AFTER AUGUST 2004)

a) Remove the 2 bolts and propeller shaft heat insulator.



26. REMOVE THE CLIPS

27. REMOVE THE FOLLOWING PARTS

- Transport / Toe Hooks (Qty: 2)
- Front Bumper Reinforcement
- Front Suspension Lower Arm
- Front Spring Bumper
- Cab Mounts (Qty: 6)
- Rear Leaf Springs

28. REMOVE THE FRAME FROM THE LIFT

a) Remove the ratcheting tie down strap and the frame from the lift.

G. ASSEMBLE THE NEW FRAME

1. PLACE THE *NEW* FRAME ON THE LIFT

a) Place the ***NEW*** frame on the lift, and secure it with a ratcheting tie down strap. This will prevent the frame from tilting or falling off as parts are installed.

- **Ratcheting Tie Down: Qty: 1**
  - **Demension: 2 in X 27 ft**
  - **Minimum Work Load Capacity: 3,000 lbs**

2. REINSTALL THE REAR LEAF SPRINGS

a) Reinstall the rear leaf spring with all ***NEW*** parts (shackle, bushings, bolts, washers & nuts) and torque to spec.

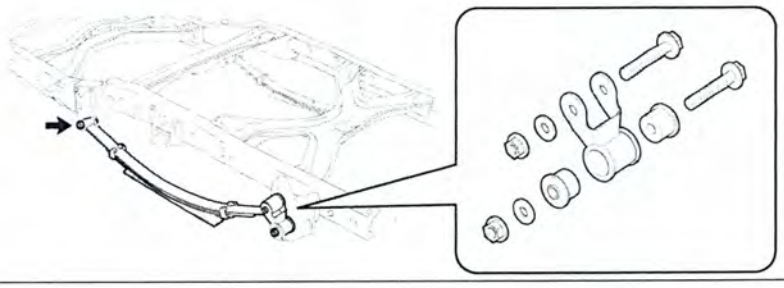
Torque Spec: 170 N·m (1733 kgf·cm, 125 ft·lbf)

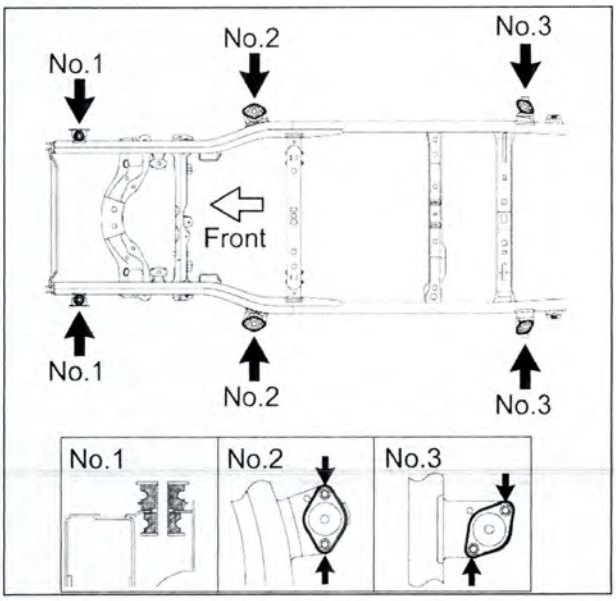
b) Repeat the procedure on the opposite side.

NEW Replacement Parts

Rear Spring Bumper

Part Number	Part Name	Kit #	Qty
04483-0C030	Shackle Kit, Rear Spring	NA*	2
90105-14132	Bolt	3	6
90179-14039	Nut	1-2	6
90201-14025	Washer	1-2	6

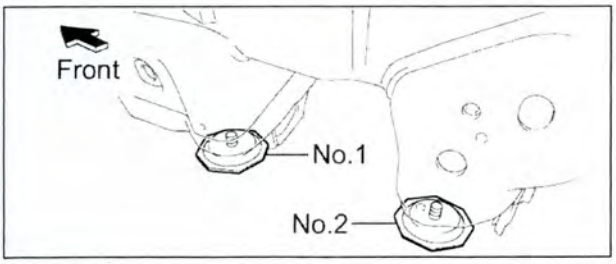




3. REINSTALL THE CAB MOUNTS

a) Reinstall cab mounts No. 1.
b) Reinstall cab mounts No. 2 & No. 3 with 2 bolts each, and torque to spec.

Torque Spec: 61 N·m (622 kgf·cm, 45 ft·lbf)



4. REINSTALL THE FRONT SPRING BUMPER

a) Install the No.1 and No.2 front spring bumpers to the frame and torque to spec.

Torque Spec: 31 N·m (316 kgf·cm, 23 ft·lbf)

b) Repeat the procedure on the opposite side.

5. REINSTALL THE FRONT SUSPENSION LOWER ARM

a) Reinstall the front suspension lower arm with 2 ***NEW*** bolts, 2 ***NEW*** toe adjustment plates 2 ***NEW*** toe adjustment cam, then torque to spec.

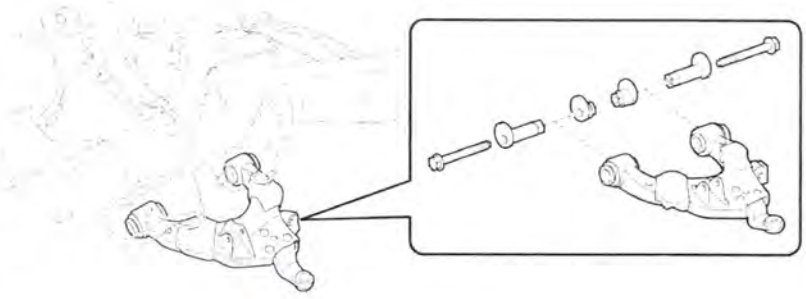
Torque Spec: 140 N·m (1427 kgf·cm, 103 ft·lbf)

b) Repeat the procedure on the opposite side.

NEW Replacement Parts

Lower Control Arm Cam Assy.

Part Number	Part Name	Kit #	Qty
48409-34020	Cam Sub-Assy, Toe Adjust	1-2	2
48409-34030	Cam Sub-Assy, Toe Adjust No. 2	1-2	2
48452-35020	Plate, Toe Adjust No. 2	1-2	4
90080-11275	Bolt w/ Washer	3	2
90080-11410		3	2



NEW Replacement Parts

Front Bumper Reinforcement

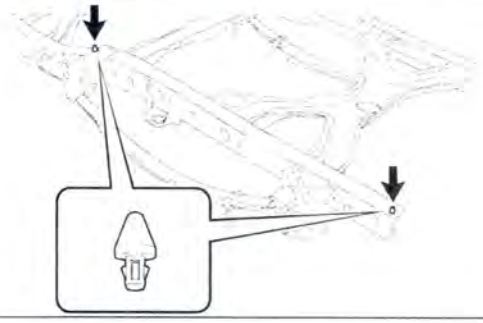
Part Number	Part Name	Kit #	Qty
90178-10024	Nut	1-2	4

6. REINSTALL THE FOLLOWING PARTS

- Front Bumper Reinforcement
  - Reinstall with 4 ***NEW*** nuts.
  - **Torque Spec: 50 N·m (509 kgf·cm, 36 ft·lbf)**

NEW Replacement Parts

Part Number	Part Name	Kit #	Qty
90467-13076	Clip	1-2	2



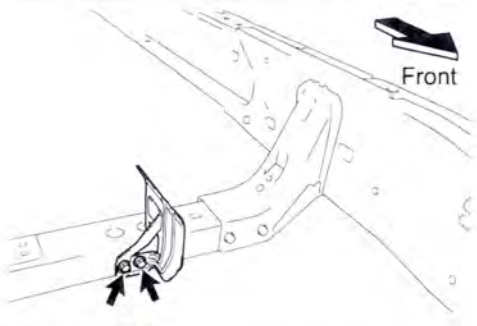
7. INSTALL THE *NEW* CLIPS

NEW Replacement Parts

Part Number	Part Name	Kit #	Qty
47351-0C010	Bracket, Flexible Hose No. 2	3	1
90080-11180	Bolt	5,7	1

8. INSTALL THE *NEW* NO.2 FLEXIBLE HOSE BRACKET (VSC EQUIPPED VEHICLES ONLY)

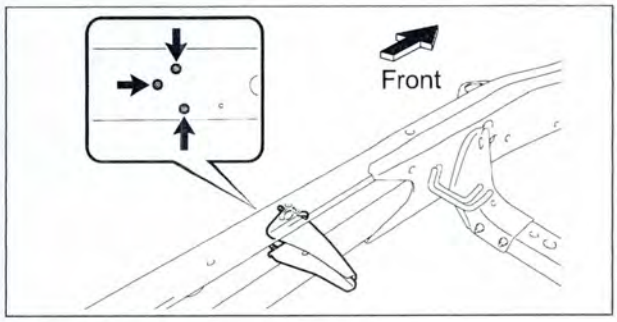
a) Install the ***NEW*** No.2 flexible hose bracket with the ***NEW*** bolt.



9. REINSTALL THE PROPELLER SHAFT HEAT INSULATOR (VEHICLES PRODUCED AFTER AUGUST 2004)

a) Reinstall the propeller shaft heat insulator with the 2 bolts, and torque to spec.

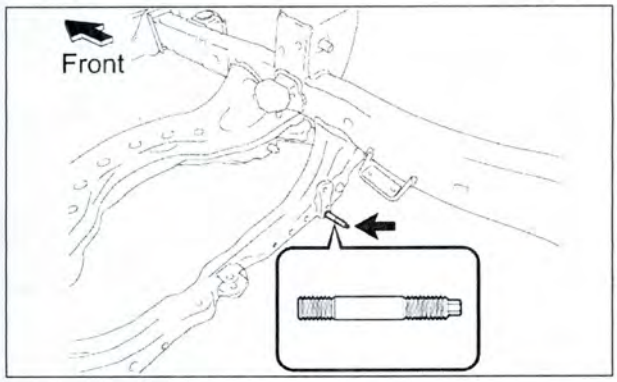
Torque Spec: 16 N·m (163 kgf·cm, 12 ft·lbf)



10. REINSTALL THE PARKING BRAKE CABLE SUPPORT BRACKET

a) Reinstall the parking brake cable support bracket with the 3 nuts, and torque to spec.

Torque Spec: 13 N·m (132 kgf·cm, 10 ft·lbf)



11. REINSTALL THE STUD BOLT

a) Reinstall the stud bolt and torque to spec.

Torque Spec: 20 N·m (203 kgf·cm, 14 ft·lbf)

12. INSTALL THE *NEW* REAR BRAKE TUBES

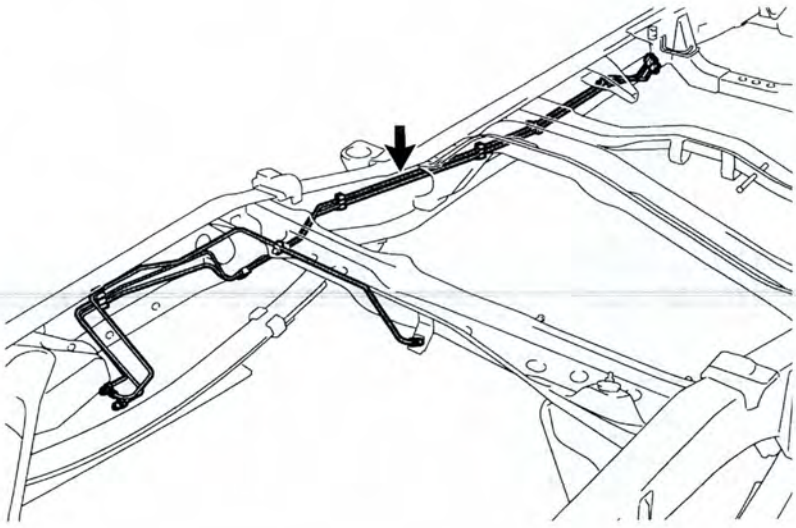
a) Install the ***NEW*** rear brake tubes with the ***NEW*** clamp(s) and the ***NEW*** bolt, then torque to spec.

Torque Spec: Bolt - 28 N·m (285 kgf·cm, 20 ft·lbf)
Brake Tube - 15 N·m (153 kgf·cm, 11 ft·lbf)

NEW Replacement Parts

Part Number	Part Name	Kit #	Qty
47323-0C013	Tube, Rear Brake No.3** (04 MY)	NA*	1
47323-0C040		NA*	1
47323-0C070	Tube, Rear Brake No.3** (05-06 MY)	NA*	1
47323-0C080		NA*	1
47324-0C014	Tube, Rear Brake No.4 – Without VSC	4,6	1
47328-0C020	Tube, Rear Brake No.8 – With VSC	5,7	1
47329-0C010	Tube, Rear Brake No.9 –With VSC	5,7	1
47361-0C013	Tube, Rear Brake No.10** (04 MY)	NA*	1
47361-0C020		NA*	1
47361-0C040	Tube, Rear Brake No.10** (05-06 MY)	NA*	1
47361-0C050		NA*	1
90080-11180	Bolt	4-7	1
90904-12068	Way, (for front brake tube)	1-2	1
90949-01C06	Clamp, Brake Tube No.6	1-2	8
90949-01C32	Clamp –Without VSC	1-2	1
90949-A1002	Clamp, Brake Tube No.7	3	1

*Individual Part(s)
**Only 1 part used. The part number varies depending on the KIT #



13. REINSTALL THE CHARCOAL CANISTER TUBE

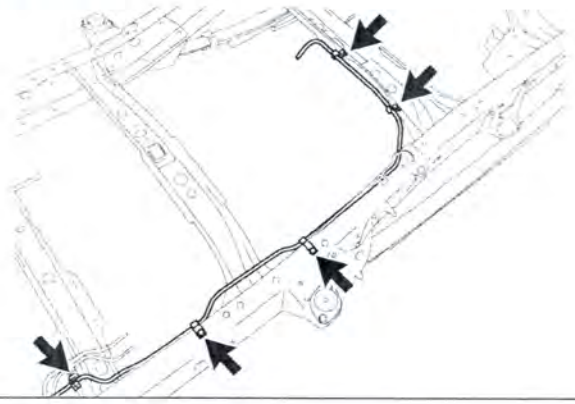
a) Reinstall the charcoal canister tube with ***NEW*** clamps and ***NEW*** bolts, then torque to spec.

Torque Spec: 29 N·m (295 kgf·cm, 21 ft·lbf)

NOTE: The number of clamps will differ depending on the vehicle spec.

NEW Replacement Parts

Part Number	Part Name	Kit #	Qty
77285-34280	Clamp, Fuel Tube No.1	1-2	2
77285-34290		1-2	1
77285-34300		1-2	1
77285-34310		1-2	1
90080-11180	Bolt	3	4



14. REINSTALL THE FUEL TUBES

a) Reinstall the fuel tubes with the ***NEW*** clamps and ***NEW*** bolts, then torque to spec.

Torque Spec: Filter Bracket Bolt - 20 N·m (203 kgf·cm, 14 ft·lbf)
Clamp Bolt - 29 N·m (295 kgf·cm, 21 ft·lbf)

NOTE: The number of clamps will differ depending on the vehicle spec.

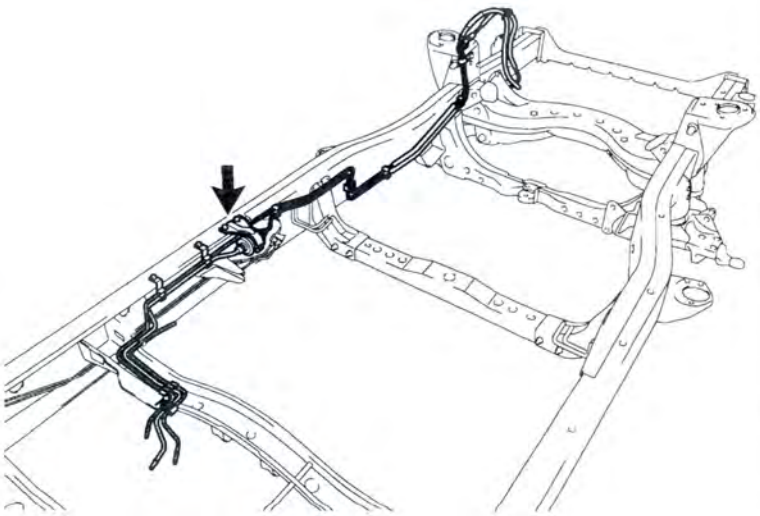
NEW Replacement Parts

2004 MY

Part Number	Part Name	Kit #	Qty
77285-34031	Clamp, Fuel Tube No.1	1	4
77285-34060		1	1
77285-34071		1	2
77285-34080		1	1
77285-34260		1	1
77285-34270		1	1
90080-11180	Bolt	3	6

2005-2006 MY

Part Number	Part Name	Kit #	Qty
77285-0C010	Clamp, Fuel Tube No.1	3	1
77285-0C020		3	1
77285-34031		2	3
77285-34071		2	2
77285-34260		2	1
77285-34280		2	2
90080-11180	Bolt	3	5



15. REINSTALL THE FRAME WIRE HARNESS

a) Reconnect the clamps to reinstall the frame wire harness.
b) Reconnect the ground wire with the bolt and torque to spec.

Torque Spec: 30 N·m (305 kgf·cm, 22 ft·lbf)

NOTE:

- **If the wire harness clamp(s) are damaged, repair them following the steps below.**
- **The number of wire harness clamps will differ depending on the vehicle spec.**

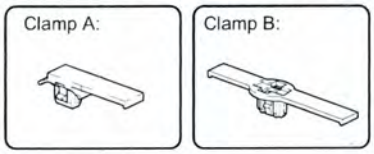
NEW Replacement Parts

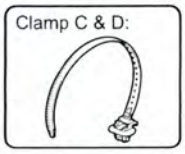
2004 MY

Part Number	Part Name	Kit #	Qty
82711-16830	Clamp, Wiring Harness	1	3
82711-26380		1	16
82711-3A640		1	1
82711-3F050		1	3

2005-2006 MY

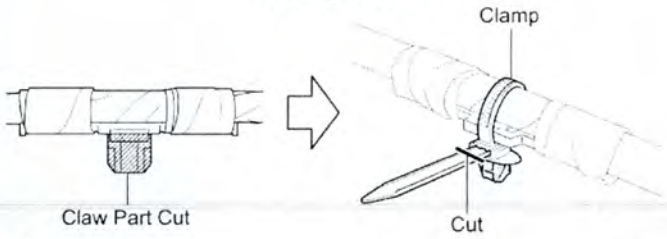
Part Number	Part Name	Kit #	Qty
82711-16830	Clamp, Wiring Harness	2	3
82711-26380		2	16
82711-33100		2	3
82711-3A640		2	1
82711-3F050		2	3
82711-3F400		2	3

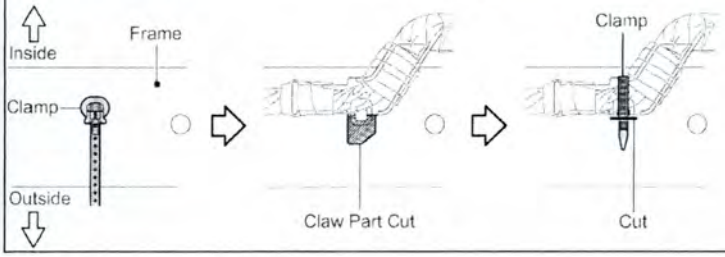




Clamp A & B

Clamp C & D





REPAIR PROCEDURE FOR CLAMP A & B

a) Remove the damaged clamp.
b) Install the ***NEW*** clamp to the frame wire harness with vinyl tape as shown in the illustration.

REPAIR PROCEDURE FOR CLAMP C & D

a) Install the replacement ***NEW*** clamp to the frame in the direction shown in the illustration.
b) Cut the damaged clamp as shown in the illustration.
c) Route the clamp through the cutout area of the damaged clamp and fasten securely.

NEW Replacement Parts

Rear Differential Housing

Part Number	Part Name	Kit #	Qty
90179-14019	Nut	1-2	8
90201-15012	Washer	1-2	8

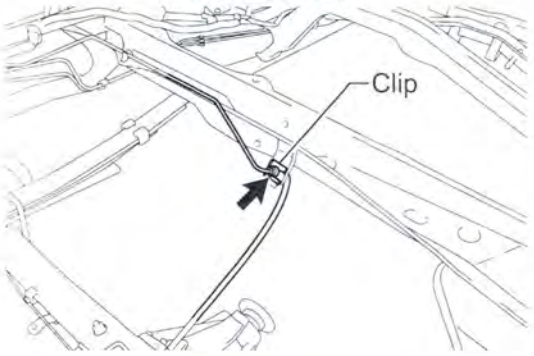
16. REINSTALL THE FOLLOWING PARTS

- Rear Differential Assy
  - Reinstall with the 4 U -bolts, 2 spring seats, 2 spring bumpers, 8 ***NEW*** mounting nuts and 8 ***NEW*** washers, then torque to spec.
  - **Torque Spec: 133 N·m (1356 kgf·cm, 98 ft·lbf)**
- Rear Shock Absorber
  - Reinstall with the bolt, 2 nuts, 3 retainers and 2 cushions, then torque to spec.
  - **Torque Spec: Bolt - 87 N·m (887 kgf·cm, 64 ft·lbf)**
    Nut - 20 N·m (203 kgf·cm, 14 ft·lbf)
  - Repeat the procedure on the opposite side.
- Rear Stabilizer Bar ***(If Equipped)***
  - Reinstall with the 2 brackets and 4 bolts, then torque to spec.
  - **Torque Spec: 29 N·m (295 kgf·cm, 21 ft·lbf)**
  - Reconnect the stabilizer bar links with the 4 nuts, then torque to spec.
  - **Torque Spec: 50 N·m (509 kgf·cm, 36 ft·lbf)**

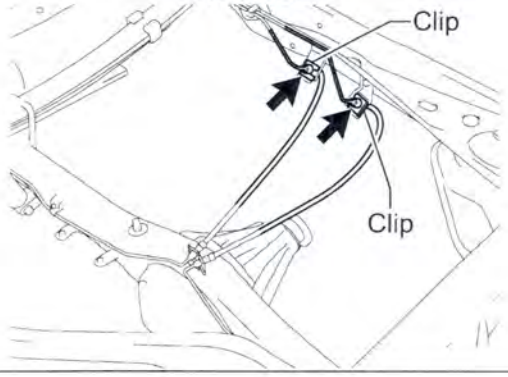
NEW Replacement Parts

Part Number	Part Name	Kit #	Qty
90468-08035	Clip	1-2	2

Without VSC



With VSC



17. RECONNECT THE BRAKE HOSE

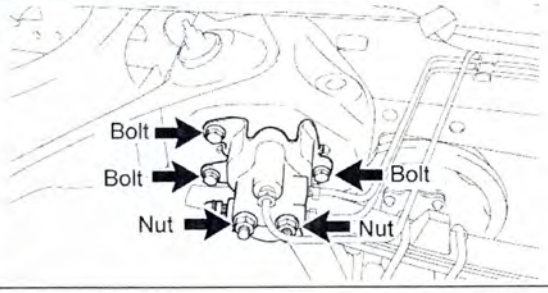
a) Reconnect the brake hose with a ***NEW*** clip.
b) Reconnect the No.4 rear brake tube and torque to spec.

Torque Spec: 15 N·m (153 kgf·cm, 11 ft·lbf)

c) Repeat the procedure on the opposite side ***(VSC Equipped Vehicles Only)***.

NEW Replacement Parts

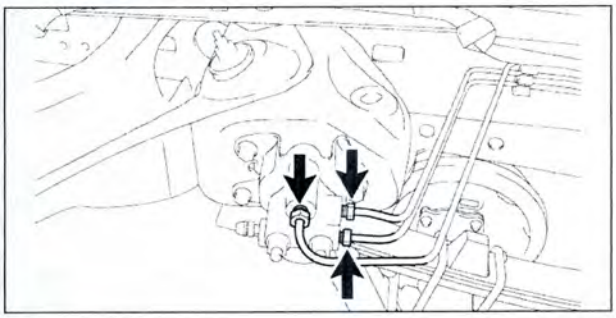
Part Number	Part Name	Kit #	Qty
47910-34070	LSPV Valve	8	1
47926-35010	Spacer, LSPV	8	1
47931-34020	Bracket, LSPV	8	1
47937-60010	Plate, LSPV Set	8	1
90080-11180	Bolt	3	3



18. INSTALL THE *NEW* LSPV AND LOAD SENSING SPRING (LSPV EQUIPPED VEHICLES ONLY)

a) Install the ***NEW*** LSPV with the following ***NEW*** parts and reuse all other components, then torque to spec.

Torque Spec: Bolt - 29 N·m (295 kgf·cm, 21 ft·lbf)
Nut - 30 N·m (305 kgf·cm, 22 ft·lbf)

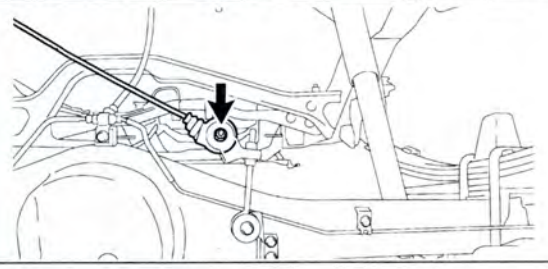


b) Connect the 3 ***NEW*** rear brake tubes to the ***NEW*** LSPV and torque to spec.

Torque Spec: 15 N·m (153 kgf·cm, 11 ft·lbf)

NEW Replacement Parts

Part Number	Part Name	Kit #	Qty
47920-34040	Spring Assy, LSPV	8	1
90467-31110	Clip (for LSPV Boot)	8	1

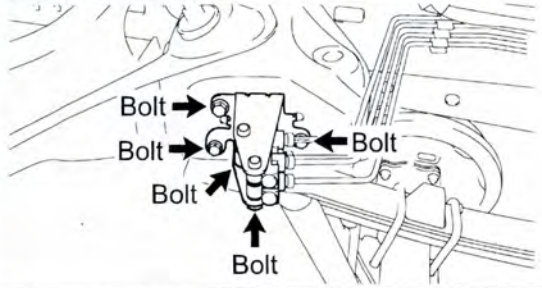


c) Install the ***NEW*** load sensing spring with a ***NEW*** clip and reuse all other components, then torque nut to spec.

Torque Spec: 18 N·m (183 kgf·cm, 13 ft·lbf)

NEW Replacement Parts

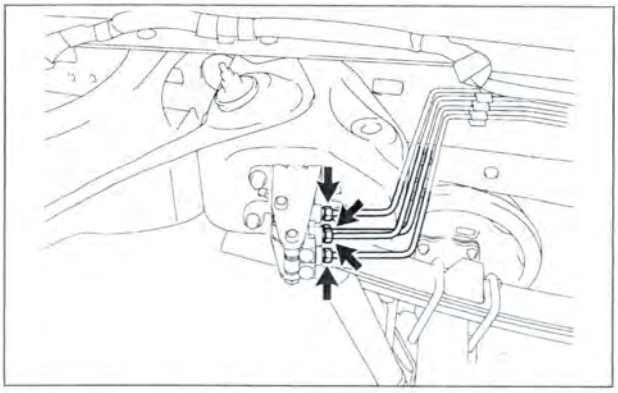
Part Number	Part Name	Kit #	Qty
47150-34020	Valve Assy, Blend Proportioning	9	1
47191-34010	Bracket, Load Sensing Valve	9	1
90080-11180	Bolt	3	3
90119-08A25	Bolt	9	2



19. INSTALL THE *NEW* BLEND PROPORTIONING VALVE (VSC EQUIPPED VEHICLES ONLY)

a) Install the ***NEW*** blend proportioning valve ***NEW*** parts and reuse all other components, then torque to spec.

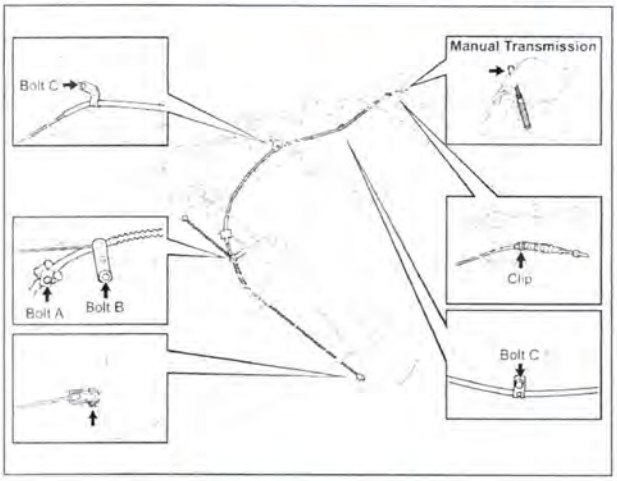
Torque Spec: 29 N·m (295 kgf·cm, 21 ft·lbf)



b) Connect the 4 ***NEW*** rear brake tubes to the ***NEW*** blend proportioning valve and torque to spec.

Torque Spec: 15 N·m (153 kgf·cm, 11 ft·lbf)

20. REINSTALL THE PARKING BRAKE INTERMEDIATE LEVER (MANUAL TRANSMISSION VEHICLES ONLY)



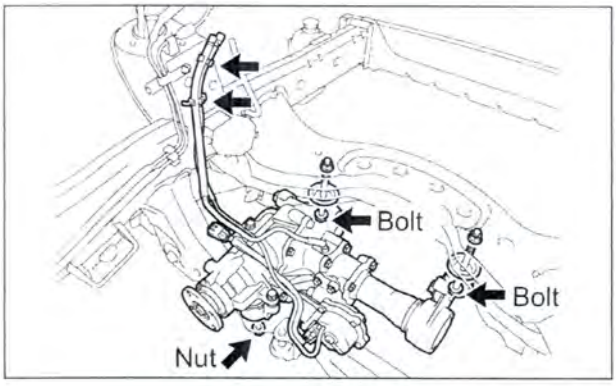
21. REINSTALL THE NO.2 PARKING BRAKE CABLE

a) Reinstall the No.2 parking brake cable with the 4 bolts, and torque to spec.

Torque Spec: Bolt A - 13 N·m (132 kgf·cm, 10 ft·lbf)
Bolt B - 16 N·m (163 kgf·cm, 12 ft·lbf)
Bolt C - 26 N·m (265 kgf·cm, 19 ft·lbf)

b) Reinstall the 2 pins and 2 clips.
c) Reinstall the clip.
d) Reinstall the No. 2 parking brake cable adjustment nut and torque to spec (***Manual Transmission Vehicles Only***).

Torque Spec: 13 N·m (132 kgf·cm, 10 ft·lbf)



22. REINSTALL THE FRONT DIFFERENTIAL CARRIER (4WD ONLY)

a) Reinstall the front differential carrier with the 2 bolts, 4 stoppers and 3 nuts, then torque to spec.

Torque Spec: Bolt - 137 N·m (1397 kgf·cm, 101 ft·lbf)
Nut - 87 N·m (887 kgf·cm, 64 ft·lbf)

b) Reinstall the breather tube with the 2 clips.

NEW Replacement Parts

Part Number	Part Name	Kit #	Qty
43425-04020	Ring, Shaft Snap (For Front Drive Shafts)	NA*	2

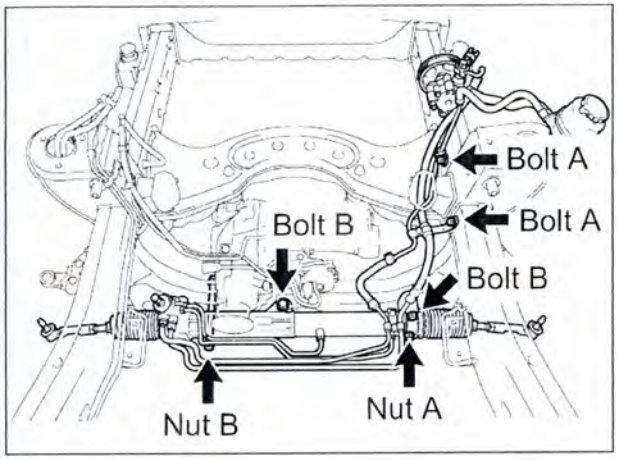
* Individual Part

23. REINSTALL THE FRONT DRIVE SHAFT (4WD ONLY)

a) Install a ***NEW*** snap ring.
b) Reinstall the front drive shaft.

NOTE: Be careful not to damage the dust cover and oil seal.

c) Repeat the procedure on the opposite side.

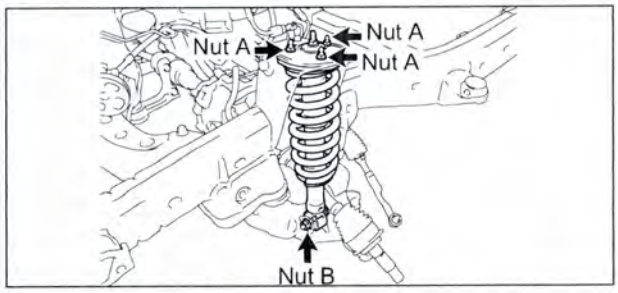


24. REINSTALL THE POWER STEERING LINK ASSEMBLY W/ POWER STEERING VANE PUMP

a) Reinstall the power steering link assembly w/ power steering vane pump with the bolts and nuts, then torque to spec.

Torque Spec: Bolt A - 29 N·m (295 kgf·cm, 21 ft·lbf)
Bolt B - 165 N·m (1682 kgf·cm, 121 ft·lbf)
Nut A - 165 N·m (1682 kgf·cm, 121 ft·lbf)
Nut B - 130 N·m (1325 kgf·cm, 95 ft·lbf)

NOTE: When reinstalling the power steering link and vane pump, have one person support the power steering link and the other support the vane pump keeping the reservoir upright to prevent fluid leakage.

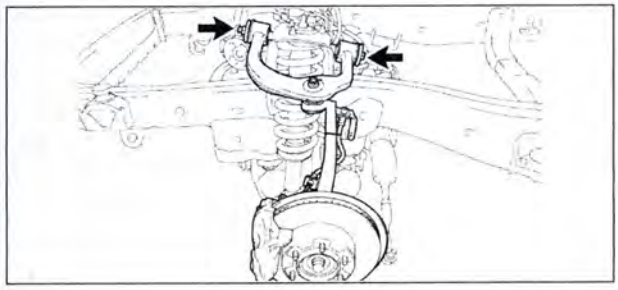


25. REINSTALL THE FRONT SHOCK ABSORBER

a) Reinstall the front shock absorber with the bolt and 4 nuts, then torque to spec.

Torque Spec: Nut A - 64 N·m (652 kgf·cm, 47 ft·lbf)
Nut B - 135 N·m (1376 kgf·cm, 99 ft·lbf)

b) Repeat the procedure on the opposite side.



26. REINSTALL THE FRONT SUSPENSION UPPER ARM AND STEERING KNUCKLE ASSY

a) Reinstall the front suspension upper arm and steering knuckle assy with the bolt, nut and 2 washers, then torque to spec.

Torque Spec: 98 N·m (999 kgf·cm, 72 ft·lbf)

b) Repeat the procedure on the opposite side.

NEW Replacement Parts

Lower Ball Joint

Part Number	Part Name	Kit #	Qty
95381-03225	Cotter Pin	1-2	2

Tie Rod End

Part Number	Part Name	Kit #	Qty
95381-03225	Cotter Pin	1-2	2

Front Stabilizer Bar

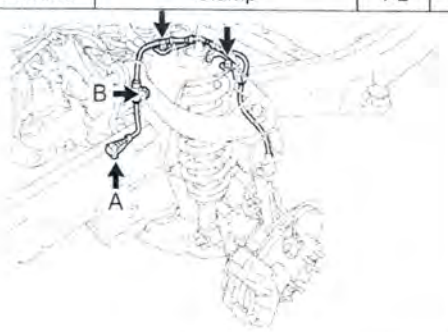
Part Number	Part Name	Kit #	Qty
48824-34030	Bracket, Front Stabilizer No1 RH	1-2	1
48829-34020	Bracket, Front Stabilizer No1 LH	1-2	1
90080-11482	Bolt	3	2
90182-10004	Nut	1-2	2

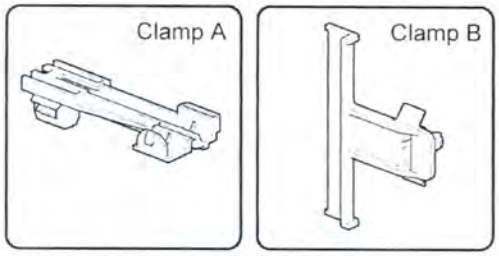
27. REINSTALL THE FOLLOWING PARTS

- Lower Ball Joint
  - Reinstall lower ball joint with the nut & torque to spec.
  - **Torque Spec: 140 N·m (1427 kgf·cm, 103 ft·lbf)**
  - Install the ***NEW*** cotter pin.
  - Repeat the procedure on the opposite side.
- The Tie Rod End
  - Reinstall the tie rod end with nut & torque to spec.
  - **Torque Spec: 91 N·m (927 kgf·cm, 67 ft·lbf)**
  - Install the ***NEW*** cotter pin.
  - Repeat the procedure on the opposite side.
- Front Axle Shaft Nut (***4WD Only***)
  - Temporarily reinstall the front axle nut.
  - Nut will be tightened when the vehicle is completed.
  - Repeat the procedure on the opposite side.
- Front Stabilizer Bar
  - Reinstall the stabilizer bar with 2 ***NEW*** brackets, 2 ***NEW*** bolts and 2 ***NEW*** nuts, then torque to spec.
  - **Torque Spec: 37 N·m (377 kgf·cm, 27 ft·lbf)**
  - Reconnect the stabilizer bar links with the 2 nuts, then torque to spec.
  - **Torque Spec: 69 N·m (703 kgf·cm, 50 ft·lbf)**

NEW Replacement Parts

Part Number	Part Name	Kit #	Qty
82666-35200	Clamp	1-2	2
89515-35030	Clamp	1-2	2





28. RECONNECT THE FRONT SPEED SENSOR WIRE HARNESS

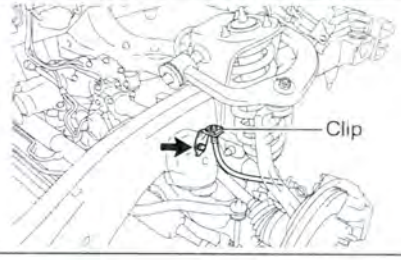
a) Reinstall the front speed sensor wire harness with 2 bolts and 2 ***NEW*** clamps, then torque to spec.

Torque Spec: 8.0 N·m (81 kgf·cm, 70 in·lbf)

b) Repeat the procedure on the opposite side.

NEW Replacement Parts

Part Number	Part Name	Kit #	Qty
47353-35110	Bracket, Flexible Hose No.3	1-2	1
47354-35100	Bracket, Flexible Hose No.4	1-2	1
90080-11180	Bolt	4-7	2
90468-08035	Clip	1-2	2



29. RECONNECT THE FRONT BRAKE HOSE

a) Install a ***NEW*** bracket with a ***NEW*** bolt and torque to spec.

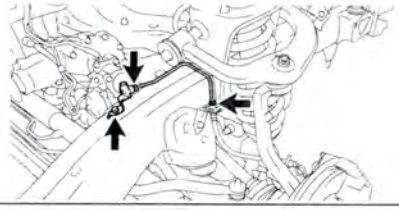
Torque Spec: 28 N·m (285 kgf·cm, 20 ft·lbf)

b) Reinstall the front brake hose with the ***NEW*** clip.
c) Repeat the procedure on the opposite side.

NEW Replacement Parts

Part Number	Part Name	Kit #	Qty
47314-0C011	Tube, Front Brake No. 4	4-7	1
47317-0C011	Tube, Front Brake No. 7**	4-5	1
47317-0C020		6-7	1
90080-11180	Bolt	4-7	2
90904-12066	Way, No.2 (FRT Brake Tube)	1-2	1
90904-12067	Way, No.3 (FRT Brake Tube)	1-2	1

**Only 1 Part is used. Part number varies depending on Kit #



30. INSTALL THE *NEW* FRONT BRAKE TUBE & *NEW* WAY

a) Temporarily install the ***NEW*** front brake tube and ***NEW*** way.
b) Install the ***NEW*** bolt to the ***NEW*** front way and torque to spec.

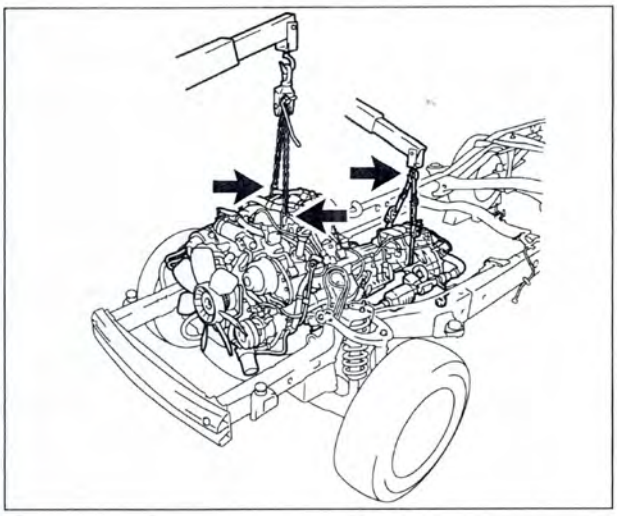
Torque Spec: 28 N·m (285 kgf·cm, 20 ft·lbf)

c) Torque the ***NEW*** front brake tube to spec.

Torque Spec: 15 N·m (153 kgf·cm, 11 ft·lbf)

d) Repeat the procedure on the opposite side.

31. REINSTALL THE WHEELS



32. REINSTALL THE ENGINE AND TRANSMISSION ASSY

a) Reinstall engine and transmission assy.

NOTE:

- **When reinstalling the engine & transmission assy, ALWAYS use 2 engine hoists/mini cranes to lift it.**
- **DO NOT use 1 engine hoist/mini crane to lift the engine and transmission assy, as the unbalanced weight may lead to an accident or injury.**
- **ONLY use engine hoists/mini cranes that can properly support the weight of the engine & transmission assy.**
- **Carefully adjust the 2 engine hoists/mini cranes used so that the engine and transmission assy is properly balanced.**

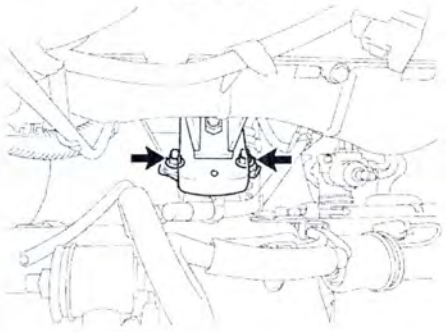
b) Attach the engine mounts with the 4 bolts and 4 ***NEW*** nuts, then torque to spec.

Torque Spec: 38 N·m (387 kgf·cm, 28 ft·lbf)

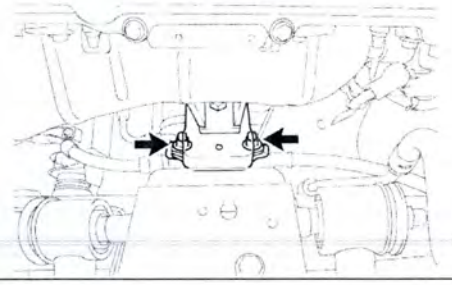
NEW Replacement Parts

Part Number	Part Name	Kit #	Qty
90179-10071	Nut	1-2	4

Left Side

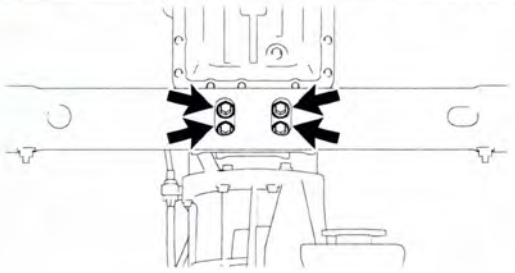


Right Side



NEW Replacement Parts

Part Number	Part Name	Kit #	Qty
90080-11387	Bolt	3	4



c) Attach the transmission mount with 4 ***NEW*** bolts and torque to spec.

Torque Spec: 18 N·m (183 kgf·cm, 13 ft·lbf)

d) Remove the bolt(s) and the engine hangers ***(5VZ-FE / 1GR-FE Only)***.

e) Reinstall the items/parts that were removed during the engine and transmission assy removal.

33. REINSTALL THE POWER STEERING PUMP ASSY

a) Reinstall the power steering vane pump with the 2 bolts and the nut ***(2UZ-FE Only)*** or the bolt and the nut ***(5VZ-FE Only)*** or with the 2 bolts ***(1GR-FE Only)***, then toque to spec.

Torque Spec: 2UZ-FE Without Cooler - 44 N·m (450 kgf·cm, 33 ft·lbf)
2UZ-FE With Cooler - 28 N·m (285 kgf·cm, 20 ft·lbf)
1GR-FE - 21 N·m (214 kgf·cm, 15 ft·lbf)

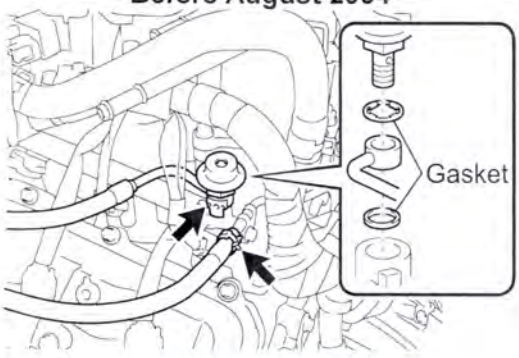
b) Reconnect the connector ***(5VZ-FE / 1GR-FE Only)***.
c) Reinstall the drive belt.

NEW Replacement Parts

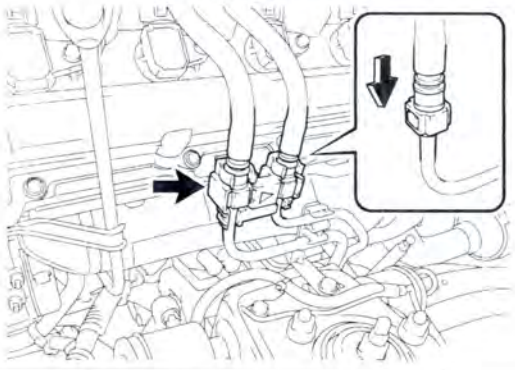
Part Number	Part Name	Kit #	Qty
23232-41081	Gasket (Fuel Pump Hose)	NA*	1
90430-12026	Gasket (Pulsation Damper Hose)	NA*	1

*Individual part(s)

Before August 2004



After August 2004



34. RECONNECT THE FUEL TUBES AND HOSES

For 2UZ-FE Vehicles:
(Only For Vehicles Produced On Or Before August 2004)

a) Reconnect the fuel return hose with the clamp.
b) Reconnect the fuel main hose with the 2 ***NEW*** gaskets and the pulsation dumper, then torque to spec with **SST 09617-24011**.

Torque Spec: 39 N·m (397 kgf·cm, 29 ft·lbf)

For 2UZ-FE Vehicles:
(Only For Vehicles Produced After August 2004)

a) Reconnect the 2 fuel pipes.
b) Reinstall the fuel pipe clamp.

NOTE:

- **Match the axis of the connector with the axis of the pipe, and push into the connector until the connector makes a "click" sound. In case that the connection is tight, apply a little amount of fresh engine oil on the tip of the pipe.**
- **After having finished the connection, check if the pipe and the connector are securely connected by pulling them**

NEW Replacement Parts

Part Number	Part Name	Kit #	Qty
90430-12026	Gasket (Pulsation Damper Hose)	NA*	2

*Individual part(s)

Illustration A

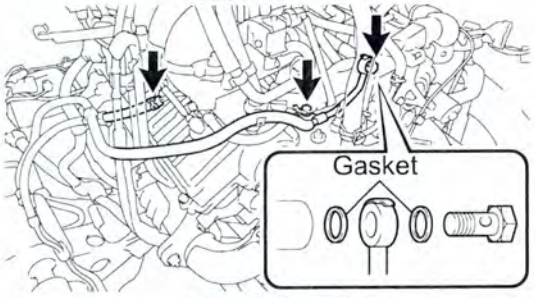
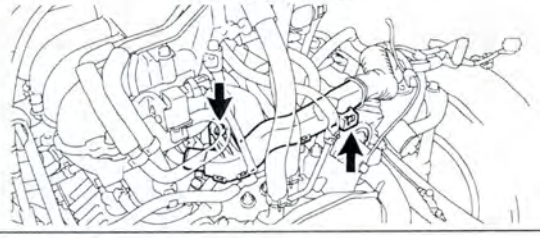


Illustration B



For 5VZ-FE Vehicles:

a) Reconnect the fuel return hose with the clamp (**Illustration A**).

b) Temporarily reconnect the main fuel pipe with the union bolt and 2 ***NEW*** gaskets (**Illustration A**).

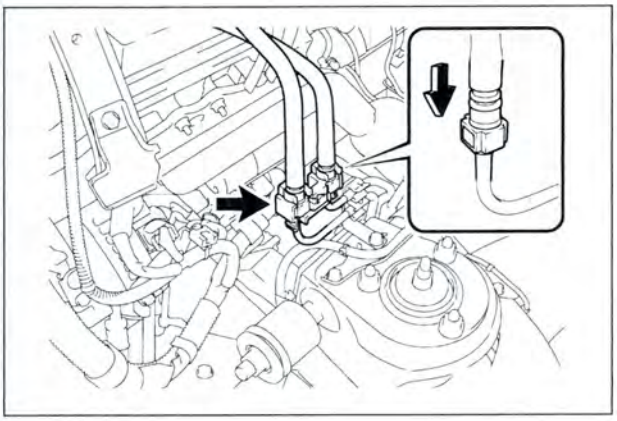
c) Reinstall the bracket bolt and torque to spec (**Illustration A**).

Torque Spec: 8.0 N·m (81 kgf·cm, 70 in·lbf)

d) Torque the union bolt to spec (**Illustration A**).

Torque Spec: 34 N·m (346 kgf·cm, 25 ft·lbf)

e) Reinstall the wire harness clip and bolt (**Illustration B**).



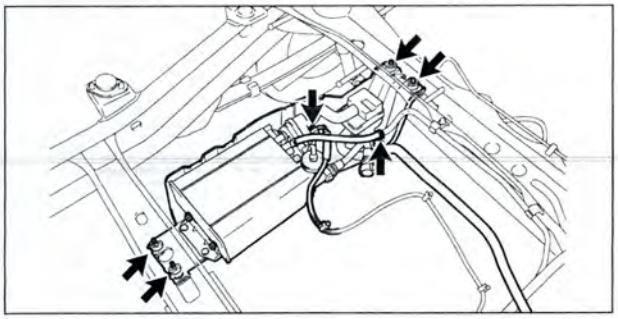
For 1GR-FE Vehicles:

a) Reconnect the 2 fuel pipes.

b) Reinstall the fuel pipe clamp.

NOTE:

- **Match the axis of the connector with the axis of the pipe, and push into the connector until the connector makes a "click" sound. In case that the connection is tight, apply a little amount of fresh engine oil on the tip of the pipe.**
- **After having finished the connection, check if the pipe and the connector are securely connected by pulling them.**

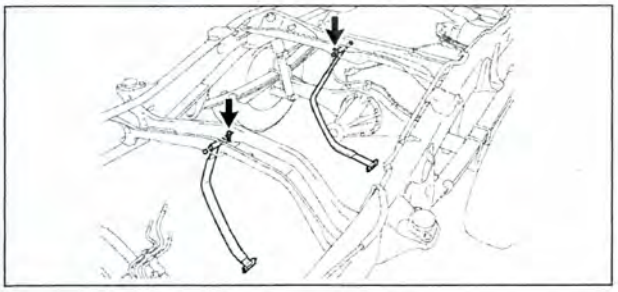


35. REINSTALL THE CHARCOAL CANISTER ASSY

a) Reinstall the charcoal canister assy with the 4 bolts and torque to spec.

Torque Spec: 15 N·m (153 kgf·cm, 11 ft·lbf)

b) Reconnect the fuel hose.

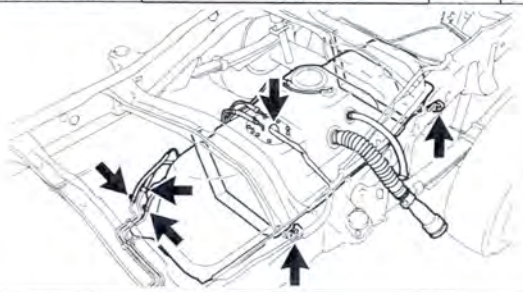


36. REINSTALL THE FUEL TANK STRAPS

a) Reinstall the fuel tank straps with the 2 pins and 2 clips.

NEW Replacement Parts

Part Number	Part Name	Kit #	Qty
90119-A0077	Bolt	3	2

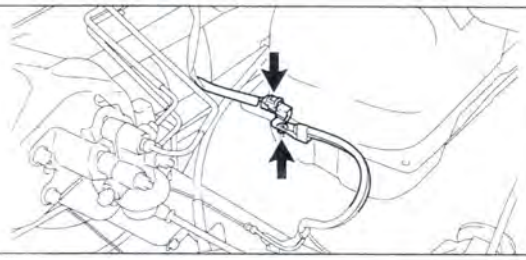


37. REINSTALL THE FUEL TANK

a) Reinstall the fuel tank with the 2 ***NEW*** bolts and torque to spec.

Torque Spec: 62 N·m (632 kgf·cm, 46 ft·lbf)

b) Reinstall the fuel tubes.



38. RECONNECT THE REAR SPEED SENSOR CONNECTOR

a) Reconnect the rear speed sensor connector with the nut, and torque to spec.

Torque Spec: 13 N·m (132 kgf·cm, 10 ft·lbf)

39. REINSTALL THE EXHAUST SYSTEM

a) Install ***NEW*** exhaust pipe gasket(s).
b) Reinstall the exhaust with exhaust pipe supports.
c) Reinstall ***NEW*** flange retainer(s) with bolts and torque to spec. (***2UZ-FE 4 Bolts, 5VZ-FE 2 Bolts***)

Torque Spec: 48 N·m (489 kgf·cm, 35 ft·lbf)

d) Using a vernier caliper, measure the free length of the exhaust spring. (***1GR-FE Only***)

Minimum length: 40.5 mm (1.5945 in.)

NOTE: If the free length is less than the minimum spec, replace the spring.

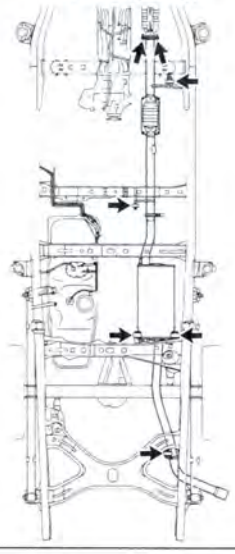
e) Reinstall the 2 bolts and 2 springs and torque to spec.(***1GR-FE Only***)

Torque Spec: 43 N·m (438 kgf·cm, 31 ft·lbf)

5VZ-FE

Part Number	Part Name	Kit #	Qty
18495-76010	Retainer, Exhaust Pipe	NA*	1
90917-06057	Gasket, Exhaust Pipe	NA*	1

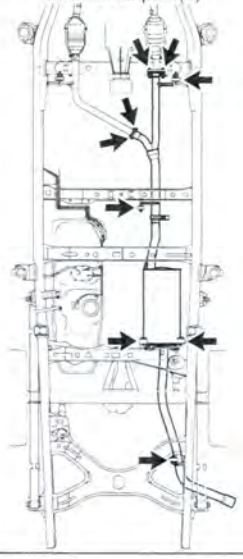
*Individual part(s)



1GR-FE

Part Number	Part Name	Kit #	Qty
17451-0D030	Retainer, Exhaust Pipe	NA*	1
90917-06083	Retainer, Exhaust Pipe	NA*	1

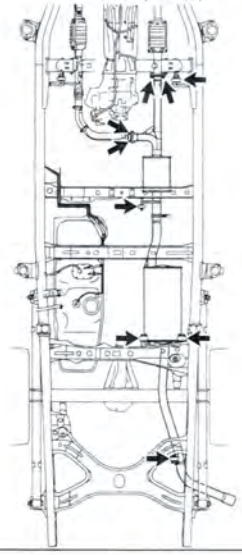
*Individual part(s)

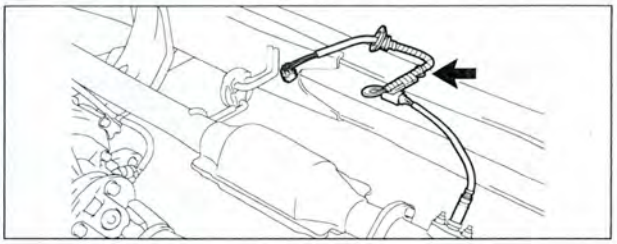


2UZ-FE

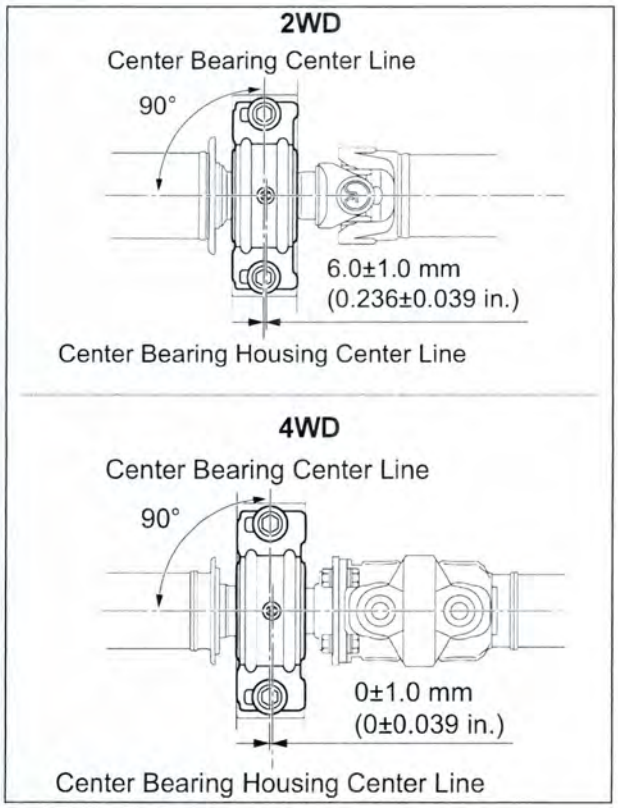
Part Number	Part Name	Kit #	Qty
18495-38020	Retainer, Exhaust Pipe	NA*	1
90917-06083	Retainer, Exhaust Pipe	NA*	1

*Individual part(s)





a) Reconnect the oxygen sensor wire harness clamp.



40. REINSTALL THE REAR PROPELLER SHAFT

a) Remove the **SST 09325-40010 (*2WD Only*)**.
b) Referencing the matchmarks, reinstall the propeller shaft to the the transmission / transfer case and torque to spec.

Torque Spec:
- **For Vehicles Produced On Or Before August 2004 - 74 N·m (750 kgf·cm, 54 ft·lbf)**
- **For Vehicles Produced After August 2004 - 88 N·m (897 kgf·cm, 65 ft·lbf)**

c) Reinstall the center support bearing to the frame as shown in the illustration with 2 bolts and torque to spec.

Torque Spec: 40 N·m (408 kgf·cm, 30 ft·lbf)

d) Referencing the matchmarks, reinstall the propeller shaft to the rear differential with 4 bolts, 4 washers and 4 nuts, then torque to spec.

Torque Spec:
- **For Vehicles Produced On Or Before August 2004 - 74 N·m (750 kgf·cm, 54 ft·lbf)**
- **For Vehicles Produced After August 2004 - 88 N·m (897 kgf·cm, 65 ft·lbf)**

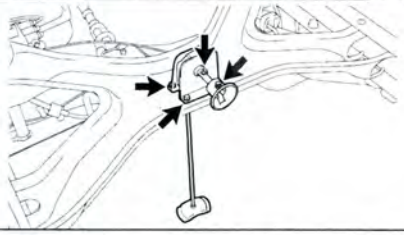
41. REINSTALL THE FRONT PROPELLER SHAFT (4WD ONLY)

a) Referencing the matchmarks, install the front propeller shaft to the transfer case and the front differential with 8 bolts, 8 washers and 8 nuts, then torque to spec.

Torque Spec:
- **For Vehicles Produced On Or Before August 2004 - 74 N·m (754 kgf·cm, 54 ft·lbf)**
- **For Vehicles Produced After August 2004 - Fr Diff Side - 74 N·m (754 kgf·cm, 54 ft·lbf)**
  Rr T/F Side - 88 N·m (897 kgf·cm, 65 ft·lbf)

NEW Replacement Parts

Part Number	Part Name	Kit #	Qty
90080-11180	Bolt	3	4



42. REINSTALL THE SPARE TIRE CARRIER

a) Reinstall the spare wheel carrier with the 4 ***NEW*** bolts and torque to spec.

Torque Spec: 20 N·m (203 kgf·cm, 14 ft·lbf)

b) Reinstall the spare tire.

43. REMOVE THE FRAME FROM THE LIFT

a) Remove the ratcheting tie down strap from the frame.
b) Lower the frame to the ground.

B. REINSTALL THE CAB BODY ASSY

NEW Replacement Parts

Without VSC

Part Number	Part Name	Kit #	Qty
47313-0C040	Tube, Front Brake No.3	4,6	1
47316-0C060	Tube, Front Brake No.6** (DCB)	4,6	1
47316-0C070	Tube, Front Brake No.6** (ACB, RCB)	4,6	1
47319-0C021	Tube, Front Brake No.9** (04 MY)	4	1
47319-0C030		4	1
47319-0C040	Tube, Front Brake No.9** (05-06 MY)	6	1
47319-0C050		6	1
47322-0C050	Tube, Front Brake No.2** (04 MY)	NA*	1
47322-0C060		NA*	1
47322-0C080	Tube, Front Brake No.2** (05-06 MY)	NA*	1
47322-0C090		NA*	1

*Individual part(s)

**Only 1 part is used. The part number varies depending on Kit #.

With VSC

Part Number	Part Name	Kit #	Qty
47313-0C050	Tube, Front Brake No.3** (04 MY)	5	1
47313-0C060		5	1
47313-0C070	Tube, Front Brake No.3** (05-06 MY)	7	1
47313-0C080		7	1
47316-0C051	Tube, Front Brake No.6**	5	1
47316-0C080		7	1
47322-0C041	Tube, Front Brake No.2**	5	1
47322-0C100		7	1
47325-0C041	Tube, Front Brake No.5**	5	1
47325-0C080		7	1

**Only 1 part is used. Part number varies depending on Kit #.

1. INSTALL THE *NEW* ENGINE COMPARTMENT BRAKE TUBES

Without VSC:

a) Install the ***NEW*** No. 3, No. 6 & No. 9 front brake tubes.
b) Install the ***NEW*** No. 2 rear brake tubes.
c) Torque all brake tubes to spec.

Torque Spec: 15 N·m (153 kgf·cm, 11 ft·lbf)

With VSC:

a) Install the ***NEW*** No. 3 & No. 6 front brake tubes.
b) Install the ***NEW*** No. 2 & No. 5 rear brake tubes.
c) Torque all brake tubes to spec.

Torque Spec: 15 N·m (153 kgf·cm, 11 ft·lbf)

2. REINSTALL THE CAB BODY ASSEMBLY

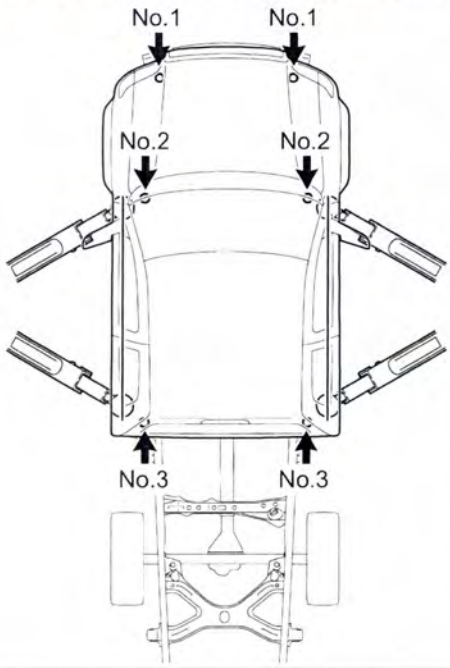
a) Raise the cab assy high enough so that the top of the engine clears the lowest point of the cab.
b) Push the frame under the cab assy and line up the tires with the marks previously placed on the floor.
c) Lower the cab assy slowly, making sure it does not interfere with anything.
d) Adjust the vehicle's frame as needed to align the cab mounts with the cab assy bolts.
e) Once the cab assy is set on the mounts, secure it to the frame with 6 bolts, 6 nuts, 6 washers and torque to spec.

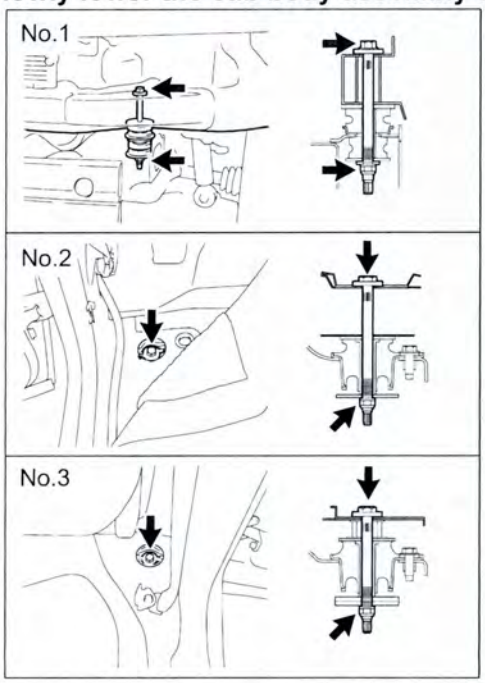
Torque Spec:

- **Regular Cab and Access Cab / Double Cab No.1 and No.2 Nut - 47 N·m (479 kgf·cm, 34 ft·lbf)**
- **Double Cab No.3 Nut - 67 N·m (683 kgf·cm, 49 ft·lbf)**

NOTE:

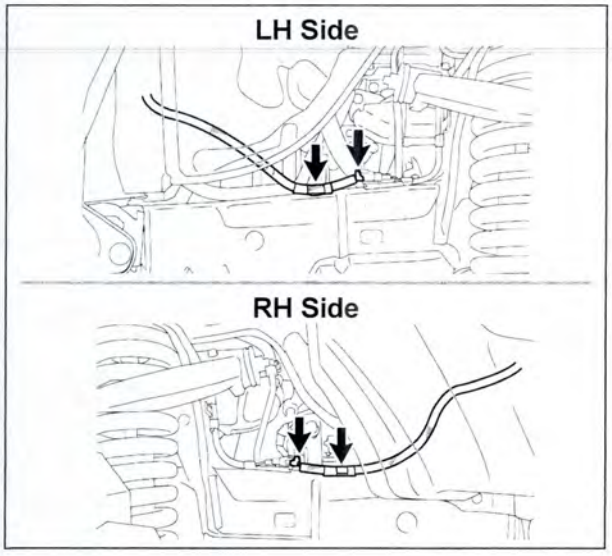
- **DO NOT work directly underneath the vehicle when pushing the frame under the cab assy.**
- **Slowly lower the cab body assembly making sure that the wire harness, steering shaft & hoses do not interfere.**
- **With 2 to 3 people checking for interference, slowly lower the cab body assembly to the frame.**





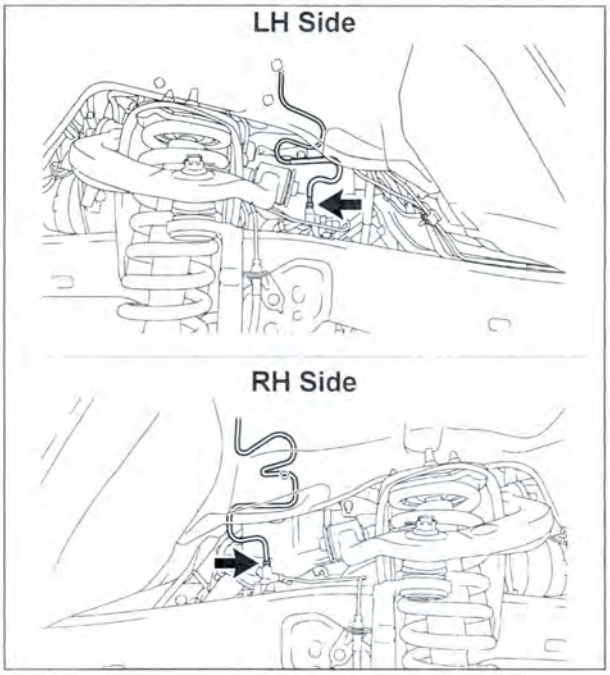
3. READJUST LIFT ARMS AND LIFT VEHICLE

4. REMOVE THE FRONT WHEELS



5. RECONNECT THE FRONT SPEED SENSOR CONNECTORS

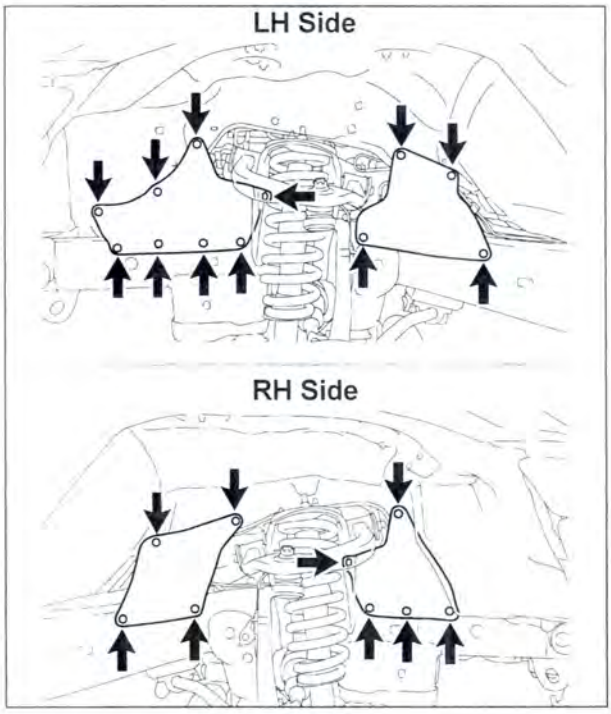
a) Reconnect the front speed sensor connector.
b) Reinstall the clamp.
c) Repeat the procedure on the opposite side.



6. RECONNECT THE FRONT BRAKE TUBES

a) Reconnect the front brake tube and torque to spec.
b) Repeat the procedure on the opposite side.

Torque Spec: 15 N·m (153 kgf·cm, 11 ft·lbf)

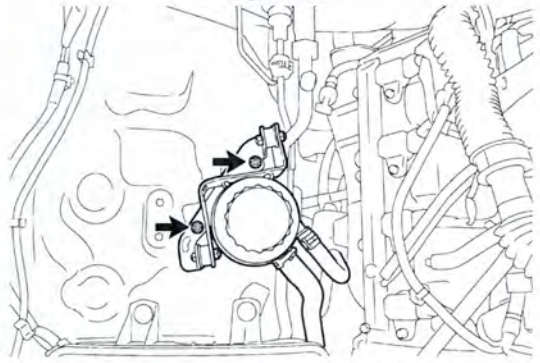


7. REINSTALL THE FRONT FENDER APRON SEALS

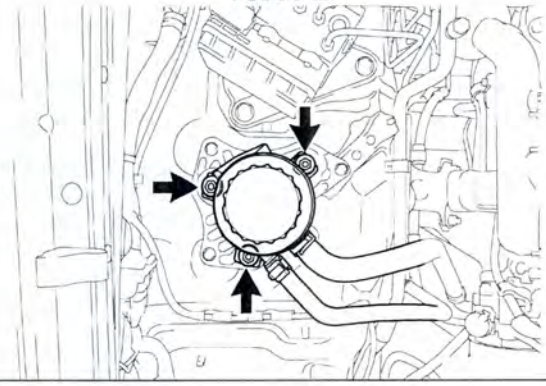
a) Reinstall the 4 front fender apron seals with the 21 clips.

8. LOWER THE VEHICLE ON THE LIFT

2UZ-FE



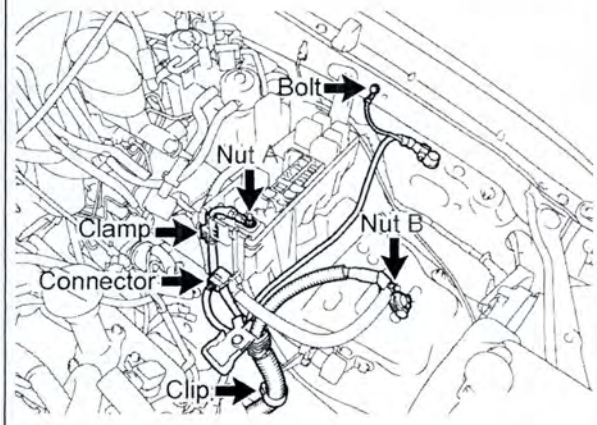
1GR-FE



9. RECONNECT THE VANE PUMP OIL RESERVOR (2UZ-FE / 1GR-FE ONLY)

a) Reinstall the vane pump oil reservoir with the 2 nuts and torque spec (***2UZ-FE Only***).
b) Reinstall the vane pump oil reservoir with the 3 nuts and torque spec (***1GR-FE Only***).

Torque Spec: 8.0 N·m (81 kgf·cm, 70 in·lbf)



10. RECONNECT THE NO.2 ENGINE WIRE HARNES

a) Reinstall the clip and reconnect the No.2 engine wire harness.
b) Reconnect the (+) positive battery cable with the 2 nuts and torque to spec.

Torque Spec: Nut A - 10 N·m (102 kgf·cm, 7 ft·lbf)
Nut B - 13 N·m (132 kgf·cm, 10 ft·lbf)

c) Reconnect the ground wire with the bolt and torque to spec.

Torque Spec: 8.0 N·m (81 kgf·cm, 70 in·lbf)

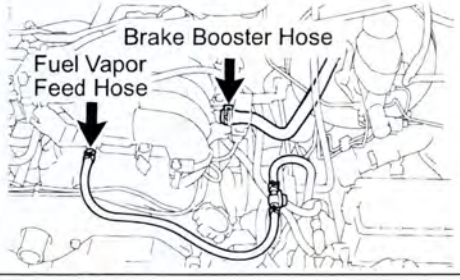
d) Reconnect the clamp and connector.
e) Reinstall the relay block cover.

11. RECONNECT THE HOSES

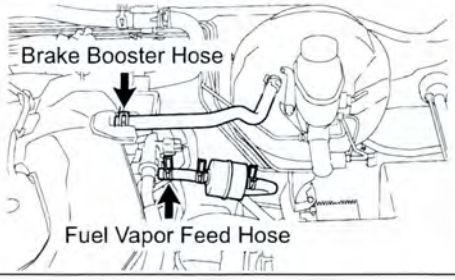
a) Reconnect the fuel vapor feed hose.
b) Reconnect the brake booster hose.

NOTE: The number of hoses will differ depending on the vehicle specification.

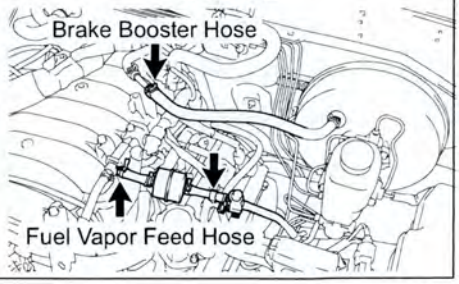
5VZ-FE



1GR-FE



2UZ-FE



NEW Replacement Parts
Radiator

Part Number	Part Name	Kit #	Qty
16492-21050	Packing (radiator drain cock) 2UZ-FE and 1GR-FE	NA*	1
96711-19007	Packing (radiator drain cock) 5VZ-FE	NA*	1

*Individual part(s)

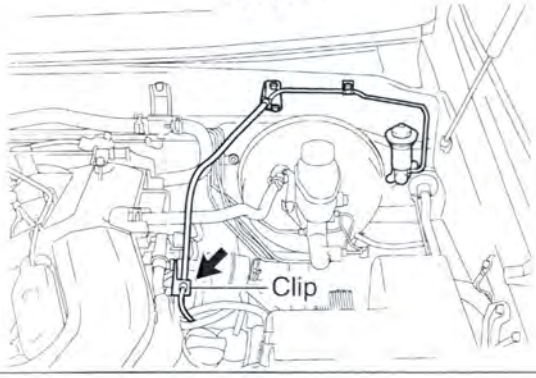
12. REINSTALL RADIATOR

- Radiator
  - Install the ***NEW*** radiator drain cock plug O-ring.
  - Tighten the radiator drain cock plug.
  - Install the radiator with the 4 bolts and torque to spec.
  - **Torque Spec:12 N·m (122 kgf·cm, 9 ft·lbf)**

13. REINSTALL THE FOLLOWING PARTS

- Throttle Body Cover
- V-Bank Cover (***1GR-FE Only***)
- Air Cleaner Assy & Hose
- External Trans Cooler (If Equipped)
- Accelerator control cable (5VZ-FE Only)

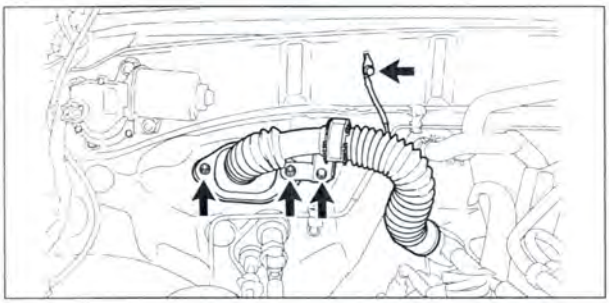
1GR-FE



14. RECONNECT THE CLUTCH MASTER CYLINDER TUBE (1GR-FE MANUAL TRANSMISSION VEHICLES ONLY)

a) Reconnect the clutch hose to the bracket with the clip.
b) Reconnect the clutch master cylinder tube and torque to spec.

Torque Spec: 15 N·m (153 kgf·cm, 11 ft·lbf)



15. RECONNECT ENGINE WIRE HARNESS

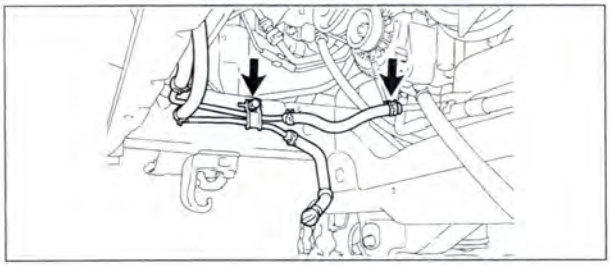
a) Feed the connectors through the bulk head
b) Reinstall the 2 nuts that hold the engine wire harness container to the cowl panel.
c) Reinstall the bolt.
d) Reinstall the ground wire and bolt and torque to spec.

Torque Spec: 8.0 N·m (81 kgf·cm, 70 in·lbf)

16. REINSTALL THE FRONT BUMPER

- Front Bumper Assy - Resin Bumper Only
  - Reinstall with the bolts and torque to spec.
  - **Torque Spec: 7.0 N·m (71 kgf·cm, 62 in·lbf)**
- Front Bumper Assy - Steel Bumper Only
  - Reinstall with the side mounting brackets, bolts and nuts, then torque to spec.
  - **Torque Spec: Bolt - 58 N·m (591 kgf·cm, 42 ft·lbf)**
    Nut - 12 N·m (122 kgf·cm, 9 ft·lbf)

17. LIFT THE VEHICLE



18. REINSTALL THE OIL COOLER PIPE (2UZ-FE / 1GR-FE ONLY)

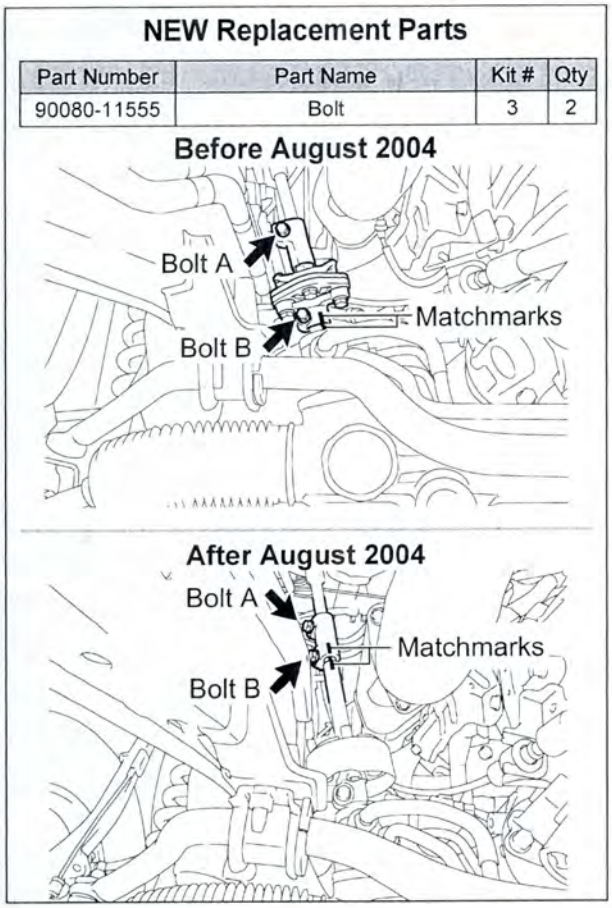
a) Reinstall the oil cooler pipe with the bolt and torque to spec.

Torque Spec: 12 N·m (122 kgf·cm, 9 ft·lbf)

b) Reconnect the hose.

NEW Replacement Parts

Part Number	Part Name	Kit #	Qty
90080-11555	Bolt	3	2



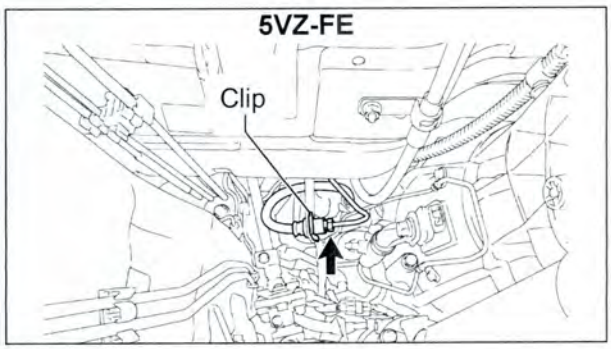
19. RECONNECT THE NO. 2 INTERMEDIATE SHAFT

NOTE: Use precaution when performing this step, as you will need to work underneath the vehicle.

a) Make sure the front wheels are in a straight-ahead position and the steering wheel is centered.
b) Referencing the match marks, connect the No. 2 intermediate shaft to the control valve shaft with the ***NEW*** bolt "B".
c) Remove bolt "A" and install the ***NEW*** bolt "A".
d) Torque all bolts to spec.

Torque Spec: 35 N·m (356 kgf·cm, 26 ft·lbf)

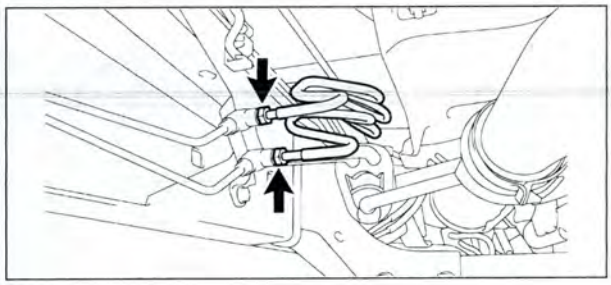
e) Disconnect the seat belt that is holding the steering wheel.



20. RECONNECT THE CLUTCH MASTER CYLINDER TUBE (MANUAL TRANS 5VZ-FE VEHICLES ONLY)

a) Reconnect the clutch hose to the bracket with the clip.
b) Reconnect the clutch master cylinder tube and torque to spec.

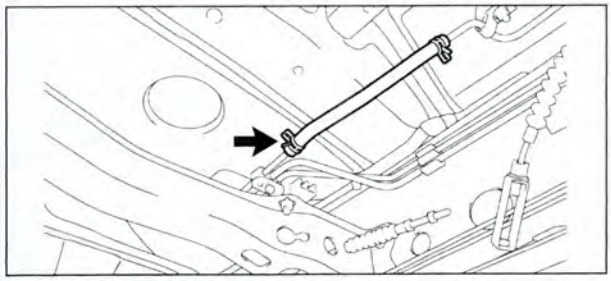
Torque Spec: 15 N·m (153 kgf·cm, 11 ft·lbf)



21. RECONNECT THE REAR BRAKE TUBES

a) Reconnect the 2 rear brake tubes and torque to spec.

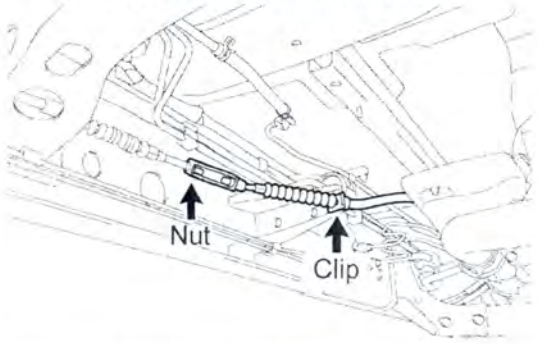
Torque Spec: 15 N·m (153 kgf·cm, 11 ft·lbf)



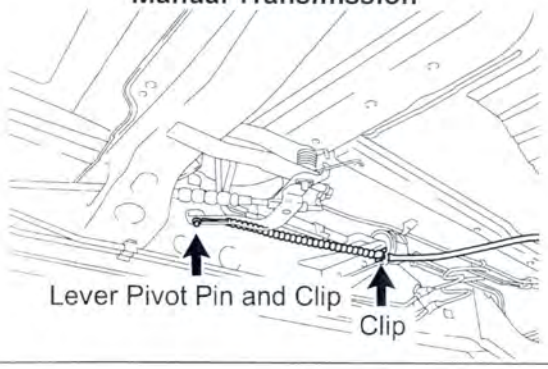
22. RECONNECT THE NO.1 FUEL HOSE

a) Reconnect the No.1 fuel hose with the clip.

Automatic Transmission



Manual Transmission



23. RECONNECT THE NO. 1 PARKING BRAKE CABLE

For Automatic Transmission Vehicles:

a) Reinstall the No.1 parking brake cable assy and tighten the nut.

b) Reinstall the clip.

For Manual Transmission Vehicles:

a) Reinstall the No.1 parking brake cable assy with the clip.

b) Reinstall the lever pivot pin and clip.

NEW Replacement Parts

Part Number	Part Name	Kit #	Qty
90179-08054	Nut	1-2	1

24. RECONNECT THE SHIFT CABLE

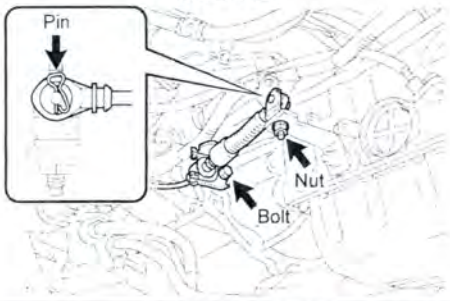
a) Reconnect the shift cable with the bolt(s) and torque to spec.

Torque Spec:

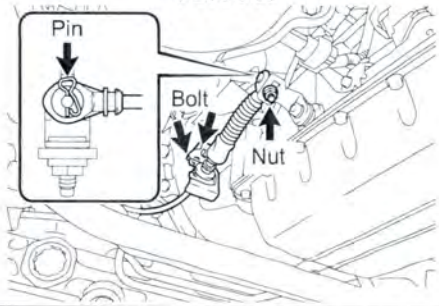
- **For 2UZ-FE Vehicles Produced On Or Before August 2004 - 18 N·m (183 kgf·cm, 13 ft·lbf)**
- **For 2UZ-FE Vehicles Produced After August 2004 - 20 N·m (203 kgf·cm, 14 ft·lbf)**
- **5VZ-FE - 71 N·m (724 kgf·cm, 52 ft·lbf)**
- **1GR-FE - 20 N·m (203 kgf·cm, 14 ft·lbf)**

b) Reinstall the washer and pin.

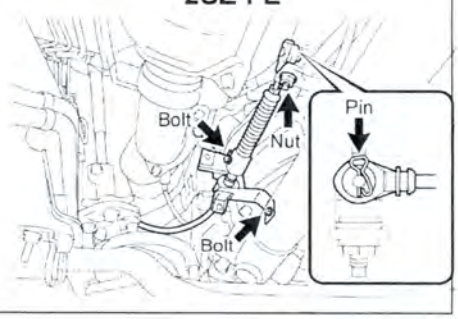
5VZ-FE



1GR-FE

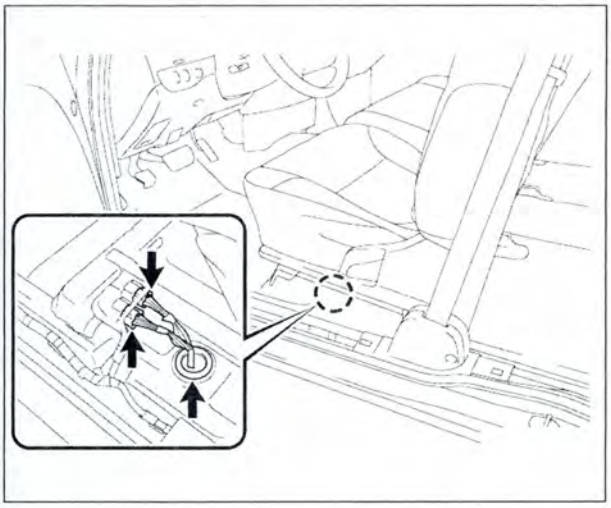


2UZ-FE



25. REINSTALL FRONT WHEELS

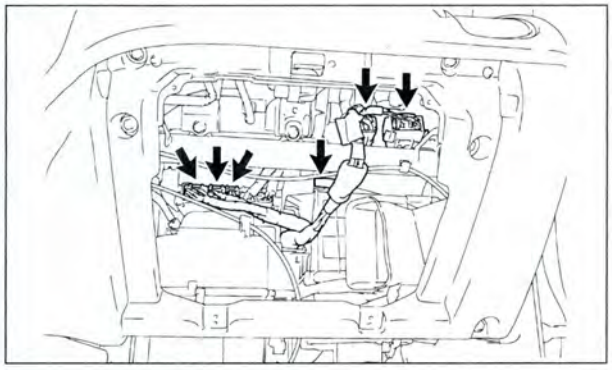
26. LOWER THE VEHICLE



27. RECONNECT THE FRAME WIRE HARNESS CONNECTOR

a) Insert the frame wire harness into the cab assy.
b) Reinstall the frame wire harness grommet to the cab assy.
c) Reconnect the frame wire harness connector(s).
d) Reinstall the left front cowl side trim panel.
e) Reinstall the left access cab door scuff plate (***Access Cab Only***).
f) Reinstall the left double cab door scuff plate (***Double Cab Only***).
g) Reinstall the left front door scuff plate.

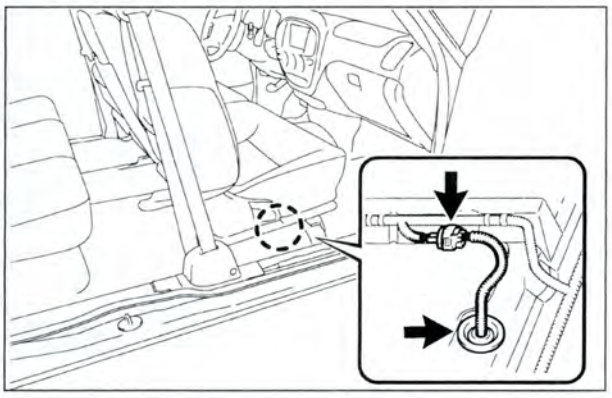
NOTE: The number of connectors will differ depending on the vehicle spec.



28. RECONNECT THE ENGINE WIRE HARNESS

e) Reconnect the connectors and clamp.
f) Reinstall the No. 4 heat register duct.
g) Reinstall the lower No. 2 finish panel.
h) Reinstall the glove box.

NOTE: The number of connectors will differ depending on the vehicle specification.



29. RECONNECT THE OXYGEN SENSOR WIRE HARNESS CONNECTOR (5VZ-FE ONLY)

a) Insert the oxygen sensor wire harness into the cab assy.
b) Reinstall the oxygen sensor wire harness grommet to the cab assy.
c) Reconnect the oxygen sensor wire harness connector.
d) Reinstall the right front cowl side trim panel.
e) Reinstall the right access cab door scuff plate (***Access Cab Only***).
f) Reinstall the right front door scuff plate.

30. REINSTALL THE FOLLOWING INTERIOR COMPONENTS

- Transfer Case Shift Lever (***5VZ-FE 4WD Only***)
- Manual Transmission Shift Lever (***Manual Transmission Vehicles Only***)

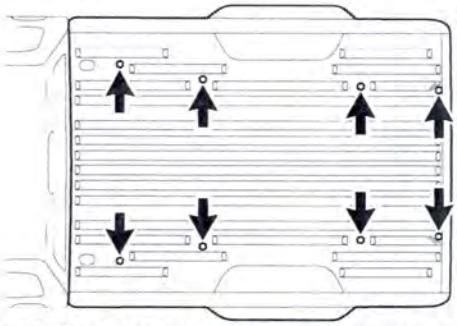
H. REINSTALL BED ASSEMBLY

1. REINSTALL THE BED ASSEMBLY

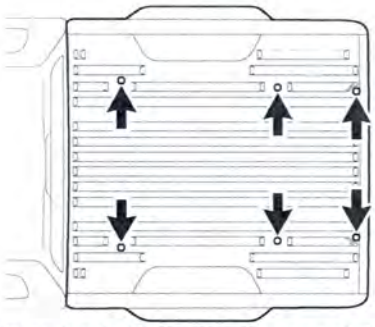
a) Using a Torx® T55H Tamper Resistant Socket, reinstall the bed assy Torx® bolts and torque to spec.

Torque Spec: 86 N·m (877 kgf·cm, 63 ft·lbf)

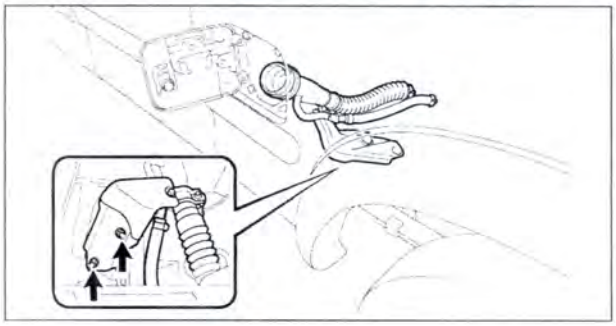
- **Regular Cab: 8 Torx® bolts**



- **Access Cab / Double Cab: 6 Torx® bolts**



NOTE: Using 4 or more people, evenly support the bed to reinstall the bed assembly on the frame ensuring not to damage or hit the fuel inlet pipe.

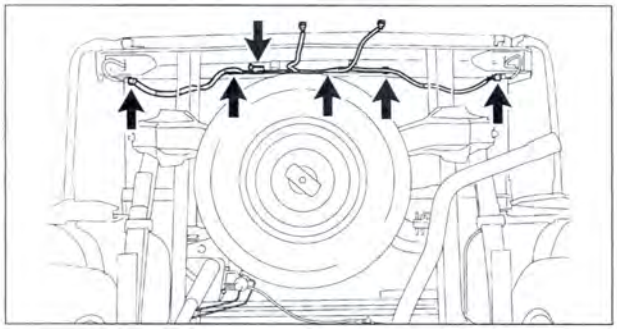


1. REINSTALL THE FUEL INLET PIPE

a) Reinstall the fuel inlet pipe with the 2 nuts and torque to spec.

Torque Spec:

- **For Vehicles Produced On Or Before August 2004 - 27 N·m (275 kgf·cm, 20 ft·lbf)**
- **For Vehicles Produced After August 2004 - 20 N·m (203 kgf·cm, 14 ft·lbf**



2. REINSTALL THE FRAME WIRE HARNESS

a) Reconnect the 4 wire harness clamps to the bed assy.
b) Reconnect the connectors.

NOTE:

- **The number of connectors will differ depending on the vehicle spec.**
- **Use new clamps if the original ones are damaged**

NEW Replacement Parts

With Trailer Hitch

Part Number	Part Name	Kit #	Qty
90080-11491	Bolt	NA*	12
90089-17059	Nut	NA*	2

*Individual part(s)

Without Trailer Hitch

Part Number	Part Name	Kit #	Qty
90119-12311	Bolt	1-2	4
90119-A0073	Bolt	3	6

3. REINSTALL THE FOLLOWING PARTS

- Fuel Tank Filler Pipe Shield
- Side Step Assy ***(If Equipped)***
- Rear Mudguards ***(If Equipped)***
- Trailer Hitch ***(If Equipped)***
- Rear Bumper Assy
  - Reinstall with 12 ***NEW*** bolts and 2 ***NEW*** nuts, then torque to spec. ***(With Trailer Hitch)***
  - Reinstall with 10 ***NEW*** bolts and torque to spec. ***(Without Trailer Hitch)***
  - **Torque Spec: 100 N·m (1019 kgf·cm, 73 ft·lbf)**
- Center Rear Bumper Pad
- License Plate Lights

I. FINAL ASSEMBLY

1. REINSTALL THE BATTERY

NEW Replacement Parts

Front Differential

Part Number	Part Name	Kit #	Qty
12157-10010	Gasket, Front Differential Filler Plug	NA*	1
90430-24003	Gasket, Front Differential Drain Plug	NA*	1

*Individual part(s)

2. REFILL THE FOLLOWING FLUIDS

- Brake Fluid
  - Refill Brake System with Toyota Dot 3 Brake Fluid.
  - Bleed the brake system at each wheel and torque the bleeder screws to spec.
  - **Torque Spec: 11 N·m (112 kgf·cm, 8 ft·lbf)**
- Clutch Fluid (***Manual Transmission Vehicles Only***)
  - Refill with Toyota Dot 3 Brake Fluid.
  - Bleed the clutch system & torque the bleeder screws to spec.
  - **Torque Spec: 11 N·m (112 kgf·cm, 8 ft·lbf)**
- Coolant
  - Refill with Toyota Long Life Coolant.
  - Bleed the cooling system.
- Front Differential
  - Install a ***NEW*** drain plug washer & torque to spec.
  - **Torque Spec: 65 N·m (662 kgf·cm, 48 ft·lbf)**
  - Refill with Hypoid Gear Oil API GL-5 75W-90.
  - Install a ***NEW*** filler plug washer and torque to spec.
  - **Torque Spec: 39 N·m (397 kgf·cm, 29 ft·lbf)**

3. START THE VEHICLE AND INSPECT THE FOLLOWING FOR LEAKS

- Fuel System
  - Start engine for 5 seconds, then stop engine.
  - Inspect for leaks, if no leaks restart engine and re-inspect.
- Brake System
- Clutch System (***Manual Transmission Only***)
- Front Differential System (***4WD Only***)
- Cooling System

4. RECHARGE THE A/C SYSTEM AND CHECK FOR PROPER OPERATION AND REFRIGERANT LEAKS

5. CHECK THE OPERATION OF THE FOLLOWING SYSTEMS AND ADJUST AS NEEDED

STOP

Follow the procedure outlined in the appropriate repair manual for the vehicle you are working on when checking and adjusting the operation of the systems listed below. This is an important step, and must be performed thouroughly to ensure proper operation..

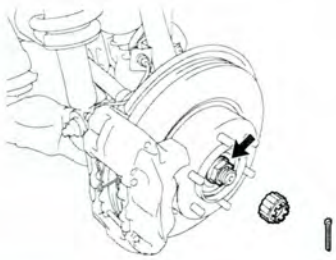
- Parking Brake Travel
- Shift Control Lever (***Automatic Trans Only***)
- Clutch Pedal (***Manual Transmission Only***)
- LSPV (***LSPV Equipped Vehicles Only***)

6. CHECK ALL FLUID LEVELS AND ADJUST AS NEEDED

NEW Replacement Parts

Part Number	Part Name	Kit #	Qty
95381-04045	Cotter Pin	NA*	2

*Individual part(s)



7. TORQUE THE FRONT AXLE NUT (4WD ONLY)

a) Remove the front wheels.
b) Torque the front axle nut to spec.

Torque Spec: 235 N·m (2396 kgf·cm, 173 ft·lb)

c) Reinstall the lock cap with the ***NEW*** cotter pin.

NOTE: If the holes for the cotter pin are not aligned, tighten the axle nut further, up to 60°.

d) Reinstall the grease cap.
e) Reinstall the front wheels and torque to spec.

Torque Spec: 110 N·m (1121 kgf·cm, 81 ft·lbf)

f) Repeat the procedure on the opposite side.

8. PERFORM A WHEEL ALIGNMENT

9. CHECK THE HEADLIGHT AIM AND ADJUST AS NEEDED

NEW Replacement Parts

Part Number	Part Name	Kit #	Qty
90080-11373	Bolt	3	9
90189-60440	Screw	1-2	4

10. REINSTALL THE ENGINE UNDER COVER

a) Reinstall the engine under cover with ***NEW*** bolts and ***NEW*** screws and torque to spec.

Torque Spec: 29 N·m (295 kgf·cm, 21 ft·lbf)

11. CHECK FOR DTC'S AND REPAIR AS NEEDED

12. PERFORM INITIALIZATION

13. FINAL INSPECTION

a) Check the operation of the following systems:

- 4WD System (***4WD Only***)
- Interior Lights
- Exterior Lights
- HVAC System
- Audio System
- Power Windows
- Power Door Locks
- All Gauges, Indicators and Warning Lights
- Cooling Fans
- Etc.

14. TEST DRIVE THE VEHICLE

◄ VERIFY REPAIR QUALITY ►

- **Confirm any DTCs and vehicle condition prior to beginning this repair**
- **Read all precautions as outlined on TIS before beginning repair**
- **Confirm your shop is equipped with the correct equipment to perform the repair (e.g. Above Ground Lift)**
- **Confirm all safety precautions are followed**
- **Confirm that the vehicle is returned to its original condition prior to delivery to the customer**

If you have any questions regarding this update, please contact your area representative.

C. APPENDIX

As required by Federal Regulations, please make sure all recalled parts (original parts) removed from the vehicle are disposed of in a manner in which they will not be reused. Adequate time has been provided in the repair time to cut up and dispose of the perforated frame.