H150F MANUAL TRANSMISSION / TRANSAXLE MANUAL TRANSMISSION ASSEMBLY(for 1GR-FE) REMOVAL

PROCEDURE

■ 1. PRECAUTION

CAUTION:

Be sure to read precaution thoroughly before servicing. Click hereVehicle Interior>SUPPLEMENTAL RESTRAINT SYSTEMS>AIRBAG SYSTEM>PRECAUTION

NOTICE:

After turning the ignition switch off, waiting time may be required before disconnecting the cable from the negative (-) battery terminal. Therefore, make sure to read the disconnecting the cable from the negative (-) battery terminal notices before proceeding with work.

Click hereGeneral>INTRODUCTION>REPAIR INSTRUCTION>PRECAUTION

2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

3.REMOVE NO. 2 ENGINE UNDER COVER

51442

Click hereEngine / Hybrid System>1GR-FE COOLING>RADIATOR>REMOVAL

4.DRAIN ENGINE COOLANT

Click hereEngine / Hybrid System>1GR-FE COOLING>COOLANT>REPLACEMENT

5.REMOVE NO. 1 RADIATOR HOSE

16571C

Click hereEngine / Hybrid System>1GR-FE COOLING>RADIATOR>REMOVAL

6.REMOVE FAN SHROUD

16711

Click hereEngine / Hybrid System>1GR-FE COOLING>RADIATOR>REMOVAL

7.REMOVE AIR CLEANER CAP SUB-ASSEMBLY WITH NO. 1 AIR CLEANER HOSE

17705

Click hereEngine / Hybrid System>1GR-FE ENGINE MECHANICAL>ENGINE ASSEMBLY>REMOVAL

8.REMOVE FRONT DOOR SCUFF PLATE LH

67914

for 2 door: (Click hereVehicle Interior>INTERIOR PANELS / TRIM>ROOF HEADLINING(for Single Cab)>REMOVAL) for 4 door: (Click hereVehicle Interior>INTERIOR PANELS / TRIM>ROOF HEADLINING(for Double Cab)>REMOVAL)

9.REMOVE FRONT DOOR SCUFF PLATE RH

67913

HINT:

Use the same procedure described for the LH side.

10.REMOVE COWL SIDE TRIM SUB-ASSEMBLY LH

62112A

for 2 door: (Click hereVehicle Interior>INTERIOR PANELS / TRIM>ROOF HEADLINING(for Single Cab)>REMOVAL) for 4 door: (Click hereVehicle Interior>INTERIOR PANELS / TRIM>ROOF HEADLINING(for Double Cab)>REMOVAL)

■ 11.REMOVE COWL SIDE TRIM SUB-ASSEMBLY RH

62111A

HINT:

Use the same procedure described for the LH side.

■ 12.REMOVE FRONT FLOOR FOOTREST

for LHD: (Click hereVehicle Interior>INTERIOR PANELS / TRIM>FRONT FLOOR FOOTREST(for RHD)>REMOVAL) for RHD: (Click hereVehicle Interior>INTERIOR PANELS / TRIM>FRONT FLOOR FOOTREST(for RHD)>REMOVAL)

13.REMOVE CONSOLE BOX

58811B

Click hereVehicle Interior>INTERIOR PANELS / TRIM>INSTRUMENT PANEL SAFETY PAD>REMOVAL

□ 14.REMOVE AIRBAG SENSOR COVER

89179A

Click hereVehicle Interior>SUPPLEMENTAL RESTRAINT SYSTEMS>CENTER AIRBAG SENSOR ASSEMBLY>REMOVAL

■ 15.REMOVE AIRBAG SENSOR ASSEMBLY WITH AIRBAG SENSOR BRACKET (w/ Airbag System)

89170

Click hereVehicle Interior>SUPPLEMENTAL RESTRAINT SYSTEMS>CENTER AIRBAG SENSOR ASSEMBLY>REMOVAL

■ 16.REMOVE DECELERATION SENSOR (w/ ABS)

89441A

Click hereBrake>BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS>DECELERATION SENSOR(w/ ABS)>REMOVAL

■ 17.REMOVE SHIFT LEVER KNOB SUB-ASSEMBLY

36303

Click hereDrivetrain>HF1A TRANSFER / 4WD / AWD>TRANSFER SHIFT LEVER ASSEMBLY>REMOVAL

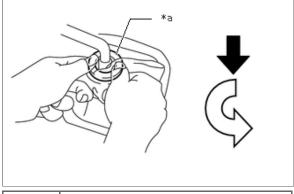
■ 18.REMOVE NO. 1 SHIFT AND SELECT LEVER BOOT

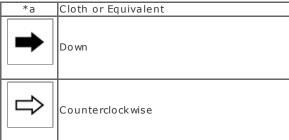
58286

Click hereDrivetrain>HF1A TRANSFER / 4WD / AWD>TRANSFER SHIFT LEVER ASSEMBLY>REMOVAL

19.REMOVE TRANSMISSION SHIFT LEVER ASSEMBLY

33530F





- a. Cover the shift lever cap with a cloth or equivalent.
- **b.** While pressing down on the shift lever cap, turn it counterclockwise to remove the transmission shift lever assembly.
- c. Pull out the transmission shift lever assembly.

20.REMOVE TRANSFER SHIFT LEVER ASSEMBLY

21.DISCONNECT HIGH AND LOW SHIFT ROD SUB-ASSEMBLY

36308

a. Remove the nut and washer, disconnect the high and low shift rod sub-assembly.

22.DRAIN MANUAL TRANSMISSION OIL

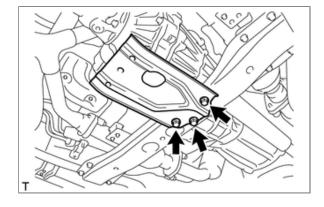
- a. Remove the drain plug sub-assembly and gasket, and then drain the manual transmission oil.
- **b.** Install a new gasket and the drain plug sub-assembly.

Torque:

37.24 N*m (380 kgf*cm, 27 ft.*lbf)

23.REMOVE TRANSFER CASE PROTECTOR

51447C



a. Remove the 3 bolts and transfer case protector from the No. 2 frame crossmember sub-assembly.

24.REMOVE FRONT EXHAUST PIPE ASSEMBLY (for Model Code #J78, #J79 Series)

17410

Click hereEngine / Hybrid System>1GR-FE INTAKE / EXHAUST>EXHAUST PIPE(for Model Code #J78, #J79 Series)>REMOVAL

25.REMOVE FRONT EXHAUST PIPE ASSEMBLY (for Model Code #J71, #J76 Series)

17410

Click hereEngine / Hybrid System>1GR-FE INTAKE / EXHAUST>EXHAUST PIPE(for Model Code #J71, #J76 Series)>REMOVAL

26.REMOVE NO. 1 EXHAUST MANIFOLD STAY

17118

Click hereEngine / Hybrid System>1GR-FE INTAKE / EXHAUST>EXHAUST MANIFOLD>REMOVAL

27.REMOVE NO. 2 MANIFOLD STAY

17119

Click hereEngine / Hybrid System>1GR-FE INTAKE / EXHAUST>EXHAUST MANIFOLD>REMOVAL

■ 28.REMOVE FRONT PROPELLER SHAFT ASSEMBLY

37140

Click hereDrivetrain>DRIVE SHAFT / PROPELLER SHAFT>FRONT PROPELLER SHAFT ASSEMBLY>REMOVAL

29.REMOVE REAR PROPELLER SHAFT ASSEMBLY

37110

Click hereDrivetrain>DRIVE SHAFT / PROPELLER SHAFT>PROPELLER SHAFT ASSEMBLY>REMOVAL

■ 30.REMOVE STARTER ASSEMBLY

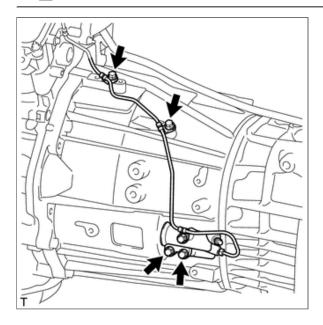
28100

Click hereEngine / Hybrid System>1GR-FE STARTING>STARTER>REMOVAL

Click hereDrivetrain>CLUTCH>CLUTCH RELEASE CYLINDER(for 1GR-FE)>REMOVAL

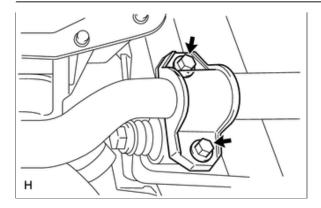
■ 32.DISCONNECT CLUTCH RELEASE CYLINDER ASSEMBLY

31470



a. Remove the 4 bolts and disconnect the clutch release cylinder assembly.

■ 33.REMOVE FRONT STABILIZER BRACKET LH



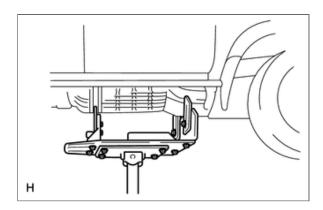
a. Remove the 2 bolts and front stabilizer bracket LH.

■ 34.REMOVE FRONT STABILIZER BRACKET RH

HINT:

Use the same procedures described for the LH side.

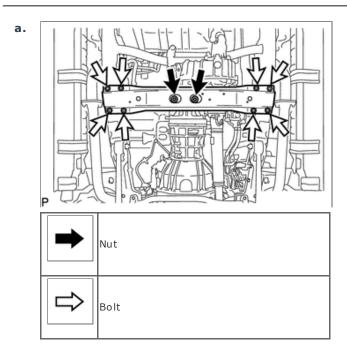
35.SUPPORT MANUAL TRANSMISSION



a. Support the manual transmission with a transmission jack.

36.REMOVE NO. 2 FRAME CROSSMEMBER SUB-ASSEMBLY

51203

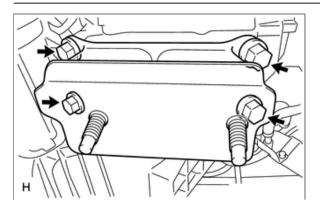


Remove the 8 bolts.

b. Remove the 2 nuts and No. 2 frame crossmember sub-assembly.

■ 37.REMOVE REAR ENGINE MOUNTING INSULATOR

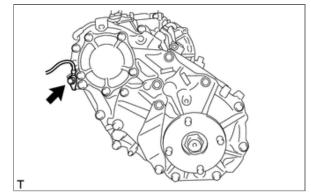
12371



a. Remove the 4 bolts and rear engine mounting insulator from the manual transmission with transfer.

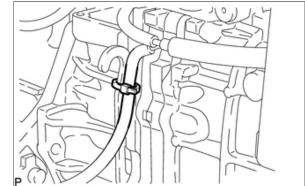
■ 38.DISCONNECT WIRE HARNESS





Remove the bolt and disconnect the No. 2 cable bond.

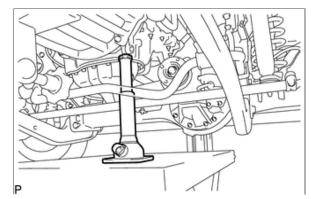




Remove the clamp and disconnect the wire harness from the manual transmission.

Tilt the manual transmission together with the transfer downward.



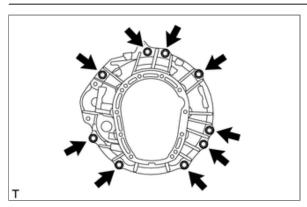


Support the engine assembly with the jack and engine lifter so that it is stable as shown in the illustration.

Disconnect the connectors and clamps, and then disconnect the wire harness from the manual transmission.



■ 39.REMOVE MANUAL TRANSMISSION WITH TRANSFER



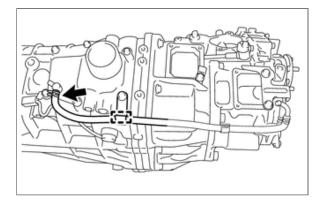
a. Remove the 9 bolts and manual transmission with transfer.

NOTICE:

Do not use excess force to pry off the transmission.

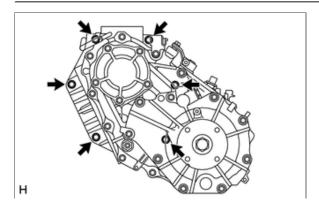
40.REMOVE REAR NO. 1 TRANSFER CASE HOSE

36112B



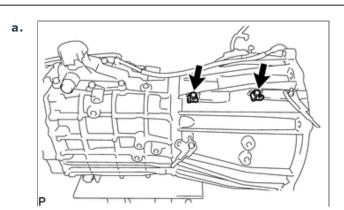
- Disconnect the clamp.
- Slide the clip and disconnect the rear No. 1 transfer case hose from the manual transmission.

■ 41.REMOVE TRANSFER ASSEMBLY



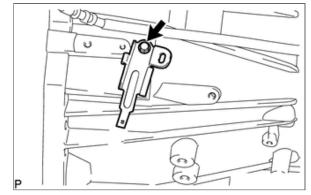
Remove the 6 bolts and transfer assembly from the manual transmission.

42.REMOVE WIRE HARNESS CLAMP BRACKET



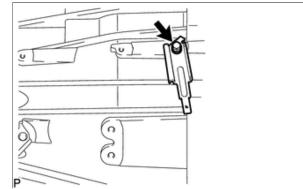
Remove the 2 bolts and 2 wire harness clamp brackets.





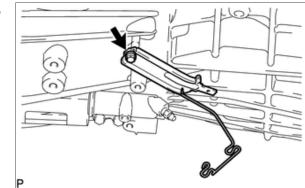
Remove the bolt and air fuel ratio sensor bracket LH.





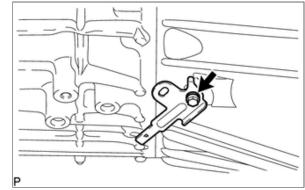
Remove the bolt and air fuel ratio sensor bracket RH.





Remove the bolt and heated oxygen sensor bracket LH.





Remove the bolt and heated oxygen sensor bracket RH.

44.REMOVE CLUTCH RELEASE FORK SUPPORT BOOT	31237
Click hereDrivetrain>CLUTCH>CLUTCH UNIT(for 1GR-FE)>REMOVAL	
45.REMOVE RELEASE FORK SUPPORT	31236B

Click hereDrivetrain>CLUTCH>CLUTCH UNIT(for 1GR-FE)>REMOVAL

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