Exit

H150F MANUAL TRANSMISSION / TRANSAXLE MANUAL TRANSMISSION ASSEMBLY(for 1VD-FTV) INSTALLATION

### **PROCEDURE**

I.INSTALL RELEASE FORK SUPPORT

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

2.INSTALL CLUTCH RELEASE FORK SUPPORT BOOT

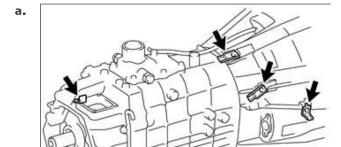
Click hereDrivetrain>CLUTCH>CLUTCH UNIT (for 1GR-FE)>INSTALLATION

3.INSTALL CLUTCH RELEASE FORK SUB-ASSEMBLY

31204

Click hereDrivetrain>CLUTCH>CLUTCH UNIT (for 1VD-FTV)>INSTALLATION

■ 4.INSTALL WIRE HARNESS CLAMP BRACKET

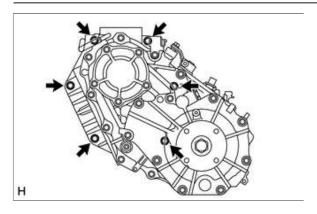


Install the 4 wire harness clamp brackets with the 4 bolts.

Torque:

30 N\*m (306 kgf\*cm, 22 ft.\*lbf)

# **■** 5.INSTALL TRANSFER ASSEMBLY

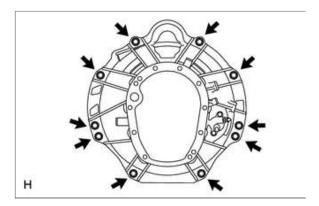


a. Install the transfer assembly to the manual transmission with the 6 bolts.

Torque:

68.6 N\*m (700 kgf\*cm, 51 ft.\*lbf)

6.INSTALL MANUAL TRANSMISSION WITH TRANSFER



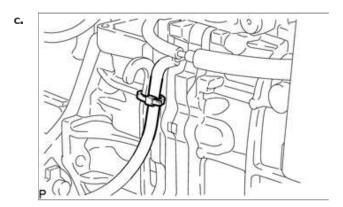
a. Install the manual transmission with transfer with the 10 bolts.

Torque

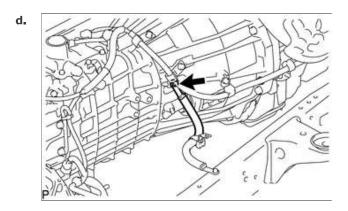
71.6 N\*m (730 kgf\*cm, 53 ft.\*lbf)

### **■ 7.CONNECT WIRE HARNESS**

- **a.** Connect the connectors and clamps, and then connect the wire harness to the manual transmission with transfer.
- **b.** Tilt up the manual transmission with transfer.



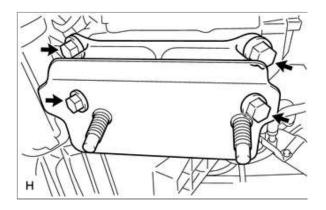
Install the wire harness clamp and connect the wire harness to the manual transmission with transfer.



Connect the ground cable with the bolt.

Torque:

13 N\*m (133 kgf\*cm, 10 ft.\*lbf)



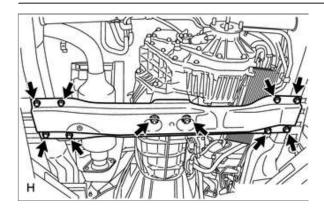
a. Install the rear engine mounting insulator to the manual transmission with the 4 bolts.

Torque:

59 N\*m (602 kgf\*cm, 44 ft.\*lbf)

## 9.INSTALL NO. 2 FRAME CROSSMEMBER SUB-ASSEMBLY

51203



**a.** Install the No. 2 frame crossmember sub-assembly with the 2 nuts.

**Torque:** 

74 N\*m (755 kgf\*cm, 55 ft.\*lbf)

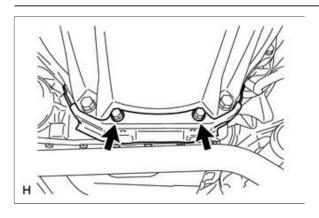
**b.** Install the 8 bolts.

Torque:

46 N\*m (469 kgf\*cm, 34 ft.\*lbf)

# **■** 10.INSTALL OIL PAN COVER

12140

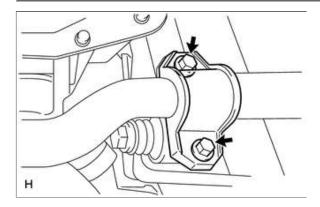


a. Install the oil pan cover with the 2 bolts.

Torque:

21 N\*m (214 kgf\*cm, 15 ft.\*lbf)

# **■ 11.INSTALL FRONT STABILIZER BRACKET LH**



a. Install the front stabilizer bracket LH with the 2 bolts.

Torque:

29.7 N\*m (303 kgf\*cm, 22 ft.\*lbf)

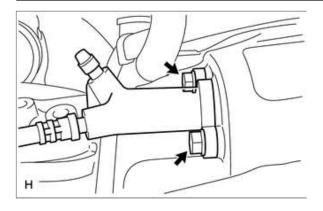
**■ 12,INSTALL FRONT STABILIZER BRACKET RH** 

### HINT:

Use the same procedure described for the LH side.

**■ 13.INSTALL CLUTCH RELEASE CYLINDER ASSEMBLY** 

31470



a. Install the clutch release cylinder assembly with the 2 bolts.

Torque:

11.8 N\*m (120 kgf\*cm, 9 ft.\*lbf)

### 14.INSTALL MONOLITHIC CONVERTER ASSEMBLY

18450A

 $\label{local-click} {\tt Click\ hereEngine\ /\ Hybrid\ System>1VD-FTV\ (INTAKE\ /\ EXHAUST)>EXHAUST\ MANIFOLD\ W/\ TURBOCHARGER\ (w/o\ DPF)>INSTALLATION }$ 

#### 15.INSTALL REAR PROPELLER SHAFT ASSEMBLY

37110

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

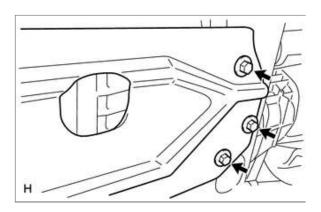
### 16.INSTALL FRONT PROPELLER SHAFT ASSEMBLY

37140

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

# **■ 17.INSTALL TRANSFER CASE PROTECTOR**

51447C



a. Install the transfer case protector to the crossmember with the 3 bolts.

Torque:

18 N\*m (184 kgf\*cm, 13 ft.\*lbf)

**■ 18.ADD MANUAL TRANSMISSION OIL** 

Click hereDrivetrain>H150F (MANUAL TRANSMISSION / TRANSAXLE)>MANUAL TRANSMISSION OIL>REPLACEMENT

■ 19.CONNECT HIGH AND LOW SHIFT ROD SUB-ASSEMBLY

36308

a. Connect the high and low shift rod sub-assembly with the washer and nut.

Torque:

11.76 N\*m (120 kgf\*cm, 9 ft.\*lbf)

**20.INSTALL TRANSFER SHIFT LEVER ASSEMBLY** 

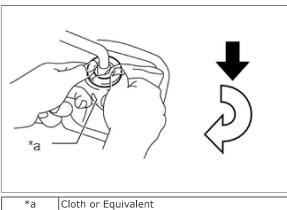
Click hereDrivetrain>HF1A (TRANSFER / 4WD / AWD)>TRANSFER SHIFT LEVER ASSEMBLY>INSTALLATION

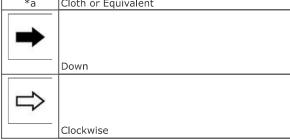
**■ 21.INSPECT AND ADJUST TRANSFER SHIFT LEVER ASSEMBLY** 

Click hereDrivetrain>HF1A (TRANSFER / 4WD / AWD)>TRANSFER SHIFT LEVER ASSEMBLY>INSTALLATION

22.INSTALL TRANSMISSION SHIFT LEVER ASSEMBLY

33530F

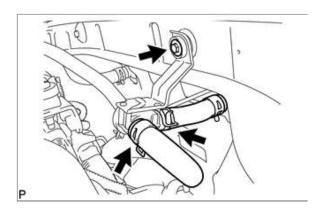




**a.** Cover the transmission shift lever cap with a cloth or equivalent.

	23.INSTALL NO. 1 SHIFT AND SELECT LEVER BOOT	58286		
Click h	ereDrivetrain>HF1A (TRANSFER / 4WD / AWD)>TRANSFER SHIFT LEVER ASSEMBLY>INSTALLATION			
	24.INSTALL SHIFT LEVER KNOB SUB-ASSEMBLY	36303		
Click h	ereDrivetrain>HF1A (TRANSFER / 4WD / AWD)>TRANSFER SHIFT LEVER ASSEMBLY>INSTALLATION			
	25.INSTALL DECELERATION SENSOR (w/ ABS)	89441A		
Click hereBrake>BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS>DECELERATION SENSOR (w/ ABS)>INSTALLA				
	26.INSTALL AIRBAG SENSOR ASSEMBLY WITH AIRBAG SENSOR BRACKET (w/ Airbag System)	89170		
Click h	ereVehicle Interior>SUPPLEMENTAL RESTRAINT SYSTEMS>CENTER AIRBAG SENSOR ASSEMBLY>INST	ALLATION		
	27.INSTALL AIRBAG SENSOR COVER	89179A		
Click h	ereVehicle Interior>SUPPLEMENTAL RESTRAINT SYSTEMS>CENTER AIRBAG SENSOR ASSEMBLY>INST	ALLATION		
	28.INSTALL CONSOLE BOX	58811B		
Click h	ereVehicle Interior>INTERIOR PANELS / TRIM>INSTRUMENT PANEL SAFETY PAD>INSTALLATION			
	29.INSTALL FRONT FLOOR FOOTREST	58191		
	ereVehicle Interior>INTERIOR PANELS / TRIM>FRONT FLOOR FOOTREST(for LHD)>INSTALLATION ereVehicle Interior>INTERIOR PANELS / TRIM>FRONT FLOOR FOOTREST(for RHD)>INSTALLATION			
	30.INSTALL COWL SIDE TRIM SUB-ASSEMBLY LH	62112A		
	loor: (Click hereVehicle Interior>INTERIOR PANELS / TRIM>ROOF HEADLINING (for Single Cab)>INSTA loor: (Click hereVehicle Interior>INTERIOR PANELS / TRIM>ROOF HEADLINING (for Double Cab)>INST			
	31.INSTALL COWL SIDE TRIM SUB-ASSEMBLY RH	62111A		
<b>HINT:</b> Use	the same procedure described for the LH side.			
	32.INSTALL FRONT DOOR SCUFF PLATE LH	67914		
	oor: (Click hereVehicle Interior>INTERIOR PANELS / TRIM>ROOF HEADLINING (for Single Cab)>INSTA			
	33.INSTALL FRONT DOOR SCUFF PLATE RH	67913		
HINT: Use	the same procedure described for the LH side.			
	34.INSTALL HEATER WATER VALVE ASSEMBLY	87240		

**b.** While pressing down on the transmission shift lever cap, turn it clockwise to install the transmission shift lever.

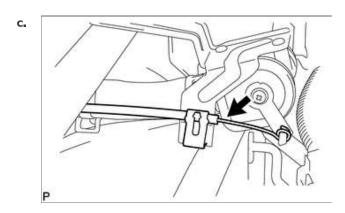


a. Install the heater water valve assembly to the vehicle with the bolt.

Torque:

5.0 N\*m (51 kgf\*cm, 44 in.\*lbf)

**b.** Connect the 2 hoses to the heater water valve assembly and slide the 2 clamps to secure it.



Connect the cable to the heater water valve assembly.

	35.INSTALL FAN PULLEY	16371			
Click hereEngine / Hybrid System>1VD-FTV (COOLING)>RADIATOR>INSTALLATION					
	36.INSTALL FAN SHROUD	16711			
Click h	Click hereEngine / Hybrid System>1VD-FTV (COOLING)>RADIATOR>INSTALLATION				
	37.INSTALL RADIATOR RESERVOIR ASSEMBLY	16470			
Click hereEngine / Hybrid System>1VD-FTV (COOLING)>RADIATOR>INSTALLATION					
	38.INSTALL INTAKE AIR CONNECTOR PIPE	17875			
Click hereEngine / Hybrid System>1VD-FTV (COOLING)>RADIATOR>INSTALLATION					
	39.INSTALL INTAKE AIR CONNECTOR SUB-ASSEMBLY	17805			
Click hereEngine / Hybrid System>1VD-FTV (COOLING)>RADIATOR>INSTALLATION					
	40.INSTALL AIR CLEANER CASE SUB-ASSEMBLY				
Click hereEngine / Hybrid System>1VD-FTV (COOLING)>RADIATOR>INSTALLATION					
	41.INSTALL AIR CLEANER CAP SUB-ASSEMBLY	17705			

	42.INSTALL NO. 1 AIR CLEANER HOSE	17881			
Click hereEngine / Hybrid System>1VD-FTV (COOLING)>RADIATOR>INSTALLATION					
	43.INSTALL NO. 1 RADIATOR HOSE	16571C			
Click hereEngine / Hybrid System>1VD-FTV (COOLING)>RADIATOR>INSTALLATION					
	44.ADD ENGINE COOLANT				
Click h	Click hereEngine / Hybrid System>1VD-FTV (COOLING)>COOLANT>REPLACEMENT				
	45.CONNECT CABLE TO NEGATIVE BATTERY TERMINAL				
	46.PERFORM DIAGNOSTIC SYSTEM CHECK				
	40.PERFORM DIAGNOSTIC STSTEM CHECK				
Click hereVehicle Interior>SUPPLEMENTAL RESTRAINT SYSTEMS>AIRBAG SYSTEM>DTC CHECK / CLEAR					
	47.CHECK SRS WARNING LIGHT				
Click hereVehicle Interior>SUPPLEMENTAL RESTRAINT SYSTEMS>AIRBAG SYSTEM>DIAGNOSIS SYSTEM					
	48.INSPECT FOR ENGINE COOLANT LEAK				
Click hereEngine / Hybrid System>1VD-FTV (COOLING)>COOLING SYSTEM>ON-VEHICLE INSPECTION					
	49.INSPECT FOR EXHAUST GAS LEAK				
Click hereEngine / Hybrid System>1VD-FTV (INTAKE / EXHAUST)>EXHAUST MANIFOLD W/ TURBOCHARGER (w/o DPF)>INSTALLATION					
	50.INSTALL NO. 2 ENGINE UNDER COVER	51442			

Click hereEngine / Hybrid System>1VD-FTV (COOLING)>COOLANT>REPLACEMENT

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