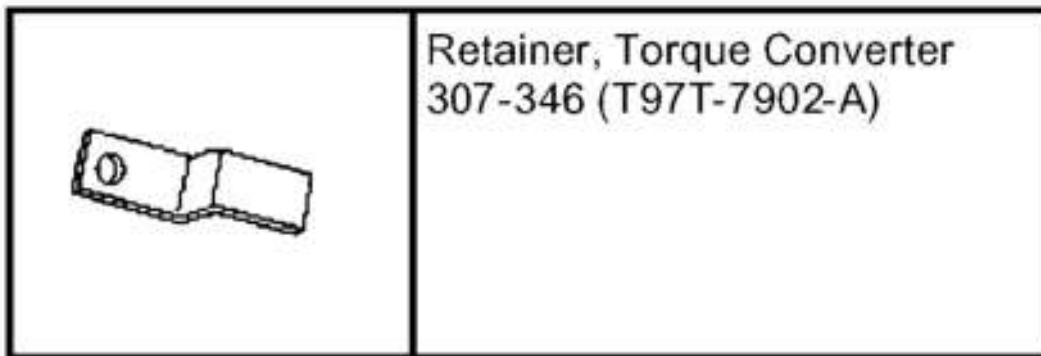


REMOVAL

TRANSMISSION - 4X2



G03182097

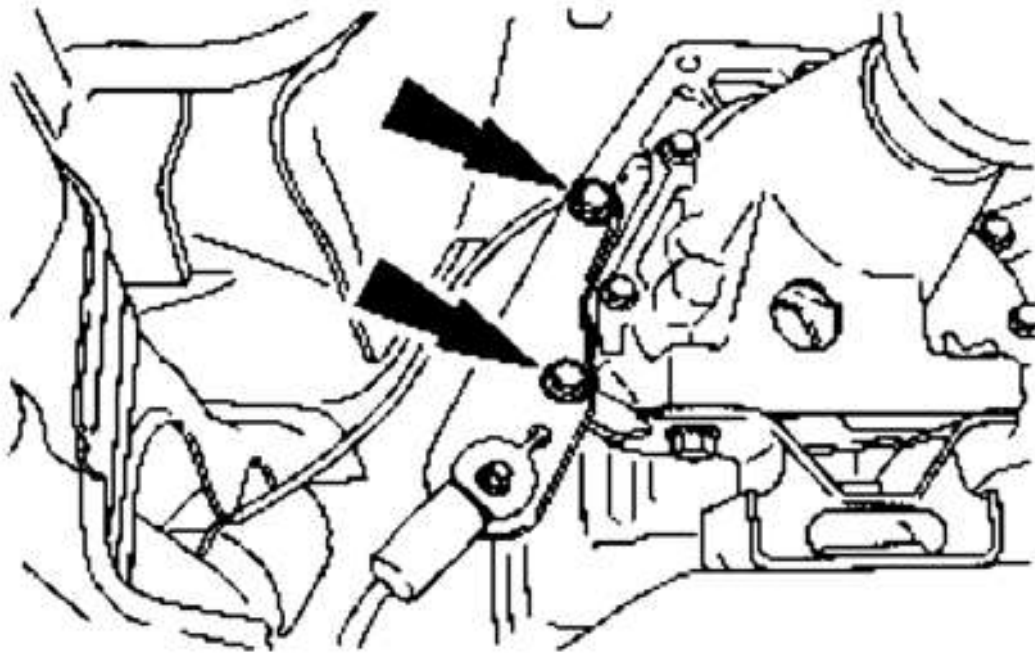
Fig. 214: Identifying Special Tool(s)
Courtesy of FORD MOTOR CO.

WARNING: Secure the transmission to the transmission jack with a safety chain. Failure to follow these instructions can result in personal injury.

NOTE: When the battery has been disconnected and reconnected, some abnormal drive symptoms can occur while the vehicle relearns its adaptive strategy. The customer needs to be notified that they can experience slightly different upshifts (either soft or firm) and that this is a temporary condition and will eventually return to normal operating condition.

NOTE: If disassembly or installation of a new transmission is necessary, drain the transmission fluid.

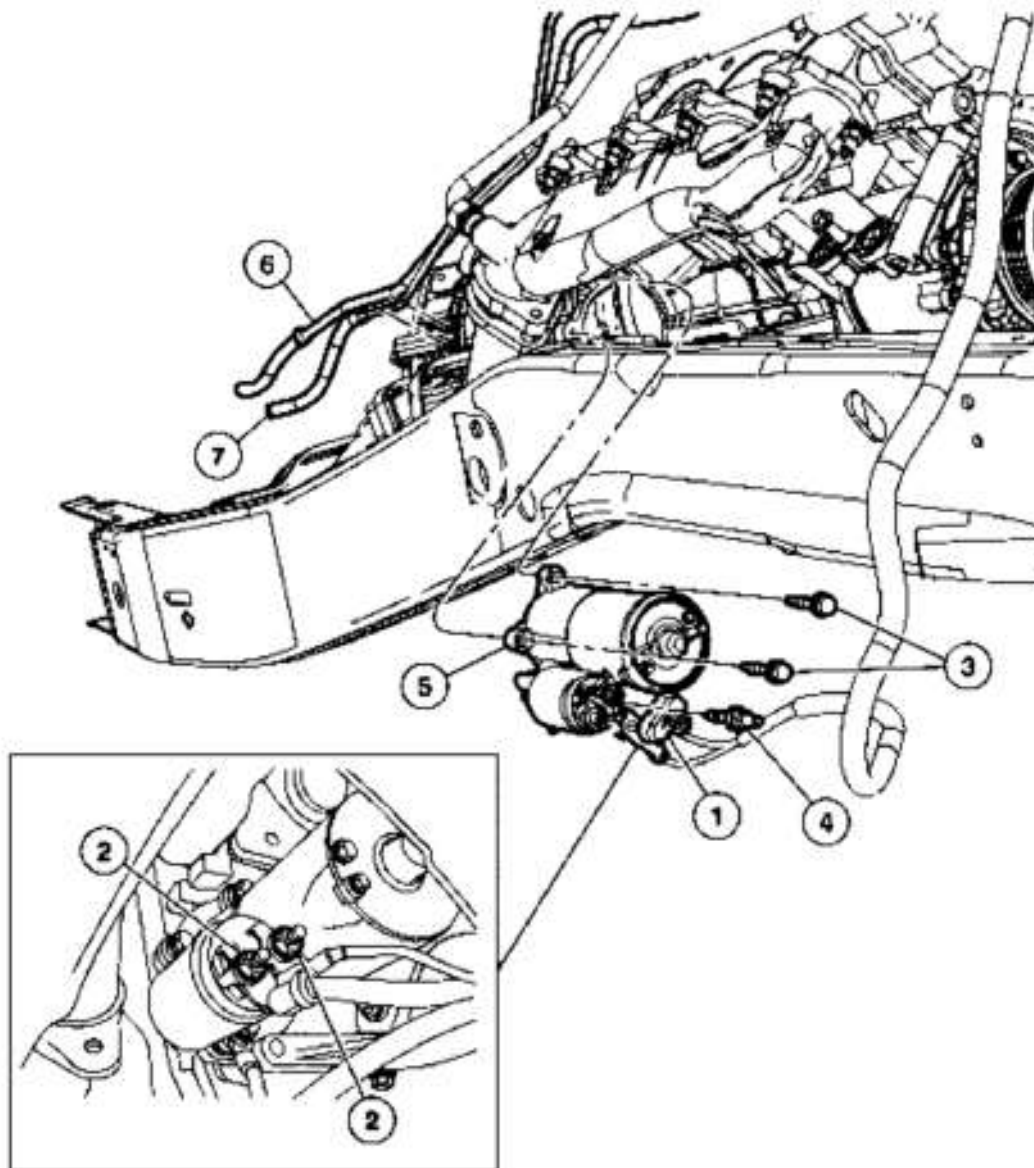
1. With the vehicle in NEUTRAL, position it on a hoist. For additional information, refer to **JACKING & LIFTING** .
2. Disconnect the battery ground cable. For additional information, refer to **BATTERY & CHARGING SYSTEM** .
3. Remove the fan shroud bolts. Do not remove the fan shroud.
4. Remove the driveshaft. For additional information, refer to **DRIVELINE SYSTEM** .
5. If equipped, remove the two bolts on the bracket and position aside.



G03182098

Fig. 215: Removing Bolts On Bracket
Courtesy of FORD MOTOR CO.

6. Illustration 1 of 3. Remove in the order indicated in the following illustration and table.

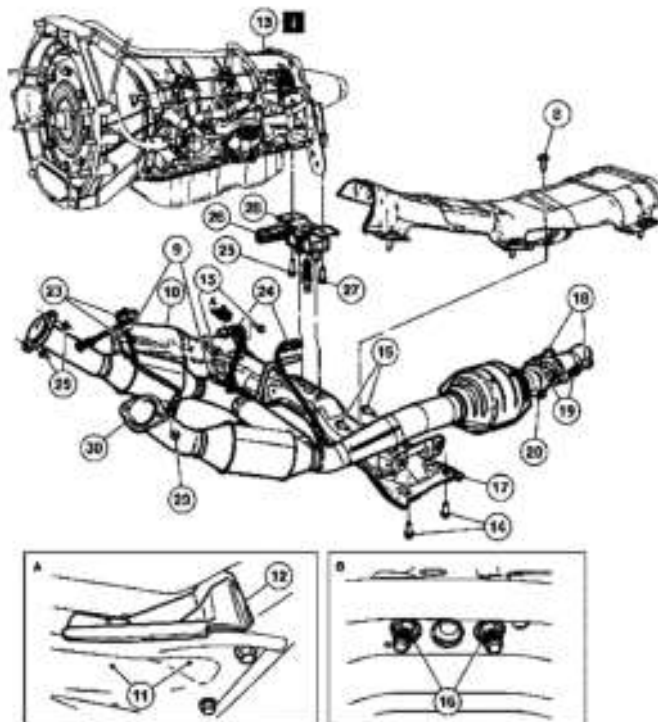


Item	Part Number	Description
1	11N087-A	Terminal cover
2	14A280	Solenoid electrical connector
3	N808980-S	Starter motor screw
4	N806771-S	Starter motor screw
5	11001	Starter motor
6	9D676	Evaporator line
7	9J280	Fuel line

G03182099

Fig. 216: Identifying Removal Order Of Transmission - 4X2 (1 Of 3)
 Courtesy of FORD MOTOR CO.

7. Illustration 2 of 3. Remove in the order indicated in the following illustration and table.

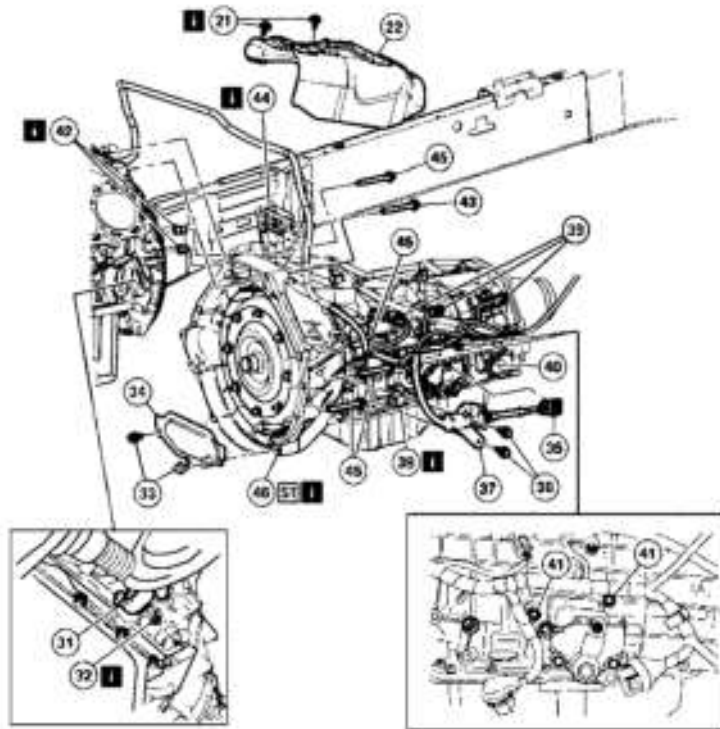


Item	Part Number	Description
8	W701834-S	Heat shield screw
9	W707079-S	Heat shield screw
10	SD032	Heat shield
11	NR21906-S	Fuel tank shield nuts
12	9B907	Fuel tank shield
13	7005	Transmission assembly Removal Note
14	—	Lower crossmember screws (4 req'd) (part of 5005)
15	—	Upper crossmember screws (part of 5005)
16	NR21945-S301	Rear transmission support nuts
17	5005	Rear crossmember
18	W706780-S	Exhaust flange screws
19	SF264	Exhaust flange springs
20	NR02641-S	Exhaust flange nuts
21	W707079	Heat shield screws (refer to illustration No. 3) Removal Note
22	5G220	Heat shield (refer to illustration No. 3)
23	9F472	Heated oxygen sensor electrical connector
24	9G444	Catalyst monitor sensor electrical connector
25	W706136-S	Rear transmission mount screw
26	9E269	Exhaust hanger
27	W706136-S	Rear transmission mount screw
28	6D091	Rear transmission mount

G03182100

Fig. 217: Identifying Removal Order Of Transmission - 4X2 (2 Of 3)
 Courtesy of FORD MOTOR CO.

8. Illustration 3 of 3. Remove in the order indicated in the following illustration and table.



Item	Part Number	Description
29	W705443-S	Upper exhaust flange nuts
30	5F250	Front exhaust crossover pipe
31	—	Torque converter access plug
32	W705443-S	Torque converter nuts Removal Note
33	W500031-S	Inspection cover screws
34	7966	Inspection cover
35	—	Shift cable eyelet (part of 7E396)
36	N605918-S	Shift cable screws
37	7B229	Shift cable and bracket
38	14A464	Solenoid body harness connector Removal Note
39	14A464	Speed sensor connectors
40	14A464	Transmission range TR sensor connector
41	7C078	Wire harness retainer clips
42	7A030	Fluid cooler nuts Removal Note
43	W500128-S	Bell housing screw
44	9D319	Fuel line bracket Removal Note
45	W500128-S	Bell housing screws
46	7005	Transmission assembly Removal Note

G03182101

Fig. 218: Identifying Removal Order Of Transmission - 4X2 (3 Of 3)
 Courtesy of FORD MOTOR CO.

9. If the transmission is to be overhauled or if installing a new or remanufactured transmission, carry out transmission backflushing and cleaning. For additional information, refer to **TRANSMISSION FLUID COOLER - BACKFLUSHING AND CLEANING.**

Item 13: Transmission Assembly Removal Note

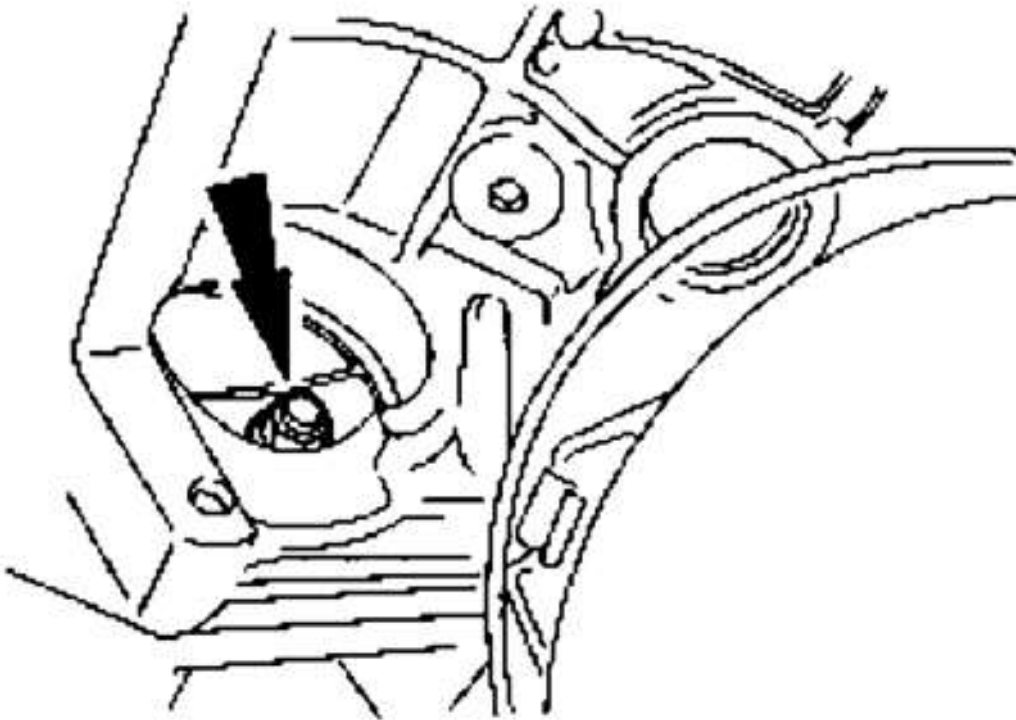
1. Install a suitable jack under the transmission.

Item 21: Heat Shield Screws Removal Note

1. Remove the two heat shield screws and position the heat shield aside to gain access to the oxygen sensor connectors.

Item 32: Torque Converter Nuts Removal Note

NOTE: Make an identifying mark on the nut, stud and flexplate to allow for correct installation.



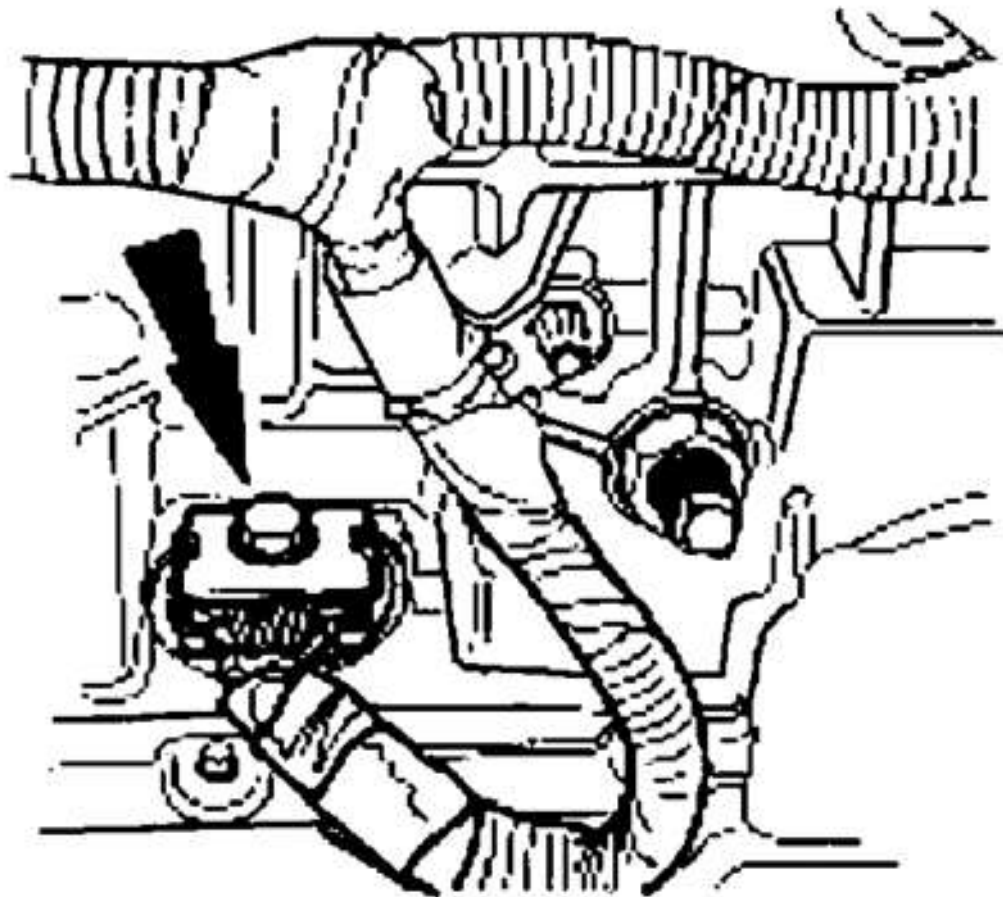
G03182102

Fig. 219: Removing Torque Converter Nuts
Courtesy of FORD MOTOR CO.

1. Remove the four torque converter nuts.

Item 38: Solenoid Body Harness Connector Removal Note

NOTE: Clean the area around the connector to prevent contamination of the solenoid body connector.



G03182103

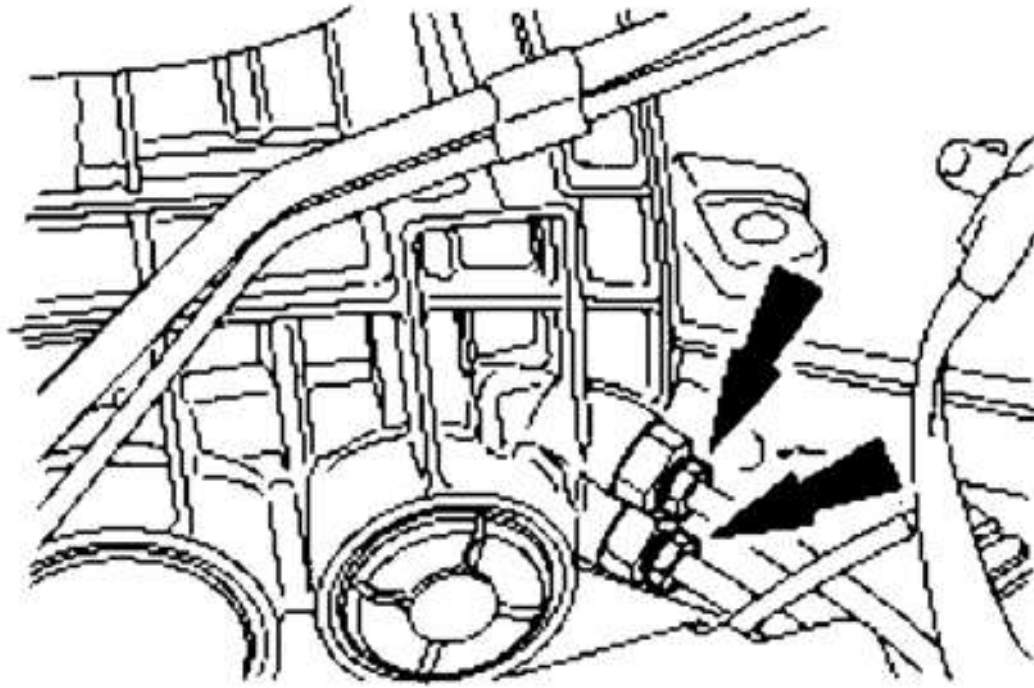
Fig. 220: Removing Solenoid Body Connector

Courtesy of FORD MOTOR CO.

1. Remove the screw from the solenoid body connector and disconnect the connector.

Item 42: Fluid Cooler Nuts Removal Note

CAUTION: Do not damage the cooler tubes. Hold the transmission case fittings with a wrench.



G03182104

Fig. 221: Disconnecting Transmission Cooler Tubes
Courtesy of FORD MOTOR CO.

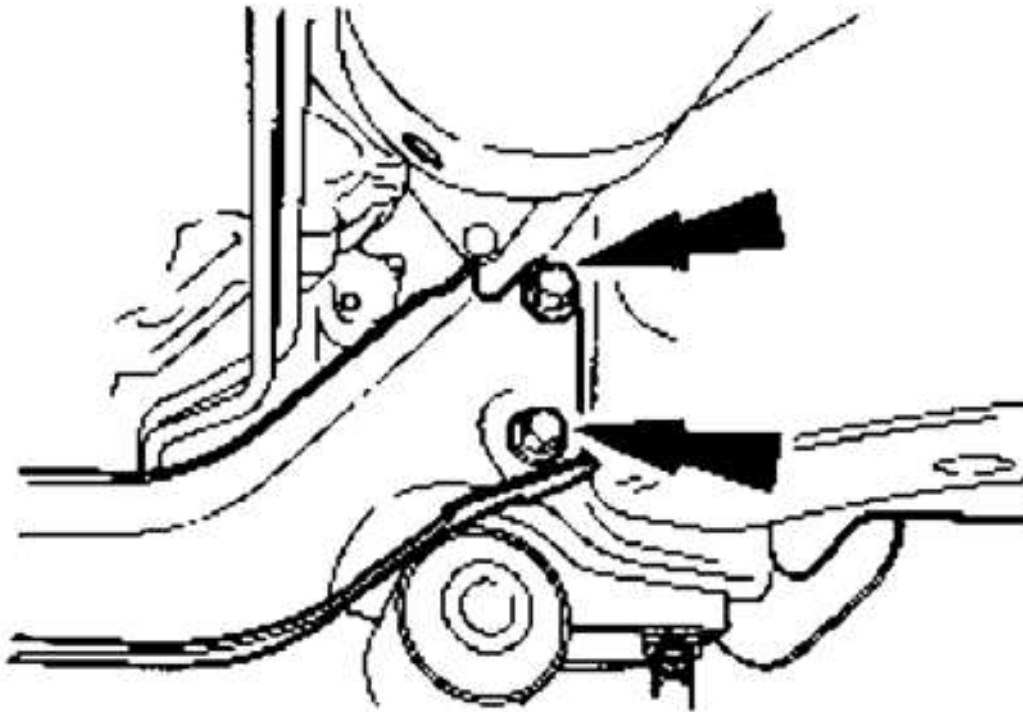
1. Disconnect the transmission cooler tubes.

Item 44: Fuel Line Bracket Removal Note

1. Position the bracket and fuel lines out of the way to gain access to the other transmission retaining screws.

Item 46: Transmission Assembly Removal Note

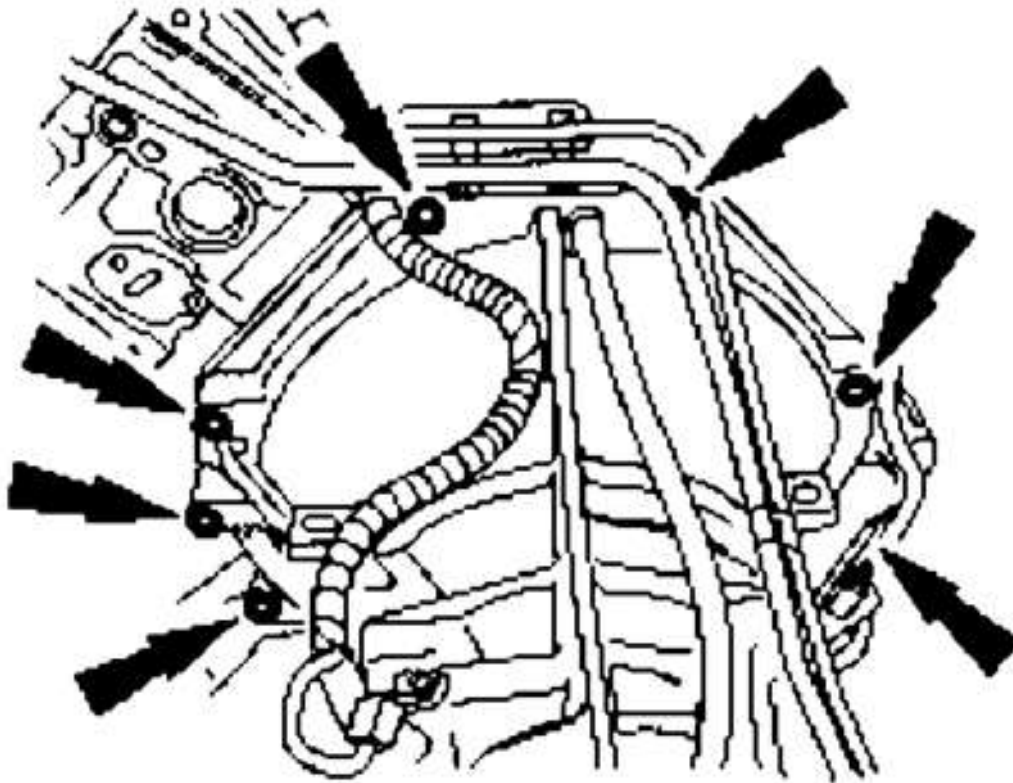
1. If equipped with a 4.6L engine, remove the front crossmember.



G03182105

Fig. 222: Removing Front Crossmember
Courtesy of FORD MOTOR CO.

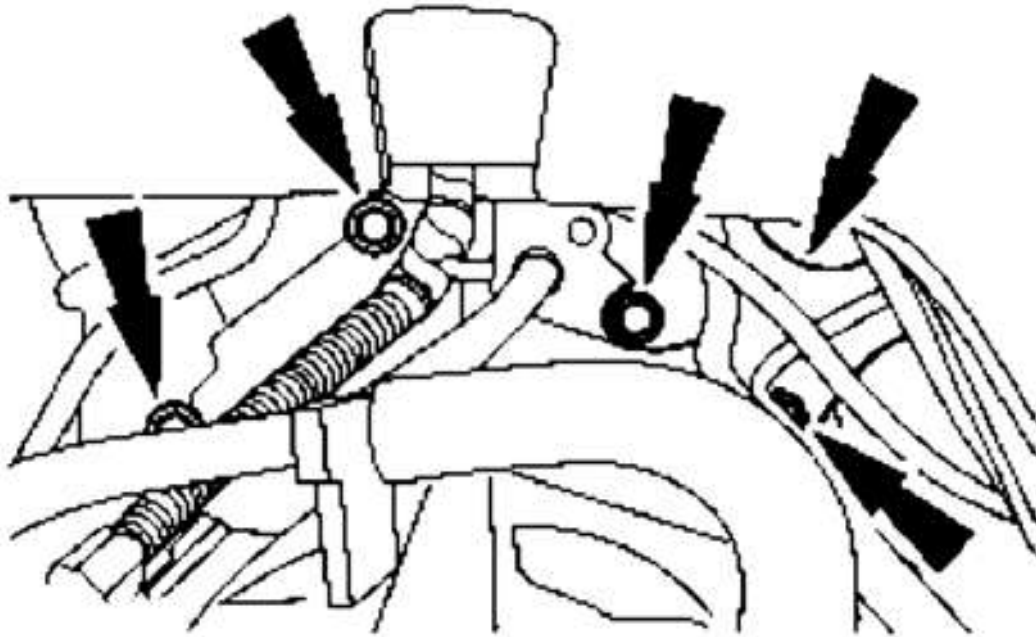
2. If equipped with a 4.6L engine, remove the seven engine-to-transmission retaining bolts.



G03182106

Fig. 223: Removing Transmission Retaining Bolts
Courtesy of FORD MOTOR CO.

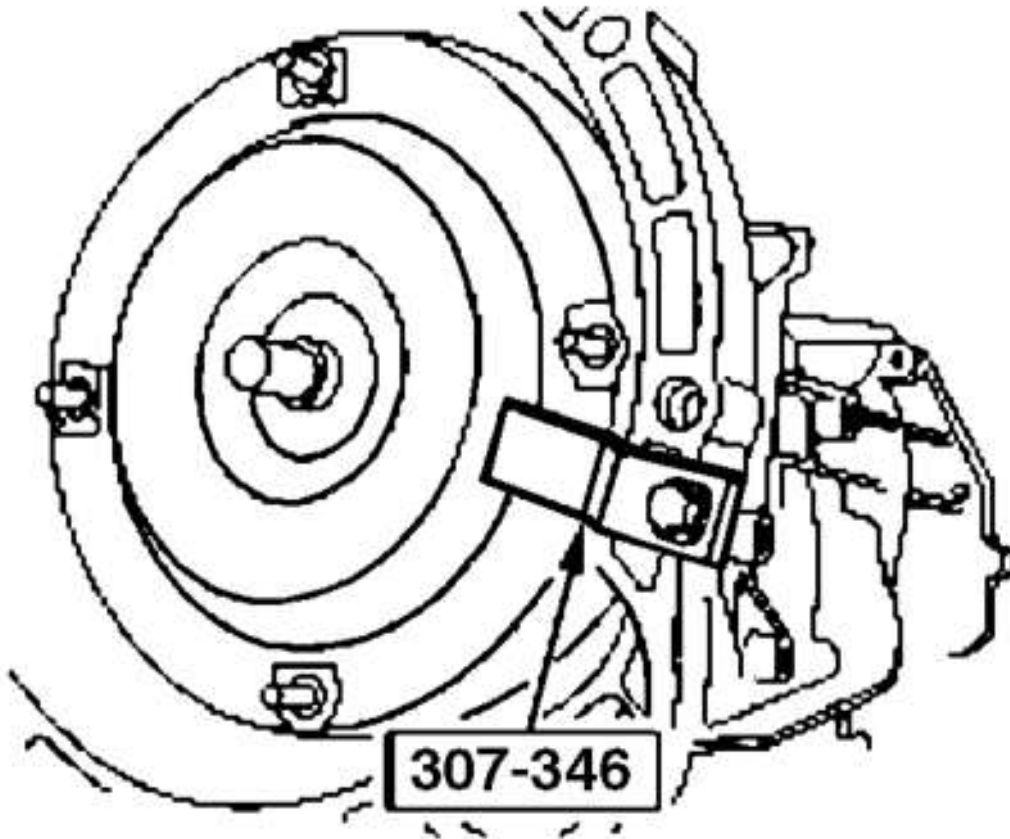
3. If equipped with a 4.0L engine, remove the six engine-to-transmission retaining bolts and position the fuel line bracket out of the way.



G03182107

Fig. 224: Removing Engine-To-Transmission Retaining Bolts
Courtesy of FORD MOTOR CO.

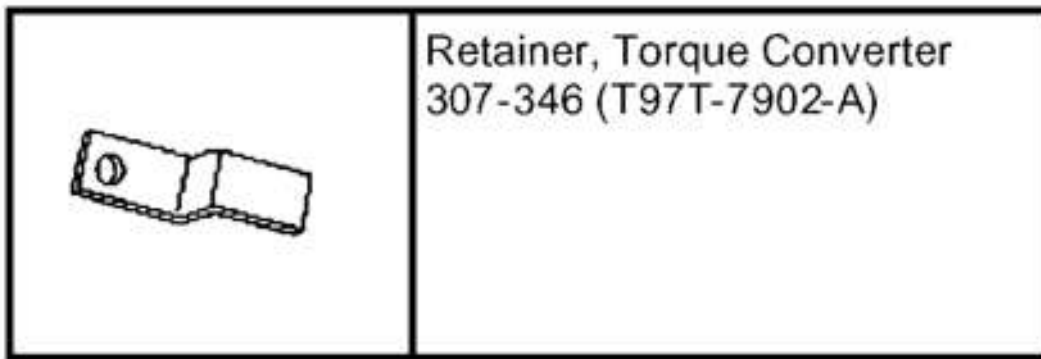
4. Install the special tool.



G03182108

Fig. 225: Installing Special Tool
Courtesy of FORD MOTOR CO.

TRANSMISSION - 4X4



G03182109

Fig. 226: Identifying Special Tool(s)

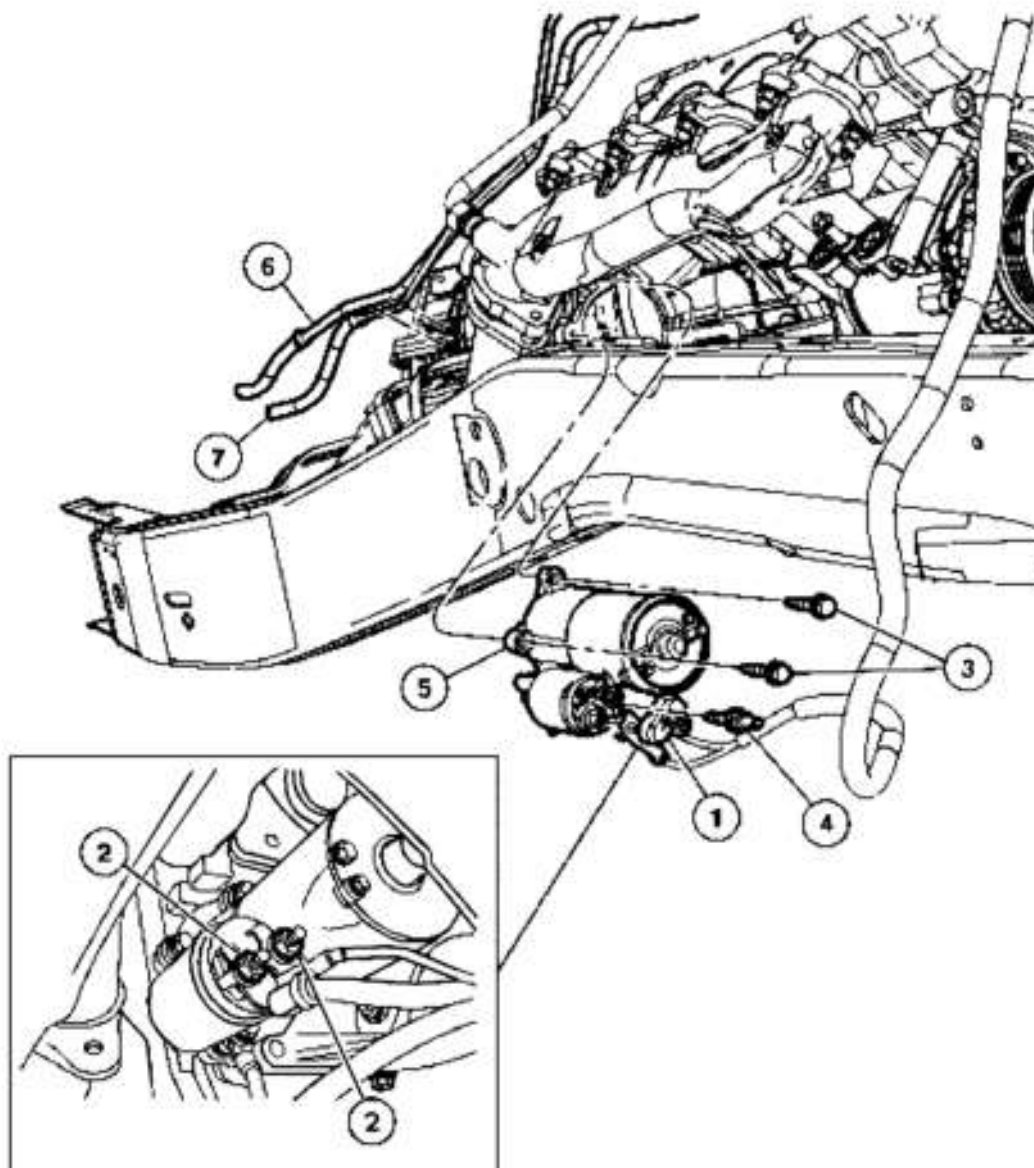
Courtesy of FORD MOTOR CO.

WARNING: Secure the transmission to the transmission jack with a safety chain. Failure to follow these instructions can result in personal injury.

NOTE: When the battery has been disconnected and reconnected, some abnormal drive symptoms can occur while the vehicle relearns its adaptive strategy. The customer needs to be notified that they can experience slightly different upshifts either (soft or firm) and that this is a temporary condition and will eventually return to normal operating condition.

NOTE: If disassembly or installation of a new transmission is necessary, drain the transmission fluid. Install the drain plug when finished.

1. With the vehicle in NEUTRAL, position it on a hoist. For additional information, refer to **JACKING & LIFTING** .
2. Disconnect the battery ground cable. For additional information, refer to **BATTERY & CHARGING SYSTEM** .
3. Remove the fan shroud bolts. Do not remove the fan shroud.
4. Remove the front and rear driveshafts. For additional information, refer to **DRIVELINE SYSTEM** .
5. Illustration 1 of 3. Remove in the order indicated in the following illustration and table.

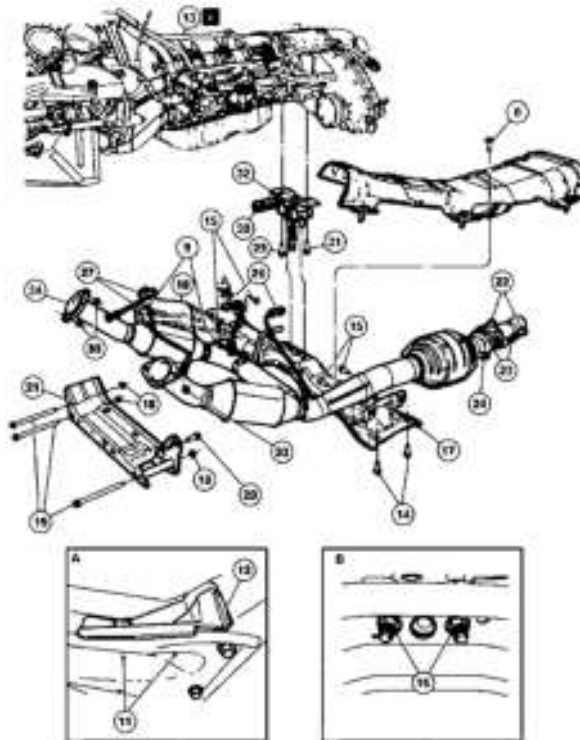


Item	Part Number	Description
1	11N087-A	Terminal cover
2	14A280	Solenoid electrical connector
3	N808980-S	Starter motor screw
4	N806771-S	Starter motor screw
5	11001	Starter motor
6	9D676	Evaporator line
7	9J280	Fuel line

G03182110

Fig. 227: Identifying Removal Order Of Transmission - 4X4 (1 Of 3)
 Courtesy of FORD MOTOR CO.

6. Illustration 2 of 3. Remove in the order indicated in the following illustration and table.

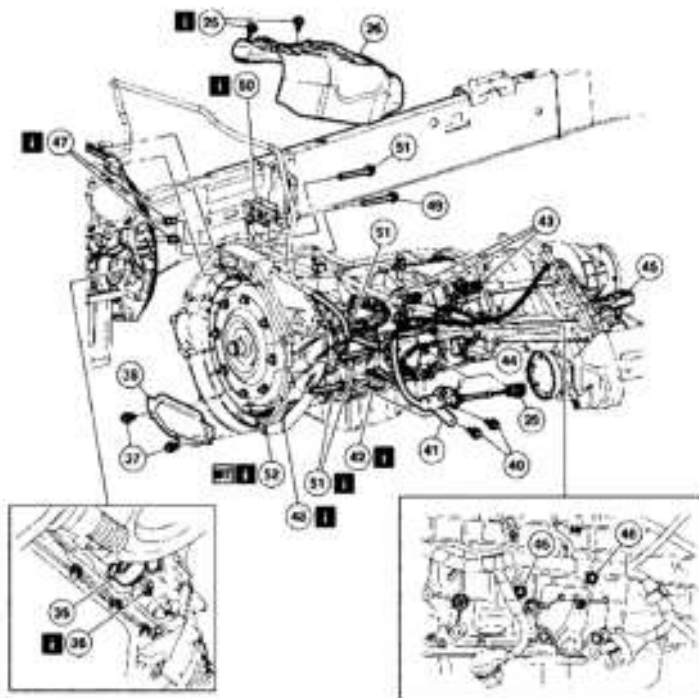


Item	Part Number	Description
8	W701834-S	Heat shield screw
9	W707070-S	Heat shield screw
10	8C033	Heat shield
11	M821906-S	Fuel tank shield nuts
12	8B007	Fuel tank shield
13	7605	Transmission assembly Removal Note
14	---	Lower crossmember screws (4 req'd) (part of 5005)
15	---	Upper crossmember screws (part of 5005)
16	M821645-S	Rear transmission support nuts
17	5005	Rear crossmember
18	---	Front crossmember nut (part of 5005)
19	---	Front crossmember screws (part of 5005)
20	---	Front crossmember screws (part of 5005)
21	---	Front crossmember (part of 5005)
22	W706780-S	Exhaust flange screws
23	8F254	Exhaust flange springs
24	M802641-S	Exhaust flange nuts
25	W797079	Heat shield screws (refer to Illustration No. 3) Removal Note
26	5C225	Heat shield (refer to Illustration No. 3)
27	8F472	Heated oxygen sensor electrical connector
28	8C444	Catalytic monitor sensor electrical connector
29	W708136-S	Rear transmission mount screw
30	8C269	Exhaust hanger
31	W708136-S	Rear transmission mount screw
32	6C091	Rear transmission mount

G03182111

Fig. 228: Identifying Removal Order Of Transmission - 4X4 (2 Of 3)
 Courtesy of FORD MOTOR CO.

7. Illustration 3 of 3. Remove in the order indicated in the following illustration and table.



Item	Part Number	Description
33	W705443-S	Upper exhaust hange nuts
34	SF250	Front exhaust crossover pipe
35	6C070	Torque converter access plug
36	W705443-S	Torque converter nuts Removal Note
37	W500031-S	Inspection cover screws
38	7986	Inspection cover
39	—	Shift cable eyelet (part of 7E395)
40	N605918-S	Shift cable screws
41	7B229	Shift cable and bracket
42	14A464	Solenoid body harness connector Removal Note
43	14A464	Speed sensor connectors
44	14A464	Transmission range TR sensor connector
45	14A464	Transfer case electrical connector
46	7C078	Wire harness retainer clips
47	7A030	Fluid cooler nuts Removal Note
48	7005	Transmission assembly Removal Note
49	W500128-S	Bell housing screws
50	9D319	Fuel line bracket Removal Note
51	W500128-S	Bell housing screws
52	7005	Transmission assembly Removal Note

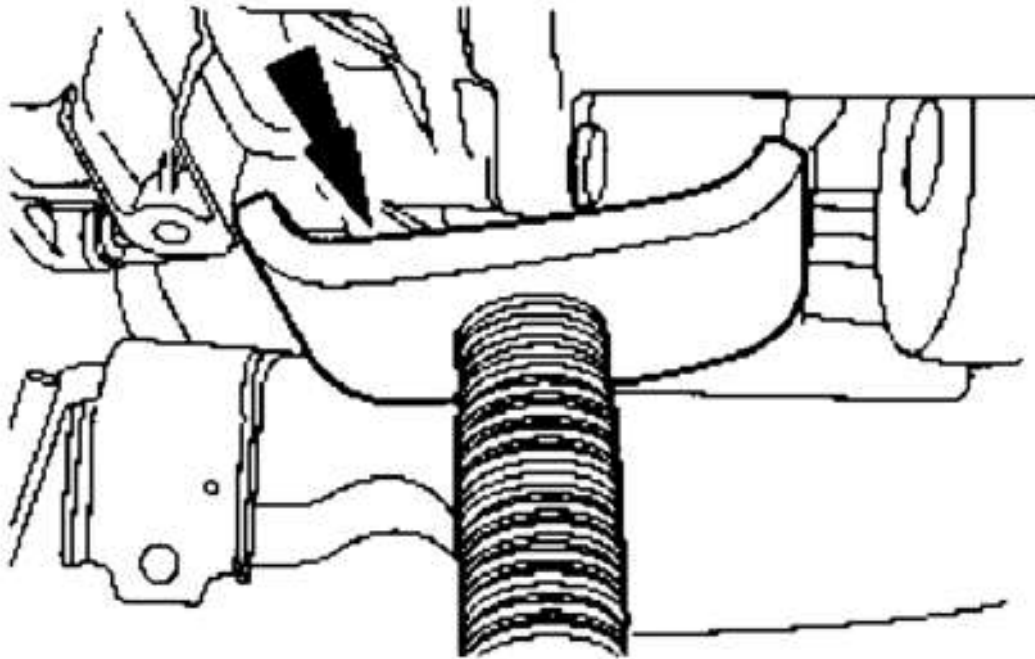
G03182112

Fig. 229: Identifying Removal Order Of Transmission - 4X4 (3 Of 3)
 Courtesy of FORD MOTOR CO.

8. If the transmission is to be overhauled or if installing a new or remanufactured transmission, carry out transmission backflushing and cleaning. For additional information, refer to **TRANSMISSION FLUID COOLER - BACKFLUSHING AND CLEANING**.

Item 13: Transmission Assembly Removal Note

1. Install a suitable jack stand under the transfer case.



G03182113

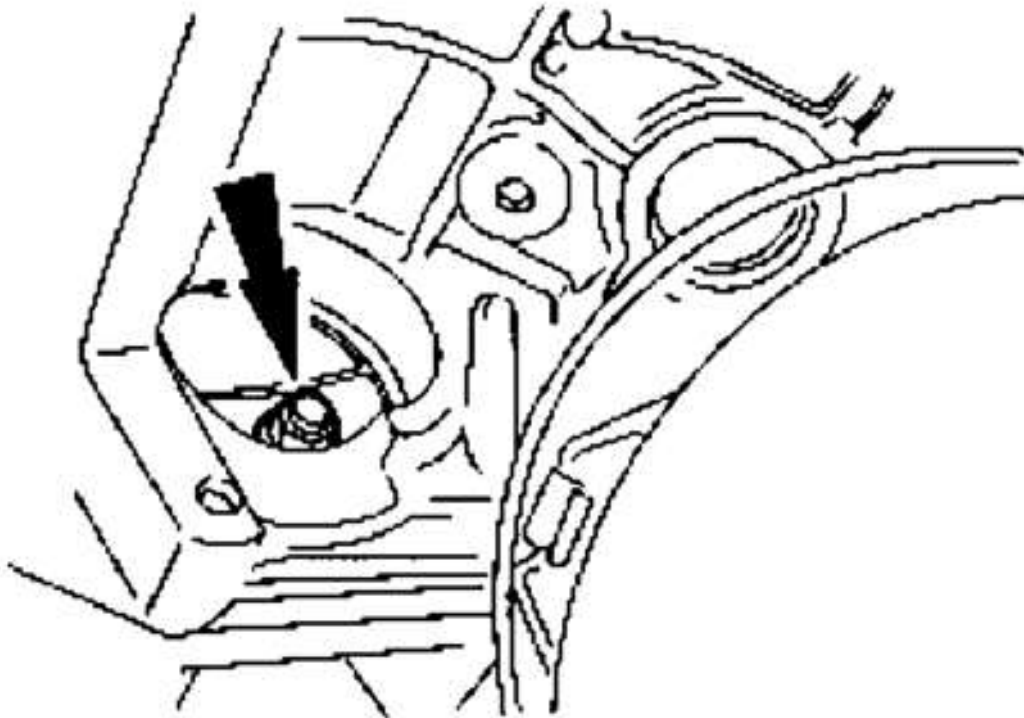
Fig. 230: Installing Jack Stand Under Transfer Case
Courtesy of FORD MOTOR CO.

Item 25: Heat Shield Screws Removal Note

1. Remove the two heat shield screws and position the heat shield aside to gain access to the oxygen sensor connectors.

Item 36: Torque Converter Nuts Removal Note

NOTE: **Make an identifying mark on the nut, stud and flexplate to allow for correct installation.**



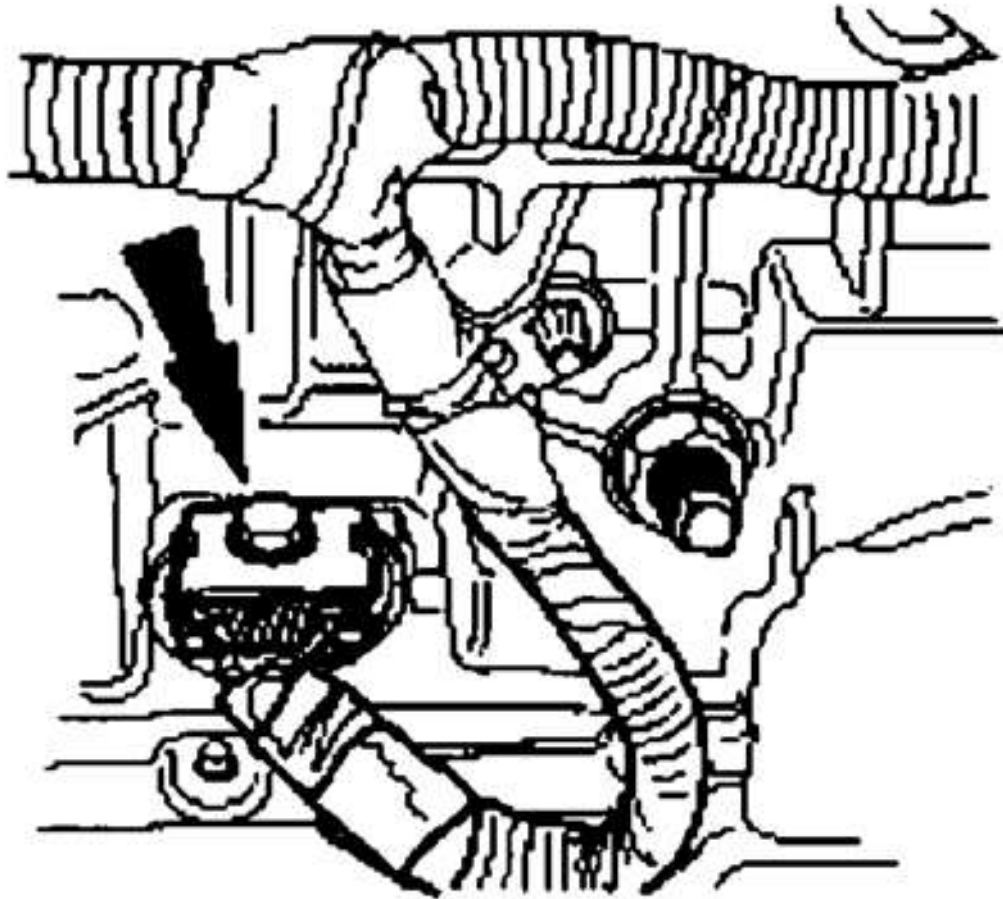
G03182114

Fig. 231: Removing Torque Converter Nuts
Courtesy of FORD MOTOR CO.

1. Remove the four torque converter nuts.

Item 42: Solenoid Body Harness Connector Removal Note

NOTE: Clean the area around the connector to prevent contamination of the solenoid body connector.



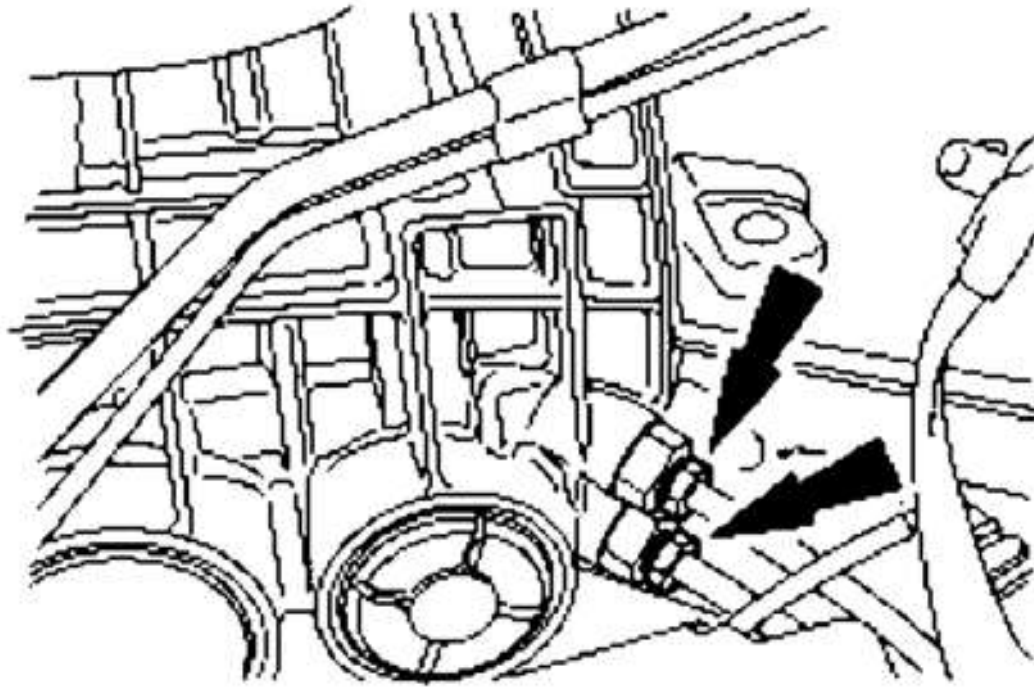
G03182115

Fig. 232: Removing Solenoid Body Connector
Courtesy of FORD MOTOR CO.

1. Remove the screw from the solenoid body connector and disconnect the connector.

Item 47: Fluid Cooler Nuts Removal Note

CAUTION: Do not damage the cooler tubes. Hold the transmission case fittings with a wrench.



G03182116

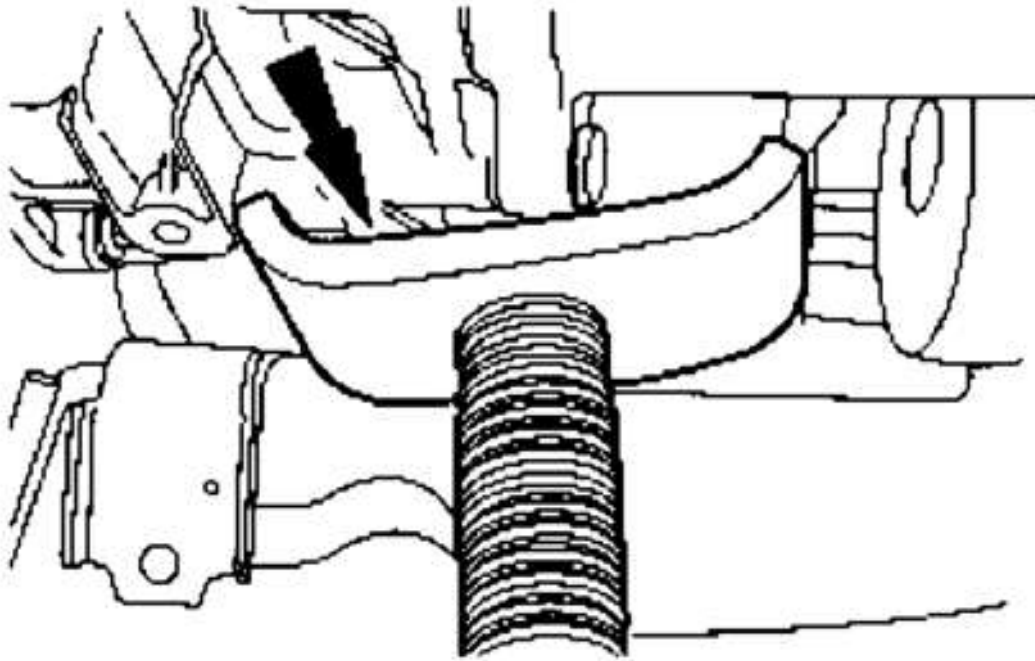
Fig. 233: Disconnecting Transmission Cooler Tubes
Courtesy of FORD MOTOR CO.

1. Disconnect the transmission cooler tubes.

Item 48: Transmission Assembly Removal Note

WARNING: Secure the transmission to the transmission jack with a safety chain. Failure to follow these instructions can result in personal injury.

1. Support the transmission with a transmission jack.
2. Remove the jack stand from under the transfer case.



G03182117

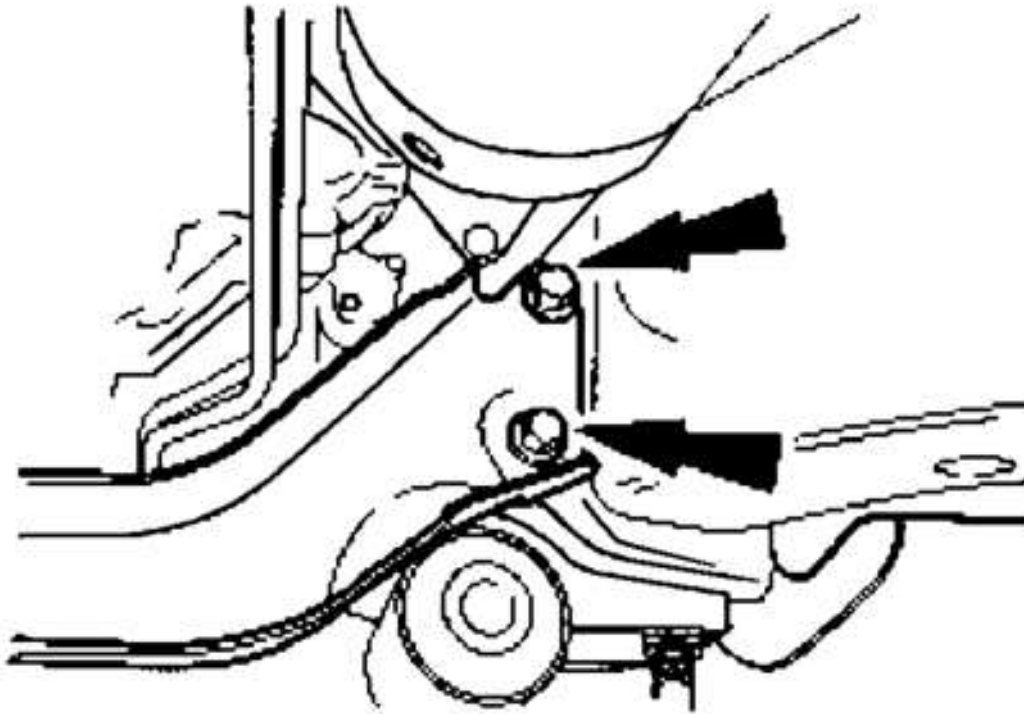
Fig. 234: Removing Jack Stand From Under Transfer Case
Courtesy of FORD MOTOR CO.

Item 50: Fuel Line Bracket Removal Note

1. Position the bracket and fuel lines out of the way to gain access to the other transmission retaining screws.

Item 52: Transmission Assembly Removal Note

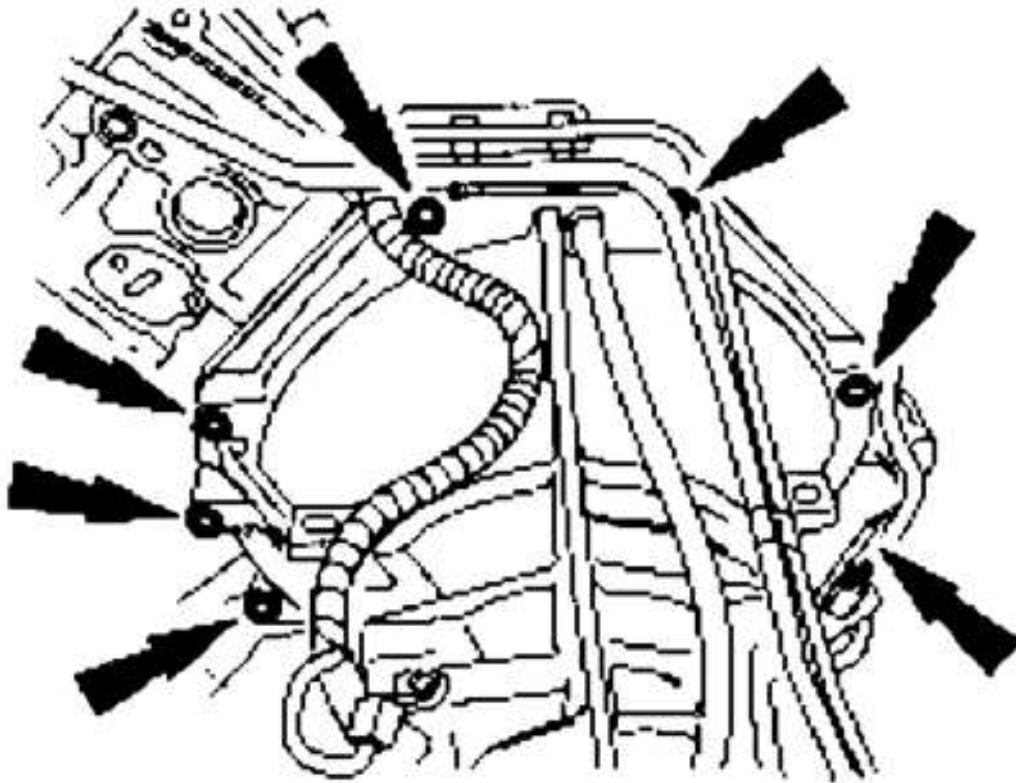
1. If equipped with a 4.6L engine, remove the front crossmember.



G03182118

Fig. 235: Removing Front Crossmember
Courtesy of FORD MOTOR CO.

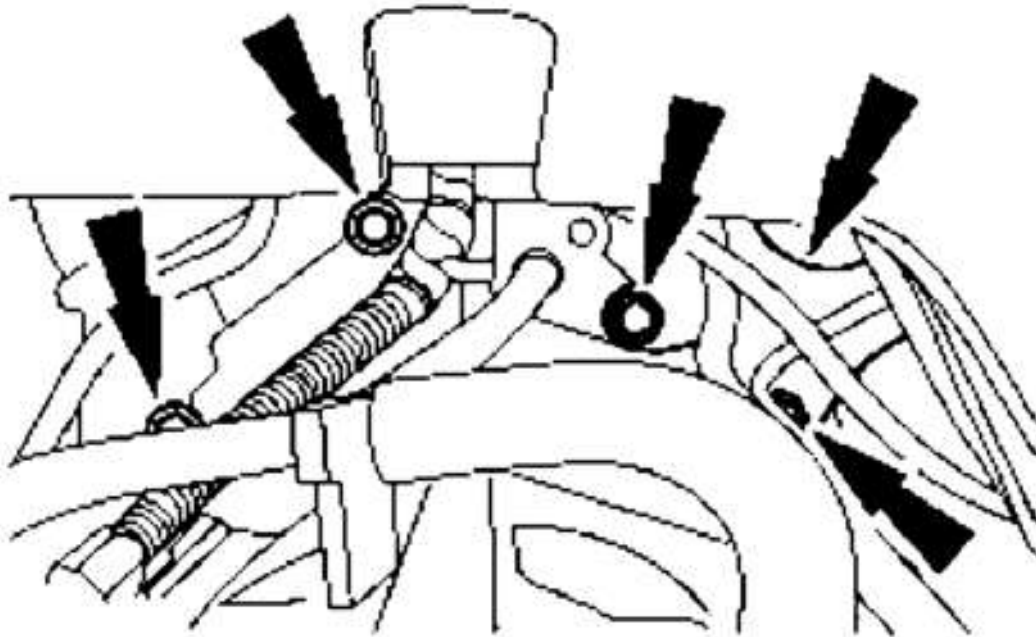
2. If equipped with a 4.6L engine, remove the seven engine-to-transmission retaining bolts.



G03182119

Fig. 236: Removing Transmission Retaining Bolts (4.6L)
Courtesy of FORD MOTOR CO.

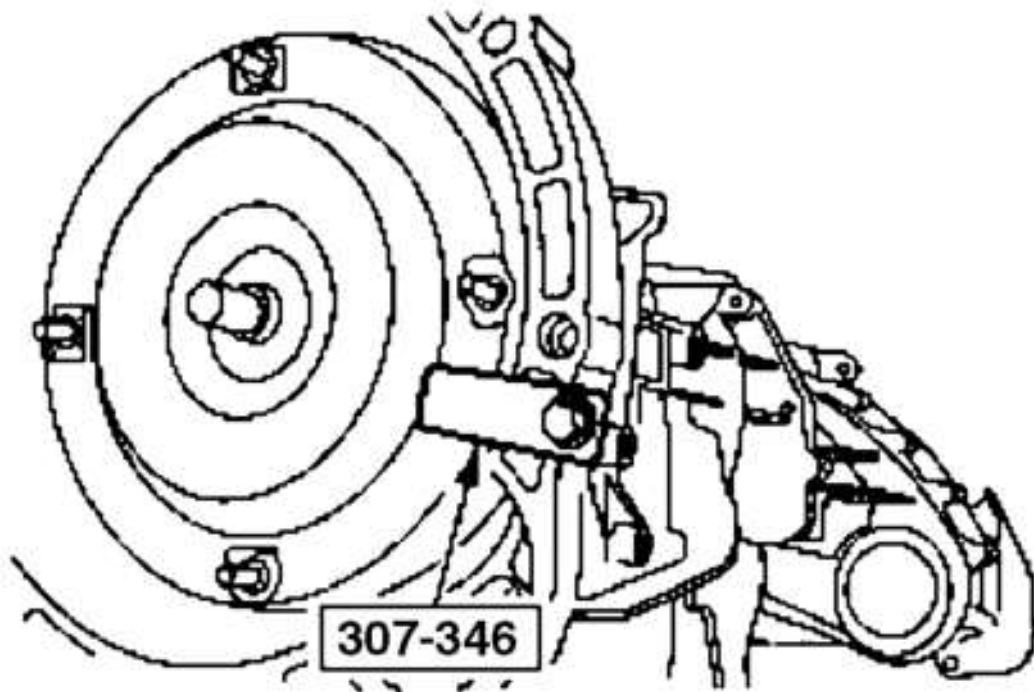
3. If equipped with a 4.0L engine, remove the six engine-to-transmission retaining bolts and position the fuel line bracket out of the way.



G03182120

Fig. 237: Removing Transmission Retaining Bolts (4.0L)
Courtesy of FORD MOTOR CO.

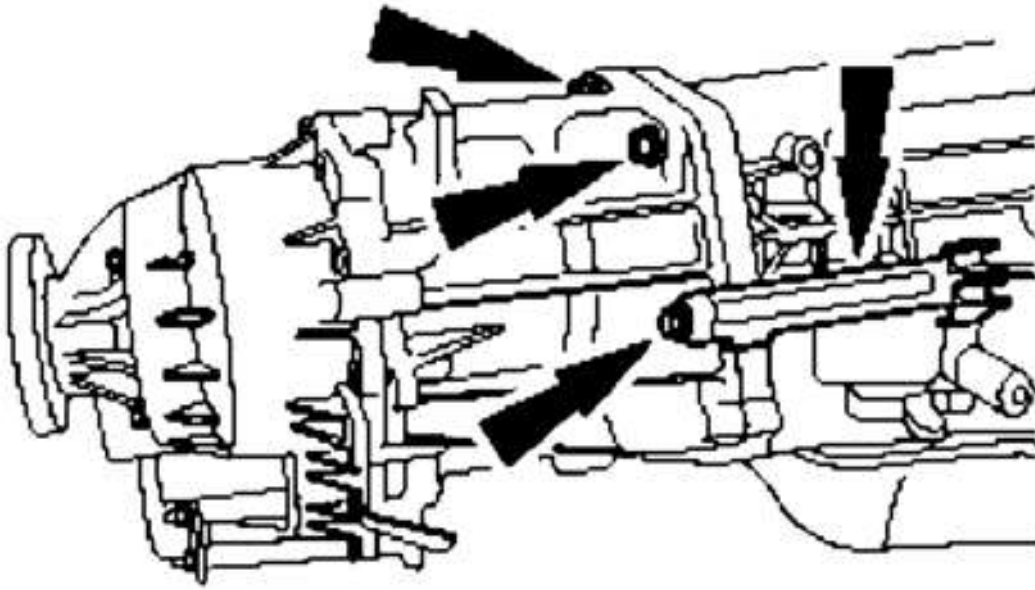
4. Lower the transmission and transfer case as an assembly from the vehicle.
5. Install the special tool.



G03182121

Fig. 238: Installing Special Tool
Courtesy of FORD MOTOR CO.

NOTE: If the transmission is being serviced, the transfer case will need to be removed.



G03182122

Fig. 239: Removing Transfer Case From Back Of Transmission
Courtesy of FORD MOTOR CO.

6. Remove the transfer case from the back of the transmission.
 - Remove the screws and the bracket.
 - Disconnect the vent hose.