

PRODEMAND

YMMS: 1993 Ford Ranger Base
Engine: 4.0L Eng
VIN:

Oct 28, 2020

License:
Odometer:

TORQUE SPECIFICATIONS [DIAGNOSIS & OVERHAUL - BORG WARNER 1354]

TORQUE SPECIFICATIONS

Application	Ft. Lbs. (N.m)
Breather Vent	6-14 (8-19)
Case-To-Cover Bolts	23-30 (31-41)
Damper Bolts	25-35 (34-47)
Drain & Fill Plug	14-22 (19-30)
4WD Indicator Switch	25-35 (34-47)
Front Drive Shaft Bolts	12-16 (16-22)
Rear Drive Shaft Flange Bolts	61-87 (83-118)
Shift Control Bolts (Mechanical Shift)	
Large (A)	70-90 (95-122)
Small (B)	33-42 (45-57)
Shift Shaft & Shift Cam Set Screw	5-7 (6.8-9.5)
Shift Lever Nut	19-26 (25-35)
Skid Plate-To-Frame Bolts	
Electronic Shift	22-30 (30-41)
Manual Shift	15-20 (20-27)
Transfer Case-To-Transmission	25-35 (34-47)
Front/Rear Yoke/Flange Nut	150-180 (203-244)
INCH Lbs. (N.m)	
Motor Mount, Motor Bracket Bolt & Clutch Coil Nuts	72-97 (8.1-11)
Motor Bracket Nuts	24-30 (2.7-3.4)
Speedometer Screw	20-25 (2.3-2.8)

TORQUE SPECIFICATIONS [REMOVAL & INSTALLATION - M/T]

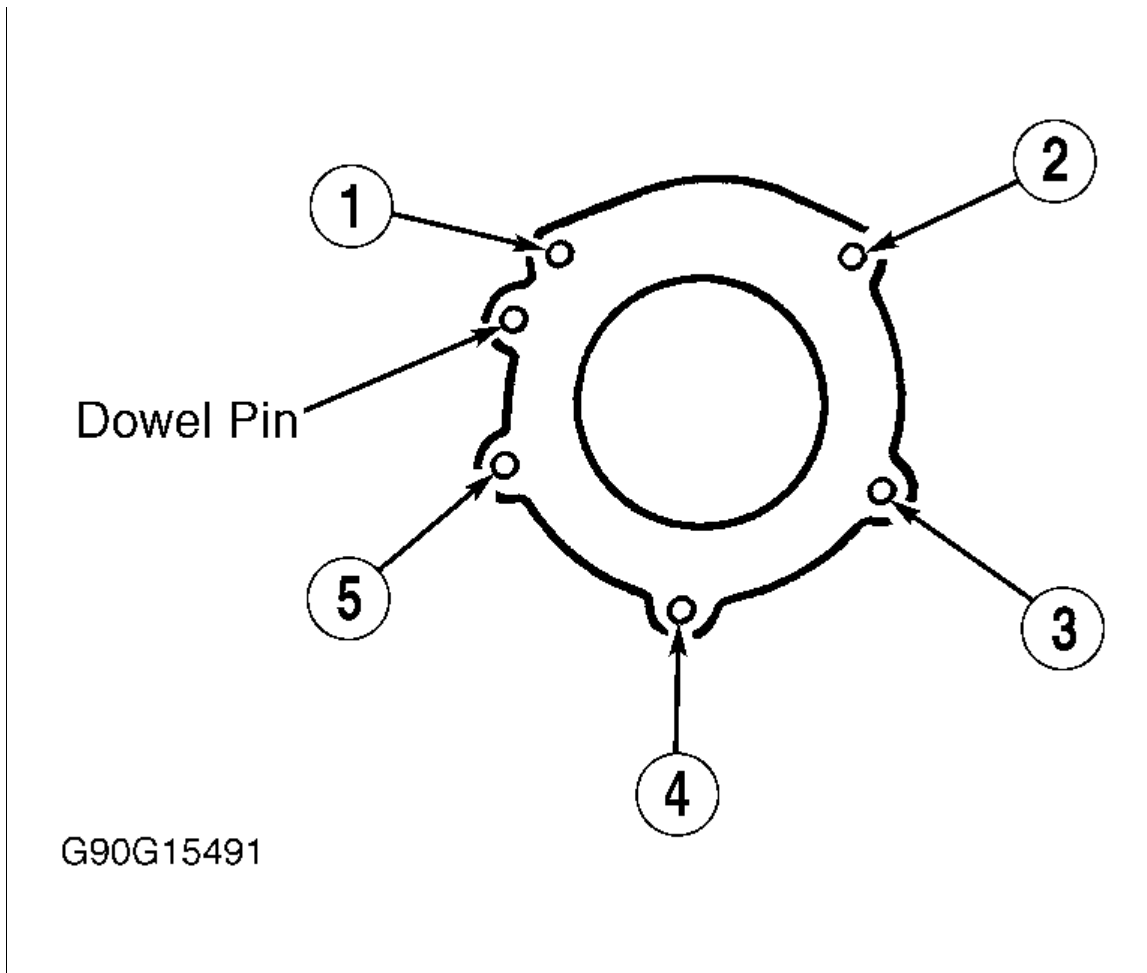
TORQUE SPECIFICATIONS

Application	Ft. Lbs. (N.m)
Back-Up Light Switch	18-26 (25-35)
Drive Shaft Retaining Bolt (Aerostar)	22-29 (30-40)
Drive Shaft-To-Rear "U" Joint Flange Bolt	70-95 (95-129)

Drive Shaft-To-Transfer Case Bolt		13-16 (17-22)
Extension Housing Retaining Bolt		24-34 (32-46)
Flywheel-To-Crankshaft Bolts		
	2.3L	56-65 (76-87)
	3.0L	59 (80)
	4.0L	
	Step 1	9-11 (12-15)
	Step 2	50-55 (68-74)
Rear Crossmember Nuts		
	3.0L	48-63 (65-85)
	2.3L & 4.0L	65-85 (88-115)
Shifter Lever		20-30 (27-40)
Starter Bolt		
	2.3L & 3.0L	15-20 (21-27)
	4.0L	18-25 (25-34)
Transfer Case-To-Extension Housing ⁽¹⁾		25-35 (34-47)
Transmission-To-Engine Bolt		28-38 (38-52)
⁽¹⁾ Tighten in sequence. See Figure .		

TC-To-Ext. Housing Tightening Sequence (Borg-Warner 1345)

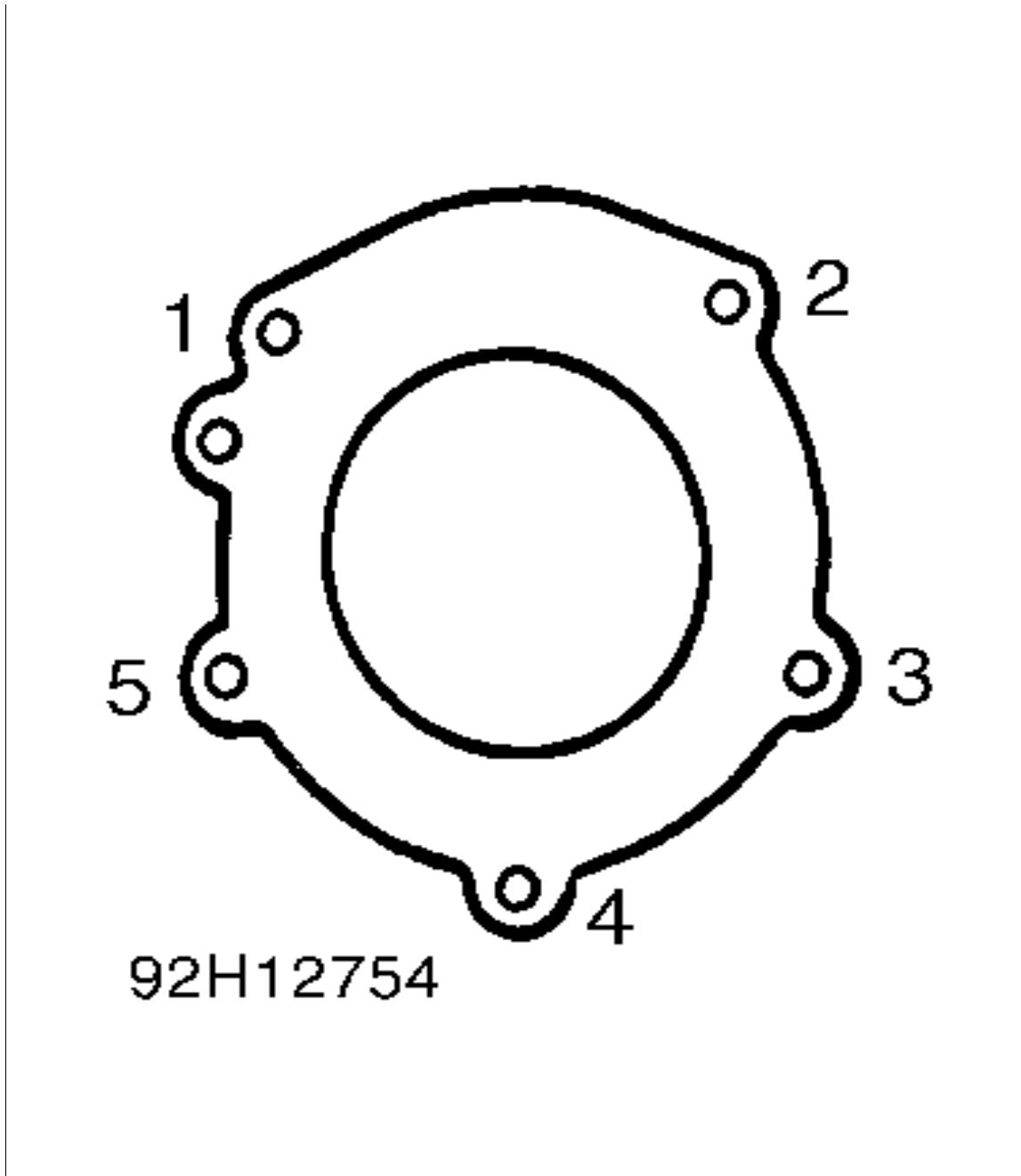
Fig 1: TC-To-Ext. Housing Tightening Sequence (Borg-Warner 1345)



Courtesy of FORD MOTOR CO.

Transfer Case Mounting Bolt Tightening Sequence (1354)

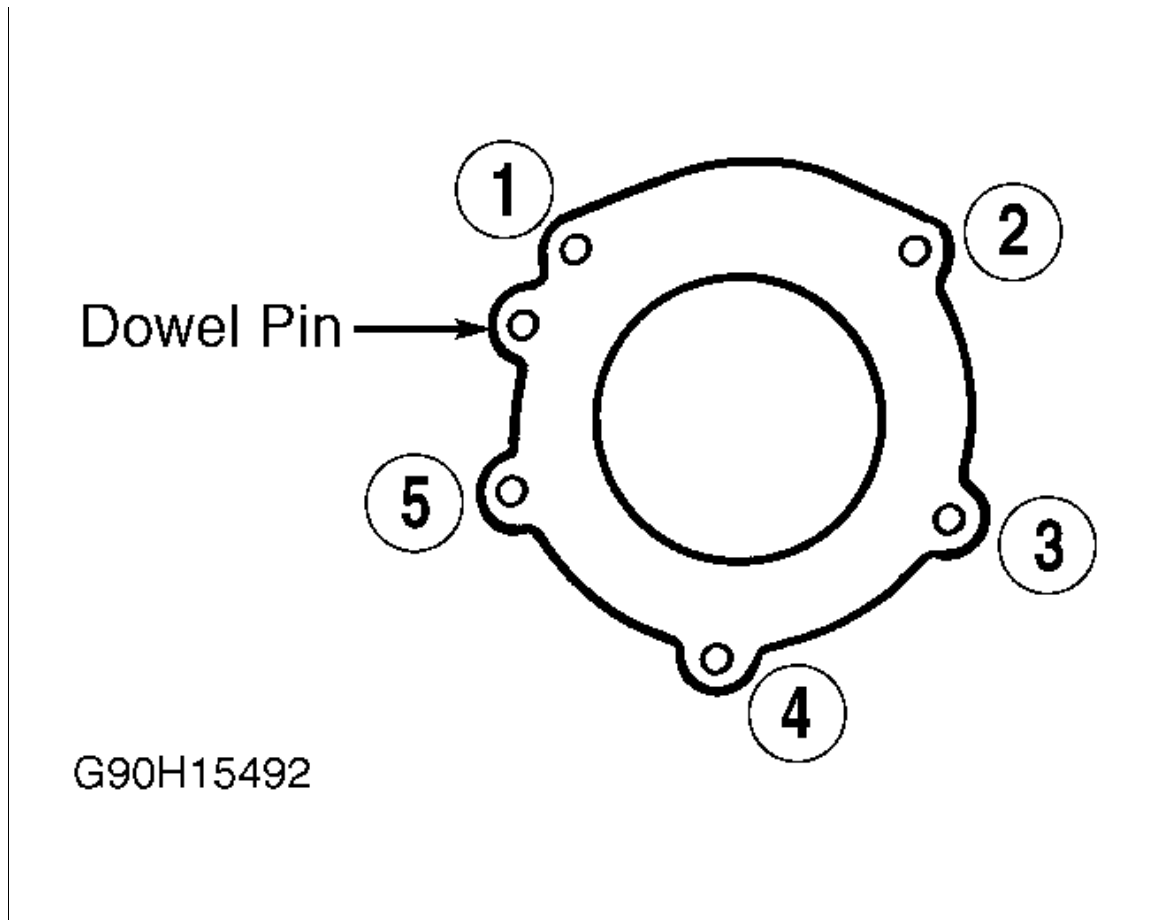
Fig 2: Transfer Case Mounting Bolt Tightening Sequence (1354)



Courtesy of FORD MOTOR CO.

Transfer Case-To-Extension Housing Tightening Sequence

Fig 3: Transfer Case-To-Extension Housing Tightening Sequence



Courtesy of FORD MOTOR CO.

TRANSMISSION & TRANSFER CASE CAPACITIES

TRANSMISSION & TRANSFER CASE CAPACITIES

Application	Specification	Quantity
Aerostar		
A4LD Auto.	Mercon	9.7 Qts. (9.2L)
E4WD Auto.	Mercon	10.0 Qts. (9.5L)
5-Speed Overdrive		
Mazda R-1	Mercon	5.6 Pts. (2.6L)
Transfer Case		
TC-28 Dana	Mercon	4.5 Pts. (2.1L)
Bronco		
AOD Auto.	Mercon	12.3 Qts. (11.6L)
C-6 Auto. (4WD)	Mercon	13.5 Qts. (12.7L)
E4OD Auto. (2WD)	Mercon	16.2 Qts. (15.3L)
4-Speed		

	Warner T-18	SAE 80W-90	3.5 Qts. (3.3L)
5-Speed Overdrive			
	Mazda R-2	Mercon	3.8 Qts. (3.6L)
Transfer Case			
	Warner 13-56	Mercon	2.0 Qts. (1.9L)
Explorer			
	A4LD Auto. (2WD)	Mercon	9.7 Qts. (9.2L)
	A4LD Auto. (4WD)	Mercon	10.0 Qts. (9.5L)
5-Speed Overdrive			
	Mazda R-1	Mercon	5.6 Pts. (2.6L)
Transfer Case			
	Warner 13-54	Mercon	2.5 Pts. (1.2L)
Pickup			
	AOD Auto. (2WD)	Mercon	12.3 Qts. (11.6L)
	C-6 Auto. (2WD)	Mercon	12.0 Qts. (11.4L)
	C-6 Auto. (4WD)	Mercon	13.5 Qts. (12.7L)
	E4OD Auto. (2WD)	Mercon	15.7 Qts. (14.8L)
	E4OD Auto. (4WD)	Mercon	16.2 Qts. (15.3L)
4-Speed			
	Warner T-18	SAE 80W-90	3.5 Qts. (3.3L)
5-Speed Overdrive			
	Mazda R-2	Mercon	3.8 Qts. (3.6L)
	ZF S5-42	Mercon	3.4 Qts. (3.2L)
Transfer Case			
	Warner 13-56	Mercon	2.0 Qts. (1.9L)
Ranger			
	A4LD Auto. (2WD)	Mercon	9.7 Qts. (9.2L)
	A4LD Auto. (4WD)	Mercon	10.0 Qts. (9.5L)
5-Speed Overdrive			
	Mazda R-1	Mercon	5.6 Pts. (2.6L)
	Mitsubishi	SAE 80W-85	4.8 Pts. (2.3L)
Transfer Case			
	Warner 13-54	Mercon	2.5 Pts. (1.2L)
Van			
	AOD Auto.	Mercon	12.3 Qts. (11.6L)
	C-6 Auto.	Mercon	12.0 Qts. (11.4L)
	E4OD Auto.	Mercon	15.7 Qts. (14.8L)

5-Speed Overdrive		
ZF HD	Mercon	3.4 Qts. (3.2L)