TOYOTA
SERVICE BULLETIN
Group: 12 No.: 09 Date: Feb 11

Yaris NCP90/91/93

Changes to Repair Manual SC00S5E (Aug 05 – Jul 08)

Changes have been made to Toyota Yaris Repair Manual SC00S5E with production period August 2005 to July 2008.

Publications	Section	Title	Paragraph
SC00S5E	Service Specification	U340E Automatic Transaxle	Torque Specifications
		U441E Automatic Transaxle	
	U340E Automatic Transaxle	Automatic Transaxle Assembly (for Sedan)	Installation
		Automatic Transaxle Assembly (for Hatchback)	
	U441E Automatic Transaxle	Automatic Transaxle Assembly (for Sedan)	Installation
		Automatic Transaxle Assembly (for Hatchback)	

Changes follow on from this page. Changed are indicated by an arrow.

Please copy and file these pages with the above repair manual.

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SERVICE SPECIFICATIONS – U340E AUTOMATIC TRANSAXLE

Part Tightened		N*m	kgf*cm	ft.*lbf
Engine moving control rod bracket x Automatic transaxle		39	398	29
Engine wire No. 3 x Automatic transaxle [Corrected]		26	260	19
Engine mounting bracket LH x Engine mounting insulator LH		52	530	38
Engine moving control rod bracket x Engine moving control rod		120	1,224	89
Starter assembly x Automatic transaxle		37	377	27
Starter assembly x Starter wire		7.8	80	69 in.*lbf
Torque converter clutch assembly x Drive plate		27	280	20
Automatic transaxle housing x Engine block		30	306	22
Transmission control cable bracket x Automatic transaxle		12	122	9
Oil cooler tube clamp No. 2 x Transmission oil filler tube		5.5	56	49 in.*lbf
Oil cooler inlet tube No. 1 x Automatic transaxle		34	347	25
Oil cooler outlet tube No. 1 x Automatic transaxle		34	347	25
Transmission oil filler tube sub-assembly x Automatic transaxle		5.5	56	49 in.*lbf
Transaxle case No. 1 plug x Automatic transaxle		7.4	75	65 in.*lbf
Oil cooler tube union x Automatic transaxle		27	275	20
Parking lock pawl bracket x Transaxle case		20	205	15
Drain plug x Automatic transaxle oil pan		49	500	36
Automatic transaxle case x Transmission wire		5.4	55	48 in.*lbf
Automatic transaxle oil pan x Automatic transaxle case		7.8	80	69 in.*lbf
Oil strainer sub-assembly x Transmission valve body assembly		11	110	8
Transmission valve body assembly x Automatic transaxle		11	110	8
Transmission valve body assembly x Manual detente spring sub-assembly		11	110	8
Transmission valve body assembly x Shift solenoid valves		11	110	8
Transaxle housing x Transaxle case	Bolt A Bolt B	29 22	300 225	22 16
Bearing lock plate x Transaxle housing		11	115	8
Oil pump assembly x Transaxle housing		22	225	16
Transaxle rear cover x Transaxle case		25	250	18
Stator shaft assembly x Front oil pump body		9.8	100	7
Transaxle rear cover plug x Transaxle rear cover		7.4	75	65 in.*lbf
Ring gear lock plate x Front differential ring gear		88	900	65

SS

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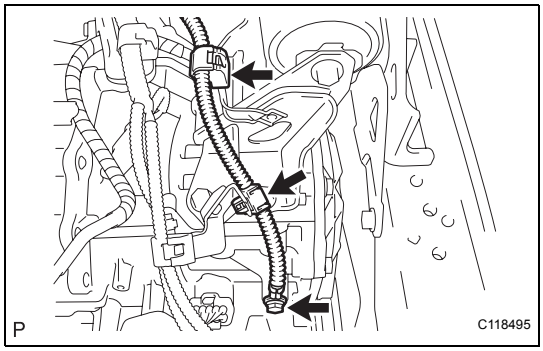
Oil pump clearance (Side clearance)	Standard Maximum	0.02 to 0.05 mm (0.0008 to 0.0020 in.) 0.05 mm (0.0020 in.)
Front oil pump oil seal drive in depth	Standard	-0.085 to 0015 mm (-0.0335 to 0.0059 in.)
INPUT SHAFT		
Direct clutch return spring free length	Standard	36.04 mm (1.4189 in.)
Direct clutch piston stroke	Standard	0.40 to 0.80 mm (0.0157 to 0.0315 in.)
Direct clutch flange thickness	Mark 1 Mark 2 Mark 3	3.0 mm (0.118 in.) 3.2 mm (0.126 in.) 3.4 mm (0.134 in.)
INTERMEDIATE SHAFT		
Forward clutch return spring free length	Standard	24.04 mm (0.9465 in.)
Reverse clutch pack clearance	Standard	0.40 to 1.00 mm (0.0157 to 0.0394 in.)
Reverse clutch flange thickness	Mark 1 Mark 2 Mark 3 Mark 4	3.0 mm (0.118 in.) 3.2 mm (0.126 in.) 3.4 mm (0.135 in.) 3.6 mm (0.142 in.)
Front clutch pack clearance	Standard	1.3 to 1.5 mm (0.051 to 0.059 in.)
Front clutch flange thickness	Mark 1 Mark 2 Mark 3 Mark 4	3.0 mm (0.118 in.) 3.2 mm (0.126 in.) 3.4 mm (0.135 in.) 3.6 mm (0.142 in.)
TRANSAXLE REAR COVER		
Overdrive brake return spring free length	Standard	18.99 mm (0.7476 in.)
Transaxle rear cover inside diameter	Standard	13.94 to 14.00 mm (0.076 to 0.551 in.)
VALVE BODY		
Shift solenoid valve S1 resistance	Standard	11 to 15 Ω at 20°C (68°F)
Shift solenoid valve S2 resistance	Standard	11 to 15 Ω at 20°C (68°F)
Shift solenoid valve ST resistance	Standard	11 to 15 Ω at 20°C (68°F)
Shift solenoid valve SLT resistance	Standard	5.0 to 5.6 Ω at 20°C (68°F)
Shift solenoid valve SL resistance	Standard	11 to 15 Ω at 20°C (68°F)
DIFFERENTIAL CASE		
Side gear back lash	Standard	0.05 to 0.20 mm (0.0020 to 0.0079 in.)
Side gear thrust washer thickness	- - - - - -	1.50 mm (0.0589 in.) 1.55 mm (0.0609 in.) 1.60 mm (0.0629 in.) 1.65 mm (0.0649 in.) 1.70 mm (0.0669 in.) 1.75 mm (0.0689 in.)
Drive pinion plug depth	Standard	2.3 to 2.35 mm (0.090 to 0.093 in.)

TORQUE SPECIFICATIONS

Part tightened		N*m	kgf*cm	ft.*lbf
Transmission revolution sensor x Automatic transaxle		5.4	55	48 in.*lbf
Park/neutral position switch assembly x Automatic transaxle	Bolt Nut	5.4 6.9	55 70	48 in.*lbf 61 in.*lbf
Transmission control cable assembly x Control shaft lever		12	122	9
Manual valve shaft x Control shaft lever		13	130	9
Transmission control cable assembly x Body		5.0	51	44 in.*lbf
Floor shift assembly x Body		12	122	9
Wire harness clamp bracket clamp bracket x Automatic transaxle		5.0	51	44 in.*lbf
Engine mounting bracket LH x Automatic transaxle		64	653	47
Engine moving control rod bracket x Automatic transaxle		39	398	29
Engine wire No. 3 x Automatic transaxle		26	260	19

[Corrected]

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See*1:
U340E AUTOMATIC TRANSAXLE - PARK/NEUTRAL POSITION SWITCH - INSTALLATION

See*2:
1NZ-FE ENGINE MECHANICAL - ENGINE ASSEMBLY - INSTALLATION

See*3:
1NZ-FE IGNITION - IGNITION COIL - INSTALLATION

See*4:
WIPER AND WASHER - FRONT WIPER MOTOR(for Sedan) - INSTALLATION

See*5:
POWER STEERING - POWER STEERING GEAR(for Sedan) - INSTALLATION

See*6:
ENGINE HOOD / DOOR - HOOD(for Sedan) - ADJUSTMENT

32. **INSTALL ENGINE WIRE NO.3**
    (a) Install engine wire No. 3 onto the automatic transaxle with the bolt.
    Torque: 26 N*m (260 kgf*cm, 19 ft.*lbf) [Corrected]
    (b) Install the 2 clamps onto the engine mount insulator.
33. **INSTALL TRANSMISSION CONTROL CABLE ASSEMBLY (See page AX-85)** See*1
34. **INSTALL BATTERY CARRIER (See page)** See*2
35. **INSTALL AIR CLEANER BRACKET (See page)** See*2
36. **INSTALL AIR CLEANER ASSEMBLY (See page)** See*2
37. **INSTALL CYLINDER HEAD COVER NO.2 (See page)** See*3
38. **INSTALL COWL TOP PANEL OUTER (See page)** See*2
39. **INSTALL FRONT AIR SHUTTER SEAL (See page)** See*2
40. **INSTALL FRONT WIPER MOTOR AND LINK (See page)** See*4
41. **INSTALL COWL TOP VENTILATOR LOUVER SUB-ASSEMBLY (for LHD) (See page)** See*4
42. **INSTALL COWL TOP VENTILATOR LOUVER SUB-ASSEMBLY (for RHD) (See page)** See*4
43. **INSTALL COWL SIDE VENTILATOR SUB-ASSEMBLY LH (See page)** See*4
44. **INSTALL COWL SIDE VENTILATOR SUB-ASSEMBLY RH (See page)** See*4
45. **INSTALL FRONT WIPER ARM AND BLADE ASSEMBLY LH (See page)** See*4
46. **INSTALL FRONT WIPER ARM AND BLADE ASSEMBLY RH (See page)** See*4
47. **INSTALL FRONT WIPER ARM HEAD CAP (See page)** See*4
48. **PROVISIONALLY TIGHTEN HOOD SUB-ASSEMBLY (See page)** See*5
49. **INSPECT HOOD SUB-ASSEMBLY (See page)** See*6
50. **ADJUST HOOD SUB-ASSEMBLY (See page)** See*6
51. **INSTALL FRONT WHEELS**
    Torque: 103 N*m (1050 kgf*cm, 76 ft.*lbf)
52. **INSTALL STEERING COLUMN HOLE COVER SUB-ASSEMBLY NO.1 (See page)** See*5
53. **INSTALL STEERING SLIDING YOKE SUB-ASSEMBLY (See page)** See*5
54. **INSTALL COLUMN HOLE COVER SILENCER SHEET (See page)** See*5
55. **INSTALL BATTERY TRAY**
56. **INSTALL BATTERY (See page)** See*2

AX

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See*1:
DRIVE SHAFT -
FRONT DRIVE SHAFT(for TMC Made Hatchback) -
INSTALLATION

See*2:
1NZ-FE STARTING - STARTER - INSTALLATION

See*3:
U340E AUTOMATIC TRANSAXLE -
PARK/NEUTRAL POSITION SWITCH - INSTALLATION

See*4:
1NZ-FE ENGINE MECHANICAL - ENGINE ASSEMBLY -
INSTALLATION

See*5:
1NZ-FE IGNITION - IGNITION COIL - INSTALLATION

22. **INSTALL TIE ROD END SUB-ASSEMBLY RH**
HINT:
The installation procedure for the RH side is the same as that for the LH side.

23. **INSTALL FRONT STABILIZER LINK ASSEMBLY LH (See page) See*1**

24. **INSTALL FRONT STABILIZER LINK ASSEMBLY RH**
HINT:
The installation procedure for the RH side is the same as that for the LH side.

25. **INSTALL SPEED SENSOR FRONT LH (See page) See*1**

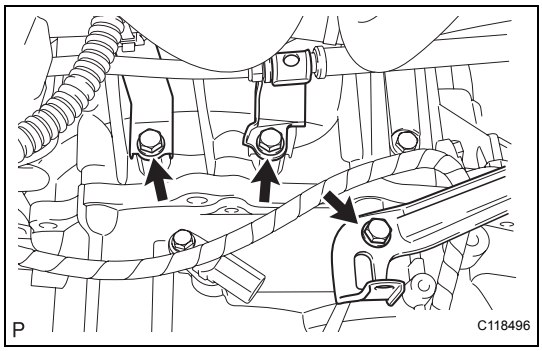
26. **INSTALL SPEED SENSOR FRONT RH**
HINT:
The installation procedure for the RH side is the same as that for the LH side.

27. **INSTALL FRONT AXLE HUB NUT LH (See page) See*1**

28. **INSTALL FRONT AXLE HUB NUT RH**
HINT:
The installation procedure for the RH side is the same as that for the LH side.

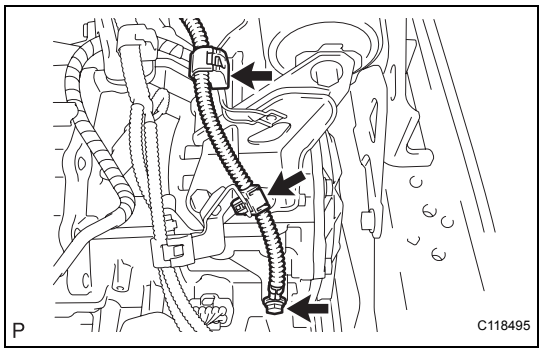
AX

29. **INSTALL STARTER ASSEMBLY (See page) See*2**



30. **CONNECT WIRE HARNESS**
(a) Install the 3 wire harness clamp brackets onto the automatic transaxle with the 3 bolts.
Torque: 5.0 N*m (51 kgf*cm, 44 in.*lbf)

31. **CONNECT CONNECTOR**
(a) Connect the vehicle speed sensor connector.
(b) Connect the transmission revolution sensor connector.
(c) Connect the transmission wire connector and install the clamp onto the engine mount insulator.
(d) Connect the park neutral position switch connector and install the clamp onto the engine mount insulator.



32. **INSTALL ENGINE WIRE NO.3**
(a) Install engine wire No. 3 onto the automatic transaxle with the bolt.
Torque: 26 N*m (260 kgf*cm, 19 ft.*lbf) [Corrected]
(b) Install the 2 clamps onto the engine mount insulator.

33. **INSTALL TRANSMISSION CONTROL CABLE ASSEMBLY (See page AX-85) See*3**

34. **INSTALL BATTERY CARRIER (See page) See*4**

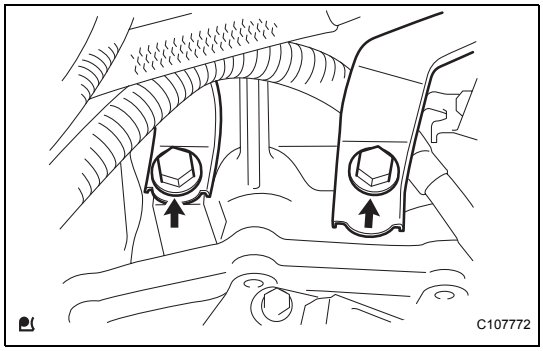
35. **INSTALL AIR CLEANER BRACKET (See page) See*4**

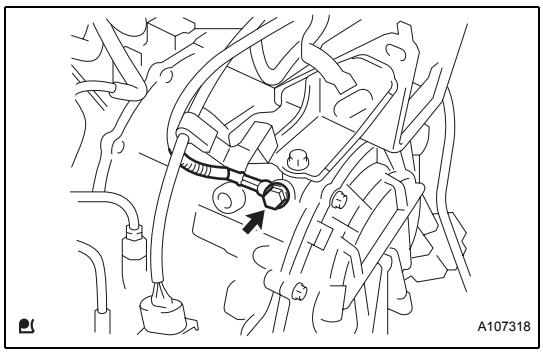
36. **INSTALL AIR CLEANER ASSEMBLY (See page) See*4**

37. **INSTALL CYLINDER HEAD COVER NO.2 (See page) See*5**

38. **INSTALL COWL TOP PANEL OUTER (See page) See*4**

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See*1:
U441E AUTOMATIC TRANSAXLE -
PARK/NEUTRAL POSITION SWITCH - INSTALLATION

See*2:
2NZ-FE ENGINE MECHANICAL - ENGINE ASSEMBLY - INSTALLATION

See*3:
2NZ-FE IGNITION - IGNITION COIL - INSTALLATION

See*4:
WIPER AND WASHER -
FRONT WIPER MOTOR(for Sedan) - INSTALLATION

See*5:
POWER STEERING - POWER STEERING GEAR(for Sedan) - INSTALLATION

See*6:
ENGINE HOOD / DOOR - HOOD(for Sedan) - ADJUSTMENT

(b) Install the 2 wire harness clamp brackets onto the automatic transaxle with the 2 bolts.
Torque: 5.0 N*m (51 kgf*cm, 44 in.*lbf)

31. **CONNECT CONNECTOR**
(a) Connect the transmission revolution sensor connector.
(b) Connect the transmission wire connector.
(c) Connect the park neutral position switch connector.

32. **INSTALL ENGINE WIRE NO.3**
(a) Install engine wire No. 3 onto the automatic transaxle with the bolt.
Torque: 26 N*m (260 kgf*cm, 19 ft.*lbf) [Corrected]
(b) Install the 2 clamps onto the engine mount insulator.

33. **INSTALL TRANSMISSION CONTROL CABLE ASSEMBLY (See page AX-85)** See*1

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41. **INSTALL COWL TOP VENTILATOR LOUVER SUB-ASSEMBLY (for LHD) (See page)** See*4

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43. **INSTALL COWL SIDE VENTILATOR SUB-ASSEMBLY LH (See page)** See*4

44. **INSTALL COWL SIDE VENTILATOR SUB-ASSEMBLY RH (See page)** See*4

45. **INSTALL FRONT WIPER ARM AND BLADE ASSEMBLY LH (See page)** See*4

46. **INSTALL FRONT WIPER ARM AND BLADE ASSEMBLY RH (See page)** See*4

47. **INSTALL FRONT WIPER ARM HEAD CAP (See page)** See*4

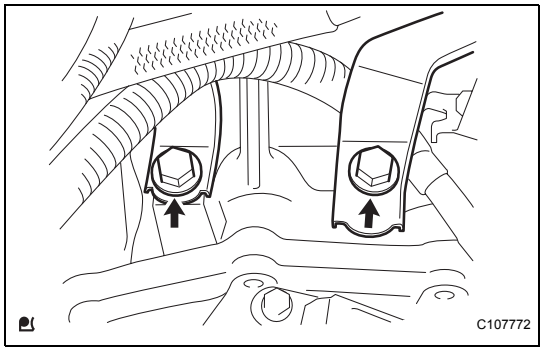
48. **TEMPORARILY TIGHTEN HOOD SUB-ASSEMBLY (See page)** See*5

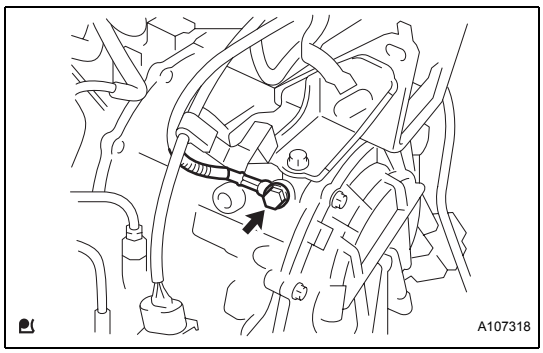
49. **INSPECT HOOD SUB-ASSEMBLY (See page)** See*6

50. **ADJUST HOOD SUB-ASSEMBLY (See page)** See*6

51. **INSTALL FRONT WHEELS**
Torque: 103 N*m (1050 kgf*cm, 76 ft.*lbf)

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See*1:
U441E AUTOMATIC TRANSAXLE -
PARK/NEUTRAL POSITION SWITCH - INSTALLATION

See*2:
2NZ-FE ENGINE MECHANICAL - ENGINE ASSEMBLY - INSTALLATION

See*3:
2NZ-FE IGNITION - IGNITION COIL - INSTALLATION

See*4:
1NZ-FE ENGINE MECHANICAL - ENGINE ASSEMBLY - INSTALLATION

See*5:
WIPER AND WASHER -
FRONT WIPER MOTOR(for Hatchback) - INSTALLATION

See*6:
POWER STEERING -
POWER STEERING GEAR(for TMC Made Hatchback) - INSTALLATION

See*7:
ENGINE HOOD / DOOR - HOOD(for Hatchback) - ADJUSTMENT

(b) Install the 2 wire harness clamp brackets onto the automatic transaxle with the 2 bolts.
Torque: 5.0 N*m (51 kgf*cm, 44 in.*lbf)

31. CONNECT CONNECTOR
(a) Connect the transmission revolution sensor connector.
(b) Connect the transmission wire connector.
(c) Connect the park neutral position switch connector.

32. INSTALL ENGINE WIRE NO.3
(a) Install engine wire No. 3 onto the automatic transaxle with the bolt.
Torque: 26 N*m (260 kgf*cm, 19 ft.*lbf) [Corrected]
(b) Install the 2 clamps onto the engine mount insulator.

33. INSTALL TRANSMISSION CONTROL CABLE ASSEMBLY (See page AX-85) See*1

34. INSTALL BATTERY CARRIER (See page) See*2

35. INSTALL AIR CLEANER BRACKET (See page) See*2

36. INSTALL AIR CLEANER ASSEMBLY (See page) See*2

37. INSTALL CYLINDER HEAD COVER NO.2 (See page)

38. INSTALL COWL TOP PANEL OUTER (See page) See*3

39. INSTALL COWL TO REGISTER DUCT SUB-ASSEMBLY RH (See page) See*4

40. INSTALL FRONT WIPER MOTOR AND LINK (See page) See*5

41. INSTALL COWL TOP VENTILATOR LOUVER LH (See page) See*5

42. INSTALL COWL TOP VENTILATOR LOUVER SUB-ASSEMBLY (See page) See*5

43. INSTALL HOOD TO COWL TOP SEAL (See page) See*5

44. INSTALL FRONT WIPER ARM LH (See page) See*5

45. INSTALL FRONT WIPER ARM RH (See page) See*5

46. INSTALL FRONT WIPER ARM HEAD CAP (See page) See*5

47. TEMPORARILY TIGHTEN HOOD SUB-ASSEMBLY (See page) See*6

48. INSPECT HOOD SUB-ASSEMBLY (See page) See*7

49. ADJUST HOOD SUB-ASSEMBLY (See page) See*7

50. INSTALL FRONT WHEELS
Torque: 103 N*m (1050 kgf*cm, 76 ft.*lbf)

51. INSTALL STEERING COLUMN HOLE COVER SUB-ASSEMBLY NO.1 (See page) See*6

52. INSTALL STEERING SLIDING YOKE SUB-ASSEMBLY (See page) See*6

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