

2022 *UPDATES*

# TRUESTART™ BATTERIES

WHY YOUR BATTERY SHOULD BE A GENUINE TOYOTA REPLACEMENT:

- The only warranty replacement battery approved for your Toyota vehicle.
- Meets or exceeds Toyota specifications for all vehicles.
- The exceptional 84-Month Warranty!
- 24-month FREE Replacement.
- 60-month proration in a simple two-tier priced plan.
- Includes Towing and Installation Labor.\*
- Coast-to-Coast warranty service at more than 1,200 locations! \*Ask your dealer for specific details.

**Features Include:**

- Matrix Radial Grids to help your battery meet today's high current starting demands.
- The right balance of Cold Cranking Amps and Reserve Capacity to provide power and cranking ability time after time.
- A patented lead alloy feature that reduces corrosion of lead parts and extends the life of your battery.
- A Negative Plate Paste Expander that reduces damage caused by high under-hood temperature or extreme heat.

**Tip:** If your car won't start or stalls frequently, it may be time for a new battery. Ask for a Genuine Toyota Replacement battery.



2022 *UPDATES*

# TRUE-2™ BATTERIES

TO STRIKE A BALANCE BETWEEN QUALITY AND PRICE, CHOOSE THE TRUE-2.

**Features and Benefits:**

- A competitive 60-Month Warranty!
- 18-month FREE Replacement.
- 42-month proration in a simple two-tier priced plan.
- Coast-to-Coast warranty service at over 1,200 locations.
- Built to top industry standards.
- High vibrations resistance.
- A great non-warranty replacement alternative.
- A Genuine Toyota battery representing quality, durability and reliability.

**Tip:** If your car won't start or stalls frequently, it may be time for a new battery. Ask for a Genuine Toyota Replacement battery.



Based on 2022 Toyota FMPC

VEHICLE	YEAR	DESCRIPTION	BATTERY SIZE
4RUNNER	1996-2000	4 CYL. (3RZFE)	24F
	1996-2000	4 CYL. (3RZFE) OPTION	27F
	1996-2002	V6 (5VZFE)	35
	1996-2002	V6 (5VZFE) OPTION	24F
	2003-2009	V6 (1GRFE)	24F
	2003-2009	V6 (1GRFE) OPTION	27F
	2003-2009	V8 (2UZFE)	24F
	2003-2009	V8 (2UZFE) OPTION	27F
2010-	V6 ALL MODELS	24F	
86/GR 86	2017-2020	ZN6 (FA20)	35
AVALON	1995-2018	ALL MODELS except HV	24F
	2019-	ALL MODELS except HV	H6 (LN3) <sup>1</sup>
AVALON HV	2013-2018	HV MODEL Use OE battery application	---
	2019-	HV MODEL	H5 (LN2) <sup>1</sup>
BZ4X	2023-	XEAM10, YEAM15	H4 (LN1) <sup>1</sup>
C-HR	2018-	ALL MODELS	H5 (LN2) <sup>1</sup>
CAMRY	1992-1998	ALL MODELS	24F
	1999-2001	4 CYL (5SF#)	24F
	1999-2001	4 CYL (5SFE)	35
	1999-2008	V6 (1MZFE, 3MZFE)	24F
	1999-2008	V6 (1MZFE, 3MZFE) OPTION	35
	2002-2009	4 CYL, V6 (2AZFE, 2GRFE)	24F
	2002-2009	4 CYL, V6 (2AZFE, 2GRFE) OPTION	35
	2010-2011	4 CYL, V6 (2ARFE, 2GRFE)	24F
	2010-2011	4 CYL, V6 (2AZFE, 2GRFE) OPTION	35
	2012-2017	ALL MODELS except HV	24F
2018-2019	ALL MODELS except HV	H6 (LN3) <sup>1</sup>	
2020-	GSV70 (2GRFKS)	H6 (LN3) <sup>1</sup>	
2020-	AXVA7# (A25AFKS)	H5 (LN2) <sup>1</sup>	
CAMRY HV	2007-2017	HV MODEL Use OE battery application	---
	2018-	HV MODEL	H5 (LN2) <sup>1</sup>
CELICA	1987-1998	ALL MODELS	35
	1999	4 CYL (5SFE)	35
	2000-2005	ALL MODELS	35
COROLLA	1988-2008	ALL MODELS	35
	2009-2013	AZE141 (2AZFE, 2AZ)	24F
	2009-2013	ZRE142 (2ZRFE, 2ZRFAE)	35
	2014-2016	ZRE172 (2ZRFE, 2ZRFAE)	35
	2020-	ZRE212, ZWE21# (2ZR#)	H4 (LN1) <sup>1</sup>
2020-	MZEA12 (M20AFKS)	H5 (LN2) <sup>1</sup>	
COROLLA CROSS STOP&START	2022-	MXGA1# (M20AFKS) COROLLA CROSS STOP&START	H6 EFB <sup>1</sup> (LN3-ISS)
COROLLA HATCHBACK	2019-	ALL MODELS (M20AFKS)	H5 (LN2) <sup>1</sup>
COROLLA iM	2017-	ALL MODELS (2ZRFAE)	35 <sup>1</sup>
CROWN	2023-	AZSH35, TZSH35	H6 (LN3) <sup>1</sup>
ECHO	2000-2005	ALL MODELS	25
	2007-2010	ALL MODELS	27F
FJ CRUISER	2011-2014	ALL MODELS	24F
	2023-	GZEA14	H6 (LN3) <sup>1</sup>

HYBRID MODEL: Special Order by Dealer from Parts Distribution Centers.

<sup>1</sup> TrueStart only

VEHICLE	YEAR	DESCRIPTION	BATTERY SIZE	
HIGHLANDER	2001-	ALL MODELS except HV + STOP&START	24F	
	2006-2009	HV MODEL (3MZFE) Auxiliary Battery	51R	
	2010-2019	HV MODEL Use OE battery application	---	
	2020-	HV MODEL (A25AFXS)	H5 (LN2) <sup>1</sup>	
HIGHLANDER STOP&START	2017-2019	GSU5# (2GRFKS) HIGHLANDER STOP&START (PANT 2021-035, approved alternate battery for 00544-S95TS, if not available)	24F EFB <sup>1</sup>	
	2017-2019	GSU5# (2GRFKS) HIGHLANDER STOP&START	S95 EFB <sup>1</sup>	
	2020-	GSU7# (2GRFKS) HIGHLANDER STOP&START	H6 EFB <sup>1</sup> (LN3-ISS)	
LAND CRUISER	1993-1998	ALL MODELS	27F	
	1999-2021	ALL MODELS	27F	
MATRIX	2003-2008	ALL MODELS	35	
	2009-2013	AZE141, 144, 146 (2AZFE)	24F	
	2009-2013	ZRE142 (2ZRFE)	35	
MIRAI	2016-2020	ALL MODELS (4JM)	S46B24R <sup>1</sup>	
MR2/MR2 SPYDER	2000-2005	ALL MODELS	51R	
PASEO	1992-1997	ALL MODELS	25	
PRIUS	2001-2003	NHW11 (1NZFXE)	S34B20L <sup>1</sup>	
	2001-2003	NHW11 (1NZFXE) TSB: EL014-03 battery capacity improvement Auxiliary battery install kit is 04003-23147 Use OE battery application	S55D23L <sup>1</sup>	
	2004-2009	NHW20 (1NZFXE)	S34B20R <sup>1</sup>	
	2004-2009	NHW20 (1NZFXE) OPTION	S46B24R <sup>1</sup>	
	2010-2015	ZVW30 (2ZRFXE)	S46B24R <sup>1</sup>	
	2016-	ZVW50, 51 (2ZRFXE)	H4 (LN1) <sup>1</sup>	
	2019-	ZVW55 (2ZRFXE)	H4 (LN1) <sup>1</sup>	
	2023-	MXWH60, 65	H4 (LN1) <sup>1</sup>	
	PRIUS c	2012-2017	NHP10 (1NZFXE)	S34B20R <sup>1</sup>
		2018-	NHP10 (1NZFXE)	H3 (LN0) <sup>1</sup>
PRIUS PHV	2010	ZVW35 (2ZRFXE)	S34B20R <sup>1</sup>	
	2012-2015	ZVW35 (2ZRFXE)	S46B24R <sup>1</sup>	
PRIUS PRIME	2017-	ZVW52 (2ZRFXE)	H4 (LN1) <sup>1</sup>	
	2023-	MXWH61L-AHXEBA	H4 (LN1) <sup>1</sup>	
PRIUS V	2012-2018	ZVW41 (2ZRFXE)	S46B24R <sup>1</sup>	
RAV4	1996-2005	ALL MODELS except EV	35	
	2006-2012	ALL MODELS except EV	24F	
	2013-	ALL MODELS except EV/HV	35	
	2019-	AXAA52L, AXAA54L GAS w/o STOP&START This OE application H5 (LN2) is serviced with H6 (LN3)	H6 (LN3) <sup>1</sup>	
	2016-2018	HV MODEL	S46B24R <sup>1</sup>	
RAV4 EV	2013-2014	EV MODEL	35	
RAV4 HV	2016-2018	HV MODEL	S46B24R <sup>1</sup>	
	2016-2018	HV MODEL With 7 inch AVN, 6 speaker or JBL audio Use OE battery application	S55D23R <sup>1</sup>	



VEHICLE	YEAR	DESCRIPTION	BATTERY SIZE	VEHICLE	YEAR	DESCRIPTION	BATTERY SIZE	
<b>RAV4 HV</b>	2019-	AXAH54, AXAL54..X HV STANDARD	H4 (LN1) <sup>1</sup>	<b>TUNDRA</b>	2010	V8 (1URFE) UPK52L-CHTSKA	27F	
	2019-2020	AXAH54L, AXAL54L..G, M HV OPTIONAL	H5 (LN2) <sup>1</sup>		2010	V8 (1URFE) UPK57L-CHTSKA	27F	
	2019-	AXAH54L, AXAL54L..X HV OPTIONAL; with Smart Entry & Audio-6Speaker 8 Inch XM	H5 (LN2) <sup>1</sup>		2010-2011	V8 (3URFE) USK52L & -CHTSKA	27F	
	2021-	AXAH54L, AXAL54L..G, M, P, S HV OPTIONAL	H5 (LN2) <sup>1</sup>		2010-2011	V8 (3URFE) USK57L & -CHTSKA	27F	
<b>RAV4 PRIME</b>	2021-	PHV MODEL (RAV4 PRIME)	H5 (LN2) <sup>1</sup>		2010-2012	V8 (3URFBE) USK57L & -CHTSGA	27F	
<b>RAV4 STOP&amp;START</b>	2019-2021	AXAA52L..M, X AXAA54L..G, M, V, X GAS with STOP&START	H6 EFB (LN3-ISS) <sup>1</sup>		2010-2013	V6 (1GRFE) GSK50L, GSK51L	24F	
	2022-	AXAA52L..M AXAA54L.. M, X GAS with STOP&START	H6 EFB <sup>1</sup> (LN3-ISS)		2010-2013	V8 (1URFE) UPK50L, UPK51L, UPK55L, UPK56L	24F	
<b>SEQUOIA</b>	2001-	ALL MODELS	27F		2010-2013	V8 (1URFE) UPK50L, UPK51L, UPK55L, UPK56L OPTION	27F	
<b>SEQUOIA HV</b>	2023-	VXKH80, 85	H7 SLI (LN4) <sup>1</sup>		2010-2013	V8 (3URFBE) USK55L, USK56L	24F	
<b>SIENNA</b>	1998-2020	ALL MODELS	24F		2010-2013	V8 (3URFBE) USK55L, USK56L OPTION	27F	
	2021-	ALL MODELS (RC: 61 AH)	H5 (LN2) <sup>1</sup>		2010-2013	V8 (3URFE) USK50L, USK51L, USK55L, USK56L OPTION	27F	
<b>SOLARA</b>	1999-2001	4 CYL (5SFE)	24F		2011-2012	V8 (1URFE) UPK50L-TRTDKA	24F	
	1999-2001	4 CYL (5SFE) OPTION	35		2011-2012	V8 (1URFE) UPK50L-TRTDKA OPTION	27F	
	1999-2008	V6 (1MZFE)	24F		2012-2013	V8 (3URFBE) USK52L	27F	
	1999-2008	V6 (1MZFE) OPTION	35		2014	GSK51L	24F	
	2002-2008	4 CYL (2AZFE)	24F		2014-2021	UPK5#, USK5# w/o cold area spec package	24F	
	2002-2008	4 CYL (2AZFE) OPTION	35		2014-2021	UPK5#, USK5# with cold area spec package (USA required cold area spec package)	27F	
<b>SUPRA</b>	1994-1998	ALL MODELS	24F		<b>TUNDRA HV</b>	2022-	VXKH7# HV MODELS: H7 SLI (LN4) 20HR: 80 AH	H7 SLI <sup>1</sup> (LN4)
	2020	DB43 (B58) TRUESTART H9 AGM	H9 AGM <sup>1</sup> (LN6)		<b>TUNDRA STOP&amp;START</b>	2022-	VXKA7# STOP&START: H7 EFB (395LN4-ISS) (All Models except HV) 20HR: 80 AH	H7 EFB <sup>1</sup> (LN4-ISS)
	2020-	DB4# Mexico (B58) TRUESTART H8 AGM	H8 AGM <sup>1</sup> (LN5)		<b>VENZA</b>	2009-2016	ALL MODELS	24F
	2020-	DB2#, 8# Mexico (B48#) TRUESTART H8 AGM	H8 AGM <sup>1</sup> (LN5)		2021-	ALL MODELS (RC: 61 AH)	H5 (LN2) <sup>1</sup>	
	2021-	DB0# Mexico (B58H) TRUESTART H8 AGM	H8 AGM <sup>1</sup> (LN5)		<b>YARIS</b>	2007-2014	ALL MODELS	35
	2021-	DB03 (B58H) TRUESTART H9 AGM	H9 AGM <sup>1</sup> (LN6)		2015-	NCP131 (1NZFE)	H5 (LN2) <sup>1</sup>	
	2021-	DB23 (B46H) TRUESTART H8 AGM	H8 AGM <sup>1</sup> (LN5)		2015-	NCP93 (1NZFE)	35 <sup>1</sup>	
<b>TACOMA</b>	1995-2004	4 CYL 2WD (2RZFE, 3RZFE)	35		<b>YARIS/iA MMVO</b>	2017-2020	ALL MODELS (P5)	35 <sup>1</sup>
	1995-2004	4 CYL 2WD (2RZFE, 3RZFE) OPTION	24F		<b>SCION FR-S</b>	2013-2016	ALL MODELS	35
	1995-2004	4 CYL 4WD (3RZFE)	24F		<b>SCION iA</b>	2016	ALL MODELS (P5)	35 <sup>1</sup>
	1995-2004	V6 2WD (5VZFE)	35		<b>SCION iM</b>	2016	ALL MODELS (2ZRFAE)	35 <sup>1</sup>
	1995-2004	V6 2WD (5VZFE) OPTION	24F		<b>SCION iQ</b>	2012-2015	ALL MODELS (1NRFE) +1.3LFF	51 <sup>1</sup>
	1995-2004	V6 4WD (5VZFE)	35			2012-2015	ALL MODELS (1NRFE) OPTION	25 <sup>1</sup>
	1995-2004	V6 4WD (5VZFE) OPTION	24F		<b>SCION iQ EV</b>	2013	EV MODEL Auxiliary Battery Use OE battery application	---
	2005-2008	V6 (1GRFE)	24F		<b>SCION tC</b>	2005-2009	ALL MODELS	24
	2005-2008	V6 (1GRFE) OPTION	27F	2010	ALL MODELS (Prod Date before March 2010)	24		
	2005-	4 CYL (2TRFE)	24F	2010-2016	ALL MODELS (Prod Date after March 2010)	24F		
	2009-2015	V6 (1GRFE)	27F	<b>SCION xA</b>	2004-2006	ALL MODELS	25	
	2016-	V6 (2GRFKS)	24F	<b>SCION xB</b>	2004-2007	ALL MODELS	25	
				2008-2015	ALL MODELS	24F		
<b>TERCEL</b>	1991-1999	ALL MODELS	25	<b>SCION xD</b>	2008-2014	ALL MODELS	35	
<b>TUNDRA</b>	2000-2004	V6 (5VZFE)	35					
	2000-2004	V6 (5VZFE) OPTION	24F					
	2000-2009	V8 (2UZFE)	24F					
	2000-2009	V8 (2UZFE) OPTION	27F					
	2005-2009	V6 (1GRFE)	24F					
	2009	V8 (3URFE, 3URFBE)	24F					
	2009	V8 (3URFE, 3URFBE) OPTION	27F					

HYBRID MODEL: Special Order by Dealer from Parts Distribution Centers.

<sup>1</sup> TrueStart only



## BATTERY DIMENSIONS

BATTERY SIZE	MILLIMETERS			INCHES		
	LENGTH	WIDTH	HEIGHT	LENGTH	WIDTH	HEIGHT
24	260	173	225	10 1/4	6 13/16	9
24F	260	173	225	10 21/32	6 13/16	9
24F EFB	260	173	225	10 3/4	6 13/16	9
25	230	175	225	9 1/16	6 7/8	8 7/8
27	306	173	225	12 1/32	6 13/16	8 15/16
27F	306	173	225	12 31/64	6 13/16	8 15/16
35	230	175	225	9 1/16	6 7/8	8 7/8
51	238	129	223	9 3/8	5 1/8	8 7/8
51R	238	129	223	9 3/8	5 1/8	8 7/8
H3 (LN0)	174	174	189	6 27/32	6 27/32	7 7/16
H4 (LN1)	207	175	190	8 3/16	6 57/64	7 7/16
H5 (LN2)	252	175	190	9 17/32	6 57/64	7 31/64
H6 (LN3)	283	175	190	10 15/16	6 7/8	7 1/2
H6 EFB (LN3-ISS)	283	175	190	10 15/16	6 7/8	7 1/2
H7 EFB (LN4-ISS)	313.5	174.4	188	12 11/32	6 55/64	7 13/32
H7 SLI (LN4)	313.5	174.4	188	12 11/32	6 55/64	7 13/32
H8 AGM (LN5)	353	175	190	13 57/64	6 57/64	7 31/64
H9 AGM (LN6)	393	175	195	15 15/32	6 57/64	7 43/64
S34B20R	194	126	224	7 5/8	4 15/16	8 13/16
S34B20L	194	126	224	7 5/8	4 15/16	8 13/16
S46B24R	238	126	227	9 3/8	4 15/16	8 15/16
S55D23L	232	173	225	9 1/8	6 7/8	8 7/8
S55D23R	---	---	---	---	---	---
S95 EFB	258	171	225	10 5/32	6 47/64	8 7/8

## TOYOTA TRUESTART BATTERY AVAILABILITY LIST/POWER RATINGS

BATTERY SIZE	PART NUMBER	MONTHS WARRANTY	COLD CRANKING AMPS @ 0°F	RESERVE CAPACITY (MINS) @ 80°F
24	00544-24060-575	84	575	130
24F	00544-24F60-575	84	575	130
24F EFB	00544-24FEF-TS	84	750	76 AH
25	00544-25060-550	84	550	100
27	00544-27060-675	84	675	160
27F	00544-27F60-710	84	710	165
35	00544-35060-550	84	550	100
51	00544-51060-500	84	500	85
51R	00544-51R60-500	84	500	85
H3 (LN0)	00544-H3LN0-TS	84	240	35 AH
H4 (LN1)	00544-H4052-470	84	470	74
H5 (LN2)	00544-H5061-540	84	540	100
H6 (LN3)	00544-H6074-770	84	770	130
H6 EFB (LN3-ISS)	00544-H6EFB-TS	84	603	65 AH
H7 EFB (LN4-ISS)	00544-H7EFB-TS	84	776	156
H7 SLI (LN4)	00544-H7SLI-TS	84	765	140
H8 AGM (LN5)	00544-H8AGM-TS	84	850	90 AH
H9 AGM (LN6)	00544-H9AGM-TS	84	950	105 AH
S34B20R	00544-21181-320	84	320	45
S34B20L	00544-21050-320	84	320	45
S46B24R	00544-21171-325	84	325	67
S55D23L	-----	---	---	---
S55D23R	-----	---	---	---
S95 EFB	00544-S95TS	84	604	70 AH

## TOYOTA TRUE-2 BATTERY AVAILABILITY LIST/POWER RATINGS

BATTERY SIZE	PART NUMBER	MONTHS WARRANTY	COLD CRANKING AMPS @ 0°F	RESERVE CAPACITY (MINS) @ 80°F
24	00544-024T2-530	60	530	90
24F	00544-24FT2-530	60	530	90
25	00544-025T2-525	60	525	100
27	00544-027T2-600	60	600	125
27F	00544-27FT2-625	60	625	130
35	00544-035T2-525	60	525	100
51R	00544-51RT2-410	60	410	70

All Toyota vehicles manufactured in Japan come with a Japan Industrial Standard (JIS) specification battery. U.S. battery manufacturers use a different specification standard called Battery Council International (BCI). The chart below can be used as an aid in determining the best fit replacement BCI specification batteries for JIS specification batteries.

## CROSS REFERENCE CHART BCI TO JIS

JIS*	BEST FIT ESTIMATE BCI	COMMENTS
46B24R	51	BCI 51 is for Scion iQ TrueStart only
50D20L	35	
50D20R	25	
50D23L	35	
55B24L	51R	
55B24L (S)	51R	
55D23L	35	May have vent cap clearance problems
55D23R	25	May have vent cap clearance problems
80D26L	24F	
80D26L	27F	
80D26R	24	
95D31L	27F	
105D31L	27F	
N/A	H3 (LN0)	
N/A	H4 (LN1)	
N/A	H5 (LN2)	
N/A	H6 (LN3)	
N/A	H6 EFB (LN3-ISS)	Enhanced Flooded Battery for Idle Stop & Start
N/A	H7 EFB (LN4-ISS)	Enhanced Flooded Battery for Idle Stop & Start
N/A	H7 SLI (LN4)	Starting, Lighting, and Ignition Battery
N/A	H8 AGM (LN5)	Absorbed Glass Mat battery
N/A	H9 AGM (LN6)	Absorbed Glass Mat battery
S34B20L	S34B20L	
S34B20R	S34B20R	
S46B24R	S46B24R	Absorbed Glass Mat battery
S55D23L	S55D23L	
S55D23R	S55D23R	
S95D26L	S95 EFB	
S95D26L (80D26L)	24F EFB	PANT 2021-035, 24F EFB approved alternate battery for S95D26L, if not available. NOTE: Enhanced Flooded Battery for Idle Stop & Start.

### NOTES:

- It is advisable to check the size of the battery installed in the vehicle to determine the proper replacement battery.
- BCI#: Battery Council International number
- For Battery Core Charge, use 00544-CRCHG

\*Japan Industrial Standard