Model Y Service Manual
Release Notes
General Information
00 - Inspection and Service
10 - Body
11 - Closures
12 - Exterior Fittings
13 - Seats
14 - Instrument Panel
15 - Interior Trim
16 - Battery System
17 - Electrical
18 - Thermal Management
20 - Safety and Restraint
21 - Infotainment
30 - Chassis
31 - Suspension
32 - Steering
33 - Brakes
34 - Wheel and Tires
39 - Front Drive Unit
Torque Specifications - Front Drive Unit
3901 - Front Drive Unit Assembly
Bushing – Front Drive Unit – RH (Remove and Replace)
Bushing - Gearbox - Front Drive Unit (Remove and Replace)

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Bushing - Gearbox - Front Drive Unit (Remove and Replace)

Correction code 39011202
FRT 0.72

NOTE: Unless otherwise explicitly stated in the procedure, the above correction code and FRT reflect all of the work required to perform this procedure, including the linked procedures. **Do not stack correction codes unless explicitly told to do so.**

NOTE: See Flat Rate Times to learn more about FRTs and how they are created. To provide feedback on FRT values, email LaborTimeFeedback@tesla.com.

NOTE: See Personal Protection to make sure wearing proper PPE when performing the below procedure.

Revision History:
- 2023-07-25: Updated the tools used to remove and install the front drive unit mount bolt.

- 1494178-00-A Raven, Drive Unit Cradle, MS/X
- 1137785-00-A Kit, Drive Unit Bushing R&R, Model 3

Remove

1. Remove the front aero shield panel from the vehicle. See Panel - Aero Shield - Front (Remove and Replace).

2. Position the front drive unit stand and transmission jack under the front drive unit.

3. Remove the bolt that attaches the LH motor mount to the LH motor mount bracket.

105 Nm (77.4 lbs-ft)

Tip: Use of the following tool(s) is recommended:
- Flex head ratchet/flex head torque wrench
- External Torx E18
- Adapter

4. Remove the bolt that attaches the RH motor mount to the RH motor mount bracket.

105 Nm (77.4 lbs-ft)

Tip: Use of the following tool(s) is recommended:
- Flex head ratchet/flex head torque wrench
- External Torx E18
- 6 in extension
- Adapter

5. Remove the front drive unit mount bolt.

80 Nm (59.0 lbs-ft)

Tip: Raise or lower the pole jack as needed to help release the bolt.
Tip: Use of the following tool(s) is recommended:
- 18 mm socket
- Flex head ratchet/flex head torque wrench
- 11in Extension Locking
- 6 in extension
- Universal Joint 3/8in

6. Lower the front drive unit and turn the pole jack knob to tilt the motor by ~35 degrees to separate the front drive unit from the subframe.

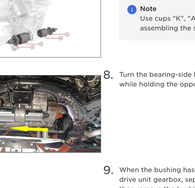
CAUTION
Take care not to damage the coolant lines and harnesses.

7. Install the bushing tool on the front drive unit gearbox bushing.

Note
Use cups "K", "A", "H", and "L" when assembling the special tool, as shown.

8. Turn the bearing-side bushing tool nut with a wrench while holding the opposite nut in place.

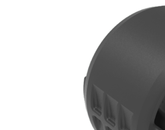
9. When the bushing has been pushed out of the front drive unit gearbox, separate the bushing tool, and then remove the bushing.



Install

1. Set up the bushing tool to press in the new bushing.

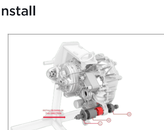
Note
Use cups "L", "H", and "D" when assembling the special tool, as shown.



2. Turn the bearing-side bushing tool nut with a wrench until the bushing is fully installed.

3. Separate the bushing tool, and then remove it from the drive unit.

4. Install the front drive unit to the vehicle.



5. Install the front drive unit mount bolt.

80 Nm (59.0 lbs-ft)

Tip: Raise or lower the pole jack as needed to help release the bolt.
Tip: Use of the following tool(s) is recommended:
- Ratchet/torque wrench
- 18 mm socket
- Flex head ratchet/flex head torque wrench

6. Install the bolt that attaches the RH motor mount to the RH motor mount bracket.

105 Nm (77.4 lbs-ft)

Tip: Raise or lower the pole jack as needed to help install the bolt.
Tip: Use of the following tool(s) is recommended:
- Flex head ratchet/flex head torque wrench
- External Torx E18
- 3 in extension
- Adapter

7. Install the bolt that attaches the LH motor mount to the LH motor mount bracket.

105 Nm (77.4 lbs-ft)

Tip: Raise or lower the pole jack as needed to help install the bolt.
Tip: Use of the following tool(s) is recommended:
- Flex head ratchet/flex head torque wrench
- External Torx E18
- 3 in extension
- Adapter

8. Remove the front drive unit stand and transmission jack from the front drive unit.

9. Install the front aero shield panel to the vehicle. See Panel - Aero Shield - Front (Remove and Replace).