

Ryder Racing Extreme Transmission Bolt Kits

Kit Contents

Bolt Kit Part Number			Bolt Location (See diagram on p. 3)	Bolt Type	Bolt Length	Nut Type
19TEBK	19TABK	19TMBK				
1			1	M10	170mm	M10
2			2	M10	190mm	M10
3			3	M8	180mm	M8
4			4	M8	150mm	M8
5			5	M10	200mm	M10
6			6	M10	170mm	M10
7			7	M8	190mm	M8
8			8	M10	130mm	M10
9			9	M8	130mm	M8
10			10	M8	120mm	M8
11			11	M8	120mm	M8
12			12	M8	120mm	M8
13			13	M8	120mm	M8
14			14	M8	120mm	M8
15			15	M8	120mm	M8
16			16	M8	120mm	M8
17			17	M10	70mm	M10

Transmission Bolt Installation

- 1) **(All kits)** Remove the upper pitch arm behind the intercooler, place this aside leaving any earth strap still connected.
- 2) Lift car using vehicle hoist, alternately use jack stands X 4, be sure that the jacks stands are placed under correct location of vehicle, jack stands should be correctly rated for the vehicle they are supporting, see stand label for safe working load (SWL).

Full Transmission Removal

In the event of full transmission removal due to transmission rebuild etc... refer to vehicle repair manual for correct procedure. Skip to number 6.

Installation - transmission in vehicle

Ryder Racing Transmission Main Bolt Kit # 19TMBK &

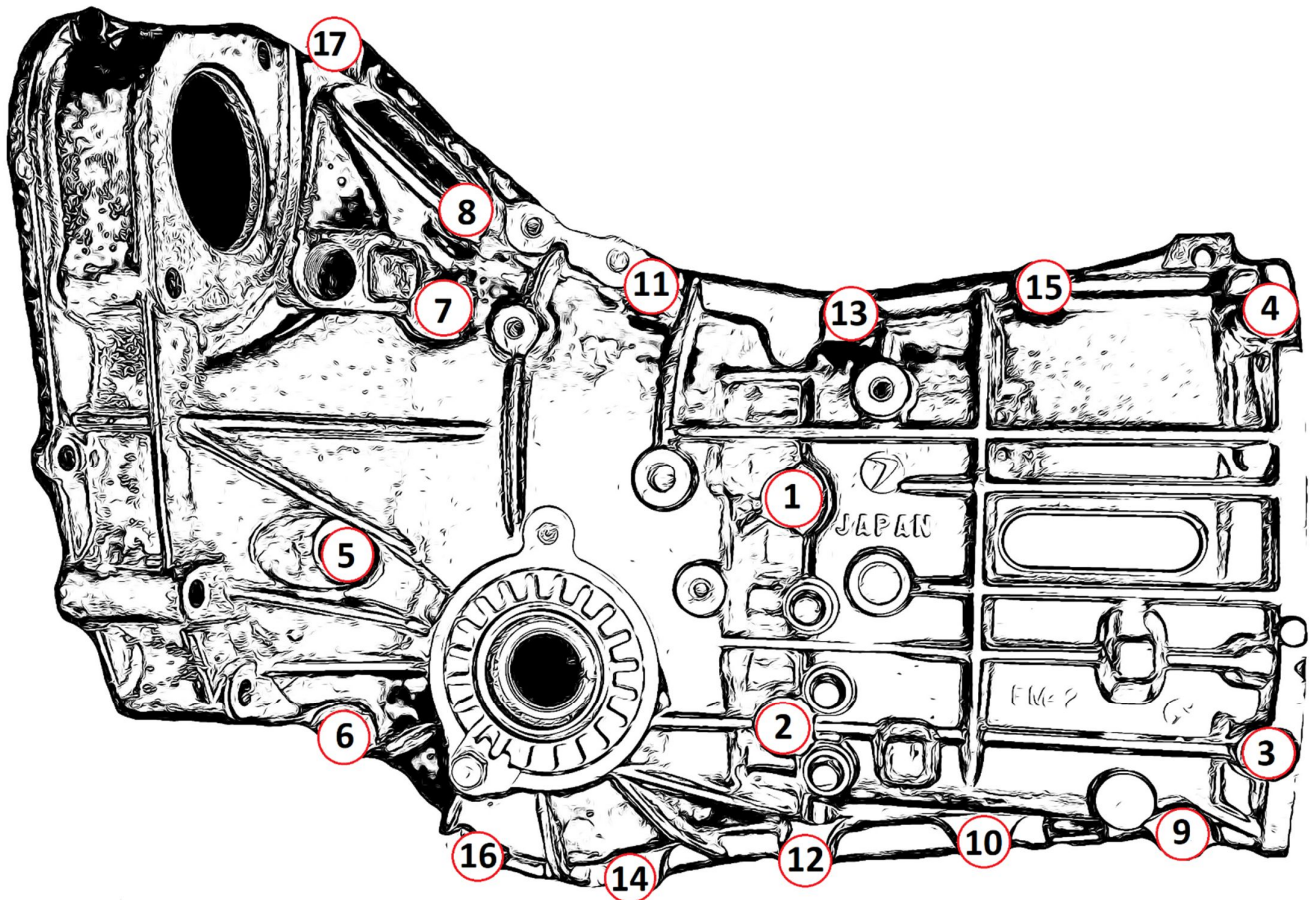
Ryder Racing Extreme Transmission Bolt Kit # 19TEBK (Continue all steps 3 to 14) For Subaru 5 Speed

- 3) Open Ryder Racing contents and be sure all bolts and nuts are accounted for. Place a single M8 washer on all M8 bolts, slide down towards the bolt end. Repeat for the M10 bolts using the M10 washers provided. In some cases, it may be easier to keep the bolt near the thread to allow extra access as the washer will interfere with the body, cross member and other parts.
- 4) **Alternate method**; after vehicle has been lifted off the ground, remove the tail shaft using OEM removal method. Disconnect the front inner CV shafts (Left and right) from transmission to allow easy access and the transmission to drop. This can be by removing the inner spring clip or popping the CV out of the transmission. Disconnect the lower ball joint and pivot suspension outward from vehicle. From this point you can chock the strut using a small piece of broom stick.
- 5) Disconnect selector lever from top of transmission.
- 6) Using a jack pivot the front of the engine carefully, avoid damaging components, recommend using a piece of wood in between the front exhaust cross pipe flange (not heat shields) and jack pad. Raise the front of the engine up slowly to allow the transmission to drop down towards the back. Be sure not to raise the engine to much as it will move the vehicle of the jack stands or hoist pads (**VERY DANGEROUS**).
- 7) While the back of the transmission is exposed remove and replace bolts number **1 and 2**. Be sure to remember which side the bolt and nuts go, if in doubt refer to the remaining bolts. Using a calibrated torque wrench, torque the M10 nut to 55 NM.
- 8) Remove and replace bolts **3 and 4**. After installing the new bolts torque the M8 nuts to 35 NM. Number 4 may have clearance issues and hit the transmission tunnel. You need to pull the transmission down and away to get full reach, using a marker, mark where its touching the transmission tunnel, using a ½" extension bar tap that same mark creating a 3-5mm indent to allow the bolts to be replaced (If you crack the paint be sure to cover the area with a sealer to prevent any rusting of the body).
- 9) If you have only purchased the Ryder Racing Transmission Main Bolt Kit continue to **number 13**

Ryder Racing Transmission Additional bolt Kit # 19TABK

- 10) Continue to replace bolts in the numbered sequence. **M10 bolts 5 – 6**, torque nut to 55 NM. Number 6 may have clearance issues where the cross member and power steering rack may hit. Loosen the engine mounts and jack the engine.
- 11) Replace M8 **Bolt 7**, torque M8 nut to 35 NM.
- 12) Replace M10 **Bolt 8**, torque M10 nut to 55 NM
- 13) Replace M8 **Bolts 9 – 10 – 11 – 12 – 13 – 14 – 15 – 16**, torque M8 nuts to 35 NM
- 14) Replace tail shaft and CV shafts as per OEM instructions.
- 15) When vehicle is lowered back on the ground replace **bolt 17**, M10 from the pitch arm mount, replace with last remaining bolt M10 X 70mm, torque nut to 55NM.
- 16) Refit pitch mount and check transmission oil level. Congratulations you have successfully installed the Ryder Racing Extreme Bolt Kit.

Bolt Location Guide



See terms and conditions for warranty on these products