



WEVO 915 GATESHIFT KIT 2020

ITEM	PART NUMBER	QTY.	KIT	DESCRIPTION
1	XT_043_03	1	YES	BOTTOM COVER PLATE
2	XT_038_08	1	YES	GATE UNIT - 915 GATESHIFT KIT
3	XT_400_01	1	YES	GATESHIFT KIT DONGLE -915
4	915 303 132 00	1	NO	MAIN SHIFT ROD - 915
6	009_O Ring	3	YES	GATE UNIT SCREW O-RING
7	M6 SPRING	3	YES	M6 SPRING WASHER
8	XT_288_01	3	YES	GATE MOUNTING BOLT - M6
9	901 303 171 01	1	NO	CLEVIS PIN - M8
10	042_O Ring	1	YES	BOTTOM COVER O-RING
11	M8_WASHER	4	YES	WASHER - M8
12*	SPLIT_PIN_16TH	1	YES	COTTER PIN
13	M8_NYLOC	4	YES	NYLOC NUT - M8

This kit includes all the parts required to install the WEVO 915 GateShift kit. The kit will improve accuracy of gear selection and protect the internals of a 915 transmission from extraneous gear selection forces that can act on the gear selection parts, and reduce the life of transmission components.

The gate design gives a very positive feedback to the driver and assists with Accurate “muscle memory” and “hand mapping” of the lever position that selects each gear. This kit can help protect your 915 transmission from problems that might accelerate wear and the need for future overhauls.

Installation of this kit will take approximately 2 hours for a technician who is familiar with the Porsche 915 transmission and has the unopened 915 transmission sitting on the bench. If the installation is performed concurrent with a transmission overhaul, the installation adds only minutes to the re-assembly of a 915 transmission. This is not a difficult kit to install and can be performed by a confident home mechanic who has the 915 Transmission experience and correct tools.

This kit can not improve any gear selection conditions related to worn or damaged synchromesh components.

In general the WEVO 915 GateShift kit can be used with any stock or aftermarket short-shifter handpiece that does not use a strict gate device on the lever. The technician should establish the effectiveness and correct adjustment of any reverse lock-out mechanism on any shifter handpiece. The WEVO GateShift kit does not have any mechanical reverse lock-out device - although the tolerance of the gate design makes selection of reverse gear very difficult except when intentional.

This kit will function correctly when the geometry of the shift rail parts is arranged as shown in the official Porsche workshop manuals. If you refer to the Workshop Manual 911 Volume IV from Model on 72 Assembly Group 3, section 3.1-2/1, the instructions and diagrams in these pages will allow for checking of original factory geometry.

Do not attempt to use the WEVO GateShift kit until the original factory geometry has been verified. This is a simple procedure, which will not take longer than 30 minutes. Adjustments are very simple, requiring no special tools. Any technician who is confident to install this kit will find no difficulty in adjusting the shift rails if required.

PREPARATION

Use the exploded diagram above and refer to parts by the ITEM # also used below for identification in this text.

These instructions assume a technical familiarity and competence in disassembly and reassembly of a Porsche 915 Transmission. Without that capability, these instructions will be inadequate and you are advised to seek more experienced assistance.

Disassemble the 915 transmission in the conventional manner until you have the MAIN SHIFT ROD - 915 (4) in your hands.

Remove the cotter pin from the CLEVIS PIN – M8 (9) and press or punch-drift the CLEVIS PIN – M8 out so that the original shift dongle can be removed.

Inspect the CLEVIS PIN – M8 (9) for burrs or damage created when the CLEVIS PIN – M8 was removed. Polish the CLEVIS PIN – M8 if necessary so that it will spin freely in both ears of the clevis feature on the new GATESHIFT KIT DONGLE – 915 (3).

Installation of the GATESHIFT KIT DONGLE – 915 (3) requires pressing the pin back through the 915 MAIN SHIFT ROD - 915 (4). Typically this is done with the pin being installed from the top side of the MAIN SHIFT ROD – 915 (4) as is installed in the transmission.

The fit of the CLEVIS PIN – M8 through the MAIN SHIFT ROD – 915 is a light interference, therefore support the GATESHIFT KIT DONGLE – 915 properly while the pin is being pushed through the MAIN SHIFT ROD – 915.

The COTTER PIN (12) is installed on the bottom side of the pin. Bend the COTTER PIN to permanently retain it in the CLEVIS PIN – M8.

The gasket surface on the bottom of the 915 Maincase housing must be thoroughly cleaned. The BOTTOM COVER PLATE (1) used in the WEVO 915 GateShift kit does not use a gasket, it uses the 042_O RING (10) to seal the BOTTOM COVER PLATE to the Maincase housing. For this reason the surface that was originally sealed by a gasket must be thoroughly cleared of any old gasket material or sealing compounds.

The two 10mm dowels from your original bottom cover need to be retrieved to prepare the BOTTOM COVER PLATE (1). Use a hot air gun or propane torch to heat the cover in the area of the dowels. These dowels can easily be extracted with pliers or Vise-Grip's. File or polish the dowels to remove any burrs created when extracting the dowels, then push the dowels into the new BOTTOM COVER PLATE with Loctite 248 or similar stud lock adhesive. (Note - if you burr the dowels during removal, push the burred surfaces into the cover)

REASSEMBLY

Fit the MAIN SHIFT ROD – 915 back into the Maincase housing so that it is situated in the same way as during removal, or reassembly of any standard 915 transmission.

Take the GATE UNIT (2) and fit this onto the GATESHIFT KIT DONGLE – 915 (3) so that it is hanging in the 5th gear slot. The 5th gear slot position is the highest track in the gate, furthest from the mounting face to the BOTTOM COVER PLATE.

The GATE UNIT (2) must be arranged partially out of the hole in the Maincase housing for the BOTTOM COVER PLATE to allow it to pass over the gear cluster as the maincase is maneuvered back into final position.

Take a couple of dry runs at this, holding the loose parts in the right place, getting the main shift rod back into the bore in the final drive housing can be awkward. It is easy to tear the new gaskets or damage the gasket surface on the Final Drive Housing - so be prepared to practice a couple of times before installing the gasket.

When you are comfortable with the assembly procedure, prepare gasket surfaces with a non-setting sealing compound such as Hylomar HPF, or your preferred gasket dressing process.

Install the Maincase Housing and make sure the GATE UNIT is hanging partially out of the hole for the bottom cover and no internals are snagged or misplaced. The tip of the GATESHIFT KIT DONGLE – 915 should be arranged to sit in the pocket of the 3rd/4th shift rail, or 1st/2nd shift rail, in both cases the shift rails must be in the neutral position.

The new BOTTOM COVER PLATE (1) needs to have the large 042_O RING (10) installed in the irregular shaped groove. Use a non-setting sealing compound as above to retain the 042_O RING in the groove.

Assemble the three M6 cap head bolts GATE MOUNTING BOLT – M6 (8) with an M6 SPRING WASHER (7). Apply a small amount of non-setting sealant onto the plain shank of the GATE MOUNTING BOLT – M6, then pass the bolts through the BOTTOM COVER PLATE (1). Install a 009_O RING (6) onto each bolt and slide the o-ring into the counterbore in the BOTTOM COVER PLATE. Use a small amount of non-setting adhesive to hold the small o-ring in the counterbore.

Offer the bottom cover up the base of the GATE UNIT that is in the opening in the Maincase housing and sitting approximately flush with the bottom mounting face for the BOTTOM COVER PLATE. At this point you can start the threads of the three GATE MOUNTING BOLT – M6 into the threads in the base of the GATE UNIT. Once you are satisfied the threads are started, you can maneuver the GATE UNIT back inside the Maincase housing and offer the BOTTOM COVER PLATE up to its sealing surface.

At this point just check the action of the dongle is free to move back and forth in the neutral slot of the gate, this means all the shift rails are in the neutral position and nothing has been displaced during the assembly of the parts.

If all checks are clear, fasten the BOTTOM COVER PLATE with the four M8 nyloc nuts and tighten the three M6 screws into the GATE UNIT. The M8 nuts should be tightened to 25Nm (18 ft/lb) and the M6 screws should be tightened to 16Nm (11 ft/lb). The M6 screws must be secured with the lock wire included in the kit.

The balance of the reassembly of the 915 follows all the factory instructions.

OTHER WEVO PRODUCTS TO CONSIDER

The installation of a WEVO PSJ - Precision Shift Joint is highly recommended. Follow the instructions for the WEVO PSJ to achieve the correct set-up of the shifter handpiece. Use either the WEVO Racing PSJ or the WEVO Stock 911 PSJ, either will offer a significant improvement in shift linkage precision.

The WEVO 915 shifter will also improve your gear selection precision, our shifter is the most compatible shifter handpiece to use with the WEVO GateShift kit.

Use the original instructions for set-up of all other shifter mechanisms.

Your WEVO GateShift kit will offer the best performance when all the components of your gear shift assembly from handpiece to transmission are restored to new or improved condition.

END.

Page 4 of 4