

15" EXTENSION HANDLE KIT

INSTALLATION MANUAL

REV.C2



TITAN
POST DRIVERS

X SERIES

**PART# :
PGDSHKX**

PREP

The Titan X-Series Driver will be referenced throughout the instructions in the upright position with the Titan Nameplate facing you (engine facing away from you).

Items included in this kit are written in **BOLD CAPITAL** letters and followed by an item number which can be referenced in the exploded parts view. Detailed views for some parts can also be found in the exploded view.

In addition to the hardware/tools included with this kit, you will need:

- **Two 10mm wrenches**
- **Phillips-head screwdriver**

Before installing your handle kit, please verify that your kit contains all parts listed on page 9. If not, please contact the distributor where you purchased your kit.

Video instructions can be found at:
<https://youtu.be/rdk1rAhLSDk>



Driver shown with the PGDSHKX kit and the optional PGDLHKX kit installed

HANDLE

Install **THREE-WAY COUPLERS** (#1) onto the **MIDDLE HANDLE** (#2):

First, see Figure 1 and the detailed view for part #3: Put two **LOCK WASHERS** (#3) on each **M10x30mm CAP SCREW** (#4). The washers should be placed with the deep serrations face-to-face and the fine bumps facing outward.



Figure 1: Proper orientation of lock washers on M10x30mm and M10x40mm cap screws

Install two cap screws with lock washers through the middle handle and the three-way couplers using an **8mm ALLEN WRENCH** (#6). Do NOT fully tighten the handle to the couplers; keeping the hardware loose will allow you to more easily connect the couplers to the driver handles.



Middle Handle/Coupler Assembly

HANDLE

Install the Middle Handle/Coupler assembly onto the main driver handles

- Remove the plastic caps from the bottom of the driver handles
- Put two **LOCK WASHERS** (#3) on each **M10x40mm CAP SCREW** (#5) as described previously
- With the threaded end of the couplers aimed down, install two cap screws with lock washers through the couplers and into the driver handles

Tighten all four previously installed cap screws with an 8mm **ALLEN WRENCH** (#6)

Note: If permanently installing the handle kit on your driver, torque cap screws to 82 N-m (60.5 ft-lb) to prevent loosening.

Screw **15" HANDLE WITH FOAM GRIP** (#7L) into the previously installed coupler on the **LEFT** side of the driver. Tighten by hand

Screw **15" HANDLE WITH THROTTLE SWITCH** (#7R) into the previously installed coupler on the **RIGHT** side of the driver. Tighten by hand

Install **BOTTOM COUPLERS** (#8) by threading onto each previously installed handle

Install **FORMED HANDLE WITH FOAM GRIP** (#9):

- The bottom handle can be installed in one of two directions:
 - Grip towards the front (preferred by most users)
 - Grip towards the motor
- Put two lock washers on each M10x40mm cap screw
- Install the two cap screws with lock washers through the formed handle and into the bottom couplers
- Tighten both cap screws with an 8mm Allen wrench

THROTTLE

Disconnect throttle cable from engine



- Remove the Air Filter Cover from the engine
- Use two 10 mm wrenches to loosen the throttle cable jam nuts, and remove the cable from the retainer/throttle body
- Unscrew and remove the P-clamp that holds the wire harness to the driver body
- Disconnect the electric connections by firmly pulling the base of the connectors apart. Pulling the wires themselves could cause damage to the wires/connectors



Install Throttle Junction Box

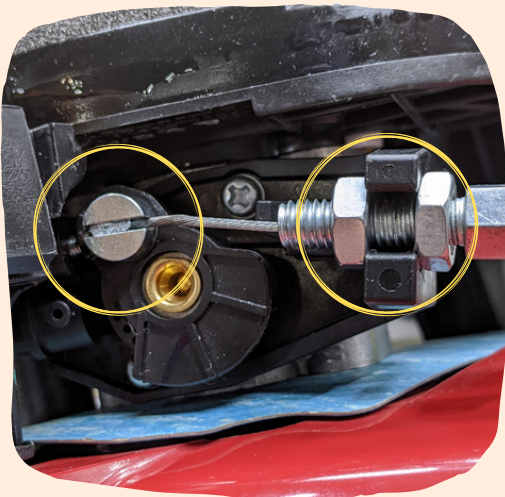


Figure 2: Engine throttle body, with metal retainer (left) and plastic retainer (right)

- Unscrew and remove the cover of the **THROTTLE JUNCTION BOX (#10)** (keep screws with cover)
- Attach the junction box to the driver body with the pre-installed cable aimed up
 - See detailed view for part #10: Screw the **M5x10mm SCREW** securely into the hole on the right side of the driver body
- Install the junction box throttle cable into the engine throttle body
 - Slide the throttle cable into the slot of the metal retainer, then pull the cable so that the cable head seats into the retainer as in Figure 2
 - Place the jam nuts over the plastic retainer and tighten snugly with two 10mm wrenches as in Figure 2

THROTTLE



Install Throttle Cables into Junction Box

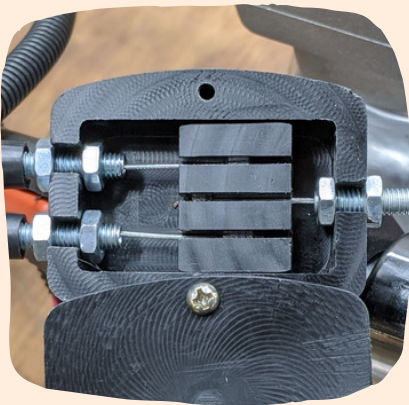


Figure 3: Final junction box assembly

- Slide one of the **THROTTLE CABLES** (from #7R or original driver throttle) into either of the outside slots of the junction box slide mechanism, then pull the cable so that the cable head seats into the slide mechanism as in Figure 3
- Place the jam nuts over the junction box retaining slot and tighten snugly with two 10mm wrenches
- Repeat for second cable



Adjust Throttle Cables

When properly adjusted, the engine throttle body will fully open when the throttle is actuated, as in Figure 4, and fully close when the throttle is released/in the idle position, as in Figure 5

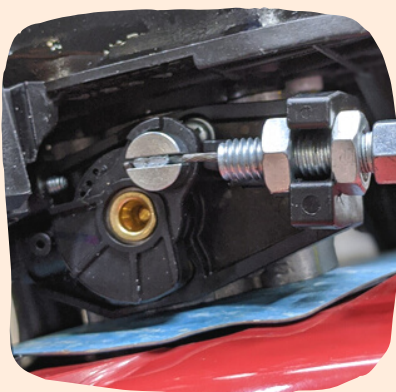


Figure 4:
Throttle "fully open"; throttle body hits the stop block



Figure 5:
Throttle "fully closed"; throttle body rests on the set screw

THROTTLE



Adjust Throttle Cables, Continued

If the throttle body **does not fully open** when actuating one of the throttles, adjust those throttle cable jam nuts as follows:

- Loosen the nut inside the junction box a bit, moving it further into the junction box. Then, tighten the outside nut until the jam nuts are snug
- Actuate that throttle and check if the throttle body is now fully engaged. If not, repeat the process until the throttle fully opens when actuated. Repeat for the other throttle cable

If the throttle body **does not fully close** in the released position, the junction box throttle cable connected to the engine is too tight. Move the jam nuts from a forward position towards a backwards position as shown in Figure 6 and Figure 7



Figure 6: Jam nuts in the "forward" position



Figure 7: Jam nuts in the "backwards" position

After adjusting the main junction box throttle cable, verify that the throttles still actuate appropriately. If not, readjust according to the previous process

Once the throttles are properly adjusted, reinstall the junction box cover. Also, use the included clip/screw to secure the junction box throttle cable to the hole on top of the clutch housing

FINAL STEPS

Wire Connections



- Connect the wires from the two throttles and the engine to **WIRE HARNESS (#11)**
 - The end of the wire harness with two connectors attaches to the two wires from the engine
 - The end of the wire harness with four ends attaches to the two pairs of wires from the throttle/stop switches: **male ends** from throttle to **female ends** from wire harness, and vice versa

Final Steps

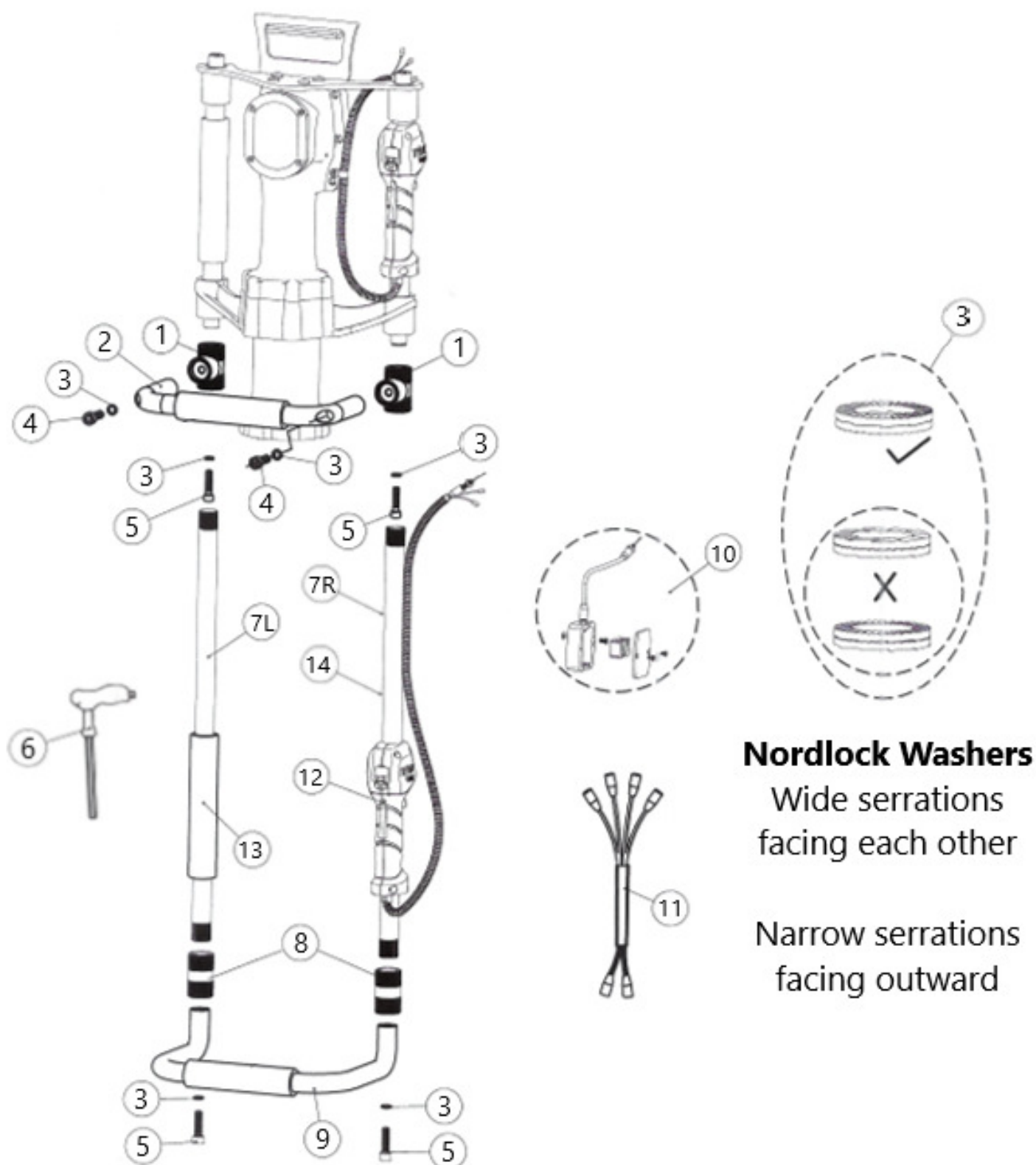


- Verify all hardware from previous steps has been securely tightened
- Reinstall air filter cover
- Again, after initial use, check installed hardware to ensure tightness

CAUTION

WHEN LIFTING ABOVE HEAD, BE SURE TO WATCH FOR UTILITY LINES AND OTHER ELECTRIFIED WIRES/OBJECTS!

PARTS VIEW



PARTS LIST

PGDSHKX Parts List

Key	Part Number	Item Description	Quantity	Note
1	YPGDTCX	3-Way Coupler	2	
2	YPGDSHX	Middle Handle	1	
3	YPGDW10	Nordlock Washer, Pack of 2	6	
4	YPGD10X30	Machine Screw, 30mm	2	M10X30 SHCS
5	YPGD10X40	Machine Screw, 40mm	4	M10X40 SHCS
6	YPGDT8X	Allen Wrench, 8mm	1	
7L	N/A	15" Handle with Foam Grip	1	
7R	N/A	15" Handle with Throttle Switch	1	
8	YPGDLCX	Long Coupler	2	
9	YPGDAHx	Formed Handle with Foam Grip	1	
10	YPGDJBX	Dual Throttle Junction Box	1	
11	YPGDJBHX	Wire Harness	1	
Replacement Parts Sold Separately				
12	YPGD33X	Replacement Throttle Switch	1	
13	YPGD32	Replacement Handle Foam	1	
14	YPGDSEHX	Replacement 15" Handle, No Throttle Switch or Foam	1	

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Population (millions)	7.7	7.9	8.1	8.3	8.5	8.7	8.9	9.1	9.3	9.5	9.7	9.9	10.1	10.3	10.5	10.7	10.9	11.1	11.3	11.5	11.7
GDP (trillion USD)	44.0	48.0	52.0	56.0	60.0	64.0	68.0	72.0	76.0	80.0	84.0	88.0	92.0	96.0	100.0	104.0	108.0	112.0	116.0	120.0	124.0
Life expectancy (years)	72.4	73.4	74.4	75.4	76.4	77.4	78.4	79.4	80.4	81.4	82.4	83.4	84.4	85.4	86.4	87.4	88.4	89.4	90.4	91.4	92.4
Urban population (%)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0	72.0	73.0	74.0
Renewable energy (%)	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
CO2 emissions (Gt)	15.0	16.0	17.0	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
Forest cover (%)	61.0	60.5	60.0	59.5	59.0	58.5	58.0	57.5	57.0	56.5	56.0	55.5	55.0	54.5	54.0	53.5	53.0	52.5	52.0	51.5	51.0
Water stress (%)	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0
Healthcare expenditure (%)	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
Internet usage (%)	20.0	25.0	30.0	35.0	40.0	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0	90.0	95.0	100.0	100.0	100.0	100.0	100.0
Gender inequality index	0.65	0.64	0.63	0.62	0.61	0.60	0.59	0.58	0.57	0.56	0.55	0.54	0.53	0.52	0.51	0.50	0.49	0.48	0.47	0.46	0.45
Urbanization rate (%)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0	72.0	73.0	74.0
Renewable energy investment (Bn USD)	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
CO2 emissions per capita (t)	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
Forest cover loss (ha)	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0
Water stress index	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2
Healthcare expenditure (Bn USD)	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
Internet usage (Bn USD)	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
Gender inequality index	0.65	0.64	0.63	0.62	0.61	0.60	0.59	0.58	0.57	0.56	0.55	0.54	0.53	0.52	0.51	0.50	0.49	0.48	0.47	0.46	0.45
Urbanization rate (%)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0				

