



MOTION PRO, INC.
3171 Swetzer Road
Loomis, CA 95650
Tel 650.594.9600 Fax 650.594.9610
www.motionpro.com

INSTRUCTIONS

MOTION PRO Vortex™ SE Throttle P/N 01-2810

IMPORTANT! READ BEFORE INSTALLATION



For Installation of the Vortex™ SE Throttle with the Motion Pro Dirt Control V2 Lock-On System or ODI® V2 Lock-On System using CAM D, SEE THE REVERSE SIDE INSTRUCTIONS.



A. Titan Throttle Tube™
(P/N 01-1186)



B. Housing Cover & Screw
(P/N C01-2810C)



C. Housing Upper Half
(P/N C01-2810A)



D. Housing Lower
Half and Bolts
(P/N C01-2810B)



E. Pulley
(P/N C01-2810D)



F. Bushing
(P/N C01-2810E)

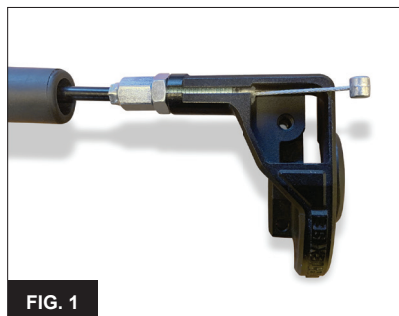


FIG. 1

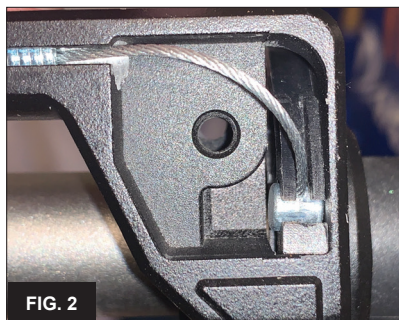


FIG. 2

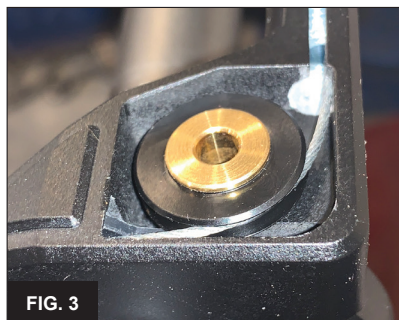


FIG. 3

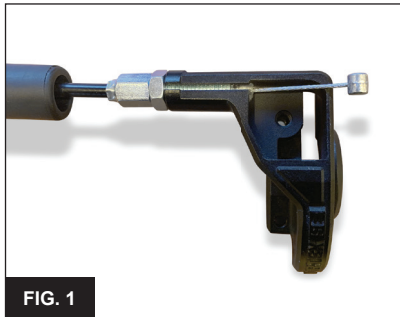
1. For optimal performance, lubricate throttle cable before installing the throttle. Recommend using Motion Pro Cable Lube part no. 15-0002 and Cable Luber V3 part no. 08-0609.
2. Before installing the new throttle housing, clean the throttle side of the handle bar and inspect for any damage.
3. Remove housing cover screw (B), housing cover (B), pulley and bushing (E and F). Take note of the orientation of the brass bushing (F). **IMPORTANT: The larger diameter shoulder should be on the top during reassembly (Fig. 3).**
4. Remove mounting screws and separate the top and bottom halves of the housing (C and D) and throttle tube (A).
5. Install the cable into the upper throttle housing (C), run the threaded adjuster all the way into the housing until it bottoms out. This will give you the maximum amount of free length on the inner wire and make assembly easier (Fig. 1).
6. Place throttle tube (A) onto the handle bar and place the upper housing (C) over the throttle tube. Place a small amount of grease on the barrel of the cable and insert it into the throttle tube. (Fig. 2)
7. Rotate the throttle tube counter clock wise slightly and attach the lower housing using the two 5mm screws and tighten to 4 Nm (36 in LBS).
8. Insert the pulley and bushing into the top housing. Make sure the inner wire is seated inside the center groove on the pulley and that the large shoulder on the bushing is facing up. (Fig. 3) Install the top cover and cover screw.
9. Adjust cable free play as described in your OEM service manual. There should always be a small amount of free play in the cable so that the throttle is not held open.
10. Install grips as per their instructions. We recommend Motion Pro DirtControl™ II Grips, part no. 01-2816 or 01-2817 and Motion Pro Grip Glue part no. 15-0003.

IMPORTANT: Before starting your vehicle, first test the throttle function with the engine off. Make sure the throttle closes completely when the throttle is released and check that the cable and throttle are operating smoothly with no stickiness. Then make sure vehicle is in neutral, start engine, and make sure throttle operates smoothly, closes completely, and that engine RPM does not increase when handlebars are turned in each direction to full range of movement.

WARNING: FAILURE TO INSTALL THESE COMPONENTS CORRECTLY MAY RESULT IN GREAT BODILY INJURY OR DEATH. INSTALLATION SHOULD BE PERFORMED BY A PROFESSIONAL TECHNICIAN. FOLLOW ALL OEM PROCEDURES AND TORQUE VALUES AS OUTLINED IN THE FACTORY SERVICE MANUAL.

MOTION PRO Vortex™ SE Throttle P/N 01-2810

IMPORTANT: Follow these instructions below for Installation of the Vortex™ SE Throttle with the Motion Pro Dirt Control V2 Lock-On System or ODI® V2 Lock-On System, using “CAM D”



1. For optimal performance, lubricate throttle cable before installing the throttle. Recommend using Motion Pro Cable Lube part no. 15-0002 and Cable Luber V3 part no. 08-0609.

2. Before installing the new throttle housing, clean the throttle side of the handle bar and inspect for any damage.

3. Remove housing cover screw (B), housing cover (B), pulley and bushing (E and F). Take note of the orientation of the brass bushing (F). **IMPORTANT: The smaller diameter of the bushing should be on the top with the large diameter shoulder on the bottom during reassembly (Fig. 3).**

4. Remove mounting screws and separate the top and bottom halves of the housing (C and D) and throttle tube.

5. Install the cable into the upper throttle housing (C), run the threaded adjuster all the way into the housing until it bottoms out. This will give you the maximum amount of free length on the inner wire and make assembly easier (Fig.1).

6. Place throttle tube onto the handle bar and place the upper housing (C) over the throttle tube. Place a small amount of grease on the barrel of the cable and insert it into the throttle tube. (Fig. 2)

7. Rotate the throttle tube counter clock wise slightly and attach the lower housing using the two 5mm screws and tighten to 4 Nm (36 in LBS).

8. **IMPORTANT: The brass bushing on the pulley must be installed with the shoulder facing DOWN (Fig. 3) Insert the pulley and bushing into the top housing. Make sure the inner wire is seated inside the center groove on the pulley and the large shoulder on the bushing is facing DOWN. Install the top cover and cover screw.**

Warning: Failure to install the bushing correctly can cause the throttle to fail to return to the fully closed position and cause great bodily harm and or death.

9. Adjust cable free play as described in your OEM service manual. There should always be a small amount of free play in the cable so that the throttle is not held open.

IMPORTANT: Before starting your vehicle, first test the throttle function with the engine off. Make sure the throttle closes completely when the throttle is released and check that the cable and throttle are operating smoothly with no stickiness. Then make sure vehicle is in neutral, start engine, and make sure throttle operates smoothly, closes completely, and that engine RPM does not increase when handlebars are turned in each direction to full range of movement.

WARNING: FAILURE TO INSTALL THESE COMPONENTS CORRECTLY MAY RESULT IN GREAT BODILY INJURY OR DEATH. INSTALLATION SHOULD BE PERFORMED BY A PROFESSIONAL TECHNICIAN. FOLLOW ALL OEM PROCEDURES AND TORQUE VALUES AS OUTLINED IN THE FACTORY SERVICE MANUAL.

