



# MOTOCROSS/OFF-ROAD GRIPS

## V2 Throttle Cam Hookup Guide

REV: 4/1/2024

|  |                                   | STROKE | YEAR RANGE | ODI CAM | REFERENCE          |
|--|-----------------------------------|--------|------------|---------|--------------------|
| <b>THIS V2 LOCK-ON KIT INCLUDES ODI THROTTLE SNAP-CAMS B, C, D, J, K &amp; M.</b>                  |                                   |        |            |         |                    |
| <b>THE "INCLUDED" THROTTLE CAMS FITMENT APPLICATIONS ARE AS FOLLOWS:</b>                           |                                   |        |            |         |                    |
| BETA   | 125/200/250/300RR Carbureted      | 2      | 2013-2024  | D       | ODI PART #: H70SCD |
| BETA   | 300RX                             | 2      | 2021-2024  | D       | ODI PART #: H70SCD |
| BETA   | 300XT                             | 2      | 2015-2024  | D       | ODI PART #: H70SCD |
| BETA   | 450RX                             | 4      | 2024       | M       | ODI PART #: H70SCM |
| GAS GAS  | EC 125/200/250/300                | 2      | 2000-2020  | D       | ODI PART #: H70SCD |
| GAS GAS  | MC 250/300                        | 2      | 2000-2011  | D       | ODI PART #: H70SCD |
| GAS GAS  | MC/EX 250/350/450F                | 4      | 2020-2024  | M       | ODI PART #: H70SCM |
| HONDA  | CR 125/250/500R                   | 2      | 1989-2007  | D       | ODI PART #: H70SCD |
| HONDA  | CRF 250R/250X                     | 4      | 2004-2024  | B       | ODI PART #: H70SCB |
| HONDA  | CRF 450R/450X                     | 4      | 2002-2024  | B       | ODI PART #: H70SCB |
| HUSQVARNA  | TC 85/125/250/300, TE150/250/300i | 2      | 2012-2016  | D       | ODI PART #: H70SCD |
| HUSQVARNA  | FC/FE/FS 250/350/450/501          | 4      | 2017       | M       | ODI PART #: H70SCM |
| KAWASAKI   | KX 125/250                        | 2      | 1992-2012  | C       | ODI PART #: H70SCC |
| KAWASAKI   | KX 250/450F                       | 4      | 2004-2024  | K       | ODI PART #: H70SCK |
| KAWASAKI   | KLX 150/230/250/300/450           | 4      | 2010-2024  | K       | ODI PART #: H70SCK |
| KAWASAKI   | KLR 650                           | 4      | 2008-2024  | K       | ODI PART #: H70SCK |
| KAWASAKI   | Ninja 300/400/650                 | 4      | 2013-2024  | K       | ODI PART #: H70SCK |
| KAWASAKI   | Versys 300/650                    | 4      | 2013-2024  | K       | ODI PART #: H70SCK |
| KTM  | 85/125/150/200SX/EXC/XC-W         | 2      | 2000-2015  | D       | ODI PART #: H70SCD |
| KTM  | 250/300/380/SX/EXC/MXC/XC-W       | 2      | 2000-2015  | D       | ODI PART #: H70SCD |
| KTM  | 250/350/450/500 SX-F/EXC-W/XC-W   | 4      | 2016-2024  | M       | ODI PART #: H70SCM |
| Motion Pro   | Throttle, Vortex™                 | 2      | 2000-2024  | C       | ODI PART #: H70SCC |
| Motion Pro   | Throttle, Straight Push/Pull      | 4      | 2000-2024  | K       | ODI PART #: H70SCK |
| SUZUKI   | RM 125/250                        | 2      | 1995-2008  | C       | ODI PART #: H70SCC |
| SUZUKI   | RM-Z 250F                         | 4      | 2008-2024  | J       | ODI PART #: H70SCJ |
| SUZUKI   | RM-Z 450F                         | 4      | 2005-2024  | K       | ODI PART #: H70SCK |
| TM   | TM 85/125/250/300                 | 2-Carb | 1999-2024  | D       | ODI PART #: H70SCD |
| YAMAHA   | YZ 125/250/250X                   | 2      | 1997-2024  | C       | ODI PART #: H70SCC |
| YAMAHA   | YZ/WR 250F/450F                   | 4      | 2014-2024  | J       | ODI PART #: H70SCJ |
| YAMAHA   | TW200/XT225/250                   | 4      | 2001-2024  | K       | ODI PART #: H70SCK |
| YAMAHA   | Super Tenere ES/Tenere 700        | 4      | 2014-2024  | J       | ODI PART #: H70SCJ |
| YAMAHA   | YZF-R6/YZF-R1                     | 4      | 2006-2020  | J       | ODI PART #: H70SCJ |
| <b>THE FOLLOWING MODELS REQUIRE THE OEM THROTTLE CAM: Consult your OEM Dealer for Replacement.</b> |                                   |        |            |         |                    |
| GAS GAS  | MC-E5 Electric                    | E      | 2021-2024  | OEM     | OEM Grips ONLY     |
| GAS GAS  | EC/EX 250/300                     | 2      | 2021-2024  | OEM     | 504.02.014.000     |
| GAS GAS  | MC 50/65                          | 2      | 2021-2024  | OEM     | 453.02.014.000     |
| GAS GAS  | MC 85/125/250                     | 2      | 2021-2024  | OEM     | 504.02.014.000     |
| HUSQVARNA  | EE5 Electric                      | E      | 2020-2024  | OEM     | OEM Grips Only     |
| HUSQVARNA  | TC 50/65                          | 2      | 2021-2024  | OEM     | 453.02.014.000     |
| HUSQVARNA  | TC/TE 125/150/250/300             | 2      | 2017-2024  | OEM     | 504.02.014.000     |
| KTM  | SX-E5 Electric                    | E      | 2020-2024  | OEM     | OEM Grips Only     |
| KTM  | 50/65SX                           | 2      | 2021-2024  | OEM     | 453.02.014.000     |
| KTM  | 85/105/125/150/250/300SX/XC/XCW   | 2      | 2017-2024  | OEM     | 504.02.014.000     |

**SEE BELOW FOR ODI AVAILABLE THROTTLE CAMS THAT ARE NOT INCLUDED IN THIS KIT:**

**ALTERNATE ODI THROTTLE CAMS ARE AVAILABLE FOR THE FOLLOWING MOTORCYCLES:**

**THE BELOW THROTTLE CAMS ARE NOT INCLUDED BUT ARE AVAILABLE FOR ADDITIONAL PURCHASE.**

|  |                                     |       |              |     |                      |
|--|-------------------------------------|-------|--------------|-----|----------------------|
| BETA   | 350/390/430/480/500RR/RR-S          | 4     | 2011-2024    | N   | ODI PART #: H70SCN   |
| BBR  | BBR Throttle Assembly               | 4     | 512-BBR-2001 | H   | ODI PART #: H70SCH   |
| COBRA  | CX 50/65                            | 2     | 2009-2018    | E   | ODI PART #: H70SCE   |
| COBRA  | CX 50/65                            | 2     | 2019-2024    | N   | ODI PART #: H70SCN   |
| GAS GAS  | MC 50/65                            | 2     | 2009-2018    | E   | ODI PART #: H70SCE   |
| GAS GAS  | MC 50/65                            | 2     | 2019-2020    | N   | ODI PART #: H70SCN   |
| Greenger   | E2/G3 models                        | E     | 2022-2024    | H   | ODI PART #: H70SCH   |
| HONDA  | CR80/85                             | 2     | 2000-2013    | N/A | No Fitment Available |
| HONDA  | CRF/XR 80, CRF/XR 100/200           | 4     | 1980-2013    | H   | ODI PART #: H70SCH   |
| HONDA  | CRF-E2 (GREENGER)                   | E     | 2022-2024    | H   | ODI PART #: H70SCH   |
| HONDA  | CRF 125/150F                        | 4     | 2003-2018    | H   | ODI PART #: H70SCH   |
| HONDA  | CRF 110/125F                        | 4     | 2019-2024    | R*  | ODI PART #: H70SCR   |
| <b>NOTE: *ABSOLUTELY REQUIRES CABLE ADJUSTMENT FOR PROPER FIT. TALL BARS WILL REQUIRE LONGER THROTTLE CABLE.</b> |                                     |       |              |     |                      |
| HONDA  | CRF 150R                            | 4     | 2007-2024    | G   | ODI PART #: H70SCG   |
| HONDA  | CBR250/300 CB300/500                | 4     | 2011-2024    | A   | ODI PART #: H70SCA   |
| HONDA  | GROM AC125                          | 4     | 2014-2024    | A   | ODI PART #: H70SCA   |
| HONDA  | XR250/400/600/650R/l models         | 4     | 1994-2020    | N/A | No Fitment Available |
| HUSQVARNA  | TC 50/65                            | 2     | 2009-2018    | E   | ODI PART #: H70SCE   |
| HUSQVARNA  | TC 50/65                            | 2     | 2019-2020    | N   | ODI PART #: H70SCN   |
| KAWASAKI   | KX 65/85/100/112/500                | 2     | 2000-2024    | L   | ODI PART #: H70SCL   |
| KAWASAKI   | KX125/250                           | 2     | 1992-2007    | C   | ODI PART #: H70SCC   |
| KAWASAKI   | KLX 110/140                         | 4     | 2002-2024    | L   | ODI PART #: H70SCL   |
| KAWASAKI   | KDX 200/220                         | 2     | 1985-2006    | L   | ODI PART #: H70SCL   |
| KAWASAKI   | Z125 Pro                            | 4     | 2017-2024    | L   | ODI PART #: H70SCL   |
| KTM Mini   | 50/65 Mini/SX, Husky TC50/65        | 2     | 2009-2018    | E   | ODI PART #: H70SCE   |
| KTM Mini   | 50/50 Mini/65SX                     | 2     | 2019-2020    | N   | ODI PART #: H70SCN   |
| KTM  | 250SX-F, 350SX-F                    | 4     | 2012-2015    | A   | ODI PART #: H70SCA   |
| KTM  | 400/450/500/520/525 SX/MXC/EXC/XC   | 4     | 2000-2014    | A   | ODI PART #: H70SCA   |
| KTM  | 625/640/950/990 Adv/Duke/SMR        | 4     | 2000-2012    | A   | ODI PART #: H70SCA   |
| KTM  | 450/525/625 SMC/SXC                 | 4     | 2003-2015    | A   | ODI PART #: H70SCA   |
| SHERCO   | 250/300 SC-R                        | 2     | 2019-2020    | S   | ODI PART #: H70SCS   |
| SHERCO   | 250/300 SE-R                        | 2     | 2016-2020    | S   | ODI PART #: H70SCS   |
| SHERCO   | 300/450 SEF-R                       | 4     | 2016-2022    | S   | ODI PART #: H70SCS   |
| SHERCO   | 300/450 SCF-R                       | 4     | 2017-2022    | S   | ODI PART #: H70SCS   |
| SHERCO   | 125/250/300 SE Factory              | 2     | 2021-2024    | S2  | ODI PART #: H70SCS2  |
| SUZUKI   | RM80/85                             | 2     | 1983-2022    | N/A | No Fitment Available |
| SUZUKI   | RM-Z 250/450                        | 4     | 2004-2008    | A   | ODI PART #: H70SCA   |
| SUZUKI   | DR250/350/DR-Z 250/400S/SM          | 4     | 1990-2022    | I   | ODI PART #: H70SCI   |
| SUZUKI   | DR-Z 650S                           | 4     | 1992-2022    | I   | ODI PART #: H70SCI   |
| TM   | TM 125/250/300                      | 2-TPI | 2019-2024    | A   | ODI PART #: H70SCA   |
| TM   | TM250/450                           | 4     | 2013-2024    | A   | ODI PART #: H70SCA   |
| YAMAHA   | TTR125/TTR230                       | 4     | 2000-2024    | N/A | No Fitment Available |
| YAMAHA   | YZ 65                               | 2     | 2018-2024    | P   | ODI PART #: H70SCP   |
| YAMAHA   | YZ 85                               | 2     | 1981-2024    | F   | ODI PART #: H70SCF   |
| YAMAHA   | YZ/IT/MX/WR 125/175/250/400/465/490 | 2     | 1973-1984    | F   | ODI PART #: H70SCF   |
| YAMAHA   | YZ125/250/490, WR250/500            | 2     | 1983-1996    | P   | ODI PART #: H70SCP   |
| YAMAHA   | YZ/WR 250F/400F/426F/450F           | 4     | 1998-2013    | A   | ODI PART #: H70SCA   |



# V2 LOCK-ON GRIP SYSTEM

## INSTALLATION INSTRUCTIONS

**THROTTLE SIDE:** Use the Application Chart on the reverse to select the appropriate Throttle Cam. Snap-Cam into position on to the throttle grip. There is an audible “click” when the cam is fully snapped into place.

**NOTE:** *Some grip patterns require that you clock the cam before installation to achieve desired grip position.*

- Unscrew bolts to open the throttle housing as if you are replacing your throttle tube.
- Insert throttle cable(s) into cam on the new grip making sure that the cables are seated correctly in the cam and are not being pinched. Position grip so that end of grip is 1-2mm away from handlebar end.
- Position and tighten throttle housing into position. *Some models may require throttle cable adjustment.*

**CLUTCH SIDE:** Remove old grips and clean handlebars thoroughly. Slide the ODI clutch grip onto bar. The grip should slide easily onto the bars until the final inch of the grip where it will become progressively tighter to on the handlebar. **NOTE:**

**Some Handlebars have very aggressive knurling, follow instruction below.**

- The grip should be installed completely onto the bar, so the end of the grip is touching the handlebar.
- Once in place, tighten the Allen bolt using a 3mm Allen key (40-45 In-lbs / 4.5-5 Nm) to secure the grip.

**NOTE:** *The Allen bolt and ODI clamp should be checked periodically and replaced if ever found damaged.*

### **\*\*CLUTCH-SIDE AGGRESSIVE KNURLING PATTERN ON AFTERMARKET HANDLEBARS\*\***

Some “aftermarket handlebars” have very aggressive knurling pattern on the clutch side grip area which can make your **ODI Lock-On Grips impossible to install**. This over-aggressive knurling improves grip adhesion on standard glue-on grips. However, with ODI Lock-On Grips, the extra knurling is not necessary. With ODI Lock-On Grips, you have absolute adhesion from ODI’s patented Lock-On Grip System for 100% Slip-Free Performance, Guaranteed. ODI’s patented Lock-On 3mm Allen bolt provide easy installation and removal.

**To install ODI’s Lock-On Grips onto these types of handlebars, you must slightly modify the surface of the Handlebars’ knurling to bring them down to the standard 7/8” (22.225mm) Outside Diameter. Once these few simple steps are completed, your ODI Lock-On grips will slide over the handlebar surface without interference. We recommend a light filing and then sanding with wet/dry sandpaper, as follows:**

- 1) Use Masking tape to mask off the handlebar just past the knurling on the clutch side of the handlebar. This will keep your handlebars finish looking fresh.
- 2) Take a metal file, using even strokes, diagonally file along the knurling area to gently knock down the knurls and create a smoother, slightly smaller outside diameter.
- 3) Complete this task all the way around the handlebar to conform to an even smoothed out knurled pattern and softer finish.
- 4) Once you have filed the knurls down, all the way around, you’ll want to gently test fit the grip onto the bar. **DO NOT** use force. Once you can securely slide the grip over the knocked down knurls, you will want to remove the grip to sand and finish.
- 5) Use a medium grit, wet/dry sandpaper to de-burr the surface and create a smooth transition for your new ODI Lock-On Grips to slide onto.
- 6) Remove masking tape, install your grips and go ride!

**NOTE:** *Recommended torque specs for your 3mm Allen-Head bolts are 40-45 In-lbs / 4.5-5 Nm.*

### **\*\*INSTALLING FULL-WRAP HANDGUARDS\*\***

**ODI V2 Lock-On™ Grips** can easily be modified to work with “full-wrap” handguards by removing the end caps.

Follow these simple steps to remove ODI end caps:

- 1) Carefully use a sharp blade to score the grip along the inside edge of the outer circle of each grip.
- 2) Use a small punch (T-Handle or ratchet extension) to knock out the end of each grip.
- 3) Carefully remove any excess rubber that may interfere with the throttle tube, allowing for non-restricted turn on the handlebar.

**NOTE:** *After opening the grip end, do not run the throttle tube without the full-wrap handguards or ODI end plugs to close off the end of the grip. This can allow for dirt and debris to build up and cause interference with proper functioning of the throttle.*

For any questions or comments concerning these instructions, contact: [info@odigrips.com](mailto:info@odigrips.com)

[WWW.ODIGRIPS.COM](http://WWW.ODIGRIPS.COM)

US PATENT Numbers: 6,035,742 : 6,263,759

SKU: 302-1702 UPDATED: 9/1/2023