

KEIHIN FCR-MX Carburetors



FCR-MX



FCR-MX with Air Cut Valve & Hot Start



FCR-MX with Air Cut Valve, Hot Start & TPS

Keihin FCR-MX Series Off-Road Racing Carburetor

The ultimate for off-road performance. Keihin has developed an FCR carburetor designed for the specialized needs of the off-road racer. The FCR-MX carburetor has many new features to take motocross and ATV performance to the next level. These are some of the unique features of the Keihin FCR-MX for off-road applications:

- Over-flow drain joint and Tube
- Hot re-start knob
- Throttle Cable enclosure
- High capacity float chamber
- Air Cut-Off Valve (ACV) for de-acceleration enrichment (only on FCR-MX carburetors listed)
- Float chamber baffle for rough terrain
- Quad Vents

FCR-MX Sizing Guide

| Venturi Size | Engine Size |
|--------------|------------------|
| 37mm | 250cc - 375cc |
| 39mm | 350cc - 500cc |
| 41mm | 450cc and larger |

FCR-MX Standard Jetting Specifications

| Carburetor | Main Jet | Main Air Jet | Slow Jet | Slow Air Jet | Jet Needle | Throttle Vlv. Cutaway | Needle Valve Seat | Float Height | Order No. |
|--|----------|--------------|----------|--------------|------------|-----------------------|-------------------|--------------|----------------|
| FCR-MX37 | #160 | #200 | #45 | #100 | OC-EMR | 1.5 | 3.8 | 9mm | 016-915 |
| FCR-MX37 w/Air Cut Valve/Hot Start | #160 | #200 | #45 | #100 | OC-EMR | 1.5 | 3.8 | 9mm | 016-916 |
| FCR-MX37 w/Air Cut Valve/Hot Start/TPS | #160 | #200 | #45 | #100 | OC-EMR | 1.5 | 3.8 | 9mm | 016-917 |
| FCR-MX39 | #160 | #200 | #45 | #100 | OC-EMR | 1.5 | 3.8 | 9mm | 016-925 |
| FCR-MX39 w/Air Cut Valve/Hot Start | #160 | #200 | #45 | #100 | OC-EMR | 1.5 | 3.8 | 9mm | 016-926 |
| FCR-MX39 w/Air Cut Valve/Hot Start/TPS | #160 | #200 | #45 | #100 | OC-EMR | 1.5 | 3.8 | 9mm | 016-927 |
| FCR-MX41 | #160 | #200 | #48 | #100 | OC-EMR | 1.5 | 3.8 | 9mm | 016-935 |
| FCR-MX41 w/Air Cut Valve/Hot Start | #160 | #200 | #48 | #100 | OC-EMR | 1.5 | 3.8 | 9mm | 016-936 |
| FCR-MX41 w/Air Cut Valve/Hot Start/TPS | #160 | #200 | #48 | #100 | OC-EMR | 1.5 | 3.8 | 9mm | 016-937 |



Sudco FCR-MX Carburetor Rebuild Kits

Genuine KEIHIN replacement parts. Sold in kits.

| Application | Order No. |
|---|----------------|
| FCR-MX | 020-318 |
| FCR-MX37, 39, 41 FCR-MX | 020-319 |
| FCR-MX37, 39, 41 with Air Cut-Off Valve/Hot Start | 020-320 |
| FCR-MX37, 39, 41 with Air Cut-Off Valve/Hot Start/TPS | 020-321 |

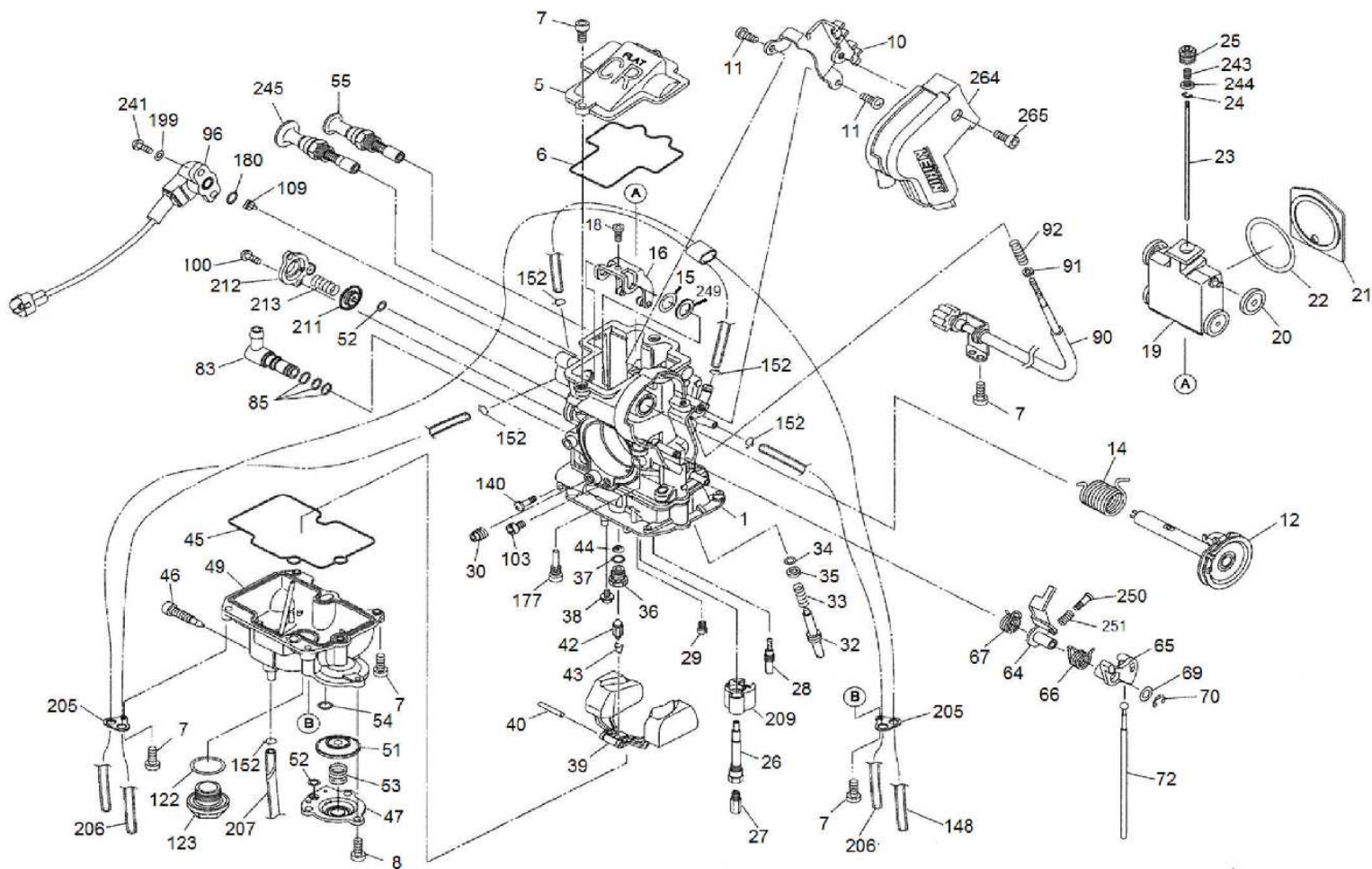


Keihin FCR-MX Pilot Screw

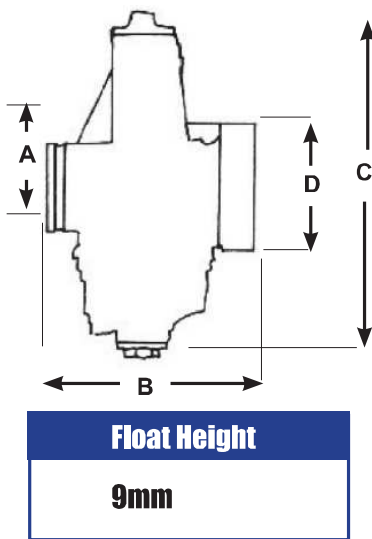
Stock replacement pilot screw for Keihin FCR-MX carburetors. Sold each.

| Size | Order No. |
|-------------------------|----------------|
| 50mm | 021-729 |
| 40mm | 021-800 |
| Individual Parts (each) | Order No. |
| Spring | 021-041 |
| Washer | 021-045 |
| O-Ring | 021-043 |

KEIHIN FCR-MX Exploded View



Carburetors are intended for off-road riding and racing use only. Not legal for use in California or other locations where similar pollution laws may apply.



FCR-MX Replacement Parts

Applications: FCR-MX37, FCR-MX39, FCR-MX41.

| No. | Description | Application | Keihin No. | Order No. |
|------|---|-------------|----------------|-----------|
| 5. | Top Cover | All | 1030-897-2000 | 021-710 |
| 6. | Gasket, Top Cover | All | 1202-895-6000 | 021-711 |
| 7. | Screw M4 x 12mm | All | 0136-806-1100 | 021-700 |
| 8. | Screw M4 x 8mm | All | 0136-808-1100 | 021-010 |
| 10. | Bracket | All | 1190-840-2101 | 021-712 |
| | | | 1190-B40-2100 | |
| 11. | Screw 5 x 8mm | All | 93500-05008-1H | 021-713 |
| 12. | Throttle Shaft | All | 5025-B35-2201 | — |
| 14. | Coil Spring | All | 1305-A83-2000 | 021-718 |
| 15. | Washer | All | 0301-092-700 | 021-018 |
| 16. | Link Arm Complete | All | 1061-831-2101 | 021-721 |
| 18. | Stop Screw | All | 4110-825-1100 | 021-723 |
| 19. | Throttle Valve | All | N501-49C01 | 021-320 |
| | (Throttle Valve requires qt1 of part #20, Roller 021-027) | | | |
| 20. | Roller | All | 1119-803-7002 | 021-027 |
| 21. | Vacuum Release Plate | All | 1609-809-2100 | 021-725 |
| 22. | Seal | All | 1099-817-2001 | 021-033 |
| 23. | Jet Needles | All | N427-OC-XXX | Pg.118 |
| 24. | Clip, Jet Needle | All | 0403-802-1000 | 018-616 |
| 25. | Needle Set Screw | All | 1421-802-2000 | 021-727 |
| 26. | Main Nozzle | All | 1154-842-2000 | 021-728 |
| 27. | Main Jet | All | 99101-357-XXX | Pg.150 |
| 28. | Slow Jet | All | N424-21-XXX | Pg.148 |
| 29. | Starter Jet | All | 99101-393-XXX | Pg.150 |
| 30. | Slow Air Jet | All | 99101-124-XXX | Pg.149 |
| | Part #30 can be replaced with Slow Air Screw. Pg.149 | | | |
| 30. | Slow Air Jet (some OEM) | | N424-33-XXX | Pg.148 |
| 32. | Pilot Screw 40mm | All | N446-07A00 | 021-800 |
| 32A. | Pilot Screw 50mm | All | N446-26A00 | 021-729 |
| 33. | Spring, Pilot Screw | All | 1290-812-2001 | 021-041 |

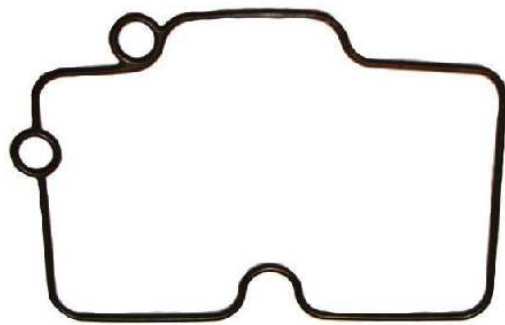
FCR-MX Carburetor Dimensions

| Size | A | B | C | D | Total Width |
|----------|----|------|-------|---|-------------|
| FCR-MX37 | 48 | 63.5 | 191.8 | — | 120.8 |
| FCR-MX39 | 48 | 63.5 | 191.8 | — | 120.8 |
| FCR-MX41 | 48 | 63.5 | 191.8 | — | 120.8 |

FCR-MX Replacement Parts

Applications: FCR-MX37, FCR-MX39, FCR-MX41.

| No. | Description | Application | Keihin No. | Order No. |
|------|---|-------------|-------------------|-----------|
| 34. | O-Ring, Pilot Screw | All | 16075-KG8-9010-M1 | 021-043 |
| 35. | Washer, Pilot Screw | All | 0301-803-2000 | 021-045 |
| 36. | Valve Seat (will not work on some OEM) | | | |
| | 3.20 | All | N361-043-3.20 | 021-240 |
| | 3.40 | All | N361-043-3.40 | 021-241 |
| | 3.60 | All | N361-043-3.60 | 021-242 |
| | 3.80 | All (Std) | N361-043-3.80 | 021-243 |
| | 4.00 | All | N361-043-4.00 | 021-244 |
| 37. | O-Ring, Valve Seat | All | 16958-397-7710-M1 | 021-047 |
| 38. | Screw, Valve Seat | All | 0118-806-1100 | 021-250 |
| 39. | Float | All | 1052-856-2100 | 018-202 |
| 40. | Arm Pin | All | W9525-25250 | 018-670 |
| 42. | Float Valve | All | 1062-814-2101 | 018-504 |
| 43. | Clip, Float Valve | All | 0405-019-1000 | 018-674 |
| 44. | Fuel Screen | All | 2009-811-2100 | 021-730 |
| 45. | Packing, Float Bowl | All | 1202-896-6000 | 021-731 |
| 46. | Drain Screw | All | 1198-810-2002 | 021-733 |
| 47. | Cover, Accel. Pump | All | 1230-826-2002 | 021-057 |
| 49. | Float Bowl | All | 1050-948-2101 | 021-734 |
| 49a. | Float Bowl w/leak jet Boss | All | 1050-948-2101 | 021-734A |
| 51. | Diaphragm | All | 1201-858-2700 | 021-735 |
| 52. | U-Ring, Accel. Pump | All | W9353-36000 | 021-067 |
| 53. | Spring, Accel. Pump | All | 1300-142-2000 | 021-069 |
| 54. | O-Ring, Accel. Pump | All | 16178-548-0040 | 021-071 |
| 55. | Cold Starter Valve | All | 1166-844-2100 | 021-737 |
| 64. | Link Lever | All | 1100-914-2100 | 021-739 |
| 65. | Link Lever | All | 1100-915-7000 | 021-740 |
| 66. | Coil Spring #1 | All | 1305-B01-2001 | 021-719 |
| 67. | Coil Spring #2 | All | 1305-A82-2000 | 021-717 |
| 69. | Washer | All | W1795-223-9900 | 021-741 |
| 70. | E-Clip | All | 16179-676-3000 | 021-742 |
| 72. | Rod | All | 1458-858-2001 | 021-743 |
| 83. | Fuel Joint | All | 1074-892-2100 | 021-744 |
| 85. | O-Ring, Fuel Joint | All | W9351-13057 | 018-755 |
| 90. | Idle Speed Screw | All | 1034-815-4500 | 021-745 |
| 91. | Washer | All | 0301-078-1200 | 021-101 |
| 92. | Spring | All | 1300-112-2000 | 021-103 |
| 96. | Throttle Position Sensor (TPS) | All | 1614-862-2100 | 021-746 |
| 100. | Screw M4 x 8mm | All | 0136-804-1100 | 021-105 |
| 103. | Main Air Jet | All | 99101-393-xxx | Pg.150 |
| 109. | Collar | All | 16145-MZ2-7800 | 021-747 |
| 122. | O-Ring | All | 16173-001-0040 | 018-664 |
| 123. | Drain Bolt | All | 16162-ND4-7511-M1 | 018-128 |
| 140. | Screw | All | 0110-804-1200 | 021-749 |
| 148. | Vent Hose | All | 0803-884-0100 | 021-751 |
| 152. | Hose Clip | All | W9535-3500 | 018-098 |
| 177. | Stop Screw | All | 1034-905-2000 | 021-722 |
| 180. | O-Ring | All | 16978-ZB9-0050 | 021-732 |
| 199. | Washer | All | 0301-261-36G5 | 021-753 |
| 205. | Hose Retainer | All | 16179-KZ4-6900 | 018-505 |
| 206. | Vent Hose | All | 0803-878-0000 | 021-750 |
| 207. | Vent Hose | All | 95003-07033-31 | 021-752 |
| 209. | Buffer Plate | All | 1157-812-7000 | 021-754 |
| 211. | Diaphragm | All | W1470-MW0-7500 | 021-736 |
| 212. | Cover | All | 1230-850-2000 | 021-755 |
| 213. | Spring | All | 1290-A19-2000 | 021-715 |
| 241. | Screw (Torx) | All | 0137-261-36G5 | 021-757 |
| 243. | Spring | All | 1290-A65-2000 | 021-716 |
| 244. | Collar | All | 1118-B36-2000 | 021-748 |
| 245. | Hot Start Valve | All | 1166-845-2100 | 021-738 |
| 249. | Washer | All | W1795-164-9900 | 021-758 |
| 250. | Stop Screw | All | 16124-KR3-6010-M1 | 021-724 |
| 251. | Coil Spring | All | 16053-KT7-0030 | 021-720 |
| 264. | Cover | All | 1230-869-7001 | 021-756 |
| 265. | Cover Screw | All | 0136-839-1100 | 021-759 |



Sudco OEM FCR-MX Float Bowl O-Ring

Genuine KEIHIN replacement part. Sold each. *Made in Japan*

Order No. **021-731**

Honda

| Application | Year |
|-------------|-------|
| CRF250R | 04-09 |
| CRF250X | 04-09 |
| CRF250X | 2012 |
| CRF450R | 02-08 |
| CRF450X | 05-09 |
| CRF450X | 2012 |

Kawasaki

| | |
|------------------------------------|-------|
| KX250N1/N2 (KX250F) | 04-05 |
| KX250T6F/T7F/T8F/W9F/XAFB (KX250F) | 06-10 |
| KLX450A8F/A9F | 08-09 |
| KX450D6F/D7F/D8F (KX450F) | 06-08 |

KTM

| | |
|----------------------------|-------|
| 250 SX-F | 05-10 |
| 250 SXS | 2004 |
| 250 XC-F Cross Country | 07-09 |
| 250 XC-W Enduro | 06-09 |
| 250 XC-W Champions Edition | 2010 |
| 250 XC-W Six Days | 2011 |
| 400 EXC-G Racing | 04-06 |
| 400 EC-W | 07-09 |
| 450 EXC | 10-11 |
| 450 EXC-G Racing | 04-06 |
| 450 EXC-R | 2008 |
| 450 SMR Supermoto | 06-09 |
| 450 SX (RFS) | 04-06 |
| 450 SX-F | 07-12 |
| 450 XC Cross Country | 06-07 |
| 450 XC-F | 08-09 |
| 450 XC-W | 09-11 |

Suzuki

| | |
|-----------------|-------|
| RM-Z250K4-L0 | 04-10 |
| RM-Z450K5/K6/K7 | 05-07 |

Yamaha

| | |
|---------------------------------|-------|
| WR250FN-FY | 02-09 |
| WR250FA/FB | 11-12 |
| YZ250FN-FDL/FDW (YZ250F) | 02-13 |
| WR400FM | 2000 |
| WR426FN/FP | 01-02 |
| YZ426FM/FN/FP (YZ426F) | 00-02 |
| WR450FR/FS/FT/FV/FW/FX/FY | 03-11 |
| YZ450FR/FS/FT/FV/FW/FX (YZ450F) | 03-08 |
| YZ450FXL/FXW/FYL/FYW (YZ450F) | 08-09 |
| YZ450FSPV 50Th Anniversary | 2006 |