



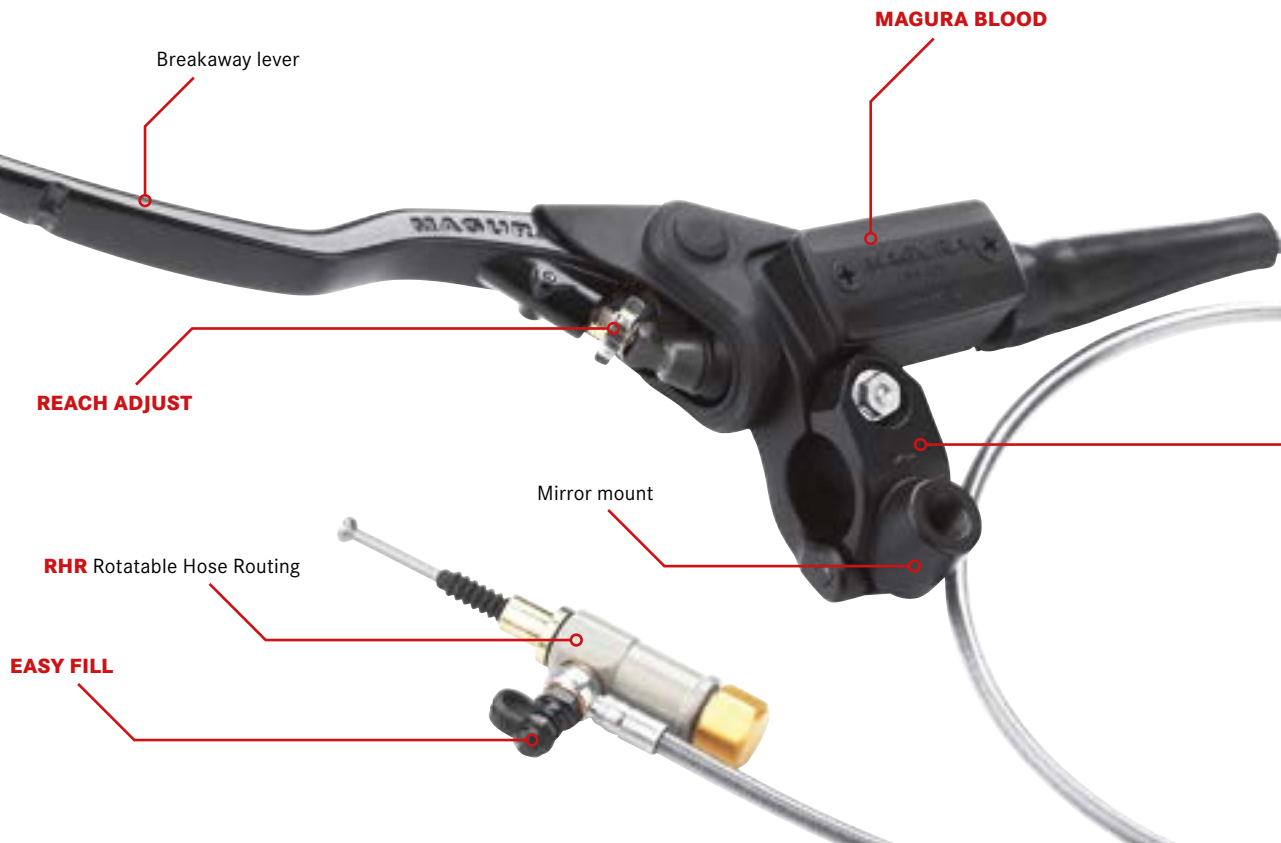


# MAGURA HYMEC

## THE RETROFITTABLE HYDRAULIC CLUTCH SYSTEM

ROBUST  
EASY TO MOUNT  
EXCELLENT MODULATION  
LESS MAINTENANCE





MAKE / MODEL	YEAR	ORDER CODE	LINE LENGTH	PISTON-Ø	ASSEMBLY	SLAVE NO.	MASTER	PRESSURE LINE
<b>AJP</b> PR5	09 → 14	2100006	1120 mm	9.5 mm	65	0120651	2700183	0722137
<b>HONDA</b>								
CRF 150	08 → 14	2100004	1045 mm	9.5 mm	70	2100003	2700183	0722138
CR 250 R	90 → 03	2100019	1045 mm	9.5 mm	52	0120648*	2700183	0722138
CR 250 R	04 → 06	2100007**	1045 mm	9.5 mm	44	0120649*	2700183	0722138
CRF 250 R	04 → 09	2100009	1045 mm	9.5 mm	57	0120655	2700183	0722138
CRF 250 R	10 → 13	2100005	1045 mm	9.5 mm	57	0120655	2700183	0722138
CRF 250 R	2014	2100307	1045 mm	9.5 mm	32 (H+)	2100308*	2700183	0722138
CRF 450 R	04 → 08	2100010	1045 mm	9.5 mm	41 (H+)	0120649*	2700183	0722138
CRF 450 R	09 → 12	2100005	1045 mm	9.5 mm	57	0120655	2700183	0722138
CRF 450 R	13 → 14	2100030	1045 mm	10.5 mm	59	0120652	2700186	0722138
CR 500 R	84 → 03	2100019	1045 mm	9.5 mm	52	0120648*	2700183	0722138
<b>KAWASAKI</b>								
KX 250	90 → 98	2100004**	1045 mm	9.5 mm	70	2100003	2700183	0722138
KX 250 F	04 → 08	2100019**	1045 mm	9.5 mm	52	0120648*	2700183	0722138
KX 250 F	09 → 14	2100006	1120 mm	9.5 mm	65	0120651	2700183	0722137
KX 450 F	09 → 14	2100007	1045 mm	9.5 mm	44 (H+)	0120649*	2700183	0722138
KX 500	90 → 03	2100004**	1045 mm	9.5 mm	70	2100003	2700183	0722138
<b>KTM</b>								
250 SX 300/360	90 → 94	2100019	1045 mm	9.5 mm	52	0120648*	2700183	0722138
<b>SUZUKI</b>								
RM 250	97 → 03	2100019	1045 mm	9.5 mm	52	0120648*	2700183	0722138
RM-Z 250	04 → 05	2100019	1045 mm	9.5 mm	52	0120648*	2700183	0722138
RM-Z 250	2009	2100011	1045 mm	9.5 mm	44 (H+)	0120649*	2700183	0722138
RM-Z 250	10 → 14	2100302	1045 mm	9.5 mm	57 (H+)	0120655*	2700183	0722138
RM-Z 450	09 → 14	2100012	1045 mm	9.5 mm	44 (H+)	0120649*	2700183	0722138
<b>YAMAHA</b>								
YZ 250	88 → 98	2100004**	1045 mm	9.5 mm	70	2100003	2700183	0722138
YZ 250	99 → 03	2100019	1045 mm	9.5 mm	52	0120648*	2700183	0722138
YZ 250 F	09 → 13	2100008	1120 mm	9.5 mm	59	0120652	2700183	0722137
YZ 250 F	2014	2100302	1045 mm	9.5 mm	57	0120655	2700183	0722138
YZ 450 F	03 → 05	2100019**	1045 mm	9.5 mm	52	0120648*	2700183	0722138
YZ 450 F	09 → 14	2100008	1120 mm	9.5 mm	59	0120652	2700183	0722137

\* Spare Part Slave Cylinder = Spare slave cylinders since 2012 are equipped with standard cap and bracket - please ensure when ordering to check if cap and bracket are also required

\*\* Extra Parts are required to fit this Hymec kit to this motorcycle - check separate table on page 19

H+ Slave attached from rear cap with stud 0430998





Carbon tubing

**167 HYMEC | OFF-ROAD**

MAGURA HYMEC – An easy to install alternative to a mechanical clutch. This system replaces the clutch lever and cable – with a small lightweight hydraulic system for improved clutch control. The HYMEC ensures an easier operating pressure, a constant pressure point, no more cable adjustment and smooth clutch actuation to ensure the perfect take-off every time.

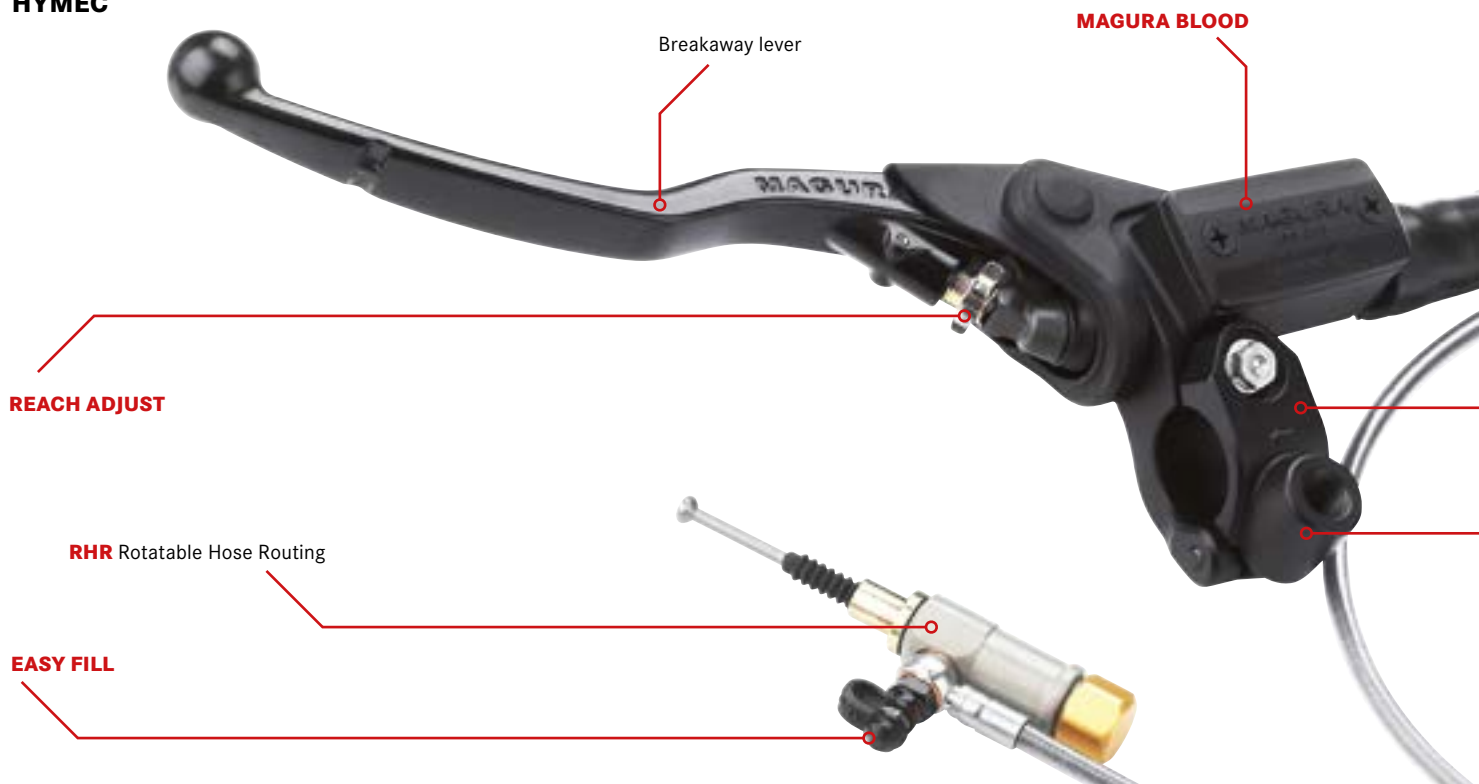
Clutch operation with the MAGURA hydraulic kick. The thousand-fold proven hydraulic clutch operating system for Motocross and Enduro. Superior technology which unites an abundance of unique advantages into one: No fading, superfine modulation, almost maintenance-free, automatic compensation for clutch wear and up to 20% less actuating force! HYMEC provides a uniquely sensitive operation and significantly improves vehicle control. A weight saving of up to 150 grams is possible according to the model.

**\*\* EXTRA PARTS ADDITIONALLY REQUIRED!**

MAKE / MODEL	YEAR	HYMEC-NO.	ORDER CODE	ORDER CODE	ORDER CODE
CR 250 R	04 → 06	2100007	0430987	0488255	
KX 250	90 → 98	2100004	0412310	0451530 (x3)	
KX 250 F	04 → 08	2100019	0430240	0723189	0412310
KX 500	90 → 03	2100004	0412310	0451530 (x3)	
RM-Z 250	04 → 05	2100019	0430240	0723189	0412310
YZ 250	88 → 98	2100004	0412310	0451530 (x3)	
YZ 450 F	03 → 05	2100019	0430240	0723189	0412310

EASY MOUNT

MAKE / MODEL	ORDER CODE	REAR CAP	BRACKET	PISTON KIT	CLAMP	LEVER	NEW
<b>AJP</b> PR5	2100006	0430217	0430224	0723184	2700176	0723290	NEW
<b>HONDA</b>							
CRF 150	2100004	0430217	0430224	0723184	2700176	0723290	
CR 250 R	2100019	0430217	0430987	0723184	2700176	0723290	
CR 250 R	2100007**	0430998	0431002	0723184	2700176	0723290	
CRF 250 R	2100009	0430217	0430224	0723184	2700176	0723290	
CRF 250 R	2100005	0430217	0430224	0723184	2700176	0723290	
CRF 250 R	2100307	0430998	2401084	0723184	2700176	0723290	NEW
CRF 450 R	2100010	0430998	0431001	0723184	2700176	0723290	
CRF 450 R	2100005	0430217	0430224	2700184	2700185	0723290	
CRF 450 R	2100030	0430217	0430224	0723185	2700176	0723290	NEW
CR 500 R	2100019	0430217	0430987	0723184	2700176	0723290	
<b>KAWASAKI</b>							
KX 250	2100004**	0430217	0430224	0723184	2700176	0723290	
KX 250 F	2100019**	0430217	0430987	0723184	2700176	0723290	
KX 250 F	2100006	0430998	0431002	0723184	2700176	0723290	
KX 450 F	2100007	0430217	0430224	0723184	2700176	0723290	
KX 500	2100004**	0430217	0430224	0723184	2700176	0723290	
<b>KTM</b>							
250 SX 300/360	2100019	0430217	0430987	0723184	2700176	0723290	
<b>SUZUKI</b>							
RM 250	2100019	0430217	0430987	0723184	2700176	0723290	
RM-Z 250	2100019	0430217	0430987	0723184	2700176	0723290	
RM-Z 250	2100011	0430998	0430990	0723184	2700176	0723290	
RM-Z 250	2100302	0430998	0430990	2700184	2700185	0723290	NEW
RM-Z 450	2100012	0430998	0430991	0723184	2700176	0723290	
<b>YAMAHA</b>							
YZ 250	2100004**	0430217	0430224	0723184	2700176	0723290	
YZ 250	2100019	0430217	0430987	0723184	2700176	0723290	
YZ 250 F	2100008	0430217	0430224	0723184	2700176	0723290	
YZ 250 F	2100302	0430217	0430224	2700184	2700185	0723290	NEW
YZ 450 F	2100019**	0430217	0430987	0723184	2700176	0723290	
YZ 450 F	2100008	0430217	0430224	0723184	2700176	0723290	



MAKE / MODEL	YEAR	ORDER CODE	MASTER TYPE	LINE LENGTH	PISTON-Ø	ASSEMBLY	SLAVE NO.	MASTER
<b>BOMBARDIER</b> DS 650 ATV	04 → 09	2100020	167 Black	1045 mm	9.5 mm	73	0120653	0723295
<b>BMW</b> F 800 Models	06 →	2100021	167 Black	1045 mm	12 mm	55 - 75	2100022	2700482
Suitable for application on F 800 GS / F 700 GS / F 650 GS (08 - 12) / F 800 R / F 800 S / F 800 ST / F 800 GT								
<b>HARLEY DAVIDSON</b> Big Twin* Big Twin* Sportster* Sportster* Sportster* Sportster*	99 → 07 99 → 07 96 → 14 96 → 14 96 → 14 96 → 14	NA 0120614 B 0120601 0120602 0120611 0120612	80" Black 80" Chrome 80" Black 57" Black 80" Chrome 57" Chrome	2030 mm 2030 mm 2030 mm 1450 mm 2030 mm 1450 mm	10.5 mm 10.5 mm 10.5 mm 10.5 mm 10.5 mm 10.5 mm	NA NA 71 71 71 71	0722179 0722179 0722160 0722160 0722160 0722160	0722163 0722180 0722163 0722163 0722180 0722180
* for inch handlebars (ø 25.4 mm) Big Twin-HYMEC only suitable for 5 speed gearbox models								
<b>HONDA</b> CBF 600 S / N (PC38) CBF 600 (PC43) NC 700 S NC 700 X	04 → 07 12 → 14 12 → 14 12 → 14	2100001 2100001 2100001 2100001	167 Black 167 Black 167 Black 167 Black	1045 mm 1045 mm 1045 mm 1045 mm	10.5 mm 10.5 mm 10.5 mm 10.5 mm	64 61 61 61	0120651 0120651 0120651 0120651	2700185 2700185 2700185 2700185
<b>HUSQVARNA</b> Nuda	12 → 14	2100021	167 Black	1045 mm	12 mm	55 - 75	2100022	2700482
<b>KAWASAKI</b> Z750 ER-6N Versys Z800 Z1000 Z1000SX	09 → 12 06 → 09 07 → 10 13 → 14 10 → 14 10 → 14	0120689 0120689 0120689 2100309 2100309 2100309	167 Black 167 Black 167 Black 167 Black 167 Black 167 Black	1045 mm 1045 mm 1045 mm 1045 mm 1045 mm 1045 mm	9.5 mm 9.5 mm 9.5 mm 10.5 mm 10.5 mm 10.5 mm	65 65 65 55 55 55	0120651 0120651 0120651 0120655 0120655 0120655	0723295 0723295 0723295 2700185 2700185 2700185
<b>SUZUKI</b> SV 650	99 → 10	0120689	167 Black	1045 mm	9.5 mm	65	0120651	0723295
<b>TRIUMPH</b> Street Triple 675 Tiger 800 / 800 XC	12 → 14 10 → 14	2100303 2100303	167 Black 167 Black	1120 mm 1120 mm	10.5 mm 10.5 mm	H+32 H+32	2100308* 2100308*	2700185 2700185
<b>YAMAHA</b> SR 400/500 FZ6	All 07 → 10	2100020 0120689	167 Black 167 Black	1045 mm 1045 mm	9.5 mm 9.5 mm	73 65	0120653 0120651	0723295 0723295

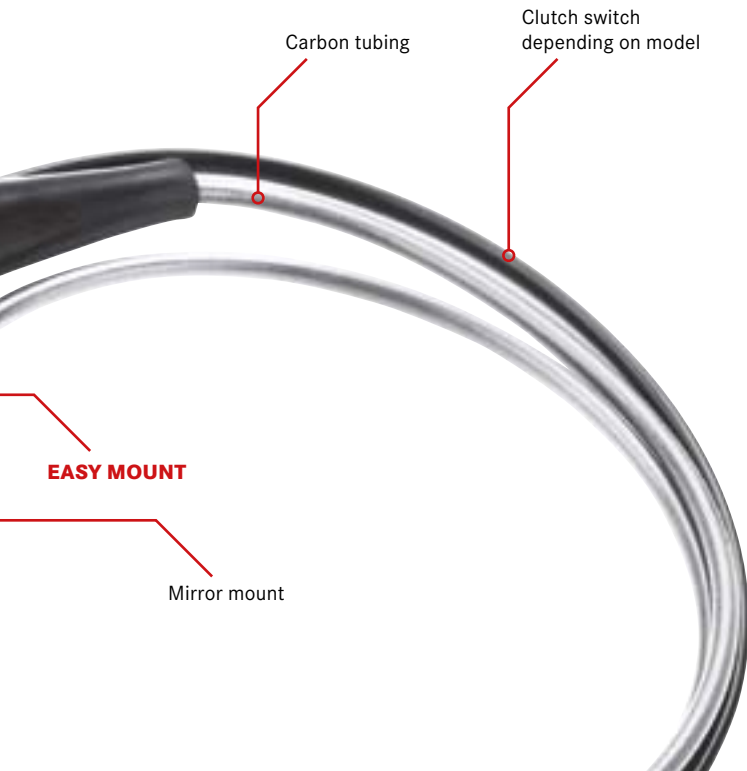
B = Model still available while stocks last

NA = Not available

OE = Original Harley Clamp. Not included!

H + = Slave attached from rear cap with stud

Spare Parts on Pages 22/23



**STREET-HYMEC**

HYMEC for Harley

MAGURA HYMEC - An easy to install alternative to a mechanical clutch. This system replaces the clutch lever and cable - with a small lightweight hydraulic system for improved clutch control. The HYMEC ensures an easier operating pressure, a constant pressure point, no more cable adjustment and smooth clutch actuation to ensure the perfect take-off every time.

HYMEC significantly improves vehicle performance - it allows the user to feel the point where the clutch releases and actuates. This product has been developed over many years and been tested under the toughest conditions possible in the world of motorcycle Off-Road sport. It has been used by world champion riders who all agree as to the benefits but it is just as useful to the complete novice who stalls at the traffic lights. Due to demand MAGURA now offers the HYMEC system for various road going motorcycles.

MAKE / MODEL	ORDER CODE	PRESSURE LINE	LEVER	BRACKET	REAR CAP	PISTON KIT	CLAMP	NEW NOTE
<b>BOMBARDIER</b> DS 650 ATV	2100020	0722138	2700244	0430224	0430217	0723184	2700177	
<b>BMW</b> F 800 Models	2100021	0722138	0723296	NA	0430217	2700489	2700385	
Suitable for application on F 800 GS / F 700 GS / F 650 GS (08 - 12) / F 800 R / F 800 S / F 800 ST / F 800 GT								
<b>HARLEY DAVIDSON</b> Big Twin* Big Twin* Sportster* Sportster* Sportster* Sportster* * for inch handlebars (ø 25.4mm)	NA 0120614 B 0120601 0120602 0120611 0120612	0722178 0722178 0722162 0722161 0722162 0722161	0722182 0722182 0722167 0722167 0722182 0722182	NA NA NA NA NA NA	0430217 0430217 0430217 0430217 0430217 0430217	0722164 0722164 0722164 0722164 0722164 0722164	OE OE OE OE OE OE	Spares only Spares only
Big Twin-HYMEC only suitable for 5 speed gearbox models								
<b>HONDA</b> CBF 600 S / N (PC38) CBF 600 (PC43) NC 700 S NC 700 X	2100001 2100001 2100001 2100001	0722138 0722138 0722138 0722138	2700244 2700244 2700244 2700244	0430224 0430224 0430224 0430224	0430217 0430217 0430217 0430217	0723185 0723185 0723185 0723185	2700177 2700177 2700177 2700177	
<b>HUSQVARNA</b> Nuda	2100021	0722138	0723296	NA	0430217	2700489	2700385	
<b>KAWASAKI</b> Z750 ER-6N Versys Z800 Z1000 Z1000SX	0120689 0120689 0120689 2100309 2100309 2100309	0722138 0722138 0722138 0722138 0722138 0722138	2700244 2700244 2700244 0723296 0723296 0723296	0430224 0430224 0430224 0430224 0430224 0430224	0430217 0430217 0430217 0430217 0430217 0430217	0723184 0723184 0723184 0723185 0723185 0723185	2700177 2700177 2700177 2700177 2700177 2700177	   01.06.14 01.06.14 01.06.14
<b>SUZUKI</b> SV 650	0120689	0722138	2700244	0430224	0430217	0723184	2700177	
<b>TRIUMPH</b> Street Triple 675 Tiger 800 / 800 XC	2100303 2100303	0722137 0722137	2700244 2700244	NA NA	2100018 2100018	0723185 0723185	2700177 2700177	NEW NEW
<b>YAMAHA</b> SR 400/500 FZ6	2100020 0120689	0722138 0722138	2700244 2700244	0430224 0430224	0430217 0430217	0723184 0723184	2700177 2700177	

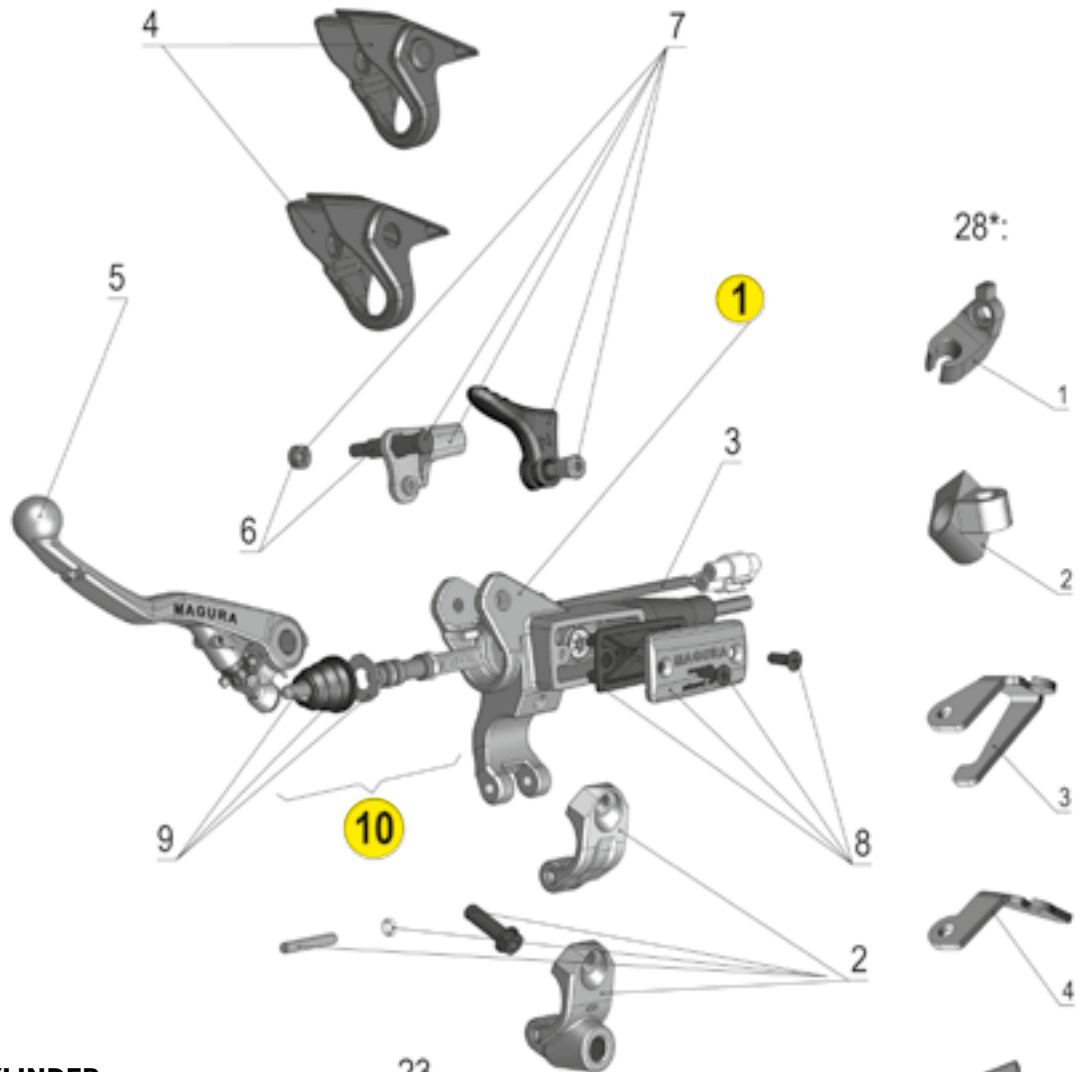
B = Model still available while stocks last

NA = Not available

OE = Original Harley Clamp. Not included!

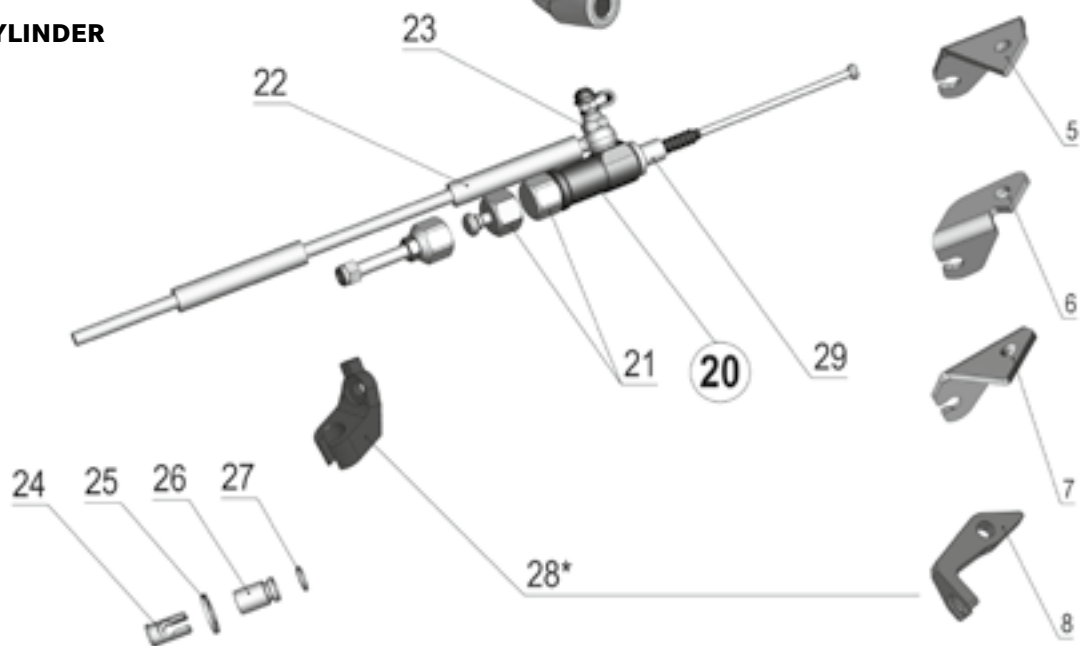
H + = Slave attached from rear cap with stud

**167 HYMEC | MASTER CYLINDER**



**167 HYMEC | SLAVE CYLINDER**

**⚠** Slave cylinder seal-kits not available as spare parts!





## 167 HYMEC | SPARE PARTS

POSITION	DESCRIPTION	ITEM CODE
1	Master cylinder*	Page36/37
2	Clamp with spiral spin Clamp for threaded mirror mounting M 10x1.25 mm Clamp for threaded mirror mount M 10x1.5mm (BMW)	2700176 2700177 2700385
3	Clutch switch Clutch switch BMW F 800 HYMEC	0723187 2700384
4	Protection cover for lever without choke lever Protection cover for lever with choke lever	0723163 <b>B</b> 0723202
5	Long lever blade with adjustment wheel l = 146 mm off-road Short lever blade with adjustment wheel l = 123 mm off-road Black lever blade with adjustment wheel l = 163 mm street Silver lever blade with adjustment wheel l = 163 mm street	0723290 0723121 0723296 2700244
6	Screw for lever without deco	0723115
7	Deco lever black Hot start lever red	0723189 0723188
8	Reservoir cover for mineral oil use with bellow and screws Reservoir membrane	2700178 0723162
9	Bellows with push rod and washer	0723116
10	Master piston-Ø 9.5 mm mineral oil 10.5 mm mineral oil 12 mm mineral oil	0723184 0723185 2700489
20	Slave cylinder	Page 24/25
21	Cap bronze anodised Cap with stud bronze anodised Cap "universal"	0430217 0430998 2100018
22	Tubekit PA with accessories l = 1,045 mm Tubekit PA with accessories l = 1,120 mm Tubekit carbon with accessories l = 1,120 mm Tubekit CARBON with accessories l = 1,045 mm Tubekit PA with accessories l = 1,500 mm	0720549 <b>B</b> 0720550 <b>B</b> 0722137 0722138 0722679
23	Banjo bolt with bleeding valve for carbon tubings M 6x16.5 mm	0722136
24	Sleeve	0412310
25	Disc	0451530
26	Sleeve for HYMEC 0120594 Sleeve for HYMEC 0120585	0430985 0430987
27	O-ring (needed for sleeve 0430985 and 0430987)	0488255
28	1. Mounting adapter Suzuki RM-Z 250, model year 2004-2008 1. Mounting adapter Kawasaki KXF 250, model year 2004-2008 2. Mounting adapter Honda CRF 450 R, model year 2004 3. Mounting adapter Kawasaki KX 450 F, model year 2006 4. Mounting adapter Honda CRF 450 R, model year 2004-2009 5. Mounting adapter Suzuki RM-Z 250, from model year 2009 6. Mounting adapter Suzuki RM-Z 450, from model year 2009 7. Mounting adapter Kawasaki KX 450 F, from model year 2009 8. Mounting adapter Honda CRF 250 R, from model year 2014	0430240 0430240 0430220 0430997 0431002 0430990 0430991 0431002 2401084
29	Support	0430224
30	MAGURA-Blood 100 ml MAGURA-Blood 1 liter Service-Kit HYMEC	0721820 0721821 0722152





**OPTIONAL EXTRAS FOR YOUR SLAVE CYLINDER**



Nipple: If your clutch cable has a large attachment nipple you will require a nipple for the end of your HYMEC slave cylinder activation rod.

**Order code 0412310**



Universal Attachment Kit: This kit facilitates the attachment of the HYMEC slave cylinder from the rear cap. It has an adjustable range and will add 55 to 70 mm to the activation length when used in conjunction with any of the slave cylinders listed on page 15.

Please note that the slave cylinder rear cap has a secondary breather function and should not be sealed when replaced.

**Order code 2100018**



Cap with Stud: If your HYMEC is attached from the rear you may require the cap with stud. This part is designed only for use with model specific adaptors.

Please note that the slave cylinder rear cap has a secondary breather function and should not be sealed when replaced.

**Order code 0430998**



Sleeve for 2 Stroke Models: If the HYMEC slave cylinder is located under the clutch cover it may be necessary to use one of the sleeves in conjunction with an o-ring.

Sleeve for 2-stroke models:

**Order Code**

**0430985** 15 mm long version

**0430987** 12 mm short version

**0488255** O-ring fits both of the above versions

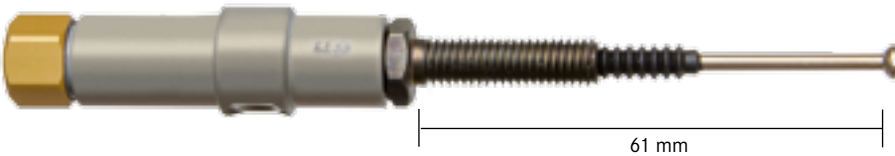
**REPLACEMENT HYMEC CLUTCH SLAVE CYLINDERS**

If you have an older HYMEC clutch activation system and require a replacement slave cylinder but are not aware of the correct part number we have devised a method to make it easier for you to establish the part number for the replacement.

Remove the slave cylinder from the motorcycle and activate the master cylinder until the slave cylinder activation rod is fully retracted and withdrawn. The piston in the slave cylinder is now contacting the bronze cap at the back of the slave cylinder and the rod length should be measured as shown in the table below. If the slave cylinder is no longer working it can be removed from the pressure line and forced slowly and carefully into the slave cylinder for the measurement.

Please note – the length you are measuring is not the activation length – the activation length is 16mm longer than the withdrawn length. Following the measurement please do not disregard your old slave cylinder you may require the cap or the support. All of our replacement HYMEC slave cylinders are delivered with the standard cap and standard support as shown in the pictures. If the slave cylinder you require lies between two different activation lengths – always order the longer version and use spacers between the support and the cable attachment to increase the activation length to suit your motorcycle.

**SPECIAL REPLACEMENT HYMEC SLAVE CYLINDERS**



**BMW F 800**

- > F 700 GS
- > F 800 GS
- > F 800 R
- > F 800 S
- > F 800 ST
- > F 800 GT
- > F 650 GS (Twin)
- > HUSQVARNA NUDA

**ACTIVATION LENGTH**

57-78 mm

**ITEM CODE**

2100022

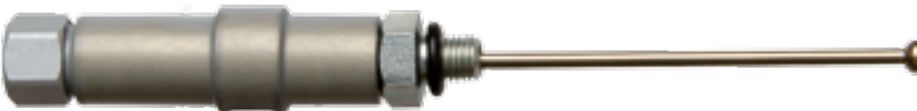


**HARLEY SPORTSTER FROM 1996**

Spacer block for assembly should be removed after installation.

**ITEM CODE**

0722160



**BUELL XB-MODELLE 2002 – 2010**



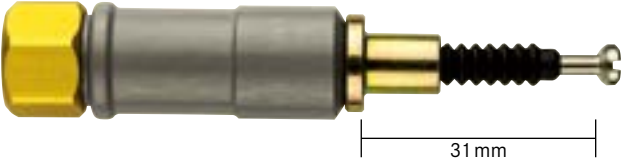
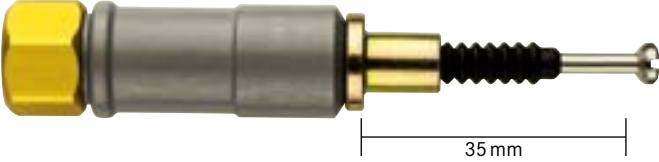
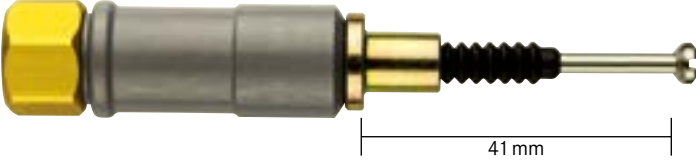
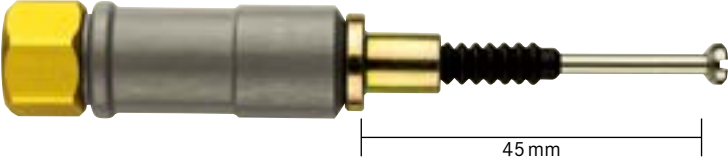
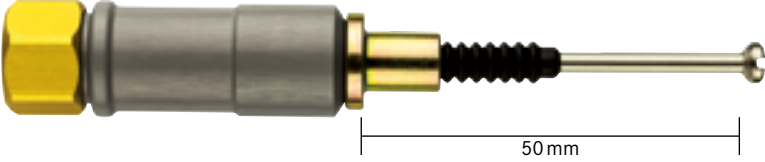
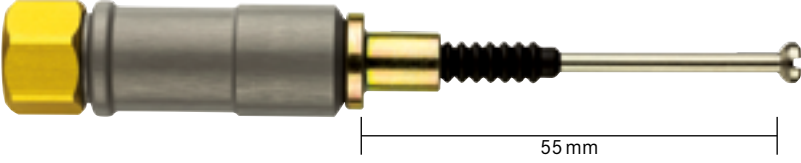
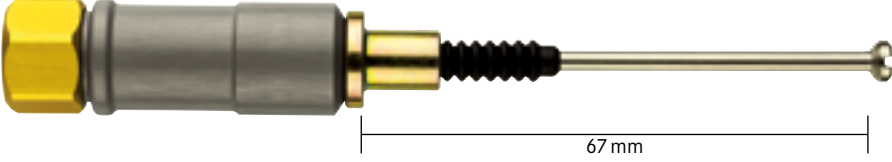

Spacer block for assembly should be removed after installation.

**ITEM CODE**

0120624



Replacement HYMEC Slave Cylinders – to measure your slave cylinder – activate the master cylinder until the pull rod is fully withdrawn.

	WITHDRAWN LENGTH	ACTIVATION LENGTH
	16 mm	31–33 mm <b>Order code 2100308</b>
	24 mm	39–41 mm <b>Order code 0120649</b>
	31 mm	46–48 mm <b>Order code 0120648</b>
	35 mm	51–53 mm <b>Order code 0120655</b>
	41 mm	56–58 mm <b>Order code 0120652</b>
	45 mm	60–62 mm <b>Order code 0120651</b>
	50 mm	65–67 mm <b>Order code 2100003</b>
	55 mm	70–72 mm <b>Order code 0120653</b>
	67 mm	82–84 mm <b>Order code 0120659</b>
	90 mm	105–107 mm <b>Order code 0120657</b>