

MISCELLANEOUS HOSE FITTINGS





















DID YOU KNOW?

Some flared tube style fittings are deliberately made longer to make them more universal. This enables you to bend the tube to the desired shape and allows you plenty of room to place the BQ23 test spade under the nut for testing.

MISCELLANEOUS HOSE FITTINGS













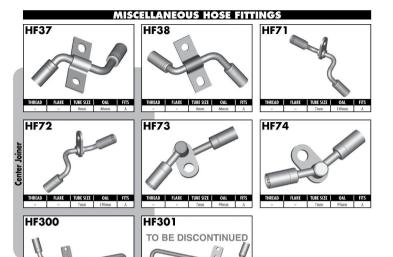












THREAD | FLARE | TUBE SIZE | OAL | FITS

THREAD | FLARE | TUBE SIZE | OAL | FITS

8mm 190mm US

MISCELLANEOUS HOSE FITTINGS















Note: Compression Style fittings are not recommended for hydraulic braking systems.

 $A = Asian \hspace{1cm} EU = European \hspace{1cm} US = United \hspace{1cm} States \hspace{1cm} UNI = Universal \hspace{1cm} V = Various \hspace{1cm} V = Various$

MISCELLANEOUS HOSE FITTINGS



For tube style

fittings







For banjo fittings

with a 7mm shank



V = Various

DID YOU KNOW?

It is impossible to stock every fitting. That is why BrakeQuip supplies lifesavers to fill in the gaps. Currently BrakeQuip offers five different lifesavers to suit different fitting situations. This makes it easy and efficient for you to reuse the original fitting. The HF01 & HF26 are virtually the same and are designed for most standard fittings. However these have a tubing



countersunk in them so that you can easily braze tube directly to them to make up custom fittings. The HF27 is designed to suit all the fittings that have a 5/16" (8mm) tube attached to it. The HF120 is designed to reuse all banjo fittings that have 7mm shank such as the HF809. The HF05 is designed to reuse all center support fittings.























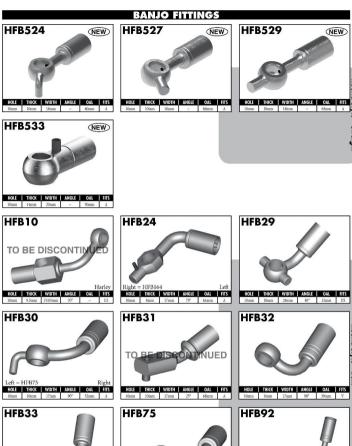








BANJO FITTINGS HFB73 HFB111 HFB194 HOLE THICK WIDTH ANGLE OAL FITS 10mm 10mm 28mm - 50mm US HFB289 HFB288 HFB344 HOLE | THICK | WIDTH | ANGLE | OAL | FITS HOLE | THICK | WIDTH | ANGLE | OAL | FITS 10mm 8mm 17mm - 61mm A HFB350 HFB351 HFB352 | HOLE | THICK | WIDTH | ANGLE | OAL | FITS | 10mm | 10mm | - | - | 55mm | A **HFB365** HFB375 HFB448 HOLE | THICK | WIDTH | ANGLE | OAL | FITS HFB521 **HFB522** HFB523 (NEW) (NEW) (NEW)









BANJO FITTINGS HFB105 HFB106 HOLE | THICK | WIDTH | ANGLE | OAL | FITS HFB157 HFB158 TO BE DISCONTINUED HFB164 **HFB340** Left = HFB24 HOLE | THICK | WIDTH | ANGLE | OAL | FITS HOLE | THICK | WIDTH | ANGLE | OAL | FITS HOLE | THICK | WIDTH | ANGLE | OAL | FITS HFB343 **HFB342** HOLE | THICK | WIDTH | ANGLE | OAL | FITS **HFB346** HFB348

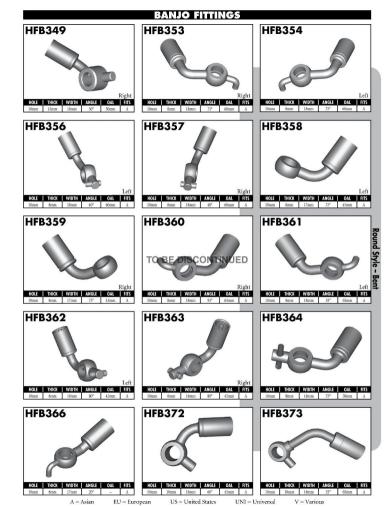
HFB93

HFB150

HFB159

HFB341

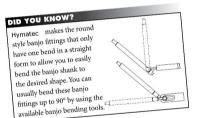
HFB345



BANJO FITTINGS HFB390 HFB389 HFB456 HOLE | THICK | WIDTH | ANGLE | OAL | FITS HFB457 HFB518 **HFB519** (NEW) HOLE | THICK | WIDTH | ANGLE | OAL | FITS HOLE | THICK | WIDTH | ANGLE | OAL | FITS HFB520 HFB530 HFB531 (NEW) (NEW) (NEW) | HOLE | THICK | WIDTH | ANGLE | OAL | FITS | 10mm | 10mm | 17mm | 15° | 82mm | A HOLE THICK WIDTH ANGLE OAL FITS 10mm 8mm 18mm 80° 45mm A HFB532 HFB534 HFB535 (NEW) (NEW) (NEW) HOLE | THICK | WIDTH | ANGLE | HOLE | THICK | WIDTH | ANGLE | OAL | FITS HOLE | THICK | WIDTH | ANGLE | OAL | FITS HFB536 HFB537 **HFB538** (NEW) (NEW) (NEW)







CAUTION

Illustrations shown in this reference guide may vary slightly in detail from actual parts due to manufacturer's tolerances and design differences. Note: Illustrations not to scale.

DISCLAIMER NOTICE

The illustrations and data contained in this illustrated reference guide are intended as an aid in identifying the various products and have been obtained and developed from the specifications and information available. Although BrakeQuip believes that such illustrations and that are correct, errors may exist and further verification on the part of the user may be necessary.

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V = Various

Round Style - Bent













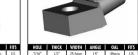
DID YOU KNOW?

The gramophone finish on some banjo fittings are designed to increase the sealing power of the copper washer. It is usually on banjo fittings that have a large flat face.

























DID YOU KNOW?

Copper washers or brake fluid compatible bonded washers should only be used for sealing the high pressures found in braking systems. Aluminum and nylon washers are for low pressure only and should not be used on braking systems.



























UNI = Universal





HOLE | THICK | WIDTH | ANGLE | OAL | FITS 16mm 14mm 22.2mm

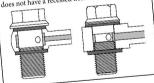
44mm US





DID YOU KNOW?

It is important to match a banjo bolt to the correct banjo fitting. If the banjo fitting hole is "scalloped" out then it doesn't matter if the banjo bolt has a groove at the inlet port. The fluid flow can be restricted if you use a banjo bolt that does not have a relief at the outlet port into a banjo fitting that does not have a recessed hole.



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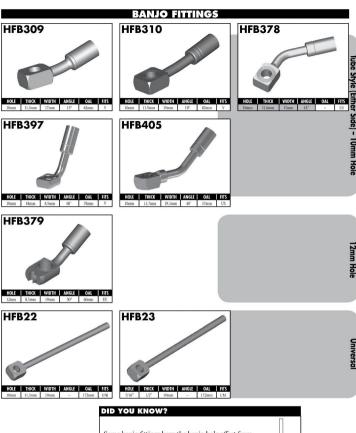


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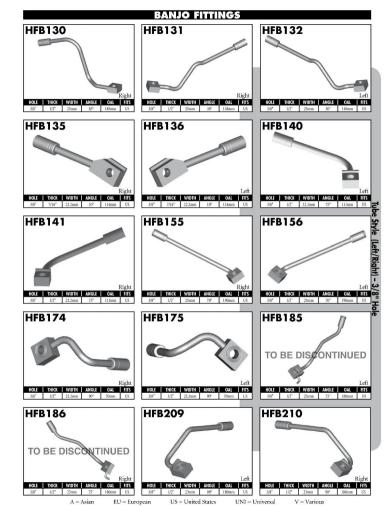
V = Various



Some banjo fittings have the banjo hole offset from the center as a locator on the caliper. By reducing the offset amount from the opposite side also allows the banjo hole to be in the center and able to fit both sides instead of just one side only.

EU = European

BANJO FITTINGS HFB68 HFB69 HFB76 TO BE DISCONTINUED HOLE | THICK | WIDTH | ANGLE | OAL | FITS HOLE THICK WIDTH ANGLE OAL HFB77 HFB82 HFB83 THICK | WIDTH | ANGLE | OAL | FITS HOLE | THICK | WIDTH | ANGLE | OAL | FITS 19.7mm 90° 143mm US HFB103 HFB115 HFB102 TO BE DISCONTINUED TO BE DISCONTINUED HOLE THICK WIDTH ANGLE OAL FITS 3/8" 1/2" 23mm 23" 140mm US HOLE | THICK | WIDTH | ANGLE | OAL | FITS HFB116 HFB125 HFB126 HOLE | THICK | WIDTH | ANGLE | OAL | FITS HFB127 **HFB128 HFB129** US = United States A = Asian EU = European UNI = Universal V = Various





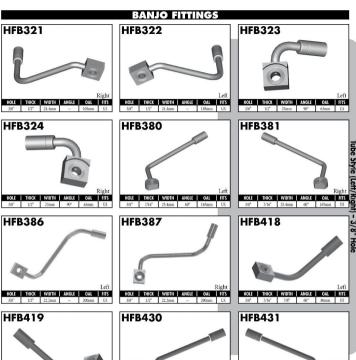
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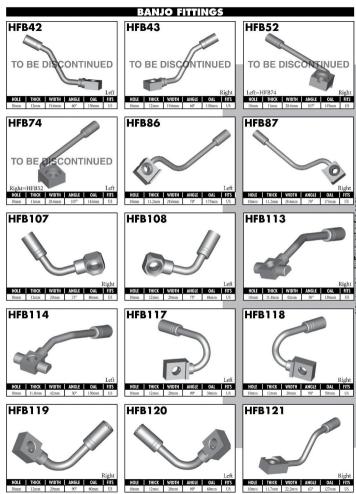




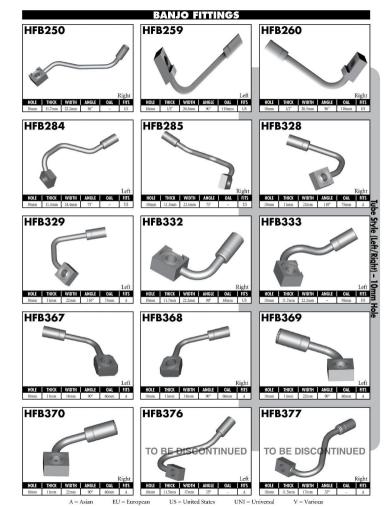




BANJO FITTINGS HFB78 HFB79 HFB94 HOLE THICK WIDTH ANGLE OAL FITS HOLE THICK WIDTH ANGLE OAL FITS HFB95 HFB123 **HFB124** HOLE | THICK | WIDTH | ANGLE | OAL | FITS HOLE | THICK | WIDTH | ANGLE | OAL | FITS HOLE | THICK | WIDTH | ANGLE | OAL | FITS 7/16* 11.6mm 20mm 90° 110mm US 7/16" 14.8mm 22.2mm 85" 90mm US HFB177 **HFB189** HFB176 HOLE | THICK | WIDTH | ANGLE | OAL | FITS HOLE | THICK | WIDTH | ANGLE | OAL | FITS HOLE | THICK | WIDTH | ANGLE | OAL | FITS HFB190 HFB201 **HFB202** TO BE DISCONTINUED HOLE | THICK | WIDTH | ANGLE | OAL | FITS HOLE | THICK | WIDTH | ANGLE | OAL | FITS HOLE | THICK | WIDTH | ANGLE | OAL | FITS HFB237 **HFB238**







BANJO FITTINGS HFB410 **HFB404 HFB411** TO BE D HOLE THICK WIDTH ANGLE OAL FITS 10mm 11.7mm 22.2mm 125° — US HOLE | THICK | WIDTH | ANGLE | OAL | FITS HFB450 HFB451 HFB465 NEW | WIDTH | ANGLE | OAL | FITS HOLE | THICK | WIDTH | ANGLE | OAL | FITS HFB474 HFB475 **HFB466** (NEW) (NEW) NEW HOLE | THICK | WIDTH | ANGLE | OAL | FITS | HOLE | THICK | WIDTH | ANGLE | OAL | FITS | 10mm | 1/2" | 18mm | - | - | US **HFB493 HFB494** HFB525 (NEW) (NEW) (NEW)



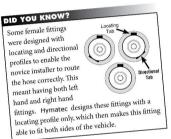
HOLE THICK WIDTH ANGLE OAL FITS

HOLE | THICK | WIDTH | ANGLE | OAL | FITS



CENTER SUPPORT FITTINGS





DID YOU KNOW?

Have you noticed all the different profiles in particular on female fittings between the retaining clip groove and the mounting shoulder? You will find this corresponding shape in the chassis or bracket where the fitting mounts. This is designed so that the hose is routed with the correct orientation. It is very important to note this orientation when assembling brake hoses. It is particularly important to make note of the orientation before you cut off any fitting you are going to reclaim with our lifesaver. Once you cut it off you have lost your orientation reference.















IMPERIAL FEMALE FITTINGS





























































EU = European

US = United States

UNI = Universal

V = Various











DID YOU KNOW?

Manufacturers design their fittings to suit resources available to them. For instance, some manufacturers make their female fittings with a 3/4" hex to give them a shoulder to mount to, but others prefer to make them from 5/8" hex and then supply a shoulder clip for the shoulder to mount to. BrakeQuip supplies these in both styles. Therefore the following applies. HFIF01 = HFIF36, HFIF02 = HFIF24,

HFIF05 = HFIF45 and vice versa.



























































































THREAD | SEAT | MOUNT | HEX | OAL | FITS





HFIFX01



5/8" x 18NF External Thread THREAD | SEAT | MOUNT | HEX | OAL | FITS 7/16" x 24NS Inverted Bulkhead 19mm 45mm V

HFIFX02



5/8" x 18NF External Thread					
THREAD	SEAT	MOUNT	HEX	OAL	FITS
3/8" x 24NF	Inverted	Bulkhead	19mm	45mm	V

HFIFX03



5/8" x 18NF External Thread							
		MOUNT					
SF	Inverted	Bulkhead	19mm	45mm	Y		

HFIFX04



5/8" x 18NF External Thread
 THREAD
 SEAT
 MOUNT
 HEX
 OAL
 FITS

 7/16* x 20NF
 Inverted
 Bulkbead
 19mm
 45mm
 V

HFIFX05



5/8" x 18NF External Thread
 THREAD
 SEAT
 MOUNT
 HEX
 OAL
 FITS

 3/8"x 24NF
 DPS
 Bulkhead
 19mm
 45mm
 V

HFIFX06

THRE 3/8°B3



5/8" x 18NF External Thread THREAD SEAT MOUNT HEX OAL FITS
7/16" x 24NS Inverted Bulkhead 16mm 46mm US T

HFIFX07







HFIFX09



11/16 x 18NS External Thread THREAD | SEAT | MOUNT | HEX | OAL | FITS



























DID YOU KNOW?

Most female fittings with a bulkhead mount use a $5/8^{\circ}$ x 18NF thread, and this is the only thread that BQ suplies. However some of these fittings come with a M16 x 1.5 or a fine brass thread. If in doubt, supply a BQ13 nut with the fitting.







UNI = Universal

rsal V

V = Various





HFIF42

HFIF60

HFIF81

HFIF109





















A = Asian



















































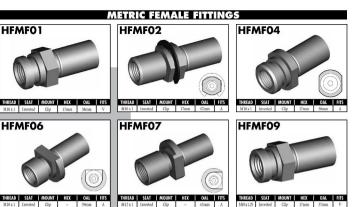








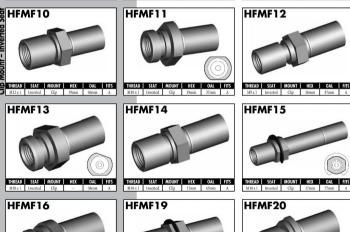
Clip Mount





HFMF01

HFMF06



































METRIC FEMALE FITTINGS HFMF333 HFMF308 HFMF366 (NEW) HFMF03 HFMF05 HFMF08 HFMF21 HFMF24 HFMF35 THREAD SEAT MOUNT HEX OAL FITS M10x1 DPS Clip 19mm 38mm V HFMF38 HFMF39 HFMF47 HFMF51 HFMF54 HFMF55

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HFMF56

HFMF59

















HFMF316 TO BE DISCONPINUED IN THE DISCONPINUED THE DISCONPINUED



HFMF315

HFMF329













A = Asian







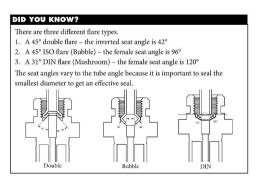














M10x1 DPS Bulkhead 17mm 46mm V

M16 x 1.5 External Thread







DID YOU KNOW?

Most female fittings with a bulkhead mount use a 5/8" x 18NF thread, and this is the only thread that BQ supplies. However some of these fittings come with a M16 x 1.5 or a fine brass thread. If in doubt, supply a BQ13 nut with the fitting.















THREAD	SEAT	MOUNT	HEX	OAL	FITS
M06-1-03	DPS	Bracket	-	44mm	115





































Bracket Retaining Screws

This thread forming screw is required to secure bracket to bracket mount fittings.

DID YOU KNOW?

The purpose of the circular groove on the fitting crimp shell is threefold.

- It helps to differentiate
 BQ fittings from others.
- BQ nttings from outers.

 2. It acts as a depth guide for the hose installation.
- It is used as a crimp setting guide for the economy crimping systems.























































BRACKETS







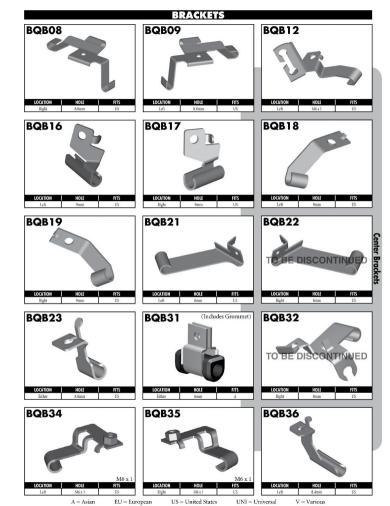




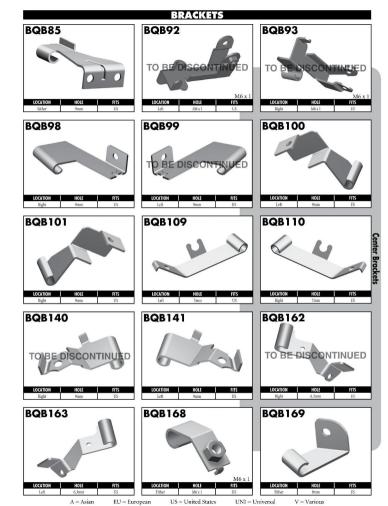












BRACKETS





















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BRAKE HOSE GROMMETS





BRAKE HOSE PLASTIC CLIPS











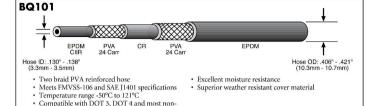






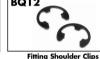
RUBBER BRAKE HOSE & ACCESSORIES

Rubber Brake Hose





petroleum based brake fluids including silicone



BQ12

BQ312-BK BQ312-GY Available in 10' increments Heat Protection Sleeve

Attractive brake hose cover to protect

Simply slide over hose before crimping

the hose from hot components.

(50' Minimum)

CONSTANT | INTERMITTENT

Hose Protector Spring (PKT 6 - Length 16"



(PKT 20)



BQ312-RK BQ312-GY Grav

end fittings.

PART NO. COLOR

Bracket Retaining Screws (PKT 50)





Plastic Protector Spring (Leneth = 500mm or 19.5"



(100ft Length)



BQ296

For rubber brake hoses

Rubber Brake Hose Cutter



This heavy duty tool cuts hose clean & square every time - with ease. Blade is reversible for double life.

STAINLESS STEEL BRAIDED HOSE & ACCESSORIES





Braided Hose Insert

PART NO.	DESCRIPTION
BQ251-SV	Braided Hose Insert - Silver
BQ251-BK	Braided Hose Insert - Black
BQ251-BL	Braided Hose Insert - Blue
BQ251-RD	Braided Hose Insert - Red
BQ251-PP	Braided Hose Insert - Purple
BQ251-GD	Braided Hose Insert - Gold
BQ251-GR	Braided Hose Insert - Green
BQ251-YL	Braided Hose Insert - Yellow



Small Braided Hose Shears High grade braided hose shears that cuts the hose clean without fraying the braid. Handy inside stops are ideal for rounding up the hose after cutting.



High Speed Skiving Tool

Skive your braided hose in a matter of a few seconds. Adjustable stop allows precise measurement every time. This tool has three actions with one simple squeeze of the handles. The first stage clamps the hose, the second stage brings the knives down and cuts the outer cover, and the final stage rips it off the hose. This high productivity tool will save you a lot of time and heartache and leave you with a professional result.

Stainless Steel Braided Brake Hose

High Performance



STAINLESS STEEL BRAIDED HOSE & ACCESSORIES

Stainless Steel Crimp Fittings

Polished Stainless Steel Fittings

Complete your brake plumbing job with stainless steel fittings for non-rusting durability. Polished finish for the chrome like look.



See these polished Stainless Steel Motorcycle Fittings on page 75.

Stainless Crimp Fittings



PART NO.	DESCRIPTION	
HF07SS	Fitting - Male Swivel Nut 7/16" x 24NS (45")	
HF09SS	Fitting - Female Swivel Nut 3/8" x 24NF (Straight)	No. 3AN
HF09WSS	Fitting - Female Swivel Nut 3/8"NF (Straight)	
HF10SS TBD	Fitting - Female Swivel Nut 3/8" x 24NF (45")	No. 3AN
HF11SS	Fitting - Female Swivel Nut 3/8" x 24NF (90")	No. 3AN
HF1255	Fitting - Female Swivel Nut 7/16" x 20NF (Straight)	No. 4AN
HF1355	Fitting - Female Swivel Nut 7/16" x 20NF (45")	No. 4A)
HF145S	Fitting - Female Swivel Nut 7/16" x 20NF (90")	No. 4A3
HF15SS	Fitting - Male Swivel Nut 7/16" x 24NS	
HF16SS	Fitting - Male Swivel Nut 3/8" x 24NF	
HF1755	Fitting - Male Swivel Nut 3/8" x 24NF (90")	
HF30SS	Fitting - 3/16" Compression	
HF3155 TBD	Fitting - 1/4* Compression	
HF3355	Fitting - Male Swivel Nut 3/8" x 24NF (45")	
HFB09SS	Fitting - Banjo 10 x 10mm	
HFB34SS	Fitting - Banjo 10 x 8mm (Extra long Neck)	
HFB37SS	Fitting - Banjo 10 x 10mm (Extra long Neck)	
HFIF01SS	Fitting - Female 3/8" x 24NF	
HFIF02SS	Fitting - Female 7/16" x 24NS	
HFIMO1SS TBD	Fitting - Male 3/8" x 24NF Short	
HFIM0355	Fitting - Male 7/16" x 20NF Short	
HFIM1955	Fitting - Male 1/8" x 27NPT	
HFMF04SS	Fitting - Female M10 x 1 (17mm Flats)	
HFMM06SS	Fitting - Male M10 x 1 (Short)	

















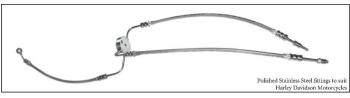








MOTORCYCLE FITTINGS



























Power Steering Hose Repair Service Program

Repair failed power steering hoses economically and quickly. Simply re-use the existing end fittings to replace the failed rubber hose utilizing BrakeQuip's uniquely designed crimp fittings.



Power Steering Components - Fittings

























US = United States

UNI = Universal

V = Various











(NEW)















Power Steering Components - Hoses

High Pressure



Temperature Range: -40°F to +275°F (-40°C to +135°C)

This hose has a high temperature rating and is compatible with most power steering oils. High expansion for noise resistance. Complies with SAE J2050 standards.

Low Pressure



38' 16.25mm 300 psi 1,200 psi 3'

Temperature Range: -40°F to +300°F (-40°C to +150°C)

This hose has a high temperature rating and is compatible with most power steering oils. Fabric cover to distinguish it and for flexibility. Complies with SAE J1019 standards.

Power Steering Hose Fabrication Instructions

Fitting Selection

Male Lifesaver – PSHF105 – Designed for when you need to reuse a non-tube style fitting. The fitting to be reused will need to be countersunk between 1/8° to 3/16° (3 – 5mm) deep with a 11mm or 7/16° drill.



Female Lifesavers – PSHF101 (3/8") and PSHF102 (10mm) – designed for when you don't have enough room to use a compression fitting. These fittings are already countersunk. It is just a matter of cutting the existing tube at the maximum length possible and installing it into the appropriately selected fitting and brazing the tube to the fitting.

IMPORTANT: The brazing process must take place before crimping the fitting.

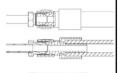


Note: It is important that only high pressure silver brazing rods be used. The silver content of the brazing rod must be at least 45%. Compression Fittings – PSHF103 (3/8") & PSHF104 (10mm) – Designed for when you have sufficient straight tube to get a good seal on these types of fittings. See illustration below for correct assembly.



Note: It is important that the cut tube is deburred with a slight outside chamfer so that it doesn't damage the sealing O-Ring. Make sure that the tube goes past the O-Ring and bottoms out at the bottom of the fitting.

Swivel Fitting – PSHF106 – Designed for an easier installation and flexible orientation. Simply braze a BQ226 (38* tube) or a BQ227 (10mm tube) fitting onto the end of the cut tube. This will then give you a male connection to attach to the No. 6 JIC female swivel fitting.



Restrictor Tube - BQ801 - This is used only where applicable. Insert restrictor tube into hose before installing last end fitting. This special high temperature tube will "float" in the hose and restrict flow to reduce noise.



Power Steering Components - Accessories







Power Steering Adaptor Kit



This flow restrictor is mainly used on smaller cars and in particular Asian & European vehicles. Its purpose is to restrict flow to eliminate power steering noise.

Flow Restrictor

Power Steering Die Sets Available



PART NO.	CRIMPING MACHINE
BQ2090	BrakeQuip BQ1005 series
BQ2300	Aeroquip 1380
BQ2301	Aeroquip 1330
BQ2302	XRP
BQ2303	Custom Crimp D100
BQ2304	Custom Crimp D200
BQ2305	Custom CC30 - Finapower P20
BQ2306	Custom CG60 - Finnpower P32 - GY40
BQ2307	Dayco NP60
BQ2308	Gates 707
BQ2309	Gates GC32
BQ2310	Imperial Eastman K24
BQ2311	Manuli - Techmaflex
BQ2312	Parker
BQ2313	Weatherhead T400
BQ2314	UniFlex 239
BQ2335	O+P70
BQ2336	0+P120



Steel Braze-On Adaptors

PART NO.	THREAD - STEEL - NO. 6 JIC	TUBE SIZE						
BQ226	9/16"x18NF	3/8"						
BQ227	9/16"x18NF	10mm						
BQ228	9/16"x18NF	1/2"						

Aluminum Braze-On Adaptor

PART NO.	THREAD - STEEL - NO. 6 JIC	TUBE SIZE
BQ170	9/16"x18NF	3/8"

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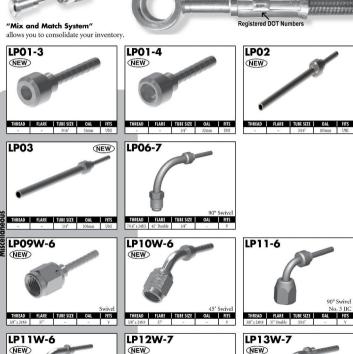
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V = Various

LOW PROFILE FITTINGS

REAL DOT Conformance with the Extreme Look

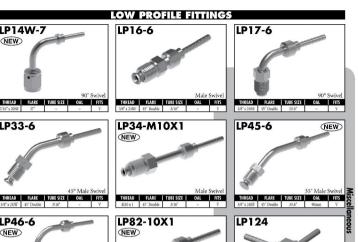














LP14W-7

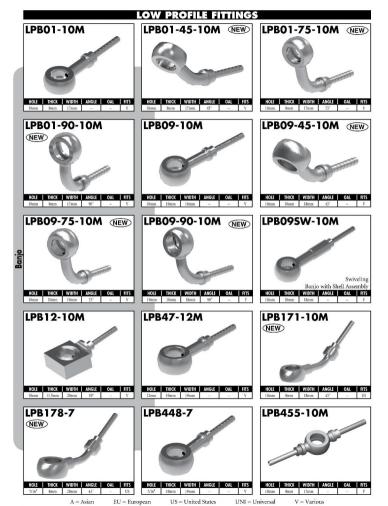
(NEW)

LP33-6





















THREAD | SEAT | MOUNT | HEX | OAL | FITS











EU = European













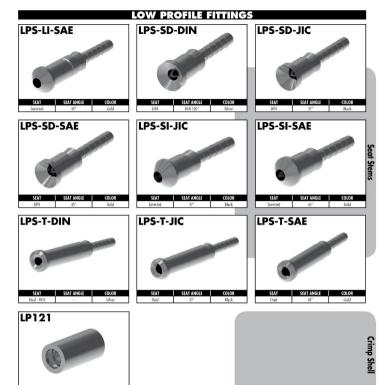










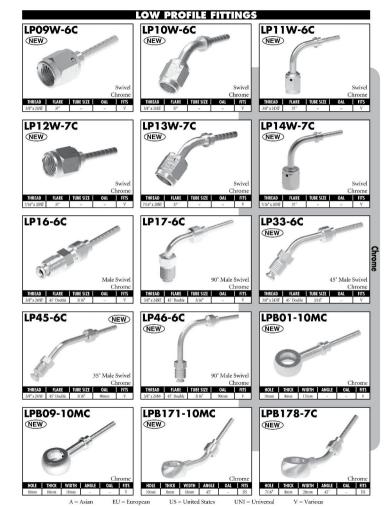












LOW PROFILE FITTINGS





















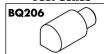


SYSTEM AIDS & ACCESSORIES

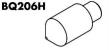
Test Cones

BQ21

BQ21 Test Cone is designed as an aid for testing banjo fittings.



BQ206 and BQ206H are universal Test Cones for doing most general applications.





BQ207H

BQ208H

BQ207 and BQ207H Test Cones are designed for testing female fittings with inverted seats.





BO206S and BO206HS Test Cones are

designed for testing female swivel fittings and female fittings with a drill point seat (DPS).



BQ208 and BQ208H Test Cone are designed for testing extra long fittings.

System Aids



Fitting Test Spade



Constriction Gauge



Rear Crimp Setting Tool



Pro System Crimp Setting Tool



Countersink Drill Bit



Econo System Crimp Setting Spade

BQ1014



Econo System Crimp Setting Clip

SYSTEM AIDS & ACCESSORIES

BQ1020



Banjo Blocking-Off Tool

A professional tool for blocking-off banjo fittings. Ideal for blocking off brake hoses with banjo fittings during maintenance & trouble shooting. Copper Washer sealing surfaces allows for sealing high pressures. Easy to use & reliable. Fits banjos holes 3/8" to 5/8".

Use lubrication on O-Rings.

Fitting Plugs

The ideal fitting for blanking off high pressure fluid ports. Fitting design has a universal seat so no scaling compounds necessary.

FEATURES:

· Zinc plated for corrosion resistance

· Imperial & Metric Threads





BQ7012.



BQ18	Male Plug	MI0x1	5mm	10mm
BQ19	Male Plug	3/8" x 24NF	3/167	10mm
BQ26	Male Plug	7/16" x 24NS	1/4"	11mm
BQ160	Female Plug	3/8" x 24NF	1/2"	15mm
BQ161	Female Plug	7/16" x 24NS	9/16"	15mm
BQ162	Female Plug	7/16" x 20NF	9/16"	15mm
BQ163	Female Plug	1/2" x 20NF	16mm	16mm
BQ164	Female Plug	M10 x 1	13mm	15mm
BQ165	Female Plug	M10 x 1.25	13mm	15mm
BQ166	Female Plug	M12 x 1	16mm	16mm
BQ167	Female Plug	M12×1.5	16mm	16mm

BQ35

Calibration Tool

Please call for instruction if Potentiometer is out of adjustment. For BO1005 series machine.



BQ22A

*Part A - Banjo Bending Bar



Part B – Banjo Holder



*Use in conjunction with BQ22B.

BQ2110 Crimp Setting Tool - LP



Angle Gauge

Can be bench mounted. Ideal for aligning tubes and fittings.

(NEW)

BQ2696-R3

BQ1150 Grease Gun BQ1415 Grease Gun Adaptor

This grease gun setup is designed for lubricating the BQ1005 series machine.

EU = European

Hose Assembly Lubricant If You want less effort when installing the fitting into the hose or sick of constriction problems - this is the answer for you.

EDUCATIONAL INFORMATION Identifying the Correct Thread

THREAD FACTS

Worldwide there are only two measuring systems - Metric and Imperial. Sometimes the imperial measurement is called SAE or American

Metric systems measure the thread by the distance between two thread pitches expressed in millimeters. Example: M10 x 1 = The OD of the thread is 10mm and the distance between each thread pitch is 1mm. Imperial systems measure the number of thread pitches over a one inch length.

Example: 7/16" x 24NS = The OD of the thread is 7/16" and the number of thread pitches over a one inch length

After some experience of looking at threads and knowing what vehicle the fitting came from, you will be able to determine fitting threads by just looking at them.

Determining if the thread is Metric or Imperial

The easiest way is using a thread gauge. We offer a thread identification kit (BQ2100) for this purpose that covers the majority of threads you will encounter working with brake plumbing. Another method could be to use a brake hose fitting or tube nut from which you could confirm the thread and size.

1. Determining the fitting OD

- a. If a male fitting Measure the OD of the thread. Take into account that this measurement will be slightly under the nominal size.
- b. If a female fitting Measure the ID of the thread. Compare this measurement at the distance between the "valleys" of opposing pitches with corresponding male fittings.

2. Determining the thread pitch

 a. If it is an imperial size - Count the number of thread pitches over, say, 1/2" length and then multiply by 2 to get your T.P.I. (Threads Per Inch).

A GLOBAL GUIDE TO THREAD SELECTION European (excluding UK) 99% Metric Asian 99% Metric UK (1930 - 1976) Imperial UK (1976-2008) Metric USA (1930 - 1980) Imperial USA (1980 - 2008) Metric & Imperial

b. If it is a metric size - Measure the distance between two thread pitches to determine the thread pitch.

Imperial threads found on braking systems

3/8" x 24NF 7/16" x 24NS 9/16" x 20NS 3/8" x 20BSF 1/2" x 20NF 7/16" x 20NF 9/16" x 18NF

Metric threads found on braking systems

M9 x 1 M10 x 1.5 M12 x 1.25 M10 x 1 M11 x 1.25 M12 x 1.5 M10 x 1.25 M12 x 1 M14 x 1.5

80% of threads found on braking systems are:

3/8" x 24NF 7/16" x 24NS M10 x 1 The two sizes most confused because they are so close in dimension are:

- a. 3/8" & 10mm. A 3/8" x 24NF thread will screw in to a M10x1 but a M10x1 will not start into a 3/8" thread. If uncertain, always go for the M10x1 to see if it will start in the thread.
- 7/16" & 11mm. The 11mm thread is extremely rare so always going for the 7/16" thread first is a safe bet.

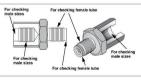
NOTE
It is possible to have metric on one end and imperial on the other end of the hose.

The metric pitch is the same for all sizes, so if you don't have the exact one you want, you can determine this pitch by selecting a different size metric gauge.



ABBREVIATIONS

NF = National Fine NS = National Special BSF = British Standard Fine



TIPS ON USING THE BQ2100 THREAD GAUGE

Gauges are organized into popularity groups: Blue = Most popular Metric threads Red = Most popular Imperial threads Gold = Less popular Metric threads Green = Less popular Imperial threads

EDUCATIONAL INFORMATION

Identify Fittings in 60 Seconds or Less

One of the biggest time wasters is time spent identifying the fittings. BrakeOuip has designed a system around the fitting catalog so that you can identify a fitting in seconds once you have identified the thread, if applicable. The first thing you need to do is understand the fitting numbering system.

For crimp style fittings, BrakeQuip has 9 different product groups and all start with HF (Hose Fitting). Usually if it is not a crimp fitting, the part number will start with BO (BrakeOuip).

Follow these steps for systemizing this quick find process:

- Decide which fitting group the fitting falls under.
- 2. Select the fitting style or the way it is mounted. Use the Fitting Catalog contents section at the front of the catalog until you get familiar with catalog.
- This narrows your search down to a couple of pages or less. Identify what is unique about the fitting and focus on this point in the Catalog.
- 4. Confirm your selection by checking that all the important attributes match the fitting you are seeking.

NOTE:

Not all fittings look the same as the original but will still function properly. The three important points that you need to consider are:

- A. Can the fitting be secured properly? Is there a mount or shoulder profile that will clash?
- B. Will the working end at the connection match up and seal?
- C. Does the hose need something to direct it away from rubbing or heat?

Undoustanding The Code

Miscellaneous Imperial Male Metric Male Imperial Female Metric Female
Imperial Male Metric Male Imperial Female
Metric Male Imperial Female
Imperial Female
Metric Female
Banjo
Center Support
Imperial Female ternal thread mount
etric Female external thread mount



Hose Fitting Numbering System

HF = Hose Fitting (These two letters are used for computer number finding only.) Fittings that don't fall into one of the categories below have the prefix HF only

	t fall into one of the categories	
PREFIX	DESCRIPTION	EXAMPLE
HF01 - HF	Hose Fittings of a Miscellaneous Nature	
HFIM01 – HFIM	Male Fittings (Imperial Thread)	
HFMM01 – HFMM	Male Fittings (Metric Thread)	
HFIF01 - HFIF	Female Fittings (Imperial Thread)	\$ 50 m
HFMF01 - HFMF	Female Fittings (Metric Thread)	
HFB01 - HFB	Banjo Fittings	
HFC01 - HFC	Center Support Fittings	
HFIFX01 - HFIFX	Female Imperial Thread (External Thread)	
HFMFX01 – HFMFX	Female Metric Thread (External Thread)	
BQ	Any items that are not a crimpable hose fitting	8 8 6

METRIC CONVERSION TABLE

FRACTION (IN.)	DECIMAL (IN.)	METRIC (MM)	FRACTION (IN.)	DECIMAL (IN.)	METRIC (MM)	FRACTION (IN.)	DECIMAL (IN.)	METRIC (MM)
1/32	0.031	0.79	2-1/32	2.031	51.59	4-1/32	4.031	102.39
1/16	0.063	1.59	2-1/16	2.063	52.39	4-1/16	4.063	103.19
3/32	0.094	2.38	2-3/32	2.094	53.18	4-3/32	4.094	103.98
1/8	0.125	3.17	2-1/8	2.125	53.98	4-1/8	4.125	104.77
5/32	0.156	3.97	2-5/32	2.156	54.77	4-5/32	4.156	105.57
3/16	0.188	4.76	2-3/16	2.188	55.56	4-3/16	4.188	106.36
7/32	0.219	5.56	2-7/32	2.219	56.36	4-7/32	4.219	107.16
1/4	0.25	6.35	2-1/4	2.25	57.15	4-1/4	4.25	107.95
9/32	0.281	7.14	2-9/32	2.281	57.94	4-9/32	4.281	108.74
5/16	0.313	7.94	2-5/16	2.313	58.74	4-5/16	4.313	109.54
11/32 3/8	0.344	8.73	2-11/32 2-3/8	2.344	59.53	4-11/32 4-3/8	4.344 4.375	110.33
13/32	0.375 0.406	9.52 10.32	2-3/8	2.375 2.406	60.32 61.12	4-3/8	4.406	111.12 111.92
7/16	0.438	11.11	2-7/16	2.438	61.12	4-7/16	4.438	111.92
15/32	0.458	11.11	2-15/32	2,456	62.71	4-7/16	4.469	113.51
1/2	0.5	12.70	2-1/2	2.5	63.50	4-1/2	4.5	114.30
17/32	0.531	13.49	2-17/32	2.531	64.29	4-17/32	4.531	115.09
9/16	0.563	14.29	2-9/16	2.563	65.09	4-9/16	4.563	115.89
19/32	0,594	15.08	2-19/32	2,594	65.88	4-19/32	4,594	116.68
5/8	0.625	15.88	2-5/8	2.625	66.68	4-5/8	4.625	117.47
21/32	0.656	16.67	2-21/32	2.656	67.47	4-21/32	4.656	118.27
11/16	0.688	17.46	2-11/16	2.688	68.26	4-11/16	4.688	119.06
23/32	0.719	18.26	2-23/32	2.719	69.06	4-23/32	4.719	119.86
3/4	0.75	19.05	2-3/4	2.75	69.85	4-3/4	4.75	120.65
25/32	0.781	19.84	2-25/32	2.781	70.64	4-25/32	4.781	121.44
13/16	0.813	20.64	2-13/16	2.813	71.44	4-13/16	4.813	122.24
27/32	0.844	21.43	2-27/32	2.844	72.23	4-27/32	4.844	123.03
7/8	0.875	22.22	2-7/8	2.875	73.03	4-7/8	4.875	123.82
29/32	0.906	23.02	2-29/32	2.906	73.82	4-29/32	4.906	124.62
15/16	0.938	23.81	2-15/16	2.938	74.61	4-15/16	4.938	125.41
31/32	0.969	24.61	2-31/32	2.969	75.41	4-31/32	4.969	126.21
1	1.0	25.40	3	3.0	76.20	5 1/22	5.0	127.00
1-1/32	1.031	26.19	3-1/32 3-1/16	3.031	76.99	5-1/32	5.031	127.79
1-1/16 1-3/32	1.063	26.99 27.78	3-3/32	3.063 3.094	77.79 78.58	5-1/16 5-3/32	5.063 5.094	128.59 129.38
1-1/8	1.125	28.57	3-1/8	3.125	79.38	5-1/8	5.125	130.17
1-5/32	1.156	29.37	3-5/32	3.156	80.17	5-5/32	5.156	130.17
1-3/16	1.188	30.16	3-3/16	3.188	80.96	5-3/16	5.188	131.76
1-7/32	1,219	30.96	3-7/32	3.219	81.76	5-7/32	5.219	132.56
1-1/4	1.25	31.75	3-1/4	3.25	82.55	5-1/4	5.25	133.35
1-9/32	1.281	32.54	3-9/32	3.281	83.34	5-9/32	5.281	134.14
1-5/16	1.313	33.34	3-5/16	3.313	84.14	5-5/16	5.313	134.94
1-11/32	1.344	34.13	3-11/32	3.344	84.93	5-11/32	5.344	135.73
1-3/8	1.375	34.93	3-3/8	3.375	85.73	5-3/8	5.375	136.52
1-13/32	1.406	35.72	3-13/32	3.406	86.52	5-13/32	5.406	137.32
1-7/16	1.438	36.51	3-7/16	3.438	87.31	5-7/16	5.438	138.11
1-15/32	1.469	37.31	3-15/32	3.469	88.11	5-15/32	5.469	138.91
1-1/2	1.5	38.10	3-1/2	3.5	88.90	5-1/2	5.5	139.70
1-17/32	1.531	38.89	3-17/32	3.531	89.69	5-17/32	5.531	140.49
1-9/16	1.563	39.69	3-9/16	3.563	90.49	5-9/16	5.563	141.29
1-19/32	1.594	40.48	3-19/32	3.594	91.28	5-19/32	5.594	142.08
1-5/8	1.625	41.28	3-5/8	3.625	92.08	5-5/8	5.625	142.88
1-21/32	1.656	42.07	3-21/32	3.656	92.87	5-21/32	5.656	143.67
1-11/16	1.688	42.86	3-11/16	3.688	93.66	5-11/16	5.688	144.46
1-23/32	1.719	43.66	3-23/32 3-3/4	3.719 3.75	94.46 95.25	5-23/32 5-3/4	5.719 5.75	145.26 146.05
1-3/4	1.75	44.45 45.24	3-3/4	3.75	95.25	5-3/4	5.75	146.05
1-25/32	1.781	45.24	3-25/32	3.781	96.04	5-25/32	5.781	146.84
1-13/16	1.844	46.83	3-13/16	3.844	97.63	5-27/32	5.844	148.43
1-7/8	1.875	47.62	3-7/8	3,875	98.43	5-7/8	5.875	149.22
1-29/32	1.906	48.42	3-29/32	3,906	99.22	5-29/32	5,906	150.02
1-15/16	1.938	49.21	3-15/16	3.938	100.01	5-15/16	5.938	150.02
1-31/32	1.969	50.01	3-31/32	3.969	100.01	5-31/32	5.969	151.61
2	2.0	50.80	4	4.0	101.60	6	6.0	152.40

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BQ18	90	BQ228	79	BQ2104	72	BQB32	65
BQ19	90	BQ233	69	BQ2110	90	BQB34	65
BQ21	89	BQ234	69	BQ2300	79	BQB35	65
BQ22A	90	BQ251-BK	72	BQ2301	79	BQB36	65
BQ22B	90	BQ251-BL	72	BQ2302	79	BQB37	66
BQ22C	90	BQ251-GD	72	BQ2303	79	BQB38	66
BQ23	89	BQ251-GR	72	BQ2304	79	BQB39	62
BQ26	90	BQ251-PP	72	BQ2305	79	BQB40	62
BQ35	90	BQ251-RD	72	BQ2306	79	BQB41	62
BQ37	89	BQ251-SV	72	BQ2307	79	BQB42	62
BQ65	70	BQ251-YL	72	BQ2308	79	BQB48	66
BQ66	70	BQ255	74	BQ2309	79	BQB49	66
BQ67	70	BQ272	69	BQ2310	79	BQB50	62
BQ68	70	BQ273	69	BQ2311	79	BQB51	66
BQ69	70	BQ274	69	BQ2311	79	BQB52	66
BQ70	70	BQ274	69	BQ2312	79	BQB53	62
BQ71	46,58	BQ276	70	BQ2313	79	BQB54	62
BQ97		BQ277		BQ2335	$\overline{}$	BQB64	_
	70	BQ277	70	BQ2336	79		62
BQ98	70		74	BQ2536 BQ2696-R3	79	BQB65	62
BQ101	71	BQ289	74		90	BQB69	66
BQ160	90	BQ294	74	BQ7003	79	BQB70	66
BQ161	90	BQ296	71	BQ7012	90	BQB71	66
BQ162	90	BQ301	72	BQ7012	90	BQB72	66
BQ163	90	BQ303	72	BQ9150	88	BQB73	66
BQ164	90	BQ303BK	72	BQ9151	88	BQB74	66
BQ165	90	BQ303BL	72	BQ42525	72	BQB75	62
BQ166	90	BQ303RD	72	BQB01	61	BQB77	66
BQ167	90	BQ310	72	BQB04	61	BQB78	66
BQ170	79	BQ311	72	BQB05	61	BQB80	62
BQ177SS	75	BQ312-BK	71	BQB06	68	BQB81	66
BQ200	71	BQ312-GY	71	BQB07	61	BQB83	62
BQ201	71	BQ330	78	BQB08	65	BQB85	67
BQ202	71	BQ331	78	BQB09	65	BQB86	62
BQ203	69	BQ611	72	BQB10	61	BQB87	62
BQ204	71	BQ611B	72	BQB11	61	BQB88	62
BQ206	89	BQ728A	88	BQB12	65	BQB89	63
BQ206H	89	BQ728B	88	BQB14	61	BQB90	63
BQ206HS	89	BQ801	79	BQB15	61	BQB91	63
BQ206S	89	BQ1014	89	BQB16	65	BQB92	67
BQ207	89	BQ1020	90	BQB17	65	BQB93	67
BQ207H	89	BQ1021A	89	BQB18	65	BQB94	63
BQ208	89	BQ1022	90	BQB19	65	BQB98	67
BQ208H	89	BQ1026	79	BQB20	61	BQB99	67
BQ210	69	BQ1150	90	BQB21	65	BQB100	67
BQ211	69	BQ1415	90	BQB22	65	BQB101	67
BQ212	69	BQ2001W	89	BQB23	65	BQB105	63
BQ213	69	BQ2008	89	BQB24	61	BQB109	67
BQ215	69	BQ2010	89	BQB25	61	BQB110	67
BQ216	69	BQ2033	90	BQB26	61	BQB111	63
BQ217	69	BQ2090	79	BQB27	61	BQB112	63
BQ218	69	BQ2091	79	BQB29	61	BQB115	63

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BQB120	63	HF18	3	HF145	3	HFB46	18
BQB140	67	HF26	- 8	HF300	6	HFB47	9
BQB141	67	HF27	- 8	HF301	6	HFB47SS	75
BQB151	63	HF28	3	HF310	4	HFB48	17
BQB152	63	HF29	3	HF311	4	HFB49	18
BQB160	63	HF30	7	HF403	6	HFB50	9
BQB162	67	HF30SS	73	HF404	6	HFB51	22
BQB163	67	HF31	7	HF07SS	73	HFB52	29
BQB166	63	HF31SS	73	HF09SS	73	HFB53	18
BQB168	67	HF33	2,42	HF09W	5	HFB54	17
BQB169	67	HF33SS	73,75	HF09WSS	73	HFB55	17
BQB171	64	HF34	3	HFB01	9	HFB56	19
BQB172	68	HF35	7	HFB02	9	HFB57	19
BQB174	68	HF37	6	HFB03	9	HFB58	21
BQB185	64	HF38	6	HFB05	9	HFB59	17
BQB186	64	HF39	2	HFB07	18	HFB60	17
BQB195	68	HF43SS	75	HFB08	18	HFB61	21
BQB221	68	HF45SS	75	HFB09	9	HFB62	19
BQB221	68	HF46SS	75	HFB09SS	73	HFB66	17
BQB222	68	HF52	3	HFB10	73	HFB67	_
BQB223		HF53	4	HFB11		HFB68	16
	68				18		24
BQB225	68	HF54	2	HFB12	18	HFB69	24
BQB312	64	HF61	5	HFB13	18	HFB72	17
BQB313	64	HF62	7	HFB14	18	HFB73	10
BQB315	64	HF63	2	HFB15	9	HFB74	29
BQB316	64	HF71	6	HFB16	18	HFB75	11
BQB415	64	HF72	6	HFB17	22	HFB76	24
HF01	8	HF73	6	HFB18	22	HFB77	24
HF02	8	HF74	6	HFB19	9	HFB78	28
HF03	8	HF77	4	HFB21	22	HFB79	28
HF04	2	HF81	2	HFB22	23	HFB80	21
HF05	8	HF82	4	HFB23	23	HFB81	19
HF06	2	HF83	7	HFB24	11	HFB82	24
HF07	2	HF84	2	HFB27	9	HFB83	24
HF08	3	HF89	2	HFB28	9	HFB84	17
HF09	5	HF92	3	HFB29	- 11	HFB85	19
HF10	5	HF94	3	HFB30	11	HFB86	29
HF10SS	73	HF97	3	HFB31	- 11	HFB87	29
HF11	5	HF98	3	HFB32	11	HFB90	21
HF11SS	73	HF99	4	HFB33	- 11	HFB91	19
HF12	5	HF100	3	HFB34	9	HFB92	- 11
HF1255	73	HF101	3	HFB34SS	73	HFB93	12
HF13	5	HF102	5	HFB35	9	HFB94	28
HF13SS	73	HF110	5	HFB36	9	HFB95	28
HF14	5	HF111	5	HFB37	9	HFB98	21
HF14SS	73	HF114	7	HFB37SS	73	HFB100	19
HF15	2	HF115	4	HFB38	20	HFB101	20
HF15SS	73	HF116	4	HFB39	21	HFB102	24
HF16	2	HF117	4	HFB40	18	HFB103	24
HF16B	2	HF119	3	HFB41	17	HFB105	12
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