

DELMICOR

Installation & Set-Up Instructions

A4

HAYES

PERFORMANCE SYSTEMS



HAYES



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HAYES PERFORMANCE SYSTEMS WARRANTY

Limited Warranty:

HAYES warrants its products to be free from defects in materials or workmanship under normal intended use for a period of one year (two years in European Union countries) from the date of purchase, subject to normal wear and tear. Unless otherwise prohibited by law, any such defective products will be repaired or replaced at the option of HAYES when received with proof of purchase, freight prepaid. This warranty does not cover breakage, bending, or damage that may result from crashes or falls. This warranty does not cover any defects or damage caused by alterations or modifications of HAYES products or by normal wear, accidents, improper maintenance, damages caused by the use of HAYES products with parts of different manufacturers, improper use or abuse of the product, application or uses other than those set forth in the HAYES instruction manual or failure to follow the instructions contained in the applicable HAYES instruction manual. Instruction manuals can be found on-line at www.hayescomponents.com. Any modifications made by the BUYER or any subsequent user will render the warranty null and void. This warranty does not apply when the serial number or production code has been deliberately altered, defaced or removed from the product. The cost of normal maintenance or replacement of service items, which are not defective, shall be the BUYER's responsibility. If permitted by local law, this warranty is expressly in lieu of all other warranties (except as to title), express or implied, and in particular and without limitation HAYES disclaims the implied warranties of merchantability or fitness for purpose. If for any reason warranty work is necessary, return the component to the place of purchase or contact your dealer or local HAYES distributor. In the USA, contact HAYES for a return authorization number (RA#) at (888) 686-3472. At that time, instructions for repair, return, or replacement shall be given. Customers in countries other than the USA should contact their dealer or local HAYES distributor.

Limitation of Liability.

Unless required by mandatory law, HAYES shall not be liable for any incidental, indirect, special or consequential damages.

This warranty does not apply to normal wear and tear. Wear and tear parts are subject to damage through normal use, failure to service according to recommendations or riding in conditions other than recommended. The cost of normal maintenance or replacement of service items, which are not defective, shall be paid for by the original purchaser. Wear and tear parts that will not be replaced under warranty include but are not limited to the following:

Bushings	Dust Seals	Stripped or Worn Bolts
Rear Shock	Air Seals and/or O-rings	Remote Lockout Cable
Mount Hardware	Bearings	Gloves
Handlebar grips	Upper Stanchion Tubes	Lower Stanchion Tubes(Dorado)
Tubeless Valves	Tubeless Tape	Pads
Rotors		

INTRODUCTION

This manual is intended to provide the information necessary for installation, set-up, normal maintenance and service of the Hayes Dominion A4 disc brake system. We highly recommend installation be performed by a qualified mechanic. These instructions can be downloaded from the Hayes Disc Brake website at www.hayesdiscbrake.com

⚠ WARNING ⚠

We highly recommend that service to this brake be performed by a certified bicycle mechanic. Failure to follow instructions presented in this manual could lead to serious injury or death. Any questions about the servicing of this brake or the manual itself should be directed to Hayes Customer Support at:

Hayes Bicycle USA	5800 W Donges Bay Road Mequon WI 53092
	Phone: 888.686.3472
	Email: techsupport@hayesbicycle.com

Hayes Bicycle Europe	Dirnismaning 20 a 85748 Garching (b. Munich) Germany
	Phone: +49 89 203237450
	Email: techsupportEU@hayesbicycle.com

Hayes Bicycle Asia	16F, No. 37, Sec. 3 Mincyuan E. Rd. Zhongshan District Taipei City 10476 Taiwan ROC
	Phone: 886-2-2518-1108

SAFETY INFORMATION

As a serious rider you are well aware of the need to practice safety in all aspects of the sport. This includes service and maintenance practices as well as riding practices. Before each ride, always check your brakes for proper function and the brake pads for wear. When you ride, always wear a helmet.

⚠️ WARNING ⚠️

When you need to install any of the disc brake components, that installation work should be done by a qualified technician with the proper tools. Improper installation could cause severe or fatal injuries.

⚠️ WARNING ⚠️

This brake has been designed for use on a single person mountain bike. The use on any other vehicle or device will void the warranty and can cause serious injury.

⚠️ WARNING ⚠️

With use, disc brake components may become very hot. Always allow components to cool before attempting to service your bike.

⚠️ WARNING ⚠️

When following any of the procedures below, be sure to keep your hands and fingers from getting caught in the disc. Failure to do so could result in injury.

⚠️ WARNING ⚠️

Do not adjust the caliper while the wheel is spinning.

⚠️ WARNING ⚠️

Do not adjust the caliper while the caliper is hot.

⚠️ WARNING ⚠️

If your bike is involved in a fall or crash it is recommended your brakes are checked by a qualified mechanic before riding to ensure they are functioning properly. The following checks should be performed: Check that all components are securely mounted to the handlebar, frame, fork, or wheel; check for proper pad installation and retention; check that the brake builds and holds pressure; check hose and fittings for kinks or leaks; check master cylinder body and caliper for damage. Always have a qualified bike mechanic check your brakes if you suspect damage.

⚠️ WARNING ⚠️

The Hayes Dominion A4 brake system uses DOT 5.1 fluid. Any spilled on the brake assembly, bike or otherwise should be cleaned up with isopropyl alcohol. The brake rotor and pads should only be cleaned with isopropyl alcohol (not disc brake cleaner).

TABLE OF CONTENTS

SECTION	PAGE NUMBER
Tools And Materials	7
Installing The Master Cylinder	8-10
Mounting The Disc To The Hub	11
Mounting Caliper	12-14
Maintenance & Troubleshooting	15-16
Exploded Views	17-18

TOOLS AND MATERIALS

Below is a list of tools and materials necessary for installing Dominion A4 brakes.

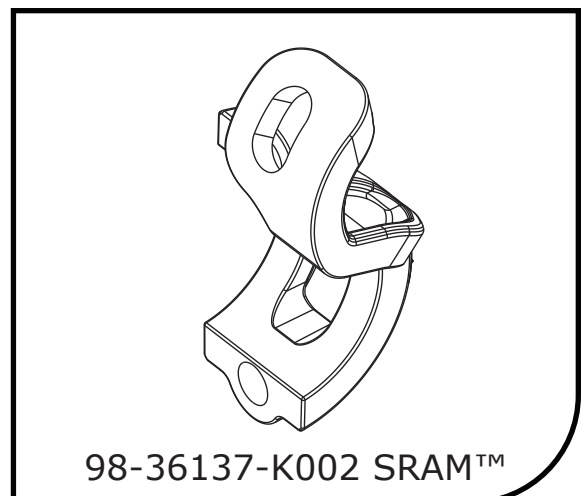
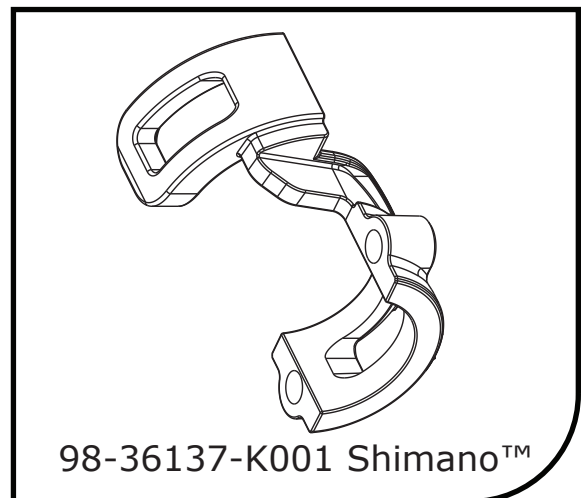
- Safety Glasses
- Nitrile Gloves
- Isopropyl Alcohol
- Lint-Free Rags
- 2mm Hex Wrench
- 4mm Hex Wrench
- 5mm Hex Wrench
- T25 Torx Wrench
- Torque Wrench
- Feel 'R Gauge (Hayes Part Number 98-23972)

INSTALLING THE MASTER CYLINDER

- 1 Remove the two mounting bolts and clamp from the master cylinder assembly.



*Optional, install either Shimano™ or SRAM™ PeaceMaker clamp. Torque bolts to 30 ± 5 in lbs (3.39 ± 0.56 N m).



INSTALLING THE MASTER CYLINDER

- 2 Position master cylinder on your handlebars in desired location. Place handlebar clamp onto master cylinder with the arrows pointing up and thread the clamp bolts into the master cylinder. Do not tighten the bolts down yet.



- 3 Once you have set the master cylinder in the final desired position on your handlebars, tighten down the top mount bolt. Torque to 30 ± 5 in lbs (3.39 ± 0.56 N m). Next tighten down the other bolt to a torque of 30 ± 5 in-lb (3.39 ± 0.56 N m).



- 4 To adjust lever reach, use the dial to turn the lever reach adjust screw. Turning it in the "-" direction will move the lever in. Turning it in the "+" direction will move the lever out. Do not force the screw beyond its limits.



INSTALLING THE MASTER CYLINDER

- 5 Adjust pad contact by turning adjuster screw in the "+" direction to add stroke or in the "-" direction to reduce stroke.

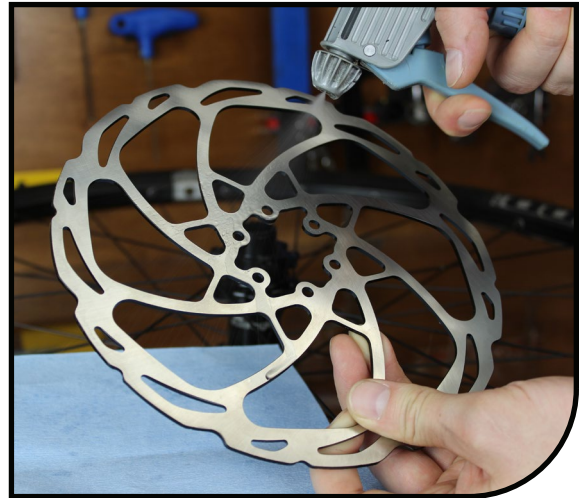


MOUNTING THE DISC THE HUB

- 1 Clean the disc and hub mounting surface with isopropyl alcohol.

NOTICE

Do not use disc brake cleaners.



- 2 Place the disc on the hub mounting surface. Be sure that the arrow on the disc is pointing in the same direction of the forward wheel rotation.



- 3 Using a T25 Torx driver, install, tighten, and torque the disc screws to 50 ± 5 in lbs (5.65 ± 0.56 N m), in a star pattern sequence.

CAUTION

The disc should be periodically inspected for wear and damage. The minimum disc thickness is 1.7 mm (0.067 in).



MOUNTING CALIPER (CROSSHAIR EQUIPPED CALIPERS)

- 1 Verify the 2mm crosshair adjuster screws are backed out of the mount slots in the caliper feet.



- 2 Place the caliper feet onto the mounting surface and thread the mount bolts (with washers) into the mount leaving the caliper loose.



- 3 Squeeze the lever blade a minimum of 5 times to seat the caliper pistons.



MOUNTING CALIPER (CROSSHAIR EQUIPPED CALIPERS)

- 4** Adjust the caliper on the mount so the outer pad (closest to you) is contacting the disc.



- 5** Snug the mount bolts using the 5mm hex tool while keeping the outer pad against the disc.



- 6** Using the 2mm hex tool, turn the adjuster screws clockwise until they contact the mount bolts.



MOUNTING CALIPER (CROSSHAIR EQUIPPED CALIPERS)

- 7 Turn each adjuster screw 1/4 turn clockwise then rotate the wheel and listen for pad drag. Repeat until the pads clear the disc, looking for a gap.



- 8 Torque the lower mount bolt (A) to 80 ± 5 in lbs (9.0 ± 0.5 N m). (the upper adjuster screw keeps the caliper from rotating out of alignment). Torque the upper mount bolt (B) to 80 ± 5 in lbs (9.0 ± 0.5 N m).



MAINTENANCE & TROUBLESHOOTING

Brake Pad Change

Due to wear, contamination, or damage, the brake pads will, on occasion, need to be replaced. The following procedure is to be followed for a change of brake pads:

- 1** Removing the pads.
 - Remove the wheel.
 - Remove the pad retaining pin from the caliper using 3mm hex wrench.
 - Remove pads and sandwich spring through the window on the bottom of the caliper.
 - Using the Hayes bleed block or a boxed end of a 10mm wrench, push the caliper pistons back in their bores until they are flush with the edge of the caliper. This will give you more room to insert the new pads.

- 2** Installing the pads.
 - Assemble the pads and sandwich spring (shown below).
 - Compress the pads together on the sandwich spring and insert through the bottom of the caliper.
 - Insert pad retaining pin through the hole in the caliper and through the tab on both pads and sandwich spring.
 - Torque the pad pin to 30 ± 3 in lbs (3.39 ± 0.34 N m) using a 3mm hex wrench.
 - Install the wheel.

- 3** Burnish brake pads.

Performing the proper burnish process is essential to ensure that your new brakes have consistent, high power braking in all riding conditions. Hard braking before proper burnish can result in a reduction in brake performance. A proper burnish, or break in process of 50+ stops under 15 mph or 24 Km/h is required in order to reach full braking power.



MAINTENANCE & TROUBLESHOOTING

Piston(s) Pumped Out

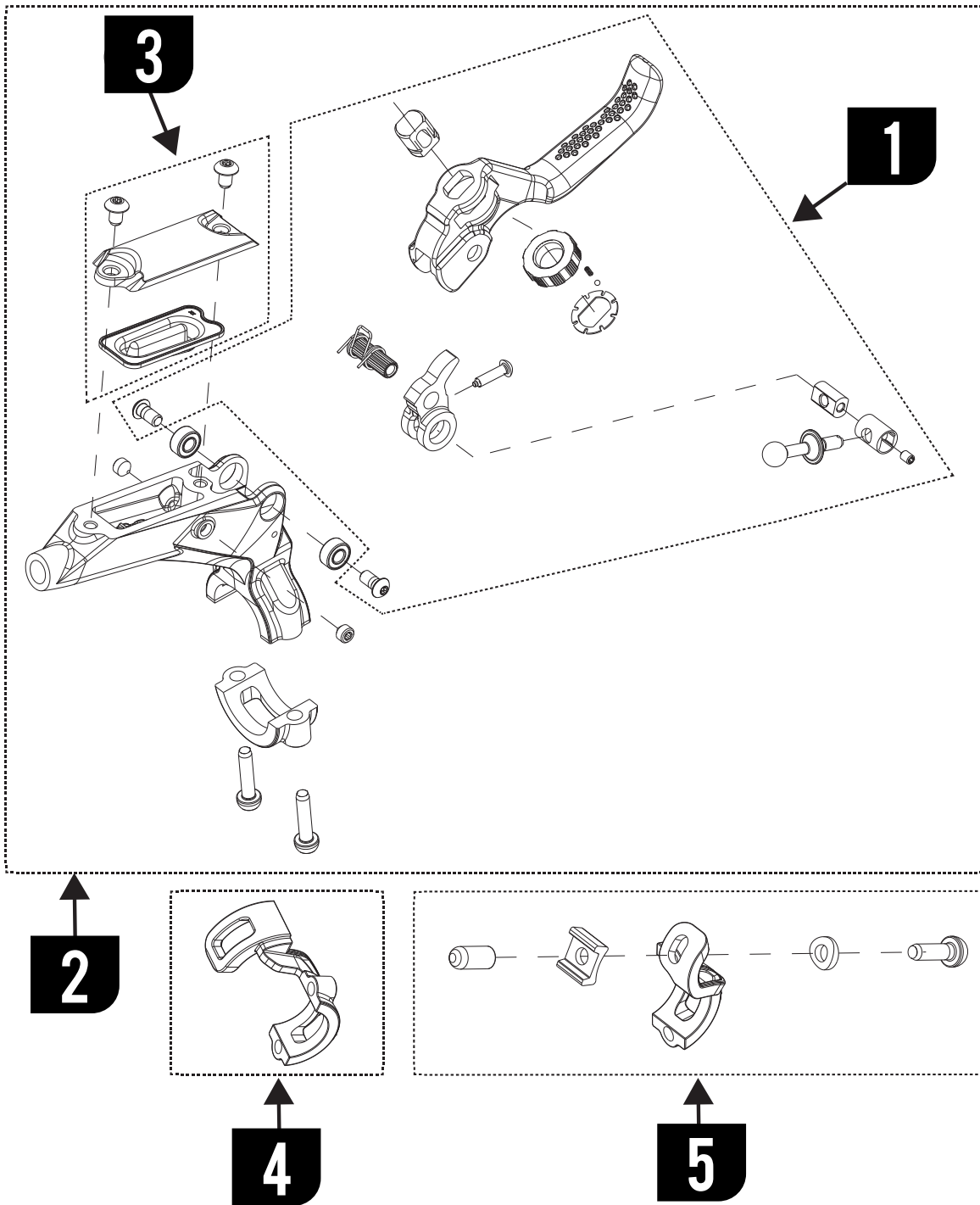
If the brake lever is stroked without the disc between the pads (this is possible when brake pads are being changed), the self-adjusting feature will allow the pads to push out. The caliper pistons will be pumped out of their bore. This can cause excessive drag on the disc when the wheel and disc are reinstalled, or even make it impossible to install the wheel and disc. To fix this problem:

- 1** Remove the brake pads from the caliper if they are not already removed.
- 2** With the pads removed, push back the pistons until they are flush with the edge of the caliper using the Hayes bleed block or boxed end of a 10mm wrench. Hint: If the pads are pushed together tight, slide the travel spacer, or Hayes Feel `R Gauge between the pads and enlarge the gap until it is large enough to pull the pads out.
- 3** When the pistons are back into their bores, replace the pads.

⚠ WARNING ⚠

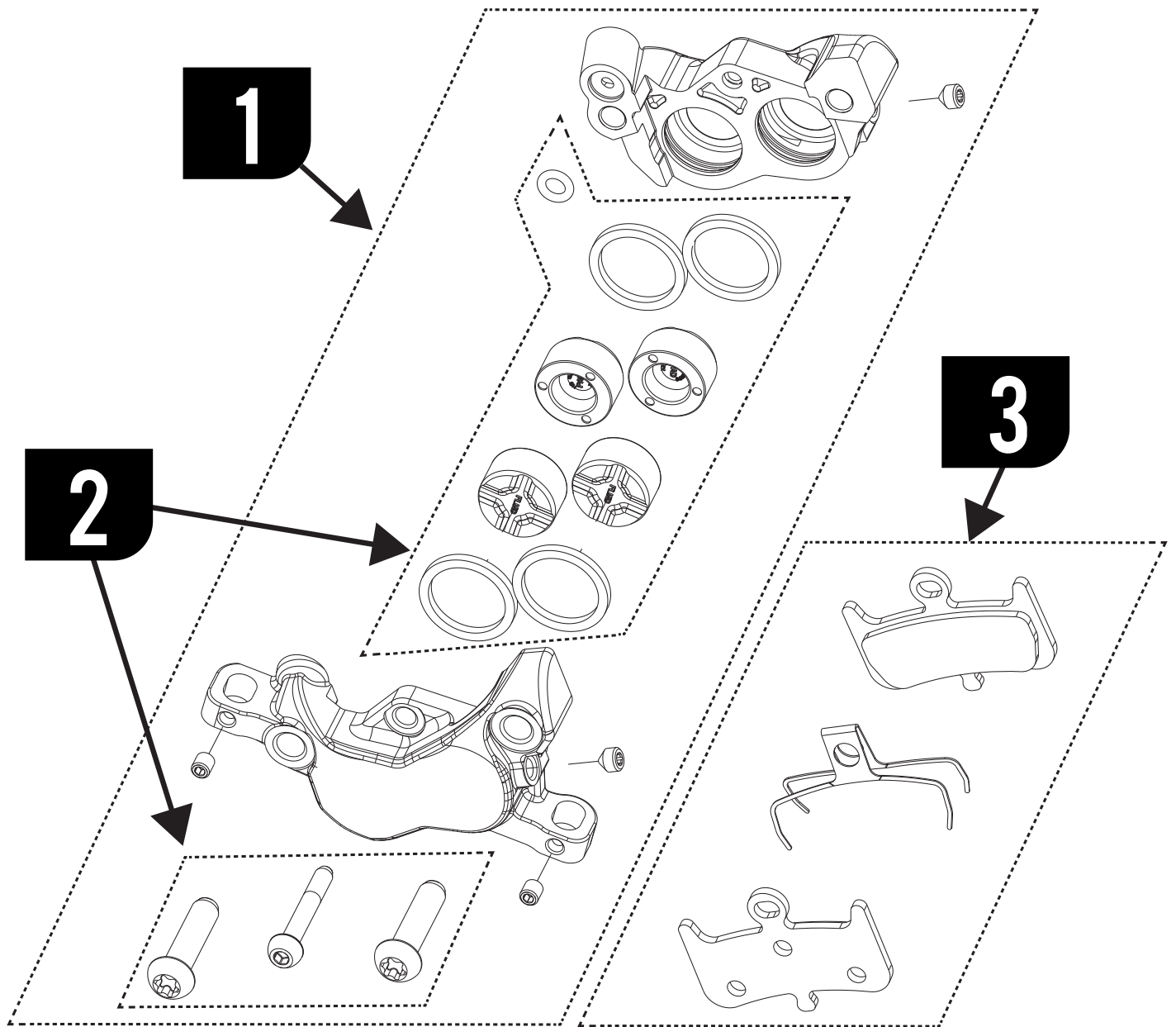
The Hayes Dominion A4 brake system uses DOT 5.1 fluid. Any spilled on the brake assembly, bike or otherwise should be cleaned up with isopropyl alcohol. The brake rotor and pads should only be cleaned with isopropyl alcohol (not disc brake cleaner). If DOT 5.1 fluid touches bare skin wash immediately with water.

MASTER CYLINDER EXPLODED VIEW



ITEM	KIT NUMBER	KIT DESCRIPTION
1	98-36117-K001	LEVER KIT ASSEMBLY, BRONZE
2	98-36118-K001	MASTER CYLINDER ASSEMBLY, BRONZE
3	98-36136-K001	RESERVOIR CAP, BLACK
4	98-36137-K001	SHIFT CLAMP, SHIMANO, BLACK
5	98-36137-K002	SHIFT CLAMP, SRAM, BLACK

CALIPER EXPLODED VIEW



ITEM	KIT NUMBER	KIT DESCRIPTION
1	98-36139-K001	COMPLETE CALIPER, BRONZE
2	98-36140-K001	CALIPER REBUILD KIT
3	98-36141-K001	T100 BRAKE PAD KIT
	98-36141-K002	T106 BRAKE PAD KIT

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