



V-M4-SM REPAIR/MAINTENANCE MANUAL

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CAUTIONS AND WARNINGS

Read, understand and follow all warnings, training materials, and safety instructions for the M4.

CAUTION: CLASS 3R LASER, PRODUCT, LASER RADIATION. DO NOT stare into beam or view directly with optical instruments.

WARNING: M4 Standard Magazines are for training purposes only.

The repair/maintenance procedures described below are to be performed by trained personnel. Any procedures not covered in the repair/maintenance user manual are considered Factory Maintenance & Repair and it is required that the item be sent to VirTra for repair.

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I. MAGAZINE COMPONENTS

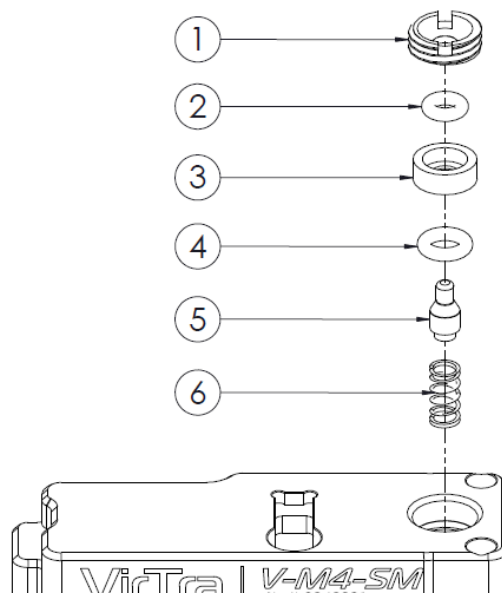


Figure 1: Double Seal Assembly

ITEM NO.	DESCRIPTION
1	Double Seal Cap
2	Top O-Ring, 005
3	Double Seal Spacer
4	Bottom O-ring, 007
5	Double Seal Valve
6	Compression spring

Table 1: Double Seal Components

II. INSPECTION/MAINTENANCE GUIDELINES

A. GENERAL CARE

The CO2 kits may accelerate firing pin wear. As a result, it is recommended that specific (non-duty) firearms and/or firing pins be dedicated for use with the CO2 recoil kits.

All magazines should be depressurized at the end of the day to increase the lifespan of VirTra products. To depressurize a VirTra magazine, first insert the depressurization tool until all CO2 has been expelled. Allow magazine to rest for at least 30 seconds, then insert the tool again to be sure all CO2 has been exhausted.

CO2 recoil kits are capable of expending at least 2 full magazines in less than 60 seconds. Doing so will reduce the temperature of the weapon and cause a reduction in number of shots. If this is experienced, wait a few minutes between magazines.

B. APPROVED LUBRICANTS

Lubricate the weapon following normal manufacturer instructions using approved lubricants.

Approved Lubricants Include:

- Lucas Oil™ Extreme Duty Gun Oil
- Slip 2000 EWL™

See repair/maintenance manual for more specific instructions.

III. TROUBLESHOOTING

A. MAGAZINE LEAKS

New magazines may leak at the double seal top cap the first few times they are filled up. If this should happen, insert the magazine into a M4 weapon that contains a VirTra recoil kit. Fire the weapon in a safe direction a few times and remove the magazine from the weapon. If this leak persists, repeating this process of test firing the weapon may help eliminate the leaking. This can be repeated 2 to 3 times.

If the magazine continues to leak, the seals may need to be lubricated using the following procedures.

Warning: Fully depressurize the magazine before proceeding. Refer to 'General Care' for depressurization procedures.

- Remove the double seal cap (Figure 1, #1) using a thick blade screwdriver.
- Use a small pick or screwdriver to remove the 005 O-ring (Figure 1, #2) and double seal spacer (Figure 1, #3). Inspect the O-ring and replace if any damage/wear is present.
- Use a small pick or screwdriver to remove the 007 O-ring (Figure 1, #4). Inspect the O-ring and replace if any damage/wear is present.
- Invert the magazine and allow the double seal valve (Figure 1, #5) and compression spring (Figure 1, #6) to drop free. Inspect the spring and replace if any damage/wear is present.
- Place compression spring onto the double seal valve and install in the cylinder.
- Apply a drop of approved lubricant to the 007 O-ring and place into the cylinder.
- Apply a drop of approved lubricant to the 005 O-ring, fit into the cup of the double seal spacer, then place into the magazine with O-ring facing up.
- Apply Loctite onto the double seal cap according to VirTra Loctite instructions and install using a thick blade screwdriver. Note: Do not overtighten.

If the leak coming from the double seal of the magazine will not stop after going through the above procedures, or if the leak is coming from a different area such as the bottom of the magazine, fully depressurize the magazine and contact the VirTra Service Department for further assistance.

If a leak is experienced when the magazine is inserted into the weapon, and the leak is not coming from the magazine, or if it is determined that a leak is occurring within the recoil kit, follow the steps provided in the recoil kit repair and maintenance manual. This can be found in the files on the instructor's station or in the V-RC Portal.

IV. CONTACT VIRTRA

For any questions or additional help with any part of this manual, please contact VirTra via the information below.

VirTra Service Department

VirTra

295 E. Corporate Pl
Chandler, AZ 85225 USA

Office: 1.480.508.5977
Email: service@virtra.com

