

USER MANUAL

AO-42RC

AO-38RL

AO-38RC

AOY-36RC

AO-42AR

DNM Air Shocks

Congratulations! You have purchased the best suspension shock absorber in the Mountain Bike Technology. DNM shocks are made of lightweight, high strength materials and they are designed to balance high performance, easy to use and easy to maintain.

This manual contains information about safe installation, operation and maintenance of your purchased item, We urge you to read it carefully to be more familiarized with its contents and follow our recommendations and references to help you make your mountain bike experience enjoyable and trouble-free.

Diagram Consumer Safety /  : warning  : Attention

INSTALLATION OF A NEW SHOCK

The first and most important factor when upgrading your rear shock is to make sure that you have the correct unit for the application.

To put it simply you need to determine the main type of riding that you will be doing, for example, Downhill, Cross Country, Free Riding or Road.

Upgrading your shock can change many aspects of your bikes handling, including the steering and also the way the bike behaves in tough terrain.

Choosing the right shock is crucial. Be sure to consider the type of riding you will be doing. It would be pointless to put a light weight air shock on a downhill bike, just as it would be unsuitable to put a long travel shock on a light weight dual suspension bike.

1. Establish the length of the shock you need by measuring from mounting eyelet to eyelet, this requires accuracy so use a set of calipers or a metal ruler. The distance from the center of the bolt at the head of the shock to the center of the other bolt at the base of the shock is the distance you need to find out.
2. You also need to know the distance for the width of the aluminum sleeves at either end of the shock which passes through the bushings and connect the shock to the frame and swing arm. This requires the use of the caliper, you measure from the inside of the mount on both sides. The gap where the shock mounts should be the same as the aluminum sleeve. If your bike has a different set up you may need to consult with a good bike shop.
3. Remember if you are seeking to extend the travel of your bike, make sure that you have sufficient clearance to accommodate the full travel of the rear swing arm. If you are going to use a shock which has an external reservoir (Piggy back chamber), Please make sure that it will be suitable for your frame, move smoothly. It won't cause any damage or interruption of your frame or seat posts as well.
4. Once you know the correct shock length and you are confident that the bushing gaps are also correct, the fitting of the new shock is a relatively simple exercise. Remove your old shock absorber and clean the inside surfaces of the frame and swing arm, remove any dirt and make sure that the surfaces are clean.
5. Establish which way you are going to position the shock take into consideration access to the adjusters. Position the shock in the mounting area using the appropriate tools usually a 5mm Allen key and a 10mm open ended spanner, depending on the type of fastener in use on your existing mount the sizes may vary.

6. The tightening process requires only a medium amount of pressure, as the aluminum spacers are a tolerance fit. It is good to use Nylock nuts and some Loc-tite fastening solution. Once the shock is fastened gently sit on the bike and progressively apply more pressure easing the bike through its travel. Providing there are no strange noises coming from the shock area, you can be fairly confident the installation process has been a success.
7. The final stage of the installation involves fine tuning, ride height can be adjusted by using the collar on the main shock body to compress the spring. The rebound adjuster to control how fast the shock kicks back and the compression damper to fine tune the stroke. You will find that as these adjustments are variable just like where you ride they will be something you change periodically.
8. So there you have it! If you have successfully got to this point the last thing you need to do is to put on your helmet and go for a ride!

SHOCK INFORMATION

1. Compressing Damping
The resistance felt when compress the shock
2. Rebound Damping
The force needed to compress the spring
3. Preload
The amount of static force placed on the spring
4. Spring Rate
The force needed to compress the spring
5. Shock Sag
The amount the shock compresses when the rider is sitting on the bike in normal riding position. This takes about 15%~25% of the shock travel for cross-country and about 25% for Downhill applications
6. Lock-Out
A unique DNM device allows the rider to choose different riding styles. Lock the movement of the shock, reduce the suspension travel of your bike, and make it easy to climb hills, fast acceleration, suitable for Downhill applications depending on the track conditions. Available for both remote lock-out and manual lock out operating systems.
7. Remote Lock-Out
Allows you to operate your Lock-Out system from your bikes handle bars via thump shifter.

SAFETY INFORMATION

Before riding your bike, make sure to wear a safety helmet, protective clothing and eye protection and do not ride beyond your limits. Always maintain your bike & suspension.

Never modify your shock or your bike frame. Any modifications can result to a broken or malfunctioning shock, may lead to serious injury or the premature termination of life.

NEVER disassemble or service your shock if it is compressed or has not returned to its original length without any load on the shock.

If your shock ever makes unusual noises or ever loses oil, DO NOT attempt to disassemble any part of the shock. Please return your shock to a DNM authorized dealer for service. Use ONLY genuine DNM parts for shock.

*** Do not use locked-out system during jump riding, it is considered very dangerous.

! SAG Set-up Instructions

To maximum performance of DNM shock in any different situation, it is necessary to adjust the SAG. The main reason of sag difference is all about the weight (bike or own weight). When you set up the sag, please sit on the saddle properly. Make sure all your weight is on the bike. And then observe the ring position which is on the shock travel body after getting off bike. We suggest that displacement percentage range is 15~25% of full travel. The sag displacement will be decreased by adding air pressure. On the contrary, displacement will be increased. Adjust air pressure to match your sag satisfied.

! Air Shocks

Air Shocks are high quality Air Hydraulic shocks consisted of hard-anodized shaft and black shock body. Adjustment: Compression, Rebound, Negative Air Spring and Lock-Out. The Compression air valve is located near the rebound adjuster and the blue lock-out knob. Air pressure is filled with 150psi during production. Increasing the air pressure will make the shock harder while decreasing the air pressure will make the shock softer. Negative air pressure is filled with 50psi during production and should be adjusted between 50psi~80psi. Rebound adjuster is the red circular knob between the main air valve adjuster and the blue lock-out knob. Turning the red circular rebound knob you can control the speed of your shock slower or faster. Lock-out adjustment is the blue knob which locks the movement of the shock and reduces the rear suspension travel of your bike by manually pulling the lock-out knob. Press the knob into turn the lock-out feature on. It is necessary to adjust the SAG to get the best performance from your DNM shock.

Please refer to Shock Specification Table and Set-Up Instructions.

! Service Maintenance

1. Do not disassemble the shock yourself, please contact your nearest DNM authorized service center for shock malfunctions or improper operation.
Attention: **Air Shocks** internal air is adopted nitrogen. Please do not disassemble by yourself. We will not be responsible if the client who disassemble the shock by self.
2. The DNM shock has been filled with high-pressure air (150psi) during production. Maximum air pressure must be limited within 250psi.
Air pressure in negative air room is 50 psi, maximum is 80 psi
3. After about 5000km of riding, take out the mount bearing sleeves from both sides to clean, grease and replace if necessary.
4. After a muddy riding, please clean the main shaft, dust seal and bumper rubber to protect the shock and maintain its life span. Wash your shock only with soap and water. Never use high-pressure washers.
5. Check and adjust to your desire level of the main air spring pressure and negative air spring pressure before riding.
6. Please note if you need to adjust your shock harder or softer, always adjust the

Weight (lbs)	Main air chamber (psi)	Negative air chamber
120	90	50
140	105	50
160	120	55
180	135	65
200	150	70
220	165	75

* The above numbers are for reference only. Air pressure depends on rider's weight and frame specification.

To get more information, please browse DNM website: www.dnmshock.com

! Service Maintenance

TERMS AND CONDITIONS / LIMITED WARRANTY

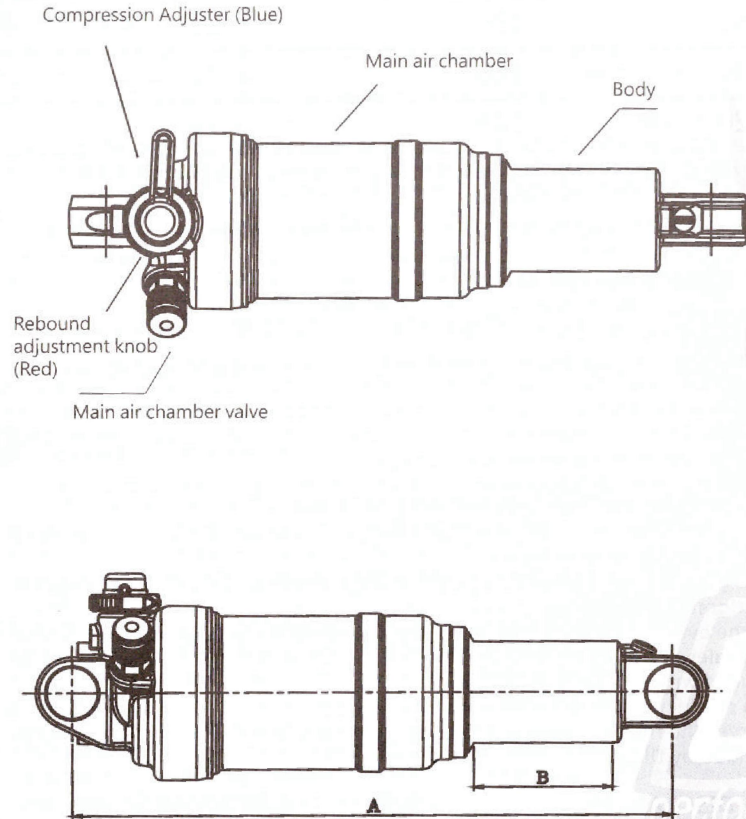
- * DNM warrants its fork or shock for the period of one year from the date of purchase to the original purchaser. It does not extend to third parties.
- * Warranty states that forks are free of defects in materials and workmanship. All forks must be returned to DNM for complete inspection, if they are found to be defective DNM will replace or repair the forks. DNM shall not be liable for any indirect, special or consequential damages.
- * Warranty does not apply to any product that has been installed improperly or adjusted using methods not outlined in this manual.
- * Warranty does not cover forks that have been misused, or forks that are missing or have altered serial numbers.
- * The forks are not warranted against damage in appearance or normal wear & deterioration occasioned by the use of the bicycle.
- * In the event of a defect covered by this warranty, the purchaser should contact the dealer or the DNM service center. A copy of the proof of purchase must be included with all warranty claims.
- * If a product needs to be replaced and is discontinued or is not available, DNM reserves the right to replace the product with one of equal value. No refund will be provided by DNM.

! DISCLAIMER

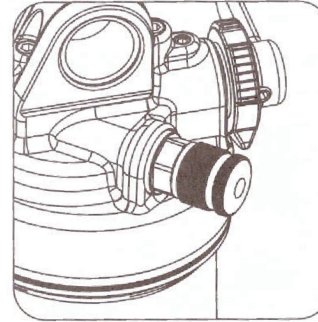
DNM is not responsible for any damages to you or others arising from riding, transporting or any other use of your shock of bicycle. In case your shock breaks or malfunctions. DNM shall have no liability or obligation beyond the repair or replacement of your shock, pursuant to the terms and conditions outlined in the Service and Warranty of this manual.


DNM Air Shock AO-42RC Product Description

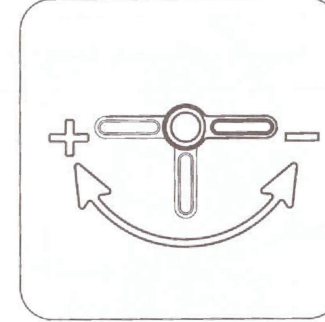
Diagram Consumer Safety /  : Warning  : Attention




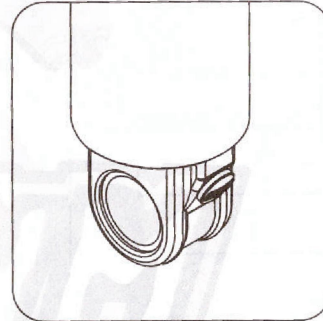
 **Main air chamber**
Maximum pressure 250psi




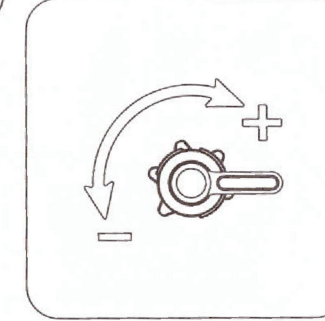
 **Compression Adjuster**
+ direction rotation, lock-out
- direction rotation, open up



 **Negative air chamber**
Recommend pressure 50~80psi



 **Rebound adjustment knob**
+ direction rotation, increase damper (slow)
- direction rotation, decrease damper (fast)

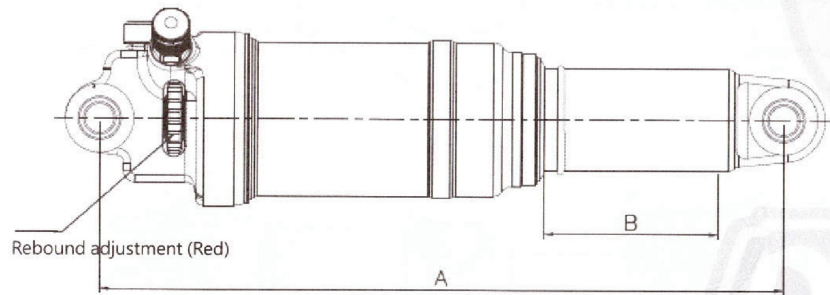
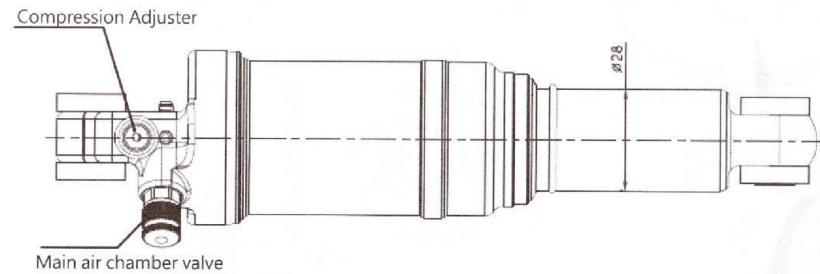


Specification

A. Total Length	B. Route
165±2	38±2
190±2	48±2
200±2	53±2

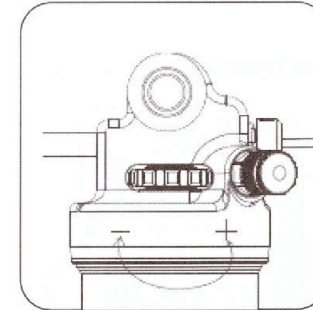
DNM Air Shock AO-38RL Product Description

Diagram Consumer Safety /  : Warning  : Attention

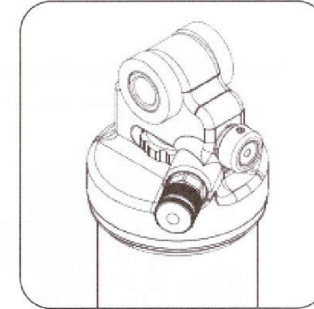



Specification	
A. Total Length	B. Route
165±2	35±2
190±2	50±2
200±2	53±2
210±2	53±2

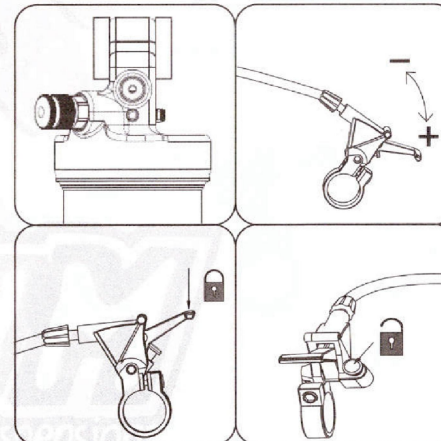
 **Rebound adjustment knob**
 + direction rotation, increase damper (slow)
 - direction rotation, decrease damper (fast)



 **Main air chamber**
 Supply air pressure according to pressure meter



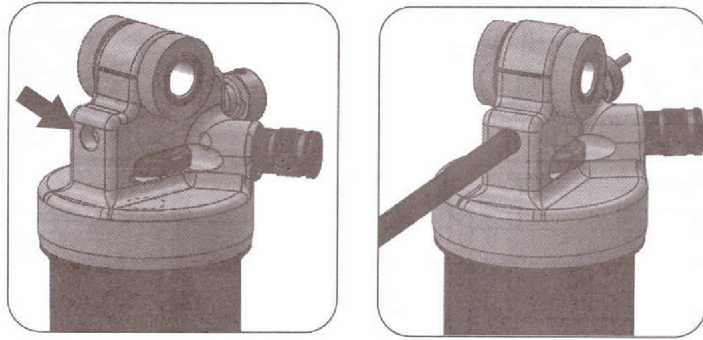
 **Compression Adjuster**
 + direction rotation, lock-out
 - direction rotation, open up



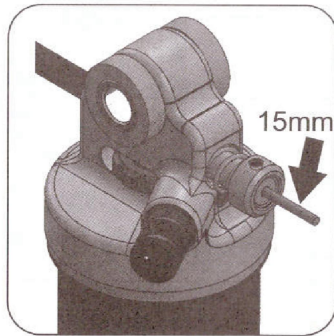
Installation Instruction for remote control cable is in next page

Installation Instruction for remote control cable for AO-38RL

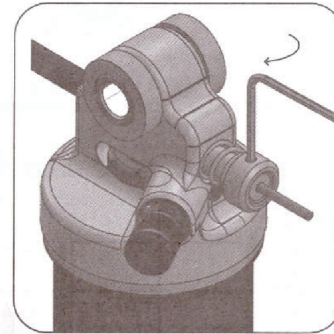
1. Use the steel cable through the center hole



2. Extended about 15mm when through the hole



3. Use the hex wrench to turn clockwise direction and tighten

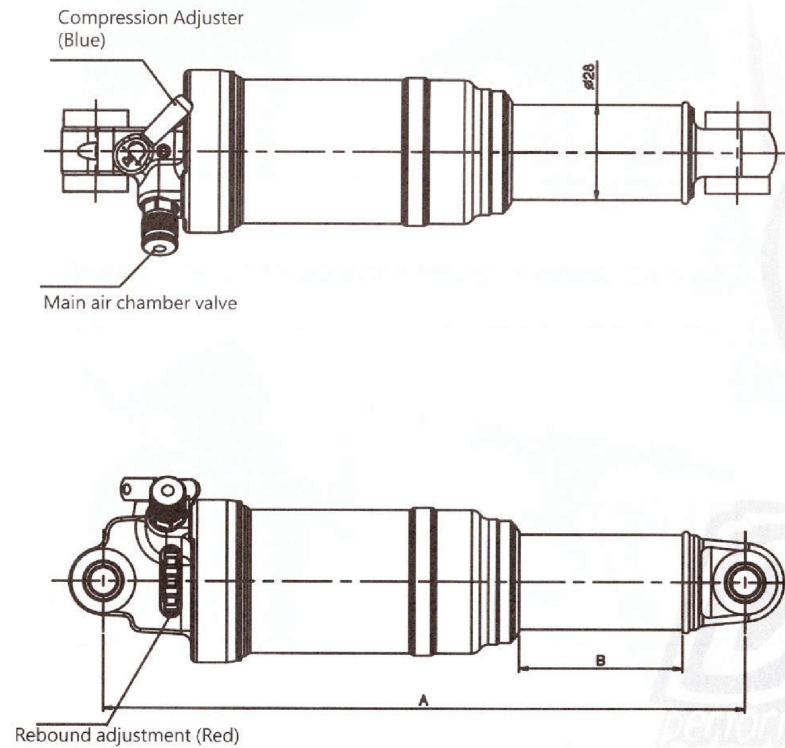


4. Use the hex wrench to turn clockwise direction and tighten

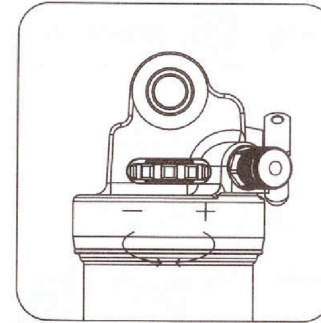



DNM Air Shock AO-38RC Product Description

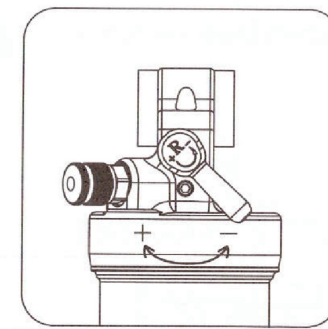
Diagram Consumer Safety /  : Warning  : Attention



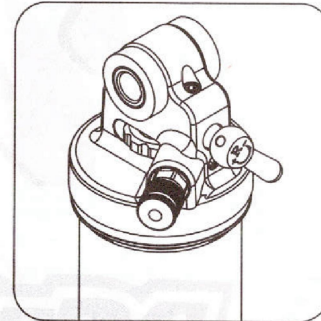
 **Rebound adjustment knob**
 + direction rotation, increase damper (slow)
 - direction rotation, decrease damper (fast)



 **Compression Adjuster**
 + direction rotation, lock-out
 - direction rotation, open up



 **Main air chamber**
 Supply air pressure according to pressure meter

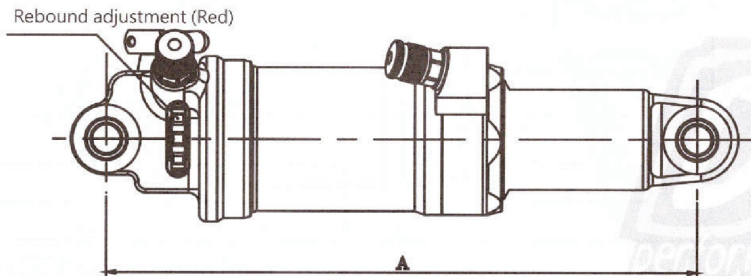
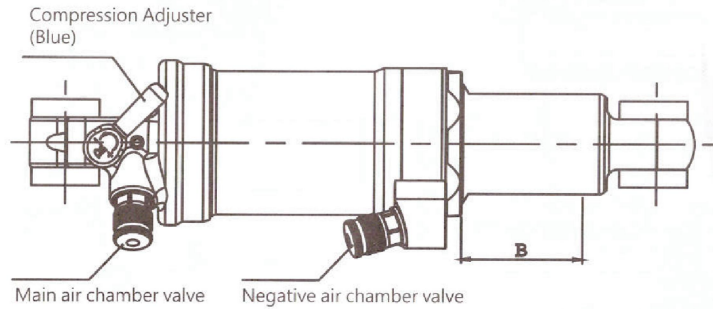


Specification

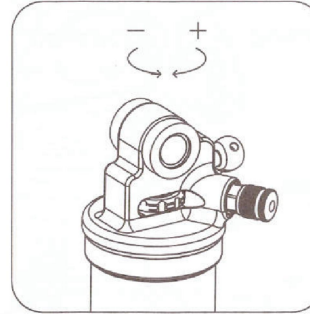
A. Total Length	B. Route
165±2	35±2
190±2	50±2
200±2	53±2
210±2	53±2


DNM Air Shock AOY-36RC Product Description

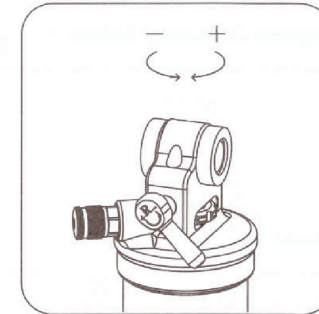
Diagram Consumer Safety /  : Warning  : Attention



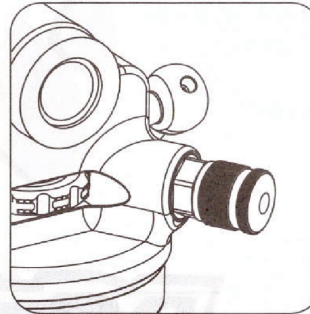
-  **Rebound adjustment knob**
+ direction rotation, increase damper (slow)
- direction rotation, decrease damper (fast)



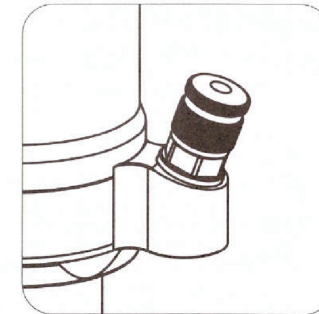
-  **Compression Adjuster**
+ direction rotation, lock-out
- direction rotation, open up



-  **Main air chamber**
Supply air pressure according to pressure meter



-  **Negative air chamber**
Supply air pressure according to pressure meter

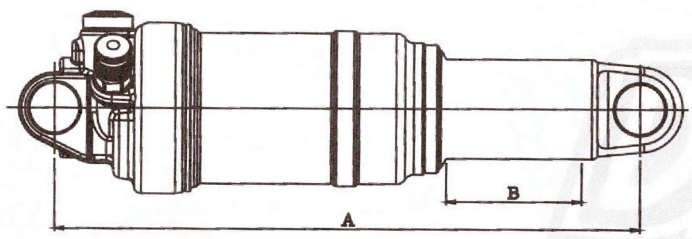
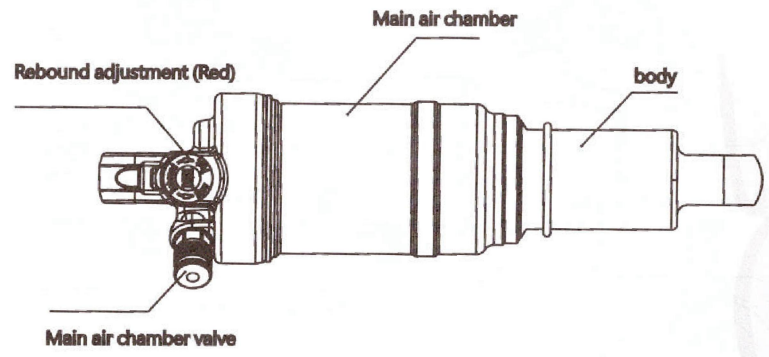


Specification

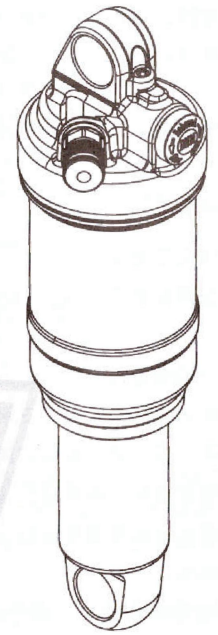
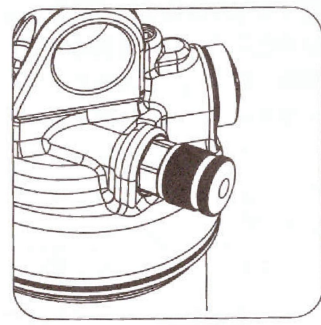
A. Total Length	B. Route
165±2	35±2
190±2	45±2
200±2	51±2


DNM Air Shock AO-42AR Product Description

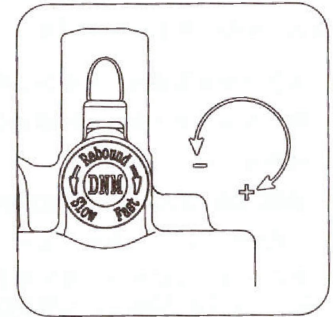
Diagram Consumer Safety /  : Warning  : Attention



 Main air chamber
Maximum pressure 250psi



 Rebound adjustment knob
+ direction rotation, decrease damper (fast)
- direction rotation, increase damper (slow)



Specification	
A. Total Length	B. Route
165±2	38±2
190±2	48±2
200±2	53±2