

# R O C K M O R E

**Rock Drilling Tools** 

<u>= 50NIC FLOW</u>=

### **ROK DTH Hammer - Assembly/Disassembly**



### **IMPORTANT SAFETY NOTICES**

- Wear proper PPE (Personal Protective Equipment) when servicing Rockmore ROK series hammers. Rockmore recommends using eye protection and gloves when servicing the hammer and hearing protection when the hammer is in operation.
- Hammers and their components can be heavy. Use proper lifting techniques. Do not assemble hammers bigger than a 5" class without lifting assistance.
- Be mindful of pinch points.

#### **CLAMPING ZONES**

If Clamping Zones are not used, the Wear Sleeve has the potential of cracking or the Piston bore could become distorted rendering the hammer Wear Sleeve unusable.



Position the break out bench chain clamps in the appropriate clamping zone positions to avoid damaging the hammer Wear Sleeve when breaking apart or assembling.

These same positions apply when utilizing the drill rig for breaking the hammer threads.





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### HAMMER DISASSEMBLY

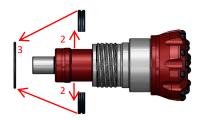
\* Hammer disassembly should begin by cleaning dirt and foreign debris from the outside of the hammer.



1. Unthread the Bit, Driver Sub and Bit Retaining Rings from the end of the Wear Sleeve.



- 2. Remove the Bit Retaining Rings from the Bit shank by pulling them apart and over the striking end of the shank.
- 3. Take the O-Ring off of the two halves of the Bit Retaining Rings.



4. Slide the Driver Sub off of the shank of the Bit.



5. Unthread the Wear Sleeve, slide it over the Piston and away from the Top Sub.



6. Remove the Piston from the Top Sub assembly.



- 7. Remove the Dowel Pin from the Top Sub.
- 8. Remove the Air Guide assembly from the Top Sub.



- 9. Pull the Check Valve away from the Spring in the Air Guide.
- 10. Pull the Spring away from the Spring Rest in the Air Guide.
- 11. Pull the Spring Rest away from the Air Guide.
- 12. <u>Steel Choke</u>: Unscrew the threaded Choke from the Air Guide. <u>Nylon Choke</u>: Press the Choke out from the small end of the Air Guide.



#### Post Disassembly Inspection

- Make sure all parts are clean and burr free.
- Use a file or emery cloth to make sure the surfaces of the parts are smooth.
- Use the Operations Guide Wear Limits Table to find what critical dimensions should be measured before re-assembly.
- Lubricate internal parts with WD40 or similar oil.
- Coat threads with thread grease.



# ROCKMORE

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### HAMMER RE-ASSEMBLY

#### **Re-assembly - Preliminaries**

- Make sure all parts are clean and burr free.
- Replace all O-Rings.
- Use a file or emery cloth to make sure the surfaces of the parts are smooth.
- Lubricate internal parts with WD40 or similar oil.
- Coat threads with thread grease.
- Use a soft-headed hammer tool to tap components together to ensure proper alignment.
- Never use excessive force.
- 1. Assemble the Air Guide with the appropriate Choke.
- 2. Insert the Spring Rest into the Air Guide.
- 3. Insert the Spring onto the Spring Rest.
- 4. Insert the Check valve over the Spring into the Air Guide.



- 5. Insert the assembled Air Guide into the Top Sub.
- 6. Align the dowel pin holes of the Top Sub and Air Guide. Insert the Dowel Pin.
- Depress spring through hole in Top Sub to verify proper alignment.



7. Insert the Piston into the assembled Top Sub.



8. Fit the Wear Sleeve over the Piston and thread onto the Top Sub.



When assembling hammers larger than 4" in the field, steps 7 & 8 are easier with the Top Sub and Piston vertical with the Piston pointing up.

9. Slide the Driver Sub onto the shank of the Bit.



- 10. Fit the Bit Retaining Rings to the retaining area of the Bit shank.
- 11. Bit Retaining Rings are held in place with an O-Ring.



12. Thread the assembled Bit, Driver Sub and Bit Retaining Rings into the end of the Wear Sleeve.



Hammer assembly is complete. Store hammer vertically. Make sure to tighten the assembly on the drill rig before starting percussion.



