## GATOR ROCK BIT, INC. ROK-AWAY BIT SAFETY GUIDELINES

- 1. Read and follow all safety and operating instructions before using the Rok-Away Bit.
- 2. Always wear safety glasses and approved personal protective equipment when working around any kind of boom mounted equipment.
- 3. Use extreme caution when installing or removing the cutter bits in the Rok-Away Bit. BITS CAN BECOME VERY HOT WHEN IN USE.
- 4. NEVER STRIKE THE TIP OF THE CUTTER BIT. The carbide tip can shatter causing severe injury. Always use a tool made to remove and install the cutter bit.
- 5. Inspect bit before each using. Check the Rok-Away Bit for worn or broken welds or other damage. If parts are worn or damaged, have them repaired or replaced before using.
- 6. Exercise caution when starting the Rok-Away Bit at the ground level. The bit can "walk" causing injury or property damage.
- 7. Never insert anything in the Rok-Away Bit while it is turning. Never turn the bit while any object is protruding from it. Turning the bit with a bar or other object inside can result in equipment damage and personal injury.
- 8. Keep hands and feet from under the bit while removing rock or debris from it.
- 9. Always store the Rok-Away Bit in a safe way to prevent injury or property damage from contact with cutter bits.

## GATOR ROCK BIT, INC. ROK-AWAY BIT OPERATING INSTRUCTIONS

- 1. READ AND UNDERSTAND ALL SAFETY INSTRUCTIONS before changing the cutter bits or using the Rok-Away Bits.
- 2. The Rok-Away Bit is designed to dig through and remove rock without the use of dynamite, jack-hammers, or hand digging.
- 3. When rock is encountered that cannot be removed with you regular digger derrick bit, remove the auger and install the Rok-Away Bit onto the Kelly bar.
- 4. Remove excess dirt from the hole and pour enough water into the hole to cover at least six inches of the bottom of the hole. Always keep enough water in the hole to keep the teeth and bit from becoming too hot. Using the Rok-Away Bit without water can cause cutter bit damage and shortened tool life.
- 5. Insert the Rok-Away Bit into the hole and being turning the bit as it is being lowered. When the bit touches the rock, put enough down pressure on to the bit to feel it cutting the rock. Let the bit turn until you cannot feel the pressure on the rock. Put more pressure on the bit and allow it to cut until it has no more pressure on it. Continue doing this until the rock is cut through or until it breaks at a layer. Remove it from the hole and move it to the side so the rock and debris can be removed from inside the bit. DO NOT USE THE EXTREME PRESSURE WHILE CUTTING ROCK, it is not necessary.
- 6. Insert a short iron bar or spadge into one of the opening of the Rok-Away Bit and punch the rock until it begins to move, rotate from one side of the bit to the other. Rotating from side to side will keep the rock from binding against the inner walls. Continue to punch and rotate from side to side until the rock falls out of the bit.
- 7. After every few minutes of drilling, raise the Rok-Away Bit up a foot or so to allow water to bet past the cuttings and to the bottoms of the hole to the cutter bits. This is a good time to check for broken rock in the barrel of the Rok-Away Bit.
- 8. Continue to drill the rock until the desired depth is reached. If the rock does not break off at the desired level, let the bit continue to cut until the rock breaks off at a seam. If the rock does not break at a seam, the rock can be broken by attaching the Rock Wedge to the Kelly bar and placing it in the groove that was made by the Rok-Away Bit. After the rock is broken off by the Rock Wedge, attach the Rok-Away Bit back onto the Kelly bar and go back to drilling until it grabs the rock and remove the broken core.

9. Before each use and every fifteen to twenty minutes of drilling, check the cutter bits for wear. To do this, remove debris from the cutter bits and feel for flat spots on the sides or broken tips. Visually check each cutter bit and the Rok-Away Bit for damage or wear. Replace or repair any broken or worn parts before reusing.

### INSTALLING AND REMOVING CUTTER BITS

- 1. The cutter bits on the Rok-Away Bit are designed to give maximum tool life in extremely hard drilling conditions. They are inexpensive to replace and should be replaced whenever they become worn to prevent damage to the Rok-Away Bit.
- 2. Always use a bit installer to remove and install utter bits. NEVER STRIKE THE CUTTER BITS. The carbide tips can shatter causing injury. All Rok-Away Bits come assembled with cutter bits installed. Each cutter bit is dipped in moly grease before installation. When replacing cutter bits, it is recommended they be dipped in a moly grease to aid in removal and to allow them to spin freely during drilling.
- 3. Each cutter bit has a grove around the top of the cutter head to place the installation tool in. To remove the bits, place the installation tool in the groove and strike the tool with a hammer to drive the cutter bit out.
- 4. To install a cutter bit, dip the end with the spring loaded collar in to a moly grease and place it in the groove of the installation tool. Hold the cutter it in the edge of the pocket and strike the installation tool with a hammer until the cutter bit is seated into the pocket.

#### MAINTENANCE INSTRUCTIONS

- 1. The Rok-Away Bit requires very little regular maintenance. Keeping the cutter bits changed when they begin to wear will prolong the life of the Rok-Away Bit tremendously.
- 2. The wear welds placed on the inside and outside of the pockets are to protect the pockets from becoming worn prematurely. When these wear welds begin to wear down, they should be replaced to keep the pocket protected. The wear welds on the collar of the Rok-Away Bit are to protect the collar from wear. Replace these welds when they begin to wear down.
- 3. When the pockets that hold the cutter bit in become worn, they should be replaced to keep the rest of the bit from being damaged and to keep the cutter bits held in properly. When anything other than replacing wear welds needs to be done, the Rok-Away should be sent back to the company. The pockets for the cutter bits are set on precise angles and if not set back to exact tolerances they will not do an effective job and could result in damage to the bit.

# GATOR ROCK BIT, INC. ROCK WEDGE

- 1. Read and understand all safety and operating instructions before using the rock wedge.
- 2. Always wear safety glasses and approved personal protecting equipment when working around any kind of boom mounted equipment.
- 3. Always handle the rock wedge in a safe manner when loading or unloading onto the digger or when attaching to the Kelly bar.
- 4. The rock wedge is designed to snap off drilled cores that will not break off during the drilling process. Because of the makeup of some types of rock, all cores may not break off using the rock wedge. When a core is encountered that will not break off, do not use excessive force, as this may cause breakage to the wedge or equipment.
- 5. Keep personnel away from the rock wedge when in use. Do not allow anyone to look into the hole while twisting or wedging the core. Rock and or metal fragment can cause injury.
- 6. Never "rock" the wedge form side to side or in and out in order to break the rock core. Breakage to the wedge and or the equipment can occur.

#### **OPERATING INSTRUCTIONS**

- 1. The rock wedge is designed to break rock cores that will not break off when drilled to the **MAXIMUM** depth of the Rok-Away Bit. In certain instances, some rock can be broken without drilling to the maximum depth of the bit. As you gain experience, you will be able to tell how much rock you can break, as rock type and hardness differ in every hole.
- 2. When a rock core is encountered that does not break off when drilled to maximum depth of the bit, remove the bit from the Kelly bar and attach the rock wedge to the Kelly bar. Move the wedge to the hole and slide the wedge into the groove around the outside of the hole that was cut by the teeth of the bit. Slowly push down the wedge until you feel the rock.
- 3. Some rock will not break in the first place where pressure is placed. When the rock does not break, move the wedge to another place around the core and apply pressure again. Continue around the hole until the rock breaks.
- 4. When a rock core cannot be broke using the pressure method, insert the wedge into the groove and apply slight pressure. Turn the wedge very slowly to apply more pressure to the core. **DO NOT APPPLY EXCESS PRESSURE** when turning the wedge, as equipment and or wedge damage can occur. This breakage can also cause personal injury to anyone close to the equipment or drill hole.

5.	After the rock core has been loosened, remove the rock wedge and store in a safer manner. Attach the Rok-Away Bit to the Kelly bar and grab the broken rock core. Remove the bit from the hole and remove the rock out of the bit as usual.