



711 Lake Street Phone (800) 527-2282
 Kent, Ohio 44240 Fax (330) 677-1616
 Portland, Oregon Phone (800) 624-1616

Redline Breakers Trouble Shooting

TROUBLE	PROBABLE CAUSE	REMEDY
Breaker will not start	<ol style="list-style-type: none"> 1. Plugged exhaust port or air passages caused by dirt or hose particles. 2. Stuck valve due to gummy oil or incorrect assembly. 3. Frozen piston due to improper lubrication. 	<ol style="list-style-type: none"> 1. Dismantle breaker and clean out all ports and air passages. Keep the air hose in top notch condition; never use a soft deteriorated hose. 2. Remove valve chest parts from the breaker. Clean parts. Never use dirty oil or oil that does not conform to the recommended specifications 3. Dismantle breaker to remove piston. Repair piston by placing in a high speed lathe and dressing with fine emery cloth. Never run breaker without the proper lubricating oil in the lubricating oil reservoir.
Breaker loses power rapidly	<ol style="list-style-type: none"> 1. Restriction in air supply line. 2. Air supply line too long. 3. Diameter of air supply line too small. 	<ol style="list-style-type: none"> 1. Never allow the air supply to kink or make sharp bends. 2. As a general rule keep the air supply line under 49 feet. (15 m) 3. A 3/4 in. (19.1mm) diameter air supply is recommended for the breaker.
Breaker lacks power	<ol style="list-style-type: none"> 1. Low air supply pressure. 2. Running on fronthead cushion. 3. Plugged air passages. 4. Lack of lubricating oil. 	<ol style="list-style-type: none"> 1. The air supply pressure at the tool should be 80 to 90 psi 2. Keep shank fed-up to the work. Always maintain a constant pressure when operating the breaker. 3. Dismantle the breaker and clean out all ports and passages. 4. Maintain the proper oil level in the lubricating oil reservoir. Steel shank must show a film of oil.
Overheating of the cylinder on a new machine.	<ol style="list-style-type: none"> 1. Breaker not properly broken in. 	<ol style="list-style-type: none"> 1. Stop operating the breaker and perform initial servicing. Never run a new breaker at full throttle until a proper break-in period has been completed.
Overheating of breaker after break-in period	<ol style="list-style-type: none"> 1. Running on fronthead cushion. 2. Piston not hitting the shank because of short shank. 3. Pulling steel at full throttle. 4. Lack of lubrication or improper lubricating oil. 	<ol style="list-style-type: none"> 1. Keep shank fed-up to work. Always maintain constant pressure when operating the breaker. 2. Remove shank from breaker. 3. When pulling steels always use minimum throttle. 4. Before operating the breaker make sure the lubricating oil reservoir is full of proper lubricant.
Erratic or sluggish operation	<ol style="list-style-type: none"> 1. Lubricating oil too heavy, slowing down valve action. 2. Gummed oil or dirt in operating parts. 	<ol style="list-style-type: none"> 1. Use only the recommended lubricating oil. 2. Dismantle breaker and clean out dirt and gummy residue. Service the breaker with clean oil. Protect tool from dirt when idle.
Freezing at exhaust ports	<ol style="list-style-type: none"> 1. Excessive moisture in the air supply line. (Usually occurs in low ambient temperatures.) 	<ol style="list-style-type: none"> 1. Install moisture traps in the air supply line or add anti-freeze lubricant directly through the air inlet. Use "KILFROST" antifreeze lubricant or equivalent.
Fogging	<ol style="list-style-type: none"> 1. Excessive moisture in the air supply line. 2. Over lubrication. 	<ol style="list-style-type: none"> 1. Blow out air lines. If moisture traps are installed in the air supply line, drain the moisture. 2. Clean lubricating oil reservoir and adjust for proper rate of feed.



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Redline Rock Drills Trouble Shooting

TROUBLE	PROBABLE CAUSE	REMEDY
Still will not start	Plugged exhaust ports; valve stuck with gummy oil; drill flooded with oil; plugged air filter or air passages caused by dirt or hose particles; stuck piston due to improper lubrication; side rods tightened unevenly, causing binding.	Dismantle drill and clean out all ports and passages; clean air filters and strainers. If due to frozen piston, repair by stoning or use fine emery cloth. Replace deteriorated hose. Make sure drill is properly assembled and lubricated.
Still loses power rapidly	Restriction in supply line; air hose too long or too small in diameter.	Check supply line for kinks or sharp bends. Keep hoses short as possible, large enough for drill.
Still lacks power	Low air pressure; short shank or short piston (because of wear or regrinding); plugged air passages or plugged air filters; lack of oil.	Check shanks and piston. Check front head cushion. Check for plugged passages; clean filters or strainers. Air pressure should be set at 80-90 psi at the drill. Check line oiler for proper rate of feed-steel shanks should be wet with oil.
Still does not rotate or weak rotation	Bad drilling ground; ravelly, fitchery, clay seams, bug holes, etc. Loss of big gauge causing binding in hole. Worn rotation parts: rifle nut, rifle bar, pawls or ratchet ring, chuck, chuck nut, or any combination of above.	Replace worn bits. Replace or repair any worn parts.
Overheating	New machines may overheat at buffer ring.	Run new drills at less than full throttle until broken in; use plenty of the proper type of oil.
Overheating	Running on front head cushion: piston not hitting steel shank because of short shank, or because machine not kept fed up to work. Also caused by pulling steels at full throttle; wrong type of oil; hot air from compressor.	Keep machine fed up to work; don't use steels with short shanks. Use as little throttle as possible when pulling steels. Keep drill lubricated with correct oil, use a line oiler with each drill; check for presence of oil on steel shank while operating.
Low drilling speed	Cuttings not being removed from hole; low air pressure; plugged drill steel or air tube; drill not aligned with hole, steel or bit binding in hole.	Use blow air frequently to keep hole clean, avoid crowding drill. Clean out drill steel or air tube. Check alignment while drilling to prevent binding and to avoid stuck steel.
Erratic or sluggish operation	Oil too heavy, slowing down valve action; gummed oil or dirt in operating parts.	Use oil of proper viscosity for class of drill and operating temperature. Dismantle drill and clean out dirt and gummy residues. Service drill with clean oil. Protect drill from dirt when idle.
Stuck steel	Driving steel after bit is dull or has lost its gauge; crowding in soft formations; cuttings not being blown from hole; misalignment of steel with hole, causing binding.	Don't force a dull bit-sharpen or use new bit. Use feed pressure cautiously in soft ground; blow the hole frequently. Keep steel and drill aligned with hole at all times.
Rapid wear of rifle nut and or rifle bar.	Most often caused by inadequate lubrication, with dirt a contributing factor.	Keep the machine clean and use sufficient oil of correct viscosity. Replace worn parts promptly.
Chipping or breakage of piston	Can be caused by bad shank which is too hard, rounded off allowing minimum contact with piston striking face. Also caused by worn chuck permitting steel to cock in chuck and piston strikes shank a glancing blow. Often caused by heat cracking due to faulty lubrication. Failure in neck of piston due to loss of front head cushion, piston striking buffer ring.	Take bad shanks out of service-one bad shank can ruin many pistons. Replace worn chucks-use wear gauge to determine when chuck should be replaced. Keep machine well lubricated with proper type of oil. Check cylinder, piston, buffer ring for maximum wear tolerances.
Stalling of shank striking	Too hard; usually caused by accumulation of water in bottom of quenching tank.	Drain off water in quenching tank. Check tempering temperatures.
Bronze cuttings	Rifle bar flutings worn, cutting rifle nut. Side rods not tightened evenly, piston binding in chuck nut, rifle bar binding in rifle nut. Excessive wear due to insufficient lubrication.	Replace damaged parts. Keep side rods at even tension. Check functioning of line oiler. Steel shanks should be wet with oil at all times during operation.
Side rod breakage	Uneven tension on rods or loose rods. Loss of front head cushion allowing piston to strike buffer ring with hard impact.	Keep side rods tight and at even tension. Tighten rods alternately. Replace worn cylinder, piston, or buffer ring.



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Cracked or broken rifle nut and or chuck nut	Rifle nut loose in piston, chuck nut loose in chuck	Replace damaged parts. Keep nuts tight against seat in piston or chuck.
Ratchet pawl breakage	Invariably caused by operator turning drill steel in wrong direction to free stuck steel	Replace pawls, instruct operator.
Broken or battered air or water tube	Shanks improperly punched; worn chucks which permit misalignment and chafing or bending of tube.	Check shank to be sure center hole is large enough and deep enough to accept tube. Replace worn chucks.
Freezing at exhaust ports	Excessive moisture in air supply-usually occurs in low ambient temperatures.	Install moisture traps in air lines or feed small amount of anti-freeze into air supply
Fogging	Excessive moisture in air supply or over lubrication.	Blow out air lines, drain water from moisture traps, adjust line oiler for proper rate of feed.



LUBRICATION - IMPORTANT



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Proper lubrication is important in the maintenance and longevity of your KENT hammer.

RECOMMENDED OIL WEIGHT FOR USE

(SAE #10) For Tampers and Diggers
 (SAE #30) For Breakers and Rock Drills

CLIMATE INFORMATION

#10 Light weight for cold climate regions (-30 degrees F to 32 degrees F)
 #30 Medium weight for warm climate regions (32 degrees F to 70 degrees F)
 #50 Heavy weight for hot climate regions (70 degrees F to 125 degrees F)