

# NEW RET RING™

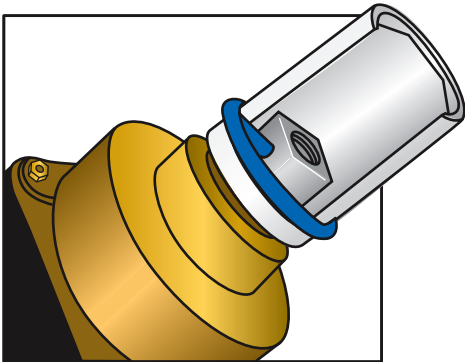
with Resin Crush Gauge



## CRUSH GAUGE on New Ret Ring will tell you when to replace Worn sockets

The original RET RING was introduced to prevent serious injuries caused by flying or slipping steel pins used with the old two-piece socket retention system for large impact wrenches. The RET RING is the solution for safer retention of impact sockets which can rotate at speeds up to 5000 RPM.. The RET RING's new resin pin with CRUSH GAUGE is designed to index in the retention holes on the tool anvil and socket at the correct location to maximize safe retention of power sockets.

We have now developed a New RET RING, designed with a New Resin CRUSH GAUGE on the resin pin, (Fig. 1) to indicate when a socket is excessively worn and should be replaced. This will alert the user when the socket is worn and unsafe to use.



The CRUSH GAUGE is on the rotational edge of the Resin insert and will show the mismatch of alignment holes (Fig. 2) occurring due to worn square drive surfaces and socket. If the CRUSH GAUGE shows compression on its raised ridge to the flat surface of the Resin insert, (Fig. 3) it will warn the operator to replace the socket.

The resin insert is made from a high modulus material which allows the resin material to compress up to 50% of its original diameter which maintaining its tensile strength and holding ability without breaking. A steel insert would not allow any relative movement of the socket and tool anvil alignment holes before failure of the pin occurred.

Tool operators should be instructed to remove unsafe worn sockets from use. Replacement of worn sockets is not only necessary for safe operations, but also to maintain maximum torque transmission from the impact tool to the socket. A worn and sloppy socket can cause losses of torque applied to the nut up to 50% or more.

There was no method with the steel insert to determine when sockets with excessive wear should not be used.



Fig 1



Fig 2



Fig 3

# Martin TOOL & FORGE

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# RET RING™

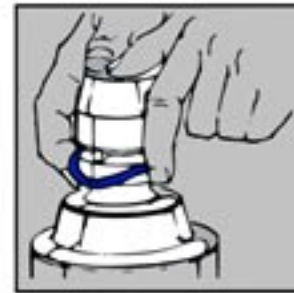
SQ DR	ID	Ret Ring with Crush Gauge
3/4"	1-1/4"	M10005S
3/4"	1-7/16"	M10032S
3/4"	1-5/8"	M10034S
3/4"	1-3/4"	M18708S
3/4"	2"	M18710S
3/4"	2-1/8"	M18715S
3/4"	2-1/4"	M18716S
1"	1-3/4"	M10008S
1"	2"	M10010S
1"	2-1/8"	M10015S
1"	2-1/4"	M10016S
1"	2-1/2"	M10017S
1"	2-5/8"	M10019S
1-1/2"	2-7/8"	M10020S
1-1/2"	3"	M10021S
1-1/2"	3-3/8"	M10025S
1-1/2"	3-7/8"	M10030S
1-1/2"	4-3/8"	M10035S



Place RET RING™ over anvil.  
Align socket and anvil holes.  
Insert pin through holes.



Push center-pin all the way in.



Pull "O" ring up into groove on  
opposite side.

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