



W-J Incorporated
 34180 Solon Road
 Solon, Ohio 44139
 Phone: 440-248-8282
 Fax: 440-248-2732
 Website: www.W-JInc.com

Signs of Wear	
<i>What are the signs of wear in barrels, screws, and non-return valves?</i>	
Issue	Typical Cause
Screw rotating during injection	Worn or damaged non-return valve and/or barrel allows screw to move forward without pushing the plastic causing the screw to rotate
Inconsistent or no ability to hold a cushion	Worn or damaged non-return valve and/or barrel permits screw to move forward without pushing and packing the plastic in the mold
Longer than normal recovery time	Reduced plasticizing efficiency resulting from worn barrel and/or screw
Increase in overall cycle time	Caused by all of the above. Worn barrel, screw and non-return valve result in slower and inefficient plasticizing
Defective, streaked or non-uniform appearing parts	Poor melt quality resulting from worn barrel and/or screw
Metal particles in parts	Flaking or peeling of screw plating or barrel lining
Dark or burned specks in parts	Barrel and/or screw worn or pitted, allowing plastic to gather in wear spots and degrade
Difficult color changes	Plastic hangs up in worn areas of barrel or screw requiring repeated cycles to clear out
The need to increase screw speed (RPM) to maintain normal output	Worn barrel and/or screw reduce plasticizing efficiency requiring higher screw speed to maintain output
Higher than normal melt temperature	As clearance between the screw and barrel increases, plastic flows through the clearance causing excessive shear