

# Axtell Twin Cam® Oil Bypass Valve



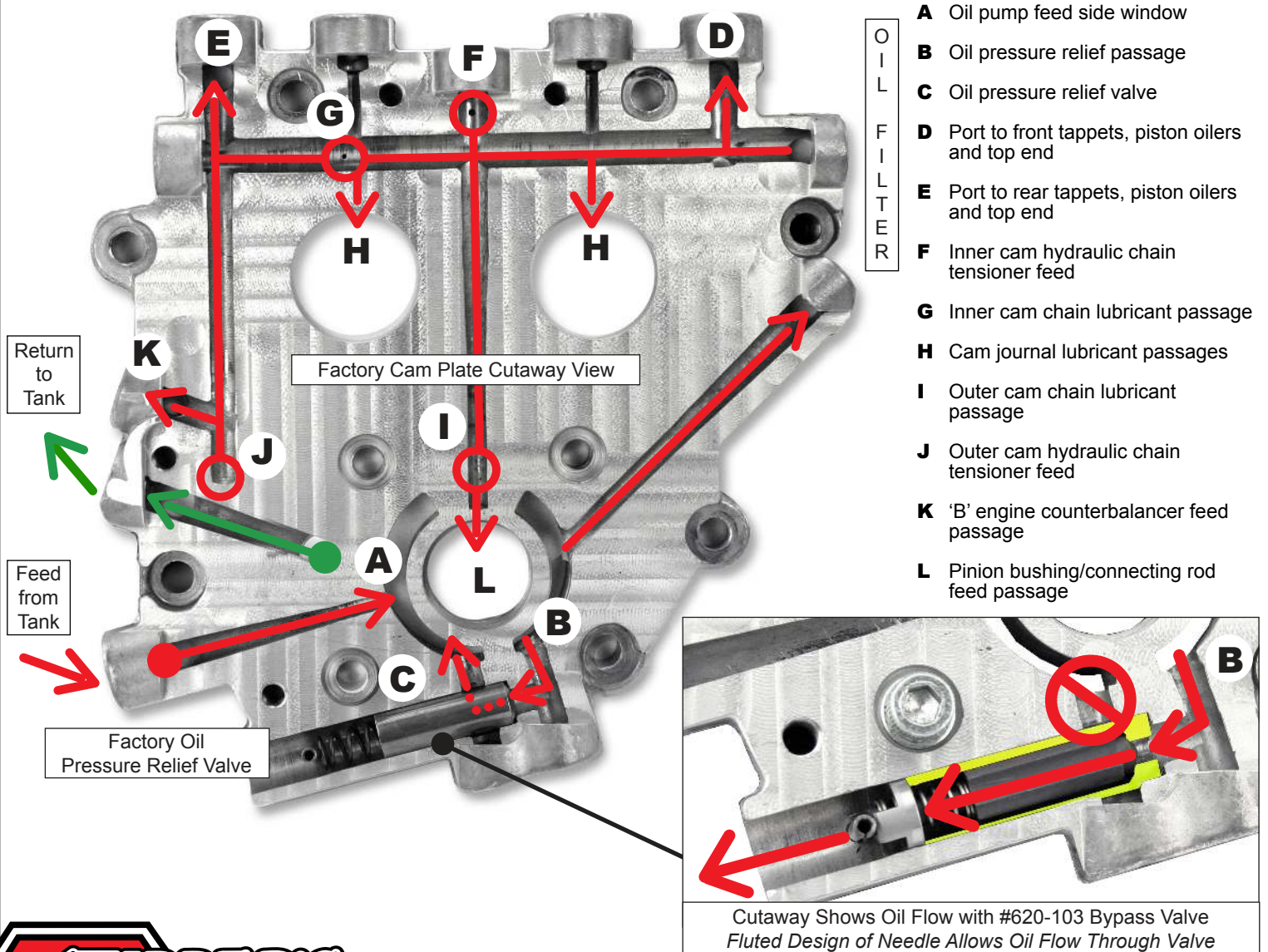
This is a new product designed and developed by the Axtell Mountain Motor team. This bypass valve consists of a precision-machined "needle and seat" that inserts in place of the factory oil pressure relief valve located within the Twin Cam® cam plate. With the factory OEM oiling system configuration, when oil pressure becomes

excessive, it is bypassed from the high pressure side of the feed gerotor back to the low pressure side, "looping" the oil in the feed gerotor gears. This causes the introduction of air into the pressurized oil (aeration) - aerated oil is foamy and spongy, and results in lower oil pressure and volume. When this occurs, the entire oiling system is affected - engine heat and noise builds, piston oilers shut down sooner than designed, valve train and top end life is shortened. This system blocks the factory port back to the feed side of the pump and directs the bypassed oil into the cam chest. The scavenge side of the oil pump returns the excess oil to the oil tank and eliminates the oil "looping" and its negative effects.

With the Axtell valve you can expect higher, more stable oil pressure at all engine rpms, longer oil life due to reduced oil shear, lower oil and engine temperature, improved valve train control and reduced noise. Zipper's recommends this for use with our Red Shift® Dual Piston Cam Chain Tensioners. Fits all factory H-D® and Screamin' Eagle® cam plates.

Patent Pending #61/693,612

PART NO.	DESCRIPTION
#620-103	Axtell Bypass Valve for All Harley-Davidson® and Screamin' Eagle® Brand Twin Cam® Cam Plates
#413-902	Red Shift® Cam Chain Tensioners w/Axtell Oil Bypass Valve Kit #620-103 for all H-D® & S.E.® Cam Plates



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