



Clutch Alignment Specifications

When installing a clutch, attention should be paid to all parallel and perpendicular alignment. The life of a clutch can be significantly lengthened if care is taken in its installation. Just as tires out of alignment work against each other trying to go their own way, a clutch cam and its housing will work against each other if their surfaces are not parallel to each other. Inconsistent pressures exerted against clutch members can cause this misalignment. This forces either a roller to incorrectly engage or disengage at an angle, or for less than four rollers to do the work of all four rollers.

Therefore, we would have the torque driving circumference working at three quarters or less efficiency. Results would include nonconcentric overloading and radial elongation causing unchecked strain of all inline transmission systems. Furthermore, when mounting a complete clutch, including any customer mounted supplemental members, care should be taken that the end of the clutch and its supplemental member are square or perpendicular to the centerline of the shaft. Without properly squaring these assemblies, a compounding runout effect would result, further causing excessive clutch wear.

Warning signs of misalignment include excessive vibration and/or heat buildup on and around the clutch assemblies, excessive lubricant breakdown, indexing variations and part fracturing (caused by rapid metal expansion and contraction). Part binding is also a telltale sign of misalignment. Our goal is to provide the most efficient and effective clutch available. But without proper installation, no device can perform to its designed capacity. Careful attention paid to the parallel and perpendicular alignment when installing the clutch will deliver maximum performance.

For further information, please feel free to call. NOTE: It is recommended on the ratchet arm ends to allow at least 1/16" free play either way on the axial plane. This allows for the cam and shaft to find their true parallelism with the ratchet housing. Tightening down and restricting the ratchet housing will cause misalignment, runout and all or some of the problems formerly listed.

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