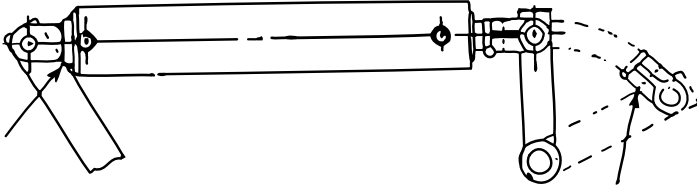
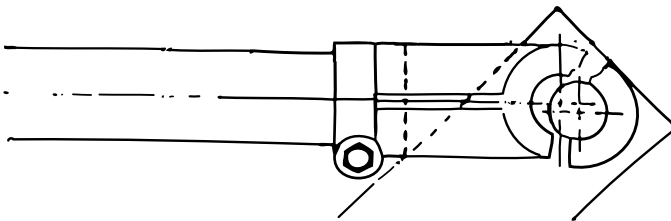


## Common Causes of Cylinder Damage



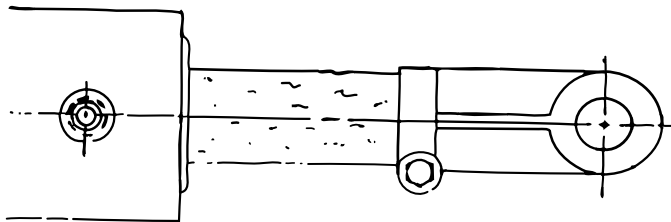
### BINDING

Binding can cause a bent rod. Before operating the cylinder under pressure, make sure there is sufficient mounting bracket clearance in all positions from retracted to fully extended.



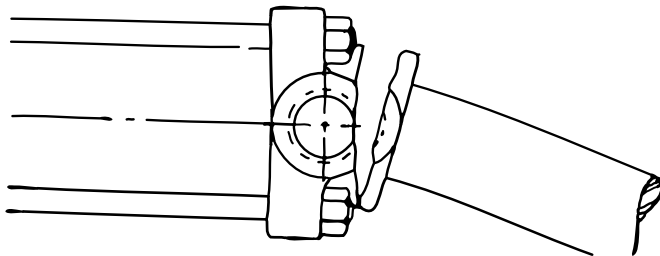
### IMPROPER CLEARANCE

Improper clearance can cause broken clevis castings. Cylinder must be mounted so as to allow free movement throughout its stroke.



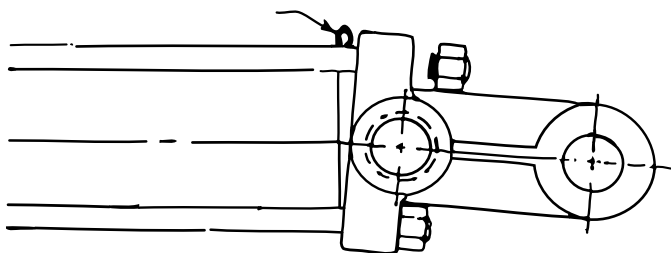
### ROUGH OR SCORED ROD

Rough or scored rod will cause damage to the seals and premature leakage.



### BENT PISTON ROD

Do not attempt to retract a bend rod, as it probably will cause the rod guide to crack or break.



### TOO MUCH PRESSURE

Do not exceed pressure rating of cylinder. Pressure beyond rated pressure could cause tie-rods to break or stretch and allow static seal to extrude. On welded-type cylinders, the retaining ring could be forced out of its groove or various other failures could occur.