

# MASTER BRAKE CYLINDERS



## BERINGER REPAIR/OH KIT

Repair kits are available for the following BERINGER® parts: Hand master cylinder, Rudder pedal master cylinder, 2 and 3 piston brake caliper. Includes all wear parts: pistons, seals, screws, grease, repair procedure.  
 Mineral Oil.....P/N 06-03550  
 DOT4 .....P/N 06-03551

## CLEVELAND MASTER BRAKE CYLINDERS



### MODEL 10-35

This model has a built-in reservoir and is used in production aircraft. Cast aluminum construction. 5/8" bore, 1.2" stroke, 0.36 cu. in. displacement. Outlet 1/8" NPT. Pin center length 8". Designed to mount on rudder pedal. Formerly Gerdes Model A-049.....P/N 10-35  
 Model 10-35 O-Ring Kit.....P/N 199-513



### MODEL 10-20

Spring-loaded piston type assembly without reservoir. Simple design assures long troublefree service. Pin center length 7-1/2". Bore 9/16". Stroke 1.25". Weight: 10 oz. Used on Pitts Special, Acro-Sport and other homebuilts.  
 Model 10-20 & 10-19 O-ring kit.....P/N 06-10600



### MODEL 10-19

Used on Pitts and other homebuilts. Similar to Model 10-20 except with ports aligned differently.  
 Model 10-20 & 10-19 O-ring kit.....P/N 06-10600



### MODEL 10-5B

This Cleveland master brake cylinder has the same type construction as Model 10-20. Model 10-5B does not have a parking brake feature. 1/8" NPT ports, on opposite sides of cylinder, have AN823-4D fittings for use with 1/4" brake line. Pin center length 8". Wt. 9.5 oz. Bore 0.562". Stroke 1.25". Used on Piper PA25 and homebuilts. O-Ring kit is Cleveland part No. 199-502. Stroke 1.25". Used on Piper PA25 and homebuilts. O-Ring kit is Cleveland part No. 199-502.  
 Model 10-5B O-Ring kit (199-503).....P/N 06-00708  
 Model 10-5 O-Ring kit (199-502).....P/N 06-10700  
 Model 10-22 .....P/N 05-13316  
 Model 10-30 .....P/N 05-13319  
 Model SSFA232-5 .....P/N 05-13328



### MODEL 10-54

Spring-loaded piston type assembly without reservoir. Simple design assures long troublefree service. Pin center length 7.88". Bore 5/8". Stroke 1.62". Wt. .45 oz. Ports in-line, no fittings.  
 P/N 06-01214

## CLEVELAND 199-512 MASTER CYLINDER REPAIR KIT



Elastomeric cure date required per ESP3620. This Service Kit will overhaul one 10-30, 10-30A, 10-30C, or 10-300 Master Cylinder Assembly. CM10-30 Overhaul Instructions for 10-30, 10-30A, 10-30C, & 10-300 ..... P/N 06-01130

VISIT OUR WEBSITE FOR MASTER CYLINDER SEAL KITS

## MATCO MASTER CYLINDERS



MC-4 EXTERNAL RESERVOIR

### MATCO MC-4 MASTER CYLINDER

MATCO mfg's MCMC-4 master cylinder uses a REMOTE reservoir. The MCMC-4 can be used in individual or dual brake applications. Buna-n o-rings are used in this assembly. Mil-H-5606 aircraft hydraulic fluid or compatible fluids are recommended. DOT5 may be used but not DOT5.1 which contains glycol. DOT3 and DOT4 may not be used and will cause immediate damage to the seals. The MCMC-4 master cylinder measures 8.05 +/-0.25 inches from end to end and 7.5 +/-0.25 inches from mounting hole to mounting hole. A 0.625 inch diameter piston is used. Available stroke is approximately 1.388 inches and displacement is 0.43 cubic inches. The ports on all MATCO mfg master cylinders are 1/8 inch NPT (except the MC-4E). Has an adjustable clevis.

### UNIVERSAL - Vertical or horizontal mounting with exterior reservoir.

MC-4.....P/N 06-11150  
 MC-4A (0.50" shorter than the MC-4) .....P/N 06-11100



MC-5 VERTICAL

### MATCO MC-5 MASTER CYLINDER

MATCO mfg's MCMC-5 master cylinder uses an INTERNAL reservoir. The MCMC-5 can be used in individual or dual brake applications. Buna-n o-rings are used in this assembly. Mil-H-5606 aircraft hydraulic fluid or compatible fluids are recommended. DOT5 may be used but not DOT5.1 which contains glycol. DOT3 and DOT4 may not be used and will cause immediate damage to the seals. The MCMC-5 master cylinder measures 8.25 inches from end to end and 7.7 inches from mounting hole to mounting hole. A 0.625 inch diameter piston is used. Available stroke is approximately 1.388 inches and displacement is 0.43 cubic inches. The ports on all MATCO mfg master cylinders are 1/8 inch NPT (except the MC-4E). The MC-5 has an adjustable clevis. The MC-5 can not be used in series with a second MC-5 or MC-5A

### VERTICAL STYLE - Cylinder for vertical mounting, with steel housing and reservoir.

MC-5.....P/N 06-11000  
 MC-5A (0.50" shorter than the MC-5) .....P/N 06-00375



### MC-7 MASTER CYLINDER

The black anodized MC-6 is designed to attach to a 1" diameter control stick and function similar to a motorcycle brake. Designed for ultralight aircraft, it is completely self-adjustable as the lining wears and draws additional fluid from the cylinder. The 6:1 mechanical leverage allows the average pilot to generate 1,500 PSI in the system.  
 P/N 06-00014

## MATCO MASTER CYLINDER REBUILD KITS



Buna-n orings are used in the original assembly, these rebuild kits are of same quality.

Description	Part Number	Price
MC-4 Rebuild Kit	06-02998	---
MC-4A Rebuild Kit	06-03003	---
MC-5 Rebuild Kit	06-02999	---
MC-5A Rebuild Kit	06-03002	---
MCMC-7/MCMC-7s Universal Rebuild Kit	06-03001	---