INSTALLATION - SERVICE INSTRUCTIONS

765 South Pierce Avenue Louisville, Colorado 80027

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PART NUMBERS: DESCRIPTION

81200 .....Carbon disc brake kit for symmetrical housing ends.

(All MW 70000 series brake kits can also be upgraded to carbon)

PARTS INCLUDED:

2 - 81100.....MW 4 piston brake calipers.
4 - 81022.....Carbon brake linings w/stainless backing plates.
2 - 81001.....Carbon rotor adapter hat (4 3/4" & 5" B.C.)
2 - 81004.....Carbon brake rotor.
1 - 58570.....Backing plate bolt kit.
4 - AN10-6A.....3/8-24 x 1.015" caliper attachment bolts.
4 - AN122584.....Hardened washer for caliper attachment bolts.
2 - 71XXX.....Caliper mounting brackets (to suit each kit).
24 - MS24694-S60.....10-32 x 1.156 flat head rotor attachment screws.
24 - MS21042-3.....10-32 self locking jet nuts.
24 - 94051A010.....Dimpled titanium rotor retaining washers.

PRIMARY APPLICATIONS:

Drag racing applications.

INSTALLATION OVERVIEW:

Prior to actual installation three important dimensions need to be checked (see Diagram A). The first two deal with the axle itself, 1) the axle flange diameter must be 6.248" or less, 2) the brake drum register must be no larger than 3.060" diameter. The third and most critical dimension is the axle standout. This measurement is taken from the outside face of the axle flange to the outside face of the housing end with the axle fully seated in the housing. This should be measured as accurately as possible. After measuring and identifing the type housing end and brake kit being used, compare to the chart below. Dimension should match one given below +/- .020.After the axle standout has been measured and the proper kit received actual installation can begin.

1) *Start installation by removing axles, bearings and stock brake assembly from housing. This is a good time to check axles, axle bearings and seals. Bad bearings and/or seals should be replaced at this time to prevent the possibility of leaking gear lube on brake assembly. It is also a good idea to check the housing ends for irregularities such as nicks or burrs on the face of the ends and in the bearing bores that could create problems when installing brake kit.*

2) *Press in type backing plate bolts should be installed before re-installing axles.*

3) *Install axles.*

4) *Slide caliper mounting brackets over axle shaft and on to backing plate bolts and install supplied lock nuts and AN washers. Brackets are designed to position the calipers at 3 or 9 o'clock for ease of bleeding the system. Caliper brackets also serve as bearing retainers in most applications and have a counterbore on the inboard side of the bracket for the bearing. Brackets should fit flat against the housing end and not have to be drawn down by the nuts that hold them on.*

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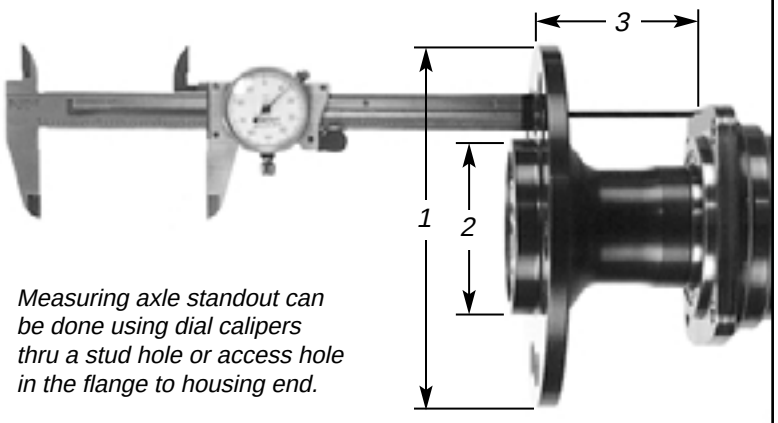
Axle Standout Dimensions:

Olds/Pontiac.....2.834"
Symmetrical.....2.812"
Large Ford.....2.500"
Small Ford.....2.500"
GM 10/12 Bolt.....2.812"
Mopar.....2.500"



Measuring axle standout can be done using dial calipers thru a stud hole or access hole in the flange to housing end.

Diagram A

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5) *Slide assembled hat and rotor over the axle flange. Make sure the hat seats against axle flange, if it does not check the chamfer on the axle flange (must be at least .060 x 45 degree). With hats held in place with lug nuts and washers, check brake rotor run-out (.005" maximum).*

6) *Bolt caliper to mounting bracket with the supplied 3/8-24 x 1.015" AN bolts and hardened washers. Torque to 35 ft/lbs. Center parting line of caliper should be directly over the center of the rotor. .031 thick shims are available if caliper needs to be moved inboard.*

7) *Remove 5/16" bridge bolt and bushing and install brake linings. Re-install bushing and bolt and torque to 20-25 ft/lbs.*

8) *Attach brake lines and bleed the system.*

9) *Install wheel and check clearance between inside of the wheel and the caliper (1/8" minimum).*

Special note for Mopar kits.

When using 56001 axle bearings and MW brake kit the retainer that is attached to the bearing must be removed. This does not create a problem when MW 53185 housing ends are used, but when using stock ends some method of keeping the axles from moving inboard must be used. One option is to place a spacer between the ends of the two axles. This will keep both axles in the proper position but sometimes is not very practical. The other option is to place a spacer ring in the housing ends prior to installing the axles and bearings. The O.D. of these spacers must be 2.875" and I.D. 2.500". The thickness may vary with depth of the stock housing ends. Also when using MW 53189 ends that hold a large Ford style axle bearing the counterbore in the bracket must be enlarged from 2.875" to 3.150" +.002" -.000"

Special note for GM kits.

The MW GM kit designed to be used with a MW "C" clip eliminator kit requires a minor modification to the bearing housing in the "C" clip kit. With the bearing housing removed the inner face (the side next to the backing plate) must have .172" removed. This will bring the thickness of the bearing housing down to 1.015" +/- .002". This modification assures caliper alignment and that the overall width of the rear remains the same.

TORQUE SPECS:

Rotor attachment screws (10-32) 10 ft/lbs.

Caliper mount nuts (3/8-24) 30 ft/lbs.

Caliper attachment bolts (3/8-24 AN) 35 ft/lbs.

MAINTENANCE REQUIREMENTS:

Periodic visual inspection of entire system. Check torque on caliper mounting bolts. Check rotors and pads for excessive or uneven wear. Pads should be changed when friction material is down to the small retaining tabs on the backing plates approx. 3/16". If pads are run thinner then 3/16" pistons can become cocked and not retract properly. When changing pads, calipers should be thoroughly cleaned, especially the pistons before they are pushed back into the bores to accept new pads.