

# INSTALLATION - SERVICE INSTRUCTIONS

765 South Pierce Avenue Louisville, Colorado 80127

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Bulletin #14 page 1 of 2 Brake Kits w/Vented Rotors

August '99

PART NUMBERS:	DESCRIPTION
72000.....	Olds/Pontiac Disc Brake Kit (ends rotated 90 degrees).
72100.....	Olds/Pontiac Disc Brake Kit (ends in stock position).
72200.....	Symmetrical Disc Brake Kit.
72500.....	Large Ford Disc Brake Kit.
72600.....	Mopar Disc Brake Kit.
72700.....	GM Passenger Car Disc Brake Kit (stock ends).
72800.....	Small Ford Disc Brake Kit (Mustang).
72900.....	GM Passenger Car Disc Brake Kit (with MW "C"-clip kit).

PARTS INCLUDED:	
2 - 82100.....	MW 4 piston brake calipers.
4 - 81130.....	Brake linings for MW calipers.
2 - 71002.....	Vented cast iron rotor.
1 - 58570.....	Backing plate bolt kit (all kits except 72500).
1 - 58575.....	Backing plate bolt kit (72500 kit only).
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).
16 - 215.05.12NC.....	5/16-18 x 3/4" rotor attachment bolts.

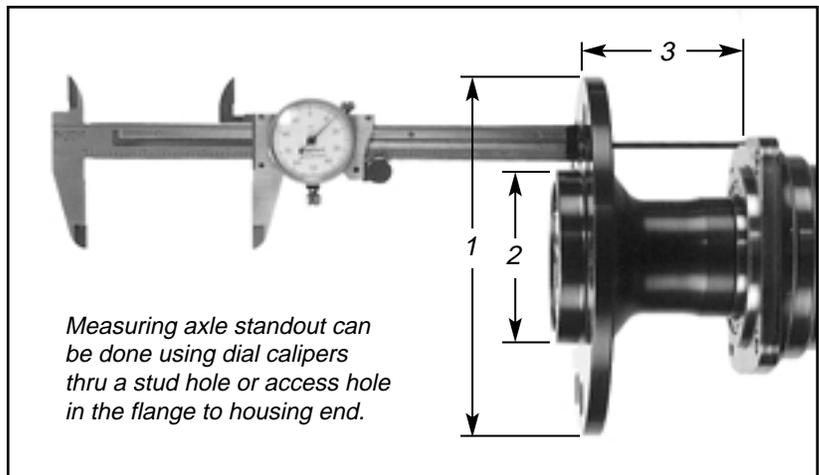
VARIABLE PARTS:	
71001.....	Rotor adapter hat with 4 3/4" and 5" x 5 bolt patterns.
71011.....	Rotor adapter hat with 4 1/2" and 4 3/4" x 5 bolt patterns.
71021.....	Rotor adapter hat with 4 3/4" x 5 bolt pattern.
71022.....	Rotor adapter hat with 4 1/2", 4 3/4" and 5" x 5 bolt patterns.

PRIMARY APPLICATIONS:  
Pro Street and street rod 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 identifying the type housing end and brake kit being used, compare to the chart below. Dimension should match one given below +/- .020.

### 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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## INSTALLATION OVERVIEW continued:

*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.
- 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 72600 Mopar kit.

When using 56001 axle bearings and 72600 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 72900 GM kit.

The 72900 kit is designed to be used with a MW "C" clip eliminator kit with 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 bolts (5/16-18 ) 25 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 rotors for excessive heat and run-out. Check torque on caliper mounting bolts. Check pads for excessive or uneven wear. Pads should be changed when friction material is down to approx. 3/16". If pads are run thinner than 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.