**Q**. Does the kit come with a dual reservoir master cylinder?

**A**. Yes, the kit comes with the proper dual reservoir master cylinder. Specify

manual or power brakes when ordering. Manual applications come with an

adjustable push rod.

**Q**. What size are the rotors?

**A**. The slotted rotors supplied with the kit are 11.06” diameter 5 lug type.

**Q**. Can I use the outer tie rod ends from my car with the kit?

**A**. Ford changed the stud size on the outer tie rod ends several times during the

60’s and 70’s. The kit includes the proper adapter tie rods for nearly all

applications.

**Q**. Why do I need to adapt my hard brake lines?

**A**. The brake line needs to be adapted or re-fabricated to fit in the proportioning

valve and the new master cylinder. Rear lines can usually be used without major

modification. It is often easier to fabricate new front lines, especially on 65-66

Mustang models where one also needs to adapt the line to accommodate the

brake hose. Unless you possess a very good double flare tool, we recommend

that you use pre-made straight lengths of lines that already have the proper

fittings attached. These come in 8” or so increments from 8” to 72”. Put loops in

the line to use up extra length. You can make a mock-up of the brake line using a

coat hanger. The master cylinder may require the use of an adapter fitting at its

outlet. These will be provided. Be certain that you use the master cylinder’s

rearward outlet for the front brakes.

**Q**. What does the kit include?

**A**. The kit has all NEW parts including high strength disc brake spindles, caliper

brackets, splash shields, an adjustable proportioning valve, performance 11"

SLOTTED rotors, corrosion protection coated calipers, semi-metallic pads,

hoses, master cylinder, outer adapter tie rods, bearings and seals, an adjustable

push rod (manual applications), Wheel hardware, caliper hardware, grade 8

attachment bolts, blue and red thread locker, caliper lube, and our renown

installation guide via download. You need only bolt the kit on and adapt or re-

fabricate your hard lines to fit the proportioning valve, the master cylinder, and

brake hoses. Bleed the system, mount the wheels, and the installation is

complete.

**Q**. My car has power steering. Will the kit work?

**A**. Kits configured for 65-66 cars with power steering include a special driver side

adapter outer tie rod. This tie rod alone retails for over $75 at a popular Mustang

parts vendor. Six cylinder 65-66 Mustangs and certain 63-64 V8 Falcons MAY

come with adapter sleeves, or other tie rod treatments. 67-73 Mustangs with

power steering do not require special treatment.

**Q**. My 65-66 Mustang has power brakes (or I want power brakes). Will the

master cylinder provided work with the SWAP.2 kit?

**A**. The original booster/bracket system used on 65-66 Mustangs is not

compatible for use with a dual reservoir master cylinder. There is not enough

space between this booster and the shock tower to mount one. This is because

Ford located the mechanical clutch linkage in a place that interferes with the

direct mounting of the booster to the firewall. In order to accommodate both

manual and automatic transmission applications with one assembly type, a

standoff bracket is employed. This bracket places the booster about 3” away

from the firewall. In this position, it will not mechanically interfere with the

operation of the clutch linkage. This works fine with the single reservoir master

cylinder which is standard to the model, but will not allow the mounting of the

dual reservoir master cylinder necessary for a safe modern brake system.

This presents the kit installer with a couple of options. In any case, the original

booster/bracket must be removed. On an automatic transmission equipped car,

CSRP offers the compatible 65.PBU 65-66 power brake upgrade with a

booster/ bracket system that allows the use of the original pedal. One could also

install the kit in manual brake mode. When purchasing the SWAP kit for these

cars, the installer must specify a manual or the power master cylinder, or a power

brake upgrade kit which includes a proper master cylinder.

On a manual transmission car with original power brakes, the installer must still

remove the original booster/bracket, but has fewer practical options for power

brakes. CSRP offers a power brake upgrade for this application only if the clutch

linkage has been replace with a cable or hydraulic type that eliminates the

interference. Otherwise, the user must install the system as manual brakes or

find other options.

**Q**. My 67-73 Mustang car has power brakes (or I want power brakes). Will the

master cylinder provided work with the SWAP.2 kit?

**A**. The kit can be provided with a power type master cylinder at no extra cost

when specified. This master cylinder will work with all existing boosters present

on 67-73 cars. Those users wishing to upgrade their manual brakes to power,

can purchase our 67.PBU power brake upgrade kit for 67-70 cars. We do not offer power

brake upgrades for 71-73 cars.

**Q**. Will the Granada type Swap give me bumpsteer? What is bumpsteer?

**A**. Bumpsteer is the change in steering output that occurs without driver input

when the suspension moves. Basically, the wheels turn a little in response to

going over bumps. This is a result of the fact that the radius of movement for the

tie rods and the ball joints are different. Large deflections of the suspension

cause different rates of movement of the control arms vs. the tie rods causing a

small steering input. This affect is most noticeable, if at all, in performance

situations.

All Mustangs and many other 60’s and 70’s cars are based on the Falcon chassis

that Ford developed in the early 60’s. The suspension and steering gear for all of

these cars are very similar. The suspension mounting configuration for the class,

including most years of Falcon, Comet, Mustang, Cougar, Fairlane, Torino,

Montego, Maverick, Granada, and Monarch remains the same from 63-80. There

were basically two steering geometries during the period. The 64-66 Mustang

and 63-65 Falcon models have a slightly different geometry than the later

models. The later models have identical geometry with Granada and the steering

geometry is not affected by the swap.

CSRP manufactures 2 Granada spindle classes. One type has correct steering

geometry for 63-65 Falcon/Comet and 65-66 Mustangs, and the second is

identical to original Granada spindles.

It is generally recognized the Falcon class chassis had poor suspension

geometry, especially the early applications. It is generally agreed that making

major modifications to the suspension like using lowering coil springs, or cutting

coil springs, or excessive lowering of the control arms in addition to the swap can

exacerbate the inherent poor steering dynamics of the early Mustang.

**Q**. Can I use my original wheels with the swap?

**A**. In general, original 14” stamped steels wheels prior to 1969 will not fit onto the

rotor hub of the swap. The bearing boss or snout of the Granada type rotor has a

larger diameter than the hub hole on the early wheels. The disc brake caliper

also tends to interfere with the inner surface of the wheels. Some people advise

that you can grind down the calipers or turn down the snout to affect clearance.

The availability of 14” tires is becoming increasingly poor and the change to 15”

or greater aftermarket wheels is very popular. If you desire to maintain the

original look, find 14” wheels from later Fords like Maverick or Granada. Original

14” Magnum 500 wheels fit with the swap (or have only minor interferance) .

**Q**. Will the swap work with my 6 cylinder car, and will I need to change the

steering gear?

**A**. This swap will mount to your existing 1960+ 6 cylinder suspension and

steering gear. You will use adapter outer tie rod end provided with the kit for pre

67 cars. On pre 1963 Falcon/Comet, the control arms will need to be replaced

with 1963-65 Falcon or Mustang type. 1967-73 6 and 8 cylinder cars use the

same tie rods. Some V8 Falcons made during the 63 and 64 model year will be used

without adaption.

**Q**. Can I keep my 4 lug wheels with the swap?

**A**. The current version of this and nearly all other swaps have a 5 lug rotor

included. This can make the selection of wheels awkward with 6 cylinder cars

that have the original 4 lug wheels in the back. We have determined that

providing a 4 lug kit is not feasible. The selection of suitable aftermarket 4 lug

wheels is poor and it is difficult to provide a suitable rotor/caliper set that will fit

standard 14” 4 lug wheels.

**Q**. How long does it take to do the swap?

**A**. The removal of the old parts and installation of the new ones can easily be

done in one weekend. The refitting of the brake lines may take a part of another.

**Q**. What does a proportioning valve do?

**A**. A proportioning valve is a vital component of a disc brake system. It is a

metering valve that controls the flow of brake fluid to the rear wheel cylinders. It

functions to delay the full implementation of the rear brakes. Without the valve,

the rear brakes would lock prematurely. There are 2 types of proportioning valves

available with the kit, either an adjustable, or an OEM combo type. An adjustable

type is the standard one included with the kit. It has an adjustment knob that

functions much like a water faucet except that the flow of fluid is never stopped,

just restricted. This valve is simple to plumb, but requires that the installer tune it

by trial and error to give the desired rear braking performance.

One may elect to purchase the optional OEM type combo valve. This valve has

the proportioning function along with a front brake metering function, as well as

leak isolation and indication functions. The pressure switch is a hydraulic system

that senses pressure loss in a circuit (front and back are plumbed separately)

and isolates that circuit from the other circuit. This prevents the total loss of

brakes in the event of a leak. This valve is plumb and forget.

**Q**. Will I need to buy anything else?

**A**. With the exception of parts necessary to adapt the hard brake lines to make

the connections of the new master cylinder and proportioning valve, and hoses,

all parts are included. Nothing from your drum system is used. You can sell your

drum system on eBay.

**Q**. Does the kit include instructions?

**A**. The kit includes internet access to the installation guide. This guide goes

through the history of the swap, and includes a complete installation guide.

**Q**. Is the swap safe?

**A**. The system is based on an original Ford OEM design. The components are

the best available. The installer must be reasonably proficient in mechanics and

must have the car realigned after the installation. Brakes are a seriously

necessary component of the safety system of your car. Have the new system

inspected by a qualified mechanic before driving the car.

CSRP will not accept the liability that the owner assumes when making the

swap

**Q**. I’ve heard that I won’t be able to align the toe after the swap?

**A**. This problem occurs when using original Granada spindles on 65-66

Mustangs. The CSRP kit includes spindles with correct steering geometry and

does not have this problem.