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DR06	Installation Photos
Date:	Date: 1/29/2019

Part Number	Part Description
M68	Misc Part - Jag Differential adapter - Front
M69	Misc Part - Jag Differential adapter - Side
Date:	1/29/2019



Example photo of Jaguar Salisbury 4HU differential used with the adapter brackets detailed in these drawings.

Salisbury 4HU differential Identification characteristics and charastics

The following are a few of the easy ways to identify the 4HU Salisbury differential (and distinguish it from the similar but less desirable Dana style):

1. The drive shaft flange on the Salisbury is round. (The Dana has a more square flange.)
2. The Salisbury has a drain plug located on the bottpm of the cstring. (The Dana has no drain plug).
3. The Salisbury 4HU differential used with these drawings have the disc brake calipers and rotors mounted directly to the differetial side bearing retainer and stub shafts. (The later model differentials with "out board" mounted brake calipers and rotors; i.e those with the caliper and rotor mounted near the suspension upright at the wheel itself, will not work.)
3. The early 1970 model XJ12 Jaguars more often had the desirable Salisbury 4HU with a limited slp differential with gear ratios of 3.54 or 3.31.
4. The later model 4HU differentials (sometimes referred to as the Series 2 had the more desirable tapered roller bearings for the pinion and stub shafts. (The earlier Series 1 units had non-tapered roller bearings and replacement parts are more difficult to obtain.)

Date: 2/1/2019

Notes:

1. These are not original Cobra parts. These drawings detail custom mounting bracket adapters developed to retrofit a more readily available (and less costly) Jaguar Salisbury 4HU differential to the original Cobra chassis. Using this adapter, no modifications are required to the Cobra chassis to mount a Jaguar differential.
- 2 The space available for mounting the differential in an original 289 Cobra chassis is minimal. The original 427 Cobra chassis has slightly more room available around the differential mounting area than the 289 chassis. These adapters will allow use of the Jaguar 4HU in both an original style 289 and a 427 chassis.
3. Although similar to the Cobra 4HU differential, the Jaguar 4HU has several differences that must be addressed in a retrofit to the Cobra chassis. These differences include:
  - a. The Jag differential has no tapped mounting holes encircling the pinion area.
  - b. The Jag differential has no tapped mounting holes above the side bearing retainer.
  - c. The Jag differential main casting side to side dimension is wider than the Cobra casting.
4. The retrofit of the Jaguar differetial for Cobra service requires two separate adapters. A pinion mount adapter and a side mount adapter. These drawings provide details for both adapters required.
5. The Jaguar differential casting requires only one minor modification to utilize these adapters. The upper rear bolt holding the side bearing retainer needs to be machined slightly deeper to fit the new side mount adapter. Full details of the casting modification are included in these drawings.
6. This drawing has been prepared based on the dimensions of Jaguar 4HU casting from a pre 1984 Jaguar of either XJS or XJ12 vehicle. Use of other Jaguar differential castings may require minor adjustment to the dimensions shown.
7. Due to casting differences some minor adjustment of the dimensions shown may be required to fit the Jaguar differential casting used. Also, since these adapter brackets mount to or around some unmachined areas of the casting, some minor filling or grinding on the Jaguar casting may be required.

Date: 1/19/2019

Introduction:  
The original 289 and 427 Cobras utilized the same Salisbury model 4HU limited sip cast iron case differential. Original 1960s vintage differentials are virtually unobtainable at this point.

At the date of this writing, there are reproduction differentials being manufactured; some in cast iron and some made of cast aluminum. The reproduction differentials appear to incorporate the unique mounting provisions of the original Cobra parts (4 tapped holes in casting bosses around the pinion area and 2 tapped holes on each of the side bearing carriers).

The cast rion reproduction differentials would be the best selection for a Cobra that is intended to be as authentic as possible. However, these drawings have been created to offer a cost effective alternative utilizing a Jaguar differential in place of the original Cobra differential .

These drawings have been prepared with the best information available, however they are provided with no written or implied guarantee of accuracy or suitability of purpose and they are intended to be used solely for entertainment purposes.

Date 1/19/2019

Rev.	Description	Date	Cobra Differential Retrofit Drawing Registration No. xxx Name: Sample Date: January 2019	FOR PRIVATE USE ONLY Copying any part of this document without the written consent of the Developer is prohibited.	Drawings developed by: <b>CAL COBRAS</b> Danville, CA.	<b>COBRA</b> <b>DIFFERENTIAL RETROFIT</b>	Line is 1 inch at full scale (if not 1" scale accordingly)	Scale NA	Title <b>DRAWING INDEX &amp; NOTES</b>	Drawing Number DR01
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