

ASSEMBLY
AND
SERVICE MANUAL
FOR THE
E.R.A.
427SC



Revision 7a
7/04

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Contents

*This manual is arranged by **assembly sequence**, not topic. For information on a specific topic - assembly or service, see the index.*

READ ME FIRST	5
SECTION A: PARTS NEEDED	7
PICKING UP YOUR KIT	8
SPECIAL NOTES	9
ENGINE	10
CLUTCH	11
BELL-HOUSING	11
ALTERNATOR	12
IGNITION NOTES	12
TRANSMISSION	13
SPEEDOMETER DRIVE GEARS	15
SHIFT LINKAGE	15
REAR DRIVE/SUSPENSION ASSEMBLY	16
STEERING GEAR	16
FRONT ROTORS AND CALIPERS ..	16
DRIVE SHAFT	17
OIL COOLER SYSTEM	17
STEERING COLUMN (UPPER)	17
STEERING WHEEL	17
SEAT BELTS	17
WIPER MOTOR AND COMPONENTS	17
FRONT SHOCK ABSORBERS	18
FRONT COIL SPRINGS:	18
EXHAUST SYSTEM	18
WHEELS, BOLT-ON	18
WHEELS, PIN-DRIVE	18
TIRES	19
RADIATOR HOSES	19
EXPANSION TANK	19
JACK, ETC.	19
PART NUMBERS AND SOURCES ..	20
SOURCE MASTER LIST	25
TOOLS NEEDED	26
SHIPPING COMPANIES (PARTIAL LIST)	26
SECTION B: PARTS PREPARATION	28
ENGINE/COMPONENTS	29
ALTERNATOR MOUNTING:	29
REAR SUSPENSION, JAGUAR:	34
REAR SUSPENSION, E.R.A. DESIGN	37
SHIFT LEVER (FORD)	40
DRIVE SHAFT	42

STEERING GEAR	43
STEERING COLUMN (UPPER)	43
WIPERS	44
DAMPERS AND SPRINGS:	46
REAR HUB ADAPTERS, BOLT-ON WHEELS:	46

SECTION C: CHASSIS PREPARATION	47
BODY REMOVAL	48
CHASSIS PAINT	49

SECTION D: BODY/CHASSIS ASSEMBLY	50
FASTENER NOTES	51
BODY MOUNTED PRE-MOUNTED ON CHASSIS OPTION	51
BRAKE AND FUEL LINES	52
HORNS	52
FLOORS	52
FOOT BOXES	52
BODY MOUNTING	56

SECTION E: BODY PREPARATION	61
--	-----------

FITTING THE ROLL BAR	62
BODY PREPARATION AND PAINTING	62
HOOD	64
DETAIL UNDERCOATING	67
WINDSHIELD WIPERS	67
TRUNK LID	68
HOOD GASKET	68
FRESH AIR HOSES	68
TONNEAU SNAPS	68
WIRING AND ELECTRICAL	69
INTERIOR PANELS	71
ENGINE AND TRANSMISSION	72
DRIVE SHAFT	73
DOORS	73
ACCELERATOR PEDAL AND LINKAGE	74
EXHAUST HEAT SHIELDS	75
ROLL BAR	76
RADIATOR AND FANS	76
GRILLE AIR FOIL	78
OIL COOLER (OPTIONAL)	78
FUEL TANK	79
FUEL FILLER CAP	79

SECTION F: SUSPENSION ASSEMBLY	81
---	-----------

FRONT SUSPENSION	83
LOWER STEERING COLUMN	83
REAR SUSPENSION	86
REAR SUSPENSION, E.R.A.	88
BRAKE AND CLUTCH PEDAL	90

SECTION G: BODY/INTERIOR	92
---------------------------------------	-----------

WINDSHIELD WASHER	93
WINDWINGS AND SUNVISORS	93
WINDSHIELD	94
HEATER/DEFROSTER	94
DASHBOARD	95
SPEEDOMETER CABLE	96
BATTERY AND CABLES	96
STEERING COLUMN AND WHEEL	97
SHIFT LEVER	98
TUNNEL	98
CARPETS	100
HAND BRAKE LEVER COVER	102
SEAT MOUNTING	103
DOOR INSTALLATION	103
SEAT BELT/SHOULDER HARNESS	104
BUMPERS, JACK-PADS	104
FRESH AIR INLET DUCTS	105
FUEL FILLER CAP	105
LIGHTS	105
REAR REFLECTOR	106
LICENSE PLATE LIGHT	107
BACK-UP LIGHT (OPTIONAL)	107
MIRRORS	107
TOP SNAPS	108
DOOR TRIM	108
EMBLEMS	109
LICENSE PLATE(S)	109
SIDE PIPES	109
CONVERTIBLE TOP	111
SIDE CURTAINS	113
FITTING THE TONNEAU COVER	113

SECTION H: FINAL OPERATIONS	115
--	------------

CLUTCH HYDRAULICS	116
BRAKE HYDRAULICS	117
BOLT-ON WHEEL NOTES	117
PIN DRIVE WHEEL NOTES	117
INSTALL WIPER ARMS	117
SUSPENSION ADJUSTMENTS	118
BRAKE BALANCE ADJUSTMENT	121
ADD FLUIDS	121
COOLING SYSTEM	122
DRIVING/CONTROLS	123
FUSES	123
RECOMMENDED SERVICE	124
MAINTENANCE PARTS	125
INSPECTION AND REGISTRATION	127
INSURANCE	128

SECTION A -PARTS NEEDED-

TIRES

(rim size appropriate for tires)

Diameter	Front	Rear
Max.	26.1"	27.0"
Min.	24.5"	25.5"
Max. Width	275mm	335mm

The original Cobra used 8.15 x 15 tires on the Sunburst street wheels (7½" wide front and rear). 9.90x15 and 11.90 x 15 were used on the original Halibrand "GT40" wheels (7½" front, 9½" rear). These were pre-50, 60 and 70 series tires with a different profile than contemporary tires. A **spreadsheet** of tire sizes is posted on the ERA web site at <http://www.erareplicas.com/427man/>.

Lower profile tires increase the clearance between the top of the tire and the fender, giving the illusion that the car is higher than it actually is. If the car is lowered to compensate, the ground clearance will be reduced somewhat. In most of the pictures you have seen of our car, the tires used were B.F. Goodrich radial T/A's, sizes 265-50 x 15 or 235-60 x 15 front and 295-50 x 15 rear. Inquire about current tires that fit properly.

For Reference: $\text{Revolutions/Mile} = \frac{20168}{\text{Tire OD in inches}}$

For 17" wheels, tires in 35 and 40 series will fit. Ask for current recommendations.

Before mounting on pin-drive wheels, see page 117.

SPARE

With bolt-on wheels, you may use a "Space Saver" spare tire as used on Camaros and other GM models. If you buy the tire with the wheel, make sure it has uses the 4 ¾" bolt pattern. This unit gives an increase in trunk room and mounts very nicely on the upper trunk shelf between the hinges.

RADIATOR HOSES

The 427SC requires several standard molded hoses, depending on your equipment. FE and small block hoses are listed on page 22. In some configurations, the hoses must be trimmed to length. See page 34.

If you are using the steel upper **connecting tube**, your radiator must have a special top fitting. Specify when you order your kit.

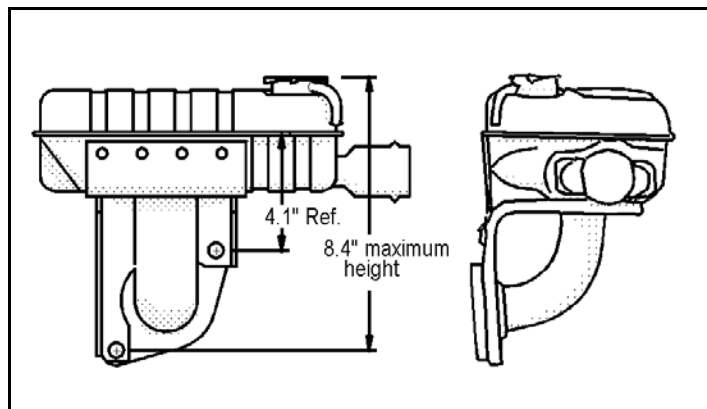
Hhose kits are available from E.R.A.

EXPANSION TANK

FE ENGINE

New reproduction tanks are available from E.R.A.

The used expansion tanks that are commonly available (see page 22) must be modified because the outlet faces the wrong way. Unfortunately, most of the original tanks are fatigued badly and frequently develop stress cracks and pinholes. Most tanks are also too high, and must be shortened. If you wish to modify an old piece, see below and page 33 for details.



a/exptank

FORD SMALL BLOCK

A Harrison tank can be modified for use. Inquire.

JACK, ETC.

A screw or hydraulic scissors jack (available from E.R.A.) works well for wheel changing, etc. Don't skimp on quality.

With pin drive wheels, use a lead or plastic "dead blow" hammer to remove the aluminum knock-off wing nuts. Removing them with a steel hammer will mar the wing nut edges.

Hydraulic jacks, knock-off hammers, safety wire pliers and other tools are available from E.R.A.

SECTION A -PARTS NEEDED-

PART NUMBERS AND SOURCES

Source addresses, etc. are found on page 25.

PART	PART NUMBER	SOURCE
Alternator Ford Small Block, FE and 429 Ford SOHC Chevrolet 283/350 Chevrolet 427/454 Alternator Adjusting Bracket FE Ford Small block Ford Fan belt 289/302 Ford 351 Ford FE Ford	Delco 321-147 (rebuilt) or any '70's Ford with separate regulator. Lucas A8806 (85-89 Chev. Sprint) Chevy w/integral regulator Same as Ford SOHC C6AZ-10145-B Comes with kit Gates 7450 XL(most app's) Gates 7445 XL (most pulleys)	Most Fords, 1971-1980 GM, aftermarket E.R.A.
Ballast resistor	Nieh FF-109 / Borg RU-6 / SMP RU-4 / Wells F795	Aftermarket
Brakes, Bearings, Front Brake Rotor/Hub (bolt-on wheels) Brake Calipers (Front) Pads Mounting pin kit Banjo bolt Dust Shield Brake reservoir Bearings-Front Wheel Outer Inner Seal, inner Spindle nut Spindle washer	GM 334348 Bendix 141040 GM 18002421, 18003761 Rebuilds: Bendix L55001, L55002 (Includes pads) Bendix D52S or equivalent (Semi-metallic for street use) GM 487293 GM 344023, 344024 BMW 3432 1 112 399 Bower/BCA A-6 or Timken LM11910/LM11949 Bower/BCA A-2 or Timken LM67010/LM67048 GM 3966202, National 8871 GM 387137 GM 457707	GM dealer or many (Front) GM cars 1970-78 (see page 16) GM dealer Local parts place GM dealer E.R.A., BMW dealer GM or local auto parts " " " "
Battery, front mount Trunk mount (optional)	Group 24 F (Must have hold-downs on both ends) Optima SC34 (See erareplicas.com/427man/ for installation details.	

SECTION A -PARTS NEEDED-

Bell-housing	To fit engine. See mod's necessary on page 31. Lakewood 15210 for FE engine. Inquire for Ford small block.	Various, E.R.A.
Clutch arm <i>pivot</i> , FE	Ford C8AZ-7522B (Small spline T.L. part must be custom)	Dealer, E.R.A.
Cables, Battery Engine ground to battery Battery to starter solenoid Starter solenoid to starter	16" long, eye/terminal clamp 24" long, eye/terminal clamp 24" long, eye/eye	E.R.A., parts supplier " " " "
Dampers, Springs, Front Coil Spring Damper	12" x 250 lbs/in Spax G135 PAS 200 Koni 8212-1126SPA1 (Double external damping adjustment w/aluminum body)	E.R.A., AFFCO, Eibach E.R.A. Special order only
Dampers, Springs, Rear Coil Spring with ht. adjst Spax Damper, w/o ht adjst w/ height adjustment	10" x 350 lbs/in 8" x 350 lbs/in Spax S200/415 (Externally adjustable damping) Spax G640 S200	E.R.A., AFFCO, Eibach E.R.A.(Std XKE Ser.2)
Drive Shaft Components	(see page 42 for parts reference)	
ENGINES AND ENGINE PARTS Mounts 429/460 Ford 427, 428 Ford 260, 289, 302, 351	Complete rebuilt Ford units are available from several suppliers C9LY-6038-A, C9LY-6038-B ('69 Mercury) 31-3058 (L), 31-3059 (R) Republic 63-64 Ford w/390-428 cid, Ford C3AZ-6038A,B Republic 31-2222 (right), 31-2223 (left) 63-65 Mustang w/260-289 cid, Ford C4DZ-6038A,B Republic 31-2221 (right), 31-2220 (left) MityMount (HD) FM132	Ask us Ford Dealer E.R.A. or local parts
Oil Pan, Extra Capacity FE	Canton 15-810 Pan (street design - no doors) /15-811 pickup 15-820 Pan (w/doors)/ 15821 pickup Custom steel pan as used on original Cobra	E.R.A., Canton Racing Products " " E.R.A.
Small block 302-351W 351 Cleveland	Various Canton numbers - call Canton 15-710 pan/15-711 pickup	
Exhaust System	Under-car-complete Side pipes w/primaries:	E.R.A. E.R.A.
Emblems	Original type, front, rear and side	E.R.A., Cobra Restorers
Fuel Filter	In-line between tank and steel line on chassis (3/8")	local auto parts store
Hand Brake Lever or Hand Brake Lever Cable	Jaguar XKE Series I - II(1961-1970) E.R.A. Reproduction Lever Custom for E.R.A. subframe	Jaguar Dealer E.R.A. E.R.A.
Heater Hoses	Gates 28472 or equivalent (must be trimmed)	
Horn Button, (dash mounted)	Lucas 31872 (Jag XKE 1961-64 starter button)	Jaguar, E.R.A., Lucas supplier

SECTION A -PARTS NEEDED-

<p>SUSPENSION, REAR</p> <p>Jaguar Rear Suspension Assembly Sub-frame Rebuilding Parts for rear suspension Differential/LSD rebuilding</p>	<p>1964-1974 Jaguar XKE, Series 2, 1965-1983 Jaguar XJ-6 Custom E.R.A. bearings, brake parts, etc., see page 125 Various ratios of Dana 44 gears</p>	<p>Wrecking yard or E.R.A. E.R.A. SICP, E.R.A., Jag Dealer Michigan Driveline</p>
<p>Steering gear</p>	<p>Subaru 631-300-540 (Subaru 1977-79 Stage 2 or ERA substitute)</p>	<p>E.R.A., Dealer, wrecking yard</p>
<p>Radiator hoses, FE engine</p> <p>Upper w/o connector w/connecting tube Lower Small Block, Lower hoses Upper Ford 429/460, Lower Upper Chevrolet, 427, Lower</p>	<p>Gates 20819 Gates 21236 or equivalent and 1-3/4" ID x 4-1/2"L straight Gates 20620 (stock water pump) or 62107 (aluminum water pump) or equivalent and 21047 or equivalent (must be trimmed) Gates 20620 or equivalent Gates 21256 (trimmed) Depends on expansion tank Same as FE Gates 20869 (trimmed) Gates 20620 (trimmed 2" off end)</p>	<p>local auto part supplier " " " " " "</p>
<p>Radiator expansion tank</p>	<p>1964 T-Bird big block</p>	<p>E.R.A.</p>
<p>Thermostat</p>	<p>See page 10 for hints</p>	
<p>Starter (FE engine) Starter solenoid</p>	<p>Delco 323-217 Note! The Shelby aluminum block requires a Tilton or CVR starter. Ford B6A2-11450 A, or C9AZ-11450 A, or C7AF-11450 A (used on Ford products 1956-1980)</p>	<p>All FE engined Fords, 1964-69 Dealer or auto parts store</p>
<p>Steering column, upper Steering column Bushings Steering wheel Wheel hub Triumph column E.R.A. column Steering wheel Center button</p>	<p>E.R.A. Reproduction or Triumph Spitfire, GT-6 (1972-mid 1977) Triumph Moto-Lita Moto-Lita Comes with E.R.A. column Reproduction of original either "AC" or "Cobra" motif</p>	<p>E.R.A., wrecking yard E.R.A., dealer, Moss Motors E.R.A. E.R.A. E.R.A.</p>
<p>Speedometer Cable Ford Top Loader Richmond Gear</p>	<p>AC 11589234 (1967 Mustang) Champ 400020 See page 14 for other parts.:</p>	<p>E.R.A., dealer, auto parts store</p>

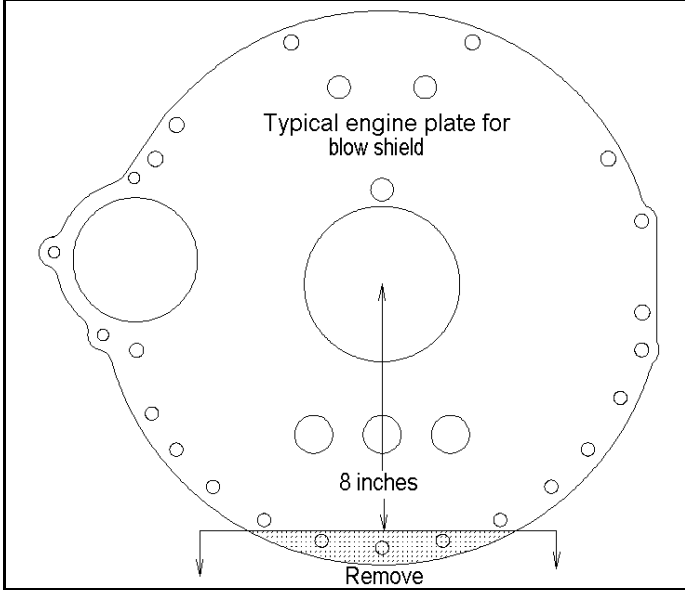
SECTION A -PARTS NEEDED-

<p>Cable drive gears, etc. <u>Top Loader, T-5, Tremec</u> Speedo drive gear Speedo driven gears Retaining clip</p>	<p><i>See calculation notes on page 15..</i> C4DZ-17285A (LH, 7 tooth, black) C8AZ-17285A (RH, 7 tooth, yellow) 20LH tooth: C2DZ-17271H (White) 19LH tooth: C4DZ-17271A (Pink tip) 18LH tooth: C2DZ-17271K (Green) 17LH tooth: C2DZ-17271G (Violet) 20RH tooth: C1DZ-17271A (Black) 19RH tooth: C0DZ-17271A (Pink) C1DZ-17292A</p>	<p>E.R.A., Dan Williams Ent Ford dealer</p>
<p>Cable drive - Richmond Gear</p>	<p><i>See parts on page 14 and notes on page 15.</i></p>	
<p>Spare Tire</p>	<p>Space Saver w/ 4 3/4" bolt circle (Non 6-pin only)</p>	<p>G.M. cars</p>
<p>Transmission:</p>	<p>Ford Top Loader Richmond Gear 5-spd for FE Ford Tremec TKO 5 speed (See notes on page 14.)</p>	<p>Dan Williams, GT Performance, David Kee E.R.A., Richmond Gear E.R.A, Summit</p>
<p>Driveshaft</p>	<p>See page 42 for parts list</p>	
<p>Transmission mounts: <i>Ford Top-loader w/ 2 holes along centerline or 2 transverse holes 5.6" apart</i> Ford Top-loader w/ holes 6.25" apart Ford C-6 Automatic Richmond Gear 5 speed and Tremec 5 speed Throw-out fork Big spline T.L., Richmond Gear 5sp Small spline T.L. Pivot bracket for above Shift Linkage 4-spd. Top-loader Richmond Gear 5 speed</p>	<p>Ford C8ZZ-6068 A, or Republic 31-2258 Ford C9AZ-6068E or Republic 31-2242 Ford C9AZ-6068H, or Republic 31-2345 Republic 31-2224 or equivalent. <u>The Tremec requires a spacer from ERA</u> *Note! Both forks listed below Ford C8OZ-7515D (May be hard to find – As a substitute, ERA widens the small-spline. (The edge must still be modified per page 30.) D0TZ-7515A or Pioneer CF-101 (Hole added) (Must be modified per page 30.) Ford C8AZ-7522B Modified Hurst recommended. The rod lengths must be modified when the shifter is moved to the correct location. (See page 15) Inquire about a plate that may be necessary. Long shifter.</p>	<p>Ford dealer, E.R.A., auto parts supplier Auto parts supplier Dealer, E.R.A., Tony Branda Dealer, E.R.A., Tony Branda Dealer, E.R.A., T.Branda Mid-sixties Ford E.R.A.</p>
<p>Shift Lever: Curved Ford unit to duplicate original Cobra</p>	<p>See page 41 for modifying the Mustang lever, or contact ERA for finished units.</p>	<p>E.R.A., 1965-67 Mustang and other period Fords</p>

SECTION B -PARTS PREPARATION-

BELL-HOUSING

Many blow-shield type bell-housings have a large bottom flange that will extend below the chassis. Trim the engine plate as shown and use it as a template to trim the bell-housing flange. This dimension applies to all engines, although the trimming operation may not be necessary for some.



b\belltrim

For other engines, trim the bell-housings similarly, using the distance from the centerline of the crankshaft to the bottom edge of the flange.

The optional E.R.A./Lakewood blow-shield is already trimmed on the bottom edge.

Note that every bell-housing should be checked for alignment/concentricity! Use a dial indicator on the flywheel to indicate the inside diameter of the transmission hole of the bell-housing. Offset bushings to shift the centering are available from Lakewood and Ford.

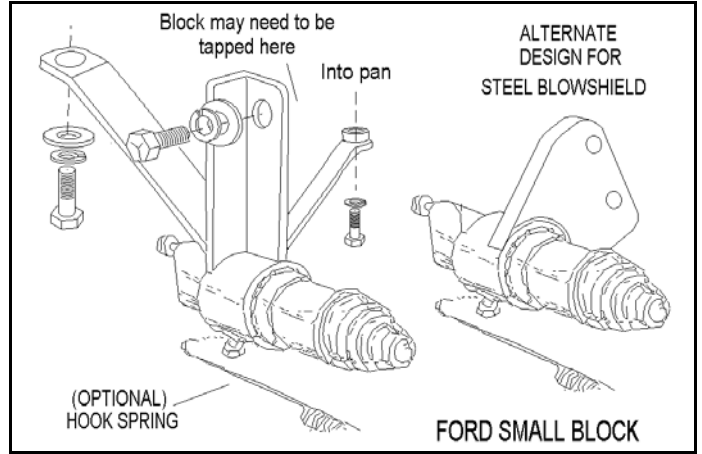
CLUTCH SLAVE CYLINDER (EXTERNAL)

See page 116 for hose installation.

SMALL BLOCK:

The bracket and slave cylinder assembly is fastened in three places:

- The tapped hole on the left side of the block bell-housing flange (where the original clutch shaft pivot ball went).
- The rear bolt of the left engine mount..
- The left rear oil pan tapped hole.

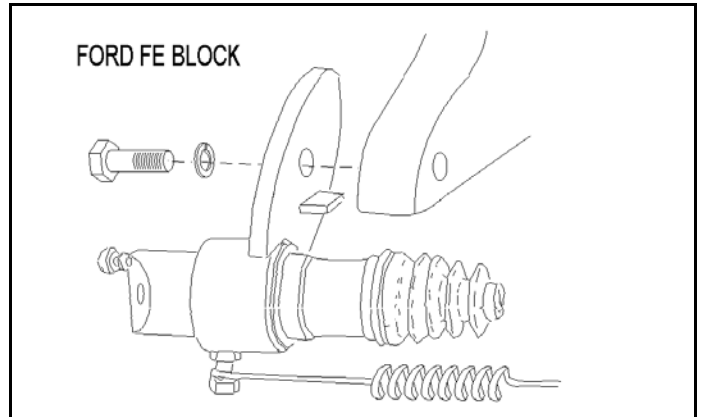


clslave (part 1)

FE ENGINE

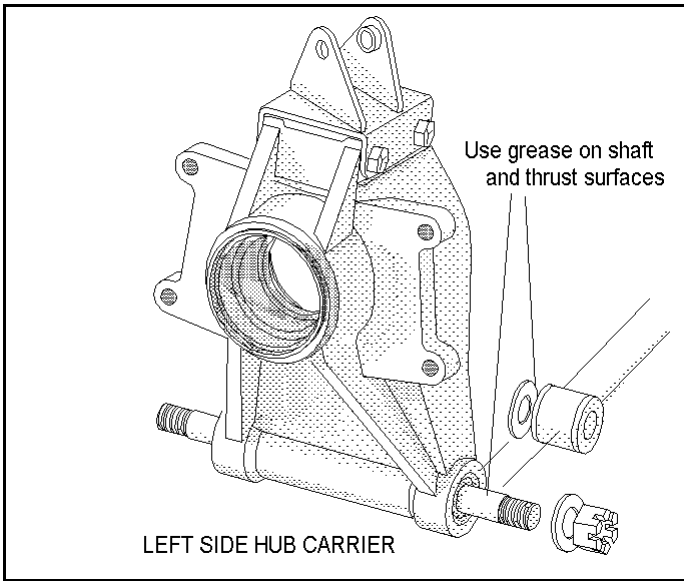
The adapter bracket and slave cylinder are installed with a single bolt on the front side of the left rear engine block bell-housing flange. The slave cylinder points toward the rear, and the locating strip on the adapter bracket goes beneath the engine block machined surface.

**Note! On some aluminum blocks the hole does not go all the way through the casting. You must drill through (3/8") and tap the hole (7/16-14) from the transmission side.*



B\clslave part 2)

SECTION B -PARTS PREPARATION-

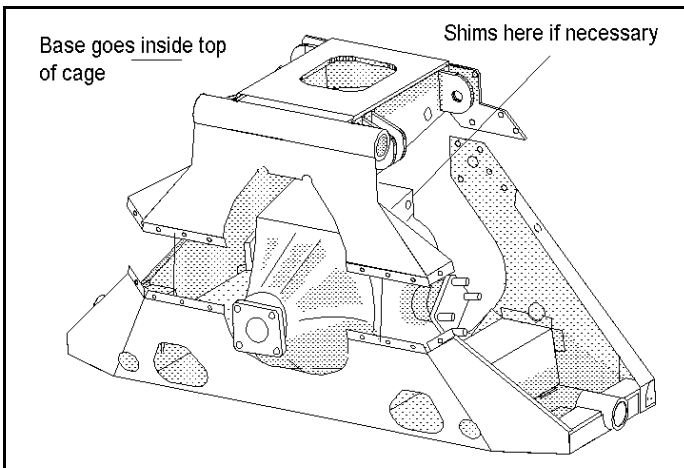


Install the upper bracket onto each hub carrier and torque the bolts to 75 lb-ft. Note the orientation below.

SUBFRAME

Rebuild the differential as necessary. Some units have a separate caliper mounting bridge on the side bearing housing. This bracket and the original Jaguar rotor can be left off.

Place the differential on the bench, right-side-up. Raise the back up about $\frac{3}{4}$ " with a block of wood, etc. Place the the top section of the subframe over the differential, lining up the 4 holes. *Loosely* bolt the top of the subframe to the top of the differential with (4) $\frac{1}{2}$ "USS x $1\frac{1}{4}$ "L bolts, flat washers and lock washers.



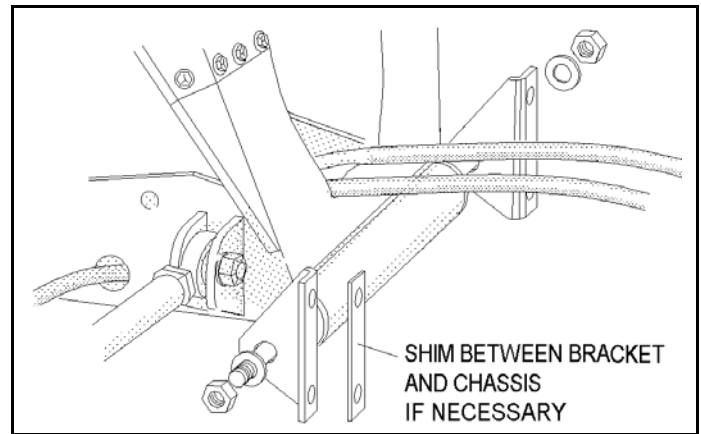
Turn the assembly upside-down. Install the **bottom** section of the subframe by inserting the *rear ears* just in front of the rear flanges of the top. Rotate down in the front to match the front holes and loosely attach the front with $\frac{5}{16}$ "USS x $\frac{3}{4}$ "L hex cap screws and flat washers. Align the rear flanges of the upper and lower sections with the $\frac{5}{8}$ " lower radius arm bolts. Insert the $\frac{5}{16}$ "USS x $\frac{3}{4}$ " bolts (flat washers on both sides) and secure with stover nuts.

Use Grade 5 torque specs on page 126 for all fasteners

Loosely fasten the bottom of the subframe to the differential using $\frac{1}{2}$ "USS x $1\frac{1}{4}$ " bolts, flat and lock washers. Shims may be necessary between the channel and the casting, so don't tighten the bolts yet.

Tighten (in sequence) the top differential bolts, the bolts between the top and bottom subframe pieces. If the clearance between the differential and the bottom section of the subframe is greater than .040", insert shims to fill the gap. Use a medium grade threadlocker on the bolts.

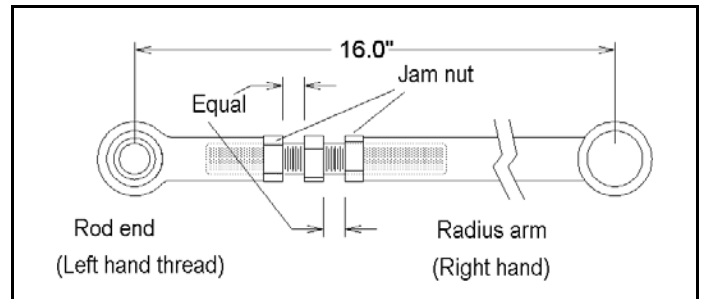
Install the bushings and side brackets on the front mount tube. Tighten one castle nut to 5 lb-ft and back off so that the slot aligns with the nearest hole in the shaft. Tighten the second nut to 15 lb-ft and back off to the nearest hole.



CONTROL ARMS

Install a male (right-hand-thread) rod end and jam nut onto each front lower radius arm so that the bushing center to rod end center distance is 16". Leave the jam nuts loose.

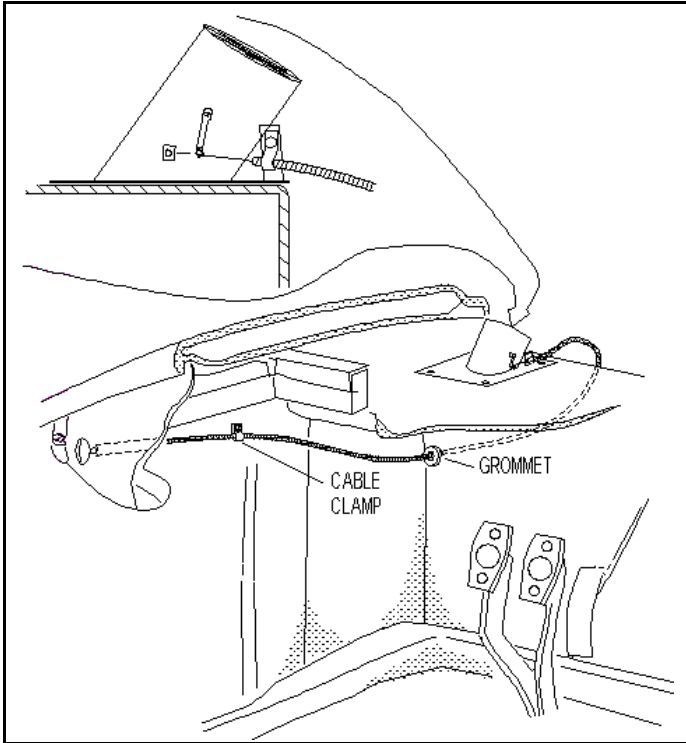
Assemble the **rear radius arm** as shown.



Install the front radius arms onto the lower differential bracket as shown.

SECTION D - BODY/CHASSIS ASSEMBLY

LEFT



d/lfair

Screw on top of the drivers foot box after putting a bead of caulk on the bottom flange.

Clamp the duct hose onto the valve. The actuating cable will be attached later.

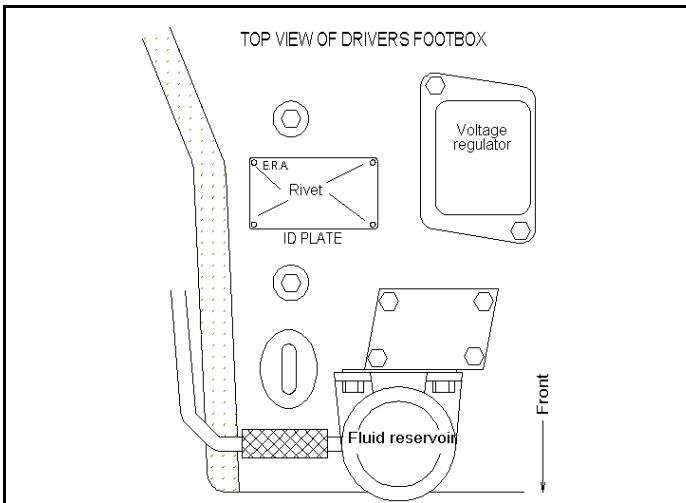
Use a wire tie to **secure** the hose to the bracket on the inside top of the fender.

THROTTLE LINKAGE

Mount the pedal onto the footbox. See page 74 for details.

ID PLATE

Install the ID plate with $\frac{1}{8}$ " diam. x $\frac{3}{8}$ " L aluminum blind rivets as shown. There are usually "shadows" of the rivet holes in the surface of the fiberglass.



d/idplate

More chassis and body ID numbers

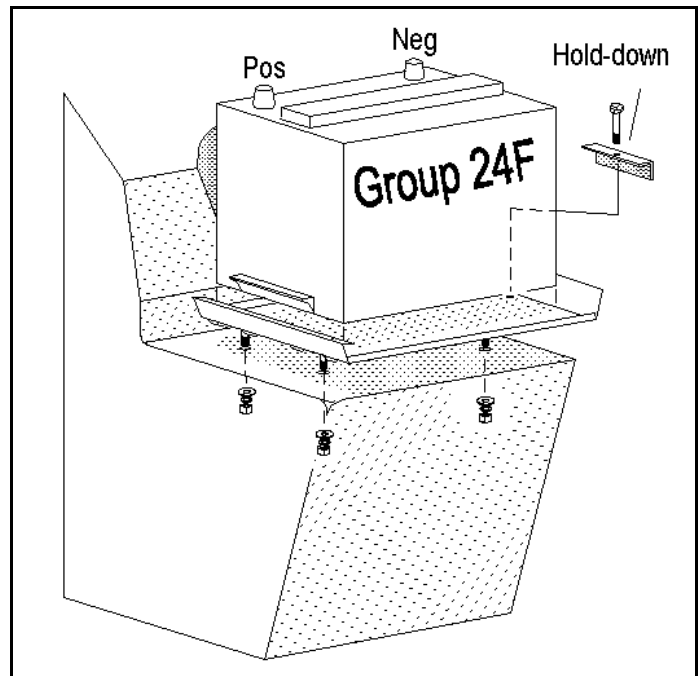
The **chassis** is stamped with the ID number in three places:

- The left front X member, inside the top shock mount.
- On the transverse tube behind the engine (usually covered by the aluminum firewall panel). On the outside of the frame just inside the right rear tire.

The **body** is marked inside the hood opening, on the left return lip about a foot from the front of the opening.

BATTERY TRAY

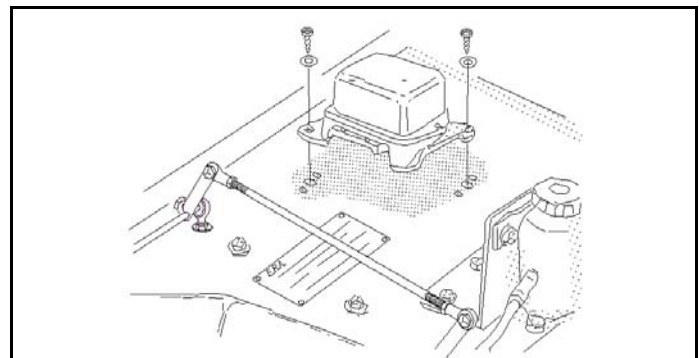
Bolt the tray in place onto the right foot box with the heat shielding flap towards the engine. If the rug for the top inside of the foot box is not already in place, see page 52.



d/battray

VOLTAGE REGULATOR

The regulator (part number on page 24) installs with #10 sheet metal screws bolts on top of the left foot box into captive speed-nuts.



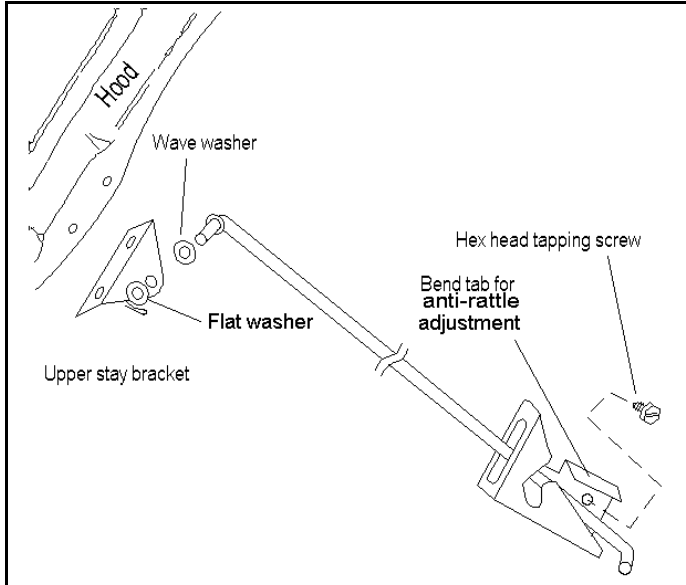
d/voltreg

SECTION D - BODY/CHASSIS ASSEMBLY

HOOD STAY

The hood stay rod and brackets are stainless steel. Painting is not required.

The upper and lower hood stay brackets are (factory) attached as shown.



Insert the hood stay rod (lower hooked end) through the slot in the lower hood stay bracket from the front, the hook pointing towards the engine. Attach the stay rod's upper bracket on the hood. Fit the flat and wave washers in the sequence shown. Secure with the retaining pin.

Lower the hood carefully. If there is **binding**, loosen the screws holding the lower bracket and shut the hood to let the bracket self-align. When fully closed, there is a slight interference built in to eliminate rattling. You may adjust the tab on the back of the lower bracket to change the amount of interference.

TRUNK LID

Tape the gasket to the main body as shown on page 68 for bodywork alignment prior to painting.

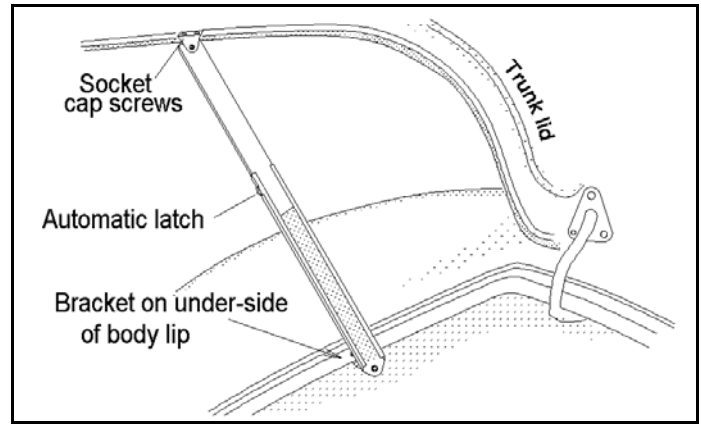
Bolt the trunk hinges (they are marked with a **T** on the lid side) loosely onto the body with any shims found earlier.

Loosely bolt the trunk lid (with factory shims) onto the hinges. Carefully close the lid, not letting the front edge contact the body. Center the lid in the opening. Slowly lift the lid just enough to get your arm (and a wrench) inside and snug the bolts on the lid part of the hinges. Remember to check the front edge while lifting lid.

The lid can be adjusted further by moving the lid and hinges in unit at the connection on the inner panel. Tighten bolts and recheck fit.

TRUNK STAY

Attach the trunk stay to the trunk lid as shown, using the sheet metal screws at the bottom, stainless steel dome head screws at the top.

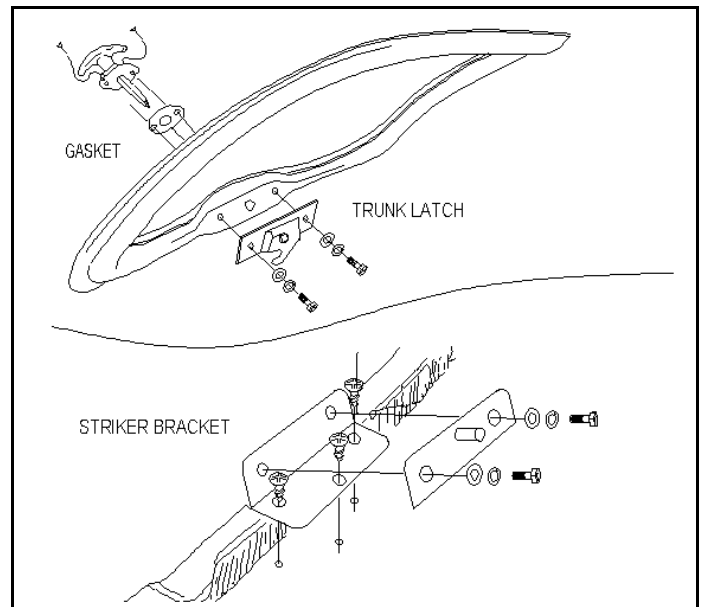


TRUNK LATCH

Attach the trunk handle and latch to the trunk lid as shown. Don't forget the gasket under the handle.

Attach the latch striker and bracket to the trunk floor.

Adjust the striker on the bracket so that when latched the lid slightly compresses the gasket and sits flush and centered on the surrounding body.

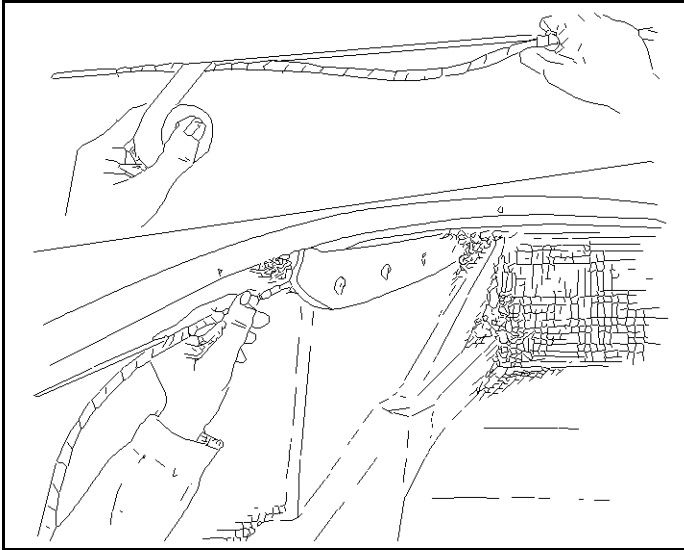


SECTION E -BODY PREPARATION-

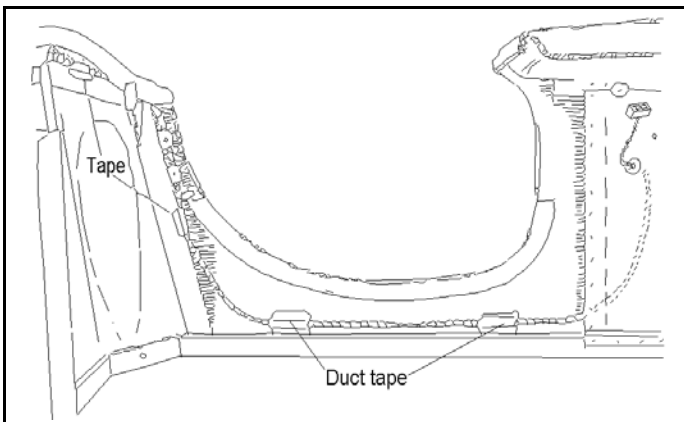
REAR HARNESS

The multi-connector block for the front end of the harness is with the dashboard module. *Don't install it until after the rear harness has been passed through the hole in the side of the footbox.*

Install the harness from inside the trunk as shown. Tape a stiff wire to the harness, then pass the stiff wire through the passage, dragging the electrical harness behind.



Before the door sill aluminum is installed, pass the harness under the door sill and secure the harness to the fiberglass under the door sill.



Punch a hole through the insulation foam with a screwdriver or pen.



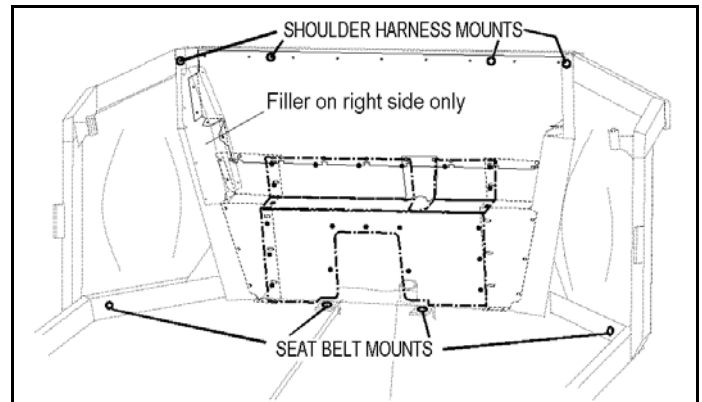
Pass the harness through the hole in the foam and up through the hole in the side of the footbox.

INTERIOR PANELS

The inner door sills and the rear bulkhead panels behind the seats are attached with rivets and sealant. If you had E.R.A. bond the body, these panels are already attached permanently (with the rear harness pre-installed, too.) If not, leave the temporary fasteners in place while you drill through the holes in the panels with a $\frac{9}{64}$ " bit.

REAR BULKHEAD PANELS

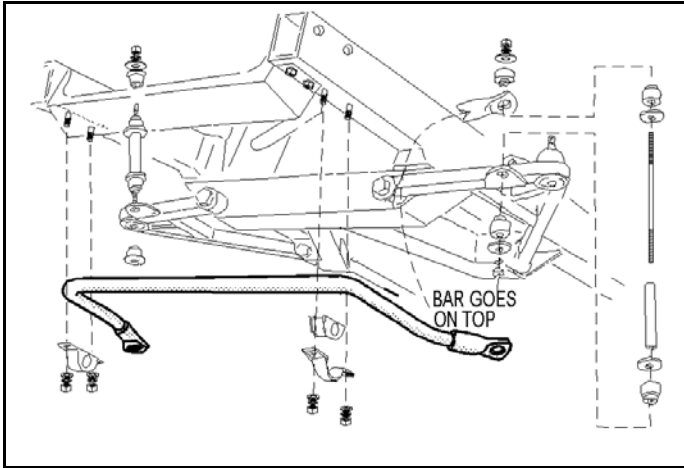
Blind rivet the top and side panels as shown, using the factory locating holes and drilling new holes in the chassis where needed.



RPANELS

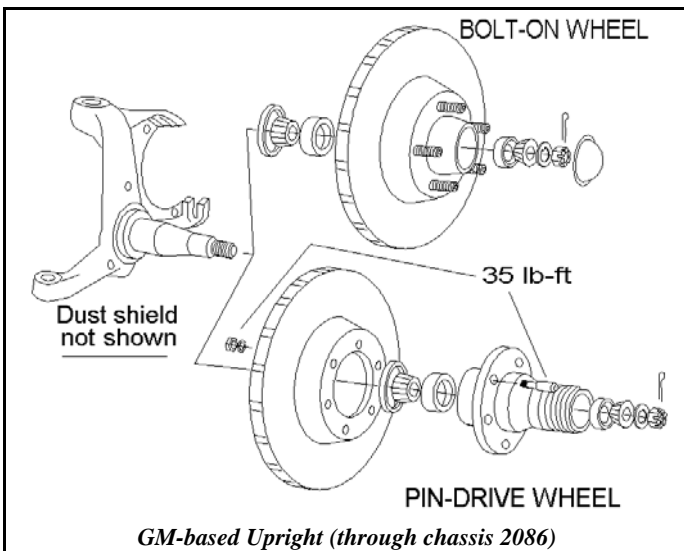
SECTION F -SUSPENSION ASSEMBLY-

- Install the connecting links between the tab on the lower control arm and the pads on the ends of the sway bar.
- Tighten the link bolts so that the rubber bush expands to the diameter of the cupped washer. Do not over-tighten.

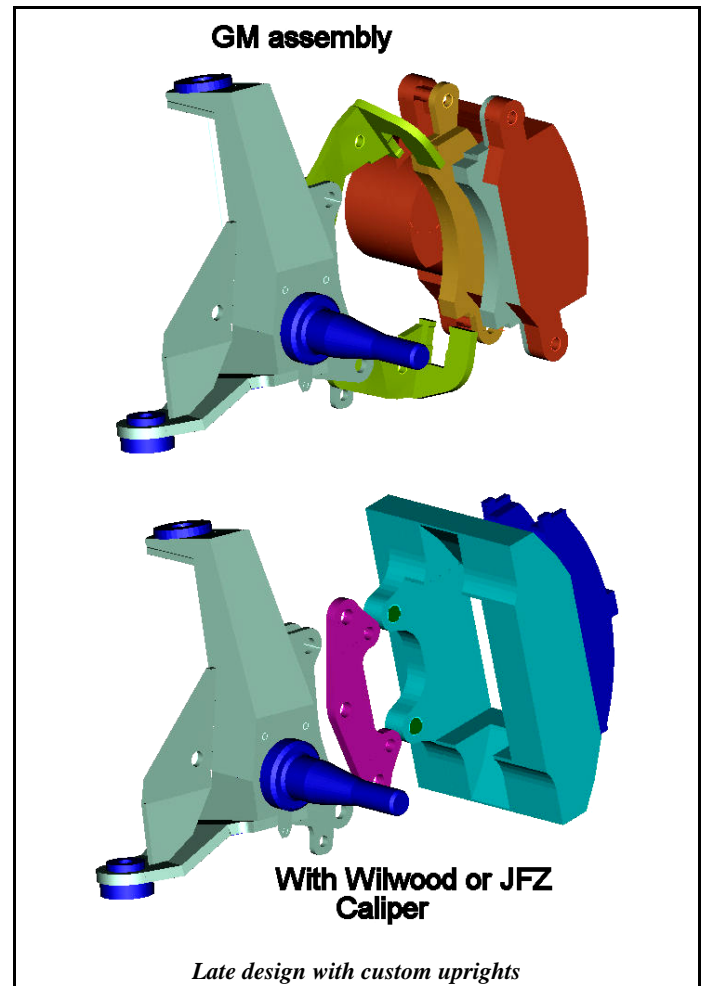


d/kswayb

ROTOR/HUB



d/ffhubasb



GENERAL INSTALLATION

Parts are listed on page 20.

Pin drive: If the rotor is not already installed on the pin drive hub, **torque** the drive pins to 35 lb-ft (with high-strength thread locking compound, i.e. Locktite® red) and the nuts to 35 lb-ft.

If you ever need to remove the pins, they will have to be heated to 300 deg. to weaken the bond. Excessive heat will weaken the pins.

Always grind the rotor after installing the wheel bearing races. If you don't have a special driver for the races, let the auto machine shop install them.

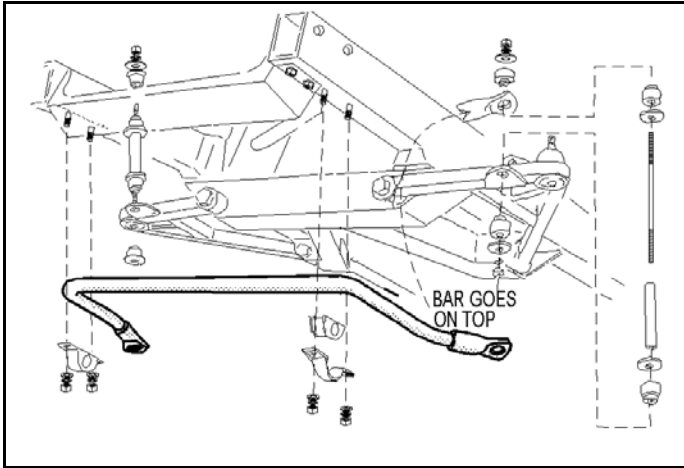
Clean off the **grinding dust** thoroughly before putting grease in the hub and installing the bearings and inner seals.

Install the **dust shields** onto the steering knuckles if desired.

Install the hub onto the stub axle with a special (tanged) washer and castle nut.

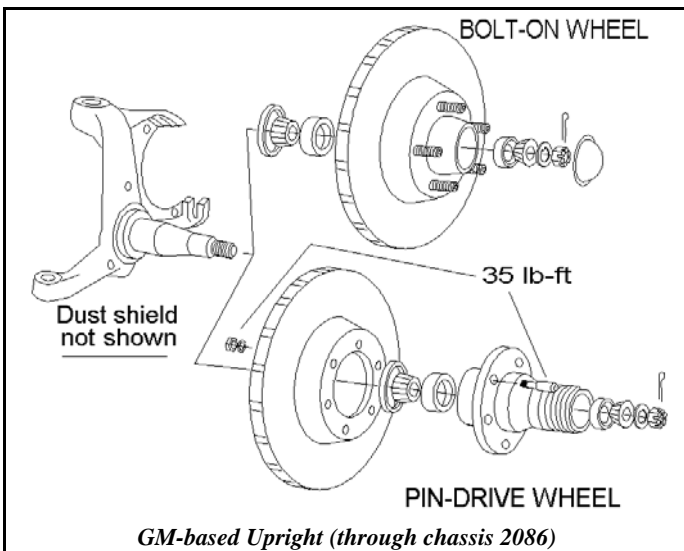
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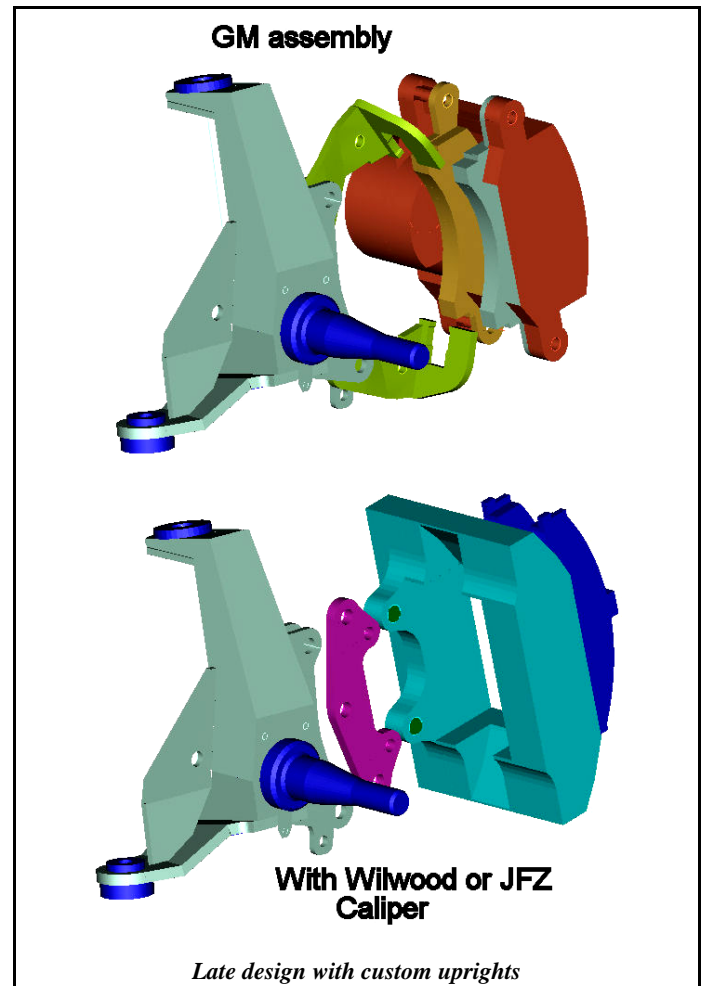


dfswayb

ROTOR/HUB



dfhubasb



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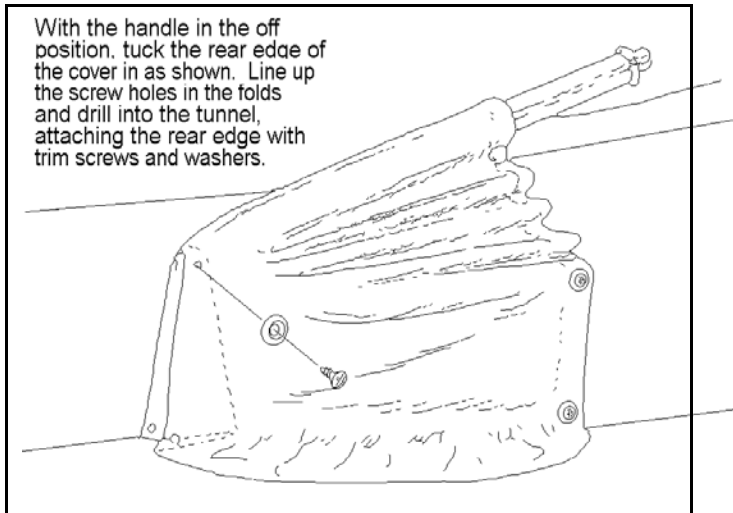
Always grind the rotor after installing the wheel bearing races. If you don't have a special driver for the races, let the auto machine shop install them.

Clean off the **grinding dust** thoroughly before putting grease in the hub and installing the bearings and inner seals.

Install the **dust shields** onto the steering knuckles if desired.

Install the hub onto the stub axle with a special (tanged) washer and castle nut.

SECTION G - BODY/INTERIOR



g\ebtrim2

When the floor carpet is installed, lay it on top of the cover material extending out onto the floor.

SEAT MOUNTING

Screw the seat belt anchors into the captive nuts provided on the lower chassis (see page 71). If necessary, clean the threads with a $7/16$ -20 tap to remove any paint build-up. If you have shoulder harnesses, cut holes in the carpet and, if necessary, chase those threads also.

Lay the floor carpets in place, and locate the seat mounting holes through the carpet. Mark and cut holes for the bolts in the carpet.

If you are not using seat adjusting rails, each seat must be raised up approx. $7/8$ " with spacers to allow the cushions to drop into place.

WITH ADJUSTING TRACKS

The lever for the seat tracks falls on the right side of both the driver's and passenger's seats.

The seats have captive nuts for the adjusting tracks in the seat bottom. Install the adjustment tracks, if used, to the seat base first with $1/4$ -20 bolts. Make sure they don't stick up through the base and prevent the cushion from seating.

Put $1/8$ " shims (supplied with the seat tracks) under the three holes not covered with the tunnel. Place the seats so that the studs in the tracks go through the floor. Adjust alignment as below.

WITHOUT ADJUSTING TRACKS

Loosely bolt the front of the tracks down ($1/4$ -20 bolts). Slide the seat forward to expose the rear mounting holes and install the two rear bolts. Tighten all four bolts.

Slide the seat all the way forward and lubricate the tracks with white lithium grease. Slide the seat back and forth to distribute the grease evenly.

If the seat does not slide freely, loosen all four bolts, slide the seat back and forth to align the tracks and re-tighten. If seat adjusting tracks are not used, follow the instructions for type I seats for marking the holes. Spacers can be made of marine plywood cut to size and drilled for the bolts.

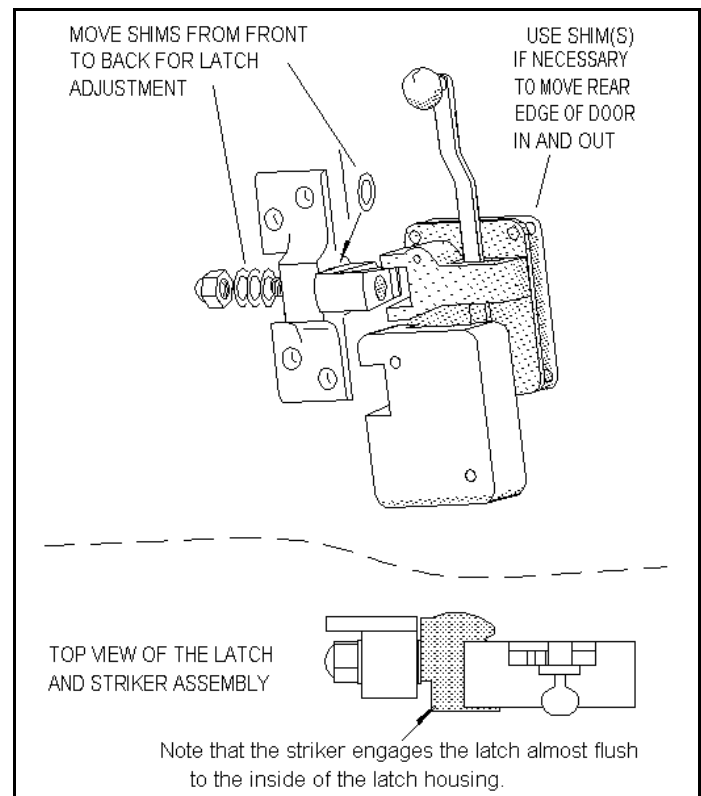
DOOR INSTALLATION

Bolt the **door hinges** onto the chassis with the **side closing plates** and original **shims** that go behind them. The plates seal off the cowl area from the engine compartment and have weather-stripping glued to their outer edges to seal against the body. See page 72. Don't tighten the hinge bolts.

Bolt the door to the hinge, lightly snugging the bolts. If the car is already painted, consider using masking tape along the door and body edges to prevent damage when assembling.

The door edge may be aligned with the body opening by loosening the bolts where the hinge attaches to the door.

To adjust the surface of the door relative to the body, loosen the hinge where it attaches to the chassis. Once the door is properly located, tighten the hinge bolts.



\ebod\dlatch

Bolt the **latch striker** to its mounting plate and install the assembly loosely to the chassis. Remember to replace any shims found earlier. Close and latch the door while allowing the striker to self-align with the latch on the door.

Tighten the striker bolts. Don't worry about the door fitting flush at the rear. The latch striker must be refit when the rugs are installed.

SUSPENSION ADJUSTMENTS

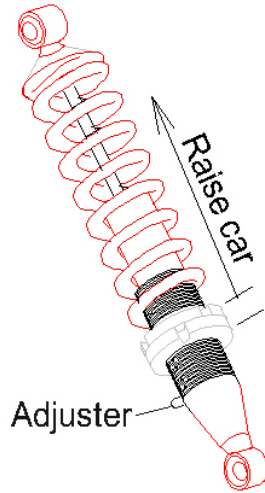
CHASSIS HEIGHT

After setting the springs as described on page 46, the car should be driven to settle everything in. Don't change the spring heights before driving the car at least 50 miles.

COIL-OVER ADJUSTMENT

Front: When you raise both sides of the coil spring collar by X (thereby compressing the spring more), the chassis height will change by roughly 1.5 x X. In other words, to raise the ride height by 1", move the spring collar up by $\frac{2}{3}$ ".

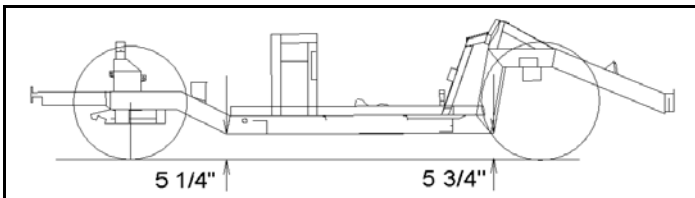
Rear (with Jag): For small changes, you can adjust only one spring per side. The ride height will change roughly $\frac{1}{2}$ the collar change. For larger changes, change all four of the collar positions equally. The ride height will then change roughly equal to the collar height change.



FRONT

The specifications for the standard front spring preload are on page 46. This will result in about 7- $\frac{1}{2}$ " from the ground to the bottom of the front crossmember (5 $\frac{1}{4}$ " to the front of the main rails). The specifications shown below are predicated on the standard tire sizes: 235-60 and 295-50-15. You may change the front height to suit personal taste but be aware that the **oil cooler scoop** will be the first to contact pavement if the car is too low.

Once the height is correct, tighten the front upper control arm pivot bolts. See page 83.



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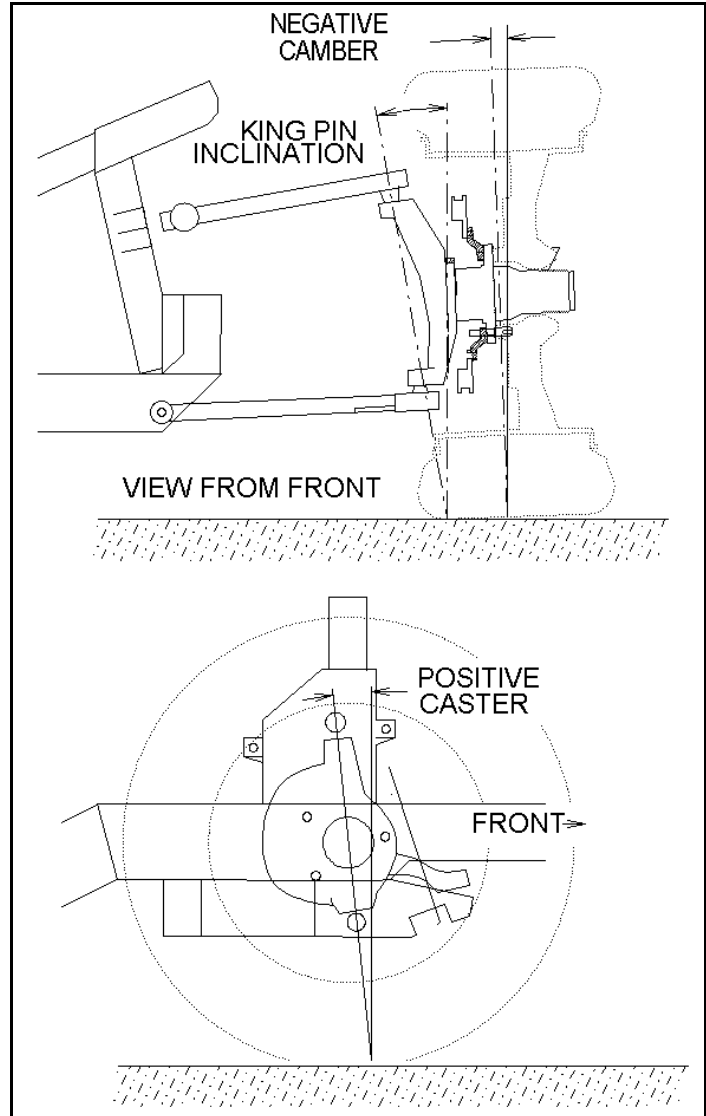
REAR

If you have adjustable spring collar shocks, the rear height can be adjusted to taste. E.R.A. recommends that the main chassis rails be raked about $\frac{1}{4}$ " to $\frac{1}{2}$ " from front to back.

ALIGNMENT

Specifications below are for **street driving**. Competition settings will differ.

See pages 83 for suspension assembly. The **chassis height** should be within the specifications given on page 118.



fcamber