

## Era Replica Automobiles

### Conversion (off road) front brake package (using original cast upright)

12.18" or 12.80" Rotor (usable only with 16" or 17" wheels)

#### Parts List

<u>Ill. #</u>	<u>Description</u>	<u>Details/ Part number</u>	<u>No. of pcs.</u>	<u>Application</u>
1.	12.18" Rotor, curved vane	12.18 x 1.25 vented, L/ H (Sierra 003-1162)	1	15"-17" wheels
	12.18" Rotor, curved vane	12.18 x 1.25 vented, R/H (003-1162)	1	15"-17" wheels
1.	12.80" Rotor, curved vane	12.8 x 1.25 vented, L/H (003-1237)	1	16"-17" wheels
	12.80" Rotor, curved vane	12.8 x 1.25 vented, R/H (003-1237)	1	16"-17" wheels
2	Hub	Modified from stock	2	Bolt-on wheel
3.	Hat, rotor	Rotor/hub	2	Bolt-on wheel
3a	Hat, rotor	Rotor/hub	2	Pin-drive wheel
4	Caliper	Wilwood 150-8854K (L//R, 1.75" bore) or Wilwood 120-3071-R, 120-3071-L (1.875" and 1.75" staggered bore)	2	All
5.	Bracket	Caliper to upright	2	
6.	Spacer	Caliper to bracket	4	
7.	Shim	Caliper to bracket	12	
8.	Pads	Wilwood 150-8854K	1 set	Street (soft) pad
9	Hose - DOT	#3 x 15"L (Russell 55032)		
10.	Adapter	#3 x 3/8"-24 (Earls 989543)	2	
11.	Angle	1/8 MP x #3 (Earls 982203 (Al), 962203 (steel))	2	
12.	Drive Pin	1 3/8" thread length	12	Early PD wheels only

#### Fastening Hardware

	Bolt	7/16" x 1 3/4" SAE, Gr.8	4	cal. to brkt
	Bolt	10-1.5mm x 20 mm low hd hex cap screw	4	brkt to upright
	Bolt	5/16" x 1 1/4" USS hex cap screw	16	hat/rotor, bolt-on
	Bolt	5/16" x 1" USS flat hd socket	16	hat/rotor, pin-drive
	Bolt	1/2"-13 x 1 1/4" Gr.8	10	hat to hub, B.O. only
	Nut	5/16" - 18 stover lock	16	hat to rotor
	Nut	3/8" - 24	10	Early pin drive only
	Washer	7/16" flat	4	cal. to brkt
	Washer	3/8" flat	10	Early pin drive
	Washer	5/16" narrow flat	16	adapter to rotor
	Washer	3/8" lock	10	early pin drive

**Steering Knuckle:** The early ERA upright that (derives from a modified mid-70s intermediate GM) must be trimmed to allow the installation of the intermediate caliper mounting

bracket. *Later ERAs have a universal upright that uses an intermediate caliper mounting bracket that only needs a new adapter. Assembly is shown in the standard manual.*

### **Upright Modifications:**

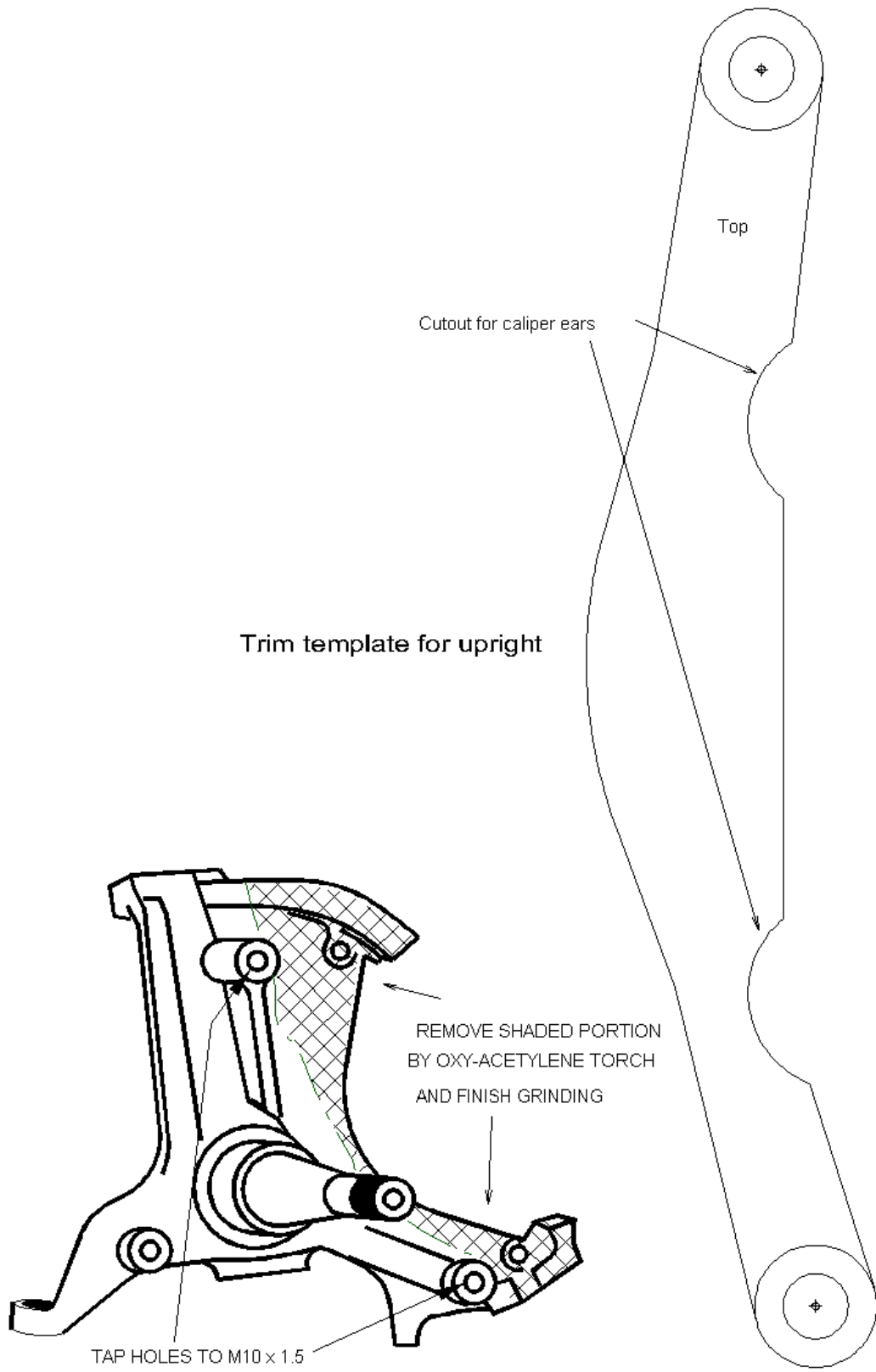
Cut the original caliper mounting ears off the upright (see illustration on the next page) with an oxy-acetylene cutting torch. The template shows the approximate areas that must be removed to clear the mounting ears. Flip the template over for the opposite side. Finish off the cut areas with a grinder. Before you paint your upright, check the fit of the bracket and caliper.

The new caliper mounting brackets are bolted to the upper and rear holes that were originally used to mount the dust shield. Enlarged the holes with a  $2\frac{1}{64}$ " drill. Tap to a depth of 1" to accept the M10 x 1.5 x 25mm metric bolts (supplied.)

**Hubs, pin-drive wheels:** Bolt on the hats and rotors as shown. Note that the rotors are handed. The rotation direction is indicated by the arrow on the backside.

**Hubs, bolt-on wheels:** The rotor portion must be machined off the stock hubs. Mounting holes for the rotor adapter drilled and tapped. See the appropriate illustration below.

*After assembling the rotors, hats, hubs and bearing races, have the rotors trued by a automotive machine or brake shop.*



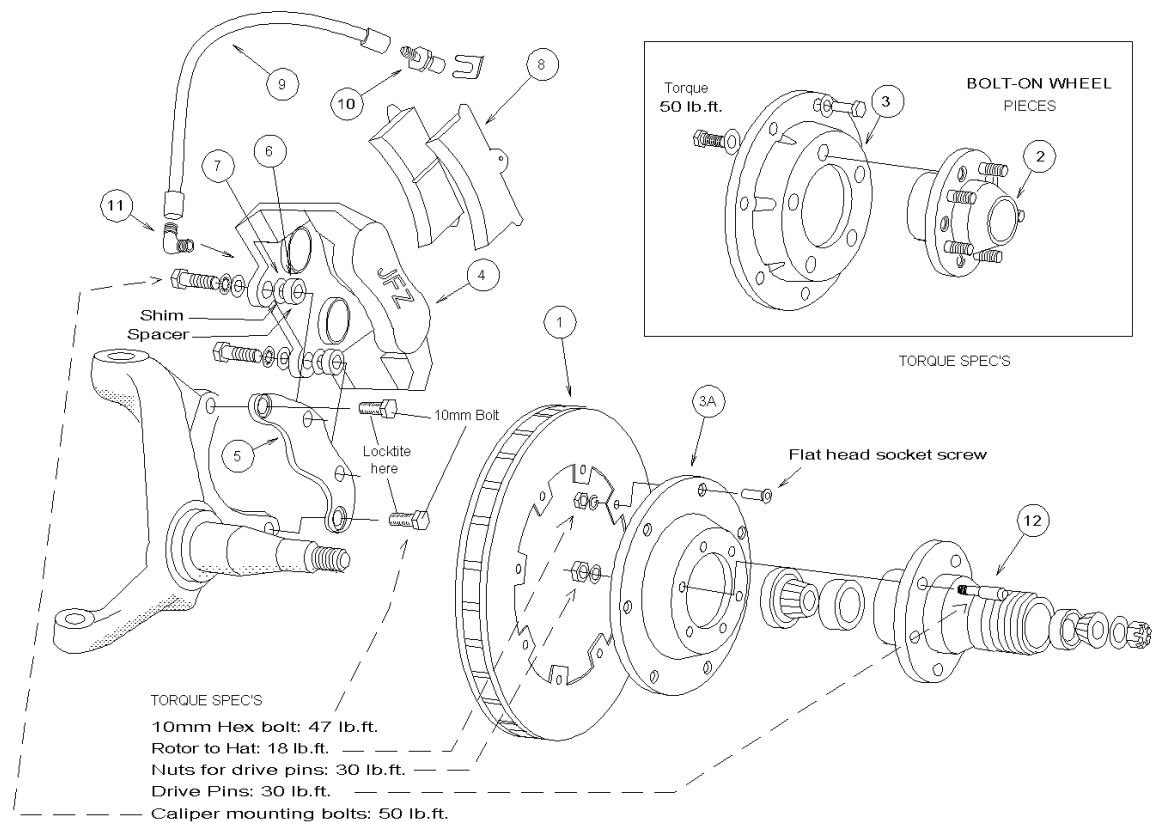
## INSTALLATION

See the parts illustration and the following:

Install the caliper bracket before the hub/rotor assy. Use thread locking compound, i.e. Loctite Red, on the bolts.

**Remember:** The rotors are marked for left and right side.

Mount the caliper using three shims between each wide spacer and the caliper ear. If the rotor is not centered in the caliper within .060", add or remove shims as necessary. If removing all the shims does not move the caliper out far enough, add shims between the mounting bracket and the upright. Fit the brake pads to the caliper and secure with the cotter pin.



## Bleeding

To remove all the air, the caliper bleeder nipple must point straight up. Loosen the lower bolt holding the caliper to the bracket and remove the upper one. Tilt the caliper back into a vertical position. Alternately, you may jack the front up to angle the entire car. When using the *tilted caliper* method, do not use high force at the pedal until the caliper is back in place. You may damage the caliper if the pads don't contact the rotor completely.

**Note:** All 4-piston calipers require a  $\frac{7}{8}$ " bore front master cylinder. E.R.A. 427SCs have used that size since chassis 262. Early cars should update to the new brake bracket and  $\frac{7}{8}$ " Tilton cylinder. The smaller master cannot supply enough fluid to properly actuate the brakes.