

TECH

VOLARE SURVIVAL KIT

Just Say Oh, Oh, Oh

TEXT BY BOB CARLISLE AND CCT STAFF ■ PHOTOGRAPHY BY DAVID FREY AND CCT STAFF

In the mid '80s there were three prime candidates available for an Effie owner interested in dumping his Ford's stock straight-axle suspension in favor of an IFS unit.

Starting alphabetically, there was the Camaro, Mustang II, and the Volare. Each frontend had its own attributes, but the Volare was the only one that offered torsion bar suspension with an adjustable ride height as standard equipment. Other features that made the Volare graft attractive for Effie fans was a 4 1/2 on 5-inch lug pattern that was

easily matched on the truck's rear with a Ford passenger car differential sporting the same bolt pattern.

With the passing of two decades, the Volare has been long forgotten by the masses, but for many an Effie owner with a Volare clip grafted on their truck, the out-of-production frontend is still a key player. Unfortunately, it is the Volare's status as an out-of-production item that has put the front suspension system on the endangered list for most Effie folks.

That is, of course, unless you're

aware of one of the Volare frontend's faithful followers since the earliest days, Bob's F-100 Parts in Riverside, California. On a recent visit to Bob's F-100 Parts, Bob told us that in the last 20 or so years his shop has performed well over 500 Volare conversions, and matched that number in the amount of Volare template kits they have sold. The only problem Bob noted about a Volare frontend was that some of the parts essential to rebuild or service them have been starting to become unattainable.

continued on page 64 ▶



1 Fresh from a clapped-out Chrysler product, this Volare-type frontend needed everything that moves up, down, or steers replaced. No problem—Bob's F-100 Parts has developed and markets a complete rebuild kit.



2 The first step Bob took to disassemble the Volare frontend was to back the tension off (unload) of the torsion bars.



5 Next, the stabilizer bolts and stabilizer hardware at the stabilizer bar ends, including the rubber donuts, were removed. Bob's kit includes all the stabilizer bar hardware that should be replaced, including new rubber donuts.



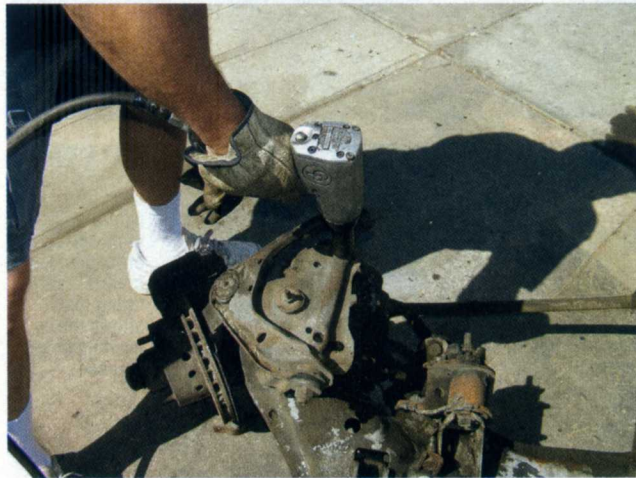
3 It can be done by hand with a ratchet or a breaker bar in a counter-clockwise direction (righthand threads), but Bob used an air impact wrench to make short work of it.



6 Forward of the stabilizer ends are the "clamshells" that attach the stabilizer bar. From the factory these were not replaceable individually, and the complete stabilizer bar assembly is now obsolete. Bob's rebuild kit includes nylon liners that replace the formerly unserviceable part with an upgraded design.



4 Ditto for removing the shock absorbers, which are not included in Bob's Volare suspension rebuild kit, but unless yours are nearly new, they should be replaced.



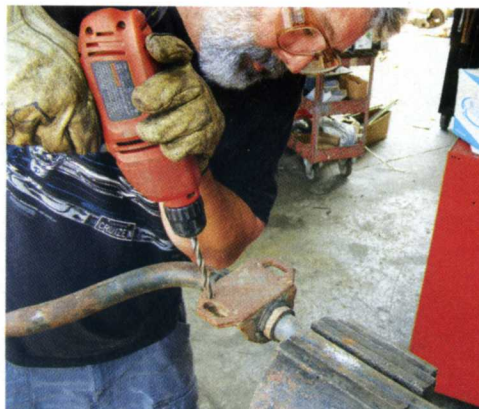
7 The upper control arms were removed by detaching the cross-shaft held by two bolts. After it was removed, Bob visually inspected the cross-shaft for excessive wear or damage.

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8 Here's the new parts in Bob's Volare kit that service the stabilizer bar (sway bar) ends. Notice the new bolts are Grade 8, the same as the original equipment.



12 To remove the original clamshell from the stabilizer bar, Bob drilled out the four factory spot welds.



9 Often overlooked but a source of steering slop if not replaced is the Pitman arm.



13 The original bottom plate must be retained to be used with Bob's replacement clamshell.



10 Another main ingredient that determines the effectiveness of a Volare rebuild is the steering box. Bob's F-100 Parts sells rebuilt units, but note that the aluminum boss for the power steering return line must be saved and reused.



14 A sharp matto knife was used to cut the old rubber bushing from the stabilizer bar.



11 Notice Bob's new clamshell and nylon replacement stabilizer arm bushing feature a zerk fitting that allows the bushing to be greased.



15 The new bushing was spread open and pushed onto the stabilizer bar.



16 Then the zerk fitting was screwed into the new Bob's clamshell half and installed.



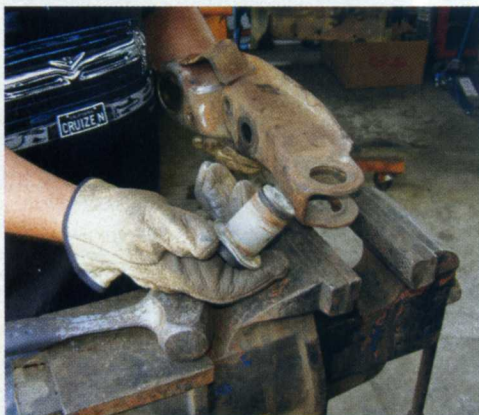
20 Once the ball joints were removed from the lower control arms, the control arms were completely bead-blasted and prepped for the installation of new ball joints and spray-painted black.



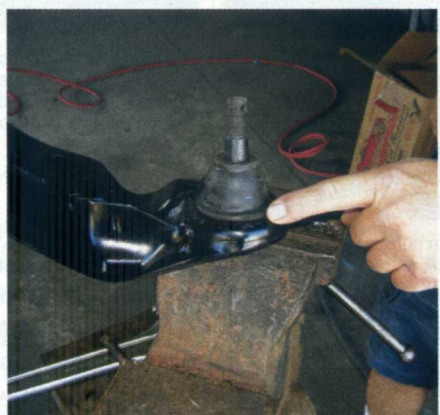
17 A two-pound hammer with a socket used as a drift knocked out the lower control arm bushings.



21 Bob securely positioned the lower control arm on the vise and used a large (whatever size will fit snugly over the ball joint) socket driven with a two-pound hammer to install the ball joint into the lower control arm.



18 Notice the jaws of the vise were opened only enough to allow the bushing to pass through while the control arm was fully supported.



22 The last step after installing the ball joints into the painted control arms was to grease them and install the boots. Bob paid special attention to ensure the boots were pulled completely over the retaining lip.



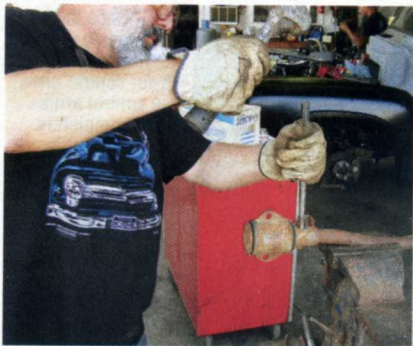
19 Using the same procedure as above, Bob used a powerful direct blow with the two-pound hammer to knock the lower control arm ball joints out.



23 Part of doing a thorough rebuild job includes an inspection of the upper control arm cross-shaft to ensure the serrations aren't excessively worn.

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24 Bob disassembled the torsion bar end by knocking the pin out with a drift punch. Bob advised it is a good idea to double-check that you have a 1 1/8-inch-diameter torsion bar and not 1-inch-diameter. Bob's F-100 Parts will sell you the right size if yours is wrong.



27 The original pin was discarded and a new Grade 8 3/8-inch bolt was pushed into place.



29 Bob demonstrated the Pitman arm could be removed without a Pitman arm puller by banging on one side of the arm with a hammer and backing up the other side with a hammer.



25 With the pin driven out, the torsion bar end was twisted off.



28 Bob used a Nylock nut to cap the 3/8-inch bolt, making sure the bolt was not over-tightened, which would cause the new torsion bar end to distort.



30 If the Pitman arm is stubborn, a Pitman arm puller will be necessary—the job will go a lot easier with one.

■ continued from page 60



26 The new replacement part from Bob's F-100 Parts was twisted on in the same manner as the old part twisted off.

Now, for some this might be a road-block, but since Bob's F-100 Parts continues to offer anything from the smallest part for Volare front suspensions right up to equipping one of their rolling chassis packages with one, the obvious solution was to manufacture or source everything needed to market a Volare survival kit.

This is good news for anyone running a Volare frontend, but, of course, locating the necessary parts is only half the battle; the other half is installing the survival kit. We figured that since Bob's handles anything to do with a Volare, the next logical step would be to ask Bob if he could take us through the steps to rebuild one. Bob agreed and said that not only would he show us how to do the

installation, but he would do it using common tools that the average guy would have at home. As the Volare rebuild progressed, Bob revealed a few methods to illustrate how these common tools could be utilized in place of expensive shop equipment, such as a hydraulic press.

All in all, the rebuild was a pretty easy project to take on, so what are you waiting for? Bob's F-100 Parts stocks everything you need to rebuild a Volare frontend, so get out in your garages and get those Effies up in the air, on jackstands, and ready to run another 100,000 miles! *CCT*

SOURCE

BOB'S F-100 PARTS

951-681-1956

www.bobsf100.com