Vintage V-Dubs IRS Conversion Kit Installation Tips

For the Following Kits:

IRS Conversion Kit – Early/Split Bus ’56-‘67

&

IRS Conversion Kit with Transmission (Optional) – Split Window Bus ’56-‘67

IRS Conversion Kit – Early/Split Bus ’56-‘67

Drums:

For Buses made thru 1963, you can use your original drums. The drum must be slightly modified to accommodate the rear axle shaft and for the axle nut to tighten properly. This is explained in the instructions provided.

For Buses made from 64 thru 67, you cannot use your original drums, backing plates or shoes. You must make the following choices:

A. Install 5 Lug Drums
from a 56–63 Bus. Drum must be modified as explained above for the pre-64 models.

B. Install 5 Lug Drums, Shoes and Backing Plates
from a 64–65 Type 3 Notch or Squareback. This is highly recommended as the drums and shoes are close to the same size as your originals. The only drawback to this is the scarcity and high price of these drums.

C. Install 4 Lug Drums, Shoes and Backing Plates
from either a 68–79 Bug or a 68–73 Type 3. The drawback to this is that adaptors must be used to convert back to the large 5 Lug Pattern. There is one advantage to using 4 Lug Bug Drums and that is that they can be re-drilled for the smaller Porsche 5 Lug Pattern if you’re using Porsche Style Alloy Wheels.

Disc Brakes:

Disc Brake conversions are separately available for this kit, with a variety of lug patterns that you may desire. Please check our links for kits we offer.

WARNING: Do not install Rear Disc Brakes if you are still using Front Drum Brakes – This is very unsafe.

Hand Brake Notes:

In most installations, the hand brake cable housing is too short to reach the backing plates. We supply a pair of E-Brake Cable Extensions to allow the proper installation of the hand brake cables to your backing plates. In some, but not all cases, the spring at the end of the cable may have to be trimmed as much as 2 inches for proper fit on your hand brake lever on the shoe(s).

The Conversion:

Owners of Buses can now remove those sometimes-unreliable reduction gear boxes and obtain engine-saving highway gearing. In addition, your Bus can now have the wide range of aftermarket gear selection with this kit, as well as the advantages of Independent Rear Suspension that allows your Bus to handle even better than before.

The basic bolt-on kit comes with our specially made Control Arm Brackets Clamps, CV Axles, Spring Plates, Hardware, Nosecone Gasket and complete instructions necessary for this conversion.

This kit does lower the rear end of your Bus at least 1 inch but can be safely lowered to a full 4 inches below stock height. In some cases, you can even go down as much as 6 inches. So, to fully appreciate the benefits of this conversion, our adjustable beam is strongly recommended so that your ride is fully level.

When returning your old spring plates, please be sure they're not bent or the splines damaged, otherwise they will not be accepted.

Transmission Notes:

An IRS Transmission from a 69–79 Bug or Super Beetle is required for this conversion. To properly mount this transmission in your Bus, your old nosecone and nosecone shift rod (the hockey stick) only needs to be swapped to the IRS tranny.

If you have a 56–Early 59 Bus, our Transaxle Front Adaptor Mount will also be needed as the front mounting system used on these years will not work with the Late 59–67 Bus nosecone required. If you need them, the adaptor, nosecone and hockey stick are shown in our parts list on this flyer.

Axle Shafts:

(Depending on the kit you purchase you either get Stub Axles or CV Axles)

Unlike other conversions that can be done by the do-it-yourselfer, we supply CV Axles specially made for this conversion. These are called floating axles, which means the splines are extra-long and allows the axle to "float" within the CV joint.

We have found that this design is much easier on the CV joints, as it does not allow the joint to "bind", which can be a real bummer when heading down the highway, taking a sharp corner or going over speed bumps.

Other conversions we've seen have the late Bus CV Axles machined down and shortened, which does not leave much splined surface for the CV joints to ride in while the axle moves back and forth. In addition, our axles come with the necessary spring clips to prevent the CV joints from sliding too far off the end of the axle shaft.

CV Joint Notes:

CV joints from a 69–79 Bug or 69–73 Type 3 are used in this conversion, if the rear end is lowered more than 3 inches. If the rear end is 1 to 2 ½ inches below stock height, the axle shaft can become angled too far to allow these CV joints to work properly.

Bug and Type 3 Joints have a limit of 16 degrees of maximum angle before the inner CV cage can possibly come out. To correct this problem, we recommend the installation of Modified CV Flanges on the Transaxle, Modified Axle Stubs on the IRS Control Arms and Type 4 CV joints both inside and outside on the axle shafts.

These axle stubs and inner CV flanges are similar to what is used on the Type 181 "Thing" and will work with the IRS Control Arms used in this kit. Type 4 CV joints have a maximum working angle of 22 degrees.

IRS Control Arms:

This kit is designed to utilize the IRS Control Arms from a 69–79 Bug or Super Beetle. These are not included in the kit, but are available from your local VW Auto Parts Recycler at a reasonable cost. While you're at it, be sure to get the axle stub and wheel bearings, if they're in reusable shape – you'll need these too.

Spring Plates:

The kit comes with Non-Adjustable spring plates that are precision laser-cut to allow proper torsion clearance. Adjustable Plates are also available, allowing you to "fine-tune" your height to your desires.

IRS Conversion Kit with Transmission (Optional) – Split Window Bus '56-'67

The Conversion:

Over 3 years in research and development has brought about our new IRS II Conversion. Now run your '56–'67 Bus or Pickup at either a lowered or stock height configuration with heavier duty components obtained and modified from the '68–'79 Type 2.

The basic bolt-on kit comes with our specially made Control Arm Brackets Clamps, modified '68–'79 Type 2 Control Arms with Urethane Bushings, CV Axles, Hardware, Nosecone Gasket and complete instructions necessary for this conversion.

Depending on the basic conversion kit purchased, you can set up for stock running height or lower it a full 5 inches. To fully appreciate the benefits of a lowered conversion, our adjustable beam is strongly recommended so that your ride is fully level.

Transmission Notes:

An IRS Transmission from a '69–'79 Bug or Super Beetle is required for this conversion. To properly mount this transmission in your Bus, your old nosecone and nosecone shift rod (the hockey stick) only needs to be swapped to the IRS tranny.

If you have a ’56–Early ’59 Bus, our Transaxle Front Adaptor Mount will also be needed as the front mounting system used on these years will not work with the Late ’59–’67 Bus nosecone required. If you need them, the adaptor, nosecone and hockey stick are shown in our parts list on this flyer.

Axle Shafts:

Unlike other conversions that can be done by the do-it-yourselfer, we supply CV Axles specially made for this conversion. These are called floating axles, which means the splines are extra long and allows the axle to “float” within the CV joint.

We have found that this design is much easier on the CV joints, as it does not allow the joint to “bind”, which can be a real bummer when heading down the highway, taking a sharp corner or going over speed bumps.

CV Joint Notes:

Although not supplied with this kit (available optionally) and depending on the height configuration you are planning to run, Type 2 or Type 4 CV Joints are required.

If running in a lowered configuration, such as 2 to 4 inches below stock height, Type 2 CV Joints are the recommended choice. These have a maximum working angle of 18 degrees before the joint will “bind” or “pop out” under load.

When running at stock height or about 1 inch below, Type 4 CV joints will be required. Type 4 CV joints have a maximum working angle of 22 degrees. A little more expensive, but worth it in the long run.

Type 1 Transaxles are equipped with inner CV flanges which are too small for these two joints. To correct this problem, we recommend the installation of Modified CV Flanges on the Transaxle.

These inner CV flanges are similar to what is used on the Type 181 “Thing” and will work with the IRS Control Arms used in this kit, however OE flanges stick out about 6mm farther than the bus modified flanges we offer and that may cause the axle shaft not to “float” as well as it should.