# Universal Steering Column

## INSTALLATION INSTRUCTIONS

## for Shorty Columns



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## Thank you for purchasing an ididit steering column!

These instructions will give you an overview of mounting the steering column in the most common street rod or hot rod applications. The steering column must be supported with two column drops under the dash and a support bearing through the firewall. (Figure 1) It is vital that the steering column is tight and secure. Attaching your column

to a steering gearbox or rack & pinion system



Figure 1

may require some combination of u-joints, couplers and shafts.

It is highly recommended that you test fit your steering column *before* painting the column. Test fitting now will save you a headache later on. We are not responsible for paint.

## **U-JOINT INSTALLATION:**

For proper installation of u-joints and couplers on your column, follow manufacturers recommendations, but in general, there are two basic styles used on your ididit steering column:

## DD Output Shaft (our most common shaft):

Double "D" output shafts are either 1" or 3/4" diameter. Most u-joint manufacturers use two setscrews to fasten the u-joint to a DD shaft. These two set screws are positioned 90 degrees from each other. To install a u-joint over the shaft simply slide the u-joint over shaft until it is fully engaged in the joint (Borgeson Universal recommends 7/8"-1" engagement).



Use a marker to make a mark through each hole in the joint. Remove the joint. Using a quarter inch drill bit, spot the shaft where the setscrews will seat. Re-install the joint and install setscrews and jam nuts. (Note: all joint mfg's recommend using a thread-locking compound on the setscrew and nut).

## **Spline Output Shaft:**

Spline output shafts are either 1"-48 or 3/4"-36. To install your u-joint

simply slide the u-joint over the spline, taking care to line one set screw up with the flat spot on the shaft. If the shaft has no flat spot, slide the joint on so the shaft is fully engaged in the joint (Borgeson Universal recommends 7/8"-1" engagement). Use a marker to make a mark through hole



in the joint. Remove the joint. Using a 5/16 inch drill bit, spot the shaft where the setscrew will seat. Re-install the joint and install setscrew and jam nut. (*Note: all joint manufacturers recommend using a thread-locking compound on setscrew and nut*).

## SHORTY INSTALLATION INSTRUCTIONS:

- Affix your adjustable under dash mount to the firewall and the dash (Part # 2301000010). (Figure 2) A support may need to be built behind the dash.
- 2. Attach the column to the mount using two steering column drops. Holes have been provided on the under dash mount to allow you to adjust the position of the column drops to where you see fit. The bigger the difference in length between the two drops, the greater the angle of the column will be. *(Figure 3)*
- 3. Install a Flange Bearing to support your steering shaft, and to seal the fire wall. (Part# MSD52130) Attach the universal joint(s) and shafting from the column to the steering box or rack. Most universal joints can bend up to 35 degrees. If you need more than 35 degrees, but less than 70, a double u-joint is required. A support or rod end bearing is necessary for every u-joint over two within the system. (*Figure 4*)
- 4. When using a column shift, mount the cable shift linkage to the base of the column. Route the cable through the kick panel to the transmission. (*Figure 5*)



Figure 2







Figure 4



Figure 5

## **KNOB & LEVER INSTALLATION:**

## **Tilt Lever:**

After removing all items from the package, screw the knobs onto the levers. The tilt lever is installed on the left side of the column in the threaded hole closest to the dash. We recommend using Locktite.

## **Turn Signal Lever:**

The turn signal lever is inserted into the hole closest to the top of the column. With the steering wheel and adaptor removed, look down from the top of the column and you'll see two holes on the turn signal switch. One is D shaped and the other is round. With the lever in place, insert the provided screw into the round hole. Use a #2 Phillips screw driver to tighten the screw tightly.

## **Emergency Flasher Knob:**

The emergency flasher is threaded into the hole located on the right side of the column. You will notice the nylon switch that the flasher screws into is flush with the outer surface when in the OFF position. It is easy to accidently turn the flashers ON while installing, which could lead to problems later. Check to make sure that the knob is in the OFF (out), position before continuing.

## **If Column Shift Application:**

Place column shift knob onto the shift lever. Once the lever is in place, use setscrew (provided) and adjust knob so set screw is pointing away from you, tighten setscrew. Do not remove the upper shift lever for any reason! The tension spring will pop out and it is very difficult to re-install.









#### Wiring your Column

This ididit steering column uses a standard 3 7/8-inch male connect. However, some GM columns use a 4 <sup>1</sup>/<sub>4</sub>-inch male connector. Connectors do not interchange and must be used in pairs. A mate to the 3 7/8 inch plug is available through ididit. If you need to change this connector for any reason the following schematic will be helpful.

C DEFGH JK LMNP

(Purple) Turn Signal Feed

#### Horn Button Wiring:

(Lt. Blue) Left Front Turn Signal

(Royal Blue) Right Front Turn Signal

(Brown) Emergency Flasher Feed

(Black) Horn Relay

A horn may require two wires to properly function with an ididit column. The center lug on the button should connect to a horn wire, which is provided by ididit with your steering column. This horn wire will slide into the horn cam (white plastic tube sticking up on the top of the column). If there is a second wire off to the side it is probably a ground wire (check with the horn button manufacturer to be sure). This is normally



(White) Brake Light Feed

Green) Right Rear Turn Signal

(Yellow) Left Rear Turn Signal

used when an o-ring is used to hold the button in place. The o-ring does not provide sufficient ground, therefore, an additional wire is provided to ground the horn button. If there is not a hole in adaptor to ground to, use one of the puller holes with a short bolt to attach the wire to the adaptor.

#### Synchronizing your Column

In order to insure proper functioning, this steering column must be installed in sync with the rest of the steering system. Turn signal cancellation and wheel position, as well as smooth steering operation depends on it. Although not all of them may need adjustment, the complete table of steps required for full synchronization is as follows:

- 1. The front wheels must be pointing straight forward with the steering toe set reasonably close.
- 2. Rotate the input shaft of the gearbox or rack from lock to lock and set the box exactly half way between. For example, if the shaft rotates three full turns from lock to lock. The center will be at  $1\frac{1}{2}$  turns from either locked position.
- 3. Install the steering arm and drag link, and adjust tie rod ends to get the drag link to fit without moving either the box/rack or the front wheels. Rotating each tie rod end the same number of turns will preserve adjustment.
- 4. With the column mounted in position and two joints are used on a shaft, the forks of the yokes closest to each other should be in line,

or "in phase". Premature wear or binding can result if the u-joints are not phased properly. Sometimes if the u-joints are at a severe angle, even if they are phased correctly, a hard spot in the steering may occur for no apparent reason. If this happens,



index the u-joints two or three splines in one direction. The hard spot should disappear or be minimized.

- 5. Install the shaft or joint on the gear box/rack. Leave the upper part of the shaft unconnected for the time being.
- 6. Position the column housing so that the signal switch arm is level to the left hand side.
- 7. Install the column through firewall, into your joint.
- To achieve proper synchronizing of your column the finished installation of your column should look like diagram 1 If the post on horn cam is not at 10:30, grasp post and turn it



Diagram 1

until it is at 10:30. Once completed, your column will be in sync.

## **IMPORTANT!!**

## **Steering Wheels:**

The top shaft of the column is the same as a GM passenger car from 1969-94 (Van columns & some truck columns are not the same as passenger cars). Original wheels from these years will bolt directly to the top of the column with no modifications. An aftermarket wheel will require an adaptor. Align the spline and horn cam on the top of the column with those in the adaptor

and slide it onto the column. A nut has been provided with your steering column. The nut will secure the wheel to the top of the column. The nut on the wheel should be torqued to 35 ft lbs.

#### **Column Shift Linkage Installation:**

At the bottom of your column you will notice a lever. This is the shift lever where your linkage will attach from the column to the transmission. Note the 5/16 hole through the bushings, most kits use a 5/16 bolt to secure the rod to the column. Please follow the kit instructions for the linkage, but make sure that no part of their kit hits the metal portion of the lever, as it will create a rattle in the column.

## Need Further Assistance?

ididit has been serving the rodding community since 1986 and we take pride in our outstanding customer service. If you need further assistance, feel free to call us at (517) 424-0577 during our normal business hours. You can also email us at tech@ididitinc.com. Go to www.ididitinc.com/ contact-us for hours of operation.

## **Need A Visual?**

Go to www.ididitinc.com/videos to watch installation videos, tech tips & more





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