# **Retrofit Steering Column** INSTALLATION INSTRUCTIONS

# for 1970-74 Cuda/Challenger

FOR PART NUMBER'S: 1620810010, 1620810020, 1620810051, 1620820010, 1620820020, 1620820051



**www.ididitinc.com** 610 S. Maumee St., Tecumseh, MI 49286 PH: (517) 424-0577 FAX: (517) 424-7293

Instruction # 800000005 REV 09/15



The ididit **1970-74 Cuda/Challenger** Steering Column comes complete with these components:

- (A) Column (Black Powder Coated column pictured)
- (B) Relay Harness for the Ignition System
- (C) Floor Mount, Gasket & Hardware
- (D) Instructions & Dress Up Kit

We will work through this installation using all these parts. For instruction purposes we will assume the vehicle is all original and has a factory manual steering gear box and an OEM harness.

#### INDEX

OEM COLUMN REMOVAL	2
INSTALLATION OF COLUMN	2-4
INSTALLATION OF KNOBS & LEVERS	4-5
ELECTRICAL INSTRUCTIONS	5-6
STEERING WHEEL INSTALLATION	6-7
RACK & PINION TECH NOTE	8
AFTERMARKET WIRE HARNESS TECH NOTE	9
GENERAL ELECTRICAL TIPS	9

# **OEM COLUMN REMOVAL:**

Disconnect positive battery cable.

Under the dash disconnect two large plugs from column, to under dash harness. NOTE, if your car is equipped with a key light, there may also a single small yellow wire that must be disconnected. (Figure 1)

Now you will have to drive out the roll pin in the coupler on the gear box. We soaked the pin with penetrating oil and that didn't help much. I ended up drilling out the pin with a carbide drill. (drill size- 5/16) (Figure 2B)

If this car is a 1970 or has column shift, there is a linkage at the bottom of the column. This linkage must be disconnected from column. There should be a cotter pin and a washer. If your vehicle is a 1970 model, and is a floor shift, remove this linkage completely it will not be reused. (Figure 2A)

Remove the three bolts that hold the mount to the fire wall, and the two that hold the load plate to the mount. (Figure 3)

Now you can remove the two nuts and washers that hold the column to the dash. Note this will release the column from all mounts and it will want to fall. After the column is loose you will have to rotate and watch the fire wall mount plate to get it past the pedals. (Figure 4)

# INSTALLING YOUR IDIDIT COLUMN

The firewall mount is the first part you will install. Loosen and remove the load plate and o-ring. Install firewall gasket and plate



(Figure 1)



(Figure 2)



(Figure 3)



(Figure 4)

loosely with the provided bolts and washers. Install the plate with the lip facing the engine side of the firewall. (Figure 5)

**Tip...**To do a professional job you may want to put a layer of masking tape on the steering column from the tabs down. The next part of the installation could scuff the finish on the column.

#### **COLUMN PREPARATION**

Slide the load plate onto the column with the raised lip facing the wheel side of the column. Then slip the O-ring against the load plate. This will hold the load plate out of the way while sliding the column in. Locate the 2 nuts and washers provided with the kit for the dash mount. If you haven't checked this out yet... pull the lower shaft of the column out about 2 inches, and then push it back rapidly with your hand. This will make the column at its shortest point, and will give you the most possible clearance while sliding through the firewall.

Now with one hand in the middle of the column and one at the top, slide the column between the pedals and through the hole in the floor mount. Set the column against the dash mount studs and center the studs in the slot provided. Loosely install the washers and nuts onto the studs. You should note that the studs and the slots allow for adjustment of the column from left to right and front to back. Center the column from front to back and adjust left to right until the column is centered in the plastic dash housings as close as possible. Then lightly tighten bolts. (Figure 6)

Next slide the load plate of the firewall mount down the column till it is against the floor plate. Install the two bolts and washers and tighten to 11 FT. LBS. (Figure 7)



(Figure 5)

· · ) () =

(Figure 6)



(Figure 7)

Now move to the engine bay and verify the column is pointing directly at the gearbox. This is easily accomplished by pulling the shaft out of the column and up to the tip of the gearbox. If this is misaligned move the column gently into place. Once your close, get the U-joint and install it onto the gearbox. Now slide the column down into the U-joint watching to index it on the DD shaft properly. (Figure 8)

#### If using Rack and pinion, see PG 9

With the U-joint installed go back inside the vehicle and center the gasket with the mount and tighten the three bolts to the fire wall (22 FT. LBS.)

**Tip..** Please follow the manufactures instructions on the U-joint installation. These instructions vary by manufacturer. But when all is said and done, ididit recommends that you use Locktite.

The last item in the column install is to tighten the dash mount nuts. Verify the column is still centered from left to right and tighten the two

nuts to 18 FT. LBS. This should be checked with a torque wrench. (Figure 9)

### 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





(Figure 8)



(Figure 9)



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.





#### **ELECTRICAL**

Please see pack "B" for wiring instructions.

Note: There are up to 3 wires on the ignition plug that may not have a mate. These wires were for key buzzer and shift indicator. The wiring of the ididit column does not support these features. The wires are however insulated and should be protected in the connector.

#### TESTING

Insert the key into the ignition to test the circuits. One click back counter clockwise and the accessories should come on. (radio, heater blower, etc.)

Turn two clicks forward. This should turn the accessories on and the ignition system on. (coil or electronic ignition has power)

Check that the vehicle isn't in gear!!! Now go to crank position. Starter should engage and vehicle should turn over.

#### TURN SIGNAL WIRING

The bag with the Dress Up Kit also contains a black wiring plug adaptor. This should simply plug into the column on the wide plug, and then the OEM plug from under the dash (Figure 10) (If you have an aftermarket harness see pg 10)

Now you can verify function of the turn signal switch.

With the key in an on position check both left and right turn signals.

Then with key in an off position, check Hazard Flashers, in is on, out is off.



(Figure 10)

Now the brake circuit can be checked by pressing the brake pedal.

#### **STEERING WHEEL INSTALLATION**

Using an adaptor, this column will accept any aftermarket steering wheel. We offer adaptors for all the common aftermarket wheels. We also offer a specially design adaptor designed to look just like the original and will fit the factory Chrysler wheel or reproduction wheel. (Figure 11) It's available in all the same finishes as the column. This adaptor will put the wheel back in the OEM location.



<sup>(</sup>Figure 11)

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.

# INSTALLING A OEM WHEEL USING AN IDIDIT OE WHEEL ADAPTOR

1. Check to verify the driving wheels are straight. On the top of the column there is a white tube sticking out of the column. This tube should be between the 10:30 and 11:00 o' clock position. When the wheels are straight. If this

is not true gently turn the white plastic tube to be in this position. Set the adaptor on the shaft of the column, this may require you to rotate a little to the closest tooth on the spline.

2. Install the 9/16 nut and torque to 40 FT. LBS.

3. Install the horn wire by aligning the catch pin and push in, then turn 1/8 of a turn clockwise. (Figure 12)

4. Now use the three provided bolts to install the wheel. (Figure 13)

5. Use the original three screws that held the horn mechanism in place to re-secure it.

6. Now connect the wire to the electrical tab, and finally push the button over the contact. (Figure 14)

#### AFTERMARKET REPLACEMENT WHEELS

If using the Grant Tuff Grip aftermarket replacement wheel, with our adaptor you will need these additional parts for your horn to work properly. (Figure 15) The kit part number is: 2611010010

If you have any questions about installation you can call our tech line and we will be happy to walk you through any of the processes. (517) 424-0577

7



(Figure 12)



(Figure 13)



(Figure 14)



<sup>(</sup>Figure 15)

# **RACK & PINION TECH NOTE**

We installed a UNISTEER kit into the test car. This column required no modifications. There was no cutting necessary due to the slip in the lower shaft of the



column. It will how ever be necessary to make sure the joint that attaches to the column is a <sup>3</sup>/<sub>4</sub> DD joint.

On a personal note, this rack kit is great. It bolts in, it fits, and it includes every little detail that others forget.

Other rack kits should have similar requirements. The use of the telescoping shaft on the column should cure any length issues. And the <sup>3</sup>/<sub>4</sub> DD shaft makes attaching a joint a breeze.



## AFTERMARKET WIRE HARNESS TECH NOTE

There are a few aftermarket harnesses out there for this application. Some are a direct factory replacement. Others are based on the GM wire color code. Our wire code is GM based. If you get one of these kits we have matching connectors and this may also plug directly in. Note that our turn signal plug is the 4 <sup>1</sup>/<sub>4</sub> male plug.

If you have an aftermarket wiring harness, please resist the urge to cut the plug's off.

We have both male plugs and both female plugs in stock if you need one that was not supplied with the kit. These plugs come with terminals, and instructions. If this is the case for your installation please call us at (517) 424-0577.

### **GENERAL ELECTRICAL TIPS**

Hey it's a big world... and just in case you are using a unusual combination of parts, here's the nuts and bolts of the electrical system.

#### TURN SIGNAL SWITCH

Black	Horn relay trigger, GROUND TO SOUND
Lt. Blue	Left front turn signal and indicator
DK Blue	Right front turn signal and indicator
Brown	4 way feed wire, Hot from Flasher Can hot all the time.
Purple	Turn signal feed. Hot with ignition on only.
Yellow	Left rear turn and brake
Green	Right rear turn and brake
White	Brake feed from brake switch

#### **IGNITION SWITCH**

RED Battery power in by way of back of starter.
Brown Goes to accessory side of fuse panel. Die's out during crank.
Pink Goes out to coil as feed for ignition, through resistor, and stays hot in run and crank. Also may be used as feed for limited items on fuse panel such as an electric fuel pump.
Purple Hot out to starter solenoid. This wire interrupted for Neutral Safety.
Black Ground for the relays to trigger.

#### **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 <u>tech@ididit.com</u>. 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!

NOTES:

No part of this guide may be reprinted, reproduced or utilized in any form without the express written permission of ididit.

2009 ididit All Rights Reserved **Printed in the USA** 

#### ididit

610 S. Maumee St., Tecumseh, MI 49286 (517) 424-0577 • (517) 424-7293 fax www.ididitinc.com