

# ARC Performance Steering Column Installation Instructions



**'Where Passion Fuels Performance'** 



## A U S T R A L I A N RODCustom

## ARC Steering Column Instructions Thank you for purchasing an ARC Steering Column!

Your new ARC Steering Column has been inspected and adjusted prior to dispatch, and will provide many years and kilometres of reliable service. Please do not disassemble the column as this may compromise its function.

These instructions and advice from our team act as a guide only for your steering component installation. We strongly recommend installation of critical steering components is always completed by a trained professional. If at any time you require assistance, please reach out to us via our Information Phone Line or email.

It is recommended that you check your column measurement before install. A non-installed column is always easier to exchange if required. The column measuring guide can be found in this document.

#### Column mounting.

Your steering column must be supported at the dash with a dash mount and supported where it protrudes through the firewall with a floor mount.

It is vital that the steering column is secure. Attaching your column to a steering box or rack and pinion system may require a combination of universal joints and shaft.

### Collapsible columns generally require a break away upper column mount (*Pic 1*).

All mounts are available from our store, and we have a variety of sizes to suit. Length is from the centre of the column shaft to the

dashboard mount position. Remember to include 10mm if a break away is required.



and Break Away Bracket

#### Knob And Stalk/lever Install.

#### Indicator stalk install.

The indicator lever is inserted into the slotted hole closest to the top of the column. Insert the lever through the slot until the hole in the lever lines up with the hole in the column (*Pic 2.* circled in red). With the lever in place, use a Phillips screwdriver to install the screw securely.



Pic 2. Turn Signal Lever Installation

#### Tilt lever install.

The tilt lever is inserted into the threaded hole closest to the dash (*Pic 3.*) Screw in until it is secure.



Pic 3. Tilt Lever Installation

The hazard flasher knob is threaded into the small nylon switch that is flush with the outer surface of the upper column (*Pic 4.*) This is the OFF position. It is easy to accidentally turn the hazards ON while installing the knob, which could lead to problems later. Check to make sure that the knob is on the OFF (out) position

#### Hazard light knob install.

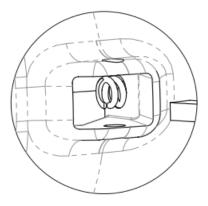
before continuing.

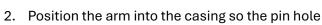


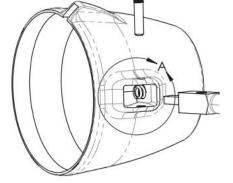
Pic 4. Hazard Knob Installation

#### Column shift lever install.

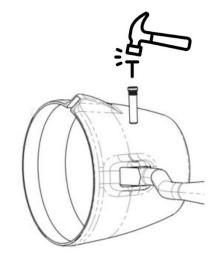
1. Grease spring and insert it into the case hole. Care must be taken not to drop the spring into the casing. Grease and a small screwdriver may help with installation.







in the arm is in relation to the pin hole on the casting.



- 3. Grease the smooth end of the pin and start it into the casting pin hole.
- 4. Using a hammer and drift, gently tap the pin into the casting until flush. DO NOT USE EXCESSIVE FORCE.

#### Horn / indicator Cam Position install.

The below diagram explains the correct Horn Cam Position for left or right hand drive vehicles. Please follow these instructions to ensure your self-cancelling turn signals operate correctly.



Diagram A

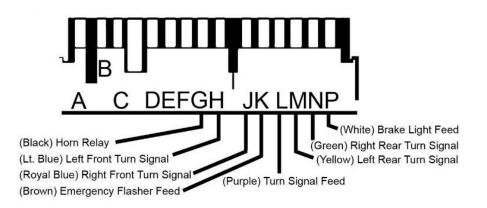
#### Horn Button Wiring.

The ARC column has installed a cancel cam with a horn wire stalk. This wire coming from the stalk on the cam is a positive power feed. When your steering wheel adaptor is installed, this stalk will protrude through one of the holes drilled. This positive wire will connect to the positive horn terminal. The other terminal on your horn button will be a ground. This ground wire will need to be connected via a small screw to the inside of the adaptor. The screw will be supplied with the adaptor.



#### Wiring Diagram.

The diagram below is a description of the wiring pin-outs on the GM plug. The plug can be rewired to suit any configuration required.

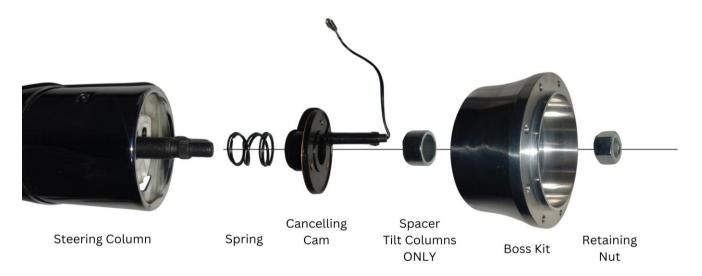


#### Boss Kit And Steering Wheel Installation.

Steering wheel info:

Wheels from 1950s-70s American GM may directly fit the ARC column as the splined shaft is the same. Aftermarket bolt on style wheels will require a steering wheel adapter (or boss kit), ARC has a range of 3 bolt, 6 bolt and 9 bolt adapters to suit most aftermarket wheels including our own extensive range. If you need help, contact us.

For ARC columns with tilt function, follow the diagram below to install your boss kit correctly. For columns without tilt function, remove the 1/2" spacer as it is not required. Please note correct position for turn signal self-cancel cam, as in previous diagram.



#### Column Shift Linkage Installation.

At the bottom of your Column Shift Steering Column, you will notice a lever (pictured.) 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 no part of their kit hits the metal portion of the lever, as this will create a rattle in the column.

Note. The connection to the transmission may be a rod or a cable.



#### How To Correctly Measure ARC Steering Columns

Please follow these procedures to identify what length column you will need.

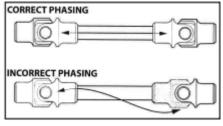
## **5 POSITION TILT COLLAPSIBLE COLUMN - FLOOR OR COLUMN SHIFT** 2.00 Inch Diameter 1.75 Inch Diameter 8-3/4 Inches Column Length **5 POSITION TILT NON-COLLAPSIBLE COLUMN - FLOOR OR COLUMN SHIFT** 2.00 Inch Diameter 1 8-3/4 Inches Column Length **RETRO 40'S COLLAPSIBLE COLUMN** 1.50 Inch 1.75 Inch Diameter Diameter 1.75 Inch With Collar 4 Inches Column Length

#### General installation Information for Steering Setups.

#### Synchronising your column.

To ensure proper synchronisation and functioning of your steering column, it is essential to follow a set of steps for adjustment. Turn signal cancellation and wheel position, as well as smooth steering operation depends on it. The following is a comprehensive table of steps for full synchronisation. Note not all of them may need adjustment:

- 1. With the front wheels disconnected from the rest of the steering system, ensure they are 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. To do this, count the number of turns it takes to go from lock to lock, and then turn the shaft half the number of turns in either direction. This should set the input shaft at the midpoint. For example, if it takes 4 full turns from lock to lock, you would rotate the shaft 2 turns from one lock position to find the centre.
- 3. Install the steering arm or drag link, and adjust the tie rod ends to get the drag link to fit without moving either the steering box/rack or the front wheels.
- 4. With the column mounted in position and two universal joints (u-joints) are used on a shaft, the forks of the yokes closest to each other should be in line, or "in phase" (see diagram). Premature wear or binding may occur if the u-joints are not phased correctly.



Sometimes if the u-joints are at an extreme angle a hard spot may occur, even if they are phased correctly. Indexing the u-joints two or three splines should eliminate this.

- 5. Install the shaft or uni joint on the steering box/rack. Leave the upper part of the shaft disconnected for now.
- 6. Position the column housing so the turn signal arm is in the correct position (IE. left or right)
- 7. Install the column through the firewall into your uni joint.
- 8. To achieve proper synchronisation of you column, the finished installation should look like Diagram A on page 4. Once completed your column will be in sync.

Please note that this steering setup is to get your vehicle in "ball park" position. We strongly recommend installation of critical steering components is always completed by a trained professional. At any time if you require assistance please reach out to us via our information line or email.

#### **Need Further Assistance?**

If you require any further assistance please do not hesitate to contact us on the Contact Information below:

