

**Name: Joshua Keen**



Motivations	Goals	Environment/ Background
<ul style="list-style-type: none"><li>• Commuting to work every day.</li><li>• Getting groceries once a week.</li><li>• Driving his dog to the vet when needed.</li><li>• Living in rural America has caused increased car dependence.</li></ul>	<ul style="list-style-type: none"><li>• Arriving at work on time.</li><li>• Being able to not be slowed down by an unintuitive process.</li><li>• Wants to have fun on his commute to and from work, and enjoys the process.</li></ul>	<ul style="list-style-type: none"><li>• Learned to drive a manual truck in 1982.</li><li>• Grew up in the inner city, but moved out to have a quieter life.</li><li>• Prefers a manual car as it keeps him focused while driving, which makes him believe he is a safer driver.</li></ul>

		<ul style="list-style-type: none"> <li>• Enjoys having routines to follow, especially specific lists of actions that will become second nature over time.</li> </ul>
Biographical information:	Behaviors:	Pain Points:
<ul style="list-style-type: none"> <li>• Age: 32 years old</li> <li>• Has a 10-year-old Golden retriever named Millie.</li> <li>• Works as a Software developer at a Fortune 500 company.</li> <li>• Has multiple hobbies, including Cycling, hunting, woodworking, and cars.</li> </ul>	<ul style="list-style-type: none"> <li>• Highly organized.</li> <li>• Prioritizes his tasks to ensure he stays on top of his workload.</li> <li>• He's never late for meetings and usually arrives early.</li> <li>• He uses a to-do list and blocks out his calendar for each task.</li> </ul>	<ul style="list-style-type: none"> <li>• Unpredictable work schedule leading to odd work hours.</li> <li>• Car maintenance is becoming expensive.</li> <li>• High Gas prices once he leaves the city.</li> </ul>

# Start-up Procedure For A 2017 Mazda 3 Equipped With A 6-Speed Manual Transmission

This guide is to teach anyone how to start and safely set up a 2017 Mazda 3 with a 6-speed manual transmission.

## Materials:

- Step 1.** 2017 Mazda 3, with a 6-speed manual transmission
- Step 2.** Key fob for the same car

## Optional Pre-Requisite Steps:

- Step 1.** Ensure the car is in a safe location.
- Step 2.** Make sure the car is parked on a flat surface.

## Entering The Car

- Step 1.** Ensure the key fob is tightly held in your right hand.
- Step 2.** Walk up to the car, and ensure to stay towards the driver's side of the car.
  - subset a.** If in an American bought car, this will be the left side of the car.
  - subset b.** If in a European or Asia bought car, this will be the right side of the car.
- Step 3.** Pull on the door handle, outwards from the car door.
  - subset a.** Outwards is defined as a perpendicular angle from the door position.
- Step 4.** Once the door starts to move from the car frame, pull the door in a semicircular motion from the car until it starts to hold its position under its own weight.
- Step 5.** Remove your hand from the door.
- Step 6.** To enter the car, put your foot closest to the car frame into the footwell (the open area in front of the seat, but below the wheel, typically the pedals' location).

**Step 7.** Now do a swinging motion of your body, lowering your body towards the seat while moving laterally into the car.

**subset a.** Continue the above movement until you line up in the center of the driver's seat.

**subset b.** (Optional) Lower your head so as not to hit the upper frame of the car when entering.

**Step 8.** Once fully in the car, reach out to the door and put your hand on the inside-facing handle.

**Step 9.** Pull towards your body until the door makes a clicking sound.

**Step 10.** Remove your hand from the door.

## Adjusting The Car

**Step 1.** Place the keys that are in your hand into the cubby below the radio.

**subset a.** If the keys are not in the car, it will not start

**Step 2.** Adjust your seat to ensure comfortable access to the pedals (clutch, brake, and accelerator).

**subset a.** This can be done by moving the electronic controls on the side of the seat.

**Step 3.** Adjust the rearview mirror, ensuring that you can comfortably see out the rear window using it.

**Step 4.** Find the knob on the driver-side door, it can be found above the window controls.

**Step 5.** Twist the knob counterclockwise to select the driver-side, side-view mirror.

**Step 6.** Control the mirror using the knob by moving it up, down, left, or right. Do this until from your standard sitting position, the rear door handle can be barely seen in the bottom right corner of the mirror.

**subset a.** Repeat steps 7-9 for the opposing side mirror and replace counterclockwise with clockwise.

- Step 7.** Find the seatbelt attached to the wall touching the door.
- Step 8.** Grab it by the metal section, and pull it diagonally across your body until it is near your hip on the opposing side of the door.
- Step 9.** Put the metal buckle into the buckle housing attached to the center console found between the seat and the center console.
- Step 10.** Release the seatbelt.
- Step 11.** To change the steering wheel position, locate the level on the underside of the steering column.
- Step 12.** Grab the handle and pull it downwards; it will release the wheel.
- Step 13.** Push or pull the wheel relative to your body until the distance seems right.
- Step 14.** Then lift the wheel up or down, depending on wheel position preference.
- Step 15.** Once the desired wheel position is reached, hold the wheel in this position.
- Step 16.** Grab the lever that releases the wheel and pull it upwards until it cannot move further.
- Step 17.** Release the wheel and lever, the steering wheel is now set to the desired position.

## **Starting The Car**

- Step 1.** Depress the clutch pedal, which is the leftmost pedal in the pedal box near your feet, and keep it depressed until the car is started.
- Step 2.** Find the shifter knob in the center of the car's center console.
- Step 3.** Move the shifter to the neutral position by moving the stick to the center (middle) of the shifter gates.

**Step 4.** To ensure the Transmission is now in neutral, move the stick side to side.

**subset a.** If the stick moves easily from side to side, you are in neutral; if it does not, please repeat step 3 until in neutral.

**Step 5.** Now, depress the brake pedal. This is the middle pedal; keep depressed until told otherwise.

**Step 6.** Look in the center console and find the shifter again.

**Step 7.** Now look 3 inches towards the back of the car. You will see an indentation next to the circular knob in the center console. This is the Electronic e-break switch

**Step 8.** Put your finger into the indentation.

**Step 9.** Keeping your finger in the indentation, slide it toward the back until you hit the switch.

**Step 10.** Lift your finger upwards, bringing the switch upwards. This will release the e-brake.

**Step 11.** Move the hand used in the previous step to the steering wheel.

**Step 12.** Move the other hand towards the button behind the wheel on the right side labeled "Start Stop Engine".

**Step 13.** With one finger, push the button inward and hold it to start the engine.

**subset a.** Ensure to keep the clutch and brake pedal fully depressed, or the car will not start.

**Step 14.** Wait until the car engine has fully started.

**Step 15.** Once it is started, release the ignition button.

**Step 16.** Once the ignition is released and the car is started, release the clutch pedal, with the stick already moved to the neutral position from the previous steps, the car is now in the neutral gear.

**Step 17.** You have now started a manual transmission car with an electronic e-brake switch and keyless ignition.

**subset a.** Once you feel comfortable to start moving;  
release the brake and shift into the desired gear.

## **Explanation**

This process applies to my experience directly. I own a 2017 Mazda 3 with a 6-speed manual transmission, and it was what I learned to drive a manual with. The issue is that the car's manual lacked a lot of detail on how to start the car and operate it. Most manual cars can be intuitive, but the issue that struck me with this car is due to it being modern, it has many electronic locks built into it. All of these locks I figured out on my own, and there is minimal to no documentation on any of these lock-outs existing in the car's extensive manual. For example, if you try to start the car when not in neutral, it will not try to start as the ECU has an electronic lock preventing it from starting. There is also a lock with similar functionality that engages if the brake is not applied. Some of these locks make sense, especially one that requires the brake to be depressed. Yet other locks, like requiring the car to be in neutral when the clutch is fully depressed, do not make logical sense to me as a safety feature. Since the clutch is being depressed means there is no gear selected, and nothing will happen if the car turns on.