TOURIST TROPHY®

Steering Wheel

Installation Instructions

For: 90–97 Miata

PART # 906-100, 906-150

Tools required:

- 10mm Wrench
- Phillips Head Screwdriver
- ¼"v Ratchet
- 10mm Deep socket ¼" drive
- ½" Ratchet
- ½" Breaker bar or impact wrench
- 3" Extension for ½" drive
- Torque wrench capable of measuring 30 ft-lbs
- Crimping pliers
- Wire strippers
- Side cutters
- Medium strength thread locking agent
- Felt tipped pen

Instructions:

1) Disconnect the battery located in the trunk with a 10mm wrench.

2) Find the steel panel covering the steering column and remove it with a Phillips head screwdriver. The panel has two screws, both of which are located at the bottom corners. See Figure 2.

Figure 2

3) Disconnect the orange and blue connectors zip tied to the steering column. The orange connector must be disconnected first to allow access to the blue connector. See Figure 3.

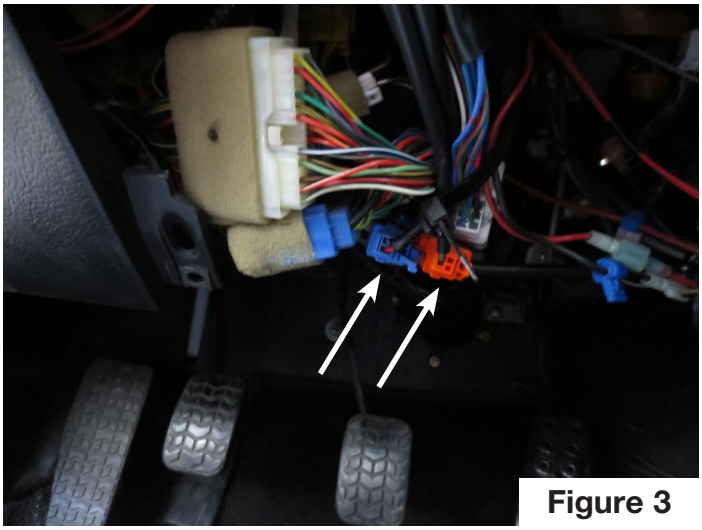

Figure 3

4) Remove the steering column cover. Unfasten the four screws located at the bottom of the cover with a Phillips screwdriver and then pull apart the top and bottom covers. See Figure 4.

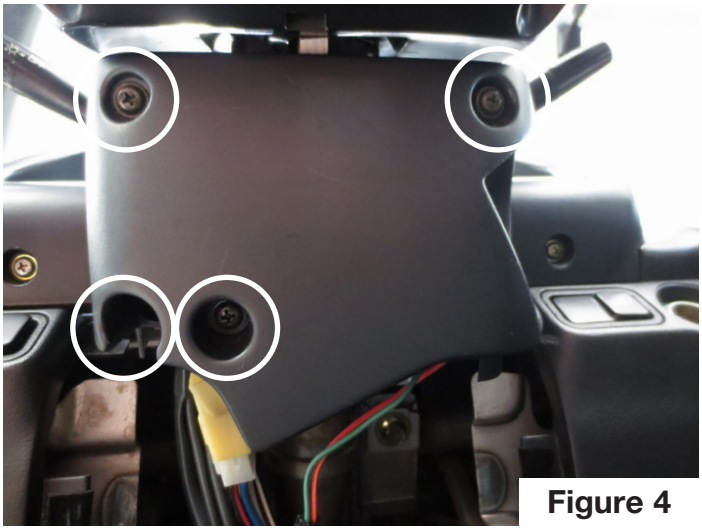

Figure 4

5) Put the key into the ignition and turn it to the "ON" position to allow movement of the steering wheel.

6) Locate and remove the four nuts located on the back of the steering wheel using the ¼" ratchet and 10mm deep socket. Turn the steering wheel to gain access to each of the four nuts. Once the nuts have been removed, turn the steering wheel so that the wheels are straight.

7) Gently pull out the top of the airbag so that the cord holding it to the steering wheel can be accessed. Unhook the cord where it attached to frame of the steering wheel. The airbag can now be gently pulled further out of the wheel to gain access to the connectors still holding it to the wheel. See Figure 7.

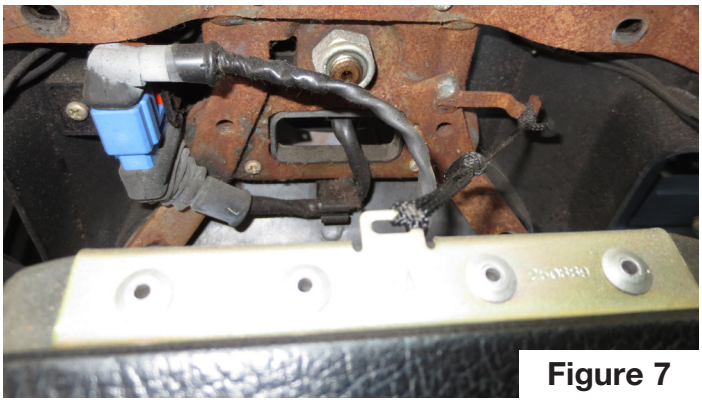

Figure 7

8) While still supporting the airbag, locate the blue and orange connectors in the steering wheel. Pull the connectors from the clip securing them to the steering wheel and then disconnect them. The orange connector must first be removed to gain access to the blue connector.

9) Verify that the wheels are still straight and use a felt tipped pen to mark the steering column with a straight vertical line. This line will be used to find the straight forward position of the steering column if the column is moved during removal. See Figure 9.

Figure 9

10) Remove the steering wheel nut with a 21mm socket, 3" extension and a breaker bar or impact wrench while holding the wheel in place.

11) Pull off the steering wheel using both hands. Pull around the steering wheel with varying amounts of pressure until it comes off. When the steering wheel has been released, push the connector attached to the clock spring back through the steering wheel. Do not turn the clock spring, and verify that the two arrows on it are lined up.

12) Put the newly removed steering wheel on a work table. See Figure 12.

A. Find the orange connector. Follow the wire attached to the connector to where it ends in the horn switch and cut it with a pair of wire cutters. This orange connector will be used in the new steering wheel.

B. Do the same for the ground wire that is connected to the right horn switch. Trace the ground wire from the eyelet attached to the steering wheel frame to the horn button, and cut it there. This ground wire will also be used in the new steering wheel.

C. Remove the rear cover of the steering wheel by unfastening the four small screws visible from the front with a Phillips screw driver. The top two screws will be longer than the bottom screws.

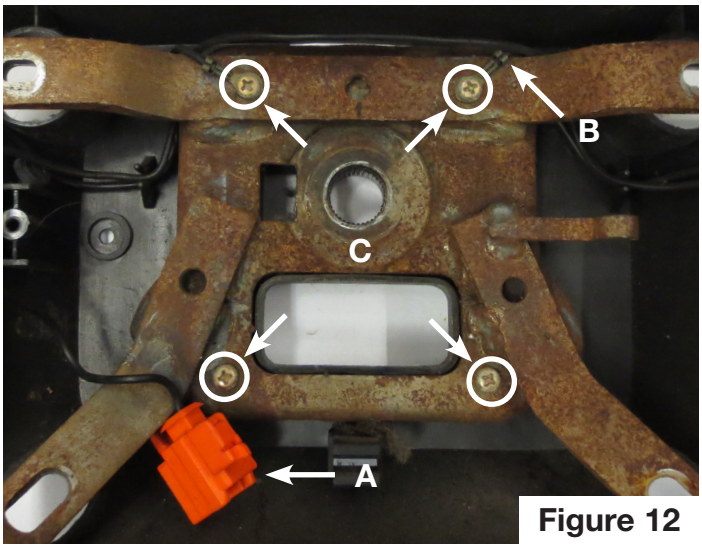

Figure 12

13) After stripping off ¼" of insulation, attach the included male terminals to the ends of both the orange connector and the ground wire using a pair of crimping pliers.

14) Connect the male terminal on the end of the orange connector to either of the female terminals at the end of the red wires in the steering wheel. The female terminals on the steering wheel may have a male portion that needs to be cut off with a pair of side cutters. See Figure 14.

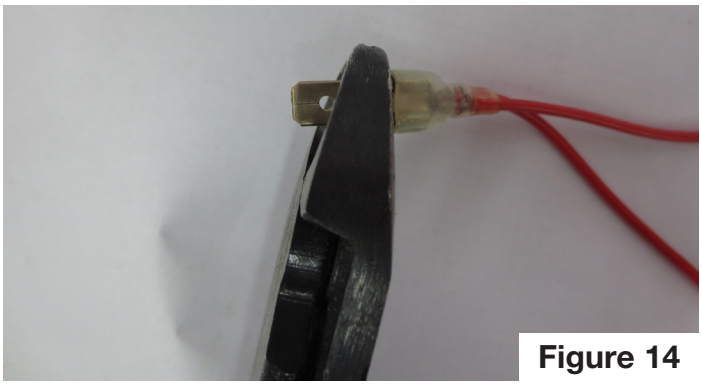

Figure 14

15) Connect the male terminal on the end of the ground wire to the remaining female terminal in the new steering wheel.

16) Install the rear cover from the original steering wheel onto the new wheel. Secure the eye terminal of grounding wire to the bottom right screw.

17) With the back cover installed and the wiring in place, install the new steering wheel onto the steering column. Pull the blue connector attached to the clock spring through the rectangular opening in the new steering wheel. Ensure that the line drawn on the steering column is still vertical, and that the wheels are straight when the steering wheel is pushed on to the splines of the steering column. See Figure 17.

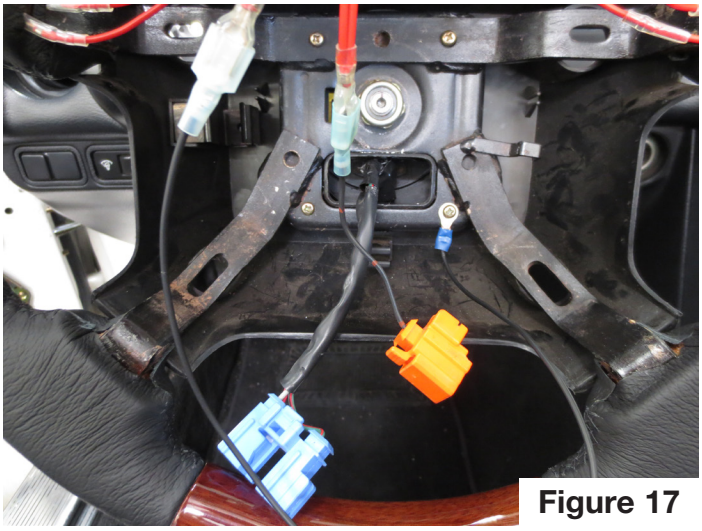

Figure 17

18) Put a couple drops of medium strength thread locker on the threads and install the steering wheel nut onto the steering column . Hold the steering wheel in place and use a torque wrench to tighten the nut to between 29 and 36 fl-lbs.

19) Connect the blue and orange connectors to the connector attached to the clock spring. Push the connectors back into the securing clip in the rear cover of the new steering wheel. See Figure 19.

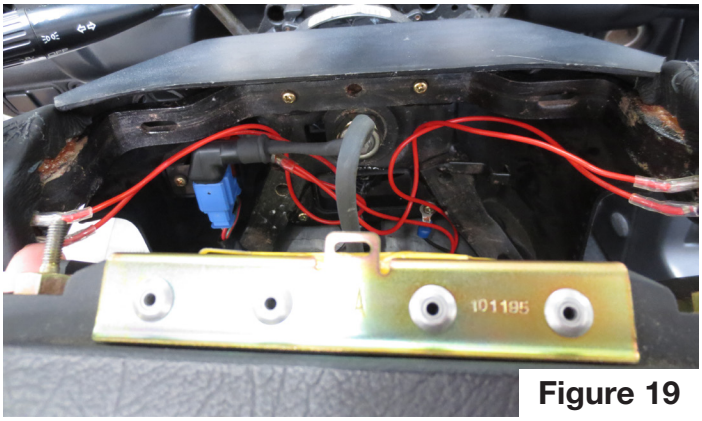

Figure 19

20) Secure all the wiring inside of the new steering wheel out of the way and place the airbag back onto the steering wheel. See Figure 19.

21) Install the cord from the airbag to the steering wheel frame, and then fasten the air bag to the new wheel with the four retaining nuts. See Figure 21.

Figure 21

22) Reconnect the orange and blue connectors attached to the bottom of the steering column.

23) Reinstall the steering column cover, and the steel panel that were removed earlier.

24) Reconnect the battery and verify that the horn works.

What's Included:

A) Steering Wheel

B) Male Terminals