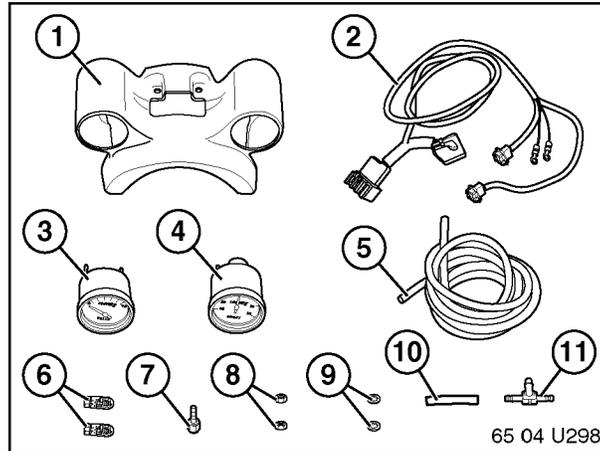




**PARTS INFORMATION**

Contents of Kit - P/N 82 94 0 393 994



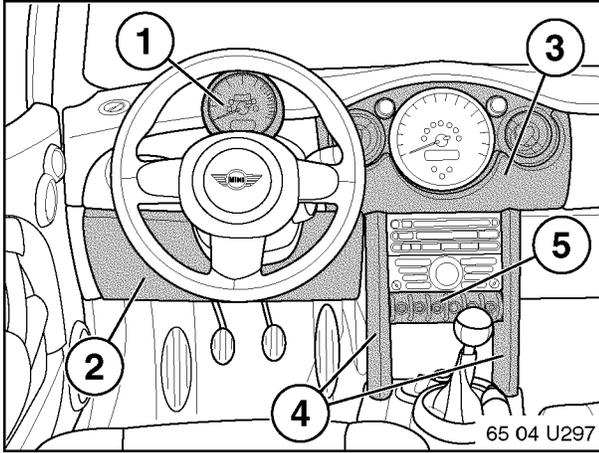
Reference*	Description	Qty	MINI Part Number
1	Gauge Pod	1	N/A
2	Wiring Harness	1	N/A
3	Voltmeter	1	N/A
4	Boost Gauge	1	N/A
5	Signal tubing	1	N/A
6	LED Lighting	2	N/A
7	Boost gauge barb fitting	1	N/A
8	Nuts	2	N/A
9	Lock Washers	2	N/A
10	Coupling hose	1	N/A
11	T fitting with integrated restrictor	1	N/A

\*Please note that the reference numbers listed above are valid only for illustration 65 04 U298 on this page.

**Additional Required Parts:**

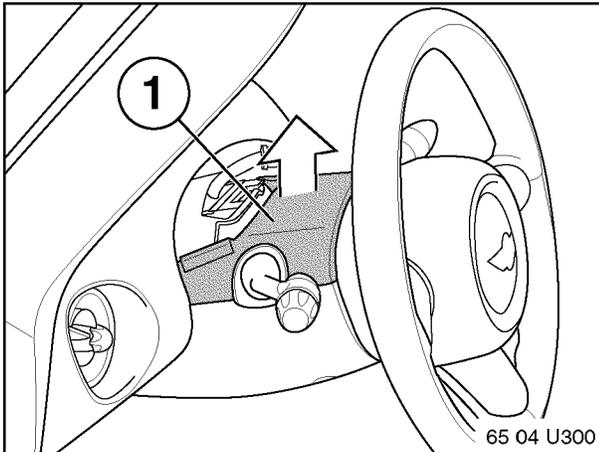
Description	MINI Part Number
Grommet	51 71 7 036 220
Wire ties	61 13 0 148 794

**CAUTION:** **GAUGES ARE PRECISION INSTRUMENTS. USE CAUTION WHEN HANDLING AND DO NOT DROP.**

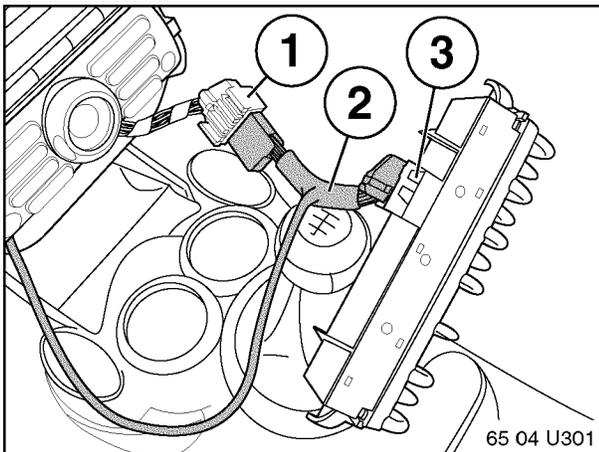
**Procedure:**

## 1. Remove the Following components:

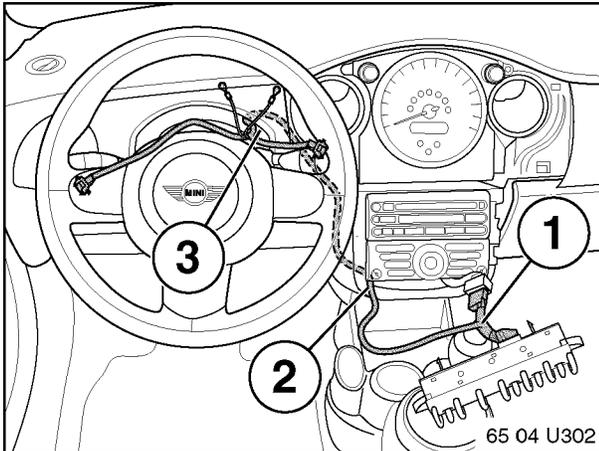
- Tachometer (1) (TIS 62 11 400)
- Drivers Knee Bolster (2)
- Center Dashboard Cover (3) (TIS 51 45 060)
- Center Console Uprights (4) (TIS 51 16 200)
- Switch Pack (5) (TIS 61 31 059)



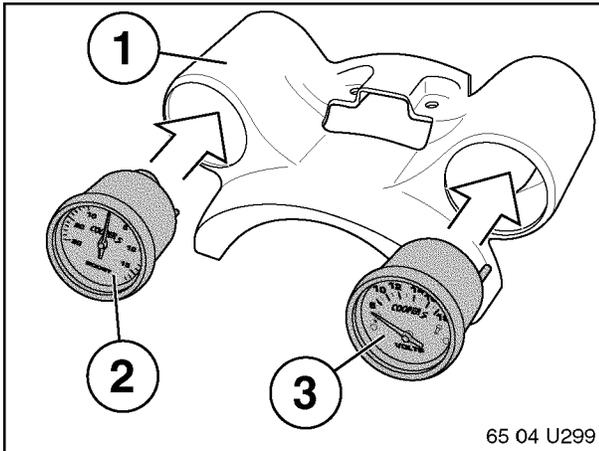
## 2. Remove top cover from steering column. (TIS 32 31 004)



## 3. Connect the included wiring harness (2) inline to the body wiring harness (1) and the Switch pack (3).

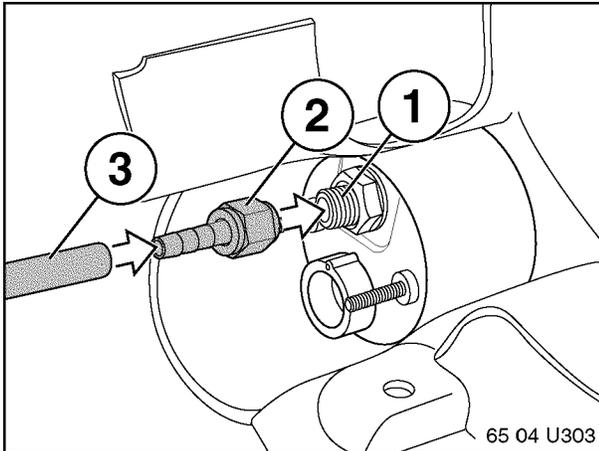


- Route wiring harness (2) as shown from center console switch pack (1) to steering column (3).



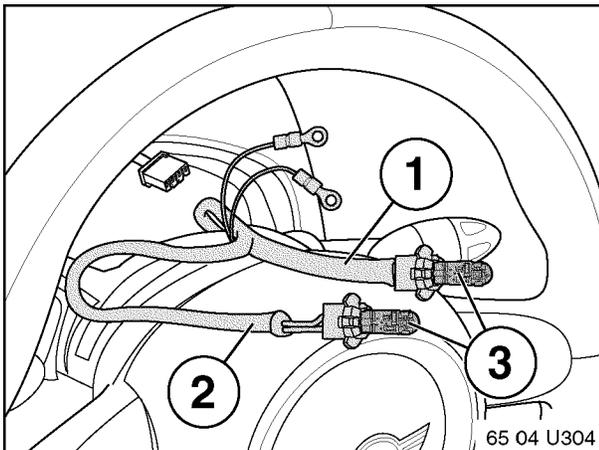
- Install gauges into gauge pod (1).
- Boost gauge (2) is shown on left and voltmeter (3) is shown on right. Gauges can be installed as shown or reversed per customer preference. In either orientation ensure that wiring and tubing are protected from being kinked or pinched.

**CAUTION:** Press against bezel only. Do not press against lens of gauges as damage may occur.



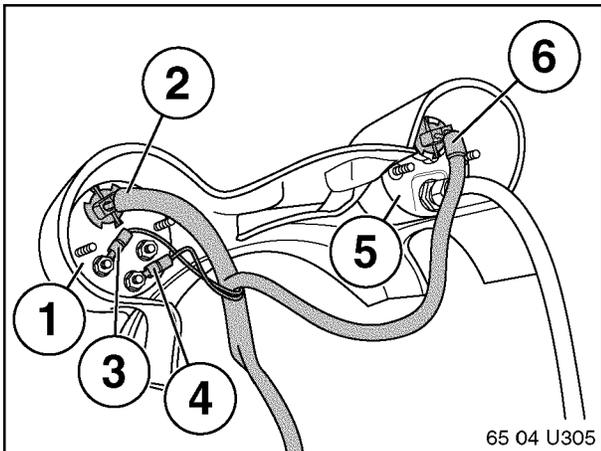
- Apply thread sealant to boost gauge threads (1)
- Secure barb fitting (2) to boost gauge fitting (1).

**NOTE:** Do not over tighten barb fitting or gauge may be damaged.

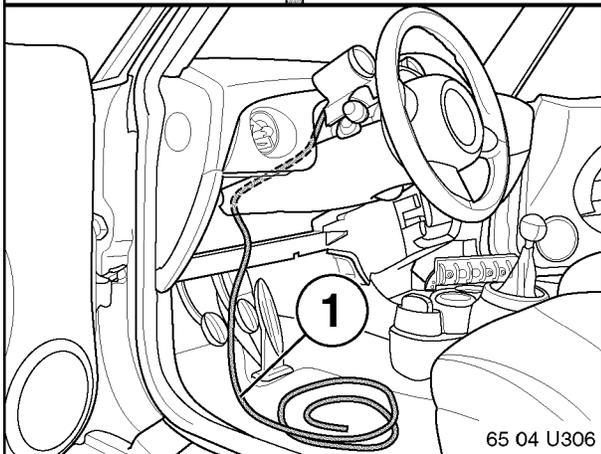


- Insert LED light bulbs into sockets, paying attention to polarity (positive on LED bulb goes to White lead).

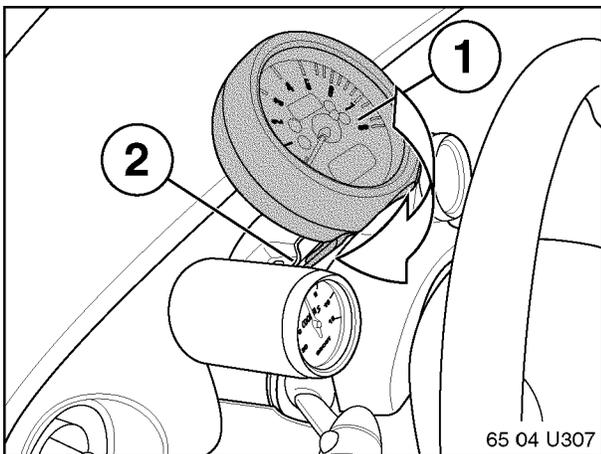
**NOTE:** These are an interference fit for secure retention. If necessary, any excess flashing can be lightly filed.



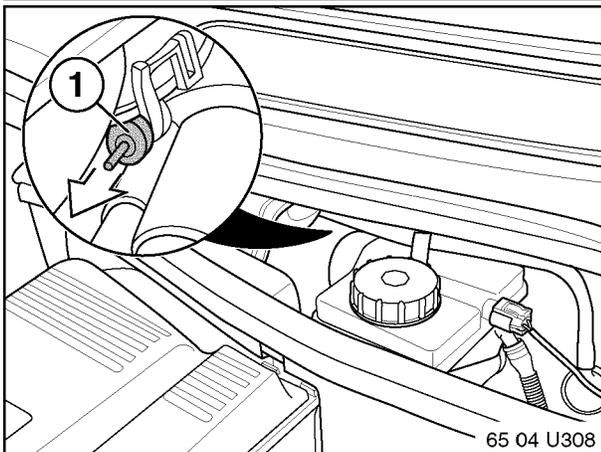
65 04 U305



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10. Connect red wire to "+" connector (2) of Voltmeter (1).
11. Connect black wire to "-" connector (4) of Voltmeter (1).
12. Insert LED lighting (2) into gauge (1) press until socket locks into place.
13. Insert LED lighting (6) into gauge (5) press until socket locks into place.

14. Route hose as shown, using care to not pinch or kink the hose.
15. Snap gauge pod into place on top of steering column.

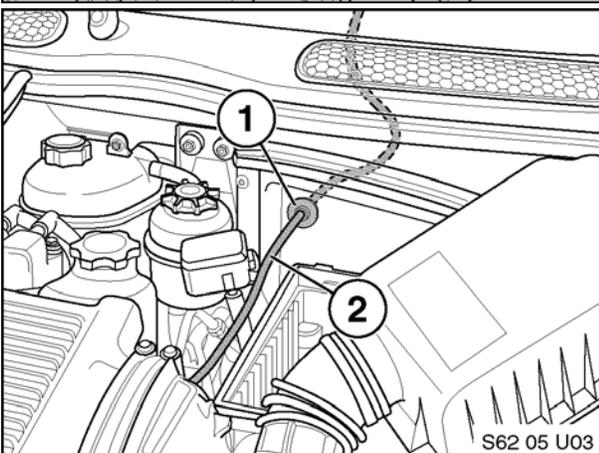
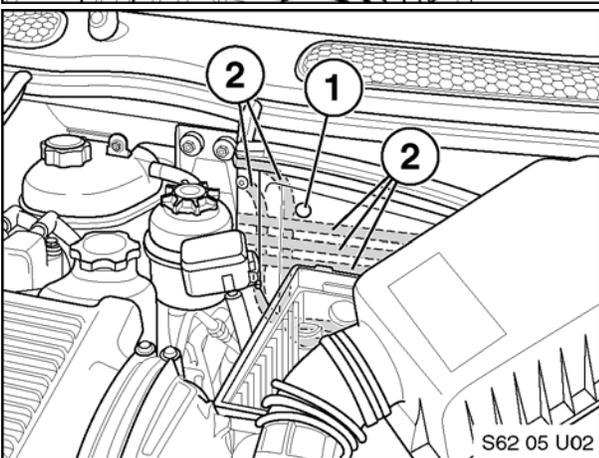
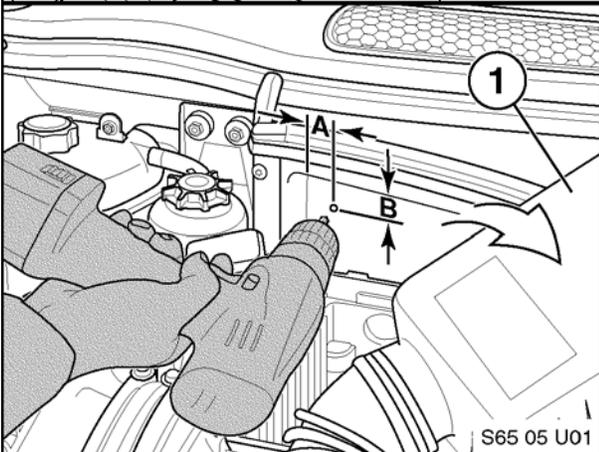
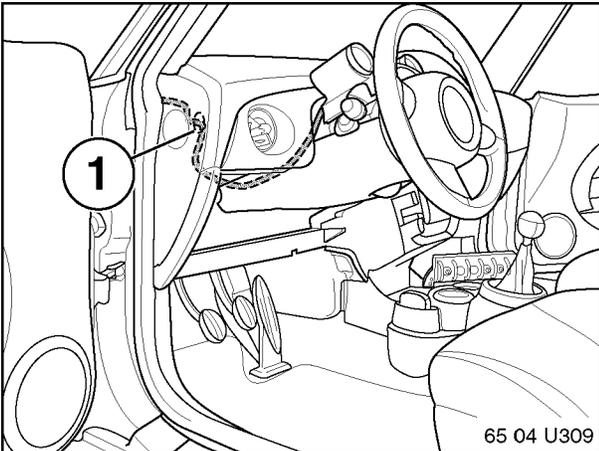
**CAUTION:** Make sure hose and wiring are not pinched. The wiring harness should be routed beneath and rearwards of the mounting flange for the tachometer.

16. Reconnect Tachometer. Pivot Tachometer (1) into place by inserting tachometer mounting tab between gauge pod (2) and steering column mounting pad.

17. Secure tachometer using original hardware

**CAUTION:** The screws can be easily cross-threaded. Use care when installing screws.

18. Locate blanking plug in firewall grommet. There is a protruding nipple which is sealed.
19. Trim tip (1) off of nipple to open pass-through for hose.



20. Route hose as shown through firewall grommet, using care to avoid pedal mechanisms and steering column joints.
21. Use cable ties to fasten hose to ignition switch harness or other non-sharp fastening point.

**CAUTION: Do not over-tighten cable ties when locating hose or hose may be pinched.**

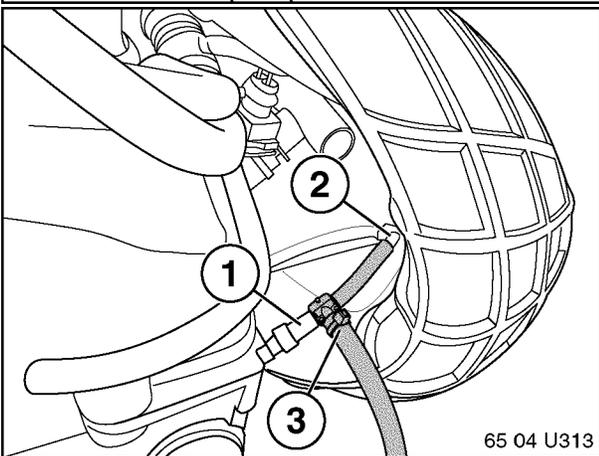
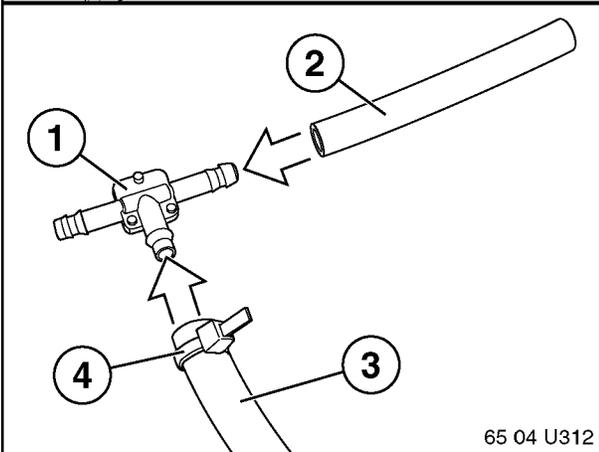
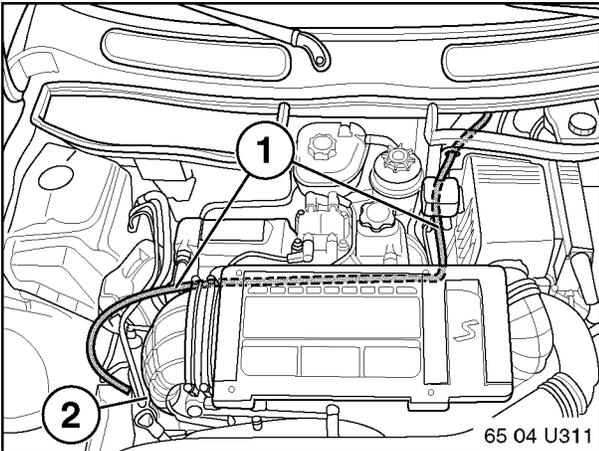
22. Remove plastic intercooler cover as per TIS 17 51 000.
23. Loosen vehicle airbox cover (1). Remove and carefully set aside air filter. Bend airbox cover (1) towards front of vehicle.
24. Drill  $\frac{3}{4}$  inch (approx 19mm) hole into plastic partition as shown. Distances "A" and "B" are measured from side and top bends in plastic partition. See also following instruction.

**A = 1.0 inches (25mm)**

**B = 1.0 inches (25mm)**

**WARNING: Use extreme care when drilling hole in partition. Brake lines (2) run immediately behind partition. Hole location (1) as shown in illustration S62 05 U02 must be high enough so that drill bit does not contact brake lines when drilling access hole.**

25. Insert grommet (MINI P/N 51 71 7 036 220) in hole (1) to protect hose. Ensure that grommet is fully seated and will not loosen due to vibration. It may be necessary to remove plastic flashing from hole area.
26. Route hose (2) forward from firewall, through grommet, and towards front of vehicle. Care should be taken to leave enough slack so that hose is not stretched or resting against any rough edges.



27. Remove Intercooler as per TIS 17 51 000.
28. Route hose (1) under battery jumper block and beneath intercooler as shown.
29. Secure hose with wire ties. Do not make wire ties too tight, as they may crimp the hose.
30. Route hose to left side of vehicle.

31. Connect coupler hose (2) to tee fitting (1)
32. Connect gauge signal hose (3) to perpendicular barb of tee fitting.

**CAUTION:** You must connect the gauge hose (3) to the perpendicular hose. This fitting has a airflow restrictor in it designed to work with this system.

33. Unplug fuel pressure regulator signal hose under passenger side of aluminum intercooler duct.
34. Trim coupler hose (2) to desired length for connection and connect to intake hose barb
35. Trim signal hose (3) to appropriate length.
36. Tee fitting connects inline as shown to existing fitting (1), Intake Barb (2), and Gauge signal hose (3).

**CAUTION:** Do not use serrated pliers or other sharp objects to connect tube. Any nicks or cuts will lead to tubing failure.

**RETROFIT CODING**

There is no retrofit coding required for this installation.

**TROUBLE SHOOTING**

Voltmeter does not work	<ul style="list-style-type: none"> <li>• Check wiring connections. Make sure +/- wires are correctly connected.</li> <li>• Check fuse F40</li> </ul>
Gauge is slow to respond or does not work	<ul style="list-style-type: none"> <li>• Check for leaks, kinks, or punctures in the boost gauge tubing</li> </ul>
Boost only registers vacuum	<ul style="list-style-type: none"> <li>• Tee fitting is connected to wrong fitting on the engine side.</li> </ul>
One or both gauges do not illuminate	<ul style="list-style-type: none"> <li>• Check that LED illumination boards are oriented correctly in socket and are fully inserted.</li> </ul>
Gauge reads erratically or flutters	<ul style="list-style-type: none"> <li>• Check Tee fitting to make sure restrictor is in the perpendicular barb, going to the boost gauge</li> </ul>