

Instruction Sheet

**REPLACEMENT OF "ENGLER" OR "DIXSON" SPEEDOMETER
BY A "VDO" SPEEDOMETER ON H5-60, "XL" AND 96" VEHICLES**

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SECTION 2

"XL" (page 8)

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SECTION 1

REPLACEMENT OF "ENGLER" OR "DIXSON" SPEEDOMETER BY A "VDO" SPEEDOMETER ON H5-60 VEHICLES

Material

SPEEDOMETER	KIT KM/H	KIT MPH
ENGLER → VDO	#09-0203	#09-0204
DIXSON → VDO		

2. Remove the two caps covering fasteners on each side of dashboard, turn fasteners counterclockwise, then remove cover.

3. Remove the screws retaining central and L.H. dashboard panels, then remove panels.

Description of kits

CAUTION: Take care not to damage components when removing panels.

Part no	Description	#09-0203 Qty	#09-0204 Qty
FI-9002A	Feuille d'instructions	1	1
IS-9002A	Instruction sheet	1	1
06-2677	Wiring harness assy	1	1
09-0198	Speedometer mph	0	1
09-0199	Speedometer km/h	1	0
56-0815	Ring terminal	1	1
56-0852	Male connector (4 pins)	1	1
56-0899	Female contact pin (W20-14)	6	6
56-1255	Yellow wire #18 (AWG) 3' (1 m)	1	1
56-1261	Black wire #18 (AWG) 10' (3 m)	1	1
56-1565	Seal	1	1
56-1689	Female contact pin (W18-20)	1	1
59-0252	Plug 7/8-18	1	1
56-0898	Male connector (2 pins)	1	1

NOTE: Depending on application, some parts may not be required.

Procedure

- A) Engler → VDO
- B) Dixson → VDO (page 4)

A) Engler → VDO

1. Park vehicle safely, apply parking brake, stop engine, and set main battery disconnect switches to the "OFF" position prior to working on the vehicle.

- 4. Disconnect connector at the back of "Engler" speedometer.
- 5. Disconnect connector of "Engler" speedometer lamp.
- 6. Unscrew the two nuts retaining speedometer, then remove speedometer and its support rail.
- 7. Cut wires #85A, #16, #20, #8 and #0 near connector, discard connector, strip extremity of wires #16, #20 and #8 then crimp a female contact pin #56-0899 on each of these wires.

8. Insert wire #16 in location #3 of male connector #56-0852, wire #20 in location #2 and wire #8 in location #4. Insulate separately wires #85A and #0 using electric tape.

9. Strip yellow wire extremity (provided with kit), crimp a contact pin #56-0899 then insert it in location #1 of connector #56-0852.

10. Strip other extremity of yellow wire, crimp a ring terminal #56-0815, and connect it to the 12 volt voltmeter feed. See figures A.1 and A.2.

NOTE: The 12 volt voltmeter is located in the lower R.H. corner of L.H. dashboard panel.

11. Fix the "VDO" speedometer to the dashboard panel using the support rail. Insert ring terminal of lamp wiring harness on one stud, then tighten the two retaining nuts.

12. Connect connector #56-0852 to the corresponding connector on speedometer.

NOTE: When performing connection, make sure that both connector ribs are in line.

13. Cut wires #114A and #0 near connector, discard connector, strip wire extremity and crimp a female contact pin #56-0899 on each of these wires.

14. Insert wire #114A in location #1 of connector #56-0898, wire #0 in location #2, then connect this connector to the one of speedometer lamps.

15. Program speedometer according to Information Letter #90-24.

16. Replace dashboard panels and fix with the retaining screws. Install cover and fix it with fasteners and caps.

CAUTION: Take care not to damage components when replacing panels.

17. Perform modification in the engine compartment according to engine type.

Vehicle equipped with DDEC I engine: see page 6.

Vehicle equipped with DDEC II engine: see page 7.

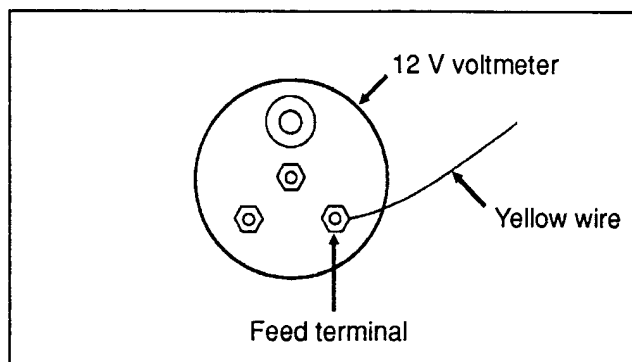


Figure A.2

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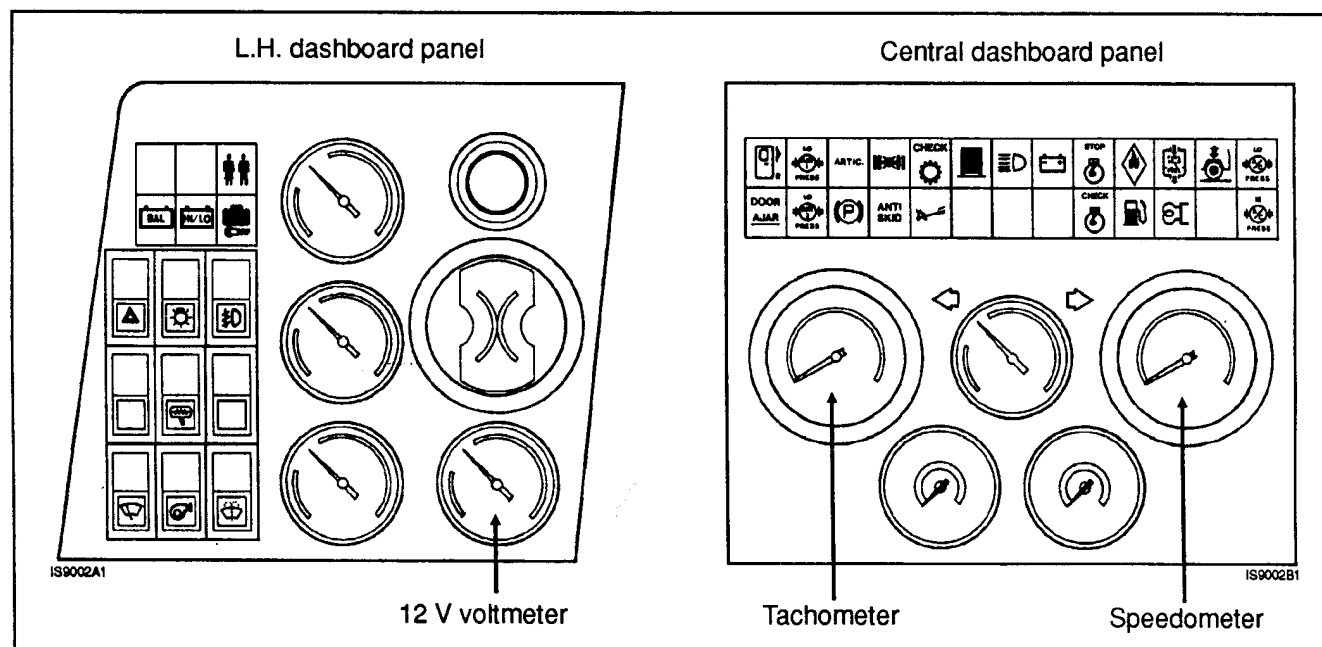


Figure A.1

B) Dixon → VDO

1. Park vehicle safely, apply parking brake, stop engine, and set main battery disconnect switches to the "OFF" position prior to working on the vehicle.
2. Remove the two caps covering fasteners on each side of dashboard, turn fasteners counterclockwise, then remove cover.
3. Remove the screws retaining central and L.H. dashboard panels, then remove panels.

CAUTION: Take care not to damage components when removing panels.

4. Disconnect wires #85A, #16, #20 and #8 at the back of "Dixon" speedometer.
5. Disconnect connector of "Dixon" speedometer lamp.
6. Unscrew the two nuts retaining "Dixon" speedometer, then remove speedometer and its support rail.
7. Cut wires #85A, #16, #20, and #8 near connector, discard connector, strip extremity of wires #16, #20 and #8 then crimp a female contact pin #56-0899 on each of these wires.
8. Insert wire #16 in location #3 of male connector #56-0852, wire #20 in location #2 and wire #8 in location #4. Insulate wire #85A using electric tape.

9. Strip yellow wire extremity (provided with kit), crimp a contact pin #56-0899 then insert it in location #1 of connector #56-0852.

10. Strip other extremity of yellow wire, crimp a ring terminal #56-0815, and connect it to the 12 volt voltmeter feed. See figures B.1 and B.2.

NOTE: The 12 volt voltmeter is located in the lower R.H. corner of L.H. dashboard panel.

11. Fix the "VDO" speedometer to the dashboard panel using the support rail. Insert ring terminal of lamp wiring harness on one stud, then tighten the two retaining nuts.
12. Connect connector #56-0852 to the corresponding connector on speedometer, then connect the speedometer lamp connector.

NOTE: When performing connection, make sure that both connector ribs are in line.

13. Program speedometer according to Information Letter #90-24.
14. Replace dashboard panels and fix with the retaining screws. Install cover and fix it with fasteners and caps.

CAUTION: Take care not to damage components when replacing panels.

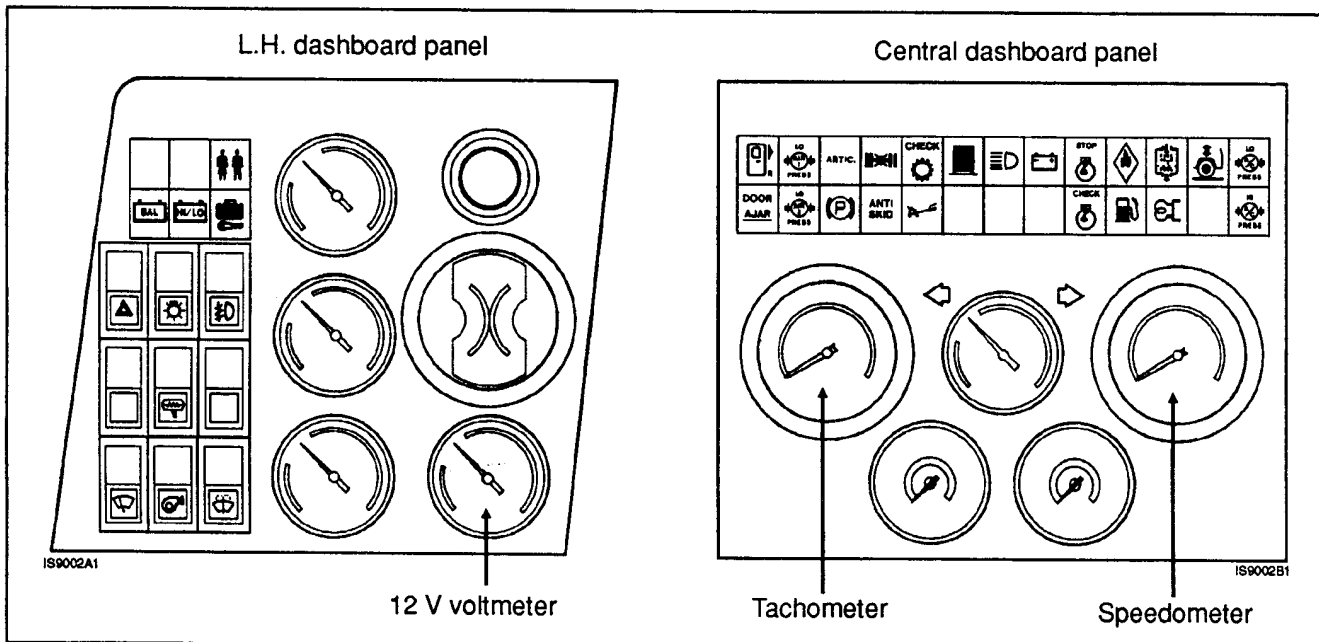
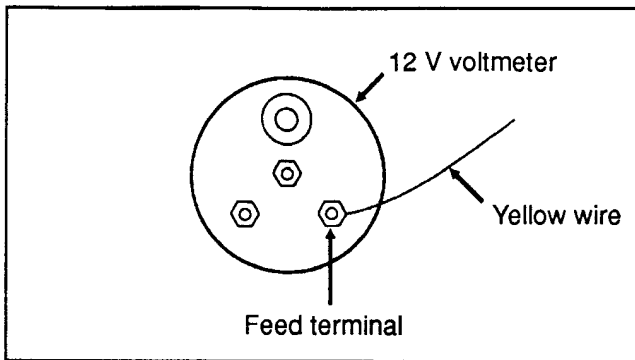


Figure B.1

**Figure B.2**

IS900202

15. Perform modification in the engine compartment according to engine type.

Vehicle equipped with **DDEC I** engine: see page 6.

Vehicle equipped with **DDEC II** engine: see page 7.

**MODIFICATION TO PERFORM IN ENGINE COMPARTMENT
OF A H5-60 VEHICLE EQUIPPED WITH DDEC I ENGINE
(VIN 2P9H33468J1001001 up to 2P9H33460J1001008 inclusively).**

Procedure

1. Open second and third baggage compartment doors on R.H. side of vehicle, turn engine access panel retaining screws 1/4 turn counterclockwise, lift and hold panel by means of the hook.
2. On the transmission, disconnect connector from driving gear and 3-circuit connector (C-267); remove pulse generator and driving gear. See figure 1.

NOTE: The pulse generator is located at the output of transmission on the R.H. side, near the yoke.

3. Remove the fasteners retaining the wiring harness to the transmission, then remove wiring harness.
4. Screw plug #59-0252 in place of driving gear.
5. Remove wire #510 from location B in 4-circuit connector (C-275), cut wire near contact pin, fold back wire and wrap it with electric tape.
6. Strip (without cutting it) a length of 1/2" (13 mm) on wire "OF" in wiring and solder it to black wire #56-1261 (provided with kit). See figure 2.

CAUTION: Put a cloth on wiring harness to protect it during soldering.

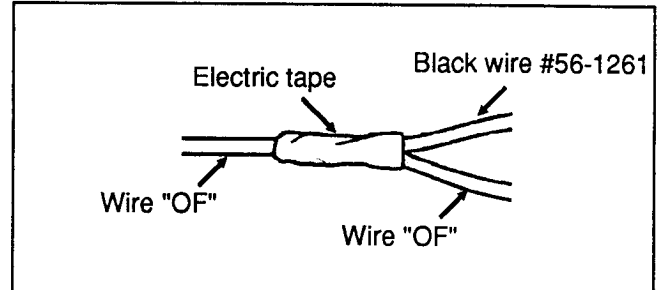


Figure 2

IS900204

7. Allow solder to cool and wrap connection with electric tape.
8. Strip other extremity of black wire #56-1261, slide a seal #56-1565, crimp a female contact pin #56-1689 and insert it in location B of the 4-circuit connector (C-275).
9. Connect wiring harness #06-2677 (provided with kit) to the 4-circuit connector (C-275) and to the 3-circuit connector (C-267), then fix wiring harness to the engine and transmission by means of fasteners.
10. Close engine access panel, turn retaining screws 1/4 turn clockwise and close baggage compartment doors.

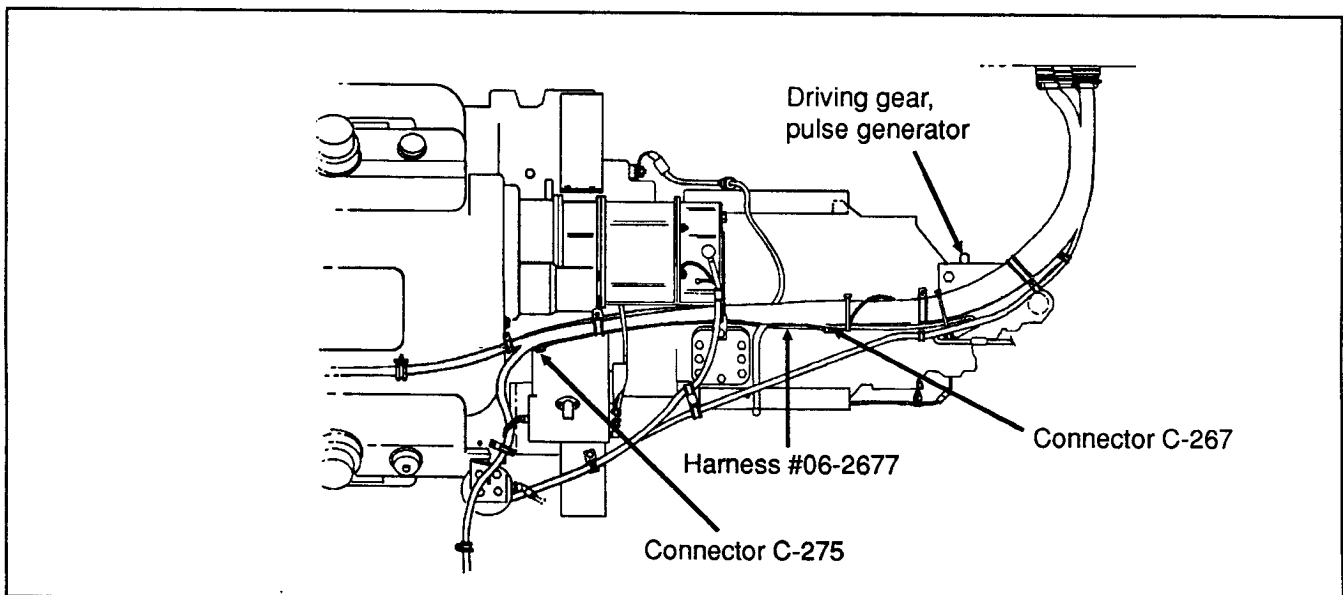


Figure 1

IS900205

MODIFICATION TO PERFORM IN ENGINE COMPARTMENT
OF A H5-60 VEHICLE EQUIPPED WITH **DDEC II** ENGINE
(VIN 2P9H33462J1001009 up to 2P9H33460K1001026 inclusively).

Procedure

1. Open second and third baggage compartment doors on R.H. side of vehicle, turn engine access panel retaining screws 1/4 turn counterclockwise, lift and hold panel by means of the hook.
 2. On the transmission, disconnect connector from driving gear and 3-circuit connector (C-267); remove pulse generator and driving gear. See figure 1.
 3. Remove the fasteners retaining the wiring harness to the transmission, then remove wiring harness.
 4. Screw plug #59-0252 in place of driving gear.
 5. Connect wiring harness #06-2677 to the 4-circuit connector (C-275) and to the 3-circuit connector (C-267), then fix wiring harness to the engine and transmission by means of fasteners.
 6. Close engine access panel, turn retaining screws 1/4 turn clockwise and close baggage compartment doors.
- NOTE: The pulse generator is located at the output of transmission on the R.H. side, near the yoke.**

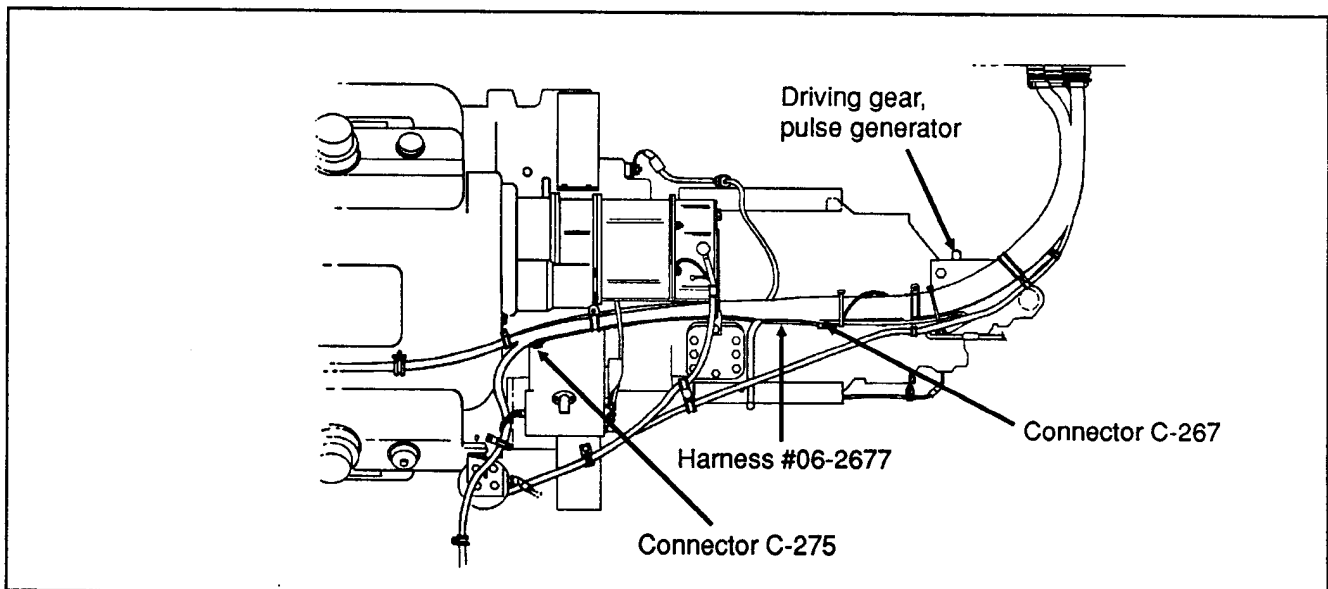


Figure 1

IS900205

SECTION 2

REPLACEMENT OF "ENGLER" OR "DIXSON" SPEEDOMETER BY A "VDO" SPEEDOMETER ON "XL" VEHICLES

Material

SPEEDOMETER	KIT KM/H	KIT MPH
ENGLER → VDO	#09-0205	#09-0206
DIXSON → VDO		

Description of kits

Part no	Description	#09-0205 Qty	#09-0206 Qty
FI-9002A	Feuille d'instructions	1	1
IS-9002A	Instruction sheet	1	1
06-2772	24/12 volt converter	1	1
09-0198	Speedometer mph	0	1
09-0199	Speedometer km/h	1	0
56-0899*	Female contact pin	5	5
56-1860*	Male connector	1	1

* Parts not required when replacing "Engler" speedometer.

Procedure

- A) Engler → VDO
B) Dixson → VDO (page 9)

A) Engler → VDO

1. Park vehicle safely, apply parking brake, stop engine, and set main battery disconnect switch(es) to the "OFF" position prior to working on the vehicle.
 2. Remove the seven screws retaining dashboard panel, then remove panel.
- CAUTION: Take care not to damage components when removing panel.**
3. Disconnect the speedometer lamp connector.
 4. Disconnect wiring harness at back of speedometer.
 5. Unscrew the two nuts retaining the speedometer, then remove speedometer and its support rail.

6. Program "VDO" speedometer according to Information Letter #90-24.

7. Fix the "VDO" speedometer to the dashboard panel using the support rail. Insert ring terminal of lamp wiring harness on one stud, then tighten the two retaining nuts.

8. Connect the 24/12 volt converter (provided with kit) to "VDO" speedometer, then connect other extremity to wiring harness already in place.

NOTE: When performing connection, make sure that both connector ribs are in line.

9. Connect the speedometer lamp connector.

10. Replace dashboard panel and fix it with the seven retaining screws.

CAUTION: Take care not to damage components when replacing dashboard panel.

B) Dixon → VDO

1. Park vehicle safely, apply parking brake, stop engine, and set main battery disconnect switch(es) to the "OFF" position prior to working on the vehicle.

2. Remove the seven screws retaining dashboard panel, then remove panel.

CAUTION: Take care not to damage components when removing panel.

3. Disconnect the speedometer lamp connector.

4. Disconnect wires #85A, #16, #20, "SH" and #0 at back of "Dixon" speedometer.

5. Unscrew the two nuts retaining the speedometer, then remove speedometer with its support rail.

6. Cut wires #85A, #16, #20, "SH" and #0 near connector, discard connector, strip extremity of wires then crimp a female contact pin #56-0899 on each of these wires with exception of wire #0.

7. Strip (without cutting it) a length of about 1/2" (13 mm) on black wire "SH", and solder black wire #0 to this wire. See fig. B.1.

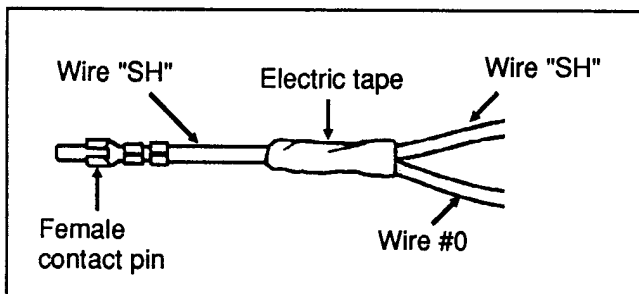


Figure B.1

IS900204

CAUTION: Put a cloth under wire harness to protect components during soldering.

8. Allow solder to cool and wrap connection with electric tape.

9. Insert wires #85A, #16, #20 and "SH" in connector #56-1860 (provided with kit) to position outlined hereafter:

Position #1: Wire #85A (24 volts, hot feed)

Position #2: Wire #20

Position #3: Blank (no wire)

Position #4: Blank (no wire)

Position #5: Wire "SH" (ground)

Position #6: Wire #16

8. Connect the 24/12 volt converter (provided with kit) to connector #56-1860.

9. Program speedometer according to Information Letter #90-24.

10. Fix the "VDO" speedometer to the dashboard panel using the support rail. Insert ring terminal of lamp wiring harness on one stud, then tighten the two retaining nuts.

11. Connect the other extremity of 24/12 volt converter to "VDO" speedometer connector, then connect the lamp connector.

12. Replace dashboard panel and fix it with the seven retaining screws.

CAUTION: Take care not to damage components when replacing dashboard panel.

SECTION 3

REPLACEMENT OF "ENGLER" SPEEDOMETER BY A "VDO" SPEEDOMETER ON 96" VEHICLES

Material

SPEEDOMETER	KIT KM/H	KIT MPH
ENGLER → VDO	#09-0205	#09-0206

Description of kits

Part no	Description	#09-0205 Qty	#09-0206 Qty
FI-9002A	Feuille d'instructions	1	1
IS-9002A	Instruction sheet	1	1
06-2772	24/12 volt converter	1	1
09-0198	Speedometer mph	0	1
09-0199	Speedometer km/h	1	0
56-0899	Female contact pin	5	5
56-1860	Male connector	1	1

Procedure

1. Park vehicle safely, apply parking brake, stop engine, and set main battery disconnect switch to the "OFF" position prior to working on the vehicle.
2. Remove the screw retaining dashboard panel, then lift and remove panel.

CAUTION: Take care not to damage components when removing panel.

3. Disconnect the speedometer lamp connector.
4. Remove the screws retaining wires to the speedometer, then remove the wires.
5. Unscrew the two nuts retaining the speedometer, take out the speedometer with its support rail.
6. Cut wires near terminals, discard terminals, and strip wire extremities.
7. Crimp a female contact pin (56-0899) on each of these wires, then insert these wires in connector #56-1860 (provided with kit) to position outlined hereafter:

Position #1: Wire #85A (24 volts, hot feed)

Position #2: Wire #20

Position #3: Blank (no wire)

Position #4: Wire #32A

Position #5: Wire #0 (ground)

Position #6: Wire #16

8. Connect the 24/12 volt converter (provided with kit) to connector #56-1860.

9. Program "VDO" speedometer according to Information Letter #90-24.

10. Fix the "VDO" speedometer to the dashboard panel using the support rail. Insert ring terminal of lamp wiring harness on one stud, then tighten the two retaining nuts.

11. Connect the other extremity of the 24/12 volt converter to "VDO" speedometer connector, then connect the lamp connector.

12. Replace dashboard panel and fix it with the retaining screw.

CAUTION: Take care not to damage components when replacing dashboard panel.