

Instruction Sheet

REPLACEMENT OF A "DIXSON" OR "ENGLER" TACHOMETER BY A "VDO" TACHOMETER

- A) Replacement of "ENGLER" tachometer by a "VDO" tachometer on H5-60 vehicles equipped with DDEC I engine**

Application: All H5-60 vehicles equipped with DDEC I engine starting from VIN 2P9H33468J1001001 up to 2P9H33460J1001008 inclusively.

- B) Replacement of "ENGLER" tachometer by a "VDO" tachometer on «XL» vehicles**

Application: All «XL» vehicles starting from VIN 2P9L33406E1001638 up to 2P9M33400L1001684 inclusively.

- C) Replacement of "ENGLER" tachometer by a "VDO" tachometer on 96" vehicles**

Application: All 96" vehicles.

- D) Replacement of "ENGLER" tachometer by a "VDO" tachometer on H5-60 vehicles equipped with DDEC II engine**

- E) Replacement of "DIXSON" tachometer by a "VDO" tachometer on H5-60 vehicles**

Application: All H5-60 vehicles equipped with DDEC II engine starting from VIN 2P9H33462J1001009 up to 2P9H33460K1001026 inclusively.

- F) Replacement of "DIXSON" tachometer by a "VDO" tachometer on «XL» vehicles**

Application: All «XL» vehicles starting from VIN 2P9L33406E1001638 up to 2P9M33400L1001684 inclusively.

- A -

REPLACEMENT OF "ENGLER" TACHOMETER BY A "VDO" TACHOMETER ON H5-60 VEHICLES EQUIPPED WITH DDEC I ENGINE

Application: All H5-60 vehicles equipped with DDEC I engine starting from VIN 2P9H33468J1001001 up to 2P9H33460J1001008 inclusively.

Material

NOTE: This kit is required to perform the modifications outlined in part A of this Instruction sheet.

Kit #09-0207 includes the following parts.

Part no	Description	Qty
FI-9003	Feuille d'instructions pour l'installation d'un tachymètre "VDO"	1
IS-9003	"VDO" tachometer installation instruction sheet	1
06-2772	24/12 volt converter	1
09-0196	Tachometer - 15 pulses	1
56-0189	Female contact pin	6
56-1860	Receptacle housing	1

NOTE: Kit #09-0207 can be ordered through regular channel.

Procedure

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

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

4. Disconnect tachometer lamp connector.
5. Disconnect tachometer connector from wiring harness.
6. Unscrew the two nuts retaining tachometer, then remove tachometer and its support rail.
7. Fix the "VDO" tachometer to the dashboard panel using the support rail. Insert the ring terminal of lamp connector on one stud, then tighten the two retaining nuts.
8. Connect the 24/12 volt converter to the "VDO" tachometer and to the wiring harness, then connect tachometer lamp to its connector.

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

9. Replace central dashboard panel and secure with the retaining screws.

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

10. Replace the cover, turn the two fasteners clockwise, then replace the caps on the fasteners.
11. Reset main battery disconnect switches to the "OFF" position.

- B -

REPLACEMENT OF "ENGLER" TACHOMETER BY A "VDO" TACHOMETER ON «XL» VEHICLES

Application: All «XL» vehicles starting from VIN 2P9L33406E1001638 up to 2P9M33400L1001684 inclusively.

Material

NOTE: This kit is required to perform the modifications outlined in part B of this instruction sheet.

Kit #09-0207 includes the following parts.

Part no	Description	Qty
FI-9003	Feuille d'instructions pour l'installation d'un tachymètre "VDO"	1
IS-9003	"VDO" tachometer installation instruction sheet	1
06-2772	24/12 volt converter	1
09-0196	Tachometer - 15 pulses	1
56-0189	Female contact pin	6
56-1860	Receptacle housing	1

NOTE: Kit #09-0207 can be ordered through regular channel.

Procedure

1. Park vehicle, apply parking brake, stop engine, and set main battery disconnect switch(es) to the "OFF" position.
2. Remove the seven screws retaining dashboard panel, then remove panel.

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

3. Disconnect tachometer lamp connector.
4. Disconnect tachometer connector from wiring harness.

5. Unscrew the two nuts retaining tachometer, then remove tachometer and its support rail.

6. Fix the "VDO" tachometer to the dashboard panel using the support rail. Insert the ring terminal of lamp connector on one stud, then tighten the two retaining nuts.

7. Connect the 24/12 volt converter to the "VDO" tachometer, then to the wiring harness.

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

8. Replace dashboard panel and fix with the seven retaining screws.

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

9. Reset main battery disconnect switch(es) to the "ON" position.

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

Application: All 96" vehicles.

Material

NOTE: This kit is required to perform the modifications outlined in part C of this instruction sheet.

Kit #09-0207 includes the following parts.

Part no	Description	Qty
FI-9003	Feuille d'instructions pour l'installation d'un tachymètre "VDO"	1
IS-9003	"VDO" tachometer installation instruction sheet	1
06-2772	24/12 volt converter	1
09-0196	Tachometer - 15 pulses	1
56-0189	Female contact pin	6
56-1860	Receptacle housing	1

NOTE: Kit #09-0207 can be ordered through regular channel.

Procedure

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

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

3. Disconnect tachometer lamp connector.
4. Loosen the screws retaining wires to the tachometer, then remove the wires.
5. Unscrew the two nuts retaining the tachometer, then remove the tachometer and its support rail.

6. Cut wires near terminals, discard terminals, and strip wire extremities.

7. Crimp a female contact pin to wire #1, 24 volt feeder wire, and ground wire.

8. Route wire #1 to location #6 on receptacle housing #56-1860, 24 volt feeder wire to location #1, and ground wire to location #5.

NOTE: Location numbers are indicated in the receptacle housing.

9. Connect the 24/12 volt converter to receptacle housing #56-1860.

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

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

11. Connect the 24/12 volt converter to the "VDO" tachometer connector.

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

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

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

13. Reset main battery disconnect switch to the "ON" position.

- D and E -

REPLACEMENT OF "ENGLER" TACHOMETER BY A "VDO" TACHOMETER ON H5-60 VEHICLES EQUIPPED WITH DDEC II ENGINE

REPLACEMENT OF "DIXSON" TACHOMETER BY A "VDO" TACHOMETER ON H5-60 VEHICLES

Application: All H5-60 vehicles equipped with DDEC II engine starting from VIN 2P9H33462J1001009 up to 2P9H33460K1001026 inclusively.

Material

NOTE: This kit is required to perform the modifications outlined in parts D and E of this instruction sheet.

Kit #09-0208 includes the following parts.

Part no	Description	Qty
FI-9003	Feuille d'instructions pour l'installation d'un tachymètre "VDO"	1
IS-9003	"VDO" tachometer installation instruction sheet	1
09-0196	Tachometer - 12 pulses	1
56-0784	Shrinkable tube 4" (10 cm)	1
56-0815	Ring terminal	1
56-0852	Receptacle housing	1
56-0899	Female contact pin (W/20-14)	6
56-1001	Male contact pin (W/18-14)	2
56-1255	Yellow wire gauge #18 (AWG) 3' (1 m)	1
56-1258	Red wire gauge #18 (AWG) 2' (60 cm)	1

NOTE: Kit #09-0208 can be ordered through regular channel.

Procedure

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

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

4. Loosen the screws retaining wires to the tachometer, then disconnect the wires.
5. Disconnect tachometer lamp connector.
6. Unscrew the two nuts retaining tachometer, then remove tachometer and its support rail.
7. Cut wire #8 near its terminal, discard terminal, strip wire extremity, crimp a contact pin #56-0899 and route wire to location #4 on receptacle housing #56-0852.

NOTE: Location numbers are indicated in the connector.

8. Cut shrinkable tube in lengths of approximately 1" (25 mm), insert the three unused wires in each tube. Heat tubes to insulate the wires, then attach to the wiring harness with electric tape.
9. Strip extremity of yellow wire included in kit, crimp a contact pin #56-0899 and route wire to location #1 of receptacle housing #56-0852.
10. Strip other extremity of yellow wire and crimp a ring terminal.
11. Strip extremity of red wire included in kit.
12. Strip (without cutting it) approximately 1/2" (13 mm) on wire #505 of connector C-370 in location #32, and solder red wire.

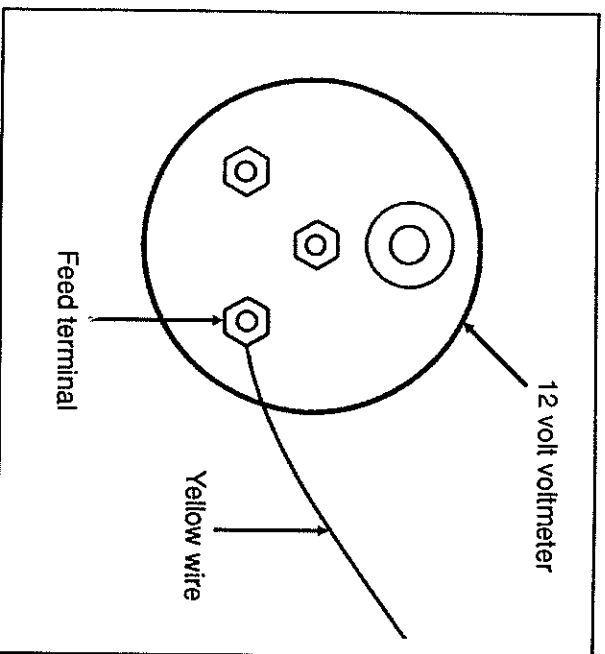
CAUTION: Put a cloth on the wiring harness in order to protect it during soldering.

NOTE: Connector C-370 is located in the front R.H. service compartment.

13. Allow solder to cool and wrap connection with electric tape.
14. Strip other extremity of red wire, crimp a contact pin #56-0899 and route it to location #3 of receptacle housing #56-0852.

15. Fix the "VDC" tachometer to the central dashboard panel using the support rail. Insert the ring terminal of red wire on one stud, then tighten the two retaining nuts.
16. Route yellow wire to the 12 volt voltmeter feed, unscrew nut, insert ring terminal on threaded rod and tighten nut adequately. See figure 1.

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



17. Connect tachometer to receptacle housing #56-0852 of wiring harness.

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

18. Replace central dashboard panel and secure with the retaining screws.

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

19. Replace the cover, turn the two fasteners clockwise, then replace the caps on the fasteners.

20. Reset main battery disconnect switches to the "OFF" position.

- F -

REPLACEMENT OF "DIXSON" TACHOMETER BY A "VDO" TACHOMETER ON «XL» VEHICLES

Application: All «XL» vehicles starting from VIN 2P9L33406E1001638 up to 2P9M33400L1001684 inclusively.

Material

NOTE: This kit is required to perform the modifications outlined in part F of this instruction sheet.

Kit #09-0210 includes the following parts.

Part no	Description	Qty
06-2772	24/12 volt converter	1
09-0197	Tachometer - 118 pulses	1
56-0899	Female contact pin	6
56-1860	Receptacle housing	1
IS-9003	"VDO" tachometer installation instruction sheet	1
FI-9003	Feuille d'instructions pour l'installation d'un tachymètre "VDO"	1

NOTE: Kit #09-0210 can be obtained through regular channel.

Procedure

1. Park vehicle, apply parking brake, stop engine, and set main battery disconnect switch(es) to the "OFF" position.
2. Remove the seven screws retaining dashboard panel, then remove panel.

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

3. Disconnect tachometer lamp connector.
4. Loosen the screws retaining wires to the tachometer, then disconnect wires.
5. Unscrew the two nuts retaining the tachometer, then remove the tachometer and its support rail.
6. Cut wires near terminals, discard terminals, and strip wire extremities.
7. Strip (without cutting it) a length of about 1/2" (13 mm) on black wire #0 and solder white wire #1 to this wire. See figure 2.

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

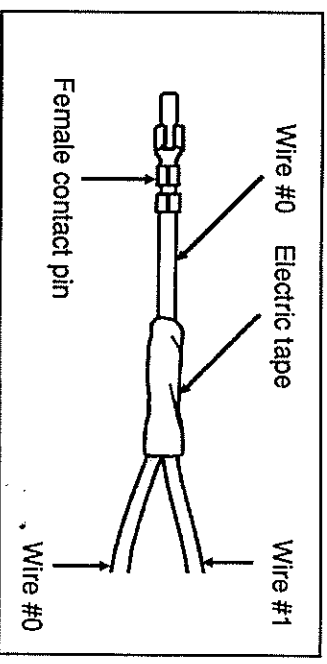


Figure 2

8. Allow solder to cool and wrap connection with electric tape.
9. Crimp a female contact pin to wires #97 (black), #85A (grey), and #0 (black).
10. Route black wire #97 to location #6 on receptacle housing #56-1860, black wire #0 to location #5, and grey wire #85A to location #1.

NOTE: Location numbers are indicated in the receptacle housing.

11. Connect the 24/12 volt converter to receptacle housing #56-1860.

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

12. Fix the "VDO" tachometer to the dashboard panel using support rail. Insert the ring terminal of lamp connector on one stud, then tighten the two retaining nuts.
13. Connect the 24/12 volt converter to the "VDO" tachometer connector and tachometer lamp to its connector.

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

14. Replace dashboard panel and fix with the seven retaining screws.

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

15. Reset main battery disconnect switches to the "ON" position.

