



MVH308DE/MVH408DE/MVH508DE Reversible Plate Compactor COMPAS II Compaction Analyzing System Installation Instructions

The following instructions are intended to assist the user in the installation of the COMPAS II Compaction Analyzing System for use on the MVH308DE, MVH408DE, and MVH508DE reversible plate compactors. Please read all assembly instructions before installing the system kit.

PARTS

Verify that all parts are accounted for. See Figure 1, Table 1 for MVH308DE and MVH408DE. See Figure 2, Table 2 for MVH508DE.

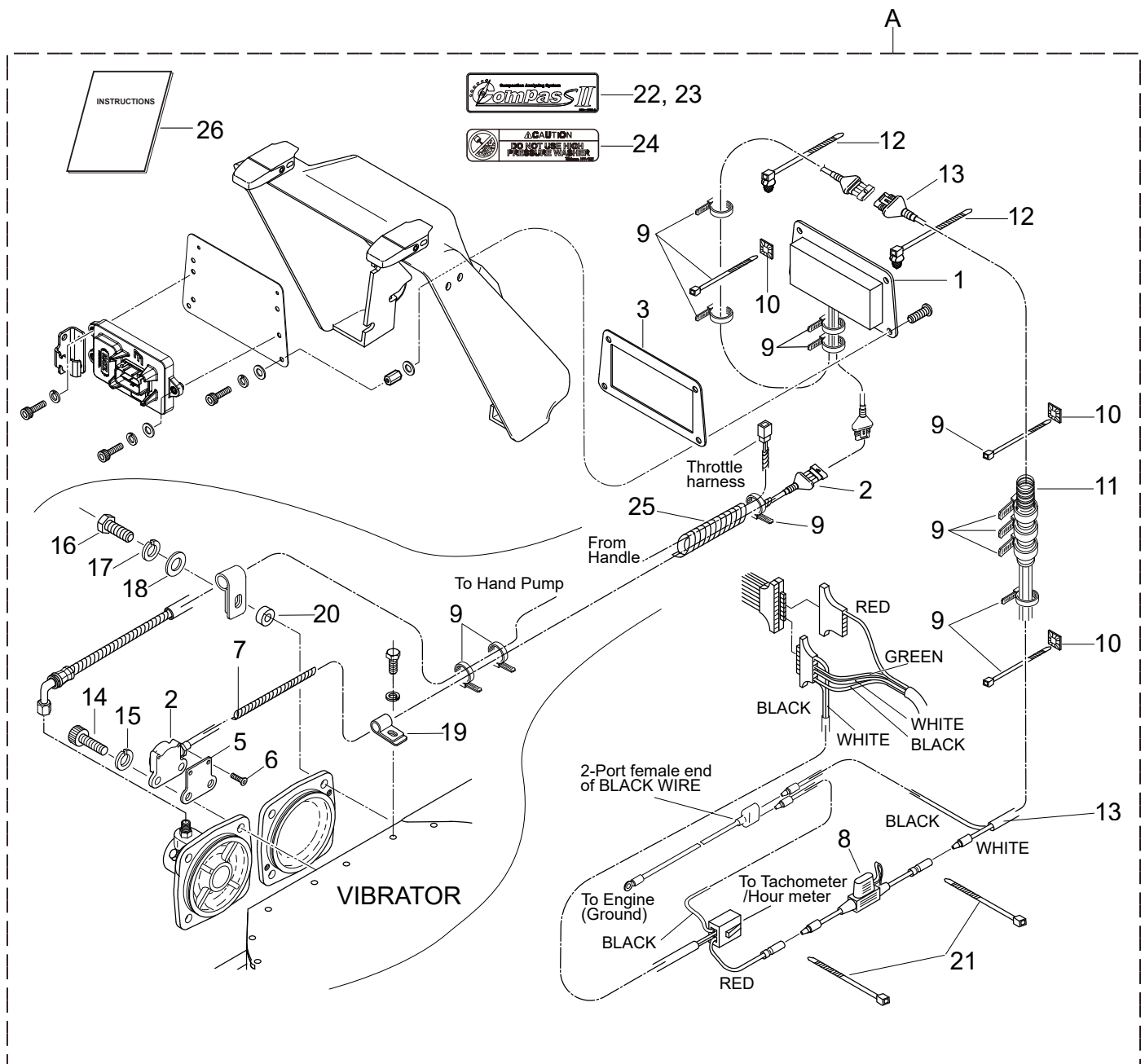


Figure 1. COMPAS II Compaction Analyzing System Kit (MVH308DE and MVH408DE)

**Table 1. COMPAS II Compaction Analyzing System Kit
(MVH308DE, MVH408DE)**

Item	Part No.	Description	Qty.	Remarks
A	CPAS308DE	Kit, COMPAS II Compaction Analyzing System	1	Includes items 2–19
A	CPAS408DE	Kit, COMPAS II Compaction Analyzing System	1	Includes items 2–19
1	467310020	Compaction Sensor Panel, MVH-308	1	308DE only
1	468310010	Compaction Sensor Panel, MVH-408	1	408DE only
2	467352040	Assy, Acceleration Sensor	1	Includes item 16
3	464350510	Sensor Panel Backing	1	
5	464464350	Sensor Holder Cover	1	
6	009120420	Socket Head Bolt, 5 x 10T	2	
7	959021829	Spiral Tube	1	
8	467352850	Fuse Holder	1	
9	506010070	Cable Tie	26	308DE only
9	506010070	Cable Tie	22	408DE only
10	955409080	Cable Tie Mount, Self-Adhesive	3	
11	959029800	Corrugate Tube	1	
12	421010010	Push Mount Tie	2	
13	467358210	Sensor Harness	1	
14	001521030	Socket Head Bolt, 10 x 30	2	
15	030210250	Lock Washer, M10	2	
16	001221035	Hex Head Bolt, 10 x 35	1	
17	030210250	Lock Washer, M10	2	
18	031110160	Flat Washer, M10	1	
19	959408920	Cable Clamp, Ø8 for M8	1	
20	740426290	Spacer, 10.5 x 22 x 10	1	
21	959409960	Clamp	2	
22	920217640	Decal, COMPAS Mark, 94 mm	1	308DE only
23	920217650	Decal, COMPAS Mark, 110 mm	2	308DE only
23	920217650	Decal, COMPAS Mark, 110 mm	3	408DE only
24	920216610	Decal, High Pressure Wash Prohibited, English	1	
25	959021812	Spiral Tube	1	
26	N/A	Instructions, COMPAS II Installation for MVH308DE/408DE	1	

**Table 2. COMPAS II Compaction Analyzing System Kit
(MVH508DE)**

Item	Part No.	Description	Qty.	Remarks
A	CPAS508DE	Kit, COMPAS II Compaction Analyzing System	1	Includes items 2–19
1	469310010	Compaction Sensor Panel, MVH508	1	508DE only
2	467352040	Assy, Acceleration Sensor	1	Includes item 16
3	464350510	Sensor Panel Backing	1	
5	464464350	Sensor Holder Cover	1	
6	009120420	Socket Head Bolt, 5 x 10T	2	
7	959021829	Spiral Tube	1	
8	467352480	Harness, Sensor	1	
9	515450380	Wire Harness	1	
10	467352850	Fuse Holder	1	
11	955408440	Lead Cord	1	
12	506010070	Cable Tie	22	
13	959408920	Cable Clamp, Ø8 for M8	2	
14	001220815	Bolt, 8 x 15	1	
15	030208200	Lock Washer, M8	1	
16	020308060	Nut, M8	1	
17	954409880	Clamp, M6	1	
18	001521030	Socket Head Bolt, 10 x 30	2	
19	030210250	Lock Washer, M10	2	
20	001221035	Hex Head Bolt, 10 x 35	1	
21	030210250	Lock Washer, M10	2	
22	031110160	Flat Washer, M10	1	
23	959408920	Cable Clamp, Ø8 for M8	1	
24	740426290	Spacer, 10.5 x 22 x 10	1	
25	959021813	Spiral Tube	1	
26	507010110	Clamp, TC-200	3	
27	920217650	Decal, COMPAS Mark, 110 mm	3	
28	920216610	Decal, High Pressure Wash Prohibited, English	1	
30	N/A	Instructions, COMPAS II Installation for MVH508DE	1	

REQUIRED TOOLS

- 10 mm, 13 mm, 17 mm, and 21 mm Socket or Wrench
- 13 mm Offset Wrench
- 4 mm, 5 mm, 6 mm, and 8 mm Hex Wrench
- Cable Tie Cutters
- Needle-Nose Pliers
- Loctite® 243™ and 263™ Thread Sealant

WORK SAFELY!

Only a **qualified service technician** with proper training should perform this installation. Follow all shop safety rules when performing this installation.

COMPACTOR SAFETY

DANGER

- **NEVER** operate the equipment in an explosive atmosphere or near combustible materials. An explosion or fire may result, causing **severe bodily harm or even death**.



WARNING

- **NEVER** disconnect any emergency or safety devices. These devices are intended for operator safety. Disconnection of these devices can cause **severe injury, bodily harm or even death**. Disconnection of any of these devices will void all warranties.

CAUTION

- **NEVER** lubricate components or attempt service on a running machine.

BATTERY SAFETY

DANGER

- **DO NOT** drop the battery. There is a possibility that the battery will **explode**.
- **DO NOT** expose the battery to open flames, sparks, cigarettes, etc. The battery contains combustible gases and liquids. If these gases and liquids come into contact with a flame or spark, **an explosion can occur**.



WARNING

- **ALWAYS** wear safety glasses when handling the battery to avoid eye irritation. The battery contains acids that can cause **serious injury to the eyes and skin**.



- **ALWAYS** wear well-insulated gloves when handling the battery.

- If battery liquid (dilute sulfuric acid) comes into contact with clothing or skin, rinse clothing or skin **immediately** with plenty of water.

- If battery liquid (dilute sulfuric acid) comes into contact with eyes, rinse eyes **immediately** with plenty of water and seek medical attention from the nearest hospital or doctor.

CAUTION

- **ALWAYS** disconnect the **negative** battery cable before performing service on the equipment.
- **ALWAYS** keep battery cables in good working condition. Repair or replace all worn cables.

TRANSPORTING SAFETY

CAUTION

- **NEVER** allow any person or animal to stand underneath the equipment while it is being lifted.

NOTICE

- Before lifting, **ALWAYS** make sure equipment parts (hook and vibration insulator) are undamaged, and no screws are loose or missing.
- **ALWAYS** make sure the lifting bail (hook) of the equipment has been properly secured to the crane or other lifting device.
- **NEVER** lift the equipment while the engine is **running**.
- **ALWAYS** tighten the fuel tank cap securely and close the fuel cock to prevent fuel from spilling when lifting or transporting the equipment.
- **ALWAYS** use adequate lifting cable (wire or rope) of sufficient strength.
- **ALWAYS** use a single-point suspension hook and lift the equipment straight upward.
- **NEVER** lift the equipment to unnecessary heights.

PREPARATION

1. Make sure the plate compactor is turned **OFF** and the engine is cool.
2. Place the plate compactor in an area free of dirt and debris, and make sure it is on secure, level ground. If possible, lift the compactor a few feet off the ground onto a flat, secure surface for easier access.

BATTERY DISCONNECTION AND REMOVAL

1. Release the two latches at the top of the rear cover (Figure 3), then pull the rear cover downward to open.

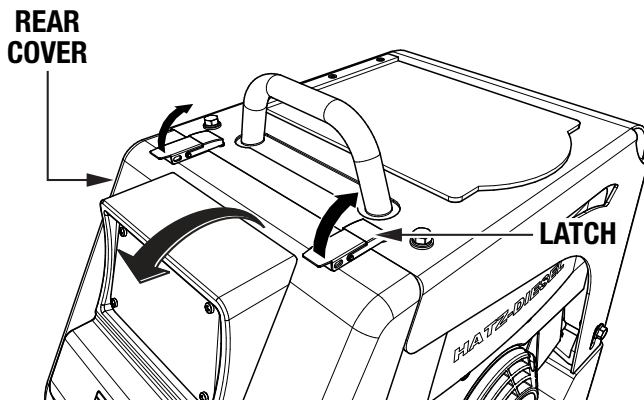


Figure 3. Open Rear Cover

2. Loosen the four 8 × 25 mm bolts securing the air cleaner stay (Figure 4) to the frame.

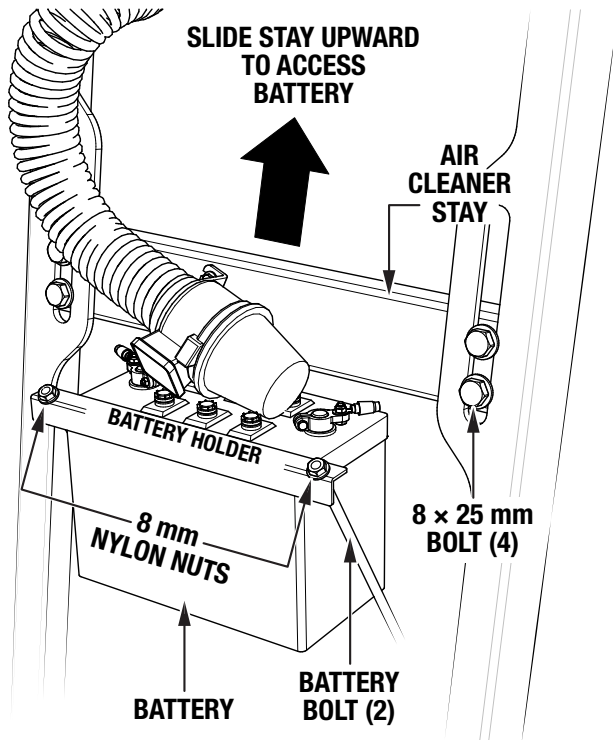


Figure 4. Battery Access

3. Slide the air cleaner stay upward to access the battery, then tighten the four 8 × 25 mm bolts to secure the stay in place (Figure 4).
4. Remove the two 8 mm nylon nuts from the battery bolts securing the battery holder to the battery (Figure 4). Remove the battery holder and set the holder and fasteners aside.

5. Disconnect the negative (**BLACK**) battery cable, then disconnect the positive (**RED**) battery cable (Figure 5).

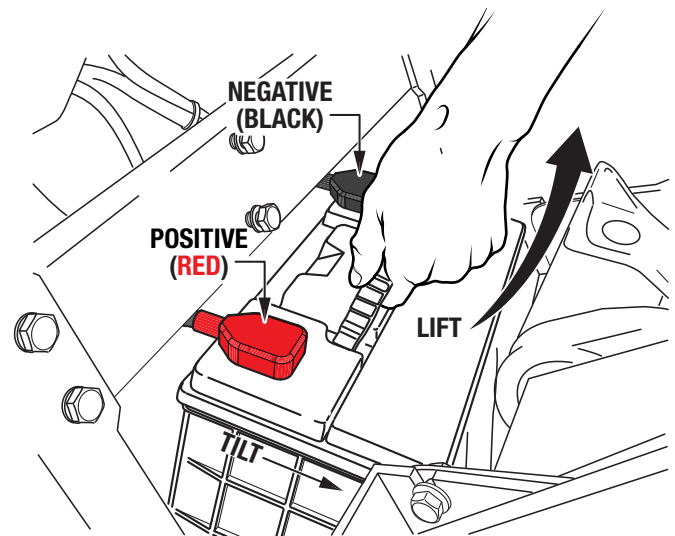


Figure 5. Battery Removal

6. Tilt the battery backward and lift up on the handle to remove (Figure 5). **MAKE SURE** the battery terminals **DO NOT** touch the frame during removal.

ACCELERATION SENSOR INSTALLATION

1. Remove and discard the **top two** 10 mm bolts, lock washers, and flat washers securing the bearing cover to the vibrator (Figure 6). Leave the existing cable clamp on the hydraulic hose as shown.

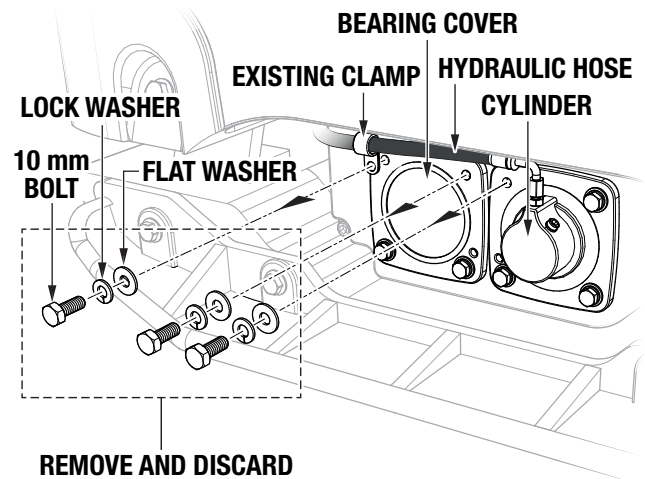


Figure 6. Bolt Removal
(Bearing Cover and Cylinder)

2. Remove and discard the **top left** 10 mm bolt, lock washer, and flat washer securing the cylinder to the vibrator (Figure 6).

- Using a 13 mm offset wrench, remove one 8 mm bolt and lock washer securing the vibrator cover to the vibrator (Figure 7). The bolt and washer are located just above the bearing cover to the left. Retain the bolt and lock washer for later.

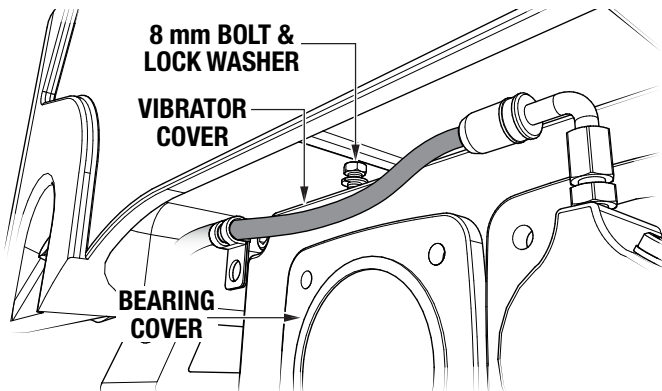


Figure 7. Bolt Removal (Vibrator Cover)

- Place a small cable clamp (P/N 959408920) onto the spiral tube (P/N 959021812) near the sensor end of the acceleration sensor assembly (P/N 467352040). See Figure 8.

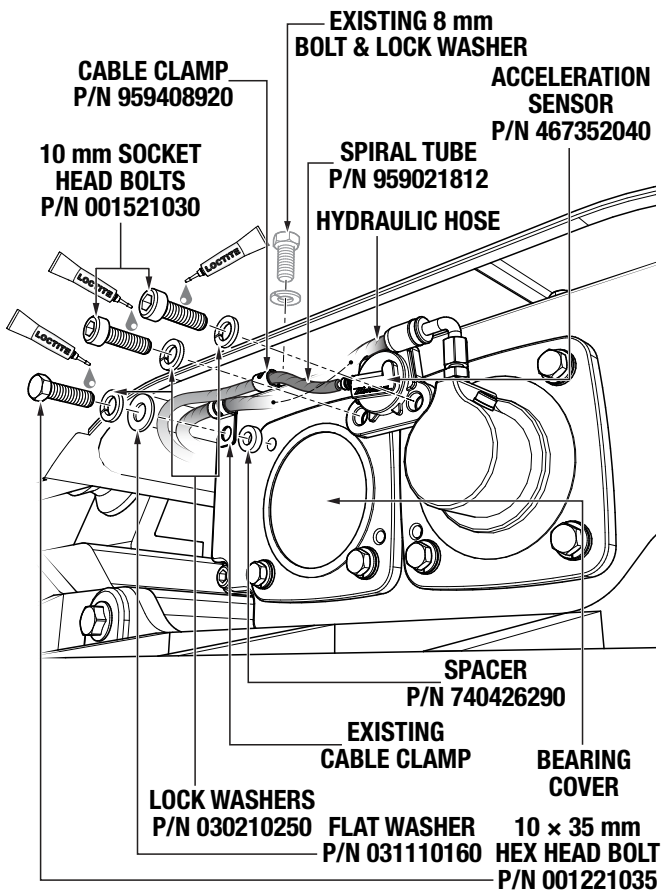
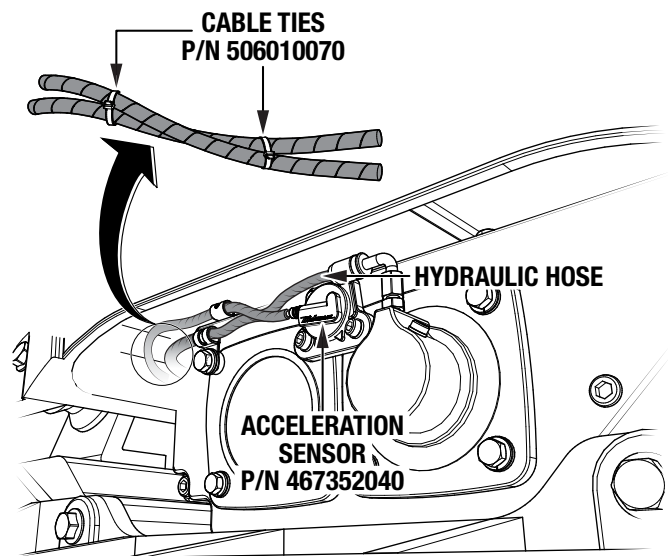


Figure 8. Acceleration Sensor Installation

- Insert the existing 8 mm bolt that was removed earlier through the cable clamp (P/N 959408920) and existing lock washer. Reinstall the bolt at its original location and tighten securely. See Figure 8.
- Apply Loctite® 243™ to the threads on the two 10 mm socket head bolts (P/N 001521030). See Figure 8.
- Secure the acceleration sensor (P/N 467352040) to the vibrator with the two 10 mm socket head bolts (P/N 001521030) and lock washers (P/N 030210250). Torque the bolts to 54.2 ft-lb (73.6 N·m). See Figure 8.
- Apply Loctite® 243™ to the threads on the 10 × 35 mm hex head bolt (P/N 001221035). See Figure 8.
- Insert the 10 × 35 mm hex head bolt (P/N 001221035) through a lock washer (P/N 030210250), the flat washer (P/N 031110160), the existing cable clamp on the hydraulic hose, and the spacer (P/N 740426290). See Figure 8.
- Secure the hydraulic hose to the bearing cover with the 10 × 35 mm hex head bolt (P/N 001221035). Torque the bolt to 54.2 ft-lb (73.6 N·m). See Figure 8.
- Secure the acceleration sensor cable (P/N 467352040) to the hydraulic hose with two cable ties (P/N 506010070). See Figure 9.



**Figure 9. Cable Tie Placement
(Acceleration Sensor and Hydraulic Hose)**

SENSOR PANEL INSTALLATION (MVH308DE/ MVH408DE)

NOTICE

The following section is for MVH308DE and MVH408DE only. If installing components of COMPAS II for MVH508DE, skip this section and proceed to section for MVH508DE.

1. Release the two latches at the top of the rear cover (Figure 10), then pull the rear cover downward to open.

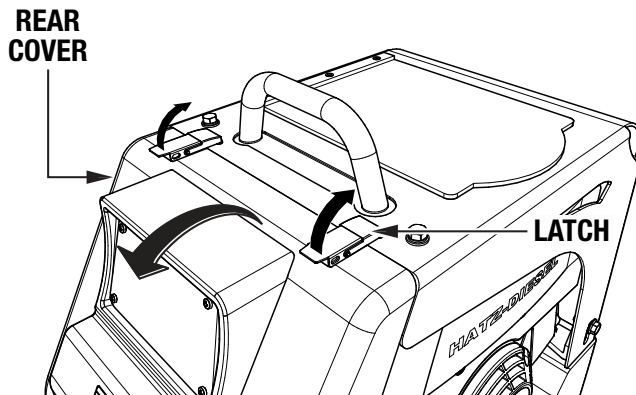


Figure 10. Open Rear Cover

2. Remove the three 6 mm bolts and washers securing the ECU of the Hatz engine to the ECU panel in the rear cover, and set them aside (Figure 11).

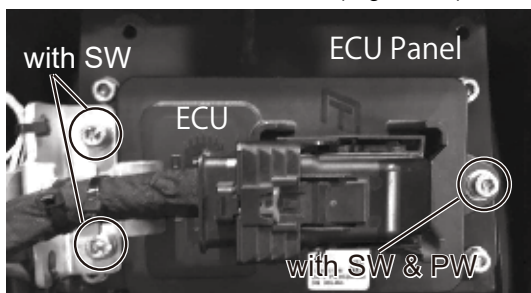


Figure 11. ECU Removal

3. Remove the four 6 mm bolts and washers securing the ECU panel to rear cover (Figure 12).

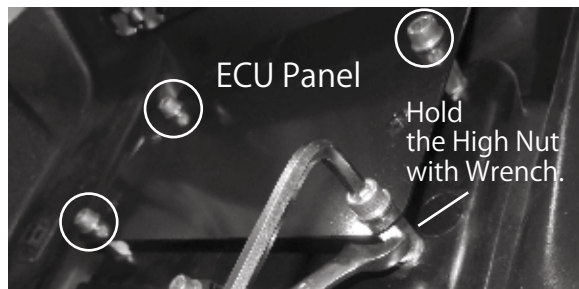


Figure 12. ECU Panel Removal

4. Remove the four 6 mm bolts, nuts, and washers securing the rear cover panel to the rear cover, and set them aside (Figure 13). Discard the rear cover panel.

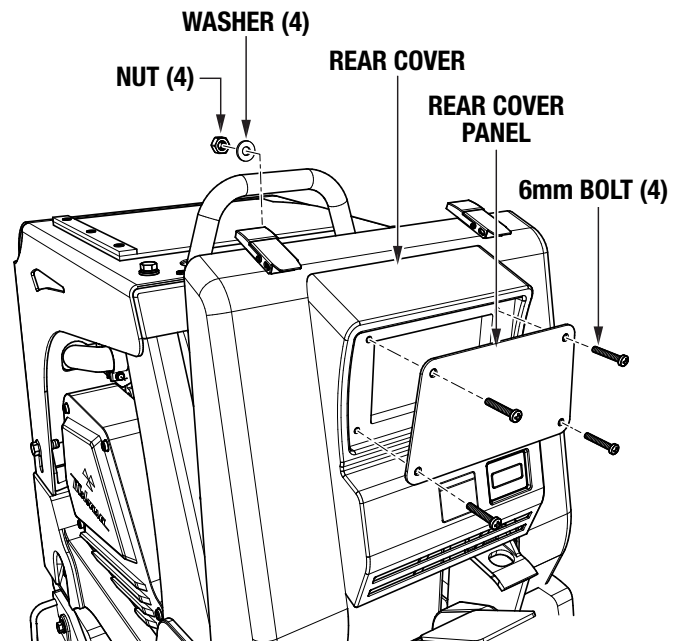


Figure 13. Rear Cover Panel Removal

5. Secure the three wiring fixed bases (P/N 955409080) on the back of rear cover as shown in Figure 14.

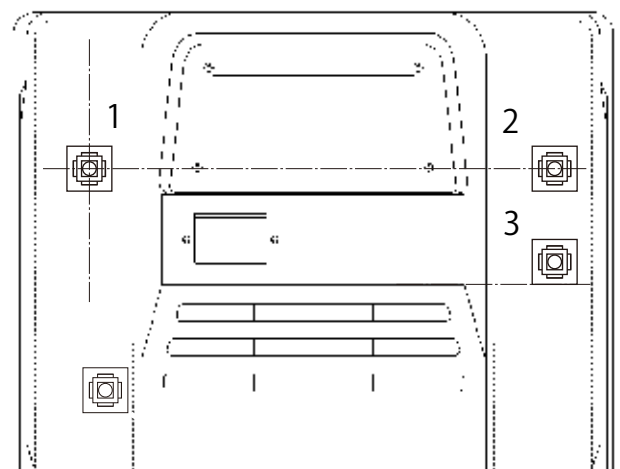


Figure 14. Mount Position of Wiring Fixed Base

- Place the sensor panel backing (P/N 464350510) onto the back of the sensor panel (P/N 467310020 [MVH308DE], or P/N 468310010 [MVH408DE]). See Figure 15.

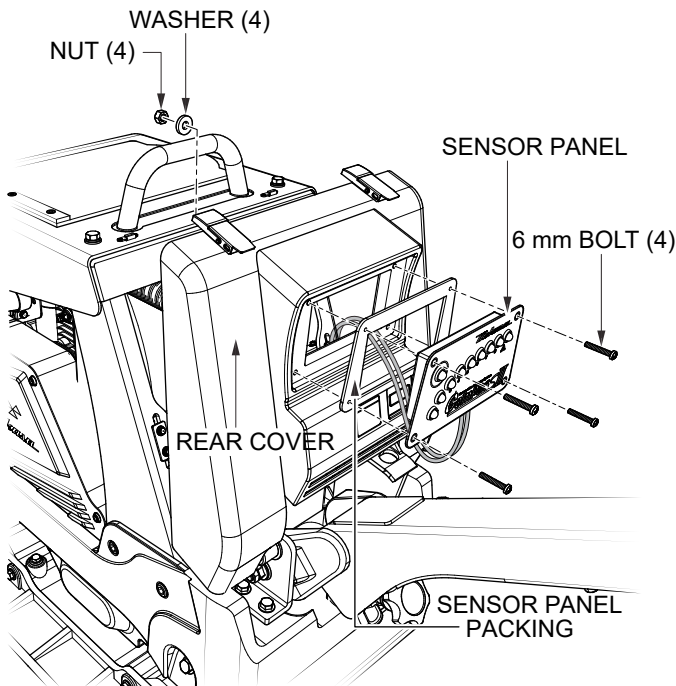


Figure 15. Sensor Panel Installation

- Place the sensor panel into the open space in the rear cover (Figure 15).
- Secure the sensor panel to the rear cover with the four 6 mm bolts, nuts, and washers that were removed earlier (Figure 15).
- Secure the ECU panel to the nuts securing the sensor panel with the four 6 mm bolts and washers that were removed earlier (Figure 12).
- Secure the ECU of Hatz engine to the ECU panel with the three 6 mm bolts and washers that were removed earlier (Figure 11).
- Secure the sensor panel cables to the back of the rear cover with a cable ties (P/N 506010070) and the wiring fixed base (P/N 955409080) that were secured earlier at Figure 14. See Figure 16.

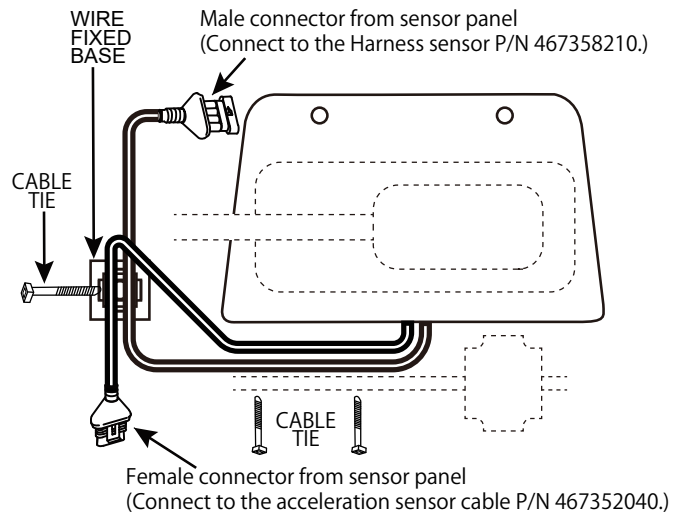


Figure 16. Secure the Sensor Panel Cables

ELECTRICAL WIRING AND ROUTING (MVH308DE/ MVH408DE)

- Route the acceleration sensor cable (P/N 467352040) through inside of the main body up toward the sensor panel.
- Cut and discard the cable ties securing the throttle harness from the speed control knob on the handle. Then, remove the 8 mm bolt securing cable clamp and remove the cable clamp from the throttle harness. See Figure 17.

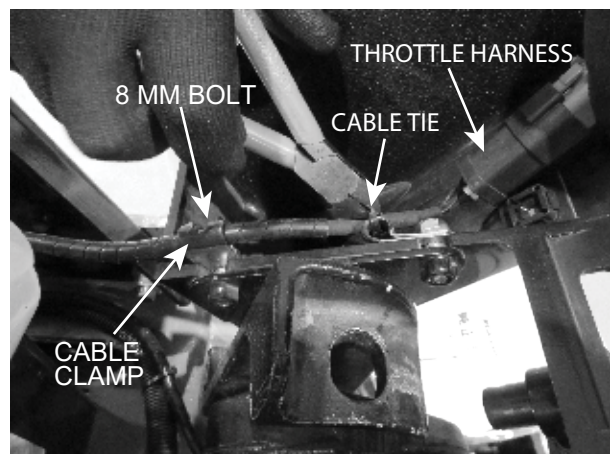


Figure 17. Throttle Harness Removal

- Place the cable clamp that was removed earlier (Figure 17) to the acceleration sensor cable (P/N 467352040). Then, secure the acceleration cable and the throttle harness with cable tie and wrap the new spiral tube (P/N 959021812) around them. See Figure 18 for positioning.

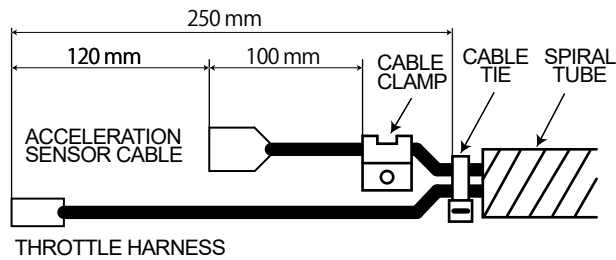


Figure 18. Positioning of Cables

- Connect the male connector of the acceleration sensor cable to the female connector extending from the sensor panel. See Figure 19.
- Connect the male connector of the wire harness to the female connector extending from the ECU. See Figure 19.
- Secure the cable clamp placing the acceleration cable with 8 mm bolt. See Figure 19.
- Secure those connectors and cables with the cable ties. See Figure 19.

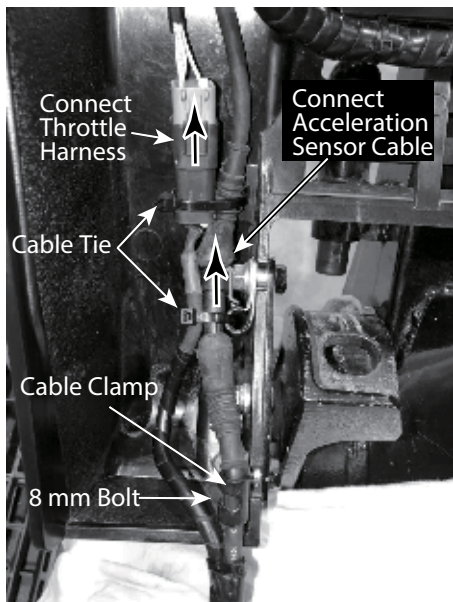


Figure 19. Sensor Cable Connections

- Cut and discard the cable ties from the existing corrugated tube. Then, take out the free end of red wire in corrugated tube. See Figure 20.

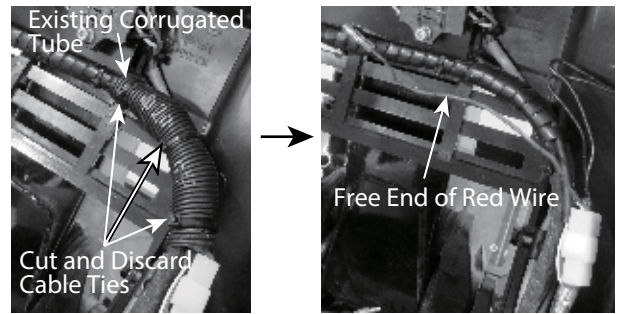


Figure 20. Free End of Red Wire

- Connect the male end of white wire of wire harness (P/N 467358210) to the female end of fuse holder (P/N 467352850). Then, connect the male end of fuse holder to the female end of red wire earlier. See Figure 21.
- Connect the male end of black wire of wire harness (P/N 467358210) to the free side of 2-Port female end of black wire. See Figure 21

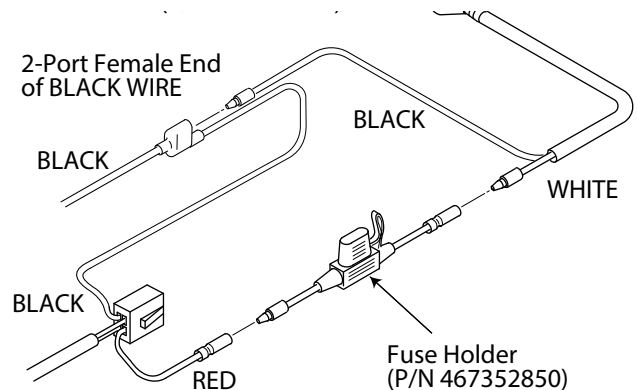


Figure 21. Wire Harness Connections

- Connect the male connector extending from the sensor panel to the female connector of the wire harness (P/N 467358210). See Figure 22.

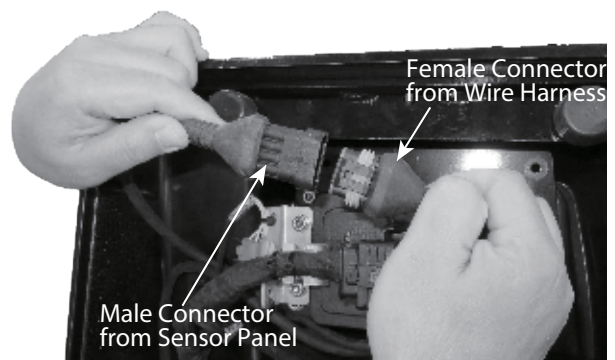


Figure 22. Sensor Cable Connections

12. Tighten the two push mount ties to cables align the caps of them with the holes of the ECU panel. Then, secure cables by installing the caps of push mount tie to holes of ECU panel. See Figure 23.

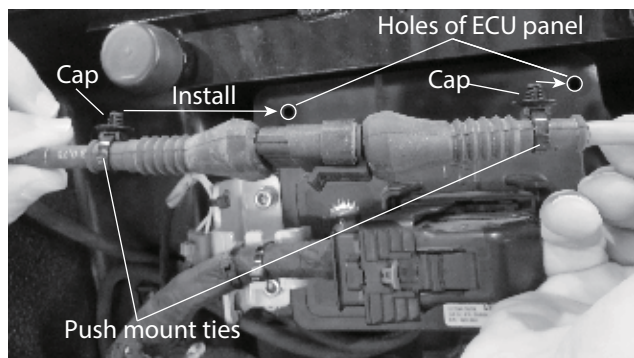


Figure 23. Secure Cables

13. Secure the fuse folder (P/N 467352850) to the existing wire harness with cable ties (P/N 506010070). See Figure 24.
14. Secure the existing corrugated tube with cable ties (P/N 506010070). See Figure 24.

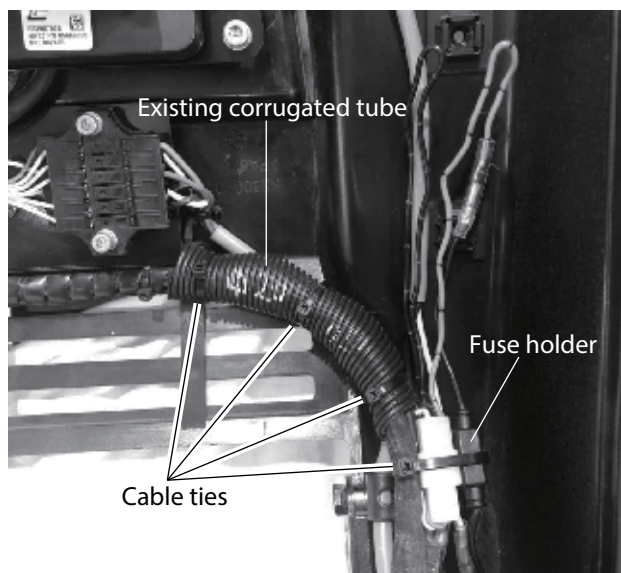


Figure 24. Secure Fuse Holder

15. Conceal the new wiring assembly inside the new corrugated tube (P/N 959029800), and secure it with cable ties (P/N 506010070) and wiring fixed base. See Figure 25.

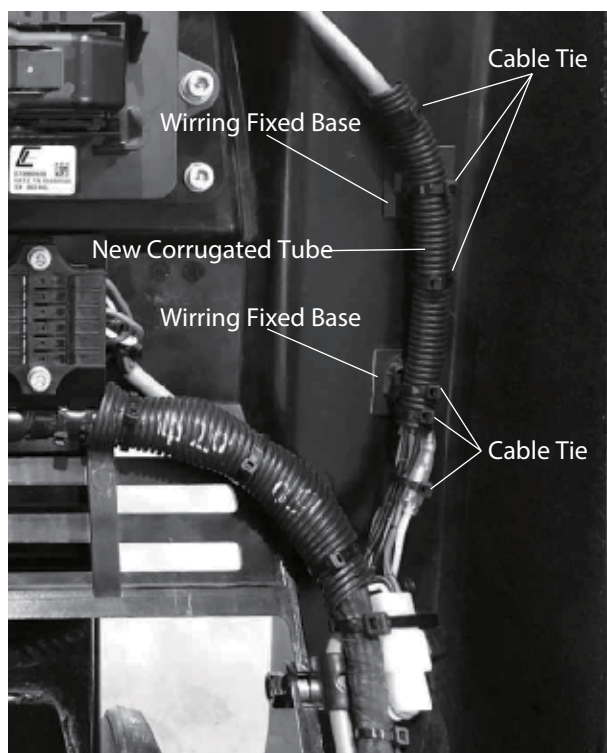


Figure 25. Conceal New Wiring Assembly

16. Use any remaining cable ties (P/N 506010070) to further secure cables and wires as needed. See Figure 26.

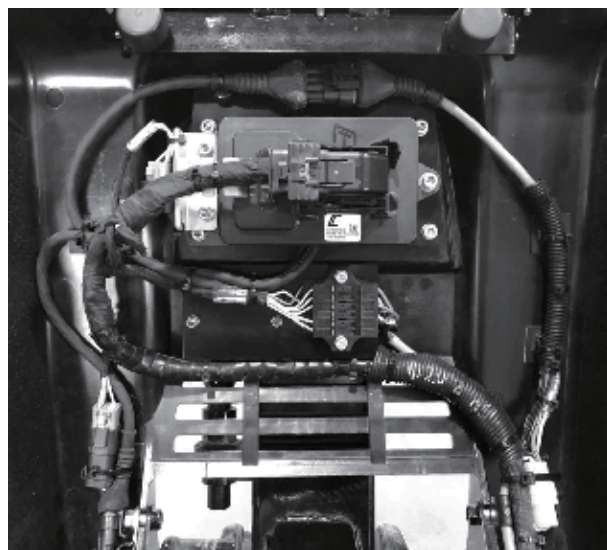


Figure 26. Wiring and Routing

17. Proceed to Final Assembly section.

SENSOR PANEL INSTALLATION (MVH508DE ONLY)

NOTICE

The following section is for the MVH508DE only.

If installing components of COMPAS II for MVH308DE or MVH408DE, skip this section and proceed to section for the desired model. If installation and wiring is complete, proceed to Final Assembly section.

Front, Side and Center Cover Removal

1. Release the two latches at the top of the rear cover (Figure 27), then pull the rear cover downward to open.

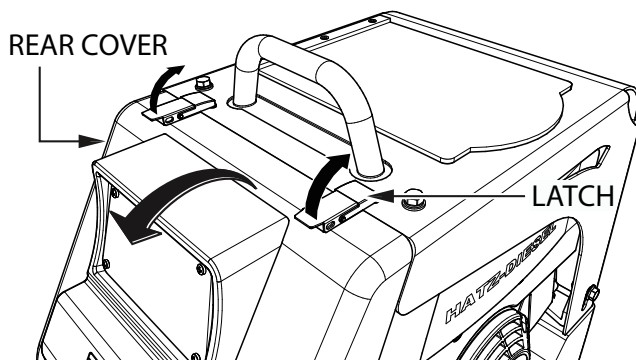


Figure 27. Open Rear Cover

2. Remove and set aside the four 14 x 35 mm bolts securing the front cover to the compactor (Figure 28). Remove the front cover and set it aside.

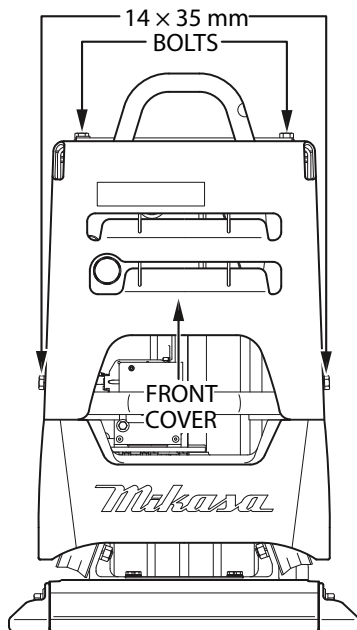


Figure 28. Front Cover Removal

3. Remove and set aside the two 14 x 35 mm socket head bolts securing the front bumper to the compactor (Figure 29). Remove the front bumper and set it aside.



Figure 29. Front Bumper Removal

4. Remove and set aside the four 12 x 55 mm socket head bolts securing the side cover to the engine (Figure 30). Remove the side cover and set it aside.

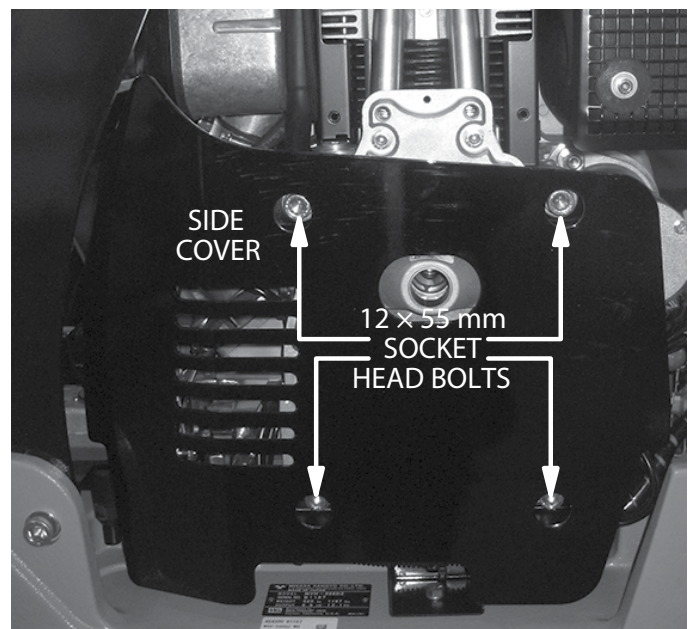


Figure 30. Side Cover Removal

- Remove and set aside the four 14 x 40 mm socket head bolts and nuts securing the center cover to the compactor. Remove the air cleaner cover. Then, remove the center cover together with air cleaner cover and set them aside. See Figure 31

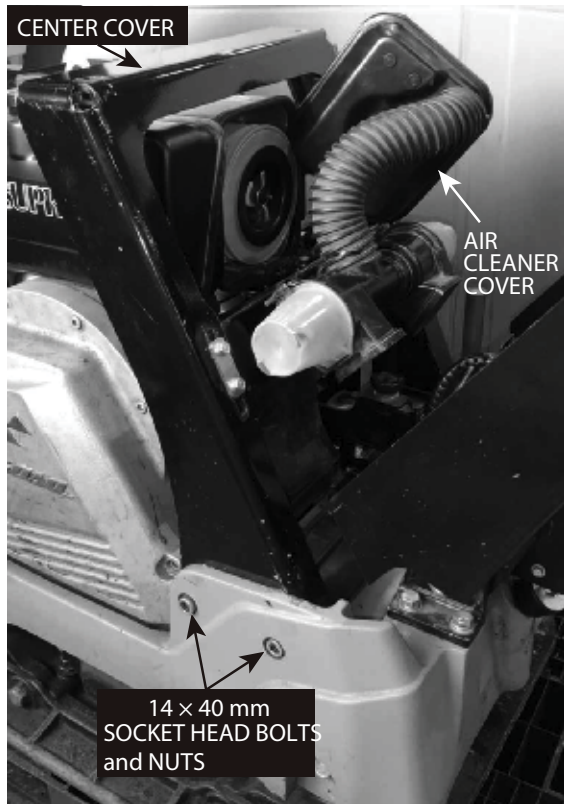


Figure 31. Center Cover Removal

SENSOR PANEL INSTALLATION

- Remove the four 6 mm bolts and washers securing the rear cover panel to the rear cover, and set them aside (Figure 32). Discard the rear cover panel.

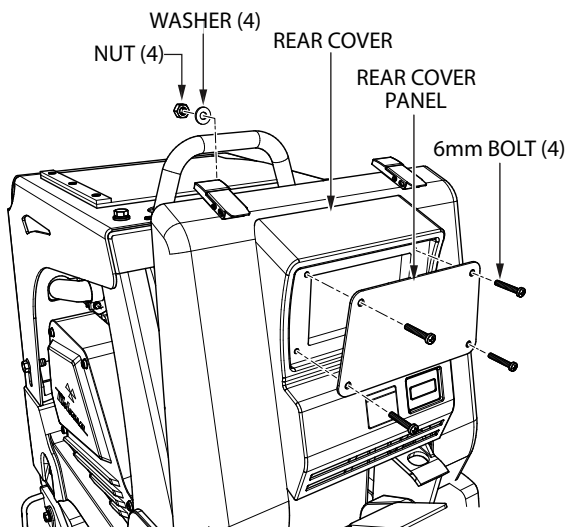


Figure 32. Rear Cover Panel Removal

- Place the sensor panel packing (P/N 464350510) onto the back of the sensor panel. See Figure 33.

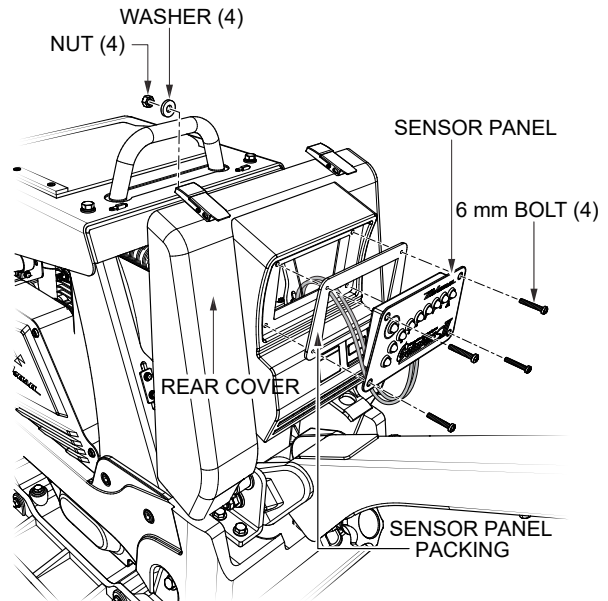


Figure 33. Sensor Panel Installation

- Place the sensor panel into the open space in the rear cover. See Figure 33.
- Place the clamp M6 (P/N 954409880) to the cable of female connector from the sensor panel and secure it with bolt and nut securing the tachometer/hour meter. Then, secure the other cable to this one with cable tie. See Figure 34.

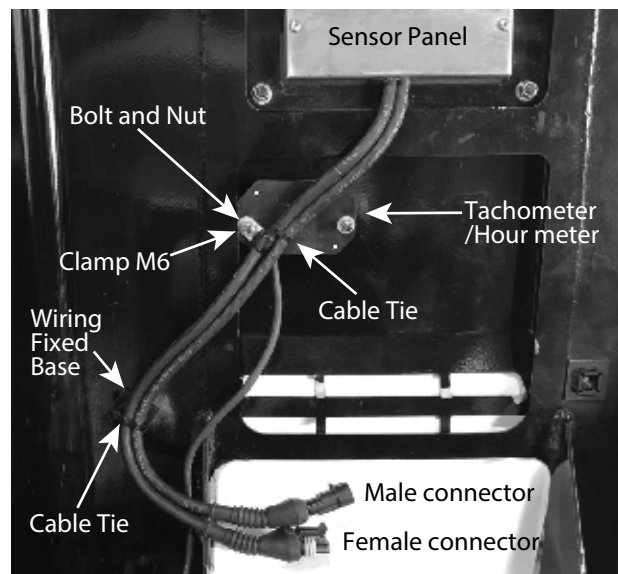


Figure 34. Secure Cables from Sensor

- Secure the cables from the sensor panel to the wiring fixed base with the cable ties. See Figure 34.

ELECTRICAL WIRING AND ROUTING (MVH508DE)

The following section describes how to connect and route the COMPAS II electrical wiring components for plate compactor model MVH508DE **only**.

1. Remove and set aside the 6 mm bolt and two 5mm socket head bolts securing the electrical panel on the front of the unit (Figure 35).

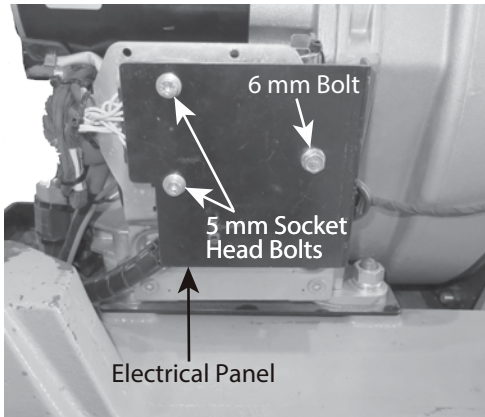


Figure 35. Electrical Panel Bolt Removal

2. Cut and discard the cable ties securing the bundled electrical connectors to the back of the electrical panel (Figure 36). Remove the panel and set it aside.

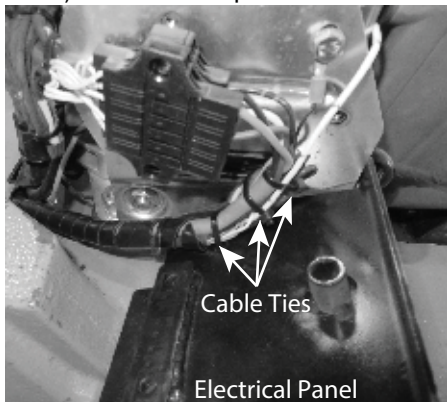


Figure 36. Cable and Electrical Panel Removal

3. Disconnect the red and green wires from the 2-Port female end of black wire (Figure 37).

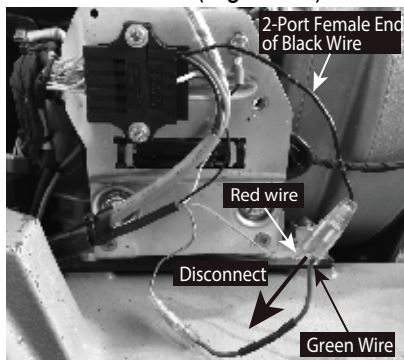


Figure 37. Existing Wiring Connections

4. Connect the disconnected red and green wires to the 2-Port female end of the yellow wire (P/N 515450380). Then, connect the male end of the yellow wire and the male end of the black wire (P/N 955408440) to the 2-Port female end of black wire disconnected earlier. See Figure 38.

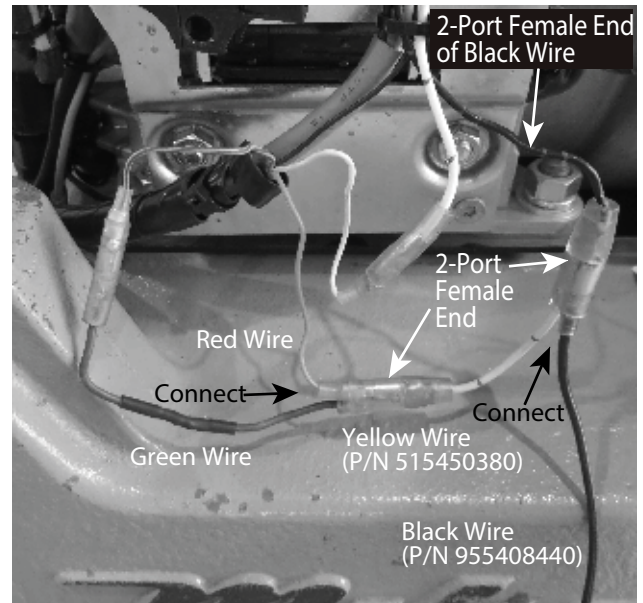


Figure 38. New Wiring Connections

5. Rebundle the wiring connectors except the female end and wire of black wire (P/N 955408440) with cable ties. See Figure 39.

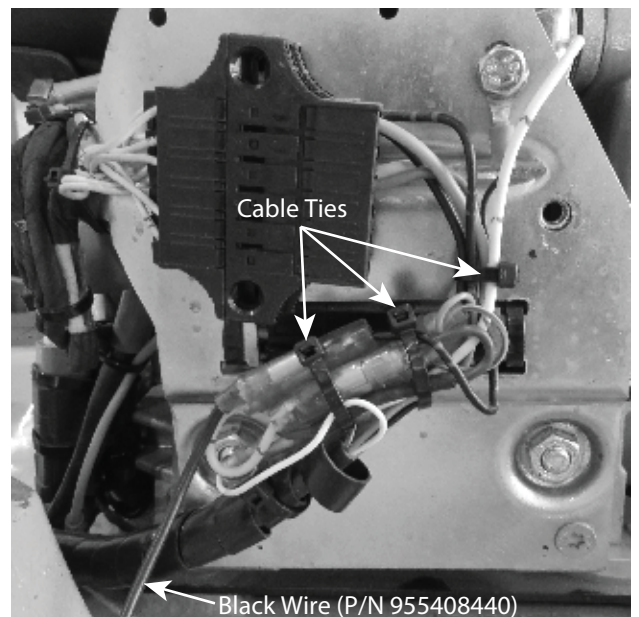


Figure 39. Rebundling Wire Connections

6. Cut and discard the cable ties securing the existing corrugated tube and spiral tube. Then, remove them and set them aside. See Figure 40.

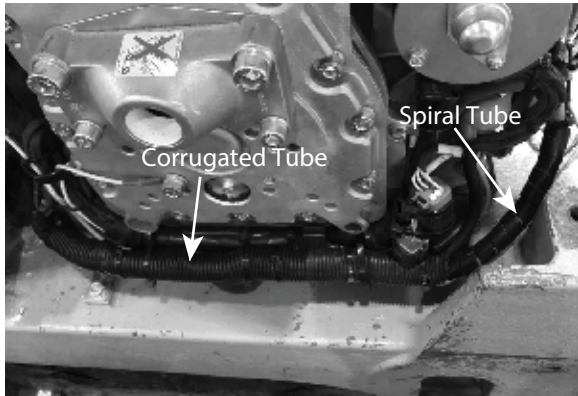


Figure 40. Corrugated and Spiral Tube Removal

7. Route the female end of black wire (P/N 955408440) earlier along the right side of the unit as shown in Figure 41.

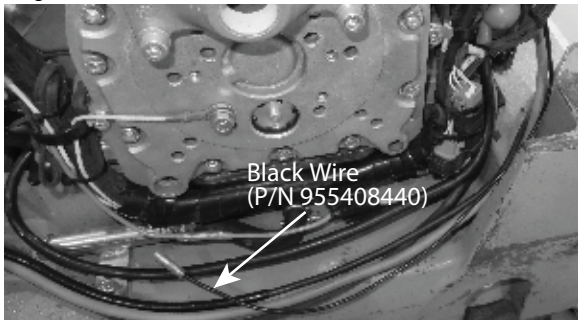


Figure 41. Black Wire Routing

8. Connect the female end of black wire (P/N 955408440) to the male end of fuse holder (P/N 467352850). Then, connect the female end of fuse holder to the male end of white wire of wire harness (P/N 467358210). See Figure 42.

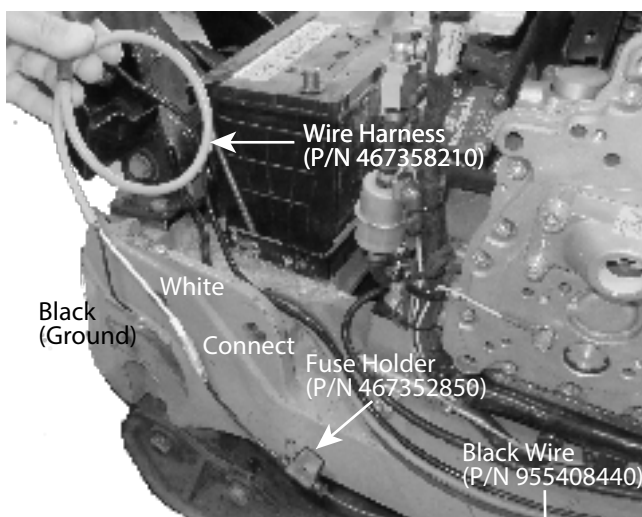


Figure 42. Wiring Connections

9. Secure the black wire (Ground) of wire harness (P/N 467358210) together with the battery cable (-) from the battery with existing socket head bolt at the rear side of engine as shown in Figure 43

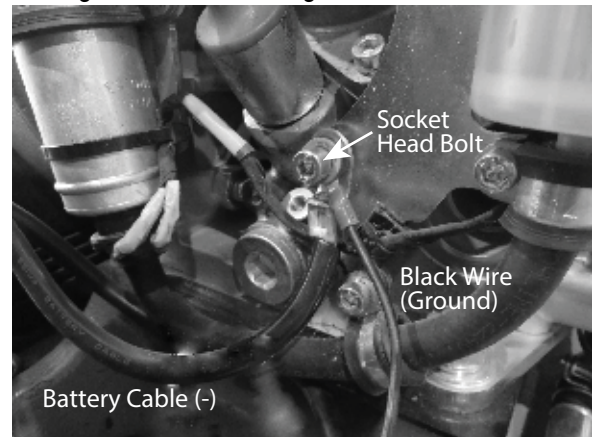


Figure 43. Ground Wire Connections

10. Conceal the wiring cables with removed the corrugated tube and spairl tube like before. Then, secure them with cable ties. See Figure 44.

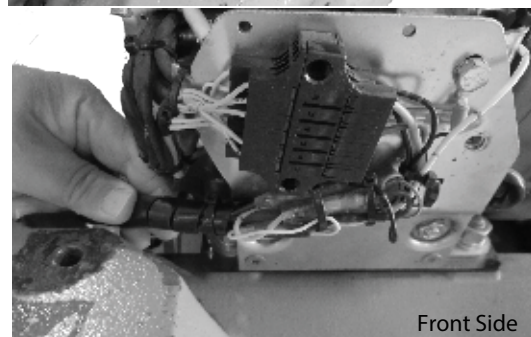
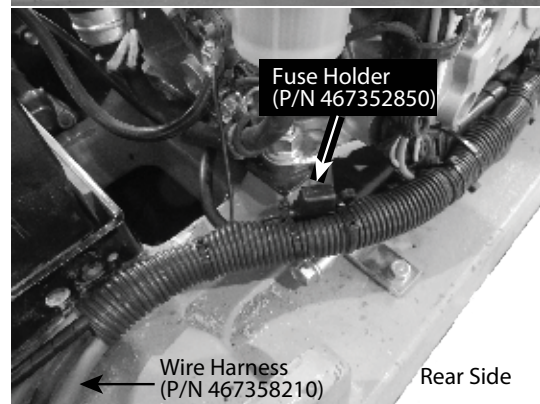
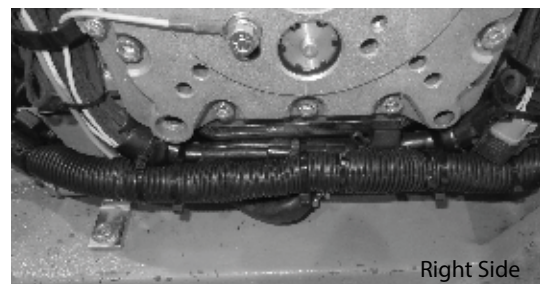


Figure 44. Rebundling Wiring Cables

11. Secure the wiring connectors to the back of the electrical panel with cable ties. See Figure 45.

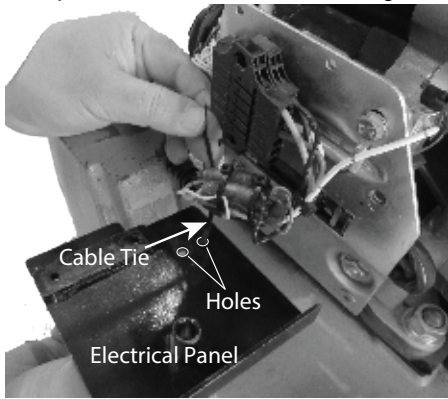


Figure 45. Secure Wiring to Electrical Panel

12. Secure the electrical panel to the plate behind it with the 6 mm bolt and two 5 mm socket head bolts that were removed earlier (Figure 46). Make sure the two existing wiring connectors are secured between the panel and the plate with the 5 mm socket head bolts as shown.

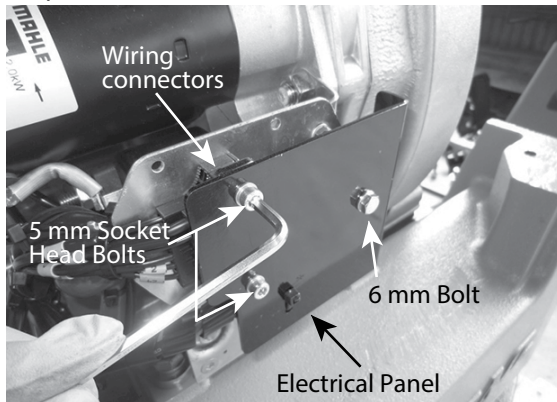


Figure 46. Electrical Plate Installation

SENSOR CABLE CONNECTIONS

1. Remove the 8 mm bolt securing cable clamp on the lower right side of back of rear cover and remove the cable clamp from the cable of Tachometer / Hour meter. See Figure 47.

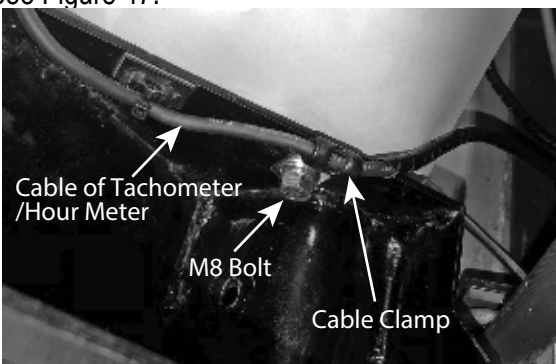


Figure 47. Cable Clamp Removal

2. Secure the clip M8 (P/N 959408920) with bolt, washer and nut on the lower right side of back of rear cover. See Figure 48.

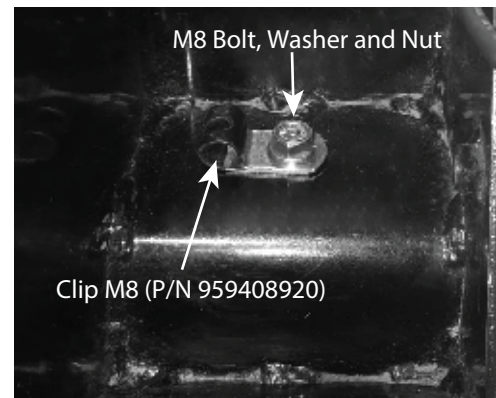


Figure 48. Secure Clip M8

3. Route the acceleration sensor cable (P/N 467352040) through inside of the main body up toward the sensor panel. See Figure 49.
4. Connect the male connector of acceleration sensor cable (P/N 467352040) to the female connector extending from sensor panel. See Figure 49
5. Connect the female connector of wire harness (P/N 467358210) to the male connector extending from sensor panel. See Figure 49.

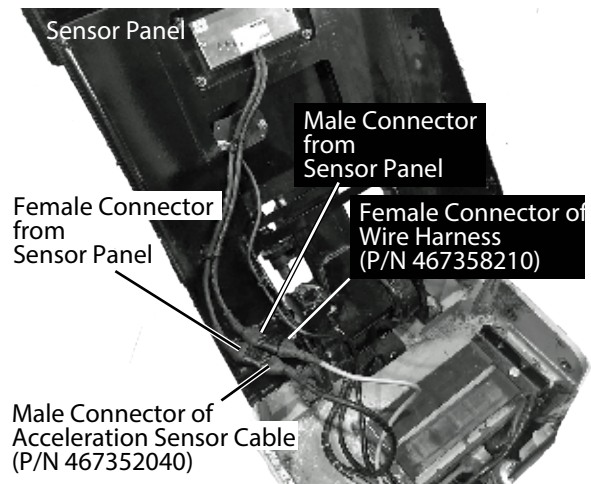


Figure 49. Secure Cable Connections

6. Place the cable clamp that was removed earlier (Figure 47) to wire harness (P/N 467358210). Then, Secure the cable clamp placing the wire harness with 8 mm bolt. See Figure 50.

7. Secure the connectors to the clip M8 with cable ties. See Figure 50.

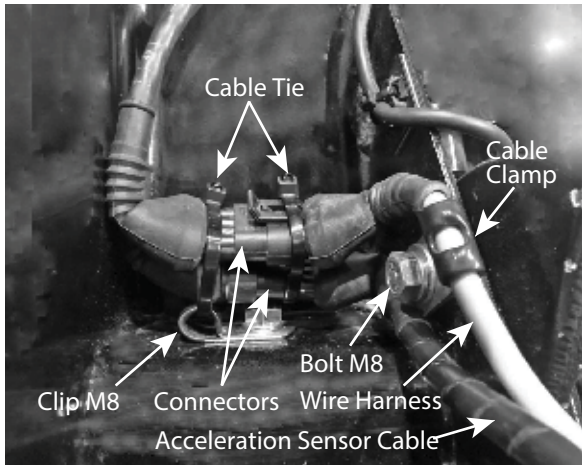


Figure 50. Secure Cable Connections

8. Secure the three cables with cable ties and wrap the additional spiral tube (P/N 959021813) around them. See Figure 51.

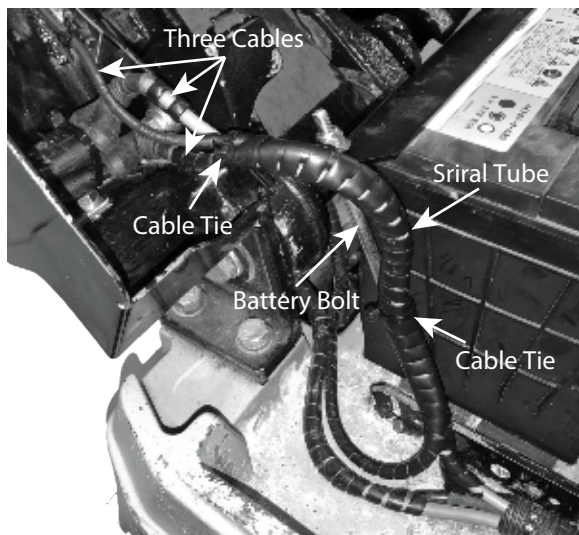


Figure 51. Secure Three Cables

9. Use any remaining cable ties (P/N 506010070) to further secure cables and wires as needed.

REASSEMBLE FRONT, SIDE AND CENTER COVER

Reassemble with the reversed procedure of removal, but be careful about the following tightening torque and applying Loctite to the bolts.

1. Apply Loctite 263 to the male threads on the four 14 x 40 mm socket heads bolts that were removed earlier from the center cover.
2. Secure the center cover to the compactor with the four 14 x 40 mm socket head bolts and two nuts that were removed earlier. Torque the bolts to 132.2 ft-lb (176.6 N-m). Then secure the air cleaner cover with bolt.
3. Apply Loctite 243 to the male threads on the four 12 x 55 mm socket heads bolts that were removed earlier from the side cover.
4. Secure the side cover to the compactor with the four 12 x 55 mm socket head bolts that were removed earlier. Torque the bolts to 54.2 ft-lb (73.5 N-m).
5. Apply Loctite 263 to the male threads on the two 14 x 35 mm socket heads bolts that were removed earlier from the front bumper.
6. Secure the front bumper to the compactor with the two 14 x 35 mm socket head bolts that were removed earlier. Torque the bolts to 132.2 ft-lb (176.6 N-m).
7. Apply Loctite 243 to the male threads on the four 14 x 35 mm bolts that were removed earlier from the front cover.
8. Secure the front cover to the compactor with the four 14 x 35 mm bolts that were removed earlier. Torque the bolts to 132.2 ft-lb (176.6 N-m).

FINAL ASSEMBLY

1. **MAKE SURE** the rear cover will close without pinching or cutting any wires, but leave the rear cover open at this time.
2. Reinstall the battery. **BE SURE** to connect the positive (**RED**) battery cable first, then connect the negative (**BLACK**) battery cable.
3. Loosen the four 8 × 25 mm bolts securing the air cleaner stay to the frame. Slide the air cleaner stay downward to its original position, then tighten the four bolts securely.
4. Close the rear cover and secure it with the two latches (Figure 52).

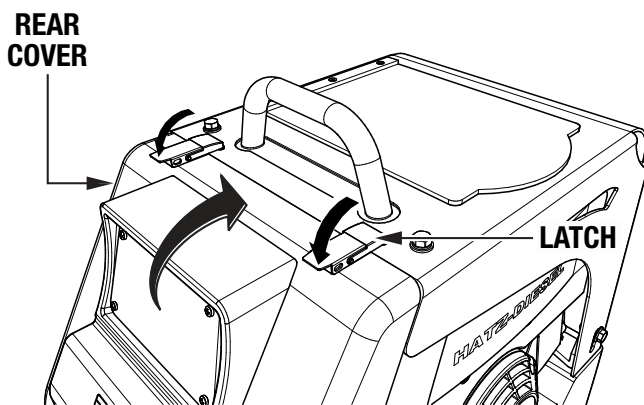


Figure 52. Close Rear Cover

5. Carefully remove the backing from the High Pressure Wash Prohibited decal (P/N 920112220). See Figure 53.

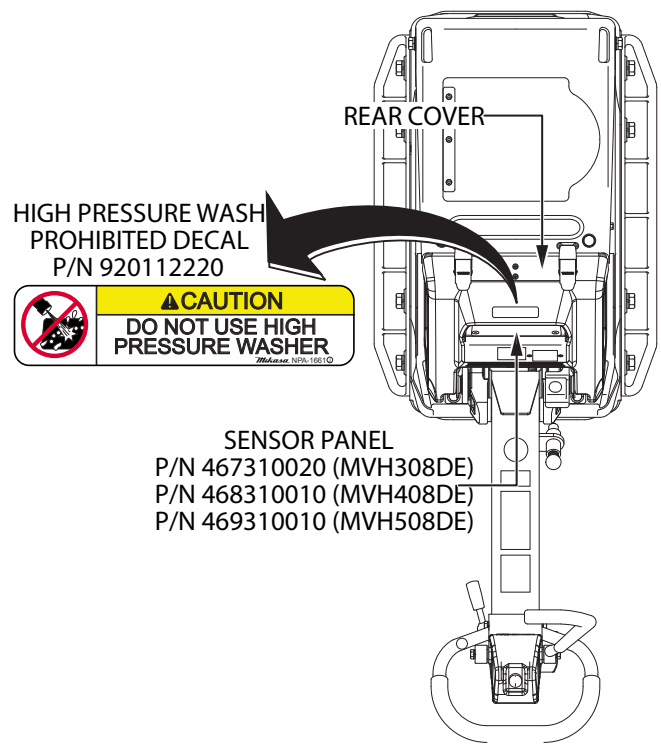


Figure 53. Decal Placement

6. Place the High Pressure Wash Prohibited decal (P/N 920112220) onto the top of the rear cover, just above the sensor panel (P/N 467310020 [MVH308DE], P/N 468310010 [MVH408DE], or P/N 469310010 [MVH508DE]). **MAKE SURE** the decal is oriented straight and flat. See Figure 53.

STARTUP

Electric Start

1. Insert the key into the ignition switch.
2. Move the throttle lever to the **IDLE** position (Figure 54).

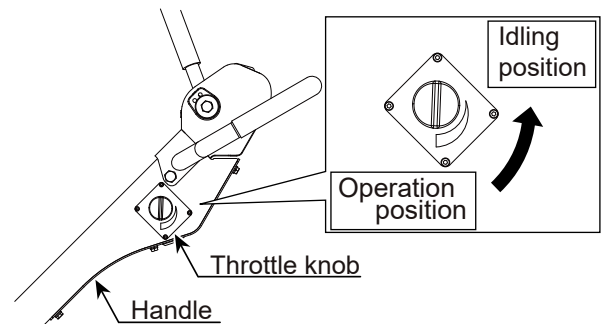


Figure 54. Throttle Lever (IDLE)

- Turn the key **clockwise** to the **RUN** position (Figure 55). The buzzer will begin to sound.

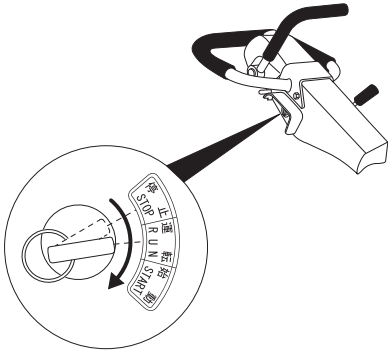


Figure 55. Ignition Switch (RUN)

- After “HA” is initially displayed on the tachometer/hour meter, the meter will change to display **cumulative time** (Figure 56).

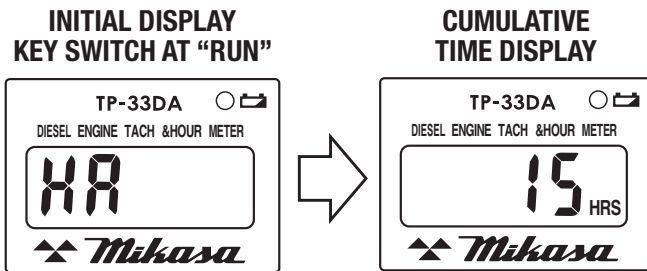


Figure 56. Tachometer/Hour Meter (Cumulative Time)

- Turn the key further **clockwise** to the **START** position (Figure 57). Once the engine starts, release the key. As the engine speed increases, the buzzer will stop.

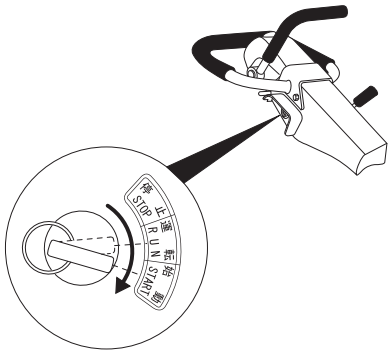


Figure 57. Ignition Switch (START)

CAUTION

DO NOT hold the key in the **START** position for more than 5 seconds. If the engine does not start, move the key back to the **RUN** position, wait about 10 seconds, then try again to start.

NEVER turn the ignition switch to the **START** position while the engine is already running.

- Once the engine starts running, the tachometer/hour meter will display **rotational speed (RPM)**. See Figure 58.

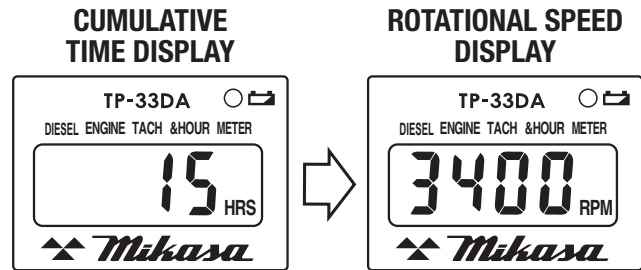


Figure 58. Tachometer/Hour Meter (Rotational Speed)

- Idle for 2 to 3 minutes to warm up the engine.

Recoil Start

- Insert the key into the ignition switch.
- Move the throttle lever to the **IDLE** position (Figure 59).

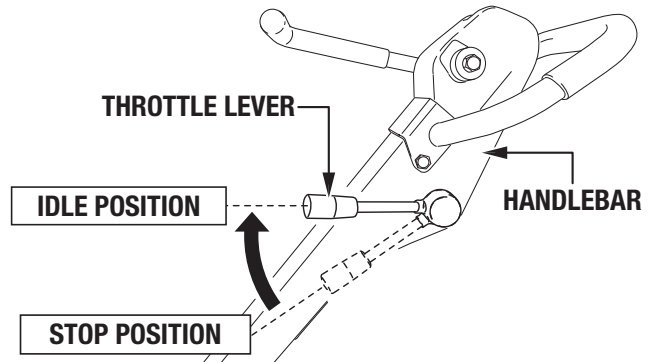


Figure 59. Throttle Lever (IDLE)

- Turn the key **clockwise** to the **RUN** position (Figure 60). The buzzer will begin to sound.

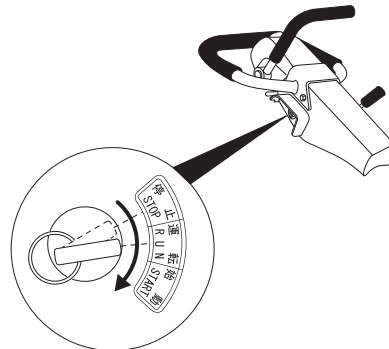


Figure 60. Ignition Switch (RUN)

- After “HA” is initially displayed on the tachometer/hour meter, the meter will change to display **cumulative time** (Figure 61).

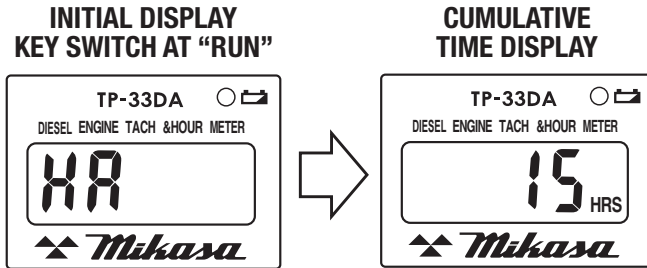


Figure 61. Tachometer/Hour Meter (Cumulative Time)

- Slowly pull the recoil starter grip (Figure 62) until resistance is felt, then pull briskly and smoothly to start the engine. Once the engine starts, **DO NOT** release the starter grip immediately. Allow the starter grip to recoil gently to its original position.

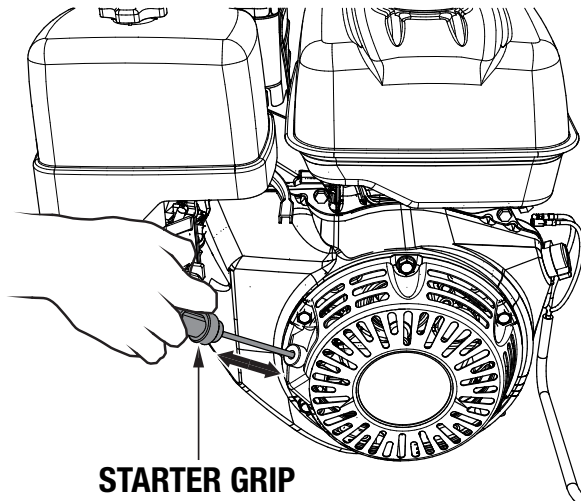


Figure 62. Recoil Starter Grip

- Idle for 2 to 3 minutes to warm up the engine.

TESTING

- When the plate compactor is started in **IDLE** mode, the green LED on the sensor panel (P/N 467310020 [MVH308DE], P/N 468310010 [MVH408DE], or P/N 469310010 [MVH508DE]) will flash, and the red LED will turn on. See Figure 63.

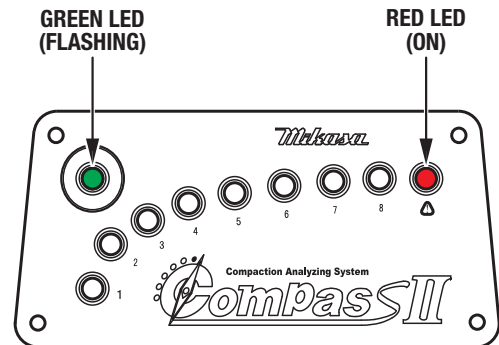


Figure 63. Sensor Panel Display (IDLE)

- As engine speed increases and compaction begins, the green LED will stop flashing and turn on (Figure 64). The red LED will turn off, and the first yellow LED (on the left) will turn on.

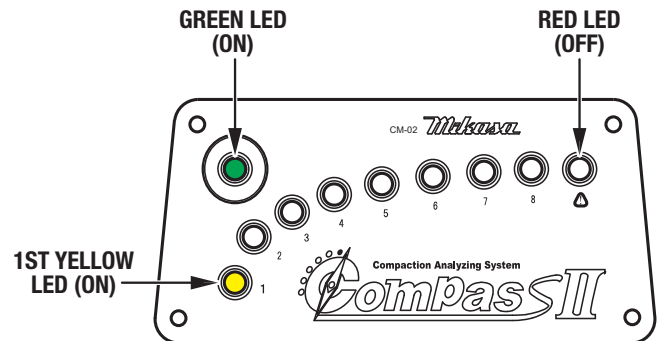


Figure 64. Sensor Panel Display (Beginning Compaction)

- As compaction progresses, the rest of the yellow LEDs (2 through 8) will turn on. See Figure 65.

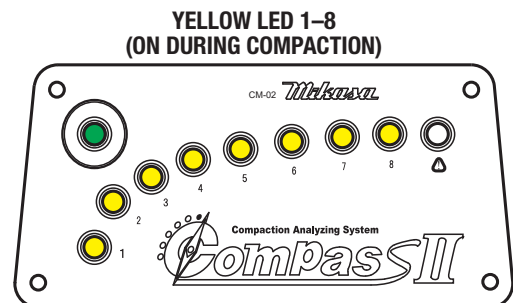


Figure 65. Sensor Panel Display (Compaction Progression)

- When the compaction limit is reached, the red LED will turn on (Figure 66). This will only happen **after** all eight yellow LEDs have turned on.

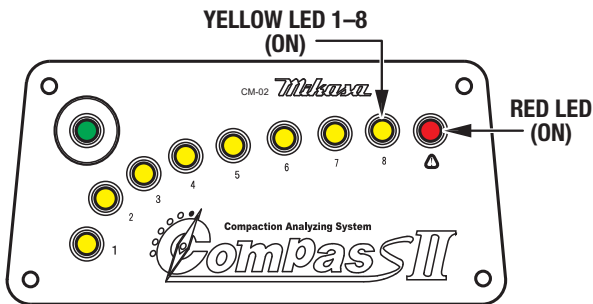


Figure 66. Sensor Panel Display (Compaction Limit)

- Once the red LED is lit, the machine cannot compact any further. If the compaction results are unsatisfactory, make sure the soil type, moisture content, lift, and number of passes are appropriate for this machine.

TROUBLESHOOTING

Detection of Unstable or Soft Ground

This plate compactor is **not suitable for use on unstable or soft ground** (soil containing high clay content). These ground conditions will cause the green and red LEDs to turn on (Figure 67), and the desired compaction results will be difficult to achieve. Check to make sure the soil to be compacted is prepared to specification before proceeding with the compaction process.

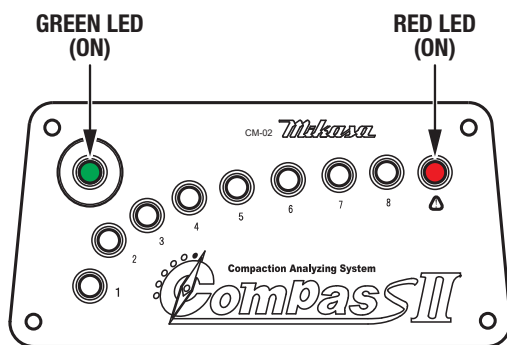


Figure 67. Unstable or Soft Ground Detection

Detection of Vibrational Abnormality

If the V-belt is tensioned incorrectly, improper engine rotational speed will prevent the compactor from achieving the appropriate vibrational frequency. When this occurs, the green LED will flash (Figure 68). Check engine speed and V-belt tension before proceeding with compaction.

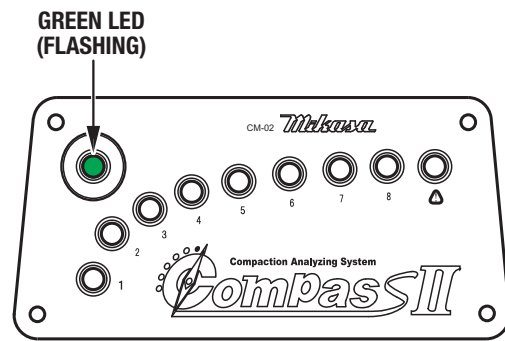


Figure 68. Vibrational Abnormality Detection

Detection of Electrical System Abnormalities

Sensor Cable Connection Failure (Between Acceleration Sensor and Sensor Panel)

A connection failure between the acceleration sensor (P/N 467352040) and the sensor panel (P/N 467310020 [MVH308DE], P/N 468310010 [MVH408DE], or P/N 469310010 [MVH508DE]) will cause the red and green LEDs to flash alternately as shown in Figure 69. Check the electrical connection between the sensor and the panel before proceeding with compaction.

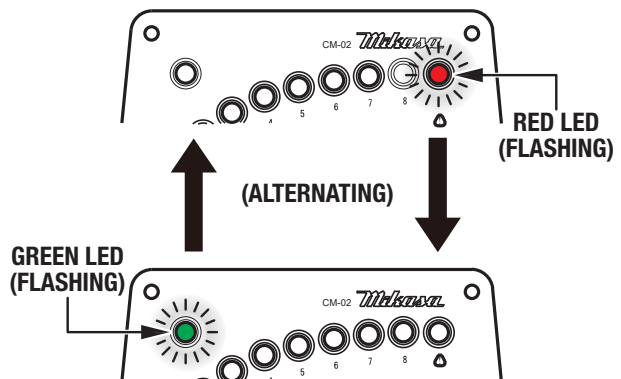


Figure 69. Sensor Cable Connection Failure

Power Cable Connection Failure (Between Battery and Sensor Panel)

A connection failure between the battery and the sensor panel will prevent any LEDs from flashing or turning on when the plate compactor is started. If the panel LEDs remain unlit upon startup, check the electrical connection between the battery and the sensor panel before proceeding with compaction.

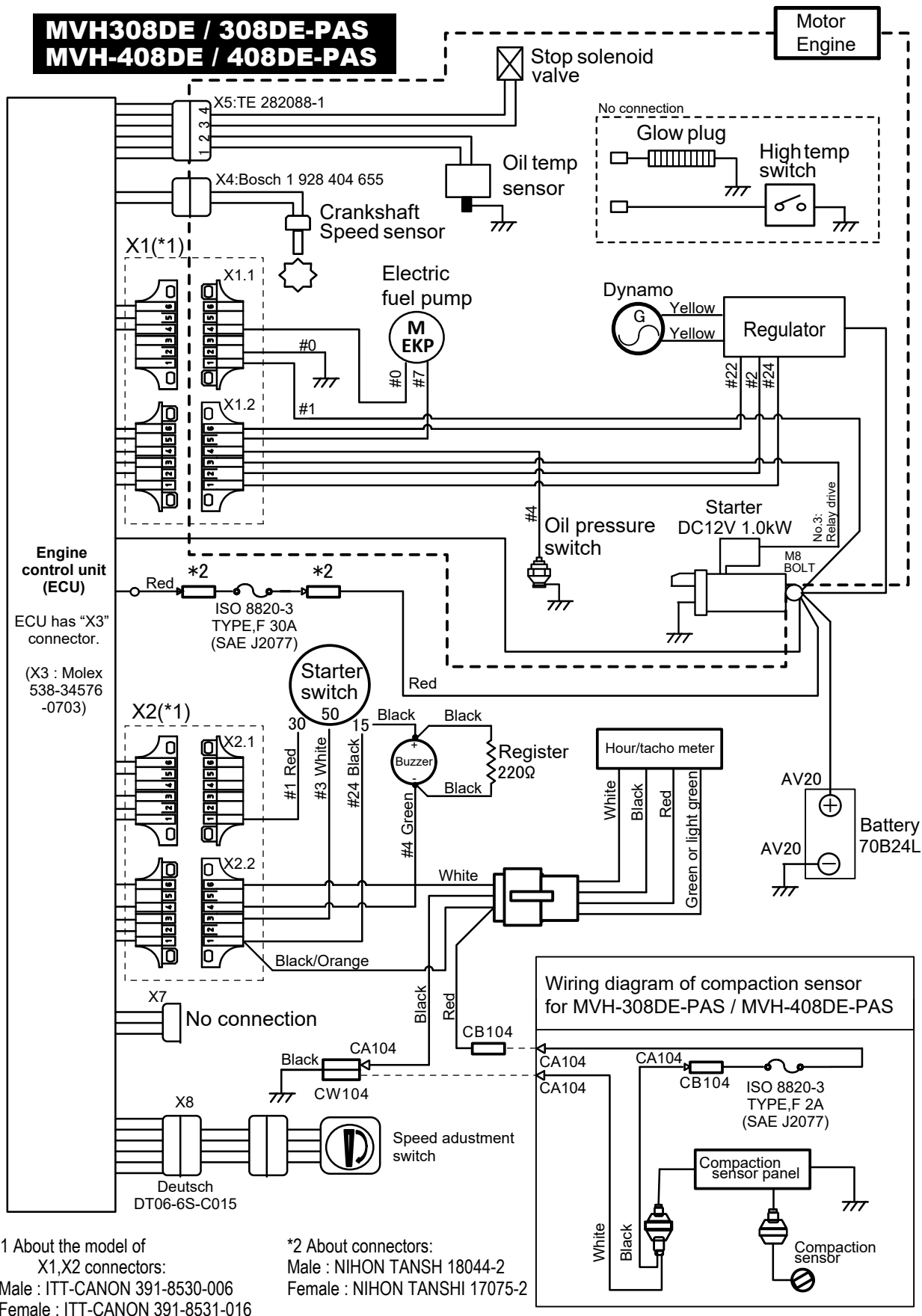


Figure 70. MVH308-408DE-PAS Wiring Diagram

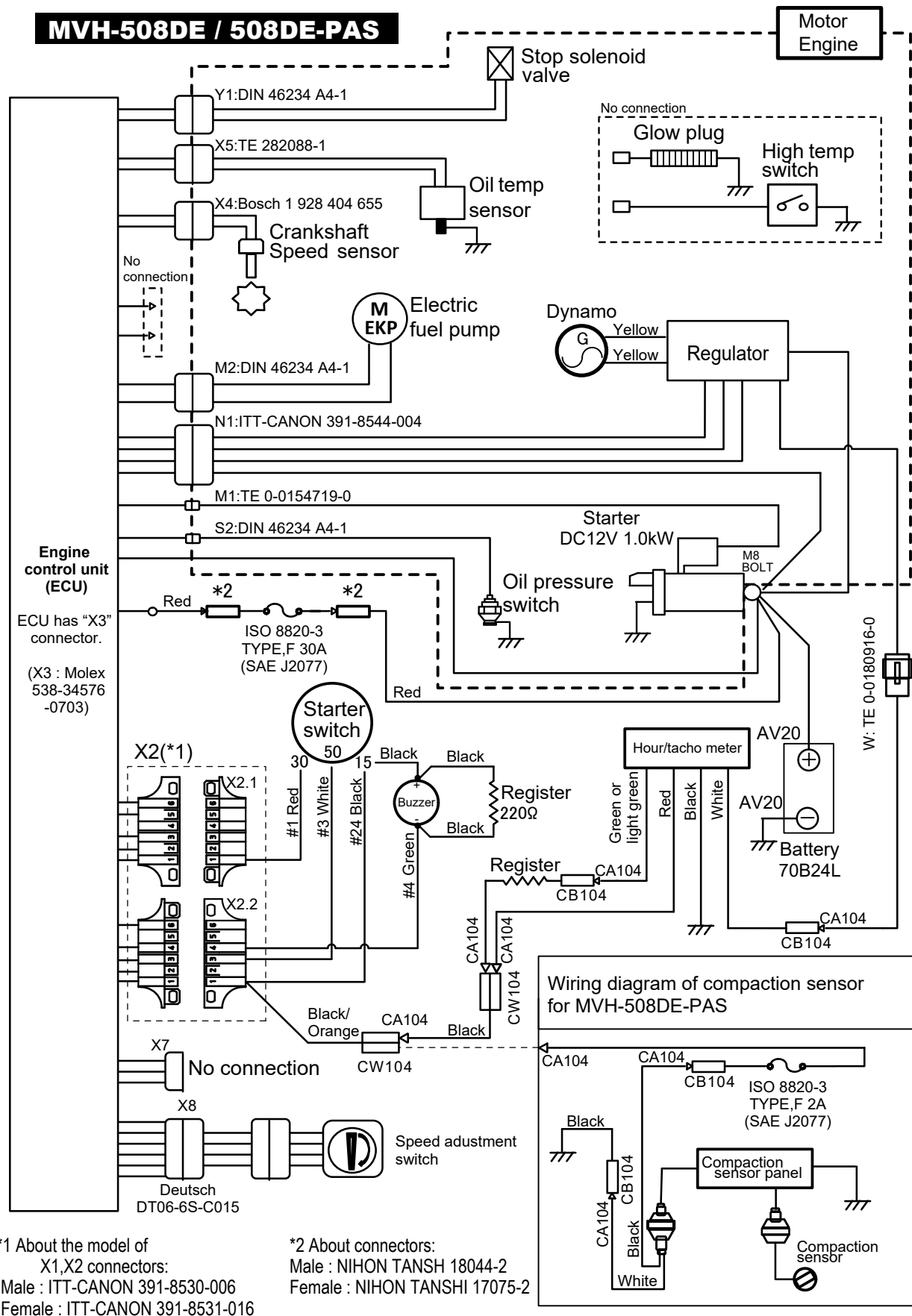


Figure 71. MVH508DE-PAS Wiring Diagram

NOTES

[illegible]



MVH308DE/MVH408DE/MVH508DE Reversible Plate Compactor

COMPAS II Compaction Analyzing System Installation Instructions

HERE'S HOW TO GET HELP

PLEASE HAVE THE MODEL AND SERIAL
NUMBER ON-HAND WHEN CALLING

UNITED STATES

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Cypress, CA 90630
E-MAIL: mq@multiquip.com
WEBSITE: www.multiquip.com

CANADA

Multiquip

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UNITED KINGDOM

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