

Assembly Instruction SCAF

Retrofit solution

Self-Cleaning Air Filter | 900 Gen6

SP006V9810010

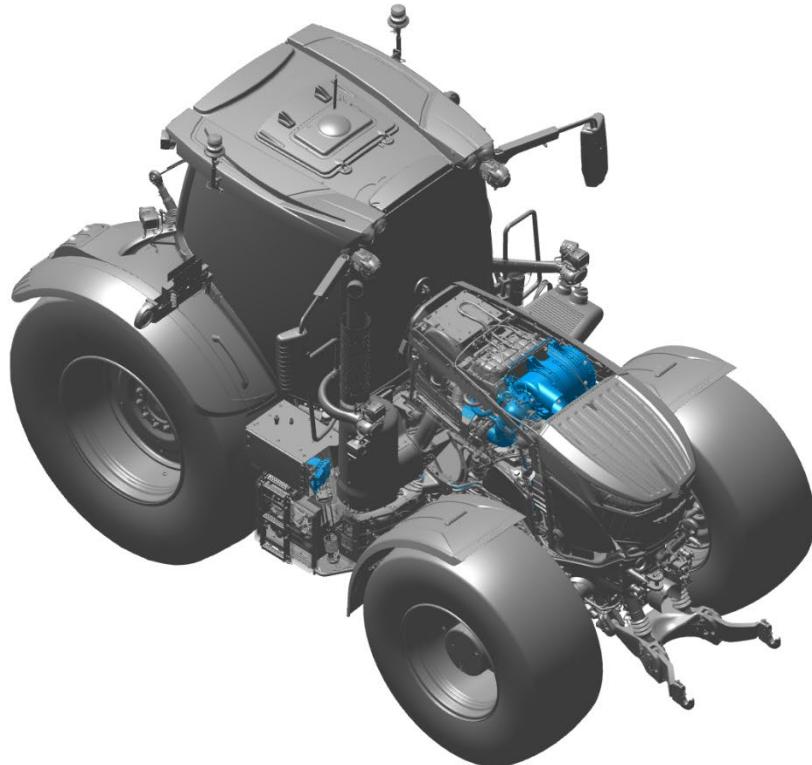


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1.0 Prerequisite

The basic requirement for retrofitting the self-cleaning air filter is that you have already converted it to the new turbocharger retaining plate set.

O requisito básico para a adaptação do filtro de ar autolimpante é que você já o tenha convertido para o novo conjunto de placas de retenção do turbocompressor.

Part number: U972200100000

PSP number: 202259

Service Bulletin: 48/2022

1.1 Bill of material for kit U972200100000

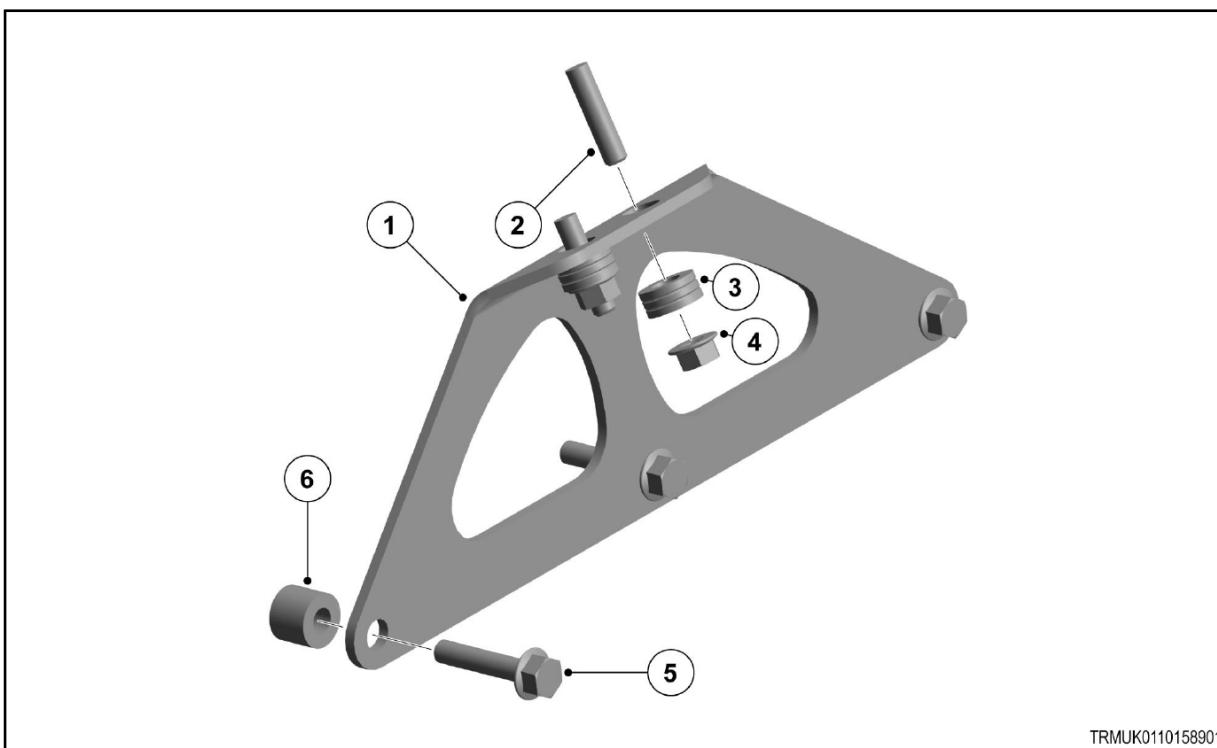
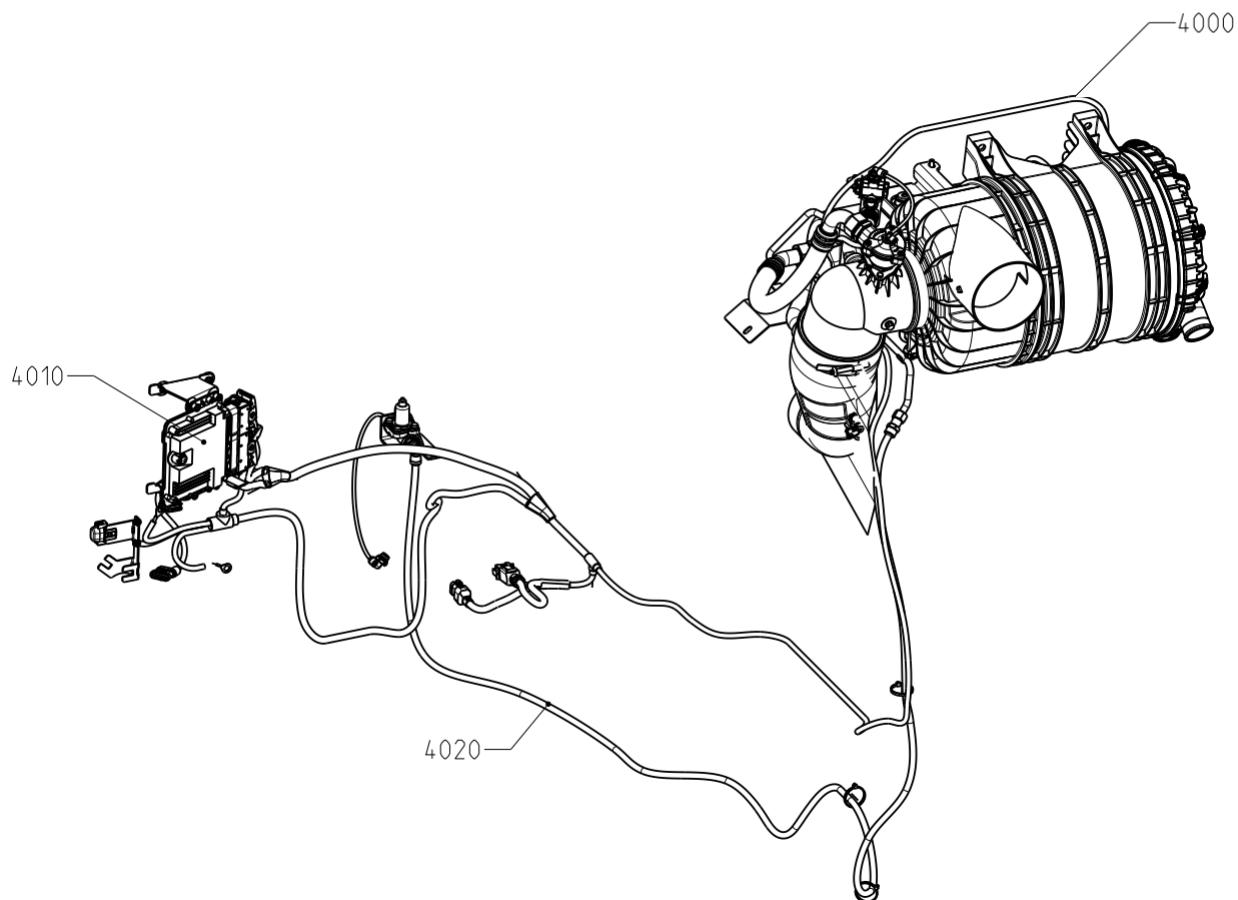


Fig. 1

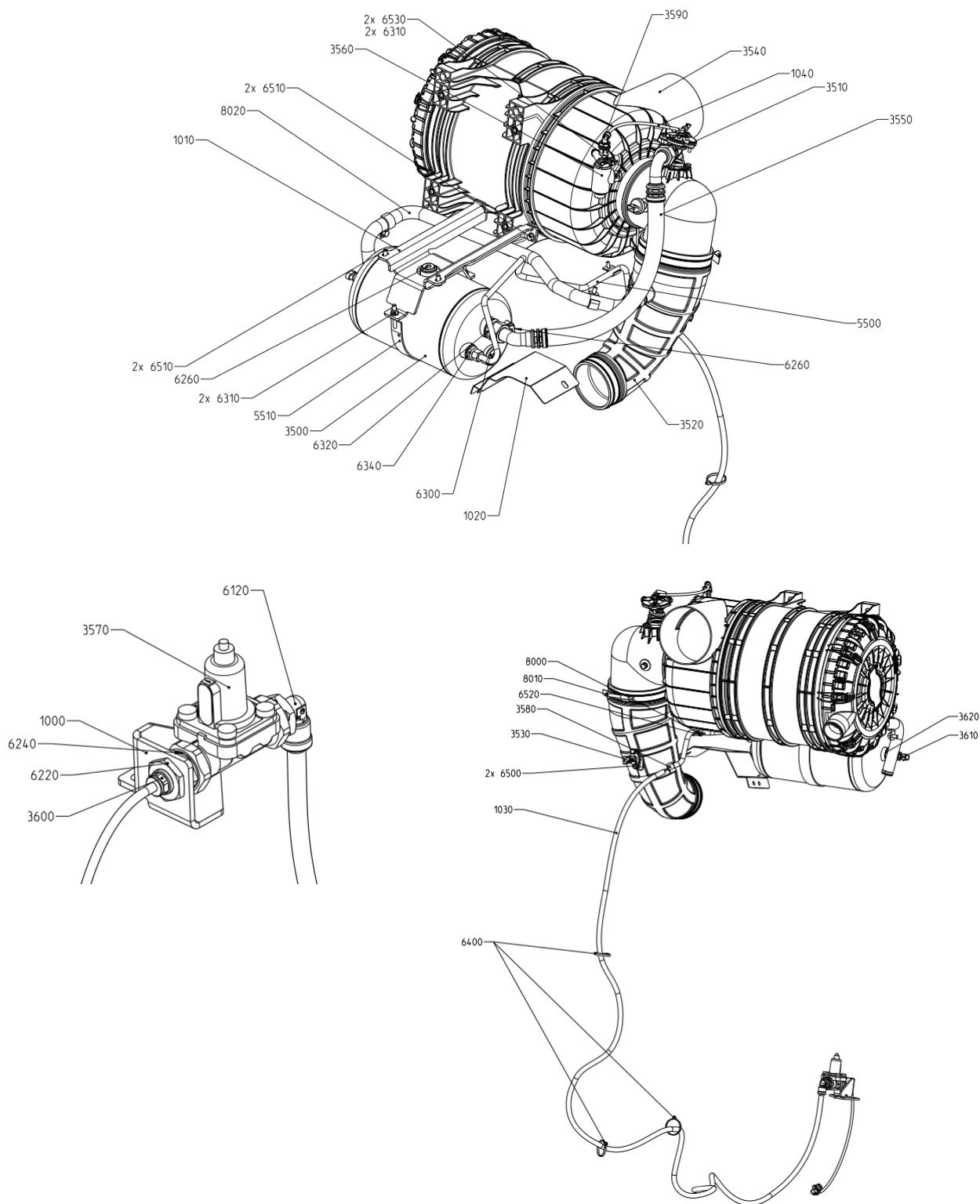
| Number | Part number | Description | Quantity |
|--------|---------------|-----------------|----------|
| (1) | ACP0708070 | Retaining plate | 1 |
| (2) | ACP0708080 | Stud bolt | 2 |
| (3) | ACP0708090 | Bush | 2 |
| (4) | F530200090740 | Nut - M8 | 2 |
| (5) | H218PF150235A | Bolt - M8 | 3 |
| (6) | ACP0353760 | Spacer | 3 |

2.0 Bill of material for kit SCAF



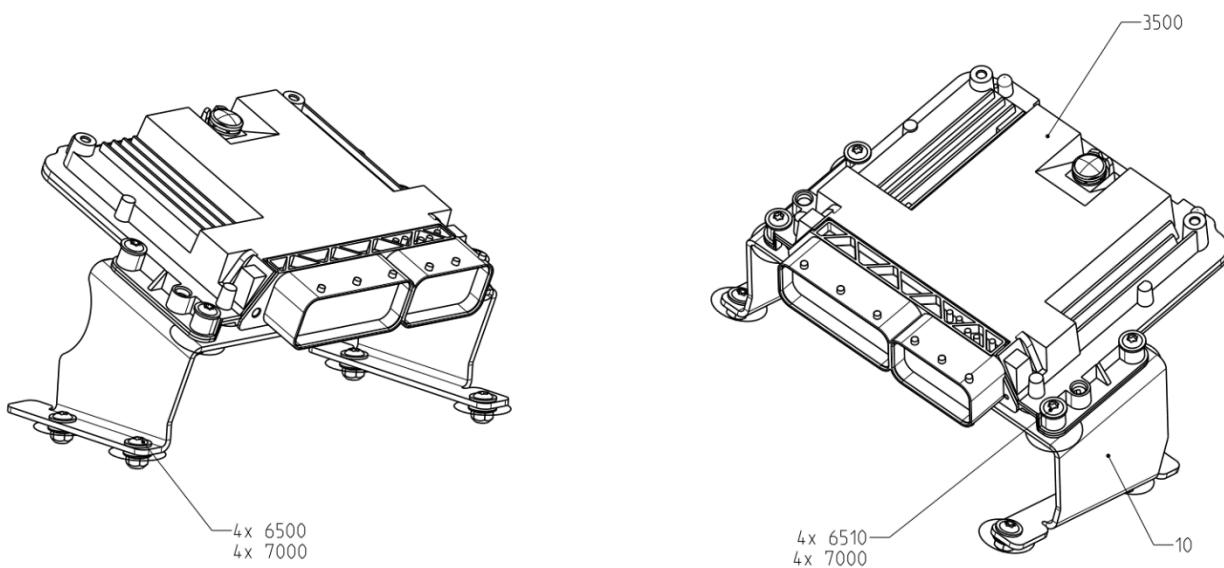
| Number | Part number | Description | Quantity |
|--------|---------------|---------------------|----------|
| 4000 | SP006D1525010 | AIR_INTAKE_SYS | 1 |
| 4010 | SP006D1003010 | ELN_CTRL_DEVICE_CHS | 1 |
| 4020 | SP006D1005010 | ELC_CHS | 1 |

4000 Air intake system



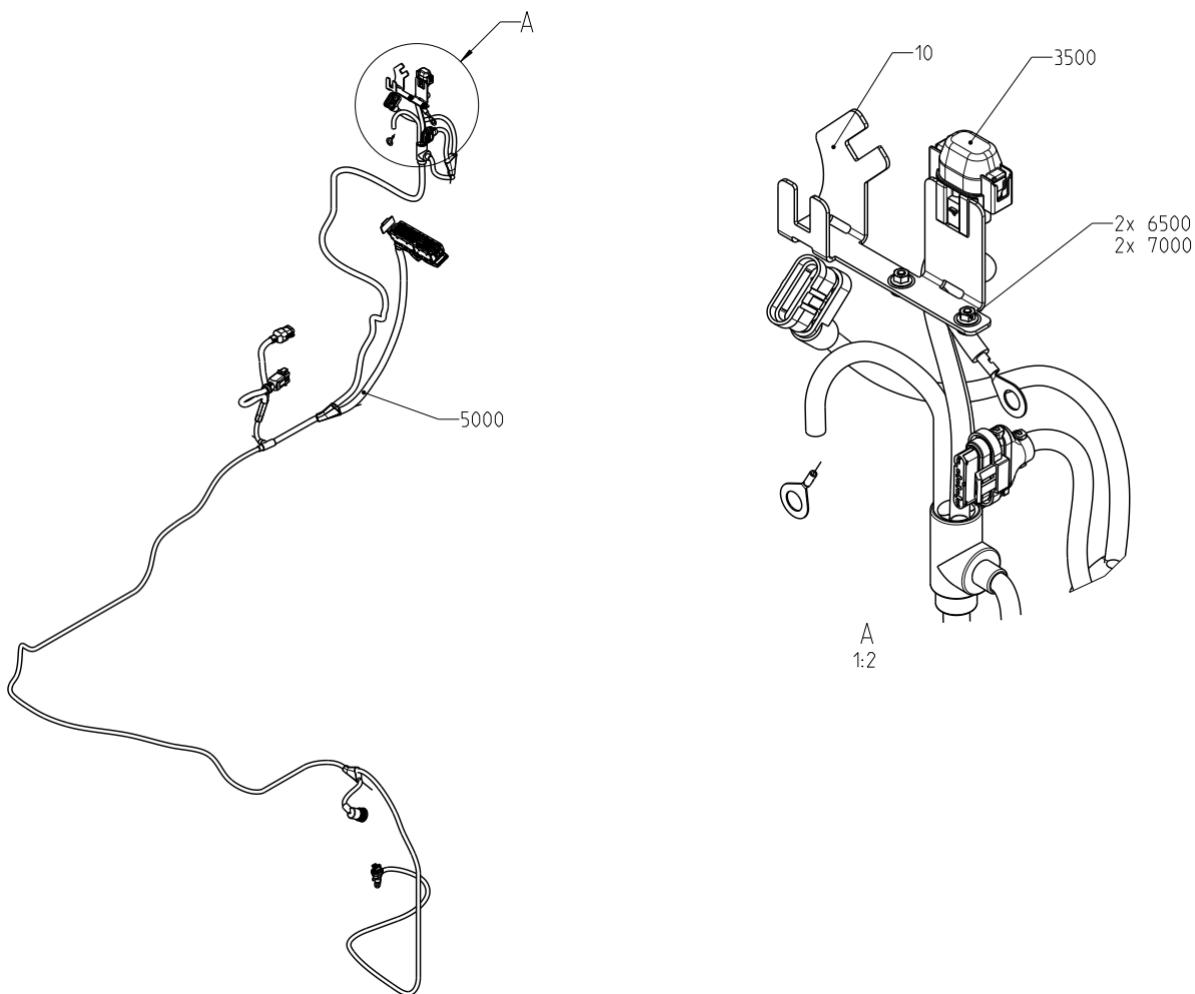
| Number | Part number | Description | Quantity |
|--------|---------------|---------------------|----------|
| 1000 | H221PP3501010 | SUPPORT | 1 |
| 1010 | H221PP1525110 | SUPPORT | 1 |
| 1020 | H221PP1525050 | MUDGUARD | 1 |
| 1030 | H321PP3501900 | PNEUMATIC HOSE 12 | 1 |
| 1040 | X334010000042 | PNEUMATIC HOSE 6 | 1 |
| 3500 | H221PB152590A | AIR TANK | 1 |
| 3510 | H221PB1525010 | THREADED SOCKET | 1 |
| 3520 | H221PB1525050 | CLEAN AIR TUBE | 1 |
| 3530 | H218PB1525040 | TEMP. TRANSMITTER | 1 |
| 3540 | H221PB1525040 | AIR FILTER | 1 |
| 3550 | H221PB1525130 | PRESSURE HOSE | 1 |
| 3560 | G931150071120 | SOLENOID VALVE | 1 |
| 3570 | G530880200200 | SPILL-VALVE | 1 |
| 3580 | H221PB3501520 | PNEU.CONNECTOR | 1 |
| 3590 | H221PB3501510 | PNEU.CONNECTOR | 1 |
| 3600 | G743880080530 | SCREWED UNION | 1 |
| 3610 | H530150030100 | PRESSURE SENSOR | 1 |
| 3620 | G954880300030 | REDUCER FITTING | 1 |
| 5500 | H221PH1525140 | PRESSURE PIPE | 1 |
| 5510 | H345880020010 | STRAP | 1 |
| 6120 | G743880080121 | ANG. UN_L | 1 |
| 6200 | X586523100000 | FEED THROUGH SOCKET | 1 |
| 6220 | X596311600000 | NUT | 1 |
| 6240 | X548862866000 | O-RING | 1 |
| 6260 | X483902401000 | PLUG | 2 |
| 6300 | X483904800000 | PLUG | 1 |
| 6310 | ACW1907400 | NUT M8 | 4 |
| 6320 | X592501600000 | THREADED SOCKET | 1 |
| 6340 | X592500500000 | CONNECT.PIECE | 1 |
| 6400 | X668981022000 | CABLE TAPE | 3 |
| 6500 | ACW0775750 | SCREW M6x12 | 2 |
| 6510 | ACW0775820 | SCREW M8x16 | 4 |
| 6520 | ACW0775760 | SCREW M6x16 | 1 |
| 6530 | ACW3030970 | SCREW M8x55 | 2 |
| 8000 | 931150722200 | COLLAR | 1 |
| 8010 | X458655000000 | HOSE CLIP | 1 |
| 8020 | H221PV3501039 | PNE_SUPPLY | 1 |

4010 Electronic control devices chassis



| Number | Part number | Description | Quantity |
|--------|---------------|----------------|----------|
| 10 | SP006P1003030 | BRACKET | 1 |
| 3500 | SP006B1003010 | ELECTRONIC_BOX | 1 |
| 6500 | ACW1281920 | SCREW M6x12 | 4 |
| 6510 | ACW2933680 | SCREW M6x25 | 4 |
| 7000 | ACW1907390 | NUT M6X1 | 8 |

4020 Electric chassis



A
1:2

| Number | Part number | Description | Quantity |
|--------|---------------|--------------------------------|----------|
| 10 | SP006P1005010 | BRACKET | 1 |
| 3500 | SP006H1005010 | FUSE BOX (PART OF THE HARNESS) | 1 |
| 5000 | SP006H1005010 | WIRING HARNESS | 1 |
| 6500 | ACX3229230 | SCREW 4x10 | 2 |
| 7000 | ACW2909750 | NUT M4vl | 2 |

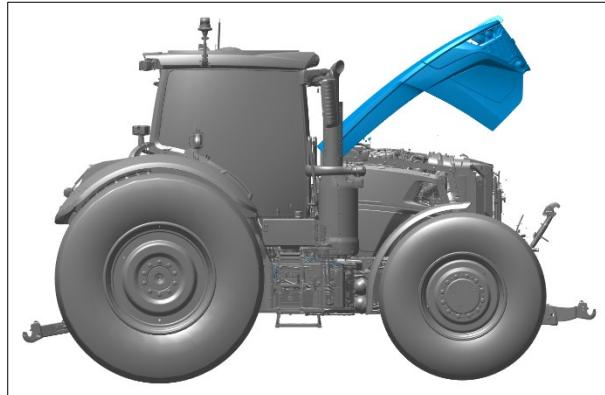
3.0 Installation instructions

3.1 Preparatory work for retrofitting

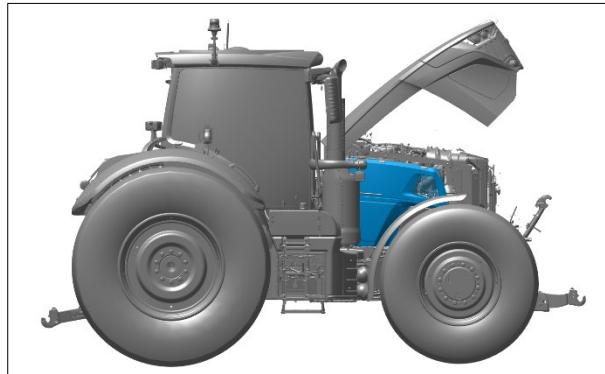
Before starting the procedure:

Antes de iniciar o procedimento:

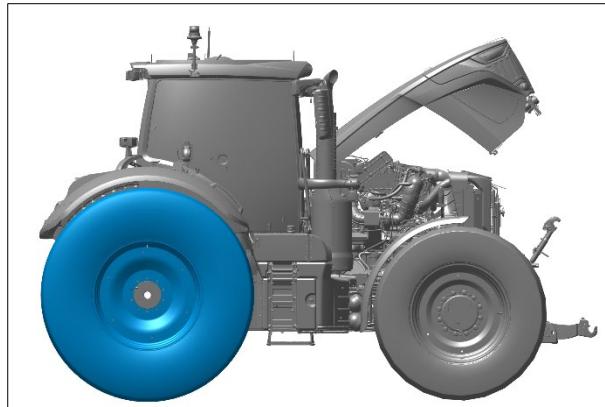
- Open the engine hood
- *Abra o capô do motor*



- Remove the side shields from both sides
- *Remova as proteções laterais de ambos os lados*



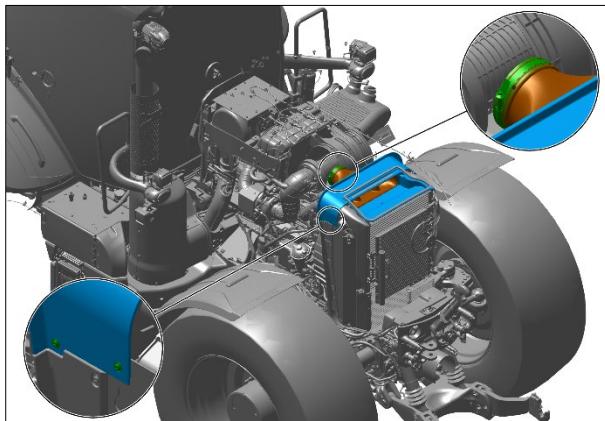
- Remove the right rear tire
- *Remova o pneu traseiro direito*



3.2 Disassembly of old components

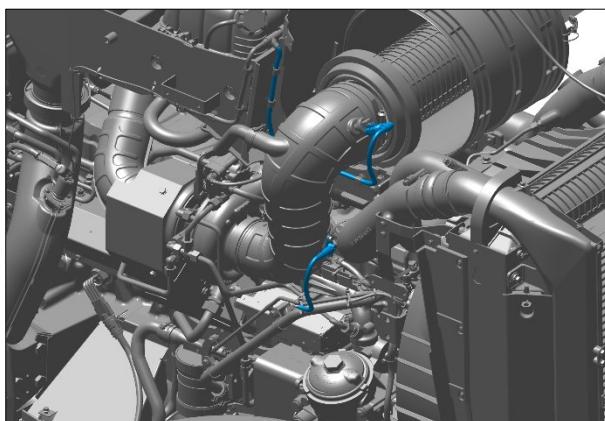
1. Loosen the hose clamp and remove suction element. Remove two screws each side and the cover.

Solte a braçadeira da mangueira e remova o elemento de sucção. Remova os dois parafusos de cada lado e a tampa.



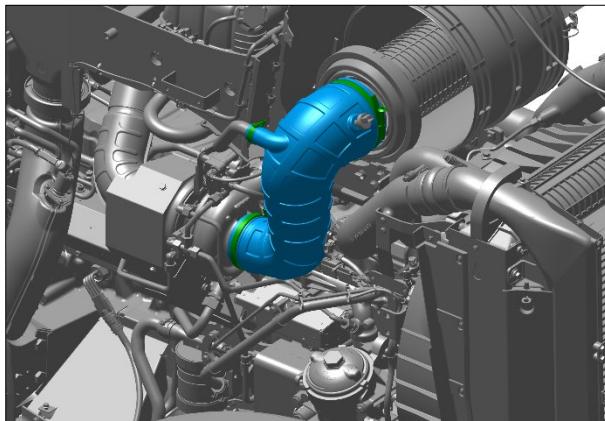
2. Disconnect the connectors from the temperature- and pressure difference sensor.

Desconecte os conectores do sensor de diferença de temperatura e pressão.



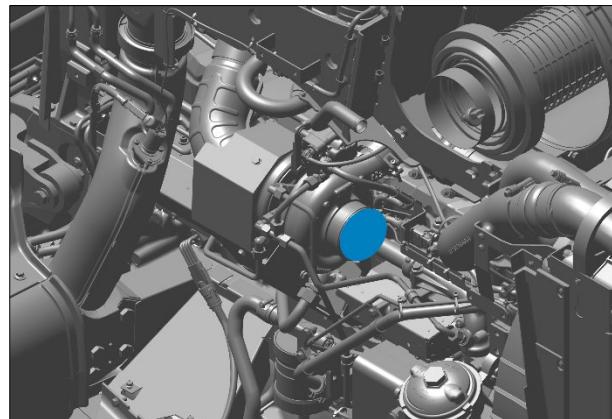
3. Loosen the three hose clamps and remove the clean air pipe and the sensor wiring harness.

Solte as três braçadeiras da mangueira e remova o tubo de ar limpo e o chicote de fiação do sensor.



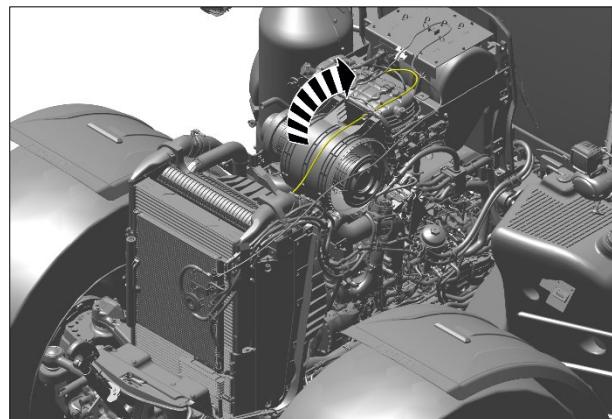
4. Stretch a film over the turbocharger to prevent dirt from entering.

Estique uma película sobre o turbocompressor para evitar a entrada de sujeira.



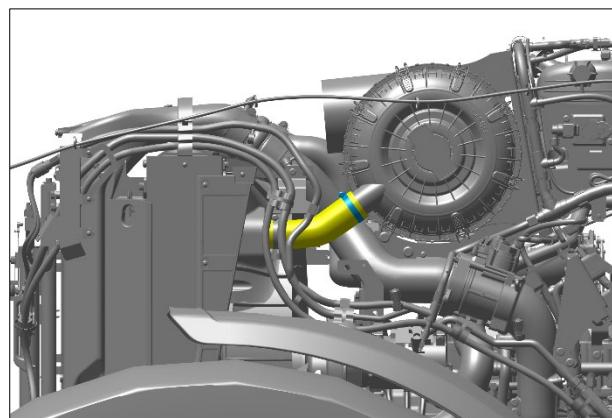
5. Unclip the coolant hose from the radiator and fold it back over the air filter.

Solte a mangueira do líquido de arrefecimento do radiador e dobre-a novamente sobre o filtro de ar.



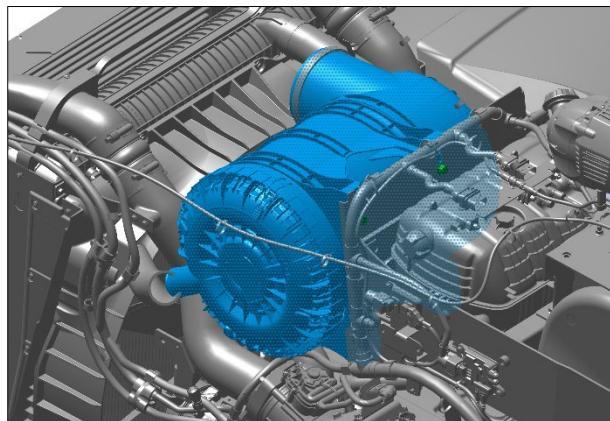
6. Loosen the hose clamp and pull the hose from the air filter.

Solte a braçadeira da mangueira e puxe a mangueira do filtro de ar.



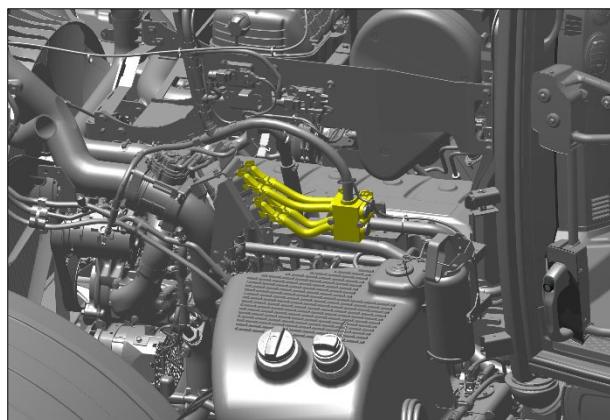
7. Remove the four screws and the air filter.
(The screws will be reused)

*Remova os quatro parafusos e o filtro de ar.
(Os parafusos serão reutilizados)*



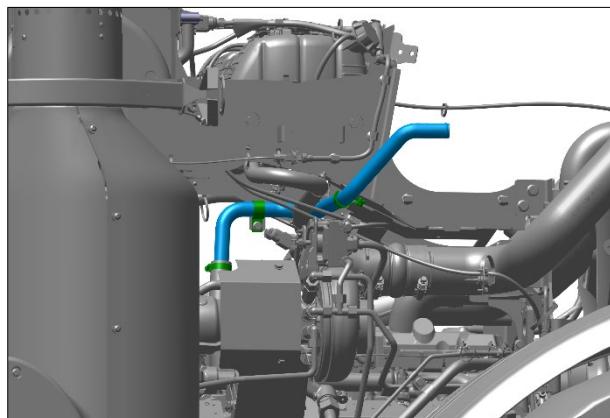
8. Unplug the cables and bend them to the side. If necessary, also loosen the junction box to get more space.

Desconecte os cabos e dobre-os para o lado. Se necessário, solte também a caixa de junção para obter mais espaço.



9. Remove the old suction pipe by opening the three pipe and hose clamps.

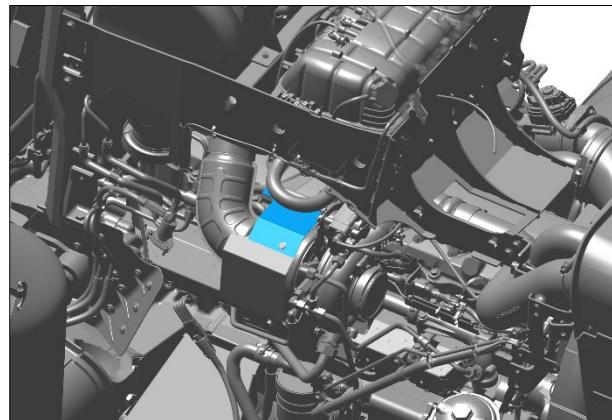
Remova o tubo de sucção antigo abrindo as três braçadeiras do tubo e da mangueira.



3.3 Assembly of new components

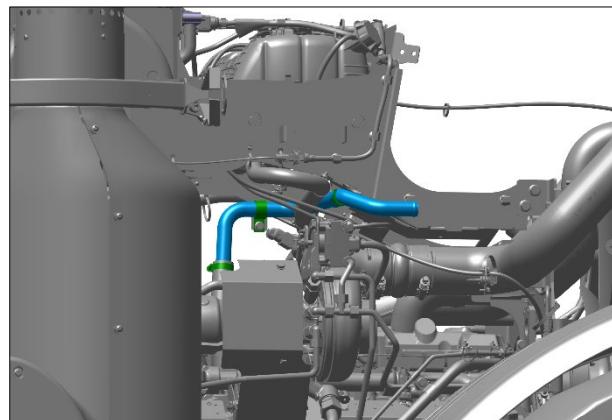
1. Install the heat shield plate.

Instale a placa de proteção térmica.



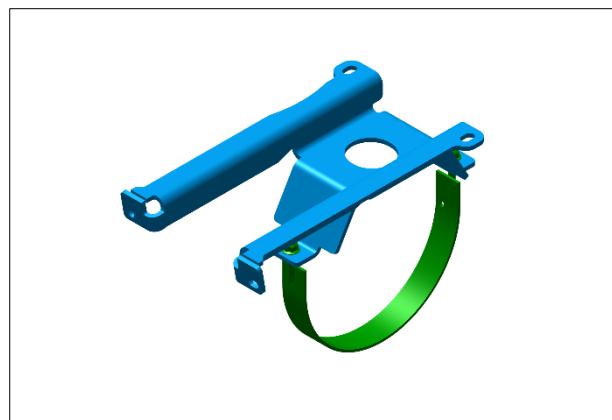
2. Install the new suction pipe.

Instale o novo tubo de sucção.



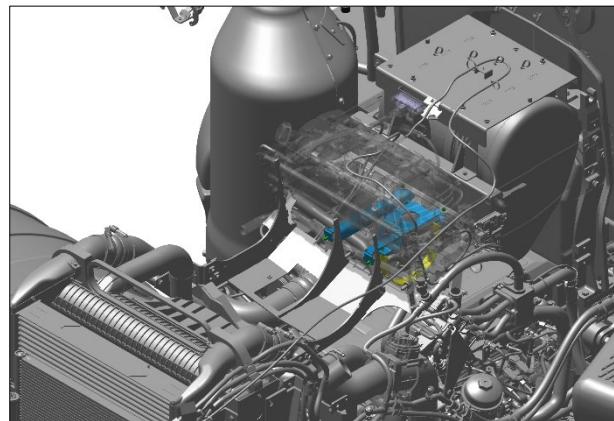
3. Pre-assemble the clamp on the pressure vessel support.

Faça a pré-montagem da braçadeira no suporte do vaso de pressão.



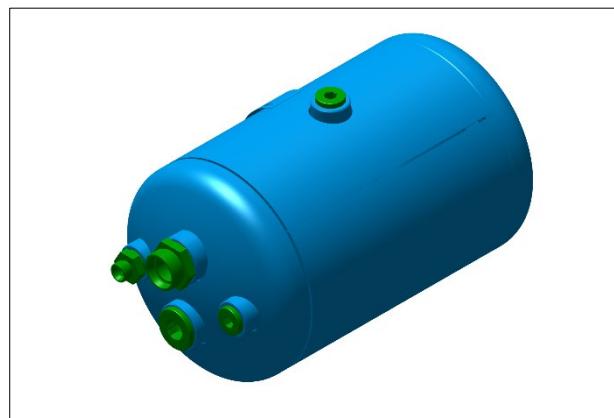
4. Assemble the pressure vessel support below the cooling water tank with four screws.

Monte o suporte do vaso de pressão abaixo do tanque de água de resfriamento com quatro parafusos.



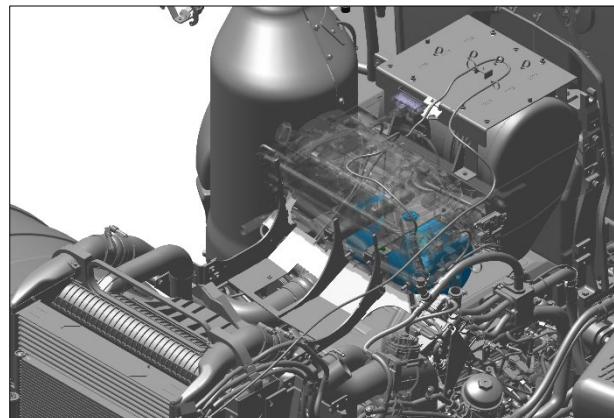
5. Pre-assemble the pressure vessel with the connection and closure nozzles.

Faça a pré-montagem do vaso de pressão com os bicos de conexão e fechamento.



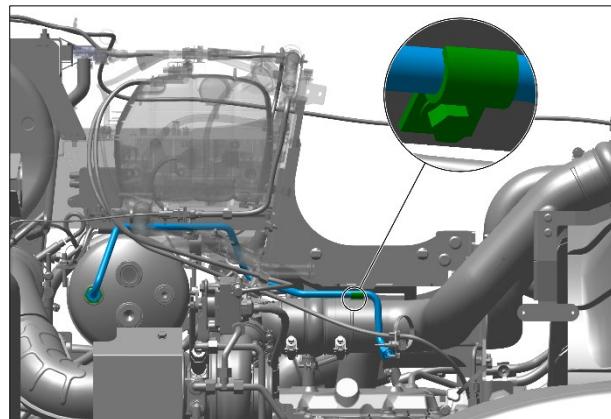
6. Assemble the pressure vessel to the support.

Monte o vaso de pressão no suporte.



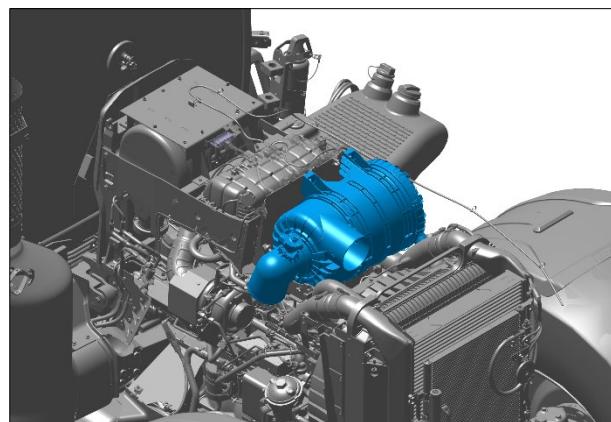
7. Mount the pressure pipe and with the pipe clamp.

Monte o tubo de pressão com a braçadeira do tubo.



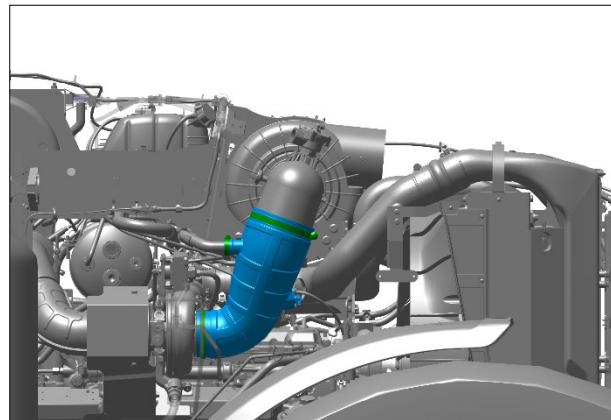
8. Install the air filter with the four old screws.

Instale o filtro de ar com os quatro parafusos antigos.



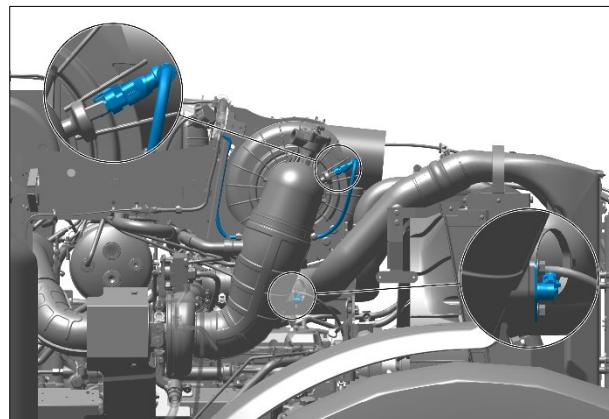
9. Install the clean air pipe with the three clamps.

Instale o tubo de ar limpo com as três braçadeiras.



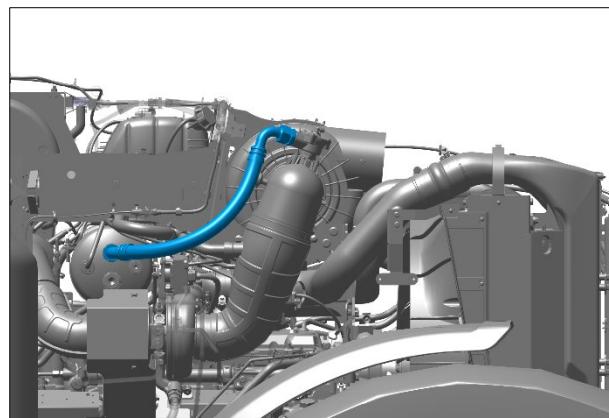
10. Connect the wiring harness to the temperature-and pressure difference sensor.

Conekte o chicote de fiação ao sensor de diferença de temperatura e pressão.



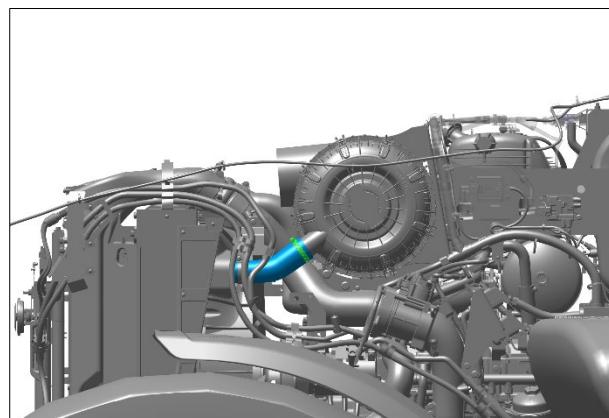
11. Install the pressure hose.

Instale a mangueira de pressão.



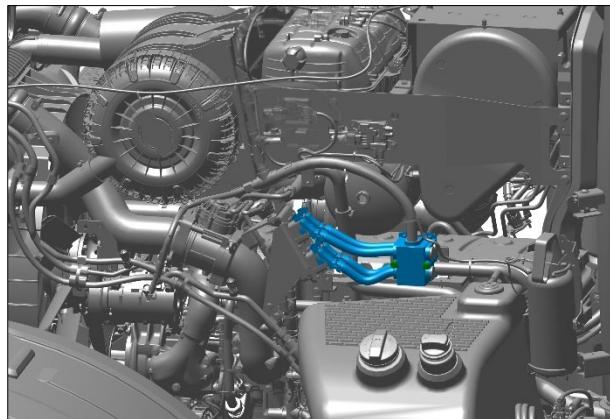
12. Install the hose with the clamp.

Instale a mangueira com a braçadeira.



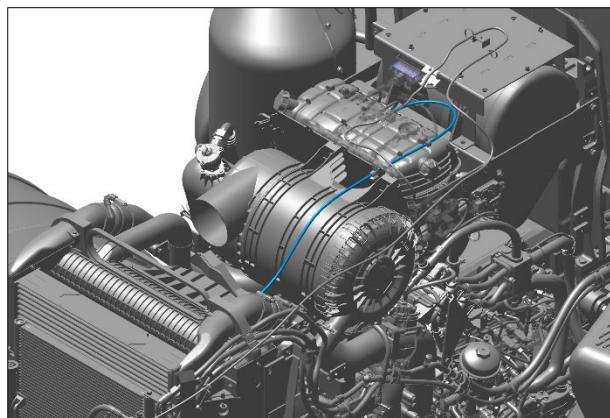
13. Mount the junction box to frame and plug the four cables.

Monte a caixa de junção na estrutura e conecte os quatro cabos.



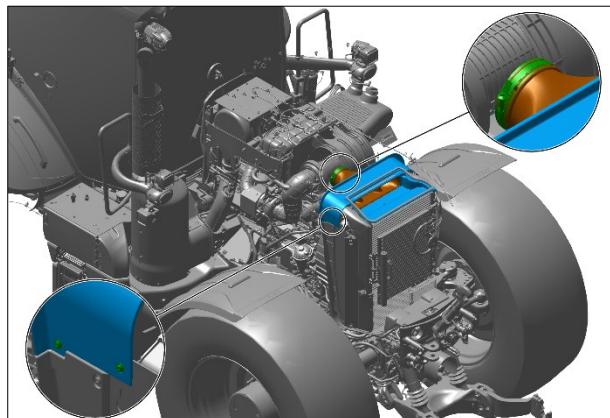
14. Clip the coolant hose to the radiator.

Prenda a mangueira do líquido de arrefecimento no radiador.



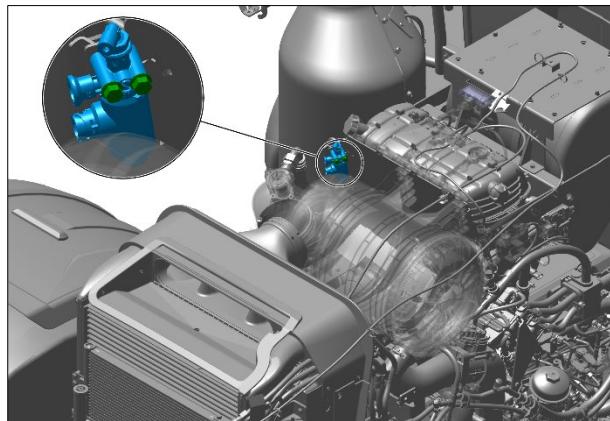
15. Reinstall the suction element and the cover.

Reinstale o elemento de sucção e a tampa.



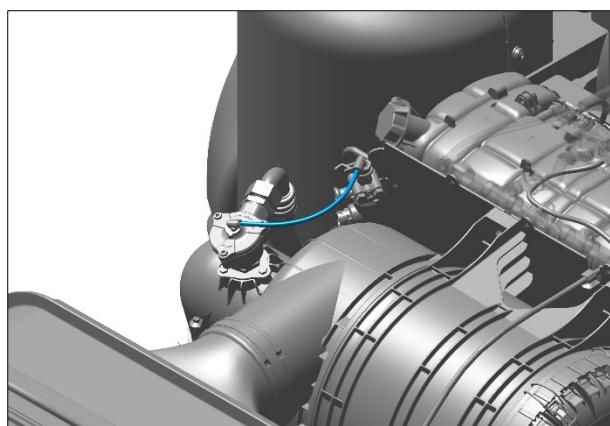
16. Install the valve.

Instale a válvula.



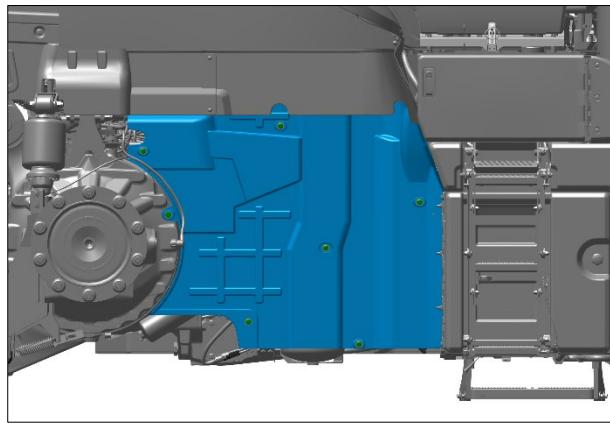
17. Install the pneumatic pipe.

Instale o tubo pneumático.



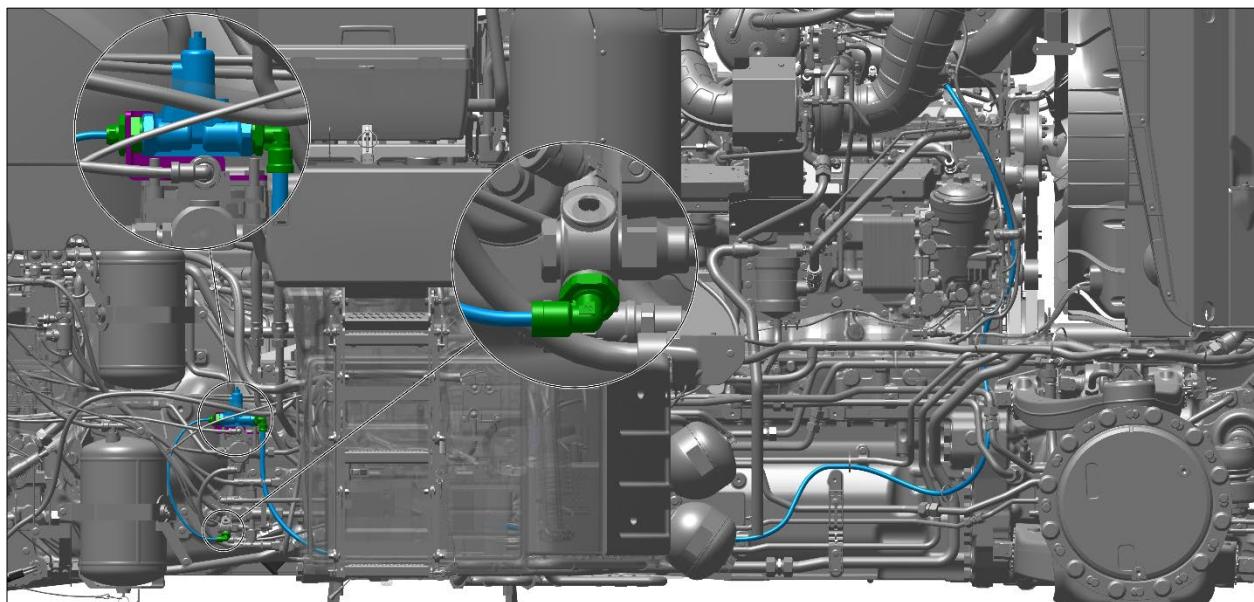
18. Remove the side cover.

Remova a tampa lateral.



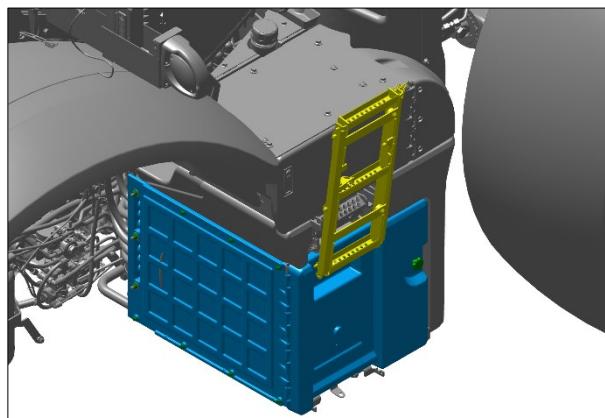
19. Install the pressure air hose and the spill valve.

Instale a mangueira de ar comprimido e a válvula de vazamento



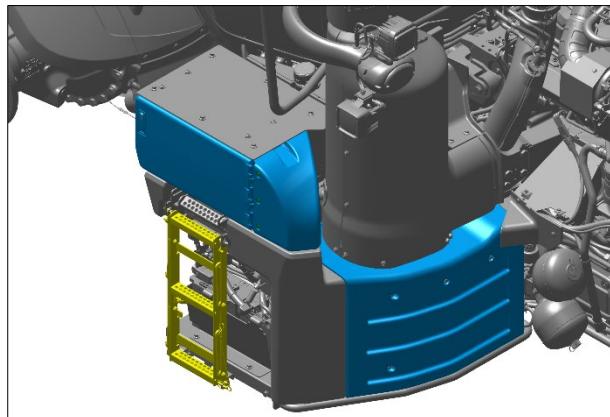
20. Flip up the leader and remove the cover.

Vire a guia para cima e remova a tampa.



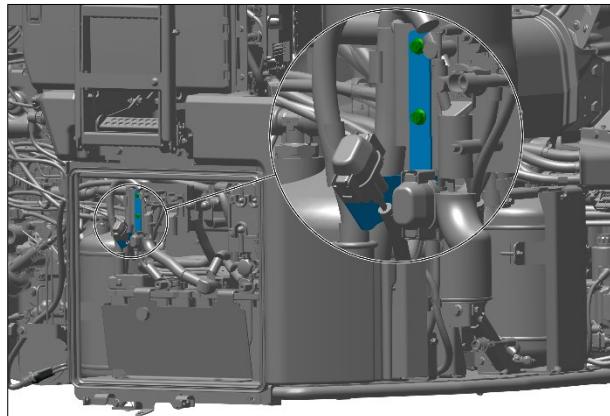
21. Flip the leader down and remove the three covers.

Vire o líder para baixo e remova as três tampas.



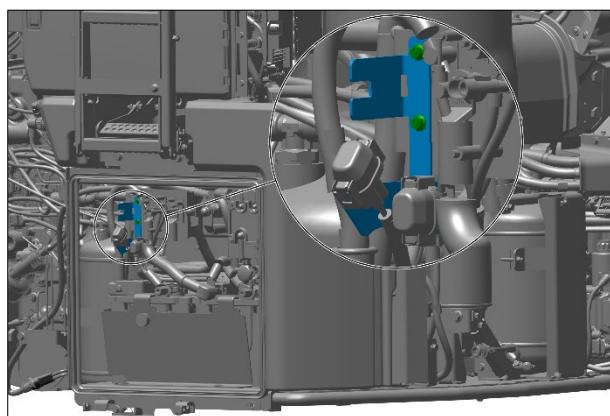
22. Pull off the fuse holders and remove the retaining plate.

Retire os suportes dos fusíveis e remova a placa de retenção.



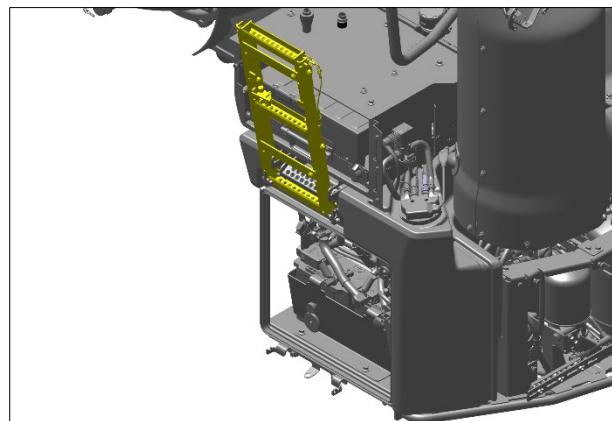
23. Assemble the new retaining plate and put the fuse holder on it.

Monte a nova placa de retenção e coloque o suporte do fusível nela.



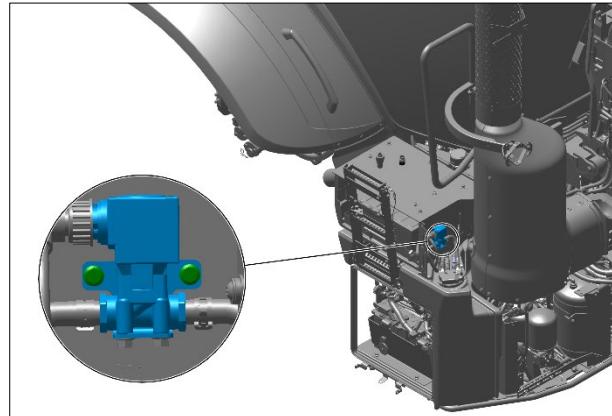
24. Move the cover and the ladder into these positions so that you can reach the screws of the entry element.

Mova a tampa e a escada para essas posições para que você possa alcançar os parafusos do elemento de entrada.



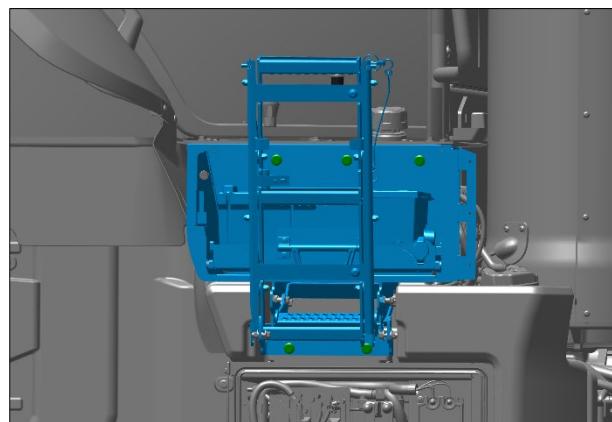
25. Remove the two screws and bend the valve away.

Remova os dois parafusos e dobre a válvula para fora.



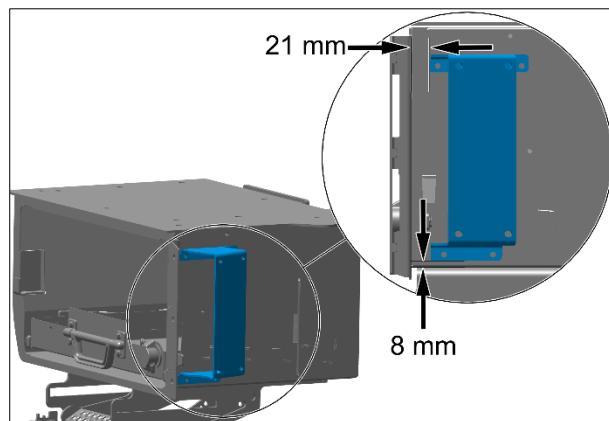
26. Remove the 5 screw's and disassemble the entry element.

Remova os 5 parafusos e desmonte o elemento de entrada.



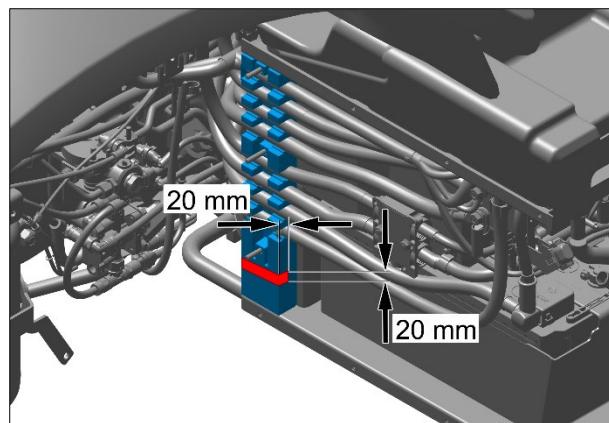
27. Hold the sheet metal in the position shown and transfer the hole pattern. Then drill the holes in the entry element.

Segure a chapa metálica na posição mostrada e transfira o padrão de furo. Em seguida, faça os furos no elemento de entrada.



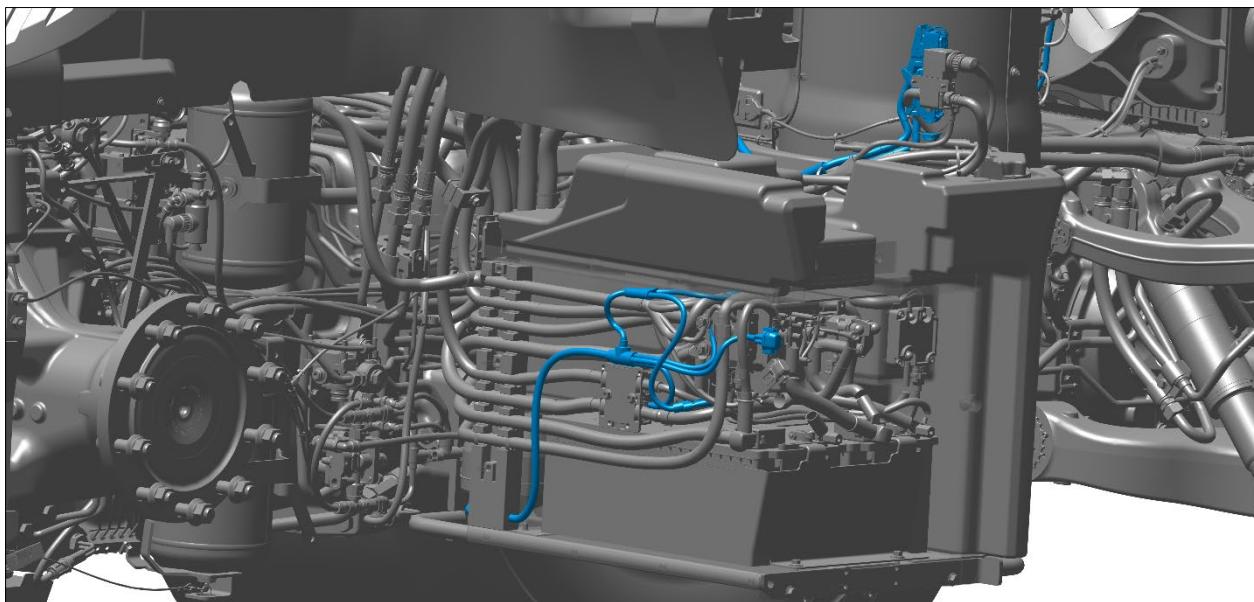
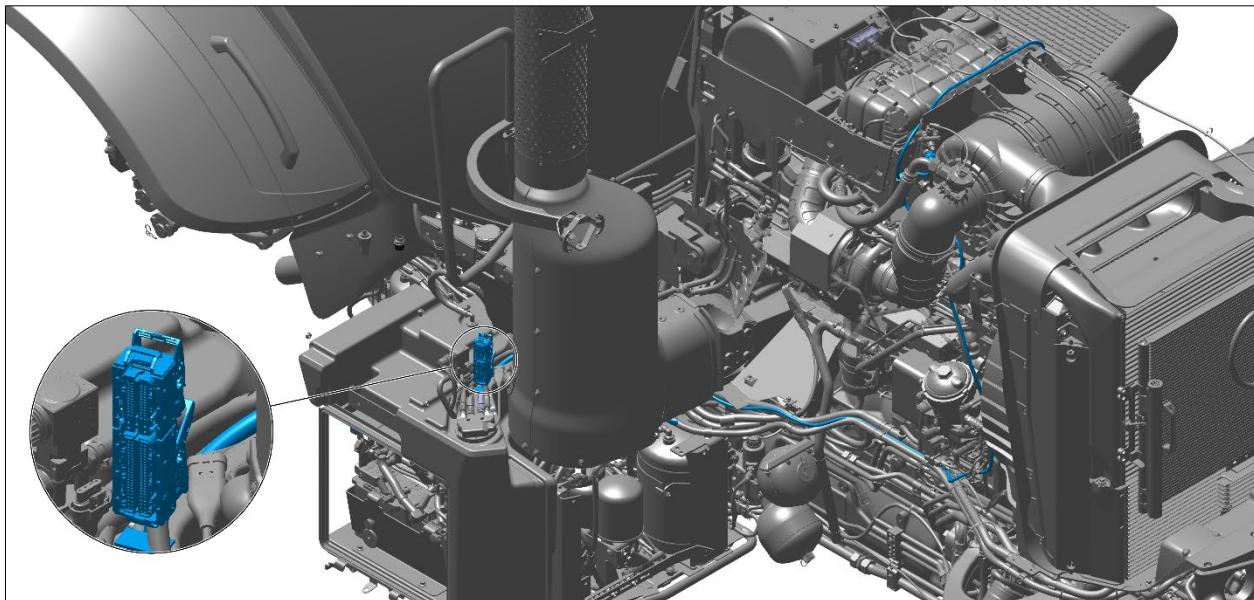
28. Cut a cuboid element out of the rubber when all of the cable entries above are occupied.

Corte um elemento cuboide da borracha quando todas as entradas de cabo acima estiverem ocupadas.



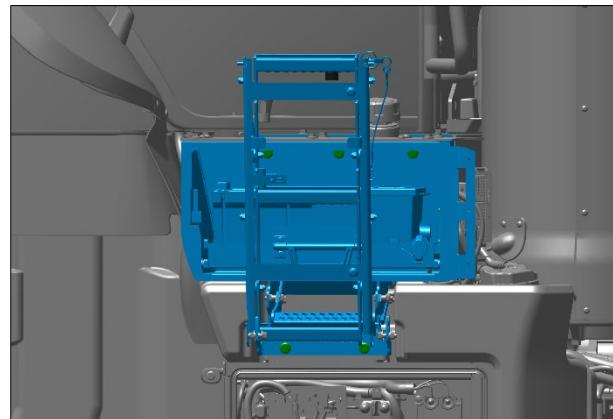
29. Lay out the cable set according to the illustration on the machine. Start at the two connectors on the control unit.

Disponha o conjunto de cabos de acordo com a ilustração na máquina. Comece pelos dois conectores na unidade de controle.



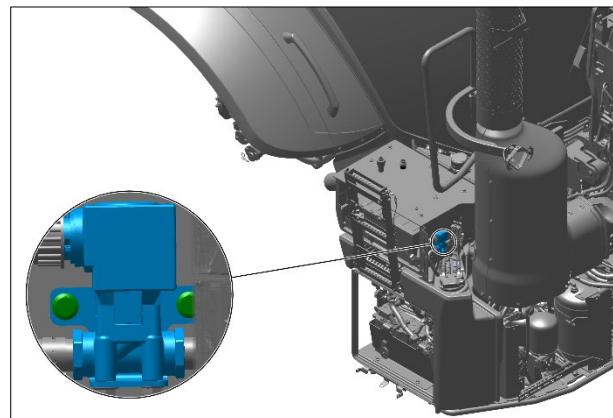
30. Mount the entry element with the five screws.

Monte o elemento de entrada com os cinco parafusos.



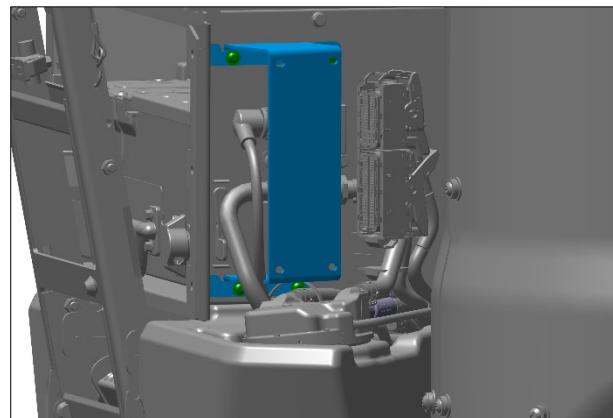
31. Mount the two screws to the entry element.

Monte os dois parafusos no elemento de entrada.



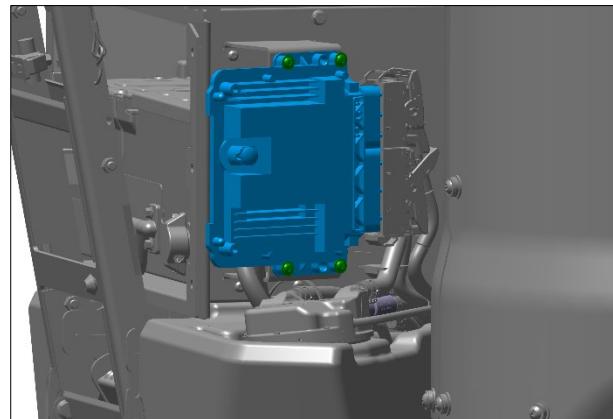
32. Mount the metal sheet bracket to the entry element.

Monte o suporte da chapa metálica no elemento de entrada.



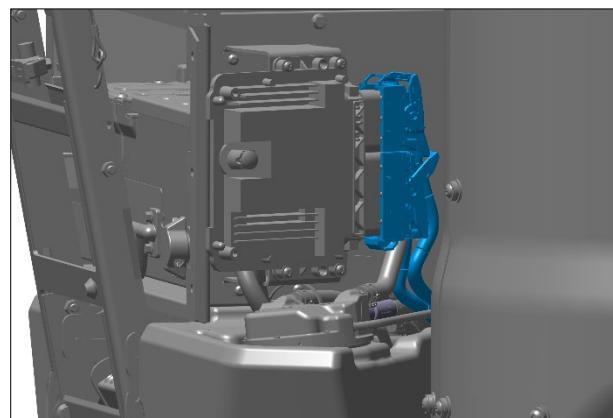
33. Mount the control unit to the metal sheet bracket.

Monte a unidade de controle no suporte de chapa metálica.



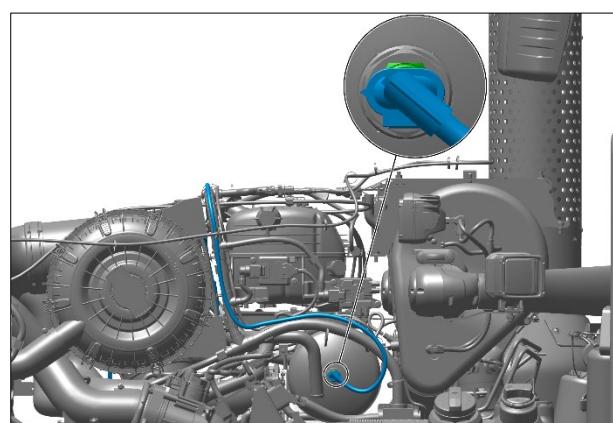
34. Plug in the Harness to the control unit.

Conecte o chicote à unidade de controle.



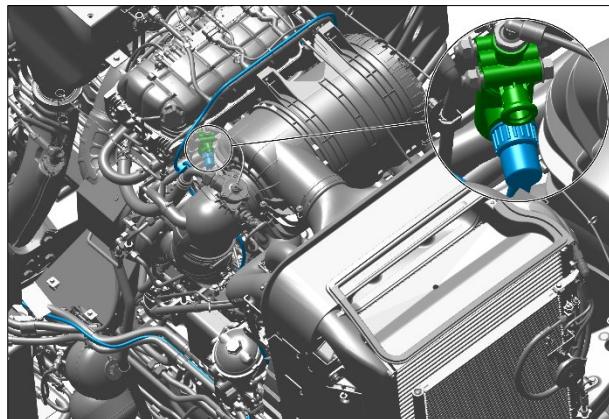
35. Connect the harness with the pressure sensor of the air vessel.

Conecte o chicote com o sensor de pressão do reservatório de ar.



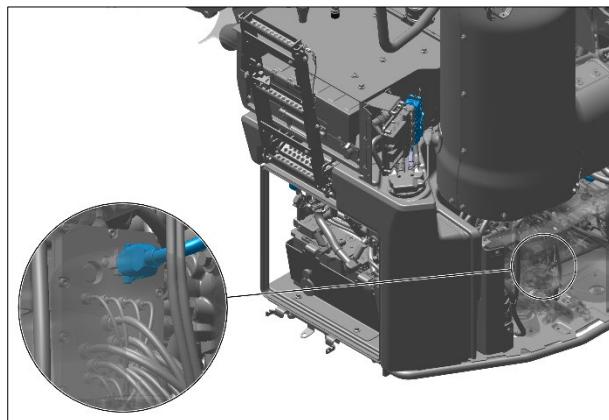
36. Connect the harness with the valve.

Conekte o chicote com a válvula.



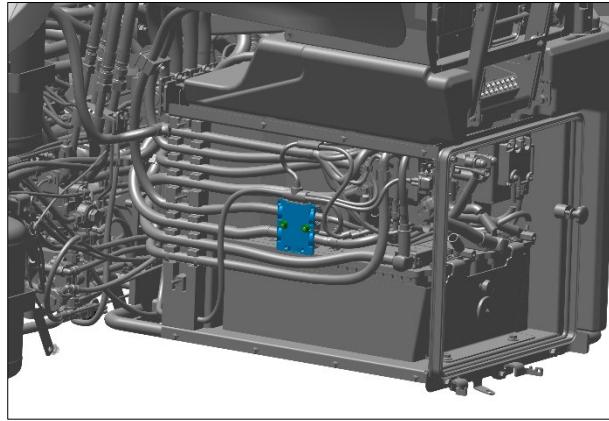
37. Connect the plug of the new wiring harness with the electrical separation point X2134 of the Vario Grip Element A087. Connect the original plug to the Y-branch of the new wiring harness.

Conekte o plugue do novo chicote de fiação com o ponto de separação elétrica X2134 do Vario Grip Element A087. Conekte o plugue original ao ramo Y do novo chicote de fiação.



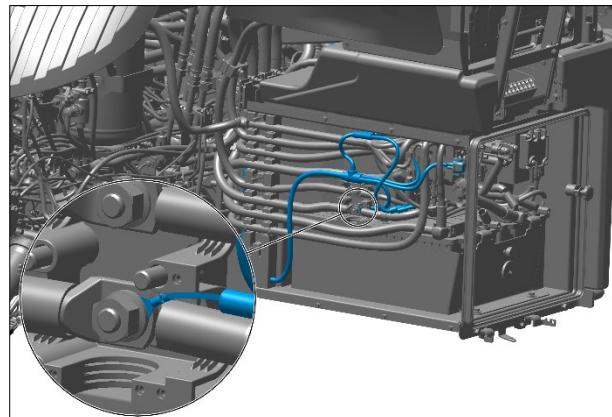
38. Remove the cover.

Remova a tampa.



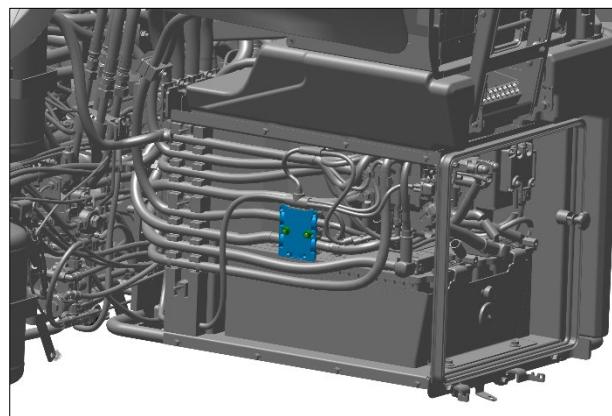
39. Connect the positive poles.

Conekte os polos positivos.



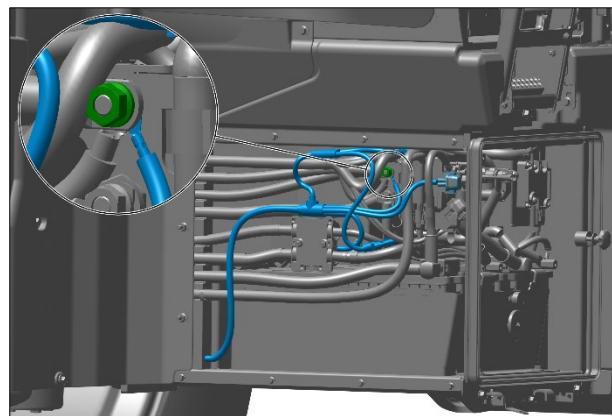
40. Mount the cover.

Monte a tampa.



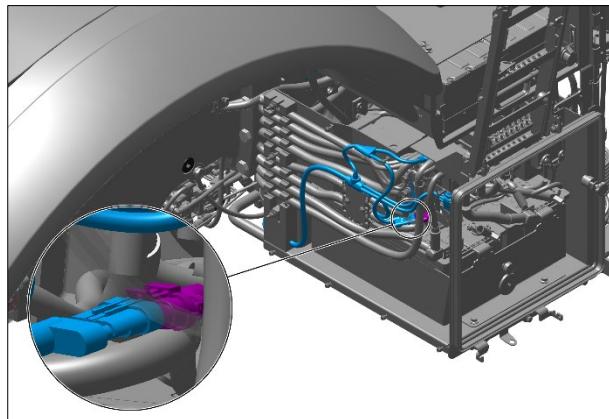
41. Connect the negative poles.

Conekte os polos negativos.



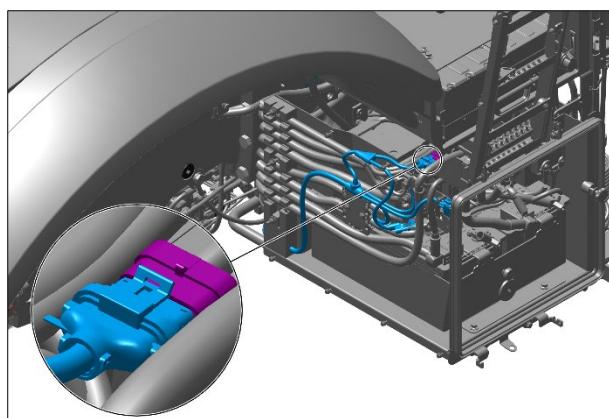
42. Disconnect the old separation point X4207.

Desconecte o ponto de separação antigo X4207.



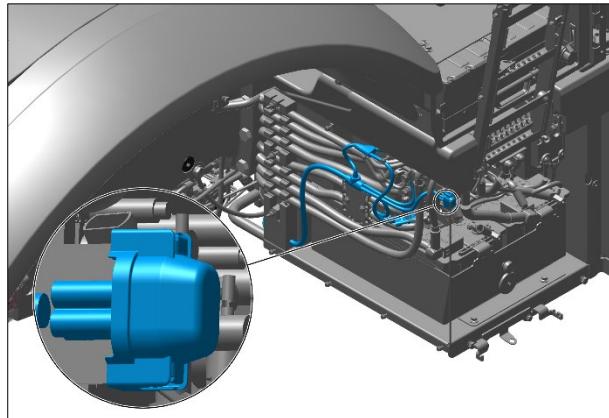
43. Connect the other separation point X4207 with the Y-branch of the new wiring harness.

Conecte o outro ponto de separação X4207 com o ramo Y do novo chicote de fiação.



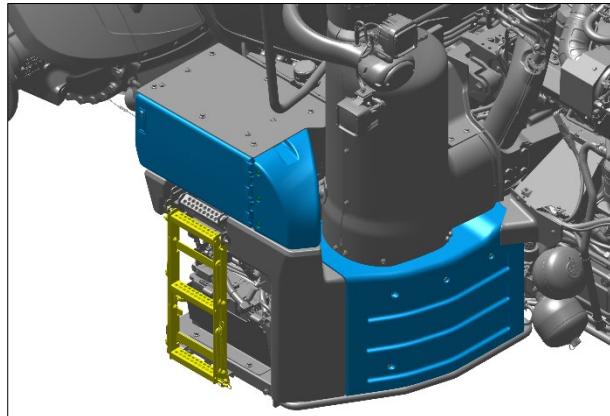
44. Place the fuse holder on the new bracket.
Finally, please fasten the new wiring harness with cable ties.

*Coloque o suporte do fusível no novo suporte.
Por fim, prenda o novo chicote de fiação com abraçadeiras.*



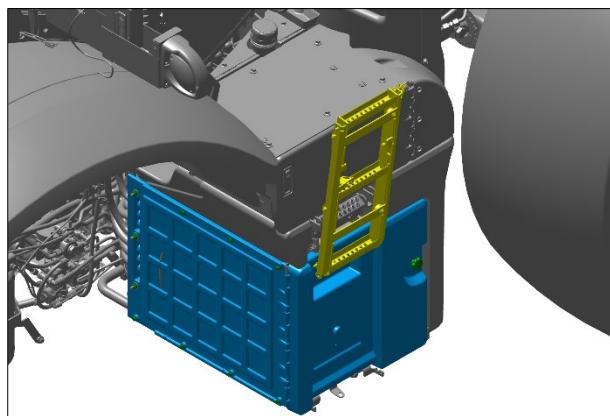
45. Install the three covers.

Instale as três tampas.



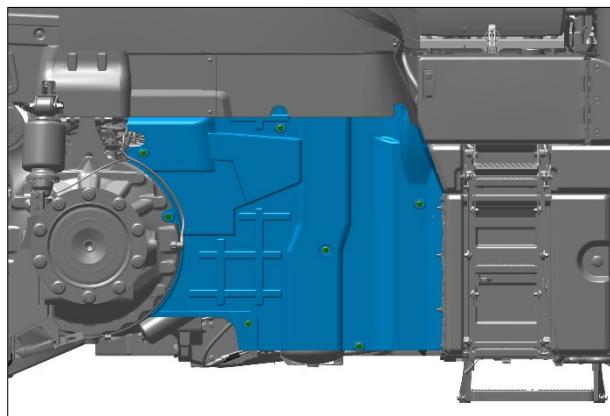
46. Assemble the cover.

Monte a tampa.



47. Assemble the side cover.

Monte a tampa lateral.



Carry out the steps in 3.1 in reverse order to complete the installation of the retrofit.

Execute as etapas do item 3.1 na ordem inversa para concluir a instalação do retrofit.