



TECHNICAL INSTRUCTIONS

(76-02122-00 and 74-50184-00) Supra Engine Bracket Retrofit and 76-02110-00 Bottom Panel Replacement

Models: Supra 950, 960, and 950MT

Purpose: The intent of this technical instruction is to provide guidelines for installing the engine bracket, as well as a metal bottom panel on field units.

Required Parts

76-02122-00 Engine Bracket Kit

Quantity	Part Number	Part Description
1	68-08775-50	Bracket, Engine
3	34-60002-08	Washer, Bellville M8
2	34-01342-30	Screw, Cap Hexhd, M8 x 30mm Hex
2	34-01184-108	Nut, Lock, M8 Nylock
1	34-00372-123	Washer, Ext Tooth, M8

76-02110-00 Bottom Panel Kit

Quantity	Part Number	Part Description
1	79-02479-00	Panel, Bottom
8	34-60044-04	Screw, Washer HD, M6 x 35mm Torx
8	58-60306-06	Washer, Nylon M6-18






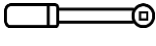
74-50184-00 Hardware Kit

Quantity	Part Number	Part Description
6	34-60002-08	Washer, Bellville M8
3	34-01184-108	Nut, Lock, M8 Nylock
3	34-00876-45	Screw, Cap Hexhd, M8 x 45mm
10	66-U---1--3882	Wire Tie

Additional Parts

Part Number	Part Description
Obtain Locally	Insulating Spray Varnish

Required Tools

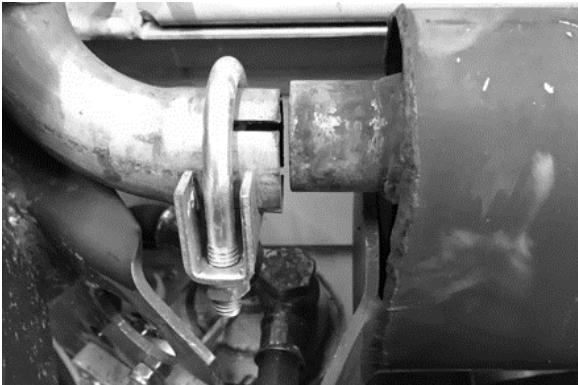

Tool	Part Number	Part Description
	Obtain Locally	Socket, 14mm
	Obtain Locally	Socket, 13mm
	Obtain Locally	Wrench 13mm
	Obtain Locally	Socket, Torx T30
	Obtain Locally	Diagonal Cutter
	Obtain Locally	Torque Wrench (8-35 ft-lbs)



Unit may start automatically at any time even if switch is in the OFF position. Use proper lockout / tagout procedures before inspection / servicing. All unit inspection / servicing to be performed by properly trained personnel only.

Engine Bracket Installation

Note: This procedure is only necessary if the unit does not have the engine bracket installed.

1	Open top grille, if installed. Open curbside door.
2	<div style="display: flex; align-items: center;">  <div> <p>Loosen exhaust tip clamp. Remove exhaust tip from muffler.</p> <div style="border: 1px solid black; padding: 5px; display: inline-block; margin-top: 10px;">  </div> </div> </div>

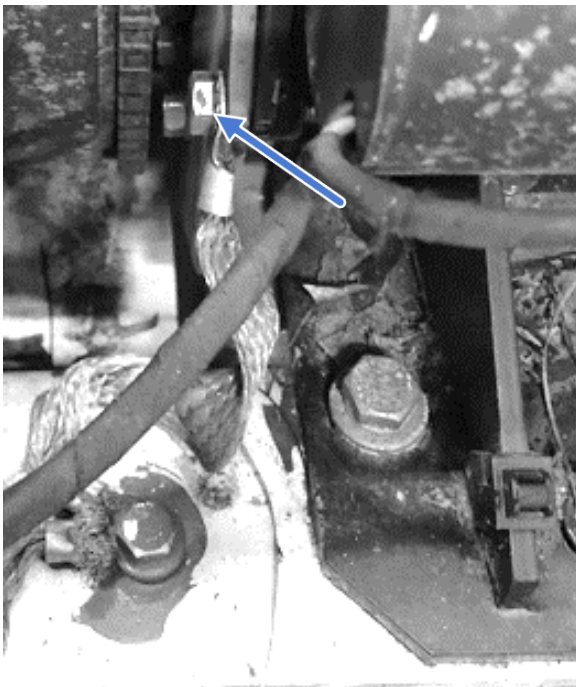
3



Remove hardware securing oil and fuel filter base to the frame.



4



Remove ground strap hardware from engine plate.

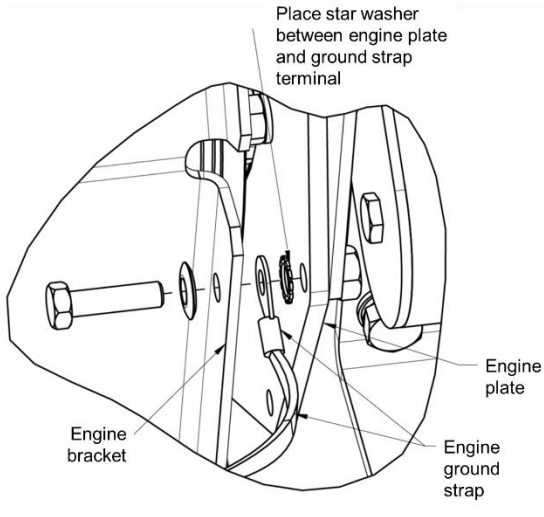
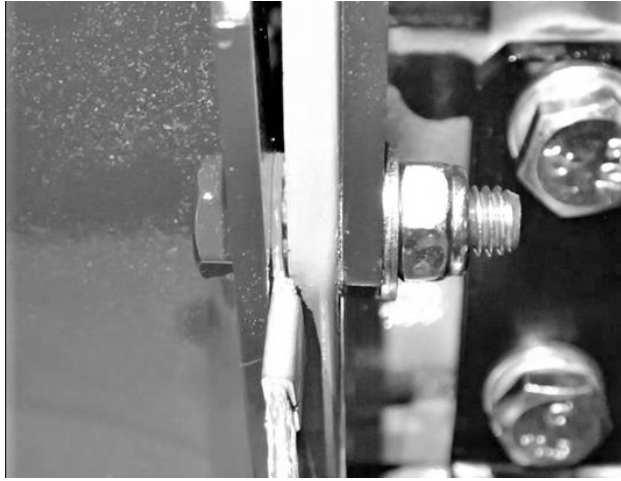
Inspect engine plate for corrosion at the ground strap mounting location.

Inspect ground strap terminal for corrosion.

Clean engine plate and ground strap terminal as required.



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Carefully slide the engine bracket into place and hand tighten the top bolt/washer.

Note: The fuel solenoid bracket hardware configuration may differ between models. The engine bracket kit contains hardware for both insert/stud and loose hardware configurations.

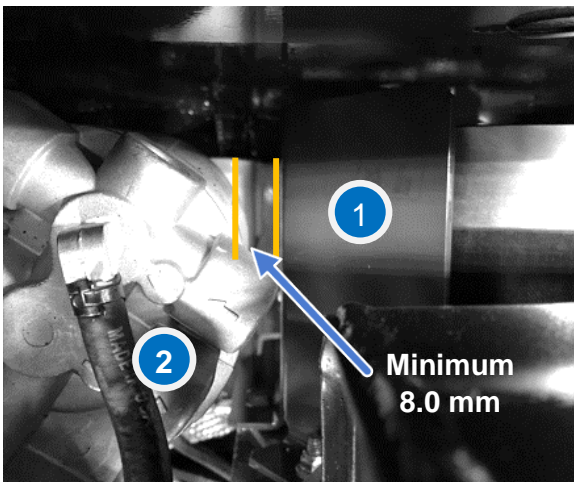
Install bottom bolt ensuring engine ground ring terminal and star washer are between the engine bracket and engine plate. Orient terminal so that the flat side faces the engine bracket.

Tighten bolts.

Apply insulating spray varnish at ground connection.



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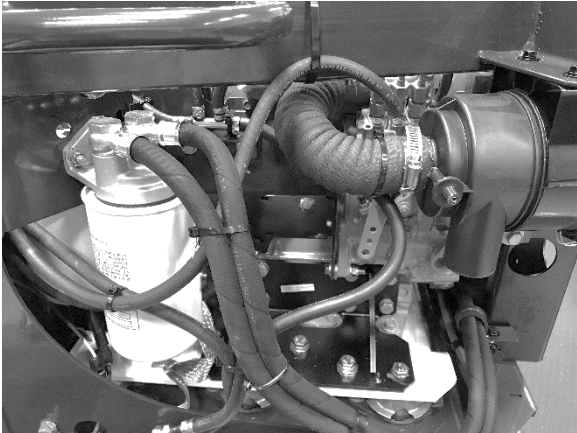

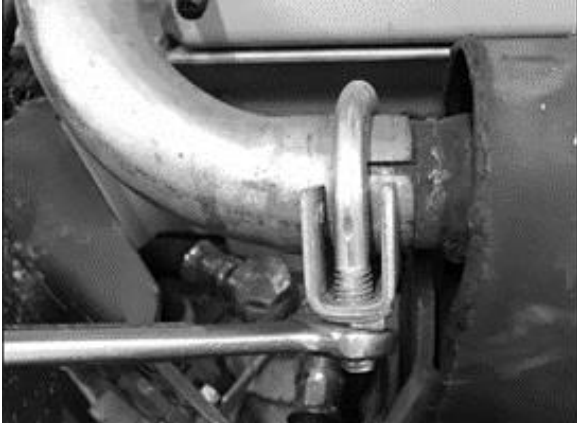

Reinstall oil and fuel filter base using the hardware supplied with the hardware kit.



When installing filter base, verify that there is a minimum 0.31" (8.0 mm) gap between the engine bracket and the rear filter.


1. Engine bracket
2. Rear filter

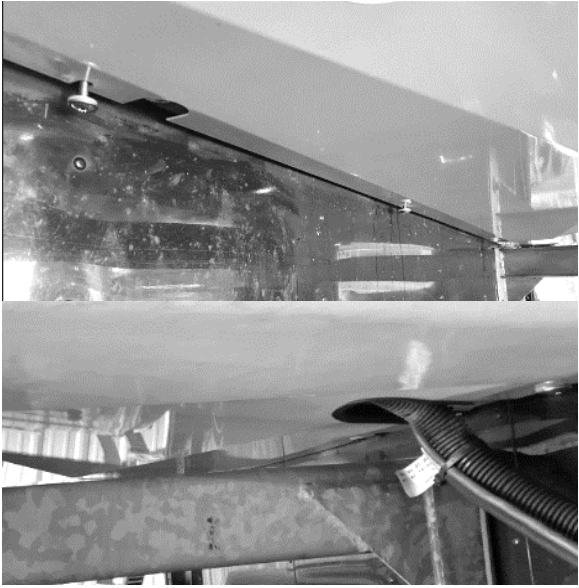

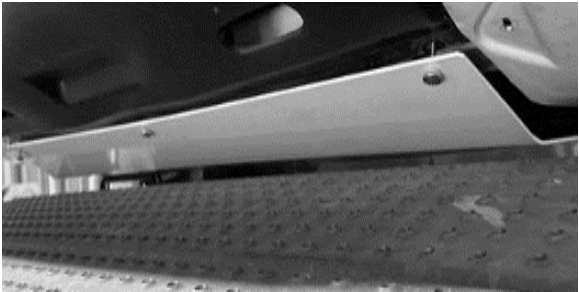

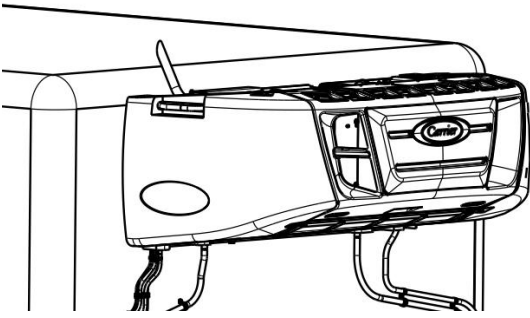



8		<p>Secure oil and fuel lines with with cable ties to prevent them from being rubbed, pinched, or damaged.</p> <div data-bbox="841 222 1490 310" style="border: 1px solid black; background-color: #e67e22; padding: 5px; text-align: center;">  WARNING </div> <p>Oil and fuel lines must be secured so that they will not be rubbed, pinched, or damaged. Damaged fuel or oil lines can allow flammable liquid to leak that may result in fire, property damage, or personal injury.</p>
9		<p>Reinstall exhaust tip on muffler.</p> <p>Tighten clamp.</p> <div data-bbox="829 800 1052 905" style="text-align: center;">  <p>17-20 ft-lb</p> </div>

Bottom Panel Replacement

Note: This procedure is only necessary if the unit has a plastic bottom panel installed.

1	<p>Remove the roadside panel</p> <p>Remove bottom panel</p>	
2		<p>Install the five Torx bolts with a nylon washer halfway in each of the holes at the rear of the unit.</p>

<p>3</p>		<p>Carefully lift the bottom panel and align each of the slots with the bolts previously installed.</p> <p>Ensure all cables and hoses are routed through the panel openings and do not rub the panel edge.</p> <div data-bbox="824 323 1474 411" style="border: 1px solid black; background-color: #e67e22; padding: 5px; text-align: center;">  WARNING </div> <p>Ensure all cables and hoses are routed through the panel opening and do not rub on the panel or other components. If cables and hoses are not routed and secured properly it may result in damage. Damaged hoses and cables may cause fire that can result in personal injury or property damage.</p>
<p>4</p>		<p>While holding the panel in place, insert the three remaining bolts with nylon washers into the holes at the front of the unit.</p> <p>Tighten the bottom panel bolts.</p> <div data-bbox="813 947 927 1100" style="text-align: center;">  <p>T30 10 ft-lb</p> </div>
<p>5</p>		<p>Reinstall roadside panel, close curbside door, and close top grille if installed.</p> <p>Tighten door and top grille hardware.</p> <div data-bbox="818 1335 937 1472" style="text-align: center;">  <p>10 5-10 ft-lb</p> </div>