

TROUBLESHOOTING

Troubleshooting Diagnosis Chart

⚠ WARNING

Troubleshooting and repair procedures must be performed as specified by an authorized service technician only. Failure to do so may result in serious bodily injury and/or property damage.

If a problem occurs with your Rampvan®, **discontinue operation immediately! Do not** attempt repairs yourself. Contact your sales representative or call The Braun Corporation at 1-800-THE LIFT. One of our national Product Support representatives will direct you to an authorized service technician who will inspect your Rampvan®.

The cause of the problem can be determined by locating the function and related symptom in the Troubleshooting Diagnosis

Charts. The specific cause and remedy can then be determined by process of elimination. Electrical Schematics and Wiring Diagrams are provided to aid in troubleshooting.

A Repair Parts section with exploded views and corresponding parts lists is also provided. **Correct the problem if possible. If the problem continues, contact The Braun Corporation.**

FUNCTION	SYMPTOM	POSSIBLE CAUSE	REMEDY
1.00 NO OPERATION	1.10 No Power To Rampvan® Systems (Circuit Problem)	1.11 Poor ground connection 1.12 Battery terminals dirty 1.13 Battery damaged 1.14 Battery discharged 1.15 12 volt source (check fuses for 12 volts) 1.16 Circuit breaker tripped or damaged	Clean and tighten Clean and tighten Replace Charge battery Check for blown fuse, loose terminals or broken wire or cable Reset or Replace
	1.20 Power to Rampvan® Systems But No Operation	1.21 Transmission not in Park 1.22 OEM Slide Door Off switch pressed to "IN" position 1.23 Slide door handles have been manually operated 1.24 Loose connection 1.25 Broken wire 1.26 Wire terminal 1.27 Control switch damaged 1.28 Braun electronic controller	Engage transmission in Park Press switch and return to OUT position Close passenger slide door using keyless entry, interior mounted switch or optional magnetic entry Clean and tighten Repair or replace Crimp tightly to wire Replace Run serial diagnostic test and/or reset by unplugging 6-pin connector from the controller for 30 seconds.

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FUNCTION	SYMPTOM	POSSIBLE CAUSE	REMEDY
2.00 KNEEL SYSTEM (LOWER)	2.10 No Lower Operation	2.11 See 1.00 2.12 Kneel On/Off switch is in OFF position. 2.13 Actuator harness disconnected or otherwise damaged 2.14 Actuator damaged. Note: Actuator can be checked with kneel override switch (passenger side C-Pillar). 2.15 Chain disconnected or otherwise damaged	Press switch to ON position Connect, repair or replace Press the kneel electrical override switch to test actuator (passenger side C-pillar). Replace if damaged Connect, repair or replace
	2.20 Faulty Kneel (Lower) Operation	2.21 Mechanical binding 2.22 Misalignment or damage to kneel system components. Inspect kneel actuator assembly for: <ul style="list-style-type: none"> • Actuator mounting pin securement (loose or missing) • Inspect chain for wear, misalignment, or other damage • Inspect chain pulley for securement, wear, misalignment or damage 	Check and correct Connect, replace or otherwise correct as needed
3.00 POWER DOOR (OPEN)	3.10 No Open Operation (Motor Does Not Run)	3.11 See 1.00 3.12 Door microswitch(es) damaged 3.13 Door operator motor harness disconnected or damaged 3.14 Door operator motor damaged	See Braun Service Center See Braun Service Center See Braun Service Center
	3.20 Motor Runs But Door Does No Move	3.21 Misaligned or otherwise damaged drive cable or door track 3.22 Door motor clutch failure	See Toyota Service Center See Toyota Service Center
	3.30 Faulty Open Operation	3.31 Obstruction in door path 3.32 Mechanical binding	Remove obstruction Check and correct
	3.40 Door Does Not Open Fully	3.41 Door Open microswitch out of adjustment or otherwise damaged 3.42 See 3.30	See Braun Service Center

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FUNCTION	SYMPTOM	POSSIBLE CAUSE	REMEDY
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4.00 FOLDOUT RAMP DEPLOY	4.10 No Unfold (Deploy) Operation	4.11 See 1.00 and 3.41 4.12 Ramp motor harness disconnected or damaged 4.13 Loose, damaged or missing fold arm securement collar/coupling and/or screws 4.14 Ramp Unfolded (Deployed) microswitch out of adjustment or damaged 4.15 Ramp motor damaged	Connect, repair or replace Tighten, replace or otherwise correct as needed Adjust or replace. Pre-2007 Ramp: Switch adjustment not available Replace motor
	4.20 Ramp Contacts Door	4.21 Door not fully open	See Braun Service Center
	4.30 Faulty Unfold (Deploy) Operation	4.31 Ramp Unfolded (Deployed) microswitch harness disconnected or damaged 4.32 Misalignment or damage to: <ul style="list-style-type: none"> • Ramp fold bearing • Ramp fold arm • Ramp fold arm bearing slot • Ramp pivot points or hinge(s) 4.33 Mechanical binding 4.34 Fold/Unfold assist spring broken, disconnected or otherwise damaged (manual ramps only) 4.35 See 3.41 and 4.14	Connect, repair or replace Realign, tighten, replace damaged parts or otherwise correct as needed Check and correct Connect or replace spring
	4.40 Faulty Ramp Extension Unfold (Deploy)	4.41 Ramp extension chain broken, detached, misaligned or otherwise damaged 4.42 Lack of lubrication 4.43 Ramp hinge damage	Replace, attach, realign or otherwise correct Lubricate - See Maintenance and Lubrication Schedule Correct or replace as needed

5.00 FOLDOUT RAMP STOW	5.10 No Fold (Stow) Operation	5.11 See 1.00 5.12 Ramp Folded (Stowed) microswitch out of adjustment or damaged 5.13 See 3.41, 4.12, 4.13 and 4.15	Adjust or replace
	5.20 Faulty Fold (Stow) Operation	5.21 Ramp Folded (Stowed) microswitch harness disconnected or damaged 5.22 Fold arm support/stop out of adjustment 5.23 See 3.41, 4.13, 4.14, 4.32, 4.33, 4.42 and 4.43	Connect, repair or replace Adjust support/stop for more travel

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FUNCTION	SYMPTOM	POSSIBLE CAUSE	REMEDY
6.00 INFLOOR RAMP DEPLOY	6.10 No Out (Deploy) Operation	6.11 See 1.00 and 3.41 6.12 Ramp motor harness disconnected or damaged 6.13 Loose, damaged or missing belt, drive pulley or belt securement components 6.14 Ramp Out (Deploy) microswitch out of adjustment or damaged 6.15 Ramp motor damaged	Connect, repair or replace Tighten, replace or otherwise correct as needed Adjust or replace Replace motor
	6.20 Ramp Contacts Door	6.21 Door not fully open	See Braun Service Center
	6.30 Faulty Out (Deploy) Operation	6.31 Ramp Out (Deploy) microswitch harness disconnected or damaged 6.32 Misalignment or damage to: <ul style="list-style-type: none"> • Loose or missing ramp mounting hardware • Loose or missing linear bearing block mounting hardware • Loose or damaged linear slide tube(s) • Linear slide tube bearing(s) loose or damaged 6.33 Carriage height out of adjustment (slide components dragging on internal frame) 6.34 Lateral alignment roller(s) loose, damaged or missing 6.35 Mechanical binding 6.36 See 3.41, 6.13 and 6.14	Connect, repair or replace Realign, tighten, replace damaged parts or otherwise correct as needed Adjust carriage height adjustment screw (clockwise to raise carriage and counter clockwise to lower) Tighten, replace or otherwise correct as needed. Rear outboard roller is adjustable Check and correct
7.00 INFLOOR RAMP STOW	7.10 No In (Stow) Operation	7.11 See 1.00 7.12 Ramp In (Stow) microswitch out of adjustment or damaged 7.13 See 3.41, 6.12, 6.13 and 6.15	Adjust or replace
	7.20 Faulty In (Stow) Operation	7.21 Ramp In (Stow) microswitch harness disconnected or damaged 7.23 See 3.41, 6.13, 6.14, 6.32, 6.33, 6.34 and 6.35	Connect, repair or replace

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FUNCTION	SYMPTOM	POSSIBLE CAUSE	REMEDY
8.00 POWER DOOR (CLOSE)	8.10 No Close Operation	8.11 See 3.10, 4.12, 5.12 and 7.12	
	8.20 Motor Runs - Door Does Not Move	8.21 See 3.20	
	8.30 Faulty Operation	8.31 See 3.30	
	8.40 Door Does Not Close Fully	8.41 See 3.30	
	8.50 Door Contacts Ramp When Closing	Foldout Ramps: 8.51 See 4.40, 5.12 and 5.20 Infloor Ramps: 8.52 See 6.32, 6.33, 6.34, 6.35, 6.36 and 7.12	
9.00 KNEEL SYSTEM (RAISE)	9.10 No Raise Operation	9.11 See 1.00, 2.12, 2.13, 2.14, 2.15 and 2.20	
	9.20 Faulty Operation	9.21 See 2.20	
10.00 REMOTE CONTROL	10.10 No Operation	10.11 See 1.20 10.12 See Toyota vehicle owner's manual	
11.00 KNEEL ELECTRICAL OVERRIDE	11.10 No Operation	11.11 See 1.00, 2.13, 2.14 and 2.15 11.12 Kneel electrical override switch damaged	Replace switch
	11.20 Faulty Operation	11.21 See 2.20	

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FUNCTION	SYMPTOM	POSSIBLE CAUSE	REMEDY
12.00 KNEEL MECHANICAL OVERRIDE	12.10 No Operation	12.10 Kneel motor release nut missing from actuator motor shaft	Replace nut