



Engine Armor Installation Instructions

KTM/Husky

Please refer to your owners manual for any basic coolant instructions, Specs, etc.

If you are not comfortable with installation, professional installation may be required

If you are not using a Thermo-Bob Thermostat, custom plumbing may be required.



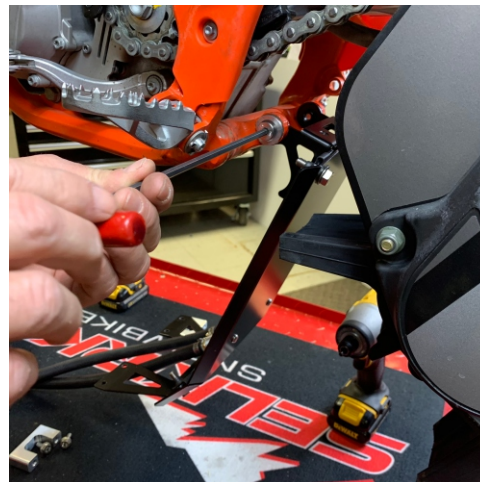
1. Drain coolant. Drain plug has crush washer and is on water pump housing.
2. Remove seat and radiator shroud plastics.
3. Remove fuel tank. (Optional, recommended for best access)
4. Remove skid plate and pipe guard if installed. Not used.



5. Remove left side radiator guard.
6. Gently pull bottom of left side radiator out slightly to remove from lower radiator hose.
7. Coolant will drip out, use care when flexing still attached upper radiator hose.
8. Remove left side lower radiator hose completely from engine.



9. Locate skid plate assembly.
10. Do not remove mounting brackets or heat exchanger.
11. Remove 2-8mm flat head bolts and bushings from rear bracket.
12. Remove 4-6mm flange head bolts and frame clamps from front bracket.



13. Install skid plate assembly on rear linkage mounts
14. Use 2-8mm flat head bolts and bushings. Use blue loctite.
15. Note left side has flat on side of bushing to fit linkage bracket.
16. Snug but do not tighten bolts.



17. Push skid plate assembly up tight to frame.
18. Install 2-front frame clamps with 4-6mm flange head bolts.
19. Use blue loctite.
20. Tighten 4-6mm bolts and 2-8mm rear bolts evenly and torque.



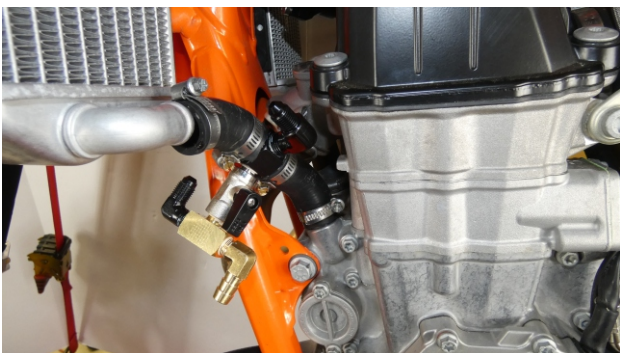
21. Install Selkirk Thermo-Bob thermostat and bypass in radiator hoses as shown.
22. Mark and cut section from stock hoses as required.
23. Mark a line lengthwise on hose to align ends after cutting.
24. Note bypass is offset from center of hose. Cut section out off center towards radiator.



25. Assemble upper thermostat/hose/clamp assembly. Leave clamps slightly loose.
26. Assemble lower bypass/hose/clamp assembly. Leave clamps slightly loose.
27. Re-install thermostat hose assembly for test fit.
28. Re-install left lower radiator hose/bypass assembly for test fit.



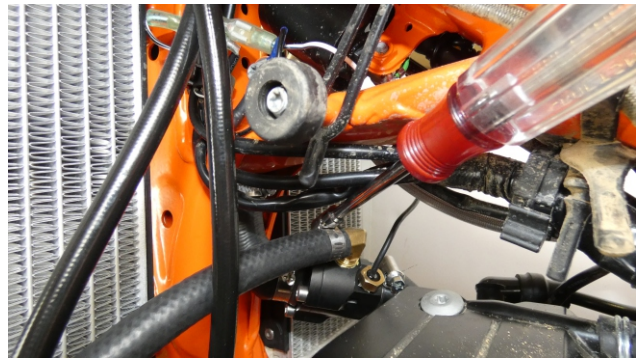
29. Check thermostat fit and alignment. Orient bypass fitting as shown.
30. Check for fan, frame, and engine clearance. Leave space for vibration.
31. Check hose for any kinks. Adjust hose cutout length, orientation as required for smooth fit.
32. Orient clamps for easy field access if needed and tighten all.



33. Install lower radiator hose assembly on engine, then install radiator into hose as shown.
34. Orient bypass assembly for clearance to engine and frame.
35. Seat radiator fully on mounting bosses, and adjust hoses for proper fit.
36. Orient clamps for field access and tighten all.



37. Route heat exchanger hoses as shown. Keep away from exhaust pipe.
38. Leave hoses with a little extra length to allow skid plate to drop down when removed.
39. Install hose clamp, and push on bypass assembly brass fitting.



40. Route long heat exchanger hose.
41. Install hose clamp, and push on to brass thermostat fitting.



42. Remove 4-8mm flange head bolts from skid plate and drop down.
43. Note distance between front of skid plate and front frame mount bracket as shown.
44. Adjust hose length and routing as needed to allow skid plate to drop down with clearance.
45. Tighten thermostat and bypass hose clamps and re-install skid plate.



- 46. Install long 30" heated bar return hose on this fitting.
- 47. No sealant is needed on these -4 AN tapered fittings.
- 48. Route up to top of left side radiator and through forks and triple clamps.



- 54. Check bar valve placement at full left turn as shown.
- 55. Orient bar valve for operation and clearance.
- 56. Tighten all -4 tapered fittings as needed to clock valve in correct location.



- 49. Install 15" heated bar hose with in-line bar valve on this fitting. Do not tighten yet.
- 50. No sealant is needed on these AN tapered fittings.
- 51. Route hose up behind radiator and through left side of forks.



- 57. Position snow shield over skidplate/heat exchanger assembly as shown 90 degrees to bike.
- 58. Raise snow shield up past skid plate and turn 90 degrees to locate snow shield into place on mounting brackets.



- 52. Loctite heated bar valve as shown.
- 53. Keep metal fittings from contacting aluminum radiator.



- 59. If enough slack was left in hoses to let skid plate drop down snow shield can be positioned without force.
- 60. Skid plate may be removed from heat exchanger by removing 4-6mm pan head torx screws for easier access and re-installed after snow shield is in position.



- 61. Install 2-6mm x 16mm flange head bolts part way through rear of snow shield to help hold shield in position.
- 62. Install 4-8mm x 25mm flange head bolts through skid plate and snow shield to thread into mounting brackets finger tight.



- 63. Remove 2-6mm flange bolts from rear of shield and install rear panel.
- 64. Work plastic flap up through track kit swing arm yoke to cover rear of engine case.
- 65. Blue Loctite rear panel bolts and use a ratcheting 10mm box end wrench to install bolts. Do not tighten yet.



- 66. Remove 2 stock subframe torx head bolts.
- 67. Install lower side panels with 5-6mm x 12mm button head torx screws.
- 68. Start at front of lower panel installing screws, use blue Loctite. Tighten screws.
- 69. Install 8mm x 30mm flat head bolts with bushings in place of stock subframe bolts on outside of any plastics. Use blue Loctite.



- 70. Tighten 4-8mm skid plate bolts and 2-6mm rear panel bolts evenly all around.
- 71. A small amount of anti-seize or lube on skid plate bolts will help keep bolts and u-nuts working smoothly with repeated use.
- 72. Skid plate bolts should be able to be removed and replaced easily without tools for easy oil change.



- 73. Quick oil change is accessed by removing 4-skid plate bolts and 2-6mm torx screws/trim piece behind shifter. Lift side panel and hold out of way with zip-tie or other.
- 74. For complete access and/or filter change left side panel can be rotated up out of the way around subframe bolt by removing 3-additional 6mm button head torx screws for complete access. Or removed completely.
- 75. Always blue Loctite lower side panel screws and subframe bolt.



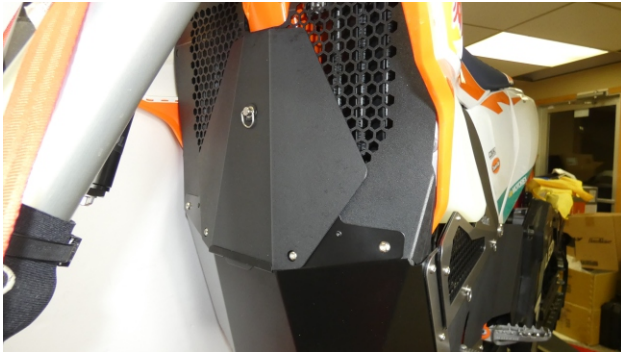
- 76. Remove front fender and trim back section off to provide clearance for radiator shield with removable powder panel. Cutting back of fender also allows more airflow to radiators for cooling.
- 77. Selkirk Supermoto front fender and number plate bracket assembly is pre-fit for Engine Armor and shorty fender will not stab you or your riding partner in the face when giving a friendly ski pull.



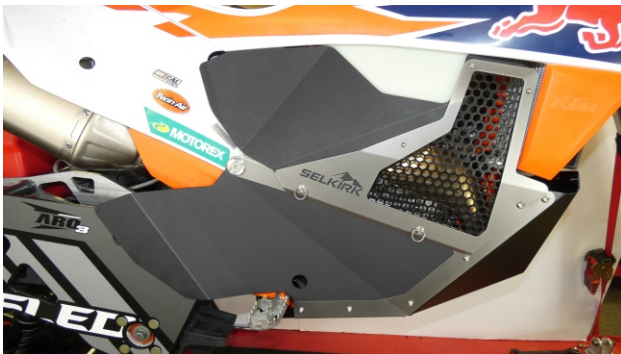
78. Remove powder panel from radiator shield assembly using quarter turn fastener.
79. Install front radiator shield with 4-6mm button head torx screws. Start with middle screws to locate panel in place. Blue Loctite, tighten screws evenly.



84. Insert plastic tabs behind bike plastic or frame as required to secure upper panels after panel is installed.



80. Install powder panel by inserting lower tab into slot, push in and turn quarter turn fastener.
81. Powder panel will help regulate temps from slow moving, low snow conditions to deep powder riding.



82. Install upper side panels custom fit to individual bike and tank combination.
83. Insert front bushing into slot, push in and lock quick release quarter turn fasteners.