



Case study

# Side Mirror Install

Safety and ergonomics with the Power Focus 6000



## The Challenge 1 2 3 4

Our off-road customer had encountered a number of instances of side mirrors becoming loose, leading to costly field repairs and the need for a rework station on the line. The decision was made to raise the torque for bolt tightening to 73Nm, putting it above the safe limit for one-handed tool use. Torque arms were suggested as a possible solution, but this would have been costly and dramatically limited operator freedom of movement and reduced productivity.



*Loose mirrors were leading to costly field repairs and damaging reputation.*

## The Solution 1 2 3 4

We recommended the Power Focus 6000 with a right-angle Tensor STR tool and TurboTight® technology. Now using one tool, rather than three, and eliminating the need for torque reaction devices entirely, the operators were free to move quickly and safely around the vehicle. This radically reduced installation time, eliminated reworks, and enhanced operator comfort and safety. The traditional solution had employed a 4.5ft click wrench for final tightening – with TurboTight®, the same process could be completed one-handed.



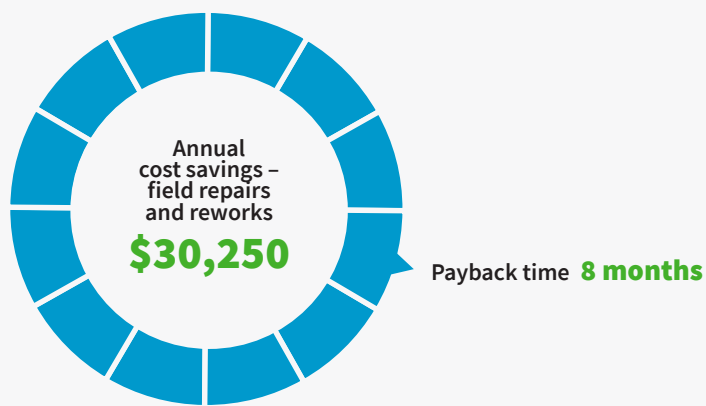
*No torque reaction devices meant operators were now free to move quickly and safely.*

## The Business Justification 1 2 3 4

Not only has our solution made a dramatic change to operator safety and comfort, it has also had significant cost saving and profit implications. Field repairs and reworks previously represented a significant cost, not to mention damage to reputation.



*Field repairs and reworks were proving costly.*



## The Validation 1 2 3 4

In partnership with our customer’s safety and ergonomics team, we conducted in-depth testing on the new solution, involving three days of intensive study. Since approval in September 2017, all four stations implementing the Power Focus 6000 have reported zero reworks and follow-up visits have also shown no field repairs necessary. Operators now find themselves with additional time on sub-assemblies, leading to greater productivity. The customer is now looking at further expansion into wireless tools, thanks to the Virtual Station option available.



*The result? Zero field repairs, zero reworks, and a satisfied customer.*