

Mismatches with Liner

When allowance was made for a 6mm liner interposed between the top of the fifth wheel and the skid plate, it was found that:

interference between the bottom of the fifth wheel jaws and the lower section of the kingpin would occur in 85/780 cases (11 %)

if fifth wheels not complying with the lower jaw dimensions of AS 1773 are excluded from consideration, the mismatch rate becomes 61/754 (8%)

if fifth wheels not complying with the lower jaw dimensions of AS 1773 and kingpins not complying with the lower section dimensions of AS 2175 are excluded from consideration, the mismatch rate becomes 24/667 (3.6%)

interference between the top of the fifth wheel jaws and the upper section of the kingpin would occur in 10/780 cases (1 %).

The total mismatch rate with a liner is 12%. If liners are only fitted to fifth wheels complying with AS 1773, the total mismatch rate with a liner becomes 9%.

Effect of Selective Fitting of Liners

Fitting liners only to fifth wheels with a JB (Fig 1) dimension of 66.5mm or less (the AS 1773 requirement) leads to lower jaw mismatch of 8% and a total mismatch rate of 9%.

Fitting liners only to fifth wheels with a JB dimension of 64mm or less would lead to a lower jaw mismatch rate of 3% and a total mismatch rate of 4%.