## Progressing break test

.1. Progressing break test :after thetest vehicle has reached the prescribed maximum speed the vehicle is slowed down to $20 \mathrm{~km} / \mathrm{h}$ by operating the brake according to either braking method $A$ or $B$ and then a rapid braking is applied. Braking A,moderate braking
Braking B.firm braking
.2. Test vehicle . mini van type vehicle
.3. Seats. A CRS equipped a webbing sensor is attached to the right seat in the second row from front.
. A CRS equipped with a vehicle sensor is attached to the left seat in the second row from front.
. . CRS is attached to the central seat in the second row from front.
.4. Dummy . VIP3C
.Conclusions.
1.In the progressing brake test, CRS with a vehicle sensor andCRS with a webbing sensor are equivalent in safety.
2.Although the maximum displacement of CRS with a vehicle sensor reaches 18 mm, this does not pose any safety problems.

|  | Speed test method | Vehicle body G <br> (sensor on floor) <br> Max G | Sample | ```Forward disp dummy head position befo testing)``` | cement of mm (head and after | Webbing <br> displacement <br> from ELR mm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Braking A or B | Rapid braking |  |
| 1 | Max speed 50 km Braking A | Braking A 0.3G <br> Rapid braking 1.1 | $\begin{array}{ll} \hline \text { CRS } & \text { with } \\ \text { vsir } & \\ \hline \end{array}$ | 0 | 10 | 0 |
|  |  |  | CRS with wsir | 0 | 0 | 0 |
|  |  |  | Without CRS | 0 | 325 | --- |
| 2 | Max speed 50 km Braking A | Braking A 0.28G <br> Rapid braking 1.1 | CRS with vsir | 0 | 0 | 0 |
|  |  |  | $\begin{array}{ll} \hline \text { CRS } & \text { with } \\ \text { wsir } \end{array}$ | 0 | 1 | 0 |
| 3 | Max speed 50 km Braking B | Braking B 0.33 <br> Rapid braking $0.76$ | $\begin{array}{ll} \hline \text { CRS } & \text { with } \\ \text { vsir } & \\ \hline \end{array}$ | 0 | 12 | 0 |
|  |  |  | CRS with wsir | 0 | 2 | 0 |
|  |  |  | Without CRS | 0 | 413 | --- |
| 4 | Max speed 50 km Braking B | Braking B 0.33 <br> Rapid braking 1.1 | CRS with vsir | 0 | 13 | 0 |
|  |  |  | CRS with wsir | 0 | 2 | 0 |
| 5 | Max speed 40 km Braking A | Braking A 0.22 <br> Rapid braking 1.2 | $\begin{array}{ll} \hline \text { CRS } & \text { with } \\ \text { vsir } \end{array}$ | 0 | 0 | 0 |
|  |  |  | CRS with wsir | 0 | 0 | 0 |
|  |  |  | Without CRS | 0 | 220 | --- |
| 6 | Max speed 40 km Braking A | Braking A 0.3 <br> Rapid braking 1.2 | CRS with vsir | 0 | 18 | 0 |
|  |  |  | $\begin{array}{ll} \hline \text { CRS } \\ \text { wsir } \end{array} \quad \text { with } \quad .$ | 0 | 2 | 0 |
| 7 | Max speed 40 km Braking B | Braking B 0.4 <br> Rapid braking 1.1 | $\begin{array}{ll} \hline \text { CRS } & \text { with } \\ \text { vsir } & \\ \hline \end{array}$ | 0 | 0 | 0 |
|  |  |  | CRS with wsir | 0 | 2 | 0 |
|  |  |  | Without CRS | 0 | 138 | --- |
| 8 | Max speed 40km Braking B | Braking B 0.35 <br> Rapid braking 1.2 | $\begin{array}{ll} \hline \text { CRS } & \text { with } \\ \text { vsir } & \\ \hline \end{array}$ | 0 | 18 | 4 |
|  |  |  | CRS with wsir | 0 | 3 | 0 |



Dummy head displacement of without crs



