

Improvements in handling have been made during recent development of the UN46. There are hardware, program, and ride trade-offs associated with this improvement. Further improvement is desired, especially in the 4x4 - 2 door.

The hardware changes which have resulted in the best vehicle to date are:

- Ranger front spring rates
- P225/70R15 tire maximum (delete P235 and P245)
- Reduce front tire pressure from 35 psi to 30 psi

Future actions to be evaluated which are expected to give further improvements are:

- Revised rear spring rates (increase proportional to front, CG effect approximately .20 inch)
- Optimization of rear stabilizer bar with new rear springs.
- Revised RGAWR to reflect the following loadings:
 - 2 + 2 + 150 lbs. for 2 door models
 - 2 + 3 + 150 lbs. for 4 door models(rear spring rating to support load specified, CG effect could be .30 - .60 inch)

Long term action includes increasing track width.

Open issues to the program:

- Marketing implications of tire size limitation
- Fuel economy and tire wear effect of reduced front tire pressure
- Ride / Durability effects of stiffer rear springs
- Acceptability of reduced RGAWR

Open issues to further development:

- Prototype availability; only 2 of 4 vehicle models have been evaluated, measured or analyzed.
- Latest schedule indicates a reduction, not an increase in Ride/Handling prototype availability.
- Prototype hardware; revised rear springs not available for at least 8 weeks (February '89).

Attachments:

- Subjective evaluation summary
- Measured data for understeer coefficients and vehicle roll

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EXPT 0786