A design concept of a backup clutch for a magnetic gear is shown in the figure. During normal operation the backup clutch does no work, but in case of slippage it contacts a pin arrangement in the driven gear, providing extra force for continuing output.

This concept is novel in that it provides a simple easily constructed safety clutch for a magnetic gearing system, which does not interfere with normal, noncontact action. The mechanical backup makes possible quiet magnetic gears.

**Notes:**

1. This development is in the conceptual stage only, and as of date of publication of this Tech Brief neither a model nor prototype has been constructed.
2. The concept may be of interest to manufacturers and users of magnetic gears and frictionless power trains.
3. No additional documentation is available. Specific questions, however, may be directed to:
   Technology Utilization Officer
   Manned Spacecraft Center
   Houston, Texas 77058

**Patent status:**
No patent action is contemplated by NASA.

Source: Robert A. Shefke of The Garrett Corporation under contract to Manned Spacecraft Center (MSC-13408)