TRANSMISSION NOISE

EXTERNAL MOVING PARTS
  ➔ CHECK FOR ACCUMULATED DEBRIS
    ➔ IF FOUND
        ➔ REMOVE DEBRIS
  ➔ TRANSMISSION OIL LEVEL
    ➔ CHECK OIL LEVEL
      ➔ IF LOW
          ➔ FILL TO CORRECT LEVEL
  ➔ BRAKE ASSEMBLY
    ➔ CHECK LINKAGE
      ➔ IF BENT OR BROKEN
          ➔ ADJUST OR REPLACE DAMAGED PARTS
  ➔ TRANSMISSION DRIVE BELT
    ➔ CHECK FOR WEAR OR DAMAGE
      ➔ IF WORN OR DAMAGED
          ➔ ADJUST OR REPLACE BELT
  ➔ FAN
    ➔ CHECK FAN BLADES
      ➔ IF CRACKED OR INTERFERENCE
          ➔ REPLACE FAN
  ➔ IDLER PULLEY
    ➔ CHECK IDLER PULLEY ASSEMBLY
      ➔ IF WORN
          ➔ ADJUST OR REPLACE DAMAGED PARTS
  ➔ INPUT SHAFT PULLEY
    ➔ INSPECT PULLEY, SPLINES, SHAFT & SNAP RING
      ➔ IF WORN
          ➔ REPLACE DAMAGED PARTS
  ➔ INTERNAL ROTATING GROUPS AND DIFFERENTIAL ASSEMBLY
    ➔ CHECK FOR WEAR OR DAMAGE
      ➔ IF FOUND
          ➔ REPLACE DAMAGED PARTS OR COMPLETE TRANSMISSION
TRANSMISSION OVERHEATING

- COOLING FINS ON TRANSMISSION
  - CHECK FOR ACCUMULATED DEBRIS
    - IF FOUND
      - REMOVE DEBRIS
  - TRANSMISSION OIL LEVEL
    - CHECK OIL LEVEL
      - IF LOW
        - FILL TO CORRECT LEVEL
    - BRAKE ASSEMBLY
      - CHECK LINKAGE
        - IF BENT OR BROKEN
          - ADJUST OR REPLACE DAMAGED PARTS
      - TRANSMISSION DRIVE BELT
        - CHECK FOR WEAR OR DAMAGE
          - IF WORN OR DAMAGED
            - ADJUST OR REPLACE BELT
      - FAN
        - CHECK FAN BLADES
          - IF CRACKED OR INTERFERENCE
            - REPLACE FAN
LOW POWER: ONE OR BOTH DIRECTIONS

- TRANSMISSION COOLING FINS
  - CHECK FOR ACCUMULATED DEBRIS
    - IF FOUND: REMOVE DEBRIS
  - TRANSMISSION OIL LEVEL
    - CHECK OIL LEVEL
      - IF LOW: FILL TO CORRECT LEVEL
  - BRAKE ASSEMBLY
    - CHECK LINKAGE
      - IF BENT OR BROKEN: ADJUST OR REPLACE DAMAGED PARTS
  - TRANSMISSION DRIVE BELT
    - CHECK FOR WEAR OR DAMAGE
      - IF WORN OR DAMAGED: ADJUST OR REPLACE BELT
  - AXLE/WHEEL HUBS
    - CHECK KEYS
      - IF BROKEN OR MISSING: REPLACE KEYS
  - ENGINE RPM
    - CHECK OPERATOR'S MANUAL
      - ADJUST OR REPLACE
  - BYPASS VALVE
    - CHECK LINKAGE
      - IF WORN: ADJUST OR REPLACE
  - INPUT SHAFT PULLEY
    - INSPECT PULLEY, SPLINES, SHAFT & SNAP RING
      - IF WORN: REPLACE DAMAGED PARTS
  - INTERNAL ROTATING GROUPS AND DIFFERENTIAL ASSEMBLY
    - CHECK FOR WEAR OR DAMAGE
      - IF FOUND: REPLACE DAMAGED PARTS OR COMPLETE TRANSMISSION
WILL NOT OPERATE IN ONE OR BOTH DIRECTIONS

- PARKING BRAKE
  - CHECK
  - IF ENGAGED
    - DISENGAGE
  - IF LOW
    - FILL TO CORRECT LEVEL

- TRANSMISSION OIL LEVEL
  - CHECK OIL LEVEL
  - IF LOW
    - FILL TO CORRECT LEVEL

- BRAKE ASSEMBLY
  - CHECK LINKAGE
  - IF BENT OR BROKEN
    - ADJUST OR REPLACE DAMAGED PARTS

- TRANSMISSION DRIVE BELT AND PULLEY ASSEMBLIES
  - CHECK FOR WEAR OR DAMAGE
  - IF WORN OR DAMAGED
    - ADJUST OR REPLACE BROKEN PARTS

- BYPASS VALVE
  - CHECK CONTROL
  - IF WORN
    - ADJUST OR REPLACE

- WHEEL HUBS
  - CHECK KEYS
  - IF BROKEN OR MISSING
    - REPLACE DAMAGED PARTS

- INPUT SHAFT PULLEY
  - INSPECT PULLEY, SPLINES, SHAFT & SNAP RING
  - IF WORN
    - REPLACE DAMAGED PARTS

- SPEED CONTROL SHAFT AND LINKAGE
  - CHECK FOR DEBRIS AND ROLL PINS
  - IF FOUND
    - REMOVE DEBRIS AND REPLACE ROLL PINS

- TRANSMISSION SHIFT CONTROL LEVER
  - CHECK FOR WEAR OR DAMAGE
  - IF FOUND
    - ADJUST OR REPLACE DAMAGED OR BROKEN PARTS

- INTERNAL ROTATING GROUPS AND INTERNAL ASSEMBLIES
  - CHECK FOR WEAR OR DAMAGE
  - IF FOUND
    - REPLACE DAMAGED PARTS OR TRANSMISSION
**CREEPS IN NEUTRAL**

- **SPEED CONTROL LINKAGE**
  - CHECK FOR DEBRIS OR DAMAGE **IF FOUND**
  - CHECK FOR BROKEN ARM OR ROLL PIN **IF FOUND**
  - CHECK FOR WEAR OR DAMAGE **IF FOUND**
  - CLEAN AND ADJUST OR REPLACE DAMAGED PARTS
  - REPLACE BROKEN PARTS, ADJUST NEUTRAL SETTING
  - REPLACE DAMAGED PARTS OR COMPLETE TRANSMISSION

- **INTERNAL COMPONENTS**

**HARD SHIFTING**

- **SPEED CONTROL LINKAGE**
  - CHECK FOR DEBRIS OR DAMAGE **IF FOUND**
  - CLEAN AND ADJUST OR REPLACE BROKEN PARTS

- **TRANSMISSION OIL LEVEL**
  - CHECK OIL LEVEL **IF LOW**
  - FILL TO CORRECT LEVEL
  - REPLACE DAMAGED PARTS OR COMPLETE TRANSMISSION

- **INTERNAL COMPONENTS**
  - CHECK FOR WEAR OR DAMAGE **IF FOUND**

**OIL LEAKAGE**

- **TRANSMISSION CASE**
  - CHECK CASE HALVES AND ALL SEALS
  - CLEAN TRANSMISSION OF ALL EXCESS OIL. RESEAL AND RETORQUE CASE BOLTS. FILL TO CORRECT OIL LEVEL, REPLACE ALL LEAKING SEALS

- **INTERNAL COMPONENTS AND ALL CONTROL SHAFTS**
  - CHECK FOR WEAR OR DAMAGE **IF FOUND**
  - REPLACE DAMAGED PARTS OR COMPLETE TRANSMISSION