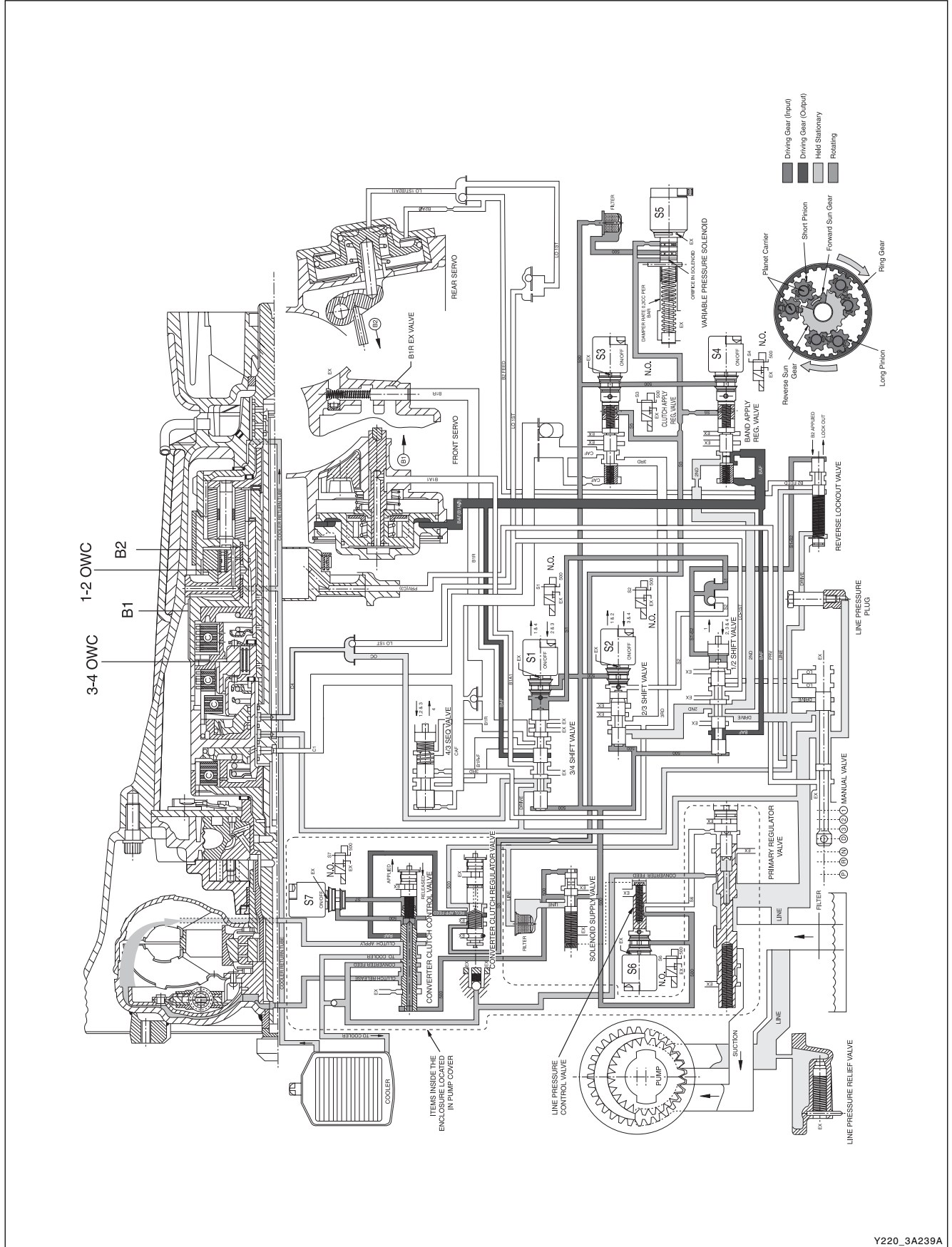


DRIVE 2 AND MANUAL 2



| | | | | | | | | | |
|---------|---------|-------|-------|----|------|--------|-------|-------|-------|
| A / CON | A / BAG | BRAKE | ST'NG | SP | AXLE | CLUTCH | T / C | M / T | A / T |
|---------|---------|-------|-------|----|------|--------|-------|-------|-------|

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Power flow - Drive 2 and manual 2

In Drive 2 and Manual 2, transmission drive is via the input shaft and forward clutch cylinder. The elements of the transmission function as follows;

- The C2 clutch is applied to drive the forward sun gear.
- The forward sun gear drives the short pinion anti-clockwise.
- The short pinion drives the long pinion clockwise.
- The B1 band is applied holding the reverse sun gear stationary therefore the long pinion walks around the reverse sun gear taking the internal ring gear and output shaft with it in a clockwise or forward direction.
- The C4 clutch is applied to bypass the 3-4 OWC and provide engine braking on overrun.

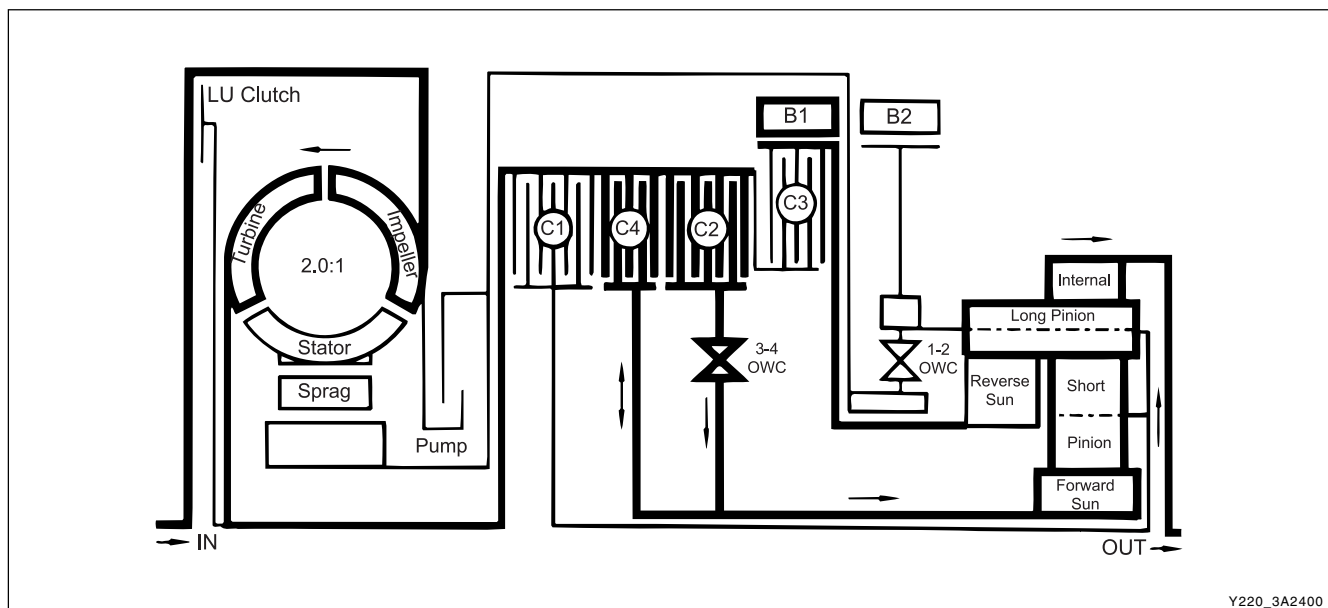
Control

To maintain this arrangement in the steady state solenoids and valves are activated as follows;

- Solenoid S1 is switched OFF. S2 is switched ON.

- Drive (line pressure) oil from the manual valve engages the C2 clutch.
- When S1 switches OFF, S1 oil pressure, which is derived from line 500 pressure, moves the 3-4 shift valve to the left. At the same time S1 oil is directed to the 1-2 shift valve which moves the valve to the second gear position.
- 2nd oil (line pressure) from the 1-2 shift valve is directed to the band apply regulator valve, and to the 2-3 shift valve.
- The band apply feed regulator valve supplies 2nd oil (regulated to line pressure multiplied by the valve ratio) to the Band Apply Feed (BAF) circuit.
- Band apply feed oil is directed to;
 - The outer apply area of the front servo
 - The 1-2 shift valve to provide an exhaust port when the transmission is shifted to first gear
 - The 3-4 shift valve for use when the transmission is shifted into fourth gear
- Drive (line pressure) is routed through the 3-4 shift valve to apply the C4 clutch.

| Gear State | ELEMENTS ENGAGED | | | | | | | | |
|----------------------|------------------|----|----|----|----|----|---------|---------|-----------|
| | C1 | C2 | C3 | C4 | B1 | B2 | 1-2 OWC | 3-4 OWC | LU CLUTCH |
| Drive 2 and Manual 2 | - | X | - | X | X | - | - | X | - |



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