Technical Data for Dodge/Jeep Torqueflites

Gear Ratios:

A518, 46RH/RE, 47RH/RE, 48RE: 1st: 2.25, 2nd: 1.45, 3rd: 1.00, 4th: .69, Rev: 2.35 (727 same but without 4th)

A500, 42RH/RE: 1st: 2.45, 2nd: 1.45, 3rd: 1.00, 4TH: .69, Rev: 2.20 (904 same but without 4th)

Jeep units and some Dodge 999 and 998: 1st: 2.74, 2nd: 1.54, 3rd: 1.00, 4TH: .69, Rev: 2.21
(A998 and 999 same but without 4th)

Applied elements:

<table>
<thead>
<tr>
<th></th>
<th>Forward</th>
<th>2nd band</th>
<th>3rd</th>
<th>o/d direct</th>
<th>O/D</th>
<th>L/R band</th>
<th>Low sprague</th>
<th>O/D sprague</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4th</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REV</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man 1</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(3 speed elements are same just ignore o/d direct, o/d and o/d Sprague.)
TV adjustment

Throttle valve adjustment: (TV cable, linkage) Adjust base TV cable by removing the cable or linkage end from throttle body lever, end of cable should line up with stud on lever, if not adjust as necessary and reattach cable to stud.

The cable must move freely with throttle through entire settings and return. If sticks “down” you may have rusty ball stud on trans end, clean and free up so won’t stick.

Sample of TV cable routing and adjustment at engine.
All band adjustments are made as follows: loosen lock nut, tighten adjusting screw to 72 inch lbs. and then back out adjusting screw by the turns indicated in the following listing per year/vehicle:

**Torqueflite 8 3 speed transmissions:**

- Front: 1 ½ turns.
- Rear: 3 turns.

**Torqueflite 6 3 speed:**

- Front: 1 ½ turns.
- Rear: 3 turns.
A518/46RH front: 1 ½ turns, rear: 3 turns.
A618/47RH front: 1 7/8 turn, rear: 3 turns.
A500/42RH front: 1 ½ turns, rear: 3 turns.
46RE front: 2 7/8 turns, rear: 2 turns.
48RE front: 1 7/8 turns, rear: 3 turns.
42RE/44RE 94-95 Jeeps front: 3 5/8 turns, rear: 4 turns.
44RE 97-99 front: 2 ¼ turns, rear: 4 turns.
42RE/44RE 96 front: 2 7/8 turns, rear 2 turns.
42RE 97 front: 3 5/8 turns, rear 2 turns.
42RE 98 front: 3 5/8 rear 4 turns.
42RE 99 and up front: 3 turns, rear 4 turns.
44RE 2000 and up front: 1 7/8 turns, rear 4 turns.

Front band adjusting lock nut uses ¾ wrench and either 5/16 square stud or # 40 Torx on later units.

Rear adjuster is either 11/16 lock nut or 9/16 lock nut. Stud will be 5/16 square.
The Main pressure regulator valve is adjustable with an allen wrench with the oil pan off. The base adjustment is measured from the valve body casting to the bottom of the adjuster plate as seen in the above picture. The base measurement is 1 5/16 inch. Turning adjuster (counterclockwise) in increases line pressure and turning out (clockwise) decreases line pressure. One turn of adjustment either way will increase or decrease pressure by approximately 1 1/3 psi.
The TV has a base adjustment using tool # C-3763 which can be checked with pan off and adjusted with an allen wrench. If you don’t have the tool you can make one or use small machinist’s gauge block to check. Measurement should be: .627 inch.

You can make this out of round stock or an old bolt etc. just be sure measurement is exactly .627 inch. You could also make one end 1 5/16 inch so use one end for PR valve and one end for TV valve.
Pressure Testing

Use the accumulator and rear servo pressure ports to check main pressure with 0-300 p.s.i. gauge. (There is no specific Main line pressure tap) Apply the parking brake and block the wheels when testing.

<table>
<thead>
<tr>
<th></th>
<th>Accumulator</th>
<th>Front servo</th>
<th>Rear servo</th>
<th>Governor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Idle WOT</td>
<td>Idle WOT</td>
<td>Idle WOT</td>
<td>Zero at stop.</td>
</tr>
<tr>
<td>Reverse</td>
<td>0 0</td>
<td>0 0</td>
<td>145-175</td>
<td>230-280 approx.</td>
</tr>
<tr>
<td>Fwd 1st</td>
<td>55-60 90-100</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0 1psi per mph</td>
</tr>
<tr>
<td>FWD 3-4</td>
<td>55-60 90-100</td>
<td>55-60 90-100</td>
<td>0 0</td>
<td>0 0 1psi per mph</td>
</tr>
<tr>
<td>Man 1</td>
<td>55-60 90-100</td>
<td>55-60 90-100</td>
<td>55-60 90-100</td>
<td>55-60 90-100</td>
</tr>
</tbody>
</table>

Manual 2\textsuperscript{nd} is same as 1\textsuperscript{st} gear and to check 2, 3\textsuperscript{rd},4\textsuperscript{th} you would need to command gears with scanner standing still. There is also a pressure port on opposite side of trans. from gov. port for the O/D clutches, same as Acc. p.s.i. in 4\textsuperscript{th} only.

Governor pressure will start at zero and go up Approx. 1 psi per mph while driving. This is good way to diagnose governor codes/issues on electronic units. \textbf{Do not} drive and watch gauge at same time! Use helper when doing this test.