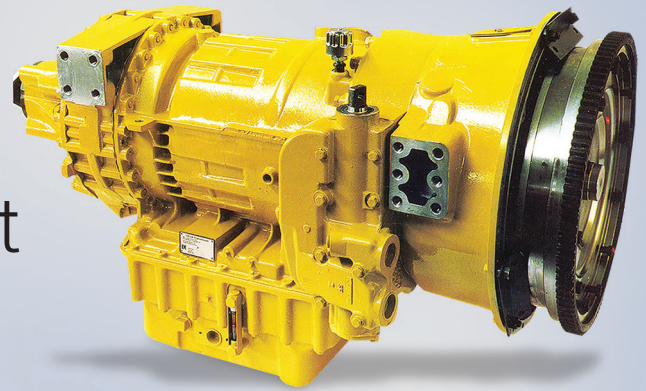


# CL(B)T 754 (445 HP)

## Automatic/Powershift Hauling Transmission



### SPECIFICATIONS

General Rating+	
Net input power (max)	445HP (332 kW)
Input speed (max)	2500 rpm
Net input torque (max)	1300 lb ft (1764 Nm)

### ROTATION

Input (viewed from input)	Clockwise
Output (viewed from input)	Clockwise (forward ranges)

### MOUNTING

#### DIRECT

SAE # 1 flywheel housing with flexdisc drive-cradle mounted using engine flywheel mounting pad and one 6-hole SAE mounting pad each side to rear cover or drop box.

#### REMOTE

Trunnion mount and one 6-hole SAE mounting pad each side of rear cover or drop box.

### TORQUE CONVERTER

Type	Single stage, 3-element
Stall torque ratio	TC 497-2.72:1;TC 498-2.45:1
Automatic lock—up clutch	Effective in all forward ranges and neutral

### GEARING

Type	Constant mesh, spur type, planetary CL(B)T 754 Standard, straight through (only)
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+Rating may vary by vocation. Consult AVTEC Marketing Department for specific information.

## RANGE

1-5 Automatic Ratios*	
First	5.18:1
Second	3.19:1
Third	2.02:1
Fourth	1.38:1
Fifth	1.00:1
Reverse	9.93:1

\*Gear ratio does not include torque converter ratio

## CLUTCHES

Hydraulically-actuated, spring-released, oil-cooled multidisk and wear compensating.

## SPEEDOMETER DRIVE

13/16-20 UNEF thread-through boss, heavy duty plug driven gear\*\* customer supplied.

\*\*Not supplied on transmission but is supplied by vehicle manufacturer.

## CONTROL VALVE BODY

Hydraulically actuated control valve provides automatic range selection in each drive position as a function of vehicle speed.

## POWER TAKE-OFF PROVISION (OPTIONAL)

Converter-driven (SAE 6-bolt)	
Location	Top, left side at 10 O' Clock position (as viewed from rear)
Drive gear rating	Intermittent-400 lb ft (543 Nm); Continuous-300 lb ft (407 Nm)
Drive gear ratio	1.00 x turbine speed (all ranges)
Engine-driven (SAE 8-bolt) on two locations	
Locations	Converter housing top mounting pad: 1 O' Clock position (as viewed from rear)
Drive gear rating	Intermittent-260 hp (194 kW); Continuous-200 hp (149 kW)
Drive gear ratio	1 O' Clock-1.35 x engine speed; side mounting pad 8 O' Clock - 0.84 x engine speed

## HYDRAULIC RETARDER (OPTIONAL)

Type	Coupling type rotor between fixed stators
Capacity	365 HP (272 kW, 913 lb ft (1237 Nm) #2100 rpm rotor speed

## DROP BOX (OPTIONAL)

Drop box available with 1:1 output; disconnects are available at all three locations: B, C and D.

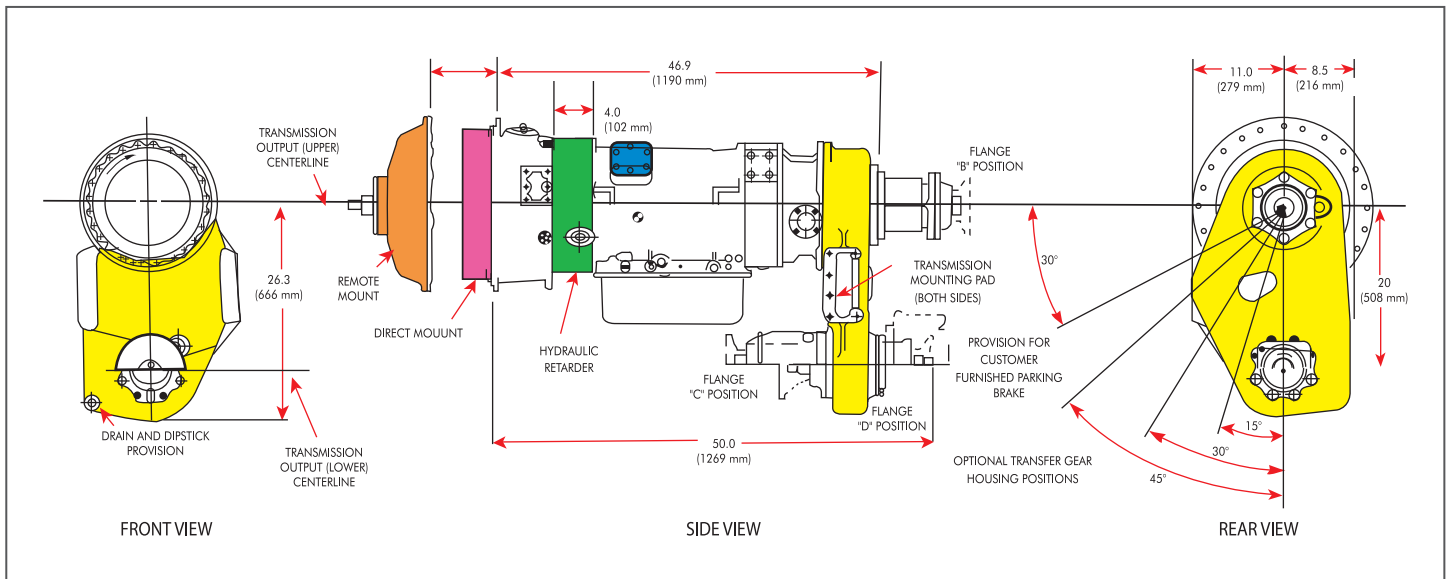
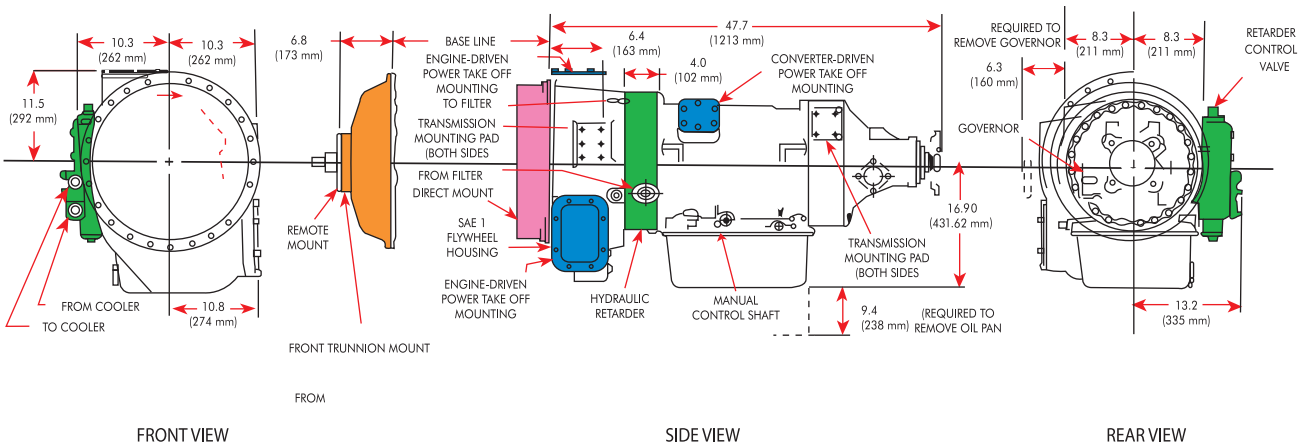
## OIL SYSTEM

Transmission	
OilType	Hydraulic transmission fluid type C-4
Capacity (less external Lines)	9.5 US gal
(Std. pan)	(36 litres)
Sump	Integral
Filter	External, remote mounted
Drop box	
Capacity	2.5 litres (0.66 US gal)
Oil type	Hydraulic transmission fluid C-4

SIZE (TYPICAL CONFIGURATION)

	Straight Through	Drop Box
Length	54.61 in (1387 mm)	62.5 in (1588 mm)
Width	24.5 in (622 mm)	24.5 in (622 mm)
Height	26.1 in (663 mm)	37.7 in (958 mm)
Weight basic model dry	1146 lb ( 520 kg)	1697 lb (770 kg)
With engine PTO and Input Retarder	Add 310 lb (140 kg) to weight	

Mounting Dimensions - Straight Through Model



## CUSTOMER BENEFITS

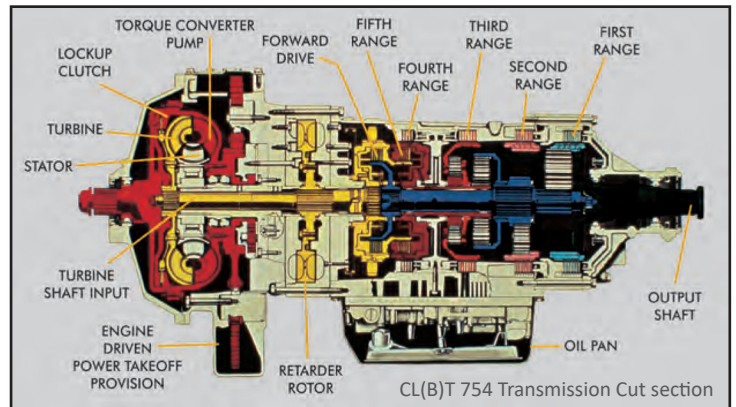
- Design Adaptability
- Smooth, Fast, Easy Operation
- High Productivity
- Greater Reliability
- Lower Operating Cost
- Reduced Maintenance Cost
- Increased Availability
- Improved Operator Efficiency

## DESIGN FEATURES AND OPTIONS

- Choice of two range selection versions
  - Automatic upshifting and downshifting in all ranges with hold in each range and deep reverse ratio
  - Automatic upshifting and downshifting in all ranges above second with hold in each range and 1st manual
- Provision for mechanical or pneumatic shift modulation control
- Provision for engine-driven and / or converter-driven power takeoff
- Inhibitors to prevent harmful downshifts or reverse shifts
- Lockup clutch in all ranges for maximum fuel economy
- Choice of converters to match wide range of diesel engines
- Provision for neutral start switch; reverse signal switch;
- High range signal provision, lock-up signal provision Optional drop box configuration
- Five optional transfer gear housing (see rear view with drop box)
- Out disconnects available in three locations on the drop box model (flange positions B, C and D)
- Optional manual/automatic controls

## APPLICATIONS

- Rear Dumper
- Oilfield Mud Pump
- Mobile Servicing Rig
- Terminal Tractor
- Crane Carrier
- Scraper
- Water Sprinkler Cementing Unit
- C Crane
- Well Killing Pump



## SCAAN SPECIFICATION ASSISTANCE

To be sure that you get the most efficient engine transmission matching for your operation, with your preferred vehicle, AVTEC offers SCAAN.

SCAAN stands for System for Computerized Application Analysis and helps eliminate guesswork from vehicle buying decisions. It can compute a wide variety of vehicle performance parameters. SCAAN will also check your powertrain specifications against AVTEC vocational experience to ensure satisfactory vehicle performance. SCAAN is user friendly. Interactive operation allows vehicle configurations to be quickly evaluated to ensure optimized powertrain selection.

## PARTS AND SERVICE SUPPORT

- Prompt Professional Service
- Complementing parts availability is AVTEC's firm commitment to provide fast economical service