



X1100-5

750 TO 1500 GHP (560-1119 kW) ENGINES
50 TO 70 TON VEHICLES



SPECIFICATIONS

X1100-5 TRANSMISSION

RATINGS*	Gross Input Power (Maximum)	Input Speed (Maximum)	Gross Vehicle Weight (GVW)
X1100-5	1500 hp (1120 kW)	2100 to 3000 rpm	50 to 70 tons

*Ratings vary with specific application; contact Allison Transmission, Inc. for specific details.

TORQUE CONVERTER

Single stage, 3-element, multiphase

Stall torque ratio	1.80:1 to 3.30:1
Automatic Lockup Clutch	Effective in 1 st , 2 nd , 3 rd , 4 th ranges

RANGE GEARING

	RATIO**
Constant mesh, spur type, planetary	
First Range	5.80:1
Second Range	2.98:1
Third Range	1.86:1
Fourth Range	1.26:1
Reverse - 1	8.19:1
Reverse - 2	2.32:1

**Gear ratio does not include torque converter ratio.

RANGE CONTROLS

Automatic; 1-4, 2-4, N, R1-R2

STEERING

	RATIO
Infinitely-variable, hydrostatically-controlled, differential	
First Range	2.59:1
Second Range	1.59:1
Third Range	1.33:1
Fourth Range	1.21:1
Neutral	Pivot
Reverse - 1	3.50:1
Reverse - 2	1.40:1

BRAKING

Multiple plate, oil cooled	
Service	Hydraulic power apply
Emergency and parking	Mechanical apply
Capacity	Up to 16 ft/sec ² (5 m/sec ²) deceleration rate

POWER TAKEOFF PROVISIONS

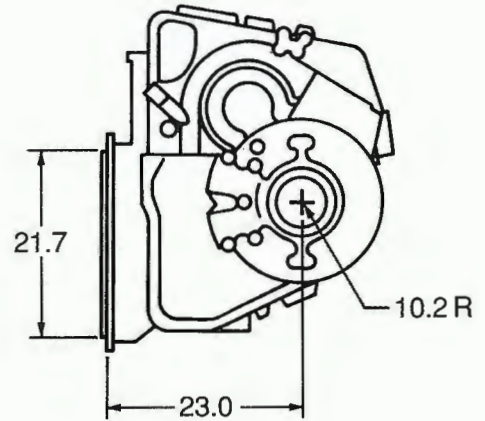
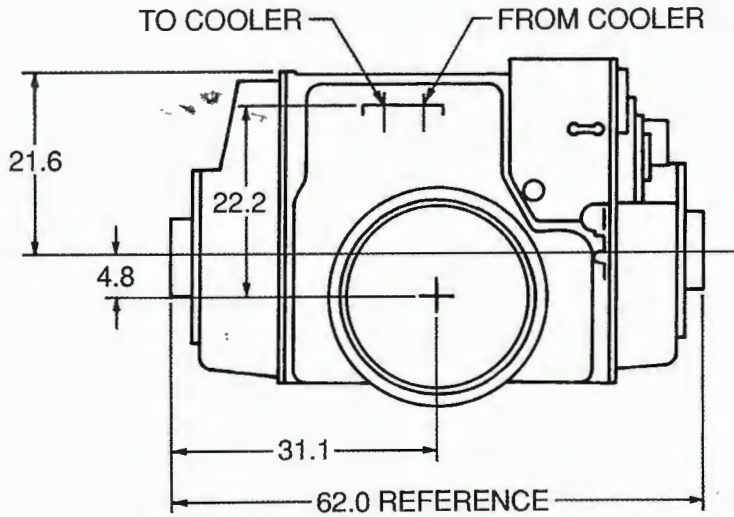
Rear	300 hp (224 kW) rating
------	------------------------

OIL SYSTEM

Oil type	MIL-L-2104D, Grade 30; MIL-L-46167 Arctic
Capacity (excluding external circuit)	40 US gals (150 liters)
Filter	Integral or remote mount, full flow, replaceable dual elements

WEIGHT (DRY)

4125 lbs (1870 kg)



STATUS

The X1100 was originally configured to accept multiple input modules to adapt to diesel, turbine or rotary engines. Production of the X1100-3B transmission for the M1 Abrams Tank started in September 1979 and utilizes an input module for a turbine engine. The configuration developed for the heavier M1A1 tank, introduced with production in April 1985, incorporates changes that further improve the efficiency and reliability of the transmission.

The X1100-5 transmission has high commonality (90%) with the X1100-3B; therefore it maintains comparable power ratings and reliability in differing vehicle installations. It can be used in applications with a variety of currently available diesel engines with ratings of 750-1500 GHP (560-1119 kW). The X1100-5 is currently available for powertrain upgrades of M60 chassis based vehicles and other main battle tanks.

APPLICATIONS

Vehicle	Engine
M60 FOV Repower	AVDS 1790 Diesel
Centurion Repower	Various diesel engines



P.O. BOX 894, SPEED CODE F06
 INDIANAPOLIS, INDIANA 46206-0894
 1-800-252-5000 OUTSIDE USA: 01-317-242-2501
 WWW.ALLISONTRANSMISSION.COM

ISO/QS 9000 AND ISO 14001 CERTIFIED
 INFORMATION AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE OR OBLIGATION. SA2490 (2008/09)

