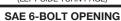
## **ALLISON TRANSMISSION**

RIGHT SIDE ONLY (LEFT SIDE TURN PAGE)





1000\*\*\*, 2000\*\*\*

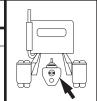
\*\*\* (EVS, RDS, SPS) (MHS, BUS, TRV Optional)

Footnotes (1, 2, 3, 10, 11, 12, 14, & 15) (HINO Chassis see ALLI-13) (GM or CV Chassis 1700, 2700 see ALLI-15)

# PTO DRIVE GEAR DATA:

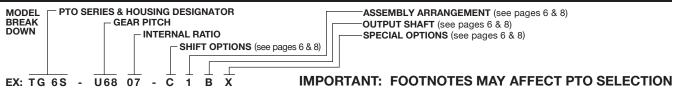
64T 6.86P 20° PA Spur

**LOCATION:** Front **PLMF:** 1.085 **PLV:** 2441 FPM **PPM:** 1,000



	6-BOLT	PTO	FOOT	SHAFT		IGINE		ADAPTER	DAPTER SPACER		SHIFT	@ 1,000 RPI			
	TYPE	MODEL NUMBER	NOTES	ROTATION	HI	LO	REV				TYPE	TORQUE	HP		
RPM.	SINGLE GEAR														
TO EXCEED 2,500	SINGLE SPEED MULTI GEAR	TG6B-A6904-Z1BX TG6B-A6905-Z1BX TG6B-A6906-Z1BX TG6B-A6907-Z1BX	4, 8 4, 8 4, 8 4, 8	Crnk Crnk Crnk Crnk	77 100 131 154					Included Included Included Included	Cable Cable Cable Cable	250 210 160 160	48 40 30 30		
S S	SH SERIES														
UTPUT SHAFT SPEED	CLUTCH SHIFT	CS6B-A6703-S1BP CS6B-A6704-S1BP CS6B-A6705-S1BP CS6B-A6707-S1BP	2, 5, 6, 7 2, 5, 6, 7 2, 5, 6, 7 2, 5, 6, 7, 9	Crnk Crnk Crnk Crnk	82 107 117 149					Included Included Included Included	Power Power Power Power	300 250 210 160	57 48 40 30		
	1 FWD. 1 REV.														
₹.	ADAPTE	ADAPTER TO CHANGE ROTATION 13 40TA6855-1 - CS6S only									REFER TO ADAPTER GEAR ASSEMBLIES IN INDEX				

8-BOLT	PTO MODEL NUMBER	FOOT NOTES	SHAFT ROTATION		IGINE		ADAPTER	SPACER		SHIFT	INTERMITTEN	
TYPE				HI	LO	REV				TYPE	TORQUE	HP
SINGLE SPEED MULTI GEAR												
1 FWD. 1 REV.							_					



FOOTNOTES:

CAUTION: MAXIMI

SEE REVERSE SIDE FOR FOOTNOTES

#### IMPORTANT: FOOTNOTES MAY AFFECT PTO SELECTION

#### FOOTNOTES FOR APPL# ALLI-09 RIGHT SIDE ONLY:

- 1 PTO speeds shown are with transmission torque converter in lock-up. To obtain lock-up, the PTO must be installed with a connection to the Allison "PTO Enable" circuit and the converter turbine speed must be above 1,100 RPM. Typically the best method is shown in the vehicle's Body Builders information.
- GM may have a special order option required for PTO operation. 2001 2006 RPO "M1F" and "PTO" must be ordered on vehicles 2007 and later RPO "PTO" must be ordered. This option is not available on crew cab.
  - b GM Pick Up Chassis may not be installable.
  - c C/K 1 ton cab-chassis 2001-2009 with gas engine. 2001 & later diesel engine can install CS6B PTO's with PF Series pumps on this opening with RPO "PTO" & RPO "M1F" ordered with vehicle. 2007-2014 add wire harness 34T40692. For 2015 & later add wire harness 34T43471 for "H" shift option, or 34T43466 for "S" shift option.
- d When using the GM C4500-C8500MY2001-2010 order 34TK4504 harness kit for CS6,for "S" shift use 34TK5172 or 34TK4505 harness kit for TG6 for the GM supplied PTO option.
- e On C4500 and C5500 Series Top Kick or Kodiak chassis the PTO interferes with exhaust.
- f On C6500 thru C8500 chassis MY2001-2010 the PTO is installable.
- g Pressure lubrication on CS Series use 43TK5157 sold separately.
- 3 PTO torque ratings shown are derated to the Transmission drive gear limit of 250 lb.ft. (2 PTO Limit is 200 lb.ft. per opening) (Multiply PTO ratings by .80 when 2 PTOs are used.) Allison Transmission Div. of General Motors has a PTO installation checklist available for this transmission and can be found in the Sales Tech Data Book available from an authorized service center.
- 4 TG Series Input Gear #03T38783 use 23M60270X spacer and 20MKM604 stud kit for installation (included). Refer to kit program on pages 27 & 28. The TG Series requires a special non-standard shift cover. Use Code "2" for Cable Shift, Code "4" for Air Shift, Code "5" for Elec/Air Shift and Code "6" for Lectra Shift option. Code "9" for Elec/Hyd shift. Pressure lubrication is not required on the TG Series PTO.
- 5 Pressure lubrication tee fittings are ordered separately for 1000, 2000, 2400 Series Transmission P.N. 43TK5157 for pressure lubrication on Clutch Shift PTOs. As an option, remove factory elbow and drill, tap and clean for lube connection. Pressure lubrication is not required on the TG Series PTO.
- 6 If Electric/Hydraulic (H) shift option is chosen for the Clutch Shift PTO then (1) 43T36431 + 43T36445 fittings & (1) 131-2-0001 Installation Kit is required for installation, sold separately. "S" shift option includes built-in solenoid valve and required fittings and hose kit on CS6B only.
- 7 The Muncie Power SPD-2000 Series speed control is available for use with the Clutch Shift Series PTOs only. It is recommended for PTO and equipment protection from overspeeding. Refer to Allison Tech Data Book for overspeed protection and PTO enable options provided by the Allison T.C.M.
- 8 The TG Series PTO requires that the transmission drive gear be stopped during the engage or disengage of the PTO. Refer to PTO operator's manual for proper shifting instructions.
- 9 The CS 07 ratio PTO requires the use of a spacer 23M60350 (requiring normal shim procedures) and stud kit 20TK6390 included with PTO.
- 10 Interference to the end cover of the CS can be minimized by use of the CSGG housing option. This option is only available with the "B" or "K" output shaft option.
- 11 INTERNATIONAL® 4300 Series use Shaft High "3" arrangement for this side.
- 12 Isuzu, Nissan, and Mitsubishi use Shaft High "3" arrangement and direct mount pump only. For chassis prior to 2007, use Left Side Opening for 2007 & later chassis.
- 40TA6855-1 can be used with CS6S Series PTO only. Use standard stud kit (20TK4418) with this PTO. Check for clearance to frame rail and attached components. Exhaust needs to be rerouted on General Motors chassis. Spacer 23M60165S (included) mounts to transmission side.
- 14 Allison Transmission has redesigned the transmission nameplates for all 1000/2000 and 3000/4000 Product Family transmissions. The new nameplate designs contain only the information essential to the identification of the transmission. The transmission product family is identified by the first two digits of the transmission serial number: Body Builders can find out information on the transmission by using the Allison Extranet to look up the serial number. For access to this service contact Allison.
- 15 Model year 2022 and later "N" Series Isuzu with 6.0L gas engine and Allison 1000/2000 Series transmissions use CS6B with "S" shift option and requires wiring harness 34T43981. Harness must be ordered separately.
- 16 Model year 2023 and later "F" Series Isuzu with Allison 1000/2000 Series transmissions use CS6B with "S" shift option and requires wiring harness 34T44017. Harness must be ordered separately.

## **ALLISON TRANSMISSION**

LEFT SIDE ONLY (RIGHT SIDE TURN PAGE)



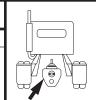


1000\*\*\*, 2000\*\*\*
\*\*\* (EVS, RDS SPS) (MHS, BUS, TRV Optional)

Footnotes (1, 2, 3, 10, 11, 12, 14, 17, & 18) (HINO Chassis see ALLI-13) (GM or CV Chassis 1700, 2700 see ALLI-15) PTO DRIVE GEAR DATA:

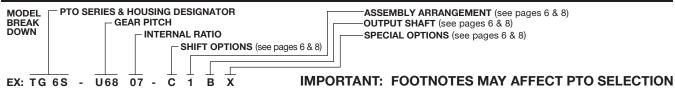
64T 6.86P 20° PA Spur

**LOCATION:** Front **PLMF:** 1.009 **PLV:** 2441 FPM **RPM:** 1,000



	6-BOLT	PTO	FOOT	SHAFT		IGINE		ADAPTER	SPACER	STUD KIT	STUD KIT SHIFT		INTERMITTENT RATING @ 1,000 RPM of PTO		
Ŀ	TYPE	MODEL NUMBER	NOTES	ROTATION	HI	LO	REV				TYPE	TORQUE	HP		
	SINGLE GEAR														
TO EXCEED 2,500	SINGLE SPEED MULTI GEAR	TG6B-A6904-Z3BX TG6B-A6905-Z3BX TG6B-A6906-Z3BX TG6B-A6907-Z3BX	4, 8 4, 8 4, 8 4, 8	Crnk Crnk Crnk Crnk	77 100 131 154					Included Included Included Included	Cable Cable Cable Cable	250 210 160 160	48 40 30 30		
- 1	SH SERIES														
	CLUTCH SHIFT	CS6B-A6703-S3BP CS6B-A6704-S3BP CS6B-A6705-S3BP CS6B-A6707-S3BP FA6B-A6706-H3BX	2, 5, 6, 7 2, 5, 6, 7 2, 5, 6, 7 2, 5, 6, 7, 9 5, 7	Crnk Crnk Crnk Crnk Opp	82 107 117 149 171					Included Included Included Included Included	Power Power Power Power	300 250 210 160 100	57 48 40 30 19		
၁၂	1 FWD. 1 REV.														
<b>∑</b>	ADAPTE	ADAPTER TO CHANGE ROTATION         13, 16         40TA6830-2, 40TA6855-2									REFER TO ADAPTER GEAR ASSEMBLIES IN INDEX				

8-BOLT	PTO MODEL NUMBER	FOOT NOTES	SHAFT ROTATION		IGINE		ADAPTER	SPACER		SHIFT	INTERMITTEN	
TYPE				HI	LO	REV				TYPE	TORQUE	HP
SINGLE SPEED MULTI GEAR												
1 FWD. 1 REV.							_					



FOOTNOTES:

**CAUTION: MAXIM** 

SEE REVERSE SIDE FOR FOOTNOTES

#### IMPORTANT: FOOTNOTES MAY AFFECT PTO SELECTION

### FOOTNOTES FOR APPL# ALLI-09 LEFT SIDE ONLY:

- 1 PTO speeds shown are with transmission torque converter in lock-up. To obtain lock-up the PTO must be installed with a connection to the Allison "PTO Enable" circuit and the converter turbine speed must be above 1,100 RPM. Typically the best method is shown in vehicle's Body Builders information.
- 2 a GM may have a special order option required for PTO operation. 2001-2006 RPO "M1F" & "PTO" must be ordered. On vehicles 2007 & later RPO "PTO" must be ordered. The option is not available on crew cab.
  - b GM Pick Up Chassis may not be installable.
  - c On General Motors 2001-2007 cab-chassis C/K3600 (Silverado/Sierra) the PTO is not installable on this side.
  - d When using the GM C4500-C8500 order 34TK4504 harness kit for CS6 (for "S" shift use 34TK5172) or 34TK4505 harness kit for TG6 for the GM supplied PTO option.
  - e On C4500 and C5500 Series Top Kick or Kodiak chassis the PTO is installable.
  - f On C6500 thru C8500 chassis the PTO is installable.
  - g Pressure lubrication on CS Series use 43TK5157, sold separately.
- 3 PTO torque ratings shown are derated to the Transmission drive gear limit of 250 lb.ft. (2 PTO Limit is 200 lb.ft. per opening) (Multiply PTO ratings by .80 when 2 PTOs are used.) Allison Transmission Div. of General Motors has a PTO installation checklist available for this transmission and can be found in the Sales Tech Data Book available from an authorized service center.
- 4 TG Series Input Gear #03T38783 use 23M60350 spacer and 20MKM604 stud kit for installation (included). Refer to kit program on pages 27 & 28. The TG Series requires a special non-standard shift cover. Use Code "Z" for Cable Shift, Code "4" for Air Shift, Code "5" for Elec/Air Shift and Code "6" for Lectra Shift option. Code "9" for Elec/Hyd shift. Pressure lubrication is not required on the TG Series PTO.
- 5 Pressure lubrication tee fittings are ordered separately for 1000, 2000, 2400 Series Transmission P.N. 43TK5157 for pressure lubrication on Clutch Shift PTOs. As an option, remove factory elbow and drill, tap and clean for lube connection. Pressure lubrication is not required on the TG Series PTO.
- 6 If Electric/Hydraulic (H) shift option is chosen for the Clutch Shift PTO then (1) 43T36431 + 43T36445 fittings & (1) 131-2-0001 Installation Kit is required for installation, sold separately. "S" shift option includes built-in solenoid valve and required fittings and hose kit on CS6B only.
- 7 The Muncie Power SPD-2000 Series speed control is available for use with the Clutch Shift Series PTOs only. It is recommended for PTO and equipment protection from overspeeding. Refer to Allison Tech Data Book for overspeed protection and PTO enable options provided by the Allison T.C.M.
- 8 The TG Series PTO requires that the transmission drive gear be stopped during the engage or disengage of the PTO. Refer to PTO operator's manual for proper shifting instructions.
- 9 The CS 07 ratio PTO requires the use of a spacer 23M60350 (requiring normal shim procedures) and stud kit 20TK4360 included with PTO.
- 10 Interference to the end cover of the CS can be minimized by use of the CS6G housing option. This option is only available with the "B" or "K" output shaft option.
- 11 The transmission shift selector is located on this side of the transmission and may interfere with the installation of PTO or components. Contact the vehicle manufacturer for recommendations regarding the movement of this control cable. Ford F-650, F-750 use "1" ass'y PTO.
- 12 Use Right Side Opening on Isuzu, Mitsubishi, Nissan on chassis prior to 2007. On INTERNATIONAL® 4000 Series use Right Side Opening.
- 13 40TA6830-2 adapter uses metric PTO stud kit. Check for clearance to frame rail and other chassis components before using. 40TA6830-2 adapter uses metric PTO stud kit. Check for clearance to frame rail and other chassis components before using.
- 14 Allison Transmission has redesigned the transmission nameplates for all 1000/2000 and 3000/4000 Product Family transmissions. The new nameplate designs contain only the information essential to the identification of the transmission. The transmission product family is identified by the first two digits of the transmission serial number: Body Builders can find out information on the transmission by using the Allison Extranet to look up the serial number. For access to this service contact Allison.
- 15 TG Series code "9" Electric/Hydraulic shift option can be used where transmission shift lever interferes with other shifter types and where vehicles do not have air.
- 40TA6855-2 can be used with CS6S Series PTO only. Use standard stud kit (20TK4418) with this PTO. Check for clearance to frame rail and attached components. Spacer 23M60165S (included) mounts to transmission side.
- 17 CS6B: "S" or "N" activation kit includes hose and fittings except the lubrication tee fitting kit which needs to be ordered separately. The "N" shift code is for Shaft High "1" arrangement PTO mounted to this side.
- 18 On the INTERNATIONAL® Terra Star chassis use shaft high "1" arrangement to clear transmission shifter assembly. Chassis exhaust is on the right side of transmission.
- 19 Model year 2022 and later "N" Series Isuzu with 6.0L gas engine and Allison 1000/2000 Series transmissions use CS6B with "S" shift option and requires wiring harness 34T43981. Harness must be ordered separately.
- 20 Model year 2023 and later "F" Series Isuzu with Allison 1000/2000 Series transmissions use CS6B with "S" shift option and requires wiring harness 34T44017. Harness must be ordered separately.