

ALLISON 1000, 2000/2400 CONVERTER HOUSINGS

PTO-TEC-103
TECHNICAL

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TO: All Chelsea® Power Take-Off Customers

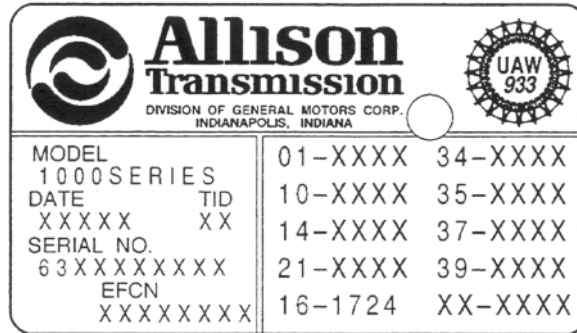


Fig. 1

When installing Chelsea P.T.O.s on the Allison 1000, 2000/2400 transmission, a tee fitting is required in the oil cooler return line to supply low-pressure oil to the idler shaft of the P.T.O. Two different size fittings can be used depending on the converter housing on the transmission.

By referring to the tag (fig. 1) and the group numbers located on the right side of the tag you will be able to determine the converter housing S.A.E. #. Group option code for the converter housing has a prefix number of 34-. There are three converter housings available with a total of eight options (Chart 1). Refer to Allison Parts Catalog for complete information.

- ❑ **S.A.E. No. 3 one-piece: Standard housing for 1000 Series™ Model.** This one-piece housing includes ports to facilitate the attachment of the oil cooler lines. The provision for direct mounting the fluid filter is also included on this housing.
- ❑ **S.A.E. No. 3 two-piece: Standard housing for the 2000 Series™ and 2400 Series™ Models. Optional housing for 1000 Series™ Model.** A provision on the bottom surface of this housing facilitates the mounting of various manifolds to the transmission.
 1. The manifold for non-retarder models provides for direct mounting of the fluid filter and includes two ports to facilitate the attachment of the oil cooler lines.
 2. The manifold for retarder models provides for direct mounting of the fluid filter and includes four ports to facilitate the attachment of hoses to the retarder.

PTO INFO

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❑ **S.A.E. No. 2 two-piece: Standard housing for 2000 Series™ and 2400 Series™ Models.**

Optional housing for 1000 Series™ Model. A provision on the bottom surface of this housing facilitates the mounting of various manifolds to the transmission.

1. The manifold for non-retarder models provides for direct mounting of the fluid filter and includes two ports to facilitate the attachment of the oil cooler lines.
2. The manifold for retarder models provides for direct mounting of the fluid filter and includes four ports to facilitate the attachment of hoses to the retarder cooler and sump cooler. The retarder control valve and retarder temperature sensors are also included in this manifold.

NOTE: 2002/2400 Series™ transmissions equipped with the retarder option may not be equipped with the PTO drive provision. The retarder option is not available with the 1000 Series™ transmission model.

Chart 1 shows the eight different suffix numbers you will find under the group number 34 for converter housings. The far right column shows the appropriate Chelsea fitting that is required to connect the oil lube line to the idler shaft of the P.T.O.

Chart 1

Converter Housing Group Number	S.A.E. NUMBER	Description	1000	2000	2400	Chelsea Fitting
34-561	#3	Integral Cooler Ports	STD.	---	---	378840
34-562	#2	Manifold Pad	OPT.	STD.	STD.	378970
34-563	#3	Manifold Pad	OPT.	STD.	STD.	378970
34-565	#3	Integral Cooler Ports	STD.	---	---	378840
34-566	#2	Manifold Pad	OPT.	STD.	STD.	378970
34-567	#2	Manifold Pad	OPT.	STD.	STD.	378970
34-572	#3	Integral Cooler Ports	STD.	---	---	378840
34-573	#3	Integral Cooler Ports	STD.	---	---	378840

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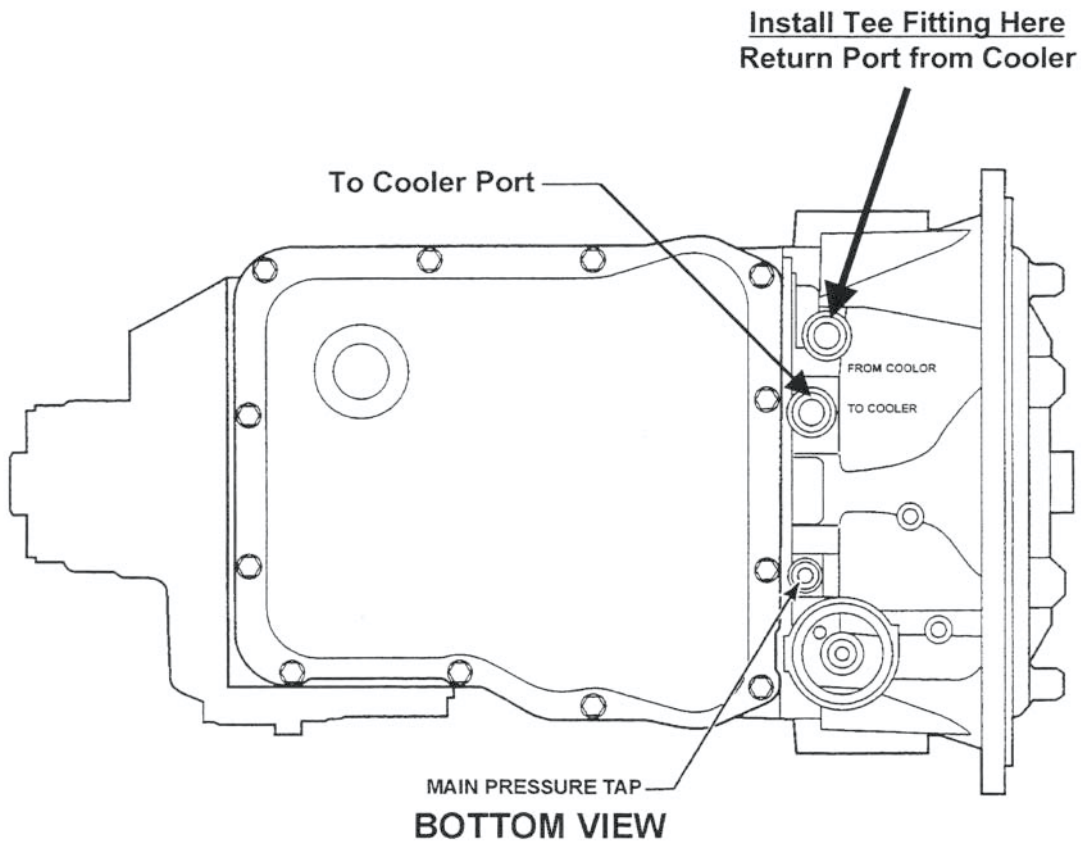


Fig. 2

Figure 2 shows the locations of the ports on the bottom side of the transmissions. The “From Cooler” port is where the tee fitting will be installed to connect the line for the idler shaft pressure lube.

To complete your P.T.O. installation, refer to the current P.T.O. owner’s manual for detail information on the shifter component installation.

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