

## DESCRIPTION

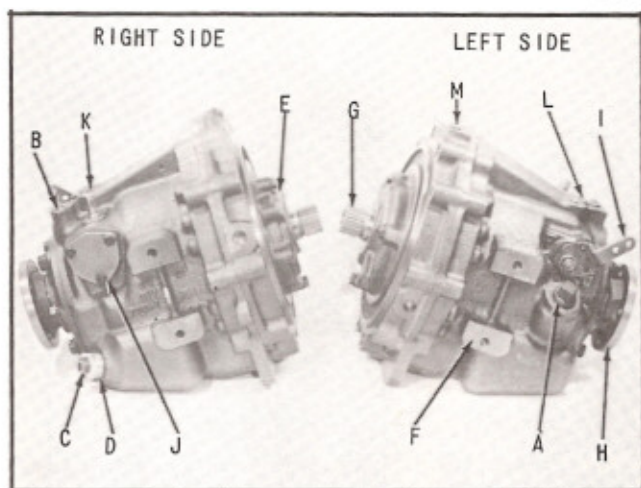


Fig. 16 External Views ASI-70C or ASI-71C

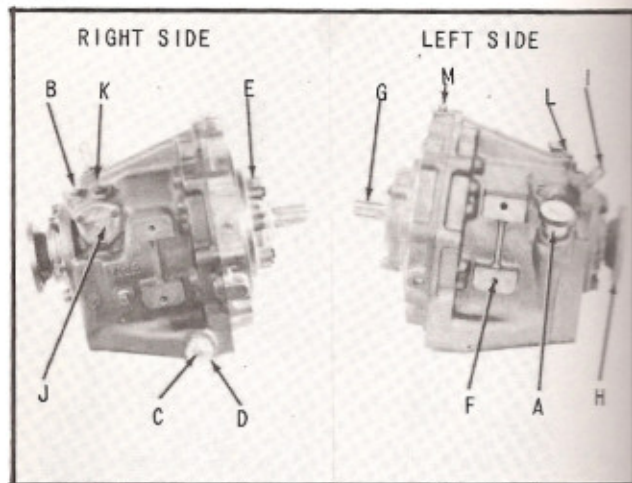


Fig. 16A External Views ASI-70 or ASI-71

This manual is prepared primarily for the Model 70C & 71C direct drive transmissions. However, all additional supplementary descriptions and illustrations are included to allow it to be used for the Model 70B, 71B, 70 and 71 transmissions.

The material in this manual is also used in conjunction with the proper reduction gear manuals for servicing all 70, 70R, 70C, 70CR, 71, 71R, 71C and 71CR reduction gear transmissions.

The following list identifies the important features of the various model transmissions in (Figs. 16 and 16A):

- |  |                                |
|--|--------------------------------|
| A. Oil filler cap & dipstick assembly  | G. Drive Gear                  |
| B. Oil outlet to cooler                | H. Output shaft flange         |
| C. Oil inlet from cooler               | I. Shift lever                 |
| D. Oil drain plug                      | J. Valve cover                 |
| E. Oil pump                            | K. Breather                    |
| F. Mounting pads & mounting bolt holes | L. Main line pressure tap      |
|  | M. Reverse clutch pressure tap |

The transmission consists of a planetary gear set, a forward clutch, a reverse clutch, an oil pump, and a pressure regulator and rotary control valve. All of these are contained in a cast iron housing along with necessary shafts and connectors, to provide forward, reverse and neutral operation. A direct drive ratio is used for all forward operation. In reverse, the speed of the output shaft is equal to input speed,

The following are the identification markings for the Warner Gear "VELVET DRIVE" Marine Transmissions.

"A" MODEL	HAND OF ROTATION	"A" MODEL	HAND OF ROTATION	"B" RATIO	"C" COLOR
*AS1-71C	CLOCKWISE	*AS1-71CR	COUNTER CLOCKWISE	1:1	RED
AS1-71B	CLOCKWISE	AS1-71BR	COUNTER CLOCKWISE	1:1	RED
AS1-71	CLOCKWISE	AS1-71R	COUNTER CLOCKWISE	1:1	RED
*AS1-70C	CLOCKWISE	*AS1-70CR	COUNTER CLOCKWISE	1:1	BLUE
AS1-70B	CLOCKWISE	AS1-70BR	COUNTER CLOCKWISE	1:1	BLUE
AS1-70	CLOCKWISE	AS1-70R	COUNTER CLOCKWISE	1:1	BLUE

The hand of rotation referred to above is when viewed from stern of boat looking forward.  
\*TRANSMISSION ASSEMBLIES PRESENTLY IN PRODUCTION.

but in the opposite direction. Helical gearing is used to provide quieter operation than can be obtained with spur gear gearing.

The transmission is fast shifting to give the boat operator complete control of the vessel. Shifting is accomplished by the fore and aft movement of the shift lever, (Fig. 16). This movement rotates the control valve and directs oil under controlled pressure to the required channels.

Oil pressure is provided by the crescent type pump, the drive gear of which is keyed to the drive shaft and operates at transmission input speed to provide screened oil to the pressure regulator.

From the regulator valve the oil is directed through the proper circuits to the bushings and anti-friction bearings requiring lubrication. A flow of lubricant is present at the required parts whenever the front pump is turning and it should be noted that supply is positive in forward, neutral and reverse conditions.

The unit has seals to prevent escape of oil.

Both the input and output shafts are coaxial, with the input shaft splined for the installation of a drive damper, and the output shaft provided with a flange for connecting to the propeller shaft.

