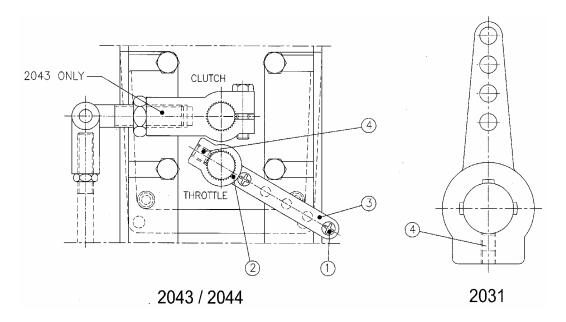


INSTALLATION INSTRUCTIONS PUSH-PULL CONTROLS 2031, 2043, 2044

In order to provide a satisfactory push-pull control system, the following points must be observed:

- 1. Control head must be installed on a flat and clean surface to avoid binding in the bearing sections.
- 2. When attaching the cable to the control head or the engine, it is important not to twist the inner core of the control cable as this will cause additional friction and possible cable failure.
- 3. The cables must be routed in a manner to have as few bends as possible and also to avoid sharp bends.
- 4. Ensure that all fasteners are tightened. For installations subject to severe vibration, secure the screws with "Loctite" or similar thread conditioning compounds.
- 5. Lubricate bearings and other moving parts with all purpose grease periodically.
- 6. Install push-pull cable in cable connector together with a jam nut.
- 7. Refer to diagram below. Loosen screws (item 1) to separate pin retainer plate (item 3) from lever (item 2). Item 1 is provided with sufficient length to allow for inserting the pin without total screw removal.
- 8. Insert pin that comes with the cable connection kit into cable connector. Apply a small amount of grease to pin.
- 9. Now install cable connector between pivot plate and pin retainer plate, and then tighten the screws securely.



2031: Lever has a series of holes to attach the rod end to after it is fitted to the cable.

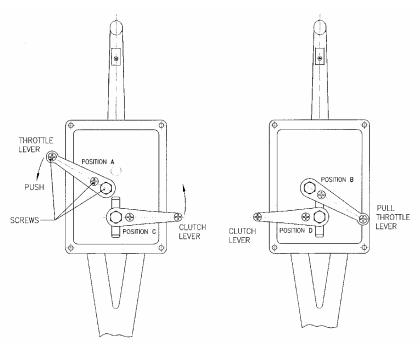
2043/2044: The lever is equipped with several attaching points for the cable connector to provide for various cable strokes. 2044 has two similar levers. 2043 has a special lever for bucket as shown on diagram. Once lever position has been established, secure the lever to the shaft with the set screw (item 4).



INSTALLATION INSTRUCTIONS PUSH-PULL CONTROL 2042

In order to provide a satisfactory push-pull control system, the following points must be observed:

- 1. Control head must be installed on a flat and clean surface to avoid binding in the bearing sections.
- 2. When attaching the cable to the control head or the engine, it is important not to twist the inner core of the control cable as this will cause additional friction leading to cable failure.
- 3. The cables must be routed in a manner to have as few bends as possible and also to avoid sharp bends.
- 4. Ensure that all fasteners are tightened. For installations subject to severe vibration, secure the screws with "Loctite" or similar thread conditioning compounds.
- 5. Lubricate bearings and other moving parts with all-purpose grease periodically.
- 6. Install push-pull cable in cable connector together with a jam nut.
- 7. Insert pin that comes with the cable connection kit into cable connector. Apply a small amount of grease to pin.
- 8. Now install cable connector between pivot plate and pin retainer plate, and then tighten screws securely.
- 9. The screws on the back retainer must be loosened (2 Philips screws and one Hex screw) to attach the cable in the hole of the lever and into the retainer plate.



The proper location must be found in order to arrive at the required stroke for the clutch and throttle. The diagram shows the throttle lever in an idling position in the push mode (position A). By reversing the lever 180° (position B) shows the throttle in a pull mode. Similarly the clutch lever can be reversed (positions C and D) to give a push or pull mode for the clutch. The lever is attached to the shaft with a spline and it is, therefore, important that when the cable is attached to the bottom of the cable bracket, the cable can go to its full stroke by slipping the lever on to a suitable spline location to arrive at a proper relation to cable travel.

After the installation is completed, ensure that all screws, nuts and bolts are adequately tightened.