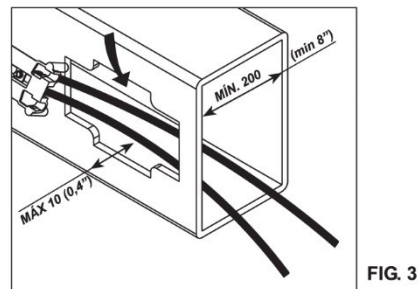
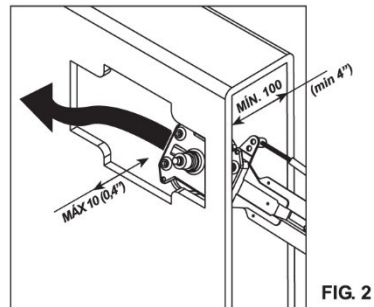
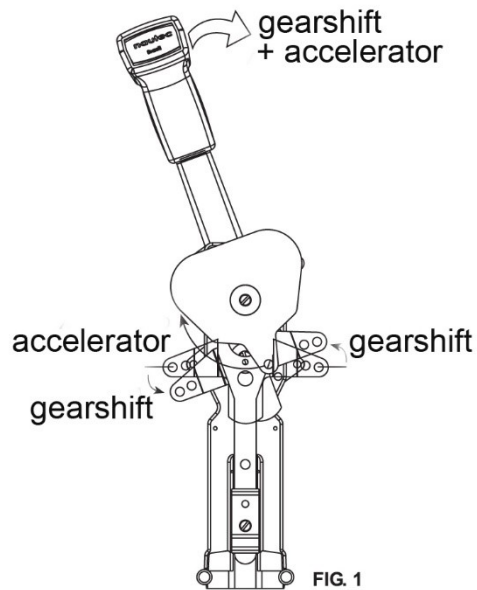


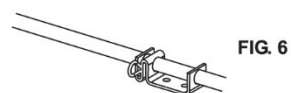
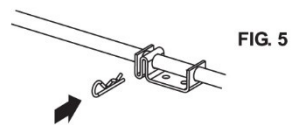
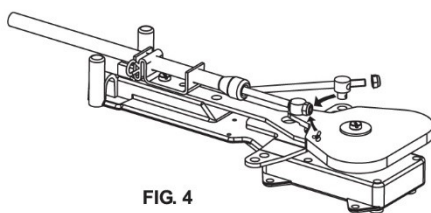
Engine Control – Assembly instructions

Choosing the location of the Engine control, is important to check IF the mechanism will be assembled from inside-out or from the outside. Check fig 1 and 2. The minimum measurements required can be seen in the template. Drill the holes according to the template provided (pg 11). If the mechanism will be installed through the outside, it is necessary to guide the command cables through the opening of the panel and connect the levers as instructed in the guide.



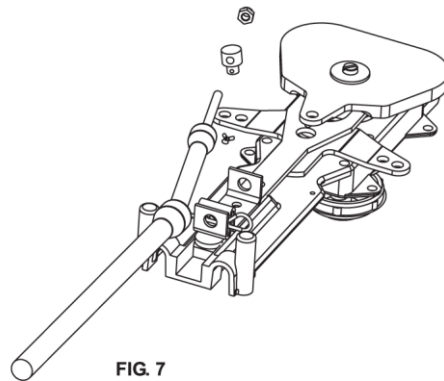
Connecting the throttle cable

- 1) Insert the throttle cable in the support as shown in FIG 4) (if necessary remove the nut and gasket of the cable)
- 2) Lock the cable in the support, fitting the clip as shown in FIG 5 e 6, Make sure that the clip is fixed with straight "leg" facing down.

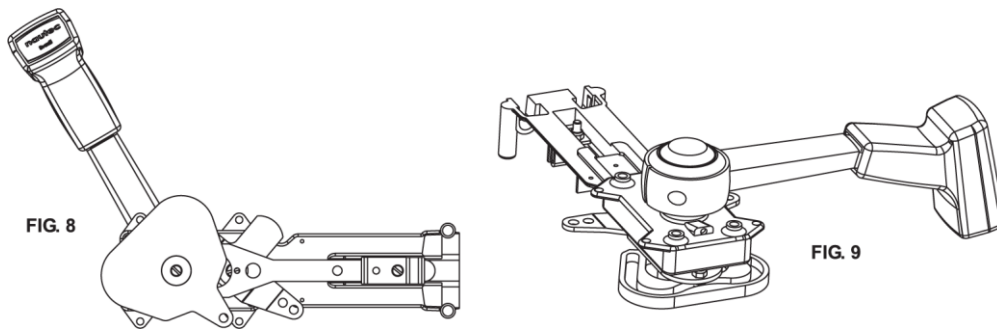


Connecting the reverse command cable

Make sure the cable is installed on the side of the mechanism that makes a “pulling movement” when the next gear is engaged. Make sure the external holes of the actuator arm (FIG 7)



The mechanism installation through the outside is made as shown in FIG 8 and 9

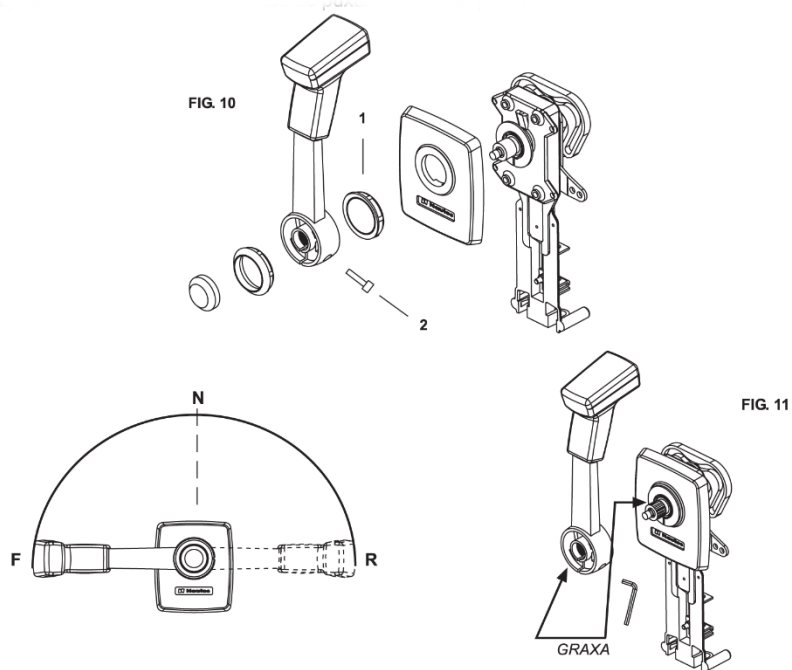


Engaged the forward gear to position the levers as shown in FIG 8. Position the mechanism. Use the command's grip to facilitate the positioning of the command.

Installing the command through the inside (FIG2), the levers should be in the neutral position. The command cables should be attached in their respective levers according FIG 4 and 5

Drill the fixation holes using a 4mm drill. Tighten the mechanism and install the cover finishing (cowling). Place the spacer (1) (FIG 10) in the command lever. Place the lever in the mechanism, making sure you can perform the full movement 'forward/backwards'. Tighten the screw (2). Fit the ring in the lever; finally, insert the disengagement button on the gearshift.

OBS: if for any reason, you need to disassemble the disengagement button, it is convenient to loosen the lever screw (2), extracting the button has you pull out the lever

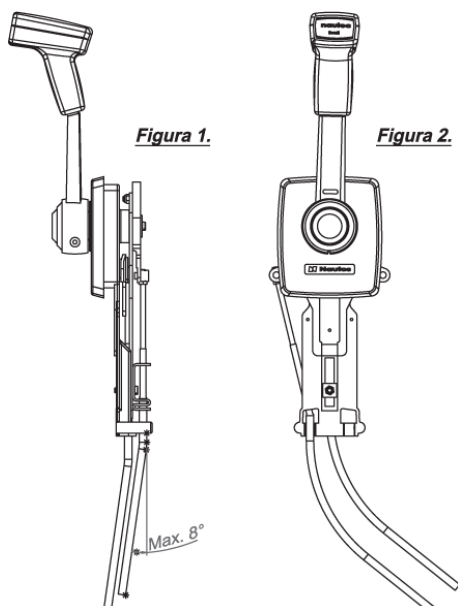


Exit angle of the cables

To the specific case of assembling the command with the cables bent (see FIG1), its recommended a maximum angle of 8 degrees.

If it is not possible to ensure this angle, the cables must be fixed with clamps, ensuring that the body of the command will not suffer severe stress.

The most common assemblies, with the cables moving forward or behind, (se FIG 2) there won't be a problem as long as the bent of the cable don't exceed the manufacturer specifications



Throttle cable

The fixation of the throttle cable must not disturb the movement of the command cable. It is recommended to slightly bend the cable once or twice immediately after the mechanism to avoid large sections of cable without fixation. The cable's movement happens when the lever is operated and is absorbed by these bends. Check the cable's movement after fixation. Respect the minimum curvature radius of $\pm 300\text{mm}$

Connecting the throttle cable to the engine

Place the lock-nut and the pivot articulated (swivel) on the cable. Make sure the command is in neutral and the throttle lever on slow running. Adjust the pivot (swivel) position so it fits the lever hole. Lock the swivel in its final position with the lock-nut and cotter. If you are using a pivot with spring preload, the adjustment must be made accordingly FIG 17.

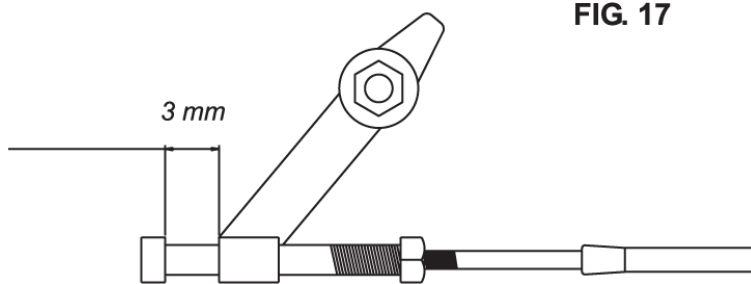


FIG. 17

Connecting the command cable to the reverse gear

Place the pivot and the lock-nut in the cable. Pull the cable outside the cover, then push as much as possible to check the cable's course. Pull the cable again just half the determined course, adjusting the pivot in the correct position, and fixing it to the lever. Lock the pivot with the lock-nut and the cotter. Check the free movement changing the gears.

Inverting the throttle

In case that is necessary to change the movement of the throttle, the mechanism must be readjusted according to FIG 18 and 19

A: Release screw (1) and washer (2)

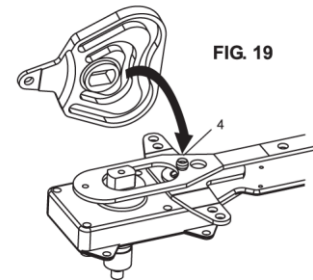
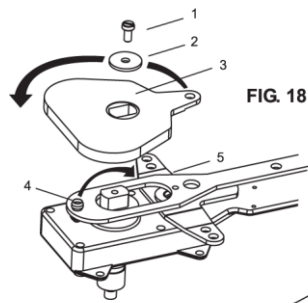
B: Remove the came (3) from the axis

C: Release the screw with roller (4)

D: Place the screw with roller (4) on position 5.
Tighten with the lock-nut.

E: Remount the came, inverting it's original position
(FIG 18 to FIG 19) making sure the roller (4) is placed
in the greased channel

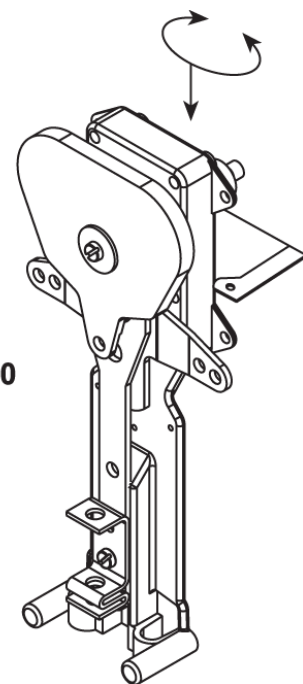
F: Remount the screw (1) with the washer(2)



Adjusting the friction control

The friction control determines the “heaviness” of the throttle movement, It’s adjusted with the gear engaged, and the throttle at half point. The movement is more stiff turning towards the (+), and softer towards the (-). Check FIG 20.
Friction control doesn’t affect the engaging gears movement.

FIG. 20



ATTENTION!

During assembly or maintenance, do not move the lever differently of the control leverage, for it may cause system blockage.

IN CASE OF ACCIDENTAL BLOCKAGE: Press the throttle button (center of lever) with gentle movement of the lever. When the pin is inside, align the lever with the imaginary axis of the gear control arms (FIG B). Once aligned, bring the arms to horizontal position. The lever is cleared and may return to the center.

Template

Recorte esta página e use como gabarito de furação

