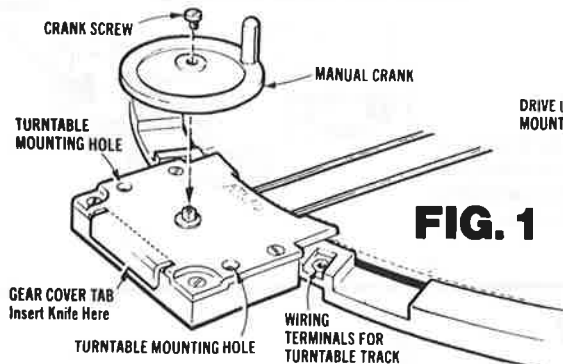


# ATLAS TURNTABLE & MOTORIZED DRIVE UNIT

NOTE: MOTORIZED DRIVE UNIT IS NOT INCLUDED WITH TURNTABLE AND MUST BE PURCHASED SEPARATELY

## ASSEMBLY & TESTING

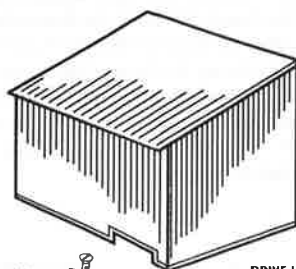
**IMPORTANT!** Read all instructions carefully before installing or wiring Turntable



**FIG. 1**

### MANUAL DRIVE

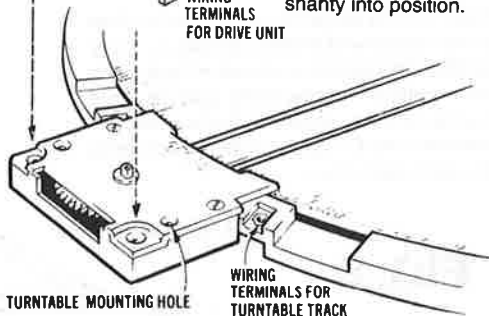
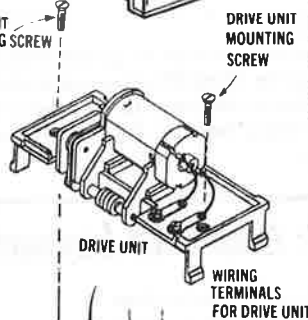
Attach the circular handcrank to the gearshaft, using the screw provided, as shown in Fig. 1. Rotation of the crank will unlock the table, shift it to the next track position and then re-lock it. Check the table's operation by rotating it through a complete revolution. If any drag is noticed during rotation check ends of rails to make certain they do not protrude beyond turntable edge. The rails can be shifted by pressing against their ends with the flat side of a screwdriver. Note: When turntable stops at desired track location, rotate the crank through an additional full revolution to lock the table in position.



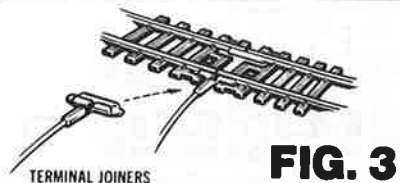
### ELECTRIC DRIVE

Turntable should be secured to layout before installing Motor Drive Unit as drive unit will cover two of the table mounting screws. However, even though the table is to be motorized, it is a good idea to use the handcrank to check the table's operation as described under "Manual Drive" it will be more convenient to use the manual crank for positioning the turntable to help align the approach and roundhouse stall tracks as will be described later.

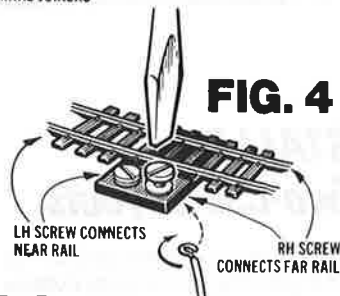
To install Motorized Drive Unit, first insert a dull knife blade behind the tab on the gearcase cover where indicated in Fig. 1. Pry the tab upward then bend it back and forth. It will snap off, cleanly, along a scored line on the underside of the cover, to expose the outermost gear seen in Fig. 2. Next, remove the two outer corner screws from the gearcase cover, install the drive unit and replace the two screws to secure it in place. Before tightening screws, make certain that the drive worm is not jammed tightly against the gear. A small amount of clearance is necessary. Temporarily connect test leads from a 12 volt DC power pack to the two drive unit wiring screws to test motor operation. When satisfied, slip shanty into position.



**FIG. 2**



**FIG. 3**



**FIG. 4**

## BEFORE INSTALLING TURNTABLE . . .

Before installing turntable on layout, you should decide how wiring connections will be made to the approach track(s) and roundhouse stalls. If you are using sectional track, you can use either of the solderless methods which follow. Fig.3 shows prewired Atlas Terminal Joiners which can be installed at any convenient joint between sections and Fig. 4 shows Atlas Track Terminal Sections. Later paragraphs on wiring call for making wiring connections to specific rails. If you decide to use Atlas Track Terminal Sections, either straight or curved, the following rule will save having to swap wires around later on: When facing any Atlas Terminal Section, as in Fig 4, the lefthand screw is connected to the near rail and the righthand screw is connected to the far rail.

Notice also that the track positions around your turntable are identified by letters A and B. There are six A and five B positions. Because these letters will be hidden when tracks are installed it is a good idea to temporarily identify the tracks with gummed labels and, if you are using Terminal Sections, to place the terminals block on all "A" tracks facing one way and in the

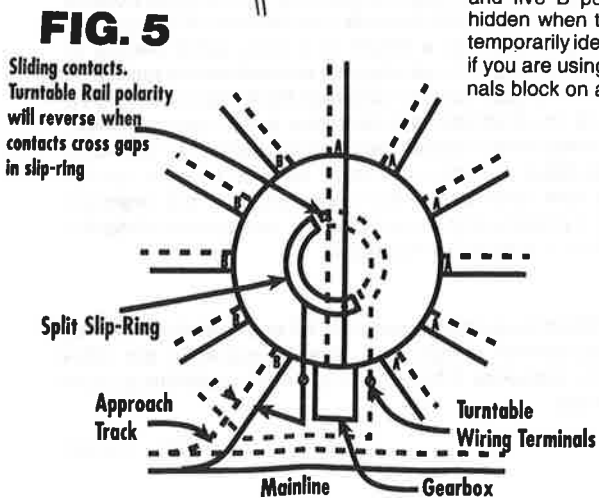
opposite direction on all "B" tracks as shown in Figs. 8 and 9 on the next page.

### TIPS FOR BEST INSTALLATION

Notching or recessing of layout table is unnecessary; however, for best appearance and operation approach track(s) and roundhouse stalls should be mounted on roadbed. If necessary, track can approach table at a slight grade but a wedge shape shim should be provided for support. Locate the turntable at the end of your approach track. Install end of track in any of the track notches around the table's periphery. Crank the turntable track into alignment with the approach track then sight along the tracks shifting table to one side or the other for the best alignment. Secure the turntable to the layout with the four woodscrews provided. Two screw holes are in the gearcase and two are in the outer rim. Before proceeding, check operation of turntable to insure that it rotates freely. If necessary, slightly loosen mounting screws. As each roundhouse stall track is installed, before fastening it down be sure to crank the table track to that position to check alignment. Be sure to leave a bit of clearance between the stall track ends and the turntable to avoid interference.

## BEFORE WIRING . . .

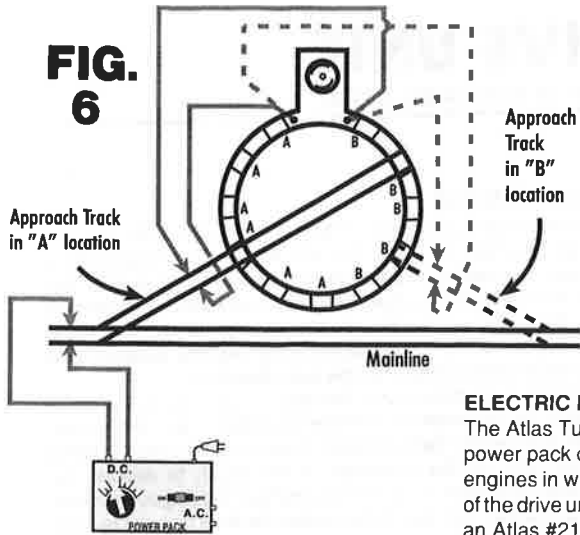
Because it is impractical to illustrate all the track arrangements possible with your Atlas Turntable, it is important that you familiarize yourself with the table's wiring scheme: In order that an engine be able to move from an approach track onto the table and then into a roundhouse stall, it is necessary that the polarity of the approach and stall track rails corresponds with the polarity of the turntable rails. This is taken care of by a split slip-ring arrangement, built into the turntable as shown in Fig. 5, which automatically reverses the turntable's rail polarity when necessary. The following simple rule will enable you to wire the stall tracks correctly: For the single "A" position track directly opposite the gearbox, the lefthand rail (dashed line) must be the same polarity as the righthand terminal screw and the righthand rail (solid line) the same polarity as the lefthand terminal screw. At all other track positions both "A" and "B", the rail nearest (solid lines) the gearbox must be the same polarity as the lefthand terminal and the other rail (dashed lines) the same polarity as the righthand terminal. Figs. 6 through 9 illustrate several typical control arrangements.



**FIG. 5**

# WIRING & CONTROL of Turntable & Roundhouse Stalls

**FIG. 6**



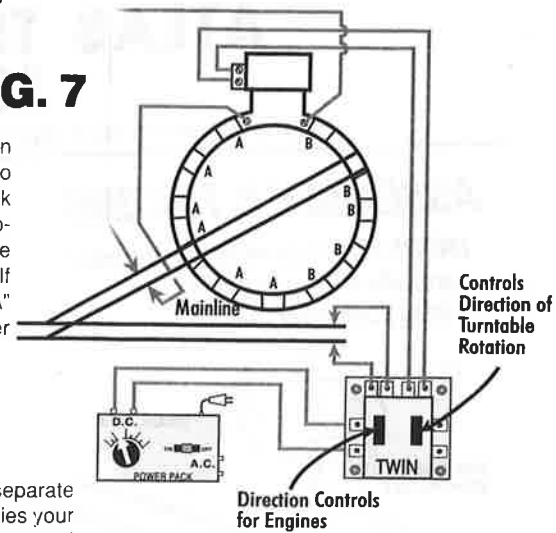
**MANUAL DRIVE**

Where a manual turntable is used only to turn engines on simple "one-cab" layouts, just two wires are needed to feed the turntable track. These may be tapped directly from the approach track as in Fig. 6. Connections are shown for "A" or "B" location approaches. If two approach tracks are used, one in the "A" and one in the "B" location as shown, either set of connections will suffice.

**ELECTRIC DRIVE**

The Atlas Turntable Drive Unit can be powered either by a separate power pack or the same 12 volt DC power pack which supplies your engines in which case a switch must be provided to separate control of the drive unit from that of the locos. Fig. 7 shows how to do this using an Atlas #210 Twin.

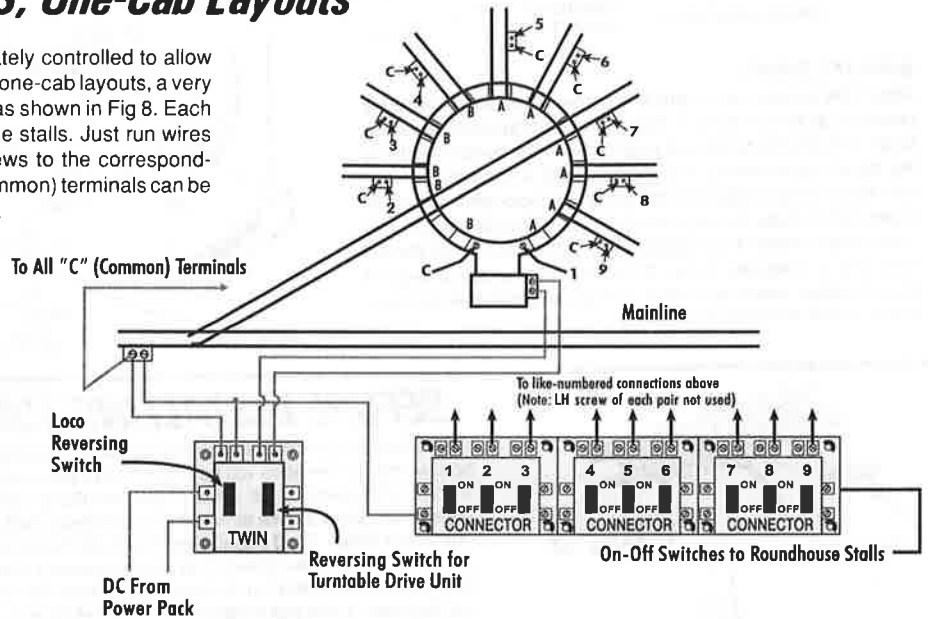
**FIG. 7**



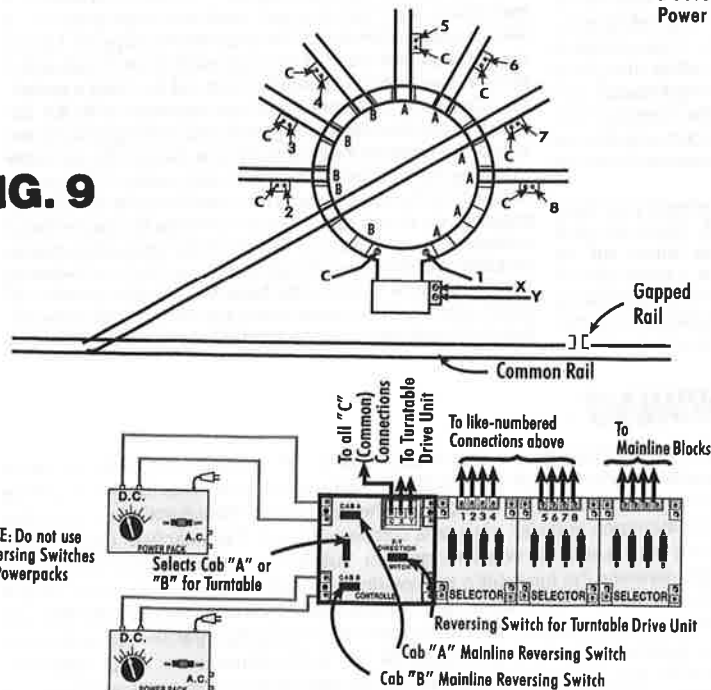
## ROUNDHOUSE STALLS; One-Cab Layouts

Each roundhouse stall track must be separately controlled to allow power to be shut off under stored engines. On one-cab layouts, a very simple method uses Atlas #205 Connectors as shown in Fig. 8. Each Connector provides separate control for three stalls. Just run wires from the numbered Connector terminal screws to the correspondingly numbered track connections. All "C" (common) terminals can be connected together at any convenient place.

**FIG. 8**



**FIG. 9**



## ROUNDHOUSE STALLS; Two-Cab Layouts

If your layout is wired for two-train operation using the common-rail system one rail of your trackage is divided into separately controllable blocks. Using an Atlas #220 Controller and Atlas #215 Selectors as shown in Fig. 9 provides a simple and easily wired method of selectively controlling and powering your turntable and its stall tracks from either of two cabs. Just run wires from the numbered or lettered terminals on the Controller and Selectors to the correspondingly identified connections on the turntable and stall tracks. The Controller governs turntable operation and each Selector provides control selectively from either cab to four stalls. Note that the additional Selector at the right in Fig. 9 is intended for the mainline blocks for which track connections are not shown.

Further information concerning your Atlas turntable and wiring with Atlas control components can be found in the Atlas book, "The Complete ATLAS Wiring Book" available at most hobby shops.