



For use with LANCER JR. TYPE "L" General Purpose AC Inverter Drives mounted in a NEMA Type 4 or Type 12 enclosure. This kit is for drives rated 20 HP, 230V.

## CIRCUIT BREAKER KIT MODEL 92116

### DESCRIPTION

**46S02634-0080**

This Louis Allis kit provides a circuit breaker switch for disconnecting a LANCER JR. TYPE "L" Inverter Drive from the incoming 3-phase AC power source. The kit is designed for installation with the LANCER JR. Drive in a NEMA Type 4 or Type 12 Sheet Steel Enclosure.

Before installing this kit, a **TECHNICALLY QUALIFIED INDIVIDUAL** who is familiar with this type of equipment and the hazards involved, should **READ** this **ENTIRE MANUAL**.

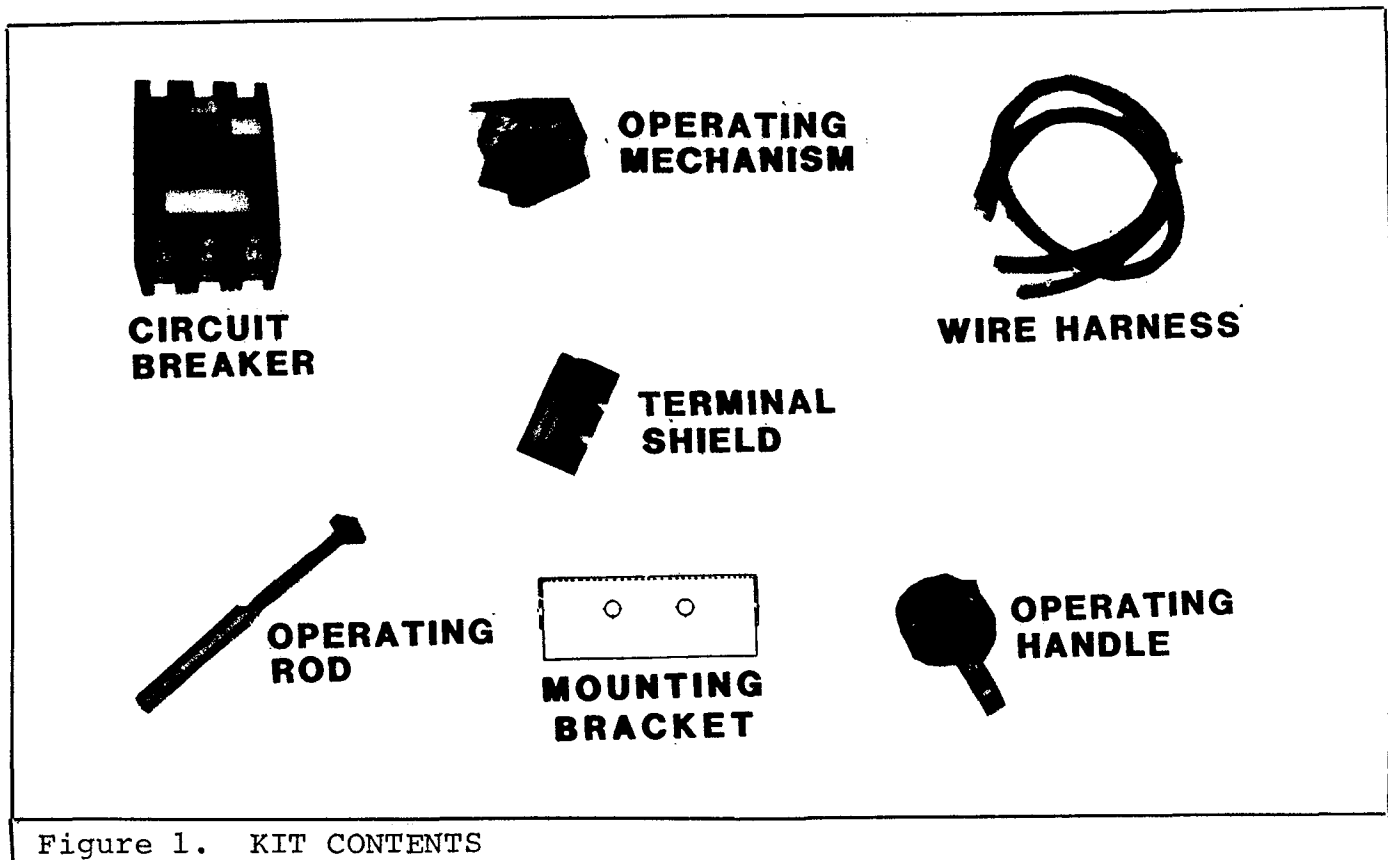


Figure 1. KIT CONTENTS

Table 1. KIT CONTENTS

QTY.	DESCRIPTION	PART NO.
1	Circuit Breaker 125A, 480V	05P00012-0312
1 4 4 1	Operating Mechanism 8-32 x 3-7/8" Screws 5/16" x 5/8" Spacers 8-32 x 1/2" Set Screw	05P00209-0048
1	Operating Rod	05P00209-0038
1 3	Operating Handle 1/4-20 x 7/16" Screws	05P00209-0033
1	Terminal Shield with 6-32 Screws	05P00209-0056
1	Wire Harness	61S02634-0080
2	Mounting Bracket	43T00858-0100
4	8-32 x 1/2" Screws	05P00306-0607
4	8-32 Lock Washers	05P00301-1004
4	8-32 Flat Washer	05P00301-0004

## INSTALLATION

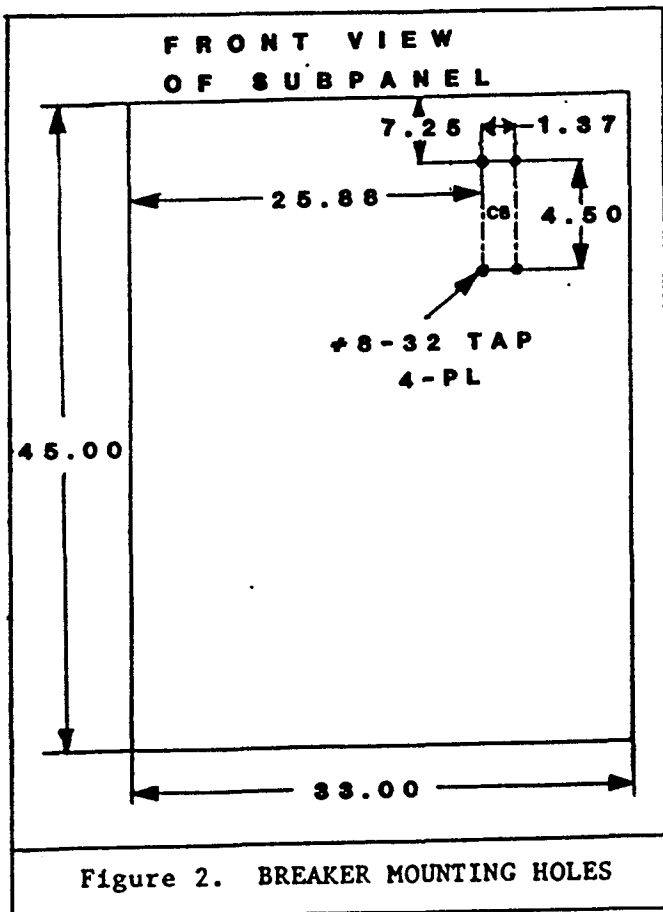
1. Disconnect all electrical power to enclosure. Verify voltage has been removed by using a voltmeter to check for voltage at incoming power terminals.

### WARNING

HAZARDOUS VOLTAGE CAN CAUSE  
SEVERE INJURY OR DEATH.

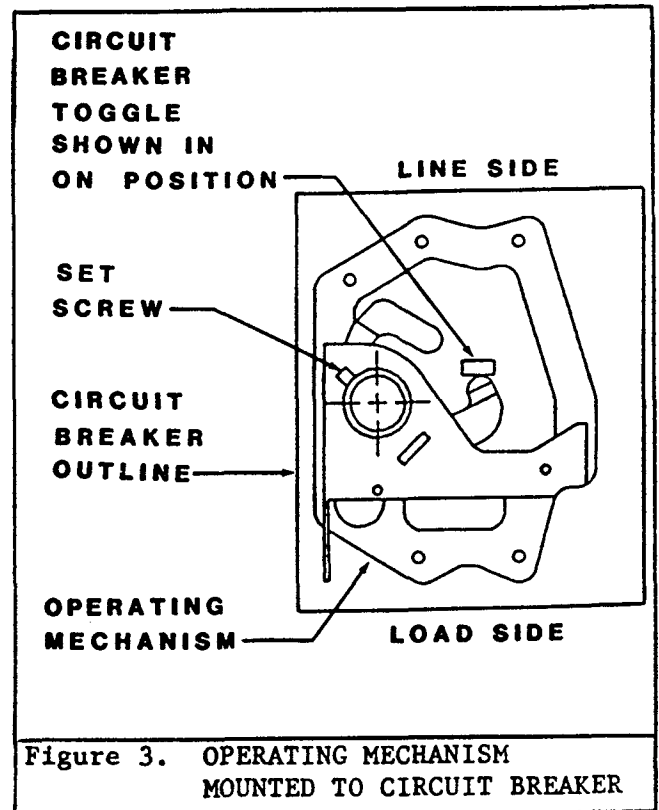
LOCK ALL POWER SOURCES FEEDING  
ENCLOSURE IN "OFF" POSITION.

2. Drill and tap four circuit breaker mounting holes into subpanel located in enclosure. See Figure 2.



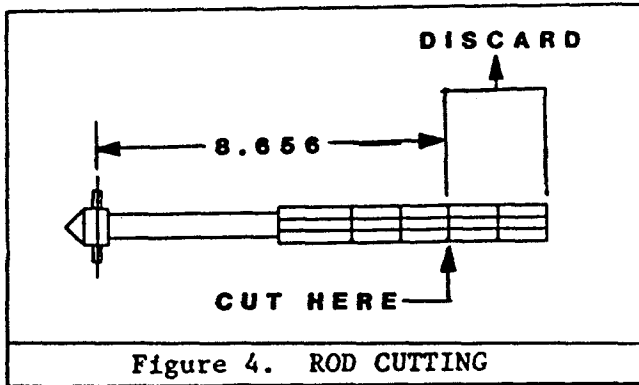
3. Position two mounting brackets over subpanel so that larger untapped holes in brackets are directly over holes drilled during Step 2. For easier installation face open side of each bracket outward. Fasten brackets to subpanel with four 8-32 x 1/2" screws, four #8 flatwashers, and four #8 lockwashers.

4. Insert the 8-32 x 1/2" set screw into operating mechanism and advance one turn only. Set circuit breaker toggle switch to ON position. Insert the four spacers into the four mounting holes in circuit breaker. Position operating mechanism over these spacers and insert four 8-32 x 3-7/8" screws. See Figure 3.

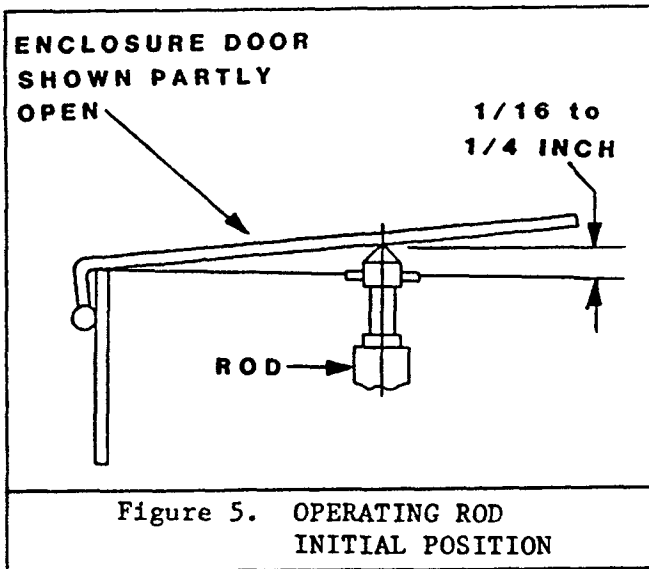


5. Position circuit breaker assembly on mounting brackets installed during Step 3. Line side of breaker must face upward, load side must face downward. Securely fasten assembly to subpanel by tightening the four mounting screws.

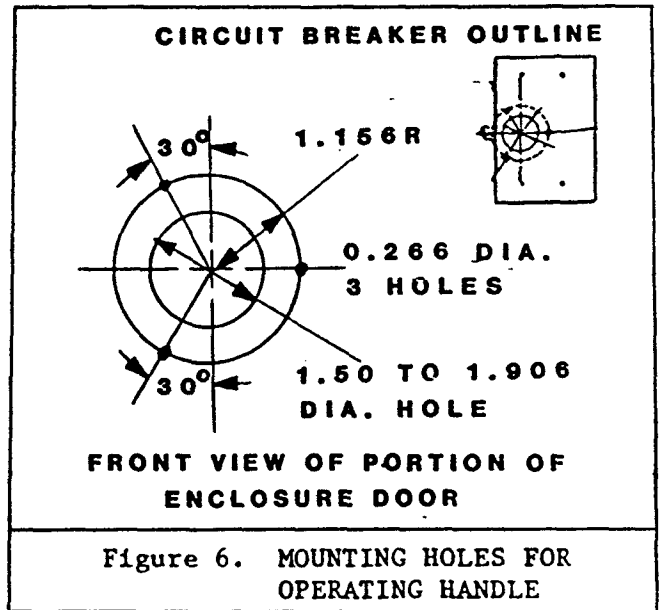
6. Cut off and discard a portion of the threaded end of operating rod as shown in Figure 4.



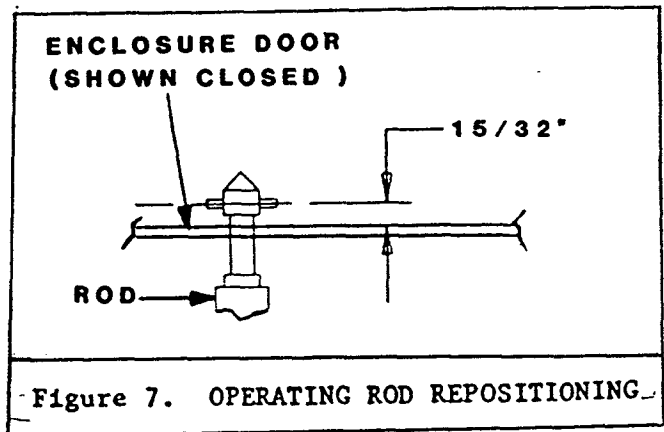
7. Turn remaining portion of operating rod into operating mechanism. Rod tip must extend a small distance beyond door opening. See Figure 5.



8. Center punch a mark onto enclosure door by lightly closing door against operating rod. Drill four holes in door as shown in Figure 6.



9. Turn out operating rod so that it extends  $15/32$ " beyond closed door. See Figure 7.



10. Turn operating rod as required (up to  $1/2$  turn) to line up keyhole slot in operating rod with set screw in operating mechanism. Tighten set screw until securely seated in operating rod slot. Push circuit breaker toggle switch to "OFF" position.

11. Position operating handle on outside of enclosure door over holes drilled in Step 7. See Figure 8 for correct positioning. Secure handle to door using three 1/4-20 x 7/16" screws.

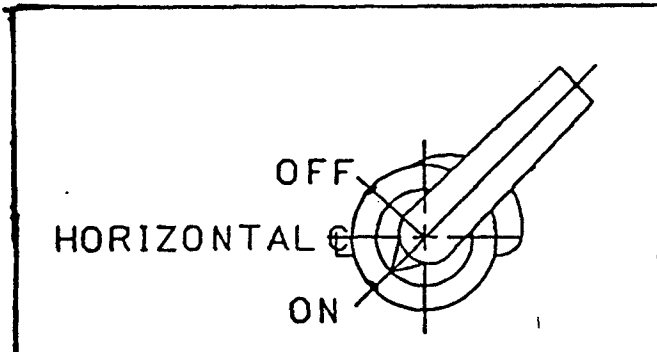


Figure 8. FRONT VIEW OF OPERATING HANDLE ON ENCLOSURE DOOR

12. Turn operating handle to OFF position and close the enclosure door. With door closed, turn handle to ON position. Enclosure door is now latched shut. If door can be opened while operating handle is in ON position, then handle is not mating properly with operating rod. Check mating of operating rod with operating handle. Refer to Steps 2 through 11.

13. Turn operating handle from ON position to OFF position. Open enclosure door and verify that circuit breaker is in OFF position. If breaker is still ON, then check Steps 2 through 12.

Note

Refer to Figure 9 for Steps 9 thru 18.

14. Disconnect incoming 3-phase AC power wires "L1", "L2", and "L3" from line input terminals on LANCER JR. Drive. Reroute these three wires to line side of circuit breaker. Cut off any lugs and excess wire as required. If no longer labeled, relabel wire "L1" as "L1", wire "L2" as "L2", and "L3" as "L3".

15. Dress each wire end for a length of 1/2 inch. Insert dressed "L1" wire into circuit breaker line terminal "L1". Insert "L2" wire into line terminal "L2" and "L3" wire into line terminal "L3".

16. Take wire harness supplied with kit and connect harness lug ends labeled "L1", "L2", and "L3" to line input terminals on Drive labeled "L1", "L2", and "L3". Connect "L1" to "L1", "L2" to "L2", and "L3" to "L3". If Drive line input terminals are labeled "R", "S", and "T", then connect wire lug "L1" to terminal "R", lug "L2" to terminal "S" and lug "L3" to terminal "T".

17. Route wire harness from Drive line input terminals to load side of circuit breaker. Cut excess wire as required. Dress each wire end for a length of 1/2 inch. Insert dressed "L1" wire end into circuit breaker load terminal "L1". Insert "L2" wire into load terminal "L2", and "L3" wire into load terminal "L3".

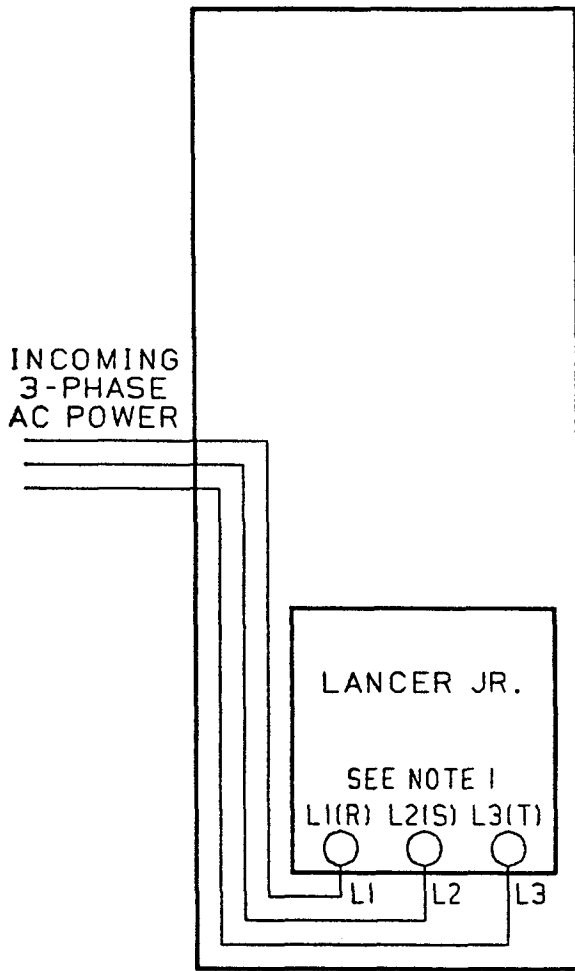
18. Fasten line side terminal shield supplied with kit to line side of circuit breaker using the 6-32 self-tapping screws supplied with shield.

19. Remove all drilling and wire waste from enclosure to avoid shorting electrical components. Check wiring one more time and then close the enclosure door.

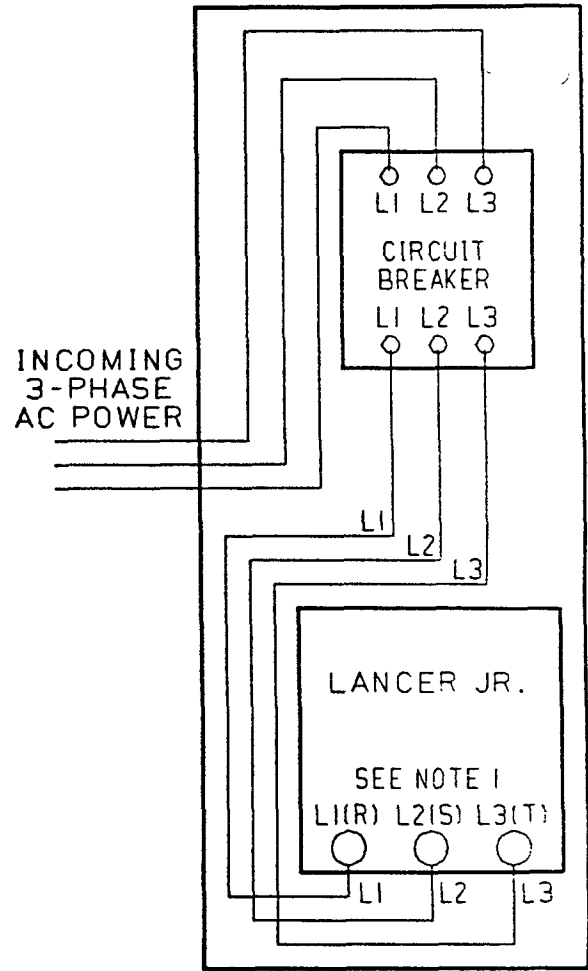
20. Reconnect electrical power to enclosure. Verify that circuit breaker is operating properly by checking drive or motor power status with breaker ON and then with breaker OFF.

NEMA Type 4 or Type 12 (Door Closed)

NEMA Type 4 or Type 12 (Door Open)



Configuration Before  
 Circuit Breaker Kit Installation



Configuration After  
 Circuit Breaker Kit Installation

Note: 1. Input line terminals on your Lancer Jr. Type L Controller are designated either L1, L2, L3 or R, S, T.

Figure 9. INTERCONNECTION DIAGRAM