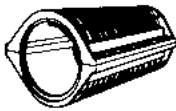


3M INSTALLATION PROCEDURE FOR 2-TYPE FIRE RETARDANT CLOSURE SYSTEM 505 VERSION

COVER

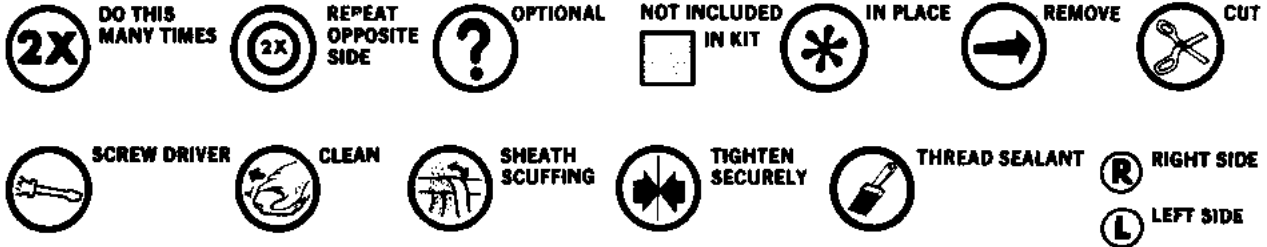


ENDPLATES



PLEASE BECOME FAMILIAR WITH THE SYMBOLS

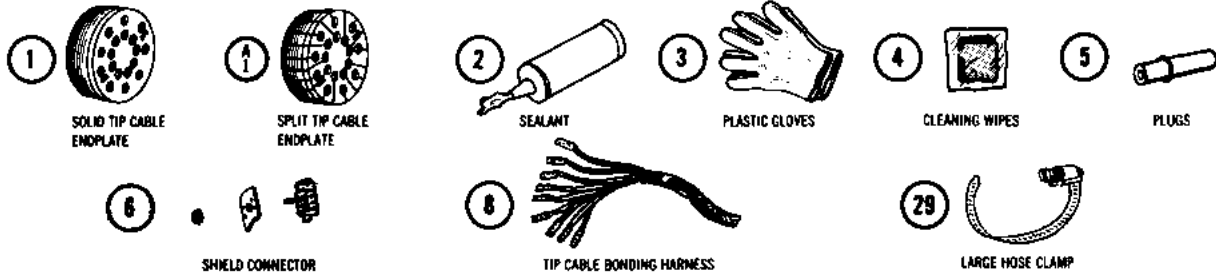
★ = EXTREMELY IMPORTANT STEPS TO FOLLOW



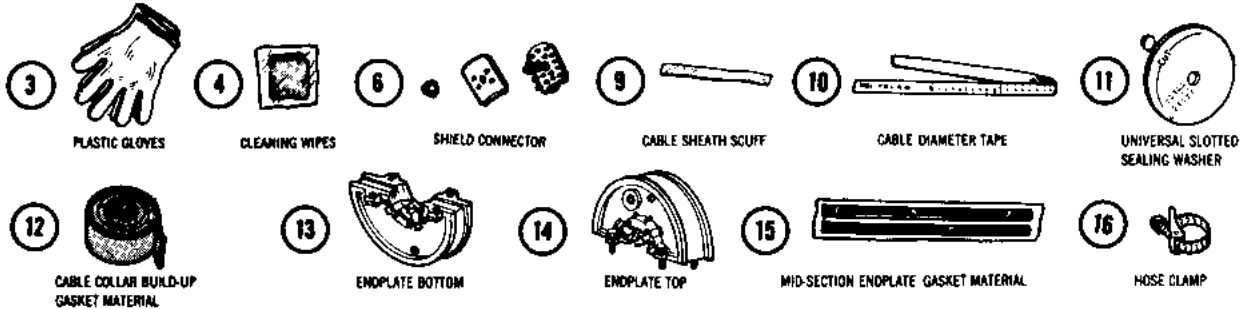
MATERIAL PACKED IN TIP CABLE ENDPLATE CARTON

NOT INCLUDED IN SOLID TIP ENDPLATE (29)

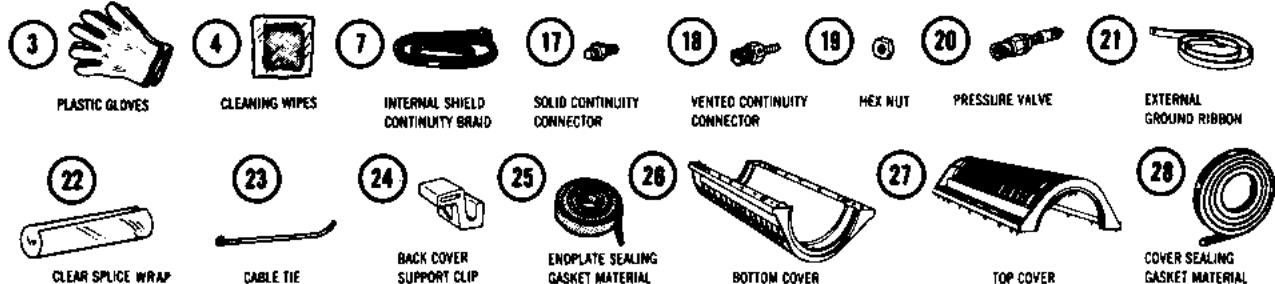
NOT INCLUDED IN SPLIT ENDPLATE (6, 9)



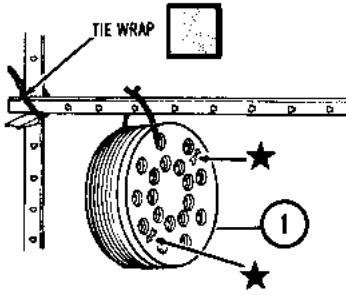
MATERIAL PACKED IN ENDPLATE CARTON



MATERIAL PACKED IN COVER CARTON

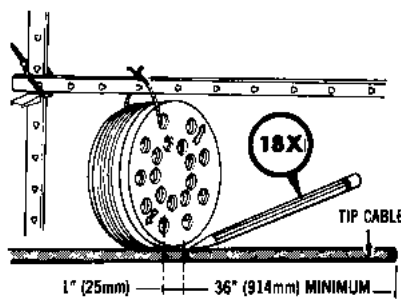


1 SOLID TIP CABLE ENDPLATE
PREPARATION FOR NEW CONSTRUCTION

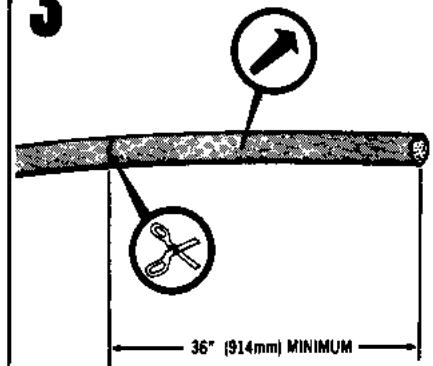


FOR SPLIT TIP ENDPLATE SEE STEP 64

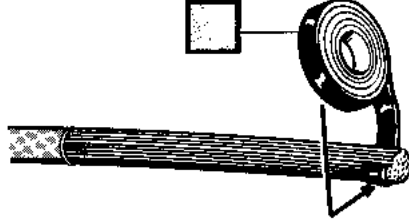
2 18E SHOWN ONLY, USE
SAME PROCEDURE FOR
OTHER TIP ENDPLATES



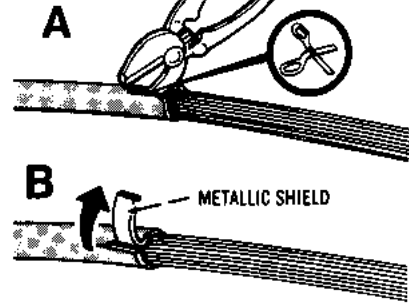
3 OUTER SHEATH AND CORE WRAP



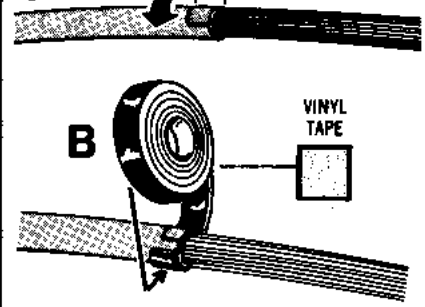
4 VINYL TAPE



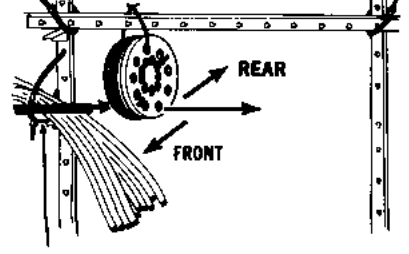
5 A



6 A

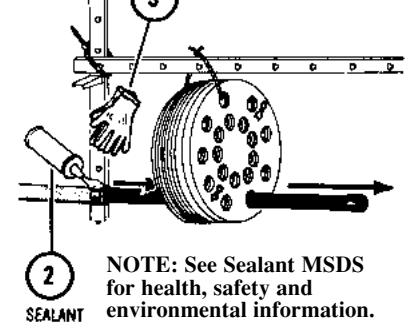


7



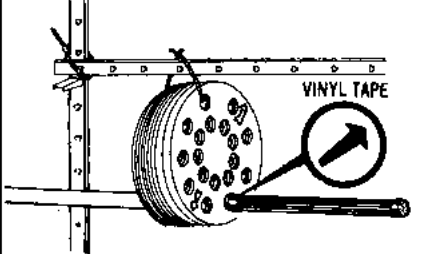
INSTALL ALL CABLES
FROM REAR TO FRONT

8

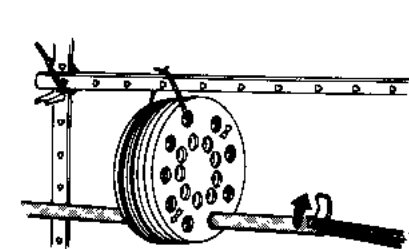


NOTE: See Sealant MSDS
for health, safety and
environmental information.

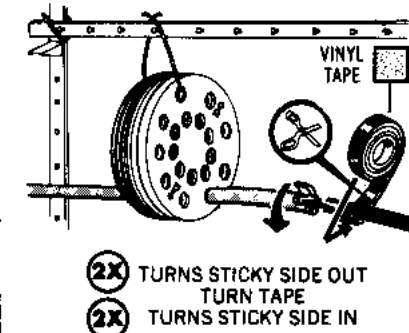
9



10

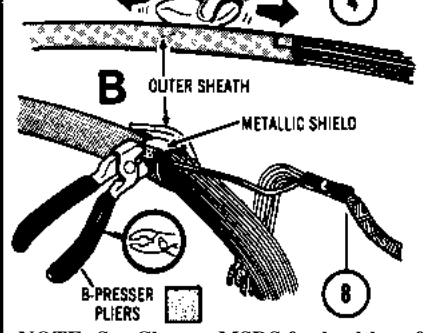


11



2X TURNS STICKY SIDE OUT
TURN TAPE
2X TURNS STICKY SIDE IN

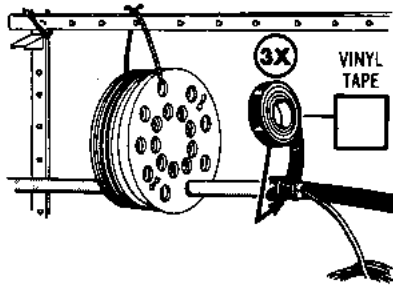
12 A



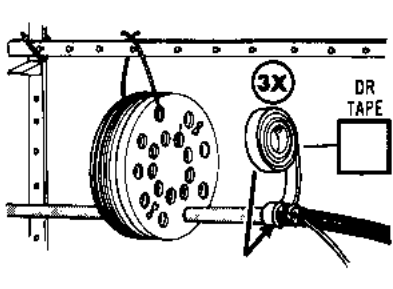
NOTE: See Cleaner MSDS for health, safety
and environmental information.



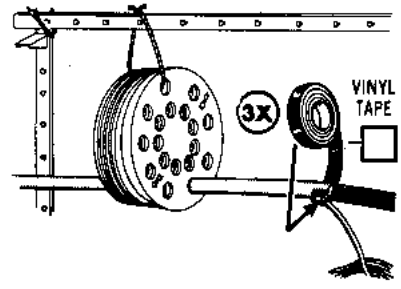
13



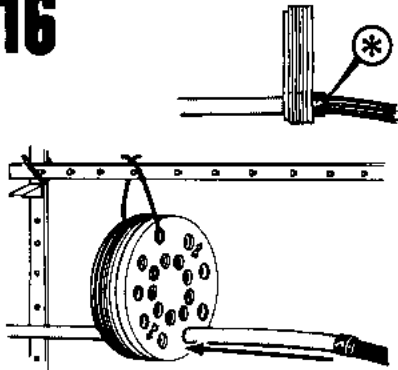
14



15

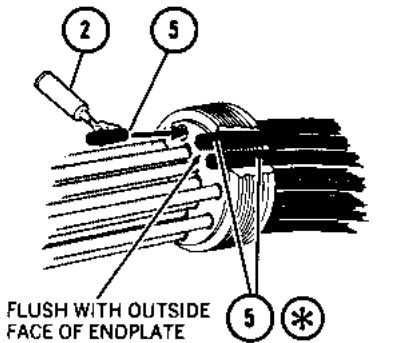


16



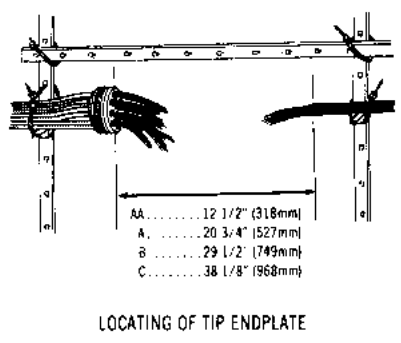
17

USE PLUGS FOR ALL UNUSED CABLE OPENINGS



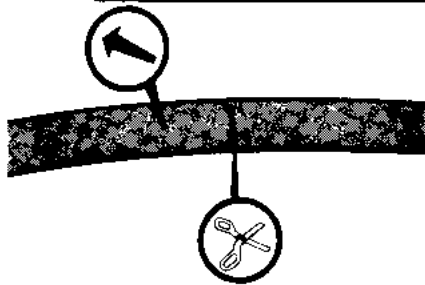
18

INSIDE FACE OF TIP CABLE ENDPLATE TO END OF CABLE SHEATH

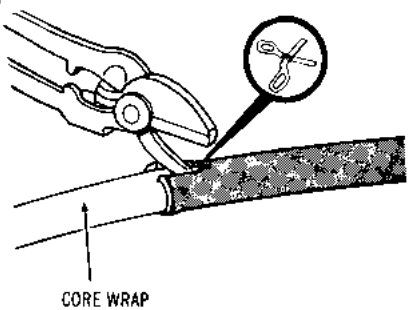


19

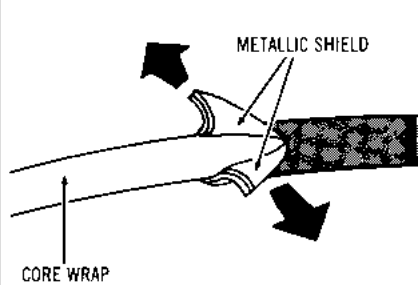
MAIN CABLE PREPARATION



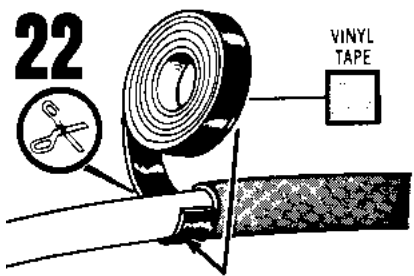
20



21

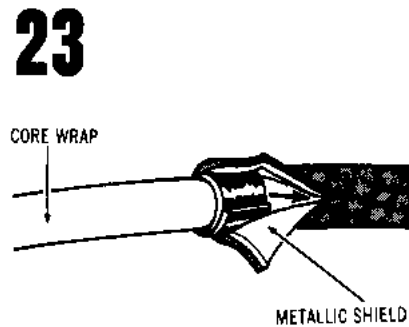


22



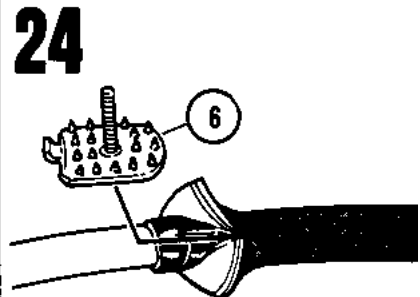
2X TURNS (STICKY SIDE OUT)
TURN TAPE
2X TURNS (STICKY SIDE IN)

23

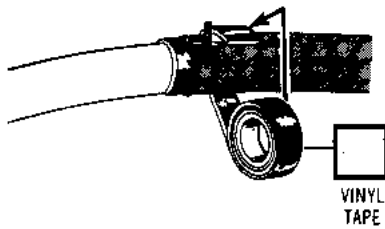


SLIDE VINYL TAPE BETWEEN METALLIC SHIELD AND CORE WRAP

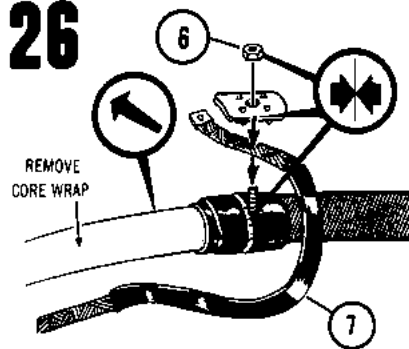
24



25

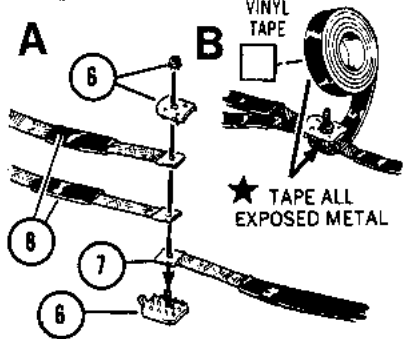


26

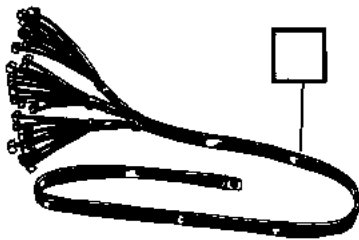


27

ATTACHING NINE FINGER BONDING HARNESSES TO INTERNAL CONTINUITY BRAID

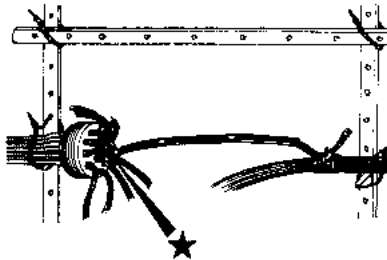


28



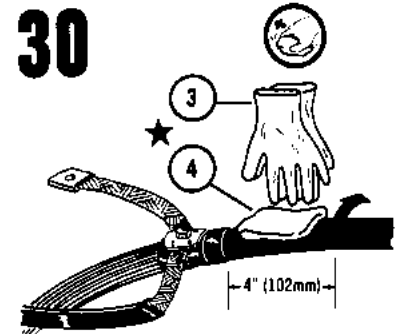
PRE-ATTACHED NINE FINGER BONDING HARNESS AND CONTINUITY BRAID

29

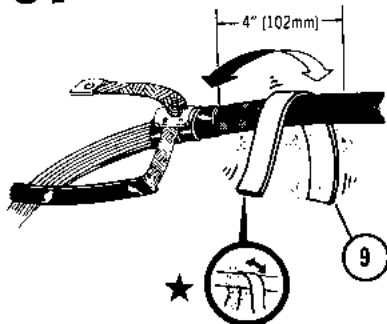


FOLD EXCESS SHIELD CONTINUITY INTO CABLES

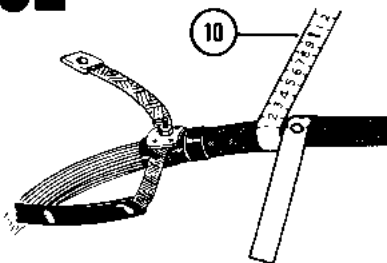
30



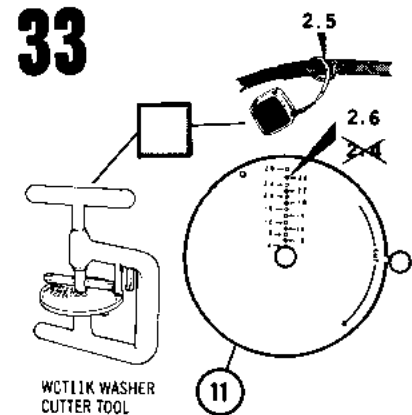
31



32



33

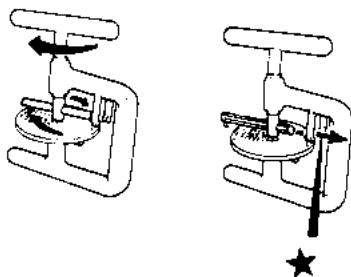


WCT11K WASHER CUTTER TOOL

34

A

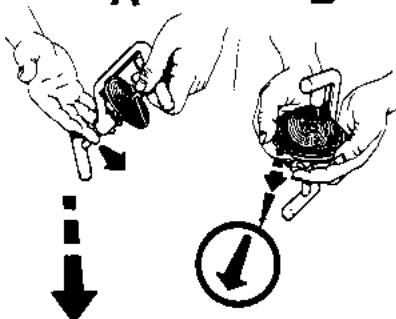
B



35

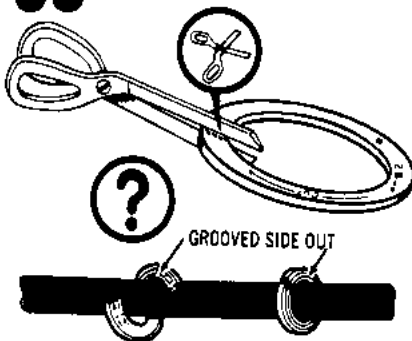
A

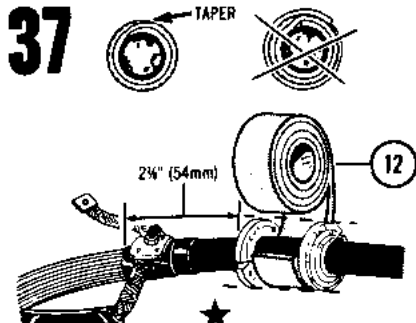
B



36

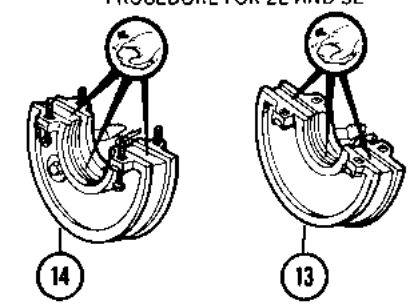
CUT WASHER AT DIMENSIONAL HOLES

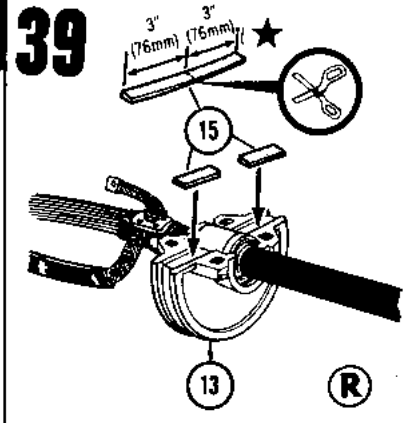


37 

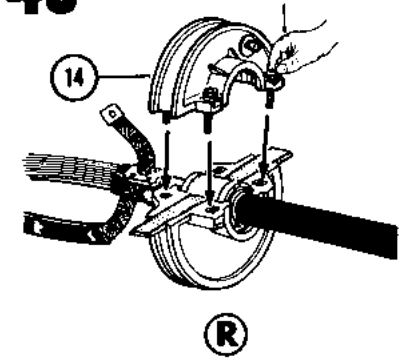
WRAP COLLAR BUILD-UP GASKET MATERIAL EVEN WITH DIAMETER OF WASHERS
DO NOT OVERWRAP

38 MAIN CABLE ENDPLATE PREPARATION
 IE SHOWN ONLY. USE SAME PROCEDURE FOR 2E AND 3E

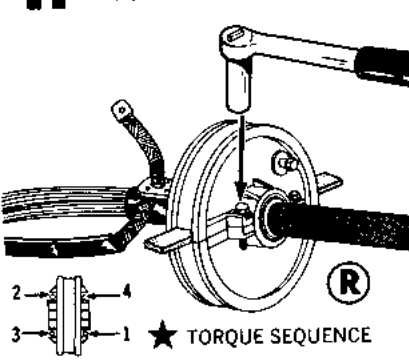


39 

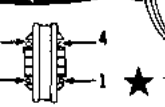
40 **HAND START ALL BOLTS AT ONE TIME**

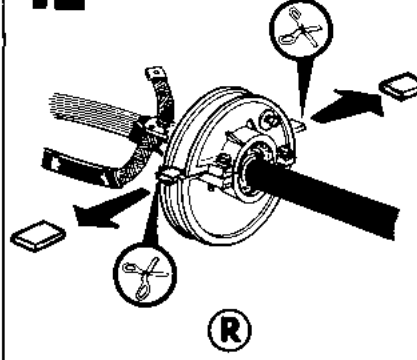


41 **TORQUE EVENLY 200-250 in-lbs (2.3-2.9 kgm)**

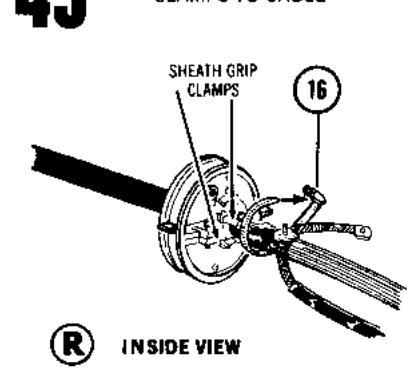


TORQUE SEQUENCE



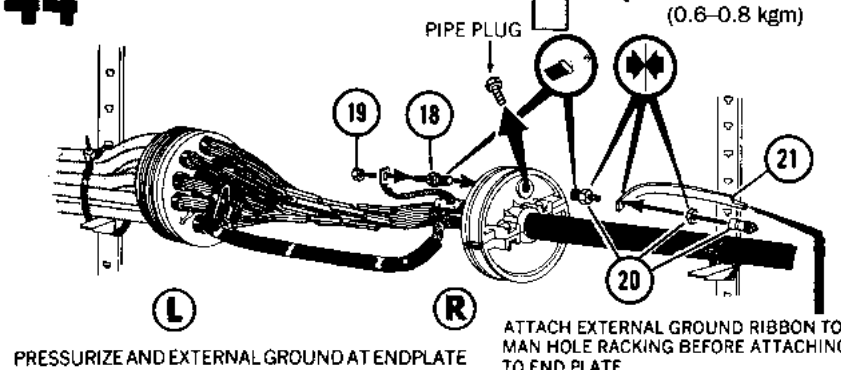
42 

43 **SECURE SHEATH GRIP CLAMPS TO CABLE**



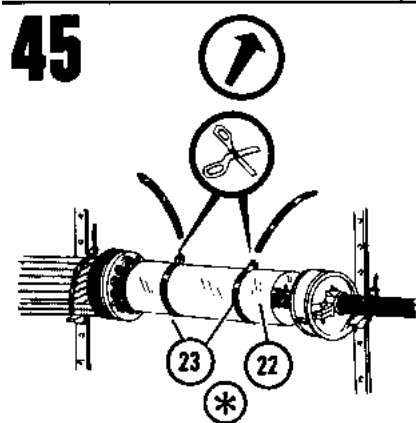
INSIDE VIEW

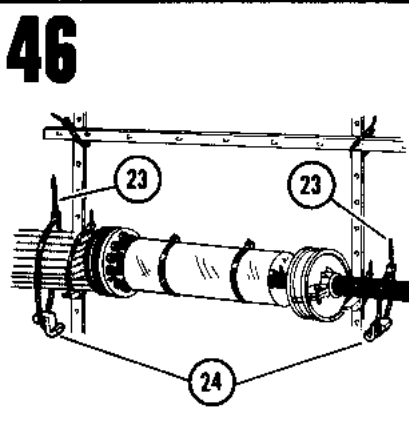
44 **TORQUE TO 50-70 in-lbs (0.6-0.8 kgm)**

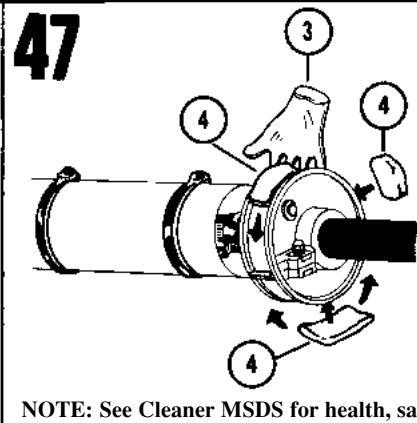


PIPE PLUG

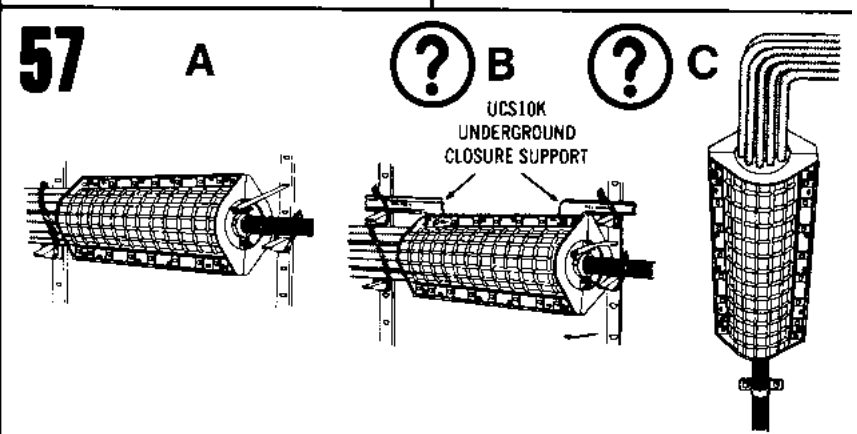
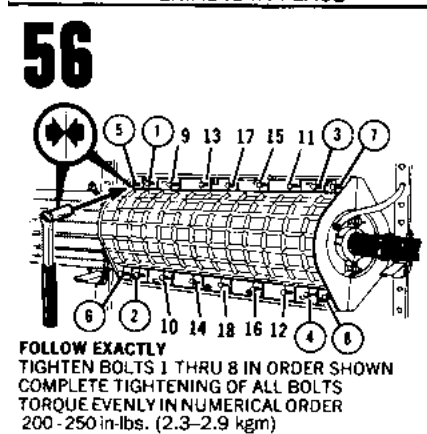
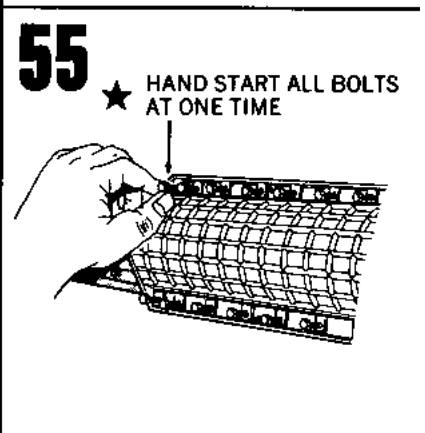
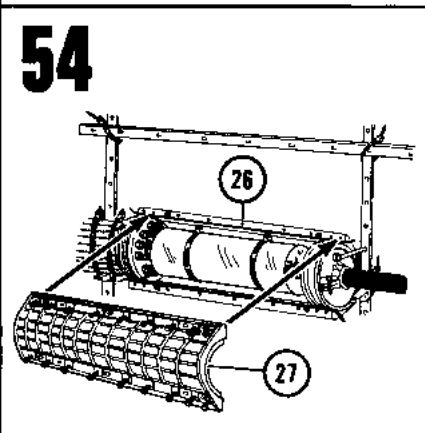
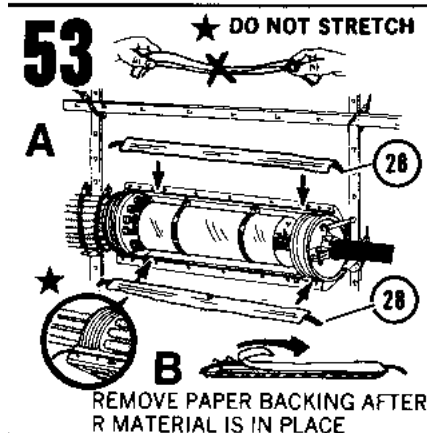
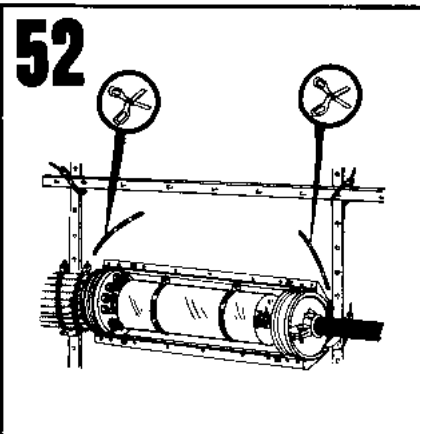
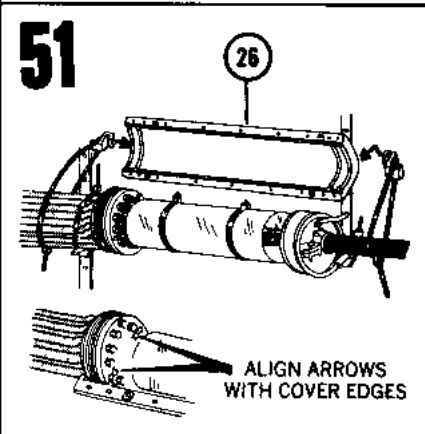
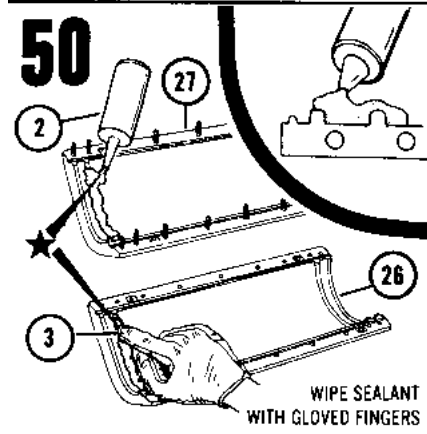
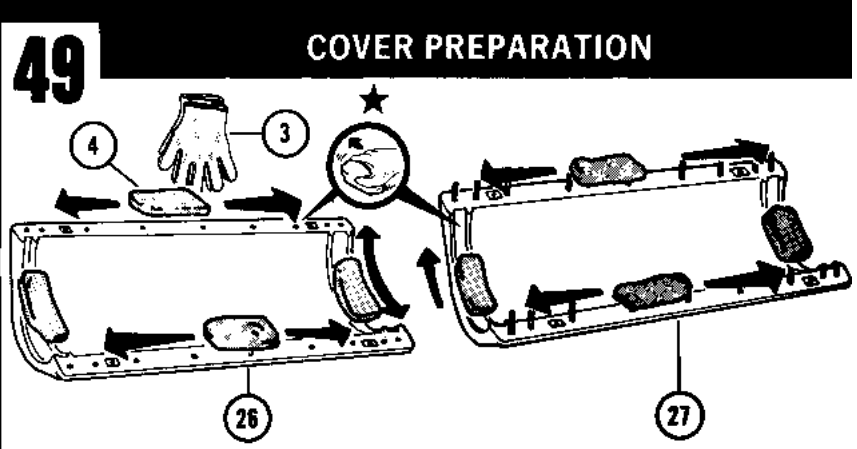
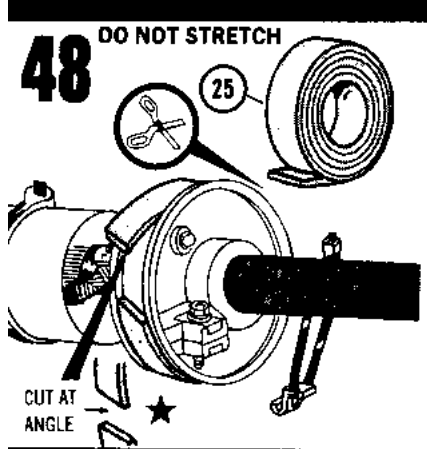
ATTACH EXTERNAL GROUND RIBBON TO MAN HOLE RACKING BEFORE ATTACHING TO END PLATE

45 

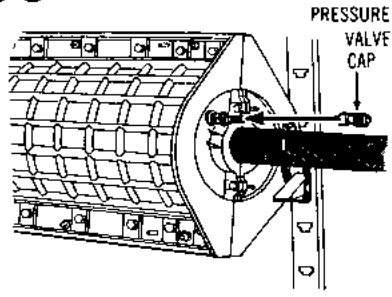
46 

47 

NOTE: See Cleaner MSDS for health, safety and environmental information.



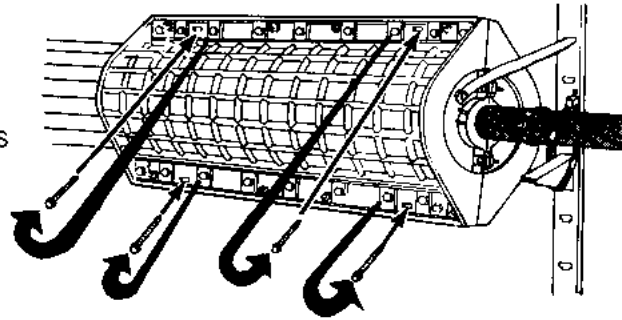
58 FLASH TEST PREPARATION



MAXIMUM FLASH TEST PRESSURE
5 PSI (0.3 BARS)

59 RE-ENTRY PREPARATION

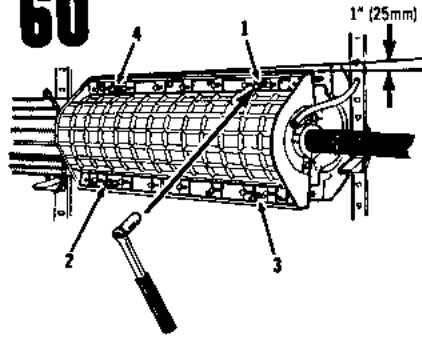
LOOSEN ALL BOLTS



4X

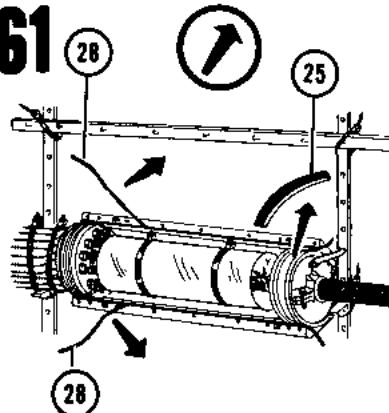
USE (3RD) BOLT IN FROM EACH END THEN HAND START

60



OPEN SEQUENCE EVENLY

61

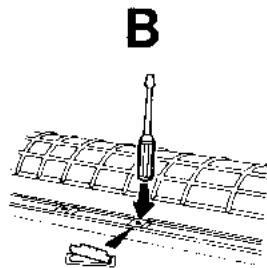
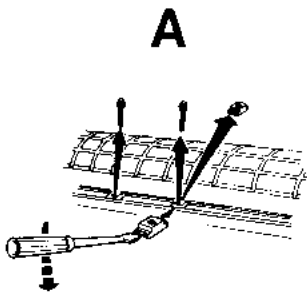


62

MAKE NEEDED REPAIRS
THEN RE-ASSEMBLE
AS IN STEPS 45 THRU
56 , THEN FLASH TEST
AGAIN

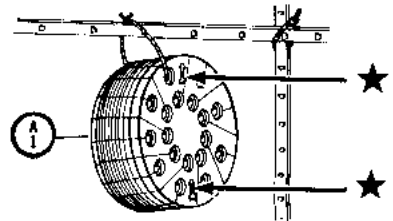
63

REMOVE AND REPLACE CHANNEL INSERTS



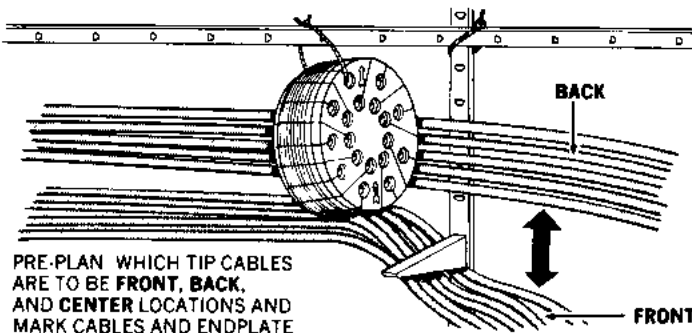
64

SPLIT TIP CABLE ENDPLATE FOR EXISTING CONSTRUCTION



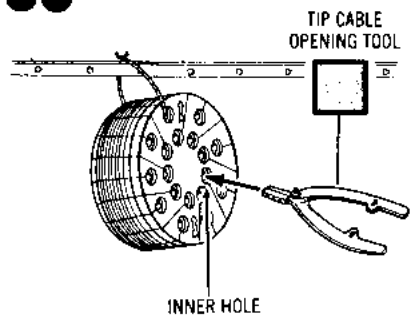
BE SURE TO LINE UP ARROWS

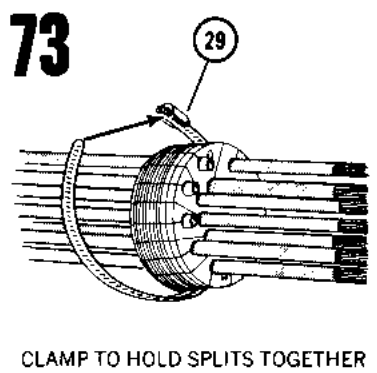
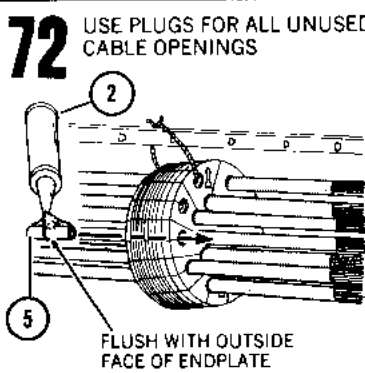
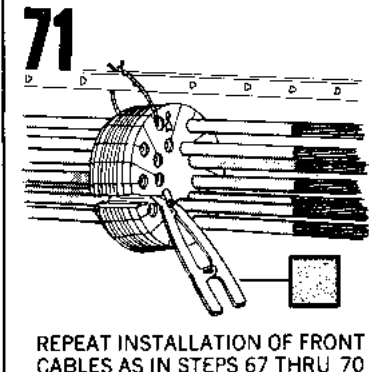
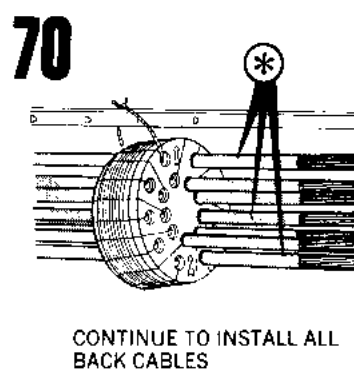
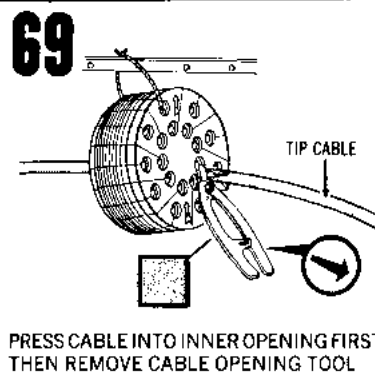
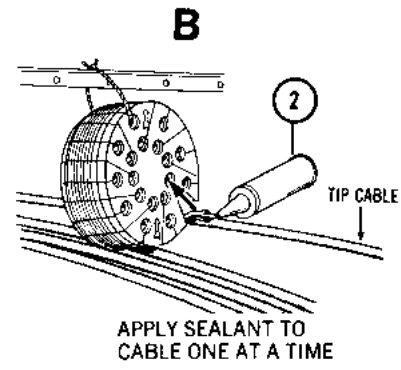
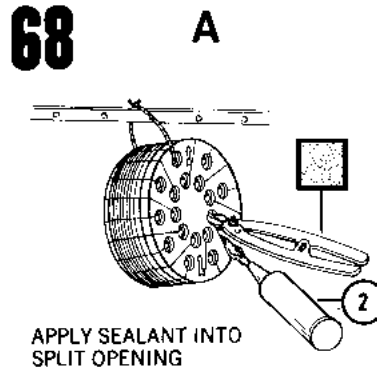
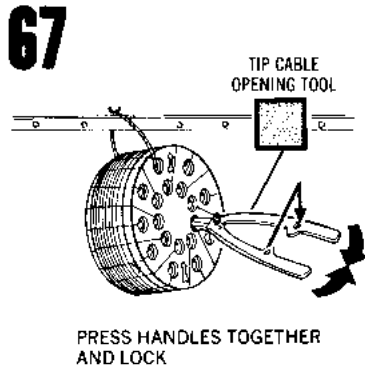
65



PRE-PLAN WHICH TIP CABLES
ARE TO BE FRONT, BACK,
AND CENTER LOCATIONS AND
MARK CABLES AND ENDPLATE

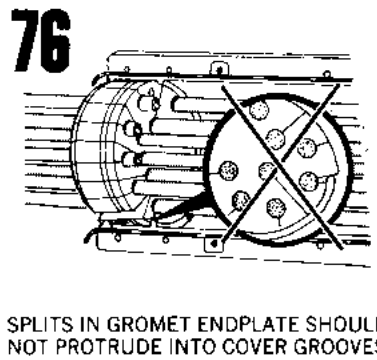
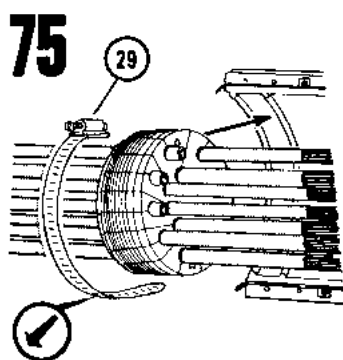
66





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TO INSTALL MAIN CABLE
ENDPLATE, REFER TO STEP
18 THEN STEPS 30 THRU 48



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FOR COVER INSTALLATION
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