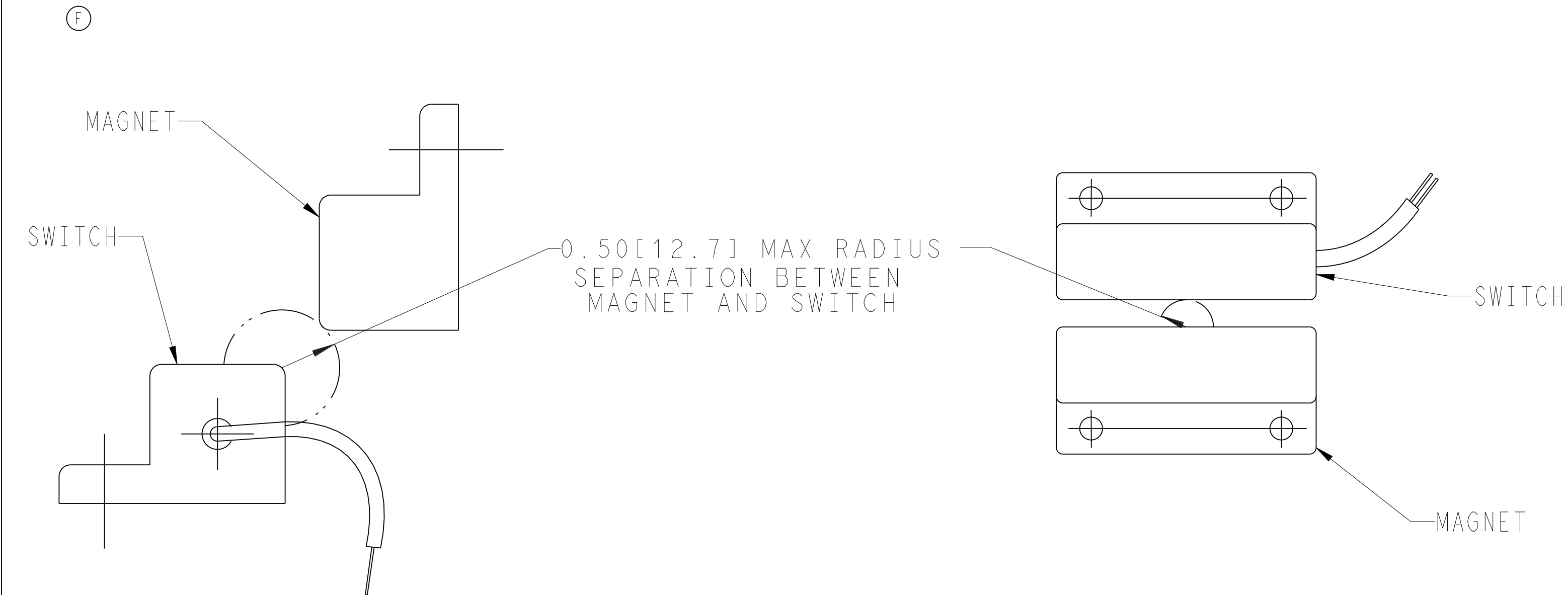


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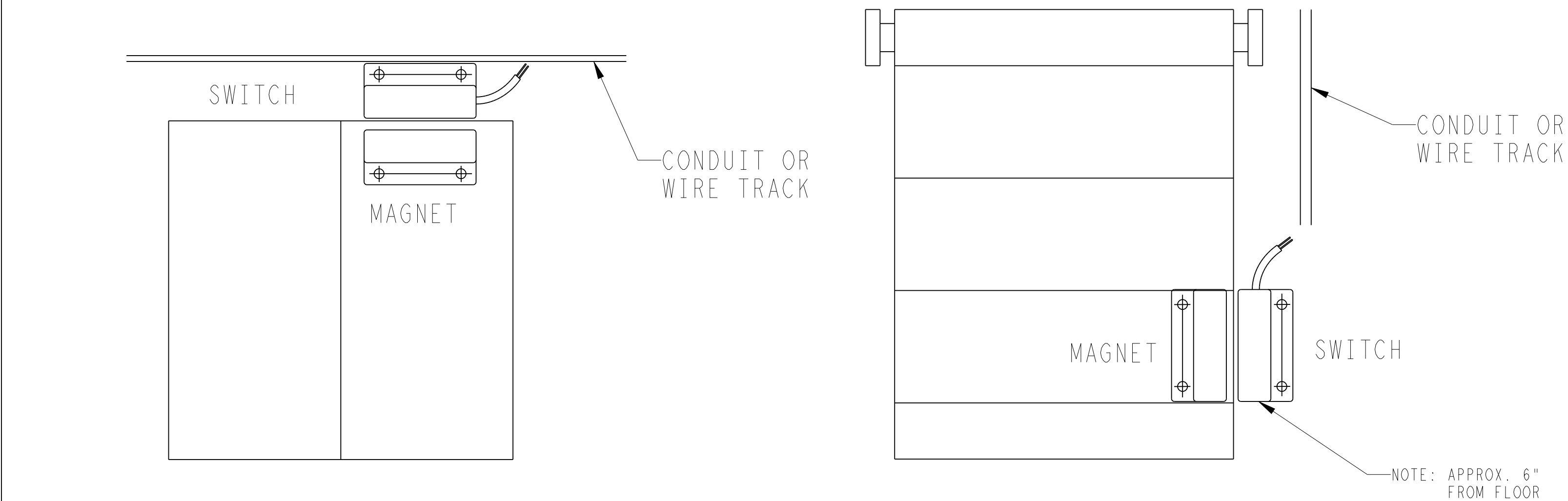
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CTD PART NO.	SHEET NUMBER	INSTALLATION PROCEDURE FOR	SWITCH TYPE
98-03241-00	1 AND 2	ADVANCE AND APX MICROS	NC (NORMALLY CLOSED)
	3	eSOLUTIONS TELEMATICS	
98-03241-01	1 AND 2	ADVANCE AND APX MICROS	NO (NORMALLY OPEN)
	3	eSOLUTIONS TELEMATICS	
	4	SUPRA S	



## RECOMMENDED MOUNTING POSITIONS



## SWINGING DOOR APPLICATION

## OVERHEAD DOOR APPLICATION

## REMOTE SWITCH INSTALLATION PROCEDURE

NDA, NDX, AND NDL ADVANCE MICRO UNITS, APX UNITS ONLY

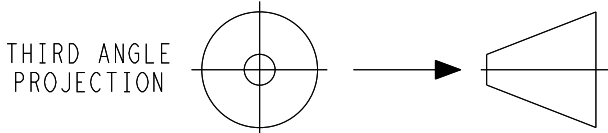
NOTE: INSTALLATION OF THIS REMOTE SWITCH KIT REQUIRES A 3/8" DIA HOLE TO BE DRILLED THROUGH THE NOSE OF THE TRAILER. THE TRAILER MANUFACTURER AND/OR CUSTOMER SHOULD BE CONSULTED PRIOR TO INSTALLATION FOR EXPLICIT INSTRUCTIONS ON THIS PROCEDURE TO AVOID AFFECTING THE TRAILER MANUFACTURER'S WARRANTY. THE CABLE MAY BE ROUTED INTO THE TRAILER THROUGH THE EVAPORATOR POD, HOWEVER, THIS WILL MAKE IT NECESSARY TO DISMOUNT THE ENTIRE CABLE INSIDE THE TRAILER SHOULD THE UNIT EVER NEED TO BE REMOVED.

- 1.0 INSTALL DOOR SWITCH AND MAGNET ON TRAILER DOORS (OR OTHER TYPE OF SWITCH). THEN INSTALL WIRE SEALS (ITEM 93) AND TERMINALS (ITEM 91) TO SWITCH WIRES. INSERT THE WIRES INTO THE EMPTY CAVITIES OF THE CONNECTOR (ITEM 87). BE SURE THAT THE PINS ARE ORIENTATED CORRECTLY AS NOT TO DAMAGE THEM. YOU SHOULD FEEL/HEAR THEM CLICK INTO PLACE WHEN THEY ARE CORRECT. INSTALL SECONDARY LOCK AND PLUG INTO CABLE CONNECTOR.
- 2.0 ROUTE THE CABLE FROM THE SWITCH TO THE 10-WAY CONNECTOR LOCATED NEAR THE CONTROL BOX ON THE UNIT. AFFIX THE CABLE USING THE CUSHION CLAMPS (ITEM 25) AND SELF THREADING SCREWS (ITEM 40). THIS WILL ALSO REQUIRE A 3/8" DIA HOLE IN THE FRONT WALL, PREFERABLY LOCATED IN THE AREA BEHIND THE CONTROL BOX, TO PASS THE CABLE THROUGH (SEE NOTE ABOVE) SO THAT EXCESS IS HANGING OUTSIDE THE FRONT OF THE TRAILER. USE SILICONE CAULK OR OTHER SIMILAR MATERIAL TO STABILIZE THE CABLE THROUGH THE WALL AND TO SEAL THE WALL AGAINST MOISTURE INTRUSION.
- 3.0 UNIT HARNESS CONNECTIONS:
  - 3.1 APPLY CONTACT LUBRICANT (ITEM 107) TO THE EXPOSED TERMINALS OF ALL CONNECTORS. TO CONNECT SWITCH AS "DOOR SWITCH", LOCATE THE 2-WAY CONNECTOR, TIED TO THE MAIN WIRE HARNESS, UNDER THE ENGINE, WITH WIRES LABELED "DS-A" AND "DS-B". REMOVE THE MATING PLUG. REMOVE THE WIRE LOCK FROM THE PLUG AND DISCARD THE CAVITY PLUGS. CUT OFF EXCESS CABLE. THEN CAREFULLY STRIP BACK CABLE JACKET ABOUT 6". CAREFULLY TRIM OFF BRAID LEAVING ABOUT 0.25" EXPOSED. THEN USING SOLDER SLEEVE (ITEM 70) ATTACH GROUND WIRE (ITEM 75) TO EXPOSED BRAID WITH HEAT GUN. APPLY HEAT UNTIL SOLDER RING INSIDE SLEEVE MELTS AND FUSES WIRE AND SHIELD. THEN INSTALL WIRE SEAL (ITEM 93) AND TERMINAL (ITEM 95) ONTO GREEN CABLE WIRE AND INSERT INTO 2-WAY CONNECTOR CAVITY B. THEN ROUTE WHITE CABLE WIRE THROUGH CAVITY OF FUSE HOLDER (ITEM 101) AND AND INSTALL TERMINAL (ITEM 99). THEN PULL WIRE BACK THROUGH TO SEAT IN CONNECTOR. TAKE EXCESS CABLE AND REMOVE 6" OF WHITE WIRE. ON ONE END INSTALL WIRE SEAL (ITEM 93) AND TERMINAL (ITEM 95) AND INSERT INTO 2-WAY CONNECTOR IN CAVITY A AND REPLACE WIRE LOCK ON 2-WAY CONNECTOR. THEN ROUTE OPPOSITE END THROUGH FUSE HOLDER AND INSTALL TERMNIAL (ITEM 99), THEN PULL WIRE TO SEAT TERMINAL IN CONNECTOR. INSTALL FUSE (ITEM 22) AND FUSE HOLDER CAP (ITEM 102) TO FUSE HOLDER (ITEM 101).
  - 3.2 TO CONNECT SWITCH AS A "REMOTE SWITCH (REMS1 OR REMS2)", LOCATE THE 10-WAY CONNECTOR UNDER THE ENGINE, TIED TO THE MAIN WIRE HARNESS. REMOVE THE MATING PLUG. REMOVE THE WIRE LOCK FROM THE PLUG AND DISCARD THE CAVITY PLUGS FROM THE APPROPRIATE CAVITIES ACCORDING TO THE CHART ON SHT 2. CUT OFF EXCESS CABLE. THEN CAREFULLY STRIP BACK CABLE JACKET ABOUT 6". CAREFULLY TRIM OFF BRAID LEAVING ABOUT 0.25" EXPOSED. THEN USING SOLDER SLEEVE (ITEM 70) ATTACH GROUND WIRE (ITEM 75) TO EXPOSED BRAID WITH HEAT GUN. APPLY HEAT UNTIL SOLDER RING INSIDE SLEEVE MELTS AND FUSES WIRE AND SHIELD. THEN INSTALL WIRE SEAL (ITEM 85) AND TERMINAL (ITEM 80) ONTO GREEN CABLE WIRE AND INSERT INTO 10-WAY CONNECTOR CAVITY B. THEN ROUTE WHITE CABLE WIRE THROUGH CAVITY OF FUSE HOLDER (ITEM 101) AND INSTALL TERMINAL (ITEM 99). THEN PULL WIRE BACK THROUGH TO SEAT IN CONNECTOR. TAKE EXCESS CABLE AND REMOVE 6" OF WHITE WIRE. ON ONE END INSTALL WIRE SEAL (ITEM 85) AND TERMINAL (ITEM 80) AND INSERT INTO 10-WAY CONNECTOR IN CAVITY A AND REPLACE WIRE LOCK ON 10-WAY CONNECTOR. THEN ROUTE OPPOSITE END THROUGH FUSE HOLDER AND INSTALL TERMNIAL (ITEM 99), THEN PULL WIRE TO SEAT TERMINAL IN CONNECTOR. INSTALL FUSE (ITEM 22) AND FUSE HOLDER CAP (ITEM 102) TO FUSE HOLDER (ITEM 101).
- 4.0 ADVANCE/APX REMOTE SWITCH SETTINGS:

DOOR AND/OR REMOTE SWITCHES MUST BE ENABLED IN THE MICRO COFIGURATION LIST. (SEE SERVICE MANUAL). CHANGE THE APPROPRIATE CONFIGURATION FROM "NOT INSTALLED" TO "DOOR OPEN SWITCH OPEN" OR "DOOR OPEN SWITCH CLOSED" DEPENDING ON SWITCH TYPE INSTALLED.

F	IN CHART, ADDED "SUPRA S" TO -01; UPDATED SHT. INDEX; ADDED SHEET 4.	1 JULY 2019	MGC			71N0214P19
E	ADDED CHART AND -01. UPDATED SPEC 4.0 TO INCLUDE DOOR OPEN SWITCH CLOSED.	30 JUN 2017	ZMG			72N0258P17
D	ADDED "APPLY LUBRICANT..." TO NOTE 3.1; SEE SHEETS 2 & 3	03FEB2017	KFV	DMM		72N0002P17
C	ADDED SHEET 3 FOR eSOLUTION TELEMATICS. ADDED APPLICABILITY TABLE TO THIS SHEET. UPDATED SHEET INDEX. CORRECTED BOM NUMBERS TO MATCH BOM.	15 DEC 2016	LT-IP			72N0031P16
SYM	REVISION RECORD	DATE	BY	ENGR.	M.E.	NPCA NO.

SHEET INDEX	REV	F	D	D	F
	SHEET	1	2	3	4



IMPERIAL INCH FORMAT:  
UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES WITH  
METRIC CONVERSIONS IN [MILLIMETERS]

TITLE  
INSTALLATION INSTRUCTIONS  
REMOTE DOOR SWITCH KIT (ADVANCE/APX/eSOLUTIONS/SUPRA S)

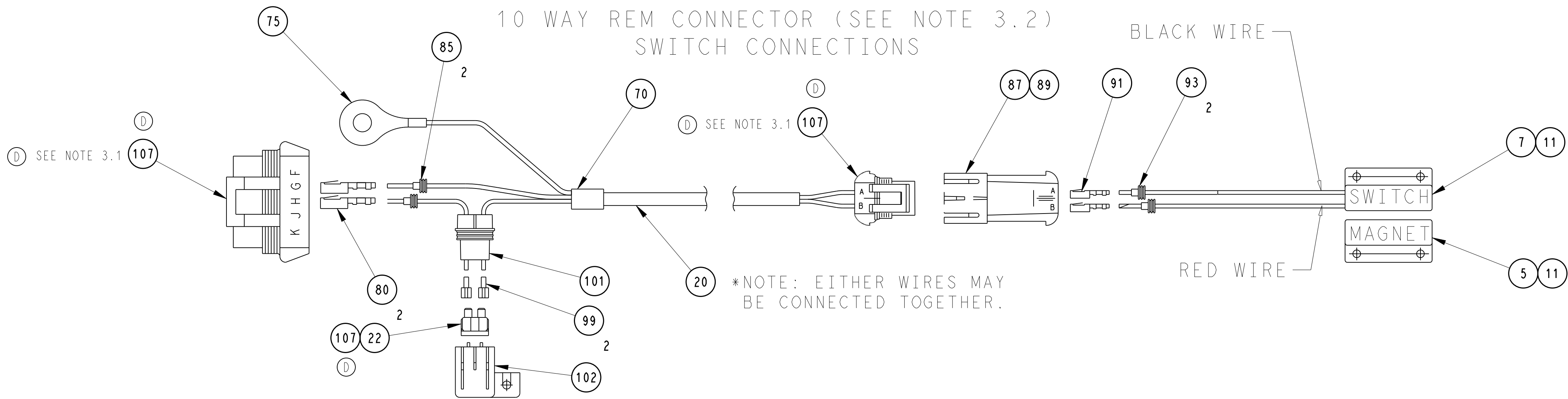
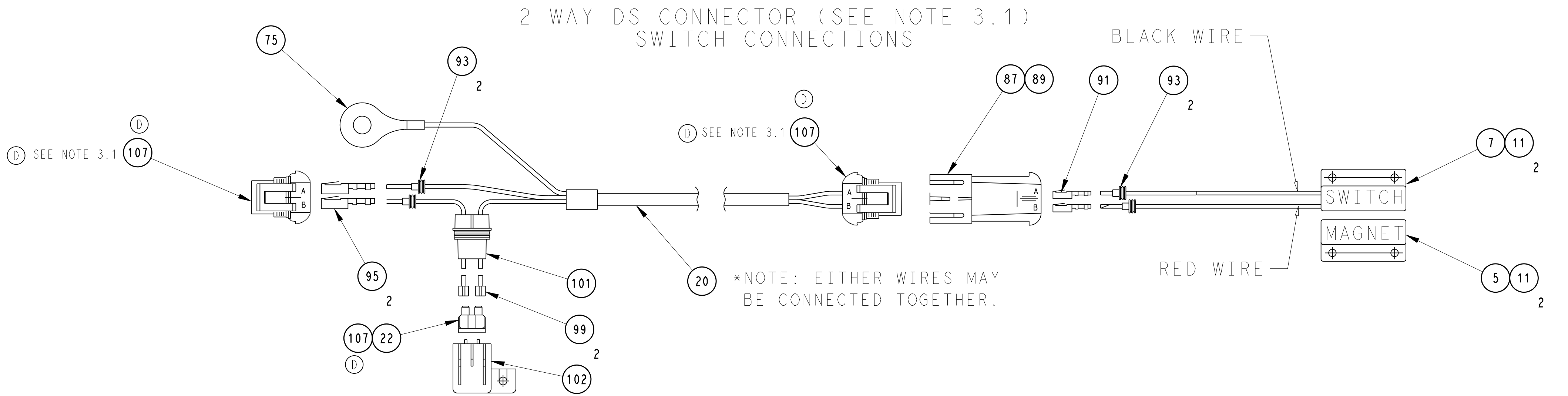
DRAWING NO.  
98-03241  
SHEET 1 of 4

REV  
F

SUPERSEDES: \_\_\_\_\_

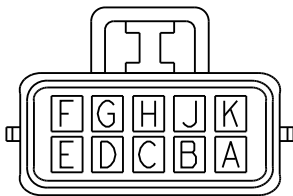
PART CLASSIFICATION: US EAR99

DRAWING CLASSIFICATION: US EAR99

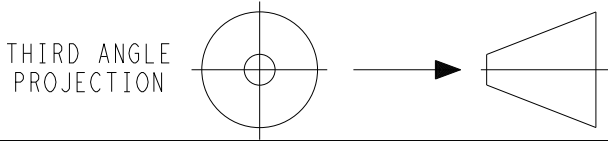


REMOTE SWITCH CONNECTOR PINOUT

SWITCH NAME	ADVANCE	APX
REMS1	A & C	A & B
REMS2	B & D	C & D



D	ADDED IT.107 IN 6 PLCS; ADDED "SEE NOTE 3.1" IN 4 PLCS	03FEB2017	KFV	DMM		72N0002P17
C	CORRECTED BALLOONS TO CORRESPOND TO BOM NUMBERS.	15 DEC 2016	LT-IP			72N0031P16
B	EDRAWN IN AUTOCAD; MOVED CONNECTION CHART FROM SHEET 1	05 MAR 2013	SDF			72N0038P13
A	INITIAL RELEASE SHEET 2; ADDED 10 WAY DIAGRAM; ADDED BALOON CALLOUT 11	04 APR 2005	DJD			72N215GP04
SYM	REVISION RECORD	DATE	BY	ENGR.	M.E.	NPCA NO.



IMPERIAL INCH FORMAT:  
UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES WITH  
METRIC CONVERSIONS IN [MILLIMETERS]

TITLE  
INSTALLATION INSTRUCTIONS  
REMOTE DOOR SWITCH KIT (ADVANCE/APX/eSOLUTIONS/SUPRA S)

DRAWING NO.  
98-03241  
SHEET 2 OF 2  
REV  
D

SUPERSEDES:

PART CLASSIFICATION: US EAR99

PART CLASSIFICATION: US EAR99

## REMOTE SWITCH INSTALLATION PROCEDURE

### SUPRA S

#### 1.0 DOOR SWITCH MOUNTING:

- 1.1 INSTALL DOOR SWITCH AND MAGNET ON TRUCK DOORS (OR OTHER TYPE OF SWITCH). (SEE SHEET 1).
- 1.2 INSTALL WIRE SEALS (ITEM 93) AND TERMINALS (ITEM 91) TO SWITCH WIRES.
- 1.3 INSERT THE WIRES INTO THE EMPTY CAVITIES OF THE CONNECTOR (ITEM 87). BE SURE THE PINS ARE ORIENTATED CORRECTLY AS NOT TO DAMAGE THEM. YOU SHOULD FEEL/HEAR THEM CLICK INTO PLACE WHEN THEY ARE CORRECT.
- 1.4 APPLY CONTACT LUBRICANT (ITEM 107) TO THE EXPOSED TERMINALS OF ALL CONNECTORS.
- 1.4 INSTALL SECONDARY LOCK AND PLUG INTO CABLE CONNECTOR.

#### 2.0 HARNESS ROUTING:

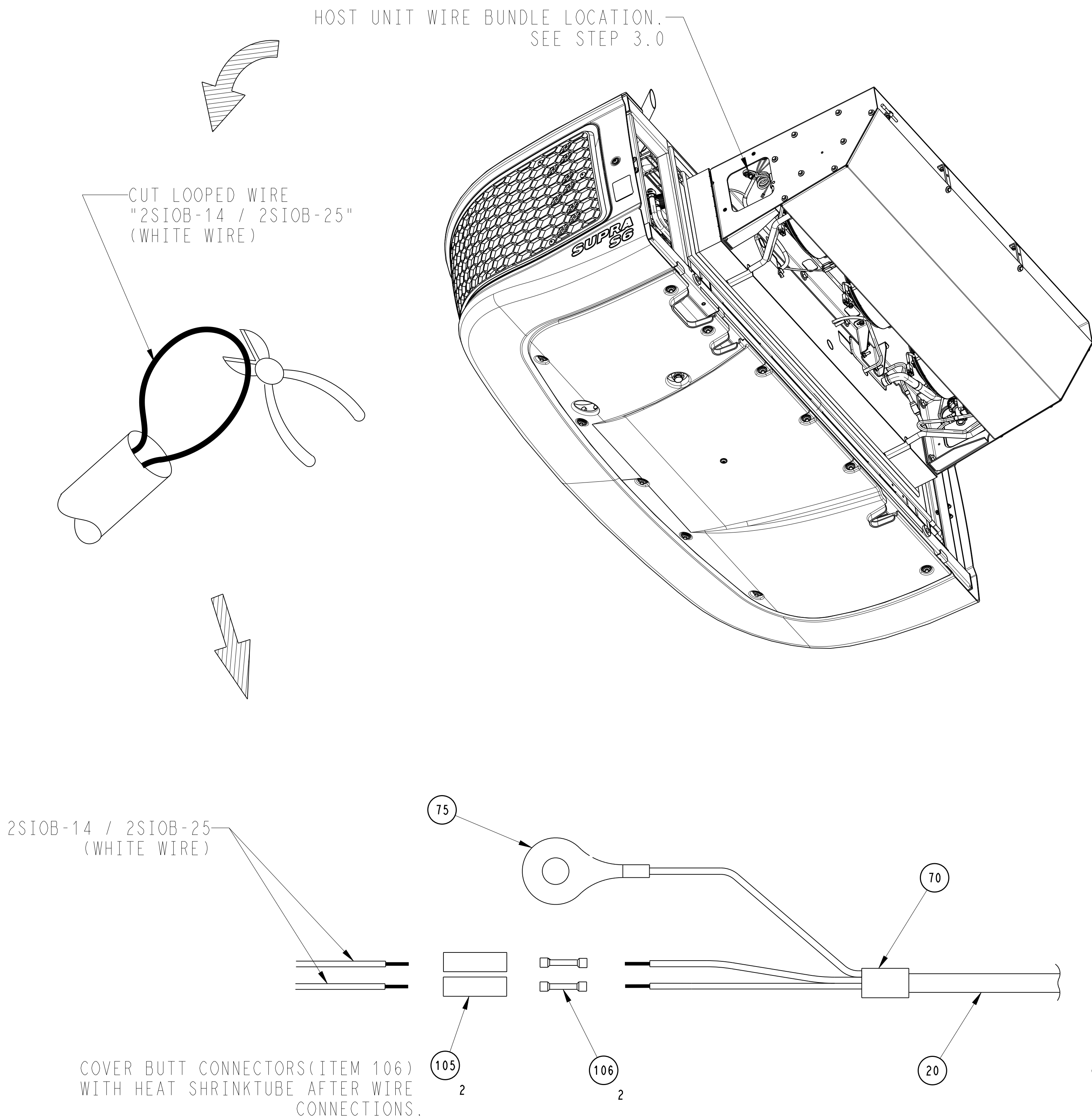
- 2.1 ROUTE THE CABLE FROM THE SWITCH TO THE EVAPORATOR (SEE LOCATION SHOWN). AFFIX THE CABLE INSIDE THE TRUCK BODY USING THE CUSHION CLAMPS (ITEM 25) AND SELF THREADING SCREWS (ITEM 40). MAKE CERTAIN TO LOCATE THE CABLE IN AN AREA THAT THE CABLE CANNOT BE DAMAGED. MAKE SURE THE WIRES DO NOT CHAFFE ON ANY SHARP CORNERS.

#### 3.0 UNIT HARNESS CONNECTIONS:

- 3.1 LOCATE THE WIRE BUNDLE TIED TO THE INSIDE TOP OF THE EVAPORATOR (SEE VIEW FOR LOCATION). FIND THE LOOPED WIRE LABELLED "2SIOB-14 / 2SIOB-25" AND CUT THIS WIRE IN THE MIDDLE OF THE LOOP.
- 3.2 DETERMINE THE CORRECT CABLE LENGTH NEEDED TO ATTACH THE CABLE TO THESE WIRES. MAKE CERTAIN TO LEAVE ENOUGH LEGNTH TO PROPERLY ROUTE THE CABLE. CUT OFF EXCESS CABLE. CAREFULLY STRIP BACK CABLE JACKET ABOUT 6". CAREFULLY TRIM OFF BRAID LEAVING ABOUT 0.25" EXPOSED. THEN USING SOLDER SLEEVE (ITEM 70) ATTACH GROUND WIRE (ITEM 75) TO EXPOSED BRAID WITH HEAT GUN. APPLY HEAT UNTIL SOLDER RING INSIDE SLEEVE MELTS AND FUSES WIRE AND SHIELD.
- 3.3 FOR THE WHITE, AND GREEN WIRES OF THE CABLE, AND THE 2 WIRES INSIDE THE EVAPORATOR THAT WAS PREVIOUSLY CUT, STRIP EACH WIRE 1/4". ASSEMBLE BUTT SPLICES (ITEM 106) AND HEAT SHRINK. APPLY HEAT TO HEAT SHRINK MAKING SURE TO CREATE A WATERTIGHT CONNECTION.
- 3.4 ATTACH RING TERMINAL TO GROUND INSIDE THE EVAPORATOR.

#### 4.0 SUPRA S REMOTE SWITCH SETTINGS:

DOOR AND/OR REMOTE SWITCHES MUST BE ENABLED IN THE MICRO COFIGURATION LIST. (SEE SERVICE MANUAL). CHANGE THE APPROPRIATE CONFIGURATION FROM "NOT INSTALLED" TO "DOOR OPEN SWITCH OPEN" OR "DOOR OPEN SWITCH CLOSED" DEPENDING ON SWITCH TYPE INSTALLED.



"SUPRA S" ONLY

F	ADDED THIS SHEET	27 JUN 2019	MGC			71N0214P19	THIRD ANGLE PROJECTION	IMPERIAL INCH FORMAT: UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES WITH METRIC CONVERSIONS IN [MILLIMETERS]	TITLE INSTALLATION INSTRUCTIONS REMOTE DOOR SWITCH KIT (ADVANCE/APX/eSOLUTIONS/SUPRA S)	DRAWING NO. 98-03241 SHEET 4 OF	REV F
SYM	REVISION RECORD	DATE	BY	ENGR.	M.E.	NPCA NO.					