

# THREE PHASE WIRING FOR ASCO 7000 SERIES MANUALLY OPERATED TRANSFER SWITCH TYPE H7MTS RATED 600-1200 AMPERES

## FEATURES, OPERATION, & NOTES

### SIGNALS & AUXILIARIES

A. FEATURE 14A & 14B - TRANSFER SWITCH AUXILIARY POSITION INDICATING CONTACTS. ONE (1) FORM A CONTACTS TO INDICATE CONNECTION OF THE TRANSFER SWITCH TO NORMAL (14A) AND ONE (1) FORM A CONTACTS TO INDICATE CONNECTION OF THE TRANSFER SWITCH TO EMERGENCY (14B). CONTACTS CONNECTED TO THE FIELD CONNECTIONS TERMINAL BLOCK (TB). CONTACTS RATED 10 AMPS, 32VDC, 250 VAC.

### INDICATORS

B. FEATURES 9A & 9B - TRANSFER SWITCH POSITION INDICATORS.  
 FEATURE 9A: TRANSFER SWITCH CLOSED ON NORMAL (GREEN LED)  
 FEATURE 9B: TRANSFER SWITCH CLOSED ON EMERGENCY (RED LED)

C. FEATURES 9C & 9D - SOURCE ACCEPTANCE INDICATORS.  
 FEATURE 9C: NORMAL SOURCE AVAILABLE (GREEN LED)  
 FEATURE 9D: EMERGENCY SOURCE AVAILABLE (RED LED)

### OPERATION

OBSERVE THE INDICATOR WINDOW. IF THE WINDOW SHOWS AN "N" THE TRANSFER SWITCH IS CONNECTED TO THE NORMAL SOURCE. AN "E" INDICATES THE TRANSFER SWITCH IS CONNECTED TO THE EMERGENCY SOURCE.

TRANSFER TO EMERGENCY:  
 - GRASP MANUAL HANDLE FIRMLY WITH BOTH HANDS AND TURN HANDLE CLOCKWISE.  
 - OBSERVE THE INDICATOR WINDOW TO CONFIRM TRANSFER.

TRANSFER TO NORMAL:  
 - GRASP MANUAL HANDLE FIRMLY WITH BOTH HANDS AND TURN HANDLE COUNTERCLOCKWISE.  
 - OBSERVE THE INDICATOR WINDOW TO CONFIRM TRANSFER.

### GENERAL NOTES

- SWITCH SHOWN DE-ENERGIZED AND CONNECTED TO THE NORMAL SOURCE.
- DEVICE SYMBOLS AND DESIGNATIONS ARE IN ACCORDANCE WITH NEMA PUBLICATION ICS 1-1983, PART 1-101A.
- ALL WIRING IS #16 AWG, TINNED, STRANDED COPPER UNLESS OTHERWISE INDICATED.
- O ON TERMINAL BLOCKS INDICATES AVAILABLE FIELD CONNECTION POINT.
- ON TERMINAL BLOCKS INDICATES FACTORY CONNECTION POINT.
- CONTROL AND ACCESSORY WIRING IS ROUTED IN ACCORDANCE WITH ASCO ASSEMBLY PROCEDURE GS451261.
- AN OPERATOR'S MANUAL IS FURNISHED WITH EACH TRANSFER SWITCH. REFER TO THIS PUBLICATION PRIOR TO INSTALLATION AND OPERATION OF THE UNIT.

BASE CATALOG NUMBER						CATALOG NUMBER SUFFIXES			EXPLANATION OF CATALOG NUMBER CODES						
TS FRAME	CATALOG TYPE	NEUTRAL TYPE	PHASE POLES	AMPS	VOLT CODE	CONTROLLER	OPTIONAL ACCESSORY	ENCLOSURE CODE	NEUTRAL TYPE		VOLTAGE CODES 3 PHASE (3 OR 4 WIRE) 50 OR 60 Hz		ENCLOSURE CODES		
									CODE	DESCRIPTION	CODE	NOMINAL VOLTAGE	CODE	TYPE	DESCRIPTION
H	7MTS	A B C	3	600 800 1000 1200	BLANK		X	C E F G H J K L	BLANK	NONE SOLID SWITCHING OVERLAPPING	BLANK	BLANK	BLANK	1 2 3R 4 4X 4X 7 12	OPEN TYPE (NO ENCLOSURE) GENERAL PURPOSE, INDOOR INDOOR, WATER & DUST RESISTANT OUTDOOR, RAINPROOF, SLEET & ICE RESISTANT INDOOR/OUTDOOR, WATERTIGHT & DUSTTIGHT TYPE 4 PLUS CORROSION RESISTANCE (STAINLESS STEEL) TYPE 4 PLUS CORROSION RESISTANCE (FIBERGLASS) EXPLOSION PROOF INDOOR, INDUSTRIAL ENVIRONMENTS, OILTIGHT & DUSTTIGHT
		BLANK FOR NONE				BLANK FOR 7MTS	BLANK FOR NONE	BLANK FOR OPEN TYPE	M	(SECURE ENCLOSURES) INDOOR, RAINPROOF, SLEET & ICE RESISTANT INDOOR/OUTDOOR, WATERTIGHT & DUSTTIGHT TYPE 4 PLUS CORROSION RESISTANCE (STAINLESS STEEL) INDOOR, INDUSTRIAL ENVIRONMENTS, OILTIGHT & DUSTTIGHT			3R 4 4X 12		

CATALOG NUMBER \_\_\_\_\_  
 CERTIFIED TO  
**ASCO**® S.O. \_\_\_\_\_  
 BY \_\_\_\_\_  
 DATE \_\_\_\_\_

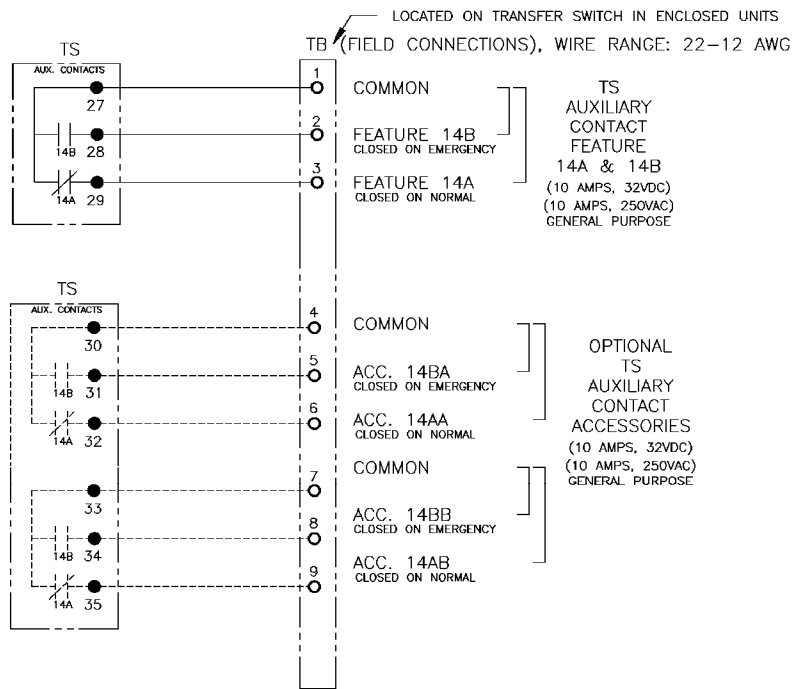
FORM REV -

PROJECT NAME: \_\_\_\_\_  
**WIRING DIAGRAM**  
**7000 SERIES (H7MTS)**  
**MANUALLY OPERATED TS**

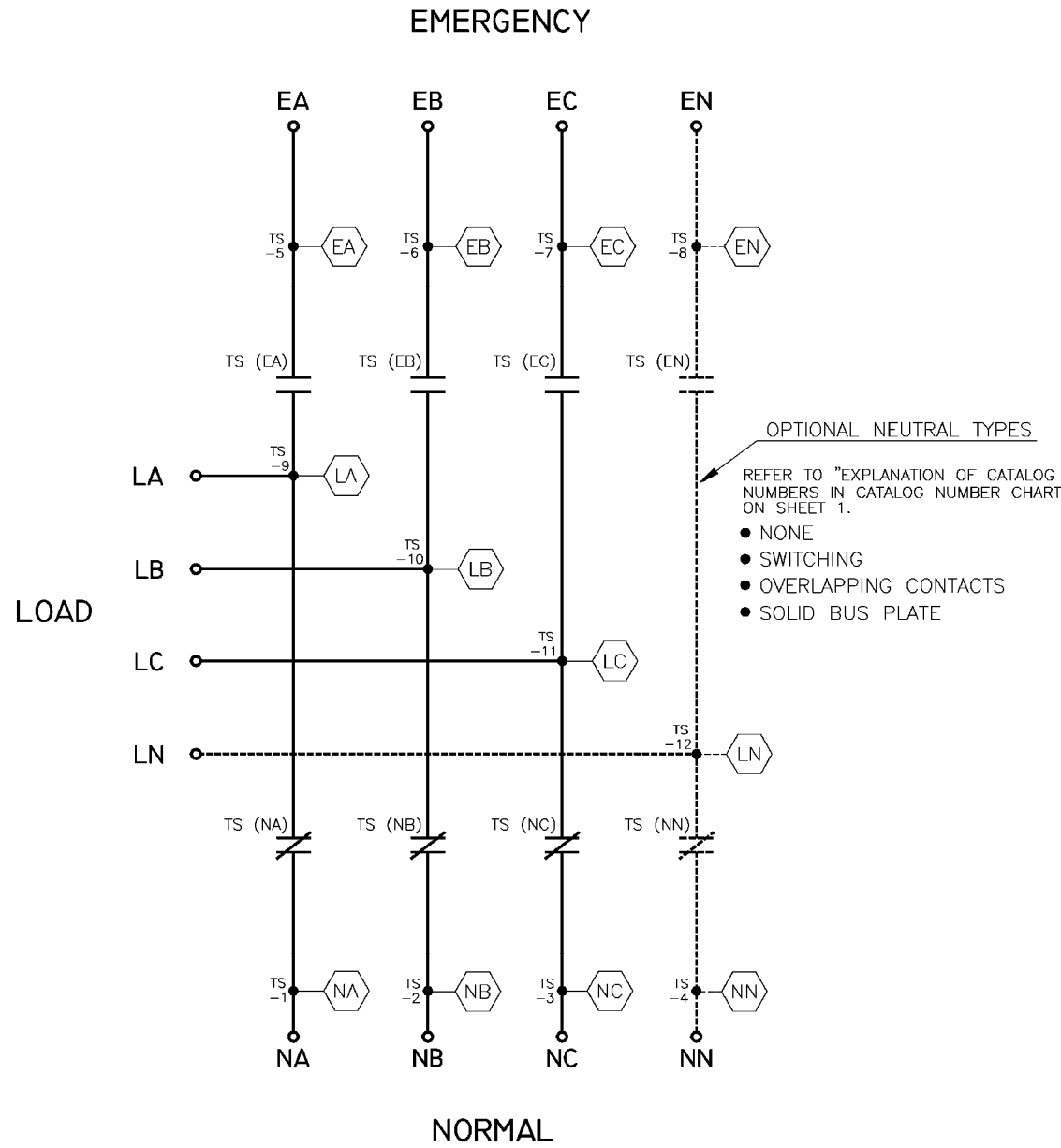
MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-1-005.  
 PROPERTY OF ASCO POWER TECHNOLOGIES. USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.  
**ASCO** ASCO POWER TECHNOLOGIES, L.P.  
 FLORHAM PARK, NEW JERSEY 07932 U.S.A.

A	159251	BWM	WK	11/01
	SEE ECN			
	157369	BWM	WK	4/01
	ISSUE			
CHANGE LETTER	ECN NO.	BY	APP.	DATE
NE	AN	AW	AA	AL
CH	AV	AA	PS	AR
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SUBSIDIARY DISTRIBUTION				
COMPUTER GENERATED DRAWING				
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SIZE	DSC. NO.			
DS713509				
CHANGE LETTER	ECN NO.	159251		SHEET 1 OF 3

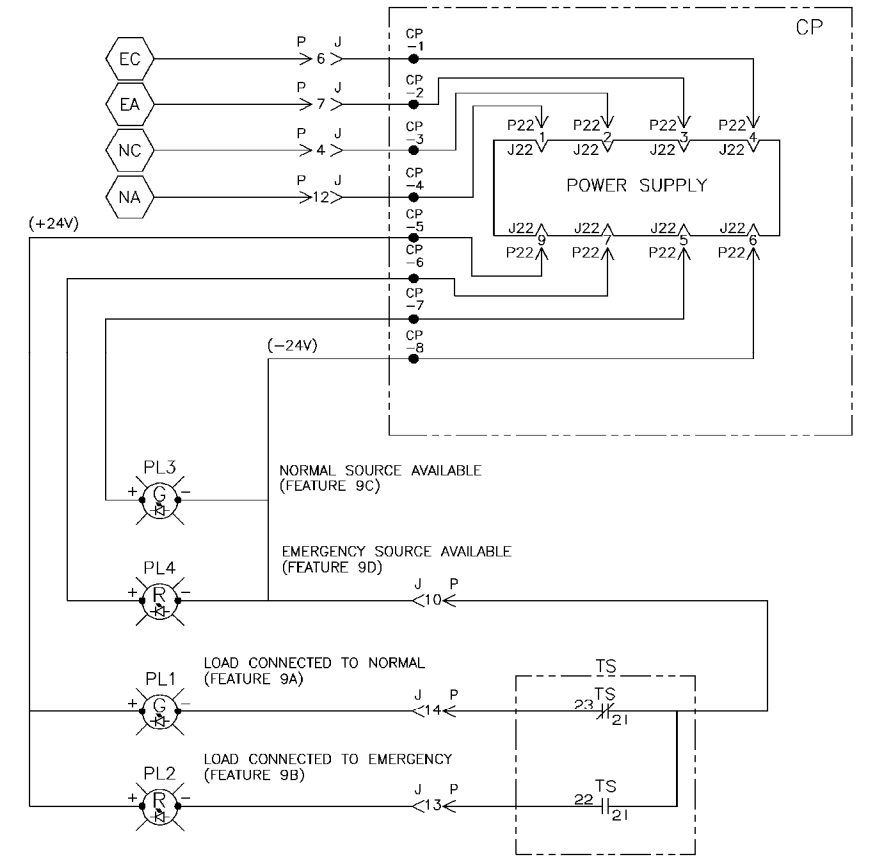
FIELD CONNECTIONS



MAIN POWER POLES



CIRCUIT



PROJECT NAME		WIRING DIAGRAM		7000 SERIES (H7MTS) MANUALLY OPERATED TS	
BY	DATE	MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-1-055.			
DRAWN BY	BKM	4/01	ASSEM. REF. NO.		
CHECKED	BK	4/01	PROPERTY OF ASCO POWER TECHNOLOGIES. USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.		
DRAFTING APPROVAL	WK	4/01	SCALE ACAD FILE A1		
FINAL APPROVAL			SIZE Dwg. No. DS713509		
ASCO		ASCO POWER TECHNOLOGIES, L.P.		FLORHAM PARK, NEW JERSEY 07932 U.S.A.	
CHANGE LETTER	A	EDN NO.	159251	BY	BWM
ISSUE		DATE	11/01	APP.	WK

PHYSICAL DIAGRAM

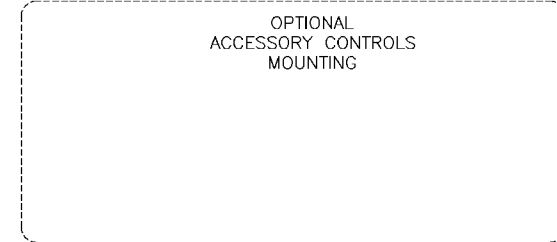
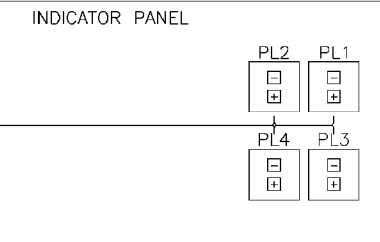
ENCLOSURE

DOOR, INSIDE (PANEL "R")

TS (TRANSFER SWITCH)  
VIEW FROM INSIDE FRONT

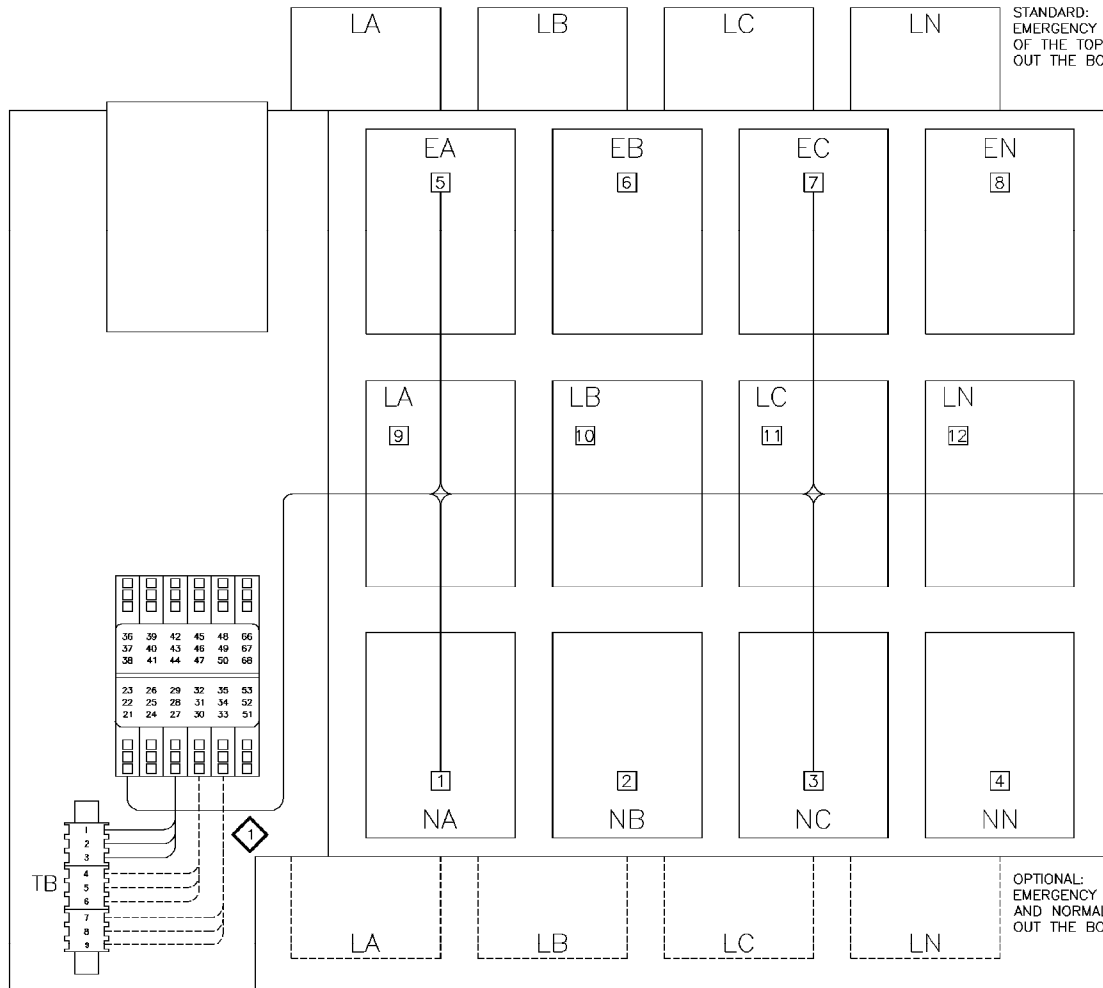
STANDARD:  
EMERGENCY & LOAD OUT  
OF THE TOP AND NORMAL  
OUT THE BOTTOM.

OPTIONAL:  
EMERGENCY OUT OF THE TOP  
AND NORMAL & LOAD  
OUT THE BOTTOM.



OPERATOR CONTROLS

ID	DESCRIPTION
PL1	LOAD CONNECTED TO NORMAL (GREEN)
PL2	LOAD CONNECTED TO EMERGENCY (RED)
PL3	NORMAL SOURCE AVAILABLE (GREEN)
PL4	EMERGENCY SOURCE AVAILABLE (RED)



1 ← HARNESS LOCATOR

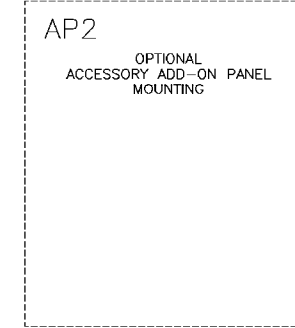
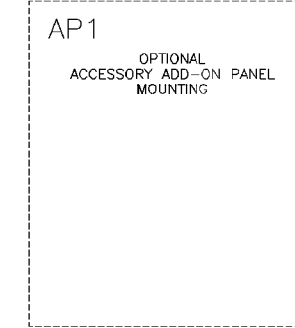
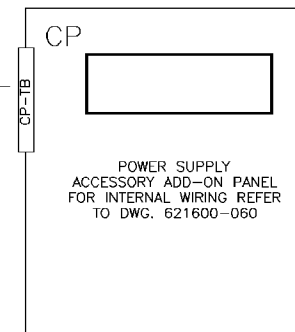
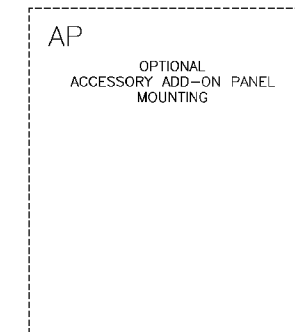
WIRE No.	WIRING (TS,TB)	CLR	AWG
1	TS-27,TB-1		16
2	TS-28,TB-2		
3	TS-29,TB-3		
4	TS-30,TB-4		
5	TS-31,TB-5		
6	TS-32,TB-6		
7	TS-33,TB-7		
8	TS-34,TB-8		
9	TS-35,TB-9		

2 ← HARNESS LOCATOR

WIRE No.	WIRING (P)	CLR	AWG
10	P-14,TS-23		16
11	P-13,TS-22		
12	P-10,TS-21		
13	P-4,TS-3		
14	P-6,TS-7		
15	P-7,TS-5		
16	P-12,TS-1		

3 ← HARNESS LOCATOR

WIRE No.	WIRING (J,CP)	CLR	AWG
10	J-14,PL1(-)		16
11	J-13,PL2(-)		
12	J-10,CP-8		
12	CP-8,PL3(-)		
12	PL3(-),PL4(-)		
13	J-4,CP-3		
14	J-5,CP-1		
15	J-7,CP-2		
16	J-12,CP-4		
17	CP-5,PL1(+)		
17	PL1(+),PL2(+)		
18	CP-6,PL4(+)		
19	CP-7,PL3(+)		



ONLY AVAILABLE  
ON 600-1000 AMP TS

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7000 SERIES (H7MTS)		MANUALLY OPERATED TS	
BY	DATE	MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-1-055.	ASSEM. REF. NO.
DRAWN BY	BWM	4/01	
CHECKED BY	BK	4/01	
DRAFTING APPROVAL	WK	4/01	
FINAL APPROVAL			

CHANGE LETTER	ECN NO.	BY	APP.	DATE
A	159251	BWM	WK	11/01
	SEE ECN			
	157369	BWM	WK	4/01
	ISSUE			

SUBSIDIARY DISTRIBUTION	
AE	<input type="checkbox"/> AN <input type="checkbox"/> AW <input type="checkbox"/> AX <input type="checkbox"/> AL <input type="checkbox"/> AR <input type="checkbox"/>
CH	<input type="checkbox"/> AV <input type="checkbox"/> AC <input type="checkbox"/> PS <input type="checkbox"/> AR <input type="checkbox"/>
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SCALE	ACAD	FILE A2
SIZE	DWG. NO.	
	DS713509	
CHANGE LETTER	ECN NO.	SHEET 3 OF 3
A	159251	

