

WABCO
PASSENGER TRANSIT
DIVISION

MATERIAL LIST
covering

One Car Set of 26-C/CS-2 Air Brake Control Details
With Outboard Mounted HP-1C Disc Brake Units

for

LONG ISLAND RAILROAD
BI-LEVEL PASSENGER CARS
Contract 5254

ITEM	QUAN.	DESCRIPTION	PC.NO.	DWG.NO.	ESTIMATED WGT.EA.
<u>Brake Control Equipment And Details</u>					
1	1	D-3 Operating Unit	Similar to: 586676	EA85142-51	280
		Unit contains the following portions on a laminated Pipe Bracket:			
		-26-C Service Portion			
		-J-1.2-1 Relay Valve			
		-32-A Magnet Valve			
		-N-1 Reducing Valve (snow brake)			
		-Snow Brake Magnet Valve			
		-H-5 Relayair Valve (snow brake)			
		-Snow Brake Cut-Out Cock			
		-Variable Load Valve			
		-Reservoir release valve			
		-Combined Brake pipe Cut-out Cock and strainer			
		-Timing and Displacement Volumes			
		-Manual reservoir release valve			
		-By pass limiting valve			
		-Pressure switch			
		-Transducer			
		-24-C Double check valve			

Registered TRADEMARK of American Standard Inc.

ITEM	QUAN.	DESCRIPTION	PC.NO.	DWG.NO.	ESTIMATED WGT.EA.
a	1	Fittings, 3/8" sweat	515956		1/2
b	3	Fittings, 1/2" sweat	503684		1/2
c	2	Fittings, 1" x 3/4" welded	565258		1
d	1	Fittings, 1" x 1" welded	565259		1
e	1	Gaskets, 3/8" flange	93839		
f	3	Gaskets, 1/2" flange	93840		
g	3	Gaskets, 1" flange	93986		
h	2	Screw, 3/8" x 1-1/2" cap	585750		
i	12	Screw, 1/2" x 1-3/4" cap	581832		
j	1	Connector, Snow Brake Magnet	573042	CA81270	
2	1	Reservoir, Comb.Control/ Selector (500/900 in. ³) w/hangers less ftgs. w/bottom drain plugged, 10" x 21-23/32"	559380	CA69810-125	55
a	1	Fitting, 3/4" sweat for 5/8" O.D.C.T.	505220		3/4
b	1	Fitting, 1/2" sweat for 5/8" O.D.C.T.	503684		1/2
c	1	Gasket, 3/4"	93841		
d	1	Gasket, 1/2"	93840		
e	4	Screw, 1/2" x 1-1/4" cap	579983		
3	1	Reservoir, 16" x 72" Main (less ftgs) (See Note 3)	586710- 1000	C-0586710, 1000,00	120
a	1	Fittings, 1" x 1" weld	565259		1
b	1	Fitting, 1" x 3/4" weld	565258		1
c	2	Gasket, 1" flange	93986		
d	4	Screw, 1/2" x 1-1/4" cap	579983		
e	1	Cock, 1/2" drain, ball type	582233	CA85074-56	1
4	1	Valve, 1" Check	520102	AA69877-11	4-1/4
5	1	Filter-P Type	569931	CA65175-2	16
a	1	Drain Cock	582233	CA85074-56	1
6	2	Valve, B-3-A Emergency Brake Valve	51497	BA28673-50	4
7	1	Valve, No. 8 Vent w/Special Branch Pipe Tee (non-plugable)	579076	EA83474-76	18

ITEM	QUAN.	DESCRIPTION	PC.NO.	DWG.NO.	ESTIMATED WGT.EA.
a	2	Fitting, 1-1/4" x 1-1/4"	565262		1-1/2
b	2	Gasket, 1-1/4"	94790		
c	2	Screw, 5/8" x 4-1/2" cap	581830		
d	2	Nut, 5/8" hex lock	549799		
e	1	Plug, Pipe, 3/8" NPT	522768		
8	1	Valve, A-1 Reduction Relay	590406	DA83334-57	42
a	1	Fitting, 1" x 1" weld	565259		1
b	1	Gasket, 1" flange	93986		
c	2	Screw, 1/2" x 1-1/4" cap	579983		
9	4	Tee, 1-1/4" x 1-1/4" x 1" Branch Pipe	95495	CA56411-54	5
a	8	Fitting, 1-1/4" x 1-1/4" Weld	565262		1-1/2
b	4	Fitting, 1" x 1" weld	565259		1
c	8	Gasket, 1-1/4" flange	94790		
d	4	Gasket, 1" flange	93986		
e	8	Screw, 5/8" x 4-3/4" hex hd. cap	587519		
f	8	Nut, 5/8" Hex lock	549799		
g	8	Screw, 1/2" x 1-7/8" hex hd. cap	576132		
h	8	Nut, 1/2" hex lock	574077		
<u>Hose and End Cock Details</u>					
10	2	Cock, 1-1/4" Angle, with Locking Handle vented	576249	CA84773-51	7
11	3	Cock, 1" Cutout, with Locking Handle vented	576601	DA84473-52	4
12	1	Cock, 1-1/4" Cutout w/Locking Handle, Vented	581236	DA84473-52	4
13	2	Hose, 1-3/8" x 22" with FP-5 Coupling and 1-1/4" Nipple	987101	CA73987-62	7
14	2	Coupling, F-3 Dummy with chain	559997	AA-5349-2	1
15	2	Hose, 1-1/8" x 22" w/LS-4 Coupling and Nipple	562651	CA78956-20	9
16	2	Coupling, E&L-3 Dummy with chain	561490	AA-5349-5	1

Spec. Issued: 8/20/87

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Spec.No. 77-LIRR-275

Spec. Revised: 9/15/87

ITEM	QUAN.	DESCRIPTION	PC.NO.	DWG.NO.	ESTIMATED WGT.EA.
<u>Leveling Valve Equipment And Details</u>					
17	2	Cock, 3/8" Ball, Vented Locking Handle	576598	DA84473-52	1
18	2	Filter, 3/8" OC-1-B w/1/16" choke	582205	CA83877-27	3
19	3	Filter, 3/8" OC-1-B	582132	BA84970-10	3
20	2	Valve, 3/8" Check	543326	AA69877-22	2-1/2
21	3	Valve, C-1 Leveling	564312	CA81173-57	4
22	3	Linkage, Non-Collapsible Extension	573743	CA81230-7	2
<u>Electronic Wheel Slide Equipment</u>					
23	1	E-7 Wheel Slide Micro- Processor Controller w/Self-Diagnostic Feature complete with enclosure, connector, receptacles	670079		30
24	2	D-1 DECELOSTAT Valve (64 volt)	670306		25
25	4	Magnetic Pick-Up	PTM-1001	SK 4900 0001,00	1
26	4	Magnetic Pick-Up Connector	PTM-1002		1/2
27	4	Magnetic Pick-Up Connector Housing	579503	CA84940-5	1
28	4	Gear, Split Ring	585368	CA84940-9	10
<u>Tread Brake Unit Equipment And Details</u>					
29	2	H-6-A Tread Brake Units L.H. (non hand brake)	304177	FA353077	84

Registered TRADEMARK of American Standard Inc.

ITEM	QUAN.	DESCRIPTION	PC.NO.	DWG.NO.	ESTIMATED WGT.EA.
a	2	3/8" Socket Welded Fitting	565252	CA78208-52	1/2
b	2	3/8" Gasket	93839		
c	4	3/8" x 1" Capscrew	579193		
30	2	H-6-A Tread Brake Units R.H. (non hand brake)	304178		84
a	2	3/8" Socket Welded Fitting	565252	CA78208-52	1/2
b	2	3/8" Gasket	93839		
c	4	3/8" x 1" Capscrew	579193		
31	2	H-6-A Tread Brake Unit L.H. (handbrake)	304179		88
a	2	3/8" Socket Welded Fitting	565252	CA78208-52	1/2
b	2	3/8" Gasket	93839		
c	4	3/8" x 1" Capscrew	579193		
32	2	H-6-A Tread Brake Unit	304180		88
a	2	3/8" Socket Welded Fitting	565252	CA78208-52	1/2
b	2	3/8" Gasket	93839		
c	4	3/8" x 1" Capscrew	579193		
33	8	Cobra Shoes	V236	AV236-51	9
34	1	Hand Brake Rigging Kit (To be designed with input from Car Builder)	PTM1006		
		<u>Outboard Mounted Disc Brake Equipment</u>			
35	4	HP-1-C Disc Brake Unit Assembly Complete, LH	302966	FA352454-51	210
36	4	HP-1-C Disc Brake Unit Assembly Complete, RH	302982	FA352454-51	210
37	8	24" Dia. Disc w/hub	581044	FA84933-13	195
		<u>Miscellaneous Details</u>			
38	2	Cock, 3/4" x 3/4" x 3/8" Brake Cylinder Cutout w/ Locking Handle	572363	BA84459-55	3-1/2

ITEM	QUAN.	DESCRIPTION	PC.NO.	DWG.NO.	ESTIMATED WGT.EA.
39	3	Hose, 3/8" AAR, M-618 w/3/4" x 18 NPT (Car Body to Truck, Leveling Valve)	PTM1005		4
40	4	5/8" x 36" AAR M618 Hose	PTM-1003		10
41	8	1/2" x 21" AAR M618 Hose	PTM-1004		7
		<u>Coupler Equipment</u>			
42	1	N-2-A Car Coupler	588063	Similar to: EA85146-52	310
43	1	Coupler Centering Device	574784	FA84419-3	12
44	1	Valve, B-5 Uncoupling (Black)	590463 0002		9
a	1	Handle	78533		1/2
b	2	3/8" x 1" O.D.C.T. sweat fitting	512032		
c	2	3/9" gasket	93839		
d	4	3/8" x 1" cap screw	579193		
45	1	Reservoir 10 x 15-13/16	544040	BA79810-14	17-1/2
46	1	Valve 3/8" Check	543326	AA69877-22	2-1/2
47	1	Choke Fitting	557106	AA63142	1/2

NOTE: Draft Gear and Drawbar are not included in WABCO PTD Scope of Supply.

NOTES:

1. Devices identified by "PTM" piece numbers are for proposal purposes to identify new devices or existing devices which will require some modifications to meet specification requirements. Drawings, if provided for "PTM" numbers, are furnished only for reference purposes to give general outline dimensions for existing devices which could be used for this program. The drawings referring to "PTM" devices are not to be considered as final outline drawings. Standard WABCO piece numbers and WABCO drawing numbers will be assigned to these devices after contract signing.
2. All WABCO flanged sweat fittings shown in this material list are designed for use with copper tubing conforming to U.S.A. standards. For nominal diameters of tubing the tolerance is:

<u>Nominal Tube Size (Inch)</u>	<u>Tolerance (Inch)</u>
1/8 - 3/8	$\pm 3/64$
1/2 - 3/4	$\pm 1/16$
1 - 2	$\pm 5/64$

3. Reservoir sizes shown are for reference purposes only. Changes in volume and/or dimensions may be necessary to meet the railways' or carbuilders' requirements once the various components' air consumptions are better defined.
4. Hose assemblies shown are tentative only and are subject to change to suit installation requirements.
5. Fittings, hoses and piping not integral to the unit packages or not specifically listed are not included. Schrader-type quick disconnect fittings must be supplied by carbuilder where required.
6. Pipe sizes and lengths shown on the equipment piping diagram must be adhered to in order to assure specification compliance.
7. Piping cleanliness must be insured before operating the brake system to prevent premature failures.
8. All pipe threads are American Standard (NPT).
9. Air gage or pressure switch test fittings are not included as part of this equipment and must be separately supplied by the carbuilder.

PRELIMINARY
MATERIAL LIST
covering

One Car Set of 26-C/CS-2 Air Brake Control Details
With Inboard Mounted 3P Disc Brake Units
and SAB Tread Brake Units
with Spring Applied Parking Brakes
for

LONG ISLAND RAILROAD
BI-LEVEL PASSENGER CARS
Contract 5254

ITEM	QUAN.	DESCRIPTION	PC.NO.	DWG.NO.	ESTIMATED WGT.EA.
<u>Brake Control Equipment And Details</u>					
1	1	D-3.1 Operating Unit	672193	EA85142-54	280
		Unit contains the following portions on a laminated Pipe Bracket:			
		-26-C Service Portion			
		-J-1.2-1 Relay Valve			
		-32-A Magnet Valve (64 Volt)			
		-N-1 Reducing Valve (snow brake)			
		-Snow Brake Magnet Valve (64 Volt)			
		-H-5 Relayair Valve (snow brake)			
		-Snow Brake Cut-Out Cock			
		-Variable Load Valve			
		-Reservoir Release Valve			
		-Combined Brake Pipe Cut-Out Cock and Strainer			
		-Timing and Displacement Volumes			
		-Manual Reservoir Release valve			
		-By Pass Limiting Valve			
		-24-C Double Check Valve			

Registered TRADEMARK of Westinghouse Air Brake Company

Spec. Issued: 8/20/87	1	Spec.No. 77-LIRR-276
Spec. Revised: 9/15/87, 2/19/88, 11/28/88, 2/20/89, 3/14/89,		
4/13/89, 8/3/89, 10/12/89, 12/02/89, 1/25/90, 2/9/90		
4/11/90, 5/8/90		

ITEM	QUAN	DESCRIPTION	PC.NO.	DWG.NO.	ESTIMATED WGT. EA.
d	8	Screw, 1/2" x 1-3/4" Cap	581832		
4	1	Valve, 1" Check (Sup R)	520102	AA69877-11	4-1/4
a	1	Choke Fitting 3/4"	71099	BA9602	1
5	1	Coalescing Filter w/Drain	672194	E0672194, 0000,00	80
a	1	Timing Unit (37.5 volt)	672426	C0672426, 0000,00	
b	1	Pressure Switch	579607-0030	BA84961-51	2
c	1	Test Fitting	584627	CA85062-50	.5
6	2	Valve, B-3-C Emergency Brake Valve	93510	CA54599-50	4
7	1	Valve, No. 8 Vent w/Special Branch Pipe Tee (pluggable)	580734	FA84990-57	19
a	2	Fitting, 1-1/4" x 1-1/4", welded	565262		1-1/2
b	2	Gasket, 1-1/4"	94790		
c	4	Screw, 5/8" x 4-1/2" cap	581830		
d	4	Nut, 5/8" hex lock	549799		
e	1	Plug, Pipe, 3/8" NPT	522768		
8	1	Valve, A-1 Reduction Relay (pluggable)	580735	FA84990-58	47
a	1	Fitting, 1" x 1" weld	565259		1
b	1	Gasket, 1" flange	93986		
c	2	Screw, 1/2" x 1-1/4" cap	579983		
9	4	Tee, 1-1/4" x 1-1/4" x 1" Branch Pipe	95495	CA56411-54	5
a	8	Fitting, 1-1/4" x 1-1/4" Weld	565262		1-1/2
b	2	Fitting, 1" x 1" weld	565259		1
c	2	Fitting, 1" x 3/4", welded	565258		
d	8	Gasket, 1-1/4" flange	94790		
e	4	Gasket, 1" flange	93986		
f	16	Screw, 5/8" x 4-3/4" hex hd. cap	587519		
g	16	Nut, 5/8" Hex lock	549799		
h	8	Screw, 1/2" x 1-7/8" hex hd. cap	576132		
i	8	Nut, 1/2" hex lock	574077		

Registered TRADEMARK of Westinghouse Air Brake Company

Spec. Issued: 8/20/87 3 Spec.No. 77-LIRR-276
Spec. Revised: 9/15/87, 2/19/88, 11/28/88, 2/20/89, 3/14/89,
4/13/89, 8/3/89, 10/12/89, 12/02/89, 1/25/90, 2/9/90
4/11/90. 5/8/90

ITEM	QUAN	DESCRIPTION	PC.NO.	DWG.NO.	ESTIMATED WGT. EA.
<u>Leveling Valve Details</u>					
17	3	Cock, 3/8" Ball, Vented w/Locking Handle	576598	DA84473-52	1.5
18	5	Filter, 3/8" OC-1-B	582132	CA85176-14	3
a	1	Choke Fitting 3/32	15473	AA11519	1
19	4	Boogie Air Spring Reservoir 14" x 30"	672359- 1000	D0672359, 1000,00	62
a	4	Plug, Pipe 1/2"	512408		
20	2	Valve, 3/8" Check	543326	AA69877-22	2-1/2
21	1	N-1 Reducing Valve	671041-0110	D0671041,0110,00	2.5
22	4	Test Fittings	589073	A0589073, 0000,0P	1
<u>Electronic Wheel Slide Equipment</u>					
23	1	E-7 Decelostat Controller (37.5 Volt) Feature complete with enclosure, connectors, receptacles (intended for inside mounting)	672181	672182, 0000,00	35
24	2	D-1 DECELOSTAT Valve (37.5 Volt) (4 Pin Connectors)	670979	F0670979, 0000,00	30
25	4	Magnetic Pick-Up	670260	B0670260, 0000,00	1
26	4	Connector	560150	CA82219	.25
27	2	Brake Cylinder Pressure Switch	579985	BA83858-0003	
a	2	Test Fittings	-0002 584627	CA-85062-50	
28	2	Cock, 3/8" Ball, Vented w/Locking Handle	576598	DA84473-52	1.5

Registered TRADEMARK of Westinghouse Air Brake Company

Spec. Issued: 8/20/87	5	Spec.No. 77-LIRR-276
Spec. Revised: 9/15/87, 2/19/88, 11/28/88, 2/20/89, 3/14/89,		
4/13/89, 8/3/89, 10/12/89, 12/02/89, 1/25/90, 2/9/90		
4/11/90, 5/8/90		

ITEM	QUAN	DESCRIPTION	PC.NO.	DWG.NO.	ESTIMATED WGT. EA.
<u>Tread Brake Unit Equipment And Parking Brake Details</u>					
29	4	SAB (BFC) Tread Brake Units	672578- 1300	FA85279-60	95
a	4	Brake Shoe Key	564390	BA-81082-4	
30		Reserved			
a	2	SAB (BFC) Tread Brake w/ Spring Applied Park B. (Left Hand).	672577 -4304	FA85279-62	130
b	2	SAB (BFC) Tread Brake w/ Spring Applied Park B. (Right Hand).	672577 -2302	FA85279-62	130
c	4	Brake Shoe Key	564390	BA-81082-4	
31	8	COBRA Brake Shoes	V-236		9
32	1	Parking Brake Magnet Valve (37.5 VDC)	583424	CA85060-59	
33	1	3-Way Cock 3/4 x 3/4 x 1/4 (1/4" NPT vent)	672582	C0672582,0000, 00	
34	1	Parking Brake Pressure Switch (37.5 VDC)	579607- 0103	BA-83858-3	
a	1	Air Gage	506287	CA-76455-11	
b	2	Test Fitting	584627	CA-85062-50	
<u>Inboard Mounted Disc Brake Equipment</u>					
35	8	WC-27 Axle-Mounted Disc & Hub Assembly	304388	F0304388	380
36	4	3P Disc Brake Unit Caliper Assembly RH (with Automatic Slack Adjustment Only)	583068	FA84988-57	150
37	4	3P Disc Brake Unit Caliper Assembly LH (with Automatic Slack Adjustment Only)	583070	FA84988-57	150
Registered TRADEMARK of Westinghouse Air Brake Company					

Spec. Issued: 8/20/87 6 Spec.No. 77-LIRR-276
Spec. Revised: 9/15/87, 2/19/88, 11/28/88, 2/20/89, 3/14/89,
4/13/89, 8/3/89, 10/12/89, 12/02/89, 1/25/90, 2/9/90
4/11/90, 5/8/90

ITEM	QUAN	DESCRIPTION	PC.NO.	DWG.NO.	ESTIMATED WGT. EA.
73	1	Cables w/connectors each end	672343	D0672343,0000 0P	20
a	1	Cables w/connectors each end	672446	D0672446,0000, 0P	20
74	1	Hose, 1-1/8" x 35" Straight Main Reservoir	673175	D0672581, 0000,S0	-
75	3	Hose, 3/8" x 24" Straight Uncoupling (Coupler & Coupler Box)	673172- 0240	D0673172, 0000,S0	-
76	1	Hose, 1-3/8" x 48" Straight Brake Pipe	673176	D0672581, 0000,S02	-
		<u>B-Car Only</u>			
77	1	Cock, 3/8" Ball, vented w/Locking Handle	576598	DA84473-52	1.5

Registered TRADEMARK of Westinghouse Air Brake Company

Spec. Issued: 8/20/87	9	Spec.No. 77-LIRR-276
Spec. Revised: 9/15/87, 2/19/88, 11/28/88, 2/20/89, 3/14/89,		
4/13/89, 8/3/89, 10/12/89, 12/02/89, 1/25/90, 2/9/90		
4/11/90, 5/8/90		

