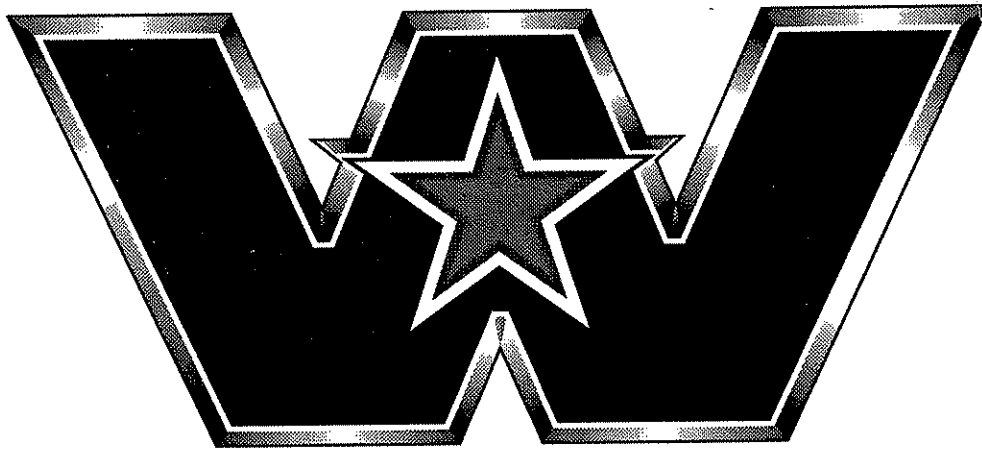


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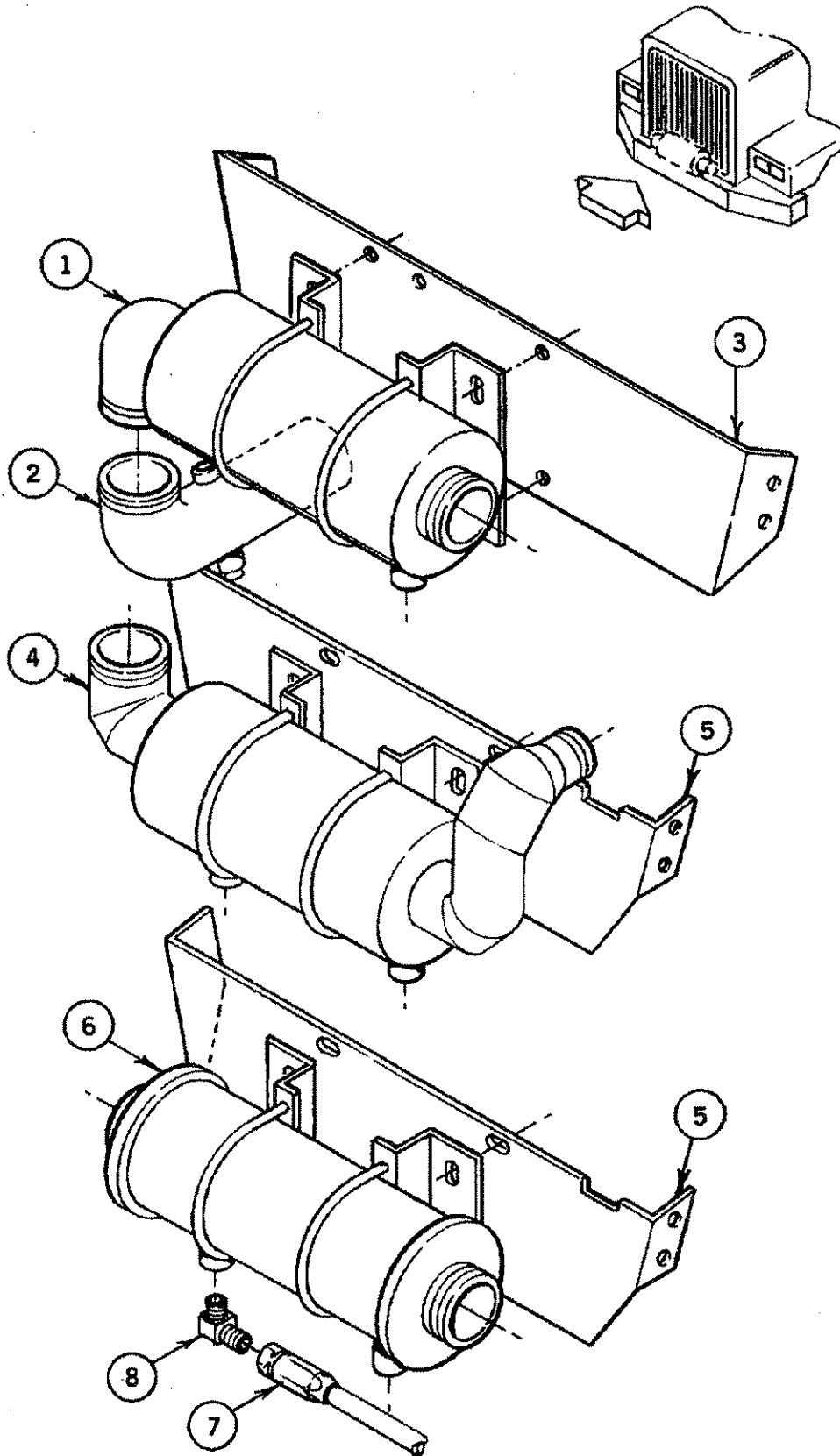


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Note: This publication is a generic parts book. Components may vary with different applications. For applications other than listed below the parts listings see the appropriate Bill of Material by truck serial number and use this publication as a guide only.



TRANSMISSION

OIL COOLER

2.10.1

TRANSMISSION OIL COOLERS

1168-542-03

Under Rad Mount, Auto Transmission, #16 Hose,
Kim Hotstart Fitting

Item	Description	Part Number	Qty
1	Oil Cooler	28601-3422	1
2	Pipe, Cooler outlet, with Kim Hotstart Fitting	28605-3459	1
3	Bracket, Auto Transmission Cooler	28603-3430	1
7	Hose Assembly, #16, 74.00 long	9052295-074	1
7	Hose Assembly, #16, 87.00 long	9052295-087	1
8	Elbow, 90 Deg. 1.00 x 1 .31 JIT	456118	2
8	Elbow, 90 Deg. 1.31 'O' x 1.31 JIT	568300	2

1168-542-04

Under Rad Mount, Auto Transmission, #16 Hose

4	Oil Cooler	28601-3424	1
5	Bracket, Auto Transmission Cooler	28603-3437	1
7	Hose Assembly, #16, 74.00 long	9052295-074	1
7	Hose Assembly, #16, 87.00 long	9052295-087	1
8	Elbow, 90 Deg. 1.00 x 1 .31 JIT	456118	2
8	Elbow, 90 Deg. 1.31 'O' x 1.31 JIT	568300	2

1168-542-06

Under Rad Mount, Auto Transmission, #12 Hose

6	Oil Cooler, 3,000 BTU	28601-3430	1
5	Bracket, Auto Transmission Cooler	28603-3437	1
7	Hose Assembly, #12, 120.00 long	5735-120.	2
8	Bushing, Reducing .75 NPT x .50 NPT	344881	1
8	Hex Nipple, Brass .50 x .50	6140C0007	1
8	Elbow, 90 Deg. .50 NPT x #12 SAE	614649	6
8	Bushing, 1.00 NPT x .50 NPT	688993	2
8	Bushing, 1.06 O-Ring x .50 NPT	04-9039690	1
8	Tee, Pipe .50	04-9002196	1

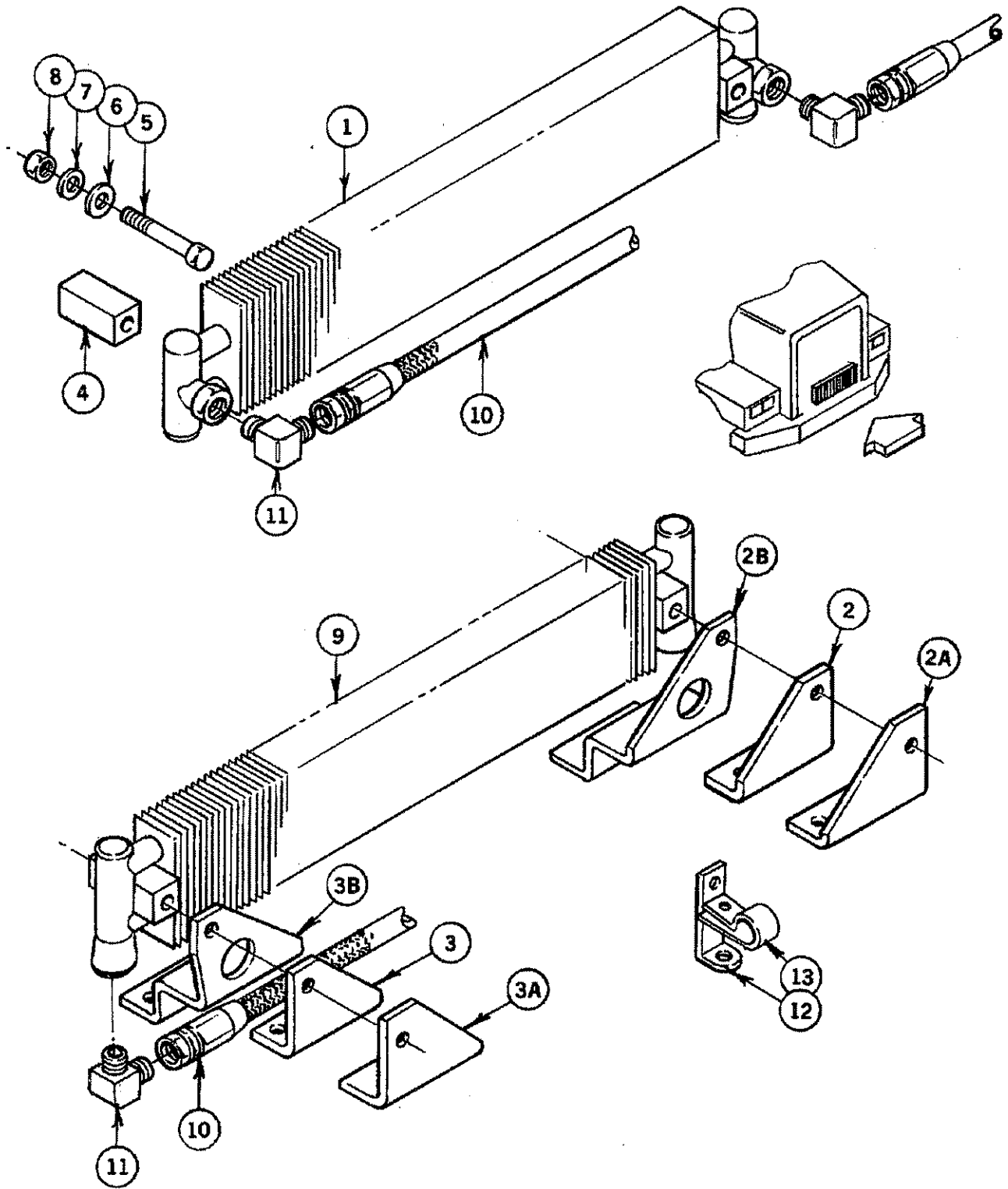
1168-542-07

Under Rad Mount, Auto Transmission, #16 Hose

6	Oil Cooler, 3,000 BTU	28601-3430	1
5	Bracket, Auto Transmission Cooler	28603-3437	1
7	Hose Assembly, #16, 74.00 long	9052295-074	1
8	Hose Assembly, #16, 87.00 long	9052295-087	1
8	Elbow, 90 Deg. 1.0 x 1 .31 JIC	456118	2
8	Elbow, 90 Deg. 1.31 'O' x 1.31 JIC	568300	2

Specific BOMs listed: 1168-542-03/04, 1168-542-06/07

TRANSMISSION 2



1168-530-41/43
**Rad Mount, Manual Transmission, #8 Wire Braid Hose
Cooler with Front Ports**

Item	Description	Part Number	Qty
1	Oil Cooler, Front Ports	28601-3431	1
2	Bracket, Cooler Mount LH, 3.06 h x 3.56 w	28603-3470	1
3	Bracket, Cooler Mount RH, 3.06 h x 3.56 w	28603-3471	1
4	Rubber Mount BLock	28690-3401	2
5	Bolt, Hex .31-18 x 2.00 long	99-180087	2
6	Washer, Flat .31 x .69	99-120393	2
7	Washer, Lock .31	99-120214	2
8	Nut, .31-18	28690-3402	2

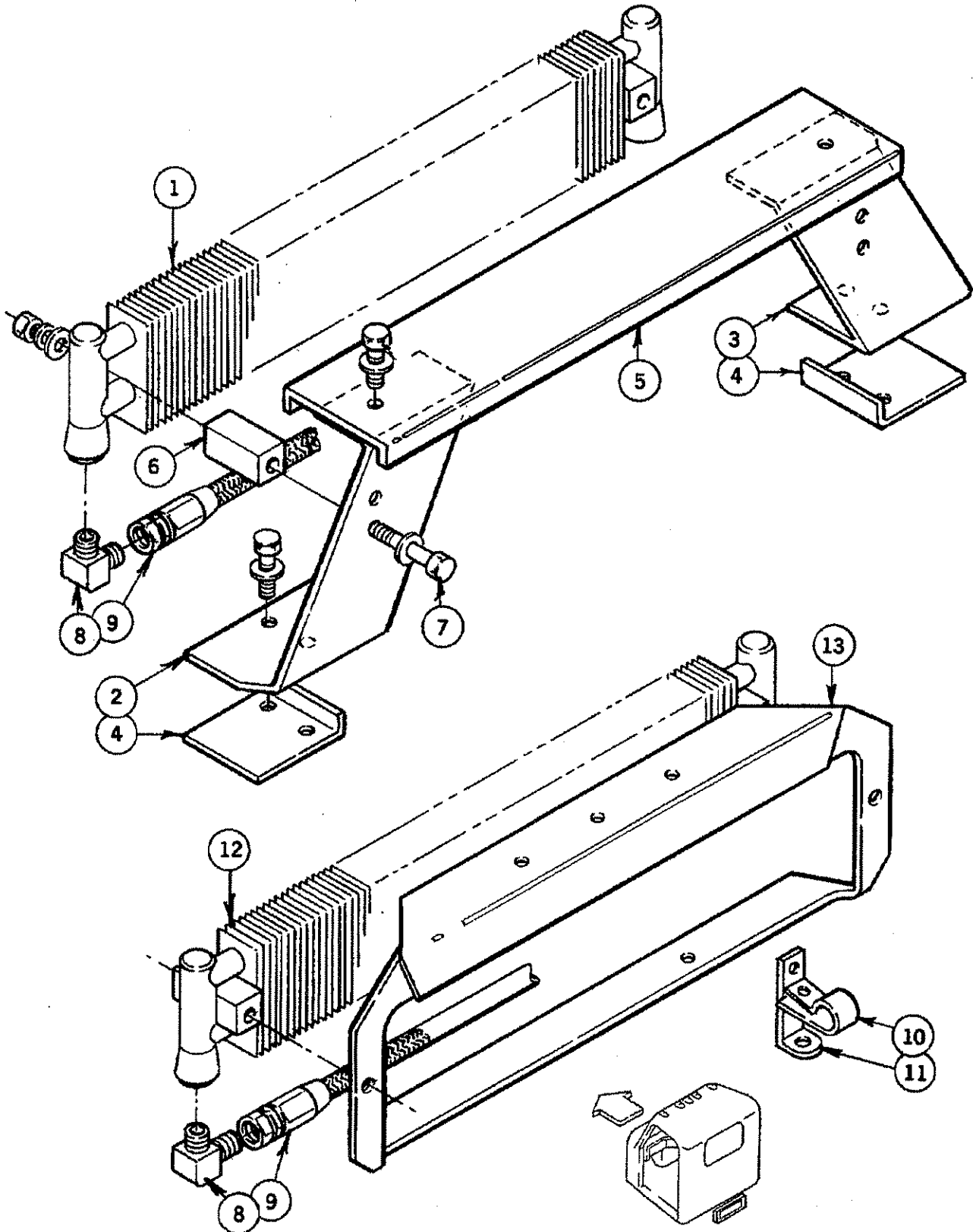
1168-642-20/21
**Rad Mount, Manual Transmission, #8 Wire Braid Hose
Cooler Top or Bottom Ports (same Cooler - flipped over)**
1168-530-50/53, 60/63

9	Oil Cooler	28601-3413	1
2A	Bracket, Cooler Mount LH, 3.25 h x 3.88 w	28603-3428	1
3A	Bracket, Cooler Mount RH, 3.25 h x 3.88 w	28603-3427	1
2B	Bracket, Cooler Mount LH, Double Bend	28603-3442	1
3B	Bracket, Cooler Mount RH, Double Bend	28603-3443	1
4	Rubber Mount Block	28690-3401	2
5	Bolt, Hex .31-18 x 2.00 long	99-180087	2
6	Washer, Flat .31 x .69	99-120393	2
7	Washer, Lock .31	99-120214	2
8	Nut, .31-18	28690-3402	2
-	Kit, Transmission Oil pump (530-60/63 only)	27091-3401	1

General Hook-Up Hardware

10	Hose Assembly, #8 Wire Braid, length as required	5733-0000	2
11	Elbow, 45 Deg. .50 x .50 NPT	5332-3401	AR
11	Elbow, 45 Deg. .50 NPT x .75 J1C	5349-3404	AR
11	Elbow, 90 Deg. .50 NPT x #8 J1C	5349-3409	AR
11	Elbow, 90 Deg. #8 x .50 NPT	614647	AR
12	Bracket, Standoff	28603-3436	AR
12	Bracket, Stand-off	04-9046643	AR
13	Clip, .38 std x 1.25 Dia.	644389	AR

Specific BOMs listed: 1168-530-41/43, 1168-642-20/21 1168-530-50/53, 1168-530-60/63



TRANSMISSION

OIL COOLER

2.10.1

1168-538-0/3,10/13 539-0/1,10 Back of Cab Mount, Manual Transmission

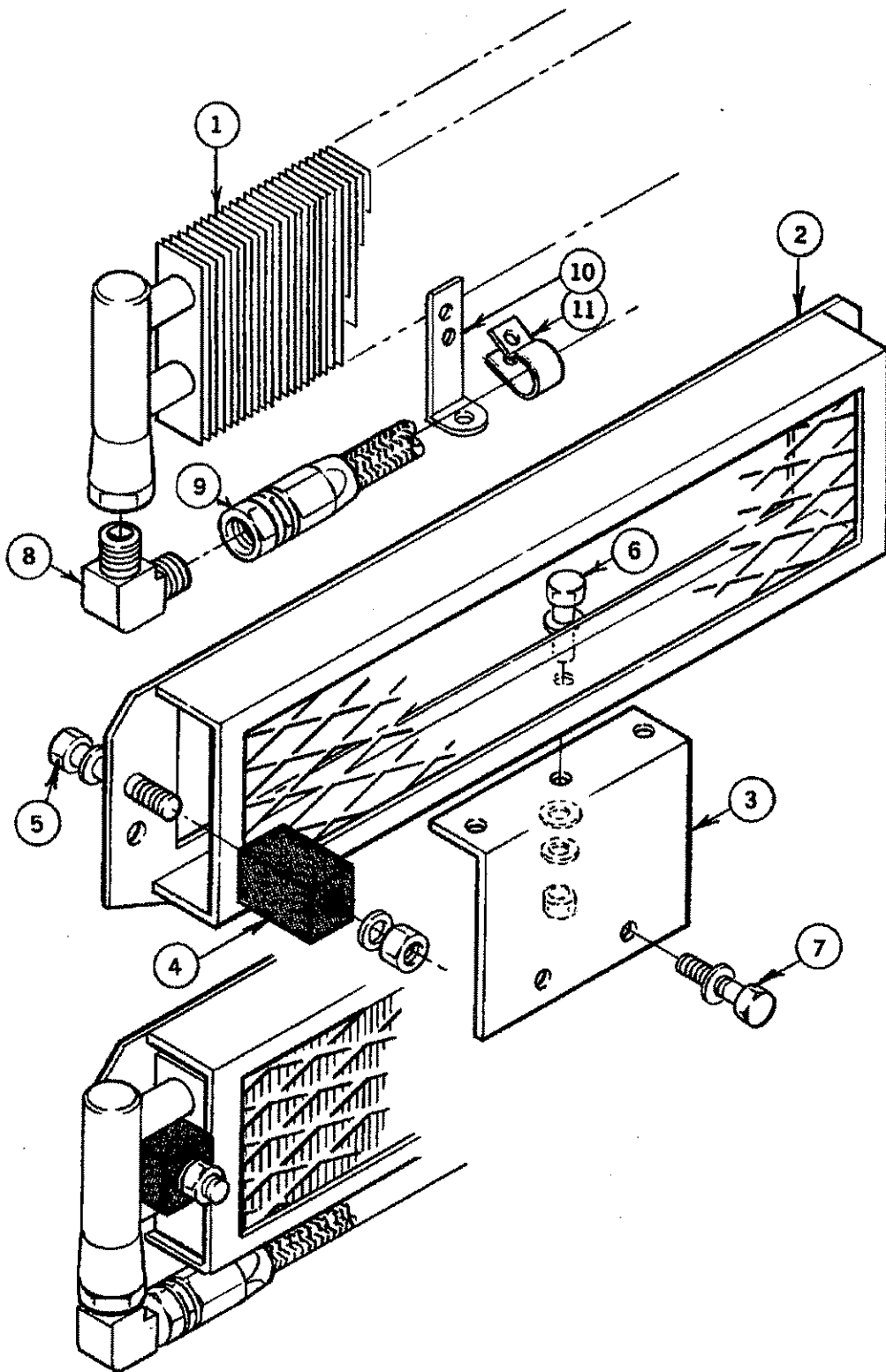
Item	Description	Part Number	Qty
-	Kit, Transmission Oil Pump (10/13, 10 only)	27091-3401	1
1	Oil Cooler, Hayden	28601-3413	1
2	Support, Transmission Oil Cooler RH	28603-3446	1
3	Support, Transmission Oil Cooler LH	28603-3447	1
4	Clamp, use with Single Channel Rail	79505-3411	2
4	Clamp, use with Double Channel or Alum. Rail	79505-3412	2
5	Guard, Oil Cooler	28603-3448	1
6	Rubber Mount, Block	28690-3401	2
7	Bolt, Hex .31-18 x 3.00 long	99-180113	2
7	Washer, Flat .31 x .69	99-120393	2
7	Washer, Lock .31	99-120214	2
7	Nut, .31-18	28690-3402	2
8	Elbow, 45 Deg. .50 x .50 NPT	5332-3401	1
8	Elbow, 45 Deg. .50 NPT x .75 JIC	5349-3404	1
8	Elbow, 90 Deg. .50 NPT x #8 JIC	5349-3409	1
8	Elbow, 90 Deg. #8 x .50 NPT	614647	2
9	Hose, #8 Wire Braid, length as required	5733-0000	2
10	Clip, .38 Std. x 1.25 Dia.	644389	AR
10	Clip, .38 Std. x .75 Dia.	689111	AR
11	Bracket, Stand-off	66023-3402	AR

1168-538-06,7,14,15 539-02,12 Air Ride Back of Cab Mount, Manual Transmission

-	Kit, Transmission Oil Pump (538-15 only)	27091-3401	1
12	Oil Cooler, Hayden	28601-3413	1
13	Support, Transmission Oil Cooler	28603-3451	1
6	Rubber Mount, Block	28690-3401	2
7	Bolt, Hex .31-18 x 3.00 long	99-180113	2
7	Washer, Flat .31 x .69	99-120393	2
7	Washer, Lock .31	99-120214	2
7	Nut, .31-18	28690-3402	2
8	Elbow, 45 Deg. .50 x .50 NPT	5332-3401	AR
8	Elbow, 45 Deg. .50 NPT x .75 JIC	5349-3404	AR
8	Elbow, 90 Deg. .50 NPT x #8 JIC	5349-3409	1
8	Elbow, 90 Deg. #8 x .50 NPT	614647	2
9	Hose, #8 Wire Braid, length as required	5733-0000	2
10	Clip, .38 Std. x 1.25 Dia.	644389	AR
10	Clip, .38 Std. x .75 Dia.	689111	2
11	Bracket, Stand-off	66023-3402	AR

Specific BOMs listed: 1168-538-00/03, 1168-538-06/07, 1168-538-10/13, 1168-539-00/01, 1168-539-10, , 1168-538-14/15, 1168-539-02, 1168-539-12

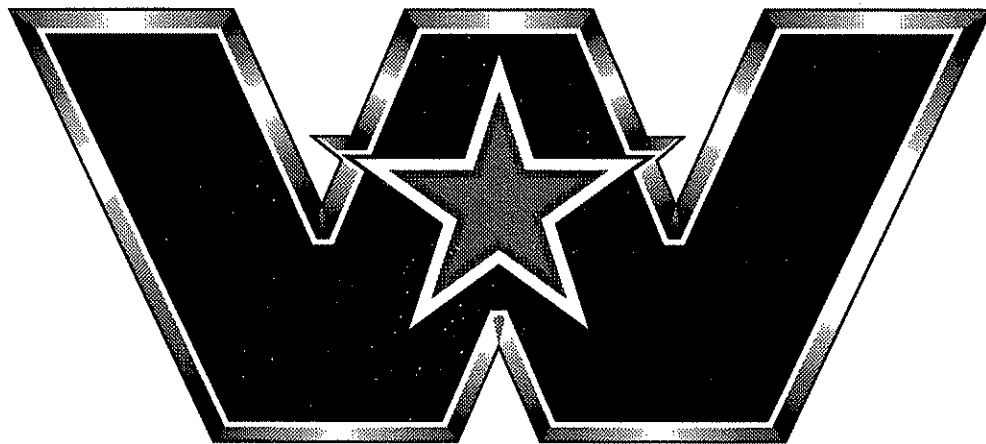
TRANSMISSION 2



1168-668-0/2 Frame Mount, Manual Transmission, #8 Wire Braid Hose

1	Oil Cooler, Hayden	28601-3413	1
2	Bracket, Oil Cooler	28603-3440	1
3	Support, Oil Cooler	28603-3449	1
4	Rubber Mount, Block	28690-3401	2
5	Bolt, Hex .31-18 x 3.00 long	99-180113	2
5	Washer, Flat .31 x .69	99-120393	2
5	Washer, Lock .31	99-120214	2
5	Nut, .31-18	28690-3402	2
6	Bolt, Hex .38-24 x 1.00	4019-3406-1.00	3
6	Washer, Hard .38 x .74 x .10	4011-3411	6
6	Nut, Lock .38-24	4012-3417	3
7	Bolt, Hex .50-20 x 1.50	4019-3408-1.50	2
7	Washer, Hard .50 x 1.00 x .10	4011-3413	4
7	Nut, Lock .50-20	4012-3419	2
8	Elbow, 45 Deg. .50 x .50 NPT	5332-3401	AR
8	Elbow, 45 Deg. .50 NPT x .75 J1C	5349-3404	AR
8	Elbow, 90 Deg. .50 NPT x #8 J1C	5349-3409	AR
8	Elbow, 90 Deg. #8 x .50 NPT	614647	AR
9	Hose, #8 Wire Braid, length as required	5733-0000	2
10	Bracket, Standoff	66023-3402	AR
10	Bracket, Standoff	28603-3436	AR
11	Clip, .38 Std. x .75 Dia.	689111	AR
11	Clip, .38 Std. x 1.25 Dia.	644389	AR

Specific BOMs listed: 1168-668-00/02

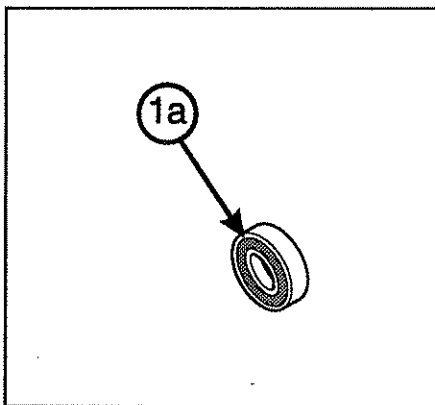
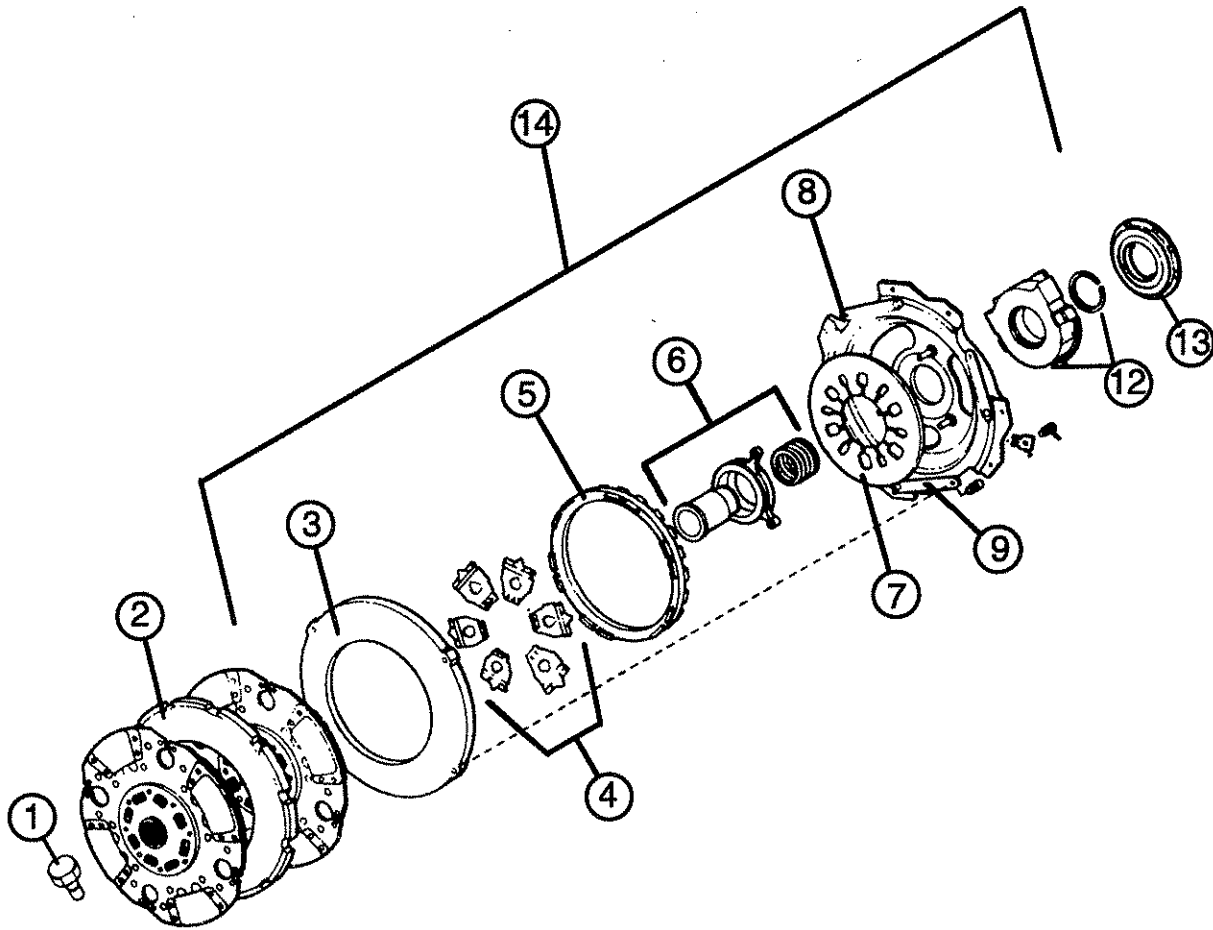


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Note: This publication is a generic parts book. Components may vary with different applications. For applications other than listed below the parts listing see the appropriate Bill of Material by truck serial number and use this publication as a guide only.



ROCKWELL 14" CLUTCHES - REPLACEMENT CLUTCH ASSEMBLIES

Western Star P/N	Rockwell Spec P/N	Replacement Clutch P/N
25001-3543	HC14C2200NB32	R141100
25001-3544	HC14M2200NB32	R140400
25001-3545	HC14C2200NB28	R140100
25001-3546	HC14M2200NB28	R144150

PILOT BEARING - SEE INSERT

Item	Description	Part Number	Qty
1a	Pilot Bearing	25011-3403	1

ROCKWELL 14" CLUTCHES - REPLACEMENT PARTS

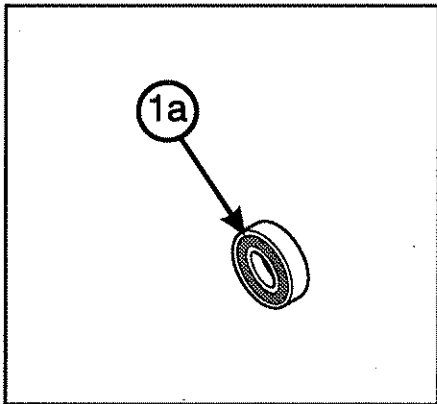
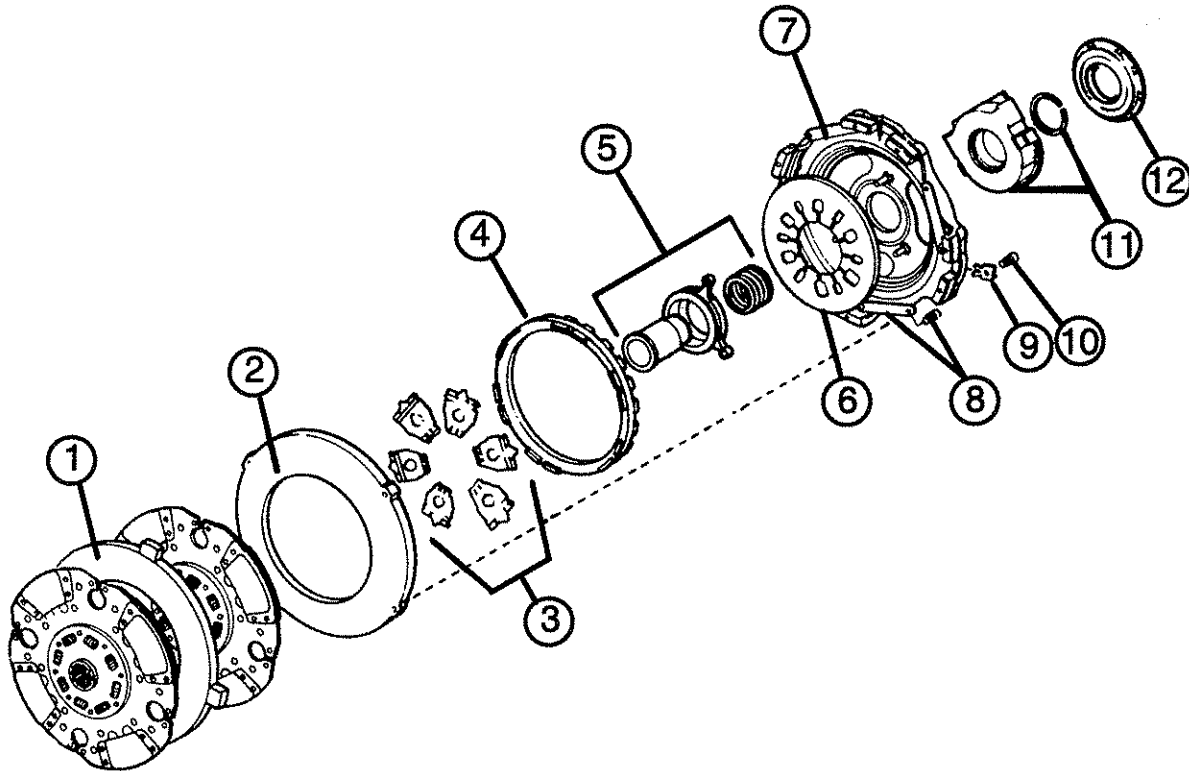
Item	Description	Replacement Part Number	Pkg. Qty
1	Drive Pin	R160008	6
2	Intermediate Plate, (DOF)	R160006	1
3	Pressure Plate	N/A	-
4	Levers	N/A	-
5	Adjusting Ring	N/A	-
6	Retainer Assy	N/A	-
7	Diaphragm Spring (3200 lb.)	N/A	-
8	Cover Housing	N/A	-
9	Drive Strap Bolts and Washers	R160013	4
10	Lock Plate (Old Style 30mm)	R160040	1
	Lock Plate (New Style 21mm)	R160174	1
12	Release Bearing & Snap Ring		
	- Greasable (with Brake)	R160010	1
	- Sealed (without Brake)	R160016	1
13	Clutch Brake (2")	R160012	1
14	Cover Assy (inc. 3-11), Greasable Bearing	R160051	1
	Cover Assy (inc. 3-11), Sealed Bearing	R160051	1

Note: Drive Pin and Clutch Brake are not included in Service Clutch Assy and must be purchased separately. N/A means not available separately, order Clutch Assy.

DOF: Compatible with Dampened Hub, Organic Facing

DCF: Compatible with Dampened Hub, Ceramic Facing

Specific BOMs listed: 1148-555-02/03, 1148-556-02/03



TRANSMISSION

ROCKWELL 15 1/2" CLUTCH

2.6.2

ROCKWELL 15" CLUTCHES - REPLACEMENT CLUTCH ASSEMBLIES

Western Star P/N	Rockwell Spec P/N	Replacement Clutch P/N
25001-3537	HC15C2200TB36	R151405
25001-3538	HC15M2200TB36	R151455
25001-3539	HC15C2200TB32	R151405
25001-3540	HC15M2200TB32	R151455
25001-3541	HC15C2200TB28	R151405
25002-3423	HC15L2200HB36	R151650
25002-3424	HC15L2200NB36	R153600
25002-3429	HC15L2200NB28	R150600
25002-3430	HC15L2200NB32	R152600

PILOT BEARING - SEE INSERT

Item	Description	Part Number	Qty
1a	Pilot Bearing	25011-3403	1

ROCKWELL 15" CLUTCHES - REPLACEMENT PARTS

Item	Description	Replacement Part Number	Pkg. Qty
1	Intermediate Plate (DOF)	R160005	1
	Intermediate Plate (DCF)	R160063	1
2	Pressure Plate	N/A	-
3	Levers	N/A	-
4	Adjusting Ring	N/A	-
5	Retainer Assy	N/A	-
6	Diaphragm Spring	N/A	-
7	Cover Housing	N/A	-
8	Drive Strap Bolts & Washers	R160013	4
9	Lock Plate		
	Old Style(30mm)	R160040	1
	New Style(21mm)	R160174	1
10	Bolt & Washer	R160041	1
11	Release Bearing & Snap Ring		
	Greasable	R160010	1
	Sealed	R160016	1
12	Clutch Brake	R160012	1

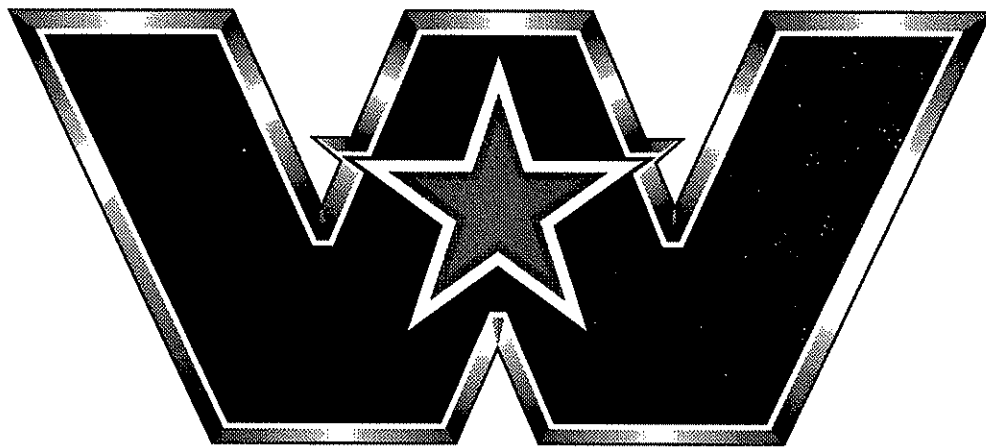
Note: Drive Pin and Clutch Brake are not included in Service Clutch Assy and must be purchased separately. N/A means not available separately, order Clutch Assy.

DOF: Compatible with Dampened Hub, Organic Facing

DCF: Compatible with Dampened Hub, Ceramic Facing

Specific BOMs listed: 1148-552-02//03, 1148-553-10/12, 1148-553-20//23

TRANSMISSION 2

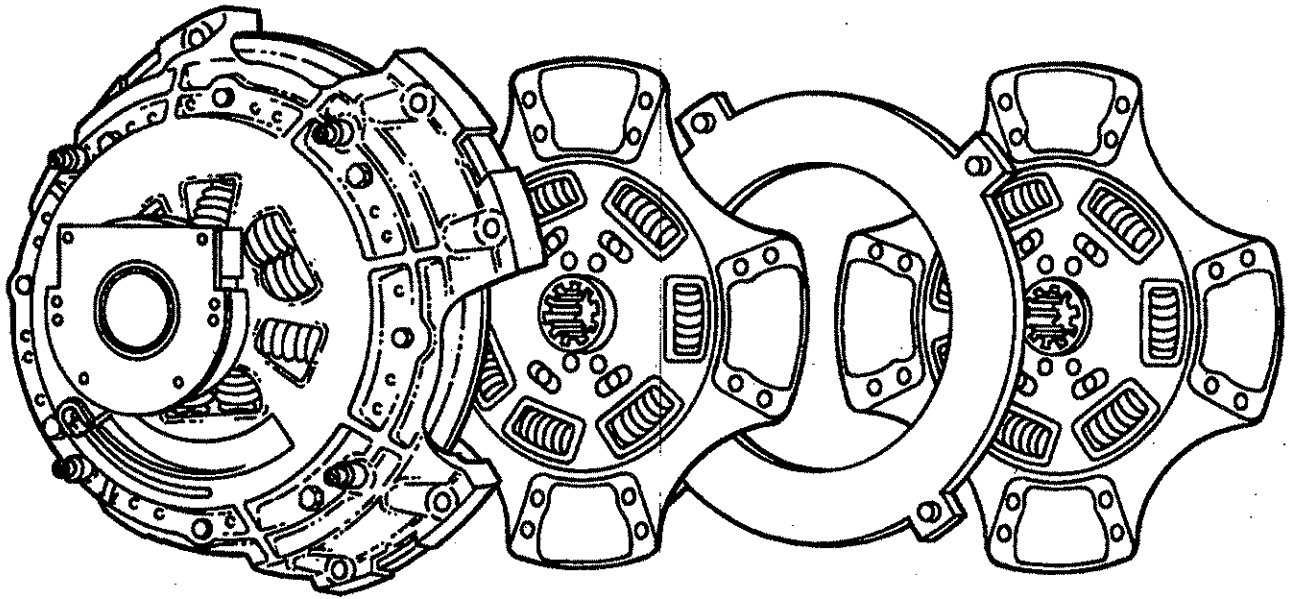


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SPICER 14" CLUTCHES - CLUTCH ASSEMBLIES

Western Star P/N	Spicer P/N	Reman Clutch P/N
25002-3425	108034-82	108034-82MO
25002-3594	108334-63	108034-82MO
25002-3413	108050-59	108050-59MO
25001-3595	108334-64	108034-61MO

SPICER 15.5" CLUTCHES - CLUTCH ASSEMBLIES

Western Star P/N	Spicer P/N	Reman Clutch P/N
25001-3579	108391-78	108391-74MO
25002-3419	108391-81	108391-74MO
25001-3578	108391-74	108391-74MO
25002-3420	108925-95	
25002-3436	108925-10	

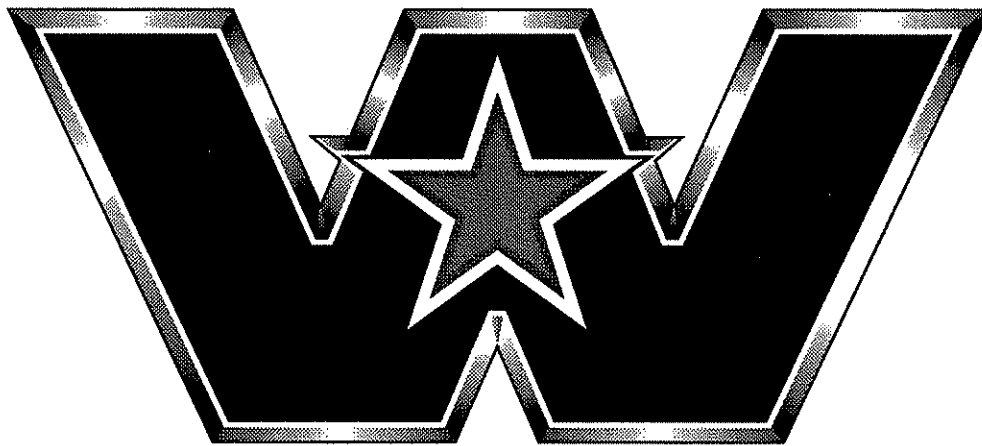
SPICER 15.5" SOLO CLUTCHES - CLUTCH ASSEMBLIES

Western Star P/N	Spicer P/N	Reman Clutch P/N
25002-3433	109701-82	Not available
25002-3432	109701-95	Not available
25002-3435	109701-10	Not available

PILOT BEARING

Description	Part Number	Qty
Pilot Bearing	25011-3403	1

Specific BOMs listed: 1148-557-05, 1148-557-11, 1148-558-05/06, 1148-559-04/05, 1148-560-13, 1148-560-14/17, 1148-563-00/02

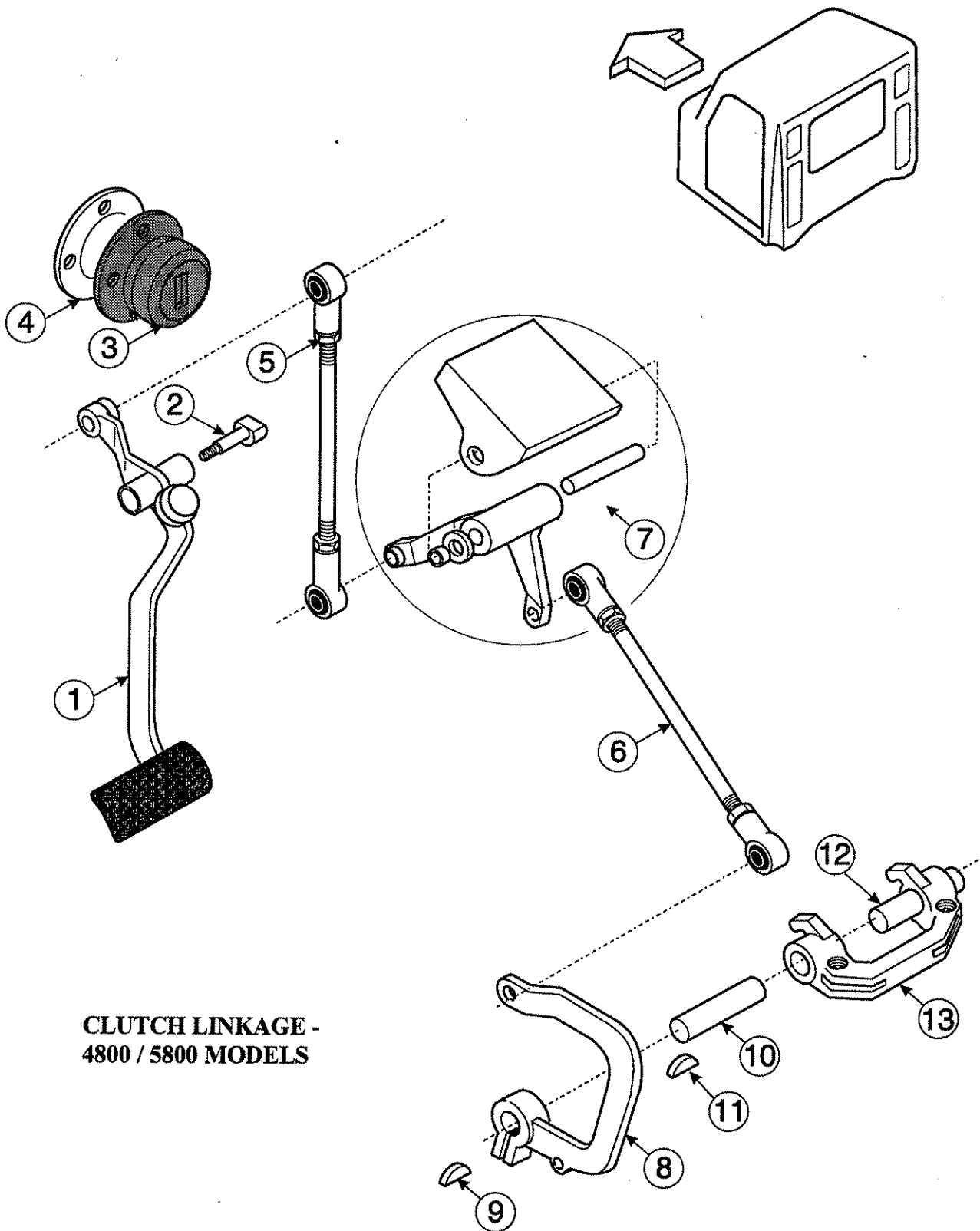


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**CLUTCH LINKAGE -
4800 / 5800 MODELS**

TRANSMISSION

CLUTCH LINKAGE 4800 & 4900 MODELS

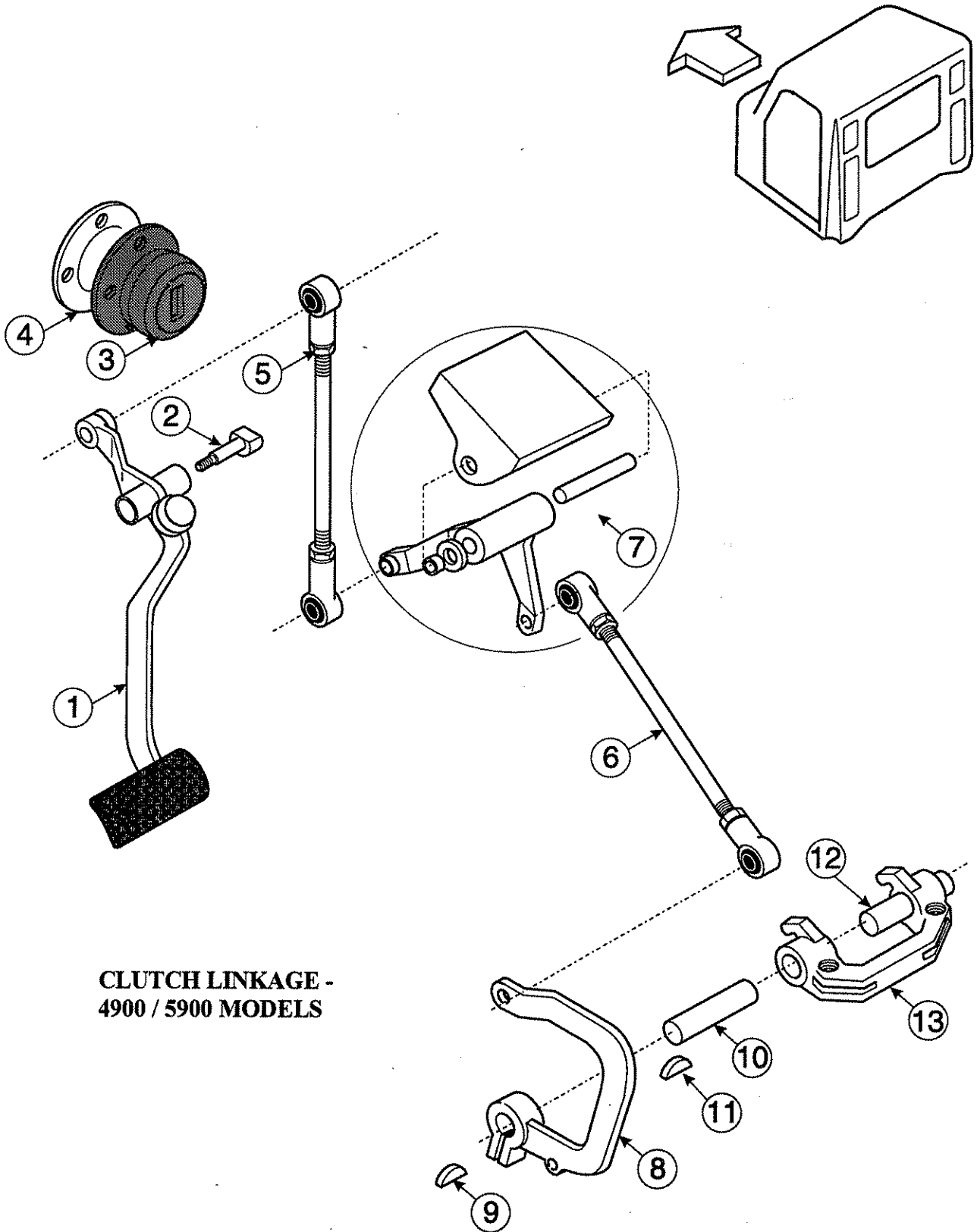
2.8.1

CLUTCH LINKAGE - 4800/5800 MODELS

Item	Description	Part Number	Qty
1	Pedal, Clutch	25101-3417	1
-	- Ny-Line Bearing	511749	2
-	- Spacer	638215	1
2	Shaft, Clutch Pedal	25210-3409	1
3	Boot, Clutch Pedal	526787	1
4	Retainer, Boot	25126-3401	1
5	Rod, Clutch Upper (48/58)	25110-3504	1
6	Rod, Clutch Lower (48/58, M11)	25110-3506	1
6	Rod, Clutch Lower (48/58, 3406, S60, N14)	25110-3503	1
6	Rod, Clutch Lower (48/58, 3176)	25110-3505	1
-	- Rod End (Upper/Lower Clutch Rod)	25136-3405	AR
7	Relay Assembly (48/58)	25111-3443	1
-	- Bracket	25119-3413	1
-	- Lever	25114-3443	1
-	- Pin	25210-3410	1
-	- Bushing	519347	2
-	- Nylon Washer	4011-3403	2
8	Lever, Clutch Release	25122-3422	1
9	Key, Clutch Release Lever	25215-3401	1
10	Release Shaft, LH	25210-3405	1
11	Key, Release Shaft	344674	1
12	Release Shaft, RH	25210-3406	1
13	Clutch Yoke	472920	1

Specific BOMs listed: 1158-001-01/03

TRANSMISSION 2



**CLUTCH LINKAGE -
4900 / 5900 MODELS**

TRANSMISSION

CLUTCH LINKAGE 4900 & 5900 MODELS

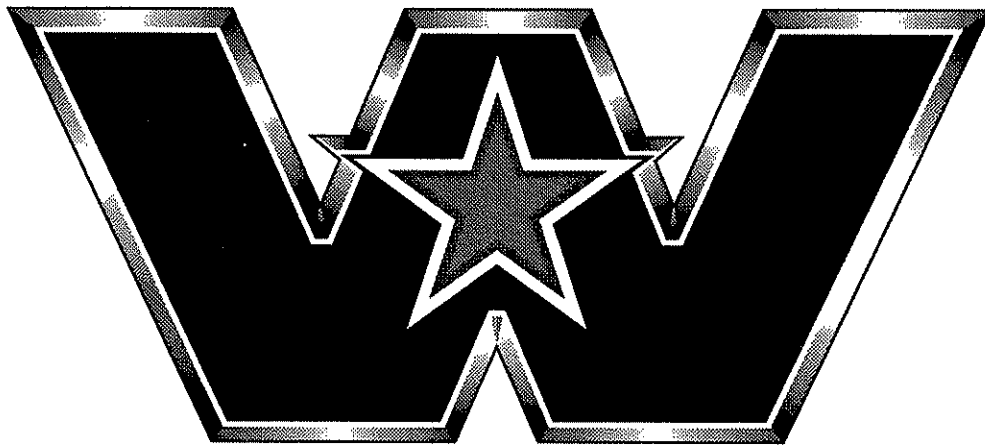
2.8.2

CLUTCH LINKAGE -4900/5900 MODELS

Item	Description	Part Number	Qty
1	Pedal, Clutch	25101-3417	1
-	- Ny-Line Bearing	511749	2
-	- Spacer	638215	1
2	Shaft, Clutch Pedal	25210-3409	1
3	Boot, Clutch Pedal	526787	1
4	Retainer, Boot	25126-3401	1
5	Rod, Clutch Upper (49FX/SX, 59SS)	25110-3501	1
6	Rod, Clutch Lower (49FX/SX, 59SS)	25110-3502	1
5	Rod, Clutch Upper (49EX)	25110-3504	1
6	Rod, Clutch Lower (49EX)	25110-3521	1
-	- Rod End (Upper/Lower Clutch Rod)	25136-3405	AR
7	Relay Assembly (49/59)	25111-3441	1
-	- Bracket	25119-3413	1
-	- Lever	25114-3441	1
-	- Pin	25210-3410	1
-	- Bushing	519347	2
-	- Nylon Washer	4011-3403	2
8	Lever, Clutch Release	25122-3422	1
9	Key, Clutch Release Lever	25215-3401	1
10	Release Shaft, LH	25210-3405	1
11	Key, Release Shaft	344674	1
12	Release Shaft, RH	25210-3406	1
13	Clutch Yoke	472920	1

Specific BOMs listed: 1158-001-00, 1158-001-04

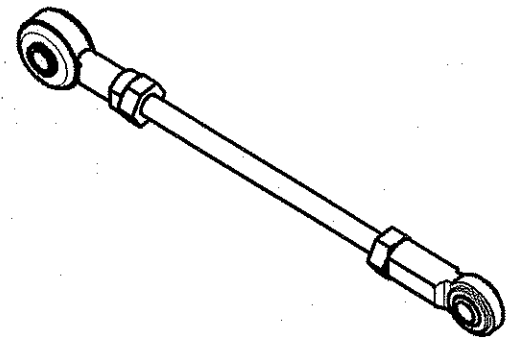
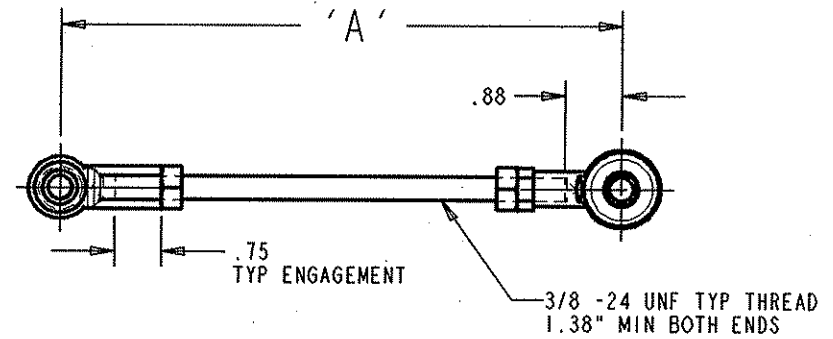
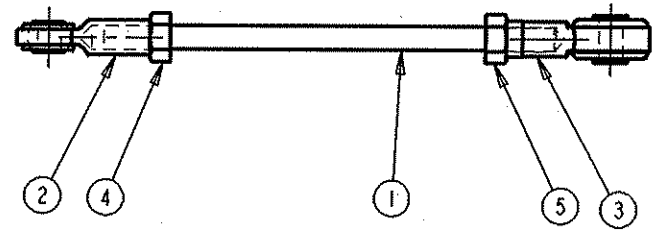
TRANSMISSION 2



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REMOVE ALL SHARP EDGES DO NOT SCALE DRAWING CAST, STAMP OR STENCIL PART NUMBER & REVISION LETTER IN SUITABLE LOCATION ORIGINAL CREATED ON WAVECO SOLID MODELING WORKSTATION

ECO	CHG	CHANGE	BY	DATE	CKD	APVD
99800	A	CLARIFIED THREAD DESIGNATIONS SEE TITLE BLOCK	SCM	1SEP98		BGK
100625	B	ADDED 25110-3596	PKK	9NOV98		PKK
102755	C	ADDED 25110-7001	TSP	17FEB99		
102526	D	ADDED 25110-7003	PKK	14APR99		PKK
109951	E	ADDED 25110-7010, 7012	EPS	19JUN00		GMD
111842	F	ADDED 25110-7014	DWW	7DEC00		
M30563-04	G	ADDED 25110-7017	NHS	26MAR03		GMD



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 PRINT ISSUE DATE CHG G

49 C12 RSD	25110-7017	16.50	A - NOMINAL SET LENGTH
69SXAWD B/S	25110-7014	14.25	FINISH (ROD): BRIGHT ZINC DICHRIMATE PLATE
48 S60, RHD	25110-7012	26.25	-5 HEX NUT RH THREAD 3/8-24 SAE J995 GR2
48 S60, RHD	25110-7010	31.00	-4 HEX NUT LH THREAD 3/8-24 SAE J995 GR2
48 3126	25110-7003	21.25	-3 ISOLATED ROD END RH 3/8-24 25136-3413
49EX 1SM	25110-7001	11.00	-2 SPHERICAL ROD END LH 3/8-24 25136-3412
49 3126	25110-3596	9.50	-1 ROD Ø3/8 AISI C1018
49 3406 B/S	25110-3569	23.50	COMP. NO. DESCRIPTION SIZE MATERIAL
49 LG BORE	25110-3568	19.75	WESTERN STAR TRUCKS INC. COMPUTER GRAPHICS KELOWNA, B.C.
49 C10 REPT	25110-3567	18.00	TOLERANCES UNLESS NOTED: BY DATE
49 C10/12	25110-3566	15.00	MACHINING ±.02 INCH DWN SCM 14APR98
49EX LG BORE	25110-3565	13.00	HOLE CENTERS ±.02 INCH CKD
49 C8.3REPT	25110-3564	12.00	HOLE DIAMETERS ±.02 INCH APVD BGK 4MAY98
49EX C10/12	25110-3563	9.00	LINEAR ±.06 INCH ECO 92296
APPLICATION PART NO. REV			ANGULAR ± 1/2 ° SCALE NONE
			THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION AND IT SHALL NOT BE USED OR REPRODUCED OR ITS CONTENTS DISCLOSED IN WHOLE OR IN PART WITHOUT THE PRIOR WRITTEN CONSENT OF WESTERN STAR TRUCKS INC., KELOWNA, BC
			ROD - CLUTCH LOWER MR NO. 1158
			25110-3563 SHT 1 OF 1

