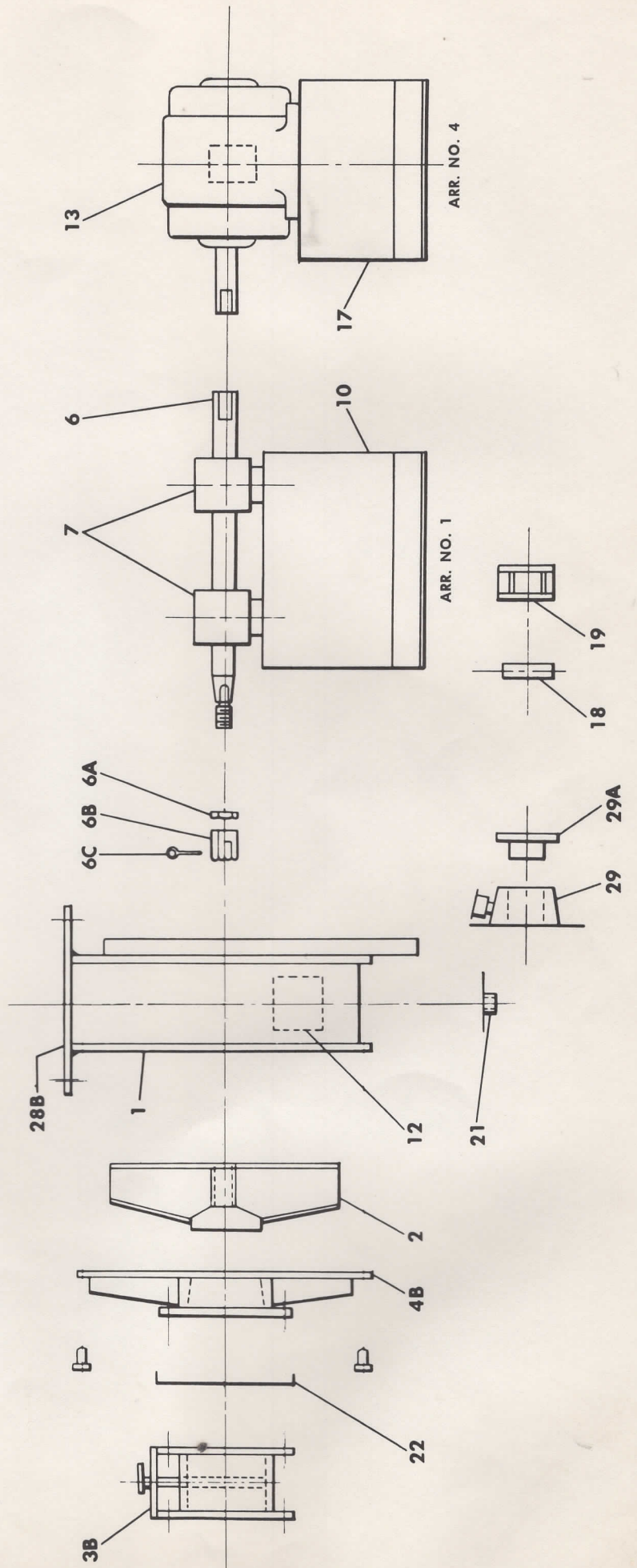
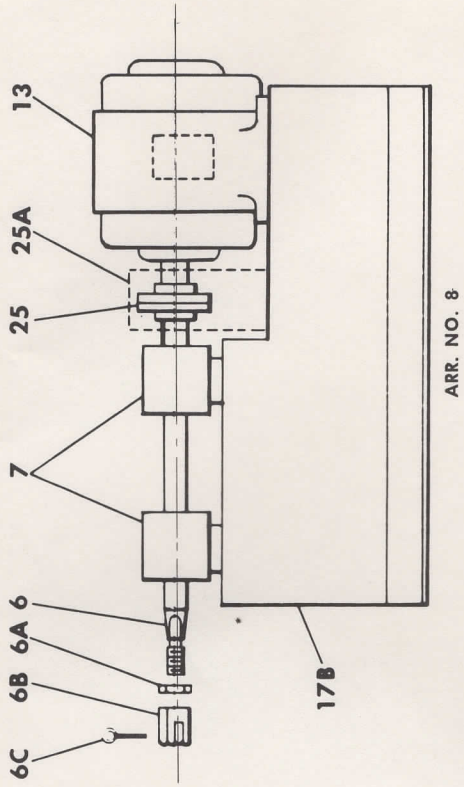


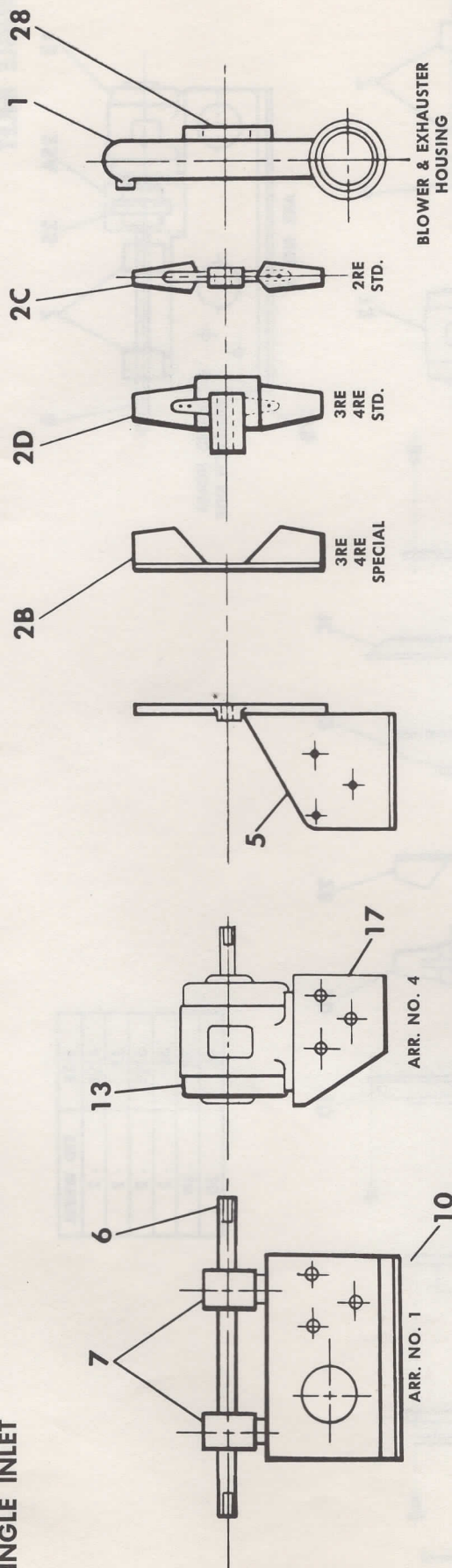
SECTION IV**FAN PARTS LIST**

- | | |
|---|---|
| 1 - Housing | 11B - Arr. 10 Motor Adjusting Screw |
| 1A - Top Half Housing | 12 - Standard or Raised Access Door |
| 1B - Bottom Half Housing | 13 - Motor |
| 1C - Power Side Half Housing | 14 - Combination All-Weather Cover & Belt Guard |
| 1D - Inlet Side Half Housing | 15 - V-Belts |
| 2 - Backplate & Flange Wheel | 15A - Motor Sheave |
| 2A - Centerplate & Flange Wheel | 15B - Fan Sheave |
| 2B - Open Wheel | 16 - Belt Guard |
| 2C - Paddle (Blast) Wheel | 17 - Arr. 4 Motor Base |
| 2D - Flange & Spider Wheel | 17A - Arr. 7 Motor Base |
| 3 - Inlet Cone or Bell | 17B - Arr. 8 Motor & Bearing Base |
| 3A - Variable Inlet Vanes | 18 - Shaft Seal |
| 3B - Butterfly Valve | 19 - Heat Slinger |
| 4 - Inlet Stand | 20 - Outlet Damper |
| 4A - Inlet Side Plate | 21 - Standard Drain, 1/2 Tapped Pipe Coupling |
| 4B - Flanged Inlet Side Plate | 21A - Flanged Type Drain |
| 4C - Drive Side Plate | 22 - Inlet Screen |
| 5 - Power Stand | 23 - Outlet Screen |
| 6 - Shaft | 24 - Outlet Cone or Evase |
| 6A - Washer | 25 - Coupling |
| 6B - Slotted Nut | 25A - Coupling Guard |
| 6C - Cotter Pin | 26 - Bearing Shield |
| 7 - Pillow Block Bearing | 27 - Unit Vibration Isolators |
| 8 - Arr. 2 Pillow Block Bearings | 27A - Rail Type Vibration Isolators |
| 9 - Arr. 2 Tripod Bearing Arm with Bearings | 28 - Inlet Collar |
| 10 - Bearing Base | 28A - Inlet Flange |
| 10A - Inlet Side Bearing Support | 28B - Outlet Flange |
| 10B - Power Side Bearing Support | 29 - Stuffing Box |
| 11 - Arr. 9 Motor Slide Rails | 29A - Stuffing Box Gland |
| 11A - Arr. 10 Motor Slide Rails | |

TYPES "CB" & "R"
SINGLE INLET

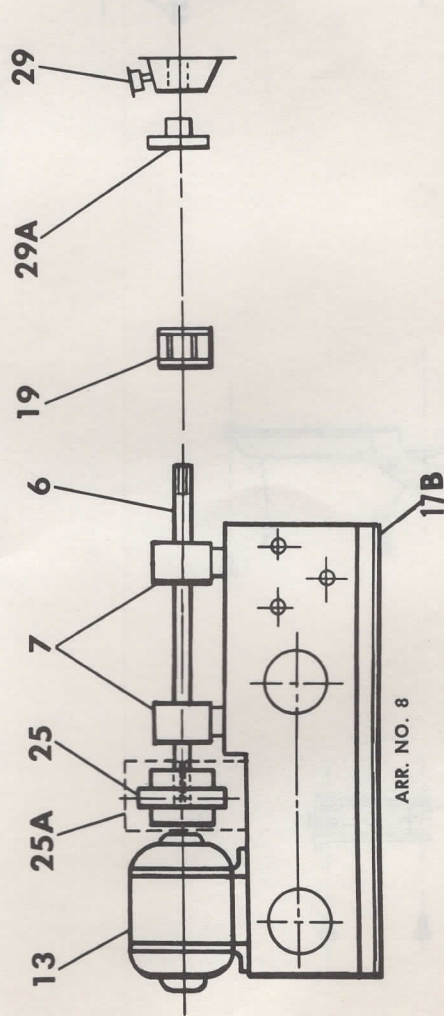


TYPE RE BLOWERS & EXHAUSTERS GAS BOOSTERS & EXHAUSTERS SINGLE INLET

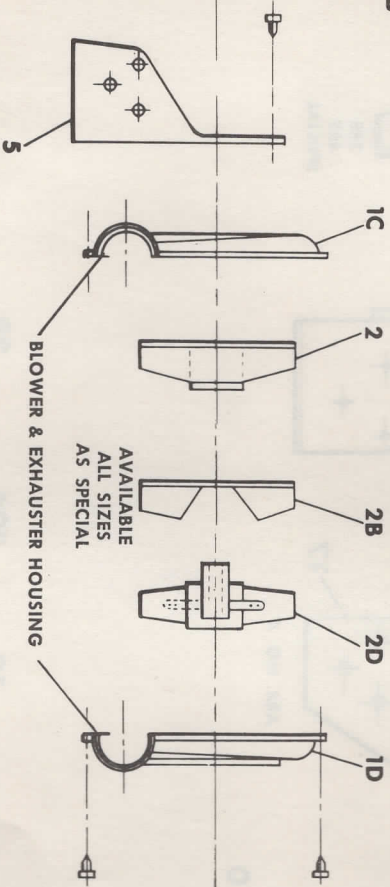
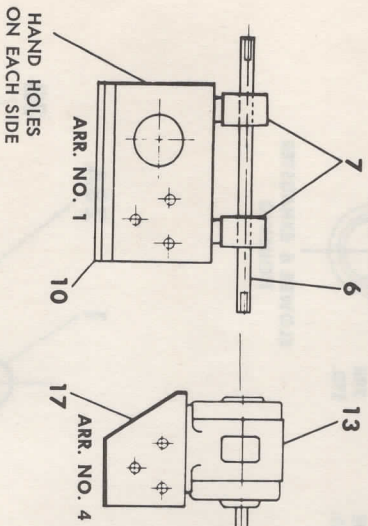
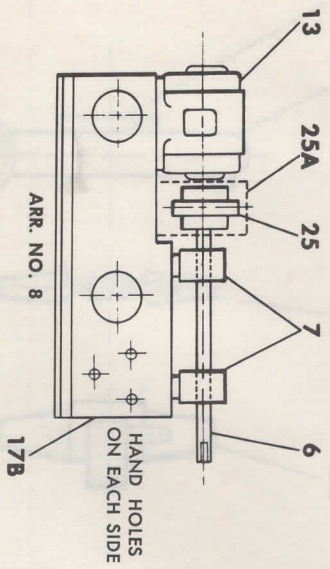


BLOWER & EXHAUSTER
HOUSING

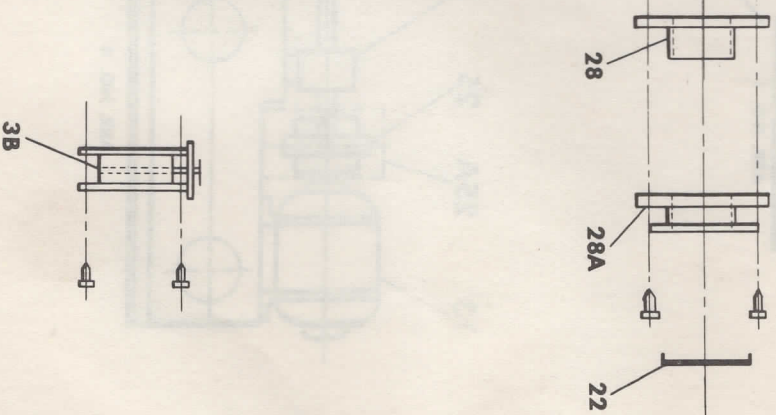
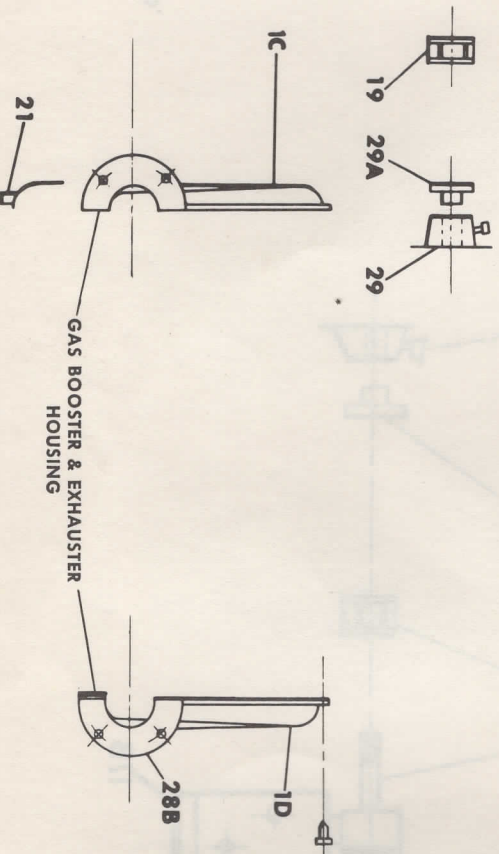
GAS BOOSTER & EXHAUSTER
HOUSING



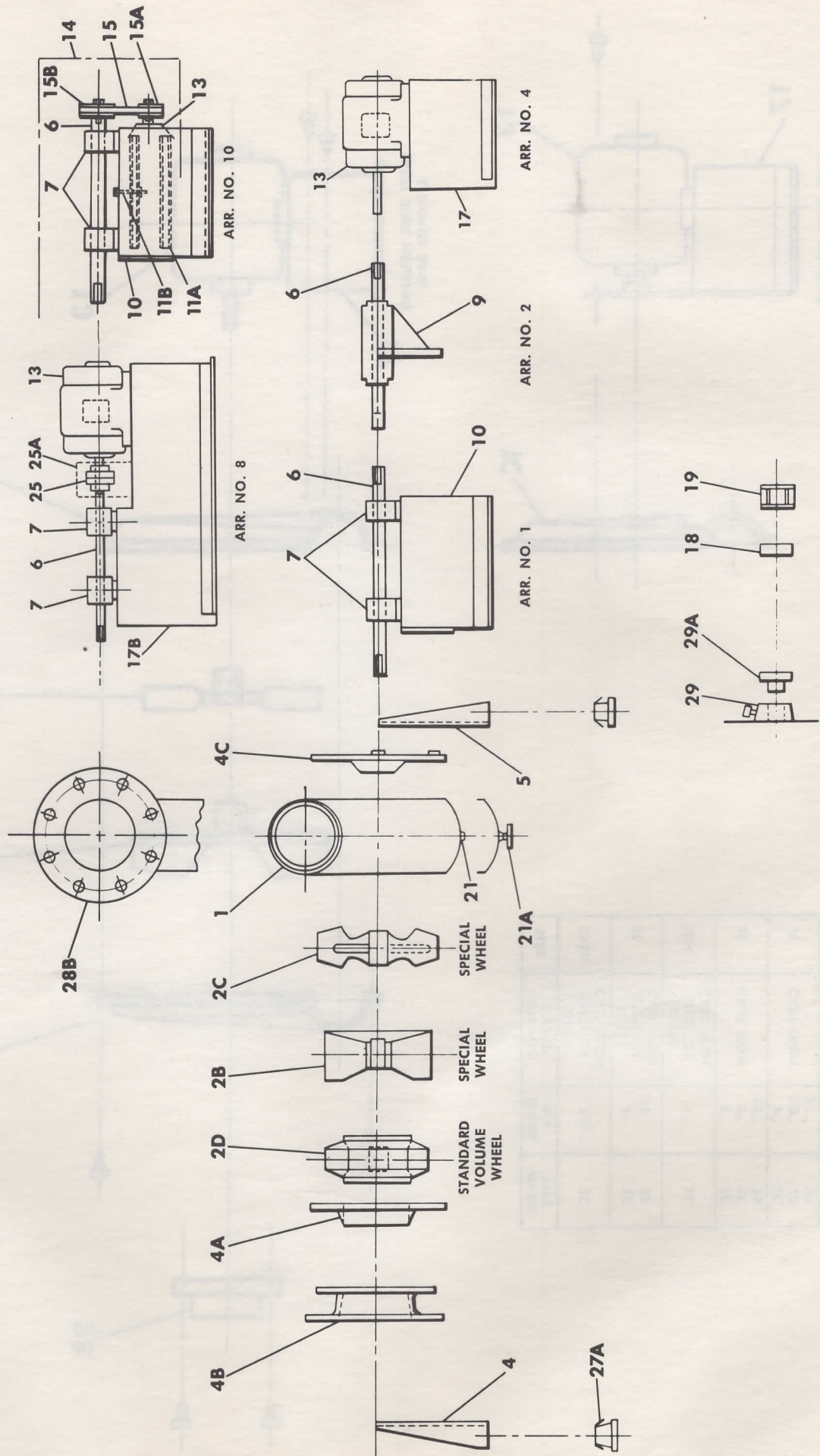
TYPE E BLOWERS & EXHAUSTERS GAS BOOSTERS & EXHAUSTERS SINGLE INLET



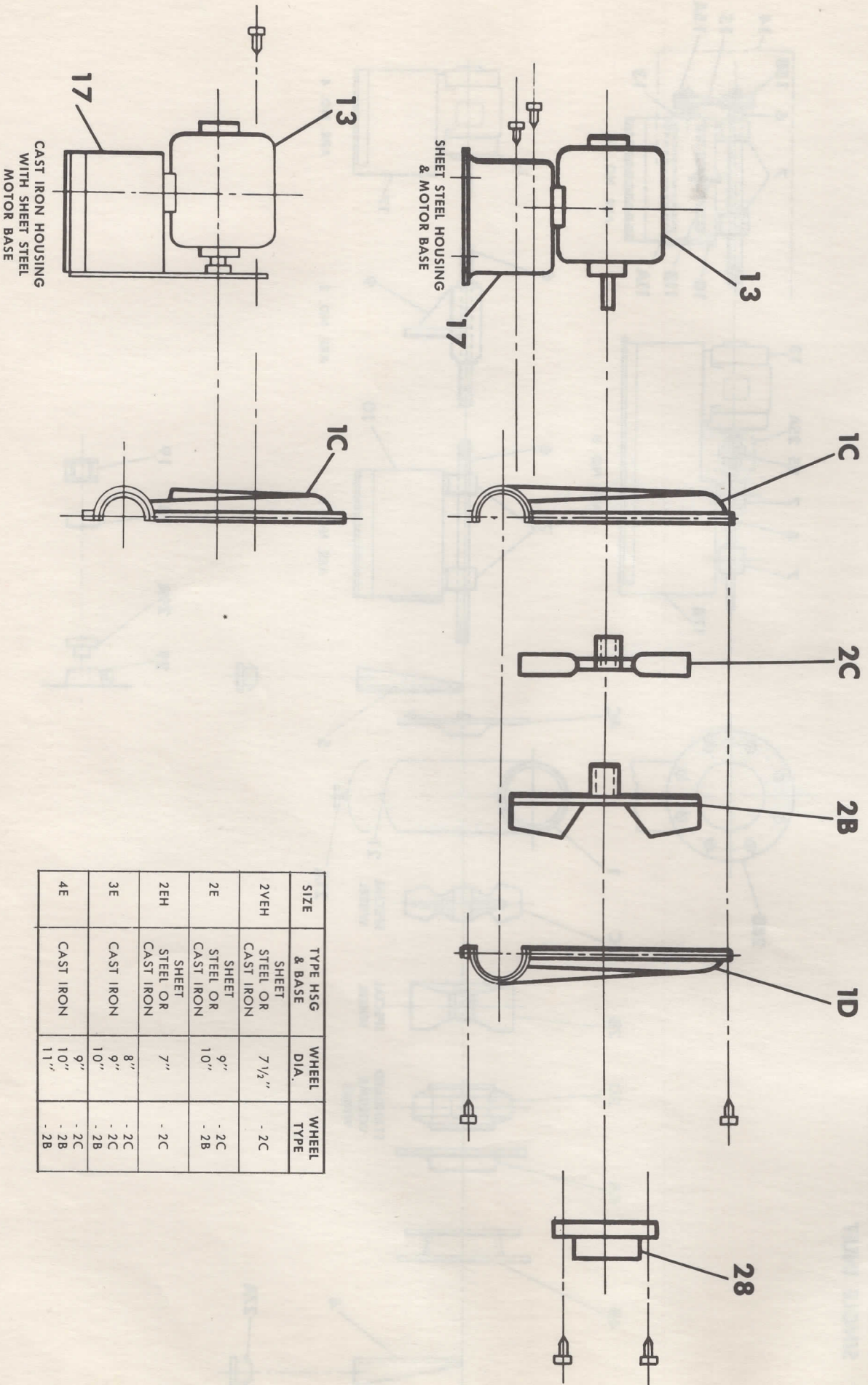
SIZE	STD WHEEL
4 1/2 E	- 2
5 E	- 2
5 1/2 E	- 2
6 E	- 2
7 E	- 2D
8 E	- 2D



TYPE "V" VOLUME FANS SINGLE INLET

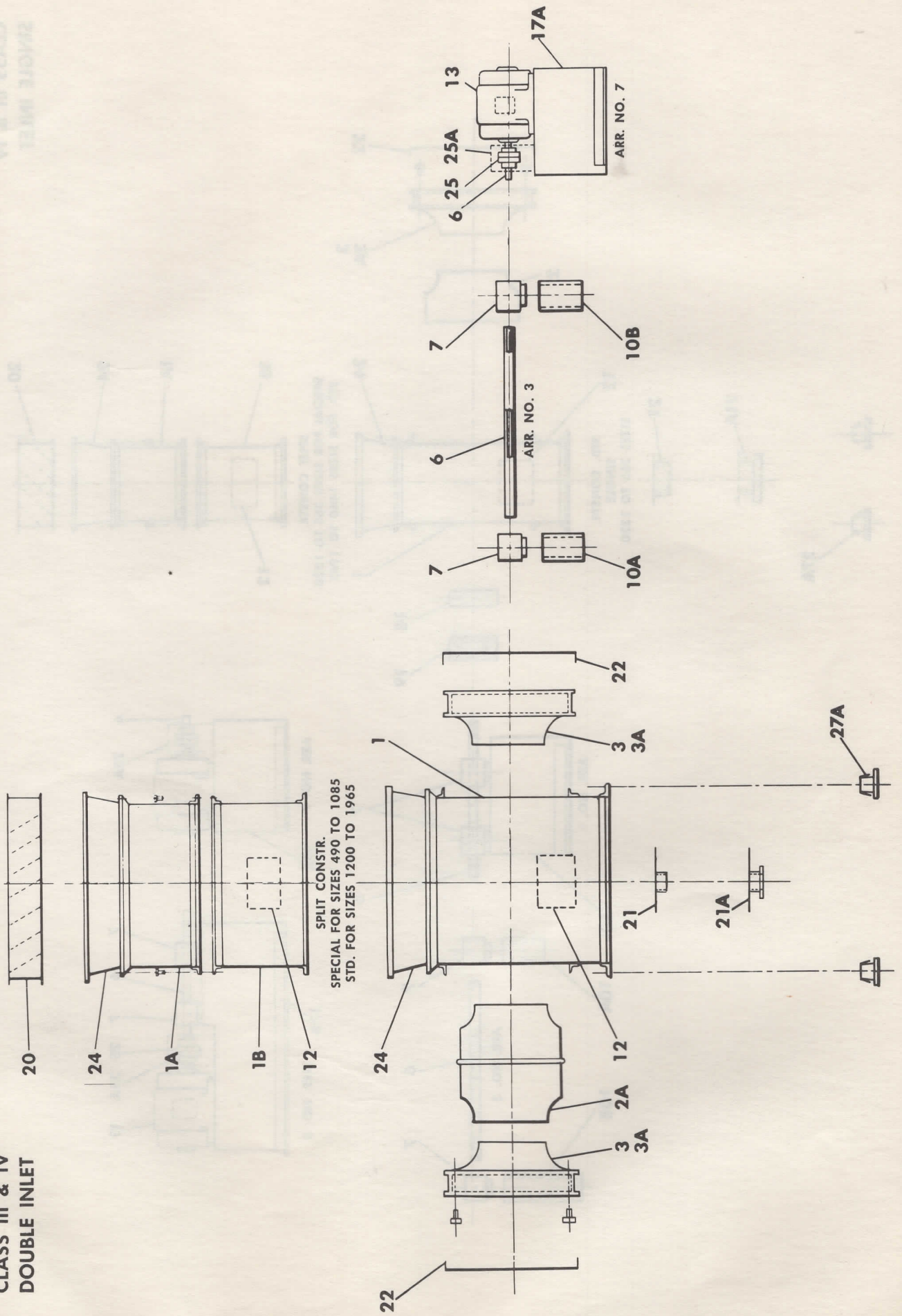


TYPE "E" BLOWERS & EXHAUSTERS
SINGLE INLET — ARR. NO. 4

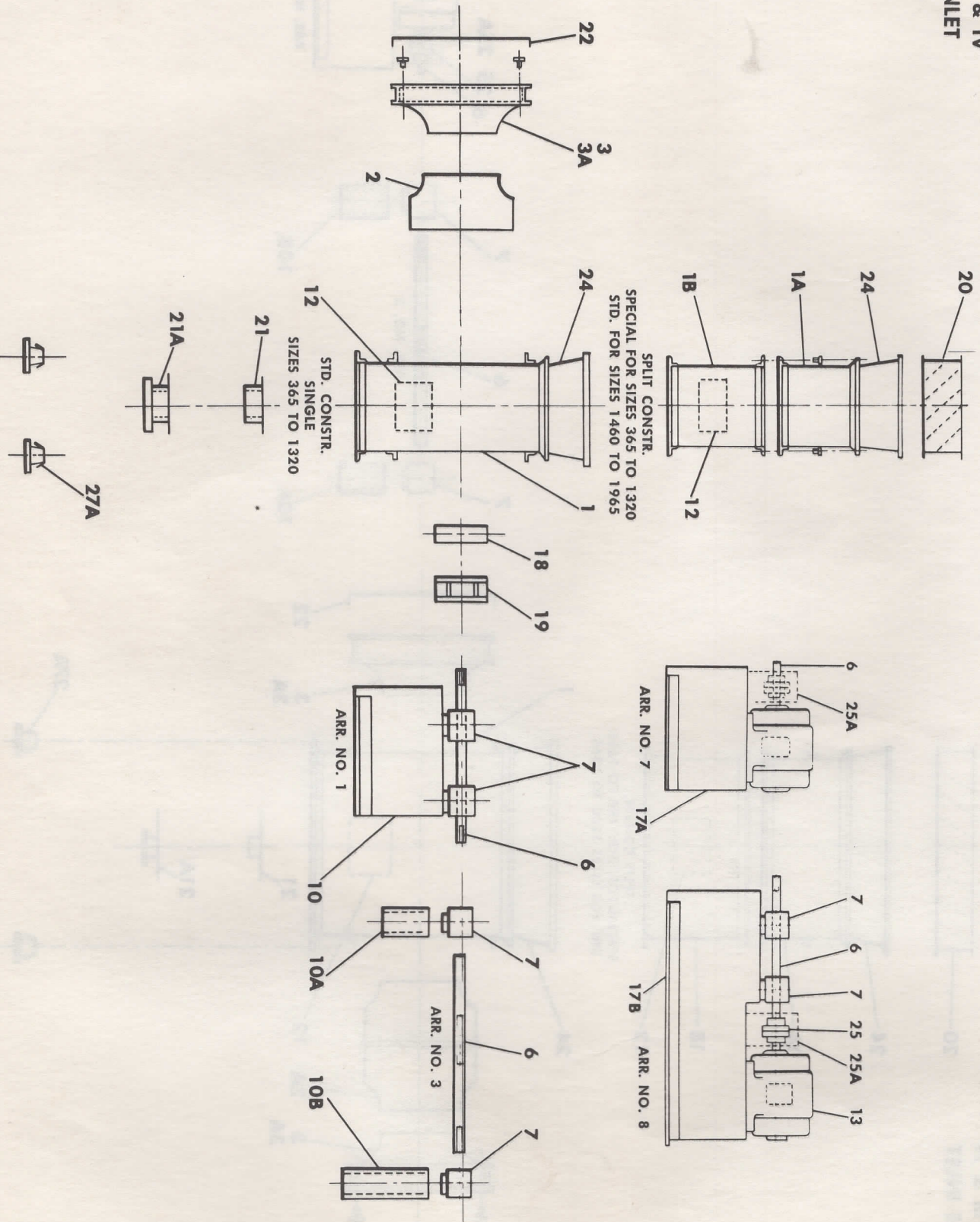


SIZE	TYPE HSG & BASE	WHEEL DIA.	WHEEL TYPE
2VEH	SHEET STEEL OR CAST IRON	7 1/2"	- 2C
2E	SHEET STEEL OR CAST IRON	9" 10"	- 2C - 2B
2EH	SHEET STEEL OR CAST IRON	7"	- 2C
3E	CAST IRON	8" 9" 10"	- 2C - 2C - 2B
4E	CAST IRON	9" 10" 11"	- 2C - 2B - 2B

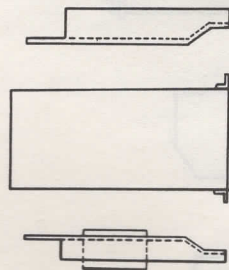
TYPES L39(BLH), L33(CL), L25(DL), & L21(EL)
CLASS III & IV
DOUBLE INLET



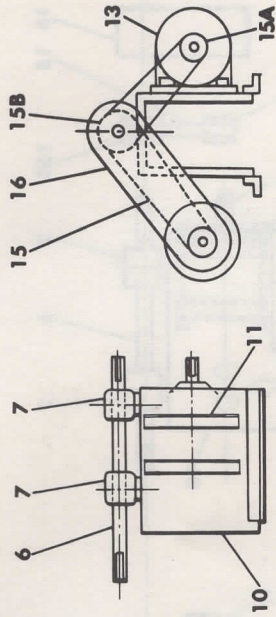
TYPES L39(BLH), L33(CL), L25(DL), L21(EL)
CLASS III & IV
SINGLE INLET



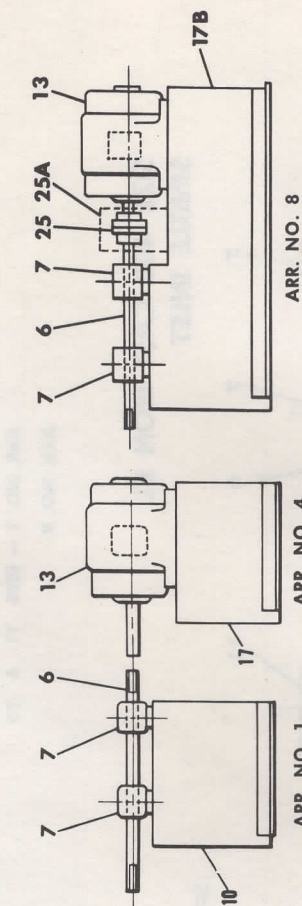
INDUSTRIAL EXHAUSTERS TYPES MW, AW & OW SINGLE INLET



SPECIAL
REMOVABLE SCROLL
CONSTRUCTION



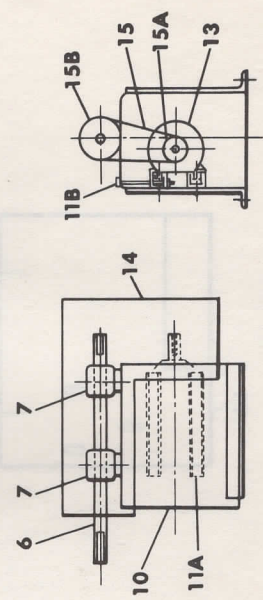
ARR. NO. 9



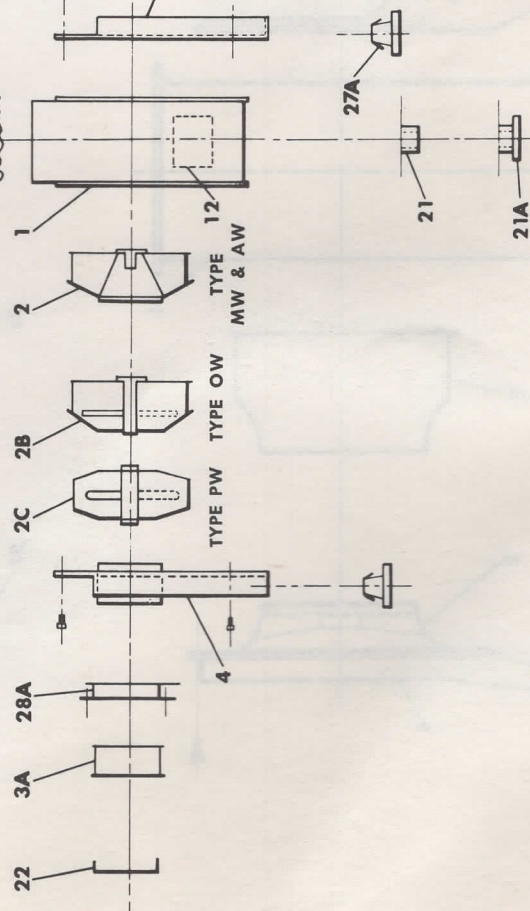
ARR. NO. 8

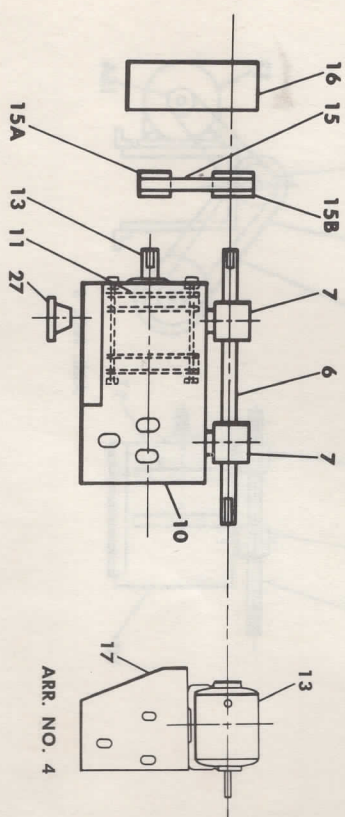
ARR. NO. 4

ARR. NO. 1



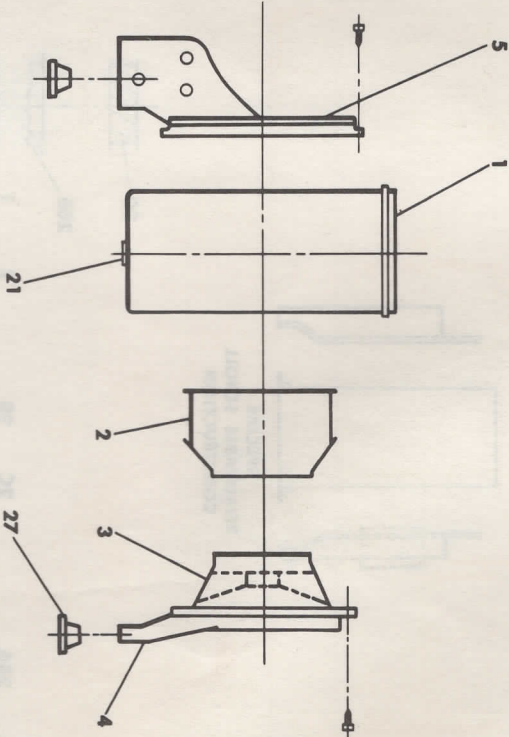
ARR. NO. 10





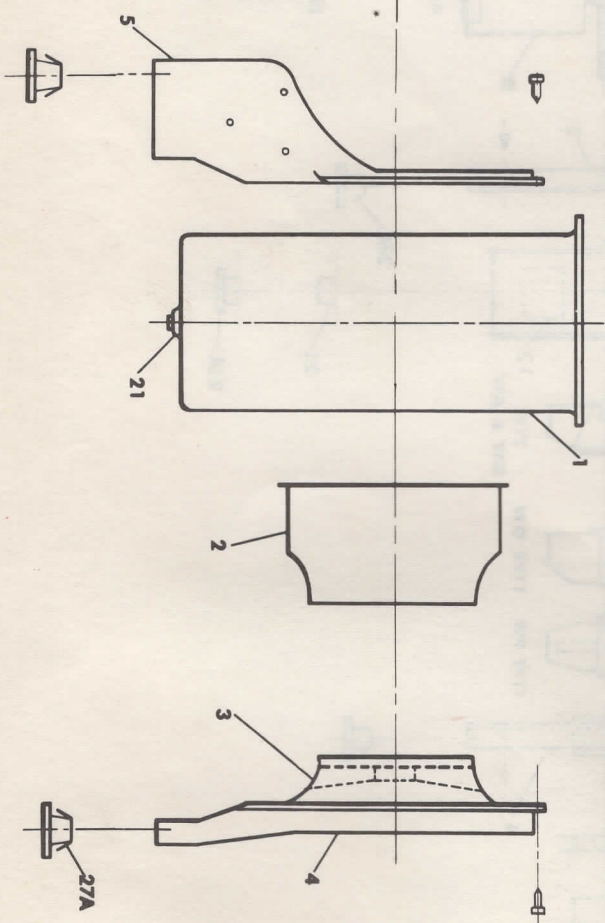
ARR. NO. 1 — LESS 11 & 13

ARR. NO. 9



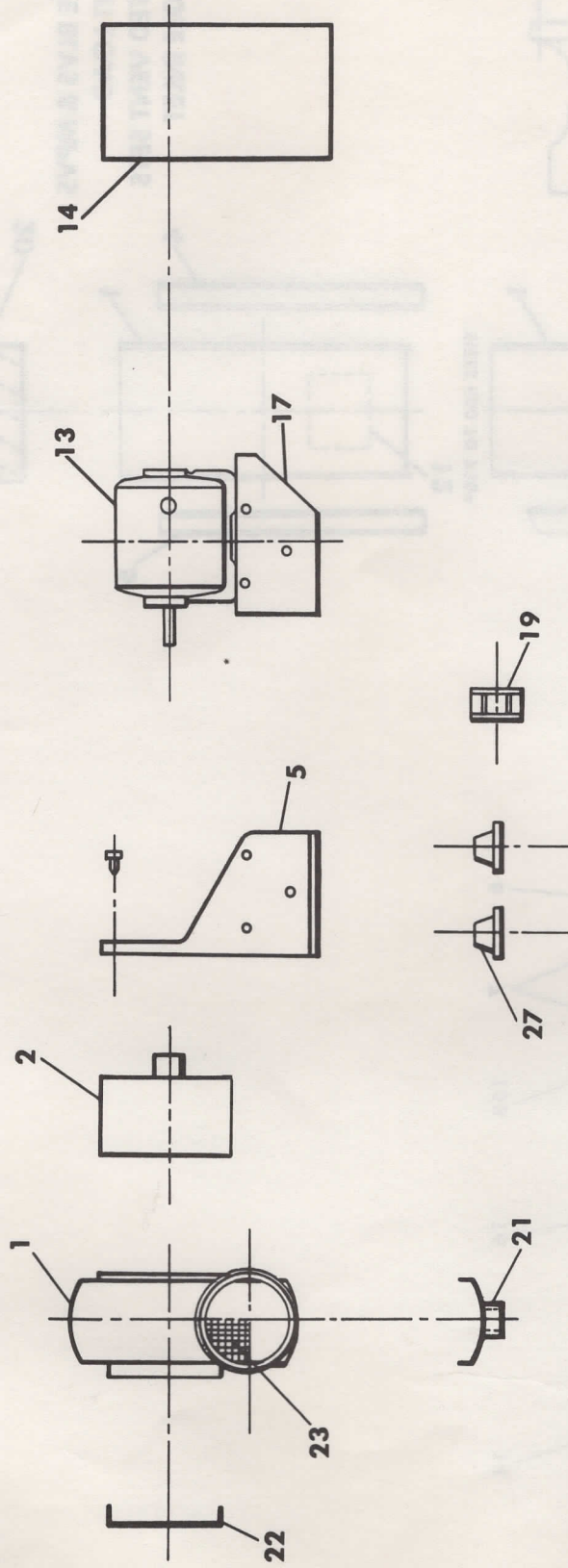
ARR. NO. 1

ARR. NO. 4

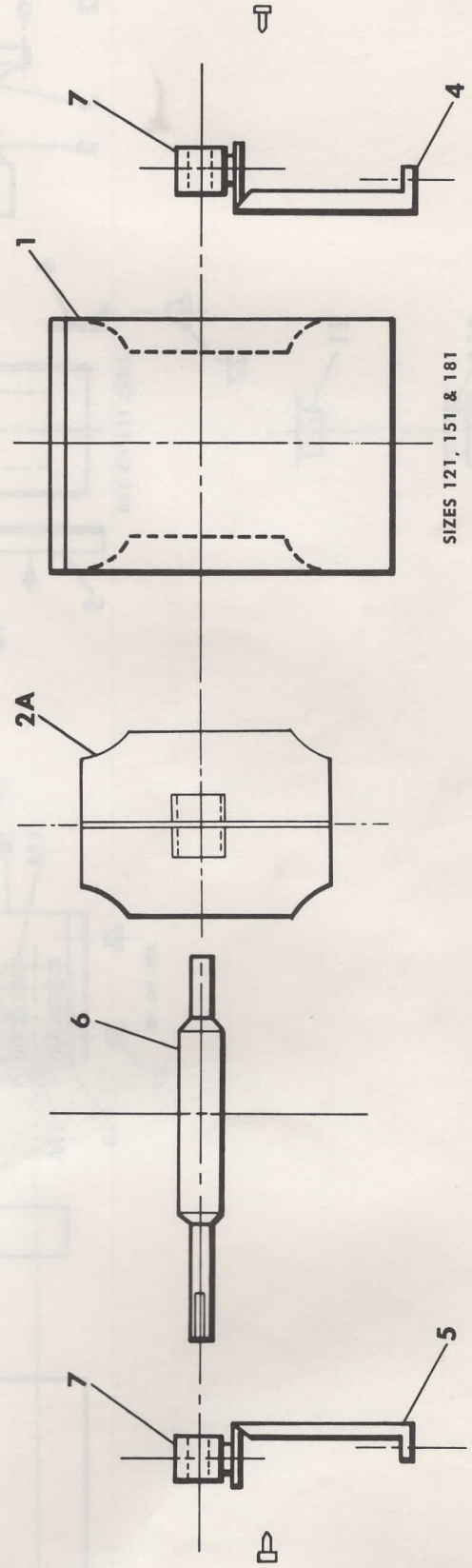


BABY VENT SET SINGLE INLET

ARR. NO. 4



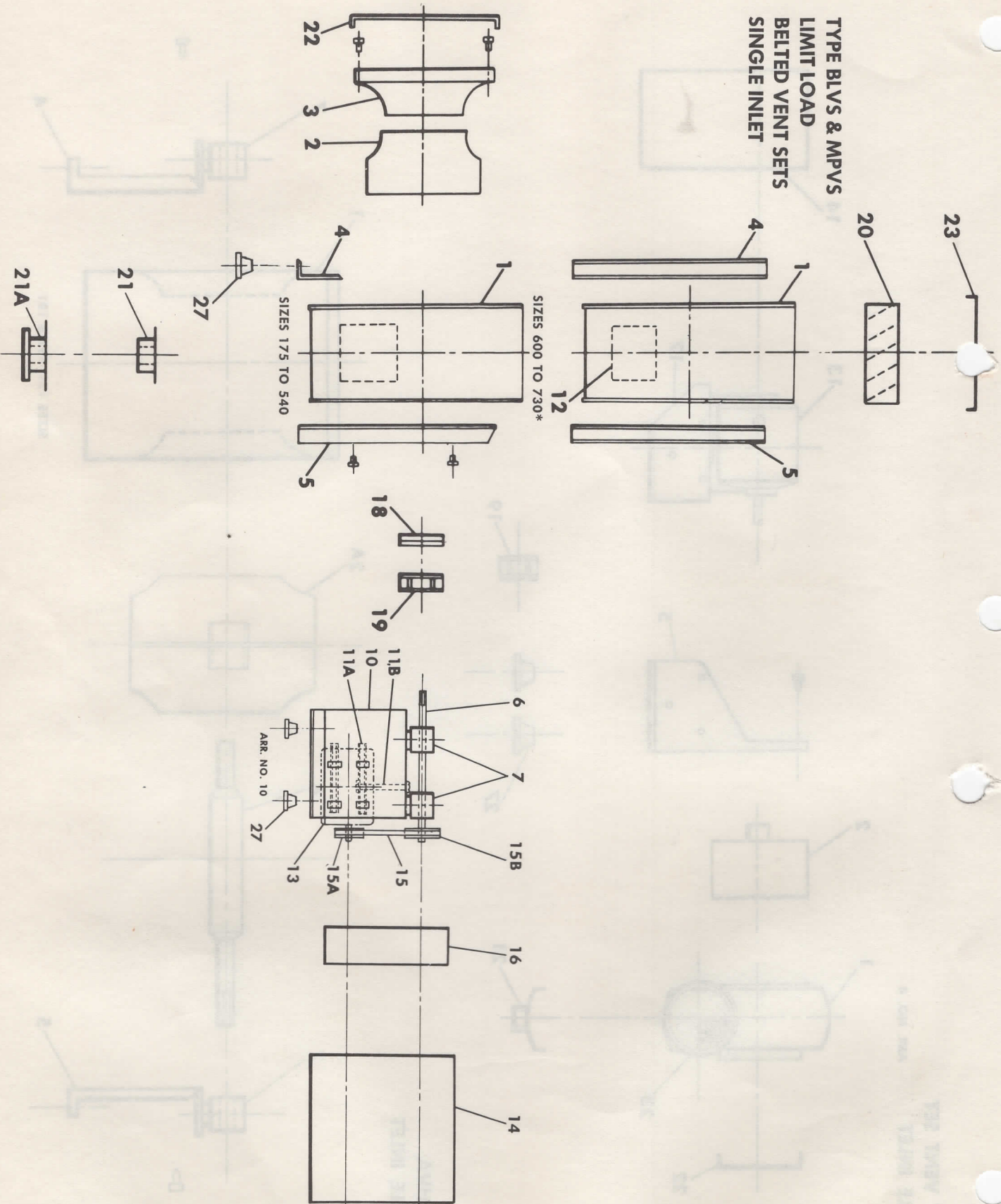
TYPE HVA DOUBLE INLET



SIZES 121, 151 & 181

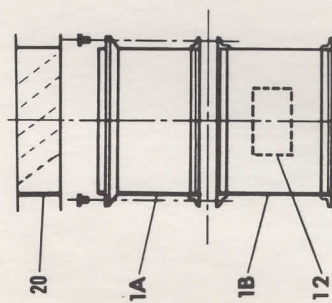
SIZES 122, 152 & 182 USES 2 WHEELS & 2 HOUSINGS WITH ONE SHAFT
SIZES 123, 153 & 183 USES 3 WHEELS & 3 HOUSINGS WITH ONE SHAFT

TYPE BLVS & MPVS
LIMIT LOAD
BELTED VENT SETS
SINGLE INLET

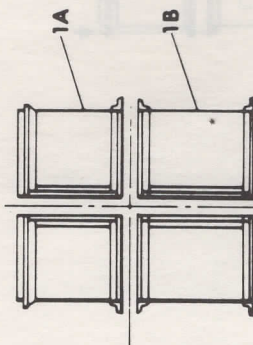


* 600 to 730 has square inlet with no collar on inlet bell

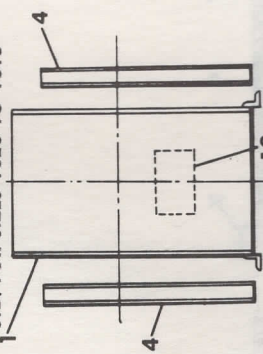
TYPES BL & BL-AEROFOIL CLASS I & II DOUBLE INLET



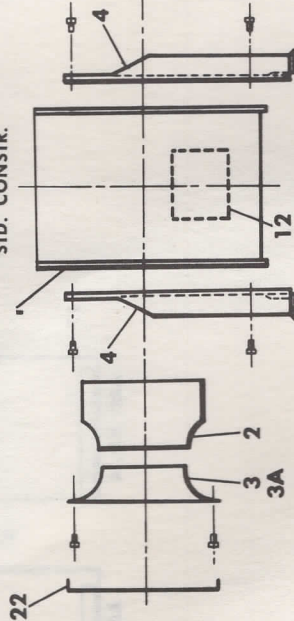
SPLIT CONSTR.
SPECIAL FOR SIZES 805 TO 1200
STD. FOR SIZES 1320 TO 1615*



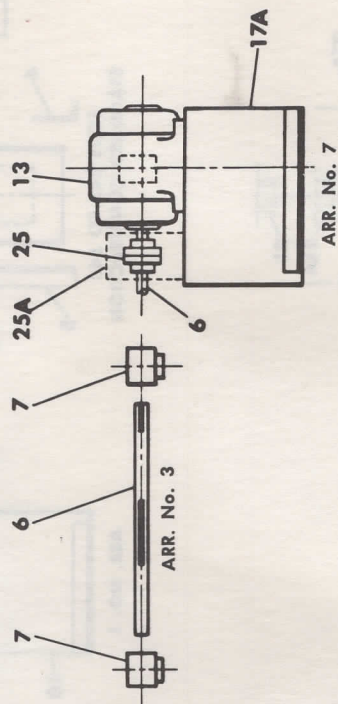
SPLIT CONSTR.
STD. FOR SIZES 1780 TO 2175



SIZES 600 TO 1200
STD. CONSTR.



SIZES 245 TO 540
DOUBLE

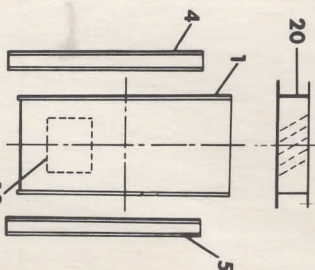


ARR. No. 7

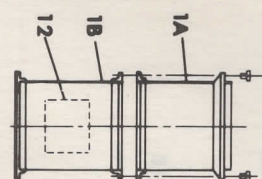


* 1320 and larger has collar on inlet bell

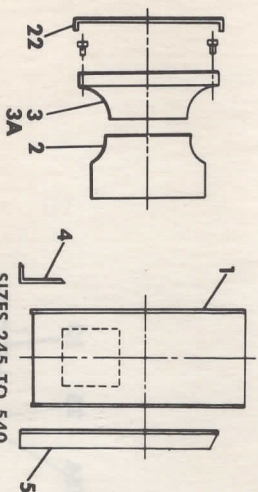
TYPES BL & BL-AEROFOIL CLASS I & II SINGLE INLET



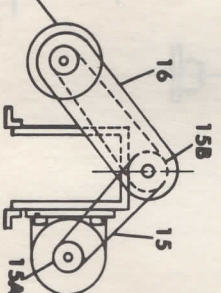
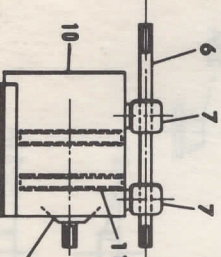
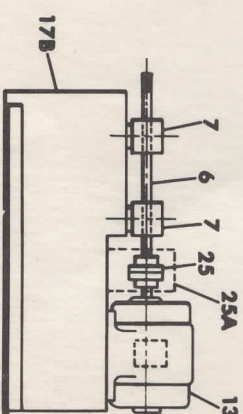
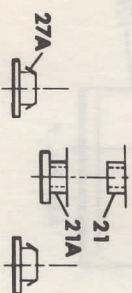
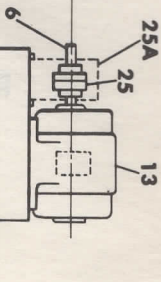
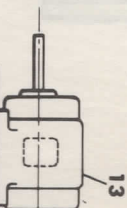
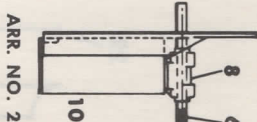
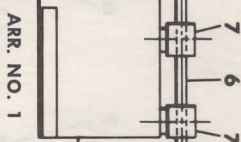
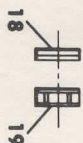
SIZES 600 TO 1200°
STANDARD CONSTRUCTION



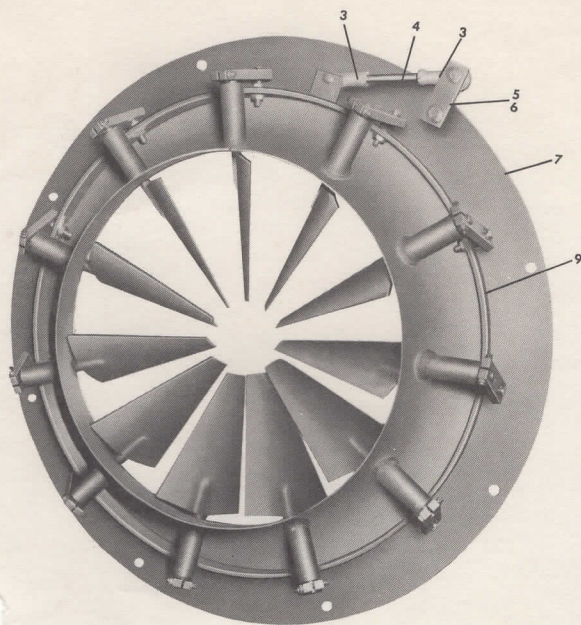
SPLIT CONSTR.
SPECIAL FOR SIZES 805 TO 1200
STANDARD FOR SIZES 1320 TO 2175



SIZES 245 TO 540
STANDARD CONSTRUCTION



* 600 to 1200 has square inlet with no collar on inlet bell



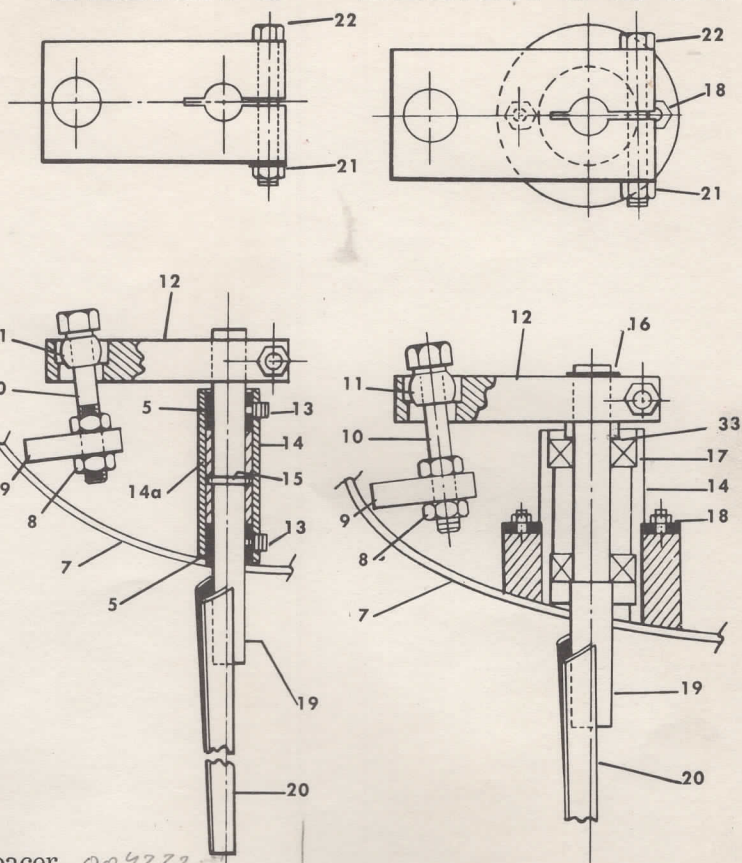
VARIABLE INLET VANES Parts List

1. Control Lever
2. Quadrant
3. Teflon Insert Rod End
4. Control Rod
5. Bronze Oilite Bearings
6. Crank Assembly
7. Inlet Bell
8. Jam Nuts 004217
9. Control Ring
10. Bearing Bolt 004218
11. Teflon-Spherco Bearing 004219
12. Vane Lever 004220
13. Half Dog Point Set Screw —
Do Not Loosen or Remove
14. Bearing Housing

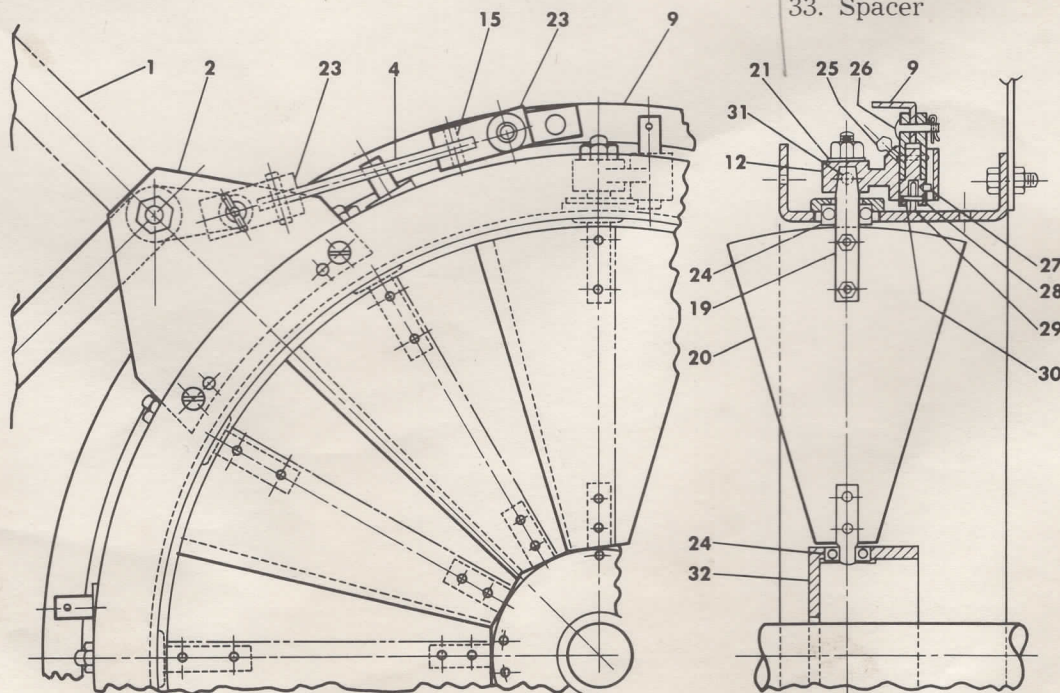
- 14a. Steel Spacer 004223
15. Roll Pin
16. Retaining Ring
17. "Nice Co" Prelube Ball 004225
Bearing
18. Weld Studs and Nuts 004224
19. Vane Shaft
20. Vane
21. Flexloc Nut 004221
22. Hex Bolt — Torque 20 ft. lbs.
for $\frac{5}{16}$ " Bolt; 30 ft. lbs. for
 $\frac{3}{8}$ " Bolt 004222

23. Knuckle
24. "Nice Co" Ball Bearings —
Run Dry — No Lube Req'd.
25. Alemite Grease Fitting
26. Connecting Pin
27. Pin
28. Wheel Swivel
29. Wheel
30. Wheel Pin
31. Set Screw
32. Center Ring
33. Spacer

DESIGN 5 DESIGN 6 & 6A



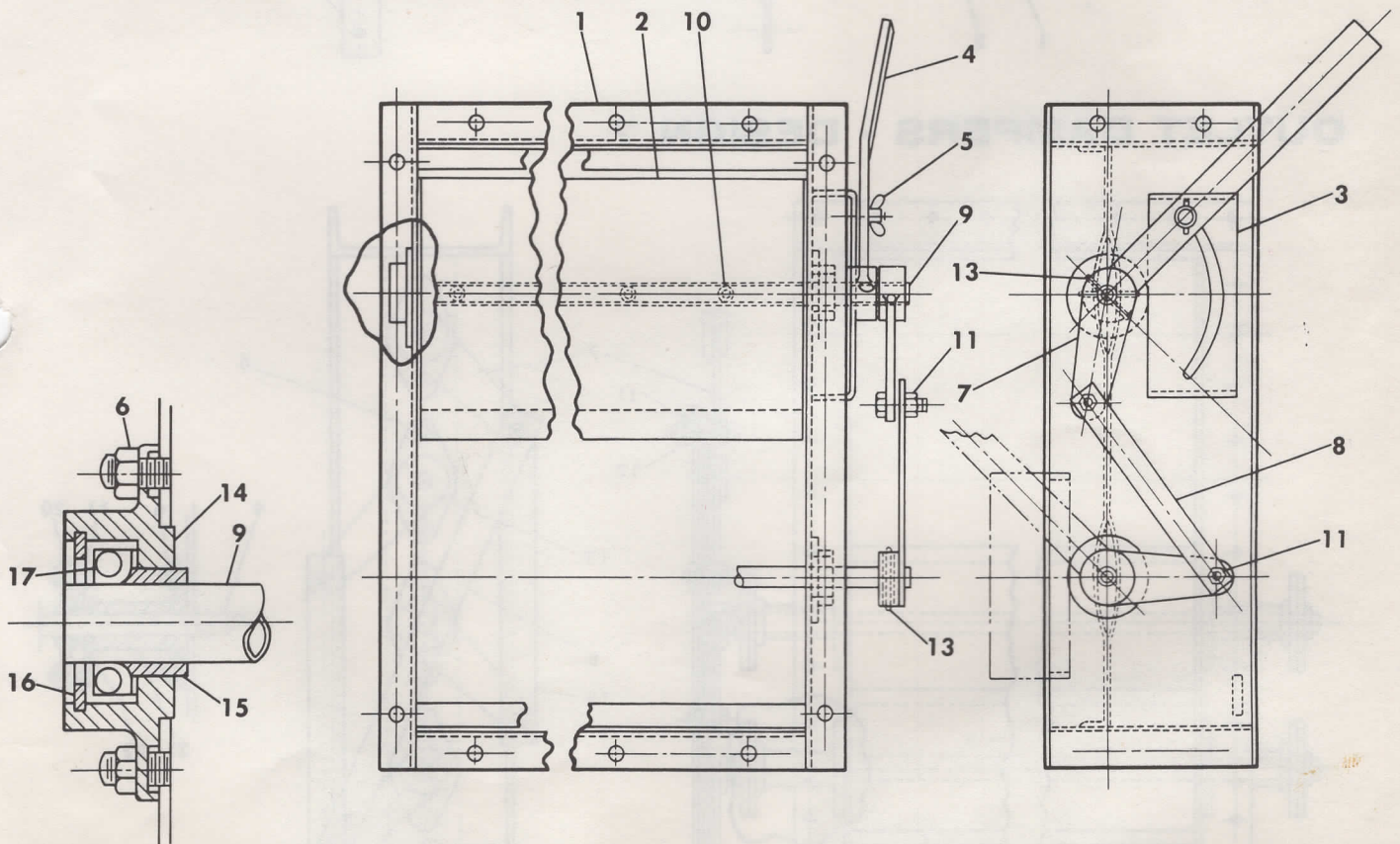
**TYPE
HV**



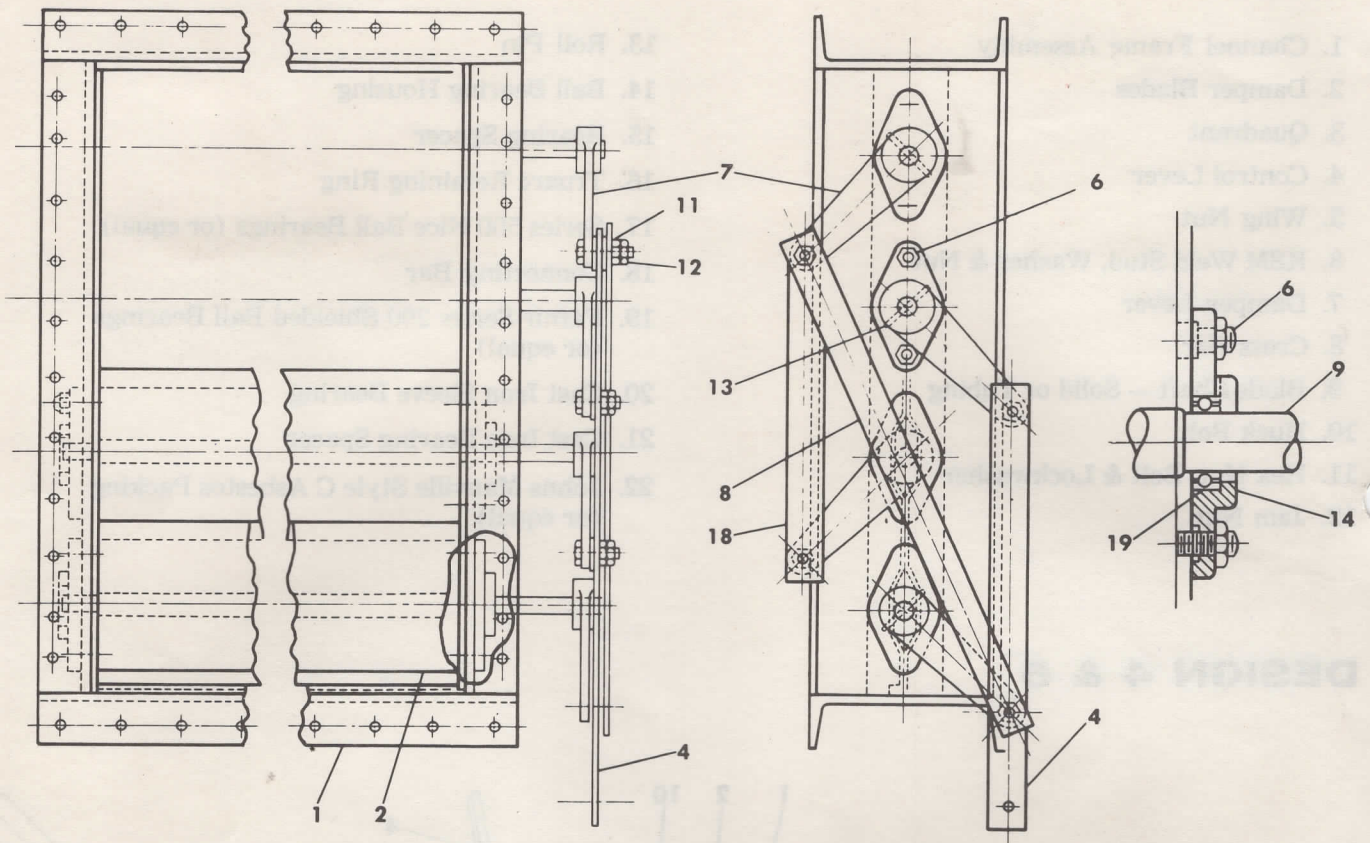
OUTLET DAMPERS - Parts List

- | | |
|----------------------------------|---|
| 1. Channel Frame Assembly | 13. Roll Pin |
| 2. Damper Blades | 14. Ball Bearing Housing |
| 3. Quadrant | 15. Bearing Spacer |
| 4. Control Lever | 16. Truarc Retaining Ring |
| 5. Wing Nut | 17. Series 500 Nice Ball Bearings (or equal) |
| 6. KSM Weld Stud, Washer & Nut | 18. Connecting Bar |
| 7. Damper Lever | 19. Fafnir Series 200 Shielded Ball Bearings (or equal) |
| 8. Cross Bar | 20. Cast Iron Sleeve Bearing |
| 9. Blade Shaft — Solid or Tubing | 21. Cast Iron Bearing Spacer |
| 10. Huck Bolt | 22. Johns Manville Style C Asbestos Packing (or equal) |
| 11. Hex Nut, Bolt & Lockwasher | |
| 12. Jam Nut | |

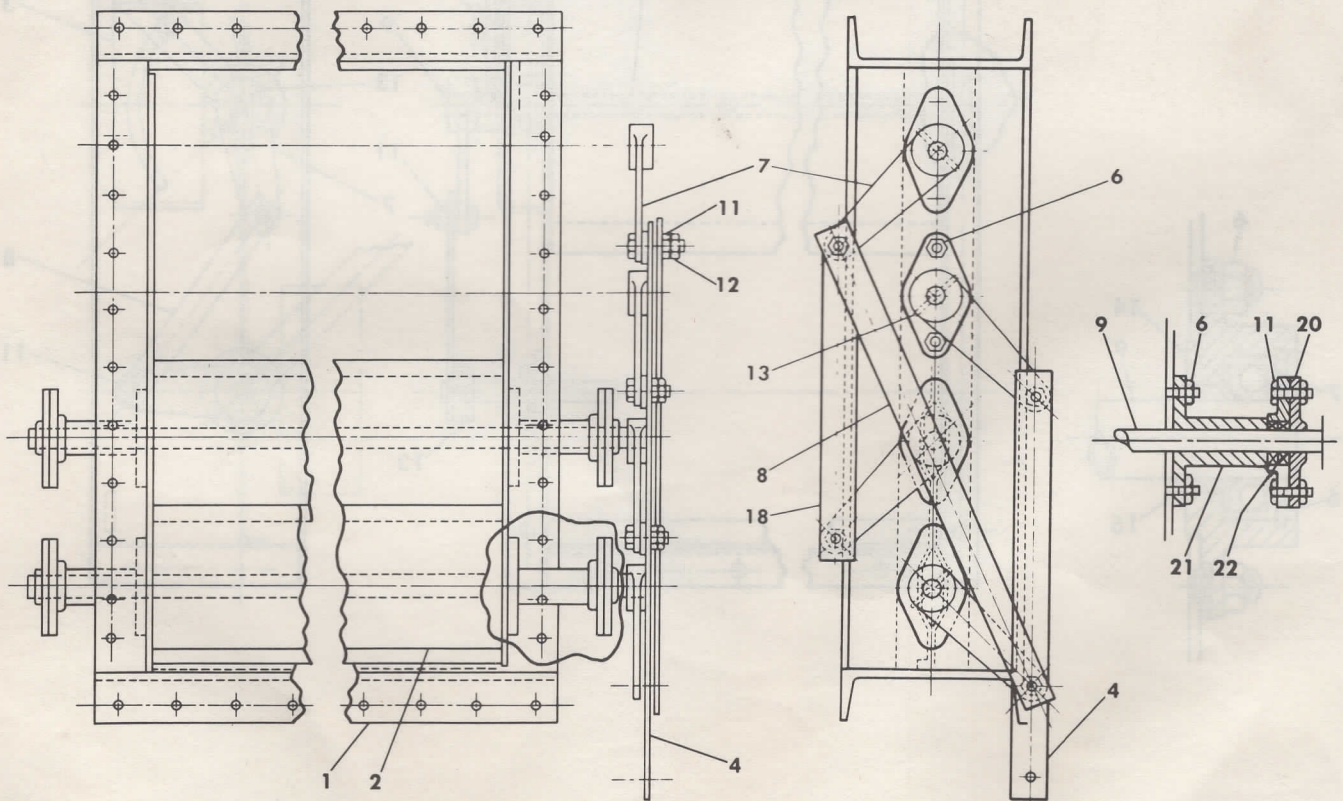
DESIGN 4 & 5



OUTLET DAMPERS - DESIGN 6



OUTLET DAMPERS - DESIGN 7



GVFTD, GVFTDR RELUBRICATABLE SERIES – VFTD, VFTDR NON-RELUBRICATABLE SERIES

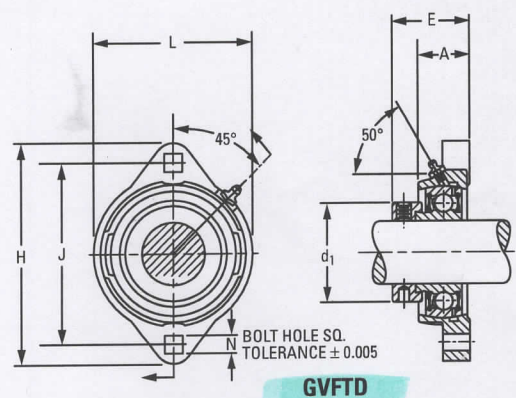
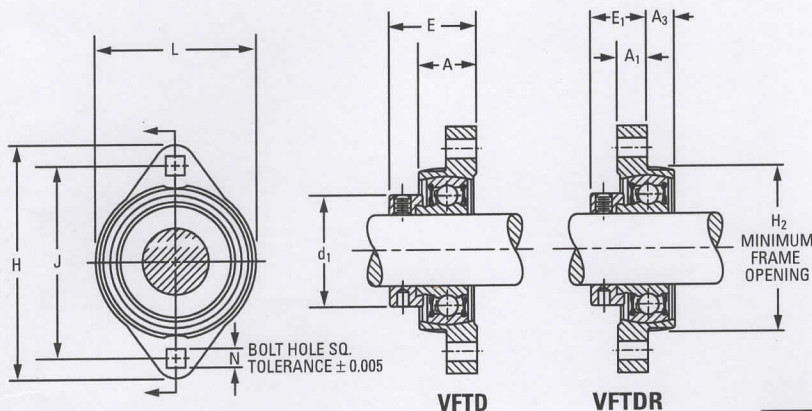
- The malleable-iron flange cartridges provide self-alignment and rigid support for medium-duty applications.

Suggested shaft tolerances: nominal to -0.013 mm, -0.0005 in.

To order, specify UNIT and SHAFT DIAMETER.

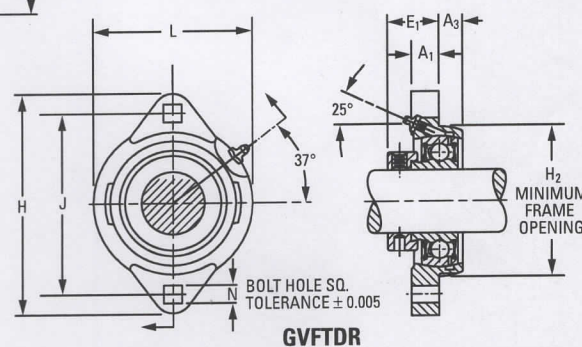
For the non-relubricatable series, omit G prefix on unit and bearing number.

Example: VFTD 1 3/16 in. or VFTDR 1 3/16 in.; GVFTD 1 3/16 in. or GVFTDR 1 3/16 in.



BEARING DATA

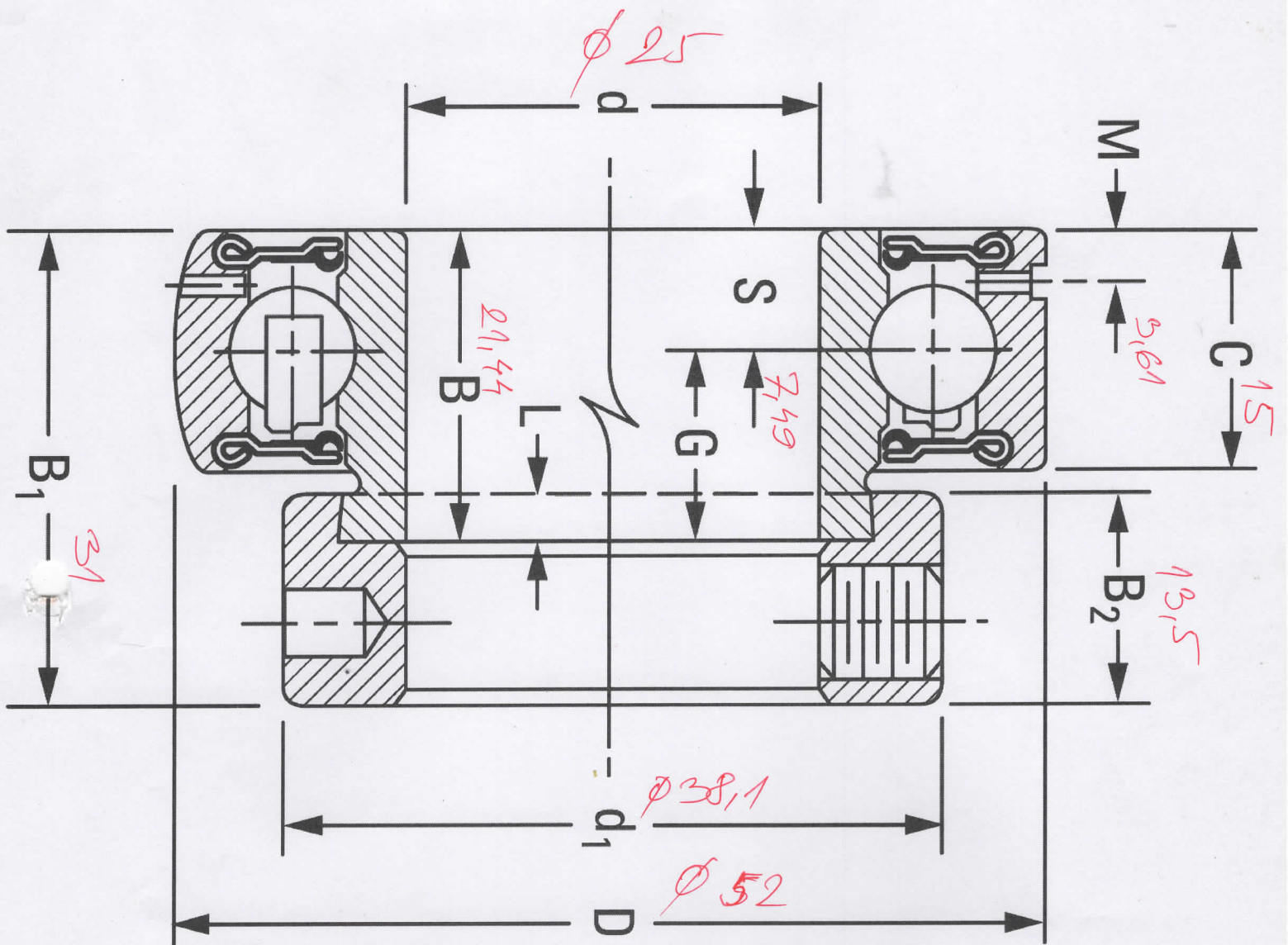
Unit	Bearing No.	Dimensions and Load Ratings
VFTD, VFTDR	RA-RRB	Page 50
GVFTD, GVFTDR	GRA-RRB	Page 52



Unit		Shaft Dia.	Dimensions and Load Ratings											Bearing No.	Housing No.	Collar No.	Unit Wt.
Face Mounted	Reverse Mounted	in. mm	H mm in.	J mm in.	L mm in.	N mm in.	H ₂ mm in.	E mm in.	A mm in.	E ₁ mm in.	A ₃ mm in.	A ₁ mm in.	d ₁ mm in.		New (Old)		kg lbs.
RELUBRICATABLE SERIES ⁽¹⁾																	
GVFTD	GVFTDR	1/2	81.0	63.5	53.2	7.1	47.6	31.8	17.5	22.2	7.9	9.5	28.6	GRA008RRB	Z956415	S1008K	0.245
GVFTD	GVFTDR	5/8	3 3/16	2 1/2	2 3/32	9/32	1 7/8	1 1/4	1 1/16	7/8	5/16	3/8	1 1/8	GRA010RRB	(T26787)	S1010K	0.54
GVFTD	GVFTDR	17												GRAE17RRB		SE17K	
GVFTD	GVFTDR	3/4	90.5	71.4	60.3	8.7	54.8	34.1	19.8	23.4	9.1	10.7	33.3	GRA012RRB	Z956415	S1012K	0.331
GVFTD	GVFTDR	20	3 9/16	2 13/16	2 3/8	1 1/32	2 5/32	1 11/32	25/32	59/64	23/64	27/64	1 5/16	GRAE20RRB	(T26787)	SE20K	0.73
GVFTD	GVFTDR	7/8												GRA014RRB		S1014K	
GVFTD	GVFTDR	15/16	95.2	76.2	66.7	8.7	60.3	34.1	19.8	23.4	9.1	10.7	38.1	GRA015RRB	Z956385	S1015K	0.363
GVFTD	GVFTDR	1	3 3/4	3	2 5/8	1 1/32	2 3/8	1 11/32	25/32	59/64	23/64	27/64	1 1/2	GRA100RRB	(T32544)	S1100K	0.80
GVFTD	GVFTDR	25												GRAE25RRB		SE25K	
GVFTD	GVFTDR	1 1/8												GRA102RRB		S1102K	
GVFTD	GVFTDR	1 3/16	112.7	90.5	78.6	10.3	71.4	38.9	22.2	26.6	10.7	11.9	44.5	GRA103RRB	Z956382	S1103K	0.608
GVFTD	GVFTDR	1 1/4 S	4 7/16	3 9/16	3 3/32	13/32	2 13/16	1 17/32	7/8	1 3/64	27/64	15/32	1 3/4	GRA103RRB2	(T32984)	S1103K3	1.34
GVFTD	GVFTDR	30												GRAE30RRB		SE30K	
GVFTD	GVFTDR	1 1/4												GRA104RRB		S1104K	
GVFTD	GVFTDR	1 3/8	122.2	100.0	88.9	10.3	81.8	42.1	23.8	29.4	11.1	12.7	54.0	GRA106RRB	Z956396	S1106K	0.862
GVFTD	GVFTDR	1 7/16	4 13/16	3 15/16	3 1/2	13/32	3 7/32	1 21/32	15/16	1 5/32	7/16	1/2	2 1/8	GRA107RRB	(T26799)	S1107K	1.90
GVFTD	GVFTDR	35												GRAE35RRB		SE35K	

⁽¹⁾All units have a 1/4-28 grease fitting.

NOTE: Shaft diameter with an S = smaller housing.



Basic Load Rating
 static 17800 N
 dynamic 15500 N