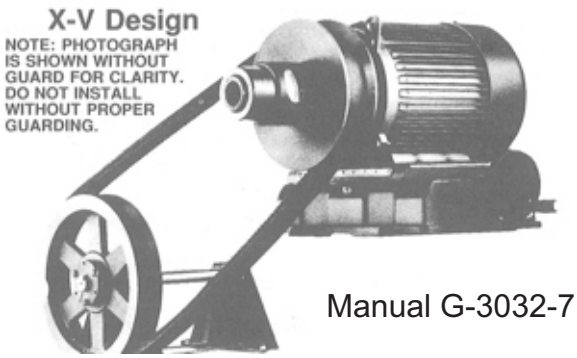
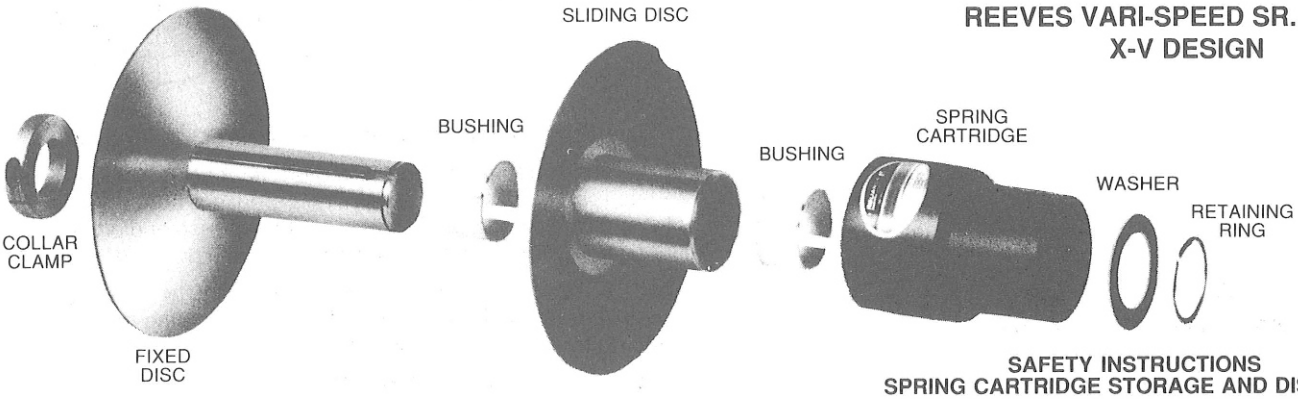
Installation and Maintenance

REEVES®

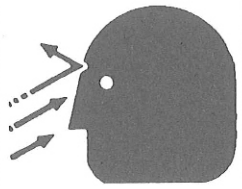
Vari-Speed Senior Motor Pulley and 90-series Motor Bases



Manual G-3032-7



REEVES VARI-SPEED SR. PULLEY X-V DESIGN



WARNING

EXTREME CARE MUST BE USED IN REMOVING SPRING CARTRIDGE ASSEMBLY. CARTRIDGE CAN SEPARATE RESULTING IN UNCONTROLLED RELEASE OF SPRING, RESULTING IN SEVERE PERSONAL INJURY OR DEATH. KEEP ALL BODY PARTS AND PERSONNEL CLEAR OF PROJECTION PATH SHOULD SUDDEN RELEASE OCCUR. SEE SAFETY INSTRUCTIONS FOR REMOVAL AND DISPOSAL OF SPRING CARTRIDGE.

SAFETY INSTRUCTIONS
SPRING CARTRIDGE STORAGE AND DISPOSAL

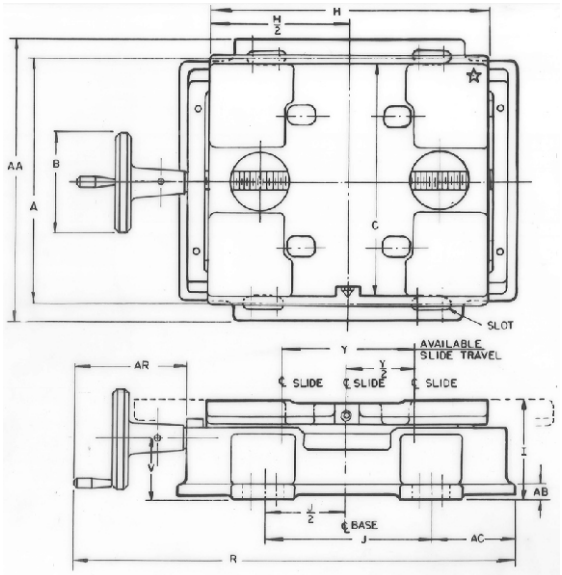
WARNING

Cartridge contains spring under compression. When not installed in drive, handle with extreme care. Insure that uncontrolled expansion will not result in bodily injury!

STORAGE: Store with some method of axial retention to prevent uncontrolled expansion.

DISPOSAL: Preferred method is to dispose of spring in free (uncompressed) state. However, do not attempt to remove compressed spring from cartridge without some method of controlling spring expansion, such as a piloted press fixture or a long (5 times cartridge length minimum) threaded rod with oversize end plates and nuts. Use such fixture to carefully compress cartridge, then remove steel can and expand spring to free length.

Alternatively, dispose of cartridge with chain or threaded rod fastened through center hole to prevent uncontrolled expansion of spring.



BASE SIZE	91B	91½B	92B	93B-1	93B-2
A	7 3/8	7 15/16	10 1/4	12 3/4	12 3/4
B	3	3 1/4	4	5 5/8	5 5/8
C	7	7 1/2	9 7/8	13	14 1/2
H	8 3/8	10	11	14 3/8	16
I	3	3 1/2	4	5 1/16	5 1/16
J	4 15/16	5 1/4	6	11 1/2	11 1/2
R	13 1/2	16 15/16	19 1/4	25 15/16	25 15/16
V	1 15/16	2 3/8	2 15/16	3 7/16	3 7/16
Y	4.1	6 5/8	7.25	8.25	7.75
AA	8 3/8	9 3/16	11 3/8	14 3/8	14 3/8
AB	1/2	1/2	5/8	7/8	7/8
AC	2 17/32	3 1/16	4 1/4	4 3/4	4 3/4
AR	3 3/4	4 11/16	5 1/8	5 9/16	5 9/16
SLOT	7/16 X 1 3/16	1/2 X 1 1/2	7/16 X 1 11/16	9/16 X 2 9/16	9/16 X 2 9/16

MASTER® POWER TRANSMISSION

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INSTALLATION

WARNING

TO INSURE THAT DRIVE IS NOT UNEXPECTEDLY STARTE. TURN OFF AND LOCK OUT OR TAG POWER SOURCE BEFORE PROCEEDING. FAILURE TO OBSERVE THESE PRECAUTIONS COULD RESULT IN BODILY INJURY.

1. Centrally locate the motor on the slide of the motor base. Insure that there is adequate clearance between the base and the disc assembly.

   In belting to a flat face pulley, the edge of the fixed disc should align with the edge of the flat face pulley as shown in Figure A.

   In belting to a companion sheave, the motor must be mounted on the base so that the slide moves at the specified angle to the centerline of the belt. This will keep the belt in alignment as the pulley is shifted through its range. The proper mounting is shown in Figure B.

2. Slide the pulley on the motor shaft as far as possible. Secure the pulley by tightening the Allen Head screw on the clamp collar. Torque the clamp collar screw to 200 in. lbs. for the 5675 and 7202 pulleys. The 9205 and 1110 pulleys require a torque of 350 in. lbs. No motor shaft key is required with this design. Do not use on undersize, corroded or damaged motor shafts. Motor shaft must be free from grease, dirt, corrosion, etc.

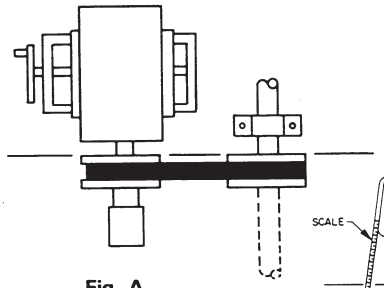


Fig. A

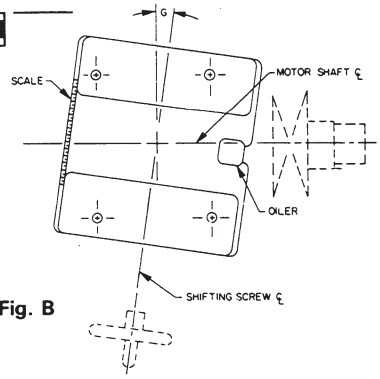


Fig. B

NEMA Motor Frame	Angle G
56 - 66	11°
143T - 182T	11°
182U - 184U	11°
213T - 284T	15°
213U - 284U	15°

OPERATION AND CARE

1. Keep the faces of the discs and belt clean.
2. The belt should run level between the faces of the discs. If one side rides high – investigate immediately. Check belt alignment and make sure that the sliding disc moves freely on the shaft of the fixed disc.
3. Adjust speed only when the unit is running.
4. It is recommended that the unit be disassembled annually for inspection.

CAUTION

Avoid any speed setting which will allow the belt to contact the disc key or to run beyond the O.D. of the disc assembly.

DISASSEMBLY AND INSPECTION

1. Shift the unit to the high speed position. Stop unit, lock out power. Remove the belt.
2. Remove the retaining ring (4) and washer (9).
3. **WARNING**

   Cartridge contains spring under compression. When not installed in drive, handle with extreme care. Insure that uncontrolled expansion will not result in bodily injury!

   a. Remove the spring cartridge assembly.

   b. Store cartridge away from work area with some form of axial retention to prevent uncontrolled expansion. Suitable methods include chain or threaded rod and endplates fastened through the center hole.

   For disposal, see instructions on reverse.

4. Check the disc bushing (7) and key (6) for signs of excessive wear or abuse. If the rotational clearance between the bushing keyway and key exceeds 1/16 in. (see Figure C), the bushing and key should be replaced.

   NOTE: Rotational clearance must be checked with sliding disc located on shaft in its normal operating location.

   Bushing/key kits are available through your local REEVES Distributor.

   Following are bushing repair kit part numbers:

Pulley Size	Bushing Kit No.
5675	415112-65-SB
7202	415112-65-SC
9205	415112-65-SD
1110	415112-65-SE

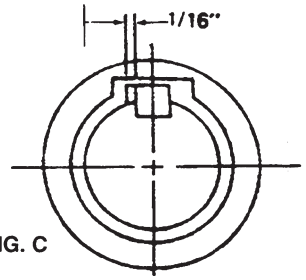
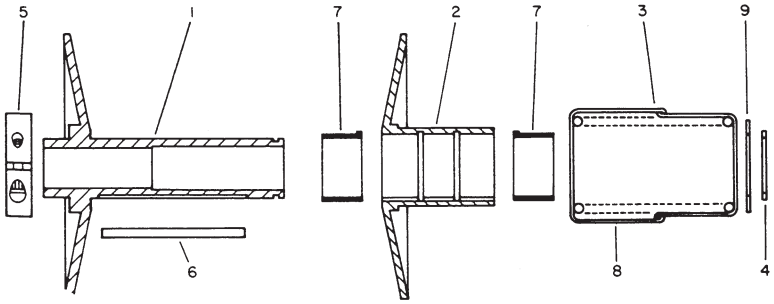


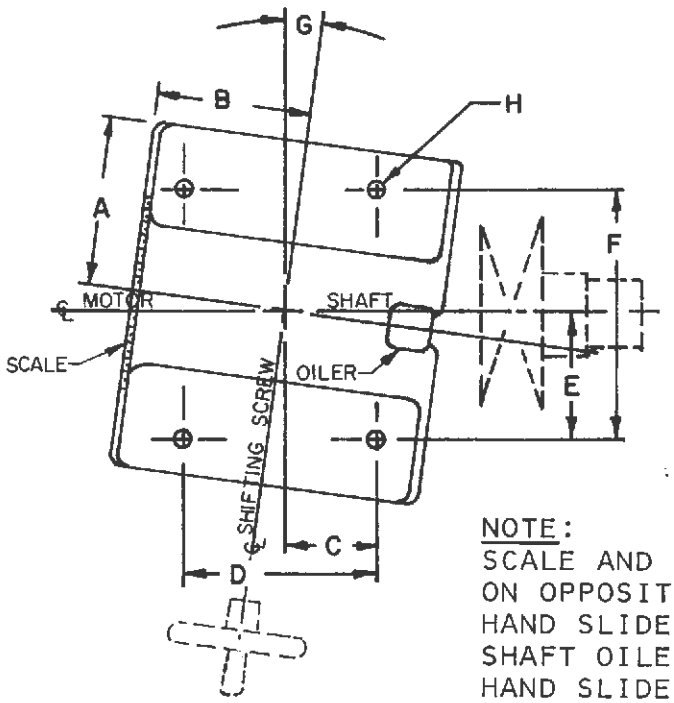
FIG. C

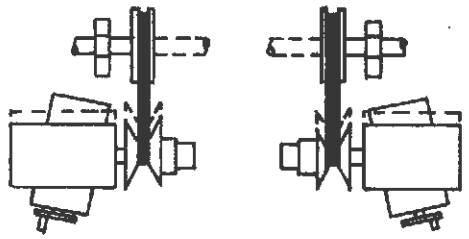
5. Remove the sliding disc (2) from the shaft of the fixed disc (1).
6. If the bushings are in good condition, relubricate with General Electric silicone grease, 330M. If this grease is not available, lubricate with a good grade of ball bearing grease and proceed to Step 10. If the bushings require replacement, proceed to Step 7.
7. With a pair of needle nose pliers, collapse the bushing and remove from the bore of the sliding disc. Turn the disc around and remove the second bushing.
8. Remove the key from the keyway.
9. Install new bushings into disc bore, ridged end first. Seat ridges into grooves in bore. Install key. Relubricate according to instructions supplied with bushing kit.
10. Reinstall sliding disc (2), spring cartridge (3), washer (9) and snap ring (4). Insure snap ring is properly seated in ring groove.



1. FIXED DISC
2. SLIDING DISC
3. SPRING CARTRIDGE
4. RETAINING RING
5. CLAMP COLLAR
6. KEY
7. BUSHING
8. NAMEPLATE
9. WASHER

REEVES VARI-SPEED PULLEY MOTOR MOUNTING FOR COMPANION SHEAVE INSTALLATION *





NOTE:
FACING CONTROL, DRIVE IS R.H. WHEN DISC ASSEMBLY IS TO RIGHT. DRIVE IS L.H. WHEN DISC ASSEMBLY IS TO LEFT.

NOTE:
SCALE AND OILER MUST BE ON OPPOSITE SIDES. RIGHT HAND SLIDE SHOWN - MTR. SHAFT OILER SIDE. LEFT HAND SLIDE - SAME DRILLING - SLIDE REVERSED 180°.

PULLEY BASE SIZE	NEMA MOTOR SERIES T	U	OLD	A	B	C	D	E	F	G°	H - TAP 4 HOLES
91-B		56		4-3/16	3-23/32	1-1/2	3	2-7/16	4-7/8	7-1/2°	5/16-18
			66			2-1/2	5	2-15/16	5-7/8		3/8-16
91-1/2-B	143T			5	4	2-1/2	4	2-3/4	5-1/2	7-1/2°	5/16-18
	145T					2-1/2	5	2-3/4	5-1/2		5/16-18
	182T	182				2-1/4	4-1/2	3-3/4	7-1/2		3/8-16
		184				2-3/4	5-1/2	3-3/4	7-1/2		3/8-16
92-B	182T	182		5-1/2	5-1/8	2-3/4	4-1/2	3-3/4	7-1/2	7-1/2°	3/8-16
	184T	184				2-3/4	5-1/2	3-3/4	7-1/2		3/8-16
	213T	213				2-3/4	5-1/2	4-1/4	8-1/2	10°	3/8-16
		215				3-1/2	7	4-1/4	8-1/2		3/8-16
			224			3-3/8	6-3/4	4-1/2	9		3/8-16
			225			3-3/4	7-1/2	4-1/2	9		3/8-16
93-B-1	215T			7-3/16	6-3/4	4-1/2	7	4-1/4	8-1/2	10°	3/8-16
	254T	254U	254			4-1/8	8-1/4	5	10		1/2-13
	256T	256U				5	10	5	10		1/2-13
	284T	284U	284			4-3/4	9-1/2	5-1/2	11		1/2-13

*NOTE: FOR FLAT FACE PULLEY INSTALLATION SEE OTHER SIDE.

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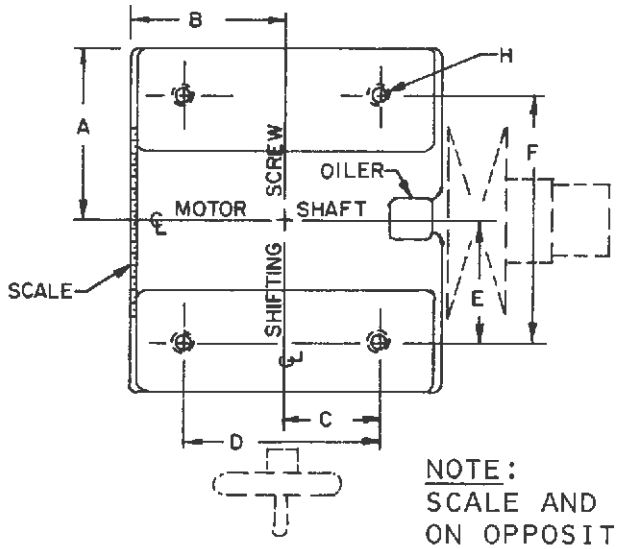
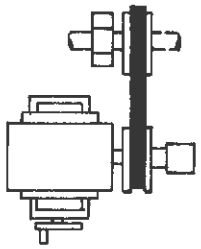
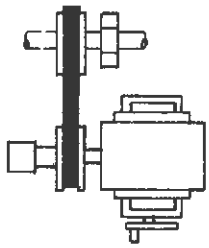
REEVES VARI-SPEED PULLEY MOTOR MOUNTING FOR FLAT FACE PULLEY INSTALLATION*

D-42000-18-E (3/77)





RIGHT HAND



LEFT HAND

NOTE:
FACING CONTROL, DRIVE IS R.H. WHEN DISC ASSEMBLY IS TO RIGHT. DRIVE IS L.H. WHEN DISC ASSEMBLY IS TO LEFT.

NOTE:
SCALE AND OILER MUST BE ON OPPOSITE SIDES. RIGHT HAND SLIDE SHOWN - MTR. SHAFT OILER SIDE. LEFT HAND SLIDE - SAME DRILLING - SLIDE REVERSED 180°.

PULLEY BASE SIZE	NEMA MOTOR SERIES			A	B	C	D	E	F	H - TAP 4 HOLES
	T	U	OLD							
91-B		56		4-3/16	3-23/32	1-1/2	3	2-7/16	4-7/8	5/16-18
			66			2-1/2	5	2-15/16	5-7/8	3/8-16
		182				2-1/4	4-1/2	3-3/4	7-1/2	3/8-16
91-1/2-B	143T			5	4	2	4	2-3/4	5-1/2	5/16-18
	145T					2-1/2	5	2-3/4	5-1/2	5/16-18
	182T	182				2-1/4	4-1/2	3-3/4	7-1/2	3/8-16
		184				2-3/4	5-1/2	3-3/4	7-1/2	3/8-16
92-B	182T	182		5-1/2	5-1/8	2-3/4	4-1/2	3-3/4	7-1/2	3/8-16
	184T	184				2-3/4	5-1/2	3-3/4	7-1/2	3/8-16
	213T	213				2-3/4	5-1/2	4-1/4	8-1/2	3/8-16
		215				2-3/4	7	4-1/4	8-1/2	3/8-16
			224			3-1/4	6-3/4	4-1/2	9	3/8-16
			225			3-1/4	7-1/2	4-1/2	9	3/8-16
93-B-1	213T			7-3/16	6-3/4	5-1/4	5-1/2	4-1/4	8-1/2	3/8-16
	215T					5-1/4	7	4-1/4	8-1/2	3/8-16
	254T	254U	254			4-3/4	8-1/4	5	10	1/2-13
	256T	256U				5	10	5	10	1/2-13
		284U	284			4-3/4	9-1/2	5-1/2	11	1/2-13
		286U				5-1/2	11	5-1/2	11	1/2-13

*NOTE: FOR COMPANION SHEAVE INSTALLATION SEE OTHER SIDE.

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