

FILM-TECH

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7000 Series Reel Support Systems Instruction Manual

The Kelmar Series 7000 Reel Support System has been designed to provide many years of continuous, trouble-free service. Please read the following instructions before installing the arms.

Note: The ball bearing film guide roller assemblies, the Allen wrenches, and the mounting hardware are packed in the small white box in the shipping container.

Installing the Upper Arm

- 1) Please refer to the exploded parts drawing for the upper arm.
- 2) Place the arm in position and hand tighten the upper mounting bracket (13) with the two 3/8-16 bolts (15) and washers provided.
- 3) Set an empty reel, the largest that you will use, in place on the spindle. Position the arm (4) so that adequate clearance is established and good film delivery is assured. Tighten bolt (17) securely and then apply full torque to set screw (14).
- 4) Take a length of film, ten feet or so, and wrap it on the reel hub, leaving 4 or 5 feet free.
- 5) Thread the film on the upper constant speed sprocket of the projector. Refer to installation drawings, Figure No. 1.
- 6) Now set the bypass roller assembly (18) in place, positioned so that the film passes through the top of the projector without any mechanical interference and engages the sprocket in a vertical plane.
- 7) View the reel, with the short length of film in place, from the front. Refer to installation drawings, Figure No. 2. Position the arm so that the film travels from the hub to the sprocket with equal clearance from each side of the reel.
- 8) Securely tighten all mounting and indexing hardware.

Installing the Lower Arm

- 1) The exploded parts drawing will be a handy reference in the following steps.
- 2) Make sure that the mounting surfaces on the lower side of the sound—head are free of dirt or foreign matter that might interfere with the lower arm mounting squarely.
- 3) Fasten the mounting plate (13), with the 5/16-18 bolts (15), to finger tight status.
- 4) Place the largest reel that you will use on the spindle. Refer to installation drawings, Figure No. 3. Lace a short length of film from the holdback sprocket in the soundhead and wrap it around the hub. Install the bypass roller assembly (18), providing adequate clearance between the film and all adjacent mechanical surfaces. Verify that a good wrap is established on the holdback sprocket.

- 5) Position arm (4) to ensure proper clearance for the reel relative to the pedestal or console, the front wall and all wiring devices. Apply substantial torque to the primary support screw (17) and the locking set screw (14).
- 6) See that the film is centered on the reel and that equal pressure has been established by the film on both sides of the last holdback sprocket. Now tighten the hardware supporting the lower mounting bracket (15).
- 7) Position the Rounthane belting over the, drive pulley of the sound— head and the take-up clutch pulley. Mark the belt and cut it $3/4$ " shorter than the mark. Press the belt ends together on the connecting link and check its operation under load. If the belt runs with a belly in the return leg, remove an additional $1/2$ " at a time until it tracks smoothly. Installation drawings, Figure No. 4, shows the procedure for putting the finishing touches on the belt splice after final sizing.

In some situations, where the pitch is extreme, the use of a belt tightener roller assembly, Kelmar Part Number 720320, will prevent abrasion of the belt by the soundhead casting or related hardware.

Adjustment and Lubrication

Final tuning of the arms will result in system performance free from film damage or accelerated wear on sprockets. Refer to Figures No. 1, 2, and 3, while carrying out the following steps.

Thread the projector with a full reel of film. Start the projector and carefully check the film path at both the upper and lower constant speed sprockets. The mounting holes for the upper and lower arms are oversized to provide clearance for lateral and rotational adjustment. The film should enter and leave the projector squarely with respect to the sprocket, while maintaining a clear and balanced profile on the feed or take-up reels.

Clutch pressures should not be excessive. Set the upper tension so that a full reel of film will rotate smoothly and without bounce. Heavy drag on the upper clutch will encourage stress on the film and the upper sprocket assembly, as the reel of film becomes smaller. When using large diameter take-up reels, they must be of the "floating hub" design. Check all reels to verify that the hubs are free. A small quantity of pure silicone spray lubricant between the hub and the reel flanges will help.

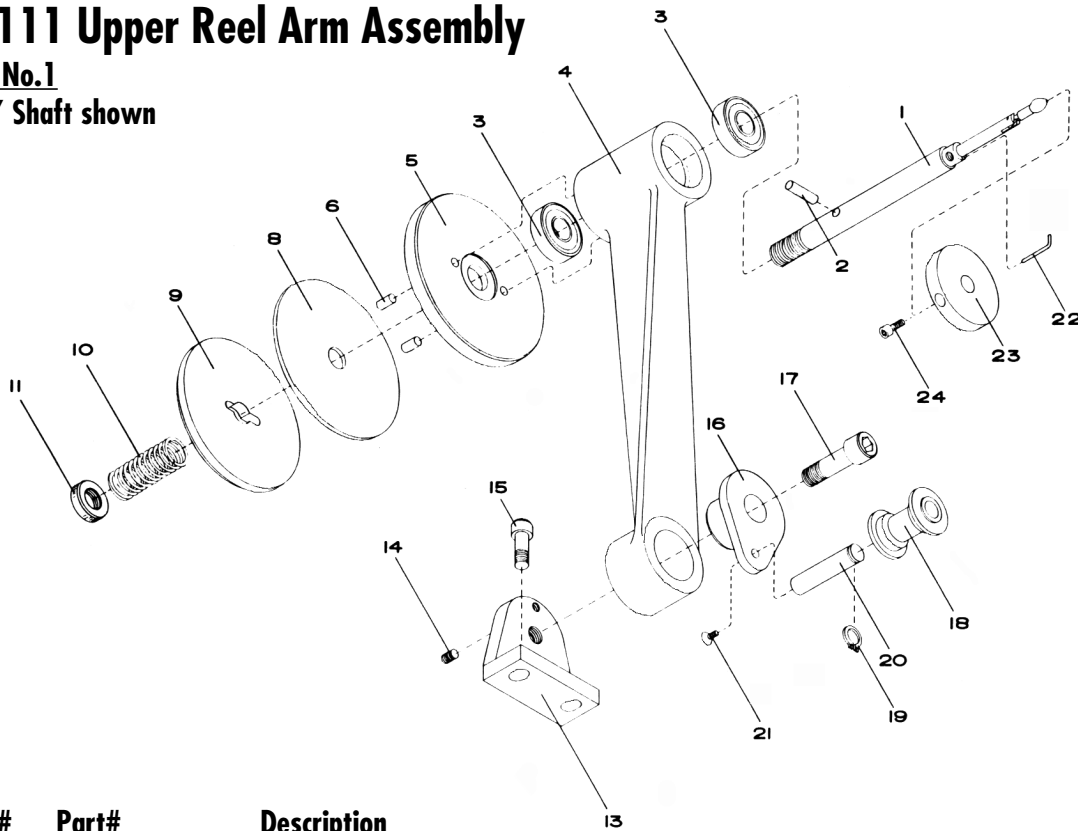
Take-up clutch pressure should be just enough to ensure uniform and consistent wrap of the film on a full reel. Excessive pressure will encourage under-cutting of the holdback sprocket and introduce undesirable deformation and abrasion of the film.

All rotating components ride on pre-lubricated ball bearings and will provide many years of service without maintenance. The felt clutch disks have been given an initial lubrication at the factory with SAE 40 non-detergent oil. It is suggested that the clutches be cleaned and examined periodically. When lubrication is required, the use of a heavy non—detergent oil is suggested. Do not over oil.

Rounthane belts should be cleaned periodically with a clean towel.

720111 Upper Reel Arm Assembly

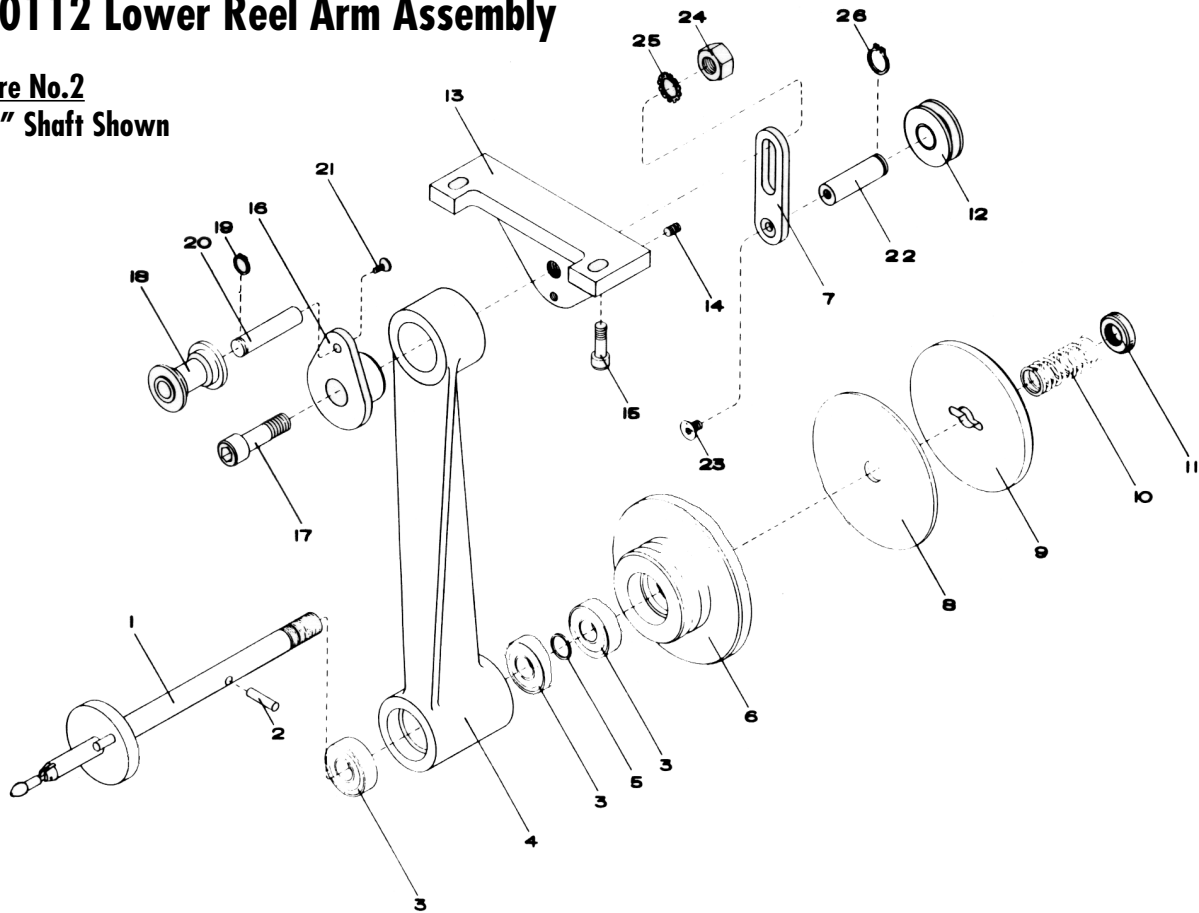
Figure No.1
5/16" Shaft shown



Index #	Part#	Description
1	720316-2	5/16" dia. Upper Shaft Sub-assembly (shown)
	720313-1	1/2" Upper Shaft Assembly
	720313-2	5/16" Upper Shaft Assembly
2	720343	Pin, Clutch Pressure Plate Driving
3	720345	Bearing, Spindle
4	720322	Arm
5	720323	Upper Clutch Face Plate
6	720349	Pin, Upper Clutch Face Plate Retaining
8	720324	Felt Clutch Disk
9	720321	Clutch Pressure Plate
10	720351	Spring, Clutch Pressure
11	720329	Clutch Pressure Adjusting Nut
13	720331	Upper Main Bracket
14	720354	Screw, Arm Locking
15	72056	Screw, Upper Arm Mounting
16	720325	Film By-pass Roller Bracket
17	720347	Screw, Main Arm Supporting
18	720536	Film By-pass Roller Assembly, c/w Bearings, Includes Parts 19,20,21
22	720339	5/16" Shaft Drive Key
23	720327	5/16" Shaft Flange
	720111-1	Complete Upper Arm Assembly with 1/2" Dia. Shaft
	720111-2	Complete Upper Arm Assembly with 5/16" Dia. Shaft

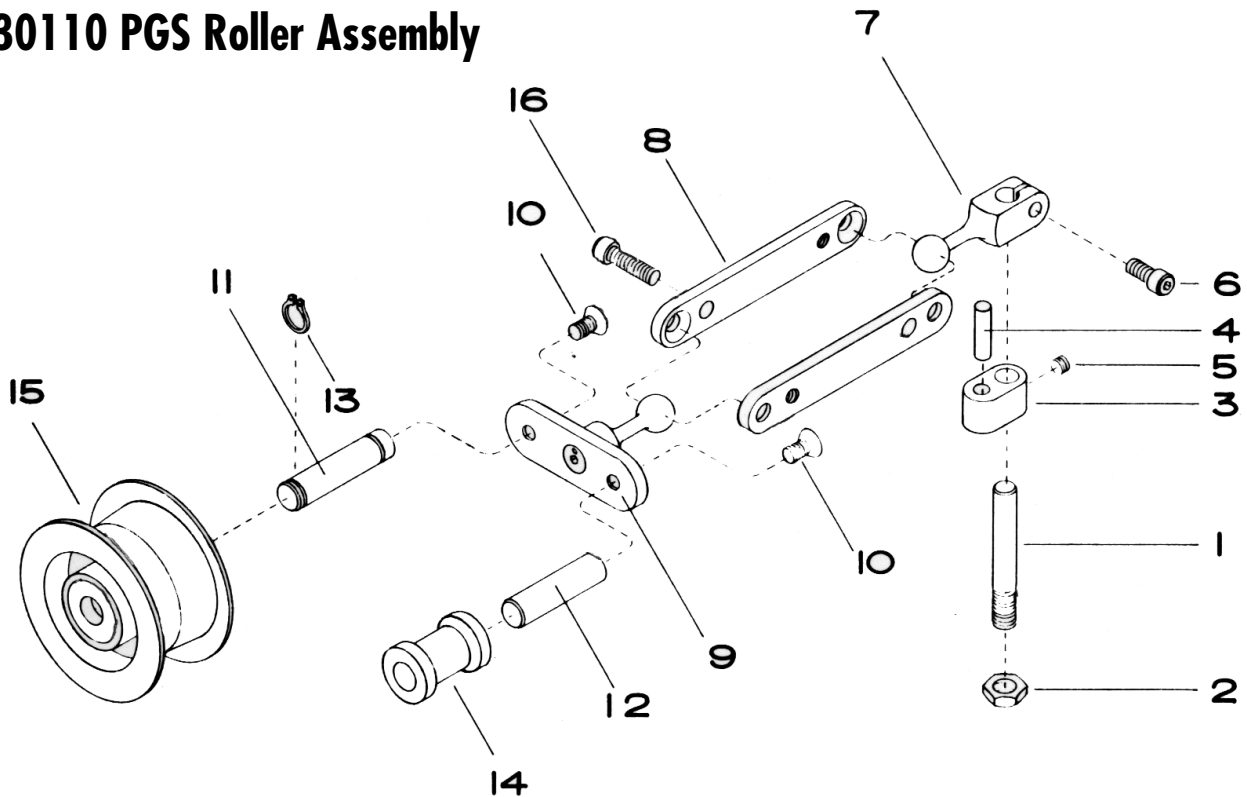
720112 Lower Reel Arm Assembly

Figure No.2
1/2" Shaft Shown



Index #	Part#	Description	Index #	Part#	Description
1	720313-3	1/2" Upper Shaft Assembly (shown)	16	720325	Film By-pass Roller Bracket
	720313-4	5/16" Upper Shaft Assembly	17	720347	Screw, Main Arm Supporting
2	720343	Pin, Clutch Pressure Plate Driving		720358	Screw, Main Arm Supporting w/ Single Belt Tightener
3	720345	Bearing, Spindle	18	720536	Film By-pass Roller Assembly, c/w Bearings, Includes Parts 19,20,21
4	720322	Arm	22	720362	Belt Tightener Idler Pulley Shaft
5	720337	Bearing Spacer	23	720359	Screw, Belt Tightener Idler Pulley Shaft
6	720320	Lower Clutch Drive Pulley	24	720365	Nut, Belt Tightener Locking
7	720333	Belt Tightener Plate	25	720366	Washer, Belt Tightener Locking
8	720324	Felt Clutch Disk	26	720367	Retaining Ring, Belt Tightener Idler Pulley
9	720321	Clutch Pressure Plate			
10	720351	Spring, Clutch Pressure			
11	720329	Clutch Pressure Adjusting Nut			
12	720335	Belt Tightener Idler Pulley			
13	720330	Lower Main Bracket			
14	720354	Screw, Arm Locking			
15	720355	Screw, Lower Arm Mounting			
720112-1		Complete Lower Arm Assembly with 1/2" Dia. Shaft			
720112-2		Complete Lower Arm Assembly with 5/16" Dia. Shaft			

730110 PGS Roller Assembly



Index #	Part#	Description
1	7302061	Mounting Stud
2	720364	Nut, Mounting Stud Locking
3	7302070	Positioning Stop
4	720343	Pin
5	720363	Set Screw
6	720360	Screw, Clamp Tightening
7	7302075	Clamp Assembly
8	7302073	Side Bar
9	7302076	Plate and Stud Assembly
10	720359	Screw
11	7302068-1	Guidance Roller Shaft
12	7302068-2	Keeper Roller Shaft
13	720350	External Retaining Ring
14	7302069	Film Keeper Roller
15	7302078	Film Guidance Roller, c/w Bearings
16	720382	Screw, Side Bar Locking

PGS-730110 Set of (2) Complete Assemblies as Shown Above to Convert Existing Reel Arms

PGS-730110-E Set of (2) Complete Assemblies as Shown Above with Wall Mounting Plates

