

X
XXX

ILLUSTRATED PARTS BREAKDOWN

TK70 TAPE DRIVE

HOW TO USE THE IPB

GENERAL

This IPB is compiled following the organization and nomenclature of the engineering drawing structure.

MAJOR ASSEMBLY LOCATOR (When Applicable)

The Major Assembly Locator (first illustration) is an index that provides a description and a figure reference for all illustrations used in this manual.

INDENTED PARTS LIST

This manual identifies each assembly being broken down (figure reference callout), and all parts of that assembly. Further breakdown of an assembly is shown by an asterisk (*) preceding the item callouts in the Description Column. The number of asterisks preceding an item is used to denote the subordination of that item with respect to the Major Assembly. A single asterisk preceding an item description indicates that the item is part of the major assembly being illustrated. Items that are subordinate to single asterisks items are denoted by two asterisks (**) and immediately follow the related single asterisk item. Additional asterisks are used, as required, to denote further subordination. This system of part identification, provides a means for the user to identify the next higher assembly item and make alternate selections for parts when the required replacement part of assembly is not immediately available.

COLUMN CALLOUT DESCRIPTION

Figure and Item - Indicates the figure number and item number of each part.

Description - Lists the name of the part and pertinent specifications (when required). Asterisks preceding the description denote the subordination of the part to the next higher assembly.

DEC Part No. - Lists the Digital part ordering number. A blank in this column indicates a Digital part number was not assigned at the time of publication.

ECO Cut-In - The notation at the top of this column indicates the ECO level of the system (option), at which the IPB was initially prepared. Subsequent ECO level designations, that modify existing parts or add new parts to the device, are inserted in the ECO Cut-In column next to the part that is added or modified.

Used On Code - Letters in this column correspond to the variation codes assigned in Figure 1. Parts with an Alpha notation(s) are used only in those option variations. A blank indicates that the part is used on all option variations.

Ref Fig No. - A cross reference between illustrations. For each Major Assembly, the number in this column denotes the figure of the next higher assembly. For all subassemblies, the number in this column denotes the figure showing additional detailed breakdown.

PART NUMBER/PART DESCRIPTION SORT SECTION

Parts are sorted both numerically and alphabetically by description, referenced to a location within the IPB, by figure number and item number.

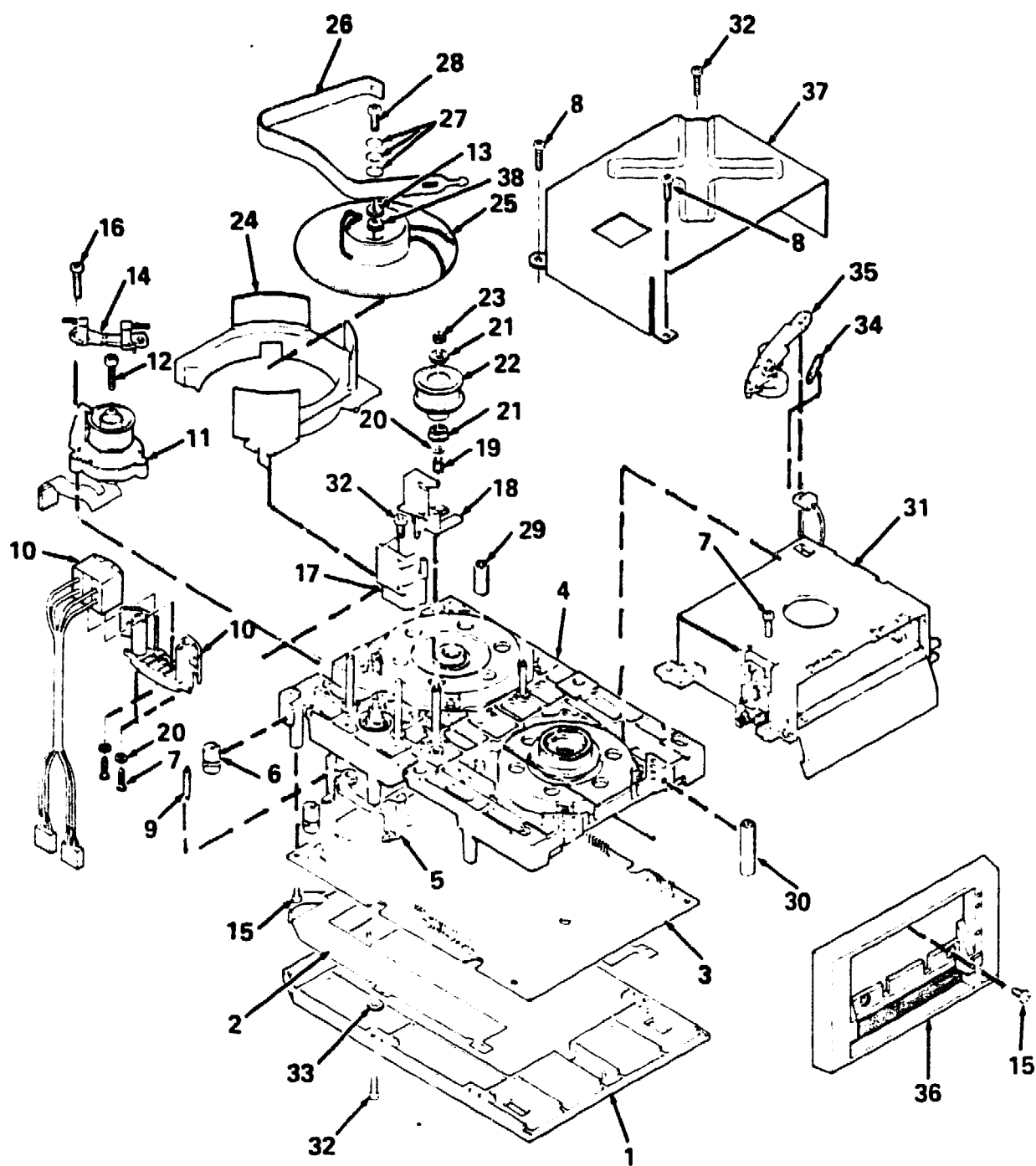
REVISION HISTORY				OTHER IPB MANUALS REQUIRED TO SUPPORT THIS OPTION
PRINTING	ECO LEVEL		DATE	
1st Printing	TK70	00000-00000	1-OCT-87	N/A
	70-21736	00003-00003		
	70-23497	00000-00000		
	70-21738	00001-00001		
	70-23517	00000-00000		
	70-24659	00000-00000		

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TK70-01

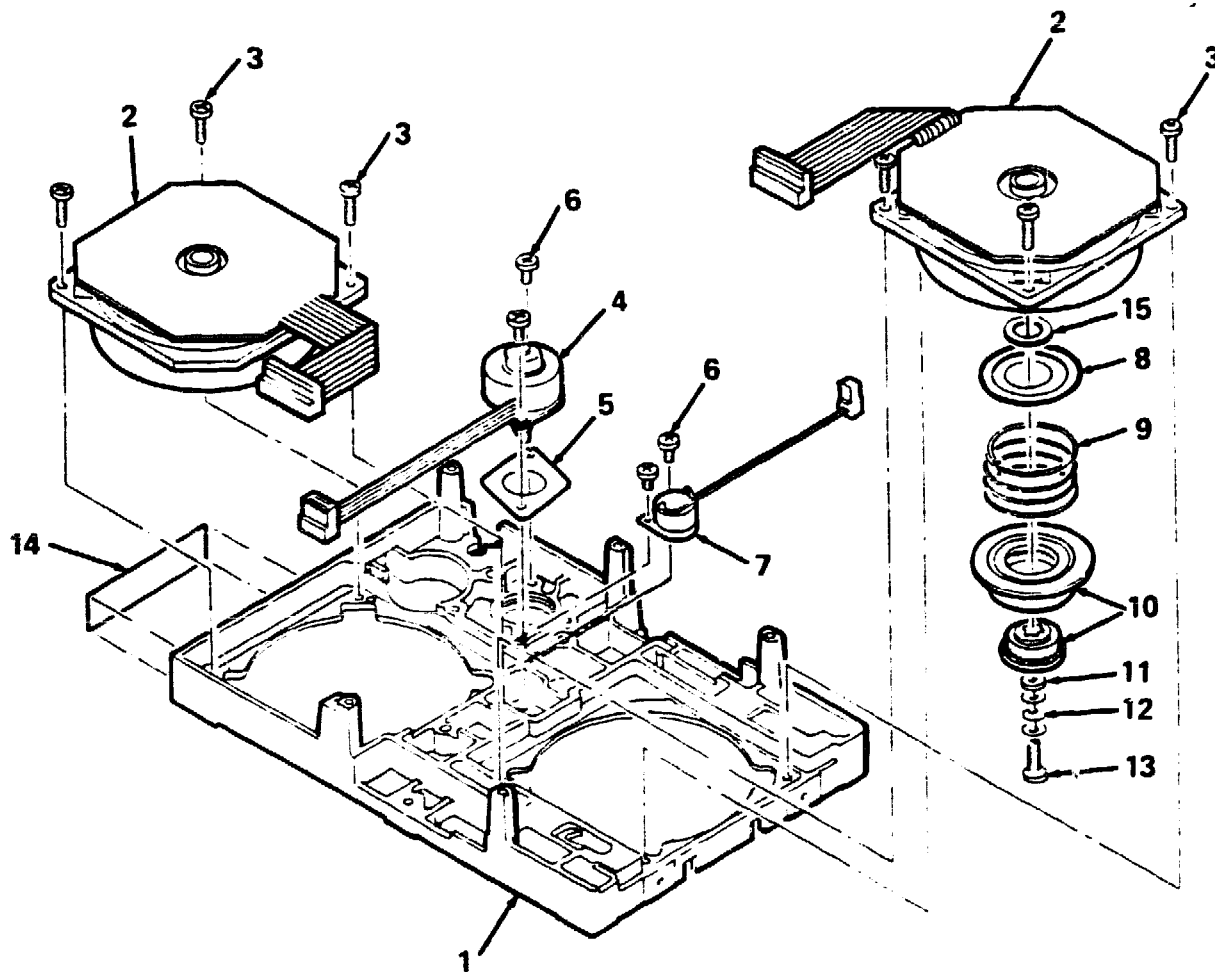
Figure 1. TK70 Tape Drive



IPB-TK70

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FIG. & ITEM NO.	DESCRIPTION	DEC PART NO.	ECO CUT-IN TK70 00000	USED ON CODE	REF FIG NO.
1-	TK70 TAPE DRIVE W/SKID PLATE TK70 TAPE DRIVE W/O SKID PLATE	TK70-01 TK70-02		A B	
1	*Plate, Skid	74-25652-01		A	
2	*Insulator Assembly	70-21765-01		A	
3	*Module, TK70 Drive	54-17637-01			
4	*MOTOR AND BASEPLATE ASSEMBLY	70-21736-01			2
5	*Bracket, Head Spring	74-30728-01			
6	*Strain Relief, Head	74-29585-01			
7	*Screw, Sems Phi Pan Hd No. 6-32 x 1/2	90-10174-03			
8	*Screw, Phi Self-Tap No. 6-32 x 1/2	90-00049-36			
9	*Spring, Head Bracket	12-22895-01			
10	*Head, Recording	70-23482-01			
11	*TACHOMETER ASSEMBLY	70-24659-01			6
12	*Screw, Phi Pan Hd No. 6-32 x 5/8	90-10109-00			
13	*Retainer, Damper	74-35724-01			
14	*EOT/BOT LED-Photo Assembly	11-23276-01			
15	*Screw, Sems Phi Pan Hd No. 6-32 x 5/8	90-10717-01			
16	*Screw, Phi Pan Hd No. 6-32 x 5/16	90-00049-58			
17	*Shield Assembly, External	70-21141-01			
18	*Guard, Tape	12-13656-01			
19	*Spring, Compression	12-13656-05			
20	*Washer, Flat	12-24692-03			
21	*Ball Bearing, Flanged	12-22788-01			
22	*Capstan, Tachometer	74-34038-01			
23	*Nut, Nylon Self-Lock No. 4-40	90-08054-00			
24	*Constraint, Tape	74-29616-01			
25	*Reel, Take-up	74-27668-01			
26	*Leader, Cartridge (Take-up)	74-28286-01			
27	*Washer, Spring	90-10506-01			
28	*Screw, Phi Fill Hd No. 8-32 x 1-1/2	90-00038-21			
29	*Spring, Compression	12-12912-01			
30	*Spring, Compression	12-22357-01			
31	*RECEIVER ASSEMBLY	70-23497-01			3
32	*Screw, Phi Pan Hd No. 6-32 x 9/16	90-06022-01		A	
33	*Washer, Internal Tooth Lock No. 6	90-09882-00		A	
34	*Spring, Compression	12-22358-01			
35	*Latch Leader Assembly	70-23544-01			
36	*BEZEL ASSEMBLY	70-23517-01			5
37	*Enclosure	74-32363-01			
38	*Damper, Vibration	74-35725-01			



TK70-02

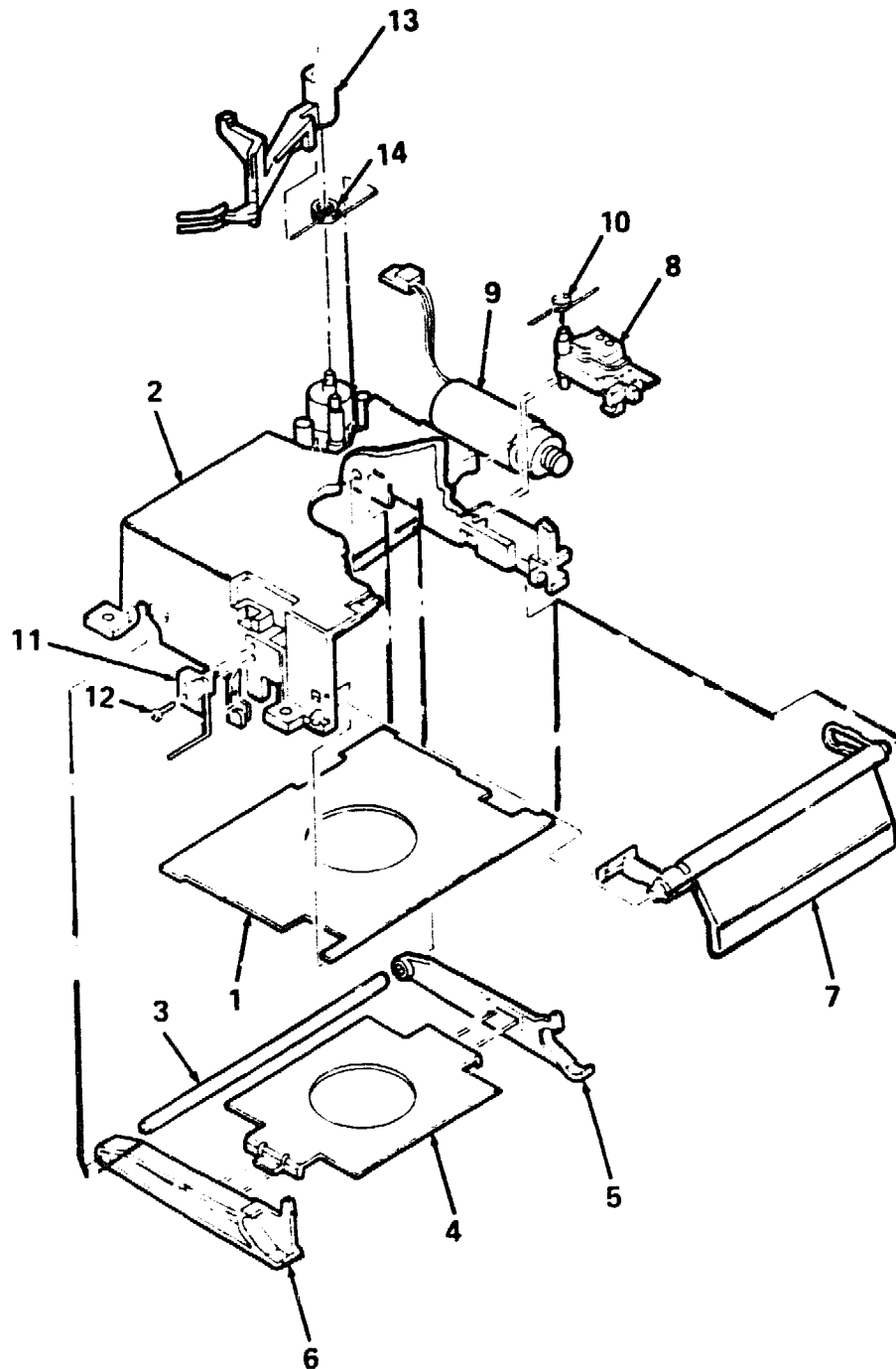
Figure 2. Motor and Baseplate Assembly

digital
PARTS LIST

IPB-TK70

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FIG. & ITEM NO.	DESCRIPTION	DEC PART NO.	ECO CUT-IN 70-21736 00003	USED ON CODE	REF FIG NO.
2-	MOTOR and BASEPLATE ASSEMBLY	70-21736-01			1
1	*Baseplate Assembly	70-21732-01			
2	*Motor, Brushless	12-22681-01			
3	*Screw, Phi Pan Hd No. 6-32 x 5/16	90-10089-03			
4	*Actuator, Digital Linear	12-21497-02			
5	*Shield, Actuator	74-29607-02			
6	*Screw, Phi Pan Hd No. 6-32 x 7/16	90-10717-01			
7	*Switch, Thermal	12-22958-02			
8	*Plate, Spring	74-31657-01			
9	*Spring, Compression	12-22356-01			
10	*Reel Driver Assembly	70-23477-01			
11	*Washer, Flat	12-24692-02			
12	*Washer, Spring	90-10506-01			
13	*Screw, Phi Fil Hd No. 8-32 x 1/2	90-06039-01			
14	*Label, "S/N, TK70"	36-19833-03			
15	*Shim, Plastic	12-24328-01			



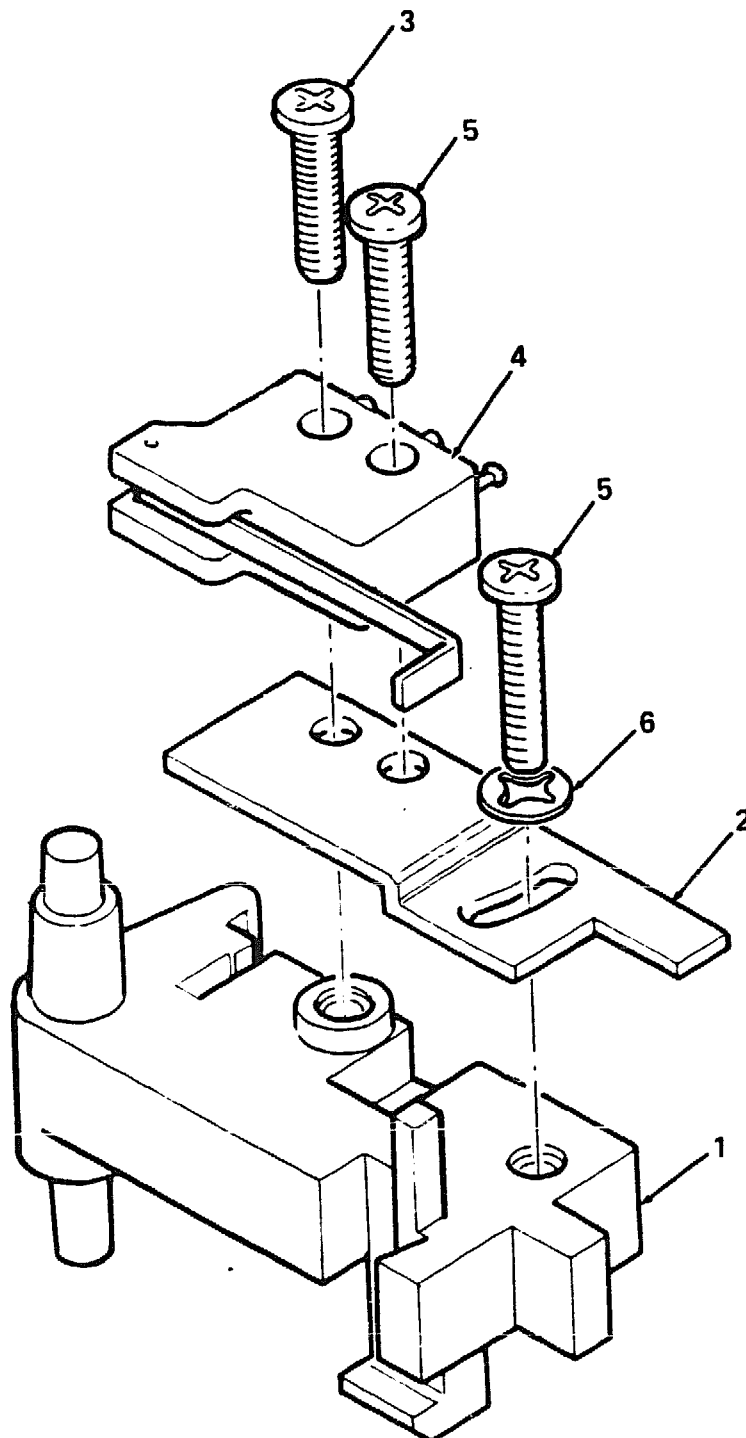
TK70-03

Figure 3. Receiver Assembly



IPB-TK70

FIG. & ITEM NO.	DESCRIPTION	DEC PART NO.	ECO CUT-IN 70-23497 00000	USED ON CODE	REF FIG NO.
3-	RECEIVER ASSEMBLY	70-23497-01			1
1	*Floor, Receiver	74-29212-01			
2	*Receiver	74-32530-01			
3	*Shaft, Pivot Link	74-29216-01			
4	*Plate, Clutch	74-29211-01			
5	*Link, Right Clutch	74-29213-01			
6	*Link, Left Clutch	74-29214-01			
7	*Handle, Engaging	70-24656-01			
8	*INTERPOSER ASSEMBLY	70-21738-01			4
9	*Solenoid, Tubular (10.5 Vdc)	12-22089-01			
10	*Spring, Torsion	12-22538-01			
11	*Switch Assembly (No Snap Action)	12-25332-02			
12	*Screw, Phl Pan Hd No. 2-56 x 3/8	90-10500-01			
13	*Link, Buckling	74-34496-01			
14	*Spring, Torsion	12-23742-01			



TK70-04

Figure 4. Interposer Assembly

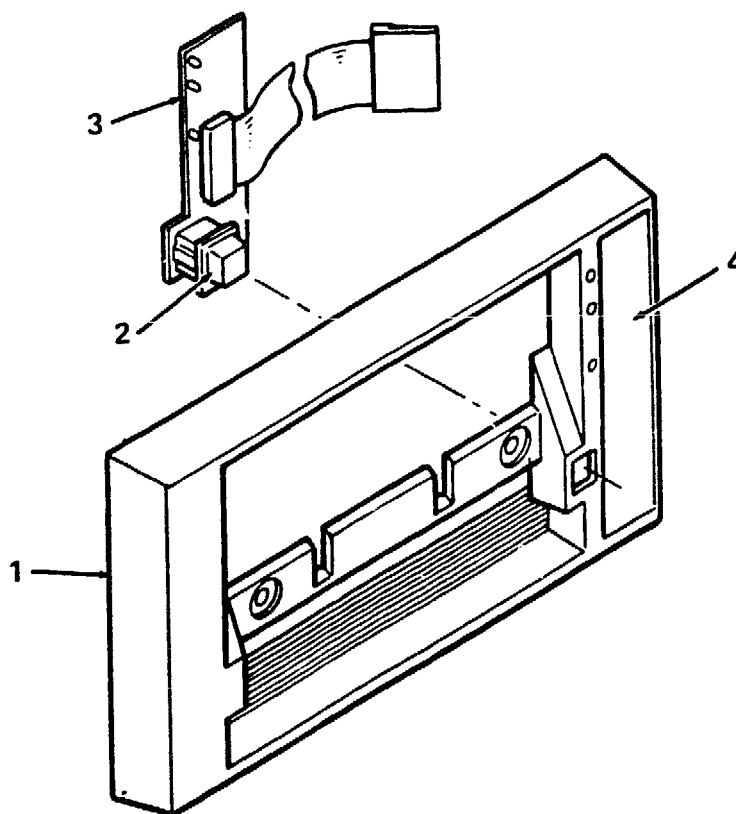


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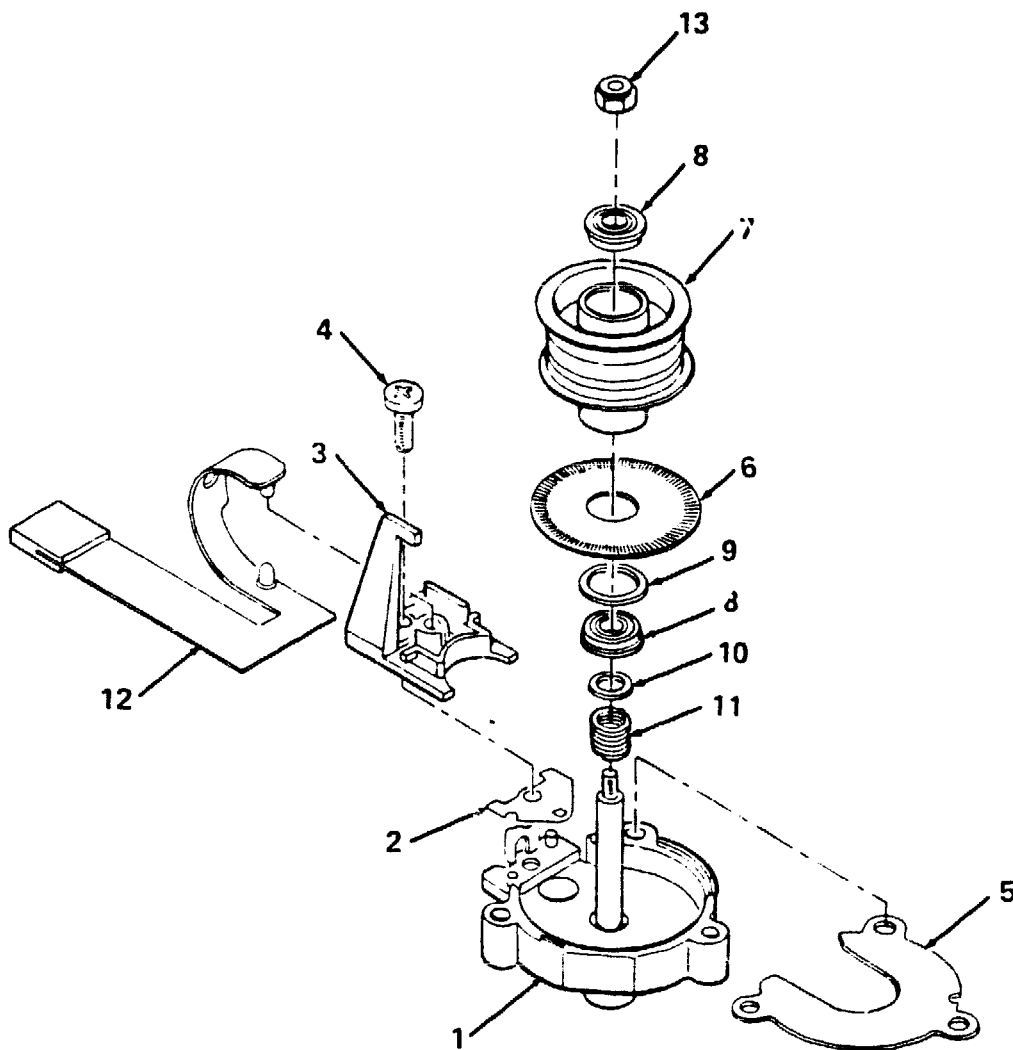
FIG. & ITEM NO.	DESCRIPTION	DEC PART NO.	ECO CUT-IN 70-21738 00001	USED ON CODE	REF FIG NO.
4-	INTERPOSER ASSEMBLY	70-21738-01			3
1	*Interposer	74-29215-01			
2	*Mount, Switch	74-29218-01			
3	*Screw, Phi Pan Hd No. 2-56 x 1/4	90-06004-01			
4	*Switch, Micro	12-22274-04			
5	*Screw, Phi Pan Hd No. 2-56 x 3/8	90-10500-01			
6	*Washer, Internal Tooth Lock No. 2	90-06631-00			

FIG. & ITEM NO.	DESCRIPTION	DEC PART NO.	ECO CUT-IN 70-23517 00000	USED ON CODE	REF FIG NO.
5-	BEZEL ASSEMBLY	70-23517-01			1
1	*Bezel	74-34041-01			
2	*Button, Push	74-34166-01			
3	*Module, Switch/LED Assembly	54-18272-01			
4	*Label, "TK70"	36-27465-01			



TK70-05

Figure 5. Bezel Assembly



TK70-06

Figure 6. Tachometer Assembly



FIG. & ITEM NO.	DESCRIPTION	DEC PART NO.	ECO CUT-IN 70-24659 00000	USED ON CODE	REF FIG NO.
6-	TACHOMETER ASSEMBLY	70-24659-01			1
1	*Body, Tachometer	74-32341-01			
2	*Mask, Encoder	74-29220-01			
3	*Guide, Tachometer	74-32343-01			
4	*Screw, Phl Flat Hd Self-Tap No. 6 x 1/2	90-09800-00			
5	*Plate, Tachometer Cover	74-32342-01			
6	*Disk, Encoder	74-27698-01			
7	*Capstan	74-34038-01			
8	*Bearing, Flanged Ball	12-22788-01			
9	*Ring, Support	74-31389-01			
10	*Washer, Flat	12-24692-03			
11	*Spring, Compression	12-13656-05			
12	*Cable Assembly, Flex	17-01088-01			
13	*Nut, Hex Self Lock Nylon No. 4-4U	90-08054-00			

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PART NUMBER/DESCRIPTION SORT



TK70 TAPE DRIVE SORT BY DEC PART NUMBER

PART NO.	DESCRIPTION	FIG. NO.	ITEM
11-23276-01	EOT/BOT LED-Photo Assembly	1	14
12-12912-01	Spring, Compression	1	29
12-13656-01	Guard, Tape	1	18
12-13656-05	Spring, Compression	6	11
12-13656-05	Spring, Compression	1	19
12-21497-02	Actuator, Digital Linear	2	4
12-22089-01	Solenoid, Tubular (10.5 Vdc)	3	9
12-22274-04	Switch, Micro	4	4
12-22356-01	Spring, Compression	2	9
12-22357-01	Spring, Compression	1	30
12-22358-01	Spring, Compression	1	34
12-22538-01	Spring, Torsion	3	10
12-22681-01	Motor, Brushless	2	2
12-22788-01	Ball Bearing, Flanged	1	21
12-22788-01	Bearing, Flanged Ball	6	8
12-22895-01	Spring, Head Bracket	1	9
12-22958-02	Switch, Thermal	2	7
12-23742-01	Spring, Torsion	3	14
12-24328-01	Shim, Plastic	2	15
12-24692-02	Washer, Flat	2	11
12-24692-03	Washer, Flat	6	10
12-24692-03	Washer, Flat	1	20
12-25332-02	Switch Assembly (No Snap Action)	3	11
17-01088-01	Cable Assembly, Flex	6	12
36-19833-03	Label, "S/N, TK70"	2	14
36-27465-01	Label, "TK70"	5	4
54-17637-01	Module, TK70 Drive	1	3
54-18272-01	Module, Switch/LED Assembly	5	3
70-21141-01	Shield Assembly, External	1	17
70-21732-01	Baseplate Assembly	2	1
70-21736-01	MOTOR and BASEPLATE ASSEMBLY	2	N/A
70-21736-01	MOTOR AND BASEPLATE ASSEMBLY	1	4
70-21738-01	INTERPOSER ASSEMBLY	4	N/A
70-21738-01	INTERPOSER ASSEMBLY	3	8
70-21765-01	Insulator Assembly	1	2
70-23477-01	Reel Driver Assembly	2	10
70-23482-01	Head, Recording	1	10
70-23497-01	RECEIVER ASSEMBLY	3	N/A
70-23497-01	RECEIVER ASSEMBLY	1	31
70-23517-01	BEZEL ASSEMBLY	1	36
70-23517-01	BEZEL ASSEMBLY	5	N/A
70-23544-01	Latch Leader Assembly	1	35
70-24656-01	Handle, Engaging	3	7
70-24659-01	TACHOMETER ASSEMBLY	6	N/A
70-24659-01	TACHOMETER ASSEMBLY	1	11

TK70 TAPE DRIVE SORT BY DEC PART NUMBER

PART NO.	DESCRIPTION	FIG. NO.	ITEM
74-25652-01	Plate, Skid	1	1
74-27668-01	Reel, Take-up	1	25
74-27698-01	Disk, Encoder	6	6
74-28286-01	Leader, Cartridge (Take-up)	1	26
74-29211-01	Plate, Clutch	3	4
74-29212-01	Floor, Receiver	3	1
74-29213-01	Link, Right Clutch	3	5
74-29214-01	Link, Left Clutch	3	6
74-29215-01	Interposer	4	1
74-29216-01	Shaft, Pivot Link	3	3
74-29218-01	Mount, Switch	4	2
74-29220-01	Mask, Encoder	6	2
74-29585-01	Strain Relief, Head	1	6
74-29607-02	Shield, Actuator	2	5
74-29616-01	Constraint, Tape	1	24
74-30728-01	Bracket, Head Spring	1	5
74-31389-01	Ring, Support	6	9
74-31657-01	Plate, Spring	2	8
74-32341-01	Body, Tachometer	6	1
74-32342-01	Plate, Tachometer Cover	6	5
74-32343-01	Guide, Tachometer	6	3
74-32363-01	Enclosure	1	37
74-32530-01	Receiver	3	2
74-34038-01	Capstan	6	7
74-34038-01	Capstan, Tachometer	1	22
74-34041-01	Bezel	5	1
74-34166-01	Button, Push	5	2
74-34496-01	Link, Buckling	3	13
74-35724-01	Retainer, Damper	1	13
74-35725-01	Damper, Vibration	1	38
90-00038-21	Screw, Phl Fill Hd No. 8-32 x 1 1/2	1	28
90-00049-36	Screw, Phl Self-Tap No. 6-32 x 1/2	1	8
90-00049-58	Screw, Phl Pan Hd No. 6-32 x 5/16	1	16
90-06004-01	Screw, Phl Pan Hd No. 2-56 x 1/4	4	3
90-06022-01	Screw, Phl Pan Hd No. 6-32 x 9/16	1	32
90-06039-01	Screw, Phl Fill Hd No. 8-32 x 1/2	2	13
90-06631-00	Washer, Internal Tooth Lock No. 2	4	6
90-08054-00	Nut, Hex Self Lock Nylon No. 4-40	6	13
90-08054-00	Nut, Nylon Self Lock No. 4-40	1	23
90-09800-00	Screw, Phl Flat Hd Self-Tap No. 6 x 1/2	6	4
90-09882-00	Washer, Internal Tooth Lock No. 6	1	33
90-10089-03	Screw, Phl Pan Hd No. 6-32 x 5/16	2	3
90-10109-00	Screw, Phl Pan Hd No. 6-32 x 5/8	1	12
90-10174-03	Screw, Sems Phl Pan Hd No. 6-32 x 1/2	1	7
90-10500-01	Screw, Phl Pan Hd No. 2-56 x 3/8	4	5
90-10500-01	Screw, Phl Pan Hd No. 2-56 x 3/8	3	12
90-10506-01	Washer, Spring	1	27
90-10506-01	Washer, Spring	2	12
90-10717-01	Screw, Phl Pan Hd No. 6-32 x 7/16	2	6

TK70 TAPE DRIVE SORT BY DEC PART NUMBER

PART NO.	DESCRIPTION	FIG. NO.	ITEM
90-10717-01	Screw, Sems Phl Pan Hd No. 6-32 x 5/8	1	15
TK70-01	TK70 TAPE DRIVE W/SKID PLATE	1	N/A
TK70-02	TK70 TAPE DRIVE WO/SKID PLATE	1	N/A

TK70 TAPE DRIVE SORTED BY DEC PART DESCRIPTION

DESCRIPTION	DEC PART NO.	FIG. NO.	ITEM
Actuator, Digital Linear	12-21497-02	2	4
Ball Bearing, Flanged	12-22788-01	1	21
Baseplate Assembly	70-21732-01	2	1
Bearing, Flanged Ball	12-22788-01	6	8
Bezel	74-34041-01	5	1
BEZEL ASSEMBLY	70-23517-01	5	N/A
BEZEL ASSEMBLY	70-23517-01	1	36
Body, Tachometer	74-32341-01	6	1
Bracket, Head Spring	74-30728-01	1	5
Button, Push	74-34166-01	5	2
Cable Assembly, Flex	17-01088-01	6	12
Capstan	74-34038-01	6	7
Capstan, Tachometer	74-34038-01	1	22
Constraint, Tape	74-29616-01	1	24
Damper, Vibration	74-35725-01	1	38
Disk, Encoder	74-27698-01	6	6
Enclosure	74-32363-01	1	37
EOT/BOT LED-Photo Assembly	11-23276-01	1	14
Floor, Receiver	74-25212-01	3	1
Guard, Tape	12-13656-01	1	18
Guide, Tachometer	74-32343-01	6	3
Handle, Engaging	70-24656-01	3	7
Head, Recording	70-23482-01	1	10
Insulator Assembly	70-21765-01	1	2
Interposer	74-29215-01	4	1
INTERPOSER ASSEMBLY	70-21738-01	3	8
INTERPOSER ASSEMBLY	70-21738-01	4	N/A
Label, "S/N, TK70"	36-19833-03	2	14
Label, "TK70"	36-27465-01	5	4
Latch Leader Assembly	70-23544-01	1	35
Leader, Cartridge (Take-up)	74-28286-01	1	26
Link, Buckling	74-34496-01	3	13
Link, Left Clutch	74-29214-01	3	6
Link, Right Clutch	74-29213-01	3	5
Mask, Encoder	74-29220-01	6	2
Module, Switch/LED Assembly	54-18272-01	5	3
Module, TK70 Drive	54-17637-01	1	3
MOTOR AND BASEPLATE ASSEMBLY	70-21736-01	1	4
MOTOR and BASEPLATE ASSEMBLY	70-21736-01	2	N/A
Motor, Brushless	12-22681-01	2	2

TK70 TAPE DRIVE SORTED BY DEC PART DESCRIPTION

DESCRIPTION	DEC PART NO.	FIG. NO.	ITEM
Mount, Switch	74-29218-01	4	2
Nut, Hex Self Lock Nylon No. 4-40	90-08054-00	6	13
Nut, Nylon Self Lock No. 4-40	90-08054-00	1	23
Plate, Clutch	74-29211-01	3	4
Plate, Skid	74-25652-01	1	1
Plate, Spring	74-31657-01	2	8
Plate, Tachometer Cover	74-32342-01	6	5
Receiver	74-32530-01	3	2
RECEIVER ASSEMBLY	70-23497-01	3	N/A
RECEIVER ASSEMBLY	70-23497-01	1	31
Reel Driver Assembly	70-23477-01	2	10
Reel, Take-up	74-27668-01	1	25
Retainer, Damper	74-35724-01	1	13
Ring, Support	74-31389-01	6	9
Screw, Phl Fill Hd No. 8-32 x 1 1/2	90-00038-21	1	28
Screw, Phl Fill Hd No. 8-32 x 1/2	90-06039-01	2	13
Screw, Phl Flat Hd Self-Tap No. 6 x 1/2	90-09800-00	6	4
Screw, Phl Pan Hd No. 2-56 x 1/4	90-06004-01	4	3
Screw, Phl Pan Hd No. 2-56 x 3/8	90-10500-01	4	5
Screw, Phl Pan Hd No. 2-56 x 3/8	90-10500-01	3	12
Screw, Phl Pan Hd No. 6-32 x 5/16	90-10089-03	2	3
Screw, Phl Pan Hd No. 6-32 x 5/16	90-00049-58	1	16
Screw, Phl Pan Hd No. 6-32 x 5/8	90-10109-00	1	12
Screw, Phl Pan Hd No. 6-32 x 7/16	90-10717-01	2	6
Screw, Phl Pan Hd No. 6-32 x 9/16	90-06022-01	1	32
Screw, Phl Self-Tap No. 6-32 x 1/2	90-00049-36	1	8
Screw, Sems Phl Pan Hd No. 6-32 x 1/2	90-10174-03	1	7
Screw, Sems Phl Pan Hd No. 6-32 x 5/8	90-10717-01	1	15
Shaft, Pivot Link	74-29216-01	3	3
Shield Assembly, External	70-21141-01	1	17
Shield, Actuator	74-29607-02	2	5
Shim, Plastic	12-24328-01	2	15
Solenoid, Tubular (10.5 Vdc)	12-22089-01	3	9
Spring, Compression	12-13656-05	6	11
Spring, Compression	12-12912-01	1	29
Spring, Compression	12-22357-01	1	30
Spring, Compression	12-13656-05	1	19
Spring, Compression	12-22356-01	2	9
Spring, Compression	12-22358-01	1	34
Spring, Head Bracket	12-22895-01	1	9
Spring, Torsion	12-22538-01	3	10
Spring, Torsion	12-23742-01	3	14
Strain Relief, Head	74-29585-01	1	6
Switch Assembly (No Snap Action)	12-25332-02	3	11
Switch, Micro	12-22274-04	4	4
Switch, Thermal	12-22958-02	2	7

TK70 TAPE DRIVE SORTED BY DEC PART DESCRIPTION

DESCRIPTION	DEC PART NO.	FIG. NO.	ITEM
TACHOMETER ASSEMBLY	70-24659-01	1	11
TACHOMETER ASSEMBLY	70-24659-01	6	N/A
TK70 TAPE DRIVE W/SKID PLATE	TK70-01	1	N/A
TK70 TAPE DRIVE WO/SKID PLATE	TK70-02	1	N/A
Washer, Flat	12-24692-03	1	20
Washer, Flat	12-24692-03	6	10
Washer, Flat	12-24692-02	2	11
Washer, Internal Tooth Lock No. 2	90-06631-00	4	6
Washer, Internal Tooth Lock No. 6	90-09882-00	1	33
Washer, Spring	90-10506-01	1	27
Washer, Spring	90-10506-01	2	12